TM 43-0001-47

SUPERSEDES COPY DATED 1 MAY 1989

TECHNICAL MANUAL

ARMY EQUIPMENT DATA SHEETS

AMMUNITION PECULIAR EQUIPMENT

DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited.

HEADQUARTERS, DEPARTMENT OF THE ARMY

DECEMBER 1993

TM 43-0001-47
C1

Change

No. 1

HEADQUARTERS
DEPARTMENT OF THE ARMY
Washington, D.C., 1 May 1995

ARMY EQUIPMENT DATA SHEETS
AMMUNITION PECULIAR EQUIPMENT (APE)

TM 43-0001-47, 22 December 1993, is changed as follows:

1. Remove old pages and insert new pages as indicated below. New or changed material is indicated by a vertical bar in the margin of the page. Added or revised illustrations are indicated by a vertical bar adjacent to the identification number.

Remove Pages	Insert Pages
2-21 thru 2-26	2-21 thru 2-26
2-33 and 2-34 (2-35 blank)	2-33 and 2-34/(2-34.1 blank)
None	2-34.2 thru 2-34.4/(2-35 blank)
2-37 thru 2-40	2-37 thru 2-40
None	2-48.1 and 2–48.2
2-49 and 2-50	2-49 and 2-50
None	2-50.1/(2-50.2 blank)
2-57 (2-58 blank)	2–57 and 2-58
None	2-68.1 thru 2-68.3/(2-68.4 blank)
None	2-76.1 and 2-76.2
2-77 and 2-78	2-77 and 2-78
2-85 and 2-86	2-85 and 2-86
None	2-86.1/(2-86.2 blank)
2-89 and 2-90	2-89 and 2-90
2-95 and 2-96 (2-97 blank)	2-95 and 2-96
None	2-96.1 and 2-96.2/(2-97 blank)
None	2-100.1 and 2-100.2
2-101 thru 2-104	2-101 thru 2-104
2-107 and 2-108	2-107 and 2-108
None	2-108.1 and 2-108.2
2-163 thru 2-170	2-163 thru 2-170
2-193 and 2-194	2-193 and 2-194
2-229 and 2-230	2-229 and 2-230/(2-230.1 blank)
None	2-230.2
2-241 thru 2-240	2-241 thru 2-244
2-257 thru 2-260	2-257 thru 2-260
2-287 thru 2-290	2-287 thru 2-290/(2-290.1 blank)
None	2-290.2
2-301 thru 2-304	2-301 thru 2–304
None	2.336.1 thru 2.336.4

Remove Pages	Insert Pages
2-337 thru 2-342	2-337 thru 2-342
2-357 and 2-358	2-357 and 2-358
None	2-358.1 thru 2-358.4
2-371 thru 2-376	2-371 thru 2-376
A-1 thru A-10	A-1 thru A-10
B-3 and B-4	B-3 and B-4
B-11 thru B-30	B-11 thru B-30
B-33 thru B-38	B-33 thru B-38
B-41 thru B-50	B-41 thru B-50
Index	Index

2. File this change sheet in front of the publication for reference purposes.

By Order of the Secretary of the Army:

GORDON R. SULLIVAN
General, United States Army
Chief of Staff

Official:

JOEL B. HUDSON
Acting Administrative Assistant to the Secretary of the Army
00181

DISTRIBUTION: To be distributed in accordance with DA Form 12-34-E, block 0857 requirements for TM 43–0001-47.

TECHNICAL MANUAL

NO. 43-0001–47

HEADQUARTERS
DEPARTMENT OF THE ARMY
Washington, D.C., 22 December 1993

ARMY EQUIPMENT DATA SHEETS

AMMUNITION PECULIAR EQUIPMENT (APE)

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistakes, or if you know of a way to improve the procedures, please let us know. Mail your DA Form 2028 (Recommended Changes to Publications and Blank Forms), or DA Form 2028–2 located in the back of this manual direct to: Commander, U.S. Army Armament, Munitions and Chemical Command, ATTN: AMSMC-MAS, Rock Island, IL 61299-6000. A reply will be furnished to you.

DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited.

TABLE OF CONTENTS

			Page
CHAPTER	1.	INTRODUCTION	1-1
CHAPTER	2.	DATA SHEETS	2-1
CHAPTER	3.	NONSTANDARD APE	3-1
APPENDIX	A.	DELETED ITEMS	A–1
APPENDIX	B.	**OPERATIONAL INDEX**	
Section	I.	Surveillance Function Tests	B–1
Section	II.	Inspections and Special Tests	B–12
Section	III.	Maintenance, Renovation, and Demilitarization	B–15
APPENDIX	C.	**PREPARATION AND HANDLING OF AMMUNITION PECULIAR EQUIPMENT FOR SHIPMENT AND STORAGE**	C-1
INDEX			Index–1

*This manual supersedes TM 43–0001–47, 1 May 1989.

CHAPTER 1

INTRODUCTION

a. This manual is a reference published as an aid in training, familiarization, and identification of ammunition peculiar equipment (FSC 4925). There are no National Stock Numbers (NSN) for APE. They are identified by an Ammunition Peculiar Equipment (APE) Management Number (AMN) and are supplied by the Commander, U.S. Army Armament, Munitions and Chemical Command, ATTN: AMSMC-DSM-M, Rock Island, IL 61299-6000, to all authorized recipients.

b. The APE AMN consists of 4925 Federal Stock Class, AA special identifier, 1001 four digit APE Number, and 0000 end item, A001 major assemblies, E001 accessory kits, or 0001 components. An example of an APE 1001 end item would be AMN 4925-AA-10010000. Accessory kits are not normally supplied with end items. This manual is not to be used as authorization for requisitioning, stockage, maintenance, or issue of the materiel described herein.

CHAPTER 2

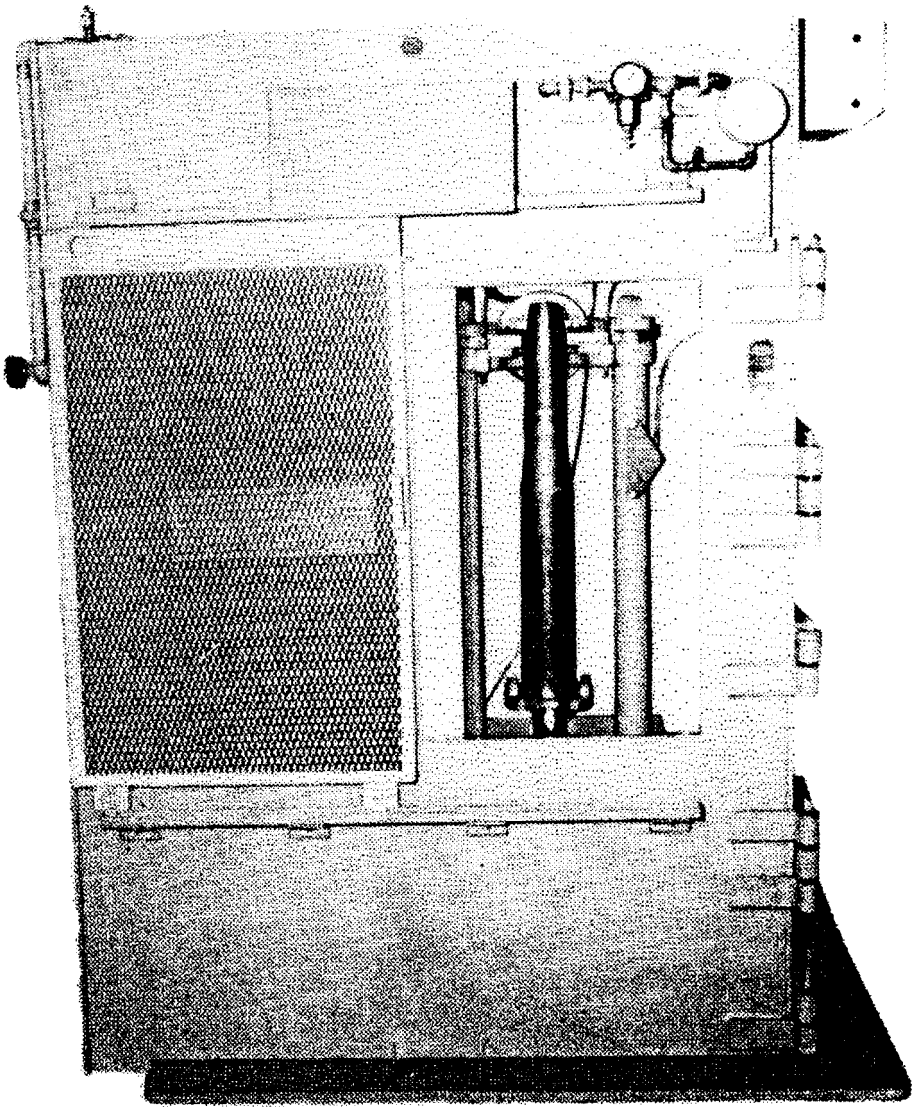
DATA SHEETS

The following Data Sheets are for those APE that are approved and used during regular daily ammunition operations to renovate, perform surveillance, demilitarize, and perform preservation and packaging functions. The data provided on each data sheet consists of equipment used, a brief description, difference between models, tabulated data, associated equipment, and available kits. Illustrations provided are for identification.

WARNING

ANY EXPLOSIVE CONTAMINATE ON MUST BE REMOVED FROM APE PRIOR TO CRATING AND SHIPMENT IAW DIRECTIVES IN DOD 5160.65-M AND PROCEDURES CONTAINED IN TB 700-4. EQUIPMENT WILL BE CERTIFIED FREE OF EXPLOSIVES AND TAGGED WITH DD FORM 2271. DECONTAMINATION IS NECESSARY TO PRECLUDE EXCLUSIVE HAZARDS.

APE 1001M1--MACHINE, VERTICAL PULL APART
(WITH 1001E091 DELUGE WITH SHIELD)



Use:
The vertical pull apart machine is a semi-automatic multipurpose machine used for processing 37MM through 106MM fixed artillery ammunition, Navy ammunition, 76MM/62, 3"/50, 5"/38, 5"/54, 6"/47 and rocket motors. It performs the following operations:

a. Separate projectile from cartridge case.

b. Assemble projectile to cartridge case.

Description:
APE 1001M1 is constructed with a base plate, operating table, three bolster rods, vise assembly, pull cylinder, and fulcrum arm assembly. The machine is powered by air. The operational shield is supplied with an installed deluge system to protect the operator.

Difference Between Models:
APE 1001M1 is the only approved configuration.

Tabulated Data:
APE No. 10010000M1
Unit of Issue . . . .Each
Installation Data:
BASIC MACHINE:
Length . . . .60in.
Width . . . .36in.
Height . . . .62-1/2in.
Weight . . . .2010 lbs
OPERATIONAL SHIELD:
Length . . . .60in.
Width . . . .50in.
Height . . . .84in.
Weight . . . .3320 lbs
Utilities Required:
Air at 100 psi and 130 cfm.
Production Capacity:
Varies with type of operation being performed.

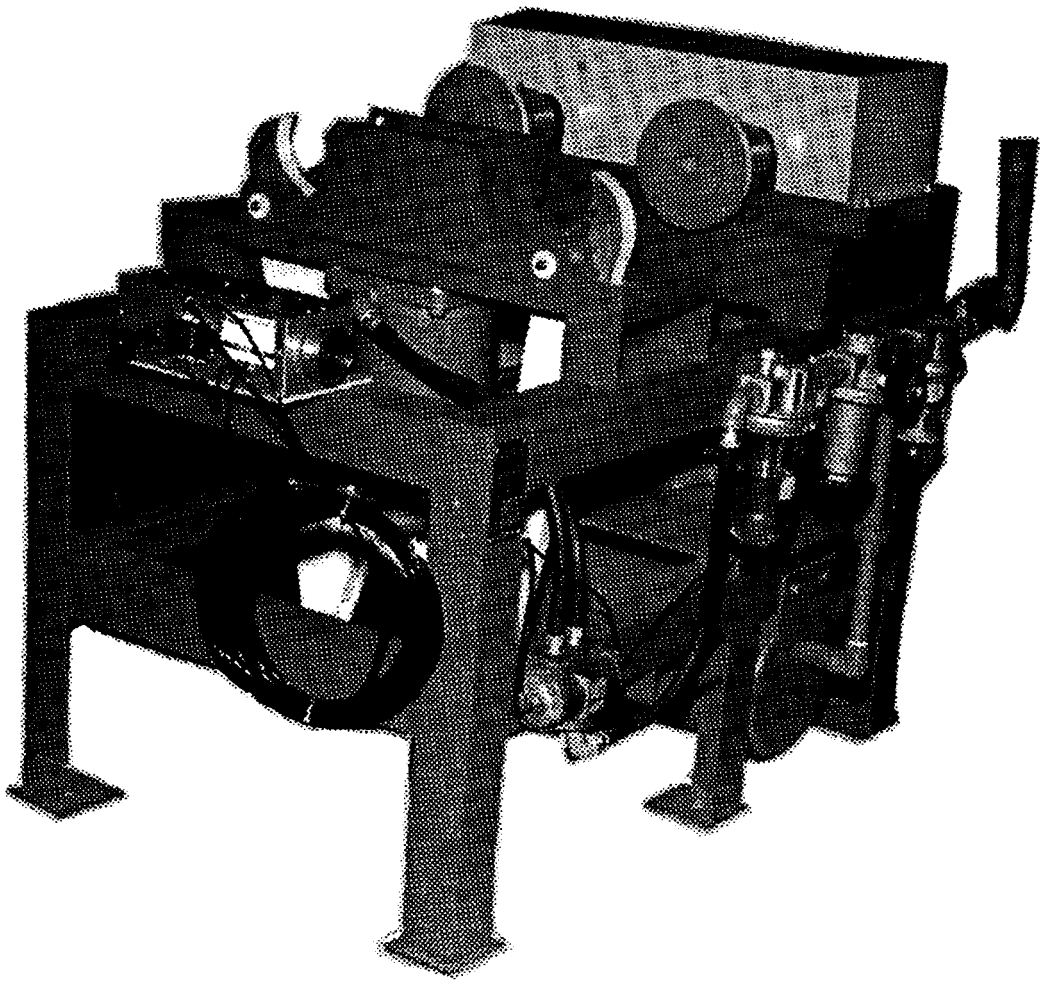
Shipping Data:
BASIC MACHINE:
Length . . . .66in.
Width . . . .42in.
Height . . . .72in.
Cube . . . .115.0 cu ft
Weight . . . .2480 lbs
OPERATIONAL SHIELD:
Length . . . .66in.
Width . . . .60in.
Height . . . .96in.
Cube . . . .220.0 cu ft
Weight . . . .4142 lbs

Associated Equipment:
None.

Kits :
1001E005 KIT, Vise jaws & cartridge case shoes for pull apart of 105MM: M323, M325
1001E006 KIT, Pull apart, 105MM: M456
1001E007 KIT, Pull apart and resize 57MM: M306 and M307
1001E009 KIT, Rebuild 12–inch air cylinders
1001E019 KIT, Basic, for pull apart, resize, assembly and crimping of cartridges
1001E020 KIT, Pull apart, 37MM: M54, M59, M63, M92 w/M16 cartridge case
1001E021 KIT, Pull Apart, 37MM: M54, M59, M63, M92 w/M17 Cartridge Case
1001E022 KIT, Pull Apart, 40MM: MK2 , MK11, M81, M91
1001E023 KIT, Pull Apart, 57MM: M306, M307, M308
1001E024 KIT, Pull Apart, 57MM: M303
1001E025 KIT, Pull Apart, 75MM: M48, M61, M64, M66, M338
1001E026 KIT, Pull Apart, 75MM: M309, M310, M311
1001E027 KIT, Pull Apart, 75MM: M349
1001E028 KIT, Pull Apart, 75MM: M334
1001E029 KIT, Pull Apart, 76MM: M42, M62, M93, M312, M315
1001E030 KIT, Pull Apart, 76MM: M319, M339, M340, M352, M361
1001E031 KIT, Pull Apart, 90MM: M71, M77, M79, M82, M133, M304, M313, M317, M318, M319, M332, M336, M431, M580
1001E032 KIT, Pull Apart, 105MM: M341
1001E033 KIT, Pull Apart, 105MM: M326
1001E034 KIT, Pull Apart, 105MM: M345
1001E035 KIT, Pull Apart, 106MM: M344
1001E036 KIT, Pull Apart, 106MM: M346, M581
1001E038 KIT, Resize Cartridge Case, 37MM: M16, M17
1001E039 KIT, Resize Cartridge Case, 40MM: M25, MK2
1001E060 KIT, Assembly & Crimp, 37MM w/ M16 Cartridge Case
1001E061 KIT, Assembly & Crimp, 37MM w/ M17 Cartridge Case
1001E062 KIT, Assembly & Crimp, 40MM: w/M25, MK2 Cartridge Case
1001E063 KIT, Assembly & Crimp, 57MM, w/M23 Cartridge Case
1001E067 KIT, Assembly & Crimp, 76MM, w/M88 or M101 Cartridge Case
1001E069 KIT, Assembly & Crimp, 105MM, w/M32 Cartridge Case
1001E070 KIT, Assembly & Crimp, 105MM, w/M90, M95 Cartridge Cases, and 106MM w/M94 Cartridge Case
1001E073 KIT, Assembly & Crimp, 40MM: MK2
1001E074 KIT, Pull Apart 105MM HEP–T: M393A1, M416 & M494
1001E075 KIT, Pull Apart 90MM: M371

1001E077 KIT, Assembly M392A1 , 105MM Projectile to M115B1 Cartridge Case
1001E079 KIT, Resize Cartridge Case, 105MM: M148, M148A1B1, M150
1001E081 KIT, Pull Apart, 37MM & 40MM w self-destroying tracer
1001E082 KIT, Pull Apart 66MM: M72 Rocket
1001E087 KIT, Accessory for Pull Apart of 105MM APDS-T, M392, M728 Cartridge
1001E088 KIT, Basic Accessories for Pull Apart of Navy Cartridge 76MM/62 Cal
1001E089 GAGE, VPA Alinement
1001E090 KIT, Pull Apart Navy 3“/50
1001E091 KIT, Deluge w/Shield (not shown)
1001E092 KIT, Resize, Cartridge. Case 6"/47 Propelling Charge
1001E093 KIT, Resize, Cartridge Case, 5"/38 Propelling Charge
1001E094 KIT, Resize, Cartridge Case 5"/54 Propelling Charge
1001E095 KIT, 5"/54, 5"/38, and 6"/47 Propelling Charge Cartridge Case
1001E096 KIT, Base Plate
1001E097 KIT, 2.75–inch Rocket Warhead XM274 Nose Cap and Retainer Removal
1001E098 KIT, 105MM: M360 Projectile Reseating
1001E099 KIT, Flue Roller Cartridge Case Resize
1001E100 KIT, 75MM thru 106MM Cartridge Case Flue Roller Resize

APE 1002M3--MACHINE, TWO SPINDLE, DEFUZING



Use:
The two spindle defuzing machine was developed for removing the point detonating or base detonating fuzes from 57MM through 106MM artillery projectiles, Navy ammunition, 3"/50 and 60MM and 81MM mortar projectiles. It's usage has also been expanded to remove base plates, plugs, tracers, from projectiles; disassemble certain projectiles; remove fuzes and plugs from fragment bombs; disassemble rockets; and debooster fuzes.

Description:
APE 1002M3 consists of a steel frame with a vise assembly and retractor head assembly mounted to accommodate two fuzed projectiles at the same time. The retractor heads are chain driven by air motor. The direction of rotation of the retractor heads is controlled by the hand throttle and/or the reversing valve on the air motor.

Difference Between Models:
The APE 1002M2 differs from the APE 1002M1 in that the APE 1002M2 has an air receiver tank, eleven tooth drive sprockets, and an elongated slot in the frame to provide exact adjustment in the vise assembly for the various size projectiles. A two-hand control has been added to the APE 1002M3 for greater operator safety and to comply with OHSA standards.

Tabulated Data:

APE No.	10020000M3
Unit of Issue	Each

Installation Data:
Length . . . .46in.
Width . . . .33in.
Height . . . .38in.
Weight . . . .1220 lbs
Utilities Required:
Air at 100 psi and 80 cfm.
Production Capacity:
Depends upon type and condition of ammunition.

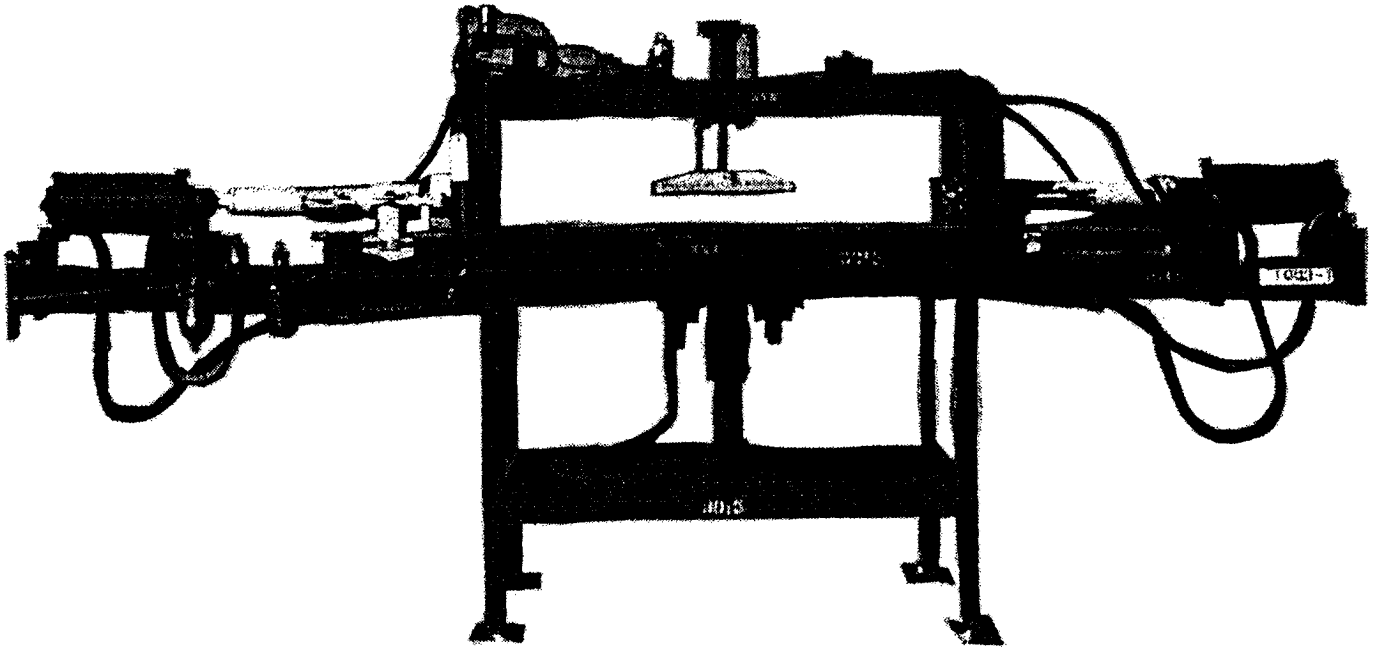
Shipping Data:
Length . . . . . 55 in.
Width . . . . . 48 in.
Height . . . . . 48 in.
Cube . . . . . 73.4 cu ft
Weight . . . . . 1305 lbs

Associated Equipment:
None.

Kits :

1002E001	KIT, Production Basic
1002E002	KIT, SIMM, Remove BD Fuze
1002E003	KIT, 75MM, Remove BD Fuze
1002E004	KIT, 76MM, Remove BD Fuze
1002E005	KIT, 75MM, Remove PD Fuze (except M334 Projectile)
1002E006	KIT, 75MM: M334, Remove PD Fuze
1002E007	KIT, 76MM, Remove PD Fuze
1002E008	KIT, 90MM, Remove PD Fuze
1002E009	KIT, 105MM, Remove PD Fuze
1002E010	KIT, 90MM, Remove BD Fuze (except T142 Series Projectile)
1002E011	KIT, 90MM, Remove BD Fuze T142 Series Projectile
1002E012	KIT, 105MM, Remove BD M92 Fuze (except T139E45 Projectile)
1002E013	KIT, 105MM, 106MM, Remove BD Fuze, 105MM: T139E45, 106MM: T139E47
1002E014	KIT, 60MM Mortar: M49 and M50, Remove Fuze M52, M82, M525, M527
1002E015	KIT, 60MM Mortar: M302, Remove Fuze M52, M82, M525, and M527
1002E016	KIT, 81MM Mortar: M43A1B1, Remove Fuze M52, M82, M525, and M527
1002E017	KIT, 81MM Mortar: M362, Remove Fuze M52, M82, M525, and M527
1002E018	KIT, 81MM Mortar: M362, M374, M375, Remove Fuze M519 and M526, and M524
1002E019	KIT, 20-23 lb Fragment Bomb, Remove Fuze
1002E020	KIT, 20-23 lb Fragment Bomb, Remove Fuzewell Plug
1002E021	KIT, 106MM: M345, Remove Base Plug
1002E022	KIT, 105MM: M84 and 155MM, M116 BE Projectile. Remove Base Plate
1002E023	KIT, 106MM: M344 Projectile, Disassembly
1002E024	KIT, 105MM: M416, Remove Tracer and Base Fuze, M534
1002E030	KIT, Disassemble M10 2.36–Inch Rocket
1002E031	KIT, 57MM: M306A1 , Remove M503 Fuze
1002E036	KIT, to Remove M21A4 Booster from 76MM Artillery Projectile
1002E038	KIT, Remove M21A4 Booster from Standard Contour Fuze
1002E039	KIT, Remove Closing Plug 57MM: M307A1 Projectile
1002E041	KIT, Remove Tracer from 40MM: HEI–T, MK2
1002E042	KIT, Defuze 3"/50 Cartridge (Remote Control)
1002E043	KIT, Remove Cartridge Case Locking Ring, 152MM
1002E044	KIT, Remove Projectile Lifting Plug
1002E045	KIT, Disassemble 106MM, M581 APERS-T
1002E046	KIT, Remove Propelling Charge from 4.2 Mortar
1002E047	KIT, Disassemble 60MM Mortar, M720

APE 1003M1--LID REMOVER, PNEUMATIC



Use:
The pneumatic lid remover was designed to remove lids from single and double end fiber containers for 40MM through 105MM ammunition (except 105MM HEAT ammunition). It can also be used to remove lids from 120MM fiber containers and closing plugs from 120MM cartridge cases.

Description:
APE 1003M1 is of table type construction with a traveling cylinder and clamp shoe assembly on each end of the table. The clamp shoe assemblies remove the lids when actuated by two button valves and a delay timer. The machine has two safety guards which prevent the operator from inserting more than one container at a time into the machine.

Difference Between Models:
The APE 1003M1 has improved safety features and is capable of removing lids from 120MM fiber containers and removing M2E3 closing plugs from 120MM cartridge cases.

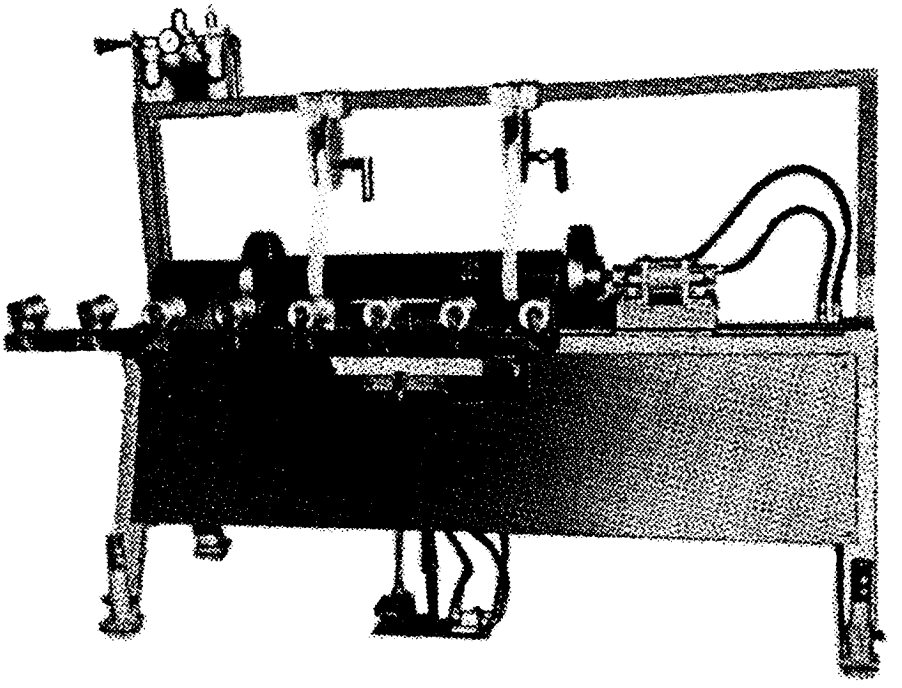
Tabulated Data:
APE No. l0030000M1
Unit of Issue . . . .Each
Installation Data:
Length . . . .124-1/2 in.
Width . . . .46 in.
Height . . . .52 in.
Weight . . . .1422 lbs
Utilities Required:
Air at 100 psi and 100 cfm.
Production Capacity:
360 containers per hour.

Shipping Data:
Length . . . .131 in.
Width . . . .51 in.
Height . . . .62 in.
Cube . . . .246 tuft
Weight . . . .1575 lbs

Associated Equipment:
APE 1004, 1088, and 1221.

Kits :
1003E001 KIT, Remove Lids from 4 0MM through 60MM Fiber Containers
1003E002 KIT, Remove Lids from 75MM through 81MM Fiber Containers
1003E003 KIT, Remove Lids from 90MM through 105MM Fiber Containers (except 105MM HEAT ammunition)
1003E004 KIT, Remove Lids from 120MM Fiber Containers
1003E005 KIT, Remove M2E3 Closing Plug from 120MM Cartridge Case

APE 1004M1--MACHINE, TAPING



Use:
The taping machine is used to apply 1–1/4 wraps plus 1 inch and tab of 1-inch to 2-inch tape to fiber containers. The fiber containers range in size from 40MM to 120MM lengths from 14 to 44 inches and diameters of 2–3/8 thru 6–1/4 inches.

Description:
APE 1004M1 consists of two air operated 16-1/2 inch cylinders which operate the drive head assembly and an air cylinder which operates the idler assembly, a fiber kickoff device, a fiber holder assembly, and two tape holders with cutters.

Difference Between Models:
Basic machine drive head rotation provided two wraps of tape to a container. APE 1004M1 version reduced the drive head rotation to 1-1/4 wraps and also include two tape cutters.

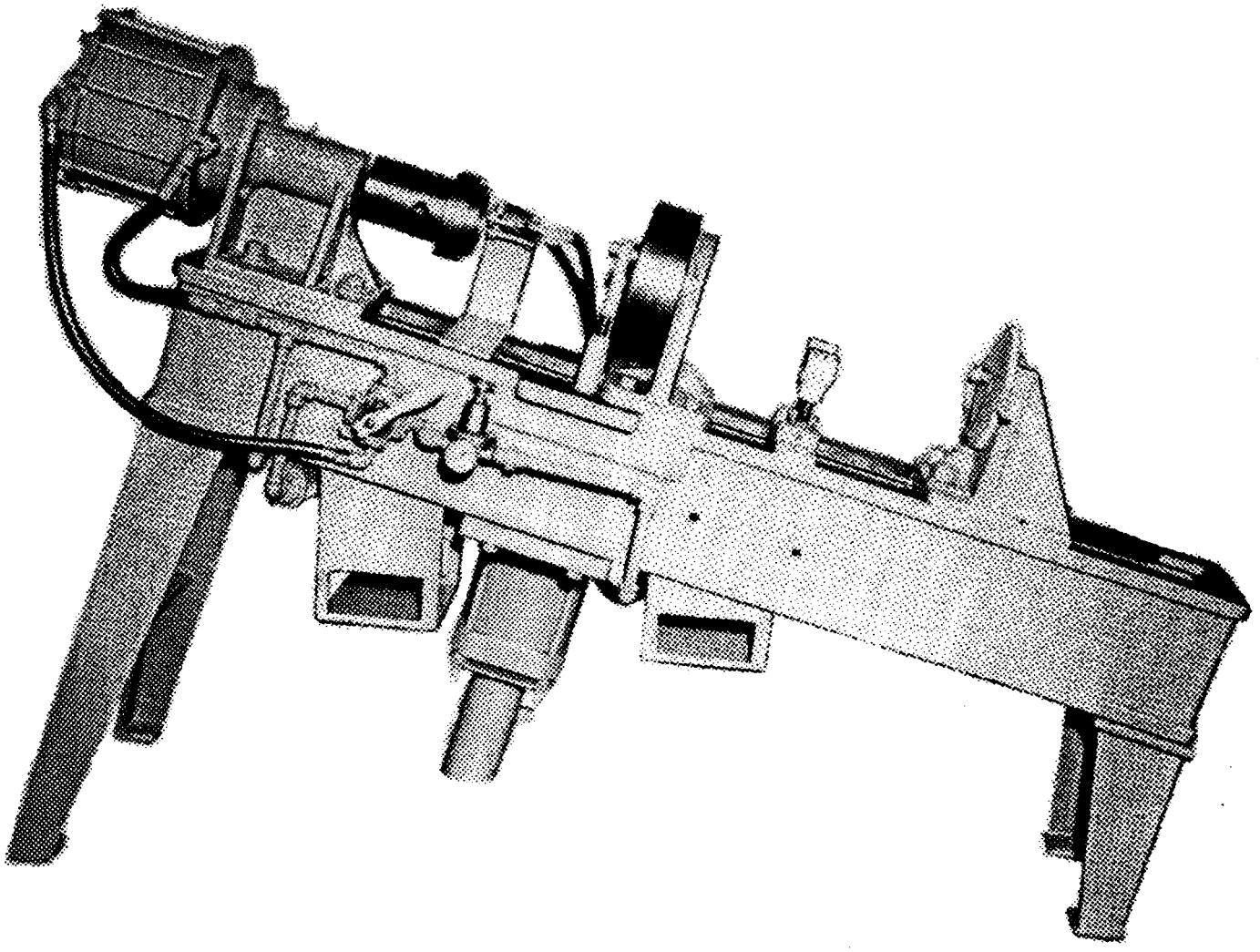
Tabulated Data:
APE No. 10040000M1
Unit of Issue . . . . . Each
Installation Data:
Length . . . . . 80in.
Width . . . . . 28in.
Height . . . . . 72in.
Weight . . . . . Not available
Utilities Required:
Air at 80 psi and 105 cfm.
Production Capacity:
386 single end fiber containers per hour. 240 double end fiber containers per hour.

Shipping Data:
Length . . . . . 89 in.
Width . . . . . 41 in.
Height . . . . . 76 in.
Cube . . . . . 160.5 cu ft
Weight . . . . . 1160 lbs

Associated Equipment:
APE 1003, 1008, and 1221.

Kits :
None.

APE 1010M2--MACHINE ASSEMBLY AND CRIMP



Use:
The assembly and crimp machine is used to aline, assemble, and crimp the cartridge case to the projectile. The machine handles 57MM through 106MM ammunition.

Description:
APE 1010M2 consists of a frame with an air cylinder assembly used to position the projectile in the cartridge case, and a crimping assembly. Pneumatic controls are provided to operate the machine.

Difference Between Models:
The APE 1010M2 has a revised parts list and revised operating procedure.

Tabulated Data:

APE No.	10100000M2
Unit of Issue	Each
Installation Data:	
Length	82 in.
Width	24 in.
Height	54 in.
Weight	1500 lbs

Utilities Required:
Air at 100 psi and 100 cfm.
Production Capacity:
240 cartridges per hour.

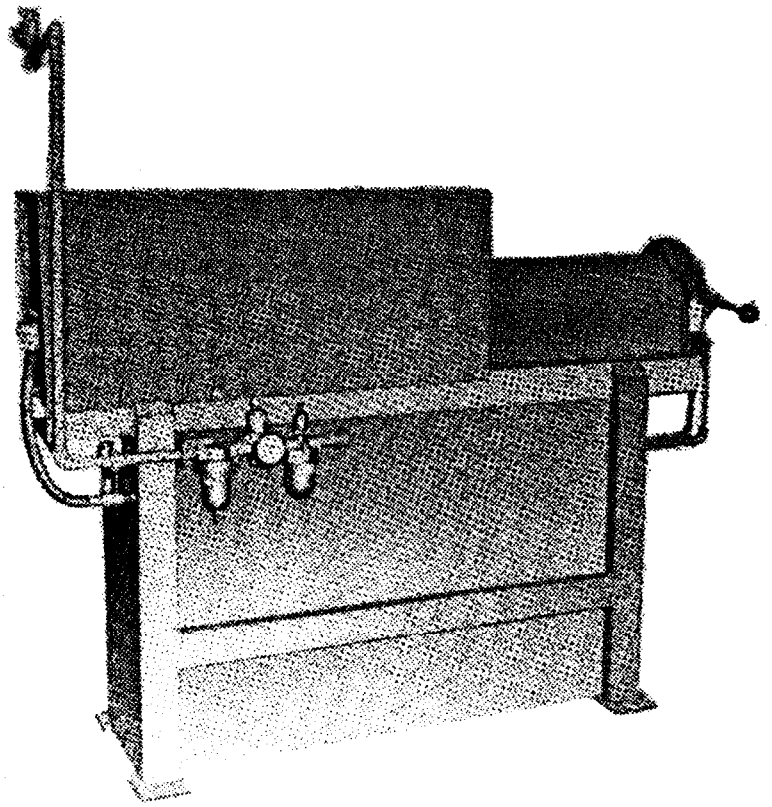
Shipping Data:
Length . . . .89 in.
Width . . . .39 in.
Height . . . .64 in.
Cube . . . .129 cu ft
Weight . . . .1795 lbs

Associated Equipment:
APE 1001.

Kits :

1010E001	KIT, Assembly and Crimp, 75MM
1010E003	KIT, Assembly and Crimp, 76MM
1010E004	KIT, Assembly and Crimp, 90MM
1010E005	KIT, Assembly and Crimp, 105MM and 106MM
1010E008	KIT, Assembly and Crimp, 90MM: M371
1010E009	KIT, Assembly and Crimp, 105MM: M456A1
1010E010	KIT, Assembly and Crimp, 57MM: M306 and M307
1010E011	KIT, precrimp 106MM: M94B1 Cartridge Case

APE 1011M5--DEPRIMING MACHINE, BACKOUT



Use:
The backout depriming machine was designed to mechanically remove screw-type primers from cartridge cases. It utilizes a back-out method which eliminates the hazard of the primer head being struck during removal.

Description:
APE 1011M5 consists of a table, a flash shield, a cartridge case locking device, a primer housing and collet holder assembly, an air motor, two air cylinders, and the control valves.

Difference Between Models:
Not available.

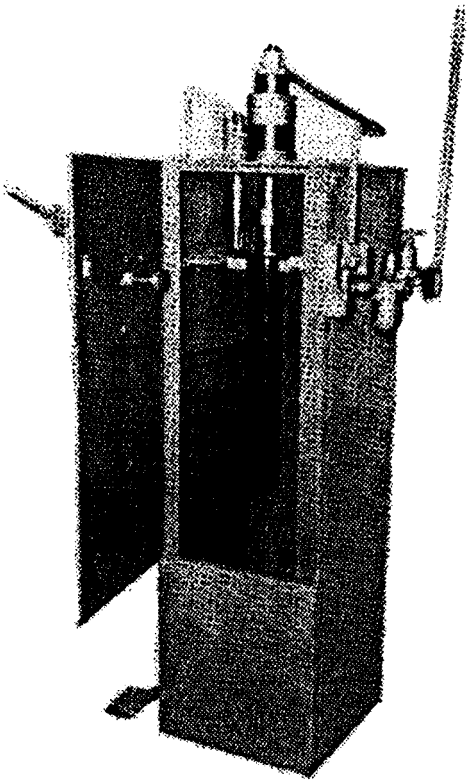
Tabulated Data:
APE No. 10110000M5
Unit of Issue . . . .Each
Installation Data:
Length . . . .70 in.
Width . . . .20 in.
Height . . . .50 in.
Weight . . . . . 1500 lbs
Utilities Required:
Air at 80 psi and 100 cfm.
Production Capacity:
225 per hour.

Shipping Data:
Length . . . . . 78 in.
Width . . . . . 24 in.
Height . . . . . 60 in.
Cube . . . . . 25 cu ft
Weight . . . . . 1926 lbs

Associated Equipment:
None.

Kits:
1011E001 KIT, Remove M86 Primer from 105MM Cartridge Cases: M115, M148, and M150
1011E002 KIT, Removal of L4 Primers from 105MM L36 Cartridge Cases
1011E003 KIT, Remove Primer from 3"/50 Navy Cartridge Case

APE 1021M4--MACHINE, PRIMER INSERTING



Use:
The primer inserting machine is used to assemble loaded screw-type primers into artillery cartridge cases. It is used on 75MM through 120MM and 3-inch through 6-inch cartridge cases.

Description:
APE 1021M4 consists of a steel barricade with door, an air motor with wrench assembly, a mounting plate for holding cartridge cases, a foot pedal operated wrench lifter, and pneumatic controls for operating the machine.

Difference Between Models:
Not available.

Tabulated Data:
APE No. 10210000M4
Unit of Issue . . . .Each
Installation Data:
Length . . . .20-1/2 in.
Width . . . .25 in.
Height . . . .64 in.
Weight . . . . . 225 lbs
Utilities Required:
Air at 90 psi and 36 cfm.
Production Capacity:
200 cartridges per hour.

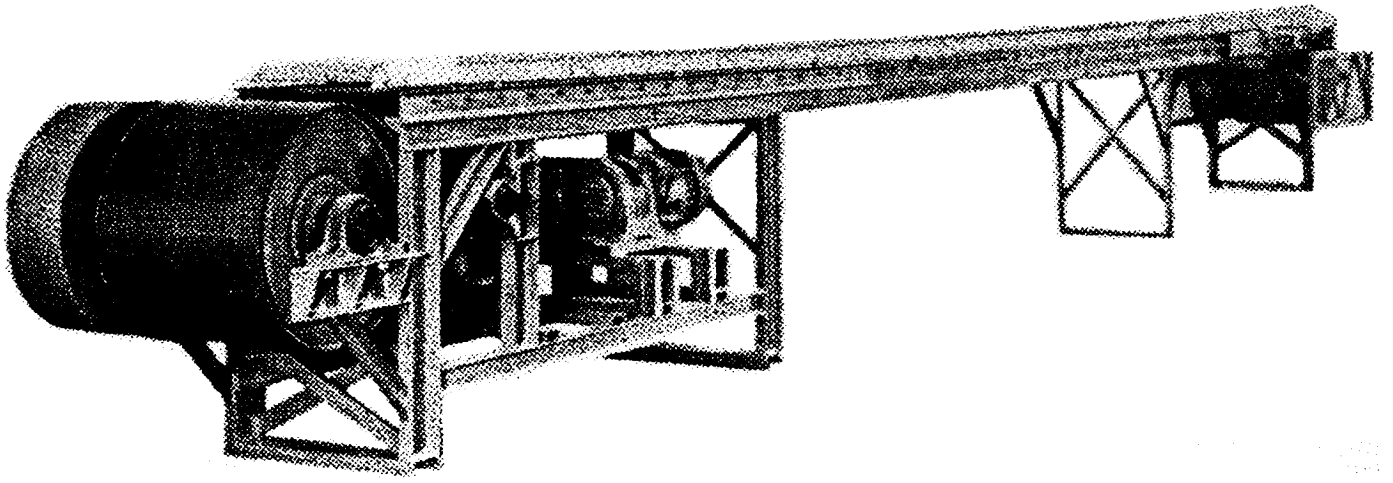
Shipping Data:
Length . . . . . 24 in.
Width . . . . . 30 in.
Height . . . . . 64 in.
Cube . . . . . 26.55 cuft
Weight . . . . . 300 lbs

Associated Equipment:
None.

Kits :

1021E001	KIT, Holding Shoes for 75MM through 120MM Cartridge Cases and Navy 3“ thru 6“ Cartridge Cases
1021E002	KIT, Holding Shoe for 105MM Cartridge Cases: M115, M148 and M150

APE 1022M1--CONVEYOR, POWERED BELT



Use:
The powered belt conveyor is used for moving artillery projectiles, small rockets, boxed general supplies, and miscellaneous ammunition components through industrial plant buildings.

Description:
APE 1022M1 is a powered, roller bed, flat belt type conveyor. The direction of belt travel can be reversed and the speed is adjustable. Conveyor lengths vary up to 280 feet maximum. Belt width is 18 inches and conveyor can support loads up to 120 pounds per lineal foot.

Difference Between Models:
Conveyors with the APE 1022M1 modification have the start–up safety alarm kit installed. Drive assembly may be located in the middle or on the end of the machine.

Tabulated Data:

APE No. 10220000M1
Unit of Issue . . . .Each

Installation Data:

Length . . . .90–280 ft
Width . . . .32 in.
Height . . . . Adjustment from 32 to 40 in.
Weight . . . . . Varies with length of conveyor

Utilities Required:
220/440 vat, 3 phase, 60 Hz.

Production Capacity:
Belt speed can be varied from 15 feet per minute to 60 feet per minute.

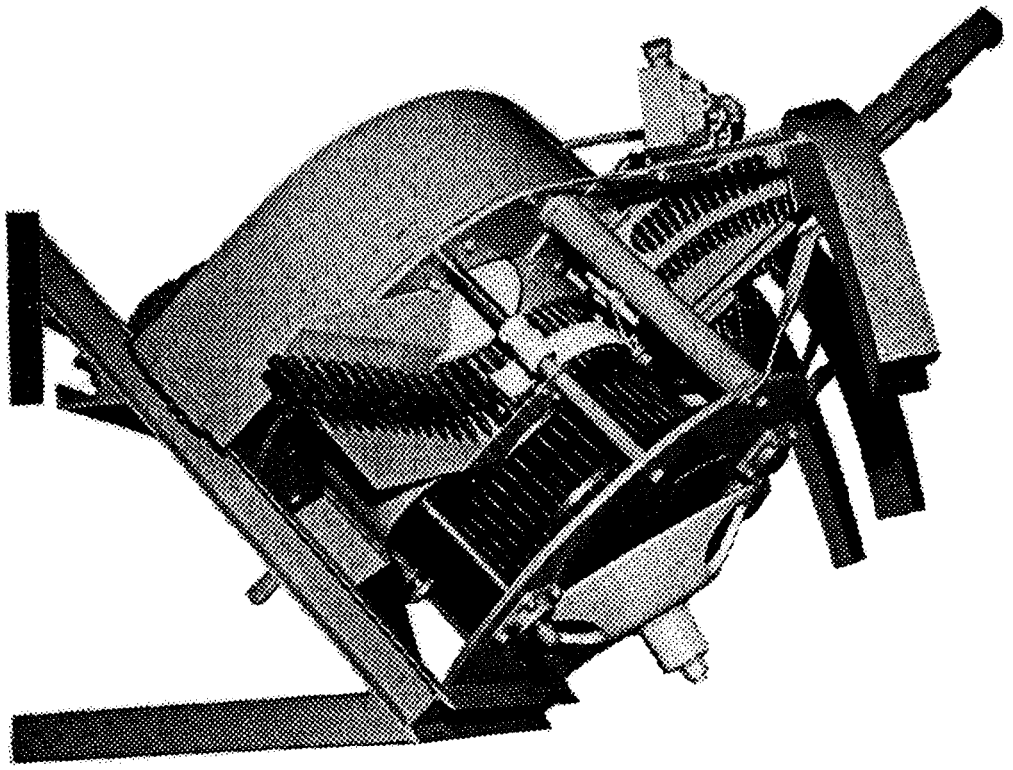
Shipping Data:

Length . . . . . Varies with length of conveyor
Width . . . . . Varies with length of conveyor
Height . . . . . Varies with length of conveyor
Cube . . . . . Varies with length of conveyor
Weight . . . . . Varies with length of conveyor

Associated Equipment:
None.

Kits:
None.

APE 1024M2--LINKER-DELINKER, POWERED, CALIBER .50



Use:
The linker-delinker was designed to link and/or delink caliber .50 cartridges with M2 or M9 links. The machine is capable of handling straight or ratio pack ammunition. Ration pack or ratio replacement must be in a sequence of 5, i.e., 4-1, 3-2, or 2-2–1.

Description:
APE 1024M2 is a drum type linker-delinker. It consists of a frame, drum, ejector rods, a link feed assembly, a cartridge feed assembly with three cartridge feed trays, ten link magazines each with 40 link capacity, and an electric motor.

Difference Between Models:
The APE 1024M1 has all ejector rods of the same length. The APE 1024M2 required new mounting arrangement for gear motor; currently available gear–motors are not dimensionally interchangeable for mounting on original or APE 1024M1 frames.

Tabulated Data:

APE No.	10240000M2
Unit of Issue	Each
Installation Data:	
Length	40 in.
Width	48 in.
Height	50 in.
Weight	1200 lbs
Utilities Required:	115/230 vac, single phase, 60 Hz, 4.6/2.3 amp.
Production Capacity:	300 cartridges per minute.

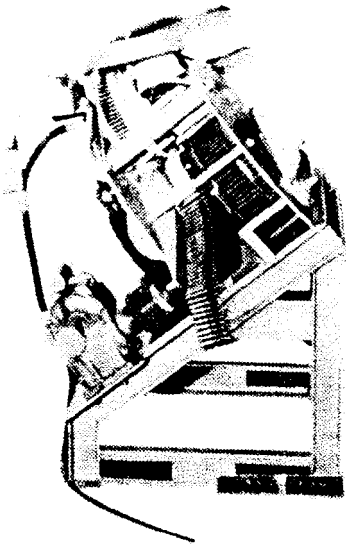
Shipping Data:

Length	55 in.
Width	48 in.
Height	56 in.
Cube	85.5 cuft
Weight	1628 lbs

Associated Equipment:
None.

Kits:
1024E001 KIT, Blank Round Linking

APE 1025--LINKER-DELINKER, POWERED, CALIBER .30



Use:
The linker-delinker was designed to link and/or delink caliber .30 cartridges with Ml links. The machine is capable of handling straight or ratio pack ammunition. Ratio pack or ratio replacement must be in a sequence of 5, i.e., 4–1, 3-2 or 2–2–1.

Description:
APE 1025 is a drum type linker–delinker. It consists of a frame drum, ejector rods, a link feed assembly, a cartridge feed assembly with three cartridge feed trays, and an electric motor.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	10250000
Unit of Issue	Each

Installation Data:

Length	32 in.
Width	38 in.
Height	45 in.
Weight	550 lbs

Utilities Required:
115/230 vat, single phase, 60 Hz, 4.6/2.3 amp.

Production Capacity:
360 cartridges per minute.

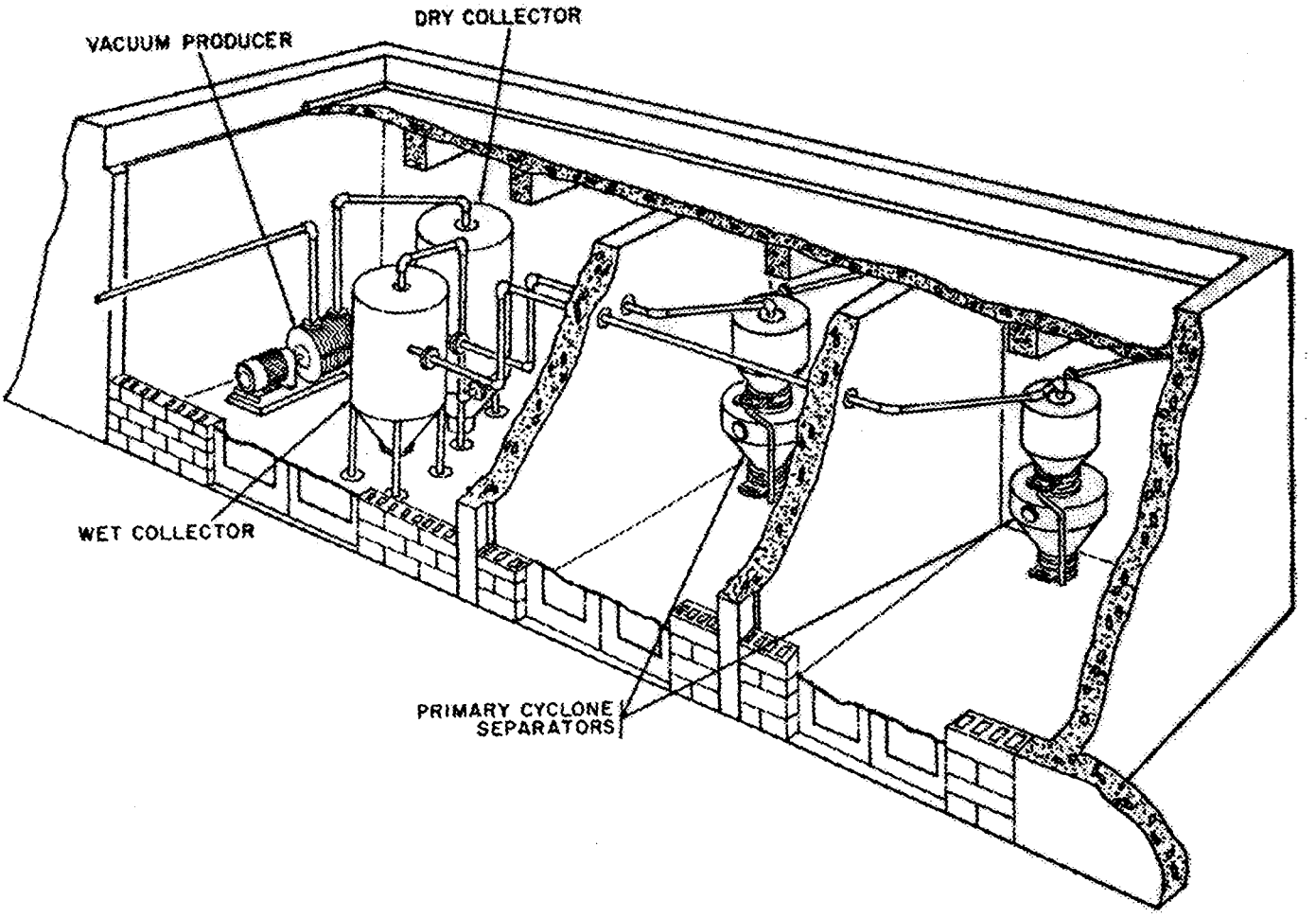
Shipping Data:

Length	54 in.
Width	43 in.
Height	72 in.
Cube	96.7 cu ft
Weight	1026 lbs

Associated Equipment:
None.

Kits:
None.

APE 1028--SYSTEM, VACUUM COLLECTION



Use:
The vacuum collection system was developed to convey propellant from maintenance operations to a powder collection building.

Description:
APE 1028 consists of a vacuum producer; a primary separator and storage hopper; a wet type explosives separator; and a dry type explosives separator. All components are connected by stainless steel piping. This is installed equipment requiring special layouts adaptable to various locations .

Difference Between Models:
Original design.

Tabulated Data:

APE No.	10280000
Unit of Issue	Each
Installation Data:	
Length	Not available
Width	Dependent on plant layout
Height	Not available
Weight	Not available

Utilities Required:
220 vac, 3 phase, 60 Hz, 27 amp
Production Capacity:
Not Applicable.

Shipping Data:
EXHAUSTER:
Length . . . . . 72 in.
Width . . . . . 36 in
Height . . . .24 in.
Cube . . . . . 36 cu. ft.
Weight . . . . . 2000 lbs.

WET COLLECTOR
Length . . . . . .72 in.
Width . . . . . 36 in
Height . . . . . 36 in.
Cube . . . . . 54 cu. ft.
Weight . . . . . 750 lbs.

DRY COLLECTOR
Length . . . . . 108 in.
Width . . . .36 in
Height . . . . . 36 in.
Cube . . . . . 81 cu. ft.
Weight . . . . . 1000 lbs.

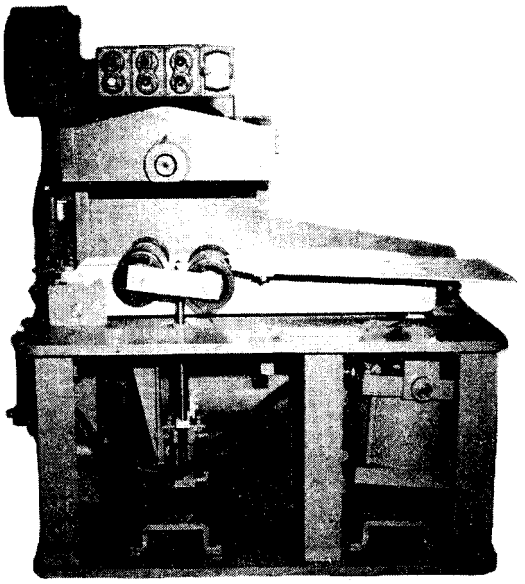
HOPPER
Length . . . . . 84 in.
Width . . . . . 24 in
Height . . . . . 24 in.
Cube . . . . . 28 cu. ft.
Weight . . . . . 750 lbs.

PIPING:
Length . . . . . 14 in.
Width . . . . . 4 in
Height . . . . . 4 in.
Cube . . . .224 cu in.
Weight . . . . . 2000 lbs.

Associated Equipment:
None.

Kits:
None.

APE 1042M3-MACHINE, DEBANDING



Use:
The debanding machine was developed to remove rotating bands from 57MM through 155MM projectiles.

Description:
APE 1042M3 consists of a frame, a work table, knurling wheel, electric motor, air cylinders, and controls.

Difference Between Models:
APE 1042, 1042M1, and 1042M2 had electrical controls and two separate air systems for pressure and ejector actuators. Motors, gearboxes and knurling wheels were refined throughout models. Pneumatic controls replaced electric on the APE 1042M3 and actuator air was consolidated into one system.

Tabulated Data:

APE No	10420000M3
Unit of Issue	Each
Installation Data:	
Length	51 in.
Width	68 in.
Height	54-1/2 in.
Weight	Not available

Utilities Required:
220/440 vac, 3 phase, 60 Hz, 28.5/13.5 amps; air at 80 psi and 105 cfm.

Production Capacity:
Depends on size and condition of projectile.

Shipping Data:

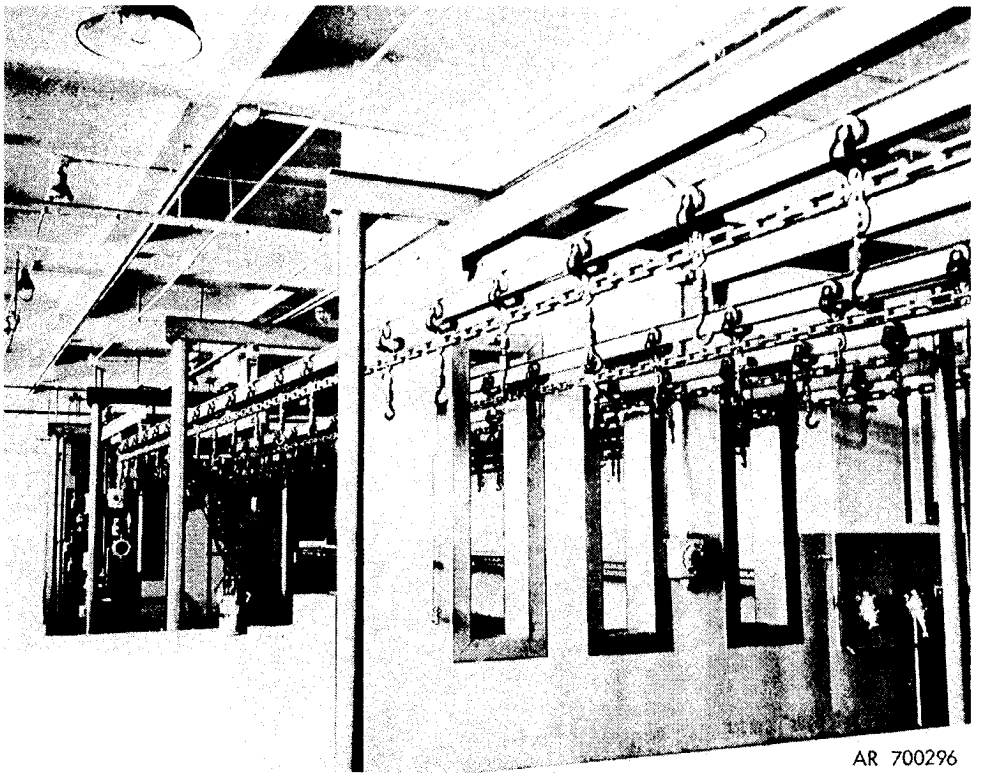
Length	Not available
Width	Not available
Height	Not available
Cube	99 cu ft
Weight	4380 lbs

Associated Equipment:
None.

Kits:

1042E001	KIT, Debanding 57MM, 3" 150 and 76MM Projectile
1042E002	KIT, Debanding 90MM Projectile and 105MM Gun Ammo
1042E004	KIT, Debanding 105MM Projectile and 106MM Rifle Ammo
1042E005	KIT, Debanding 75MM Projectile

APE 1044M1-SYSTEM, MONORAIL CONVEYOR



Use:
The monorail conveyor system was designed to convey loaded projectiles and/or fixed rounds of ammunition through required processes.

Description:
APE 1044M1 is the overhead monorail type . It is made up of monorail tracks, trolleys, conveyor chain, hooks, drive and take-up units, electrical controls and track supports. This is installed equipment requiring special layouts adaptable to various locations.

Difference Between Models:
APE 1044M1 version has a start-up safety alarm.

Tabulated Data:

APE No	10440000M1
Unit of Issue	Each

Installation Data:
Peculiar in design configuration as to each plant layout.

Utilities Required:
220/440 vac, 3 phase, 60 Hz 9/4.5 amp.

Production Capacity:
Conveyor will carry loads up to 100 pounds per lineal foot at a rate of 5 feet per minute to 20 feet per minute.

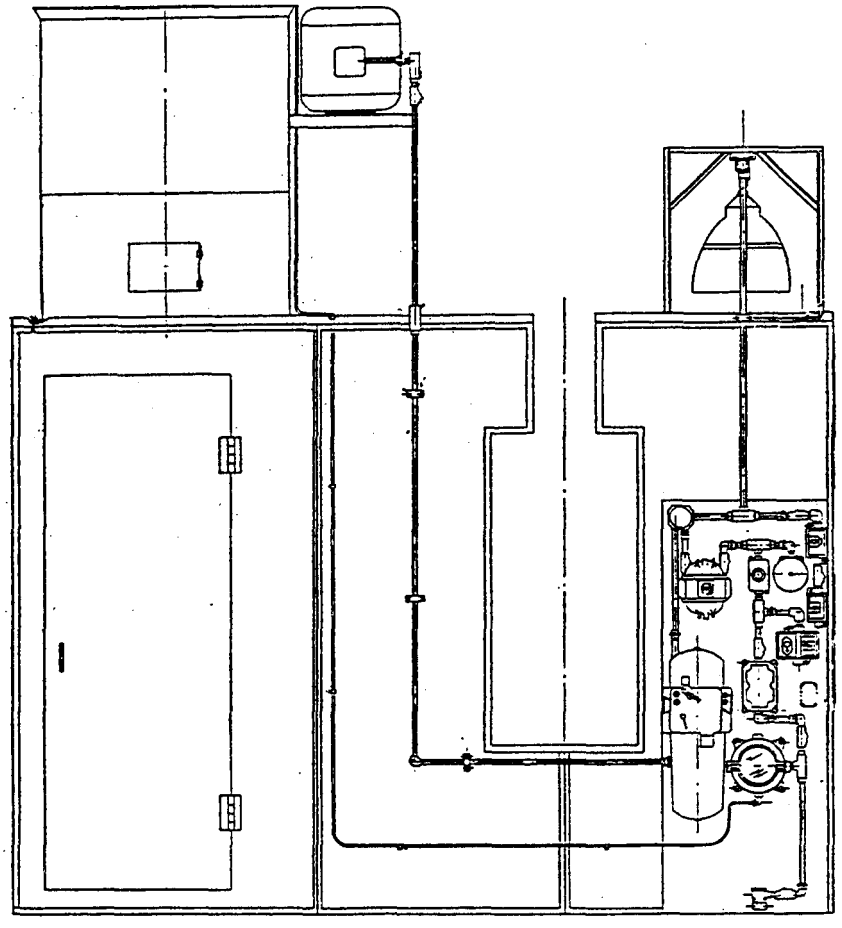
Shipping Data:
Varies by design configuration of each layout.

Associated Equipment:
APE 1045M1, 1069M1, 1070M1, 1205M1, 1214M1, 1280M1, 2168.

Kits:

None.

APE 1045M1--BOOTH, PAINT SPRAY



Use:
The paint spray booth is used in production line painting of packing materials and ammunition items.

Description:
The booth, is a floor style, self supported, dry filter type, with a 10 foot face opening. It is complete with exhaust fan system, automatic shut down control, monorail and roller conveyor openings.

Difference Between Models:
A tech data package was developed to replace original purchase description, to insure conformity of design.

Tabulated Data:
APE No 10450000M1
Unit of issue: . . . . . Each

Installation Data:
Length: . . . . . 12 ft.
Width: . . . . . 10 ft. 6 in
Height: . . . . . .9 ft. plus max
4 ft 6 in Exhaust Stack
Weight : . . . . . not available

Utilities Required:
220 VAC, 3 phase, 60 HZ,

Production Capacity:
Not applicable.

Shipping Data:
Crate 1
Length: . . . . . 124 in.
Width: . . . .52 in.
Height: . . . . . 65 in.
Cube: . . . . . not available
Weight: . . . . . not available

Crate 2

Length: . . . . . 92 in.
Width: . . . . . 61 in.
Height: . . . . . 42 in.
Cube: . . . . . not available
Weight: . . . . . not available

Crate 3

Length: . . . . . 42 in.
Width: . . . . . 42 in.
Height: . . . . . 51 in.
Cube: . . . . . not available
Weight: . . . . . not available

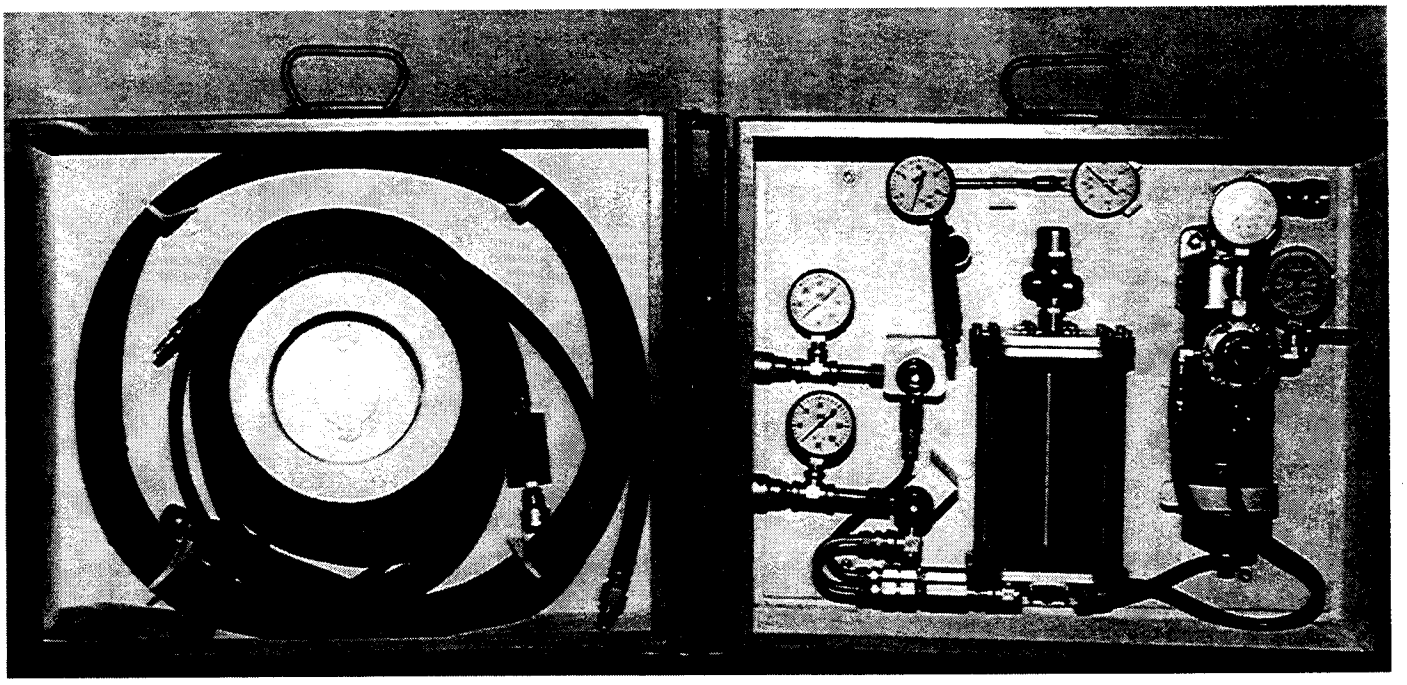
Associated Equipment:

APE 1022M1 Conveyor, Powered Belt
Ape 1044M1 System, Monorail Conveyor

Kits:

None

APE 1052M1--AIR TEST KIT



Use:
The air test kit was designed to test large metal containers for air leaks.

Description:
APE 1052M1 consists of two metal cases. the first case contains air regulators and a desiccant drying system to remove moisture from the air. The dry air is forced into a container being tested and pressure gage is used to check for constant pressure in the container for a predetermined length of time. The second case contains the necessary hoses to connect the container being tested to the compressed air source.

Difference Between Models:
The APE 1052M1 has a modification to the case to accommodate new water and oil extractor.

Tabulated Data:
(Dimensions are for one case)

APE No.	10520000M1
Unit of Issue	Each

Installation Data:

Length	25 in.
Width	11–1/2 in. with extrac–tor; 9-1/2 in. with hoses
Height	21-1/4 in.
Weight	134 lbs (case no. 1--74 lbs; case no. 2--60 lbs)

Utilities Required:
Air at 30 psi.

NOTE

Compressed bottled dry air or dry nitrogen may be utilized in lieu of air from compressor required by APE operational manual and parts list for air test kit for APE 1052M1, dtd Jan 1986. Air bottles should have regulators set between 30 and 50 psi. Use of dessicant is not required when APE 1052M1 is used in this configuration but retention of humidity indicator is recommended.

Production Capacity:
Not applicable.

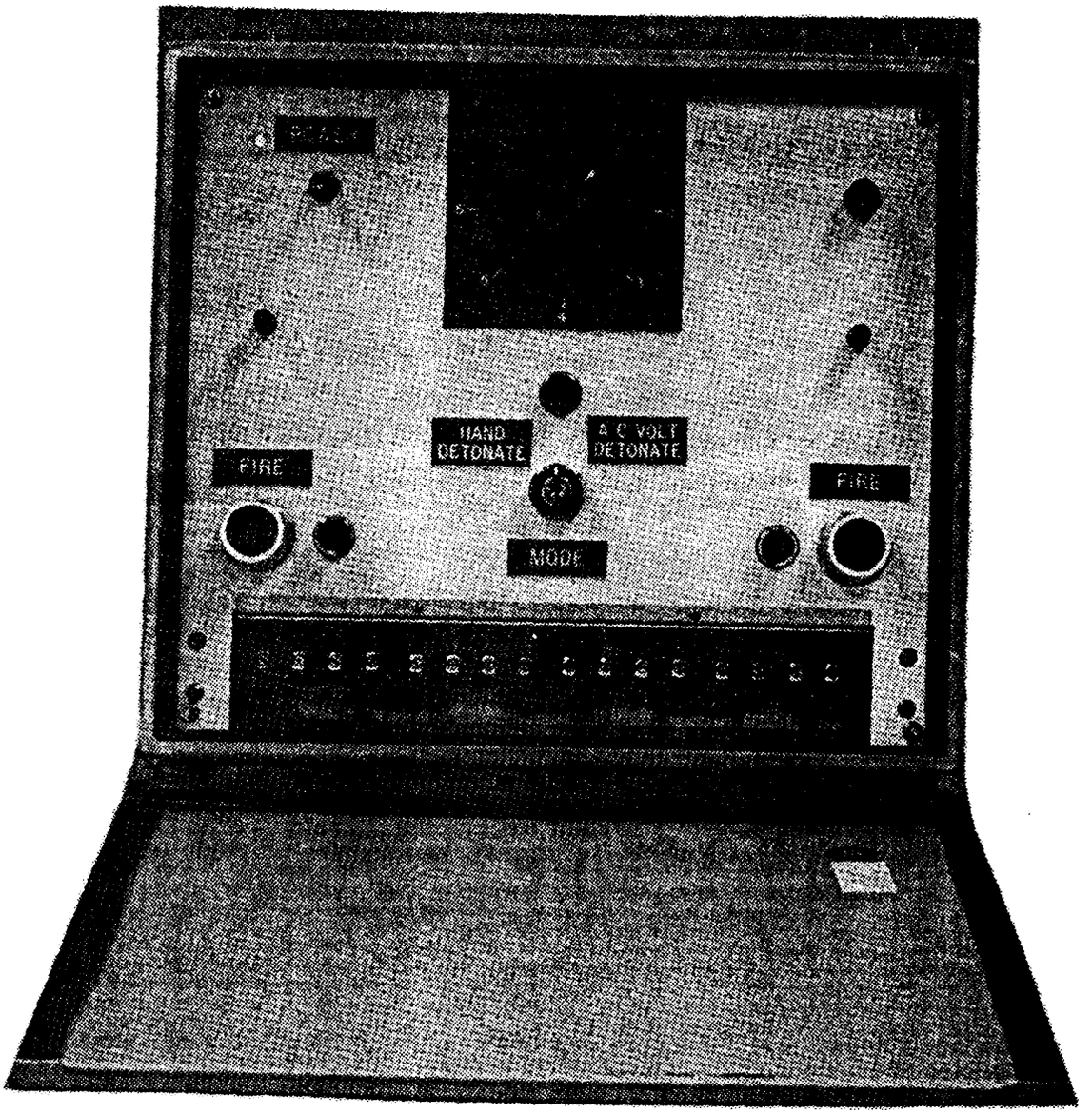
Shipping Data:

Length	28 in.
Width	21 in.
Height	25 in.
Cube	9 cu ft
Weight	190 lbs

Associated Equipment:
None.

Kits:
None.

APE 1055M3--PANEL, FIRE CONTROL



Use:
The fire control panel is designed to initiate electric blasting caps that are in direct contact with selected explosive charges in support of demil operations at approved demolition grounds.

Description:
APE 10155M3 is a moisture resistant, steel enclosure containing the necessary circuitry and electrical components needed to initiate an electric blasting cap. The panel is capable of firing in either the 110 vac mode, or a blasting machine can be attached to the binding posts to fire the blasting caps in the hand detonation mode. A numbered selector switch allows the operator to choose any one of seven firing circuits capable of firing a blasting cap. Firing circuits are designed to fire one at a time.

Difference Between Models:
APE 1055M3 has improved circuitry.

Tabulated Data:

APE No. 10550000M3
Unit of Issue . . . .Each

Installation Data:

Length . . . .14 in.
Width . . . .16 in.
Height . . . .6 in.
Weight . . . .25 lbs

Utilities Required:

110 vac, 60 Hz
None if M32 Blasting Machine is used.

Production Capacity:

Not applicable.

Shipping Data:

Length . . . . . 14 in.
Width . . . . . 16 in.
Height . . . . . 6 in.
Cube . . . . . 0.8 cu ft
Weight . . . . . 25 lbs

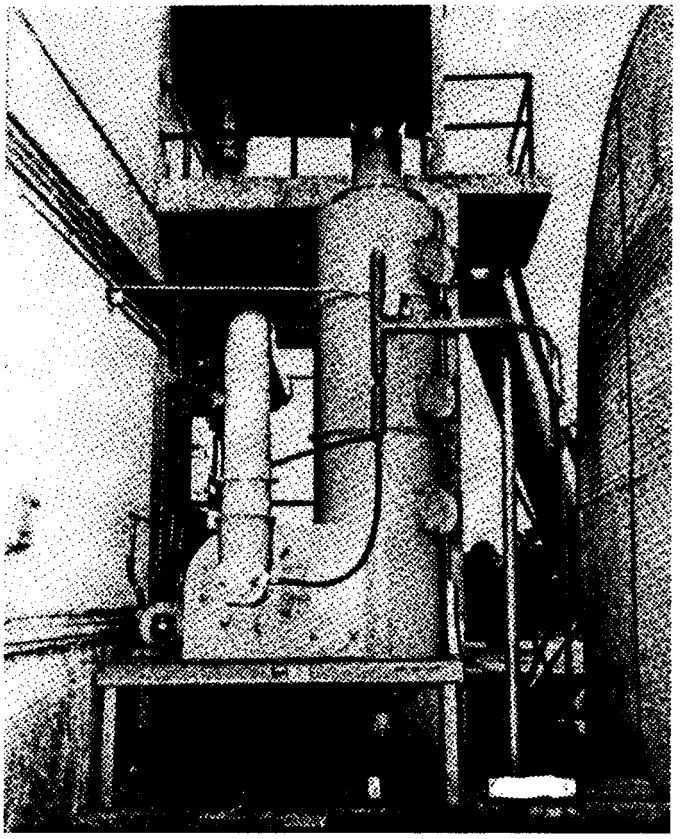
Associated Equipment:

None.

Kits:

None.

APE 1061--COLLECTOR, DUST AND TNT



Use:
The dust and TNT collector is used to collect air entrained TNT dusts, having a specific gravity of 1.62 from areas where maximum allowable concentration of dusts must be below 1.5 milligrams per cubic meter for an 8 hour work day.

Description:
Not available.

Difference Between Models:
Original design.

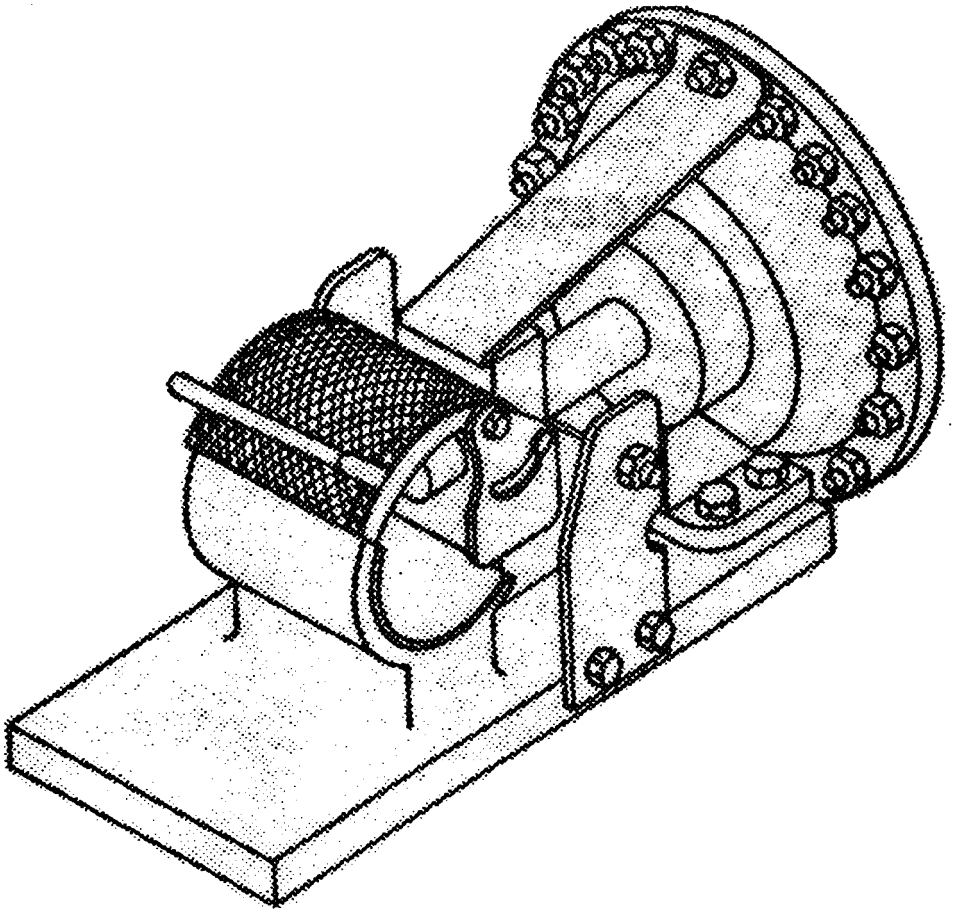
Tabulated Data:
APE No. 10610000
Unit of Issue . . . .Each
Installation Data:
Length . . . .87 in.
Width . . . .71 in.
Height . . . .166 in.
Weight . . . . . 2500 lbs
Utilities Required:
220/440 vat, 60 Hz, 3 phase, 22/11 amps. Water at 60 psi and 20 gpm.
Production Capacity:
3,000 cfm.

Shipping Data:
Length . . . . . 98 in.
Width . . . . . 84 in.
Height . . . . . 181 in.
Cube . . . . . 862 cu ft
Weight . . . . . 3040 lbs

Associated Equipment:
APE 1300M1.

Kits:
None.

APE 1065--VISE, PNEUMATIC



Use:
The pneumatic vise is used to hold ammunition items for assembly and disassembly. Sizes range from 37MM through 120MM. It is also used to compress the fuze head on M204A1 grenade fuzes.

Description:
APE 1065 consists of a frame with an air brake chamber mounted on the frame. A bushing is assembled to the pushrod of the air brake.

Difference Between Models:
Original design.

Tabulated Data:

APE No. 10650000
Unit of Issue . . . . . Each
Installation Data:
Length . . . . . 17-5/16 in.
Width . . . . . 9-9/16 in.
Height . . . . . 9-1/2 in.
Weight . . . . . 72 lbs
Utilities Required:
Air at 80 psi and 81 cfm.
Production Capacity:
Not applicable.

Shipping Data:

Length	26 in.
Width	15 in.
Height	14 in.
Cube	1.8 cu ft
Weight	90 lbs

Associated Equipment:

None.

Kits:

1065E001 KIT, Device, Compression for M204A1 Grenade Fuze Head

1065E002 KIT, Secure 37MM: M51B1A1, M54, M54A1, M55A1, M59, M63

1065E003 KIT, Secure 40MM; M81A1

1065E004 KIT, Secure 3.5-Inch Rocket

1065E005 KIT, Secure 75MM: M48, M64, T65E11, M66, M88A1, M309, M309A, M309A1, M311, M311A1, M334, M349

1065E006 KIT, Secure 76MM & 3“/50: M42A1, M62, M62A1, M93A1, M166E2, M312, M312B1, M315, M339, M340A1, M352, M361, 3“/50 (All MKS & MODS)

1065E007 KIT, Secure 90MM: M33, M71, M77, T91, T142E5, M304, M304A1, M313, M317A2, M318A1, M332, M333, M336, M353, M382

1065E008 KIT, Secure 105MM: M1, M45, M60, M84B1, M84BE, T139E44, M314A2B1, M324, M325, M326, M327, M328, M360, 4.2 in. M329

1065E009 KIT, Secure 60MM: M49A2, M50A2

1065E010 KIT, Secure 81MM: M43A1

1065E011 KIT, Secure 120MM: T15E1, T16E1, M61A1, M73, T115E3, T116E6, T147E5, M358, M359

1065E012 KIT, Secure 57MM: T18E1, M303, M307, M307A1

1065E013 KIT, Secure 81MM: M57, M362

1065E015 KIT, Remove Boom Adapter from Boom Assembly of 90MM: M371

1065E016 KIT, Safety Guard

1065E017 KIT, Remove Boom Adapter from Boom Assembly of 105MM: M341 Cartridge

1065E018 KIT, Secure 2.75 In. MK2, MK(18 HEAT Rocket

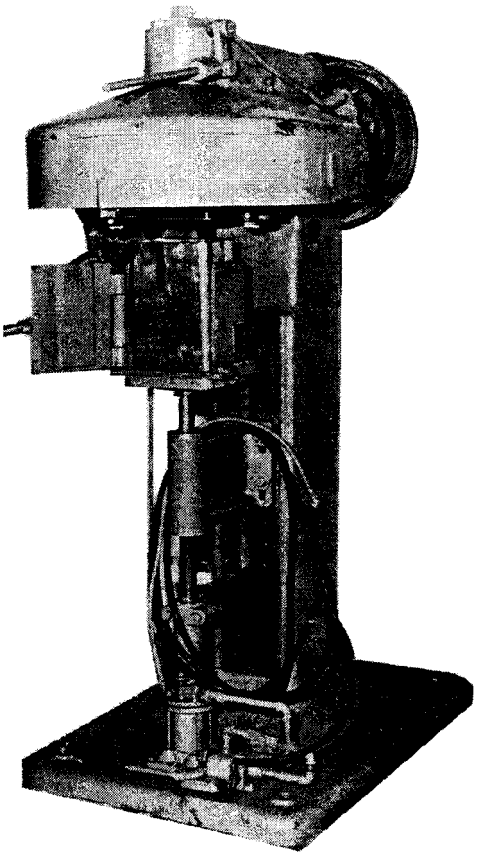
1065E019 KIT, Secure 2.75 In. MK4 MOD O Rocket

1065E020 KIT, Secure 2.75 In. Rocket Motor

1065E021 KIT, Secure 120mm Projectile

1065E049 KIT, Accessory, M72 Rocket, 66MM, Heat Round

APE 1066-CAN SEALING MACHINE



Use:
The can sealing machine is used to hermetically seal M20 and M21 containers opened during surveillance cyclic and special inspections and small arms production line sealing operations.

Description:
Not available.

Difference Between Models:
Original design.

Tabulated Data:

APE No	10660000
Unit of Issue	Each

Installation Data:

Length	48 in.
Width	36 in.
Height	72 in.
Weight	2250 lbs

Utilities Required:
220/440 vac, 60 Hz, 3 phase, 9/4.5 amps.

Production Capacity:
Not available.

Shipping Data:

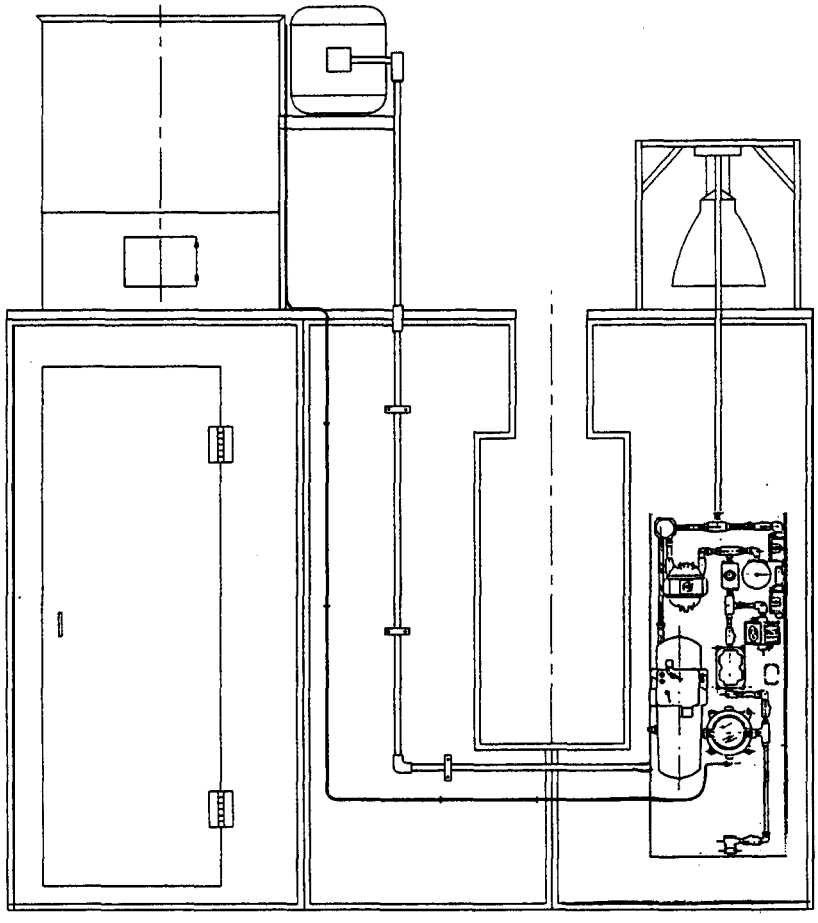
Length	Not available
Width	Not available
Height	Not available
Cube	Not available
Weight	Not available

Associated Equipment:
None.

Kits:

None.

APE 1069M1--BOOTH, PAINT SPRAY



Use:
The paint spray booth is used in production line painting of packing materials and ammunition items.

Description:
The booth, is a floor style, self supported, dry filter type, with a 7 foot face opening. It is complete with exhaust fan system, automatic shut down control, monorail and roller conveyor openings.

Difference Between Models:
A Tech Data Package was developed to replace original purchase description, to insure conformity of design.

Tabulated Data:

APE No	10690000M1
Unit of issue:	Each

Installation Data:

Length:	12 ft.
Width:	7 ft. 6 in.
Height:	9 ft. plus max
	4 ft. 6 in. Exhaust Stack
Weight:	not available

Utilities Required:
220/440 VAC, 3 phase, 60 HZ,

Production Capacity:
Not applicable.

Shipping Data: (Approximately)
Crate 1

Length:	103 in.
Width:	66 in.
Height:	55 in.
Cube:	217 cu ft.
Weight:	1950 lbs.

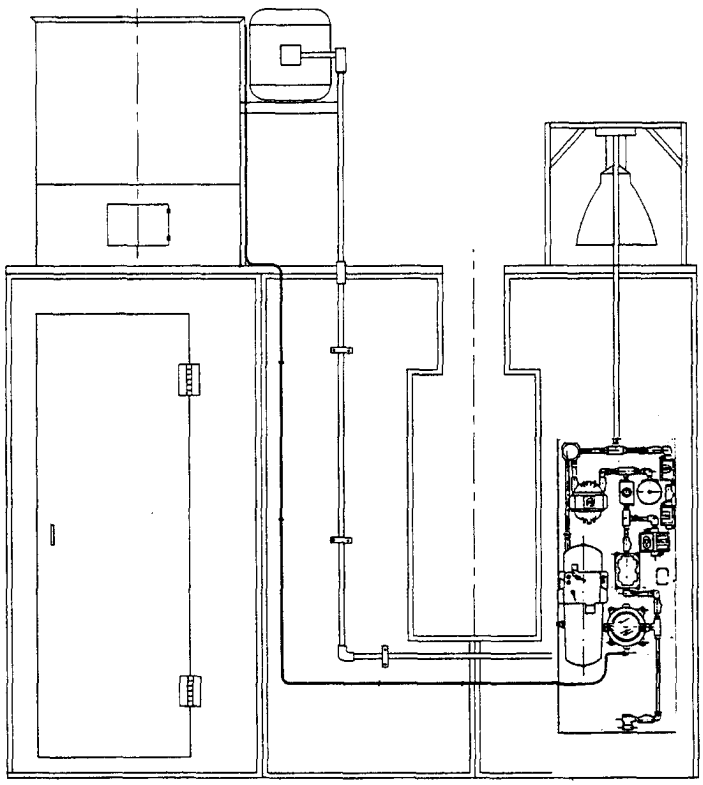
Crate 2 (Approximately)
- Length: . . . . . 78 in.
- Width: . . . . . 35 in.
- Height: . . . . . 50 in.
- Cube: . . . . . 79 cu. ft.
- Weight: . . . . . 700 lbs.

Crate 3 (Approximately)
- Length: . . . . . 96 in.
- Width: . . . . . 48 in.
- Height: . . . . . 53 in.
- Cube: . . . . . 142 cu. ft.
- Weight: . . . . . 825 lbs.

Associated Equipment:
- APE 1022M1 Conveyor, Powered Belt
- Ape 1044M1 System, Monorail Conveyor

Kits:
- None

APE 1070M1--BOOTH PAINT SPRAY



Use:
The paint spray booth is used in production line painting of packing materials and ammunition items.

Description:
The booth, is a floor style, self supported, dry filter type, with a 12 foot face opening. It is complete with exhaust fan system, automatic shut down control, monorail and roller conveyor openings.

Difference Between Models:
A Tech Data Package was developed to replace original purchase description, to insure conformity of design.

Tabulated Data:
APE 10700000M1
Unit of issue: . . . . . Each

Installation Data:
Length: . . . . . 12 ft.
Width: . . . . . 12 ft. 6 in.
Height: . . . . . 9 ft. plus max
4 ft. 6 in. Exhaust Stack
Weight: . . . .Not available.

Utilities Required:
220 VAC, 3 phase, 60 HZ,

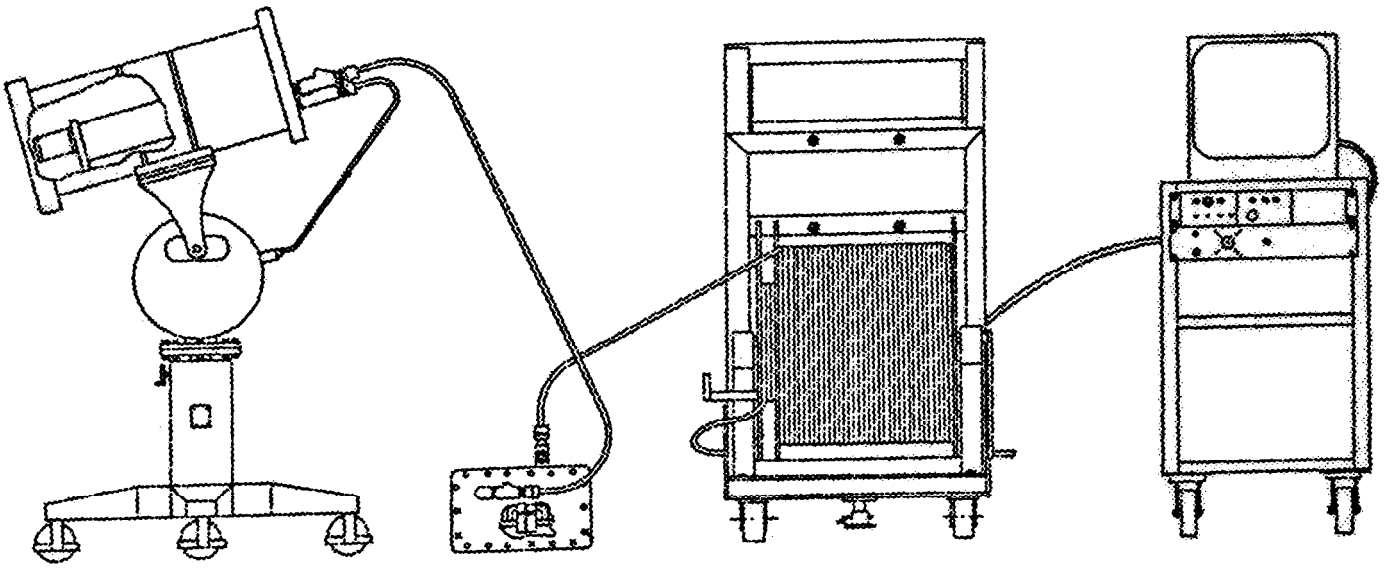
Production Capacity:
Not applicable.

Shipping Data: (Approximately)
Length: . . . . . Not available
Width: . . . . Not available
Height: . . . . . Not available
Cube: . . . . . Not available
Weight: . . . . . Not available

Associated Equipment:
APE 1022M1 Conveyor, Powered Belt
Ape 1044M1 System, Monorail Conveyor

Kits:
None

APE 1072M3--CLOSED CIRCUIT TELEVISION SYSTEM FOR HAZARDOUS ENVIRONMENTS



Use:
The closed circuit television is used to view hazardous operations performed in a remote area.

Description:
APE 1072M3 consists of the following major assemblies:

A camera assembly made up of a closed circuit television camera with zoom lens, (encased in an explosion proof housing) and a pan/tilt unit, which are mounted on a camera dolly.

A cable cart assembly with cable reel, casters and foot operated floor lock.

A monitor assembly consisting of a television monitor, power source, camera controls, pan/tilt unit controls, and zoom lens controls. All components are located on shelves of a cart type dolly.

Difference Between Models:
The APE 1072M2 reflects a change in vendors. The original vendor listed as suggested source of supply for APE 1072 went out of business. All provisions of the APE 1072M1 model remain the same. The APE 1072M3 reflects system procured by purchase description.

Tabulated Data:

APE No 10720000M3
Unit of Issue . . . .Each

Installation Data:

CAMERA ASSEMBLY

Length . . . . . 42 in.
Width . . . .42 in.
Height . . . . . 60 to 78 in.
Weight . . . . . .282 lbs
Floor space . . . . . 12-1/4 sq ft

CABLE CART ASSEMBLY

Length . . . . . .31 in.
Width . . . . . 34 in.
Height . . . . . 51 in.
Weight . . . . . 430 lbs
Floor space . . . . . 7-1/3 sq ft

MONITOR ASSEMBLY

Length . . . . . 21-1/2 in.
Width . . . . . 26 in.
Height . . . . . 50-1/2 in.
Weight . . . . . 120 lbs
Floor space . . . . . 3-9/10 sq ft

Utilities Required:

115 vac, 60 Hz, 10 amp.

Production Capacity:

Not applicable.

Shipping Data:

CAMERA ASSEMBLY

Length . . . . . 55 in.
Width . . . . . 43 in.
Height . . . . . 55 in.
Cube . . . . . 75.27 cuft
Weight . . . . . 410 lbs

CABLE CART ASSEMBLY

Length . . . . . 53 in.
Width . . . . . .38 in.
Height . . . . . 53 in.
Cube . . . . . 61.27 cu ft
Weight . . . . . 758 lbs

MONITOR*

Length . . . . . 15 in.
Width . . . . . 18 in
Height . . . . . 15 in.
Cube . . . . . Not available
Weight . . . . . 55 lbs

NOTE

*Shipping weight shown for monitor only and does not include the monitor dolly.

*Total shipping weight may vary slightly due to difference in manufacturers.

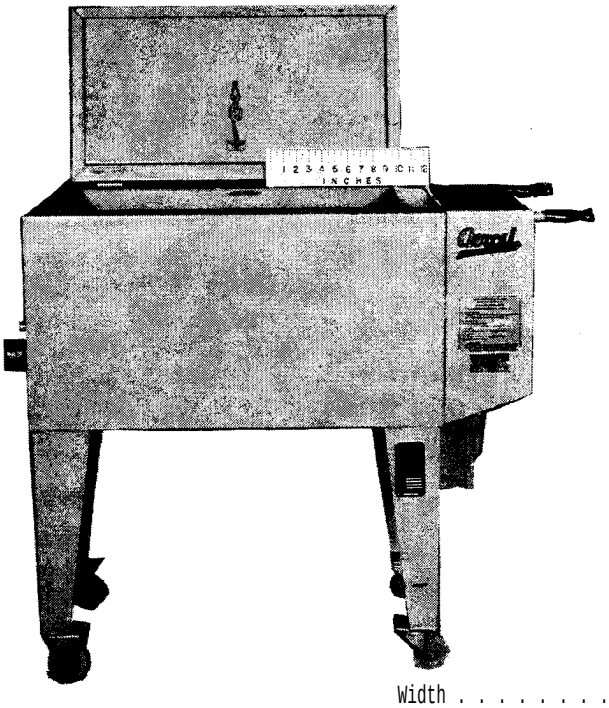
Associated Equipment:

None.

Kits:

None.

APE 1086–TANK, HOT DIP, PORTABLE



Use:
The portable hot-dip tank is used to melt and keep in a molten state compounds for sealing wrappings and packages.

Description:
APE 1086 is an electrically heated tank on wheels. It has a lid with fusable link so that it automatically closes if a fire should break out. Dual thermostats are provided. Tank inside dimensions are 12″ wide x 24″ long x 12″ deep.

Difference Between Models:
Original design.

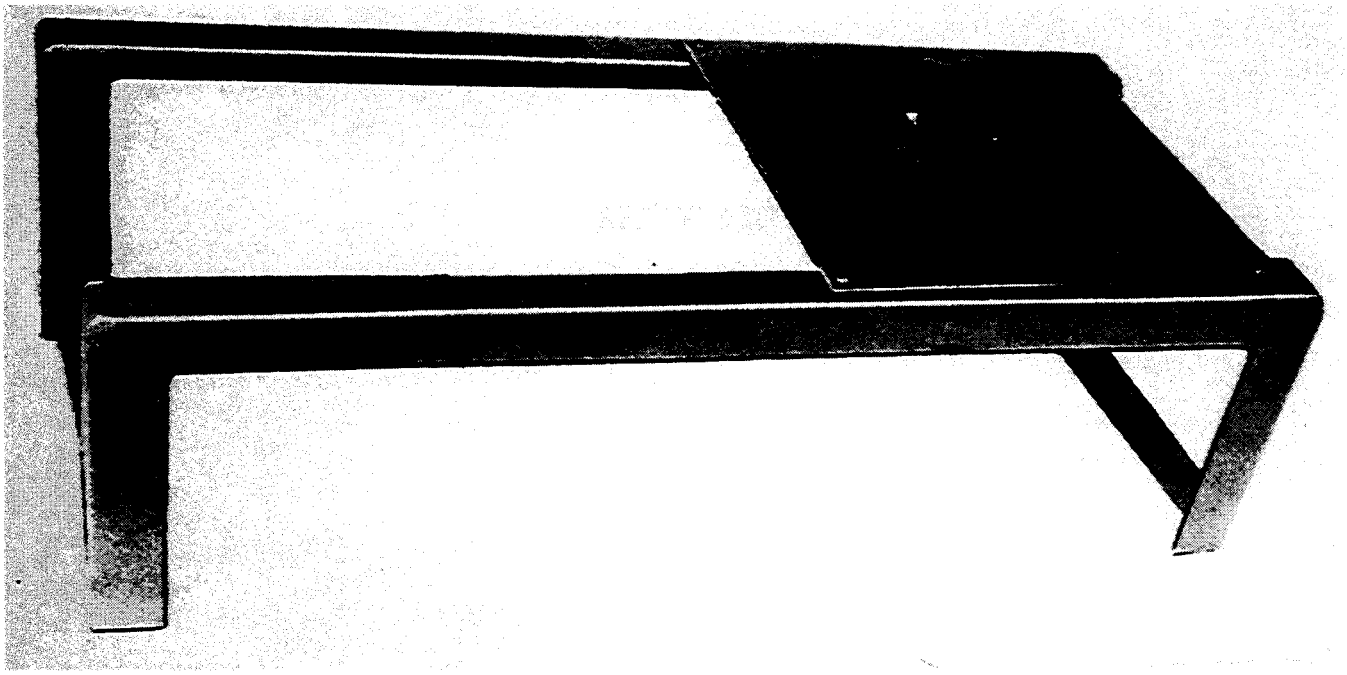
Tabulated Data:
APE No. 10860000
Unit of Issue . . . . . Each
Installation Data:
Length . . . . . 40 in.
Width . . . . . 18 in.
Height . . . . . 36 in.
Weight . . . . . 275 lbs
Utilities Required:
208/240 vac, 3 phase, 60 Hz, 30/15 amp.
Production Capacity:
Not applicable.

Shipping Data:
Length . . . . . 47 in.
Width . . . . . 22 in.
Height . . . . . 41 in.
Cube . . . . . 24.5 cu ft
Weight . . . . . 312 lbs

Associated Equipment:
None.

Kits:
None.

APE 1099--DECLIPPER HAND, EIGHT ROUND



Use:
The hand declipper is used to remove caliber .30 & 7.62MM cartridges from eight round clips by hand operation.

Description:
The declipper consists of a frame with a slot for the clipped cartridges. Below the slot is a group of metal fingers which spread the clip apart as it is pressed down which releases the cartridges

Difference Between Models:
Original design

Tabulated Data:
- APE No 10990000
- Unit of issue: . . . . . Each

Installation Data:
- Length: . . . . . 17 in.
- Width: . . . . . 7-1/2 in.
- Height: . . . . . 5-1/2 in.
- Weight: . . . . . 5-1/2 lbs

Utilities Required:
None

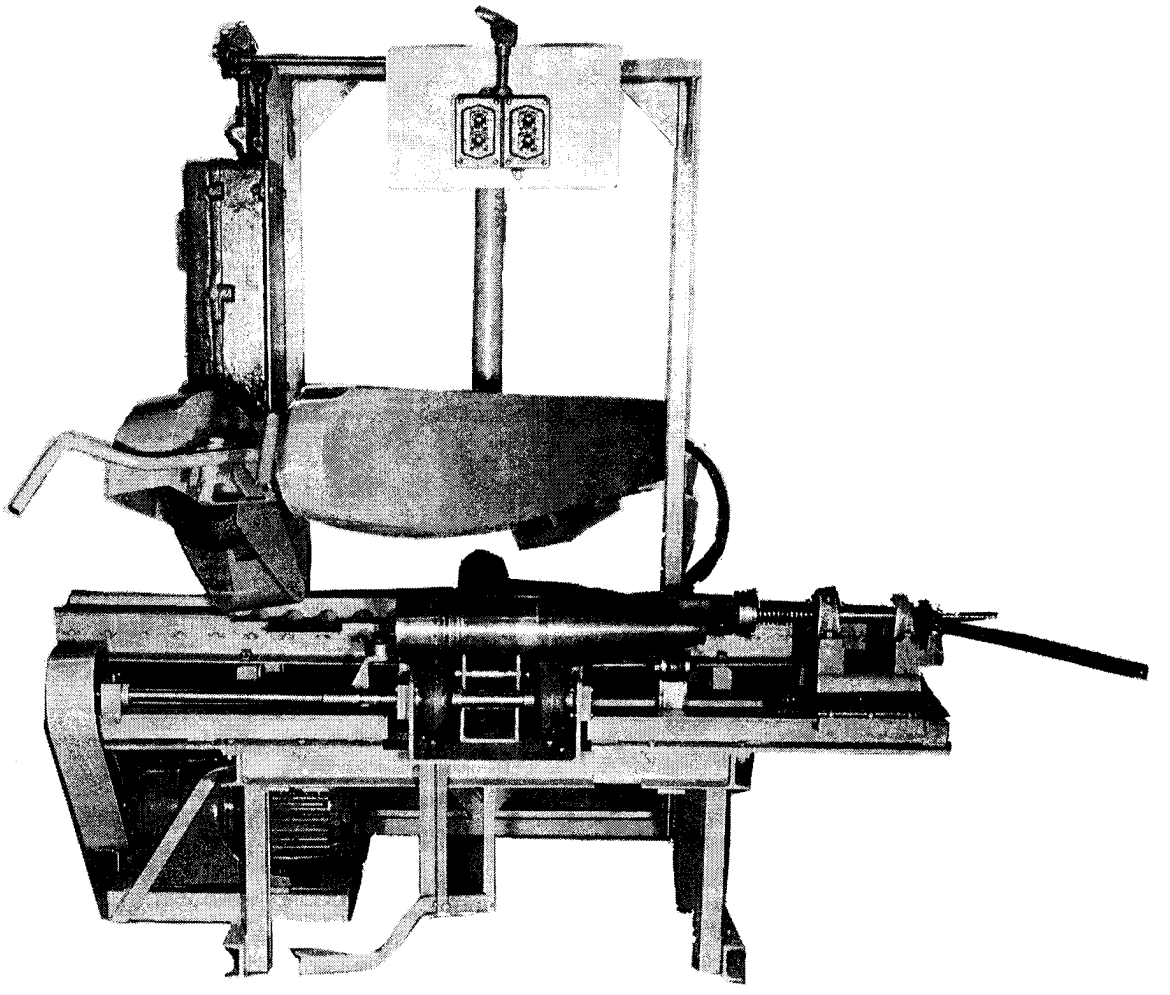
Production Capacity:
16 clips per minute (128 cartridges per minute)

Shipping Data:
- Length: . . . . . 17 in.
- Width: . . . . . 8 in.
- Height: . . . . . 6 in.
- Cube: . . . . . 4 cu. ft.
- Weight: . . . . . 8 lb

Associated Equipment:
None

Kits:
None

APE 1105M2--MACHINE, SWING BRUSH



Use:
The swing brush machine is used to clean and derust projectiles through 240MM and cartridge storage cases. The cartridge storage cases are 75MM M173, 90MM M159, 155MM M13, M14 and MK1, and 8 inch M18 and M19.

Description:
APE 1105M2 consists of a frame, projectile rotating assembly, a power driven wire brush or abrasive wheel/disc, suspended above the projectile rotating assembly.

Difference Between Models:
The APE 1105M2 has improved safety features and has a water holding tank that is permanently mounted under the machine to hold and recycle coolant water being used in operations utilizing the abrasive wheel.

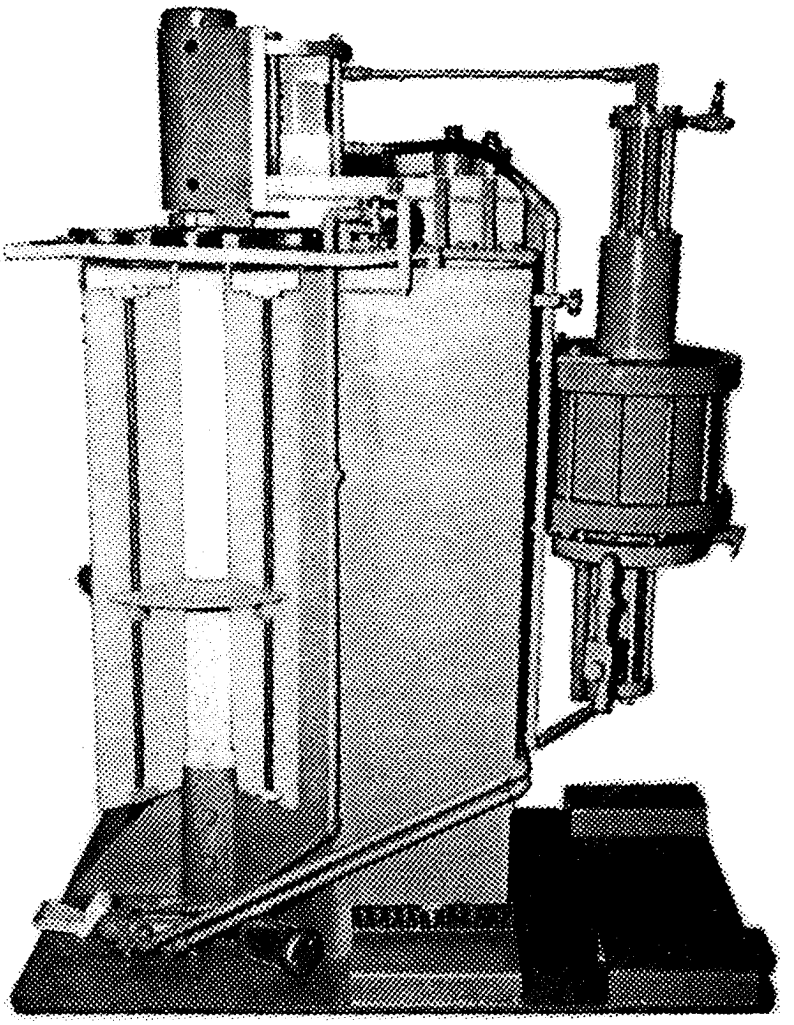
Tabulated Data:
APE No. 11050000M2
Unit of Issue . . . .Each
Installation Data:
Length . . . .72 in.
Width . . . .72 in.
Height . . . .74 in.
Weight . . . .1800 lbs
Utilities Required:
220/440 vac, 60 cycle, 3 phase, 18.5/9.3 amp.
Production Capacity:
Depends on size and condition of item being cleaned or derusted.

Shipping Data:
Length . . . .83 in.
Width . . . . . 83 in.
Height . . . . . 88 in.
Cube . . . . . 350.8 cuft
Weight . . . . . 2200 lbs

Associated Equipment:
None.

Kits:
1105E001 KIT, Derust, 75MM thru 155MM Projectiles
1105E002 KIT, Derust 8 Inch thru 240MM Projectiles
1105E003 KIT, Derust Cartridge Storage Cases 75MM thru 8 Inch
1105E004 KIT, Dust Collector

APE 1106 M1--MACHINE, PRIME AND DEPRIME



Use:
The prime and deprime machine is used to deprime 37MM through 106MM cartridge cases with screw and press type primers prior to cartridge case salvage; deprime 37MM through 106MM cartridge cases with press type primers prior to repriming; and press type primers into 37MM through 106MM cartridge cases.

Description:
APE 1106M1 consists of a steel barricade, a four station index turntable, an air–hydraulic unit which supplies the power to operate the punch cylinder, and a series of valves and controls to operate the machine.

Difference Between Models:
The APE 1106M1 machine has new parts added and different part numbers.

Tabulated Data:

APE No	11060000M1
Unit of Issue	Each
Installation Data:	
Length	36 in.
Width	54 in.
Height	71 in.
Weight	3120 lbs
Utilities Required:	
Air at 100 psi and 105 cfm.	
Production Capacity:	
Dependent on operation being performed.	

Shipping Data:
- Length . . . . . 60 in.
- Width . . . . . 48 in.
- Height . . . . . 84 in.
- Cube . . . . . 140 cu ft
- Weight . . . . . 3370 lbs

Associated Equipment:
APE 2178.

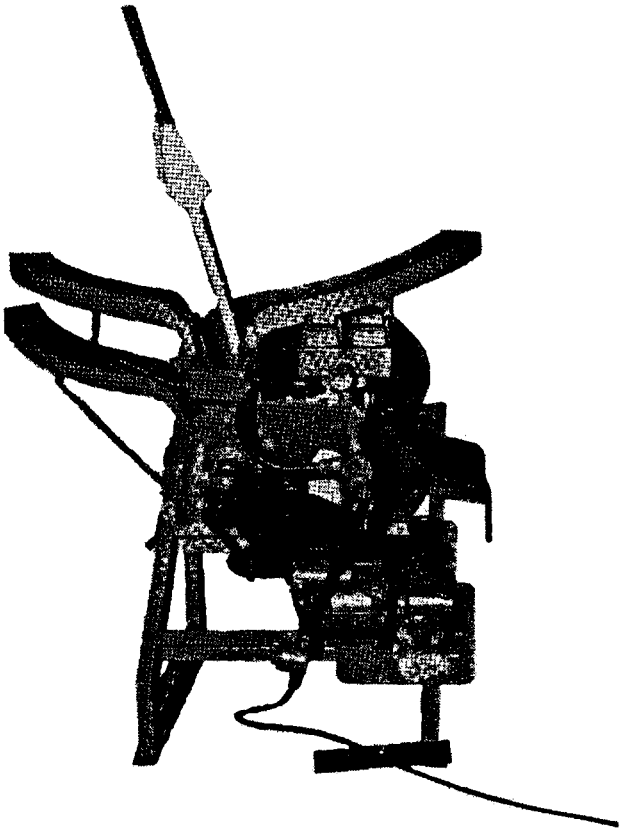
Kits:

1106E001	KIT, Repair Power Pack
1106E003	KIT, Prime or Deprime 37MM: M17 Cartridge Cases
1106E004	KIT, Prime or Deprime 37MM: M16, MK1, and MK2 Cartridge Cases
1106E005	KIT, Prime or Deprime 40MM: M25 Cartridge Cases
1106E006	KIT, Prime or Deprime 57MM: M30 Cartridge Cases
1106E007	KIT, Prime or Deprime 57MM: M23, 75MM: M35, or 76MM: M26 Cartridge Cases
1106E008	KIT, Prime or Deprime 75MM: M5, M9, or M18 Cartridge Cases
1106E009	KIT, Prime or Deprime 75MM; M31, 76MM: M88 or M101 Cartridge Cases
1106E010	KIT, Prime or Deprime 90MM: M19, M27, or M108; 105MM: M32, M90, or M95; 106MM: M93 or M94 Cartridge Cases
1106E011	KIT, Prime or Deprime 105MM: M14 or M15 Cartridge Cases
1106E013	KIT, Prime or Deprime 3-Inch: MK7 , MOD 0 Cartridge Cases

NOTE

KITS are interchangeable with APE 1229 KITS.

APE 1114--LINK-DELINK MACHINE, 7.62MM



Use:
The link-delink machine is used to link and/or delink 7.62MM cartridges from M13 links . Machine is capable of handling straight or ratio pack ammunition. Ratio pack or ratio replacement must be in a sequence of five.

Description:
APE 1114 is a drum type link-delink machine. It consists of a frame, drum, ejector rods, a link feed chute assembly, a cartridge feed assembly with three cartridge feed trays, and an electric motor.

Difference Between Models:
Original design.

Tabulated Data:
- APE No. 11140000
- Unit of Issue . . . . . Each

Installation Data:
- Length . . . . . 40 in.
- Width . . . . . 50 in.
- Height . . . . . 60 in.
- Weight . . . . . 624 lbs

Utilities Required:
115/230 vac, single phase, 60 Hz, 5.2/2.6 amps.

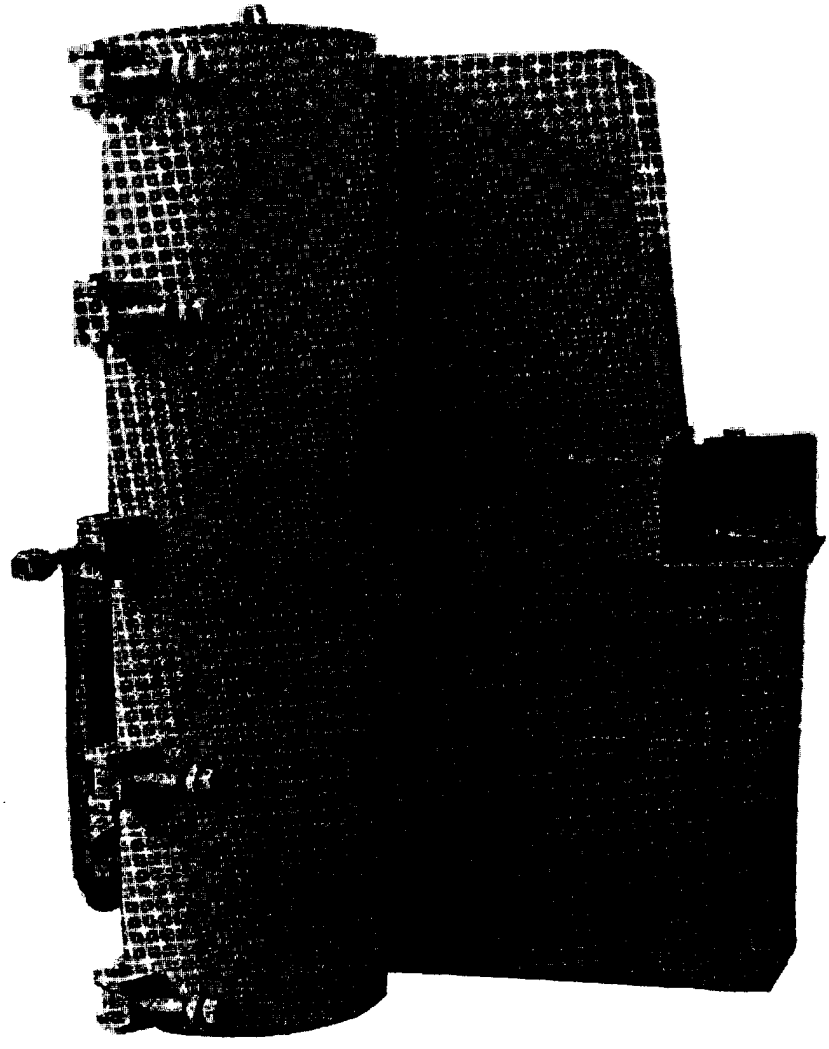
Production Capacity:
300 cartridges per minute.

Shipping Data:
- Length . . . . . 64 in.
- Width . . . . . 41 in.
- Height . . . . . 57 in.
- Cube . . . . . 88.6 cu ft
- Weight . . . . . 824 lbs

Associated Equipment:
None.

Kits:
1114E001 KIT, Blank Adapter

APE 1118M2--MACHINE, FUZE DISASSEMBLY



Use:
The fuze disassembly machine is used to remove the booster assembly from artillery and mortar fuzes. Operation is completely shielded.

Description:
APE 1118M2 consists of an operational shield, an indexing turntable, a drive head assembly, and an air motor with necessary control for manual and automatic operation.

Difference Between Models:
The APE 1118M2 model of the machine has a completely enclosed shield and machine mechanism mounted on tracks for removal from shield.

Tabulated Data:

APE No.	11180000M2
Unit of Issue	Each
Installation Data:	
Length	57 in.
Width	34-1/4 in.
Height	89-5/8 in.
Weight	2525 lbs

Utilities Required:
Air at 90 psi and 150 cfm.
Production Capacity:
3000 fuzes per 8 hour shift.

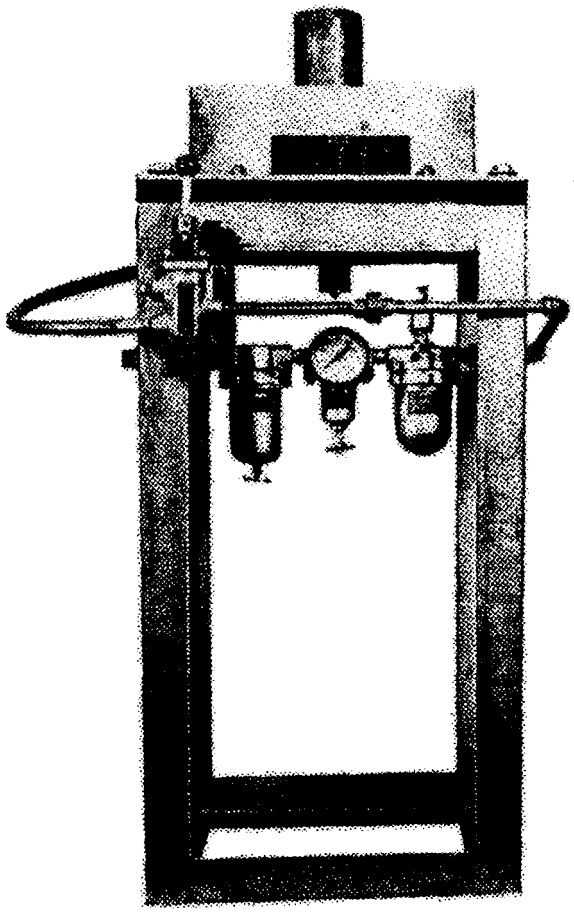
Shipping Data:
Length . . . .59 in.
Width . . . .51 in.
Height . . . .102 in.
Cube . . . .204 .7 cu ft
Weight . . . .3040 lbs

Associated Equipment:
None.

Kits:

1118E001	KIT, Remove Booster from Fuzes AN M103, M139, M140, M163, M164, M165, and M167
1118E002	KIT, Remove Head from Fuze PD M52A2 60MM and 81MM Mortar
1118E003	KIT, Remove Booster from Fuze, M145
1118E004	KIT, Remove Booster from Fuzes, M110, M158, and M193
1118E005	KIT, Remove Booster from Fuzes, M120 and M170
1118E006	KIT, Remove Booster from Fuzes, M147 and M155
1118E007	KIT, Remove Booster from Fuze: M52
1118E010	KIT, Remove Bottom Closing Screw Assembly from Fuze: M78 CP
1118E011	KIT, Remove and Replace Bottom Closing Screw of Fuze: M48, M51 and M500
1118E012	KIT, Remove Booster from Fuze: M51A5, M500, M502A1, M508, and M518
1118E013	KIT, Separate Booster Cup from M21A4 Booster Assembly
1118E016	KIT, Remove Fuze Body from Fuze Head, M62 BD Fuze
1118E017	KIT, Remove Auxiliary Booster from M90 PD Fuze
1118E018	KIT, Remove M41 Detonator Assembly from M404A2 Fuze
1118E019	KIT, Remove Detonator Cap Housing from M404A1 Fuze
1118E020	KIT, Remove Booster from Fuze: M524

APE 1123--DEVICE, SHAKER, BLACK POWDER



Use:
The black powder shaker device is used to level the black powder in 75 MM, 76MM, 90MM, and 105MM blank cartridges prior to inserting the retaining disk.

Description:
APE 1123 consists of a frame, a pneumatic shaker, and a control valve.

Difference Between Models:
Original design.

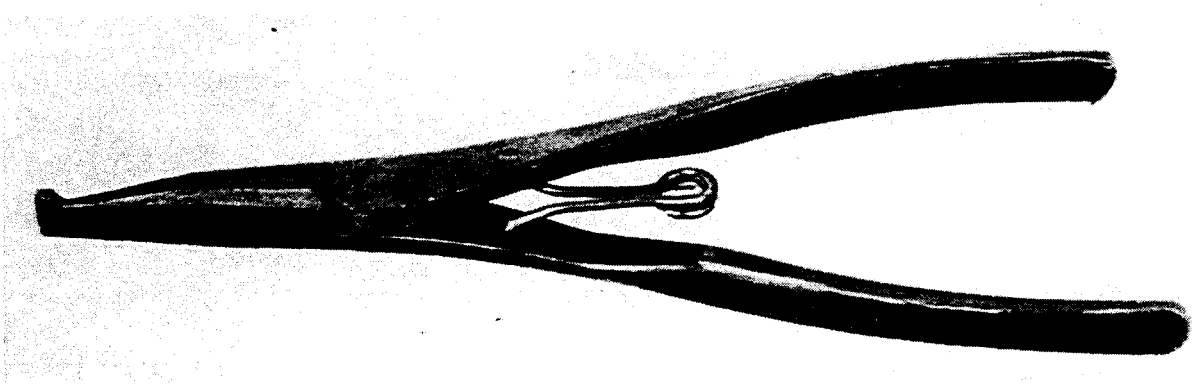
Tabulated Data:
APE No. 11230000
Unit of Issue . . . .Each
Installation Data:
Length . . . .21-3/4 in.
Width . . . .13-3/4 in.
Height . . . . . 35-1/2in.
Weight . . . . . 400 lbs
Utilities Required:
Air at 80 psi and 80 cfm.
Production Capacity:
600 cartridges per hour.

Shipping Data:
Length . . . . . 24 in.
Width . . . . . 16 in.
Height . . . . . 40 in.
Cube . . . . . 9 cu ft
Weight . . . . . 475 lbs

Associated Equipment:
None.

Kits:
None.

APE 1124--TOOL, RETAINER RING EXPANDER



Use
The retainer ring expander tool is used to expand and remove retainer rings from M6 and M15 mines.

Description:
The tool is a commercial type plier for expanding retainer rings

Difference Between Models:
Original design.

Tabulated Data:
APE No 11240000
Unit of issue . . . . . Each

Installation Data:
Length: . . . . . 8-3/16 in.
Width: . . . . . 2-1/8 in.
Height: . . . . . 3/8 in.
Weight: . . . . . 1/4 lb.

Utilities Required:
None

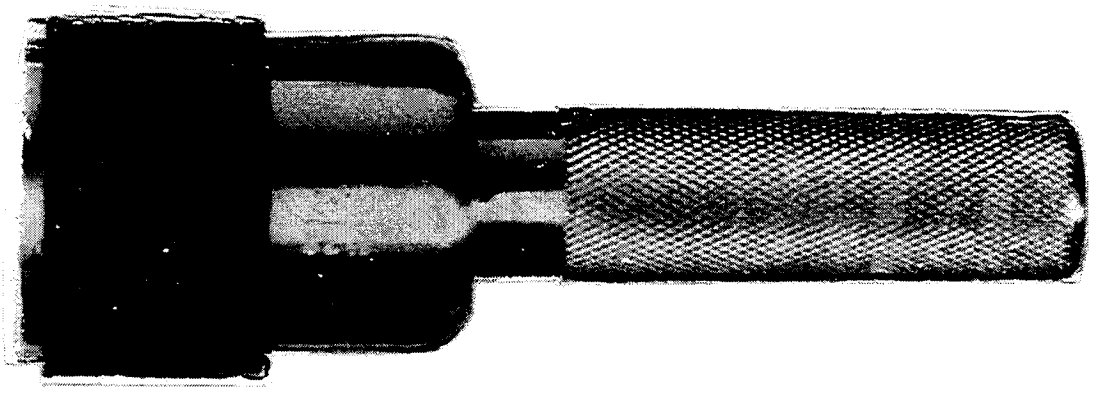
Production Capacity:
Not applicable.

Shipping Data:
Length: . . . . . 9 in.
Width: . . . . . 3 in.
Height: . . . . . 1 in.
Cube: . . . . . 27 cu. in.
Weight: . . . . . 1 lb.

Associated Equipment:
None

Kits:
None

APE 1128M1--WRENCH, FUZEWELL LINER



Use:
The fuzewell liner wrench is used to assemble or remove screw type fuzewell liners from projectiles. It can be used with an impact wrench

Description:
The wrench consists of a handle or shaft, a rubber gripper, and the hardware which assembles the parts together.

Difference Between Models:
The basic wrench has a rubber collar which expands when turned counterclockwise. The M1 model has a solid rubber collar

Tabulated Data:
- APE No 11280000
- Unit of issue: . . . . . Each

Installation Data:
- Length: . . . . . 5 in.
- Width: . . . . . .2 in.
- Height: . . . . . .2 in.
- Weight: . . . . . .2 lbs

Utilities Required:
None

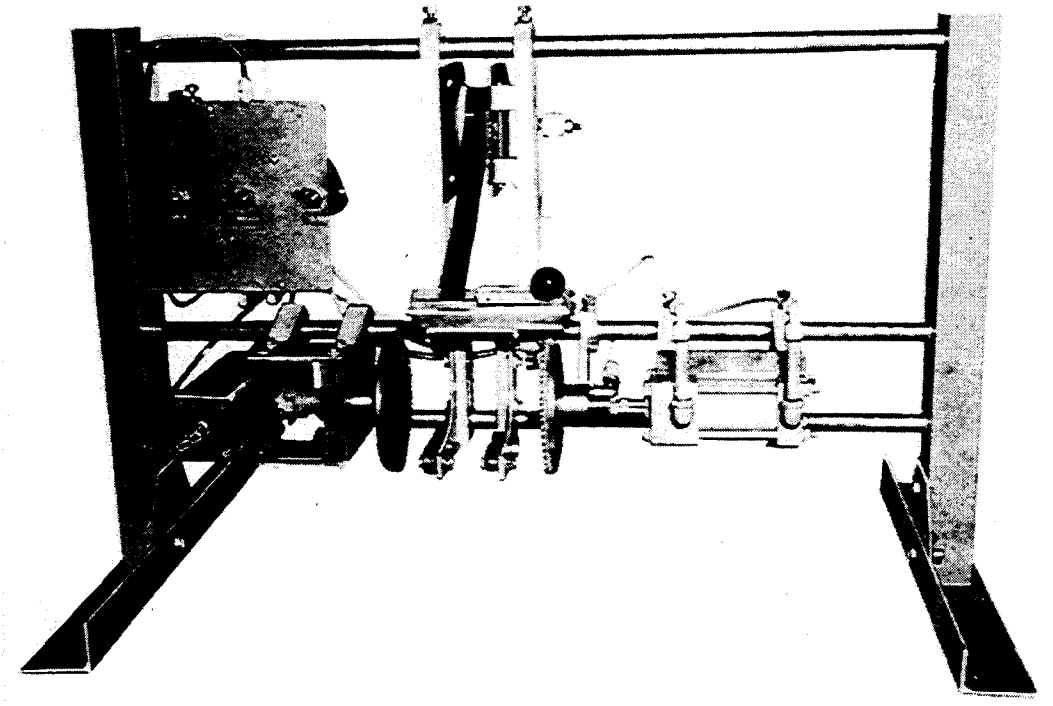
Production Capacity:
350 Liners per hour.

Shipping Data:
- Length: . . . . . 6 in
- Width: . . . . . 3 in
- Height: . . . . . 3 in
- Cube: . . . . . .03 cu ft
- Weight: . . . . . 3 lb

Associated Equipment:
None

Kits:
None

APE 1137 M1--MACHINE, TAPING, SMALL ITEMS



Use:
The small items taping machine is used to apply tape to fiber and metal container ranging in size from 4 inches to 14 inches in length with a maximum diameter of 5-1/2 inches.

Description:
APE 1137M1 consists of an angle iron frame, tied together with three 7/8-inch rods. The two lower rods are utilized to hold the drive head with 360–degree actuator air cylinder, container holder brackets, and an idler head mounted on a 2-inch bore, 2-inch stroke, air cylinder. The cylinders are controlled by two 1/4-inch pilot operated valves connected to four bleed valves.

Difference Between Models:
The APE 1137M1 machine utilizes a newer manufactured rotary actuator. The original model may be utilized until rebuilt to APE 1137M1 model.

Tabulated Data:
APE No 11370000M1
Unit of Issue . . . . . Each

Installation Data:
Length . . . . . 40 in.
Width . . . . . 17-3/4 in.
Height . . . . . 24-13/16 in.
Weight . . . . . 125 lbs

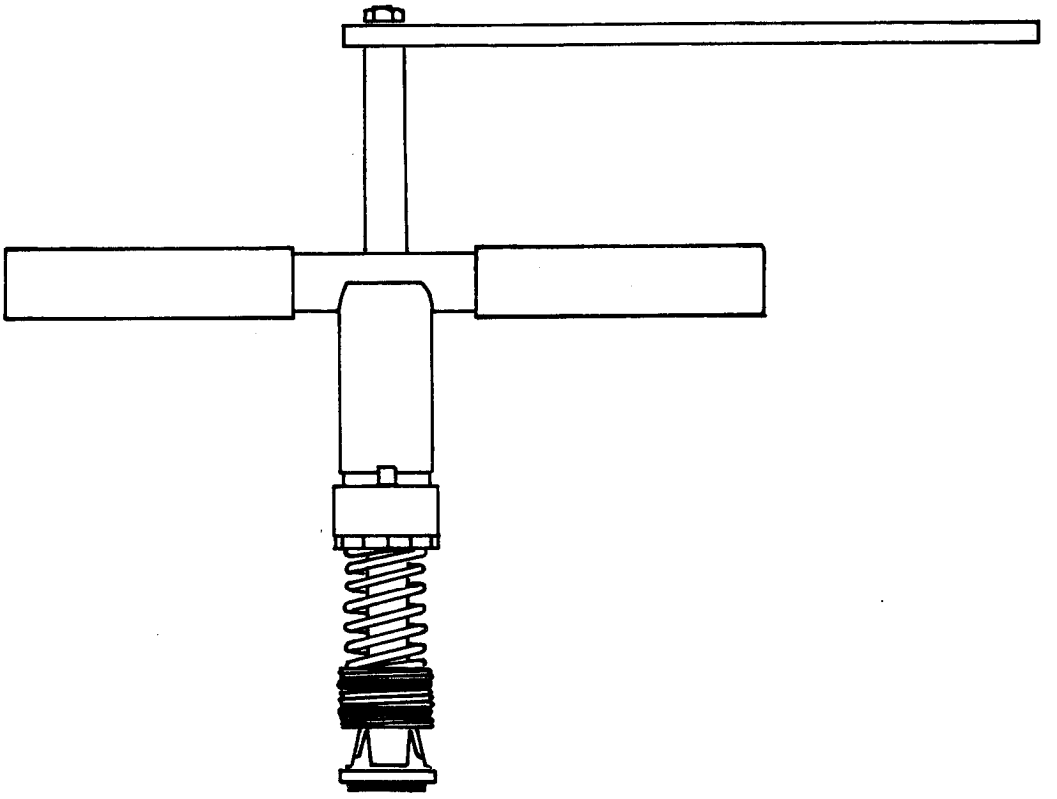
Utilities Required:
Air at 90 psi and 20 cfm.
Production Capacity:
330 containers per hour.

Shipping Data:
Length . . . . . 44 in
Width . . . . . 24 in.
Height . . . . . 28-1/2 in.
Cube . . . . . 17.5 cu ft
Weight . . . . . 185 lbs

Associated Equipment:
None.

Kits:
1137E001 KIT, Tape Cutter

APE 1140M2--FUZEWELL LINER REMOVAL



Use:
The fuzewell liner removal fixture is used to remove press type well liners from artillery projectiles.

Description:
The fixture is a hand tool consisting of a handle, a shaft, and a taper lock feature for gripping the fuzewell liner.

Difference Between Models:
M2 version is a new design for improved performance. M1 version is no longer approved.

Tabulated Data:
APE No 11400000M2
Unit of issue: . . . . . Each

Installation Data:
Length: . . . . . 14 in.
Width: . . . . . 2 in.
Height: . . . . . 14 in.
Weight: . . . . . 3 lbs.

Utilities Required:
None.

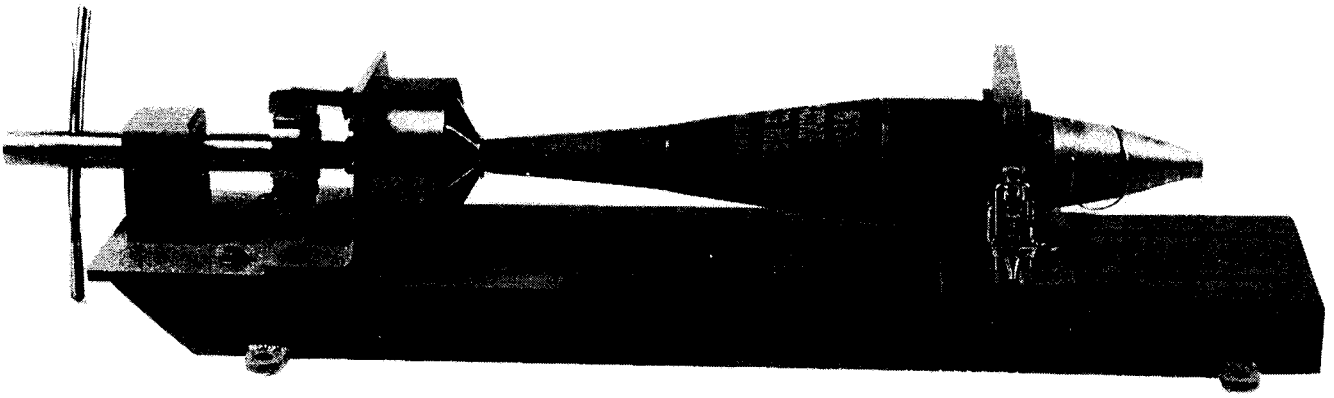
Production Capacity:
2 to 3 liners per minute.

Shipping Data:
Length: . . . . . 16 in.
Width: . . . . . 16 in.
Height: . . . . . 3 in.
Cube: . . . . . 0.45 cu. ft.
Weight: . . . . . 5 lb.

Associated Equipment:
None

Kits:
None

APE 1148–FIXTURE, PRIMER REMOVAL AND INSERTION



Use:
The primer removal and insertion fixture is used to assemble or disassemble M32, M34 or M71 screw type primers from the fin assemblies of 60MM and 81MM mortar ammunition by hand operation.

Description:
APE 1148 consists of a nose clamp and fin holder assembly, mounted on the base, which hold the projectile in position while the pins of the wrench head engage the primer. After the primer is loosened by means of the hand-operated primer wrench, the primer is removed by hand.

Difference Between Models:
Original design.

Tabulated Data:

APE No	11480000
Unit of Issue	Each

Installation Data:

Length	34 in.
Width	8 in.
Height	7 in.
Weight	50 lbs

Utilities Required:
None.

Production Capacity:
120 primers per hour.

Shipping Data:

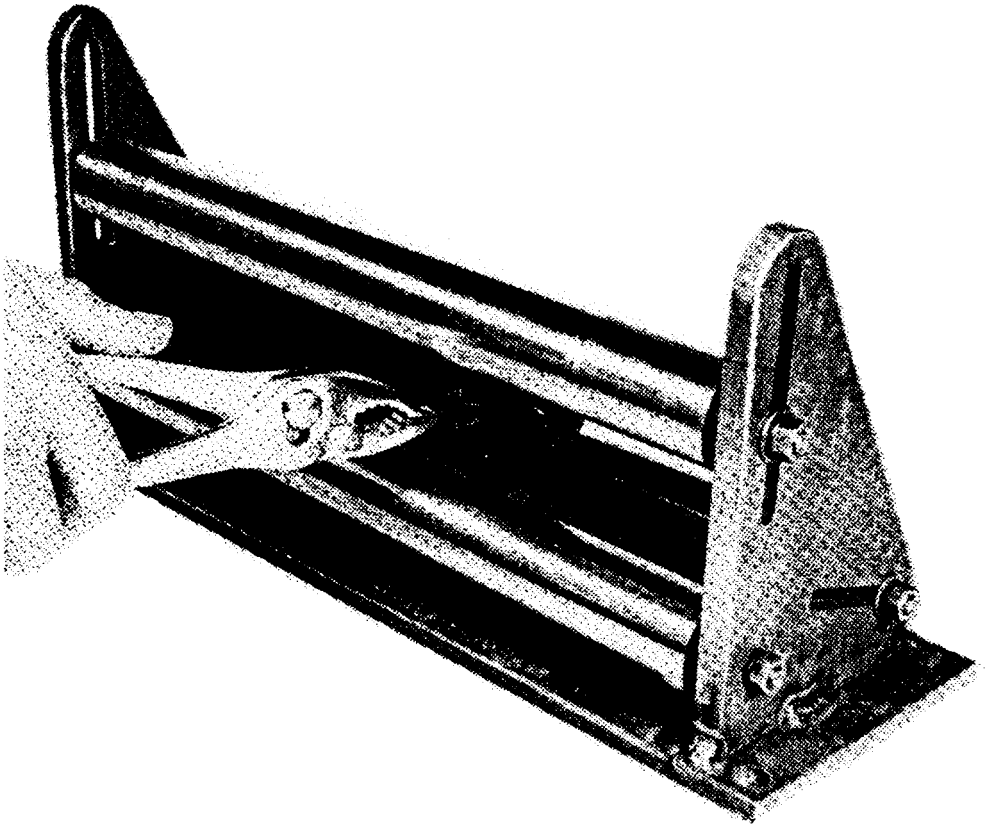
Length	36 in.
Width	10 in.
Height	9 in.
Cube	1.9 cu ft
Weight	89 lbs

Associated Equipment:
None.

Kits:
1148E001 KIT, 60MM, M720, and 81MM, M299 Ignition Cartridge Removal and Insertion

1148E002 KIT, 81MM, M819 and M853A1 Ignition Cartridge Removal and Insertion.

APE 1151--REMOVER, TEAR STRIP



Use:
The tear strip remover is used with a pair of pliers to remove the tear strip from hermetically sealed containers ranging in diameter from 1.37 inches to 4.06 inches and in length from 2.1 inches to 12 inches.

Description:
APE 1151 consists of a steel frame with three rollers which can be adjusted to the size of the container being opened.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	11510000
Unit of Issue	Each

Installation Data:

Length	14-3/4 in.
Width	4-1/2 in.
Height	6–5/8 in.
Weight	20 lbs

Utilities Required:
None.

Production Capacity:
Varies with condition of containers.

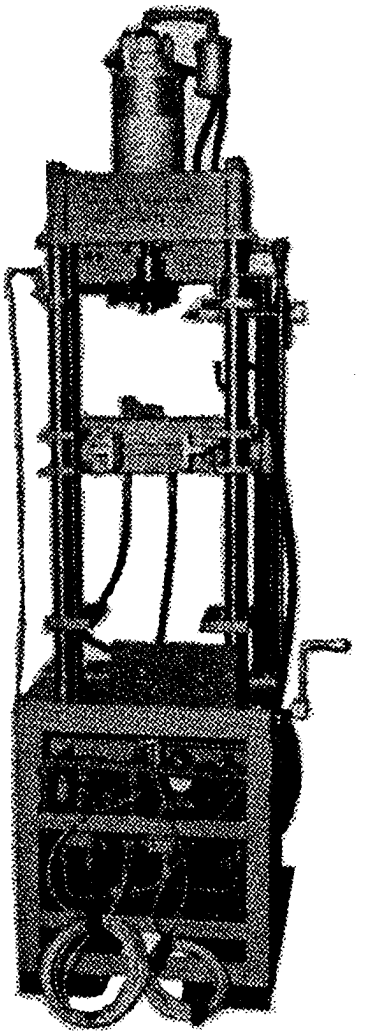
Shipping Data:

Length	16 in.
Width	8 in.
Height	6 in.
Cube	0.5 cu ft
Weight	24 lbs

Associated Equipment:
None.

Kits:
None.

APE 1153M1--MACHINE, VERTICAL DISASSEMBLY



Use:
The vertical disassembly machine is used to remove fuzes from cartridges and projectiles; remove fin and boom assemblies from projectiles; remove primers from cartridge cases; and remove closing screws from fuzes.

Description:
APE 1153M1 consists of a frame, a movable clamp assembly, a rachet type clutch and a high torque air drive motor.

Difference Between Models:
The APE 1153M1 assembly is raised and lowered mechanically. It also has an improved timer, a different clutch, and a more powerful air motor.

Tabulated Data:

APE No.	11530000M1
Unit of Issue	Each
Installation Data:	
Length	37 in.
Width	26 in.
Height	84 in.
Weight	540 lbs
Utilities Required:	
Air at 90 psi and 83 cfm.	
Production Capacity:	
500 to 1000 items per 8 hour shift depending on operation being performed.	

Shipping Data:

Length . . . .43 in.
Width . . . .32-1/2 in.
Height . . . .92 in.
Cube . . . .74 tuft
Weight . . . .675 lbs

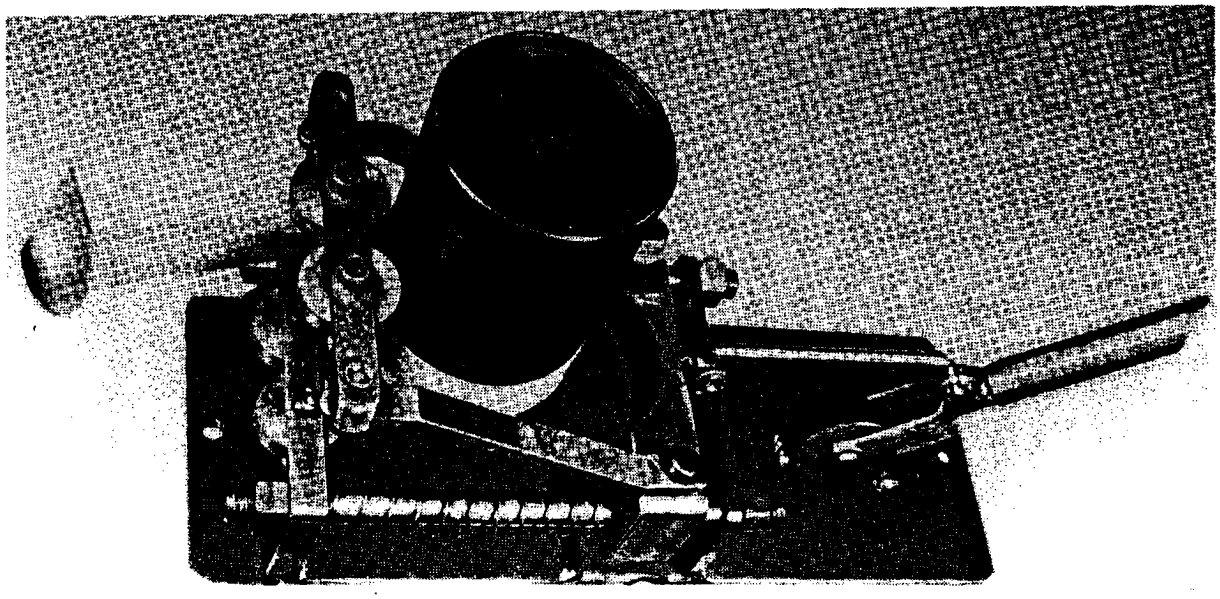
Associated Equipment:

None.

Kits:

1153E001	KIT, Deprime 60MM Mortar: M49A2, M83, and M302; 81MM Mortar: M43A1, M56, M57, M57A1, M301A1, and M301A2
1153E002	KIT, Deprime 90MM: M371 HEAT
1153E003	KIT, Remove Head from Adapter, M519 Fuze
1153E005	KIT, Remove PD Fuze from 90MM and 105MM Projectiles
1153E006	KIT, Remove BD Fuze M9A1, M66A1, M66A2, M68 and/or tracer M5 series from 75MM M349; 76MM M319; 90MM M82, M142E3, M332A1; 105MM M326; 106MM M346A1
1153E014	KIT, Remove Fins: M2 and MS from 60MM Mortar Cartridges and Fins M3 and M6 from 81MM Mortar Cartridges
1153E016	KIT, Remove Booster from M52 Fuze
1153E019	KIT, Remove Fuze from Projectile, 57MM, M307A1
1153E020	KIT, Remove M524 Fuze from Cartridge, 81MM: M362
1153E024	KIT, Defuze 60MM, 81MM and 4.2-Inch Mortar Cartridges
1153E025	KIT, Remove Bottom closing Screw from Fuze PD: M78
1153E027	KIT, Remove Booster Assembly and/or Cup from Standard Contour Fuzes
1153E028	KIT, M19 Rifle Grenade FIN Assy Removal
1153E029	KIT, Remove Ignition Cartridge, Housing from 81MM Mortar M362, M362A1, M370, M374, M374A1, M374A2, M375A1, M375A2
1153E031	KIT, Remove Ignition Cartridge, Housing from 81MM M158 Fin Assembly
1153E032	KIT, Deprime 81MM Mortar M301A3 , M362, M362A1, M370, M374, M374A2, M375, M375A1, M375A2
1153E033	KIT, Remove M8 Fuze from M14 Burster–4.2 Mortar

APE 1159--DEVICE, VERTICAL LID REMOVAL



Use:
The vertical lid removal device is used to remove the tape and lid from small fiber containers such as those used for hand grenades, fuzes and 60MM mortar fuzes.

Description:
APE 1159 consists of a base, a container clamping assembly, a lid removal assembly, and an operating lever. The device is hand operated.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	11590000
Unit of Issue	Each
Installation Data:	
Length	14 in.
Width	5 in.
Height	11-3/8 in.
Weight	15 lbs
Utilities Required:	
None.	
Production Capacity:	
Not applicable.	

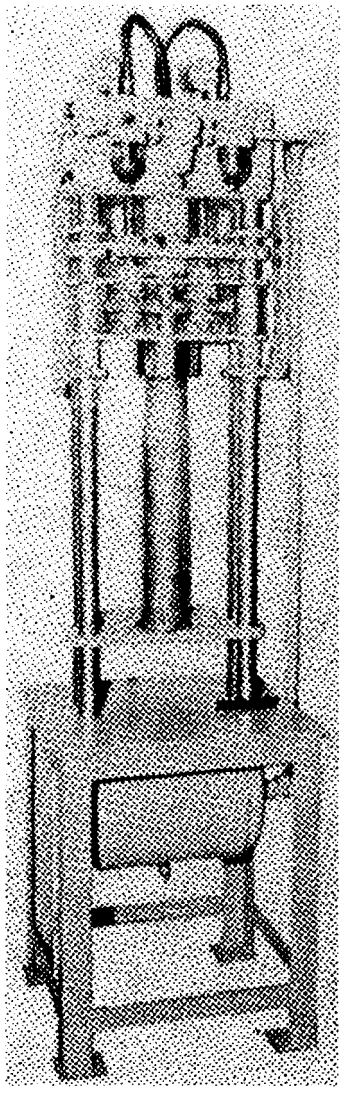
Shipping Data:

Length	16 in.
Width	7 in.
Height	14 in.
Cube	0.9 cu ft
Weight	20 lbs

Associated Equipment:
None.

Kits:
None.

APE 1164--MACHINE, CARTRIDGE CASE RESIZING



Use:
The cartridge case resizing machine is used to remove the crimp indentation and to resize the necks of brass and steel cartridge cases.

Description:
APE 1164 consists of a table, an air tank mounted under the table, four bolster rods, an air motor, drive gears, and the control valves.

Difference Between Models:
Original design.

Tabulated Data:
APE No. 11640000
Unit of Issue . . . . . Each
Installation Data:
Length . . . . . 42 in.
Width . . . . . 24 in.
Height . . . . . 92 in.
Weight . . . . . 540 lbs
Utilities Required:
Air at 100 psi and 120 cfm.
Production Capacity:
2100 90MM brass cartridge cases per 8 hour shift.

Shipping Data:

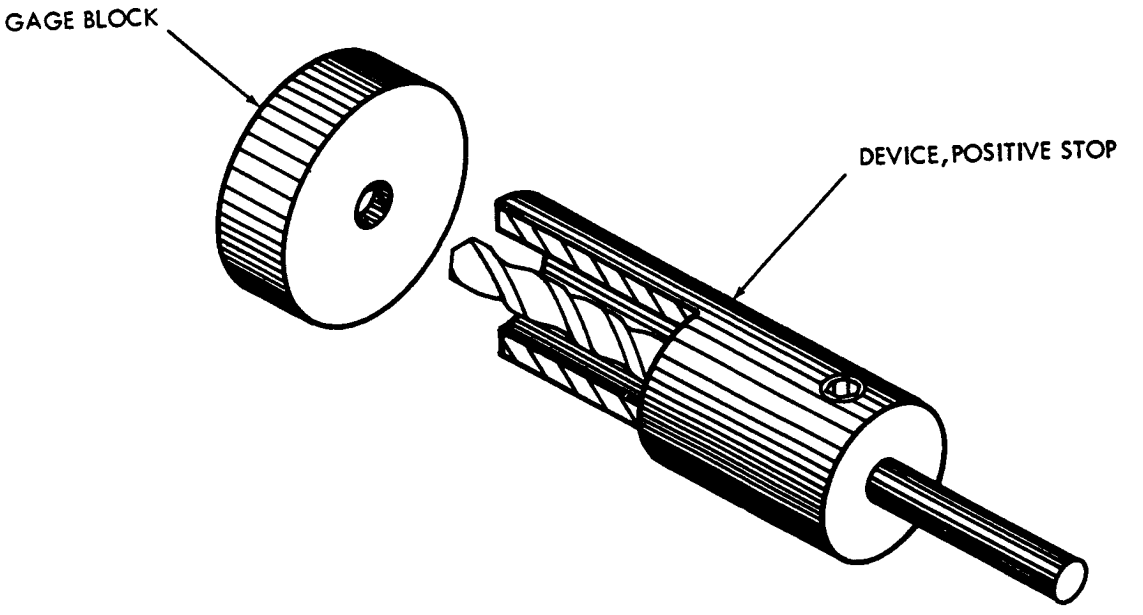
Length	59 in.
Width	44 in.
Height	96 in.
Cube	145 cu. ft.
Weight	1222 lbs.

Associated Equipment:
None.

Kits:

1164E001, Kit, Resize 75MM: M31A1 Cartridge Cases
1164E002, Kit, Resize 76MM: M88 Cartridge Cases
1164E003, Kit, Resize 57MM: M30 Cartridge Cases
1164E004, Kit, Resize 57MM: M23 Cartridge Cases
1164E005, Kit, Resize 75MM: M35 (T6E3) Cartridge Cases
1164E006, Kit, Resize 75MM: M18 Cartridge Cases
1164E007, Kit, Resize 75MM: M9A1 Cartridge Cases
1164E008, Kit, Resize 76MM: M26 Cartridge Cases
1164E009, Kit, Resize 76MM: M101 Cartridge Cases
1164E010, Kit, Resize 90MM: M19, M108, T24 Cartridge Cases
1164E011, Kit, Resize 105MM: M32 Cartridge Cases
1164E012, Kit, Resize 105MM: T43 Cartridge Cases
1164E013, Kit, Resize 105MM: M90 and M95 Cartridge Cases 106MM: M93 and M94 Cartridge Cases
1164E014, Kit, Resize 106MM Cartridge Cases with Double Crimp
1164E015, Kit, Resize 90MM: M112 Cartridge Cases

APE 1171--DEVICE, POSITIVE STOP



Use:
The positive stop device is used to prevent over-drilling of stake marks and setscrews.

Description:
The device consists of a metal sleeve with a setscrew which fits over a drill. The setscrew locks the drill in the sleeve at the desired position to control the drilling depth.

Difference Between Models:
Original design.

Tabulated Data:
APE No 11710000
Unit of issue: . . . . . Each

Installation Data:
Length:. . . . . 3 in.
Width: . . . . . 1-1/2 in.
Height: . . . . . 1-1/2 in.
Weight: . . . . . 3/4 lbs.

Utilities Required:
None

Production Capacity:
Not applicable
Length: . . . . . 4 in.
Width: . . . . . 2 in.
Height: . . . . . 2 in.
Cube: . . . . . 16 cu in.
Weight: . . . . . 1 lb.

Associated Equipment:
None

Kits:
None

APE 1176--CART, AMMUNITION, PROJECTILE, 37MM THROUGH 105MM



Use:
The ammunition cart is used to transport six projectiles during maintenance operations. The projectiles can be up to 18 inches long and 4.5 inches in diameter. Maximum load on cart cannot exceed 400 pounds.

Description:
APE 1176 consists of a metal frame with four wheels. It is equipped with brakes to hold the cart in place when not in use. The rack on top of the frame holds six projectiles .

Difference Between Models:
Original design.

Tabulated Data:
APE No. 11760000
Unit of Issue . . . .Each
Installation Data:
Length . . . . . 35-1/4 in.
Width . . . . . 22 in.
Height . . . . . 32-1/4 in.
Weight . . . . . 75 lbs
Utilities Required:
None.
Production Capacity:
Not applicable.

Shipping Data:
Length . . . . . 40 in.
Width . . . . . 24 in.
Height . . . . . 36 in.
Cube . . . . . 20 cu ft
Weight . . . . . 100 lbs

Associated Equipment:
None.

Kits:
1176E001 KIT, 105MM M115 Cartridge Case Wood Rack

APE 1177--CART, AMMUNITION, COMPLETE ROUND



Use:
The complete round ammunition cart is used to transport four complete rounds of ammunition during maintenance operations. The cart accommodates 37MM through 105MM cartridges up to 40 inches long.

Description:
APE 1177 consists of a metal frame with four wheels. It is equipped with brakes to hold the cart in place when not in use. The rack on top of the frame holds four cartridges.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	11770000
Unit of Issue	Each

Installation Data:

Length	45-1/4 in.
Width	24-1/2 in.
Height	37-1/2 in.
Weight	90 lbs

Utilities Required:
None.

Production Capacity:
Not applicable.

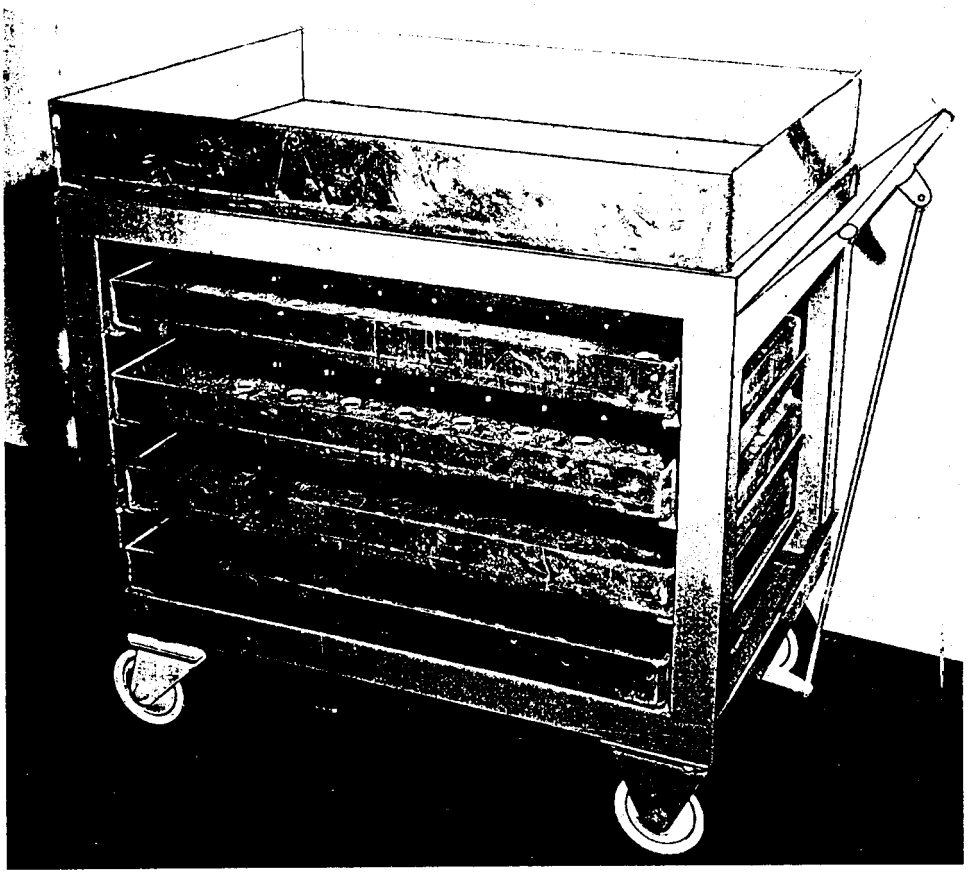
Shipping Data:

Length	48 in.
Width	28 in.
Height	48 in.
Cube	37 cu ft
Weight	125 lbs

Associated Equipment:
None.

Kits:
None.

APE 1178--CART, AMMUNITION, SMALL ITEMS



Use:
The small items ammunition cart is used to transport fuzes and other small items during maintenance operations.

Description:
APE 1178 consists of a metal frame with four wheels. It is equipped with brakes to hold the cart in place when not in use. The cart holds five small item racks.

Difference Between Models:
Original design.

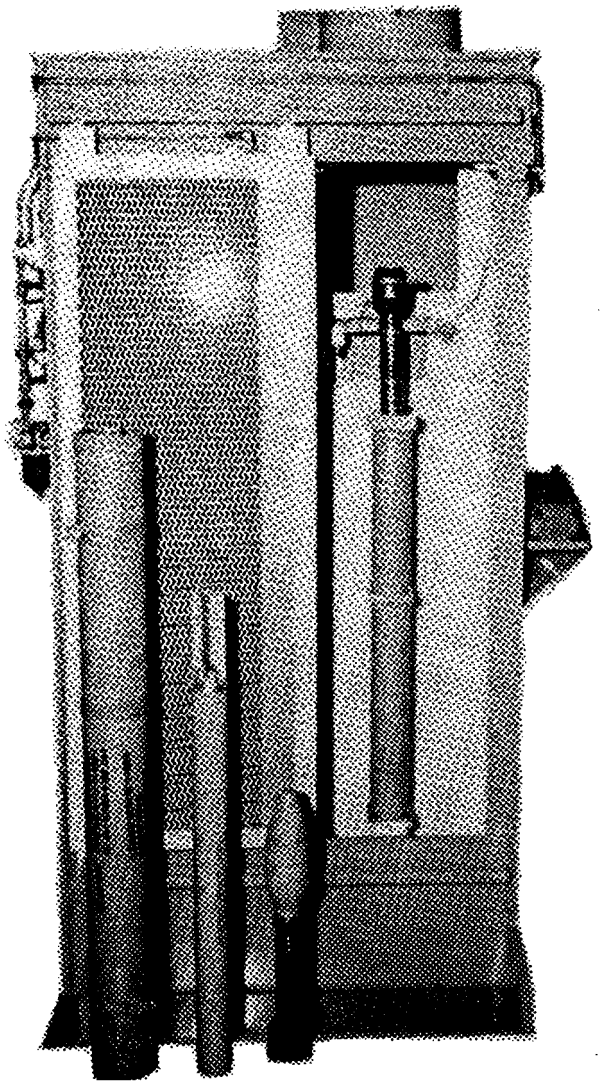
Tabulated Data:
APE No. 11780000
Unit of Issue . . . .Each
Installation Data:
Length . . . .37 in.
Width . . . .22 in.
Height . . . .33 in.
Weight . . . . . 80 lbs
Utilities Required:
None.
Production Capacity:
Not applicable.

Shipping Data:
Length . . . . . 42 in.
Width . . . . . 24 in.
Height . . . . . 40 in.
Cube . . . . . 23.4 cu ft
Weight . . . . . 110 lbs

Associated Equipment:
None.

Kits:
1178E001 KIT, M70 Mine Rack
1178E002 KIT, M36, M39, M42, M43A1, and M46 Grenade Rack

APE 1189--EQUIPMENT CONTINUITY TEST



Use:
The continuity test equipment is used to protect operating personnel while conducting the circuit continuity testing of 2.75-. 3.5-, and 5–inch rocket motors.

Description:
APE 1189 consists of an operational shield, holding fixtures for 2.75-, 3.5–, and 5-inch rockets, and electrical connections for a continuity tester.

NOTE

User must supply test instrument.

Difference Between Models:
Original design.

Tabulated Data:

APE No. 11890000
Unit of Issue . . . . . Each
Installation Data:
Length . . . . . 40 in.
Width . . . . . 36 in.
Height . . . . . 81 in.
Weight . . . . . 2358 lbs
Utilities Required:
Air at 60 psi and 50 cfm.
Production Capacity:
120 per hour with warhead;
240 per hour without warhead.

Shipping Data:

Length . . . . . 56 in.
Width . . . . . 46 in.
Height . . . . . 90 in.
Cube . . . . . 134.1 cu ft
Weight . . . . . 2693 lbs

Associated Equipment:

APE 1980 Continuity Tester Alinko

Kits:

1189E001 KIT, Continuity Test 2.75–Inch Rocket Motors w/, Press Type Closures

1189E002 KIT, Continuity Test 3.5-Inch Rocket Motors

1189E003 KIT, Continuity Test 5–Inch Rocket Motors

1189E004 KIT, Continuity Test 2.75-Inch Rockets with Solid Bulkhead Closures or with M151 or XM229 Warheads and 2.75–Inch Rocket Motor, w/Screw Type Closing Plug, MK4, Mods 8 and 9; MK40, Mods 1 and 2

1189E011 KIT, Continuity Test 5-Inch M3 JATO Rocket Motors

1189E013 KIT, Accessory for Continuity Testing M37 & M37A1 Honest John Spin Rockets

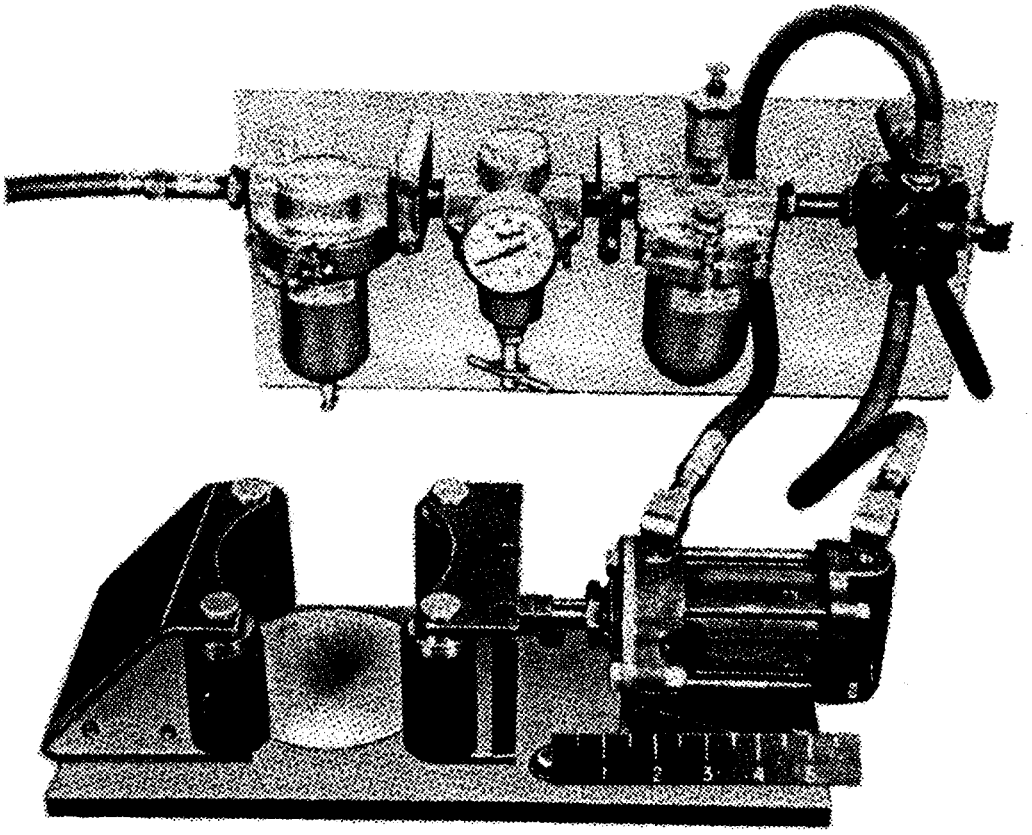
1189E014 KIT, Accessory for Continuity Testing M7A2B1 Spin Rockets

1189E015 KIT, Accessory for Continuity Testing 2.75 Inch Rocket Motor MK40 with Warhead M151, M156, M229, M247, WTU/1B and WDU-4A/A (Remote Operation only) without manually removal of shorting clip

1189E016 KIT, Accessory for Continuity Testing 2.75 Inch Rocket Motor MK40 only without manually removing shorting clip. Machine Tests for proper shorting lifts clip and tests continuity, replaces shorting clip, and ensures proper shorting by remote operation.

1189E017 KIT, Accessory for Continuity Testing of MK66, 2.75 Inch Rocket Motor

APE 1195--REMOVER, TAPE AND LID, FIBER CONTAINER



Use:
The fiber container lid and tape remover is used when opening fiber containers containing mortars, cartridges, hand grenades, and fuzes.

Description:
APE 1195 consists of a base, an air control assembly, and a clamping assembly. The clamping assembly consists of an air cylinder and a stop. The air cylinder and stop are equipped with rollers which allow the container to turn when removing the sealing tape.

Difference Between Models:
Original design.

Tabulated Data:
APE No. 11950000
Unit of Issue . . . .Each

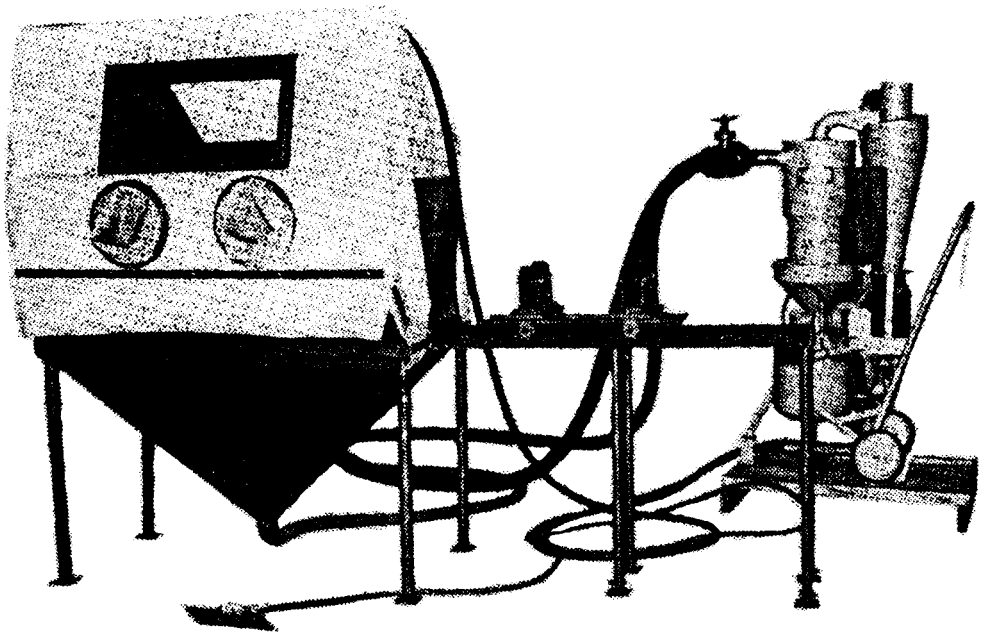
Installation Data:
Length . . . . . 20 in.
Width . . . . . 7 in.
Height . . . . . 7 in.
Weight . . . . . 20 lbs
Utilities Required:
Air at 90 psi.
Production Capacity:
Not applicable.

Shipping Data:
Length . . . . . 24 in.
Width . . . . . 8 in.
Height . . . . . 8 in.
Cube . . . . . 0.9 cut ft
Weight . . . . . 25 lbs

Associated Equipment:
None.

Kits:
None.

APE 1200--MACHINE, AMMUNITION CLEANING



Use:
The ammunition cleaning machine is used to provide a safe and effective method of removing rust and corrosion from artillery projectiles, ammunition components, and metal packing material.

Description:
APE 1200 consists of two basic components: a light–weight portable cleaning cabinet and portable abrasive blast unit. The cabinet is equipped with rollers and a track to permit items to be pushed inside the cabinet and rotated during cleaning operations.

Difference Between Models:
Original design.

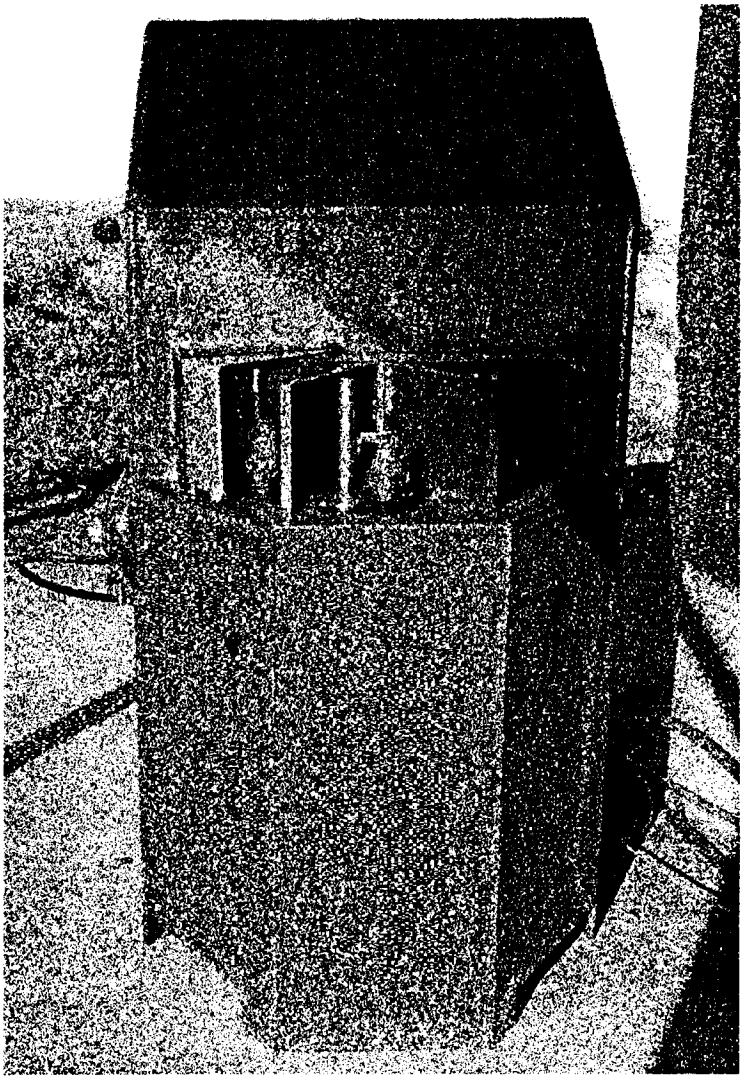
Tabulated Data:
APE No. 12000000
Unit of Issue . . . .Each
Installation Data:
BLAST UNIT:
Length . . . .31 in.
Width . . . .22 in.
Height . . . .59 in.
Weight . . . .1075 lbs
CABINET:
Length . . . . . 102 in.
Width . . . . . 28 in.
Height . . . . . 78 in.
Weight . . . . . 1150 lbs
Utilities Required:
Air at 90 psi and 95 cfm.
Production Capacity:
Depends on items being processed.

Shipping Data:
BLAST UNIT:
Length . . . . . 36 in.
Width . . . . . 36 in.
Height . . . . . 72 in.
Cube . . . . . 54 cu ft
Weight . . . . . 1400 lbs
CABINET:
Length . . . . . 114 in.
Width . . . . . 48 in.
Height . . . . . 42 in.
Cube . . . . . 133 cu ft
Weight . . . . . 1450 lbs

Associated Equipment:
None.

Kits:
1200E001 KIT, Clean 60MM Mortar

APE 1202M1--DEFUZING MACHINE, HAND GRENADE



Use:
The hand grenade de fuzing machine is used to remove fuzes from hand grenades in a shielded operation.

Description:
APE 1202M1 consists of a six section turntable mounted in an operational shield. An air cylinder rotates the turntable 60 degrees at a time. Holding cups are mounted in each section of the turntable and are used to secure the grenade being disassembled. Barricade does not meet MIL–STD-398 requirements for M15 and M34 WP grenades and must be used in a remote operation when 1200E005 and 1202E007 kits are used to defuze these rounds.

Difference Between Models:
APE 1202M1 version has an improved operational shield.

Tabulated Data:

APE No.	12020000M1
Unit of Issue	Each
Installation Data:	
Length	37-1/4 in.
Width	35 in.
Height	75-5/8 in.
Weight	1750 lbs

Utilities Required:
Air at 80 psi and 27 cfm.
Production Capacity:
140 to 180 grenades per hour - remote operation.
250 to 300 grenades per hour - attended operation.

Shipping Data:

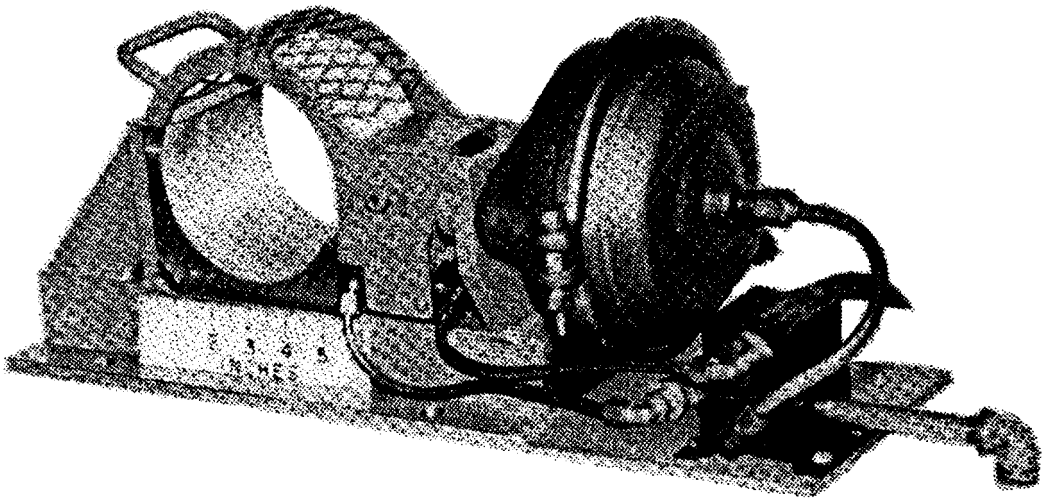
Length	46 in.
Width	46 in.
Height	85 in.
Cube	104 cu ft
Weight	1900 lbs

Associated Equipment:
APE 1213M1 pitch in barricade for fragmentation grenades. APE 2252 pitch in barricade for chemical grenades.

Kits:

1202E003	KIT, Remove Fuze from M26, M26A1 & M61 Hand Grenade
1202E004	KIT, Remove Fuzes from MK2 Hand Grenades
1202E005	KIT, Remove Fuzes from M34 WP Smoke Grenades
1202E006	KIT, Remove Fuzes from M6, M7, M8, M14 and M18 Chemical Grenades
1202E007	KIT, Remove Fuzes from M15 WP Smoke Grenades
1202E009	KIT, Remove Fuzes from MK3A2 Offensive Hand Grenades
1202E0101	KIT, Remove Fuzes from M33, M67 Delay Fragment Grenades and M69 Practice Grenades
1202E011	KIT, Remove Fuzes from M6, M7, M8, M14, and M18 Chemical Grenade

APE 1204--VISE, PNEUMATIC



Use:
The pneumatic vise is used to hold ammunition items for repair and/or renovation. Items range in size from 37MM to 120MM including 2.75–inch and 3.5–inch rockets.

Description:
APE 1204 consists of a base, an air brake chamber, a valve assembly controlled by a safety shield, and a filter-regulator-lubricator.

Difference Between Models:
Original design.

Tabulated Data:
APE No. 12040000
Unit Of Issue . . . .Each
Installation Data:
Length . . . .20 in.
Width . . . .10 in.
Height . . . .9 in.
Weight . . . .48 lbs
Utilities Required:
Air at 80 psi and 81 cfm.
Production Capacity:
Depends on operation being performed.

Shipping Data:
Length . . . . 30 in.
Width . . . . 19 in.
Height . . . . . 12 in.
Cube . . . . . 4 cu ft
Weight . . . . 135 lbs

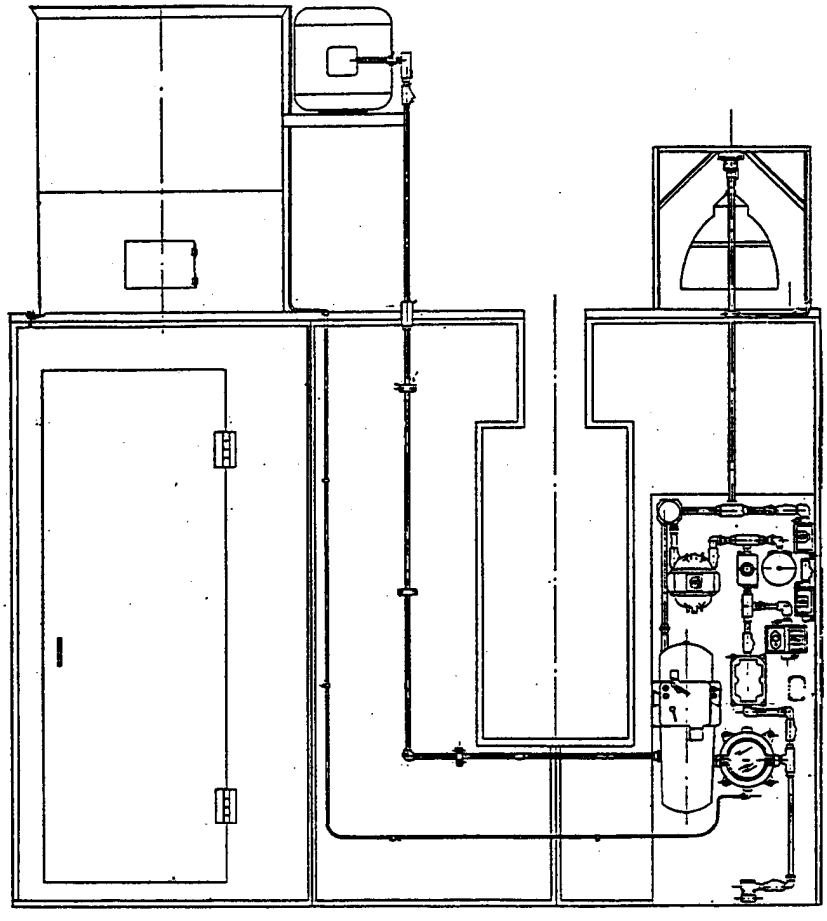
Associated Equipment:
None.

Kits:

1204E001	KIT, Jaw, 120MM
1204E002	KIT, Jaw, 37MM
1204E003	KIT, Jaw, 40MM
1204E004	KIT, Jaw, 57MM
1204E005	KIT, Jaw, 75MM
1204E006	KIT, Jaw, 76MM
1204E007	KIT, Jaw, 90MM
1204E009	KIT, Jaw, 81MM: M43 Series Projectile
1204E010	KIT, Jaw, 3.5 Inch Rocket
1204E011	KIT, Jaw, 2.75 Inch Rocket Warhead
1204E012	KIT, Jaw, 60MM: M49A2 and M50A2
1204E013	KIT, Jaw, 2.75 Inch Rocket Warhead: MK5 Mod 0
1204E014	KIT, Jaw, 81MM: M57, M362, M370, M374, and M375
1204E015	KIT, Hold, 2.75 Inch Rocket Motor
1204E016	KIT, Jaw, 4.2 Inch, 105MM or 106MM Projectile
1204E017	KIT, Jaw 60MM Cartridge M302, M302A, M49A2, M49A3, M49A4, M49A5 , M50A2, M50A3, M720, M722, M888

1204E018 Kit, 120MM Mortar Jaw
1204E019 Kit, 81MM Mortar Jaw

APE 1205M1--BOOTH, PAINT SPRAY



Use:
The paint spray booth is used in production line painting of packing materials and ammunition items.

Description:
The booth, is a floor style, self supported, dry filter type, with a 15 foot face opening. It is complete with exhaust fan system, automatic shut down control, monorail and roller conveyor openings.

Difference Between Models:
A Tech Data Package was developed to replace original purchase description, to insure conformity of design.

Tabulated Data:
APE No 12050000M1
Unit of issue: . . . . . Each

Installation Data:
Length: . . . . . 12 ft.
Width: . . . . . 15 ft. 6 in.
Height: . . . . . 9 ft. plus max
4 ft. 6 in. exhaust stack
Weight: . . . . . Not available

Utilities Required:
220/440 VAC, 3 phase, 60 HZ,

Production Capacity:
Not applicable.

Shipping Data: (Approximately)
Crate 1
Length: . . . . . 113 in.
Width: . . . . . 61 in.
Height: . . . .74 in.
Cube: . . . . . 575 cu ft. (Total)
Weight: . . . . . 5824 lbs. (Total)

Shipping Data: (Approximately)
Crate 2
Length: . . . . . 95 in.
Width: . . . . . 43 in.
Height: . . . .20 in.

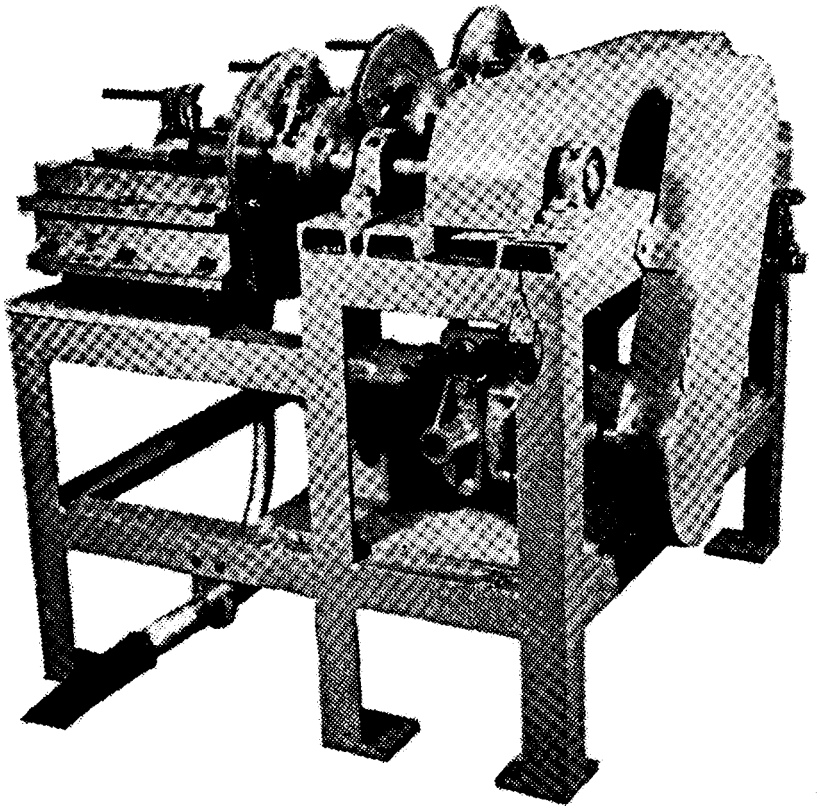
Crate 3
Length: . . . . . 93 in.
Width: . . . . . 59 in.
Height . . . . . 62 in.

Crate 4
Length: . . . . . 203 in.
Width: . . . .22 in.
Height: . . . . . 14 in.

Associated Equipment:
APE 1022M1 Conveyor, Powered Belt
Ape 1044M1 System, Monorail Conveyor

Kits:
None

APE 1206--MACHINE, THREE SPINDLE DISASSEMBLY



Use:
The three spindle disassembly machine is used for screw type disassembly operations such as removing boosters from fuzes.

Description:
APE 1206 has three stations to disassemble fuzes. An air motor powers a drive chain which rotates the disassembly heads. The disassembly system is mounted on a steel frame.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	12060000
Unit of Issue	Each
Installation Data:	
Length	36 in.
Width	43 in.
Height	36 in.
Weight	1200 lbs
Utilities Required:	
Air at 90 psi and 80 cfm.	
Production Capacity:	
2500 boosters per 8 hour shift.	

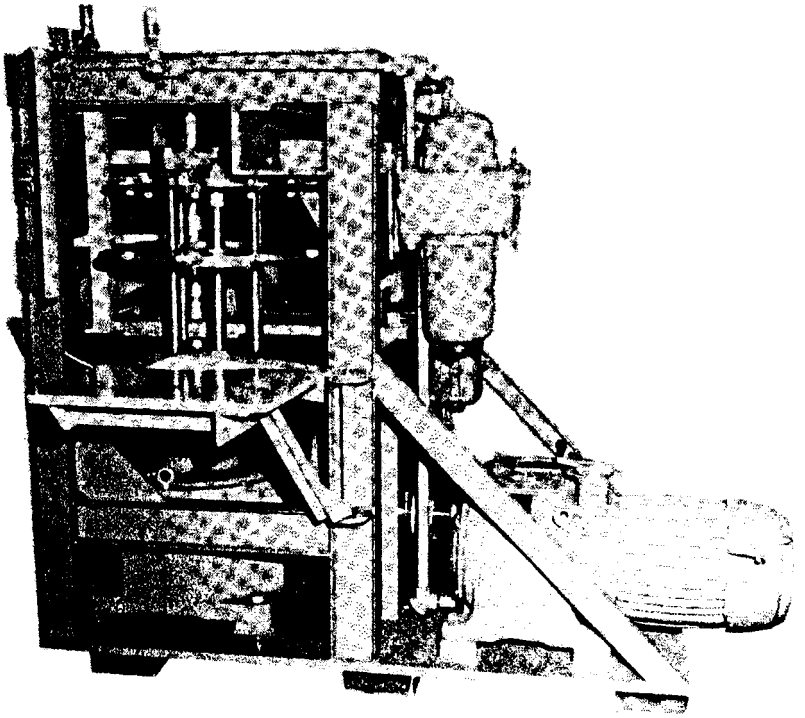
Shipping Data:

Length	42 in.
Width	50 in.
Height	42 in.
Cube	50.5 cu ft
Weight	1500 lbs

Associated Equipment:
None.

Kits:
None.

APE 1208--MACHINE, VERTICAL DEBANDING



Use:
The vertical debanding machine is used to remove rotating bands from 37MM through 106MM projectiles.

Description:
APE 1208 consists of a welded steel frame, a revolving feed table, a knurling assembly, and a 10 horsepower variable speed motor.

Difference Between Models:
Original design.

Tabulated Data:
- APE No. 12080000
- Unit of Issue . . . .Each
- Installation Data:
  - Length . . . .80 in.
  - Width . . . .48 in.
  - Height . . . .64 in.
  - Weight . . . .7050 lbs
- Utilities Required:
  - 220/440 vac, 60 Hz, 3 phase.

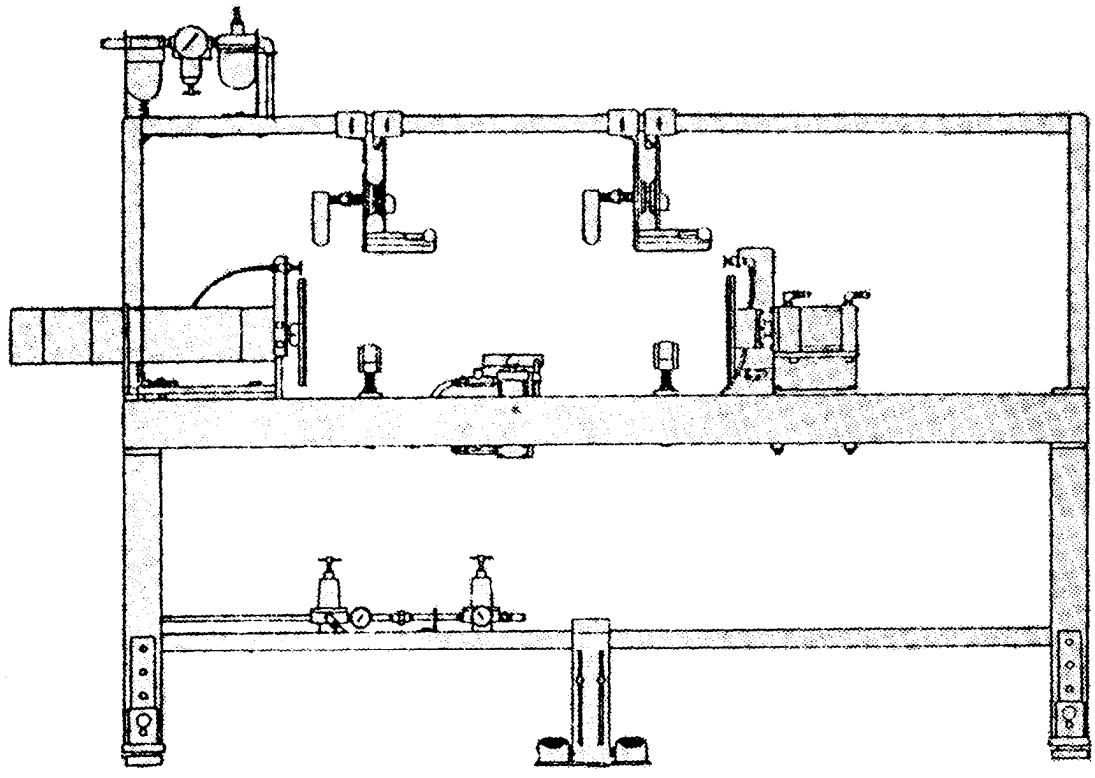
Production Capacity:
Depends on size and condition of projectile.

Shipping Data:
- Length . . . . . 8 ft
- Width . . . . . 5 ft
- Height . . . . . 6-1/2 ft
- Cube . . . . . 260 cu ft
- Weight . . . . . 7500 lbs

Associated Equipment:
None.

Kits:
- 1208E001 KIT, Deband 90MM: M71 Projectiles
- 1208E002 KIT, Deband 57MM Projectiles
- 1208E003 KIT, Deband 75MM and 76MM Projectiles
- 1208E004 KIT, Deband 37MM and 40MM Projectiles
- 1208E005 KIT, Deband 105MM and 106MM Projectiles

APE 1209M1--MACHINE, TAPING



Use:
The taping machine is used to apply sealing tape to fiber or metal containers ranging in length from 12 inches to 44 inches and up to 8-1/2 inches in diameter.

Description:
APE 1209M1 consists of a steel channel frame, a 360 degree actuator to revolve the container being taped, a clamp cylinder to seat the container lid against the container body, two tape holders with tape cutters, and a roller conveyor to feed the containers from the main conveyor line to the machine.

Difference Between Models:
Not available.

Tabulated Data:

APE No.	12090000M1
Unit of Issue	Each
Installation Data:	
Length	80in.
Width	28 in.
Height	72 in.
Weight	300 lbs

Utilities Required:
Air at 80 psi and 6 cfm.

Production Capacity:
2520 double lid containers per 8 hour shift; 3360 single lid containers per 8 hour shift.

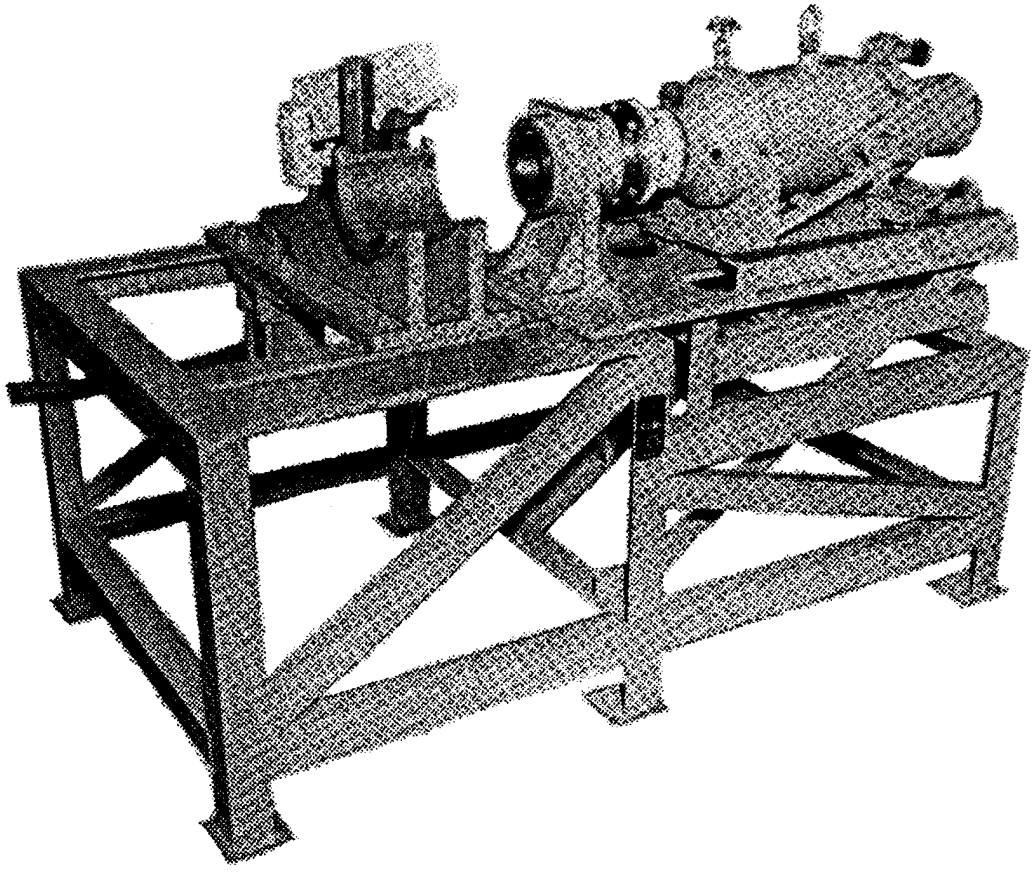
Shipping Data:

Length	96 in.
Width	30 in.
Height	78 in.
Cube	130 cu ft
Weight	700 lbs

Associated Equipment:
None.

Kits:
1209E001 KIT, Apply Three Wraps of Tape
1209E003 KIT, 2.75 Rocket (for up to 68" length containers)

APE 1210--MACHINE, DISASSEMBLY, 155MM M116, 4.5" ROCKET WARHEAD



Use:
The disassembly machine is used to remove the base plate from 155MM: M116 HC smoke projectiles and the warhead from 4.5" rocket. This machine is used if APE 1002M2 cannot perform the disassembly operation.

Description:
APE 1210 consists of a frame, a pneumatic wrench, a thrust cylinder to position the pneumatic wrench, and a pneumatic vise clamp.

Difference Between Models:
Original design.

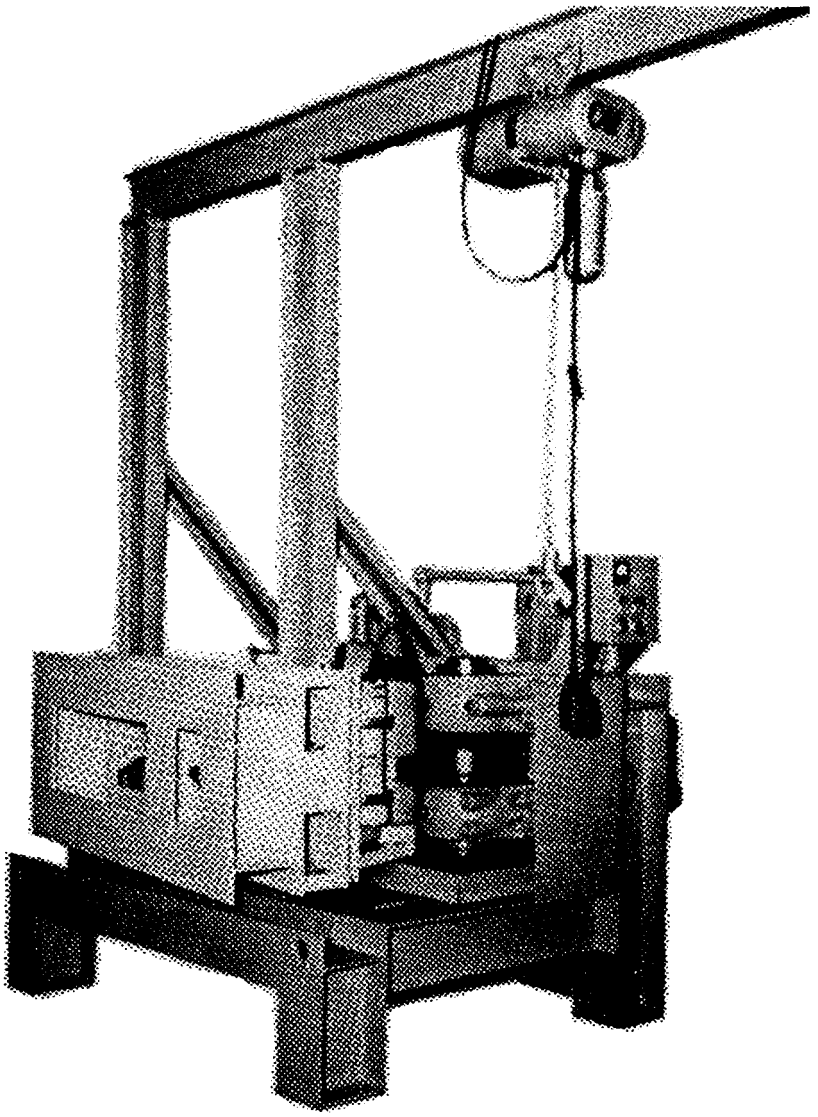
Tabulated Data:
APE No. 12100000
Unit of Issue . . . . . .Each
Installation Data:
Length . . . .65 in.
Width . . . . . 40 in.
Height . . . . . 43 in.
Weight . . . . . 1000 lbs
Utilities Required:
Air at 100 psi.
Production Capacity:
55 projectiles per hour.

Shipping Data:
Length . . . . . 72 in.
Width . . . . . 44 in.
Height . . . . . 48 in.
Cube . . . . . 89 cu ft
Weight . . . . . 1400 lbs

Associated Equipment:
None.

Kits:
1210E002 KIT, Remove Warhead from 4.5-Inch Rocket

APE 1212M1--MACHINE, DEBANDING, 120MM THRU 280MM PROJECTILES



Use:
The debanding machine is used to remove the rotating bands from 120MM through 280MM projectiles.

Description:
APE 1212M1 frame is constructed of heavy steel channel and I beams welded together. A 25 horsepower motor is mounted on the frame. The motor is connected to a knurling wheel drive shaft by a sprocket drive shaft. A fulcrum arm assembly moves the projectile against the knurling wheel. An auxiliary hydraulic power source operates the cylinders.

Difference Between Models:
APE 1212 was the pilot model. APE 1212M1 has a stronger structure.

Tabulated Data:

APE No.	12120000M1
Unit of Issue	Each
Installation Data:	
MACHINE:	
Length	86 in.
Width	94 in.
Height	129 in.
Weight	11000 lbs

POWER UNIT:
Length . . . .74 in.
Width . . . .30 in.
Height . . . .45 in.
Weight . . . .500 lbs

Utilities Required:
208-220/440 vac, 60 Hz, 3 phase.

Production Capacity:
740 120MM/155MM projectiles per 8 hour shift; 300 240MM projectiles per 8 hour shift.

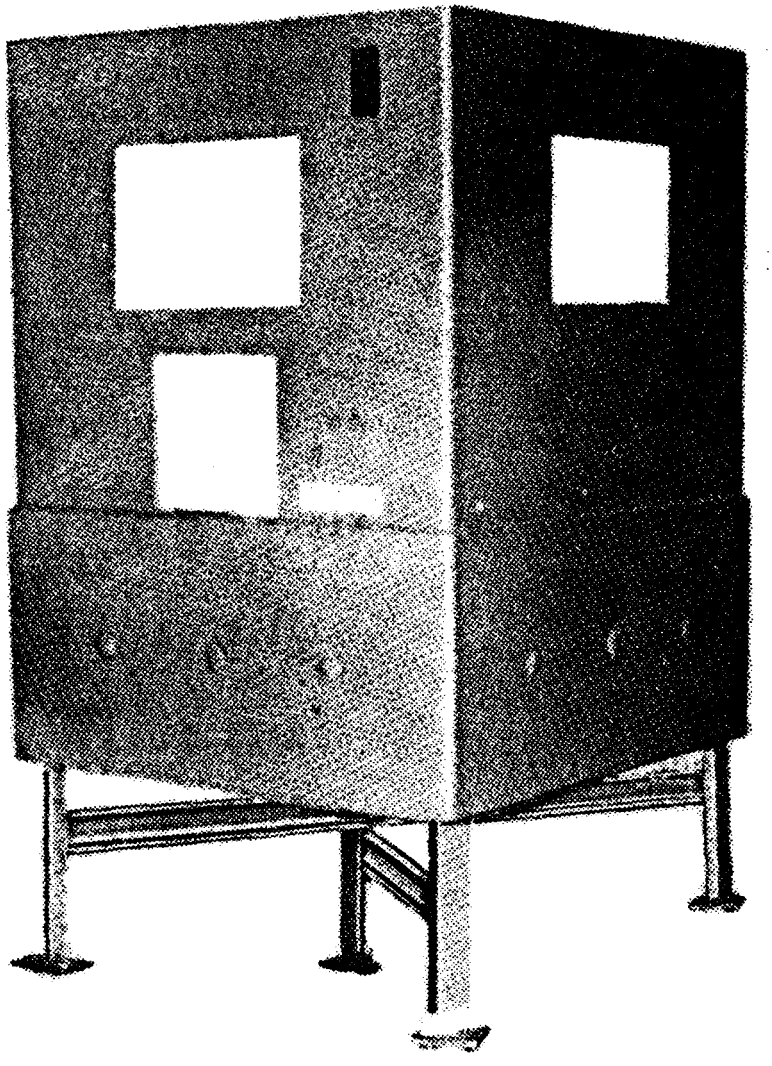
Shipping Data:
MACHINE:
Length . . . . . 96 in.
Width . . . .102 in.
Height . . . .138 in.
Cube . . . .782 cu ft
Weight . . . .15000 lbs

POWER UNIT:
Length . . . . . 80 in.
Width . . . . . 36 in.
Height . . . . . 60 in.
Cube . . . . . 100 cu ft
Weight . . . . . 750 lbs

Associated Equipment:
None.

Kits:
1212E001 KIT, Deband 280MM Projectiles
1212E002 KIT, Deband 8-Inch and 240MM Projectiles except 8–Inch M106
1212E003 KIT, Deband 155MM Projectiles
1212E004 KIT, Deband 175MM Projectiles
1212E005 KIT, Deband 120MM Projectile with single rotating band

APE 1213M1--GRENADE PITCH-IN BARRICADE



Use:
The barricade is intended for use adjacent to hand grenade maintenance and renovation operations. It provides a protective enclosure into which an operator can "throw" a grenade he has reason to suspect may accidentally function. The Barricade affords protection to the operator and other immediate personnel should the grenade function or it provides a holding chamber should the grenade prove to be a dud. The Barricade was tested in compliance with MIL-STD-398 and can be used with all fragmenting grenades except those having impact sensitive fuzes.

Description:
APE 1213M1 is fabricated from heavy steel plates, box shaped and welded. Four channel iron legs support the structure and the large metal grenade containment sphere. The sphere is attached to the metal chute covering the barricade by a perforated aluminum duct. The duct attaches to the seven inch round opening on the barricade chute and extends at a 60 degree angle into the interior of the containment sphere. The aluminum duct houses a flexible, accordion, folding, canvas sock.

The sock is a basic part of the machine and must be installed prior to using the barricade. The sock functions with the barricade's dud removal kit to remove dud grenades.

Difference Between Models:
The APE 1213M1 differs from the original in that no wheels are installed.Baffles within the barricade were removed and a sphere, duct assembly installed as a replacement. Original configuration is authorized with the restrictions requiring the operator to wear earplugs, ear muffs and a full face shield.

Tabulated Data:
- APE No. 12130000M1
- Unit of Issue . . . .Each
- Installation Data:
  - Length . . . . . 36 in.
  - Width . . . .37 in.
  - Height . . . . . 65 in.
  - Weight . . . . . 1700 lbs.

Utilities Required:
None.

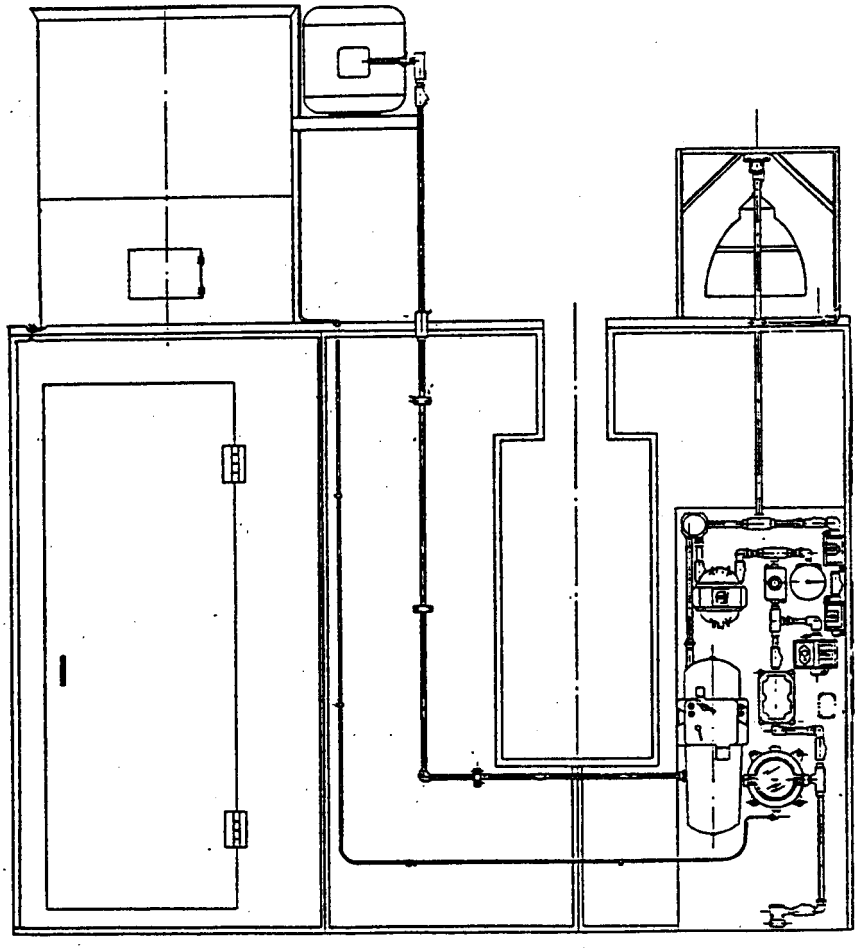
Production Capacity:
Not Applicable.

Shipping Data:
- Length . . . . . 47 in.
- Width . . . .43 in
- Height . . . . . 76 in.
- Cube . . . . . 89 cu. ft.
- Weight . . . . . 2000 lbs.

Associated Equipment:
APE 1202

Kits:
1213E002 Dud Removal Kit

APE 1214M1--BOOTH, PAINT SPRAY



Use:
The paint spray booth is used in production line painting of packing materials and ammunition items.

Description:
The booth, is a floor style, self supported, dry filter type, with a 19 foot face opening. It is complete with exhaust fan system, automatic shut down control, monorail and roller conveyor openings.

Difference Between Models:
A Tech Data Package was developed to replace original purchase description, to insure conformity of design.

Tabulated Data:

APE No	12140000M1
Unit of issue:	Each

Installation Data:

Length:	12 ft.
Width:	19 ft. 6 in.
Height:	9 ft. plus max 4 ft. 6 in. Exhaust Stack
Weight:	not available

Utilities Required:
220 VAC, 3 phase, 60 HZ,

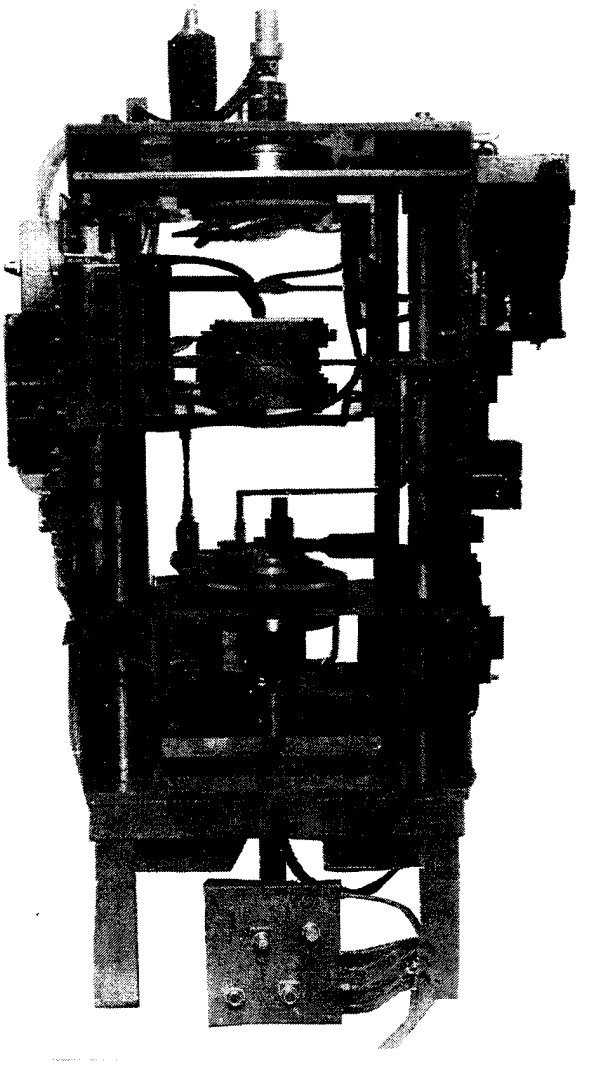
Production Capacity:
Not applicable.

Shipping Data: (Approximately)
Length: . . . . . Not available
Width: . . . . . Not available
Height: . . . . . Not available
Cube: . . . . . Not available
Weight: . . . . . Not available

Associated Equipment:
APE 1022M1 Conveyor, Powered Belt
Ape 1044M1 System, Monorail Conveyor

Kits:
None

APE 1215M1–MACHINE, ROCKET DISASSEMBLY



Use:
The rocket disassembly machine is used to disassemble 3.5-inch and 66MM rockets.

Description:
APE 1215M1 consists of a frame, lower head assembly, upper head assembly, fuze clamp assembly, detonator clamp assembly, pneumatic logic circuit board, remote control panel, and a hydraulic system.

Difference Between Models:
APE 1215M1 has improved valving and revolution counting capability.

Tabulated Data:

APE No	12150000M1
Unit of Issue	Each

Installation Data:

Length	41 in.
Width	38 in.
Height	80 in.
Weight	1242 lbs

Utilities Required:
Air at 100 psi and 100 cfm.

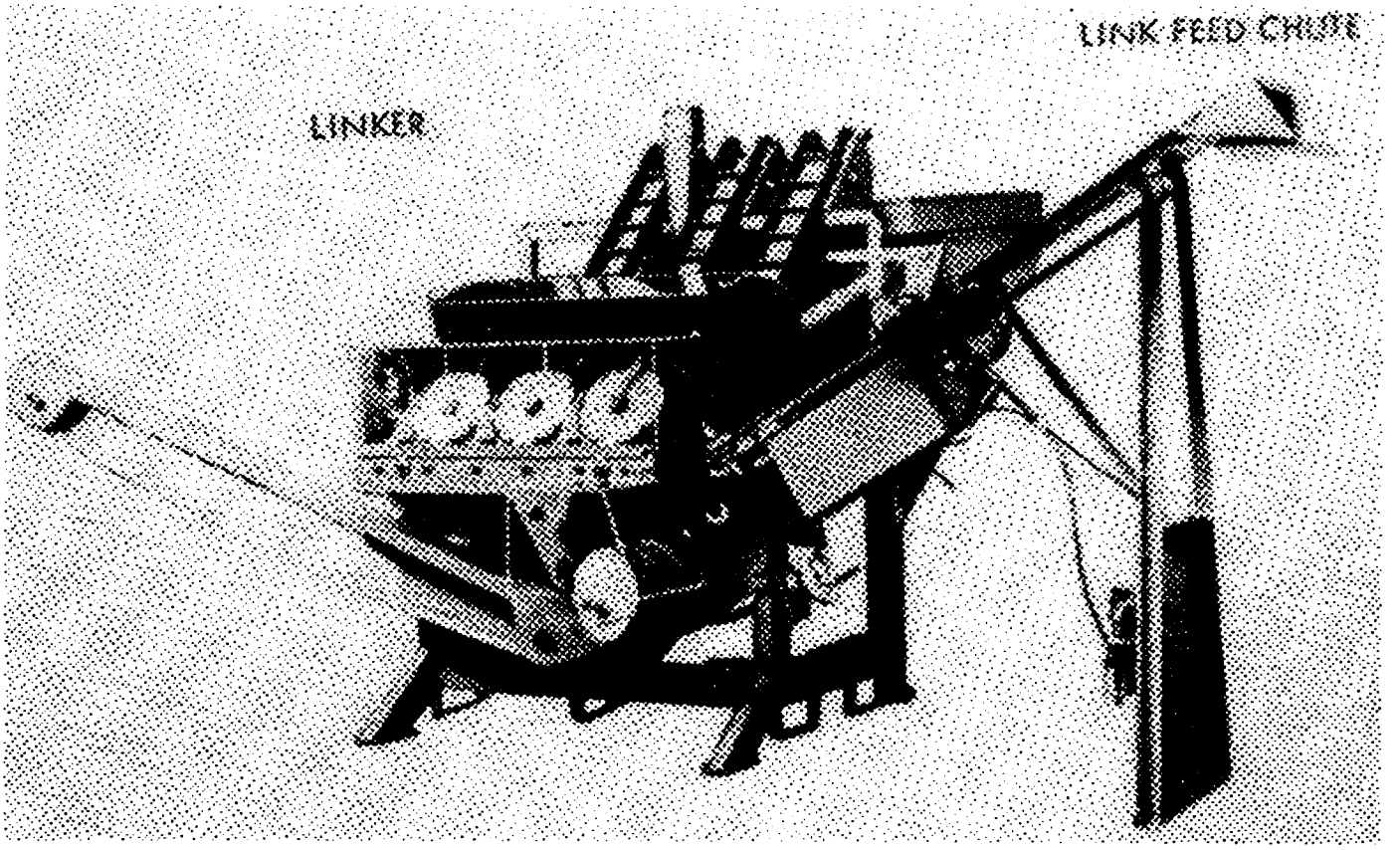
Production Capacity:
Depends on operation being performed and condition of rockets.

Shipping Data:
Length . . . .64 in.
Width . . . .48 in.
Height . . . .92 in.
Cube . . . .164 cu ft
Weight . . . .1600 lbs

Associated Equipment:
APE 1065, 1196M1, 1204.

Kits:
1215E002 KIT, Replace Igniter in 3.5–Inch Rocket
1215E003 KIT, Tighten or Replace Rivets in 3.5–Inch Rocket Motor
1215E004 KIT, Hand Tools to Assemble 3.5–Inch Rocket
1215E005 KIT, Drill Stake Marks from M404A2 Fuze
1215E006 KIT, Remove Detonator Housing from M404A2 Fuze
1215E007 KIT, Thread Chasing and Holding Device for M404 Fuze Body
1215E008 KIT, Hand Tools for Changing Setback Sleeve, M404A2 Fuze
1215E009 KIT, Staking Gun, Guide, and Holding Fixture
1215E010 KIT, Press out and Insert Nozzle Closure Plug
1215E049 KIT, Hand Tools for Assembly of 66MM Rocket: M72
1215E050 KIT, Disassemble 66MM HEAT Rocket: M72
1215E052 KIT, Alinement Bar

APE 1217M1--LINKING MACHINE, 7.62MM



Use:
The 7.62MM linking machine is used to straight link, or ratio link 7.62MM cartridges with M13 links. The machine works with a sequence of 5 cartridges (i.e., 4–1, 3-2, 2–2-1, or 5-0) for ratio pack.

Description:
APE 1217M1 consists of two separate units: a linker, and a link feed chute. The linker unit is power operated and links cartridges in belts of various lengths. Cartridge belt break assembly is included to make belts containing 100 cartridges, 210 cartridges and 220 cartridges. One cartridge must be hand linked at the end of each belt. The cartridges can be linked in either a straight or ratio pack. The pack must be in sequence of five cartridges, namely: 2-2-1, 4-1 or 3-2 ratio, or all of one kind.

A 2-2-1 ratio would indicate two cartridges of one type, two of another type, and one of a third type. The link feed chute is attached to the linker for the linking operation. It feeds into the linker from two stations. An automatic shuttle device shifts the feed from one station to the other whenever a shortage of links occurs in the chute. The linker unit can be connected to a delinker machine, APE 2198, for ratio changing.

Difference Between Models:
Basic model included the delinker now designated as APE 2198.

Tabulated Data:
APE No. 12170000M1
Unit of Issue . . . .Each
Installation Data:
LINKER:
Length . . . .132 in.
Width . . . .84 in.
Height . . . .67 in.
Weight . . . .1970 lbs
LINK FEED CHUTE:
Length . . . .48 in.
Width . . . .24 in.
Height . . . .62-1/2 in.
Weight . . . . . .155 lbs
Utilities Required:
115/230 vac, 60 Hz, single phase; air at 100 psi.
Production Capacity:
600 cartridges per minute.

Shipping Data:
LINKER:

Length	144 in.
Width	96 in.
Height	78 in.
Cube	624 cu ft
Weight	2140 lbs

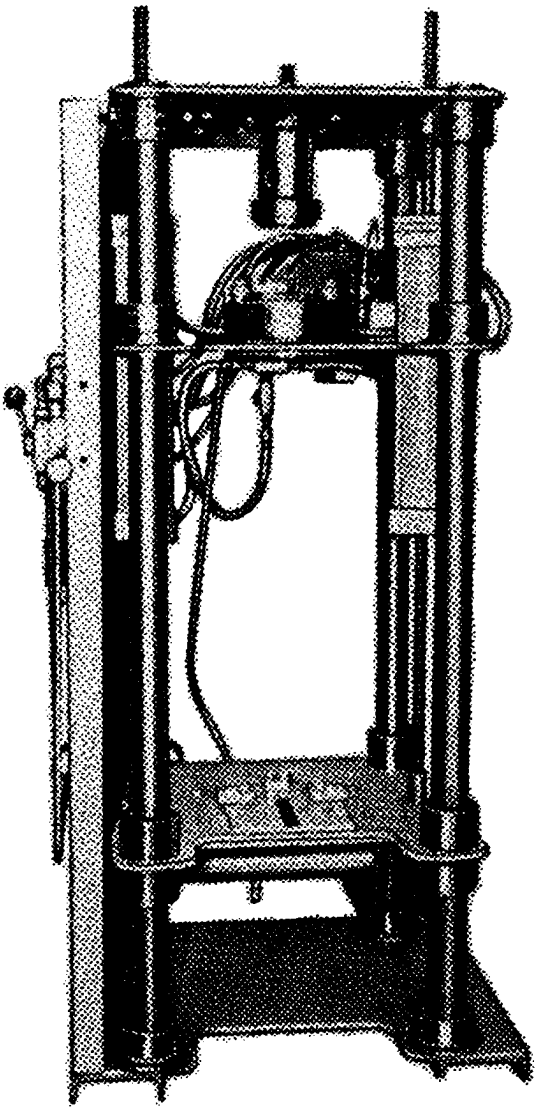
LINK FEED CHUTE:

Length	95 in.
Width	58 in.
Height	68 in.
Cube	Not available
Weight	Not available

Associated Equipment:
APE 2198 (for delinking only).

Kits:
None.

APE 1220--MACHINE, CRIMPING, VERTICAL



Use:
Vertical crimping machine is used to assemble and crimp fixed artillery ammunition 37MM thru 106MM. The case is crimped with an eight stab type.

Description:
APE 1220 consists of the platform with cartridge case shoe holder, crimping head, ogive and machine controls.

Difference Between Models:
Original design.

Tabulated Data:

APE No. 12200000
Unit of Issue . . . . . Each

Installation Data:

Length . . . . . 40 in.
Width . . . . . 48 in.
Height . . . . . 68 in.
Weight . . . . . 1600 lbs

Utilities Required:
Air at 90 psi and 50 cfm.

Production Capacity:
2100 per 8 hour shift.

Shipping Data:

Length . . . .48 in.
Width . . . .54 in.
Height . . . .84 in.
Cube . . . .126 cu ft
Weight . . . .1750 lbs

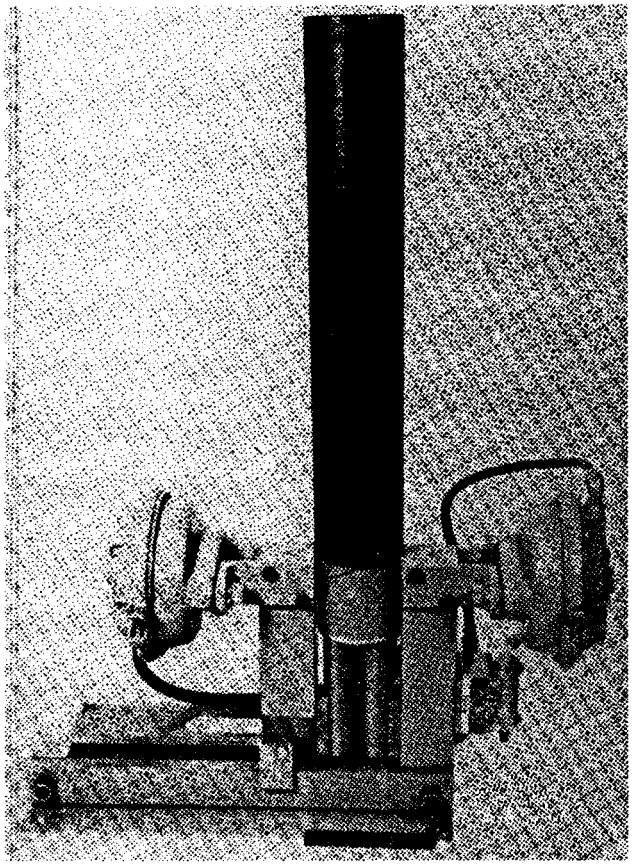
Associated Equipment:

None.

Kits:

1220E001	Assemble and Crimp 75MM M48, M61, M66 or M338 with M18 Cartridge Case
1220E002	Assemble and Crimp 75MM TSO, M312, M334 to Cartridge Case M35
1220E003	Assembly and Crimp 76MM M93, M312, M315 to Cartridge Case M26 w/.150 Crimp Groove
1220E004	Assemble and Crimp 76MM M304 and M339 to Cartridge Case M88
1220E005	Assemble and Crimp 76MM M42 and M312 to Cartridge Case M26 w/.050 Groove
1220E006	Assembly and Crimp 90MM M71 to Cartridge Case M19
1220E007	Assemble and Crimp 90MM M307
1220E008	Assemble and Crimp 105MM M325, M326 to M94 and M95 Cartridge Case
1220E009	Assemble and Crimp 105MM M456 w/8 Stab Crimp
1220E010	Assemble and Crimp 57MM M307
1220E011	Crimp Ogive on M90 Fuze

APE 1221--MACHINE, HOLE PUNCH



Use:
The hole punch machine is used to punch pressure relief holes in the necks of fiber containers for 75MM through 120MM ammunition.

Description:
APE 1221 consists of a metal slide assembled to a flat metal base with two air brake cylinders attached to the metal slide. One guide block with die holder is stationary. The other is adjustable for the different diameter containers.

Difference Between Models:
Original design.

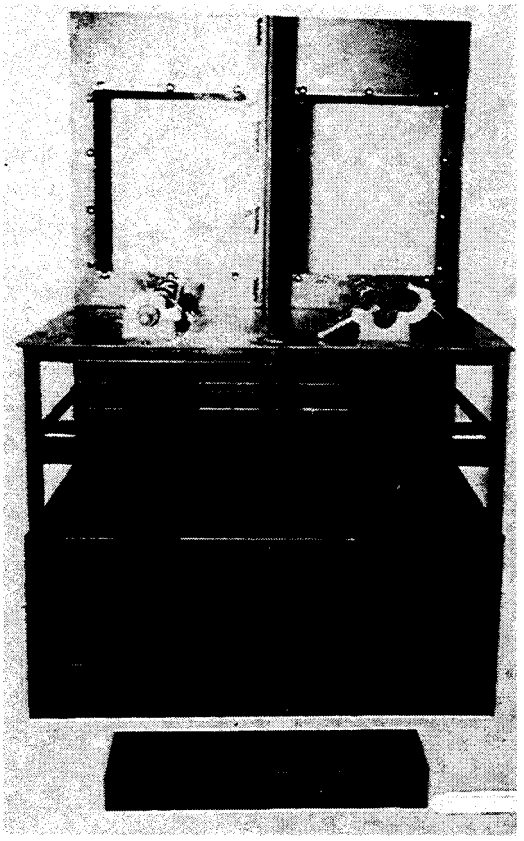
Tabulated Data:
APE No. 12210000
Unit of Issue . . . . . Each
Installation Data:
Length . . . . . 30 in.
Width . . . . . 18 in.
Height . . . . . 17 in.
Weight . . . . . 75 lbs
Utilities Required:
Air at 80 psi and 3 cfm.
Production Capacity:
2100 containers per 8 hour shift.

Shipping Data:
Length . . . . . 41 in.
Width . . . . . 18 in.
Height . . . . . 20 in.
Cube . . . . . 8 cu ft
Weight . . . . . 120 lbs

Associated Equipment:
APE 1003.

Kits:
None.

APE 1222–REMOVER, IGNITION CARTRIDGE AND PRIMER



Use:
The ignition cartridge and primer remover is used to remove M32 and M34 percussion primers and M5A1 and M8 ignition cartridges from 81MM, M43A1 mortar cartridges

Description:
APE 1222 consists of a shipping box which is used as the base mount, a table top, holding vises, flash shields and disassembly tools.

Difference Between Models:
Original design.

Tabulated Data:
- APE No 12220000
- Unit of Issue . . . .Each

Installation Data:
- Length . . . . . 48 in.
- Width . . . . . 37-1/2 in.
- Height . . . .7 in.
- Weight . . . . . 400 lbs

Utilities Required:
- None.

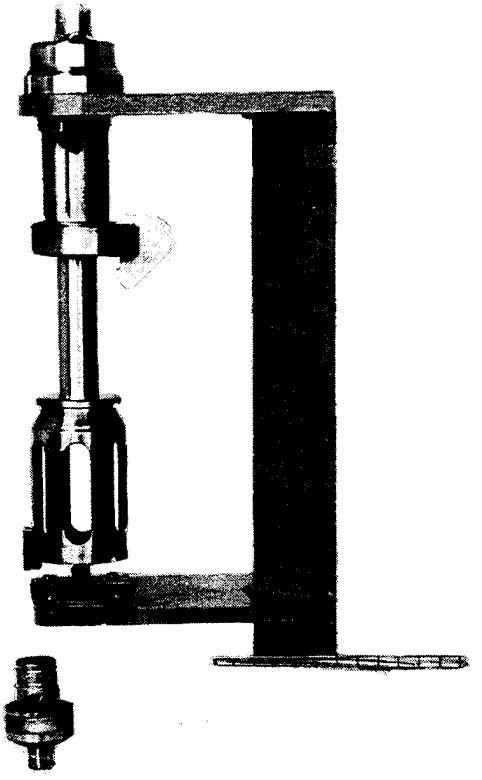
Production Capacity:
- 3 cartridges per minute.

Shipping Data:
- Length . . . . . 48 in.
- Width . . . . . 31-1/2 in.
- Height . . . . . 20-1/2 in.
- Cube . . . . . 18 cu ft
- Weight . . . . . 400 lbs

Associated Equipment:
- None

Kits:
- None

APE 1223--TORQUE FIXTURE, M54, M55, AND M500 SERIES FUZES



Use:
The torque fixture is used to hold M54, M55, and M500 series, M548, M564 and M565 fuzes for testing the torque required to set the fuze.

Description:
The fixture consists of a frame which is to be fastened to a table or other rigid surface, a drive ratchet shaft with fuze adapter and a ratchet device. A dual detent drive lug must be used for torque check of M548, M64 and M565 fuzes

Difference Between Models:
Original Design

Tabulated Data:
APE No 12230000
Unit of issue: . . . . . Each

Installation Data
Length: . . . . . 9-1/2 in.
Width: . . . . . 7-1/4 in.
Height: . . . . . 21 in.
Weight . . . . . 23 lbs.

Utilities Required:
None

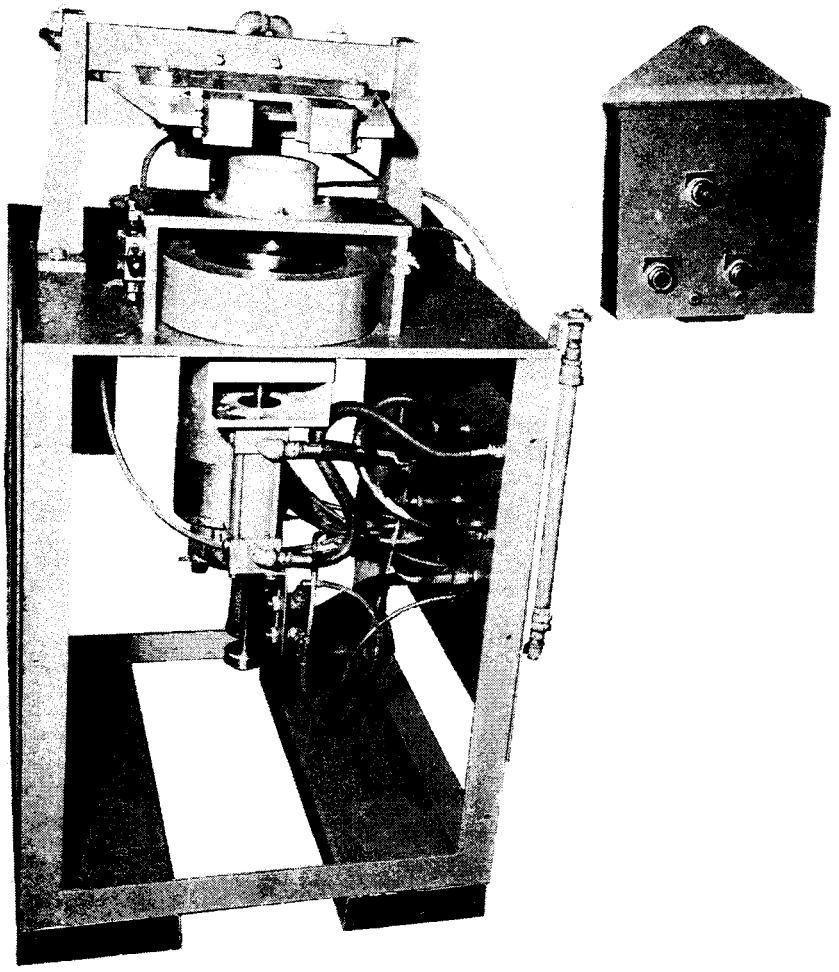
Production Capacity:
Not applicable.

Shipping Data
Length:. . . . . 11 in.
Width:.. . . . . 9 in.
Height:. . . . . 25 in.
Cube: . . . . . 1.5 cu. ft.
Weight:. . . . . 28 lbs.

Associated Equipment:
None

Kits:
1223E001 Kit, Screwdriver

APE 1224–MACHINE, DISASSEMBLY, SHAPED CHARGE MUNITIONS



Use:
The disassembly machine is used to disassemble for modification renovation, or demilitarization, the projectile (with shaped charge) of 75MM through 105MM HEAT cartridges.

Description:
APE 1224 consists of a frame assembly, air driven motor, vise assembly and component assembly for each size cartridge.

Difference Between Models:
Original design.

Tabulated Data:
APE No. 12240000
Unit of Issue . . . . . .Each

Installation Data:
Length . . . . . .30 in.
Width . . . . . 30 in.
Height . . . . . 46 in.
Weight . . . . . 1100 lbs

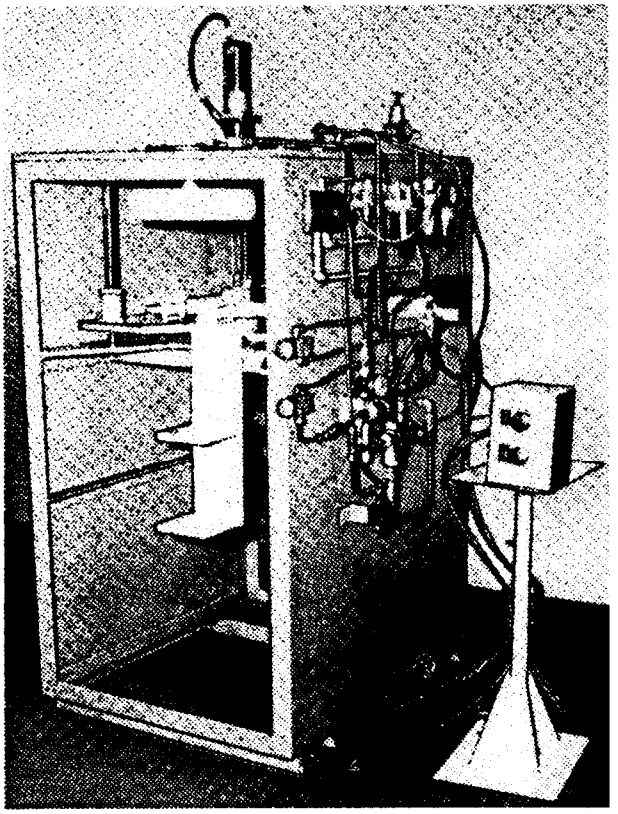
Utilities Required:
Air at 90 psi and 83 cfm.
Production Capacity:
280 to 385 per hour.

Shipping Data:
Length . . . . . Not available
Width . . . . . Not available
Height . . . . . Not available
Cube . . . . . 23.73 cu ft
Weight . . . . . Not available

Associated Equipment:
None.

Kits:
None.

APE 1227--MACHINE, VERTICAL DISASSEMBLY



Use:
The vertical disassembly machine was developed to remove the fin and boom assembly from the projectile of 90MM HEAT: M371 and 105MM M341 cartridges.

Description:
APE 1227 consists of a pneumatic drive motor, vise assembly, cartridge elevating assembly, and a fluidic industrial control counter system assembled to a metal stand. The control system is arranged to permit operation of the machine starting system by remote control.

Difference Between Models:
Original design.

Tabulated Data:
- APE No. 12270000
- Unit of Issue . . . .Each
- Installation Data:
  - Length . . . .41in.
  - Width . . . . . 44 in.
  - Height . . . . . 77 in.
  - Weight . . . . . 900 lbs
- Utilities Required:
  - Air at 90 psi and 25 cfm.
- Production Capacity:
  - 840 cartridges per 8 hour shift.

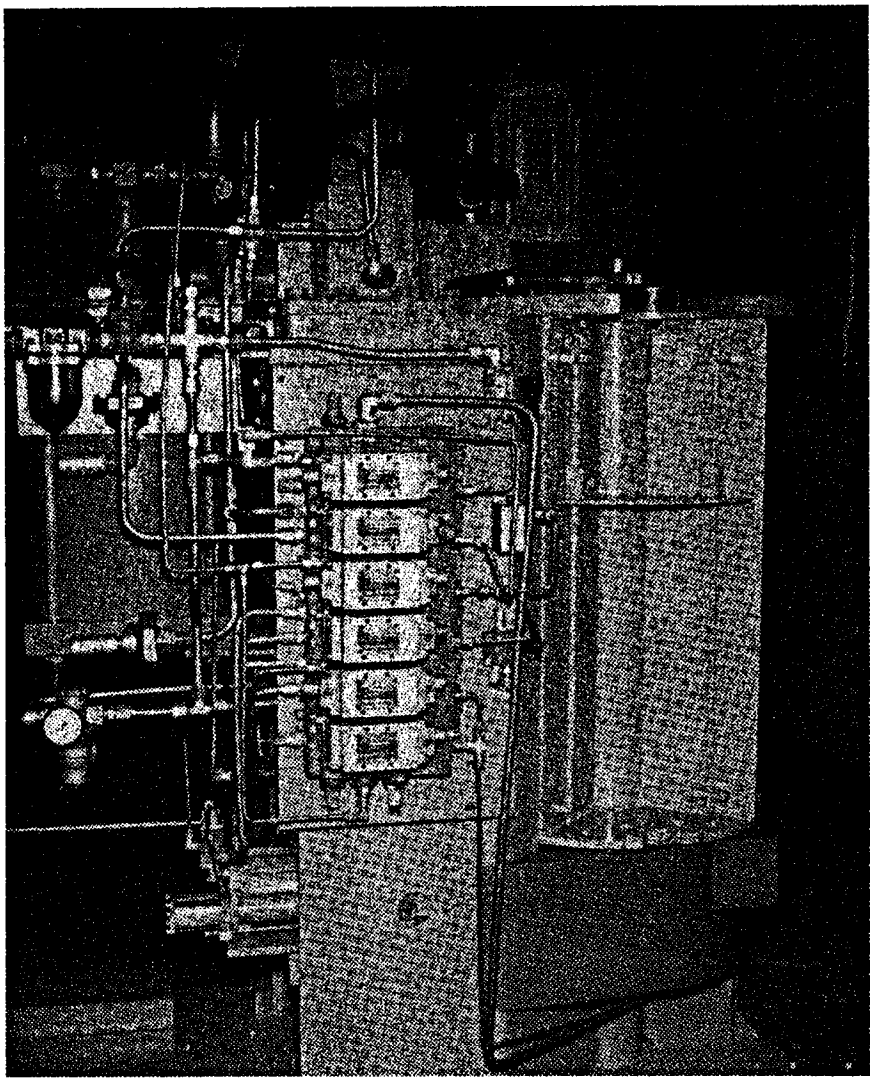
Shipping Data:
- Length . . . . . 48 in.
- Width . . . . . 54 in.
- Height . . . . . 84 in.
- Cube . . . . . 126 cu ft
- Weight . . . . . 1200 lbs

Associated Equipment:
None.

Kits:

1227E001	KIT, Disassemble 90MM: Cartridge	M371
1227E002	KIT, Disassemble 105MM: Cartridge	M341

APE 1229M1--MACHINE, PRIME AND DEPRIME



Use:
The prime and deprime machine is used to insert or remove press type primers from 37MM through 106MM cartridge cases. It may also be used to remove screw type primers from 37MM through 106MM cartridge cases which will be demilitarized.

Description:
APE 1229M1 design consists of a 1/2-inch thick steel barricade with a four station index turntable. An air-hydraulic unit supplies power to operate a punch cylinder. A series of valves and controls automatically function the machine.

Difference Between Models:
APE 1229M1 - Operational controls have been changed to a manifold system and pneumatic piping schematics are completely different.

Tabulated Data:

APE No.	12290000M1
Unit of Issue	Each
Installation Data:	
Length	54 in.
Width	36 in.
Height	71 in.
Weight	3120 lbs

Shipping Data:

Length	60 in.
Width	48 in.
Height	84 in.
Cube	.140 cu ft
Weight	3370 lbs

Associated Equipment:

None.

Kits:

1229E004 KIT, Prime and Deprime 40MM: M25 Cartridge Case

1229E005 KIT, Prime and Deprime 57MM: M30 Cartridge Case

1229E006 KIT, Prime and Deprime Cartridge Case, 57MM: M23; 75MM: M35; and 76MM: M26

1229E007 KIT, Prime and Deprime 75MM: M5, M9, M18 Cartridge Cases

1229E008 KIT, Prime and Deprime 75MM: M31 and 76MM: M88 and M101 Cartridge Cases

1229E009 KIT, Prime and Deprime Cartridge Case, 90MM: M19, M27, M108; 105MM: M32, M90, M95; 106MM:M93, M94 Cartridge Cases

1229E010 KIT, Prime and Deprime 105MM: M14 and M15 Cartridge Case

1229E011 KIT, Prime and Deprime 120MM, M34, M24, and M109

1229E012 KIT, Deprime 3-inch: MK7 Mod 0 Cartridge Case

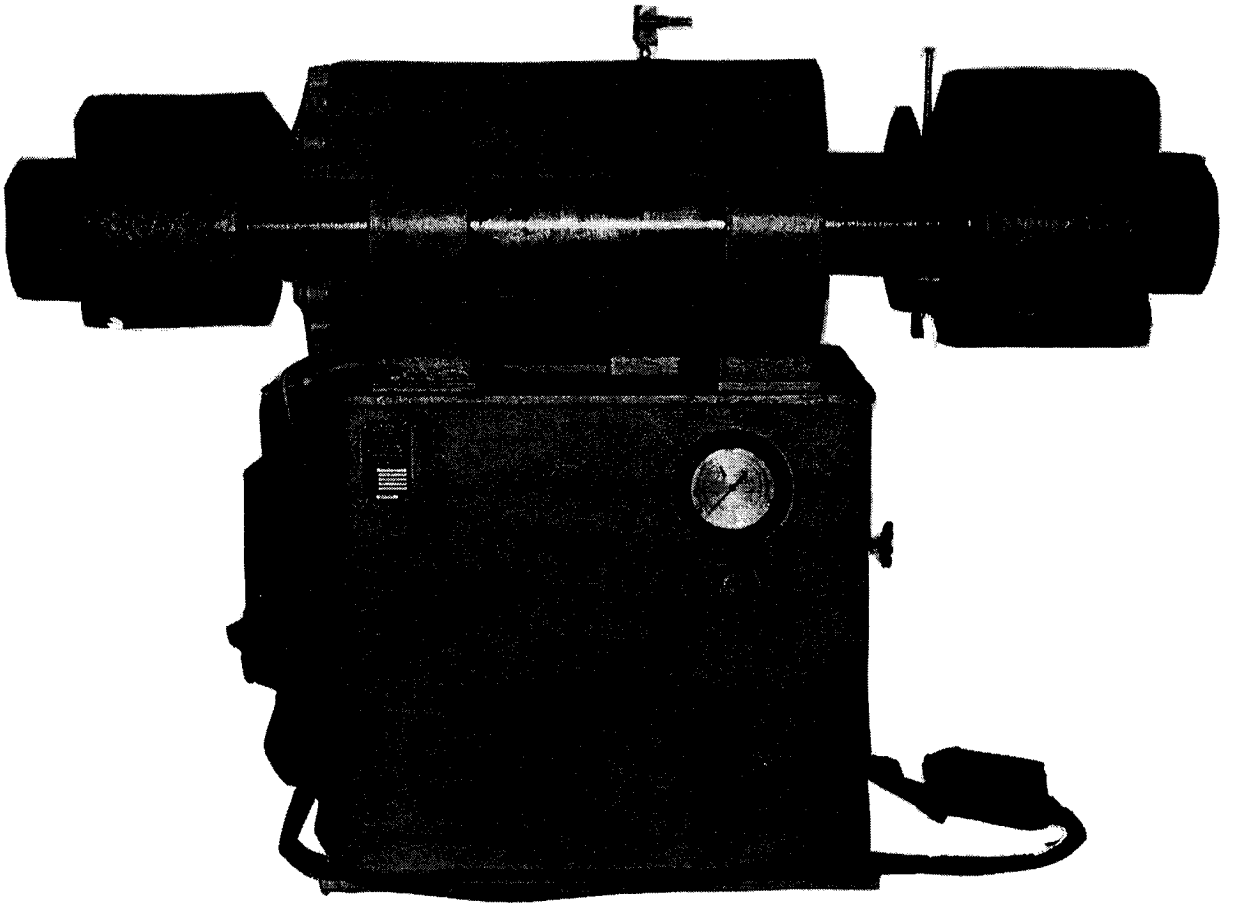
1229E016 KIT, Demilitarize M21A4 Boosters

1229E020 KIT, Remove Detonator from Rocket Fuze M404A2

NOTE

Kits are interchangeable with APE 1106 kits.

APE 1231-CRIMPING MACHINE, RUBBER DIE, 150 TON



Use:
The crimping machine is used to crimp cartridge cases to projectiles with a roll type crimp at the cartridge case mouth. It can be adapted for use on 40MM through 6-inch cartridges.

Description:
APE 1231 consists of two units. The crimping unit is made up of a metal base, a crimping head and associated controls. The pump unit consists of a metal base which serves as the oil reservoir, an electric motor, a hydraulic pump, a filter unit, an oil cooler and electrical controls.

Difference Between Models:
Original design.

Tabulated Data:

APE No 12310000
Unit of Issue . . . . . Each

Installation Data:

CRIMPING UNIT:

Length . . . .71 in.
Width . . . . . 44 in.
Height . . . . . 54 in.
Weight . . . . . 2800 lbs

PUMPING UNIT:
Length . . . . . 71 in.
Width . . . . . 52 in.
Height . . . . . 74 in.
Weight . . . . . 3000 lbs

Utilities Required:
230 vac, 3 phase, 60 Hz.

Production Capacity:
Not available.

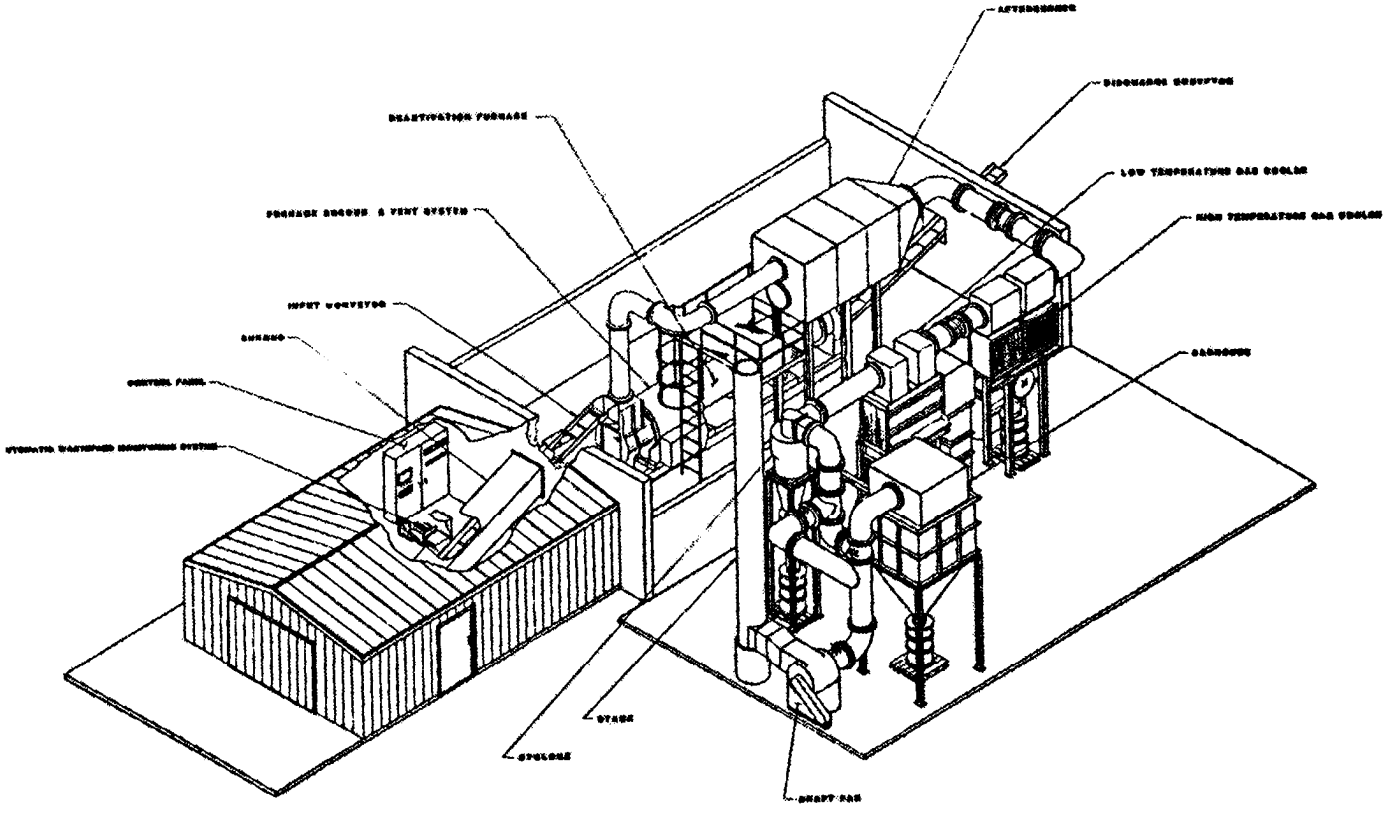
Shipping Data:
CRIMPING UNIT:
Length . . . . . 75 in.
Width . . . . . 48 in.
Height . . . . . 62 in.
Cube . . . . . 129 cu ft
Weight . . . . . 3175 lbs

PUMPING UNIT:
Length . . . . . 75 in.
Width . . . . . 57 in.
Height . . . . . 82 in.
Cube . . . . . 203 cu ft
Weight . . . . . 3305 lbs

Associated Equipment:
None.

Kits:
None.

APE 1236M1--INCINERATOR, HAZARDOUS WASTE



Use:
The Army's hazardous waste incinerators are used to demilitarize and/or dispose of ammunition items and bulk explosive wastes. They will accommodate demilitarization of small arms ammunition, primers, fuzes, and boosters. They can be used to flash 75MM through 120MM projectiles after washout of explosive charge; and to deactivate drained chemical bombs, rockets, grenades and other miscellaneous items.

Description:
APE 1236M1 consists of the following: deactivation furnace, afterburner, high and low temperature gas coolers, cyclone, baghouse, draft fan, control panel, gas sampling system, and connecting ducting. It also includes: automatic feed system, feed and discharge conveyors, fuel oil and propane storage tanks, oil pump, and final exhaust stack.

Difference Between Models:
APE 1236M1 differs from the APE 1236 deactivation furnace in that APE 1236M1 has been modified to satisfy RCRA requirements for hazardous waste incinerators.

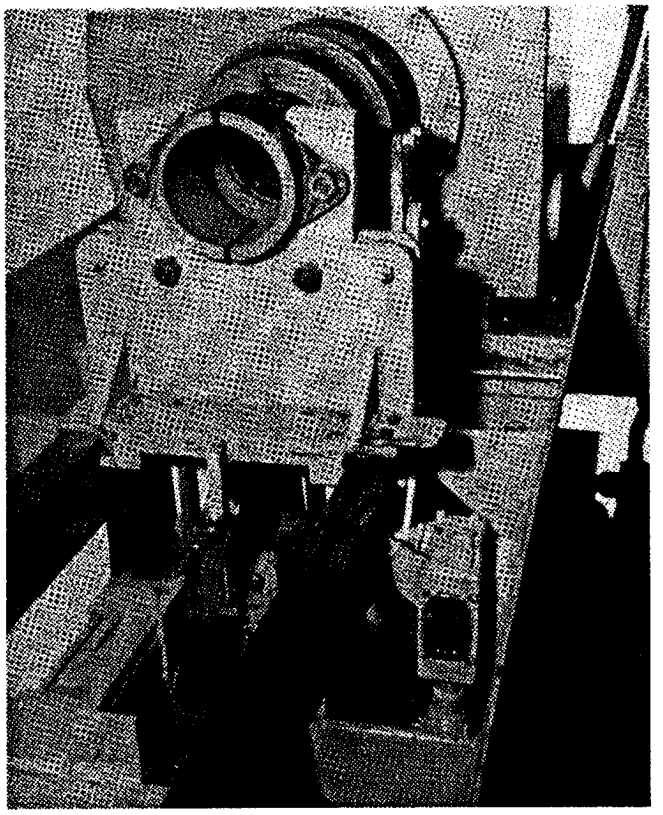
Tabulated Data:
APE No. 12360000M1
Unit of Issue . . . .Each
Installation Data:
Detailed data available in the APE 1236M1 Operational Manual.
Utilities Reauired:
300 kva, 220/440 vac, 60 Hz, 3 phase.
Production Capacity:
Refer to APE 1236M1 Operational Manual.

Shipping Data:
Detailed data available in the APE 1236M1 Operational Manual.

Associated Equipment:
APE 2196.

Kits:
None.

APE 1240--SEPARATOR, MOTOR FROM WARHEAD



Use:
The motor from warhead separator is used to remove warheads from rocket motor on 115MM: M55 and 4.5-inch: M32 rockets.

Description:
APE 1240 consists of a modified commercial pipe threading machine and a remote control console.

Difference Between Models:
Original design.

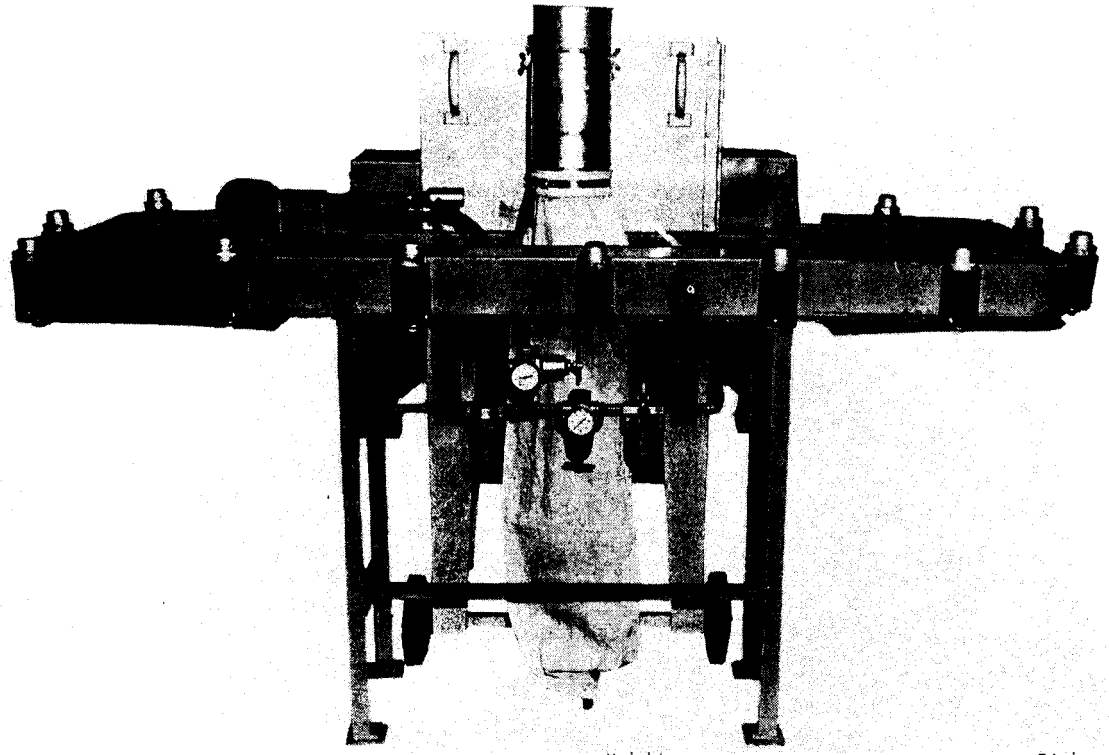
Tabulated Data:
APE No. 1240000
Unit of Issue . . . .Each
Installation Data:
SEPARATOR:
Length . . . .68 in.
Width . . . .34 in.
Height . . . .53 in.
Weight . . . .1500 lbs
CONTROL CONSOLE:
Length . . . .24 in.
Width . . . . . . 23 in.
Height . . . . . 50 in.
Weight . . . . . 200 lbs
Utilities Required:
220 vac, 60 Hz, 3 phase;
air at 100 psi and 100 cfm.
Production Capacity:
1000 rockets per 8 hour shift.

Shipping Data:
Length . . . . . 84 in.
Width . . . . . 42 in.
Height . . . . . 72 in.
Cube . . . . . 147 cu ft
Weight . . . . . 1900 lbs

Associated Equipment:
None.

Kits:
1240E001 KIT, M55 Rocket
1240E002 KIT, 2.75 Inch Rocket APERS-T (Flechette) Warhead

APE 1243–MACHINE, ABRASIVE CLEANING



Use:
The abrasive cleaning machine is used to clean the threads on the base of standard contour fuzes.

Description:
APE 1243 consists of a metal frame on which is installed a pneumatic drive motor, gear reduction box, conveyor chain, chain guards and fuze holders; and an abrasive blast cabinet.

Tabulated Data:
- APE No. 12430000
- Unit of Issue . . . . . Each

Installation Data:
- FRAME:
  - Length . . . . . 72 in.
  - Width . . . . . 24 in.
  - Height . . . . . 45 in.
  - Weight . . . . . 300 lbs.

BLAST CABINET
- Length . . . . . 24 in.
- Width . . . . . 24 in.
- Height . . . . . 54 in.
- Weight . . . . . 275 lbs.

Utilities Required
Air at 80 psi and 62 cfm.

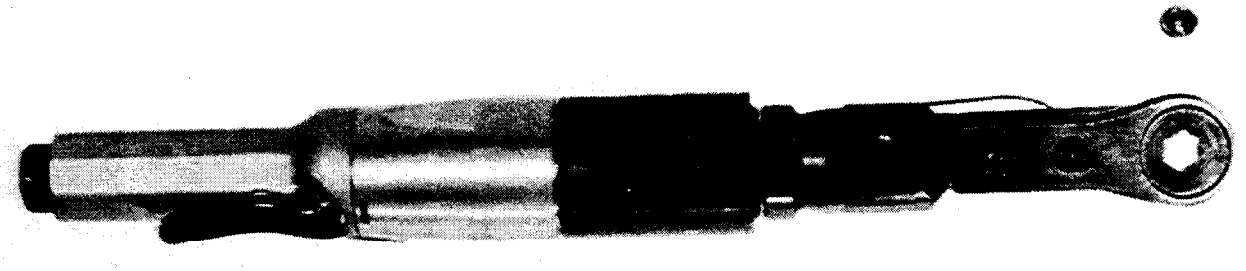
Production Capacity:
2000 fuzes per 8 hour shift.

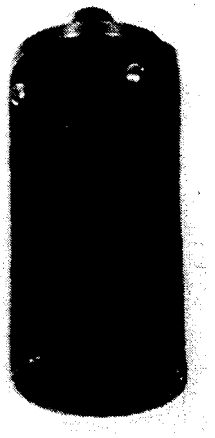
Shipping Data:
- FRAME:
  - Length . . . . . 76 in.
  - Width . . . . . 36 in.
  - Height . . . . . 54 in.
  - Cube . . . . . 85 cu. ft.
  - Weight . . . . . 400 lbs.
- BLAST CABINET:
  - Length . . . . . 30 in.
  - Width . . . . . 36 in.
  - Height . . . . . 66 in.
  - Cube . . . . . 41.5 cu. ft.
  - Weight . . . . . 357 lbs.

Associated Equipment:
None

Kits:
None

APE 1247--WRENCH, FUZE, PNEUMATIC





Use:
The pneumatic fuze wrench is used to assemble and disassemble standard contour artillery fuzes from artillery projectiles.

Description:
The unit consists of an air driven ratchet wrench with a rubber fuze inserting cup attached.

Difference Between Models:
Original design.

Tabulated Data:
APE No 12470000
Unit of issue: . . . . . Each

Installation Data:
WRENCH
Length: . . . . . 17 in.
Width: . . . . . 2 in.
Height: . . . . . 2 in.
Weight: . . . . . 4 lbs.

CUP
Length: . . . . . 5-1/2 in.
Width: . . . . . 2-1/4 in.
Height: . . . . . 2-1/4 in.
Weight: . . . . . 1 lb.

Utilities Required:
Air at 90 PSI and 28 CFM.

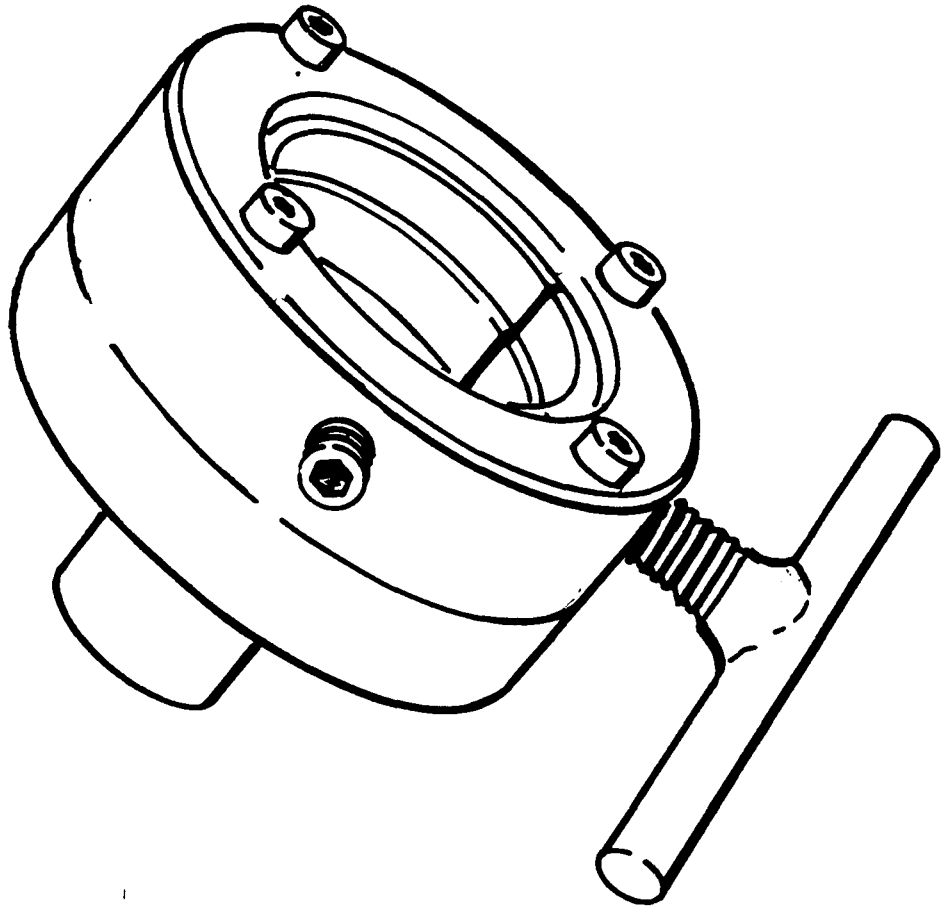
Production Capacity:
350 fuzes per hour.

Shipping Data:
Length: . . . . . 18 in.
Width: . . . . . 4 in.
Height: . . . . . 4 in.
Cube: . . . . . 0.17 cu. ft
Weight: . . . . . 5 lbs.

Associated Equipment:
None

Kits:
None

APE 1250--ADAPTER, NOSE CAP



Use:
The nose cap adapter is used to assemble and torque the nose cap on the spike of the 90MM M371E1 HEAT projectile

Description:
The unit consists of an adapter for gripping the nose cap

Difference Between Models:
Original design.

Tabulated Data:
APE No. 12500000
Unit of issue: . . . .Each

Installation Data:
Length: . . . . . 2-1/4 in.
Width: . . . . . 3-1/4 in.
Height: . . . . . 1-13/16 in.
Weight: . . . . . 1-1/8 lbs.

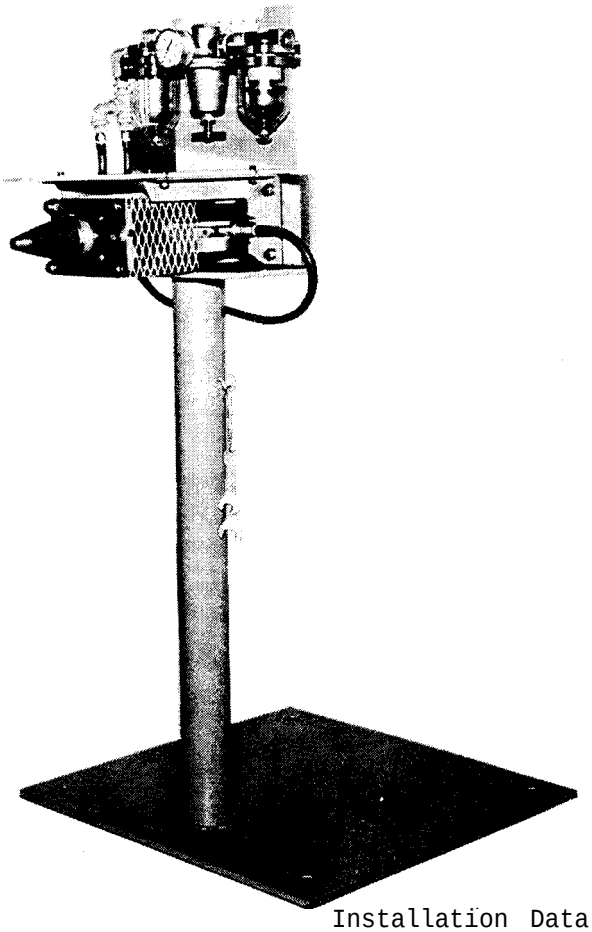
Utilities Required:
None

Production Capacity:
Not applicable.

Associated Equipment:
None

Kits:
None

APE 1251–MACHINE, FUZE DEBURRING



Use:
The fuze deburring machine is used to remove staking burrs from fuze shoulders. It can debur fuzes with or without boosters assembled.

Description:
The machine consists of a pedestal mounted deburring mechanism with protective guards. The deburring mechanism is air operated. The fuze to be deburred is positioned in the machine by hand and rotated by hand.

Difference Between Models:
Original design.

Tabulated Data:

APE No	12510000
Unit of Issue	Each

Installation Data:

Length	30 in.
Width	24 in.
Height	48 in.
Weight	165 lbs

Utilities Required:
Air at 90 psi and 60 cfm.

Production Capacity:
Depends on condition of fuzes.

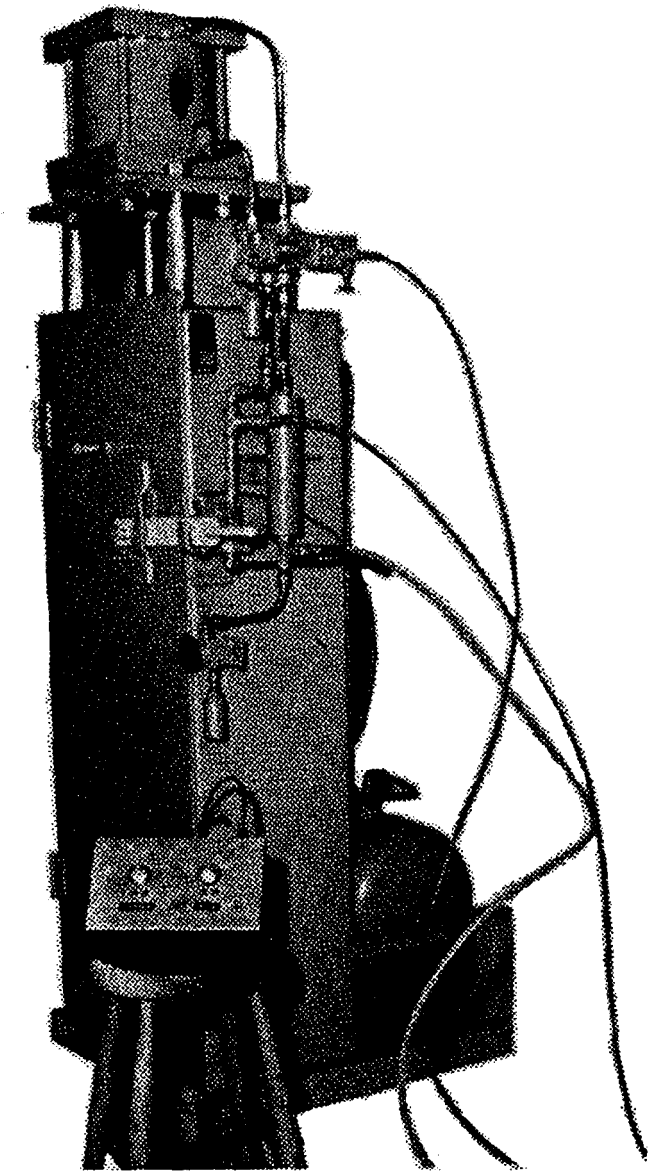
Shipping Data:

Length	53 in.
Width	27 in.
Height	34 in.
Cube	28 cu ft
Weight	318 lbs

Associated Equipment:
None.

Kits:
None.

APE 1254M1--MACHINE, PRIMER STAKING AND CONTINUITY TESTING



Use:
The primer staking and continuity testing machine is used to stake the M86 primer into the 105MM M150 series cartridge case and measure the electrical resistance between the cartridge case and the primer. It has the capability to primer stake and continuity test the primer in a complete round.

Description:
APE 1254M1 consists of an operational shield with an air operated cylinder, an electrical probe, a staking head, an ohmmeter, a time control air valve, and a remote control system for use when complete rounds are processed.

Difference Between Models:
The APE 1254M1 machine has changed the bottom deflector to increased inside height to accommodate complete rounds and has added remote control capability.

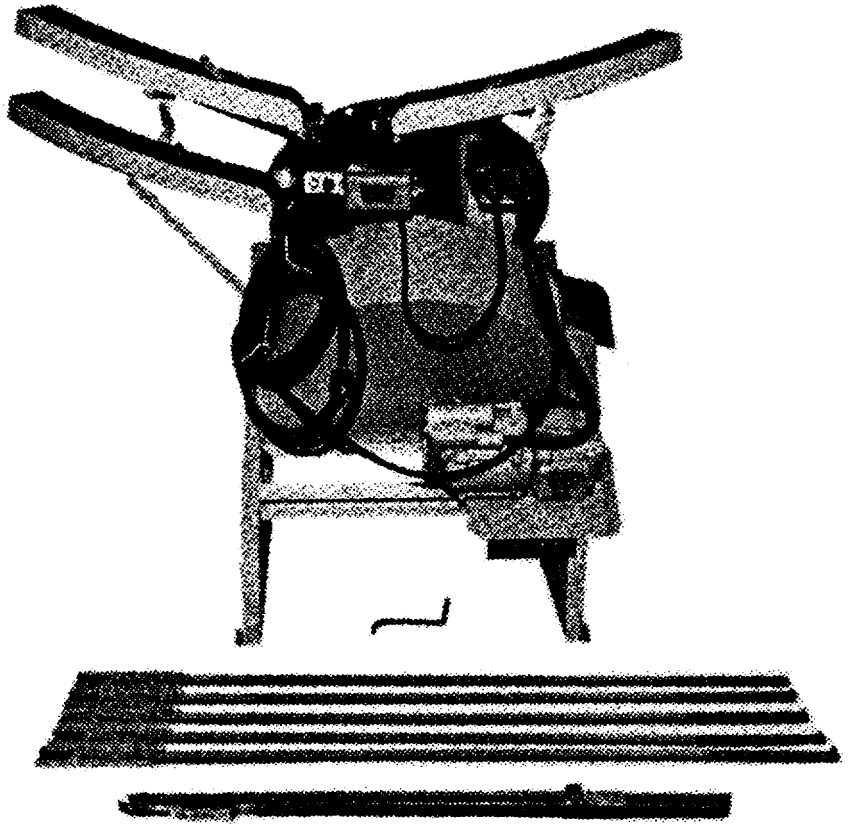
Tabulated Data:
APE No. 12540000M1
Unit of Issue . . . .Each
Installation Data:
Length . . . .36 in.
Width . . . .25 in.
Height . . . .82 in.
Weight . . . .1000 lbs
Utilities Required:
Air at 80 psi and 80 cfm.
Production Capacity:
840 cartridge cases per 8 hour shift.

Shipping Data:
Length . . . .48 in.
Width . . . .30 in.
Height . . . .96 in.
Cube . . . . . 70 cu ft
Weight . . . . . 1200 lbs

Associated Equipment:
None.

Kits:
1254E001 KIT, Stake M80 and M83 Primers into 105MM: M115 and M148 Cartridge Cases
1254E002 KIT, Stake M58 Primers into 90MM: M108 Cartridge Cases
1254E003 KIT, Stake Continuity Check: Navy 5/54 Cartridge Case
1254E004 KIT, Stake Continuity: 105MM M148A1B1 Cartridge Case with M20 Primer

APE 1259--LINKING MACHINE, 7.62MM



Use:
The linking machine is used to link 7.62MM cartridges into M13 links. It can link straight pack or ratio pack in any sequence of five cartridges (i.e., 2–2–1, 3-2, 4-1).

Description:
APE 1259 is an APE 1114 link–delink machine without the delink features. The linker consists of cartridge feed chutes, a link feed assembly, a drum type linking mechanism, and a metal frame.

Difference Between Models:
Original design.

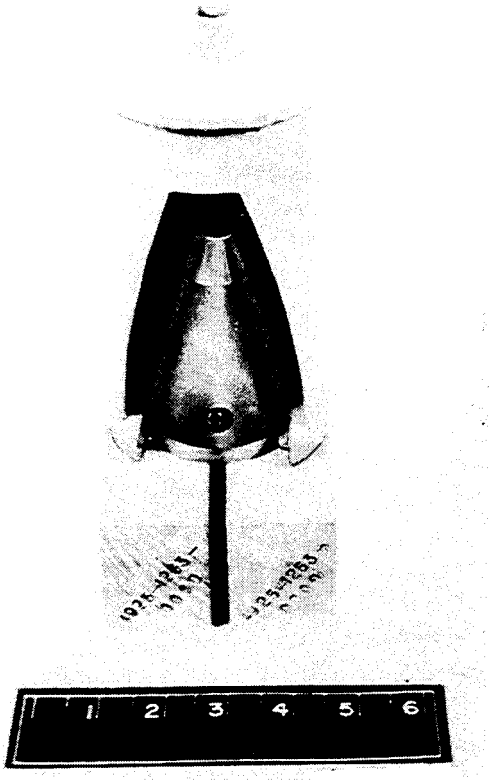
Tabulated Data:
APE No. 12590000
Unit of Issue . . . .Each
Installation Data:
Length . . . .40 in.
Width . . . . . 50 in.
Height . . . . . 60 in.
Weight . . . . . 500 lbs
Utilities Required:
115/230 vat, 60 Hz, single phase, 4.6 amp.
Production Capacity:
300 cartridges per minute.

Shipping Data:
Length . . . . . 46 in.
Width . . . . . 43 in.
Height . . . . . 55 in.
Cube . . . . . 63 cu ft
Weight . . . . . 743 lbs

Associated Equipment:
None.

Kits :
1114E001 KIT, Blank Adapter

APE 1263--TORQUING FIXTURE, FUZE BOOSTER



Use:
The fuze booster torquing fixture is used to test the disassembly torque of the booster from the fuze.

Description:
The unit consists of a wrench adapter and two wooden booster holder blocks. the wrench adapter is cylindrical, has a standard contour fuze configuration opening with fuze lugs at the bottom, and a 1/2-inch square drive socket on top for assembly to a torque wrench. The booster holder blocks are to be used with a vise.

Difference Between Models:
Original design.

Tabulated Data:

APE No	12630000
Unit of issue:	Each

Installation Data:

ADAPTER

Length:	3-5/8 in.
Width:	3-5/8 in.
Height:	7-1/2 in.
Weight:	3 lbs.

BLOCKS

Length:	5-5/8 in.
Width:	1-11/16 in.
Height:	2-1/4 in.
Weight:	2 lbs.

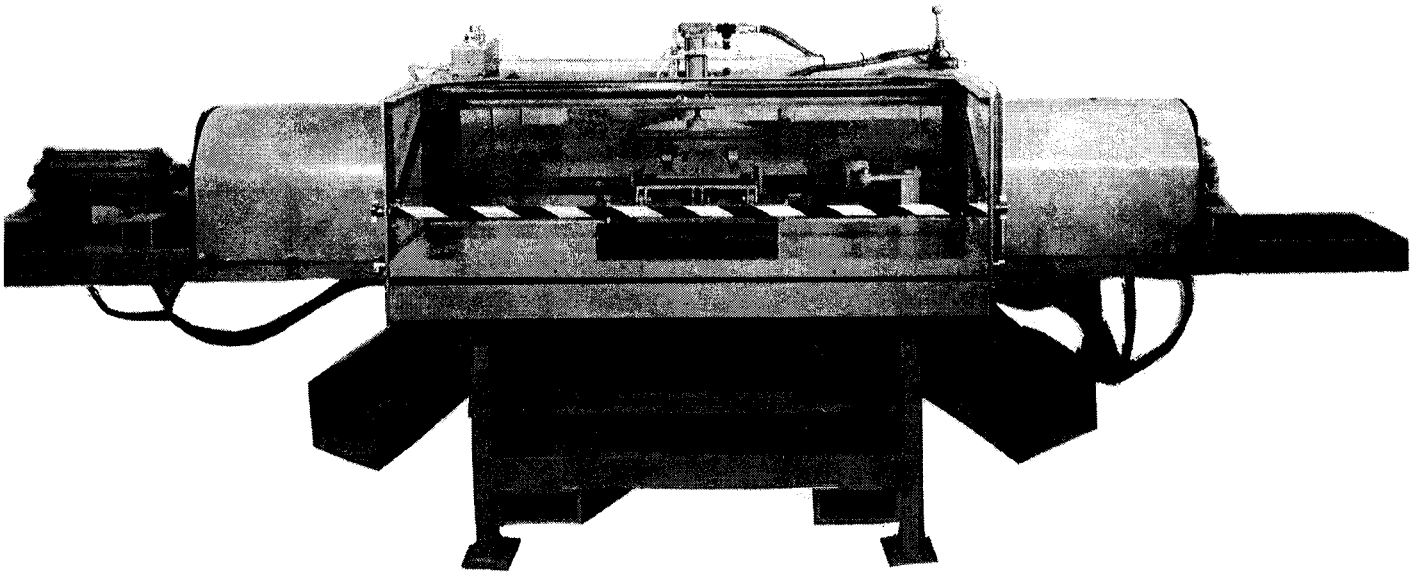
Utilities Required:
None

Production Capacity:
Not established.

Associated Equipment:
None

Kits:
None

APE 1270M1--AUTOMATIC LID REMOVAL MACHINE



Use:
The APE 1270M1, Automatic Lid Removal Machine is used to remove one or both lids from a cylindrical fiber ammunition container. The machine handles 40MM through 120MM projectile containers, with a maximum length of 50 inches.

Description:
The APE 1270M1 consists of a metal frame with a feed table and an ejection table. The machine is pneumatically powered with a clamping cylinder to hold the containers in place while pull cylinders on each end of the frame remove the lids from either end or both ends of the container. The user must determine the size range of the ammunition container intended for lid removal operations, in order to request an appropriate Clamp Shoe Kit.

Difference Between Models:
The APE 1270M1 has a longer frame making it possible to remove lids from 120MM containers. The APE 1270E004, 120MM Fiber Container Clamp Shoe Kit and the APE 1270E005, Immersion Tank Kit, are designed for use with the APE 1270M1 only.

Tabulated Data:

APE No	12700000M1
Unit of issue:	Each

Installation Data:

Length:	137 in.
Width:	52 in.
Height:	58 in.

Utilities Required:
Air at 100 psi.

Production Capacity:
10 containers per minute

Shipping Data:

Length: . . . . . 145.in.
Width: . . . .57 in.
Height: . . . . . 67 in.
Cube: . . . . . 285 cu. ft.
Weight: . . . . . 1750 lbs.

Associated Equipment:

None

Kits:

1270E001, 40MM, Thru 60MM (Maximum 2-3/4 Inch Diameter) Fiber Container Clamp Shoe Kit

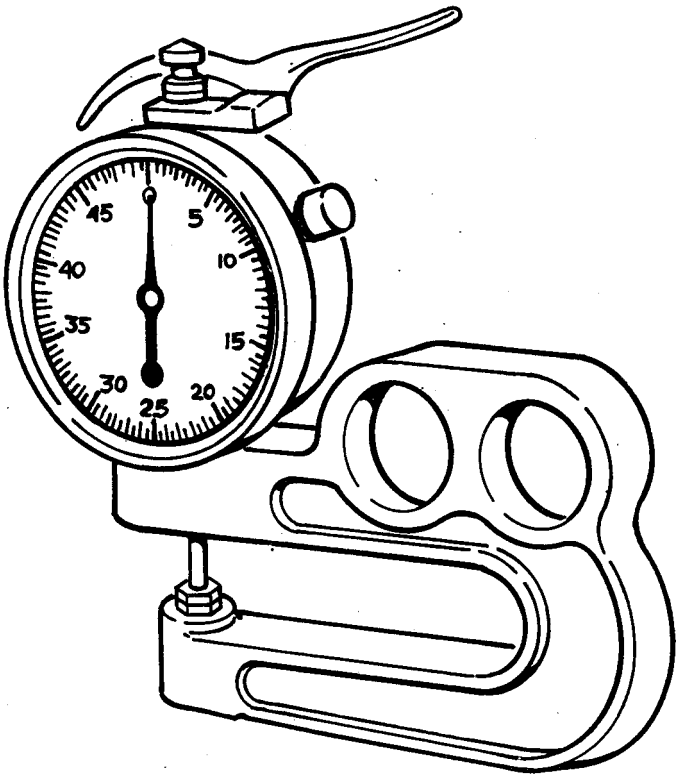
1270E002, 75MM Thru 81MM (Maximum 4-1/4 Inch Diameter)Fiber Container Clamp Shoe Kit

1270E003, 90MM Thru 105MM (Maximum 5-1/2 Inch Diameter) Fiber Container Clamp Shoe Kit

1270E004, 120MM (Maximum 8-1/4 Inch Diameter) Fiber Container Clamp Shoe Kit

1270E005, Immersion Tank Kit, provides a means of submerging leaking 60MM, Smoke, White Phosphorus (WP), M722 Cartridges during lid removal operations, as specified in Depot Maintenance Work Requirements (DMWR) 9-1310-B646–X20.

APE 1272-GAGE, DIAL INDICATING



Use:
The dial indicating gage is used to determine the wall thickness of M72 series rocket launcher used with 66MM rocket.

Description:
APE 1272 is a modified commercial thickness gage. The one jaw of the gage is modified.

Difference Between Models:
Original design.

Tabulated Data:
APE No 12720000
Unit of Issue . . . . . Each
Installation Data:
Length . . . . . 9-1/4 in.
Width . . . . . 3/4 in.
Height . . . . . 10-3/4 in.
Weight . . . . . 4 lbs
Utilities Required:
None.
Production Capacity:
Not applicable.

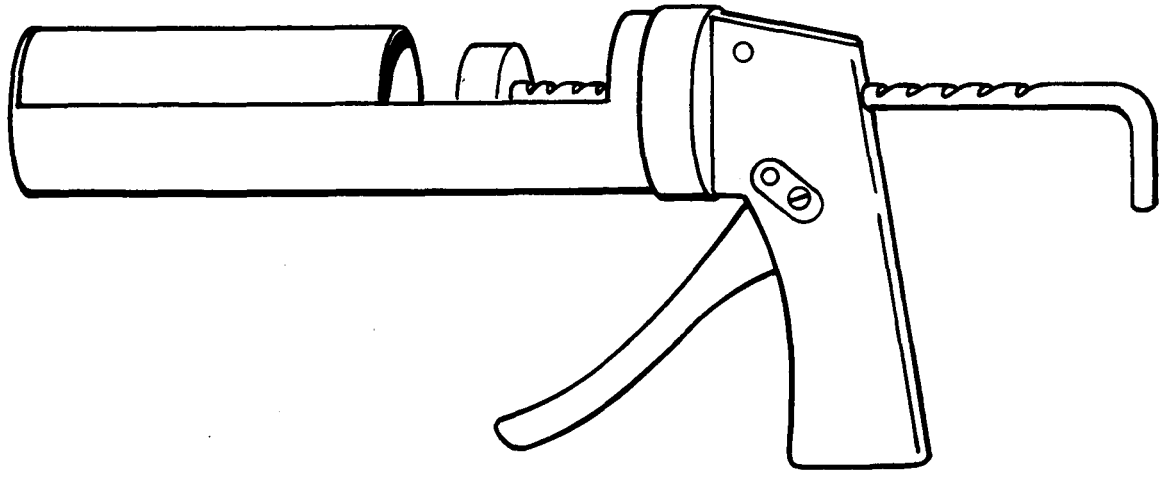
Shipping Data:
Length . . . . . 10 in.
Width . . . . . 1 in.
Height . . . . . 10 in.
Cube . . . . . 100 cu in.
Weight . . . . . 5 lbs

Associated Equipment:
None.

Kits:

None.

APE 1277--TOOL, LINK-DELINK, 40MM M16 LINK



Use:
The link and delink tool is used to link or delink 40MM, M384 cartridges into M16 links.

Description:
The tool consists of a modified heavy duty caulking gun.

Difference Between Models:
Original design.

Tabulated Data:
APE No 12770000
Unit of issue: . . . . . Each

Installation Data:
Length: . . . . . 14 in.
Width: . . . . . 2 in.
Height: . . . . . 7 in.
Weight: . . . . . 5 lbs.

Utilities Required:
None

Production Capacity:
Not applicable.

Shipping Data:
Length: . . . . . 15 in.
Width: . . . . . 3 in.
Height: . . . . . 8 in.
Cube: . . . . . 0.21 cu. ft
Weight: . . . . . 6 lbs.

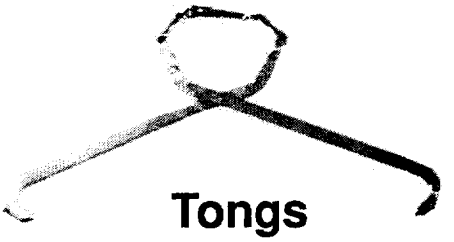
Associated Equipment:
None

Kits:
None

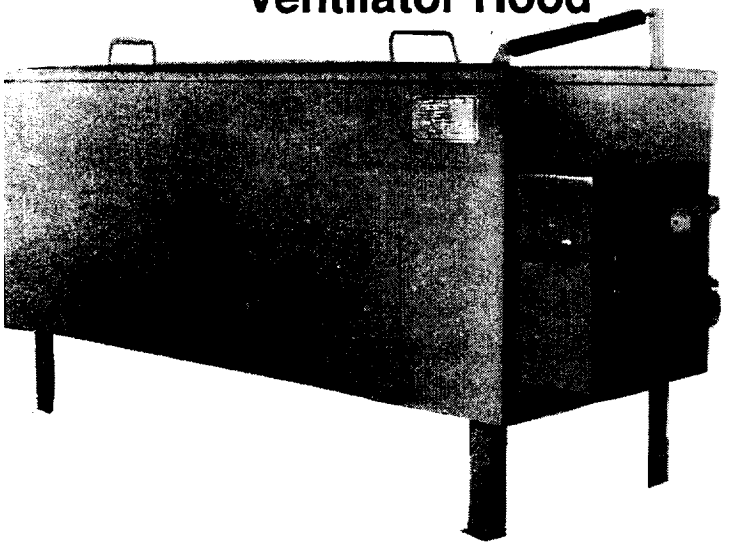
APE 1278M1-TANK, HOT DIP, JUNGLE PACK AMMUNITION



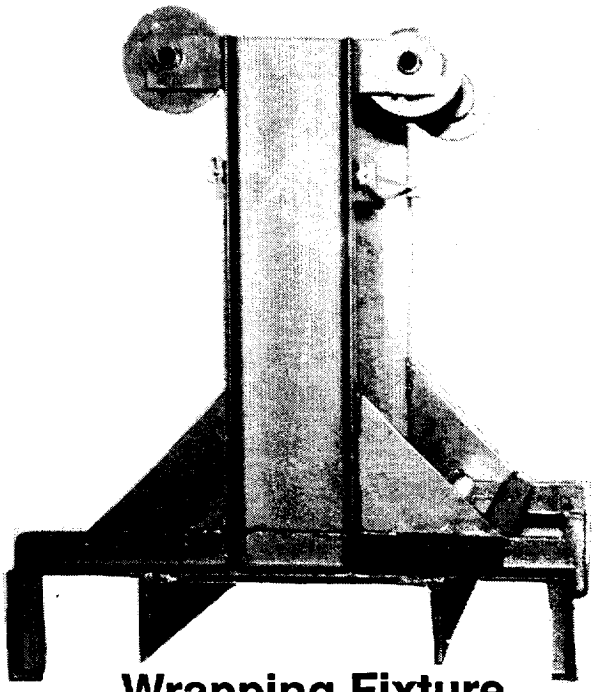
Ventilator Hood



Tongs



Hot Dip Tank



Wrapping Fixture

Use:
The hot dip tank is used to jungle pack 81MM and 4.2-inch mortar ammunition. Jungle pack consists of dipping the inner pack containing the rounds into a wax like compound to hermetically seal the container.

Description:
APE 1278M1 consists of a dip tank for heating sealing compound, an exhaust ventilator hood (furnished CONUS installat ions only), two wrapping fixtures, and four pairs of lifting tongs. The inside dimensions of the tank are 24″ minimum width, 24″ minimum depth, and 60″ minimum length.

Difference Between Models:
The ventilator hood, two wrapping fixtures and four pair of lifting tongs, are supplied with the APE 1278M1 only. The APE 1278M2 consists only of a hot water conditioning tank.

Tabulated Data:

APE No	12780000M1
Unit of Issue	Each

Installation Data:

HOT DIP TANK:

Length	77 in.
Width	30 in.
Height	42 in.
Weight	Not available

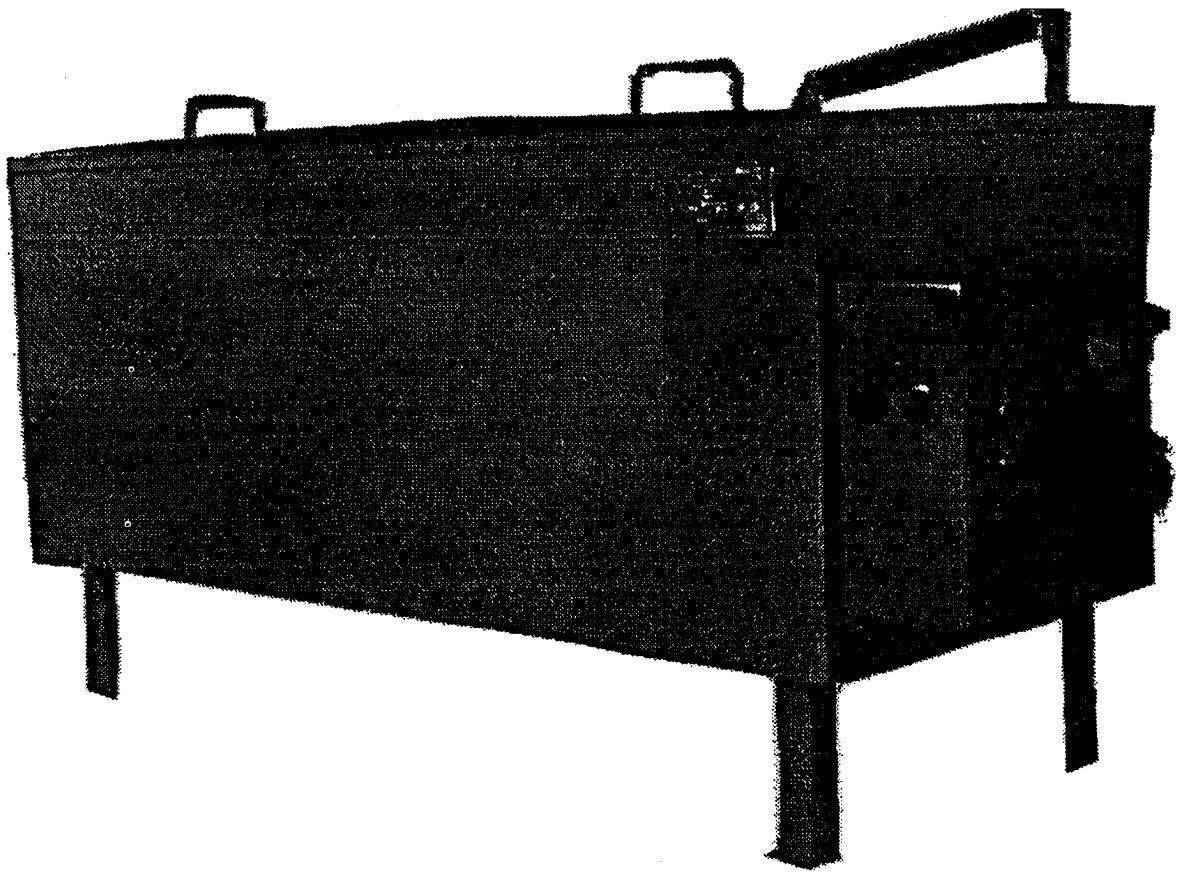
VENTILATOR HOOD:
Length . . . . . 60 in.
Width . . . . . 24 in.
Height . . . . . 32 in.
Weight . . . . . Not available
WRAPPING FIXTURE (EACH):
Length . . . . . 44 in.
Width . . . . . 28 in.
Height . . . . . 35 in.
Weight . . . . . Not available
Utilities Required:
220 vac, 3 phase, 60 Hz.
Production Capacity:
Not applicable.

Shipping Data:
BOX:
Length . . . . . 58 in.
Width . . . . . 50 in.
Height . . . . . 37 in.
Cube . . . . . 61 cu ft
Weight . . . . . 645 lbs
CRATE:
Length . . . . . 100 in.
Width . . . . . 77 in.
Height . . . . . 49 in.
Cube . . . . . 215 cu ft
Weight . . . . . 2540 lbs

Associated Equipment:
None.

Kits:
1278E002 KIT, Counter Balance for Dip Tank Cover

APE 1278M2--TANK, HOT WATER, CONDITIONING



Use:
The hot water conditioning tank is used in the conditioning of materials which must be warmed in a hot water bath prior to installation or use.

Description:
APE 1278 consists of dip tank for heating water. The inside dimensions of the tank are 24 inch minimum width, 24 inch minimum depth, and 60 inch minimum length.

Difference Between Models:
The ventilator hood, two wrapping fixtures and four pairs of lifting tongs are supplied with the APE 1278M1 only. The APE 1278M2 consists only of a hot water conditioning tank.

Tabulated Data:

APE No.	12780000M2
Unit of Issue	Each
Installation Data:	
Length	77 in.
Width	30 in.
Height	42 in.
Weight	Not available
Utilities Required:	
220 vac,3 phase, 60 Hz.	
Production Capacity:	
Not applicable.	

Shipping Data:

BOX:

Length . . . . . 58 in.
Width . . . . . 50 in.
Height . . . . . 37 in.
Cube . . . . . 61 cu ft
Weight . . . . . 645 lbs

CRATE:

Length . . . . . 100 in.
Width . . . . . 77 in.
Height . . . . . 49 in.
Cube . . . . . 215 cu ft
Weight . . . . . 2540 lbs

Associated Equipment:

APE 2230, Obturator installation Fixture

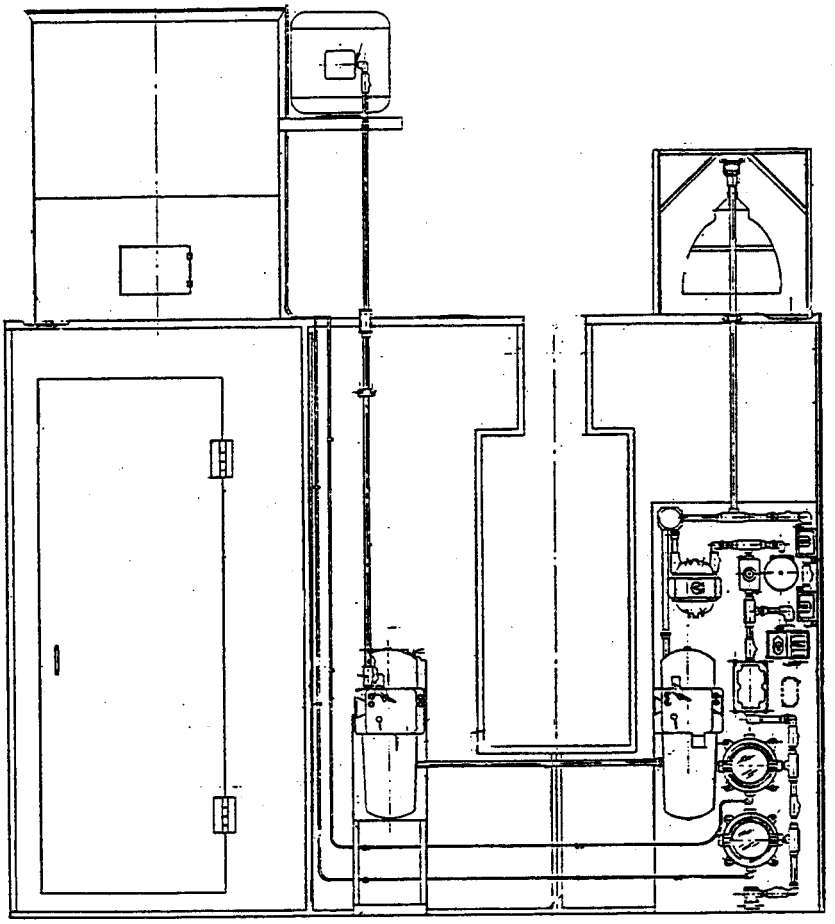
Kits:

1278E001 KIT, Centering Band Holding Rack, 155MM

1278E003 KIT, Obturator Holding Rack, 155MM

1278E004 KIT, Obturator Holding Rack 8 Inch

APE 1280M1--BOOTH, PAINT SPRAY



Use

The paint spray booth is used in production line painting of packing materials and ammunition items.

Description:

The booth, is a floor style, self supported, dry filter type, with a 32 foot face opening. It is complete with exhaust fan system, automatic shut down control, monorail and roller conveyor openings.

Difference Between Models:

A Tech Data Package was developed to replace original purchase description, to insure conformity of design.

Tabulated Data:

APE No 12800000M1
Unit of issue: . . . . . Each

Installation Data:

Length: . . . . . 12 ft.
Width: . . . . . 32 ft. 6 in.
Height: . . . . . 9 ft. plus max
4 ft. 6 in. Exhaust Stack
Weight: . . . . . Not available

Utilities Required:
220 VAC, 3 phase, 60 HZ,

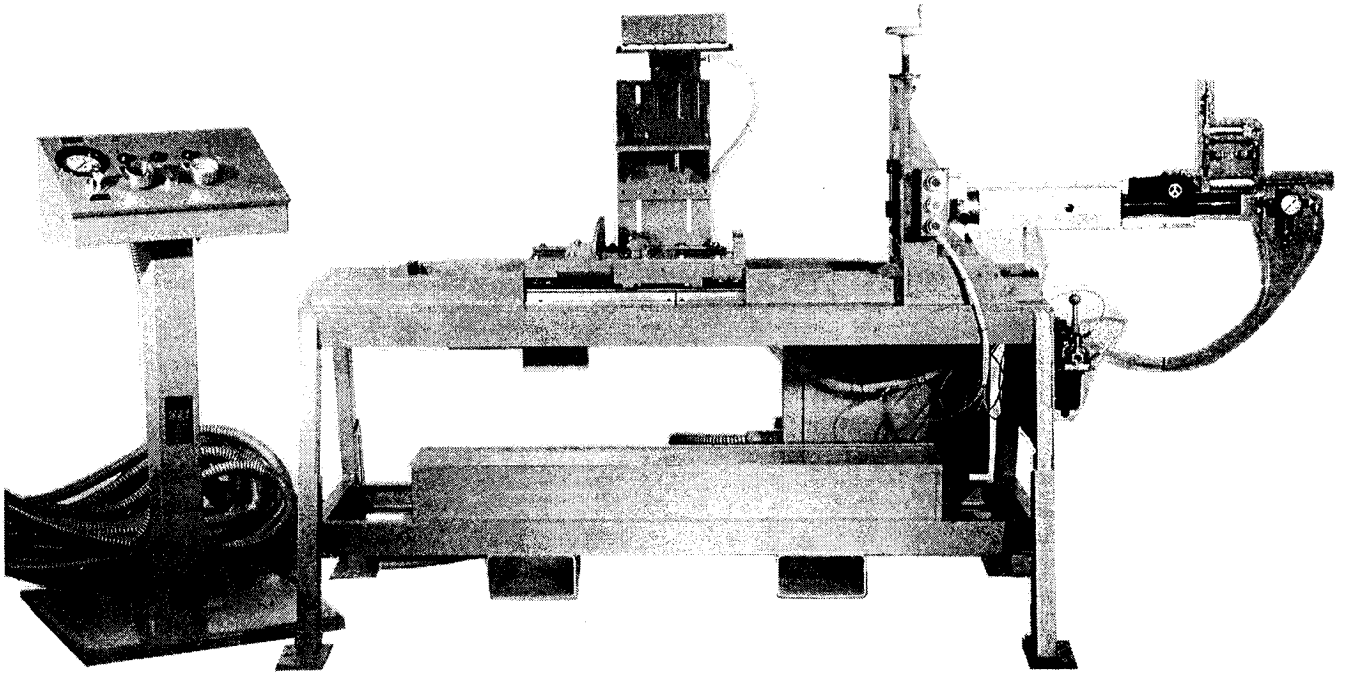
Production Capacity:
Not applicable.

Shipping Data:
CRATE 1
Length: . . . . . Not available
Width: . . . . . Not available
Height: . . . . . Not available
Cube: . . . . . Not available
Weight: . . . . . Not available

Associated Equipment:
APE 1022M1 Conveyor, Powered Belt
Ape 1044M1 System, Monorail Conveyor

Kits:
None

APE 1283-MACHINE, DEEP CAVITY, DRILL AND RESIZE



Use:
The deep cavity and resize drill is used to drill out or resize the fuze cavity in 75MM through 280MM explosive loaded projectiles. It can also be used for powered thread cleaning. This machine will eventually be replaced by APE 7025.

Description:
APE 1283 consists of a metal frame, a projectile holding assembly, a self-centering drill, and pneumatic controls to operate the drill from a remote location.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	12830000
Unit of Issue	Each

Installation Data:

Length	8 in.
Width	39-7/8 in.
Height	68-9/16 in.
Weight	975 lbs

Utilities Required:
Air at 90 to 100 psi at 20 cfm.

Production Capacity:
Depends on size of projectile.

Shipping Data:

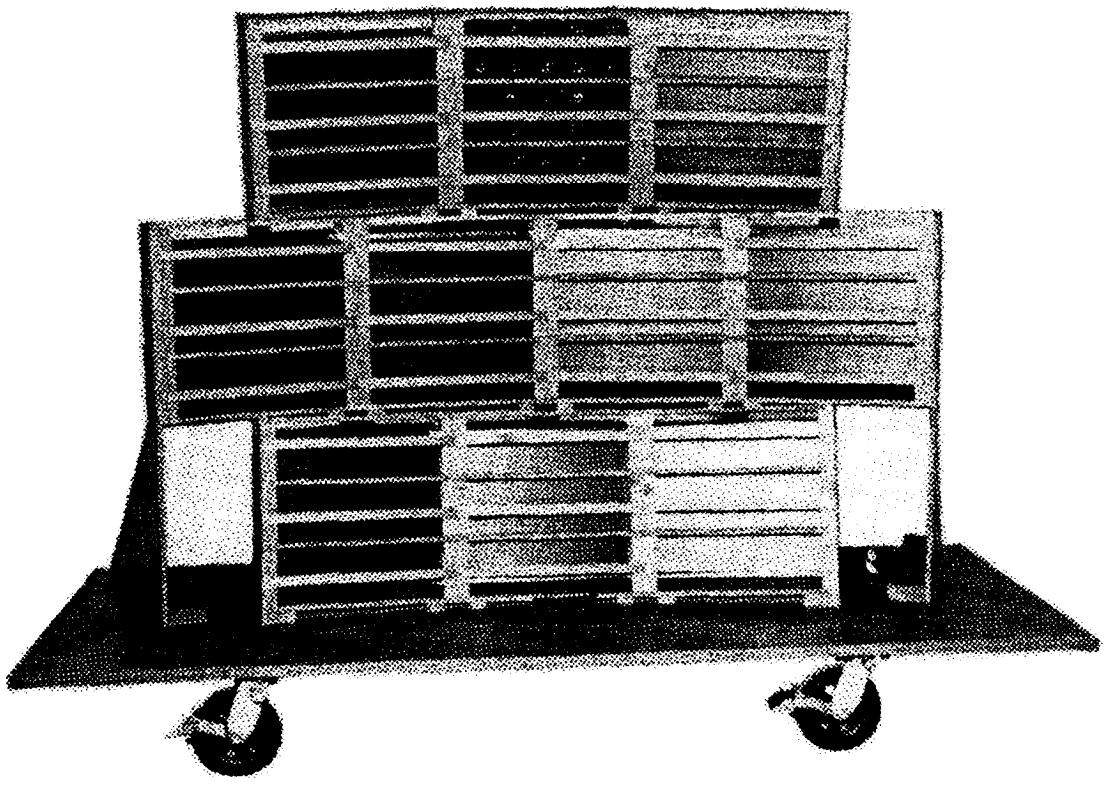
Length	108 in.
Width	53 in.
Height	72 in.
Cube	171 cu ft
Weight	1390 lbs

Associated Equipment:
None.

Kits:

1283E001 KIT, Powered Thread Cleaner

APE 1288--HOLDING FIXTURE, GRENADE, X–RAY



Use:
The holding fixture is used to hold gre–nades or grenade fuzes in the proper posi-tion for x-ray examination.

Description:
APE 1288 consists of a wooden rack built to hold 270 grenades or 330 fuzes and x-ray film cassettes. The rack is curved so that all grenades or fuzes receive equal intensity from the x–ray head.

Difference Between Models:
Original design.

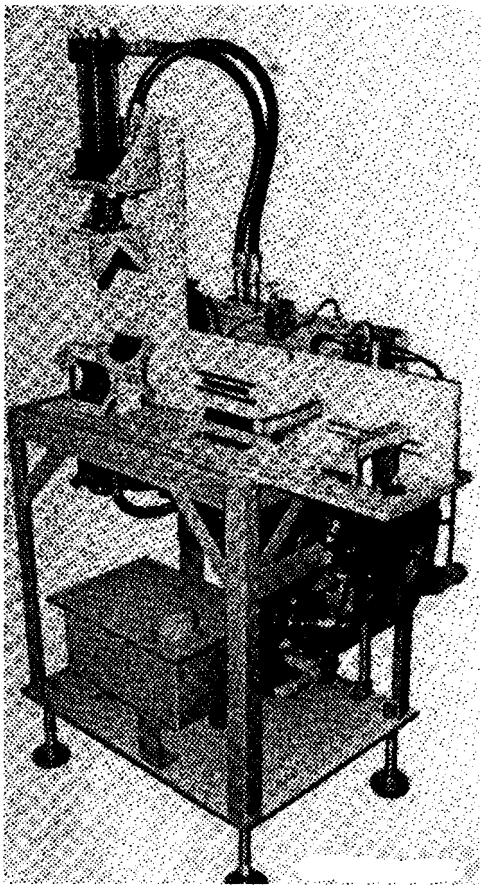
Tabulated Data:
APE No. 12880000
Unit of Issue . . . .Each
Installation Data:
Length . . . .96-5/8 in.
Width . . . . . 38-1/8 in.
Height . . . . . 68 in.
Weight . . . . . 318 lbs
Utilities Required:
None.
Production Capacity:
Not applicable.

Shipping Data:
Length . . . . . 100 in.
Width . . . . . 43 in.
Height . . . . . 20 in.
Cube . . . . . 50 cu ft
Weight . . . . . 613 lbs

Associated Equipment:
APE 2068M2, 2074.

Kits:
None.

APE 1294--VISE, PNEUMATIC, COMPLETE ROUND



Use:
The pneumatic vise is used to secure 75MM through 106MM projectiles or cartridges during normal maintenance operations.

Description:
APE 1294 consists of a metal frame with a rotating vise jaw and a cartridge case rest. An air operated hydraulic pump is mounted in the framework. Above the frame table is mounted a hydraulic cylinder with a vise jaw which clamps the projectile or cartridge into the rotating jaw.

Difference Between Models:
Original design.

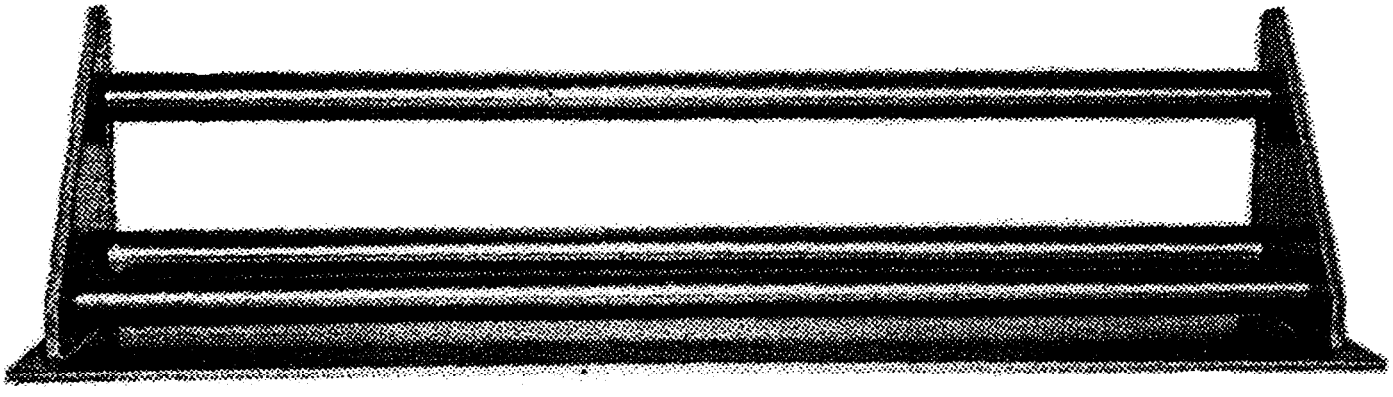
Tabulated Data:
APE No. 12940000
Unit of Issue . . . .Each
Installation Data:
Length . . . . . 35 in.
Width . . . . . 25 in.
Height . . . . . 58 in.
Weight . . . . . 200 lbs
Utilities Required:
Air at 100 psi and 28 cfm.
Production Capacity:
Not applicable.

Shipping Data:
Length . . . . . 42 in.
Width . . . . . 32 in.
Height . . . . . 72 in.
Cube . . . . . 56 cu ft
Weight . . . . . 350 lbs

Associated Equipment:
None.

Kits:
None.

APE 1295--REMOVER, TEAR STRIP



Use:
The tear strip remover is used to hold large cylindrical containers while the tear strip is being removed.

Description:
APE 1295 consists of a metal frame with three rollers assembled to the frame. The rollers are positioned so that a container can turn when the tear strip is being removed.

Difference Between Models:
Original design.

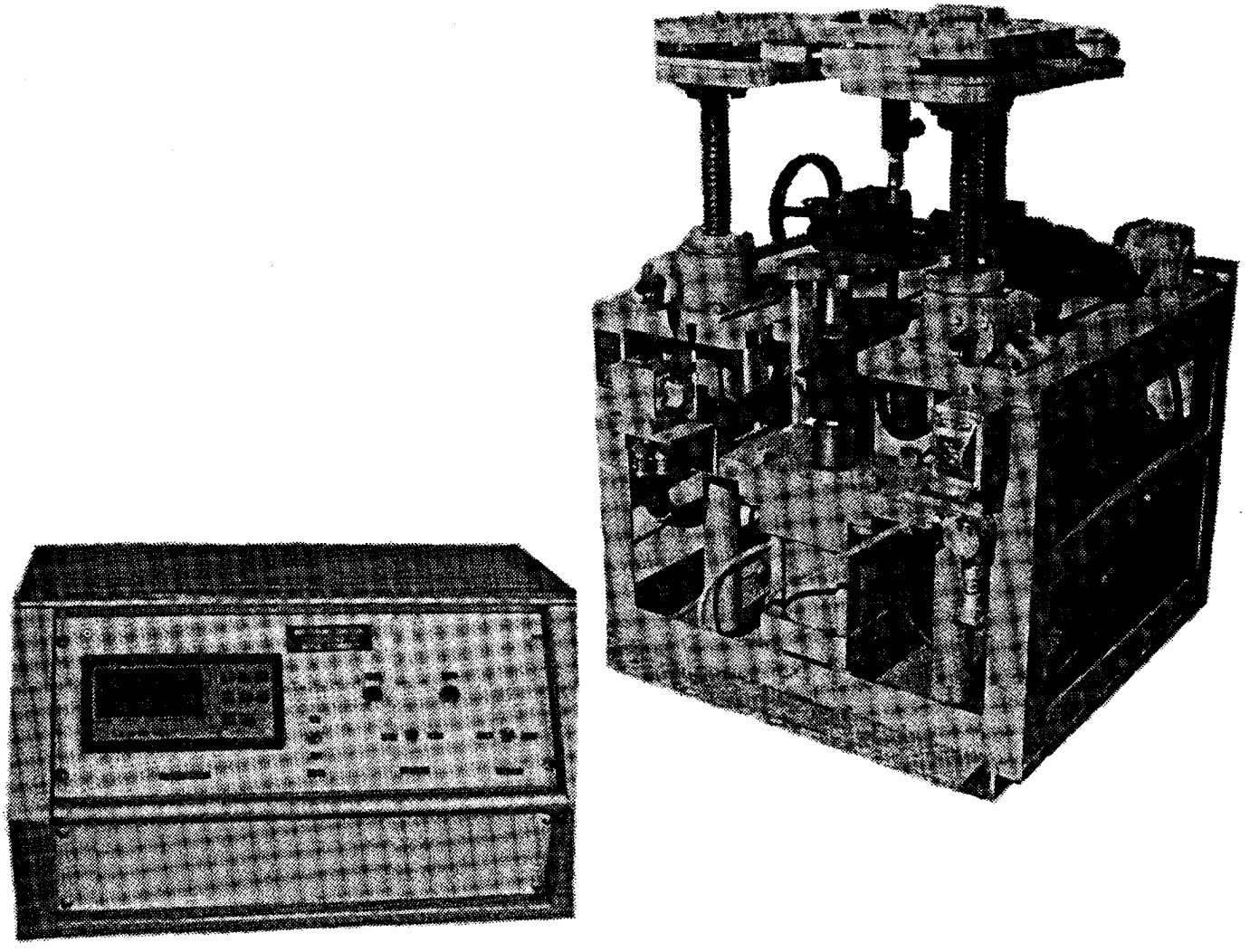
Tabulated Data:
- APE No. 12950000
- Unit of Issue . . . .Each
- Installation Data:
  - Length . . . .53 in.
  - Width . . . . . 12 in.
  - Height . . . . . 13 in.
  - Weight . . . . . 85 lbs
- Utilities Required:
  - None.
- Production Capacity:
  - Not applicable.

Shipping Data:
- Length . . . . . 60 in.
- Width . . . . . 16 in.
- Height . . . . . 18 in.
- Cube . . . . . 10 cu ft
- Weight . . . . . 150 lbs

Associated Equipment:
- None.

Kits:
- None.

APE 1299M1--MACHINE, SINGLE PURPOSE PULL TEST



Use:
The single purpose pull test machine is used as a surveillance test machine to pull test fixed type artillery ammunition ranging in size from 40MM thru 106MM. This machine has a controlled rate of pull.

Description:
APE 1299M1 consists of a frame to which three adjustable screw jacks are mounted for height adjustment to the vise jaw assembly. The machine is equipped with a load cell and a readout indicator installed in a control console, for pull force measurement readings. The control console is provided for remote operation.

Difference Between Models:
The APE 1299M1 model replaces the Emery, hydraulic type load cell with a BLH, electronic type load cell. The BLH load cell requires a weight processor which is mounted in a control console with other electronic components. The APE 1299M1 model also has the capability to terminate the pull test when the minimum pull test requirement has been met. This eliminates pulling projectiles from the cartridge case if the minimum requirement is met, therefore the cartridges do not require re-work.

Tabulated Data:

APE No.	12990000
Unit of Issue	Each
Installation Data:	
Length	37 in.
Width	34 in.
Height	65 max in.
Weight	1500 lbs
Utilities Required:	
110 vac; air at 80 psi.	
Production Capacity:	
Not applicable.	

Shipping Data:

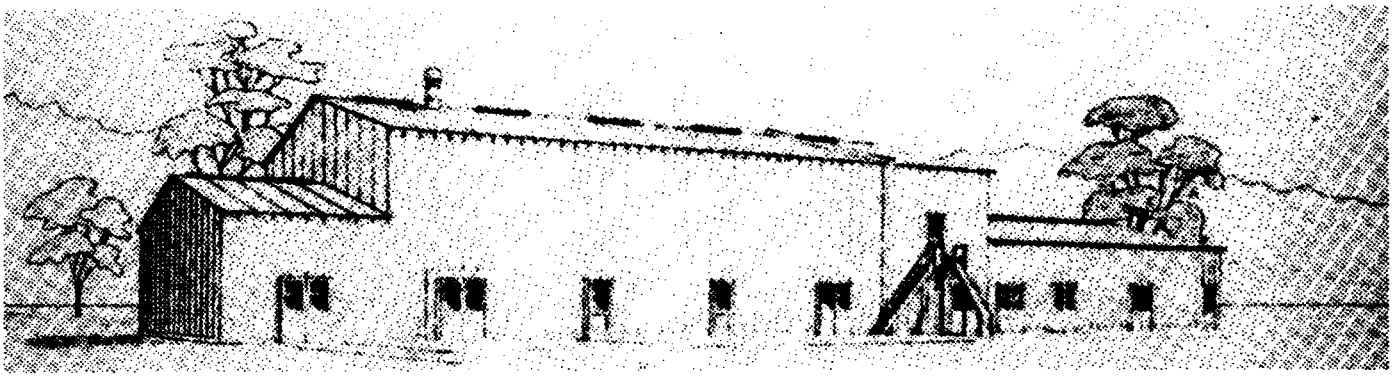
Length	47 in.
Width	44 in.
Height	65 in.
Cube	77.79 cu ft
Weight	1625 lbs

Associated Equipment:
None.

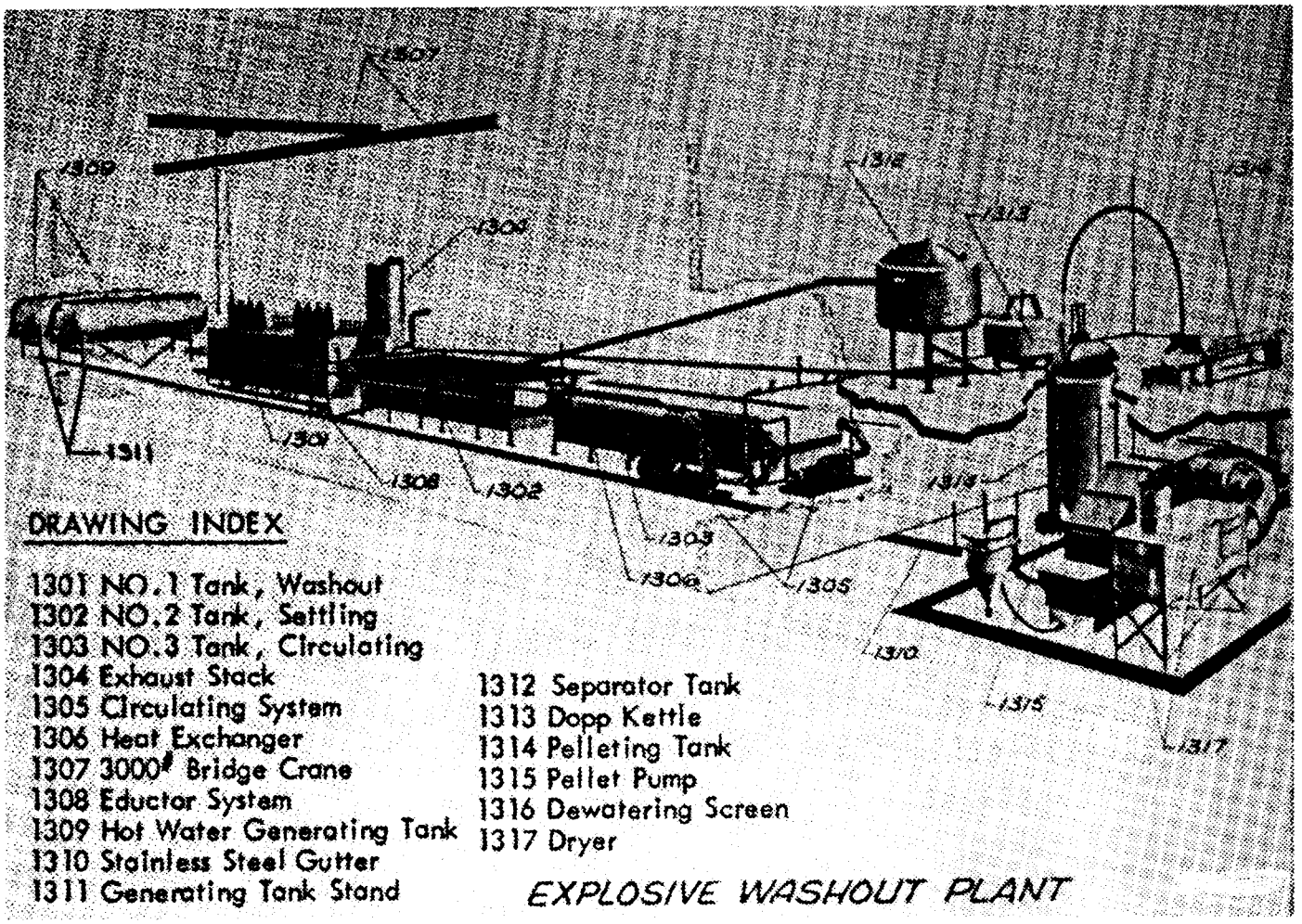
Kits:

1299E001	KIT, Pull Test of 40MM, M81, M91, MK2, MK11
1299E002	KIT, Pull Test of 57MM, M303, M306, M307, M308
1299E003	KIT, Pull Test of 75MM, M48, M61, M64, M66, M338
1299E004	KIT, Pull Test of 75MM, M309, M310, M311
1299E005	KIT, Pull Test of 75MM, M334
1299E006	KIT, Pull Test of 75MM, M340
1299E007	KIT, Pull Test of 76MM, M42, M62, M93, M312, M315
1299E008	KIT, Pull Test of 76MM, M319, M339, M340, M352, M361
1299E009	KIT, Pull Test of 90MM, M77, M79, M82, M133, M304, M313, M317, M319, M332, M336
1299E010	KIT, Pull Test of 90MM, M71
1299E011	KIT, Pull Test of 105MM, M456
1299E012	KIT, Pull Test of 105MM, M323, M325
1299E013	KIT, Pull Test of 105MM, M344
1299E014	KIT, Pull Test of 105MM, M326
1299E015	KIT, Pull Test of 105MM, M341
1299E016	KIT, Pull Test of 105MM, M345 and 106MM M346
1299E017	KIT, Pull Test of 105MM, M392
1299E019	KIT, Pull Test of 105MM M393
1299E020	KIT, Pull Test of 105MM M60 Smoke and HE Rounds
1299E021	KIT, Extend Pull Test Capability from 5000 lbs maximum to 20000 lbs maximum.

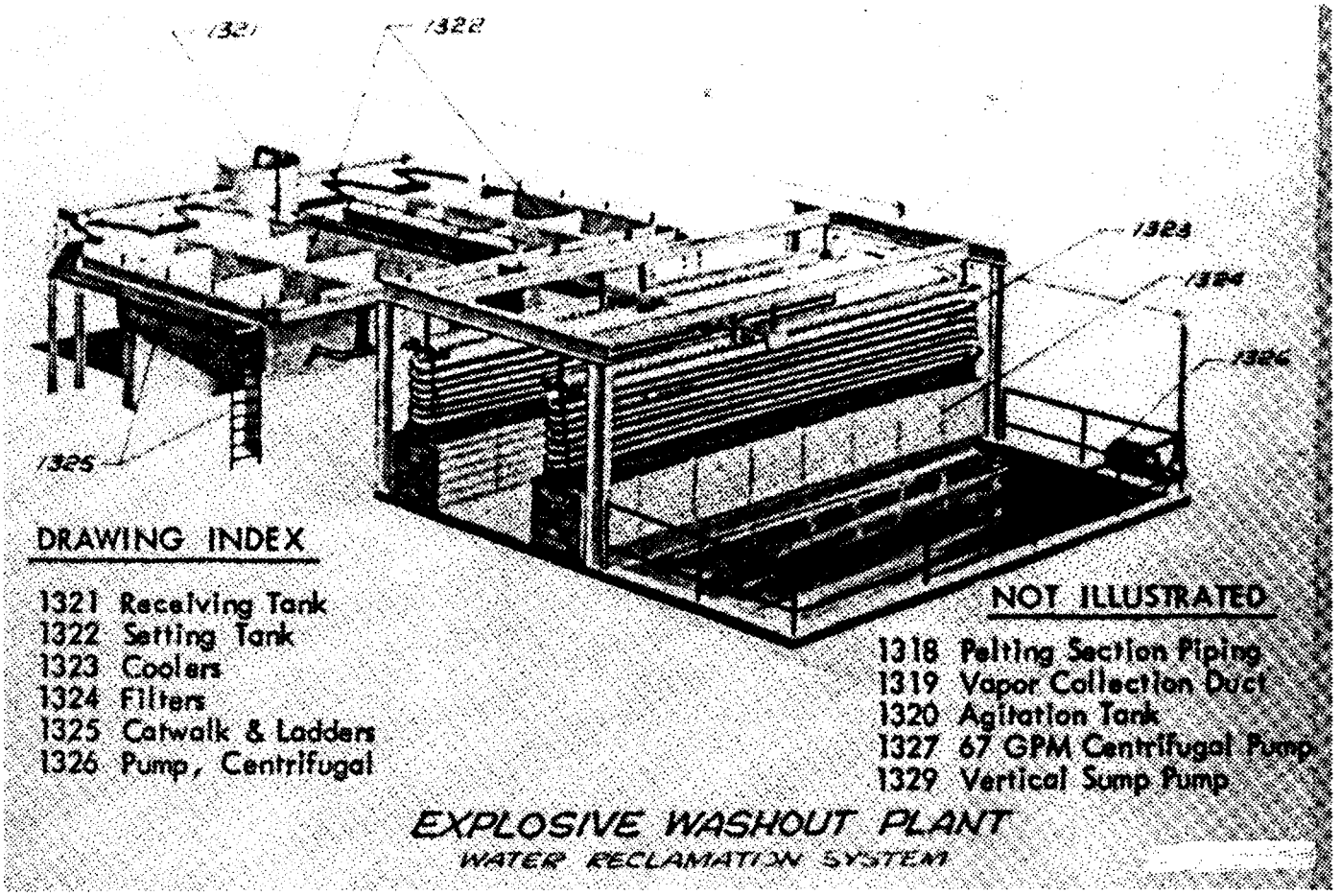
APE 1300M1--EXPLOSIVE WASHOUT PLANT



APE 1300M1--EXPLOSIVE WASHOUT PLANT



APE 1300M1--EXPLOSIVE WASHOUT PLANT



Use:
The explosive washout plant is used to wash explosives out of bombs, projectiles, mines, and warheads, and to reclaim the explosives.

Description:
APE 1300M1 consists of a hot water generating and circulating system, circulating pumps, a washout tank, a water settling tank, a water circulating tank, hot water heat exchangers, and a water reclamation system.

Difference Between Models:
The original APE 1300 system flaked the recovered explosives. The APE 1300M1 version pelletizes the recovered explosives.

Tabulated Data:

APE No.	13000000M1
Unit of Issue	System

Installation Data:
Length ..... 123 ft 8 in.
Width ..... 32 ft
Height ..... 30 ft
Weight ..... Special building

Utilities Required:
110 kva, 112/220 vac, 60 Hz, 3 phase; air at 100 psi and 86000 cubic feet per 8 hour shift; 10600 pounds of steam per 8 hour shift.

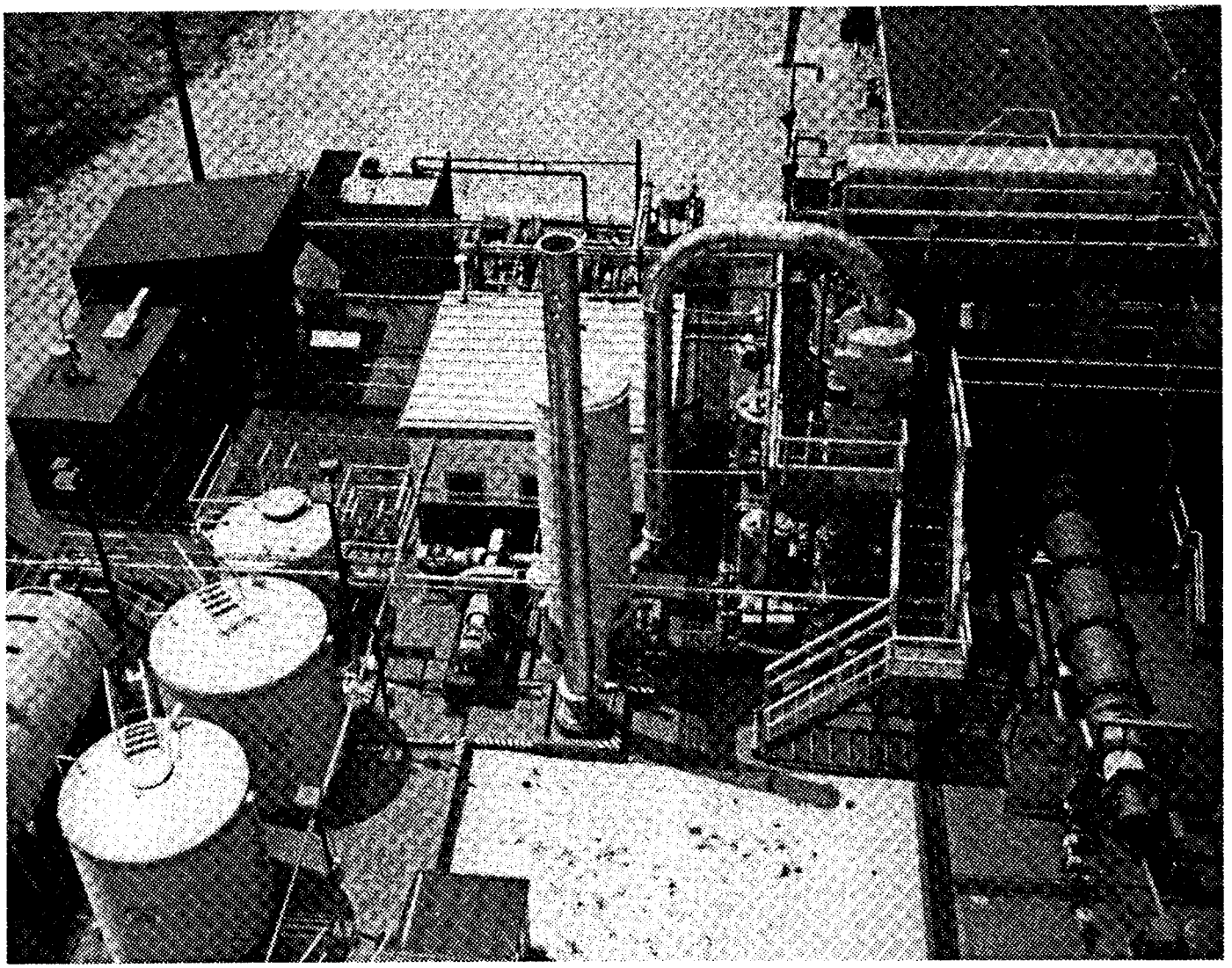
Production Capacity:
Depends upon item being processed.

Shipping Data:
Depends on plant configuration.

Associated Equipment:
APE 1061.

Kits:
1301E002 KIT, Washout 75MM and 76MM Projectiles
1301E003 KIT, Washout 90MM Projectiles
1301E004 KIT, Washout 106MM Projectiles
1301E005 KIT, Washout 120MM Projectiles
1301E006 KIT, Washout 155MM Projectiles
1301E007 KIT, Washout 175MM Projectiles
1301E008 KIT, Washout 20 Pound and 23 Pound Fragmentation Bombs
1301E009 KIT, Washout 90 Pound Fragmentation Bombs
1301E010 KIT, Washout 100 Pound General Purpose Bombs
1301E011 KIT, Washout 220 Pound and 260 Pound Fragmentation Bombs
1301E012 KIT, Washout 240MM and 280MM Projectiles
1301E013 KIT, Washout 8-Inch Projectiles
1301E014 KIT, Washout 250 Pound and 500 Pound General Purpose Bombs and 500 Pound MK82 Bombs
1301E015 KIT, Washout 750 Pound Bombs (Nose End)
1301E016 KIT, Washout 750 Pound Bombs (Base End)
1301E017 KIT, Washout 1000 Pound Bombs
1301E018 KIT, Washout 2000 Pound Bombs
1301E019 KIT, Washout Guided Missile: M3, M4 and T-34 (Lacrosse)
1301E020 KIT, Washout Guided Missile: T39E4 and T-45
1301E021 KIT, Washout 3.5-Inch Rocket Warhead
1301E022 KIT, Washout M15 Mines
1312E001 KIT, Separator Tank Paddle
1313E001 KIT, Modification
1314E001 KIT, Cooling Tower
1315E001 KIT, Modify Pump
1321E001 KIT, Modify Butterfly Valve
1322E001 KIT, Modify Butterfly Valves

APE 1400--PLANT, WHITE PHOSPHORUS



Use:
The white phosphorus plant converts obsolete and/reject white phosphorus from chemical munitions to phosphoric acid and reclaims the empty shells and acid for resale.

Description:
APE 1400 to phosphoric acid conversion plant consists of two systems, the feed system and the acid plant system.

Downloaded munitions (fuze, detonator, and explosives removed) are placed in a 115 ton hydraulic press for punching to expose the W.P. and then into a converted APE 1236 rotating kiln furnace for burning. The resultant smoke is then pulled out of the furnace by a negative pressure closed loop ducting system into the acid plant system for conversion to phosphoric acid.

The two systems consist of a 115 ton punch, a converted APE 1236 furnace, hydrator, initial demister-separator, two negative pressure draft fans, a final demister, water cooling tower, acid cooling heat exchanger, acid filtering unit, acid storage tanks, rail and tanker truck acid loading stations, and an emergency generator in the event of power failure.

The two systems utilize automated controls for maximum efficiency.

Difference Between Models:
Original plant.

Tabulated Data:
APE No. 14000000
Unit of Issue ..... System
Installation Data:
Not applicable.

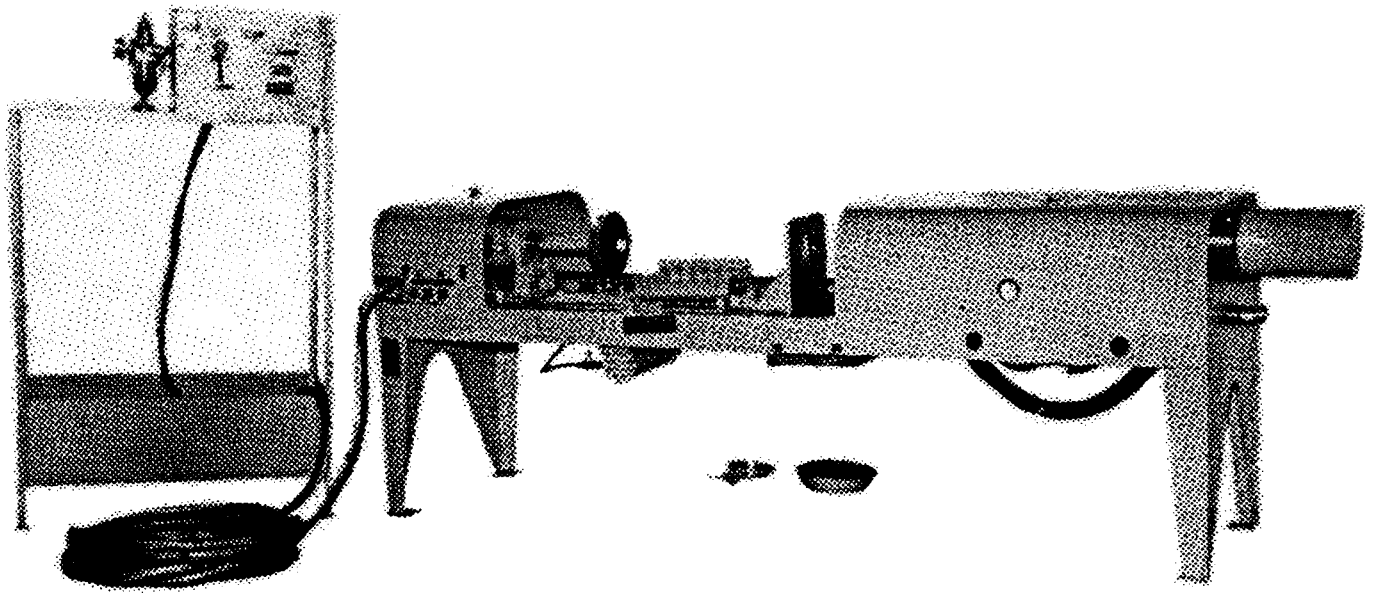
Utilities Required:
400 kva, 115/200 vac, 60 Hz, 3 phase; air at 100 psi, draft air at 8000 cfm; 2200 pounds hydraulic pressure; natural gas at 3500 cu ft per hour; water at 200 gals per hour.
Production Capacity:
480 pounds of white phosphorus per hour.

Shipping Data:
Not applicable.

Associated Equipment:
None.

Kits:
None.

APE 1504--DRILL, STUCK SUPPLEMENTARY CHARGE



Use:
The stuck supplementary charge drill is used to remove stuck supplementary charges from 155MM, 4.2", 175MM, and 8-inch projectiles.

Description:
APE 1504 consists of a metal frame, a pneumatic drill, a liner removal assembly, a projectile holding assembly, and a remote control panel with connecting control lines.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	15040000
Unit of Issue	Each
Installation Data:	
DRILL:	
Length	116 in.
Width	29 in.
Height	38 in.
Weight	979 lbs
CONTROL PANEL:	
Length	37 in.
Width	26 in.
Height	61 in.
Weight	160 lbs

Utilities Required:
Air at 90 psi and 20 cfm.
Production Capacity:
Not applicable.

Shipping Data:

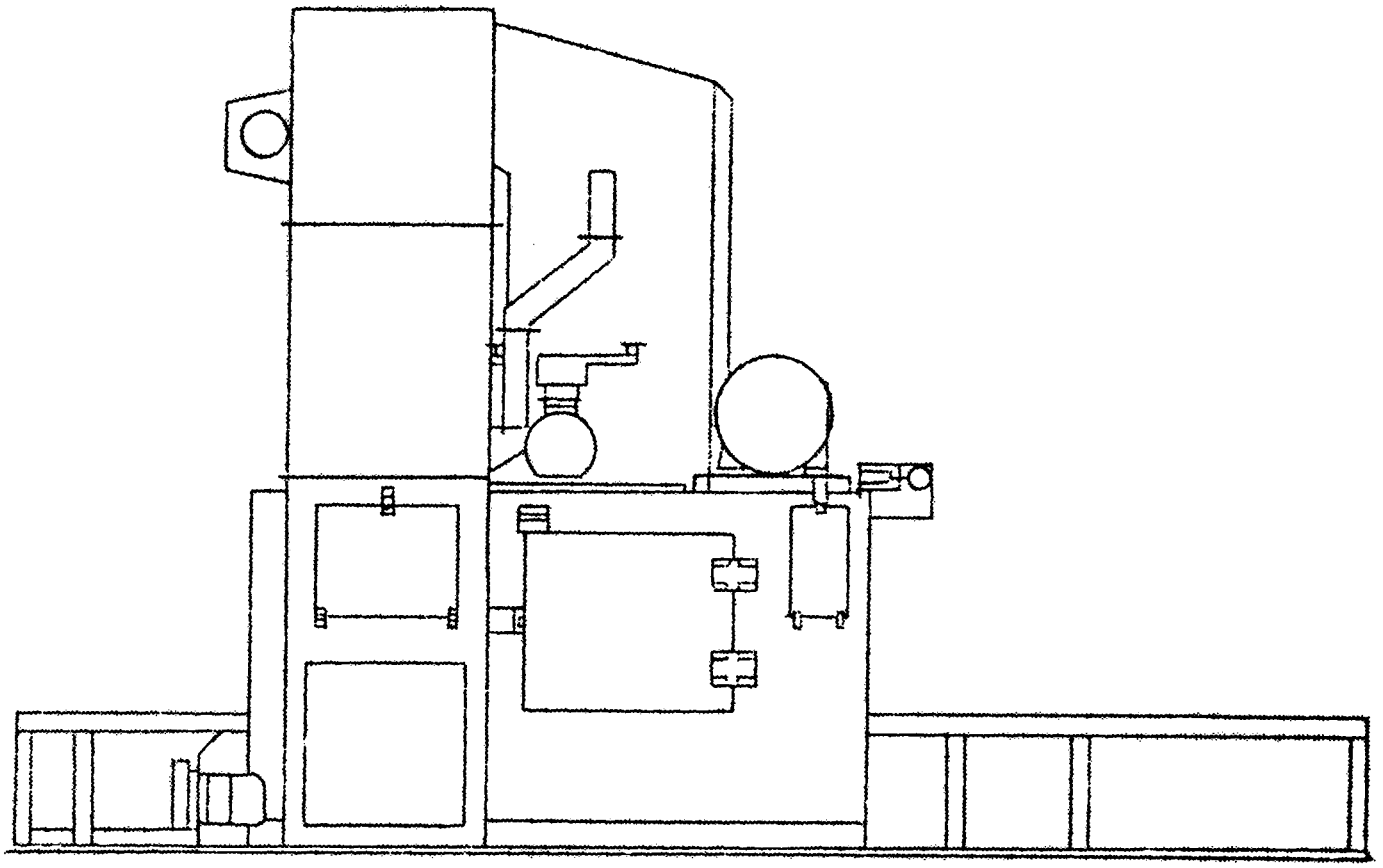
DRILL:	
Length	120 in.
Width	37 in.
Height	49 in.
Cube	126 cu ft
Weight	1603 lbs
CONTROL PANEL:	
Length	43 in.
Width	33 in.
Height	68 in.
Cube	56 cu ft
Weight	536 lbs

Associated Equipment:
APE 2042 and 2043.

Kits:

1504E001	KIT, 4.2 Inch Mortar HE, M329, M329A1 and M329B1 Base Cone Adapter
1504E002	KIT, 4.2 Inch Mortar HE, M329A2 Base Cone Adapter
1504E003	KIT, 155MM Projectile M549, Stuck Supplementary Charge Removal

APE 1507--MACHINE, ABRASIVE BLAST CLEANING



Use:
The abrasive blast cleaning machine is used to remove rust, corrosion, and oxidized paint from unfuzed projectiles and bombs. Projectiles range in size from 105MM through 8 inch, and larger cylindrical objects up to 750 lb bombs.

Description:
APE 1507 consists of a blast cabinet, skew roll conveyor, and dust collector, and two 1000 cfm charcoal filter banks.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	15070000
Unit of Issue	Each

Installation Data:

MACHINE:

Length	21 ft
Width	6 ft
Height	12 ft 8 in.
Weight	10000 lbs

DUST COLLECTOR:

Length	8 ft
Width	4 ft
Height	11 ft 8 in.
Weight	3030 lbs

FILTER BANKS:

Length	16 ft max
Width	4-5 ft
Height	5 ft max
Weight	varies

Utilities Required:
208/440 vac, 3 phase, 60 Hz, 40/20 amp.

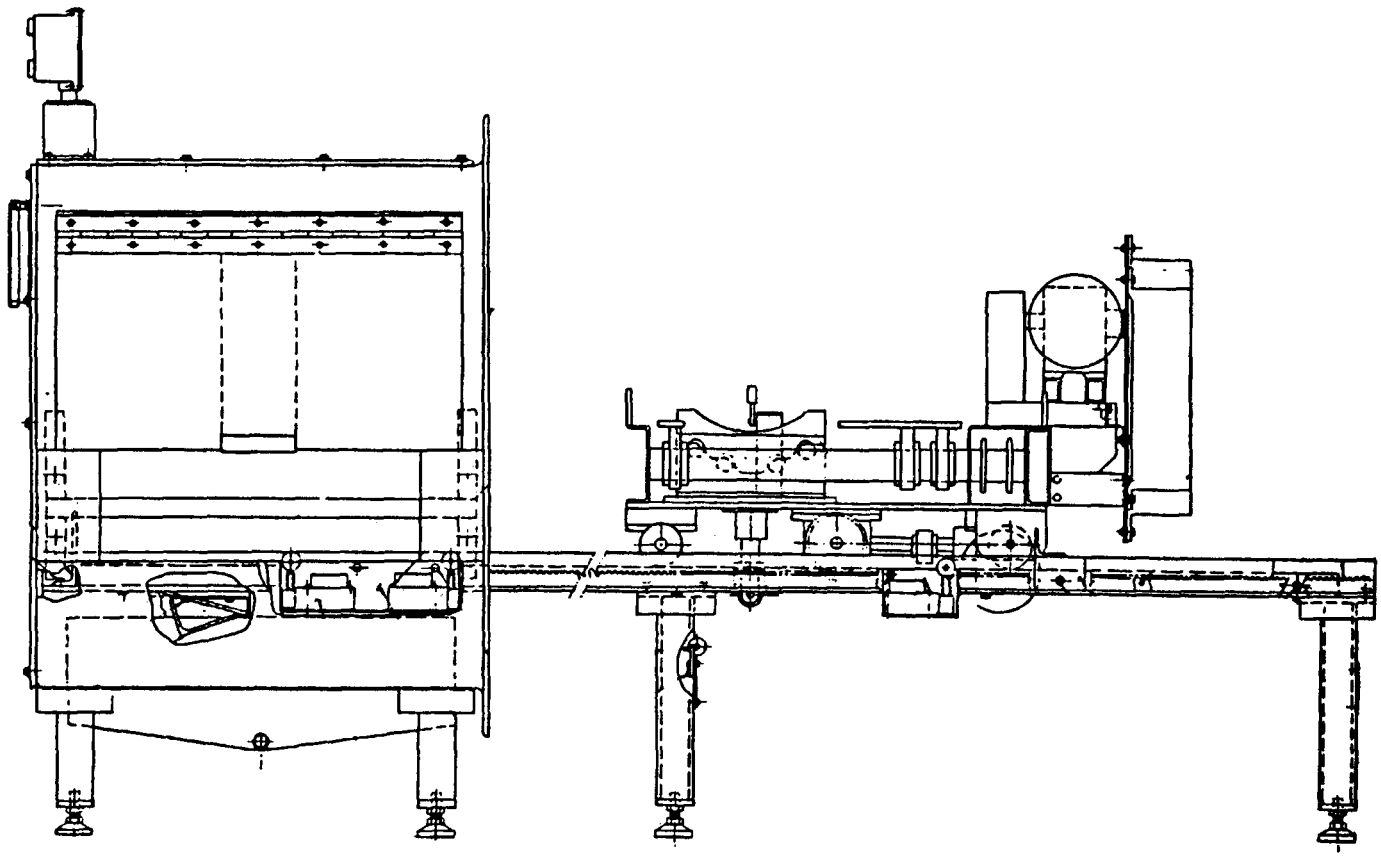
Production Capacity:
Not applicable.

Shipping Data:
  MACHINE:
    Length ..... 24 ft
    Width ..... 8 ft
    Height ..... 14 ft
    Cube ..... 2080 cu ft
    Weight ..... 12000 lbs
  DUST COLLECTOR:
    Length ..... 10 ft
    Width ..... 6 ft
    Height ..... 14 ft
    Cube ..... 840 cu ft
    Weight ..... 3,500 lbs
  FILTER BANKS:
    Length ..... 16 ft max
    Width ..... 4-5 ft
    Height ..... 5 ft max
    Weight ..... varies

Associated Equipment:
  APE 1510.
  M10 Alarm System.

Kits:
  None.

APE 1510--TRANSFER CONVEYOR AND GLOVE BOX



Use:
The transfer conveyor and glove box are designed for use in maintenance operations on chemical agent munitions. They provide a safe and effective means to remove munitions from the abrasive cleaning room (ACR); a glove box for inspection of the munition; and a means of transfer back into the ACR if necessary.

Description:
APE 1510 consists of two basic components. A light weight inspection glove box and a transfer conveyor system.

a. The inspection glove box consists of a frame assembly, a stainless steel drip tank, four plexiglass windows with glove ports in two windows, a hinged door in one window and a mechanical cam/ramp mounted on the floor of the box. The box has rubber gloves attached for use by the operator in manipulating the items being inspected.

b. The transfer conveyor system consists of a frame assembly that has a commercially available roller conveyor mounted on the top side. The transfer carriage moves along the frame assembly by means of rack gears and an electric motor. Essentially there is movement in the x-y axis.

Difference Between Models:
Original design.

Tabulated Data:
- APE No. 15100000
- Unit of Issue ..... Each
- Installation Data:
  - Length ..... 100 in.
  - Width ..... 98 in.
  - Height ..... 59 in.
  - Cube ..... 335 cu ft
  - Weight ..... 1500 lbs
- Utilities Required:
  - 208/230/460 vac, 3 phase, 60 Hz
- Production Capacity:
  - Not applicable.

Shipping Data:
- Length ..... Not available
- Width ..... Not available
- Height ..... Not available
- Cube ..... Not available
- Weight ..... Not available

Associated Equipment:
- APE 1507; M10 Alarm System; M3 Filter System

Kits:
- None.

APE 1901--TANK, IMMERSION



Use:
The immersion tank is used to condition samples of ammunition items in water prior to surveillance function testing.

Description:
APE 1901 is circular and mounted on a stand with four legs. Inside dimensions of the tank are 34-3/4 inches in diameter and 21-3/4 inches deep. A 3/4-inch male boiler drain valve is installed in the bottom of the tank. A foot operated tire pump is included to pressurize the tank. The tank has a cover that is held in place by eight T-screws.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	19010000
Unit of Issue	Each

Installation Data:

Length	44-1/2 in.
Width	38-3/4 in.
Height	38-3/4 in.
Weight	350 lbs

Utilities Required:
Water at 70° to 110°F.

Production Capacity:
Not applicable.

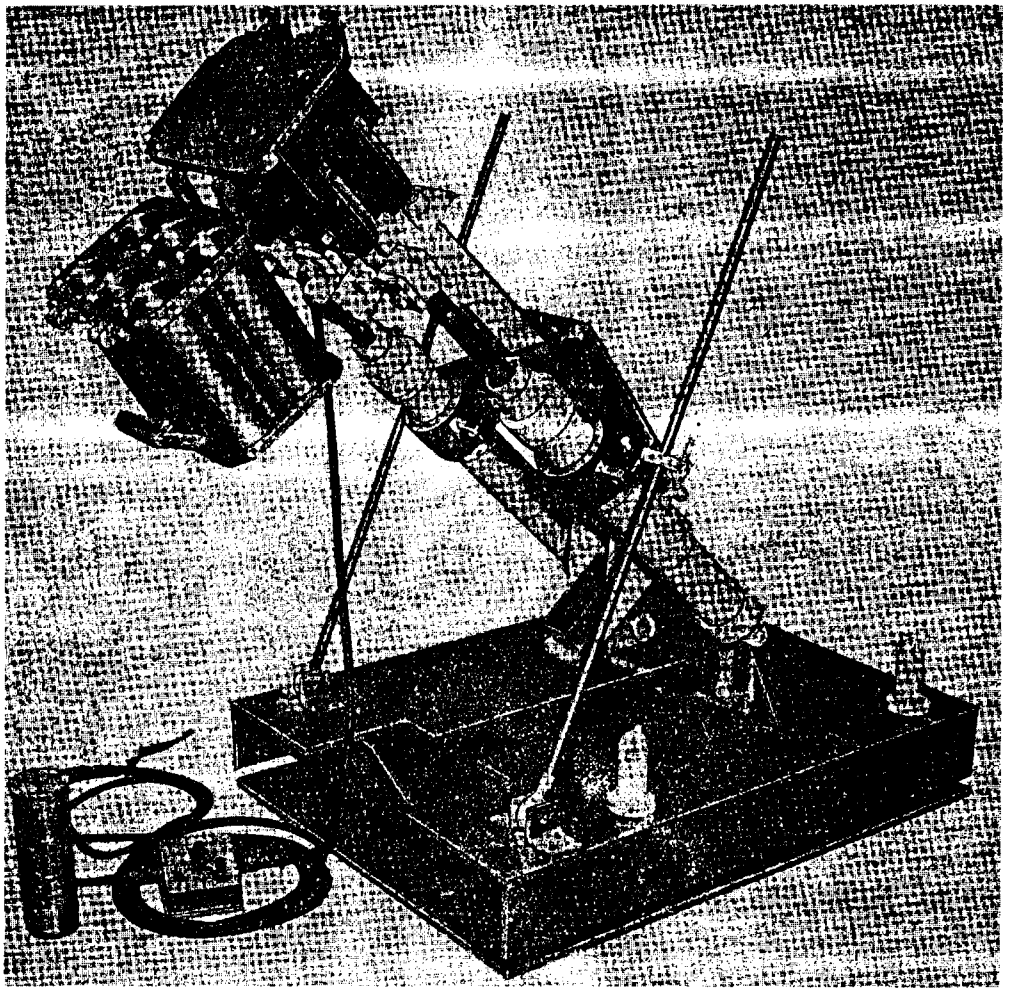
Shipping Data:

Length	50 in.
Width	44 in.
Height	44 in.
Cube	51.6 cu ft
Weight	424 lbs

Associated Equipment:
None.

Kits:
1901E001 KIT, Air Pressurization

APE 1902M2--DEVICE, HOLDING, FUNCTION TEST



Use:
The holding device is used to hold M1903, M1, M14 and M16 rifles; M1 and M2 carbines; M79 grenade launchers, and the AM-M8 pyrotechnic pistol when surveillance function testing signals, simulators, and photoflash cartridges launched from these weapons.

Description:
APE 1902M2 consists of a base that is 36 inches long, 27 inches wide, and 4 inches high, that is made of 1/2-inch aluminum. Two 16-inch stroke air cylinders are attached to the base. Two adjusting arms are attached to the base and air cylinders to hold the weapons at the proper firing angle.

Difference Between Models:
The APE 1902M1 has kit 1902E005 attached.
APE 1902M2 has kit 1902E007 attached.

Tabulated Data:

APE No.	19020000M2
Unit of Issue	Each
Installation Data:	
Length	36 in.
Width	27 in.
Height	50-3/4 in.
Weight	300 lbs
Utilities Required:	
None.	
Production Capacity:	
Not applicable.	

Shipping Data:

Length . . . .42 in.
Width . . . .33 in.
Height . . . .57 in.
Cube . . . .25.7 cu ft
Weight . . . .351 lbs

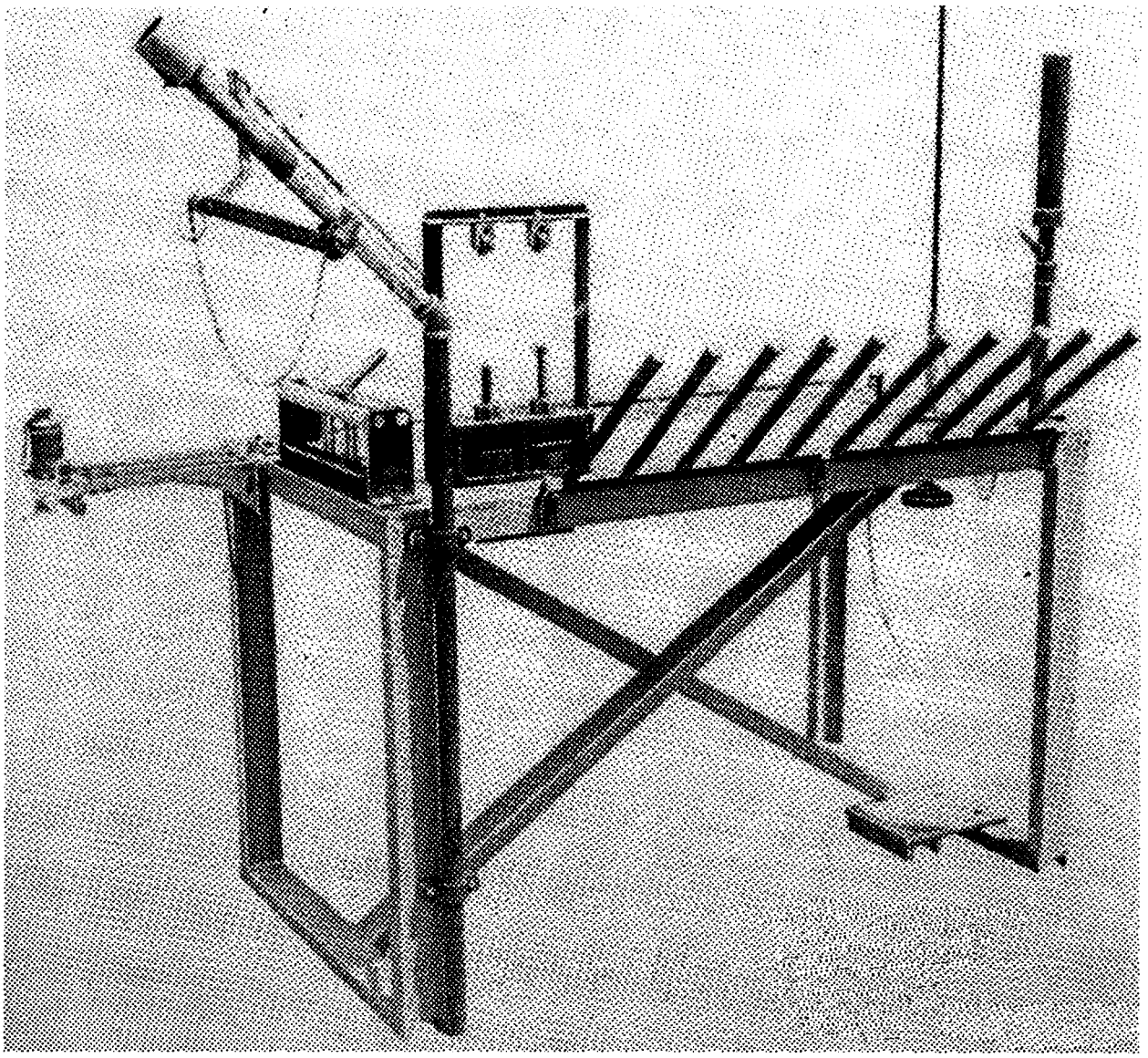
Associated Equipment:

APE 1937.

Kits:

1902E001 KIT, Mount Ml or M14 Rifle
1902E002 KIT, Mount Ml or M2 Carbine
1902E003 KIT, Mount M16 Rifle
1902E004 KIT, Mount M79 Grenade Launcher
1902E005 KIT, Modify APE 1902 to APE 1902M1
1902E006 KIT, Holding Device, M203 Grenade Launcher
1902E007 KIT, Modification Elevation Indicator Quadrant. Modification changes machine from APE 1902M1 to 1902M2

APE 1903--TABLE, TESTING, FUNCTION



Use:
The testing table is used as a standard piece of equipment for surveillance function testing of several ammunition items.

Description:
APE 1903 is constructed of steel with heavy legs and crossmembers. Several holding devices and remote control actuators are mounted on the table.

Difference Between Models:
Original design.

Tabulated Data:

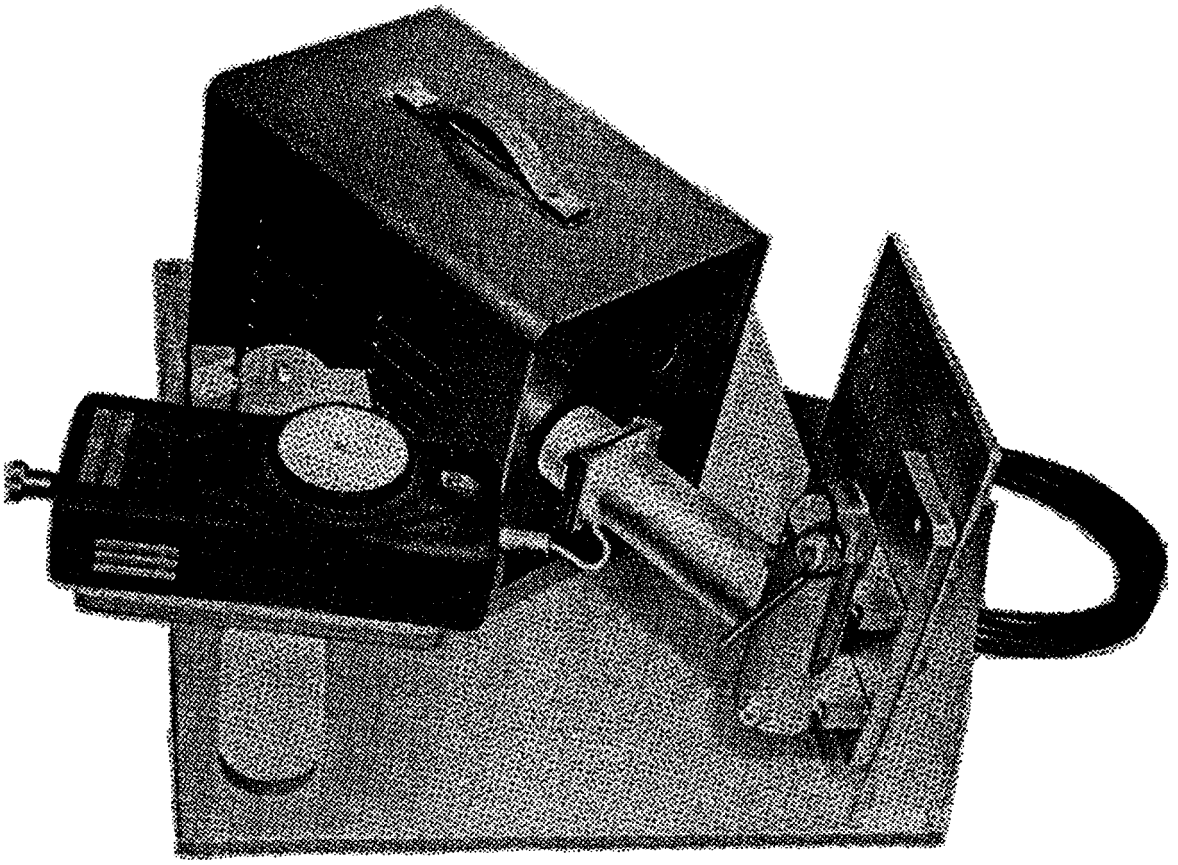
APE No. 19030000
Unit of Issue . . . . . Each
Installation Data:
Length . . . . . 56 in.
Width . . . . . 30 in.
Height . . . . . 36 in.
Weight . . . . . 800 lbs
Utilities Required:
None.
Production Capacity:
Not applicable.

Shipping Data:
- Length . . . .65 in.
- Width . . . .36 in.
- Height . . . .44 in.
- Cube . . . .56.2 cu ft
- Weight . . . .1038 lbs

Associated Equipment:
APE 1907, 1926, 1937.

Kits:
1903E001 KIT, Function Test M49 and M49A1 Trip Flares
1903E002 KIT, Function Test M6, M10, M204, M205, M206 and M213 Hand Grenade Fuzes
1903E003 KIT, Remove Cap from M49 and M49A1 Trip Flares
1903E004 KIT, Function Test MK1 Illuminating Grenade
1903E005 KIT, Function Test Nonelectric Blasting Caps
1903E006 FIXTURE, Holding, Trip Flare
1903E007 KIT, Blasting Cap Tester

APE 1906--TESTER, FUZE, GRENADE IGNITING



Use:
The grenade igniting fuze tester is used to surveillance function test M201A1 grenade fuzes.

Description:
APE 1906 consists of an electric timer, a small telephone transmitter, and a photoelectric cell mounted in a metal case. Fuze holders and a mechanical force gage are included with the tester.

Difference Between Models:
Original design.

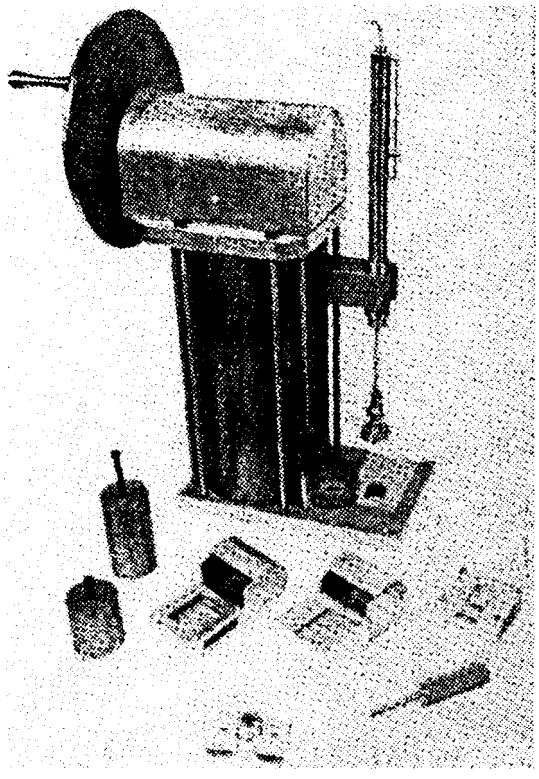
Tabulated Data:
APE No. 19060000
Unit of Issue . . . .Each
Installation Data:
Length . . . .23 in.
Width . . . . . 18 in.
Height . . . . . 13 in.
Weight . . . . . 100 lbs
Utilities Required:
110 vac, single phase, 60 Hz.
Production Capacity:
Not applicable.

Shipping Data:
Length . . . . . 25 in.
Width . . . . . 20 in.
Height . . . . . 18 in.
Cube . . . . . 5.2 cu ft
Weight . . . . . 132 lbs

Associated Equipment:
None.

Kits:
1906E001 Tube, Flash Vertical
1906E002 Tube, Flash Horizontal

APE 1907--DEVICE, PRESSURE TESTING



Use:
The pressure testing device is used to measure force when pushing or pulling during surveillance function testing.

Description:
APE 1907 is a hand powered geared system that applies pressure to a calibrated spring gage to indicate the force being exerted.

Difference Between Models:
Original design.

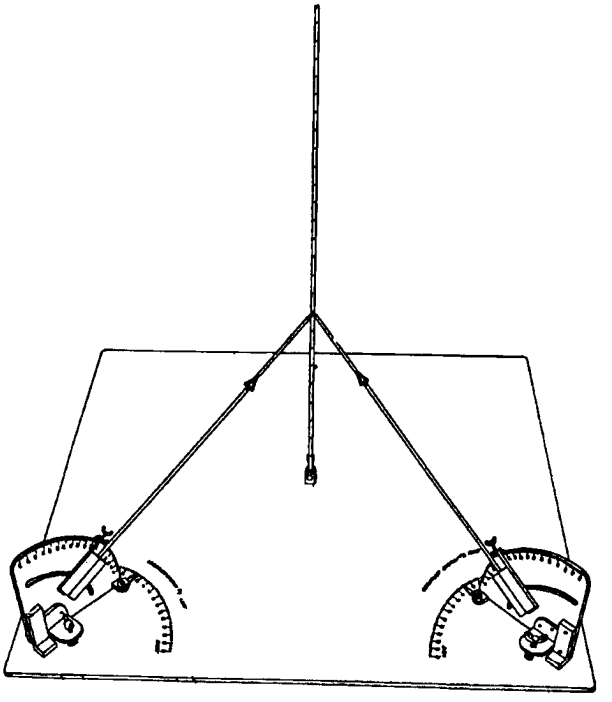
Tabulated Data:
APE No. 19070000
Unit of Issue . . . .Each
Installation Data:
Length . . . .12 in.
Width . . . .11 in.
Height . . . .24-1/2 in.
Weight . . . .90 lbs
Utilities Required:
None.
Production Capacity:
Not applicable.

Shipping Data:
Length . . . . . 16 in.
Width . . . . . 16 in.
Height . . . . . 30 in.
Cube . . . . . 3.1 cu ft
Weight . . . . . 105 lbs

Associated Equipment:
None .

Kits:
1907E002 KIT, Function Test M6A1 Fuze, With Cocking Device
1907E003 KIT, Firing Device, Demolition, Pressure Release Type, M5
1907E004 KIT, Firing Device, Demolition, Release Type, M1
1907E005 KIT, Firing Device, Demolition, Pressure Type, M1
1907E007 KIT, Function Test M605 Mine Fuze
1907E008 KIT, Function Test Firing Device, Pull–Release Type, M3

APE 1908--DEVICE, MEASURING, ALTITUDE AND DRIFT



Use:
The altitude and drift measuring device is used to record the angle and the degree of elevation of signals, simulators, and M48 surface trip parachute flares during surveillance function testing.

Description:
APE 1908 consists of three pieces of equipment. A plotting board is a scale model of the firing range with two quadrant controls, two indicating rods, and a scribe rod. Two sighting devices with stands are provided to follow the item being tested and mark the position that it functions.

Difference Between Models:
Not available.

Tabulated Data:

APE No.	19080000
Unit of Issue	Each
Installation Data:	
SIGHTING DEVICE:	
Length	28 in.
Width	28 in.
Height	56 in.
Weight	550 lbs
PLOTTING BOARD:	
Length	30 in.
Width	24 in.
Height	51 in.
Weight	Not available
Utilities Required:	
None.	
Production Capacity:	
Not applicable.	

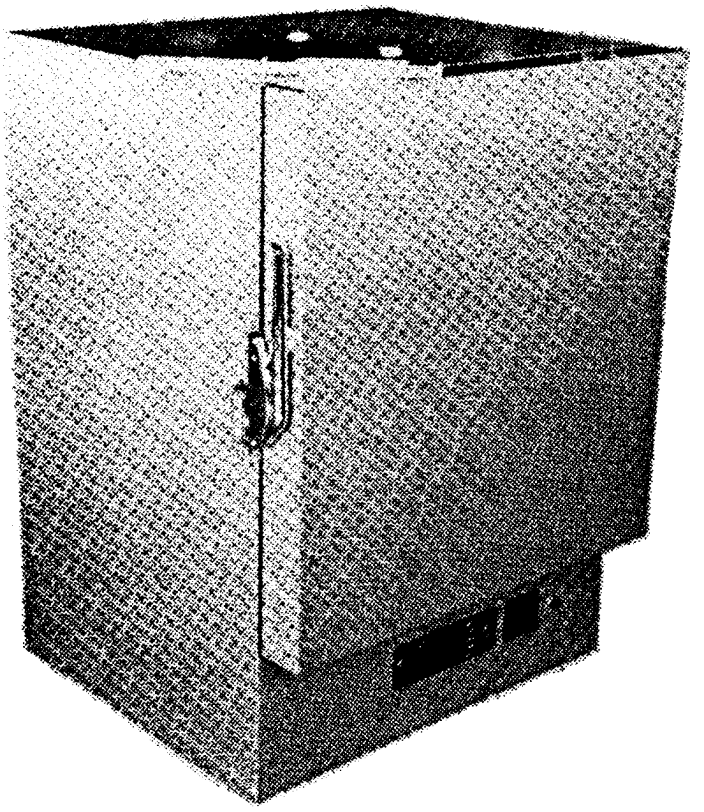
Shipping Data:

Length	36 in.
Width	30 in.
Height	54 in.
Cube	34.3 cu ft
Weight	605 lbs

Associated Equipment:
None.

Kits:
1908E001 Additional Quadrant to Measure Angle of Departure from Vertical

APE 1916M1--OVEN, PRECONDITIONING



Use:
The preconditioning oven is used to condition various items at a controlled temperature for a specified length of time prior to surveillance function testing.

Description:
APE 1916M1 is a radiant heating type with a maximum temperature of 200 centigrade. It is complete with four shelves, thermometer holder, adjustable air vent, neon pilot light, four neoprene feet and a three wire grounded cord with plug. The inside dimensions of the oven are 18 inches wide, 20 inches high, and 18 inches deep.

Difference Between Models:
The APE 1916M1 model is operated by remote control and has additional safety controls against overheating.

Tabulated Data:

APE No.	19160000M1
Unit of Issue	Each

Installation Data:

Length	24 in.
Width	23 in.
Height	30 in.
Weight	105 lbs

Utilities Required:
115/230 vac, 50 or 60 Hz, single phase.

Production Capacity:
Not applicable.

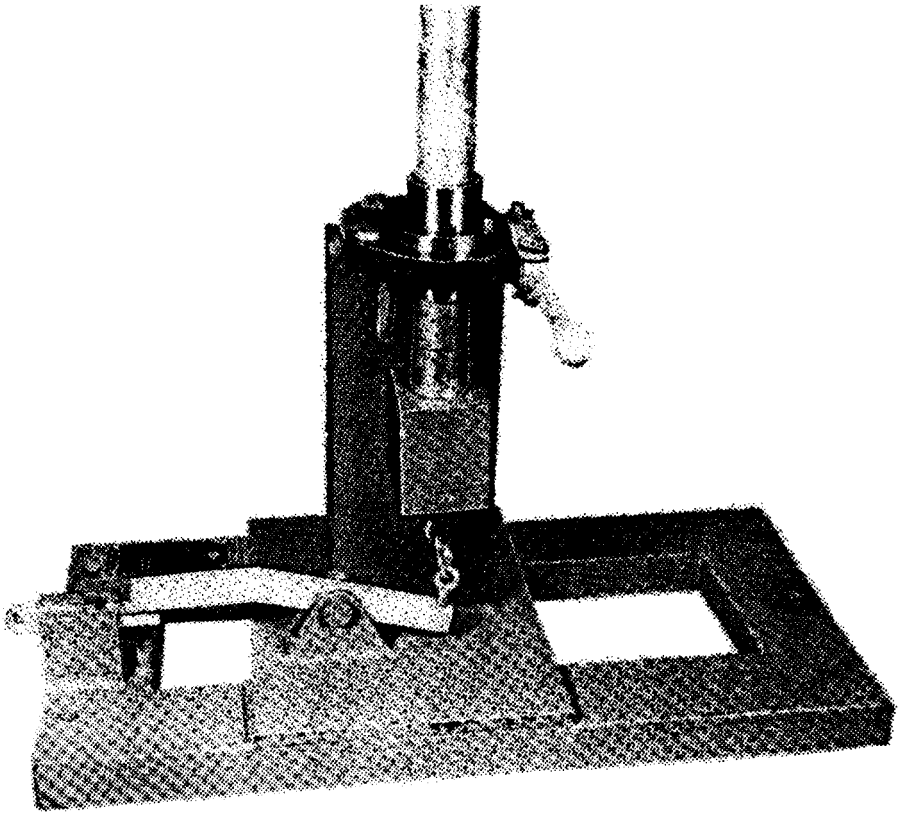
Shipping Data:

Length	30 in.
Width	30 in.
Height	36 in.
Cube	18.75 cu ft
Weight	268 lbs

Associated Equipment:
None.

Kits:
1916E001 KIT, Modification

APE 1918M2--DEVICE, HOLDING, HAND SIGNAL



Use:
The hand signal holding device is used to function test M125, M126, M127, and M131 hand held signals.

Description:
APE 1918M2 consists of a metal base, a short mast with locking vise jaws to hold the signal being tested, and a firing assembly to actuate the signal.

Difference Between Models:
The APE 1918 holding jaws are welded to the clamping jaws and will not accommodate M131 signals. APE 1918M1 has removable clamping jaws to accommodate kits 1918E001 and 1918E002. APE 1918M2 resulted from addition of a cocking device (originally issued as kit 1918E003 but is now integral to the end item).

Tabulated Data:

APE No.	19180000M1
Unit of Issue	Each

Installation Data:

Length	24 in.
Width	12 in.
Height	15-3/4 in.
Weight	70 lbs

Utilities Required:
None.

Production Capacity:
Not applicable.

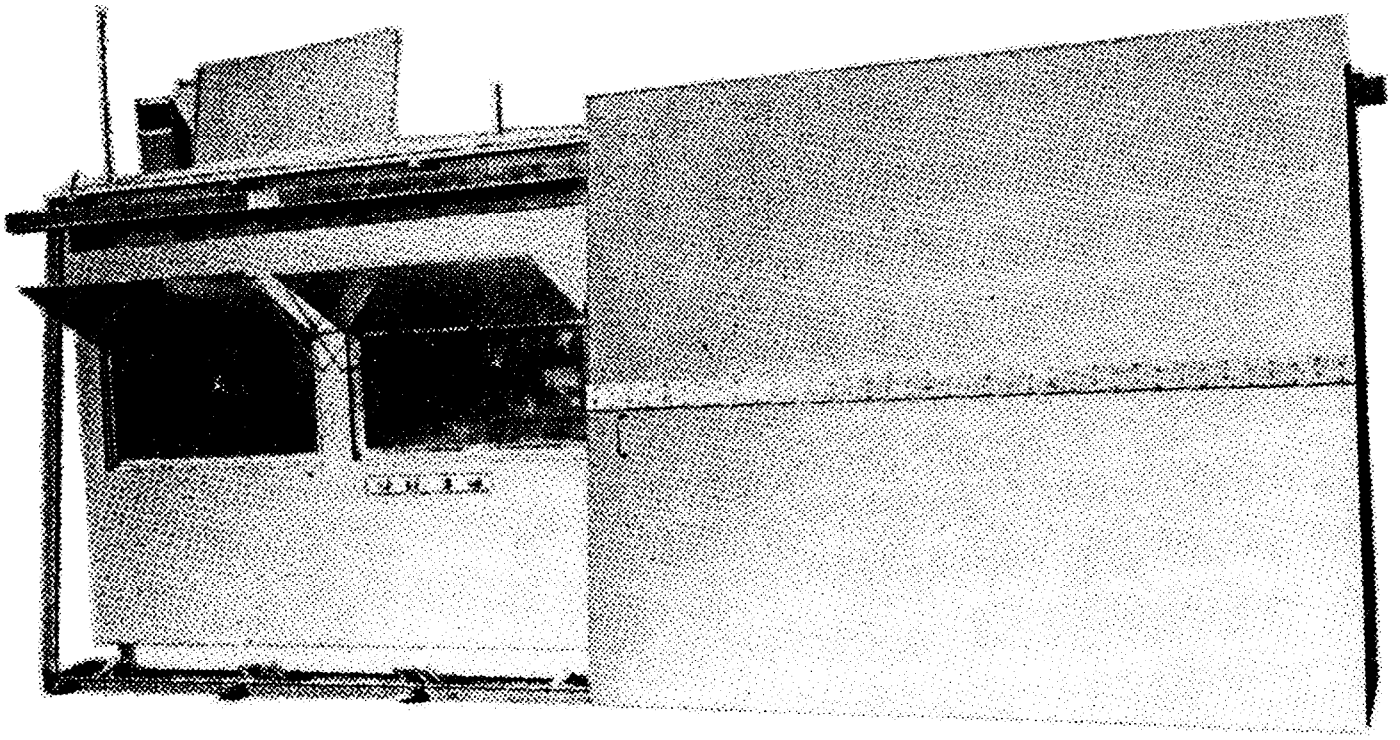
Shipping Data:

Length	30 in.
Width	18 in.
Height	20 in.
Cube	3.5 cu ft
Weight	86 lbs

Associated Equipment:
1908, 1933 and 1937,

Kits:
1918E001 KIT, Test M125, M126, and M127 Signals
1918E002 KIT, Test M131 Signals

APE 1920--SHIELD, OPERATIONAL



Use:
The operational shield is used to provide additional protection for operators inside the APE 1937 shelter when function testing mines and hand grenades.

Description:
APE 1920 consists of two A–frames connected by tracks on top and at the bottom. The metal shield is suspended from the upper track by two 4–wheel trolley hangers. It mounts in front of the APE 1937.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	19200000
Unit of Issue	Each

Installation Data:

Length	20 ft
Width	24 in.
Height	7 ft 7 in.
Weight	1585 lbs

Utilities Required:
None.

Production Capacity:
Not applicable.

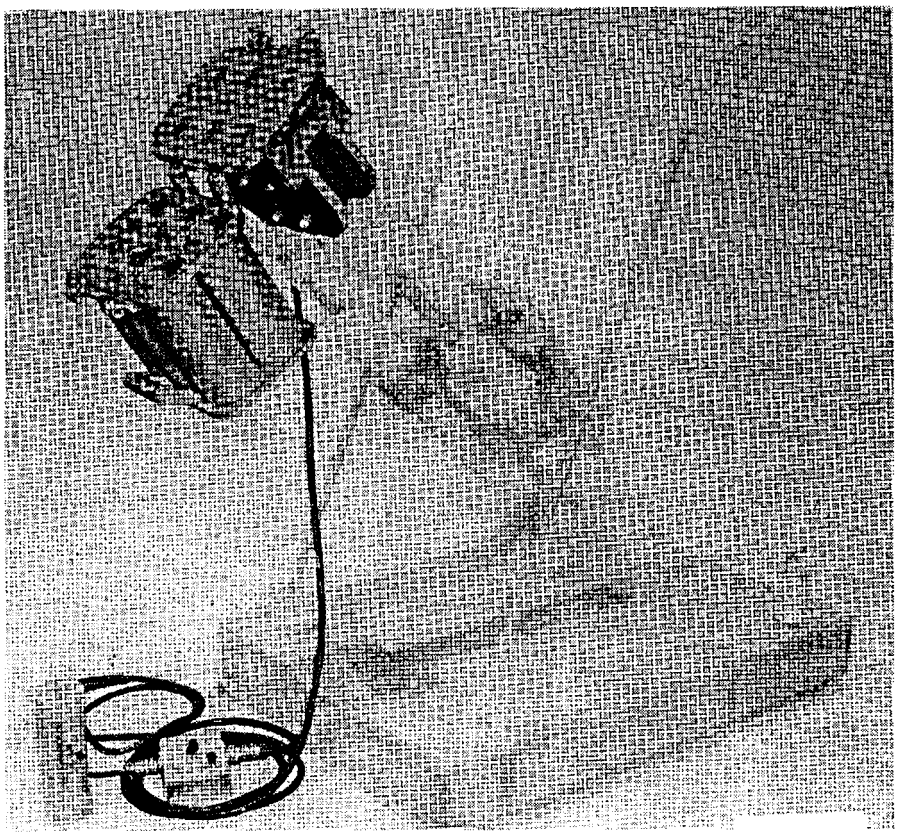
Shipping Data:

Length	130 in.
Width	59 in.
Height	42 in.
Cube	202 cu ft
Weight	2200 lbs

Associated Equipment:
APE 1937.

Kits:
None.

APE 1921M2--DEVICE, PHOTOFLASH CARTRIDGE TEST



Use:
The photoflash cartridge test kit is used to function test M112, M112A1, M121, M123A1, and M124 photoflash cartridges.

Description:
APE 1921M2 consists of a six barrel cartridge holder, six inserts for the smaller cartridges, a firing cover, an intervalometer, connecting cables, and a battery.

Difference Between Models:
The 1921M2 model has an additional pigtail electrical cable.

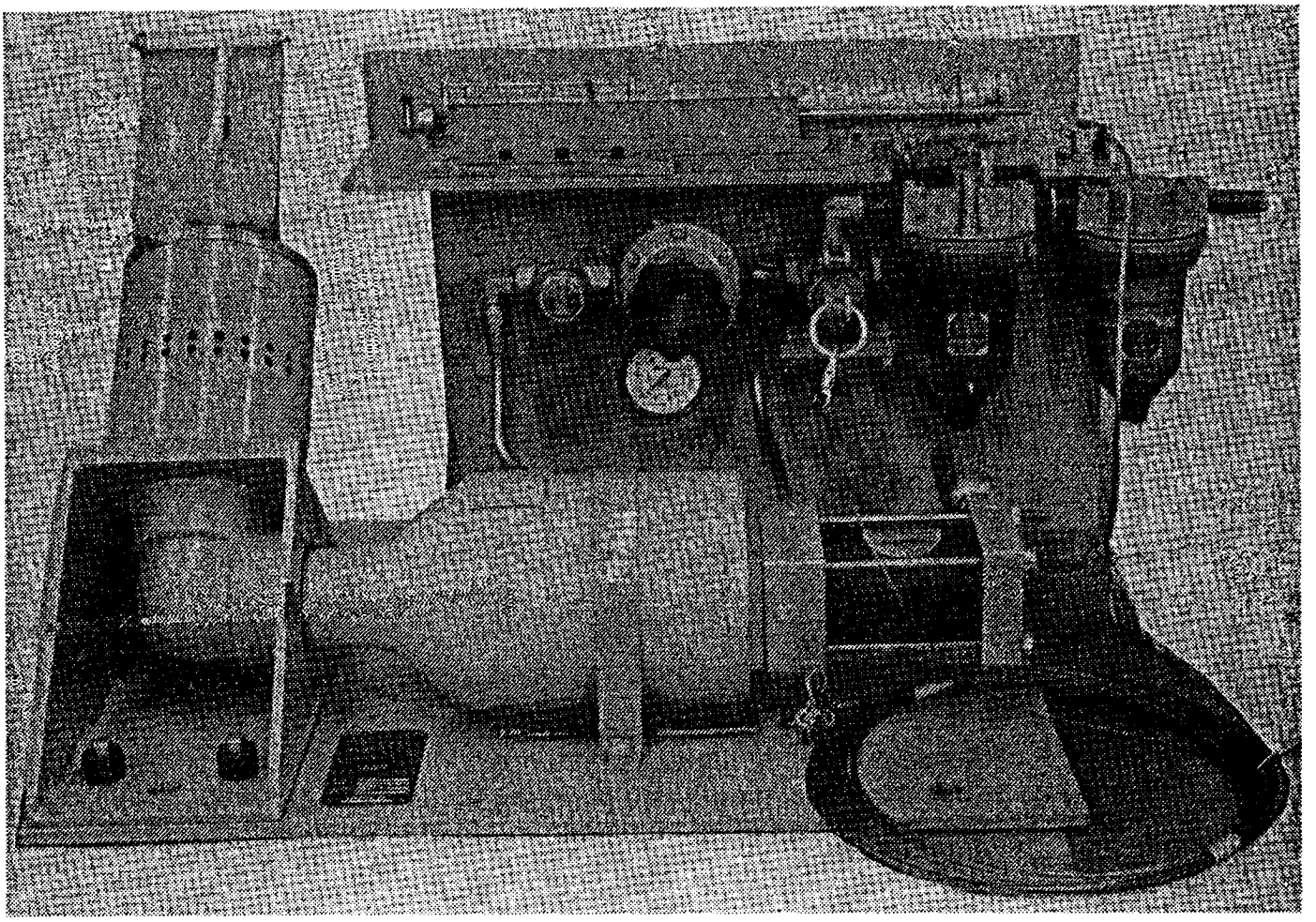
Tabulated Data:
APE No. 19210000M2
Unit of Issue . . . .Each
Installation Data:
Length . . . .12 in.
Width . . . .12 in.
Height . . . . . 17 in.
Weight . . . . . 70 lbs
Utilities Required:
None.
Production Capacity:
Not applicable.

Shipping Data:
Length . . . . . 15 in.
Width . . . . . 15 in.
Height . . . . . 20 in.
Cube . . . . . 2.6 cu ft
Weight . . . . . 110 lbs

Associated Equipment:
APE 1902M1, APE 1902M2.

Kits:
1921E001 KIT, Test M112, M112A1, and M121 Photoflash Cartridges

APE 1922M1--LAUNCHER PNEUMATIC, GRENADE



Use:
The pneumatic grenade launcher is used to hold and launch hand grenades during surveillance function testing. It also records the force in pounds used to remove the safety pull rings from the grenades.

Description:
APE 1922M1 consists of a frame, an accumulator, an air valve, an air regulator, a quick release valve. Holding cups for the grenades are ordered as kits.

Difference Between Models:
The APE 1922M1 accommodates chemical grenades while the APE 1922 does not.

Tabulated Data:

APE No.	19220000M1
Unit of Issue	Each
Installation Data:	
Length	27 in.
Width	25 in.
Height	14-1/2 in.
Weight	173 lbs
Utilities Required:	
Air at 85 to 100 psi.	
Production Capacity:	
Not applicable.	

Shipping Data:

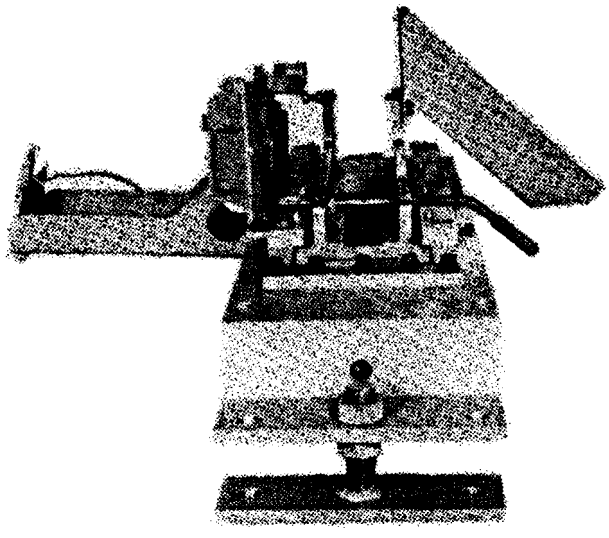
Length	33 in.
Width	30 in.
Height	18 in.
Cube	6 cu ft
Weight	250 lbs

Associated Equipment:
None.

Kits:

1922E001	KIT, Function Test MK2 Grenades
1922E002	KIT, Function Test M26 Grenades
1922E005	KIT, Function Test M33, M59, M67, and M68 Grenades
1922E006	KIT, Static Test M26A2, M33A1, M57, M59, and M68 Grenades
1922E007	KIT, Function Test M25 Grenades
1922E008	KIT, Function Test, MK3A2 Grenade
1922E009	KIT, Function Test, M47 & M48 Grenade
1922E010	KIT, Function Test, M34 Grenades
1922E011	KIT, Function Test, M6, M7, M8, M14, M15 and M18 Grenades

APE 1923--COMBINATION GUN MOUNT FOR TRACER TESTING SMALL ARMS AMMUNITION



Use:
The combination gun mount is used to trace test small arms tracer ammunition and function test the 64MM projectile.

Description:
APE 1923 is constructed of metal and is to be mounted on a concrete base. It has oil buffers to absorb the weapon recoil.

Difference Between Models:
Original design.

Tabulated Data:
APE No. 19230000
Unit of Issue . . . .Each
Installation Data:
Length . . . .39 in.
Width . . . .29 in.
Height . . . .14 in.
Weight . . . .200 lbs
Utilities Required:
115 vac, single phase, 60 Hz.
Production Capacity:
Not applicable.

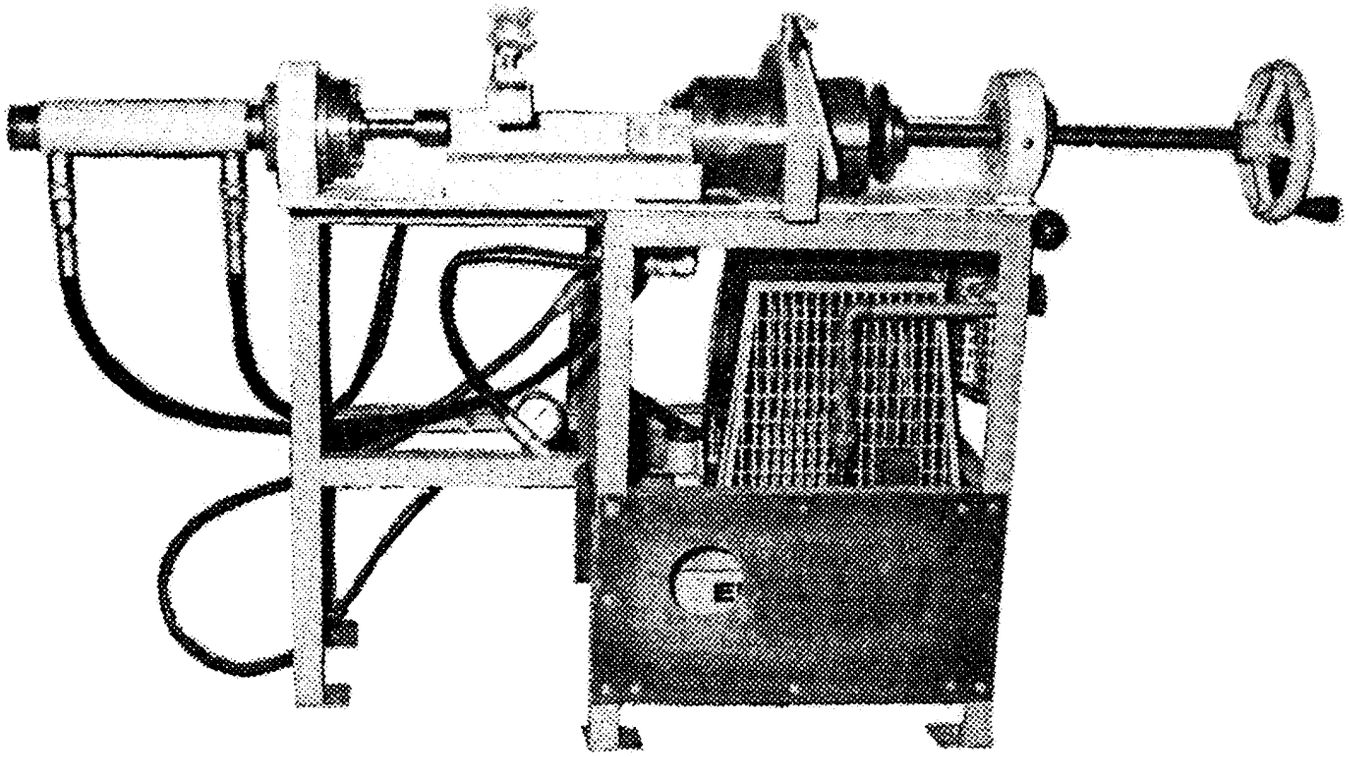
Shipping Data:
Length . . . .50 in.
Width . . . .30 in.
Height . . . .17 in.
Cube . . . . . 15 cu ft
Weight . . . . . 534 lbs

Associated Equipment:
APE 1963.

Kits:

1923E001	KIT, Mount Caliber .30 Machine Gun, M37
1923E003	KIT, Mount 7.62MM Machine Gun, M60
1923E004	KIT, Mount Caliber .50 spotting Rifle, M8C
1923E005	KIT, Mount Caliber .30 Carbine, Ml or M2
1923E006	KIT, Graze Impact Table
1923E010	KIT, Mount 7.62MM Machine Gun M240
1923E011	KIT, Mount 7.62MM Machine Gun M219
1923E012	KIT, Mount 7.62MM Machine Gun M134
1923E013	KIT, Chronograph and Ballistic Screens
1923E014	Power Supply for Kits E011 and E015
1923E015	KIT, Mount Caliber .50 Machine Gun
1923E016	KIT, M16A1 Rifle Mounting for Function Testing 5.56MM on 64MM Ammunition
1923E017	KIT, Mounting, M16 Rifle with M203 Launcher or M79 Launcher for Function Test

APE 1925--DISASSEMBLY EQUIPMENT 155MM: M118 AND 4.2 INCH: M335



Use:
The disassemly equipment is used to push the base from the 155 MM: M118 illuminating projectile and 4.2 inch mortar allowing removal of the parachute and illuminating canister for renovation or inspection.

Description:
APE 1925 consists of a work-table with a projectile holding device, a hydraulic ram, a ram extension, and a power driven hydraulic pump.

Difference Between Models:
Original design.

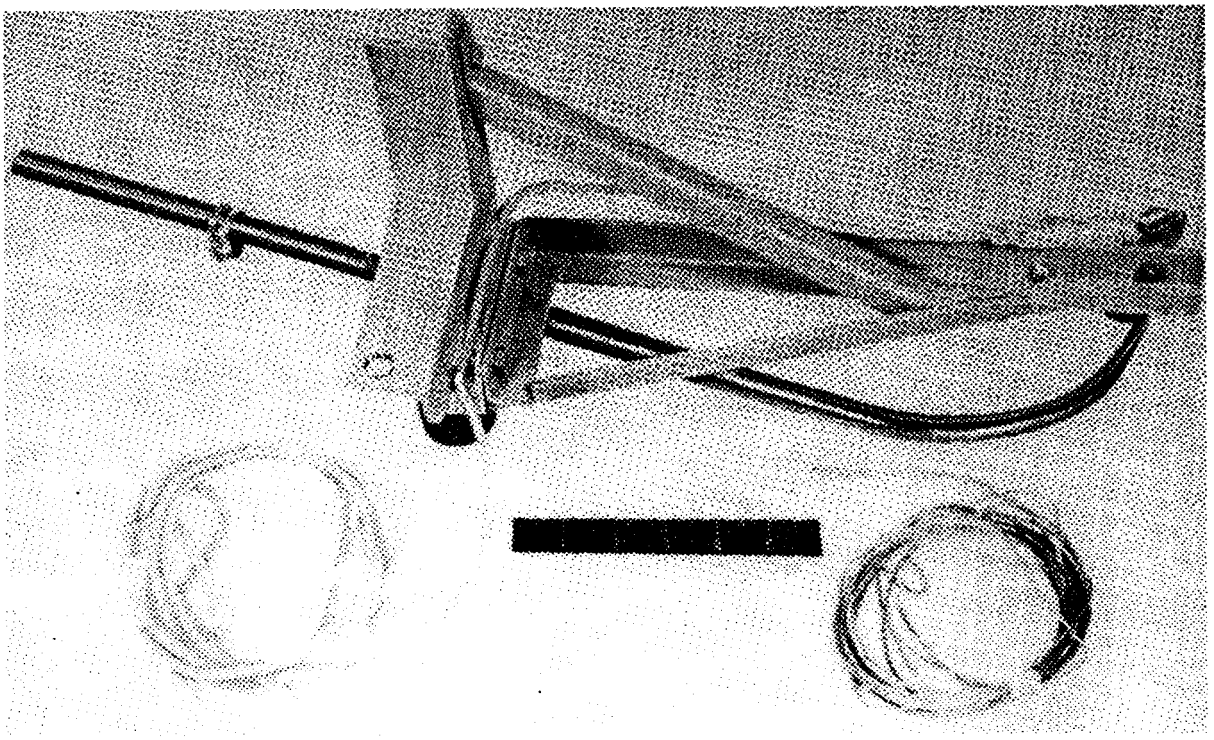
Tabulated Data:
APE No. 19250000
Unit of Issue . . . .Each
Installation Data:
Length . . . .38 in.
Width . . . . . 24 in.
Height . . . . . 38 in.
Weight . . . . . 340 lbs
Utilities Required:
Air.
Production Capacity:
Not applicable.

Shipping Data:
Length . . . . . 48 in.
Width . . . . . 30 in.
Height . . . . . 48 in.
Cube . . . . . 40 cu ft
Weight . . . . . 410 lbs

Associated Equipment:
None.

Kits:
1925E001 KIT, Conversion for Cartridge 4.2 and Illuminating M335, M335A1, and M335A2

APE 1926--DEVICE, LANYARD QUICK RELEASE



Use:
The lanyard quick release device is used to function test M117, M110, M118 and M119 simulators.

Description:
APE 1926 consists of a frame with a spring loaded lever, a pulley assembly, and a lanyard.

Difference Between Models:
Original design.

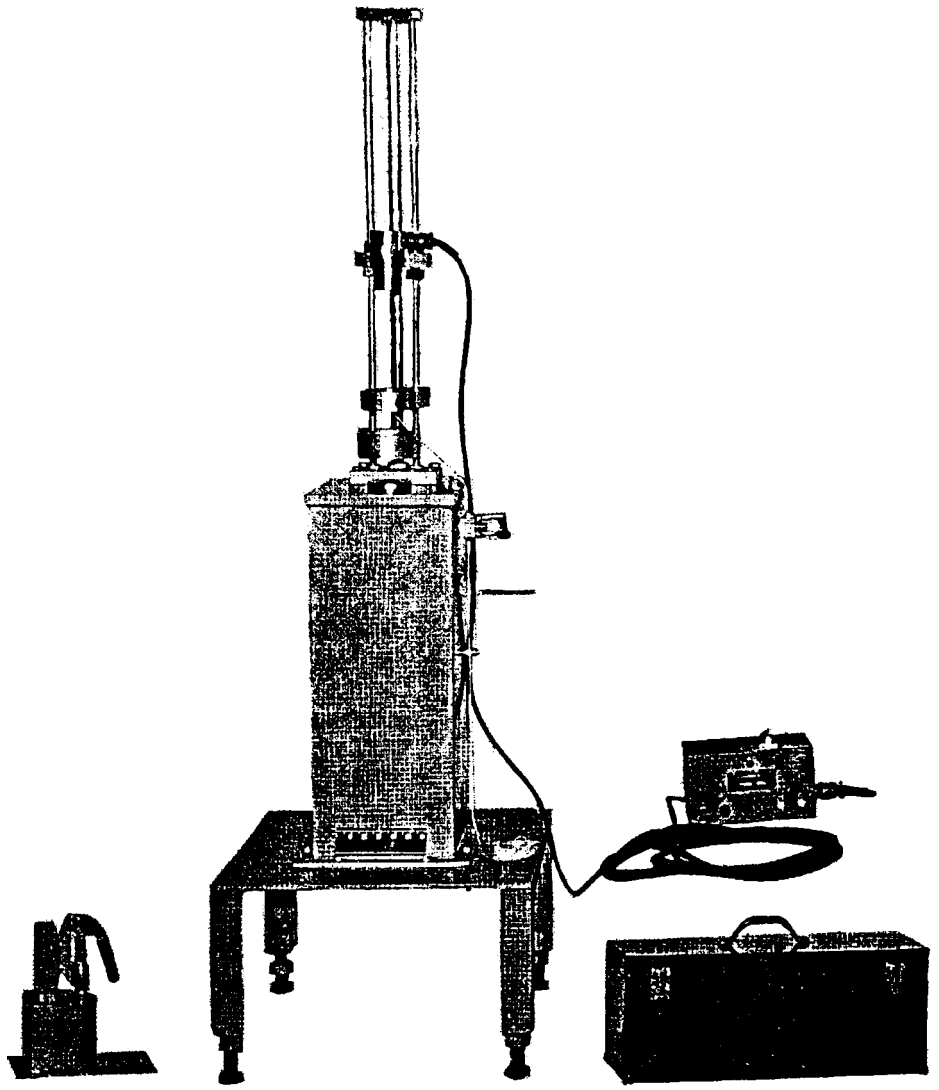
Tabulated Data:
- APE No. 19260000
- Unit of Issue . . . .Each
- Installation Data:
  - Length . . . .11 in.
  - Width . . . .9-1/2 in.
  - Height . . . . . 27 in.
  - Weight . . . . . 5-1/4 lbs
- Utilities Required:
  - None.
- Production Capacity:
  - Not applicable.

Shipping Data:
- Length . . . . . 14 in.
- Width . . . . . 11 in.
- Height . . . . . 32 in.
- Cube . . . . . 3 cu ft
- Weight . . . . . 15 lbs

Associated Equipment:
APE 1903, 1905, 1937.

Kits:
None.

APE 1931M1--TESTER, PERCUSSION PRIMER



Use:
The primer disassembly and function test machine, APE 1931M1, is designed to surveillance function test M28B2, M32, M34, M57, M58, M60A1, M71A1E1, M82, MK2A4, M1B1A2, MK15, MK22, M38, M90, M92E1, percussion primers and M80A1, M83, M86, electric primers. The machine will also disassemble the primer head from the primer body M28B2, M58, M60A1, M1B1A2, MK22, M38, M80A1, M83 and M60 primers.

Description:

a. APE 1931M1 consists of a primer firing stand with drop tower, electrornagnet, and safety cups, a power supply with connecting cables, and an accessory tool chest assembly containing the tooling necessary to set up the machine for disassembly and function testing the primers listed above.

b. The APE 1984 electric firing instrument is connected to the APE 1931M1 when function testing electric primers.

Difference Between Models:
APE 1931M1 differs from the APE 1931 as outlined below:

a. Tooling was added for the MK15, MK22, M38, M90, and M92E1 percussion primers and M80A1, M83, and M86 electric primers.

b. Ball weighs 1.94 ounces and 16.28 ounces are added to function test the new primers.

c. Non–function gage rods were not supplied as part of the tooling for APE 1931. New gage rods are added to include the non-function as well as the function testing of all percussion primers listed above.

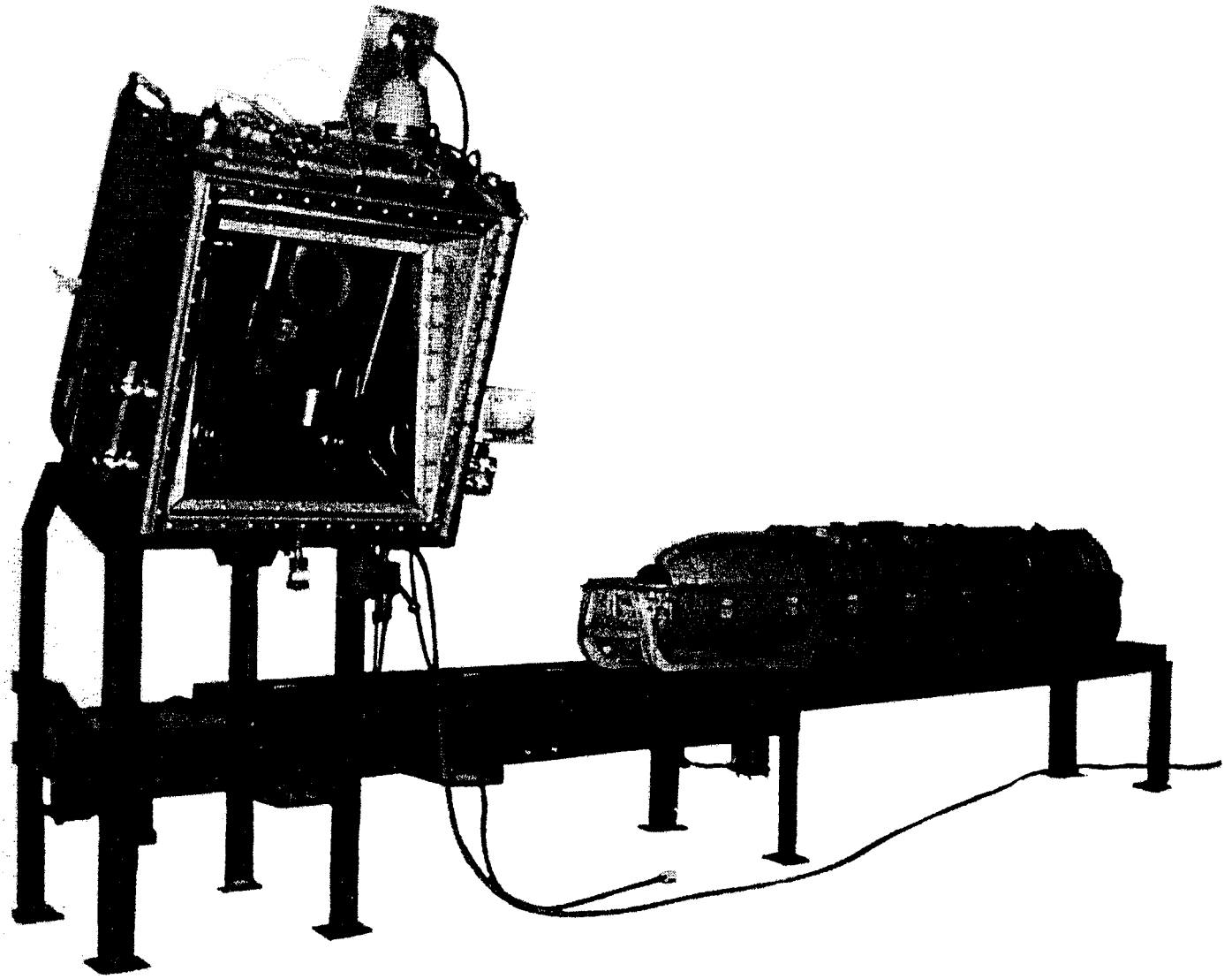
Tabulated Data:
APE No. 19310000
Unit of Issue . . . .Each
Installation Data:
TESTER :
Length . . . .21 in.
Width . . . .21 in.
Height . . . .70 in.
Cube . . . .17.86 cu ft
Weight . . . .185 lbs
POWER SUPPLY:
Length . . . . . 9 in.
Width . . . . . 5 in.
Height . . . . . 6 in.
Cube . . . . . 0.156 cu ft
Weight . . . . . 17 lbs
ACCESSORY TOOL CHEST:
Length . . . . . 26 in.
Width . . . . . 12–3/32 in.
Height . . . . . 14-5/16 in.
Cube . . . . . 2.6 cu ft
Weight . . . . . 128 lbs
Utilities Required:
115 vac, 60 cycle, 5 amps.
Production Capacity:
Varies with primer being tested.

Shipping Data:
Length . . . . . Not available
Width . . . . . Not available
Height . . . . . Not available
Cube . . . . . Not available
Weight . . . . . Not available

Associated Equipment:
APE 1984 Electric Firing Instrument.

Kits:
1931E001 FIXTURE, Primer Piercing
1931E002 KIT, Continuity Test for MK42 Primers

APE 1934--AGENT SAMPLING UNIT FOR CHEMICAL BOMBS



Use:
The agent sampling unit is used for agent sampling of bomb, gas, 500 lb, MK94 Mod 0, Bomb, Gas 750 lb, MC–1, Bomb, Gas MK116 Mod 0 (Weteye) and TMU–28/B spray tank.

Description:
APE 1934 consists of a totally inclosed head assembly with a removable plexiglass window provided with two glove ports, a movable drill unit, a two piece mounting stand for MK94, MC-1, M116 (Weteye) bombs and a stand for TMU-28/B spray tanks. Agent sampling is accomplished by drilling, sampling, hand tapping and plugging the munition.

Difference Between Models:
Original design.

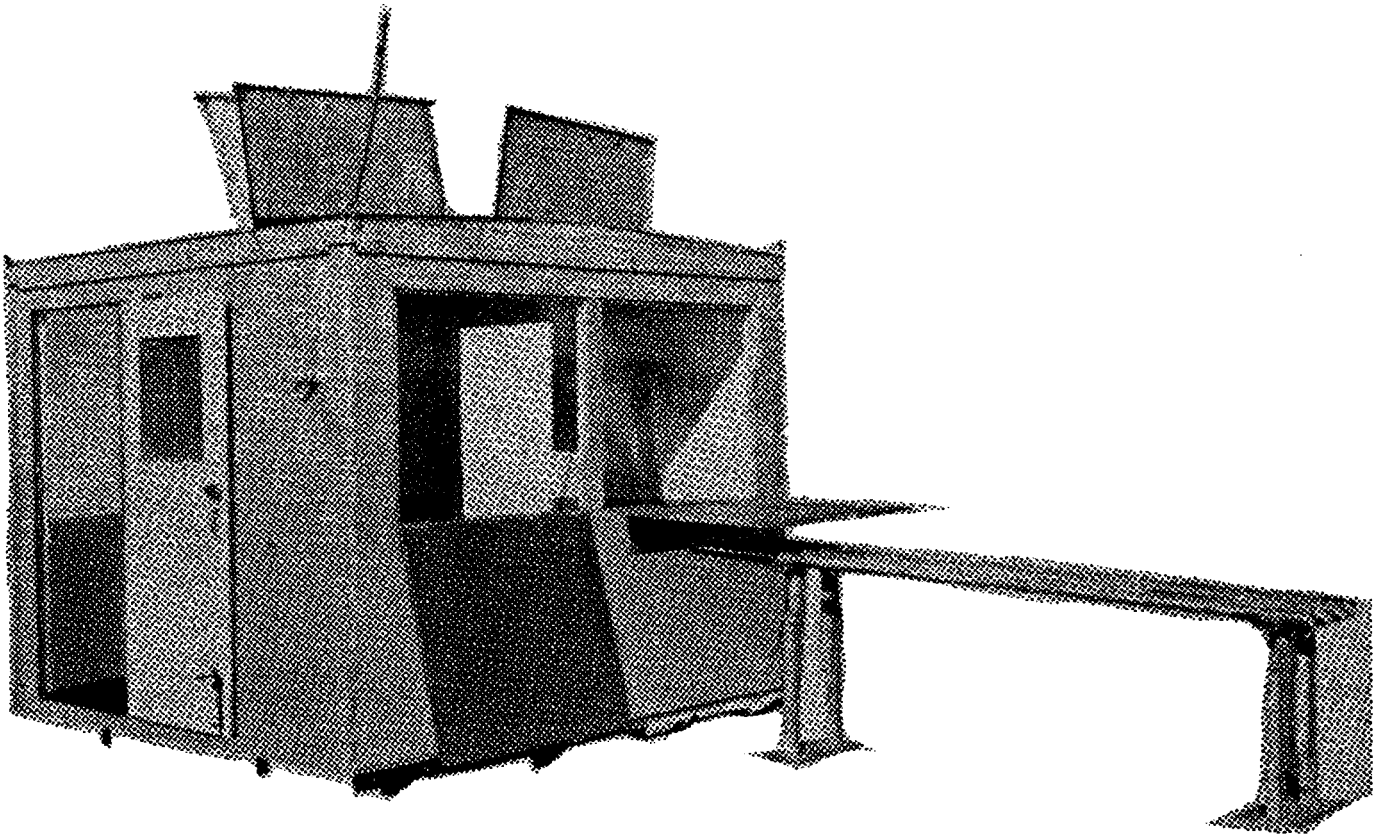
Tabulated Data:
APE No. 19340000
Unit of Issue . . . .Each
Installation Data:
Length . . . .156 in.
Width . . . .30 in.
Height . . . .78 in.
Weight . . . .1458 lbs
Utilities Required:
Air at 90 psi and 125 cfm; 110 vac, 60 Hz, single phase and 230 vac, 60 Hz, 3 phase.
Production Capacity:
Not applicable.

Shipping Data:
SAMPLING UNIT:
Length . . . .42 in.
Width . . . . . 35 in.
Height . . . . . . 80 in.
Cube . . . . . 68 cu ft
Weight . . . . . 650 lbs
CONVEYOR ASSEMBLY:
Length . . . . . 98 in.
Width . . . . . 42 in.
Height . . . . . 54 in.
Cube . . . . . 129 cu ft
Weight . . . . . 908 lbs

Associated Equipment:
M6A1 Gas Particulate filter unit (2 ea).

Kits:
1934E001 KIT, Accessory for TMU-28/B Spray Tank
1934E003 KIT, Accessory for M116 (Wet-eye) MK94 (500 lbs), and MC1 (750 lbs), Bombs

APE 1937--SHELTER, PERSONNEL PROTECTION



Use:
The portable barricade is used to protect personnel while performing surveillance function tests.

Description:
APE 1937 is constructed of aluminum sheet over compressed fiberglass insulation. Windows are positioned so that tests can be observed and recorded. The windows are made of 3/4–inch plexiglass.

Difference Between Models:
original design. This item replaces APE 1905.

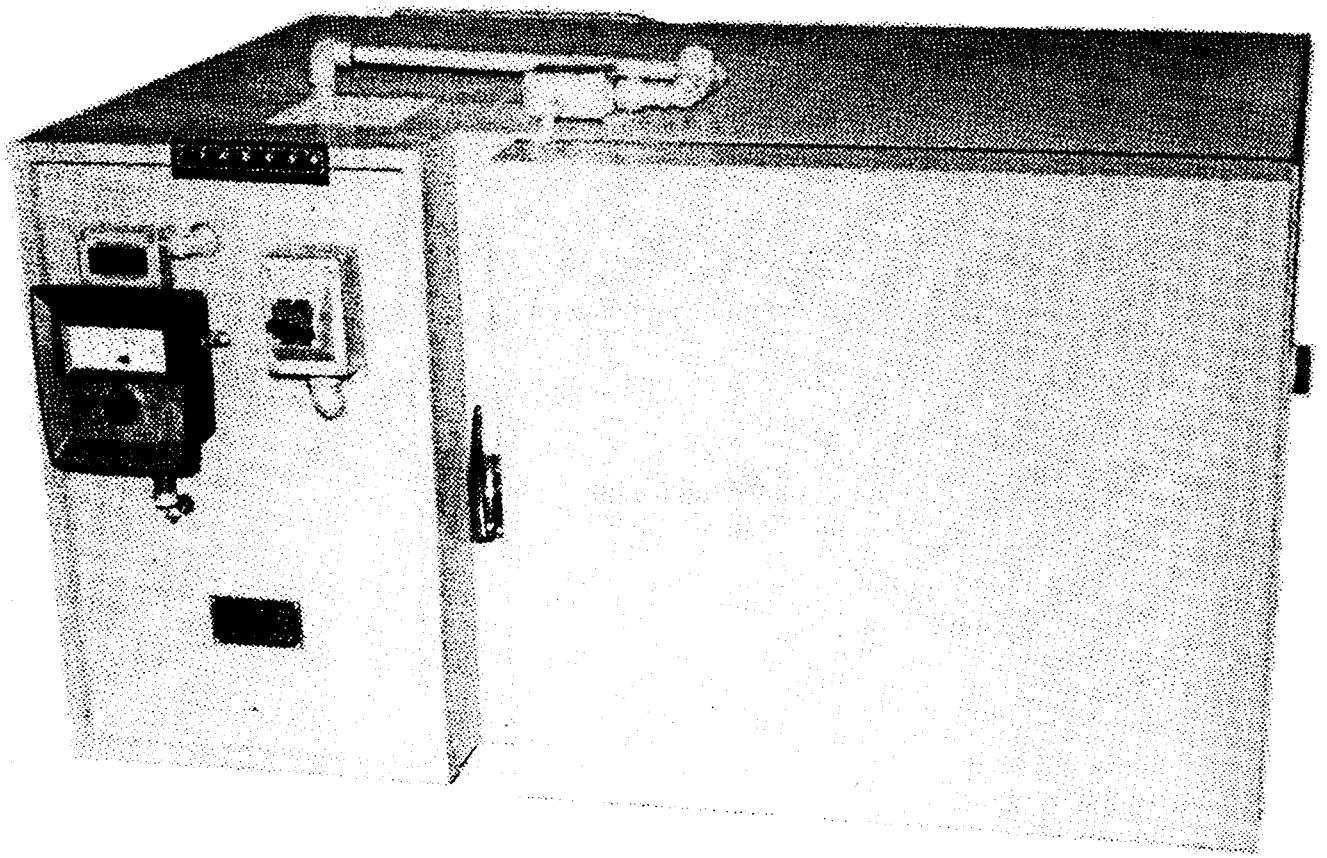
Tabulated Data:
APE No. 19370000
Unit of Issue . . . .Each
Installation Data:
Length . . . .114 in.
Width . . . .114 in.
Height . . . . . 94 in.
Weight . . . . . 5750 lbs
Utilities Required:
None.
Production Capacity:
Not applicable.

Shipping Data:
Length . . . . . 114 in.
Width . . . . . 114 in.
Height . . . . . 94 in.
Cube . . . . . 707 cu ft
Weight . . . . . 5750 lbs

Associated Equipment:
APE 1920, 1926.

Kits:
1937E001 KIT, Periscope and Step Stool
1937E002 KIT, Screens for Overhead Windows
1937E003 KIT, Lanyard Controls
1937E004 KIT, Lanyard Guide Unit

APE 1938--CHAMBER, LOW TEMPERATURE



Use:
The low temperature chamber will be used to temperature condition ammunition or ammunition related items to as low as –70°F.

Description:
APE 1938 is a self–contained electric motor operated, air cooled unit complete with mechanical refrigeration system and controls. Interior dimensions of test compartment are 18 inches wide x 26 inches deep x 20 inches high.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	19380000
Unit of Issue	Each

Installation Data:

Length	50 in.
Width	43-1/2 in.
Height	40-1/2 in.
Weight	Not available

Utilities Required:
230 vac, single phase, 60 Hz, 20 amp.

Production Capacity:
Not applicable.

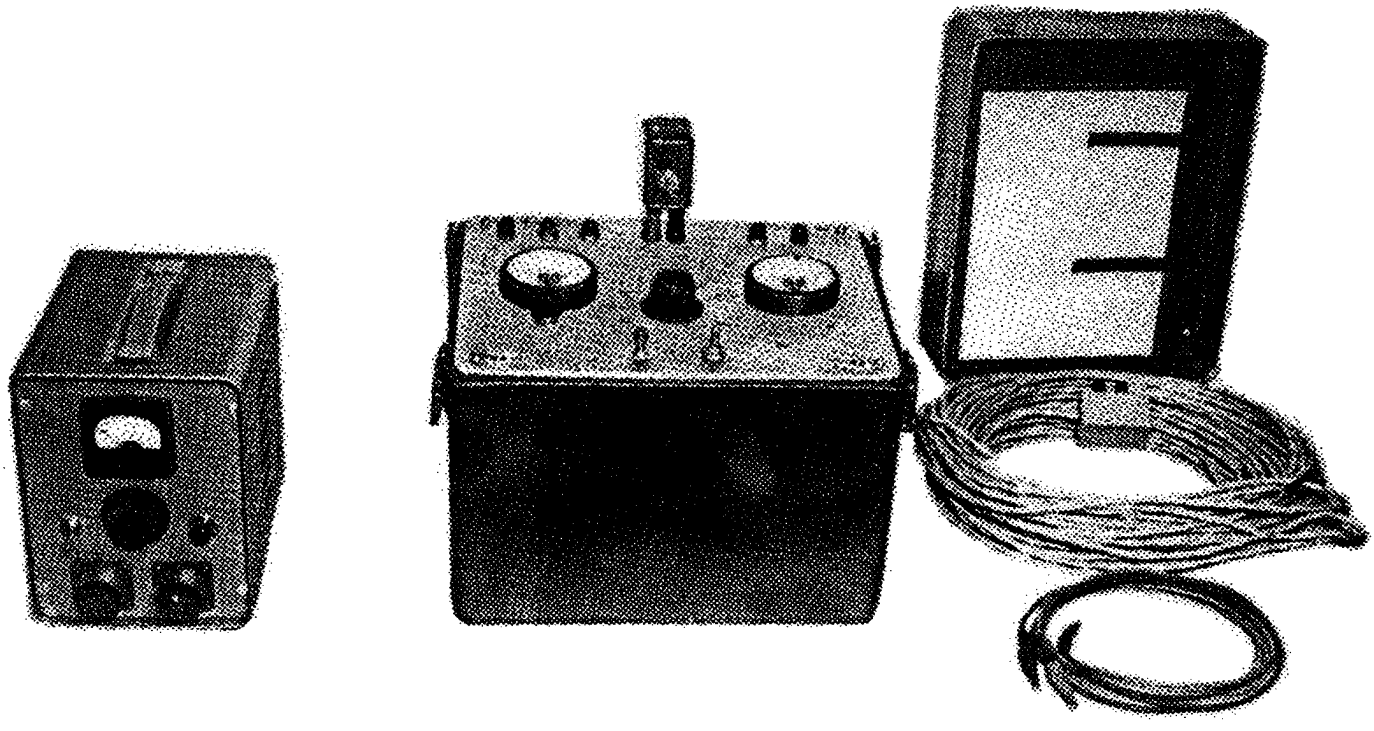
Shipping Data:

Length	56 in.
Width	51 in.
Height	42 in.
Cube	104 cu ft
Weight	1096 lbs

Associated Equipment:
None.

Kits:
None.

APE 1939M1--EQUIPMENT, CONTINUITY AND RESISTANCE TEST



Use:
The continuity test equipment is used to electrically test M509 fuzes used in 106MM, M344A1 projectiles.

Description:
APE 1939M1 consists of a continuity tester, with self contained battery and battery charger, 100 feet of shielded cable and an adapter cord for battery charging.

Difference Between Models:
APE 1939M1 has a self contained battery charger and is more compact.

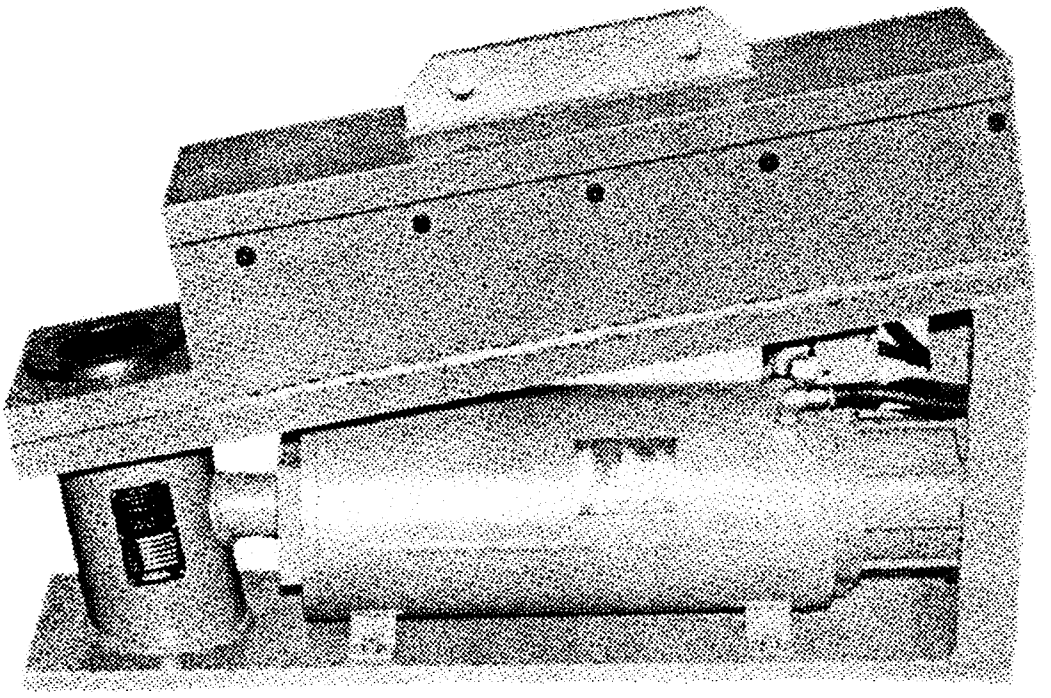
Tabulated Data:
APE No. 19390000M1
Unit of Issue . . . . . Each
Installation Data:
TESTER:
Length . . . . . 12 in.
Width . . . . . 9 in.
Height . . . . . 11 in.
Weight . . . . . 15 lbs.
Utilities Required:
110 vat, single phase, 60 Hz.
Production Capacity:
Not applicable.

Shipping Data:
Length . . . . . 16 in.
Width . . . . . 12 in.
Height . . . . . 13 in.
Cube . . . . . 1.4 cu ft
Weight . . . . . 50 lbs

Associated Equipment:
None.

Kits:
None.

APE 1940M3--TESTING FIXTURE, MINE, AP, M16



Use:
The mine testing fixture is used to function test M16, AP series mines. The fixture contains a mechanism which can shear the fuze from a dud mine and eject it away from the fixture.

Description:
APE 1940M3 consists of a heavy steel frame with a hardened steel cover which protects everything except the mine holder. Within the frame are two air cylinders, the control valves, and an accumulator. A hand control valve for remote operation and connecting hoses are also provided.

Difference Between Models:
Rubber hoses of the original design are replaced by steel tubing. The front cover was replaced by a hardened steel plate and the hole for the shear has been made smaller to keep debris from getting inside.

Tabulated Data:

APE No.	19400000M3
Unit of Issue	Each
Installation Data:	
Length	42-1/2 in.
Width	11 in.
Height	28 in.
Weight	1330 lbs
Utilities Required:	
Air at 60 to 110 psi.	
Production Capacity:	
Not applicable.	

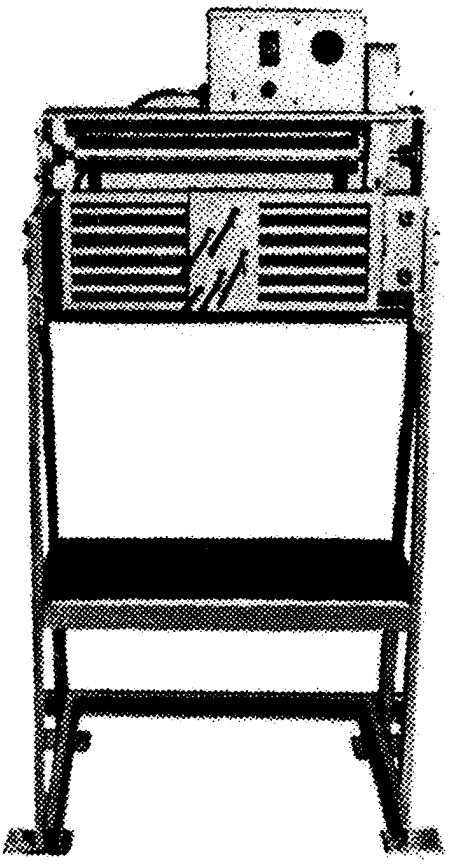
Shipping Data:

Length	53 in.
Width	42 in.
Height	37 in.
Cube	48 cu ft
Weight	1550 lbs

Associated Equipment:
APE 1920, 1937.

Kits:
1940E001 KIT, Function Test Equipment for M26 Mines.

APE 1949--TIMING DEVICE, AUTOMATIC FOR FIRING DEVICE, DEMOLITION: DELAY TYPE, M1



Use:
The automatic timing device is used to automatically record the time interval from initiation to firing of firing device, demolition: delay type, M1.

Description:
APE 1949 consists of a metal frame, a firing device holder, an initiator door, a tabulating paper drive mechanism and a control box. A reading board is provided to aid in reading the test results.

Difference Between Models:
Original design.

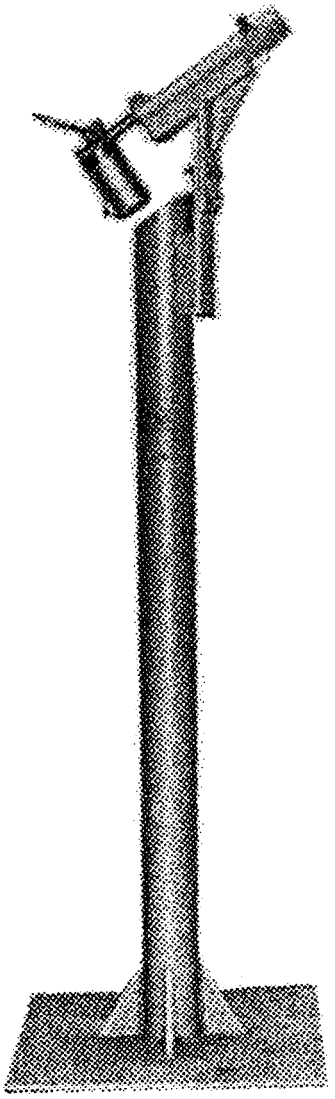
Tabulated Data:
APE No. 19490000
Unit of Issue . . . .Each
Installation Data:
Length . . . .22.5 in.
Width . . . . . 24 in.
Height. . . . . 45 in.
Weight . . . . . 200 lbs
Utilities Required:
115 vac, 60 Hz, single phase, 6.8 amps.
Production Capacity:
Not applicable.

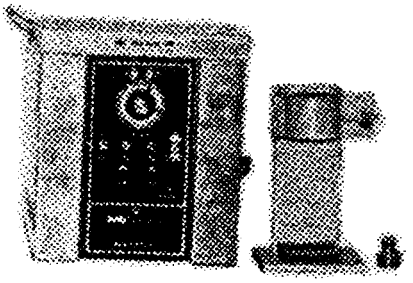
Shipping Data:
Length . . . . . 29 in.
Width . . . . . 28 in.
Height . . . . . 52 in.
Cube . . . . . 25 cu ft
Weight . . . . . 320 lbs

Associated Equipment:
None.

Kits:
None.

APE 1951M1--TEST EQUIPMENT, M176 AND M226 GRENADE LAUNCHER





Use:
The test equipment is used for surveillance testing of M176 and M226 grenade launchers. The equipment is used to torque test, leak test, and function test the grenade launchers.

Description:
APE 1951M1 consists of a torque test fixture, a leakage test fixture, and a function test fixture.

Difference Between Models:
APE 1951M1 model changes the adjustment of the firing angle from 33 to 62 degrees and replaces the firing pin retainer. Basic model not authorized for use.

Tabulated Data:

APE No.	19510000M1
Unit of Issue	Each
Installation Data:	
LEAK TEST FIXTURE:	
Length	27 in.
Width	14 in.
Height	16 in.
Weight	62 lbs
FUNCTION TEST FIXTURE:	
Length	24 in.
Width	24 in.
Height	77 in.
Weight	182 lbs

TORQUE TEST FIXTURE:
Length . . . .8 in.
Width . . . .8 in.
Height . . . .13 in.
Weight . . . .23 lbs

Utilities Required:
115 vac, single phase, 50/60 Hz.

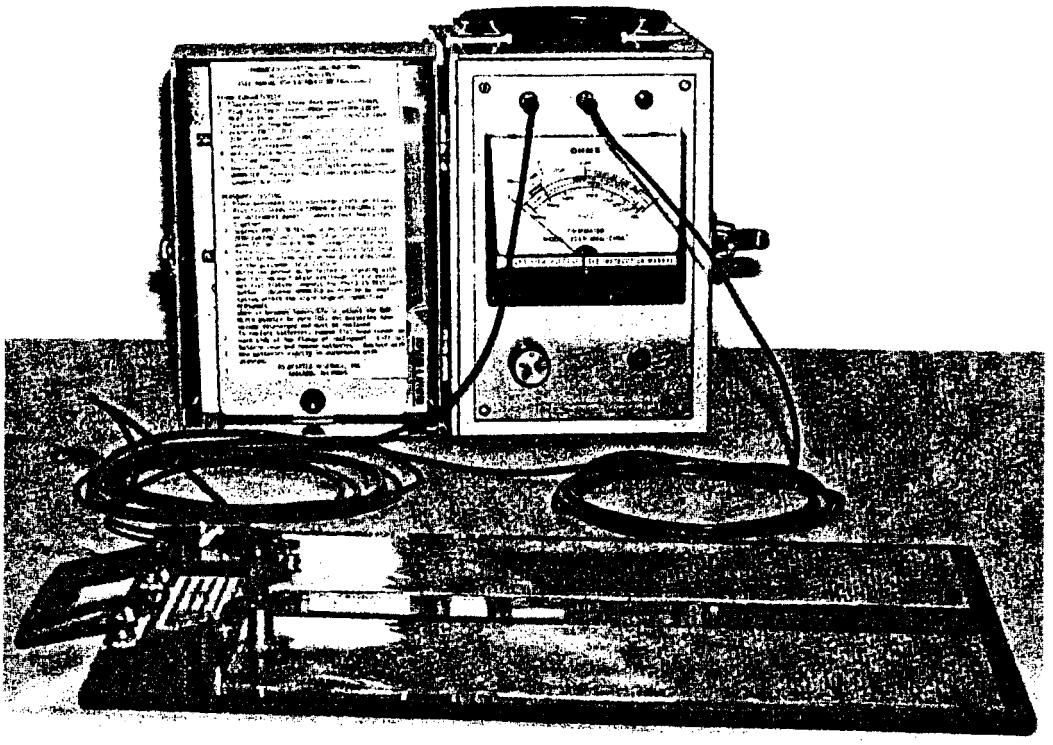
Production Capacity:
LEAK TEST FIXTURE
60 launchers per hour.
FUNCTION TEST FIXTURE
6–10 launchers per hour.
TORQUE TEST FIXTURE
60 launchers per hour.

Shipping Data:
Length . . . . . Not available
Width . . . . . Not available
Height . . . . . Not available
Cube . . . . . Not available
Weight . . . . . Not available

Associated Equipment:
APE 1937, 1963.

Kits:
1951E001 KIT, Comparator

APE 1953--EQUIPMENT, CONDUCTIVE FLOOR AND CONDUCTIVE SHOE TEST



Use:
The conductive floor and conductive shoe test equipment is used to check the resistance of conductive floors, conductive shoes, and grounding rods for aircraft. This test is to insure good ground for preventing static electric buildup.

Description:
APE 1953 consists of an ohmmeter with test leads, two electrodes with carrying case, and personnel test plate.

Difference Between Models:
Original design.

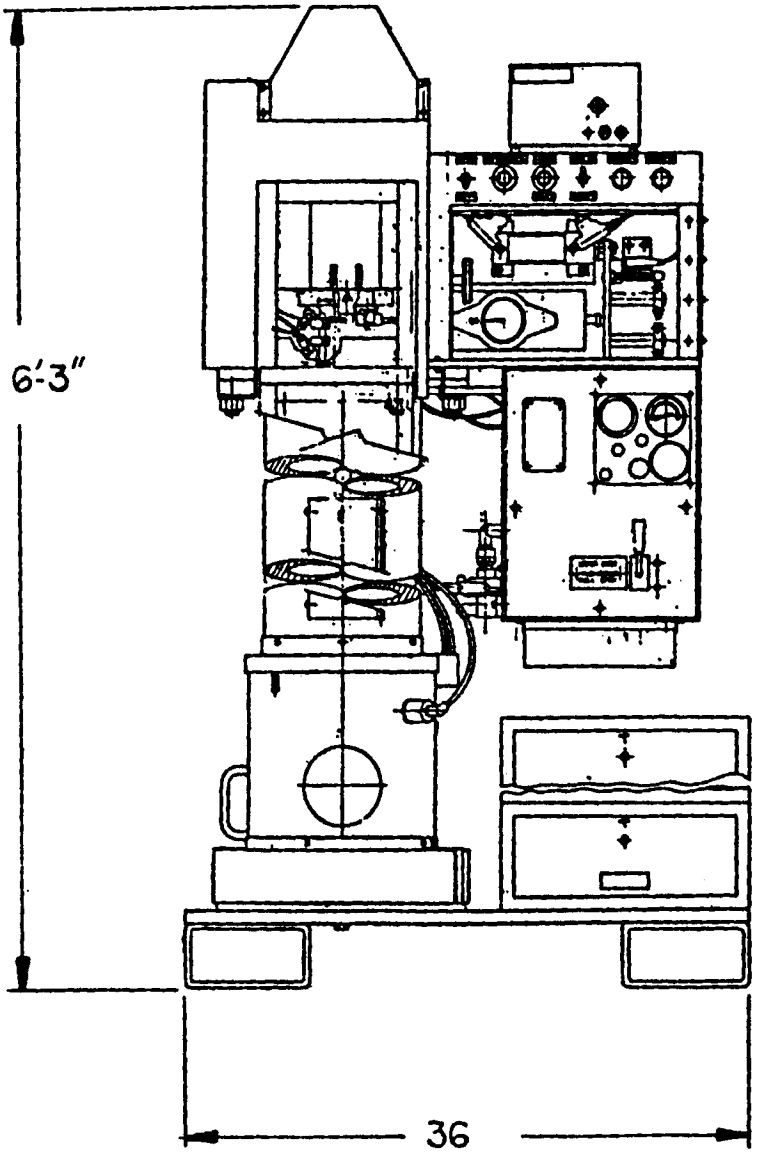
Tabulated Data:
APE No. 19530000
Unit of Issue . . . .Each
Installation Data:
OHMMETER:
Length . . . .9 in.
Width . . . .6-1/4 in .
Height . . . .9-1/4 in.
Weight . . . .18 lbs
ELECTRODE CASE:
Length . . . .6 in.
Width . . . . . 4-1/2 in.
Height . . . . . 6 in.
Weight . . . . . 6 lbs
PERSONNEL TEST PLATE:
Length . . . . . 19-1/2 in.
Width . . . . . 12 in.
Height . . . . . 2 in.
Weight . . . . . 6 lbs
Utilities Required:
None.
Production Capacity:
Not applicable.

Shipping Data:
Length . . . . . 23 in.
Width . . . . . 20 in.
Height . . . . . 12 in.
Cube . . . . . 3.2 cu ft
Weight . . . . . 90 lbs

Associated Equipment:
None.

Kits:
1953E001 KIT, Compression Test Fixture
1953E003 KIT, Aircraft Ground Test

APE 1955-GRENADE FUZE TESTER



Use:
The grenade fuze tester is used to measure the time delay of M204, M205, M206, M213 and M215 hand grenade fuzes in a static test and dynamic test. The fuze is secured in the tester and detonated in a static position. The tester is used to perform a dynamic test on the fuzes whereby the fuze is armed and dropped four feet onto a horizontal steel plate, where detonation occurs.

Description:
APE 1955 consists of a drop tube and lower barricade assembly, an upper chamber assembly, a fuze holder assembly for 9/16 inch threaded body and fuze holder assembly for 5/8 inch threaded body. The tester is air operated and has an electric blower. The time delay test is measured by an electronic timer.

Difference Between Models:
Original design.

Tabulated Data:
- APE No. 19550000
- Unit of Issue . . . .Each

Installation Data:
- Length . . . .36 in.
- Width . . . .20 in.
- Height . . . .75-1/4 in.
- Weight . . . .1400 lbs

Utilities Required:
Air at 70 psi; 115 vac, 60 Hz.

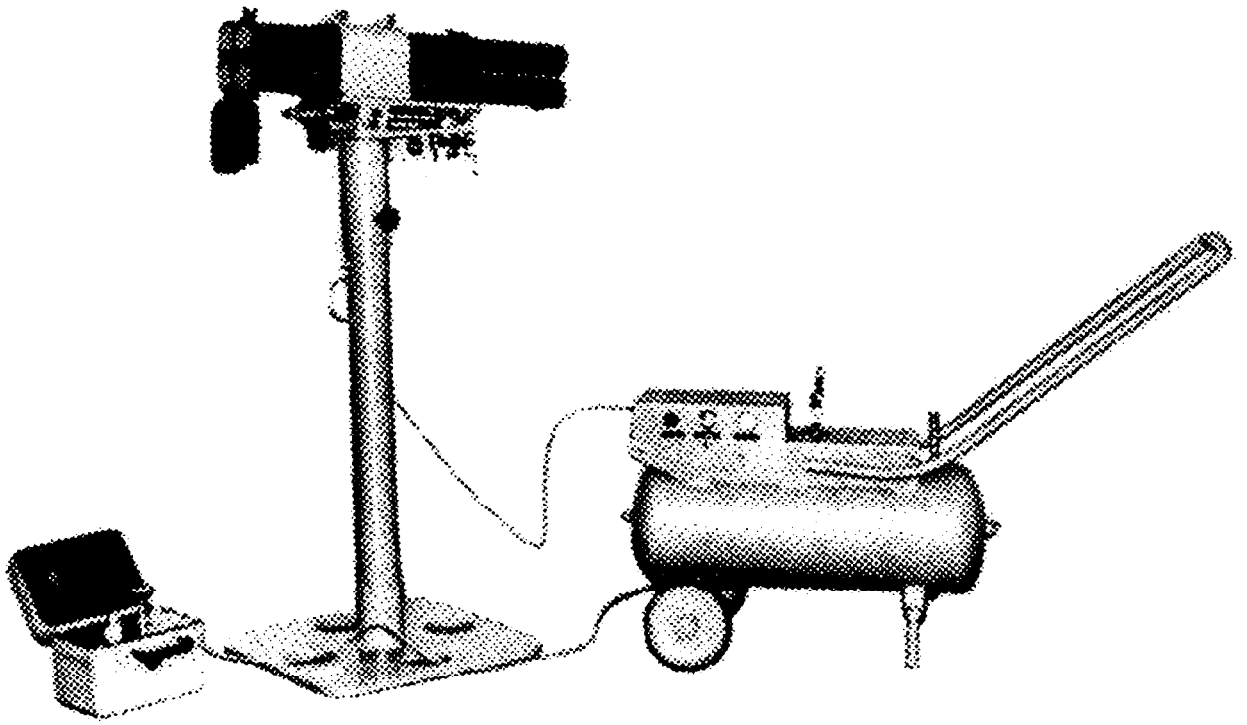
Production Capacity:
Not applicable.

Shipping Data:
- Length . . . . . Not available
- Width . . . . . Not available
- Height . . . . . Not available
- Cube . . . . . Not available
- Weight . . . . . Not available

Associated Equipment:
None.

Kits:
None.

APE 1956--TEST EQUIPMENT, 66MM INCENDIARY ROCKET



Use:
The test equipment is used to function test 66MM incendiary rocket ammunition.

Description:
APE 1956 consists of a function test fixture on which the rocket launcher is mounted; a compressed air storage tank; a control box; and connecting air lines. Rocket launcher is to be furnished by the user.

Difference Between Models:
Original design.

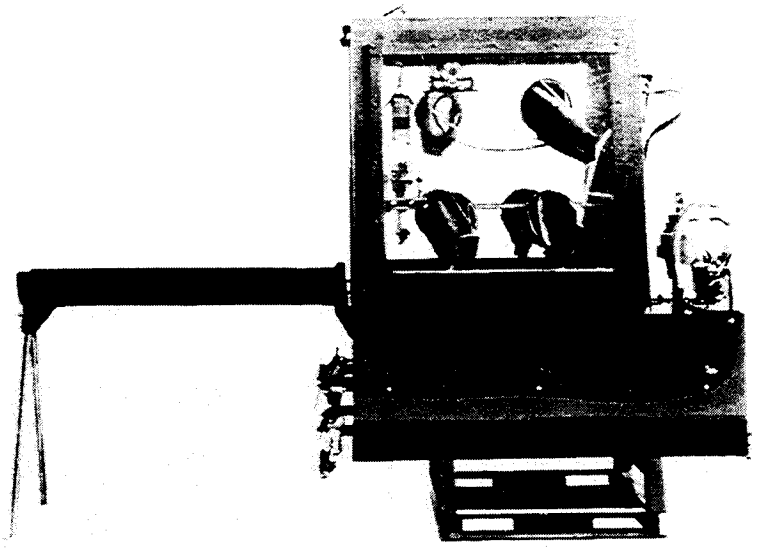
Tabulated Data:
APE No. 19560000
Unit of Issue . . . .Each
Installation Data:
FUNCTION TEST FIXTURE:
Length . . . .23-1/8 in.
Width . . . .23-1/8 in.
Height . . . .58-1/2 in.
Weight . . . .78 lbs
AIR TANK:
Length . . . .42 in.
Width . . . .17 in.
Height . . . . . 26 in.
Weight . . . . . 98 lbs
CONTROL BOX:
Length . . . . . 11 in.
Width . . . . . 8 in.
Height . . . . . 9 in.
Weight . . . . . 12 lbs
Utilities Required:
Compressed air to charge air tank.
Production Capacity:
Not applicable.

Shipping Data:
Length . . . . . 64 in.
Width . . . . . 48 in.
Height . . . . . 34 in.
Cube . . . . . 61.0 cu ft
Weight . . . . . 420 lbs

Associated Equipment:
APE 1905 or APE 1937, M202 or M202A1 rocket launcher, inert 4-round clip of 66MM rocket ammunition, and a gunner’s quadrant, special firing range.

Kits:
None.

APE 1957–DEVICE, CHEMICAL MUNITION AGENT SAMPLING



Use:
The sampling device is used to drill, drain, tap and sample lethal agent filled 105MM, 155MM, and 8 inch projectiles and mines to chemically detoxify the chemical agents when necessary.

Description:
APE 1957 consists of a stainless steel tank inclosed in a hood or cover. Inside the hood is a movable drill fixture, an agitator and a circulating pump. The tank hood or enclosure contains plexiglass windows with glove ports and an adapter for use in connecting an M6 gas particulate filter unit to the hood. In an emergency disposal, procedures are authorized in Public Law 91-121 and 91-441.

Difference Between Models:
Original design.

Tabulated Data:
APE No 19570000
Unit of Issue. . . . . Each

Installation Data:
Length . . . . . 64 in.
Width . . . . . 38 in.
Height . . . . . 83 in.
Weight . . . . . 3000 lbs

Utilities Required:
120 vac single phase, 60 Hz.
Production Capacity:
Not applicable.

Shipping Data:
Length . . . . . 76 in.
Width . . . . . 50 in.
Height . . . . . 95 in.
Cube . . . . . 105 cu ft
Weight . . . . . 3200 lbs

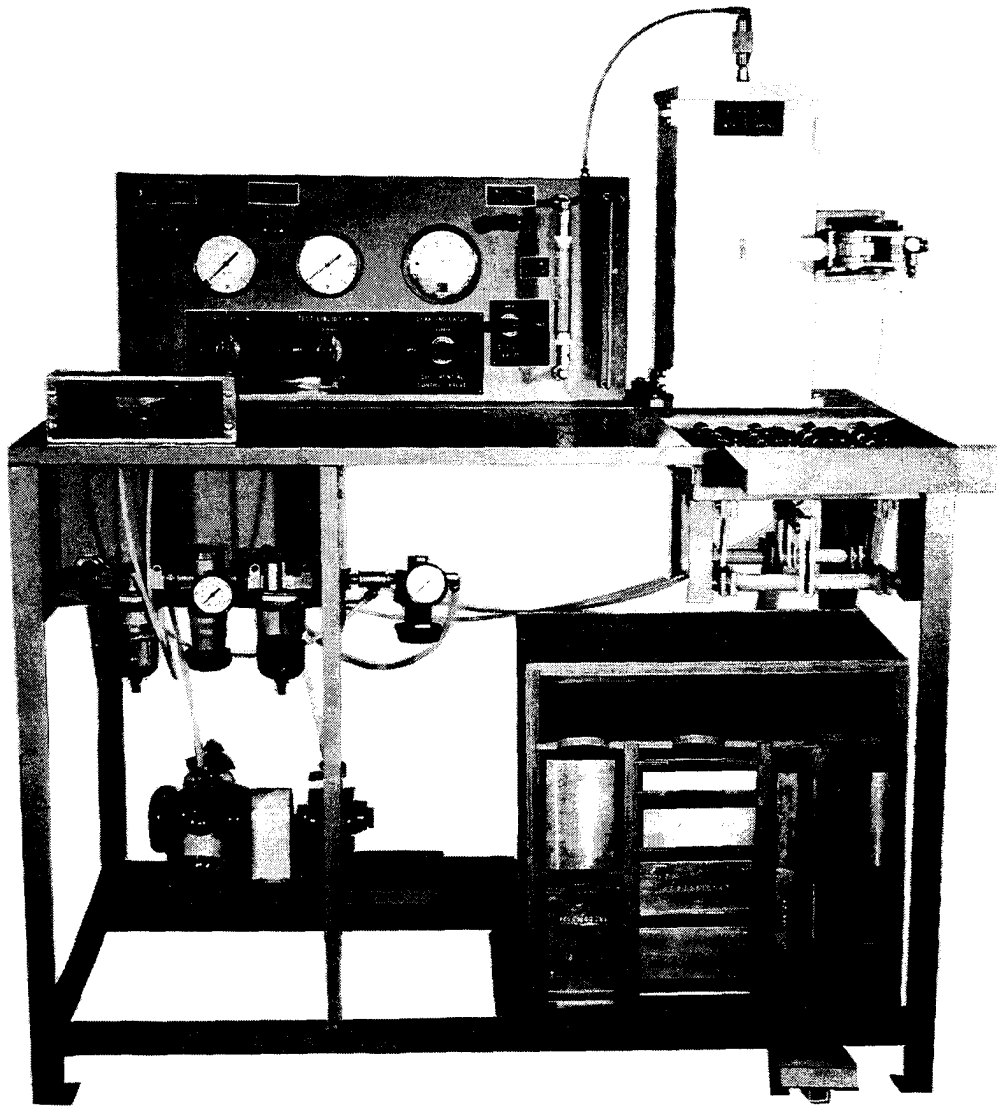
Associated Equipment:
M6A1 Gas Particulate Filter Unit.

Kits:

1957E001 KIT, Equipment for Leak Testing Rubber Gloves

1957E002 KIT, for Sampling M23 Mines

APE 1958M2--CAN LEAK TEST DEVICE



Use:
The Can Leak Test Device, APE 1958M2, is a pneumatically operated machine designed for dry vacuum leak testing of assembled, gasket sealed, quick-opening ammunition containers.

Description:
The APE 1958M2 consists of the following major assemblies mounted or housed in a table type frame unit.

a. A test chamber assembly which combined with fillers, houses the ammunition can during can leak tests.

b. The vacuum pumping system assembly creates a vacuum in the test chamber and test circuit.

c. A control panel assembly containing meters and controls for evaluation of can leak test.

Difference Between Models:
APE 1958 machines are the original equipment design. They do not feature the vent valve on the test chamber. These machines also are not equipped with a transfer loading plate.

The APE 1958M1 will perform the same function as the APE 1958. The APE 1958M1 differs from the APE 1958 in that it features components which speed production and facilitate ammunition container handling. APE 1958M1 machines feature an ON/OFF vent valve on the test chamber for rapid reduction of the vacuum in the test chamber. A transfer loading plate provides the operator with a method of lifting heavier ammunition containers to slide them into the test chamber. A foot lever is used to raise the loading plate. A stop plate welded to the table frame prevents the can from sliding off the table.

APE 1958M2 machines are of the same design as APE 1958M1 machines, with the exception of a redesigned test chamber featuring a replaceable O-ring door seal and a pneumatic door clamping system. Additional pneumatic components were added to support the use of the pneumatic door clamp.

Tabulated Data:

APE No 19580000M2
Unit of issue: . . . . . Each

Installation Data:

APE 1958M2:
Length . . . . . 48 inches
Width . . . . . 30 inches
Height . . . . . 60 inches
Cube . . . . . 60 cu ft
Weight . . . . . 650 pounds

APE 1958E002:
Length . . . . . 18 inches
Width . . . . . 9 inches
Height . . . . . 15 inches
Cube . . . . . 1.21 cu ft
Weight . . . . . 90 pounds

APE 1958E003:
Length . . . . . 25 inches
Width . . . . . 22 inches
Height . . . . . 20 inches
Cube . . . . . 6.4 cu ft
Weight . . . . . 530 pounds

Utilities Required:
Air at 80 psi

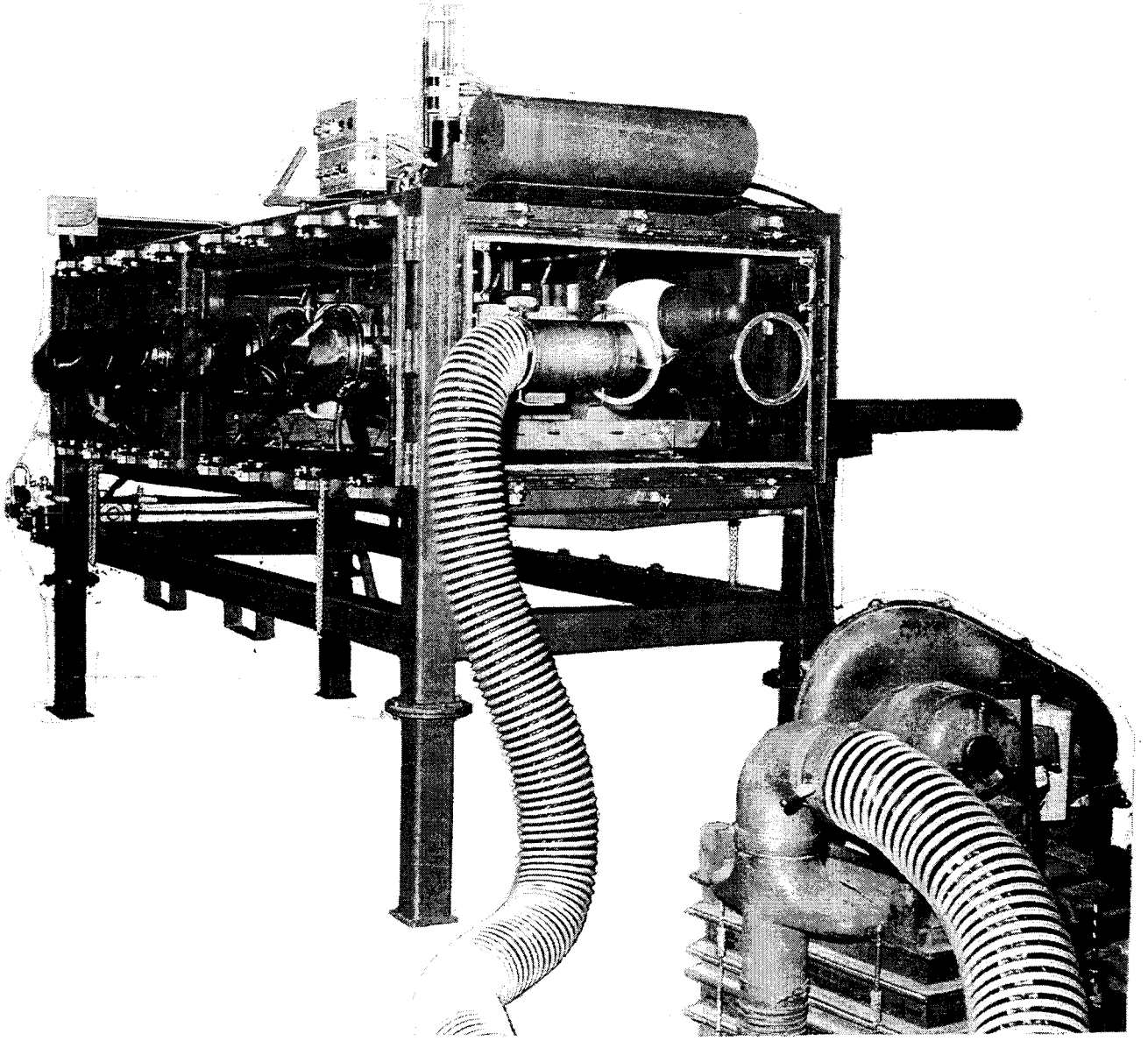
Production Capacity:
Not available

Shipping Data:
Length: . . . . . Not available
Width: . . . . . Not available
Height: . . . . . Not available
Cube: . . . . . Not available
Weight: . . . . . Not available

Associated Equipment:
None

Kits:
1958E002 M621 Container Liner Kit
1958E003 Test Chamber for Containers M548 and M592
1958E004 PA125 Metal Container Liner Kit
1958E005 PA120 Metal Container Liner Kit

APE 1959M1–UNIT, AGENT SAMPLING, FOR CHEMICAL MUNITIONS



Use:
The agent sampling unit is used for drilling, tapping and sampling lethal agent filled M23 mines, 115MM rockets, 105MM, 155MM and 8 inch projectiles. It also has the capability to chemically detoxify the complete munition and to transfer the agent to a ton container or standard D.O.T. bottle.

Description:
APE 1959M1 consists of a totally enclosed hood assembly with six plexiglass windows and eight glove ports. It also has eight drilling stations and a movable combination drill/tapper unit.

Difference Between Models:
APE 1959M1 has a ton container attaching fixture also a contaminated/decontaminated divider.

Tabulated Data:

APE No	19590000M1
Unit of Issue	Each

Installation Data:

Length . . . . . 120 in.
Width . . . . . 48 in.
Height . . . . . 78 in.
Weight . . . . . 4260 lbs

Utilities Required:

Air at 90 psi and 125 cfm; 110 vac, 60 Hz, single phase and 230 vac, 60 Hz, 3 phase.

Production Capacity:

Not applicable.

Shipping Data:

Length . . . . . 135 in.
Width . . . . . 56 in.
Height . . . . . 89 in.
Cube . . . . . 389 cu ft
Weight . . . . . 5000 lbs

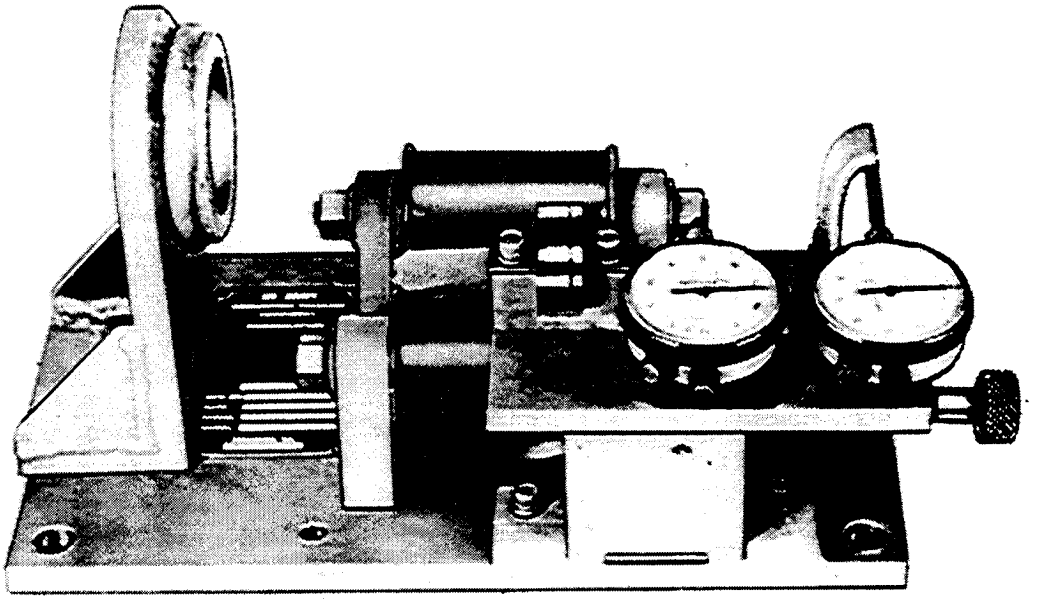
Associated Equipment:

M6A1 gas particulate filter unit (4 ea).

Kits:

None.

APE 1960M1-FIXTUE, PROJECTILE CONCENTRICITY CHECK



Use:
The projectile concentricity check fixture is used to check the runout of the centering band and sheath and subprojectile of the M392 series (L36A1), 105MM, APDS-T projectile. The complete round can be concentricity checked with this machine.

Description:
APE 1960M1 consists of two dial indicators mounted on a base which has rollers for rotating the projectile. The complete cartridge kit 1960E001 adapts the fixture for use with complete cartridges.

Difference Between Models:
The APE 1960M1 has a follower roller with a ridge instead of a smooth roller and has been modified for floating on a steel ball when checking a complete round.

Tabulated Data:
APE No 19600000M1
Unit of Issue . . . . . Each
Installation Data:
BASIC MACHINE:
Length . . . . . 14-1/2 in.
Width . . . . . 9-3/4 in.
Height . . . . . 7 in.
Weight . . . . . 23 lbs
ADAPTER:
Length . . . . . 40-3/4 in.
Width . . . . . 14 in.
Height . . . . . 17-1/2 in.
Weight . . . . . 41 lbs
Utilities Required:
None.
Production Capacity:
Not applicable.

Shipping Data:
Length . . . . . 48 in.
Width . . . . . 24 in.
Height . . . . . 16 in.
Cube . . . . . 10.7 cu ft
Weight . . . . . 160 lbs

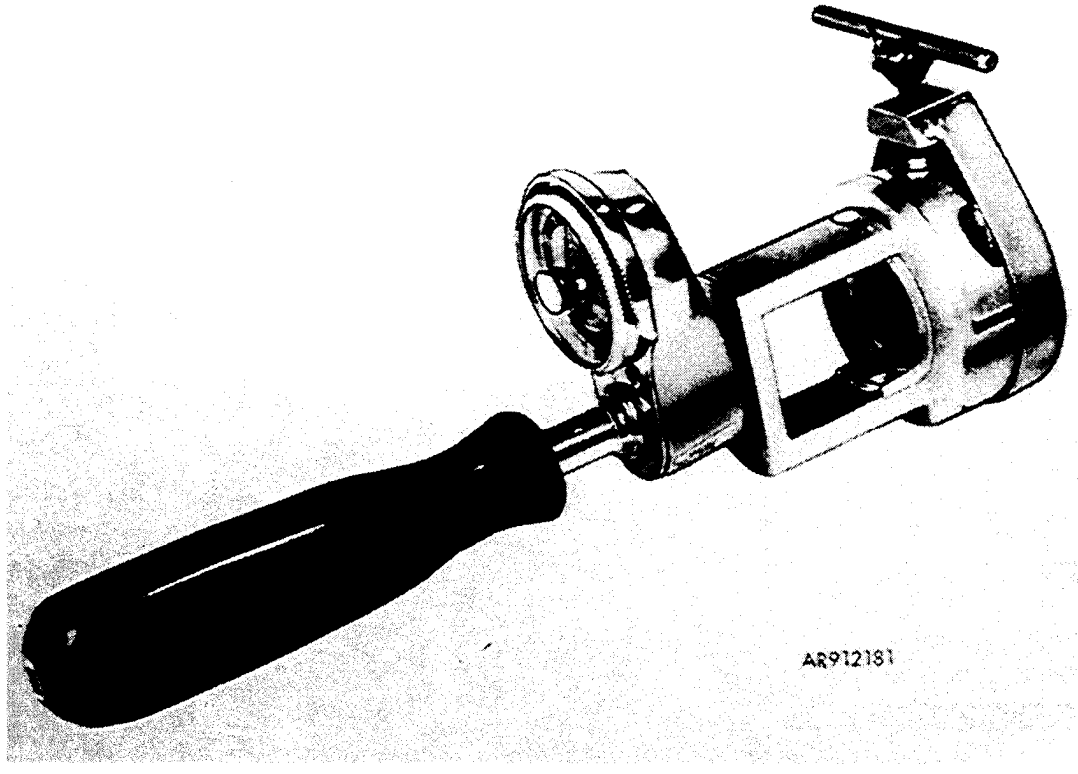
Associated Equipment:
None.

Kits:

1960E001 ADAPTER, Complete Cartridge
1960E002 ADAPTER, Standard, Projectile Setup

1960E003 ADAPTER, Standard, Complete Cartridge Setup

APE 1961--FIXTURE SUBCALIBER TORQUE TEST



Use:
The subcaliber torque test fixture is used to apply a specified torque to the subcaliber projectile of the 105MM M392 series (136A1), APDS-T projectile.

Description:
The fixture consists of a torque driver and an adapter to grip the subcaliber projectile.

Difference Between Models:
Original design.

Tabulated Data:
APE No 19610000
Unit of issue: . . . . . Each

Installation Data:
TORQUE DRIVER
Length: . . . . . 8-1/2 in.
Width: . . . .2 in.
Height: . . . . . 3-1/2 in.
Weight: . . . . . 5 lbs.

ADAPTER
Length: . . . . . 4-1/4 in.
Width . . . .3-1/2 in.
Height: . . . . . 2-7/8 in.
Weight: . . . . . 1 lbs.

Utilities Required:
None

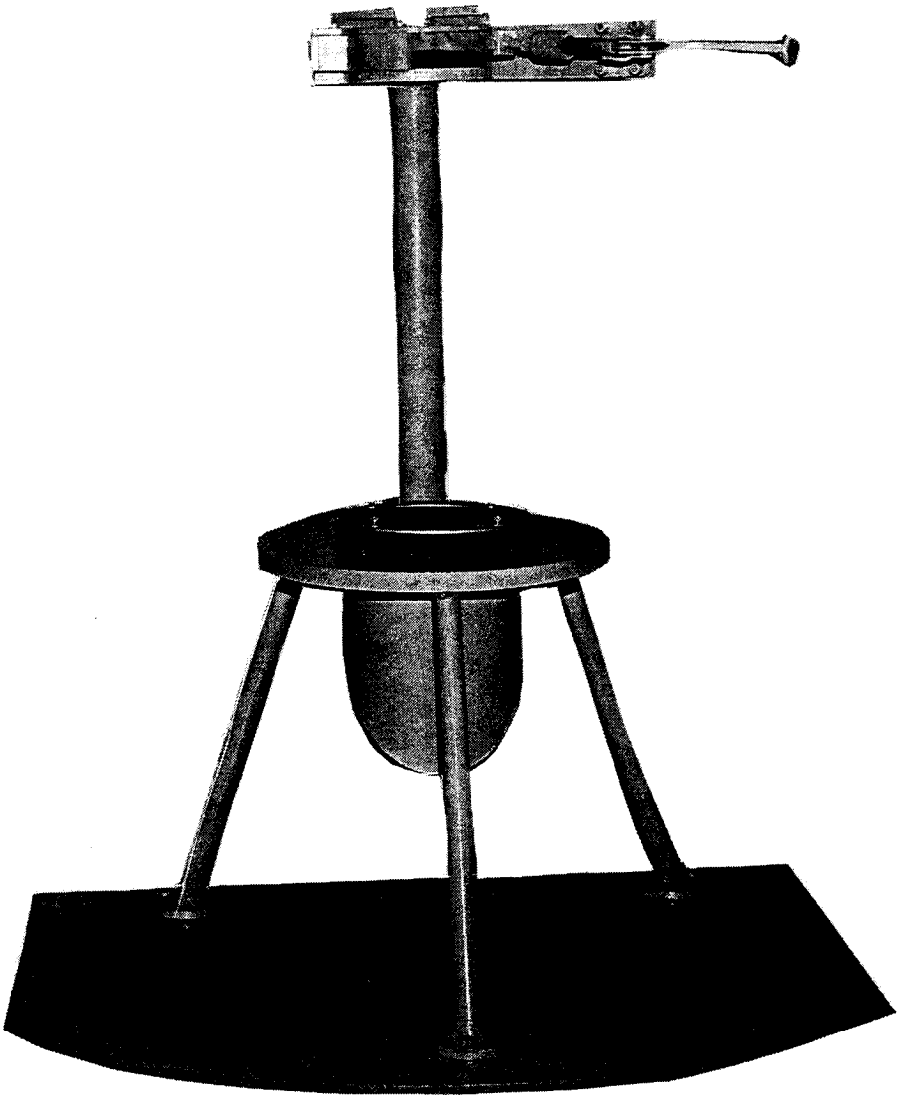
Production Capacity:
Not applicable.

Shipping Data:
Length: . . . . . 13 in.
Width: . . . . . 5 in.
Height: . . . . . 5 in.
Cube: . . . . . 325 cu in.
Weight: . . . .7 lbs.

Associated Equipment:
APE 1065, APE 1204, APE 1294

Kits:
None

APE 1962M1–FIXTURE, PRIMER TORQUE TEST.



Use:
The primer torque test fixture is used to hold the 105MM cartridge case so a specified disassembly/assembly torque can be applied to its primer. With the addition of kits, the fixture can be adapted to perform continuity tests on the electric primers in: the 105MM cartridge case; the 5"/54 cartridge case with MK45 primer; and the MK42 primer.

Description:
APE 1962M1 torque test fixture consists of cartridge case base, a cartridge case holder and deflector to provide personnel protection. The basic machine may be disassembled and adapted to perform continuity tests of the Navy 5"/54 cartridge case and the MK42 primer.

Difference Between Models:
The APE 1962M1 is capable of holding the Navy 5"/54 cartridge case and the Navy MK42 primer in addition to the Army 105MM cartridge case. The exchange of the holding fixtures is accomplished by the removal of cap screws which hold the fixtures to the machine base. The APE 1962 is all welded construction and will only hold the 105MM cartridge case.

Tabulated Data:
- APE No. 19620000M1
- Unit of Issue . . . .Each

Installation Data:
- Length . . . .22 in.
- Width . . . .24 in.
- Height . . . .38 in.
- Weight . . . .70 lbs
- Floor Space . . . .3.7 sq ft
- Overall Cube . . . .11.6 cu ft

Utilities Required:
- None.

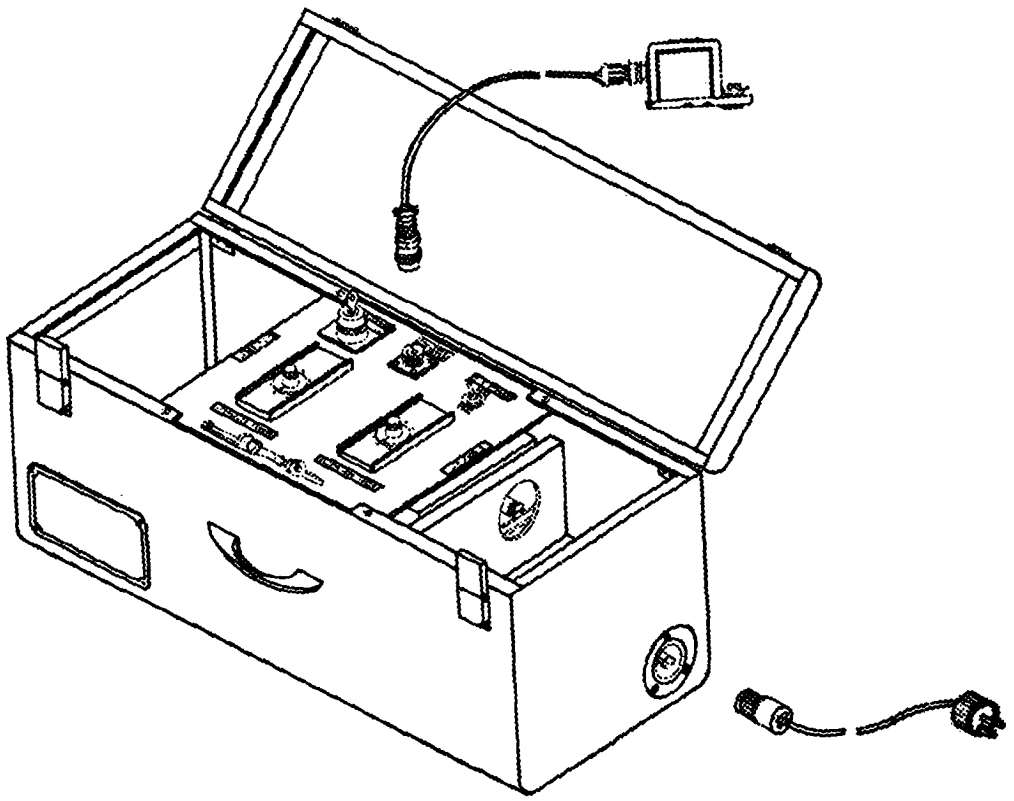
Production Capacity:
- Not applicable.

Shipping Data:
- Length . . . .30 in.
- Width . . . .38 in.
- Height . . . . . 43 in.
- Cube . . . . . 37.0 cu ft
- Weight . . . . . 277 lbs

Associated Equipment:
- Torque Wrench
- APE 1980 - Universal Resistance Test Instrument
- Two Resistors

Kits:
- 1962E002 ADAPTER, Torque, M80A1, Round Pin
- 1962E003 ADAPTER, Torque, M80A1, Slotted
- 1962E004 KIT, Continuity Test
- 1962E005 5“/54 Cartridge Case Holder
- 1962E006 KIT, MK42 Primer Resistance

APE 1963--UNIT, ELECTRONIC CONTROL



Use:
The electronic control unit is used to remotely control the firing of weapons and launchers. The unit provides a 28 vdc pulse to a solenoid. The duration of the pulse can be controlled.

Description:
APE 1963 consists of a control box, a solenoid cable assembly, and a solenoid. The unit has a key lock firing mechanism.

Difference Between Models:
Original design.

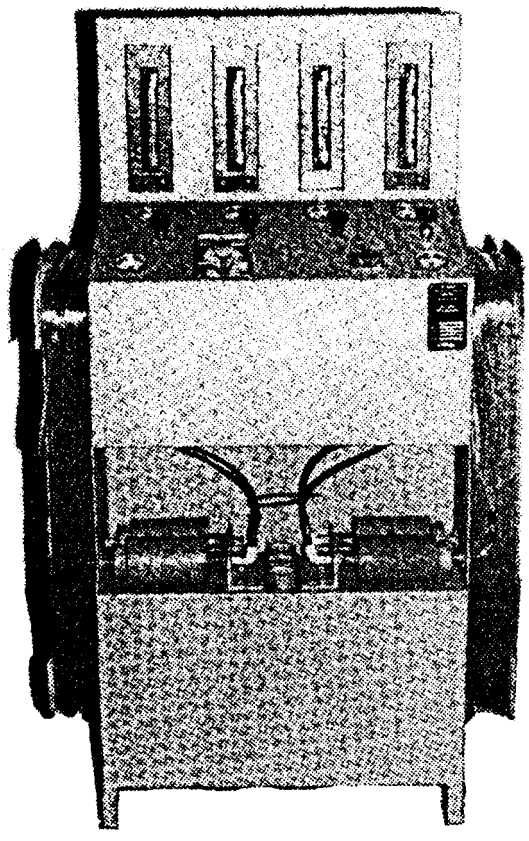
Tabulated Data:
APE No. 19630000
Unit Of Issue . . . .Each
Installation Data:
Length . . . .20-1/8 in.
Width . . . . . 8 in.
Height . . . . . 9 in.
Weight . . . . . 26 lbs
Utilities Required:
115 vac, 60 Hz, single phase.
Production Capacity:
Not applicable.

Shipping Data:
Length . . . . . 24 in.
Width . . . . . 10 in.
Height . . . . . 12 in.
Cube . . . . . 1.67 cu ft
Weight . . . . . 36 lbs

Associated Equipment:
APE 1923, 1951M1.

Kits:
None.

APE 1964--CHEMICAL AGENT DETECTION DEVICE



Use:
The chemical agent detection device is used to test for the presence of mustard agent in igloos.

Description:
APE 1964 is a portable unit that houses a vacuum system: flowmeters, metering valves, vacuum gages, and vacuum pump; and, electrical controls that permit preselecting a time period for the operation of the vacuum pump for the testing procedure. The vacuum pump draws samples of air from four locations inside the igloo. The device is not designed to be positioned in the igloo as the electrical wiring is not explosion proof .

Difference Between Models:
Original design.

Tabulated Data:

APE No.	19640000
Unit of Issue	Each

Installation Data:

Length	34 in.
Width	23 in.
Height	56-1/2 in.
Weight	203 lbs

Utilities Required:
115 vac, 60 Hz, single phase.

Production Capacity:
Not applicable.

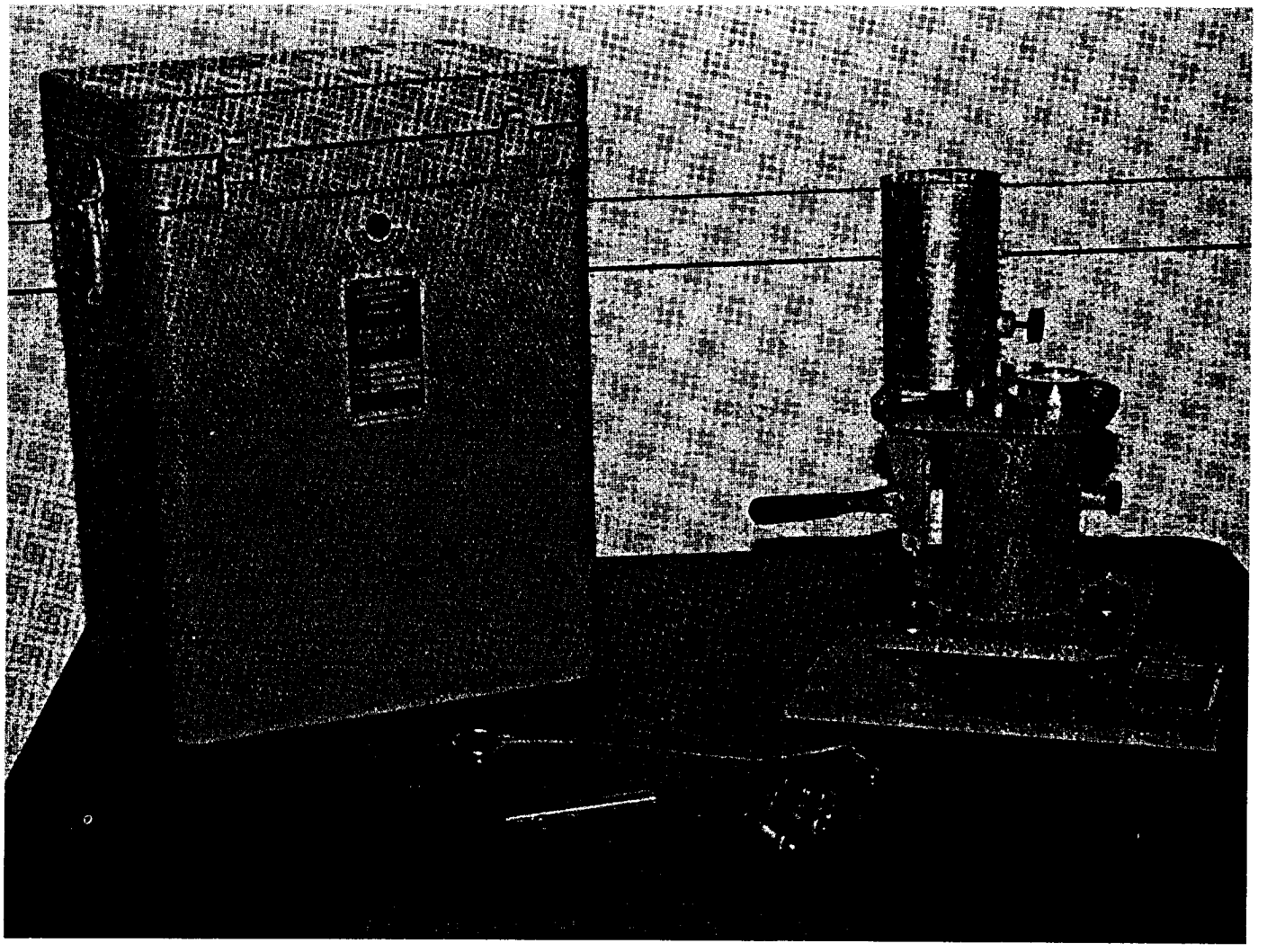
Shipping Data:

Length	22 in.
Width	34 in.
Height	44 in.
Cube	19 cu ft
Weight	156 lbs

Associated Equipment:
None.

Kits:
None.

APE 1967M1--FUNCTION TEST EQUIPMENT SIGNALS M185 THRU M190



Use:
The function test equipment is used to function test M185 through M190 signals and check the fire pin force in the pyrotechnic projector in M185 through M190 signals.

Description:
APE 1967M1 consists of a holder assembly to hold the projector in the cocked position for remote firing. The equipment includes a cocking assembly, a projector assembly, a cable assembly, and a cover assembly. The equipment has its own storage box.

Difference Between Models:
The APE 1967M1 has a function control safety added to prevent a signal from being fired while it is being screwed into the projector and prevents re–use of fixture until safety is returned to safe position.

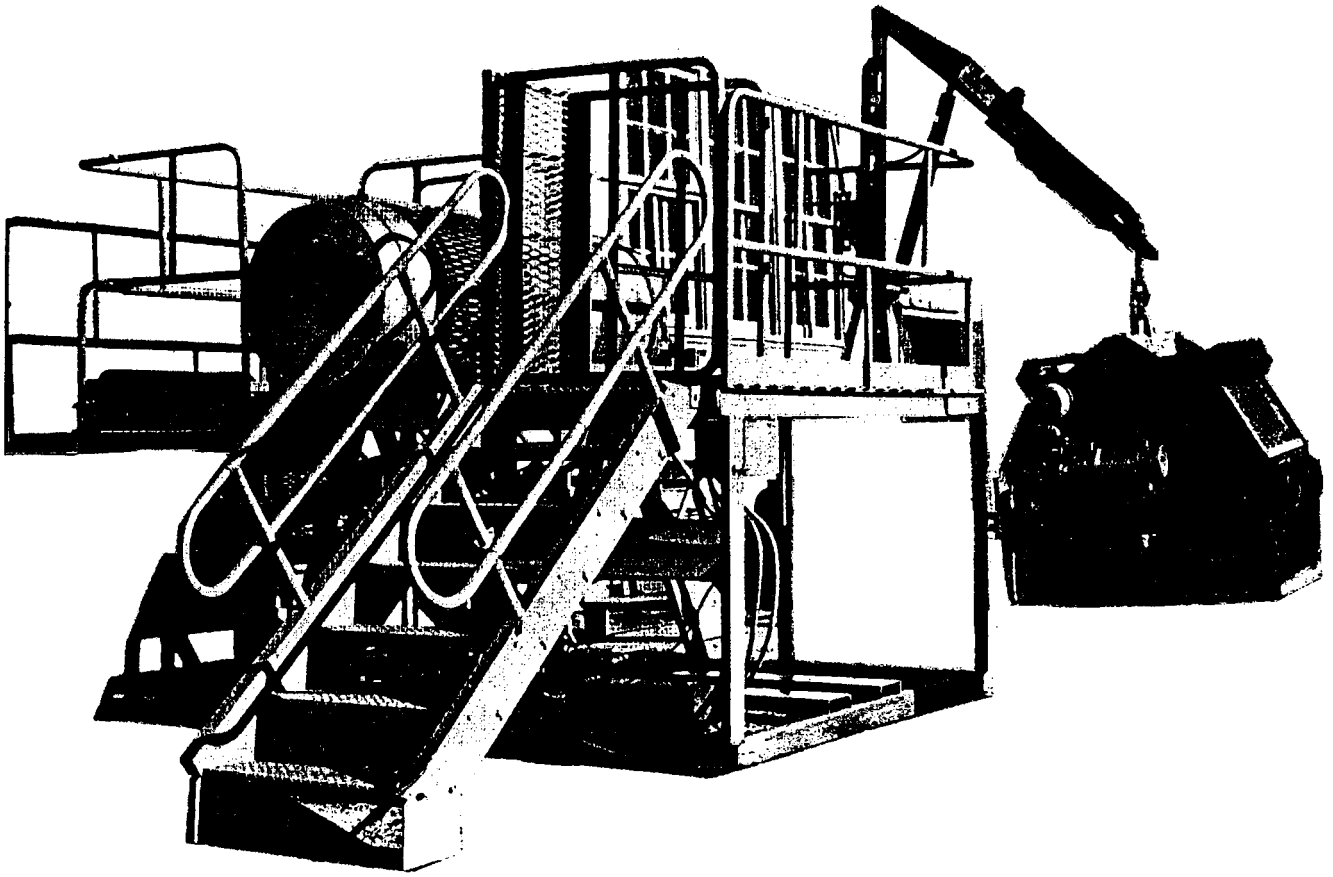
Tabulated Data:
APE No. 19670000
Unit of Issue . . . .Each
Installation Data:
BASIC EQUIPMENT:
Length . . . .12-1/2 in.
Width . . . .8-1/4 in.
Height . . . .16 in.
Weight . . . .26 lbs
STORAGE BOX:
Length . . . .15 in.
Width . . . .12-1/2 in.
Height . . . .19 in.
Weight . . . .16 lbs
Utilities Required:
None.
Production Capacity:
Not applicable.

Shipping Data:
Length . . . . . Not available
Width . . . . . Not available
Height . . . . . Not available
Cube . . . . . Not available
Weight . . . . . Not available

Associated Equipment:
APE 1903.

Kits:
1967E001 KIT, Force Indicator, Firing Pin for Projector Signal

APE 1969--UNIT, AGENT SAMPLING, ONE TON CONTAINER



Use:
The one ton container agent sampling unit is used for extracting chemical agent samples from ton containers.

Description:
APE 1969 consists of: a stainless steel glove box which can be positioned on or off the ton container with a portable hydraulic crane; a liquid transfer system for movement of liquid agent; and a tipping cradle assembly for rotating the tone container.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	19690000
Unit of Issue	Each
Installation Data:	
Length	128 in.
Width	95 in.
Height	96 in.
Weight	4500 lbs

Utilities Required:
Air at 90 psi and 125 cfm; 110 vac, 1 phase, 60 Hz, 208 vac, 3 phase, 60 Hz.

Production Capacity:
Not applicable.

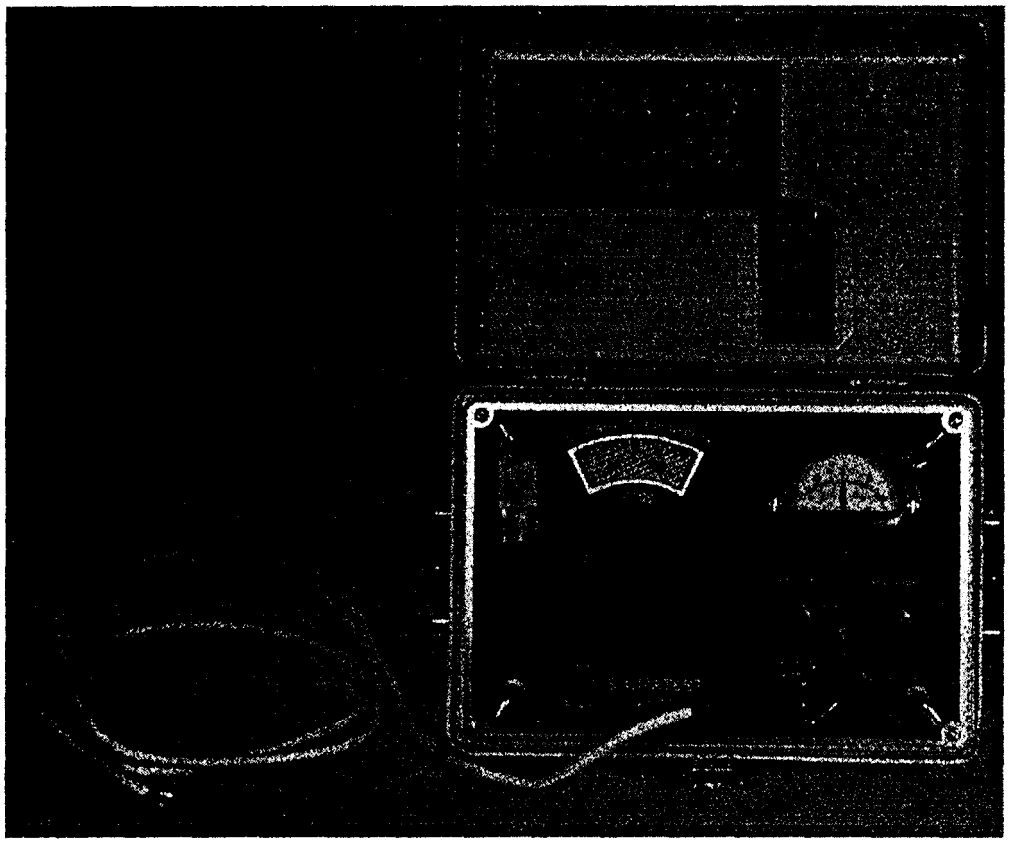
Shipping Data:

Length	Not available
Width	Not available
Height	Not available
Cube	Not available
Weight	Not available

Associated Equipment:
Two HEPA filter systems
M10 alarm system.

Kits:
None.

APE 1972--METER, WARHEAD CONDUCTIVITY TEST



Use:
The warhead conductivity test meter is used to determine the hardness properties of the M74, 66MM incendiary rocket warhead. It provides information to establish if the warhead is too soft for safe firing.

Description:
APE 1972 is a commercial battery powered unit which produces eddy currents in the warhead specimens. The magnitude of the eddy current is measured by the meter. This conductivity reading is proportional to the hardness of the warhead material.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	19720000
Unit of Issue	Each

Installation Data:

Length	9-1/4 in.
Width	6-3/4 in.
Height	4 in.
Weight	4-1/2 lbs

Utilities Required:
Two 1.5 volt batteries.

Production Capacity:
Not applicable.

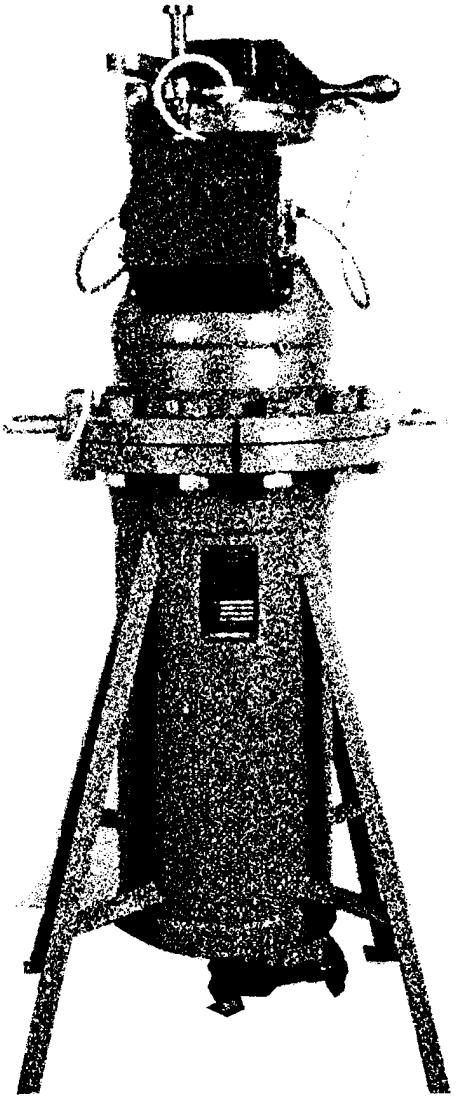
Shipping Data:

Length	9-3/4 in.
Width	7-1/4 in.
Height	4-1/2 in.
Cube	Not available
Weight	5 lbs

Associated Equipment:
None.

Kits:
1972E001 KIT, Digital Thermocouple Readout Meter

APE 1974--CONTINUITY TEST EQUIPMENT FOR THE L8 SERIES GRENADE



Use:
The continuity test equipment for L8 series grenades, APE 1974 is designed for use in determining the serviceability of the L8 series red phosphorous smoke grenade. The test equipment serves as an operational shield in the event of accidental firing of the grenade.

Description:
APE 1974 consists of following major assemblies.

a. An upper chamber assembly that houses the grenade during the continuity test. In the event of the accidental functioning of the grenade, the grenade will be propelled into the base.

b. The test chamber top assembly secures the top of the chamber during testing and holds the breakaway grenade holder.

c. The electrical assembly provides two interlocks between the universal resistance test instrument, APE 1980 and the inner clip probe in the chamber cover.

Difference Between Models:
Original design.

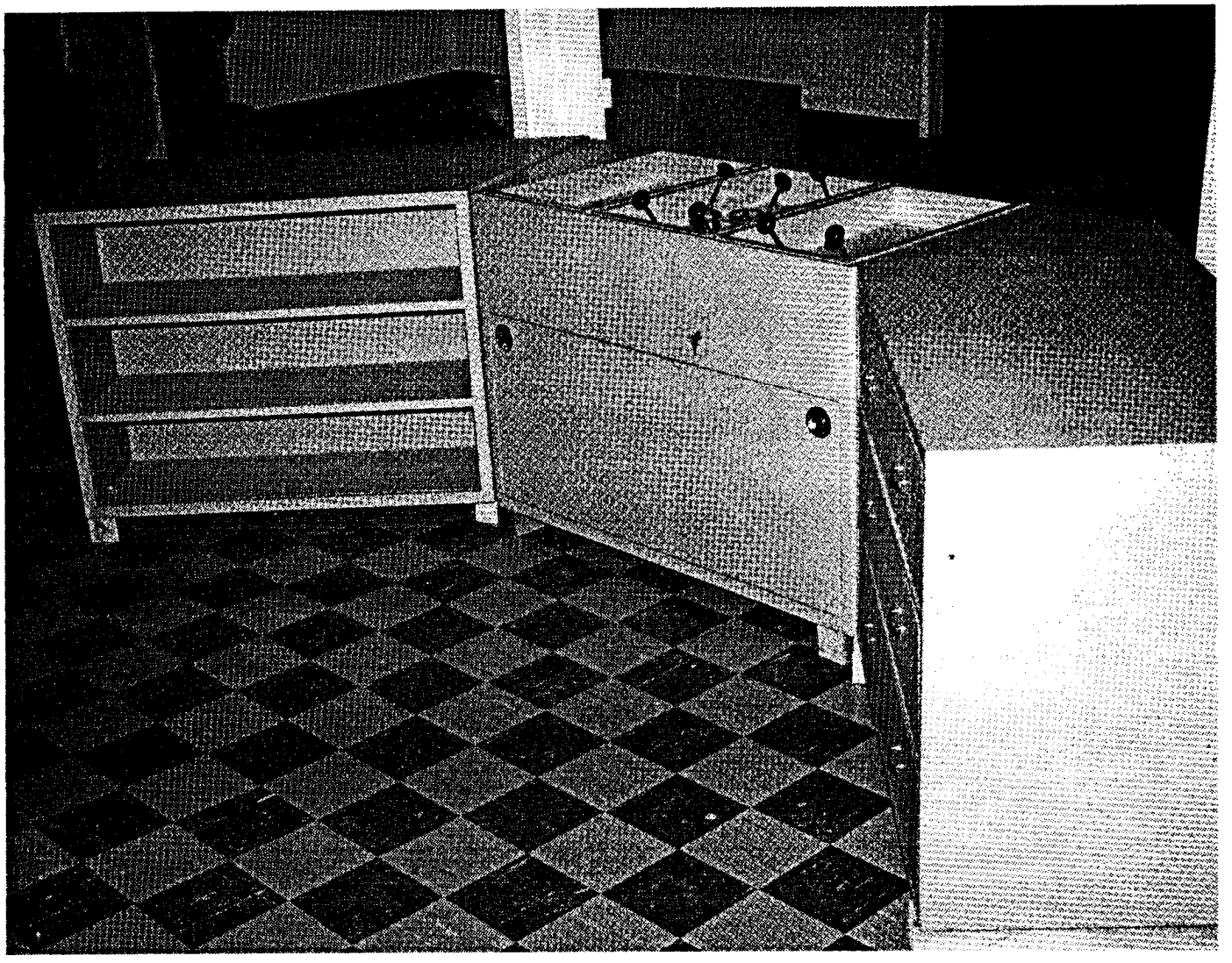
Tabulated Data:
APE No. 19740000
Unit of Issue . . . .Each
Installation Data:
Length . . . .31 in.
Width . . . .31 in.
Height . . . .50 in.
Weight . . . .323 lbs
Utilities Required:
None.
Production Capacity:
Not applicable.

Shipping Data:
Length . . . . Not available
Width . . . .Not available
Height . . . . . . Not available
Cube . . . . . . Not available
Weight . . . . . . Not available

Associated Equipment:
APE 1980, the Universal Resistance Test Instrument

Kits:
1974E001 KIT, Function Test for L8 Series Grenades
1974E002 KIT, Continuity Test for M76, Grenade Launcher, Smoke, IR Screening
1974E003 KIT, Function Test Extension for M76 Grenade Launcher, Smoke, IR Screening

APE 1976--PNEUMATIC ACTUATION SYSTEM



Use:
The pneumatic actuation system is a pneumatically hand operated machine designed to remotely operate the APE 1922M1 pneumatic launcher for function testing of H.E. and chemical hand grenades, the APE 1940M3 fixture for testing mine, AP, M16, and the APE 1940E001, kit for function testing mine, AP, M26.

Description:
APE 1976 consists of a large cabinet with three sections. The center section of the cabinet houses the pneumatic power and controls of the machine. The left and right sections of the cabinet are for storage of tools and equipment used in function testing. The following six satellite assemblies are used to adapt APE 1922M1, APE 1940M3, and APE 1940E001 for remote control use.

a. The scale box pneumatic assembly consists of three air cylinders which attach to the scale box of the APE 1940E001 kit.

b. The pneumatic lanyard pull assembly is composed of an air cylinder and three lanyards which attach to the M16 mine.

c. The pneumatic weight pull assembly consists of two cylinders used on the APE 1940E001.

d. The quick release valve pull assembly is used to activate the APE 1922M1 for grenade launching.

e. The pin pull assembly attaches to the pull gauge assembly of the APE 1922M1.

f. The air tank reservoir assembly is used to maintain the required compressed air pressure to function the APE equipment at remote distances from the air supply.

Equipment is provided to handle lanyards should they be used in place of the pneumatic system.

Difference Between Models:
Original design.

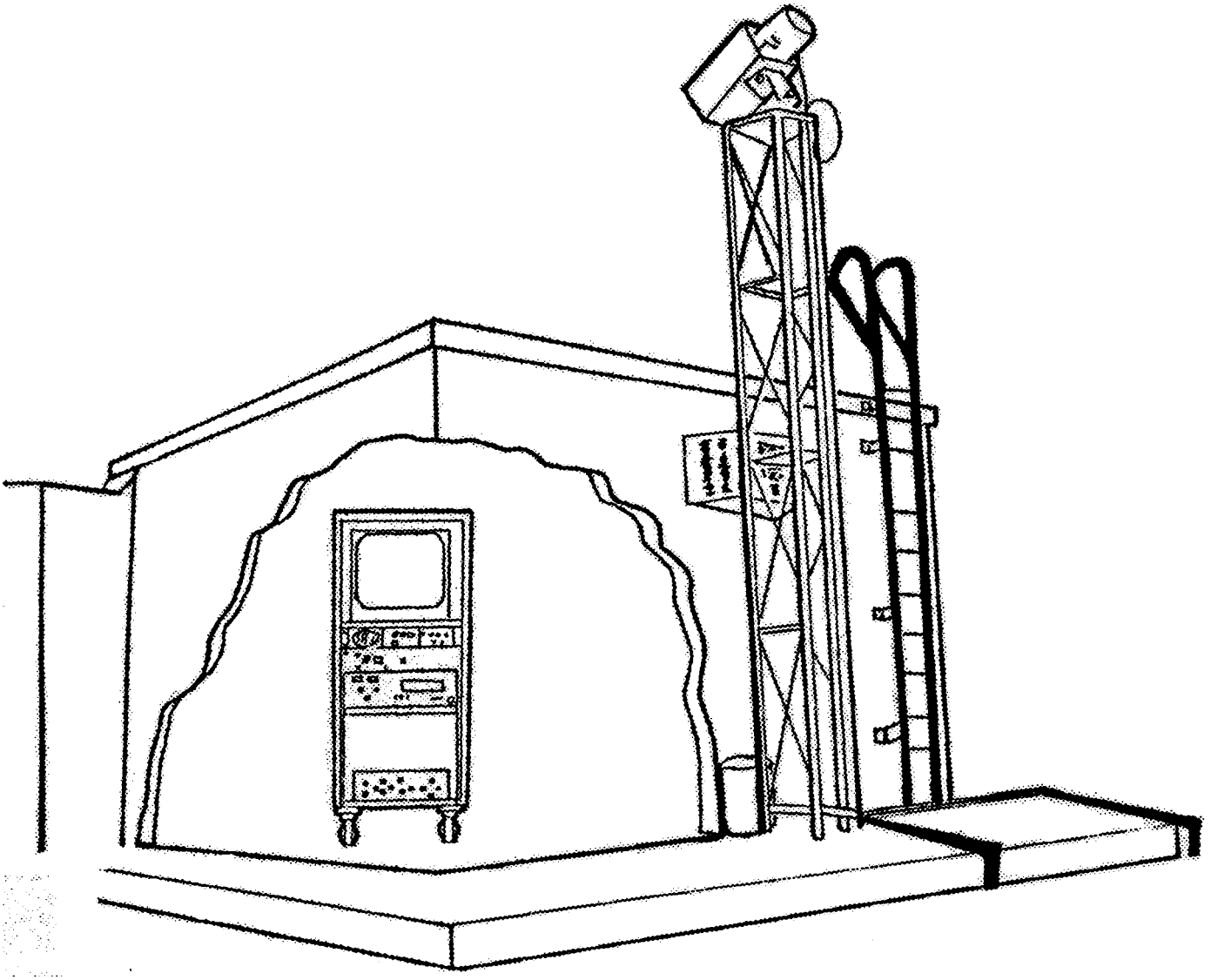
Tabulated Data:
APE No. 19760000
Unit of Issue . . . .Each
Installation Data:
Length . . . .165-1/4 in.
Width . . . .64 in.
Height . . . .41-3/8 in.
Weight . . . .4270 lbs
Utilities Required:
Air at 90 psi.
Production Capacity:
Not applicable.

Shipping Data:
CRATE 1:
Length . . . . . 88 in.
Width . . . . . 57 in.
Height . . . . . 48 in.
Cube . . . . . Not available
Weight . . . . . 1200 lbs
CRATE 2:
Length . . . . . 77 in.
Width . . . . . 51 in.
Height . . . . . 39 in.
Cube . . . . . Not available
Weight . . . . . 1830 lbs
CRATE 3:
Length . . . . . 70 in.
Width . . . . . 69 in.
Height . . . . . 48 in.
Cube . . . . . Not available
Weight . . . . . 1240 lbs

Associated Equipment:
Approved personnel shelter and shield
Trench with removable cover
APE 1922M1, Launcher, Pneumatic for Function Testing of HE and Chemical Hand Grenades
APE 1940M3, Fixture for Testing Mine AP, M16
APE 1940E001, Kit for Function Testing Mine, AP, M26
APE 1978, Mine Test Monitoring System

Kits:
None.

APE 1978--MINE TEST MONITORING EQUIPMENT



Use:
The test equipment is designed to provide operators at a function test range the capability to remotely view, record and evaluate function test operations from a non-hazardous location. The monitor, recorder, video scaler and remote control units are located inside a test shelter. The camera and its affiliated equipment are mounted on an outside tower at a height permitting a total view of the function test range.

Description:
APE 1978 consists of a color video camera having a zoom lens attachment with automatic iris control, and an ac adapter to convert ac voltage to dc voltage. The camera, zoom lens and adapter are mounted in an environmental housing that provides automatic heating, cooling and a moisture barrier for these components. A camera cover assembly is provided as protection from possible shrapnel damage during function testing. These items are attached to the motorized pan/tilt unit. The entire mechanism will be mounted on a tower provided by the user at a test range site. The color video cassette recorder has slow motion and stop action features. The recorder, in conjunction with the video camera, is used to document function test proceedings . A color television monitor is

used for viewing of the function test as it occurs, permitting the operator to make camera adjustments as necessary to obtain the best possible vantage point for video taping of the test. The monitor is also used for reviewing video tapes to evaluate and document function test data. A video scaler generates and superimposes selectable scale or gridding onto the monitor and video recording of the function test. The scale or gridding mode best suited for individual function tests may be selected by the equipment operator. A pan/tilt remote control unit provides vertical and horizontal movement of the camera, allowing operator to adjust the field of view as necessary. A zooms lens control allows remote control of the motorized zoom lens. Pushbutton operation provides distance and focus adjustments to picture. An equipment cabinet with casters, adjustable shelves and doors that lock is provided to house the television monitor, video cassette recorder, the video scaler, pan/tilt remote control unit and the zoom lens remote control unit. The cabinet has an outlet box with a switch, 6 three–pronged ac outlets, a pilot light, 15 amp circuit breaker and a 15 foot power cord. The cabinet and its contents are located inside the test shelter.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	19780000
Unit of Issue	Each
Installation Data:	
EQUIPMENT CABINET:	
Length	28 in.
Width	55 in.
Height	23 in. (with cabinet doors closed)
CAMERA COVER ASSEMBLY:	
Length	24-1/2 in.
Width	13–1/4 in.
Height	13–1/2 in.
Total Weight	360 lbs

Utilities Required:
120 vac, 20 amps (1 circuit in test shelter); 120 vac, 10 amps (2 circuits in camera housing)

Production Capacity:
Not available.

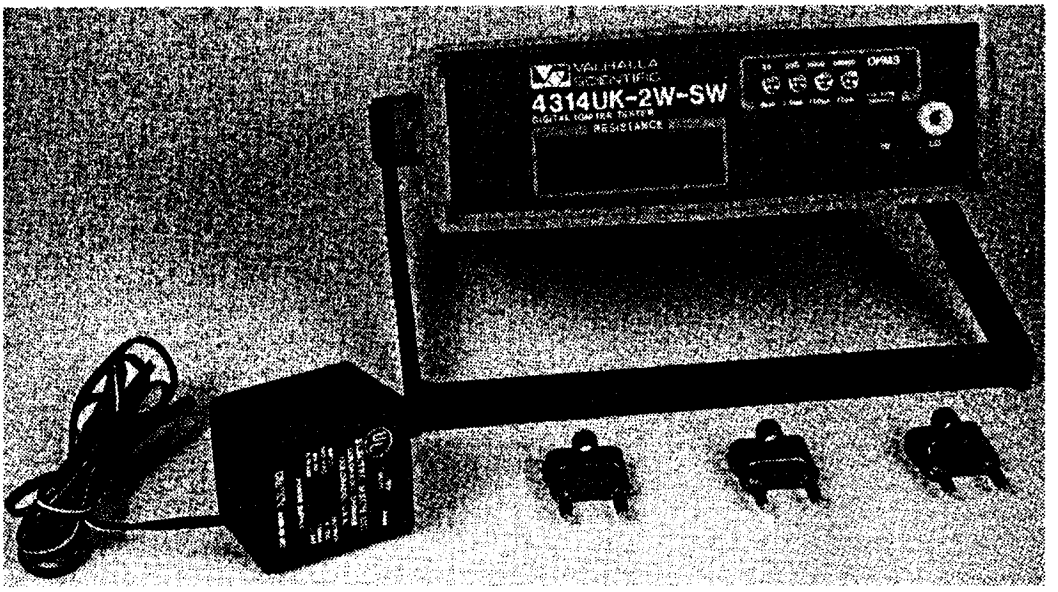
Shipping Data:

Length	Not available
Width	Not available
Height	Not available
Cube	Not available
Weight	Not available

Associated Equipment:
None.

Kits:
None.

APE 1980--UNIVERSAL RESISTANCE TEST INSTRUMENT



Use:
The resistance test instrument is used to measure resistance values of projectile electric primers, blasting caps and other detonating devices with specifications applicable to milliohm resolution in the 20 ohm range.

Description:
APE 1980 consists of a portable 4–1/2 digit (19999) ohmmeter providing precise resistance readings to a milliohm resolution in the 20 ohm range. The test current and failsafe current is a 10 milliamperes maximum. Included with the instrument are three calibration resistance networks: zero ohm resistance value, 0.5 ohm resistance value, and 10 ohm resistance value.

Difference Between Models:
Original design.

Tabulated Data:
APE No. 19800000
Unit of Issue . . . .Each
Installation Data:
OHMMETER:
Length . . . .9 in.
Width . . . .8-1/2 in.
Height . . . . . 2-1/2 in.
Weight . . . . . 3-1/2 in.
Utilities Required:
Battery operated. Battery charger included for use with 115 vac, 50/60 Hz power outlet
Production Capacity:
Not applicable.

Shipping Data:
Length . . . . . Not available
Width . . . . . Not available
Height . . . . . Not available
Cube . . . . . Not available
Weight . . . . . Not available

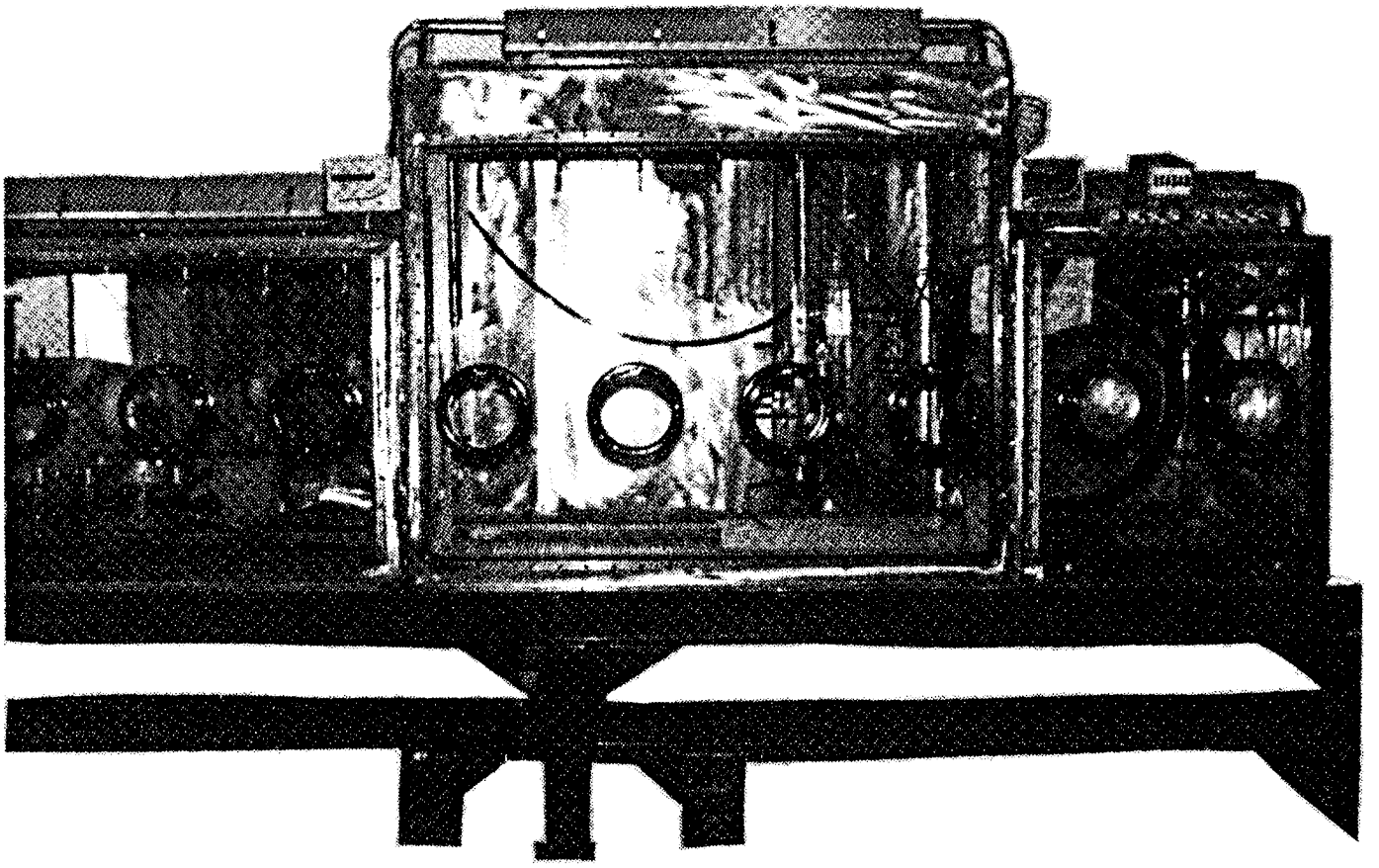
NOTE

Electronics are very sensitive to temperature change in storage and transportation.

Associated Equipment:
None.

Kits:
None.

APE 1981--UNIT, CHEMICAL AGENT MUNITIONS SAMPLING



Use:
The chemical agent munition sampling unit is used for extracting agent samples from 105MM, 155MM, and 8" projectiles, 4.2" mortars, M23 land mines, 115MM M55 rockets, MC-1 and MK94 bombs.

Description:
APE 1981 is a three compartment enclosed, ventilated glove box equipped with the following: self-feed drill motor for drilling into agent cavity of munitions; mechanical transfer system to move munitions into and out of glove box; liquid transfer system for movement of liquid agent; control center; inflatable seals; and decon and washdown capabilities. The unit can transfer agent from drilled munitions to one ton containers. The unit can hold one each (explosive or non–explosive loaded) of any of the above–listed munitions.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	19810000
Unit of Issue	Each

Installation Data:
Length . . . . . 180 in.
Width . . . . . 42 in .
Height . . . . . 91 in.
Weight . . . . . 5000 lbs
Weight w/ancillary equipment . . . . . 6400 lbs

Utilities Required:
Air at 90 psi and 125 cfm; 110 vac, 1 phase; 230 vac, 3 phase, to operate filter units

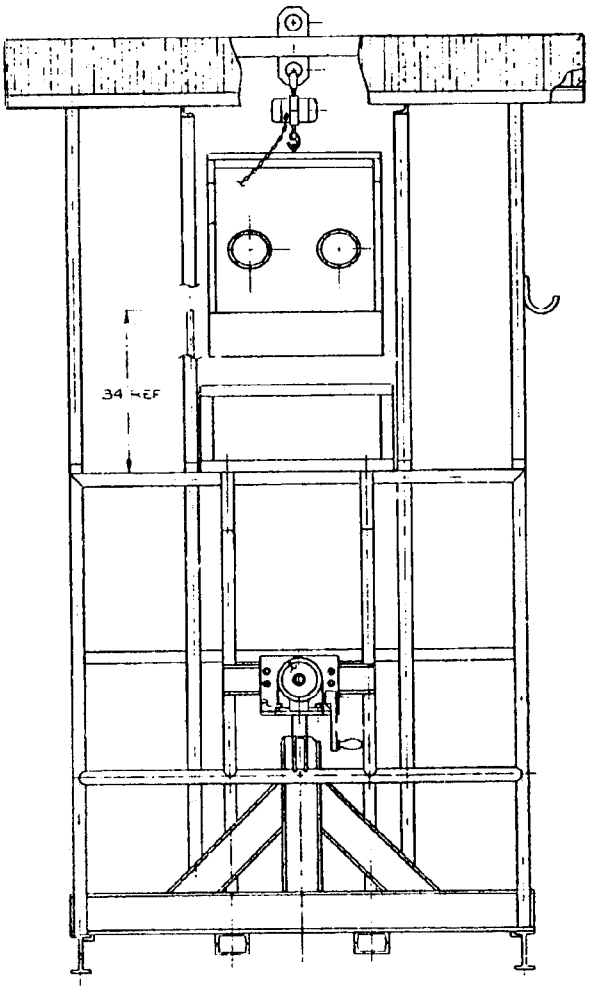
Production Capacity:
Not applicable.

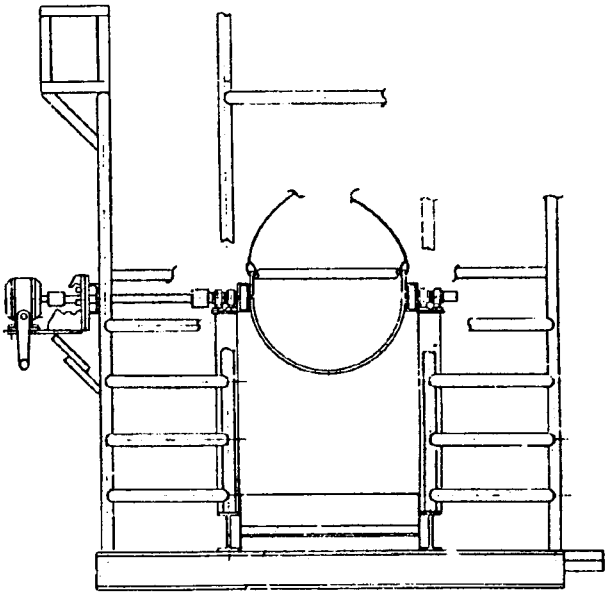
Shipping Data:
Length . . . . . Not available
Width . . . . . Not available
Height . . . . . Not available
Cube . . . . . 400 cu ft
Weight . . . . . 5500 lbs

Associated Equipment:
Two HEPA filter systems
M10 alarm system

Kits:
None.

APE 1982--EQUIPMENT, TON CONTAINER PLUG AND VALVE REPLACEMENT





The ton container plug and valve replacement equipment is used in surveillance operations to permit replacement of plugs and valves on the ends of a ton container.

Description:
APE 1982 consists of a ton container tipping cradle, glove box, personnel working platforms, and a 1000 cfm charcoal filter unit. The equipment permits changeout of plugs and/or valves in a negative pressure chamber.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	19820000
Unit of Issue	Each
Installation Data:	
PLATFORM AND CRADLE:	
Length	92 in.
Width	120 in.
Height	120 in.
Weight	2000 lbs

GLOVE BOX:
- Length . . . . . 36 in.
- Width . . . . . 36 in.
- Height . . . . . 46 in.
- Weight . . . . . 125 lbs

utilities Required:
110 vac, 1 phase; 208 vac, 3 phase

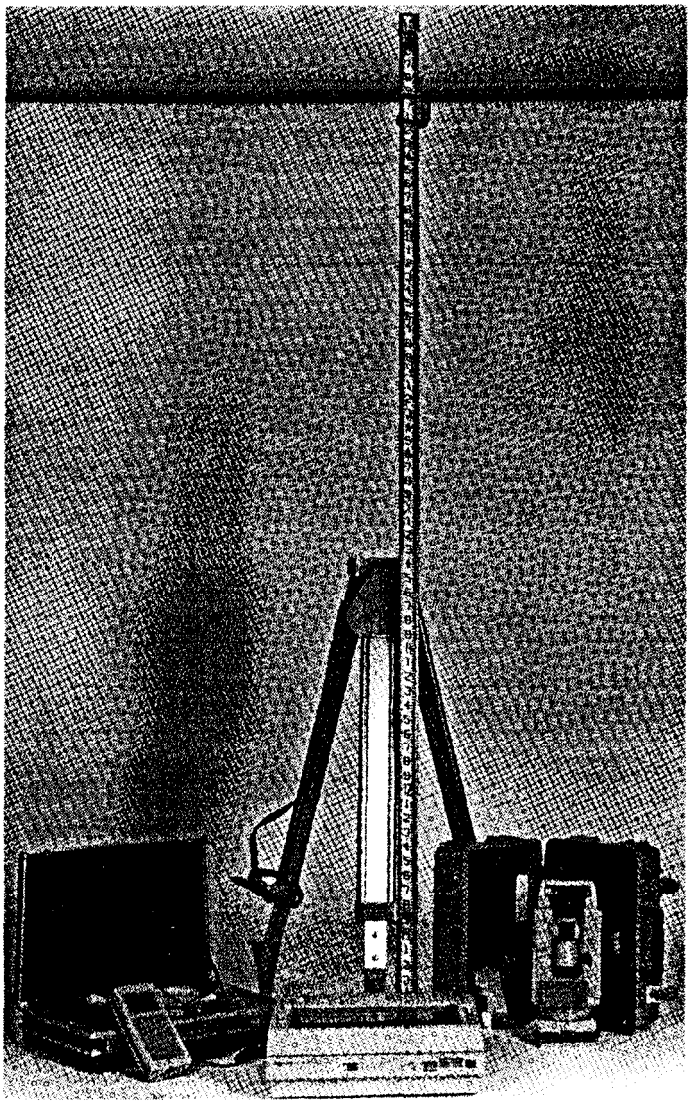
Production Capacity:
Not applicable.

Shipping Data:
- Length . . . . . Not available
- Width . . . . . Not available
- Height . . . . . Not available
- Cube . . . . . .766 cu ft
- Weight . . . . . 2500 lbs

Associated Equipment:
Two HEPA filter systems
M10 alarm system

Kits:
None.

APE 1983--RANGE AND ELEVATION MEASURING EQUIPMENT



Use:
The range and elevation measuring equipment APE 1983, has an earth cover program which will determine the earth cover of various earth covered magazines. It is also designed to measure ammunition burst elevation and distance downrange.

Description:
APE 1983 is a complete system capable of performing the four basic functions:

a. Earth cover measurement equipment is capable of measuring the depth of earth over and earth covered storage magazine in a non-destructive manner. The equipment is capable of storing this information and producing a detailed report.

b. Ammunition burst measurement equipment can be used to manually track ammunition shot from a predetermined position. It can automatically calculate the range and elevation of the ammunition burst. The equipment is capable of storing this information and producing a detailed report.

c. Sequential notepad equipment provides a means by which an operator can enter data, notes, or comments into a portable hand–held unit in a sequential order. The equipment is capable of storing this information and producing a detailed report.

d. Inspection checklist. equipment provides a function for the purpose of inspections, by which an operator can go through a check list answering questions yes or no and adding notes. The equipment is capable of storing this information and producing a detailed report.

Difference Between Models:
Original design.

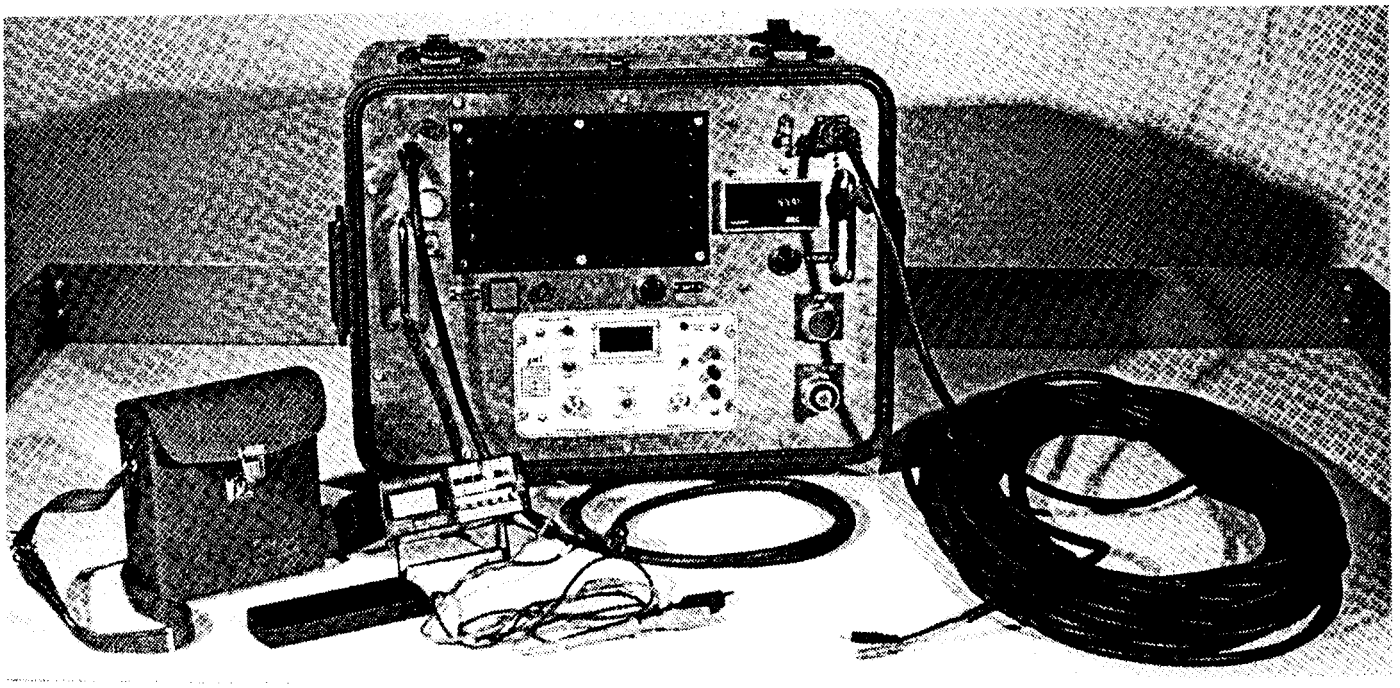
Tabulated Data:
APE No. 19830000
Unit of Issue . . . .Each
Installation Data:
Length . . . . Not applicable
Width . . . . . .Not applicable
Height . . . . Not applicable
Weight . . . . . . Non applicable
Utilities Required:
Printer - 155 Vac, 50/60 Hz.
Theodolite – “AA” disposable or rechargeable batteries data collection.
Unit - “9V” disposable or rechargeable “CR1/3N” lithium batteries production.
Production Capacity:
Not applicable.

Shipping Data:
Length . . . . . 96 in.
Width . . . . . 24 in.
Height . . . . . 18 in.
Cube . . . . . 65 lbs
Weight . . . . . Not available

Associated Equipment:
APE1974, Test Equipment for L8 Series Grenade.

Kits:
None.

APE 1984--ELECTRIC FIRING INSTRUMENT



Use:
The electric firing instrument's primary design is for field testing of M4 and M6 blasting caps, and projectile electric primer. The APE 1984 may be applied to other field applications requiring a constant current source, including additional detonating devices.

Description:
The APE 1984 is a portable electronic control console which provides a constant direct current (DC) output signal controlled by an integral timer.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	19840000
Unit of Issue	Each
Installation Data:	
Instrument Case:	
20-1/4 x 19–1/2 x 15-1/4 in.	
Digital Multimeter:	
5–5/8 x 4–5/8 x 2 in.	
Cable Assembly	100 ft long
Weight	55 lbs
Utilities Required:	
110 vac, 50/60 Hz.	

Production Capacity:
Not applicable.

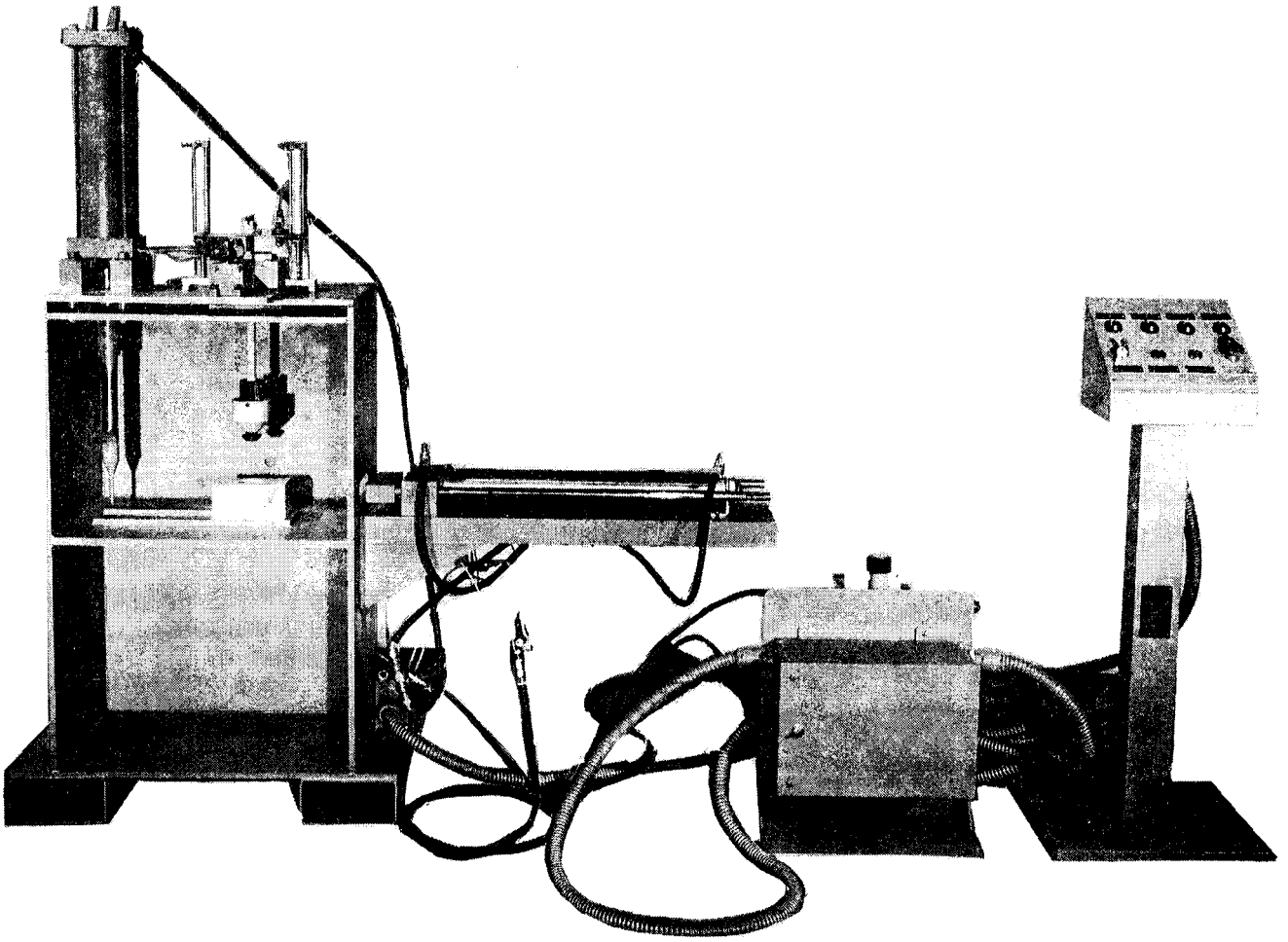
Shipping Data:
Instrument Case:
20-1/4 x 19-1/2 x 15-1/4 in.
Digital Multimeter:
5-5/8 x 4-5/8 x 2 in.
Cable Assembly:
100 ft long
Weight:
55 lbs

Associated Equipment:
None.

Kits:

1984E001 KIT, M4 and M6 Blasting Cap Fixture and Signal Transfer Box.

APE 1985–EQUIPMENT FOR TESTING NONMETALLIC M14 MINE



Use:
The testing equipment is designed to perform function tests of the M14, anti personnel nonmetallic mine with integral fuze.

Description:
APE 1985 tests one mine at a time. The mine is placed upright, in a user provided wooden holding block, under a weight assembly in the test chamber. The mine is functioned by lanyards from a remote position. In instances when the mine will not function by use of the weight assembly it will be functioned by a remotely located control panel. The APE 1985 consists of the following principal parts.

a. The test chamber assembly serves as a housing for function tests of the M14 mine.

b. The control cabinet and panel assemblies are used to remotely operate the test chamber when a mine fails to function.

c. The weight assembly which drops and causes the mine to function.

Difference Between Models:
Original design.

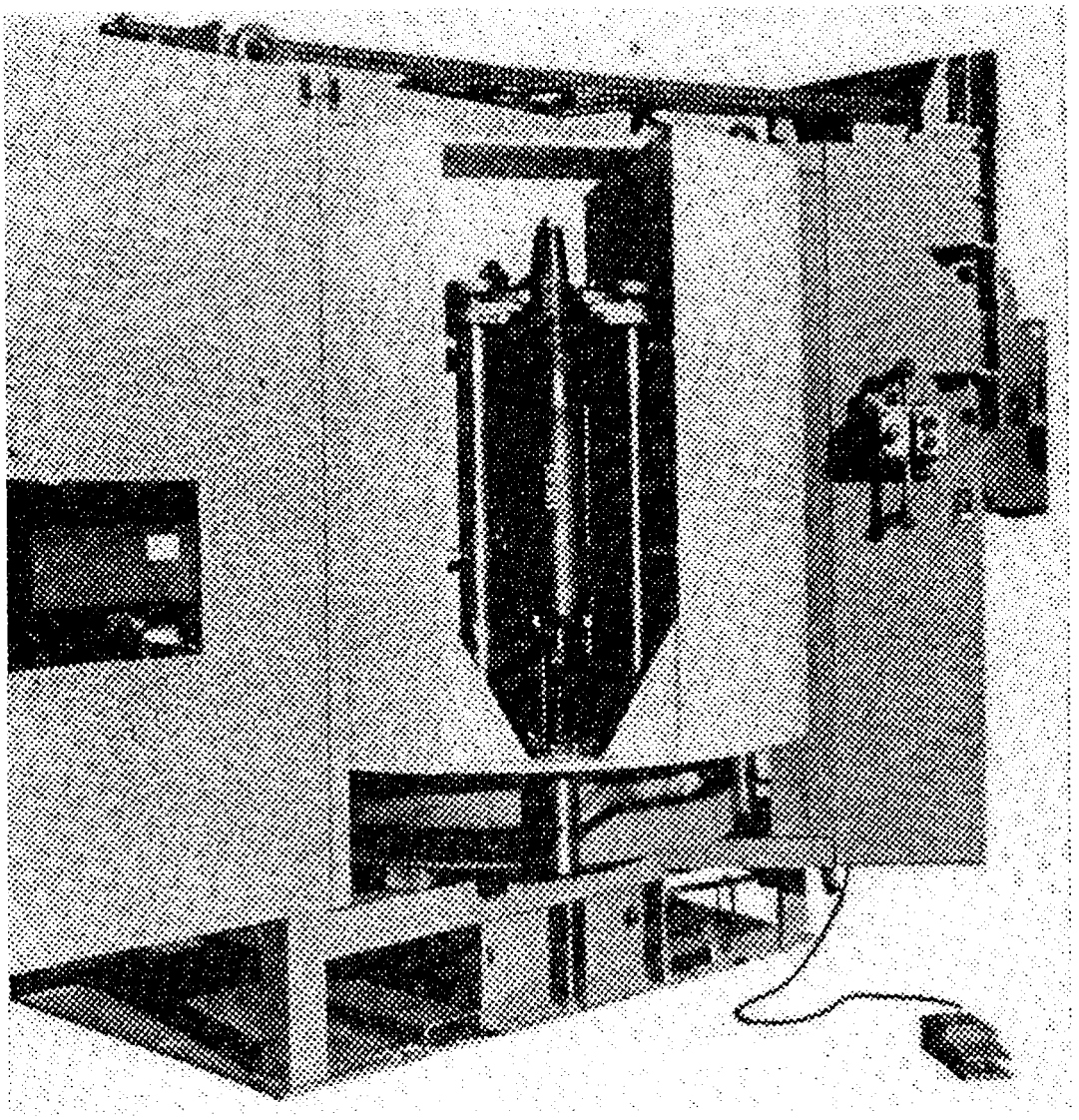
Tabulated Data:
APE No. 19850000
Unit of Issue . . . . . .Each
Installation Data:
TEST CHAMBER ASSEMBLY:
Length . . . .63-1/2 in.
Width . . . .18-1/2 in.
Height . . . .68 in.
Weight . . . . Not available
CONTROL CABINET ASSEMBLY:
Length . . . .18 in.
Width . . . .20 in.
Height . . . .23 in.
Weight . . . . Not available
CONTROL PANEL ASSEMBLY:
Length . . . .18 in.
Width . . . .18 in.
Height . . . .46 in.
Weight . . . . . Not available
Utilities Required:
Oil free air (minimum) 90 psi
at 50 cfm.
Production Capacity:
Not available.

Shipping Data:
Length . . . . . Not available
Width . . . . . Not available
Height . . . . . Not available
Cube . . . . . Not available
Weight . . . . . Not available

Associated Equipment:
None.

Kits:
None.

APE 2000--MACHINE, VERTICAL PULL APART, ROTATING



Use:
The vertical pull apart rotating machine is used to pull or separate fixed type artillery ammunition ranging in size up to 40MM with exception of fin stabilized projectiles.

Description:
APE 2000 consists of a frame mounting a four station turntable. Each station is independent of each other and is mechanically operated. A projectile pickoff station removes the separate projectile? from each pull apart station and exists the projectile from the working area. The machine is equipped with a protection barricade, but no deluge system and is only approved for 40MM.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	20000000
Unit of Issue	Each
Installation Data:	
Length	124 in.
Width	73 in.
Height	95 in.
Weight	11200 lbs

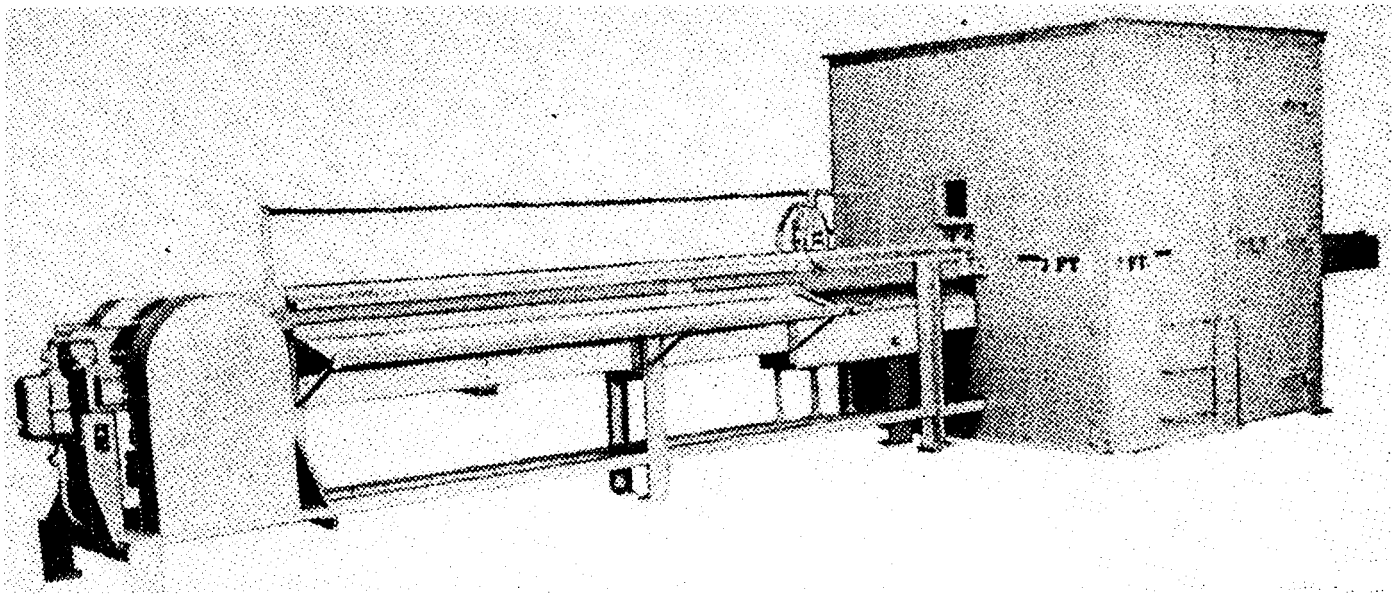
Utilities Required:
3 phase, 208/220 vac, 30 amp outlet.
Production Capacity:
360 rounds per hour.

Shipping Data:
Length . . . .134 in.
Width . . . .83 in.
Height . . . .105 in.
Cube . . . . . 676 cu ft
Weight . . . . . 11400 lbs

Associated Equipment:
None.

Kits:
2000E001 KIT, Basic Accessories
2000E002 KIT, Pull Apart of 40MM M81, M91, MK2, MK11

APE 2001M1--MACHINE, BREAKDOWN, 20MM



Use:
The 20MM breakdown machine is used to break apart 20MM cartridges and separate the components.

Description:
APE 2001M1 consists of a frame with a metal belt which carries the cartridges to a breakoff wedge where the projectile is forced out of the cartridge case. The projectiles exit the machine on a rubber belt. An operational shield is provided.

Difference Between Models:
Not available.

Tabulated Data:

APE No.	20010000M1
Unit of Issue	Each
Installation Data:	
Length	26 ft 3 in.
Width	79 in.
Height	79 in.
Weight	8441 lbs
Utilities Required:	
220/440 vac, 3 phase, 60 Hz.	

Production Capacity:
200 cartridges per minute.

Shipping Data:

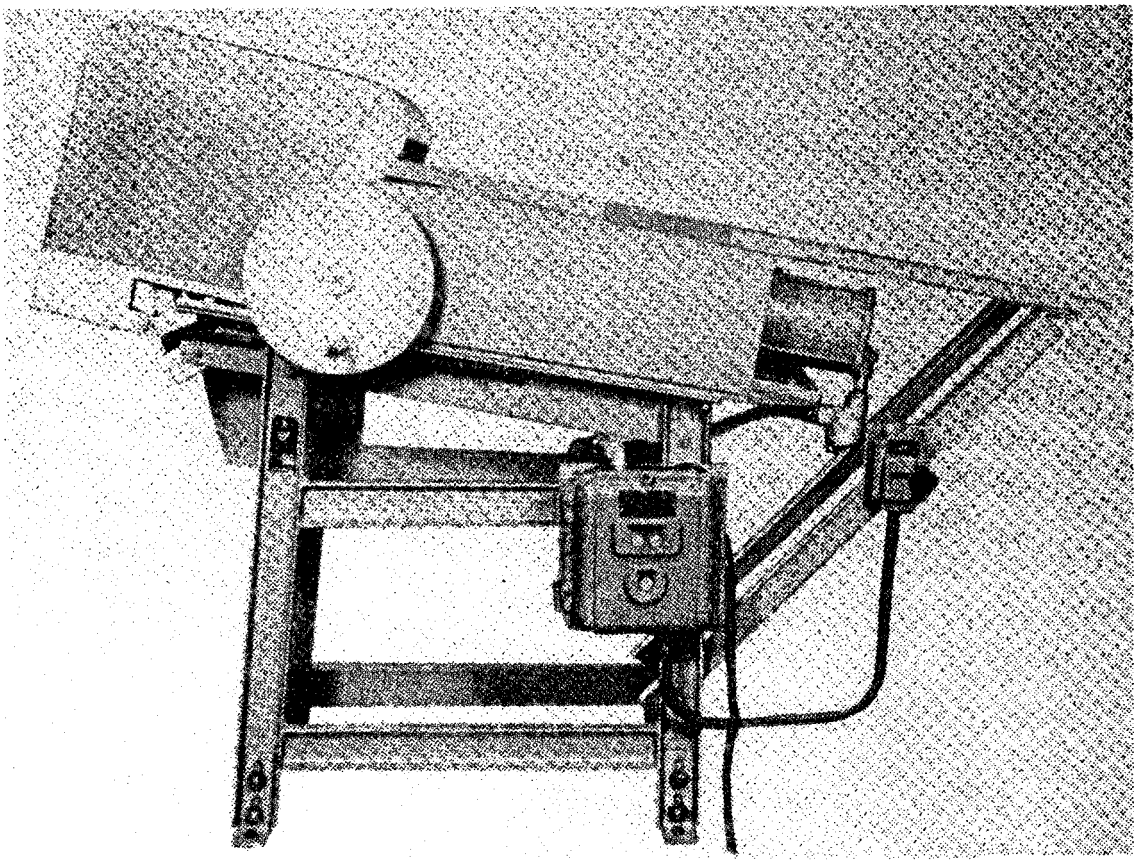
MACHINE:	
Length	27 ft
Width	4 ft
Height	5 ft
Cube	540 cu ft
Weight	6000 lbs
SHIELD:	
Length	7 ft
Width	7 ft
Height	7 ft
Cube	343 cu ft
Weight	3000 lbs

Associated Equipment:
None.

Kits:

2001E001	KIT, Cartridge Breakdown, 20MM; M187 and M204 Cartridge Case
2001E002	KIT, Cartridge Breakdown, 20MM; M103
2001E003	KIT, Cartridge Breakdown, 20MM; M21 Cartridge Case

APE 2006M1--MACHINE, DELINKING, CALIBER .50



Use:
The caliber .50 delinking machine is used to extract caliber .50 cartridges from M2 and M9 links by pulling on the extraction groove.

Description:
APE 2006M1 consists of a metal table with a delinking drum at one end of the table. The drum consists of a group of metal fingers which rotate and each finger pulls a cartridge from the belt as it passes the drum.

Difference Between Models:
The APE 2006M1 has a speed change on the machine.

Tabulated Data:

APE No.	20060000M1
Unit of Issue	Each

Installation Data:

Length	72 in.
Width	34 in.
Height	54 in.
Weight	1272 lbs

Utilities Required:
220/440 vac, 3 phase, 60 Hz.

Production Capacity:
830 cartridges per minute.

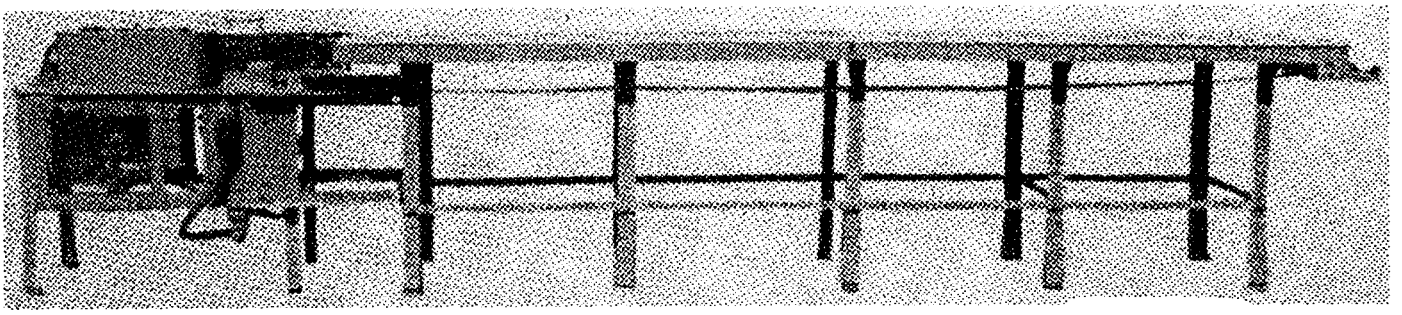
Shipping Data:

Length	78 in.
Width	40 in.
Height	62 in.
Cube	112 cu ft
Weight	2350 lbs

Associated Equipment:
APE 2013, 2015, 2016, 2017 and 2126.

Kits:
None.

APE 2008--DELINKER-DEBELTER, CALIBER .30



Use:
The delinker–debelter is used to remove caliber .30 cartridges from web or metallic link belts. Cartridges are removed from the belts by pushing on the bullet tips.

Description:
APE 2008 consists of a metal frame, a positive cartridge belt feed, a wedge device for removing the cartridges from the belts, and an electric motor. Also included are two tables with a belt running down the center to feed the ammunition belts to the delinker–debelter.

Difference Between Models:
Original design.

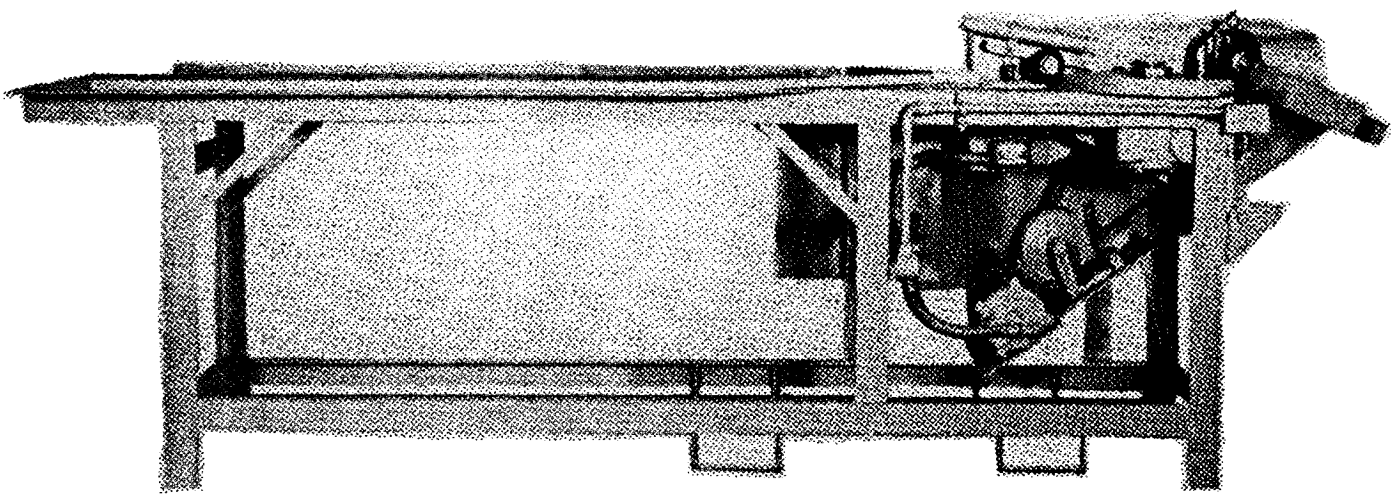
Tabulated Data:
APE No. 20080000
Unit of Issue . . . .Each
Installation Data:
Length . . . .16 ft 8 in.
Width . . . .36 in.
Height . . . .39 in.
Weight . . . . . 1450 lbs
Utilities Required:
220/440 vac, 3 phase, 60 Hz.
Production Capacity:
950 cartridges per minute.

Shipping Data:
BOX:
Length . . . . . 78 in.
Width . . . . . 39 in.
Height . . . . . 19 in.
Cube . . . . . 33.4 cu ft
Weight . . . . . 1018 lbs
CRATE:
Length . . . . . 50 in.
Width . . . . . 35 in.
Height . . . . . 48 in.
Cube . . . . . 48.6 cuft
Weight . . . . . 788 lbs

Associated Equipment:
None.

Kits:
None.

APE 2009--MACHINE, DELINKING, CALIBER .30



Use:
The caliber .30 delinking machine is used to remove cartridges from metallic link belts by power operation. It will seqre-gate a single round from a 4 to 1 ratio pack.

Description:
APE 2009 consists of a metal table with the delinking mechanism mounted on one end. A delink plate holds the links as the cartridges are pulled free by two rotating rubber rollers. The delink plate carries the links forward to the link discharge chute.

Difference Between Models:
Original design.

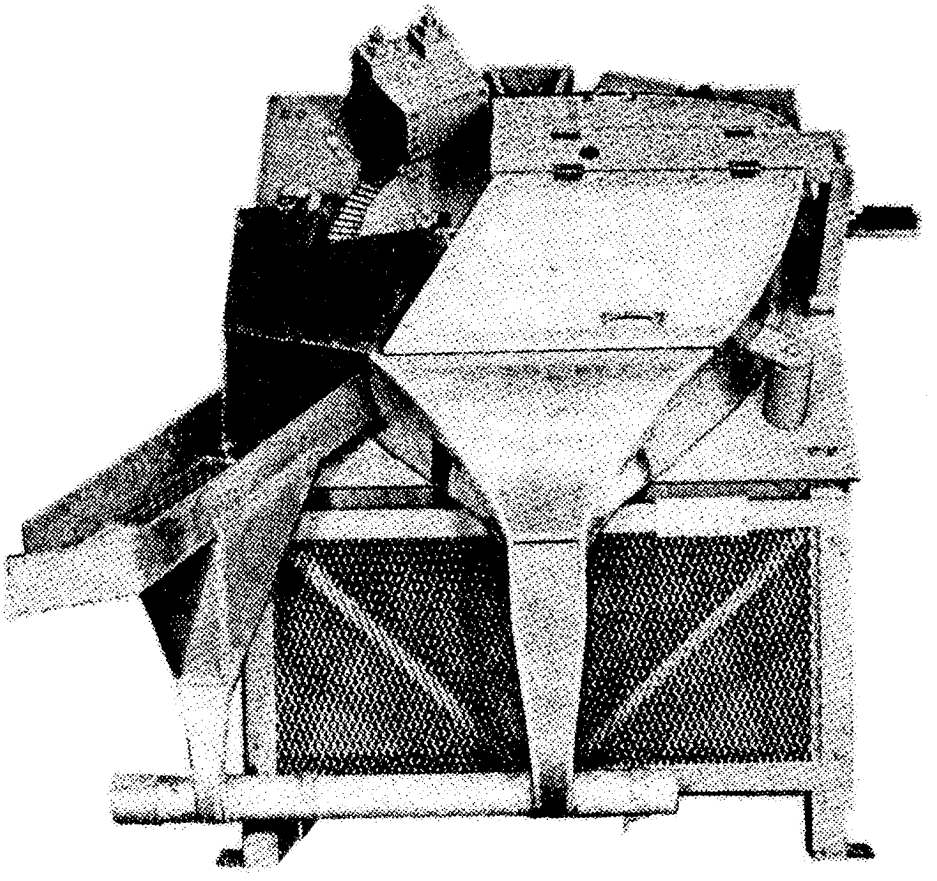
Tabulated Data:
APE No. 20090000
Unit of Issue . . . .Each
Installation Data:
Length . . . .108 in.
Width . . . . . 36 in.
Height . . . . . 40 in.
Weight . . . . . 1378 lbs
Utilities Required:
115/230 vac, single phase, 60 Hz, 7.4/3.7 amp.
Production Capacity:
3000 cartridges per minute.
Straight Pack: 900 cartridges per minute ratio pack.

Shippinq Data:
Length . . . . . 130 in.
Width . . . . . 43 in.
Height . . . . . 52 in.
Cube . . . . . 168.2 cu ft
Weight . . . . . 1450 lbs

Associated Equipment:
None.

Kits:
None.

APE 2011--MACHINE, ROTARY BULLET PULL, CALIBER .30, 5.56MM AND 7.62MM



Use:
The rotary bullet pull machine is used to pull the bullet from the cartridge and segregate the bullet, the cartridge case, and the propellant.

Description:
APE 2011 consists of a metal frame, a cartridge wheel, a cartridge case cutter, a bullet breaker, a powder collection chute, three electric motors, and machine guards.

Difference Between Models:
Original design.

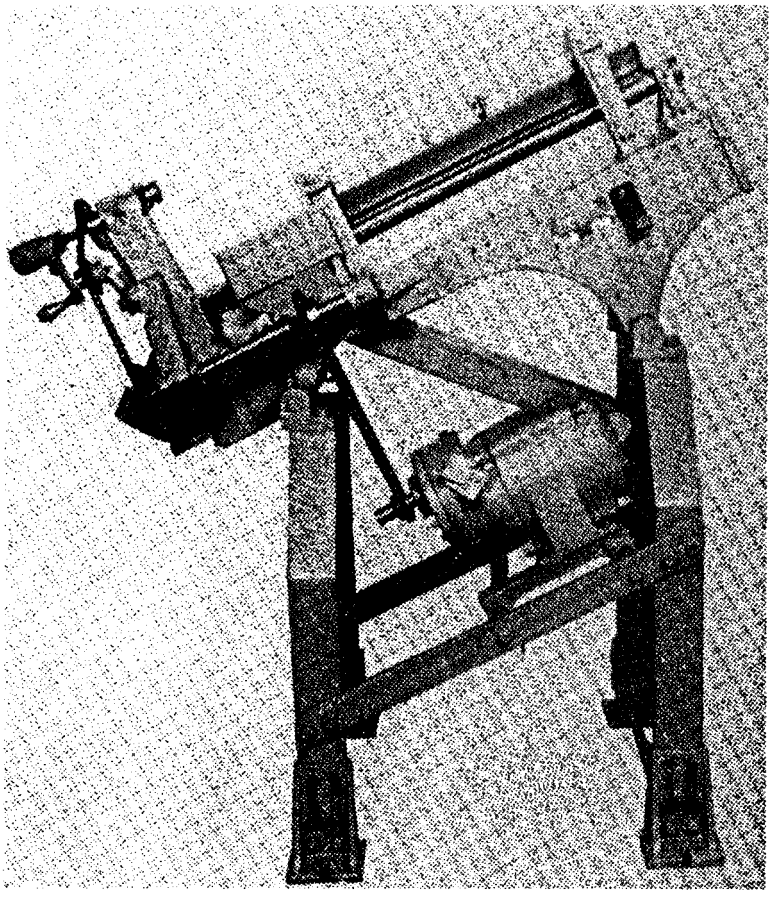
Tabulated Data:
APE No. 20110000
Unit of Issue . . . .Each
Installation Data:
Length . . . .69 in.
Width . . . .50 in.
Height . . . . . 62 in.
Weight . . . . . 1873 lbs
Utilities Required:
220/440 vac, 3 phase, 60 Hz.
Production Capacity:
660 cartridges per minute.

Shipping Data:
Length . . . . . 64 in.
Width . . . . . 56 in.
Height . . . . . 69 in.
Cube . . . . . 143.1 cu ft
Weight . . . . . 2360 lbs

Associated Equipment:
APE 2012, 2013, 2030, 2021, 2031, and 2032.

Kits:
2011E001 KIT, Caliber .30 Bullet Pull
2011E002 KIT, 7.62MM Bullet Pull
2011E003 KIT, 5.56MM Bullet Pull

APE 2012--CARTRIDGE ALINER, CALIBER .30 AND 7.62MM



Use:
The cartridge aliner is used to regiment and feed caliber .30 and 7.62MM cartridges to the rotary bullet pull machine.

Description:
APE 2012 consists of a metal frame with two power driven alining rolls and a cartridge feed chute.

Difference Between Models:
Original design.

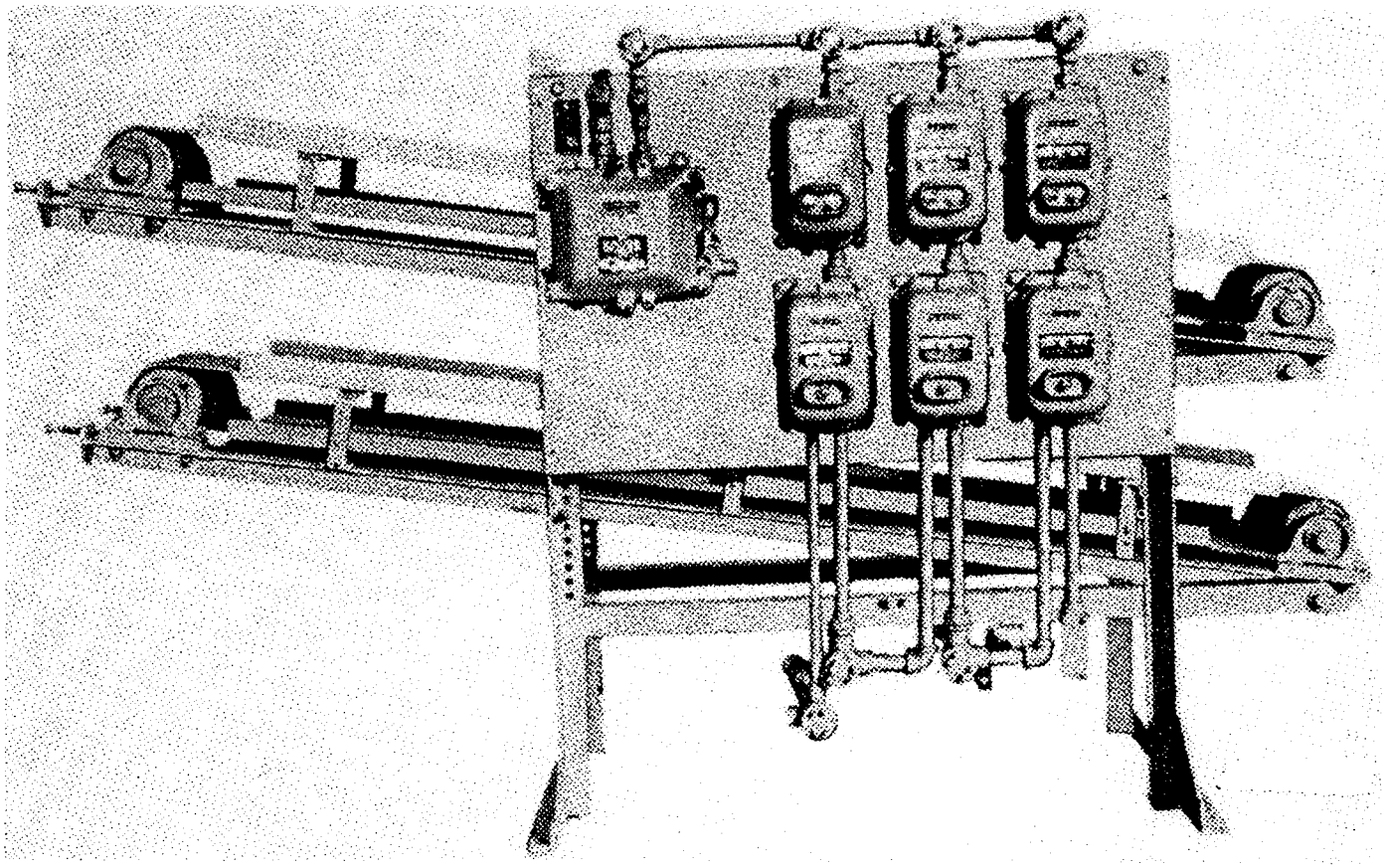
Tabulated Data:
APE No. 20120000
Unit of Issue . . . .Each
Installation Data:
Length . . . .50 in.
Width . . . .28 in .
Height . . . .82 in.
Weight . . . . . 750 lbs
Utilities Required:
208/220/440 vac, 3 phase, 60 Hz.
Production Capacity:
660 cartridges per minute.

Shipping Data:
Length . . . . . 68 in.
Width . . . . . 56 in.
Height . . . . . 64 in.
Cube . . . . . 141 cu ft
Weight . . . . . 1185 lbs

Associated Equipment:
APE 2011, 2021, 2031, and 2032.

Kits:
2012E001 KIT, 7.62MM Feed Chute
2012E002 KIT, 7.62MM Cartridge Guide
2012E003 KIT, Molin Roll Stand

APE 2013M2--PANEL BOARD ASSEMBLY



Use:
The panel board assembly is used to centrally control several electrically operated machines in a small arms demilitarization line.

Description:
APE 2013M2 consists of a metal panel on legs on which are mounted the switches controlling the machines in a small arms demilitarization line. Two short belt conveyors are mounted on the back of the conveyor.

Difference Between Models:
Model based on configuration of SAA demilitarization line and APE utilized.

Tabulated Data:

APE No.	20130000M2
Unit of Issue	Each

Installation Data:

Length	96 in.
Width	27 in.
Height	59 in.
Weight	494 lbs

Utilities Required:
220/440 vac, 3 phase, 60 Hz, 30 amp.

Production Capacity:
Not applicable.

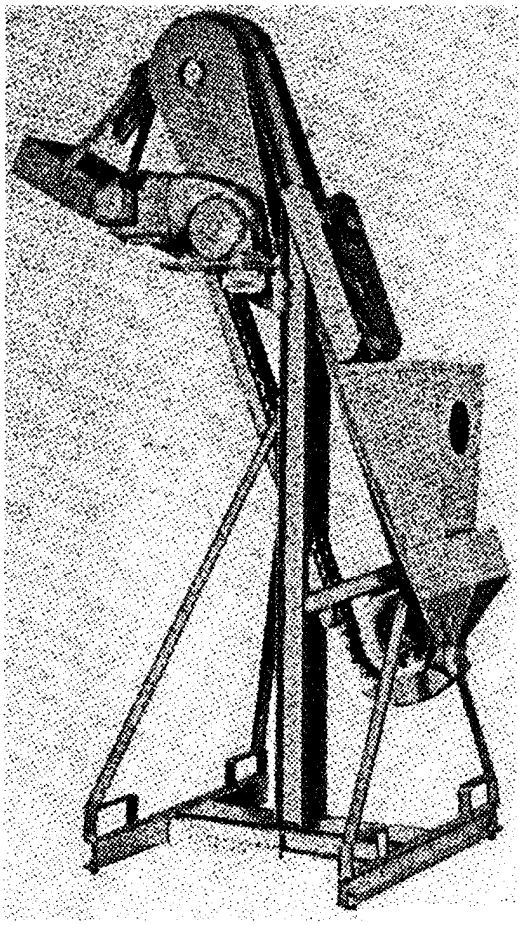
Shipping Data:

Length	Not available
Width	Not available
Height	Not available
Cube	Not available
Weight	Not available

Associated Equipment:
APE 2011, 2012, 2015M1, 2016, 2017, 2020, 2021M1, 2031, 2032.

Kits:
None.

2015M1--MACHINE, AUTOMATIC FEED, CALIBER .50 DECORING



Use:
The automatic feed machine is used to feed caliber .50 bullets into the decoring machine, APE 2126.

Description:
APE 2015M1 consists of a metal frame, a bullet hopper, a feed chain, an overflow chute, a feed tube, an electric motor drive, and the necessary guards.

Difference Between Models:
The APE 2015M1 model is equipped with a commercial overload coupling rather than a clutch .

Tabulated Data:

APE No.	20150000M1
Unit of Issue	Each

Installation Data:

Length	80 in.
Width	36 in.
Height	87 in.
Weight	984 lbs

Utilities Required:
220/440 vac, 3 phase, 60 Hz.

Production Capacity:
275 bullets per minute.

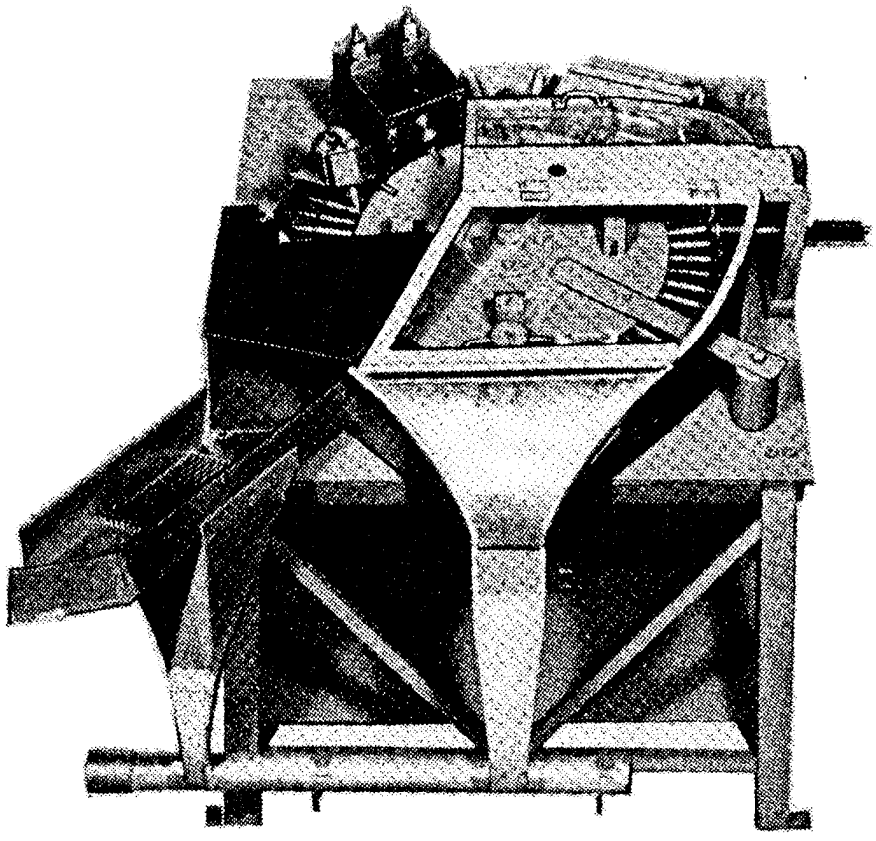
Shipping Data:

Length	84 in.
Width	38 in.
Height	96 in.
Cube	173 cu ft
Weight	1400 lbs

Associated Equipment:
APE 2013M2, 2024, 2126.

Kits:
None.

APE 2016--MACHINE, ROTARY BULLET PULL, CALIBER .50



Use:
The rotary bullet pull machine is used to pull the bullet from the cartridge case of caliber .50 cartridges. It segregates the bullet, the cartridge case, and the propellant.

Description:
APE 2016 consists of a metal frame, a cartridge wheel, a cartridge case cutter, a bullet breaker, a powder collection chute, three electric motors, and machine guards.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	20160000
Unit of Issue	Each

Installation Data:

Length	69 in.
Width	54 in.
Height	62 in.
Weight	2165 lbs

Utilities Required:
220/440 vac, 3 phase, 60 Hz.

Production Capacity:
320 cartridges per minute.

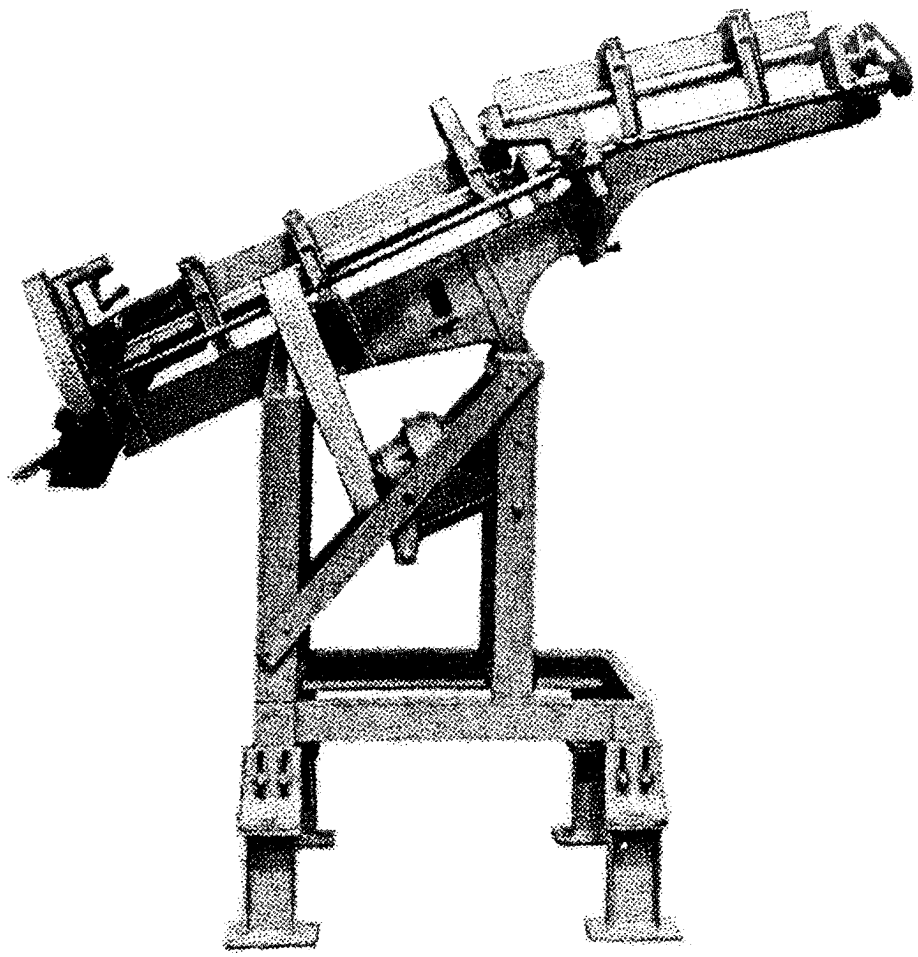
Shipping Data:

Length	64 in.
Width	56 in.
Height	69 in.
Cube	143.1 cu ft
Weight	2665 lbs

Associated Equipment:
APE 2013M2, 2017, 2020, 2021, 2031, and 2032.

Kits:
None.

APE 2017--CARTRIDGE ALINER, CALIBER .50



Use:
The caliber .50 cartridge aliner is used to regiment caliber .50 cartridges and feed them to the rotary bullet pull, APE 2016.

Description:
APE 2017 consists of a metal frame with four power driven alininq rolls and a cartridge feed chute.

Difference Between Models:
Original design.

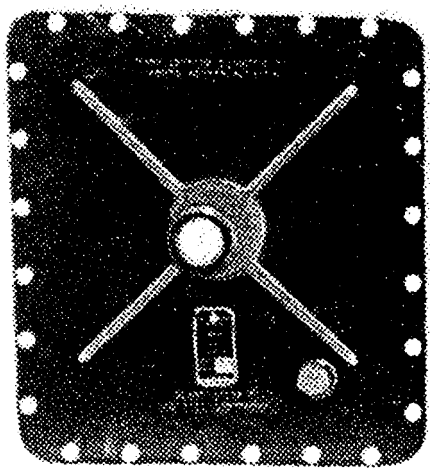
Tabulated Data:
APE No. 20170000
Unit Of Issue . . . .Each
Installation Data:
Length . . . .100 in.
Width . . . . . 40 in.
Height . . . . . 102 in.
Weight . . . . . 1870 lbs
Utilities Required:
208–220/440 vac, 3 phase, 60 Hz.
Production Capacity:
320 cartridges per minute.

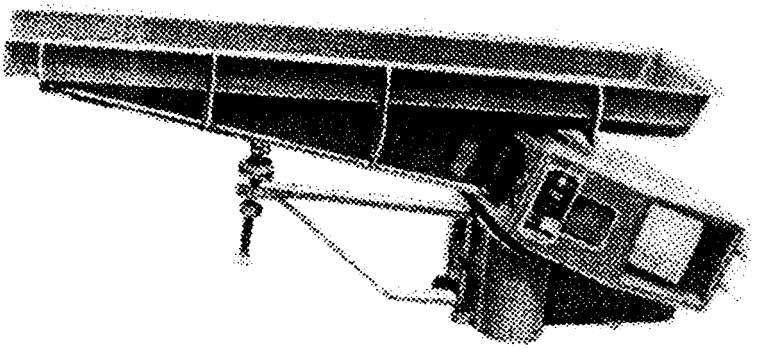
Shipping Data:
Length . . . . . 75 in.
Width . . . . . 53 in.
Height . . . . . 85 in.
Cube . . . . . 196 cu ft
Weight . . . . . 2300 lbs

Associated Equipment:
APE 2013M2, 2016, and 2032.

Kits:
None.

APE 2020--FEEDER, VIBRATORY, CARTRIDGE





Use:
The vibratory feeder is used to feed cartridges from a hopper to conveyor or other machine at a variable rate. The feeder may be used for other materials.

Description:
APE 2020 is a commercial vibrating feeder with explosion proof construction. A rheostat is included to control the speed the material is fed from the vibratory feeder.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	20200000
Unit of Issue	Each

Installation Data:

Length	32 in.
Width	15 in.
Height	20 in.
Weight	370 lbs

Utilities Required:
115/230 vac, single phase, 60 Hz.

Production Capacity:
600 cartridges per minute.

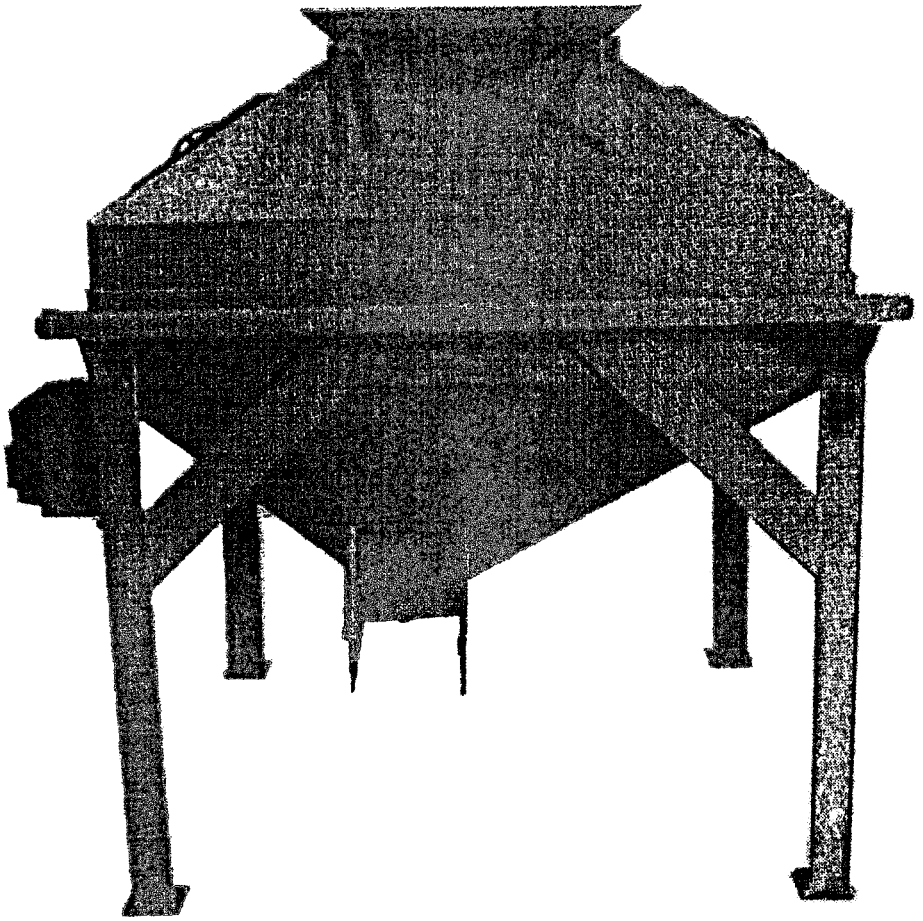
Shipping Data:

Length	36 in.
Width	18 in.
Height	24 in.
Cube	9 cu ft
Weight	450 lbs

Associated Equipment:
APE 2021, 2031.

Kits:
None.

2021--HOPPER, FEEDER (SINGLE)



Use:
The vibrating feeder hopper is used as a storage hopper from which small arms ammunition or other material can be fed onto a vibrating feeder tray.

Description:
APE 2021 is constructed of metal with one opening in the bottom. It has a metal top with a viewing port and an opening for filling the hopper. The hopper is supported on four legs.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	20210000
Unit of Issue	Each

Installation Data:

Length	56 in.
Width	53 in.
Height	66 in.
Weight	340 lbs

Utilities Required:
None.

Production Capacity:
Not applicable.

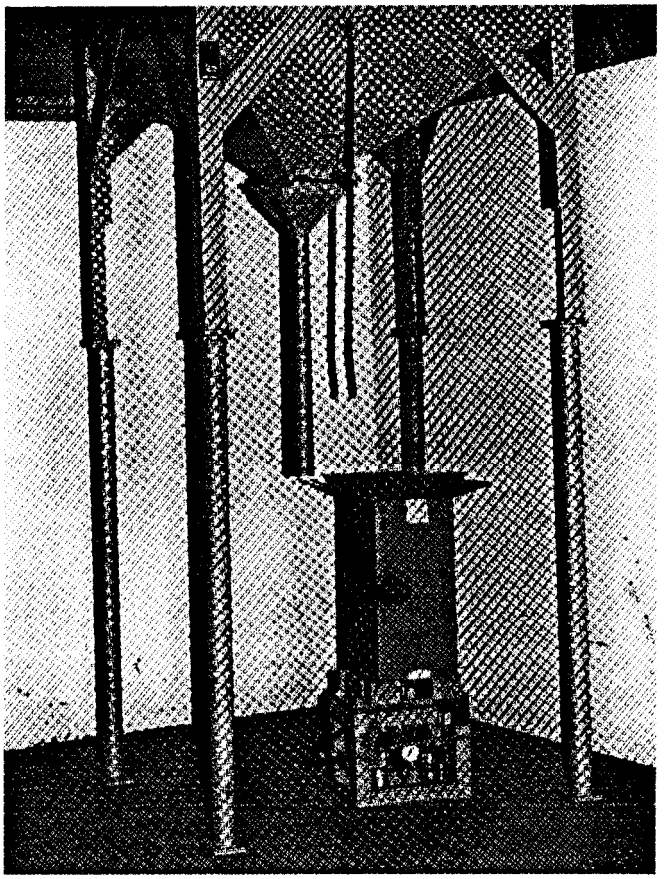
Shipping Data:

Length	60 in.
Width	60 in.
Height	69 in.
Cube	144 cu ft
Weight	370 lbs

Associated Equipment:
APE 2020.

Kits:
None.

APE 2021M1--HOPPER, FEEDER, SINGLE (MODIFIED)



Use:
The modified single vibrating feeder hopper is used to hold and dispense vermiculite. The vermiculite is used to pack the fiberboard containers that hold the polystyrene boxes that house a M74, 66MM incendiary rocket clip.

Description:
APE 2021M1 consists of a modified APE 2021 vibrating feeder hopper.

Difference Between Models:
The APE 2021M1 is an APE 2021 that has had the upper hopper assembly and hopper outlet feed door removed.

Tabulated Data:

APE No.	20210000M1
Unit of Issue	Each
Installation Data:	
Length	56 in.
Width	55-1/2 in.
Height	117 in.
Weight	380 lbs
Utilities Required:	None.
Production Capacity:	Renovation line production is 185 to 192 boxes per 8 hour shift.

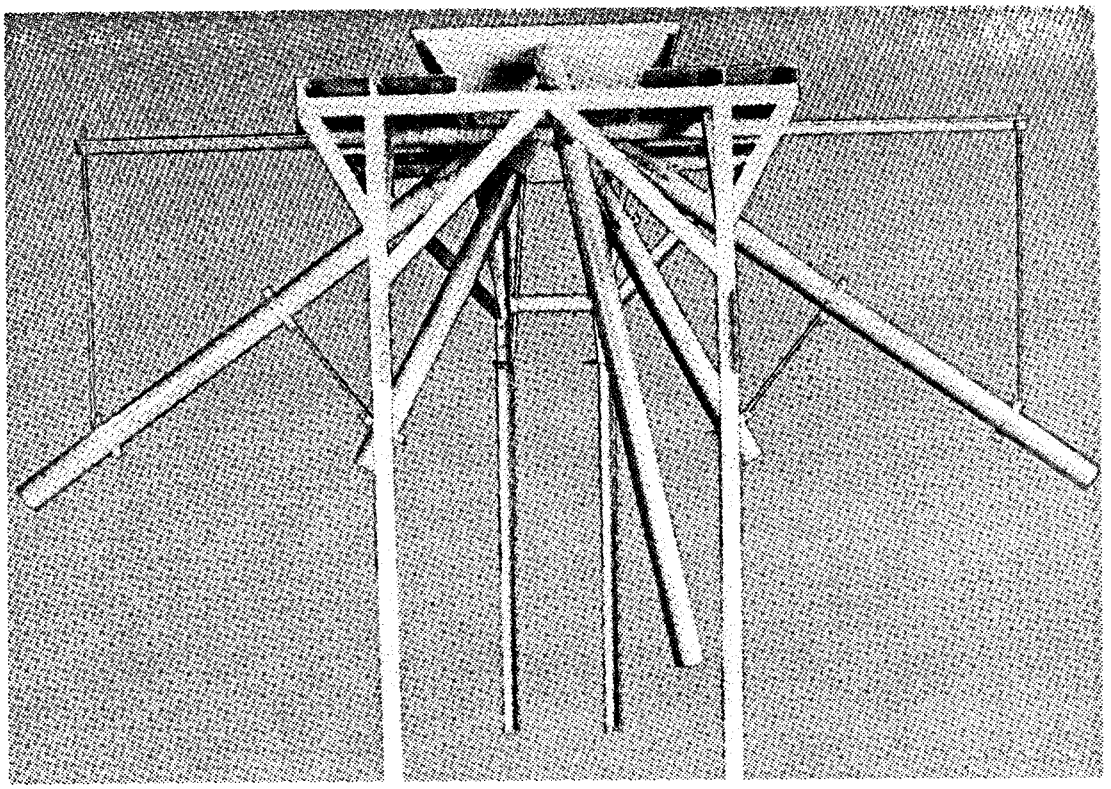
Shipping Data:

Length	Not available
Width	Not available
Height	Not available
Cube	Not available
Weight	Not available

Associated Equipment:
APE 2194.

Kits:
2021E001 KIT, Vermiculite Dispenser

APE 2024--FEED HOPPER, CENTRAL



Use:
The central feed hopper is used to feed caliber .50 armor-piercing, ball, or incendiary bullets into four automatic feeders for decoring operations.

Description:
APE 2024 consists of a small hopper supported by metal legs with four feed tubes leading down from the hopper.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	20240000
Unit of Issue	Each
Installation Data:	
Length	15 ft
Width	5 ft
Height	11 ft
Weight	1100 lbs
Utilities Required:	
None.	

Production Capacity:
Feeds 1 to 4 automatic feeders, APE 2015, simultaneously.

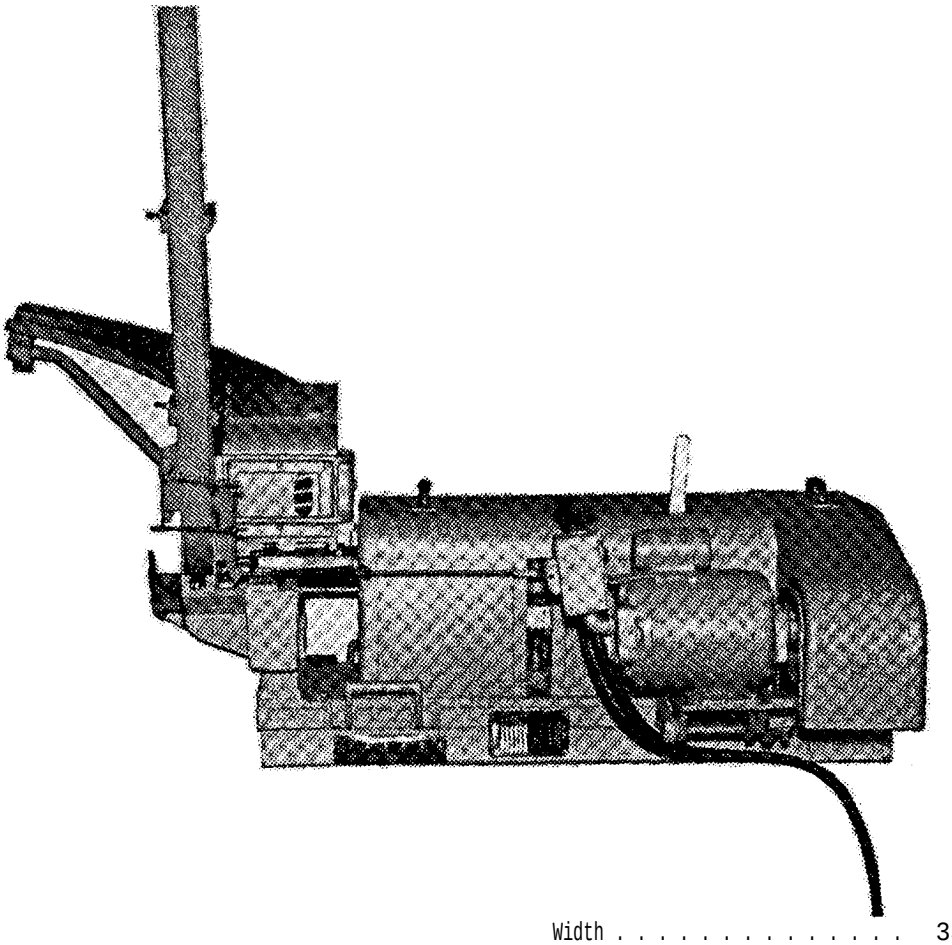
Shipping Data:

CRATE:	
Length	88 in.
Width	66 in.
Height	68 in.
Cube	237 cu ft
Weight	1442 lbs
Box:	
Length	108 in.
Width	19 in.
Height	15 in.
Cube	18 cu ft
Weight	535 lbs

Associated Equipment:
APE 2015M1, 2032, and 2136.

Kits:
None.

APE 2026--LINKING MACHINE, POWERED, CALIBER .50, M2 OR M9 LINK



Use:
The linking machine is used to link caliber .50 cartridges into M2 or M9 links by power operation. A delinking attachment may be attached to the machine for delinking cartridges from ammunition belts.

Description:
APE 2026 consists of a metal frame, a drive mechanism, an indexing assembly, an ammunition tray, and a link chute. A sheet metal guard covers the machine.

Difference Between Models:
Original design.

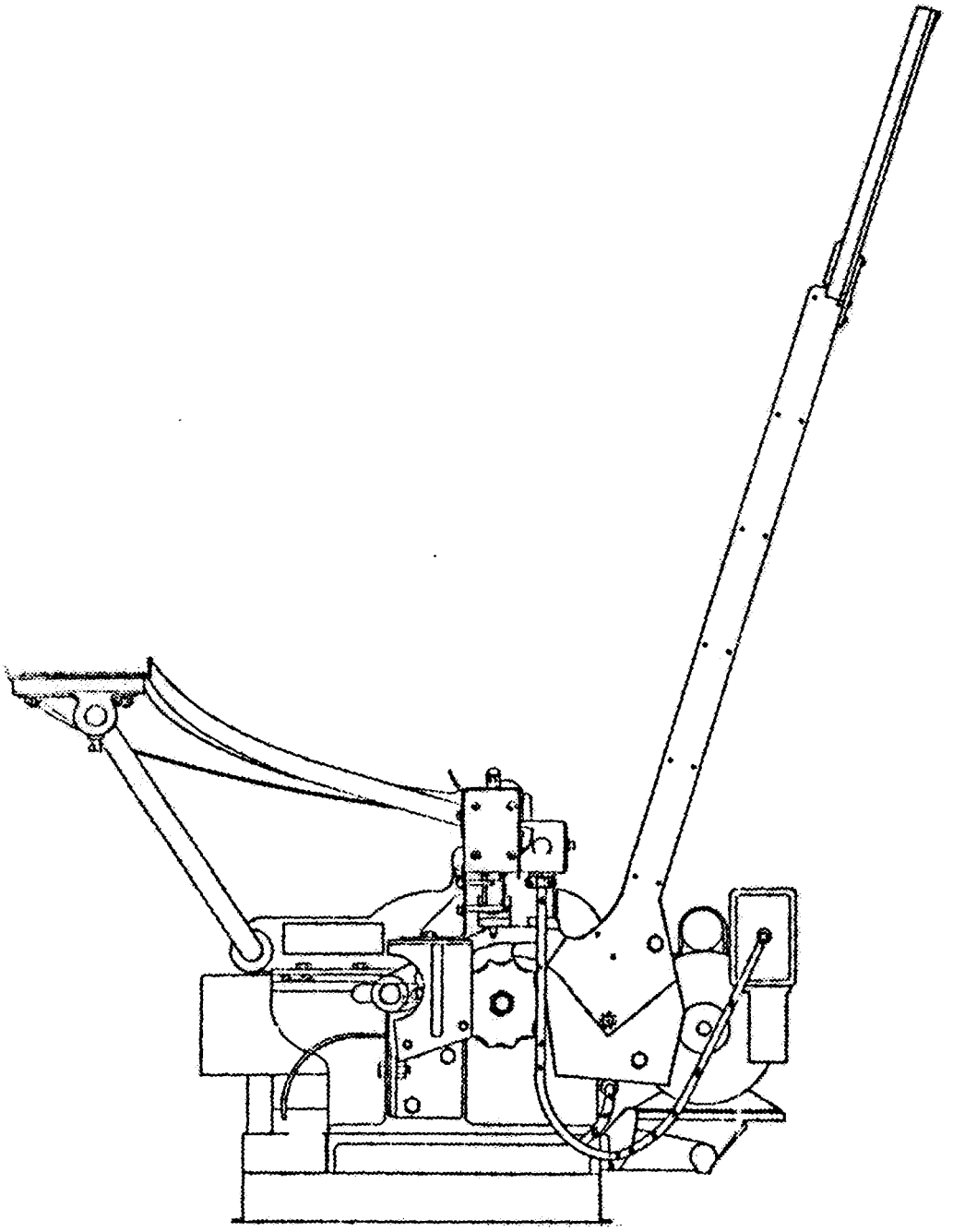
Tabulated Data:
APE No. 20260000
Unit of Issue . . . . . Each
Installation Data:
Length . . . . . 53-3/4 in.
Width . . . . . 33-5/8 in.
Height . . . . . 36-1/2 in.
Weight . . . . . 312 lbs
Utilities Required:
110 vat, single phase, 60 Hz.
Production Capacity:
50 to 150 cartridges per minute.

Shipping Data:
Length . . . . . 51 in.
Width . . . . . 34 in.
Height . . . . . 25 in.
Cube . . . . . 25 cu ft
Weight . . . . . 470 lbs

Associated Equipment:
None.

Kits:
2026E001 KIT, Caliber .50 Delinking Attachment

APE 2027M4--LINKING MACHINE, CALIBER .50, M15A2 LINK



Use:
The caliber .50 linking machine is used to link caliber .50 cartridges into M15A2 links. A tight link detector and marking assembly marks the cartridges requiring excessive force to insert them into the links.

Description:
APE 2027M4 consists of a metal frame, a drive mechanism, an indexing assembly, an ammunition tray, a link chute, and a tight link detector and marking assembly. A sheet metal guard covers the moving parts of the machine.

Difference Between Models:
Earlier models were built for the M15 and the M15A1 links.

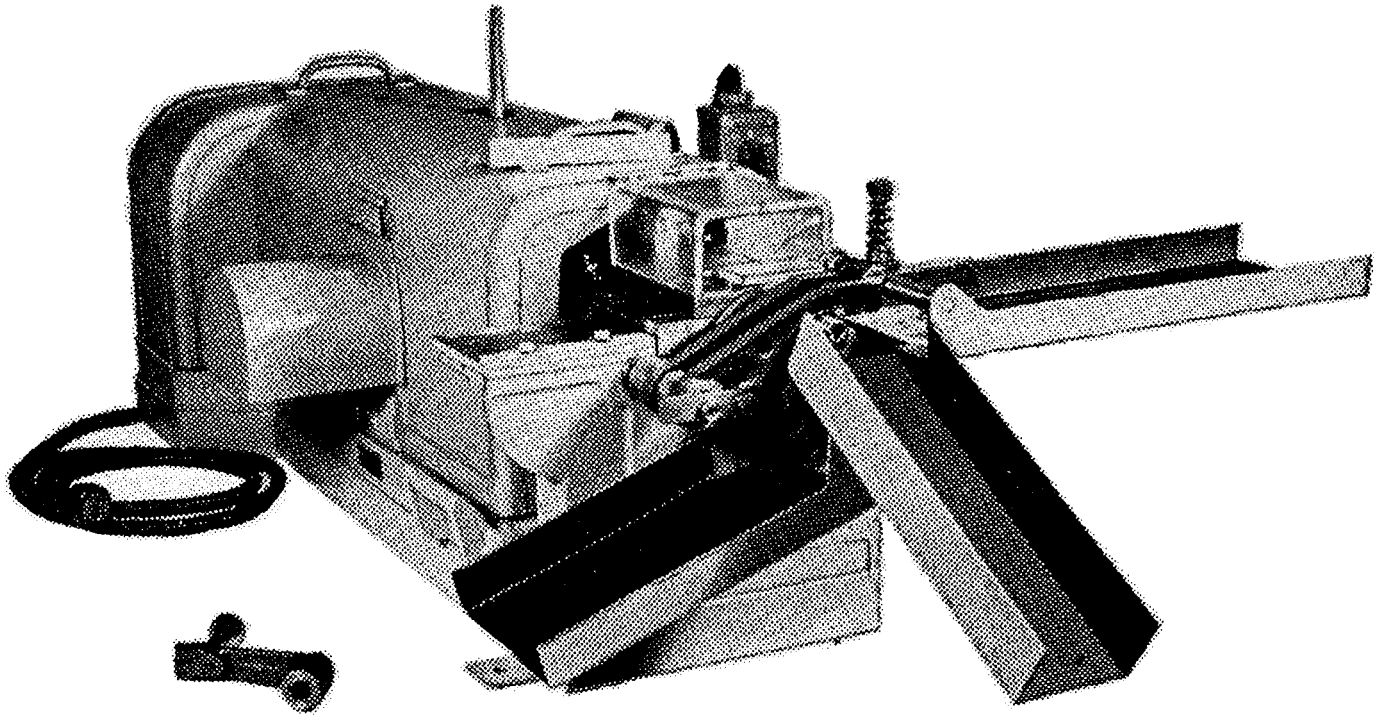
Tabulated Data:
APE No. 20270000M4
Unit of Issue . . . .Each
Installation Data:
Length . . . .53-3/4 in.
Width . . . .39 in.
Height . . . .50 in.
Weight . . . .350 lbs
Utilities Required:
110 vac, single phase, 60 Hz.
Production Capacity:
100 cartridges per minute.

Shipping Data:
Length . . . . . 57 in.
Width . . . . . 42 in.
Height . . . . . 27 in.
Cube . . . . . 37 cu ft
Weight . . . . . 560 lbs

Associated Equipment:
None.

Kits:
None.

APE 2030--DELINKING MACHINE, CALIBER .50, M15A2 LINK



Use:
The delinking machine is used to extract caliber .50 cartridges from M15A2 links by power operation.

Description:
APE 2030 consists of a metal frame, a drive mechanism, an indexing assembly, and the infeed and exit trays. A sheet metal guard covers the moving parts of the machine.

Difference Between Models:
Original design.

Tabulated Data:

APE No. 20300000
Unit of Issue . . . .Each

Installation Data:

Length . . . .54 in.
Width . . . . . 29 in.
Height . . . . . 18 in.
Weight . . . . . 295 lbs

Utilities Required:
110 vac, single phase, 60 Hz.

Production Capacity:
50 to 150 cartridges per minute.

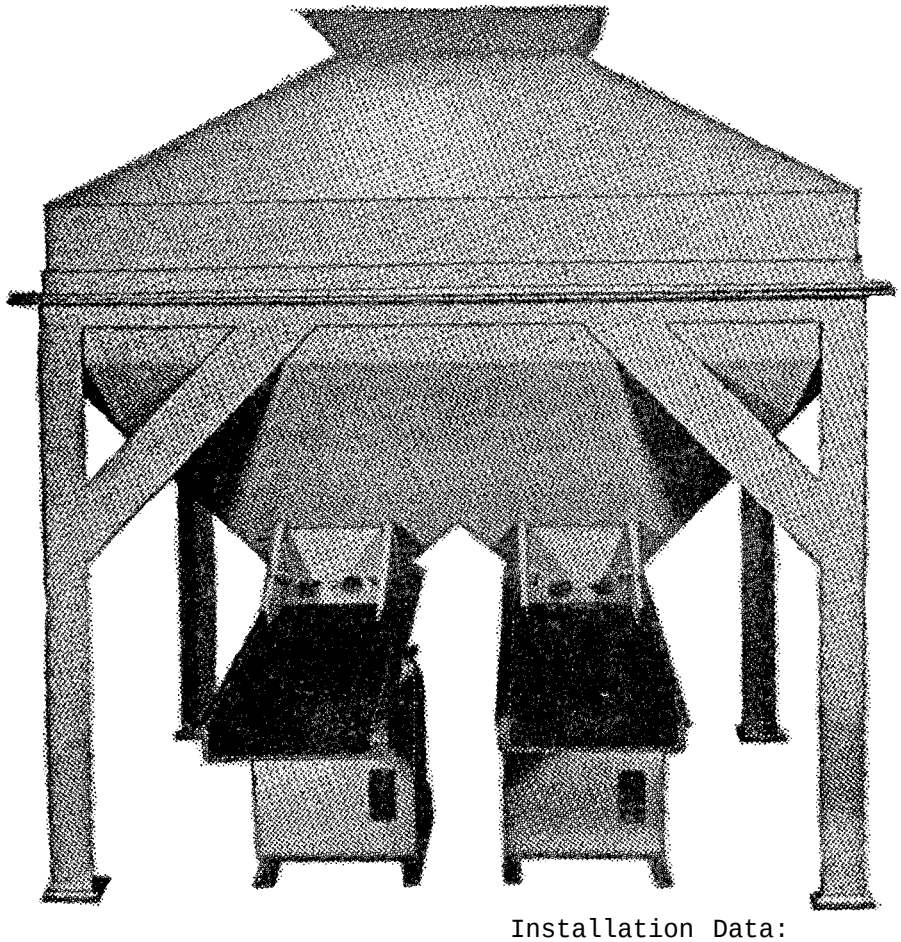
Shipping Data:

Length . . . . . 58 in.
Width . . . . . 31 in.
Height . . . . . 26 in.
Cube . . . . . 27 cu ft
Weight . . . . . 435 lbs

Associated Equipment:
None.

Kits:
None.

APE 2031--HOPPER, FEEDER (DOUBLE)



Use:
The feeder hopper is used as a storage hopper from which small arms ammunition or other material can be fed onto two vibrator feeder trays.

Description:
APE 2031 is made of metal and has two openings at the bottom for feeding small arms ammunition. The cover has a viewing port and an opening for filling the hopper. The hopper is supported on four steel legs.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	20310000
Unit of Issue	Each

Installation Data:

Length	62 in.
Width	53 in.
Height	66 in.
Weight	440 lbs

Utilities Required:
None.

Production Capacity:
Not applicable.

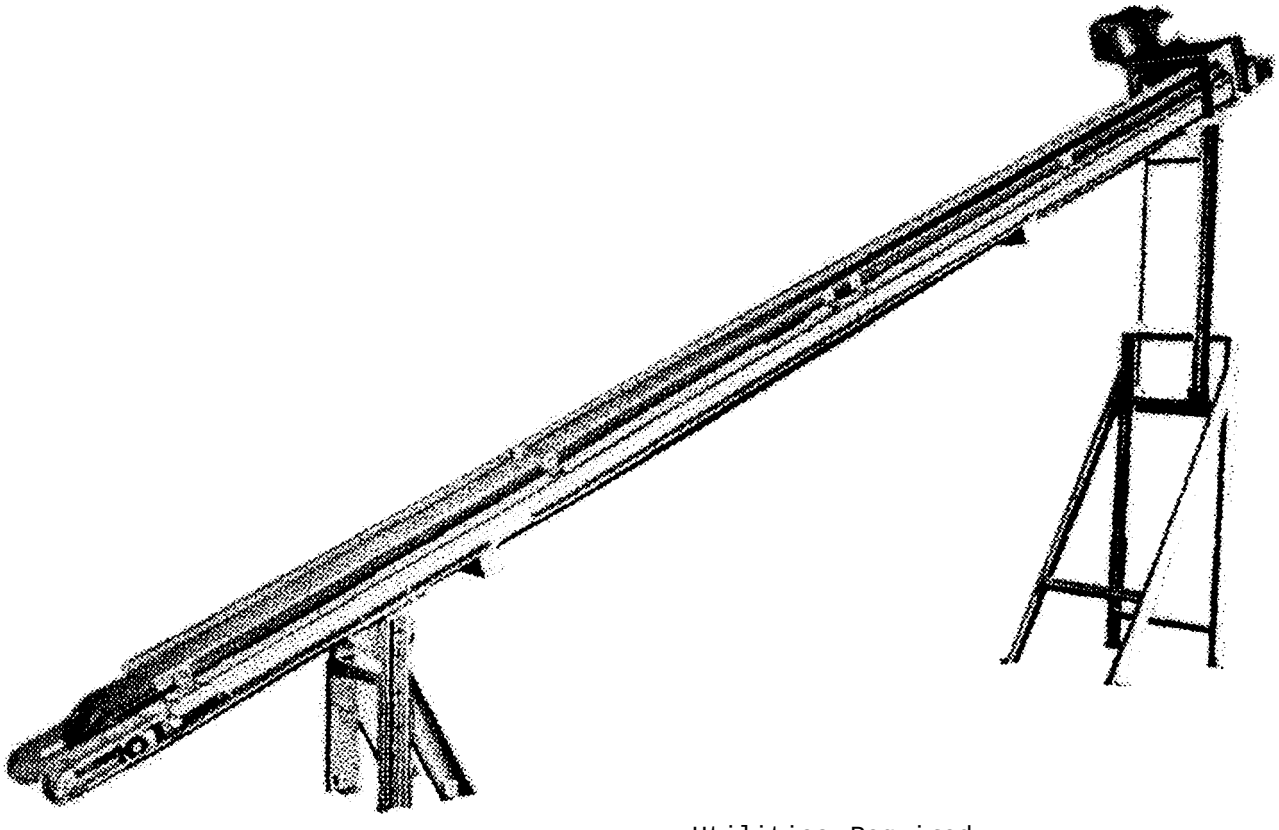
Shipping Data:

Length	66 in.
Width	57 in.
Height	72 in.
Cube	156 cu ft
Weight	640 lbs

Associated Equipment:
APE 2020.

Kits:
None.

APE 2032--CONVEYOR, POWERED BELT



Use:
The powered belt conveyor is used to convey small arms ammunition and other small items short distances.

Description :
APE 2032 consists of two 10-foot frame sections, a drive end, an idler end, 8–inch wide belting, and the supporting legs. The conveyor may be set up for incline or horizontal use.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	20320000
Unit of Issue	Each
Installation Data:	
Length	136 in.
Width	19 in.
Height	33 in. to 103 in.
Weight	1560 lbs

Utilities Required:
208–220/440 vac, 3 phase, 60 Hz.
Production Capacity:
Not applicable.

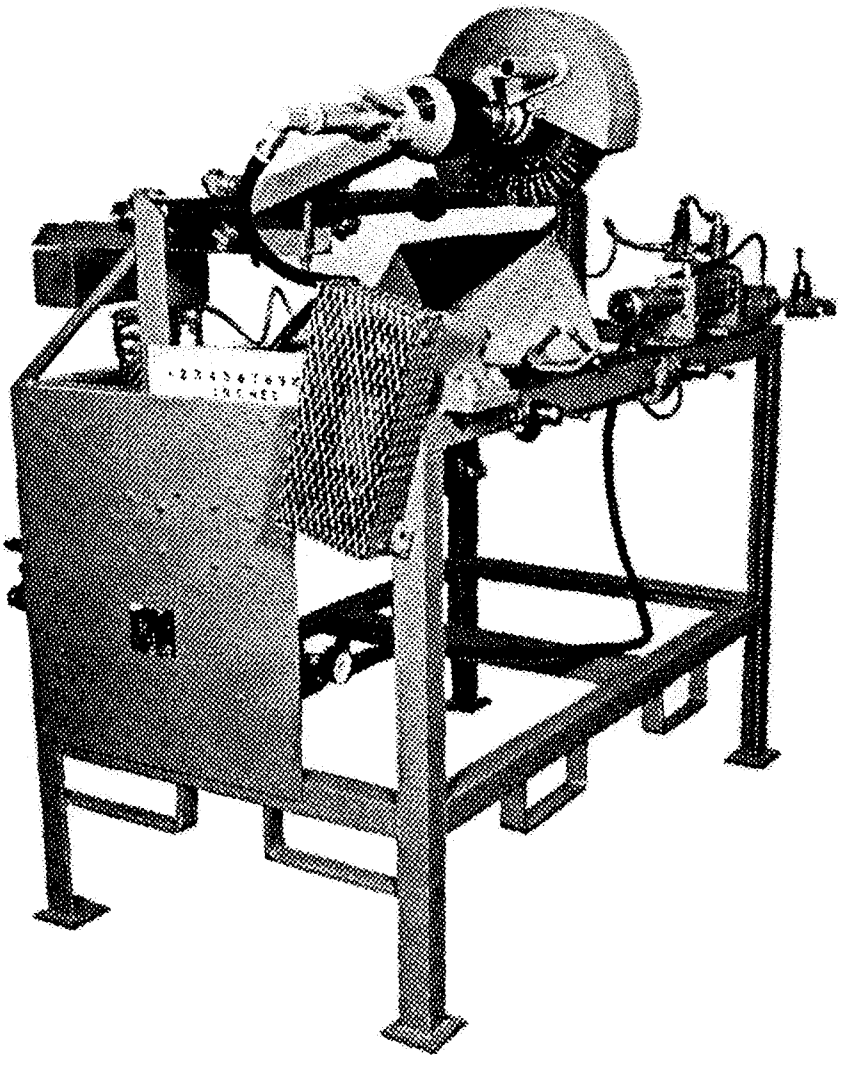
Shipping Data:

PACKAGE 1:	
Length	143 in.
Width	48 in.
Height	38 in.
Cube	151 cu ft
Weight	1635 lbs
PACKAGE 2:	
Length	65 in.
Width	30 in.
Height	37 in.
Cube	41.8 cu ft
Weight	305 lbs

Associated Equipment:
None.

Kits:
None.

APE 2038--DERUST MACHINE



Use:
The derust machine is used to remove rust from mortar projectiles with the fuze and fin assemblies removed. It will accommodate 60MM M49A2; 81MM M43A1, M56A1, M68, and M361; and 4.2-inch, M3A1 projectiles. A dust collector is supplied with the machine.

Description:
APE 2038 consists of a metal frame with adapters to hold the projectiles. An air motor rotates the projectile. An air driven wire brush is balanced over the machine. The dust collector is connected to the machine by a flexible hose.

Difference Between Models:
original design.

Tabulated Data:

APE No.	20380000
Unit of Issue	Each
Installation Data:	
DERUST MACHINE:	
Length	55 in.
Width	47 in.
Height	54 in.
Weight	585 lbs

DUST COLLECTOR:
- Length . . . . . 37 in.
- Width . . . . . 24 in.
- Height . . . . . 37 in.
- Weight . . . . . 196 lbs

Utilities Required:
Air at 100 psi and 60 cfm; 220 vac, 3 phase, 60 Hz.

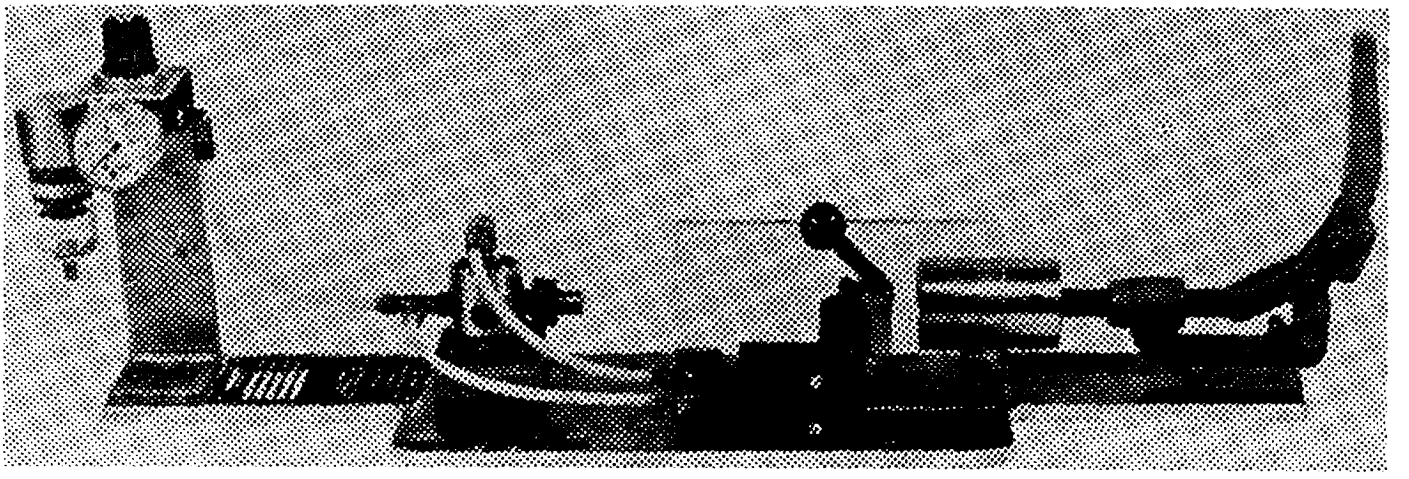
Production Capacity:
Depends on size and condition of projectile.

Shipping Data:
- Length . . . . . 85 in.
- Width . . . . . 57 in.
- Height . . . . . 68 in.
- Cube . . . . . 190.7 cu ft
- Weight . . . . . 1643 lbs

Associated Equipment:
None.

Kits:
None.

APE 2040--FIXTURE, IGNITION CARTRIDGE REMOVAL



Use:
The ignition cartridge removal fixture is used to remove ignition cartridges from M149 and M170 fin assemblies of M374 series HE and M375 series smoke 81MM mortar ammunition.

Description:
APE 2040 consists of a metal base, a filter–regulator, control valves, a flash shield and a toggle clamp.

Difference Between Models:
Original design.

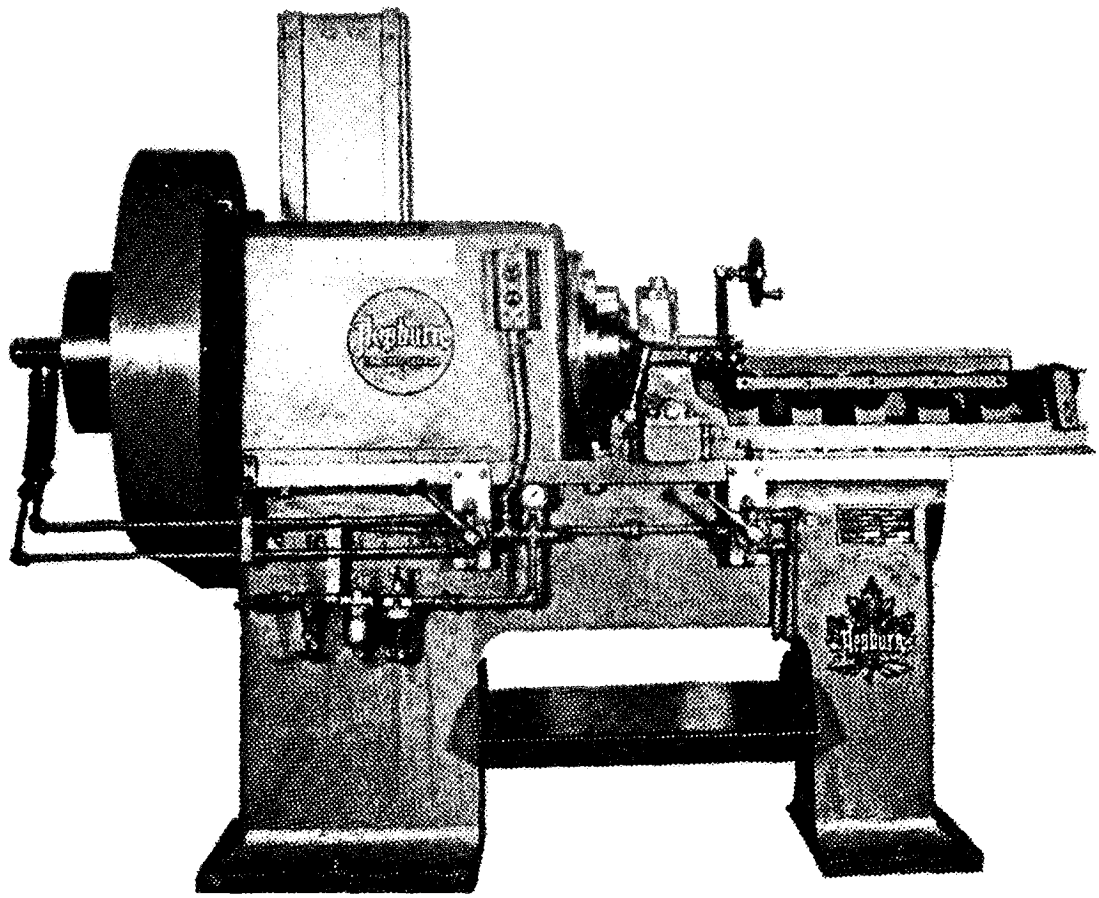
Tabulated Data:
APE No. 20400000
Unit of Issue . . . .Each
Installation Data:
Length . . . .27-1/2 in.
Width . . . . . 5–1/2 in.
Height . . . . . 8-1/2 in.
Weight . . . . . 8 lbs
Utilities Required:
Air at 110 psi.
Production Capacity:
180 cartridges per hour.

Shipping Data:
Length . . . . . 29-1/2 in.
Width . . . . . 7-1/2 in.
Height . . . . . 10-1/2 in.
Cube . . . . . 1.35 cu ft
Weight . . . . . 29 lbs

Associated Equipment:
None.

Kits:
None.

APE 2041--EQUIPMENT, BAND TURNING



Use:
The tooling and handling equipment is used to turn down the rotating band of the 155MM M101 projectile changing it to the M107B2 projectile.

Description:
APE 2041 consists of a modified floor mounted engine lathe with a special cutting tool.

Difference Between Models:
Original design.

Tabulated Data:
APE NO. 20410000
Unit of Issue . . . .Each
Installation Data:
Length . . . .104 in.
Width . . . .58 in.
Height . . . .80 in.
Weight . . . .5240 lbs

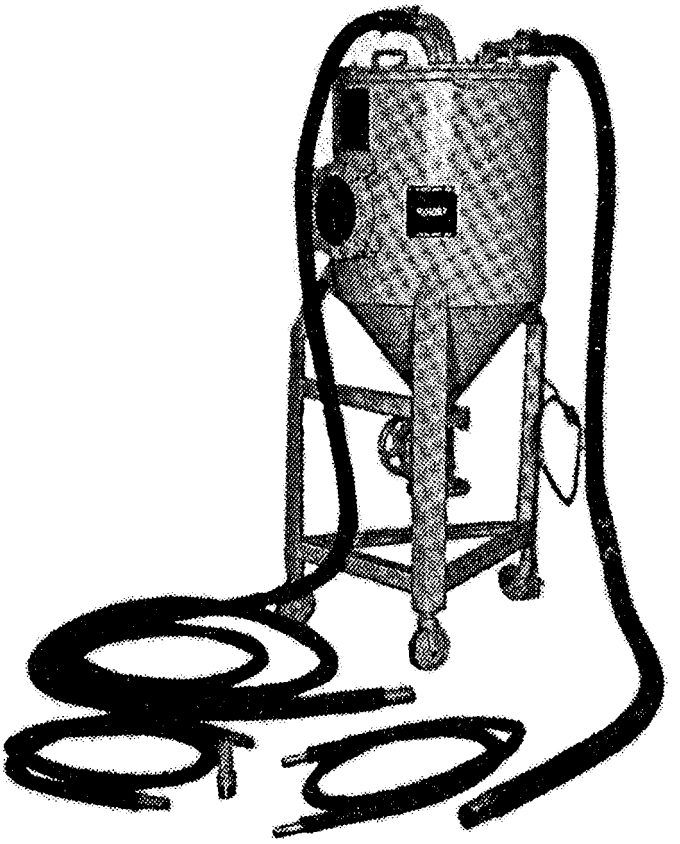
Utilities Required:
220/440 vac, 3 phase, 60 Hz, 25/13 amps; air at 80 psi and 7.5 cfm.
Production Capacity:
Not available.

Shipping Data:
Length . . . . . 100 in.
Width . . . . . 70 in.
Height . . . . . 72 in.
Cube . . . . . 292 cu ft
Weight . . . . . 6145 lbs

Associated Equipment:
None.

Kits:
2041E001 KIT, Positioning Tool
2041E002 KIT, Width Tool
2041E003 KIT, Sharpening Jig

APE 2042--SEPARATOR, EXPLOSIVES, LIQUID TYPE, PORTABLE



Use:
The explosives separator is used to receive military type explosive dusts, mix the dust with water, and hold the mixture as a sludge until it is drained from the separator through a valve.

Description:
The upper portion of the APE 2042 body is cylindrical in shape and has an inspection port for viewing the inside of the body. The lower portion is conical in shape and has an explosive sludge drain valve connetted to the bottom end of the cone. APE 2042 is mounted on wheels and is equipped with hoses to connect it to a vacuum source.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	20420000
Unit of Issue	Each

Installation Data:

Length	28 in.
Width	28 in.
Height	62 in.
Weight	330 lbs

Utilities Required:
Vacuum source.

Production Capacity:
Not applicable.

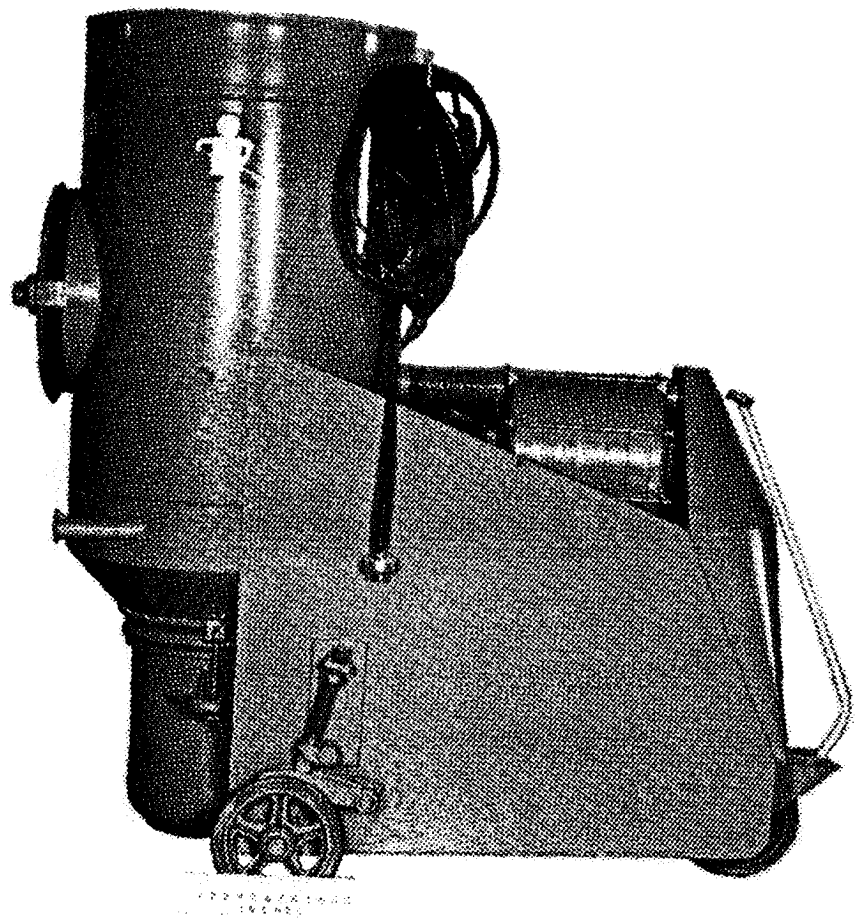
Shipping Data:

Length	42 in.
Width	41 in.
Height	74 in.
Cube	73.7 cu ft
Weight	685 lbs

Associated Equipment:
APE 2043.

Kits:
None.

APE 2043--VACUUM CLEANER (ELECTRIC PORTABLE)



Use:
The vacuum cleaner is used with military ammunition oriented equipment for the pick-up of explosive dusts and explosive material.

Description:
APE 2043 is a modified commercial type with enclosed filter. It cleans by suction only and is powered by a 5–horsepower motor. The unit is mounted on a three wheel cart.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	20430000
Unit of Issue	Each

Installation Data:

Length	66 in.
Width	24 in.
Height	68 in.
Weight	510 lbs

Utilities Required:
220 vac, 3 phase, 60 Hz.

Production Capacity:
Not applicable.

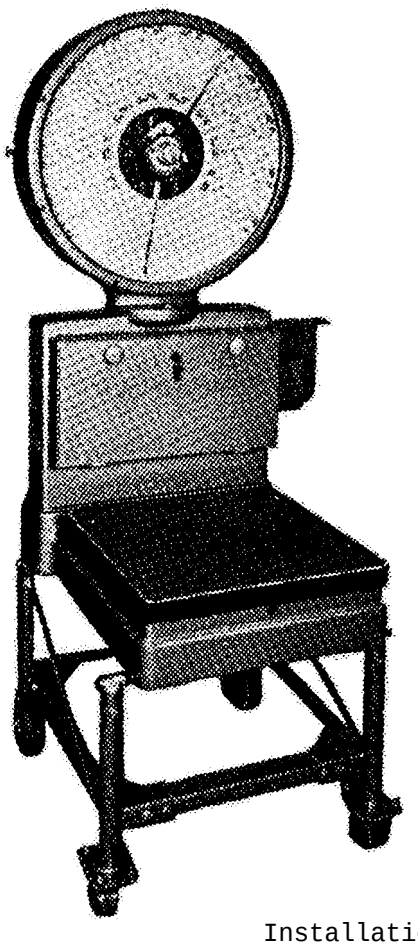
Shipping Data:

Length	77 in.
Width	43 in.
Height	75 in.
Cube	143.7 cu ft
Weight	1099 lbs

Associated Equipment:
APE 2042.

Kits:
None.

APE 2044M1--SCALE, ZONE WEIGHING, 75MM THRU 120MM



Use:
The zone weighing scale is used to zone weigh artillery projectiles ranging in size from 75MM through 120MM.

Description:
APE 2044M1 is a bench model of the automatic indicating, portable platform, pendulum type. A metal stand is provided with each scale.

Difference Between Models:
The APE 2044M1 dial face was changed to include a greater variety of projectile types. Double indicator replaced with single indicator.

Tabulated Data:

APE No.	20440000M1
Unit of Issue	Each

Installation Data:

Length	31 in.
Width	25 in.
Height	51 in.
Weight	535 lbs

Utilities Required:
None.

Production Capacity:
Not applicable.

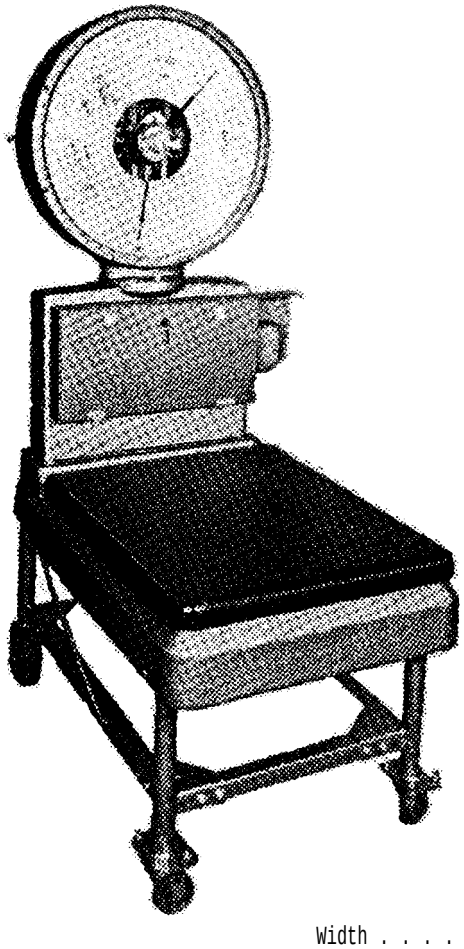
Shipping Data:

Length	49 in.
Width	32 in.
Height	66 in.
Cube	60 cu ft
Weight	600 lbs

Associated Equipment:
APE 2094.

Kits:
None.

APE 2045M1--SCALE, ZONE WEIGHING, 155MM THRU 8 INCH



Use:
The zone weighing scale is used to zone weigh artillery projectiles ranging in size from 155MM through 8 inch.

Description:
APE 2045M1 is a bench model of the automatic indicating, portable platform, pendulum type. A metal stand is provided with each scale.

Difference Between Models:
The APE 2045M1 had projectile size range changed from 155MM thru 240MM to 155MM thru 8 inch.

Tabulated Data:

APE No. 20450000M1
Unit of Issue . . . .Each

Installation Data:

Length . . . .40 in.
Width . . . . . 25 in.
Height . . . . . 51 in.
Weight. . . . . 909 lbs

Utilities Required:
None.

Production Capacity:
Not applicable.

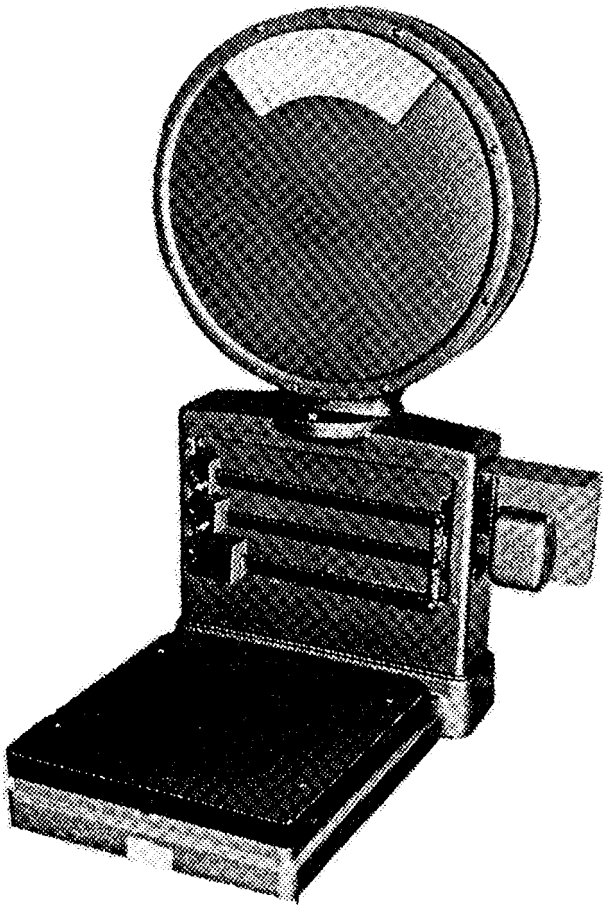
Shipping Data:

Length . . . . . 58 in.
Width . . . . . 41 in.
Height . . . . . 63 in.
Cube . . . . . 86.7 cu ft
Weight . . . . . 1037 lbs

Associated Equipment:
APE 2094.

Kits:
None.

APE 2046--SCALE, OVER–UNDER, DIAL INDICATING



Use:
The scale is used to weigh military explosive loaded items and/or equipment. The scale weighs in 0.01–pound increments.

Description:
APE 2046 is bench type and is set up to show the exact weight at the center of the dial. If the pointer is to the left of center, the weight is under the desired amount; if it is to the right of center, the weight is greater than the desired amount.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	20460000
Unit of Issue	Each

Installation Data:

Length	41 in.
Width	35 in.
Height	60 in.
Weight	400 lbs

Utilities Required:
None.

Production Capacity:
Not applicable.

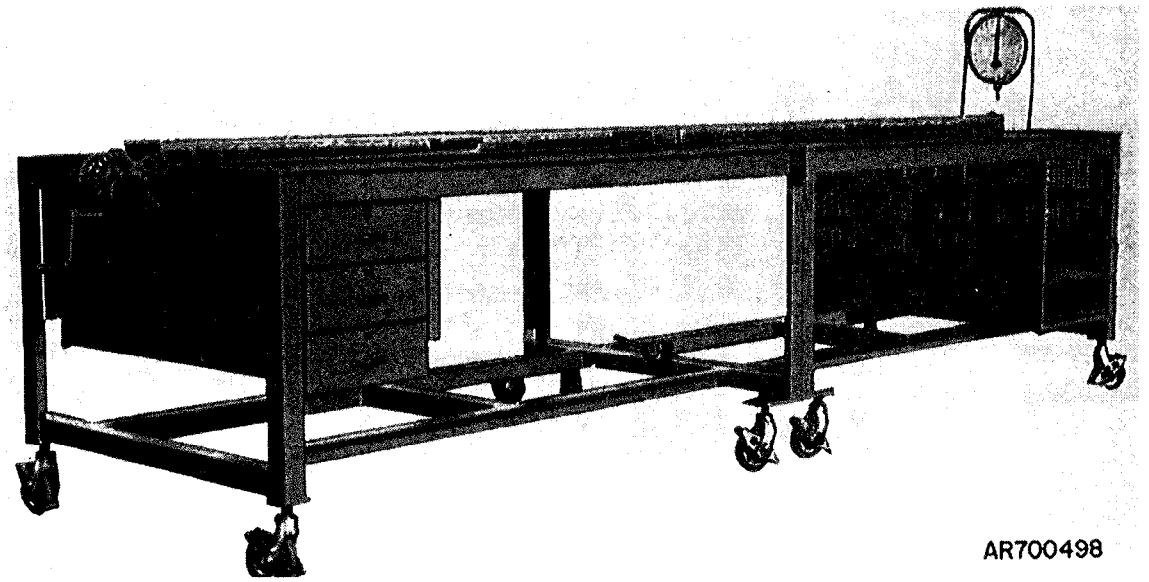
Shipping Data:

Length	Not available
Width	Not available
Height	Not available
Cube	50 cu ft
Weight	732 lbs

Associated Equipment:
None.

Kits:
None.

APE 2050M1–TABLE, SURVEILLANCE WORK



Use:
The surveillance work table is used to perform surveillance tests of small arms ammunition. It provides work area for gaging operations and equipment for drop weight tests and spring tension tests on metallic link belts.

Description:
APE 2050M1 consists of two mating sections. The two sections when joined mske a table 4 feet wide and 13-1/2 feet long. The table is equipped with a winch assembly and a scale assembly. A hinged plastic guard extends the full length of the table. The table is mounted on eight locking casters.

Difference Between Models:
APE 2050M1 has wider guard assemblies, narrower plywood boards and narrower storage area for the plywood boards. Use of 2050E001 kit requires APE 2050 configuration or upgrade to APE 2050M1 configuration.

Tabulated Data:

APE No	20500000M1
Unit of Issue	Each

Installation Data:

Length	14-1/2 ft
Width	4 ft
Height	5 ft
Weight	1260 lbs

Utilities Required:
None.

Production Capacity:
Not applicable.

Shipping Data:

SECTION I:

Length	93 in.
Width	53 in.
Height	41 in.
Cube	117 cu ft
Weight	1064 lbs

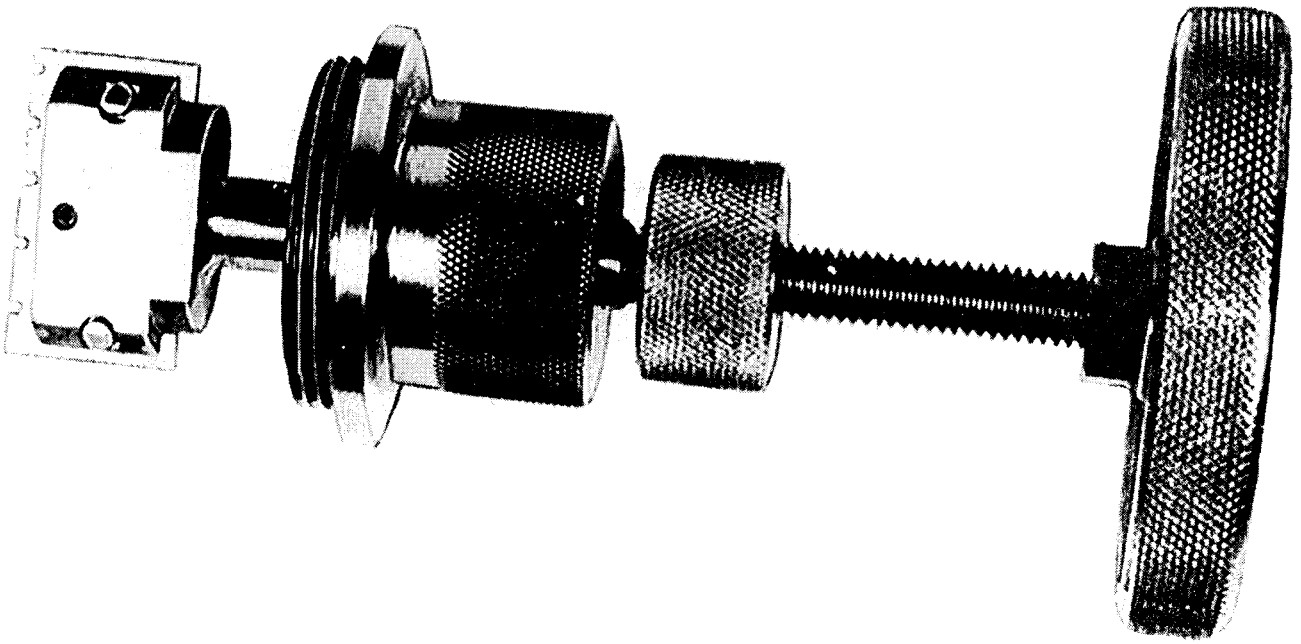
SECTION II:

Length	93 in.
Width	53 in.
Height	41 in.
Cube	117 cu ft
Weight	998 lbs

Associated Equipment:
None.

Kits:
2050E001 KIT, 20MM Inspection
2050E002 KIT, 25MM Inspection

APE 2052--TOOL CAVITY RESIZING



Use:
The cavity resizing tool is used to ream the fuze cavity of projectile/cartridge with 2 inch dia. threads for assembly of fuzewell liner. The tool is hand operated

Description:
The tool consists of a handwheel, an adapter comparable to a nose plug, a fly cutter blade for the reaming process, and an adjustable stop nut to control the depth of cut. The handwheel, stop nut, and adapter are knurled for ease in handling.

Difference Between Models:
Original design.

Tabulated Data:
- APE No 20520000
- Unit of issue: . . . . . .Each

Installation Data
- Length: . . . . . 3-1/2 in.
- Width: . . . . . 3-1/2 in.
- Height: . . . .7-1/8 in.
- Weight: . . . . . 3.5 lbs.

Utilities Required:
None

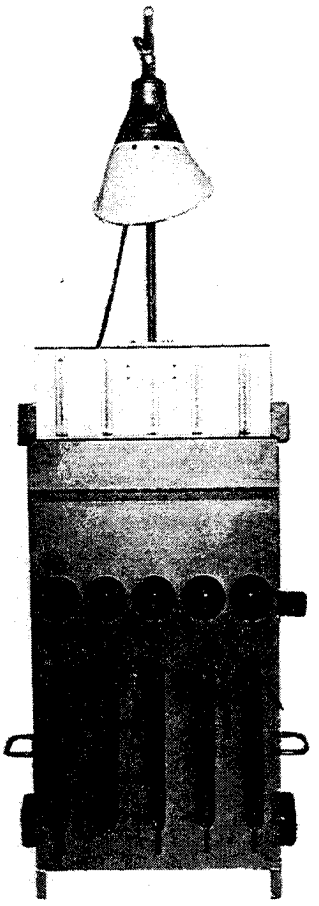
Production Capacity:
Varies with operator and condition of cartridge being processed.

Shipping Data
- Length . . . . . 5 in.
- Width: . . . . . 5 in.
- Height: . . . . . 9 in.
- Cube: . . . . . 0.13 cu. ft.
- Weight: . . . . . 4 lbs.

Associated Equipment:
None

Kits:
None

APE 2053M3–DEVICE, AIR SAMPLING



Use:
The air sampling device is used to test for leaks in toxic chemical filled munitions. It contains a vacuum pump which draws samples of air from within the munitions through detection devices as specified in "Ammunition Surveillance Procedures". If the device is to be used to sample VX filled artillery projectiles for leaks, it will be necessary to order the 2053E001 kit. Each kit consists of five detector ticket adapters.

Description:
APE 2053M3 consists of a metal cabinet with a vacuum pump mounted inside the cabinet. The pump draws samples through five separate rubber tubes. A work area is provided for sample tubes on the top of the cabinet. The cabinet is mounted on wheels for portability.

Difference Between Models:
APE 2053 was only able to draw samples through one tube and was not mounted on wheels. APE 2053M1 differs from APE 2053 in that it has five sampling tubes and mounts for battery pack for miners lamps. APE 2053M2 differs from APE 2053M1 in that it has an explosion proof incandescent light replacing the dc battery pack and miners lamps. APE 2053M3 differs from APE 2053M2 in that packaging of the M11 canister was changed to a hermetically sealed can without the cap and plug which was used to assure a tight seal when modified for use on the APE 2053M2. The APE 2053M3 incorporates the use of plastic canister caps, O-rings, gaskets, and a new mounting plate to seal the M11 canister.

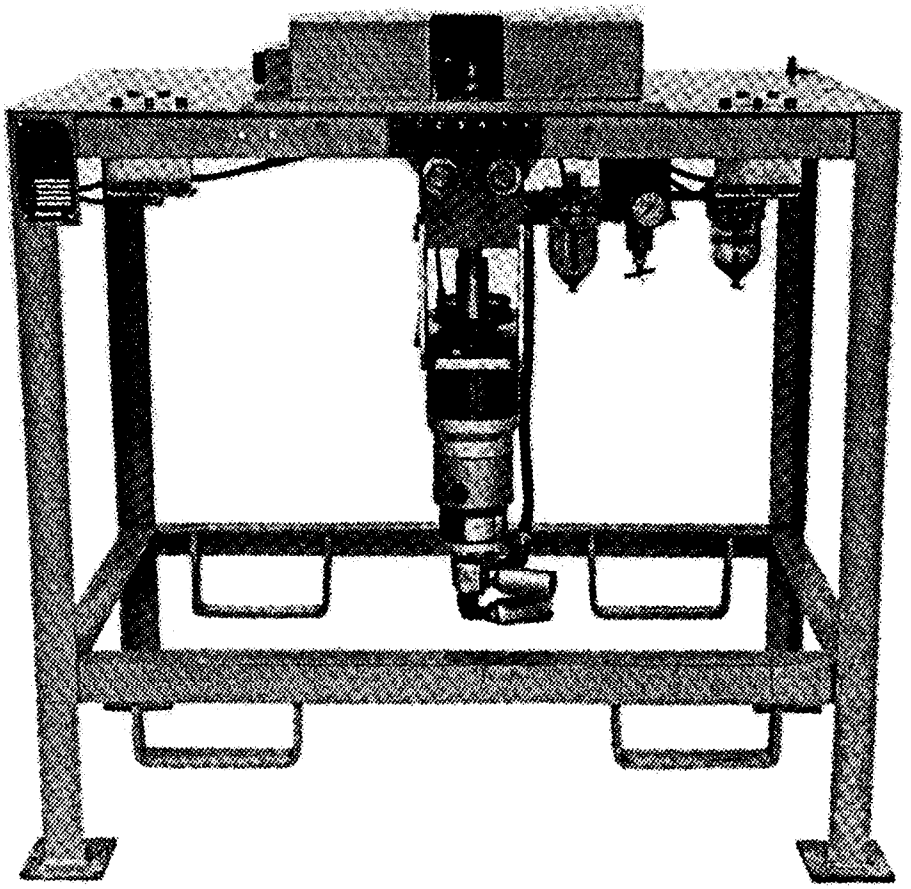
Tabulated Data:
APE No. 20530000M2
Unit of Issue . . . .Each
Installation Data:
Length . . . .32 in.
Width . . . .31-1/2 in.
Height . . . .67 in.
Weight . . . .190 lbs
Utilities Required:
120 vac, single phase, 60 Hz, 6.8 amp.
Production Capacity:
Not applicable.

Shipping Data:
Length . . . . . 64 in.
Width . . . . . 34 in.
Height . . . . . 29 in.
Cube . . . . . 37 cu ft
Weight. . . . . 410 lbs

Associated Equipment:
None.

Kits:
2053E001 Holder, Detector Ticket

APE 2055--MACHINE, OBLITERATING



Use:
The obliterating machine is used for obliterating stamped markings from the body of nose type fuzes.

Description:
APE 2055 consists of a metal table with an air motor mounted below the table. An obliterating disk is mounted on each side of the fuze holder. The air motor turns the disks and fuze holder to obliterate the markings.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	20550000
Unit of Issue	Each

Installation Data:

Length	40-1/2 in.
Width	24-1/2 in.
Height	41 in.
Weight	380 lbs

Utilities Required:
Air at 90 psi and 40 cfm.

Production Capacity:
Not available.

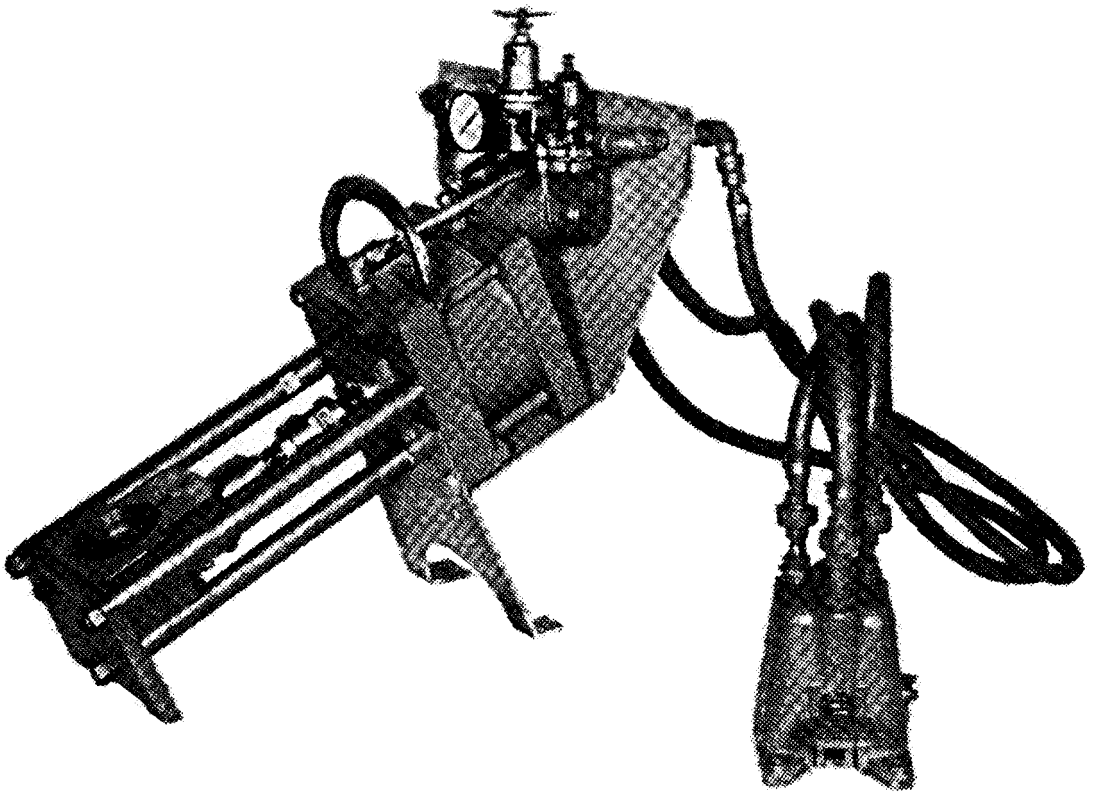
Shipping Data:

Length	48 in.
Width	32 in.
Height	51 in.
Cube	45.3 cu ft
Weight	680 lbs

Associated Equipment:
None.

Kits:
None.

APE 2057--MACHINE, PNEUMATIC STAKING



Use:
The pneumatic staking machine is used to stake a booster to the body of nose type fuzes.

Description:
APE 2057 consists of an 8–inch air cylinder with a punch assembly attached, a fuze holding block, a foot operated air valve, and a filter regulator lubricator.

Difference Between Models:
Original design.

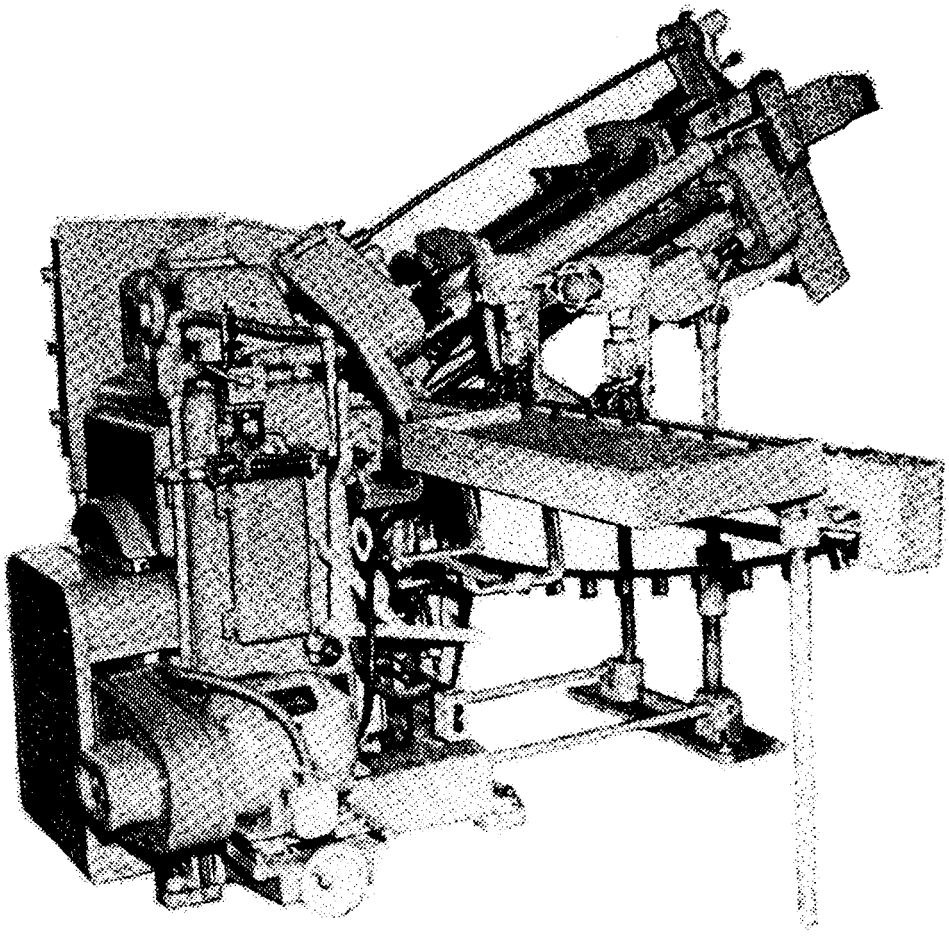
Tabulated Data:
APE No. 20570000
Unit of Issue . . . .Each
Installation Data:
Length . . . .36 in.
Width . . . .18 in.
Height . . . . . 27 in.
Weight . . . . . 220 lbs
Utilities Required:
Air at 80 psi and 4 cfm.
Production Capacity:
Depends on operator skill.

Shipping Data:
Length . . . . . 40 in.
Width . . . . . 21 in.
Height . . . . . 31 in.
Cube . . . . . 15.1 cu ft
Weight . . . . . 318 lbs

Associated Equipment:
None.

Kits:
None.

APE 2058--CLIP LOADING MACHINE, EIGHT ROUND, CALIBER .30



Use:
The clip loading machine is used to insert eight caliber .30 cartridges into eight round clips by power operation.

Description:
APE 2058 consists of a cast metal frame, a cartridge aliner, a clip feed mechanism, a clipping mechanism, and a drive mechanism.

Difference Between Models:
original design.

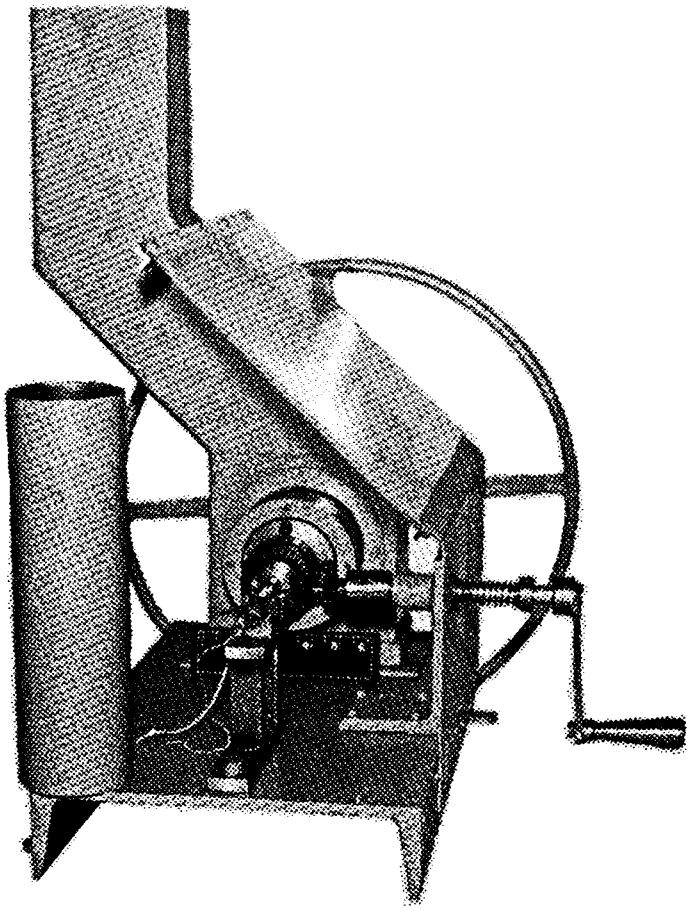
Tabulated Data:
APE No. 20580000
Unit of Issue . . . .Each
Installation Data:
Length . . . .97 in.
Width . . . .84 in.
Height . . . . . 66 in.
Weight . . . . . Not available
Utilities Required:
220/440 vac, 3 phase, 60 Hz.
Production Capacity:
85 clips per minute.

Shipping Data:
Length . . . . . 85 in.
Width . . . . . 59 in.
Height . . . . . 76 in.
Cube . . . . . 220.5 cu ft
Weight . . . . . 2902 lbs

Associated Equipment:
None.

Kits:
None.

APE 2061--ASSEMBLY AND DISASSEMBLY MACHINE, M605 MINE FUZE



Use:
The M605 mine fuze assembly and disassembly machine is used to assemble and torque and to disassemble the loading assembly from the head assembly of M605 mine fuzes. It is hand operated.

Description:
APE 2061 has a metal frame with an exhaust stack and a shield mounted on it. A handwheel supplies power for assembly and disassembly. Holding fixtures for the fuze are provided.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	20610000
Unit of Issue	Each

Installation Data:

Length	28 in.
Width	23 in.
Height	29 in.
Weight	116 lbs

Utilities Required:
None.

Production Capacity:
Depends on condition of fuzes.

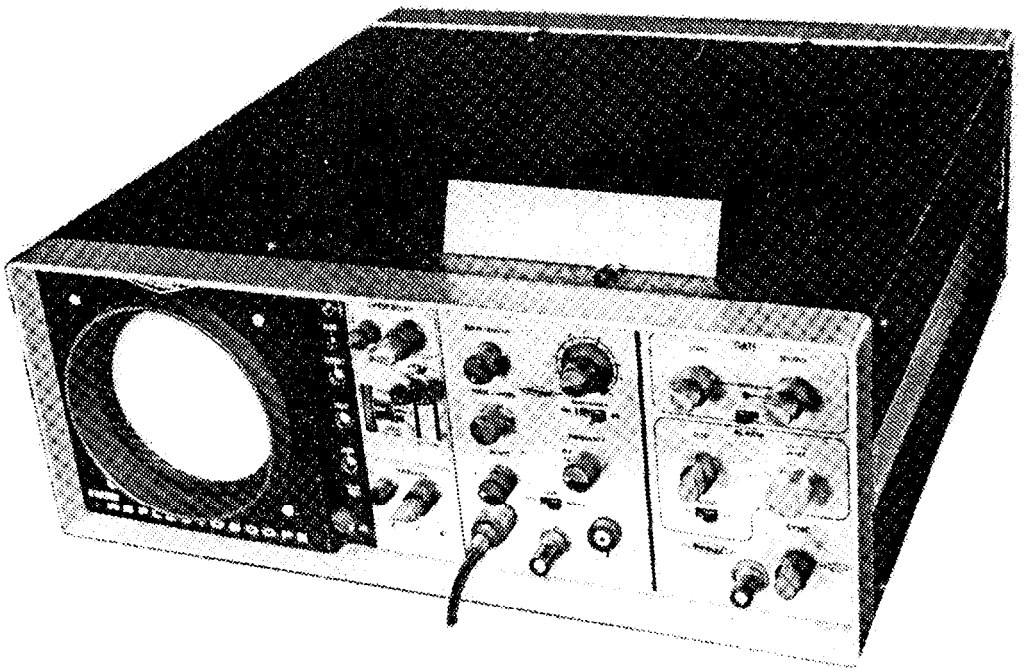
Shipping Data:

Length	30 in.
Width	20 in.
Height	26 in.
Cube	9 cu ft
Weight	175 lbs

Associated Equipment:
None.

Kits:
None.

APE 2062--TEST SET, ULTRASONIC



Use:
The ultrasonic test set is used for rapid and simple nondestructive testing of materials by contact or immersion testing through the use of interchangeable plug-in search units.

Description:
APE 2062 is a single channel test instrument with a buzzer and a flashing light signal to indicate flaws in the items being tested.

Difference Between Models:
Original design.

Tabulated Data:
APE No. 20620000
Unit of Issue . . . .Each
Installation Data:
Length . . . .20 in.
Width . . . .20 in.
Height . . . . . 7 in.
Weight . . . . . 45 lbs
Utilities Required:
115 ±10 vac, single phase, 50/60 Hz, 2 amp.
Production Capacity:
Not applicable.

Shipping Data:
Length . . . . . 29 in.
Width . . . . . 26 in.
Height . . . . . 13 in.
Cube . . . . . 6 cu ft
Weight . . . . . 66 lbs

Associated Equipment:
None.

Kits:
2062E001 KIT, 66MM: M72 LAW Fuze Closure
2062E002 KIT, Hollow Core Eyebolt Lifting Plug

APE 2068M2--MACHINE, X-RAY



Use

The x-ray machine is used to inspect parts, components, and finished assemblies for defects. Items may range from thin walled aluminum and magnesium castings to 4–inch thick steel parts.

Description:

APE 2068M2 consists of a cylindrical x–ray head, a control panel, and connecting cables. These items are stored in two trunks.

Difference Between Models:

The APE 2068M1 has been modified to operate with a safety interlock system. The APE 2068M2 is procured with the interlock system built into the machine, not added on.

Tabulated Data:

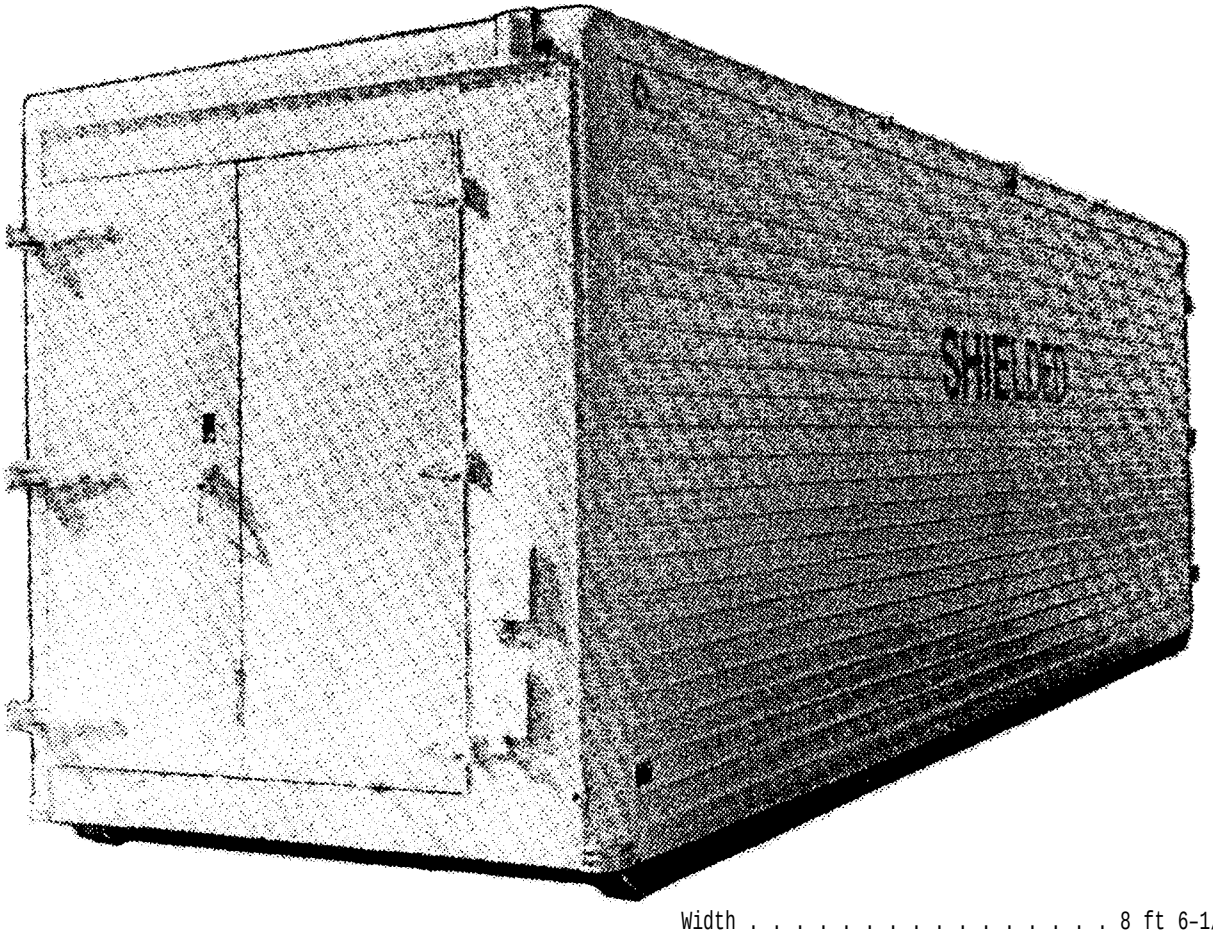
APE No.	20680000M2
Unit of Issue	Each
Installation Data:	
X–RAY HEAD TRUNK:	
Length	50 in.
Width	20 in.
Height	21 in.
Weight	238 lbs
CONTROL PANEL TRUNK:	
Length	32 in.
Width	16 in.
Height	14 in.
Weight	95 lbs
Utilities Required:	
115 vac, single phase, 60 Hz.	
Production Capacity:	
Not applicable.	

Shipping Data:
  X-RAY HEAD TRUNK:
    Length . . . . . 50 in.
    Width . . . . . 30 in.
    Height . . . . . 21 in.
    Cube . . . . . 15 cu ft
    Weight . . . . . 238 lbs
  CONTROL PANEL TRUNK:
    Length . . . . . 32 in.
    Width . . . . . 16 in.
    Height . . . . . 14 in.
    Cube . . . . . 5 cu ft
    Weight . . . . . 95 lbs

Associated Equipment:
  APE 1288 and 2074.

Kits:
  None.

APE 2074--FACILITY, RADIOGRAPHIC INSPECTION



Use:
The radiographic inspection facility is used to provide a portable facility for radiographic inspection of ammunition items.

Description:
APE 2074 consists of a skid mounted shelter, containing an x-ray head, x-ray controls, and photo developing and printing equipment.

Difference Between Models:
Original design.

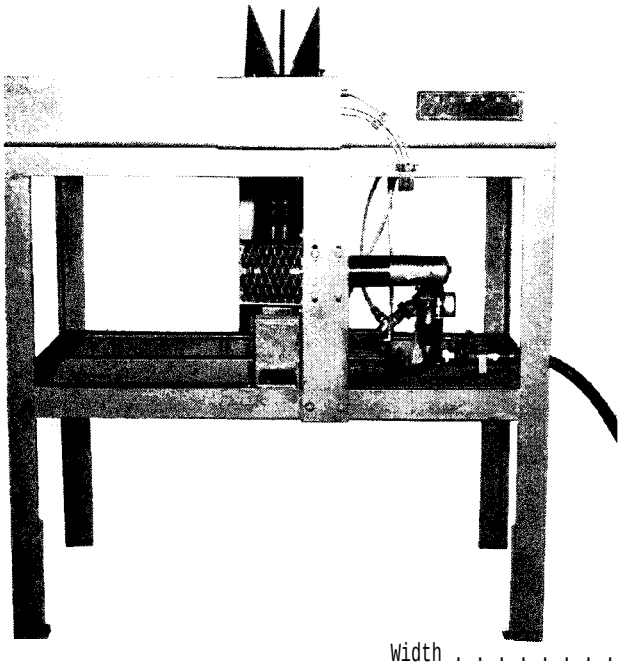
Tabulated Data:
APE No. 20740000
Unit of Issue . . . .Each
Installation Data:
Length . . . .26 ft 1 in.
Width . . . . . 8 ft 6-1/2 in.
Height . . . . . 8 ft 11 in.
Weight . . . . . 18000 lbs
Utilities Required:
120/208 vac, 3 phase, 60 Hz or 45 kw generator.
Production Capacity:
Not applicable.

Shipping Data:
Length . . . . . 26 ft 1 in.
Width . . . . . 8 ft 6-1/2 in.
Height . . . . . 8 ft 11 in.
Cube . . . . . 1989 cu ft
Weight . . . . . 18000 lbs

Associated Equipment:
APE 1288, 2068M2.

Kits:
None.

APE 2077-DECLIPPER, 10 ROUND, 5.56MM; FIVE ROUND, 7.62MM; AND FIVE ROUND, CALIBER .30



Use:
The declipper is used to remove 5.56MM cartridges from 10 round clips and 7.62MM and caliber .30 cartridges from five round clips by power operation.

Description:
APE 2077 consists of a metal frame with a feed table mounted on top of the frame, and a clip feed chute mounted below the table in the center of the frame. An air motor is mounted over the clip feed chute. A roller mounted on the air motor removes the clips from the cartridges.

Difference Between Models:
Original design.

Tabulated Data:
APE No 20770000
Unit of Issue . . . . . Each
Installation Data:
Length . . . . . 36 in.
Width . . . . . 30 in.
Height . . . . . 46 in.
Weight . . . . . 290 lbs
Utilities Required:
Air at 90 psi.
Production Capacity:
Dependent on operator skill and condition of cartridges and clips.

Shipping Data:
Length . . . . . 42 in.
Width . . . . . 35 in.
Height . . . . . 51 in.
Cube . . . . . 43 cu ft
Weight . . . . . 414 lbs

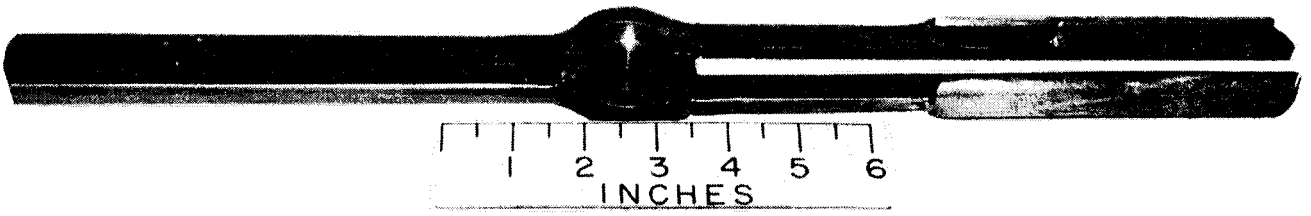
Associated Equipment:
APE 2021M1, 2031, 2032.

Kits:

2077E001 KIT, Center Guide, 5.56MM

2077E002 KIT, Center Guide, 7.62MM and Caliber .30

APE 2081--WRENCH, NOSE CAP REMOVAL, 90MM: M371



Use:
The nose cap removal wrench is used to remove the cap from the spike of the 90MM: m371 HEAT cartridge by hand operation. The wrench allows for application of minimum pressure for gripping the nose cap for the removal operation.

Description:
The wrench is constructed of steel and one handle is forked. The nose cap cup and 1 inch of the solid handle have a 1/16-inch slot centrally located. This spacing and the slotted cup allow application of minimum pressure for gripping the nose cap.

Difference Between Models:
Original design.

Tabulated Data:
- APE No 20810000
- Unit of Issue: . . . . . Each

Installation Data:
- Length . . . . . 20 in.
- Width . . . . . .2 in.
- Height . . . . . 1 in.
- Weight . . . . . 1.5 1bs.

Utilities Required:
None

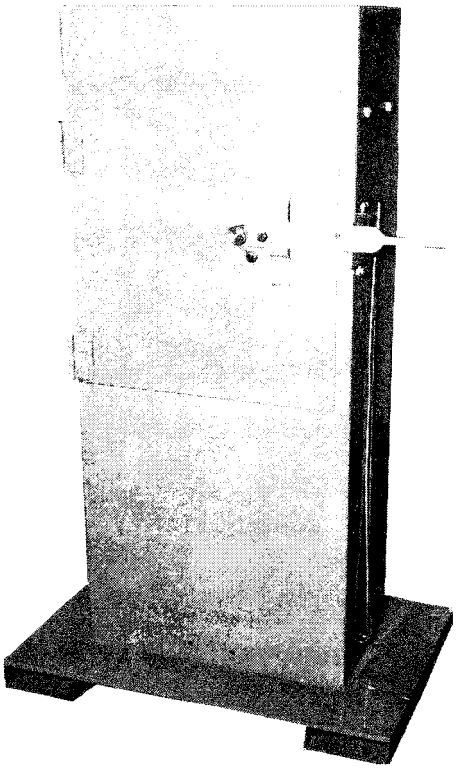
Production Capacity:
Not applicable

Shipping Data:
- Length . . . . . 22 in
- Width . . . . . 3 in.
- Height . . . . . 2 in.
- Cube . . . . . 132 cu. ft.
- Weight . . . . . 3 lbs.

Associated Equipment:
None.

Kits:
None.

APE 2083–FIXTURE, FUZE HEAD REMOVAL, M48A3 FUZE



Use:
The head removal fixture is used to remove and/or assemble the head assembly on the M48A1 series fuzes. The fixture will also accommodate the M51A4 Mod3 fuze.

Description:
APE 2083 consists of an operational shield, a fuze holder, a bose assembly holding assembly, an air motor, and the air controls.

Difference Between Models:
Original design.

Tabulated Data:

APE No	20830000
Unit of Issue	Each

Installation Data:

Length	36 in.
Width	60 in.
Height	24 in.
Weight	250 lbs

Utilities Required:
Air at 100 psi and 100 cfm.

Production Capacity:
240 fuzes per hour.

Shipping Data:

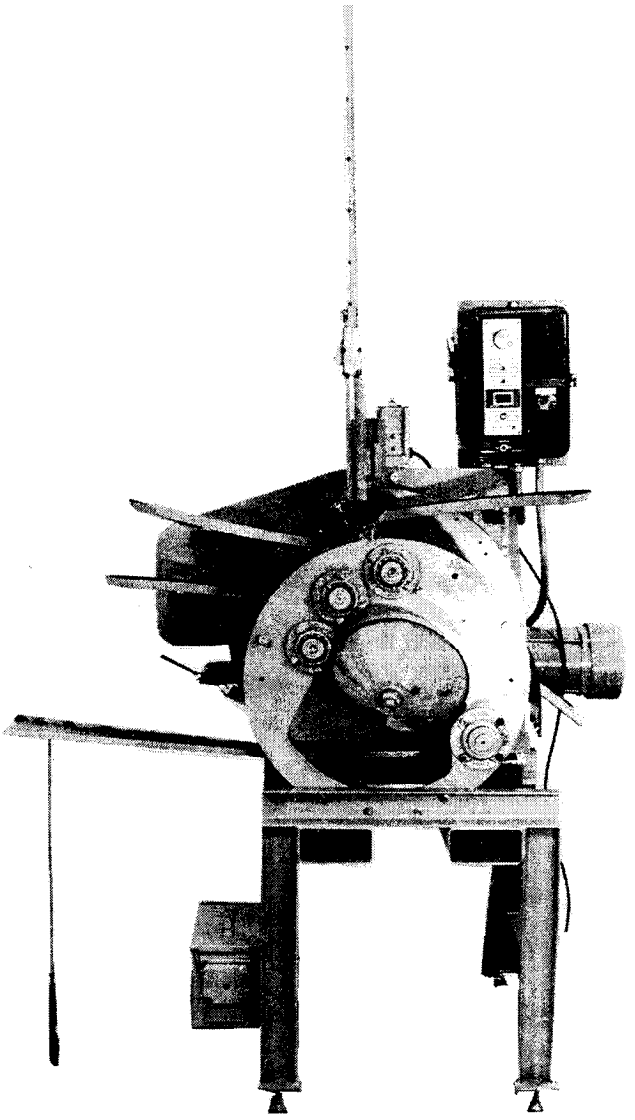
Length	40 in.
Width	66 in.
Height	30 in.
Cube	46 cu ft
Weight	300 lbs

Associated Equipment:
None.

Kits:

None.

APE 2086–LINK-DELINK MACHINE, 5.56MM



Use:
The link-delink machine is designed for use in linking, delinking, or ratio changing 5.56MM cartridges with the M27 link. The machine is capable of handling straight or ratio packed ammunition. Linking or ratio changing will be in a sequence of five cartridges.

Description:
The APE 2086 is a drum type, frame mounted machine, convertible to linking, delinking or ratio changing.

During linking operations, cartridge feed chutes, feed wheel assemblies and the link feed chute simultaneously feed cartridges and links onto the drum grooves to be combined by the cartridge insert and link retainer assembly into one continuous belt. A vibrator is provided to keep cartridges and links moving into the grooves of the rotating drum. The link feed chute is supplied with links by twelve hand filled link magazines which must be removed and replace manually during linking operations.

Delinking operations are performed by means of ejector rods moved by a delink cone which pushes the cartridges from the links as the drum rotates. Links and cartridges are released into separate user supplied retrieval containers.

The ratio change operation is accomplished by a combination of the linking and delinking operations. Cartridges to be changed will be removed by ejector rods and replaced as in the linking procedure.

The machine is electrically operated by a variable speed, direct current motor drive controller.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	20860000
Unit of Issue	Each

Installation Data:

Length	35 in.
Width	55 in.
Height	106 in.
Weight	Not available
Cubic Feet	52.5 cu ft
Floor Space	12 sq ft

Utilities Required:
115 Vac, single phase, 60 Hz, 20 amps.

Production Capacity:
The APE 2086 is a hand feed machine, the production rate given will vary dependent upon the operation being performed and the dexterity of the operators.

Linking	150 to 400 rounds per minute.
Ratio Changing	150 to 800 rounds per minute.
Delinking	150 to 1000 rounds per minute.

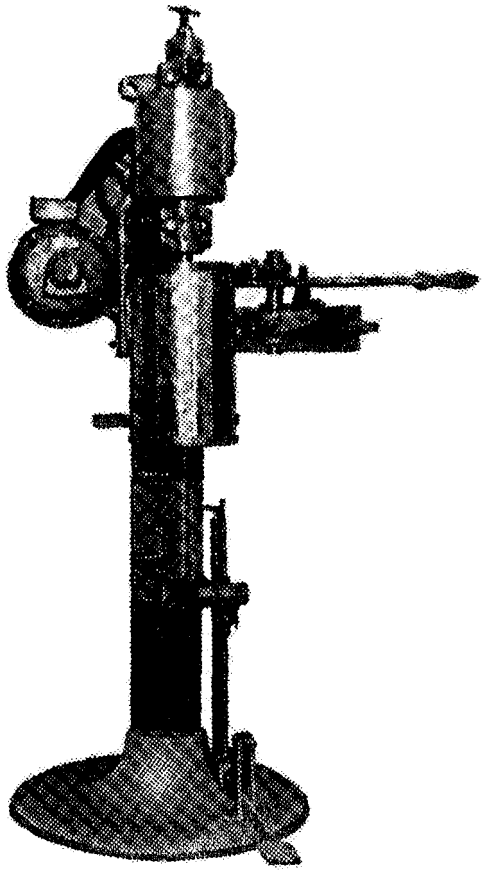
Shipping Data:

Length	Not available
Width	Not available
Height	Not available
Cube	Not available
Weight	Not available

Associated Equipment:
None.

Kits:
None.

APE 2091--MACHINE, CAN SEALING



Use:
The can sealing machine is used to seal cans 3 to 10–1/2 inches in diameter and from 4 to 20 inches in height.

Description:
APE 2091 consists of a sealing head and can support mounted on a steel column. The column is attached to a pedestal. A drive motor is mounted on the side of the column.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	20910000
Unit of Issue	Each

Installation Data:

Length	37 in.
Width	34 in.
Height	58 in.
Weight	500 lbs

Utilities Required:
220/440 vac, 3 phase, 60 Hz.

Production Capacity:
100 to 125 containers per hour.

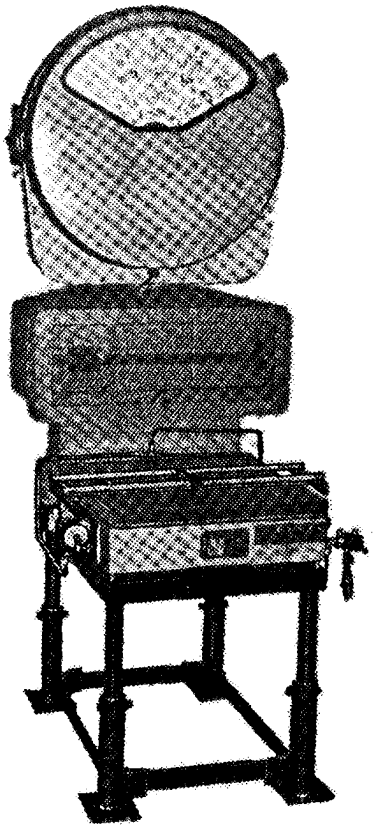
Shipping Data:

Length	48 in.
Width	42 in.
Height	72 in.
Cube	84 cu ft
Weight	740 lbs

Associated Equipment:
None.

Kits:
None.

APE 2094--DEVICE, LOCKING, SCALE PLATFORM



Use:
The scale platform locking device is used to hold the scale platform to reduce shock and protect the divots and other delicate scale parts from damage during the process and rolling projectiles on and off the scale platform.

Description:
APE 2094 consists of two air cylinders, a control assembly, and the stop assemblies. The stop assemblies are mounted on the sides of the scale platform. The air cylinders are mounted on the scale frame and clamp onto the stop assemblies to hold the platform still.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	20940000
Unit of Issue	Each

Installation Data:

Length	25-1/2 in.
Width	23 in.
Height	10 in.
Weight	14 lbs

Utilities Required:
Air at 80 psi and 0.5 cfm.

Production Capacity:
Not applicable.

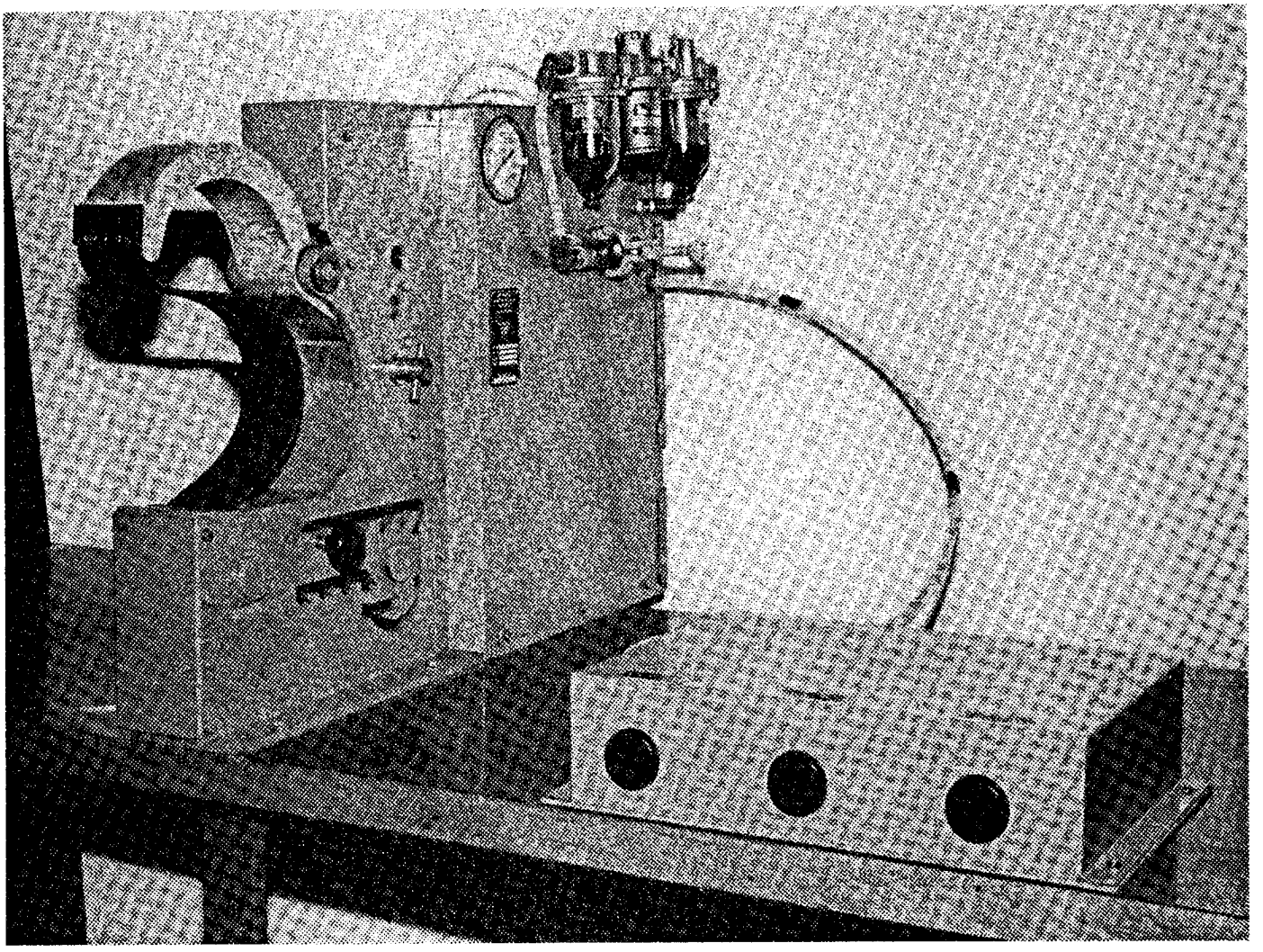
Shipping Data:

Length	15 in.
Width	11 in.
Height	9 in.
Cube	1.0 cu ft
Weight	29 lbs

Associated Equipment:
APE 2044M1, 2045M1, 2089, 2090.

Kits:
None.

APE 2097--DEVICE, PROJECTILE HOLDING



Use:
The projectile holding device is used to hold ammunition items ranging in size from 60MM to 8 inches in diameter. It holds the projectile with a belt that is tightened by an air cylinder.

Description:
APE 2097 consists of the belt holding device, an air system for operation and three 3–way air control valves in a control panel. The device can be installed in a vertical or horizontal position.

Difference Between Models:
Original design.

Tabulated Data:
APE No. 20970000
Unit of Issue . . . . . Each
Installation Data:
DEVICE:
Length . . . . . 39 in.
Width . . . . . 14-1/2 in.
Height . . . . . 29 in.
Weight . . . . . 263 lbs
CONTROL PANEL:
Length . . . . . 20 in.
Width . . . . . 8-1/2 in.
Height . . . . . 4-3/4 in.
Weight . . . . . Not available
Utilities Required:
Air at 90 psi.

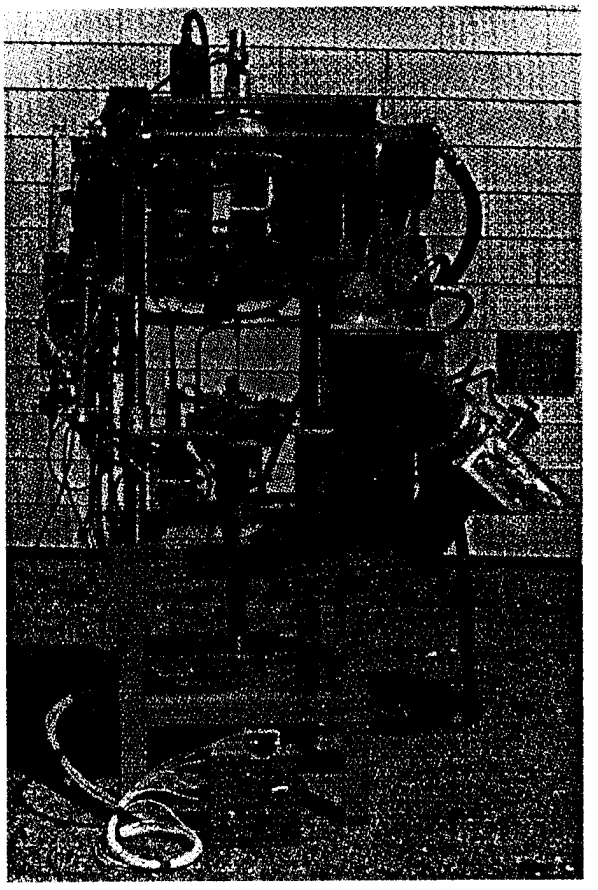
Production Capacity:
Dependent on operating being performed.

Shipping Data:
Length . . . . . Not available
Width . . . . . Not available
Height . . . . . Not available
Cube . . . . . Not available
Weight . . . . . Not available

Associated Equipment:
None.

Kits:
None.

APE 2099--DISASSEMBLY MACHINE, WP 3.5 INCH ROCKET



Use:
The rocket disassembly machine is used to remotely disassemble 3.5 white phosphorus rockets with an automatic or emergency dump chute.

Description:
APE 2099 is a hydraulically powered and pneumatically controlled machine. The machine consists of a frame, an upper disassembly head, lower disassembly head, fuze clamp assembly, detonator clamp assembly and fire sensor, automatic or emergency dump chute, pneumatic logic control system, remote control box and hydraulic power system.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	20990000
Unit of Issue	Each

Installation Data:

Length	41 in.
Width	36 in.
Height	90 in.
Weight	2000 lbs

Utilities Required:
Air at 100 psi; 115 vac.

Production Capacity:
Not available.

Shipping Data:

Length	61 in.
Width	46 in.
Height	102 in.
Weight	165.6 cU ft
Cube	2300 lbs

Associated Equipment:
None.

Kits:
None.

APE 2101--SCALE, OVER-UNDER



Use:
The over-under scale is used to weigh propellant powder and other small items weighing up to 4 ounces.

Description:
APE 2101 is a bench style with a commodity platter. It has a moving pointer to indicate if the item being weighed is overweight or underweight. The pointer is protected by a clear plastic cover.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	21010000
Unit of Issue	Each

Installation Data:

Length	18-1/2 in.
Width	10-3/4 in.
Height	12-3/4 in.
Weight	Not available

Utilities Required:
110 vac, single phase, 60 Hz.

Production Capacity:
Not applicable.

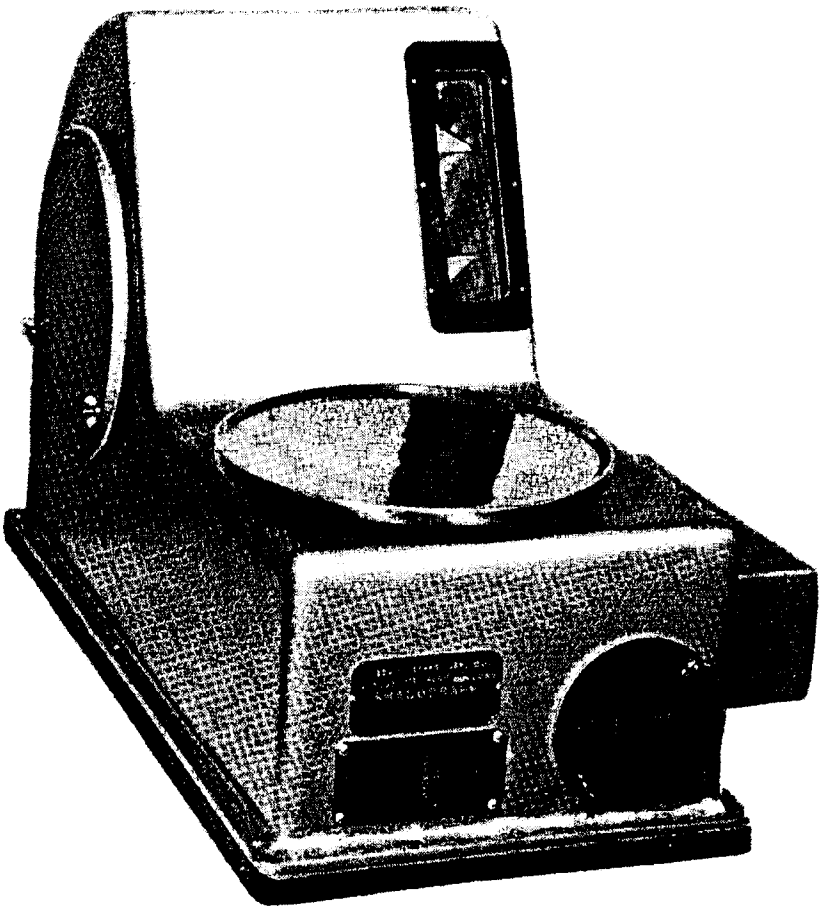
Shipping Data:

Length	Not available
Width	Not available
Height	Not available
Cube	Not available
Weight	Not available

Associated Equipment:
None.

Kits:
None.

APE 2102--SCALE, OVER–UNDER



Use:
The over–under scale is used to weigh propellant powder and other small items weighing up to 1 pound.

Description:
APE 2102 is a bench style with a commodity platter. It has a moving pointer to indicate if the item being weighed is overweight or underweight. The pointer is protected by a clear plastic cover.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	21020000
Unit of Issue	Each
Installation Data:	
Length	18-1/2 in.
Width	10–3/4 in.
Height	12–3/4 in.
Weight	Not available
Utilities Required:	
110 vac, single phase,	60 Hz.
Production Capacity:	
Not applicable.	

Shipping Data:

Length	Not available
Width	Not available
Height	Not available
Cube	Not available
Weight	Not available

Associated Equipment:
None.

Kits:
None.

APE 2103--SCALE, OVER-UNDER



Use:
The over-under scale is used to weigh propellant powder and other small items weighing up to 3 pounds.

Description:
APE 2103 is a bench style with a comodity platter. It has a moving pointer to indicate if the item being weighed is overweight or underweight. The pointer is protected by a clear plastic cover.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	21030000
Unit of Issue	Each

Installation Data:

Length	18-1/2 in.
Width	10-3/4 in.
Height	12-3/4 in.
Weight	Not available

Utilities Required:
110 vac, single phase, 60 Hz.

Production Capacity:
Not applicable.

Shipping Data:

Length	Not available
Width	Not available
Height	Not available
Cube	Not available
Weight	Not available

Associated Equipment:
None.

Kits:
None.

APE 2104--SCALE, OVER-UNDER



Use:
The over-under scale is used to weigh propellant powder and other small items weighing up to 6 pounds.

Description:
APE 2104 is a bench style with a commodity platter. It has a moving pointer to indicate if the item being weighed is overweight or underweight. The pointer is protected by a clear plastic cover.

Difference Between Models:
Original design.

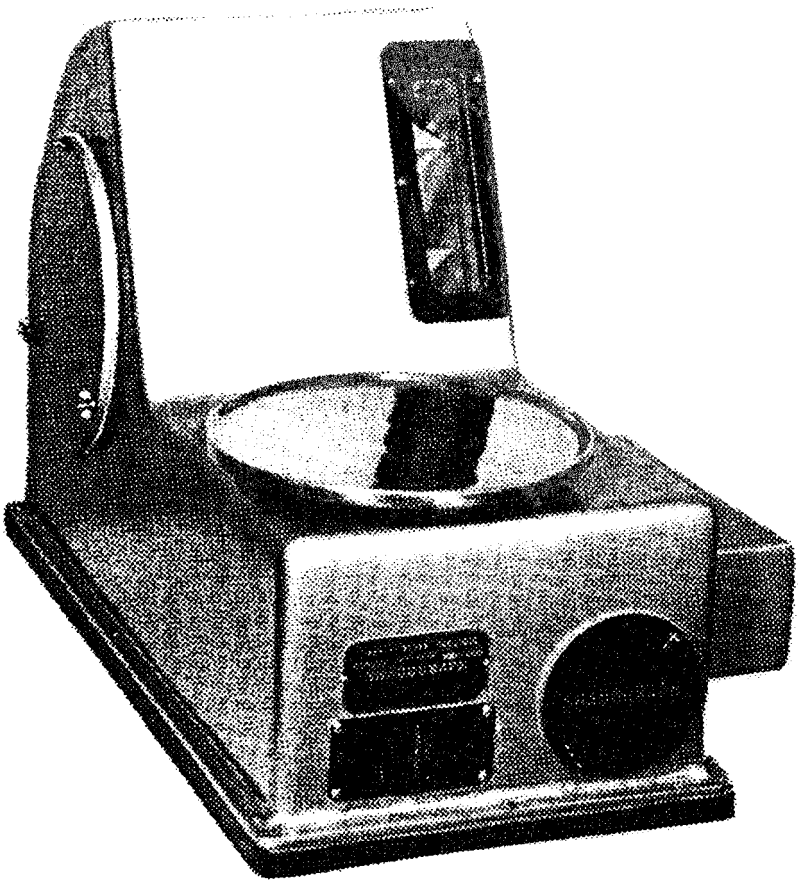
Tabulated Data:
APE No. 21040000
Unit of Issue . . . . . Each
Installation Data:
Length . . . . . 25-1/2 in.
Width . . . . . 14-1/2 in.
Height . . . . . 17 in.
Weight . . . . . Not available
Utilities Required:
110 vac, single phase, 60 Hz.
Production Capacity:
Not applicable.

Shipping Data:
Length . . . . . Not available
Width . . . . . Not available
Height . . . . . Not available
Cube . . . . . Not available
Weight . . . . . Not available

Associated Equipment:
None.

Kits:
None.

APE 2105--SCALE, OVER-UNDER



Use:
The over-under scale is used to weigh propellant powder and other small items weighing up to 12 pounds.

Description:
APE 2105 is a bench style with a comodity platter. It has a moving pointer to indicate if the item being weighed is overweight or underweight. The pointer is protected by a clear plastic cover.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	21050000
Unit of Issue	Each
Installation Data:	
Length	24-1/2 in.
Width	16-5/8 in.
Height	18-7/8 in.
Weight	90 lb
Utilities Required:	
110 vac, single phase, 60 Hz.	
Production Capacity:	
Not applicable.	

Shipping Data:

Length	30 in.
Width	18 in.
Height	21 in.
Cube	6.3 cu ft
Weight	118 lb

Associated Equipment:
None.

Kits:
None.

APE 2106--SCALE, OVER-UNDER



Use:
The over–under scale is used to weigh propellant powder and other small items weighing up to 22 pounds.

Description:
APE 2106 is a bench style with a commodity platter. It has a moving pointer to indicate if the item being weighed is overweight or underweight. The pointer is protected by a clear plastic cover.

Difference Between Models:
Original design.

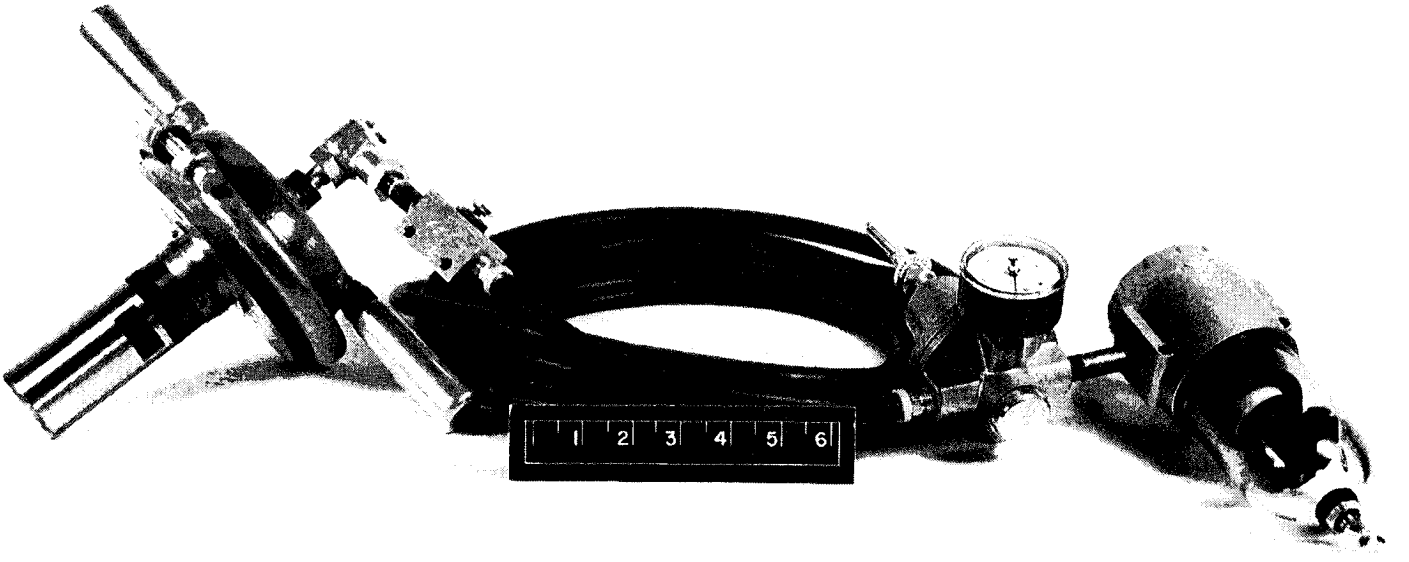
Tabulated Data:
APE No 21060000
Unit of Issue . . . . . Each
Installation Data:
Length . . . . . 25–1/2 in.
Width . . . . . 14–1/2 in.
Height . . . . . 17 in.
Weight . . . . . Not available
Utilities Required:
110 vac, single phase, 60 Hz.
Production Capacity:
Not applicable.

Shipping Data:
Length . . . . . Not available
Width . . . . . Not available
Height . . . . . Not available
Cube . . . . . Not available
Weight . . . . . Not available

Associated Equipment:
None.

Kits:
None.

APE 2107–TOOL, FUZEWELL LINER EXPANSION



Use:
The expansion tool is used to secure fuzewell liners in artillery projectiles. The tool may be used for direct operation or remote control operation.

Description:
APE 2107 consists of a modified air brake chamber with controls for either direct or remote control operation. The tool has a rubber expansion ring positioned between metal guides. A filter regulator assembly is included with the tool.

Difference Between Models:
Original design.

Tabulated Data:

APE No	21070000
Unit of Issue	Each

Installation Data:

Length	9 in.
Width	8 in.
Height	10 in.
Weight	8-1/2 lbs

Utilities Required:
Air at 60 psi.

Production Capacity:
Not applicable.

Shipping Data:

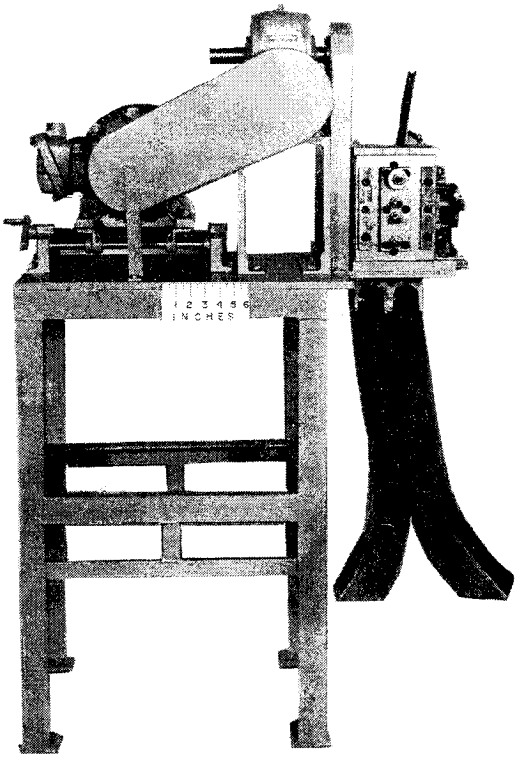
Length	14 in.
Width	10 in.
Height	8 in.
Cube	0.65 cu ft
Weight	21 lbs

Associated Equipment:
None.

Kits:

2107E001 KIT, Remote Control

APE 2126–MACHINE, CALIBER .50 DECORING



Use:
The decoring machine is used to cut the metal jackets on caliber .50 bullets for separation of metal jackets, lead tips, and steel cores for salvage operations.

Description:
APE 2126 consists of a metal frame with decoring head, discharge chute, shuttle assembly, and bullet feed tube. An electric motor is mounted on the frame. Moving parts are shielded by a metal guard.

Difference Between Models:
Original design.

Tabulated Data:
APE No 21260000
Unit of Issue . . . . . Each
Installation Data:
Length . . . . . 32 in.
Width . . . . . 34 in.
Height . . . . . 55 in.
Weight . . . . . 587 lbs

Utilities Required:
220/440 vac, 3 phase, 60 Hz.
Production Capacity:
HAND FEED:
Tracer . . . . . 48 per min
Armor-piercing
or bal . . . . . 73 per min
Incendiary 62 per min
AUTOMATIC FEED
Armor-piercing
or ball . . . . . 125 per min
Incendiary . . . . . 100 per min

Shipping Data:
Length . . . . . 34 in.
Width . . . . . 42 in.
Height. . . . . 58 in.
Cube . . . . . 48 cu ft
Weight . . . . . 887 lbs

Associated Equipment:
APE 2015M1.

Kits:

None.

APE 2128M1--WRENCH, 81MM MORTAR FINS, DISASSEMBLY-ASSEMBLY



Use
The disassembly-assembly wrench is used to disassemble, assemble and torque 81MM mortar fins to projectiles.

Description:
The wrench is constructed of steel and has slots with rubber safety strips which accommodate the different mortar fin configurations. It has a 1/2 inch square drive for use with a socket wrench.

Difference Between Models:
Rubber safety strips were added to prevent contact with primers.

Tabulated Data:
APE No 21280000M1
Unit of issue: . . . . . .Each

Installation Data
Length: . . . . . 4-1/2 in.
Width: . . . . . .2-1/2 in.
Height: . . . . . 2-1/2 in.
Weight: . . . . . 1 lbs.

Utilities Required:
None

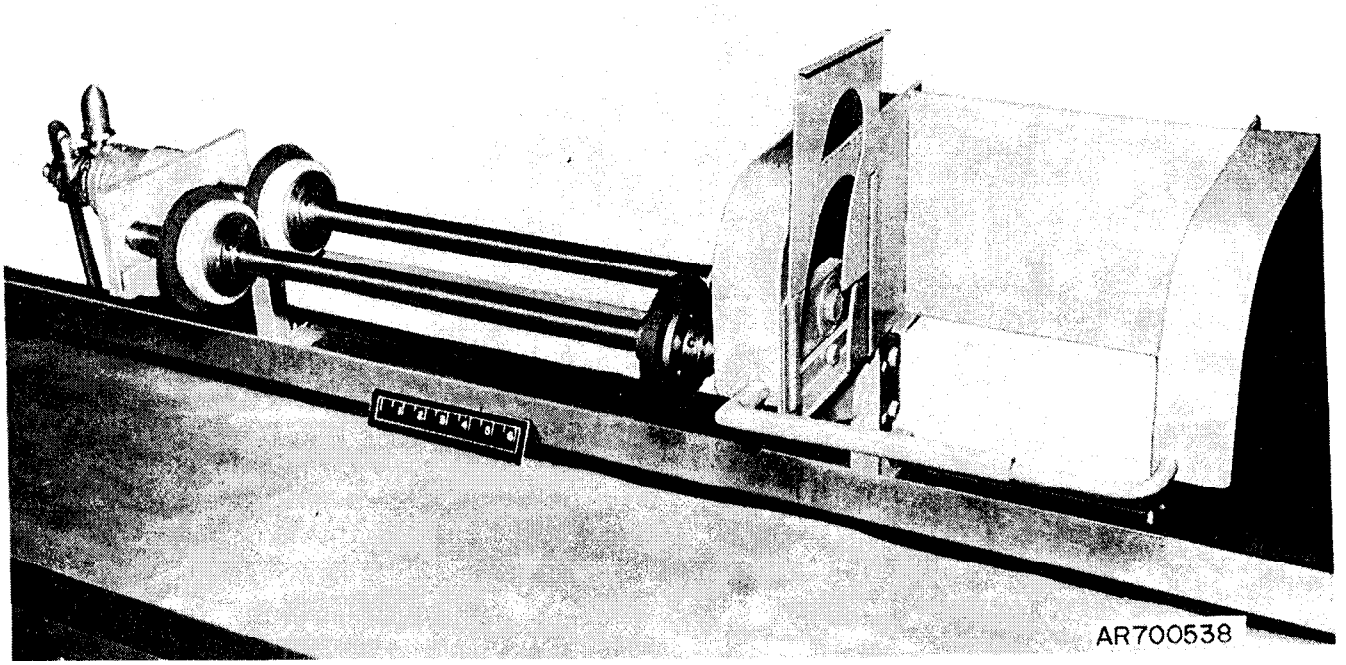
Production Capacity:
Not applicable.

Shipping Data
Length: . . . . . 6 in.
Width: . . . . . 6 in.
Height: . . . . . 6 in.
Cube: . . . . . 0.2 cu. ft.
Weight: . . . . . 3 lbs.

Associated Equipment:
None

Kits:
None

APE 2130M1-ROTATOR, POWERED, COMPLETE ROUND, 75MM THRU 90MM



Use:
The complete round rotator is used to rotate and shield projectiles, 75Mm through 90MM cartridges during painting operations. Additional accessory kits provide the capability to adapt the machine for use with 76MM/62 Navy cartridges and 3“/50 Navy cartridges.

Description:
APE 2130M1 consists of a metal frame, an air drive motor, a drive shaft with drive wheels, an idler shaft with idler wheels, and a shield assembly.

Difference Between Models:
The APE 2130M1 added a static electricity eliminating brush to the original model design.

The APE 2130M2 is adaptable for use with the accessory kits APE 2130E004, rotator, powered, complete round, 76MM Navy and APE 2130E005, rotator, powered, complete round, 3“/50. The APE 2130M1 does not have these capabilities.

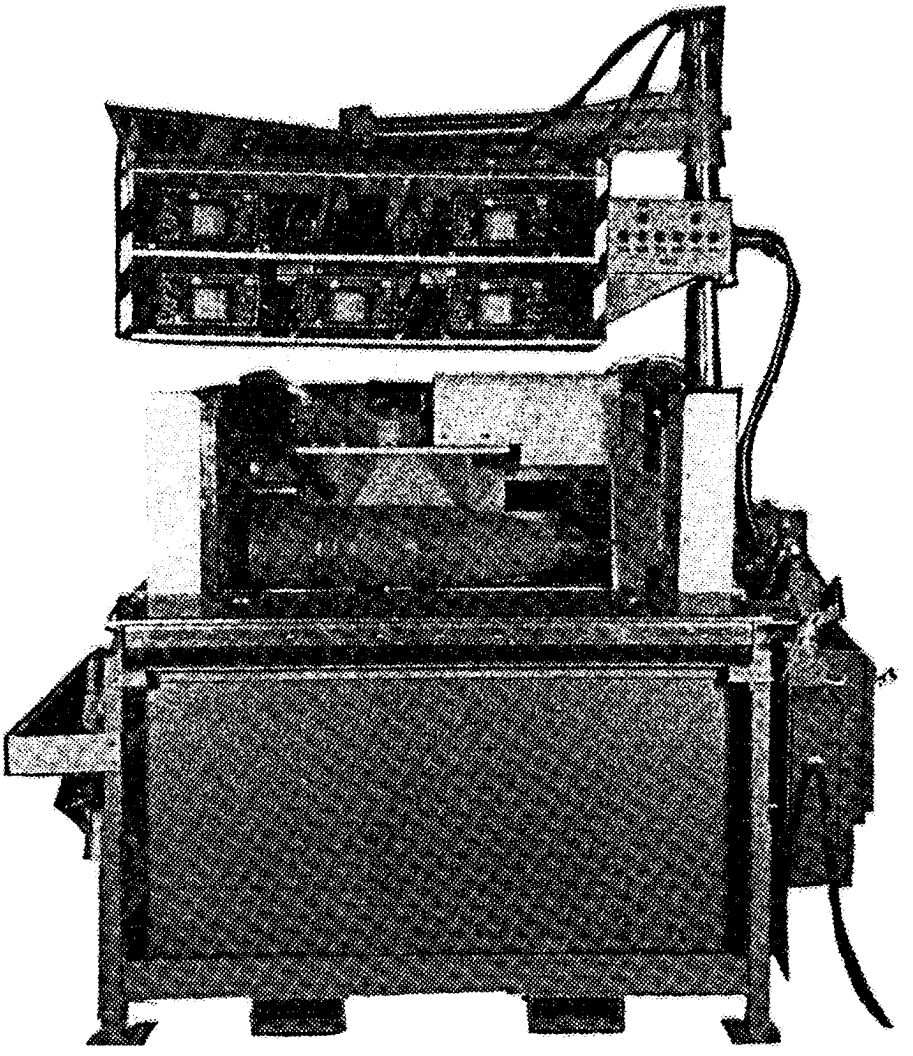
Tabulated Data:
APE No. 21300000M2
Unit of Ussue . . . . . Each
Installation Data:
Length . . . . . 47-7/8 in.
Width . . . . . 15-1/4 in.
Height . . . . . 15–1/2 in.
Weight . . . . . 55 lbs
Utilities Required:
Air at 80 psi and 11 cfm.
Production Capacity:
Not applicable.

Shipping Sata:
Length . . . . . 43 in.
Width . . . . . 18 in.
Height . . . . . 22 in.
Cube . . . . . 10 cu ft
Weight . . . . . 155 lbs

Associated Equipment:
None.

Kits:
2130E001 KIT, 90MM Shield
2130E002 KIT, 75MM or 76MM Shield
2130E003 KIT, Foot Valve
2130E004 KIT, Rotator, Powered, Complete Round, 76MM Navy
2130E005 KIT, Rotator, Powered, 3“/50

APE 2132--EQUIPMENT, ULTRASONIC INSPECTION



Use:
The ultrasonic inspection equipment is used to search for flaws in the nose, forward bourrelet, rear bourrelet and base of the following projectiles:

105MM: M1 Cartridge
155MM: M107 Projectile
175MM: M437 Projectile
8 Inch: M106 Projectile

Description:
APE 2132 accepts one projectile at a time placed horizontally on the elevator assembly and lowered into the immersion tank. The projectile is then rotated about its axis, as five ultrasonic transducers focused at a determined location search for flaws. The transducers are connected to five portable ultrasonic flaw detector units mounted in the tester cabinet. When flaws are detected an alarm light and alarm horn is actuated.

The principal assemblies which make up the ultrasonic inspection equipment are described below.

a. The frame assembly houses the projectile immersion tank and provides structural support for the components that make up the ultrasonic inspection equipment.

b. The tester cabinet and mounting assembly provides a housing for the portable ultrasonic flaw detector units and a shelf for mounting the alarm box assembly. The cabinet and mounting assembly are positioned above the machine which allows viewing the flaw detector units and alarm box during machine setup and operation.

c. The projectile elevator assembly takes one projectile at a time and lowers it into position for the screening operation in the projectile immersion tank.

d. The electrical assembly and the pneumatic assembly provide power to operate the machine.

e. One ultrasonic test standard assembly for each projectile. The machine is designed to inspect; A008 for 105MM:M1, A009 for 175MM:M437, A010 for 8 Inch:M106, and A011 for 155MM:M107.

Difference Between Models:
Original design.

Tabulated Data:

APE NO.	21320000
Unit of Issue	Each

Installation Data:

Length	63 in.
Width	80 in.
Height	102 in.
Weight	2000 lbs
Floor Space	33.69 sq ft

Utilities Required:

Electrical	208–240 vac, 120 vac, 60 Hz @ 35 amps maximum
Air	1 cfm at 85 psi
Couplant	Distilled water mixed with Immunol #1228–2 water conditioner
Projectile Immersion Tank Capacity	187 gal
Immunol	Grade 1228–2
Pump Motor	1/4 HP
Capacity	5.8 gallons per minute at 10 foot head

Production Capacity:
Not applicable.

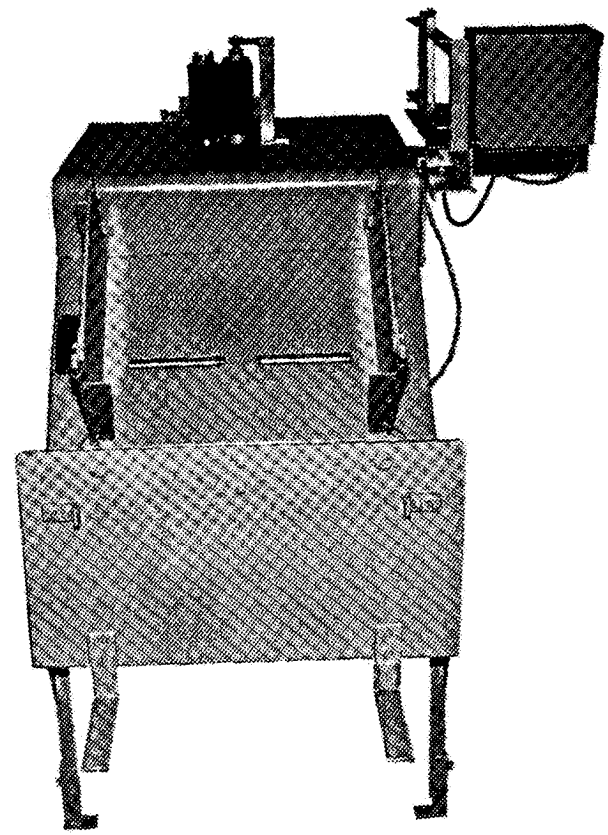
Shipping Data:

Length	87 in.
Width	67 in.
Height	64 in.
Cube	226 cu ft
Weight	3540 lbs

Associated Equipment:
None.

Kits:
None.

APE 2134--PACKER, BOX, LINKED 7.62MM CARTRIDGES



Use:
The box packer is used to assist in packing two 750 round belts of 7.62MM cartridges into cardboard packing sleeves and placing them into an M548 container.

Description:
APE 2134 consists of a metal table with powered roller feed for ammunition belts, a spacer dispenser, a tray positioned at a 50 degree angle on which to pack the packaging sleeve, and a rack to hold and position the M548 container for filling.

Difference Between Models:
Original design.

Tabulated Data:

APE No	21340000
Unit of Issue	Each
Installation Data:	
Length	24 in.
Width	51-1/2 in.
Height	45-5/8 in.
Weight	300 lbs
Utilities Required:	
	115 vac, single phase, 60 Hz; air at 60 to 100 psi.
Production Capacity:	
	Production is dependent on operator skill.

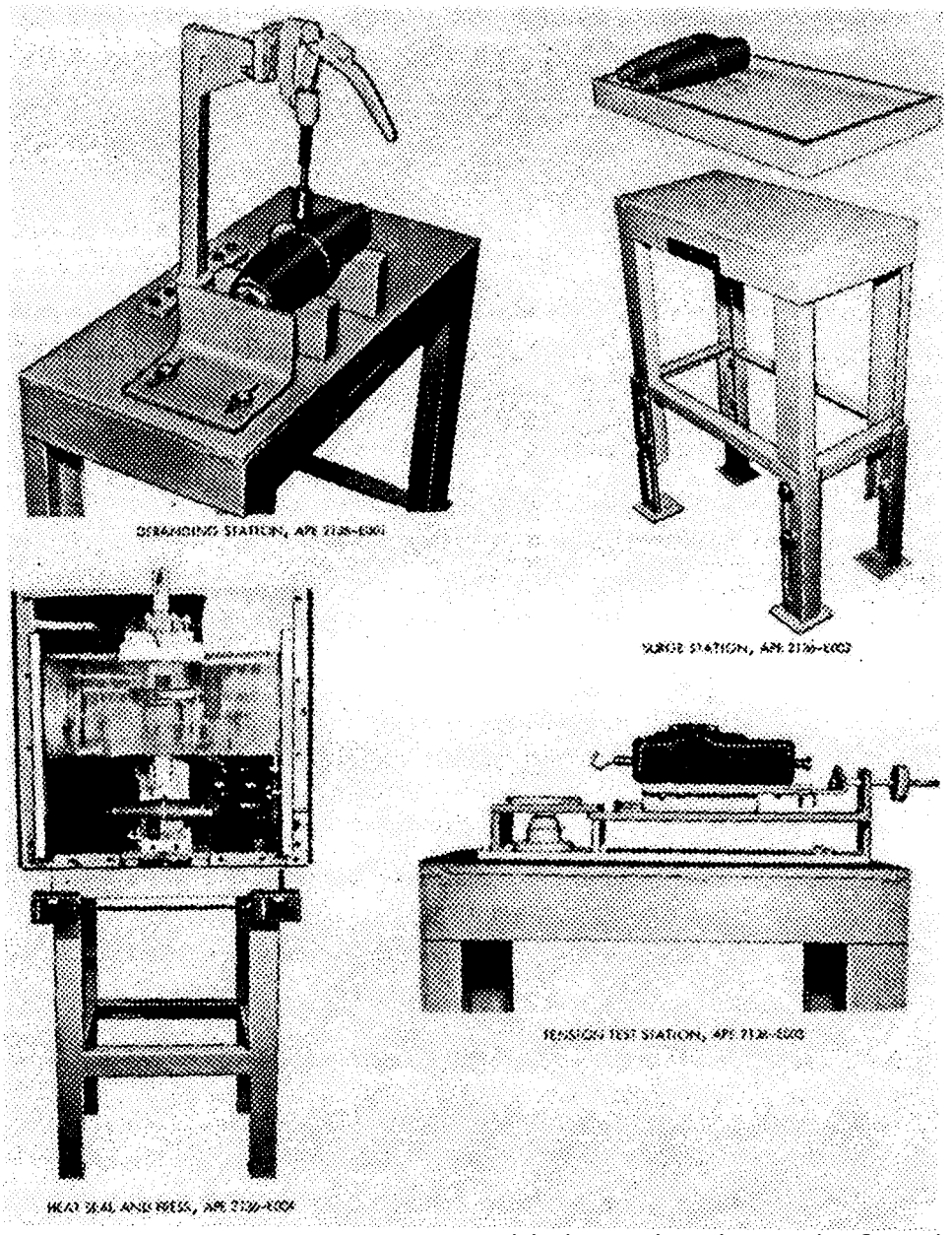
Shipping Data:

Length	60 in.
Width	43 in.
Height	54 in.
Cube	81 cu ft
Weight	520 lbs

Associated Equipment:
None.

Kits:
None.

APE 2136--DEBANDER-REBANDER, 81MM MORTAR



Use:
The debander–rebander is used to remove the old plastic obturating band, replace it with a new band, and heat seal it in place.

Description:
APE 2136 consists of four separate stations. The first is a debanding station which consists of a table with a band cutter attached. The second station is a table to hold the projectiles until the third station is ready for them. The third station is a heat seal press. The fourth station is a test station with a test unit for testing the strength of the obturating band.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	21360000
Unit of Issue	Each

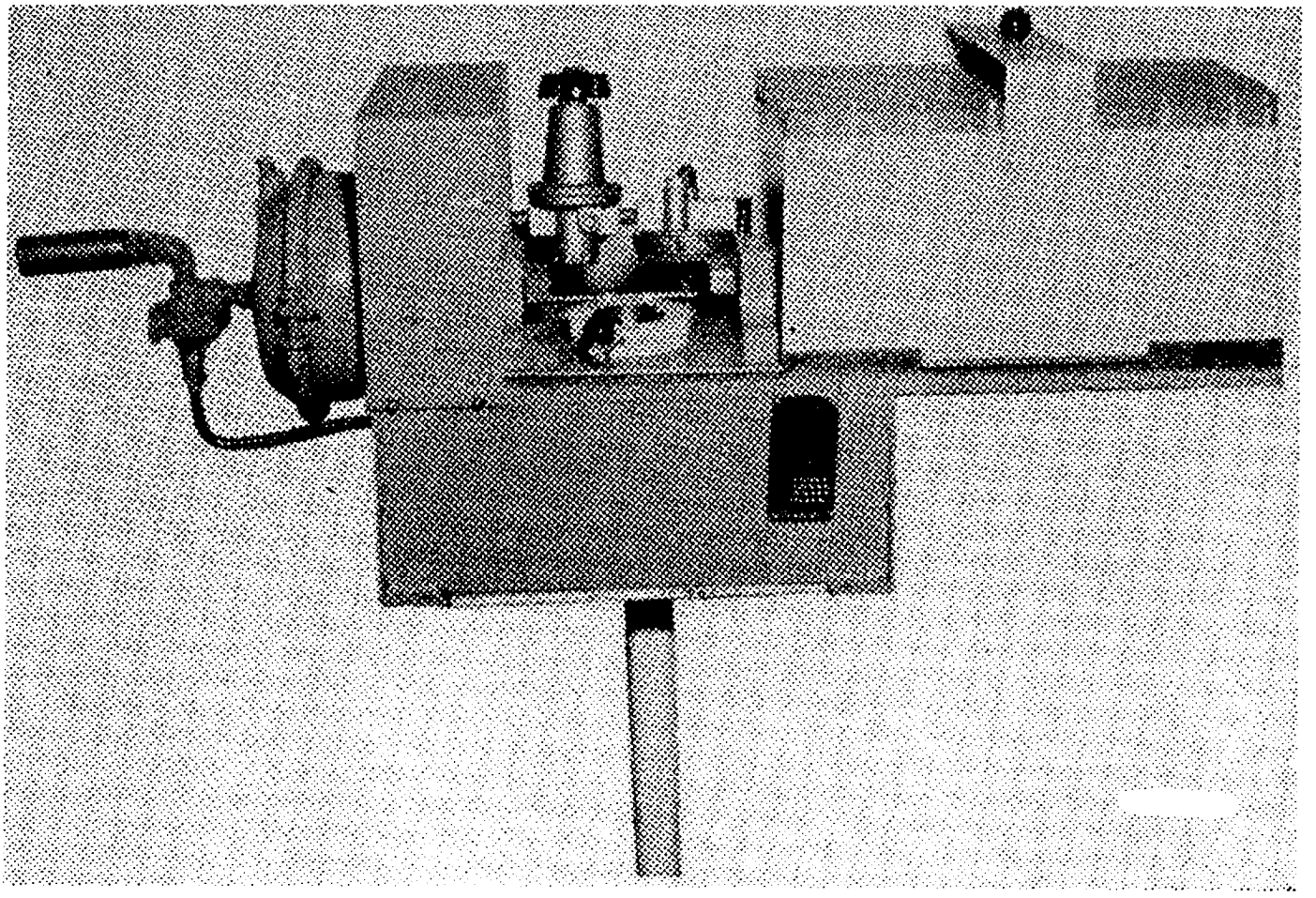
Installation Data:
DEBANDING STATION:
Length . . . . . 14-1/2 in.
Width . . . . . 26 in.
Height . . . . . 55 in.
Weight . . . . . Not available
SURGE STATION:
Length . . . . . 14–1/2 in.
Width . . . . . 26 in.
Height . . . . . 35 in.
Weight . . . . . Not available
HEAT SEAL AND PRESS:
Length . . . . . 32 in.
Width . . . . . 36 in.
Height . . . . . 68 in.
Weight . . . . . 500 lbs
TENSION TEST STATION:
Length . . . . . 14-1/2 in.
Width . . . . . 26 in.
Height . . . . . 39-1/2 in.
Weight . . . . . 85 lbs
Utilities Required:
110 vac, single phase, 60 Hz.
Production Capacity:
300 rounds per hour.

Shipping Data:
Length . . . . . 60 in.
Width . . . . . 53 in.
Height . . . . . 79 in.
Cube . . . . . 145 cu ft
Weight . . . . . 1700 lbs

Associated Equipment:
None.

Kits:
None.

APE 2139--REMOVER, WINDSHIELD, M90A1 FUZE



Use:
The windshield remover is used to remove the windshield or ogive from M90A1 fuzes.

Description:
APE 2139 has a flat metal base with two air brake cylinders mounted on top and a holding fixture to secure the fuze. A shield is fastened to the base.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	21390000
Unit of Issue	Each
Installation Data:	
Length	37 in.
Width	13 in.
Height	17 in.
Weight	75 lbs
Utilities Required:	
Air at 90 psi and 80 cfm.	
Production Capacity:	
Not applicable.	

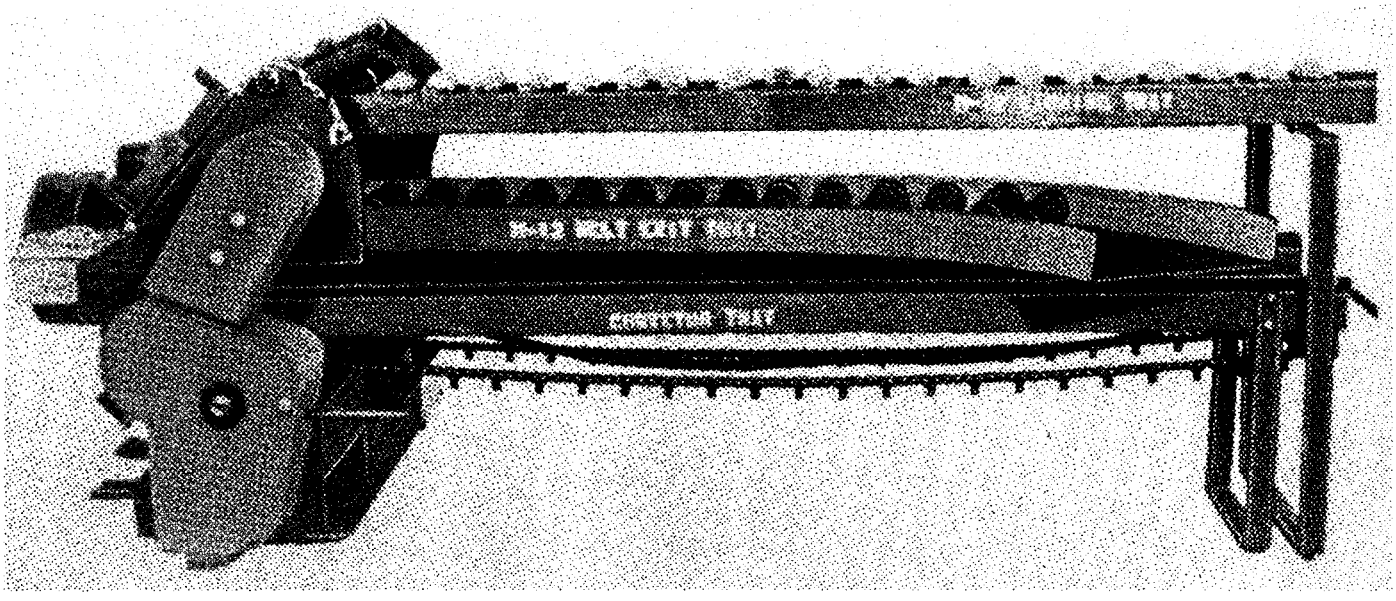
Shipping Data:

Length	42 in.
Width	18 in.
Height	24 in.
Cube	10.5 cu ft
Weight	125 lbs

Associated Equipment:
None.

Kits:
None.

APE 2140--LINK-DELINK MACHINE, 20MM



Use:
The 20MM link–delink machine is used to link or delink 20MM cartridges with M12, M14, or M17 links. It can remove cartridges from one type of link and place them in another link in one operation.

Description:
APE 2140 is a self–contained, bench mounted, motor driver unit which mechanically links 20MM cartridges into a continuous flexible amunition belt.

Difference Between Models:
Original design.

Tabulated Data:
- APE No. 21400000
- Unit of Issue . . . . . Each

Installation Data:
- Length . . . . . 24 in.
- Width . . . . . 15 in.
- Height . . . . . 15 in.
- Weight . . . . . 233 lbs

Utilities Required:
115 vac, single phase, 60 Hz.

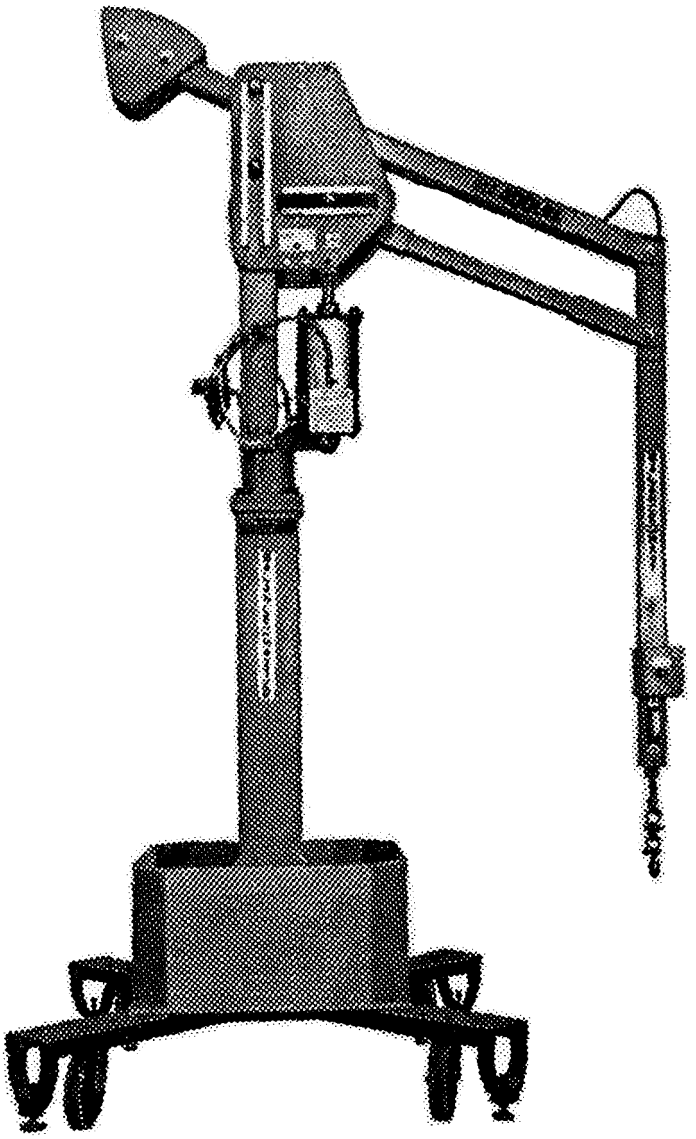
Production Capacity:
72 cartridges per minute.

Shipping Data:
- Length . . . . . 48 in.
- Width . . . . . 24 in.
- Height . . . . . 24 in.
- Cube . . . . . 16 cu ft
- Weight . . . . . 400 lbs

Associated Equipment:
None.

Kits:
None.

APE 2146--DEVICE, LIFTING AND POSITIONING



Use:
The lifting and positioning device is used to lift and position heavy objects such as artillery projectiles and bombs. The lifting capacity of the device is 400 pounds. The device when used with kit, projectile manipulator, APE 2146E001, is limited to 230 pounds.

Description:
APE 2146 consists of a base on wheels, a center column, a counterweighted lift arm, and a pneumatic circuit.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	21460000
Unit of Issue	Each
Installation Data:	
Length	108 in.
Width	72 in.
Height	153 in.
Weight	Not available
Utilities Required:	
Air at 100 psi.	
Production Capacity:	
Not applicable.	

Shipping Data:

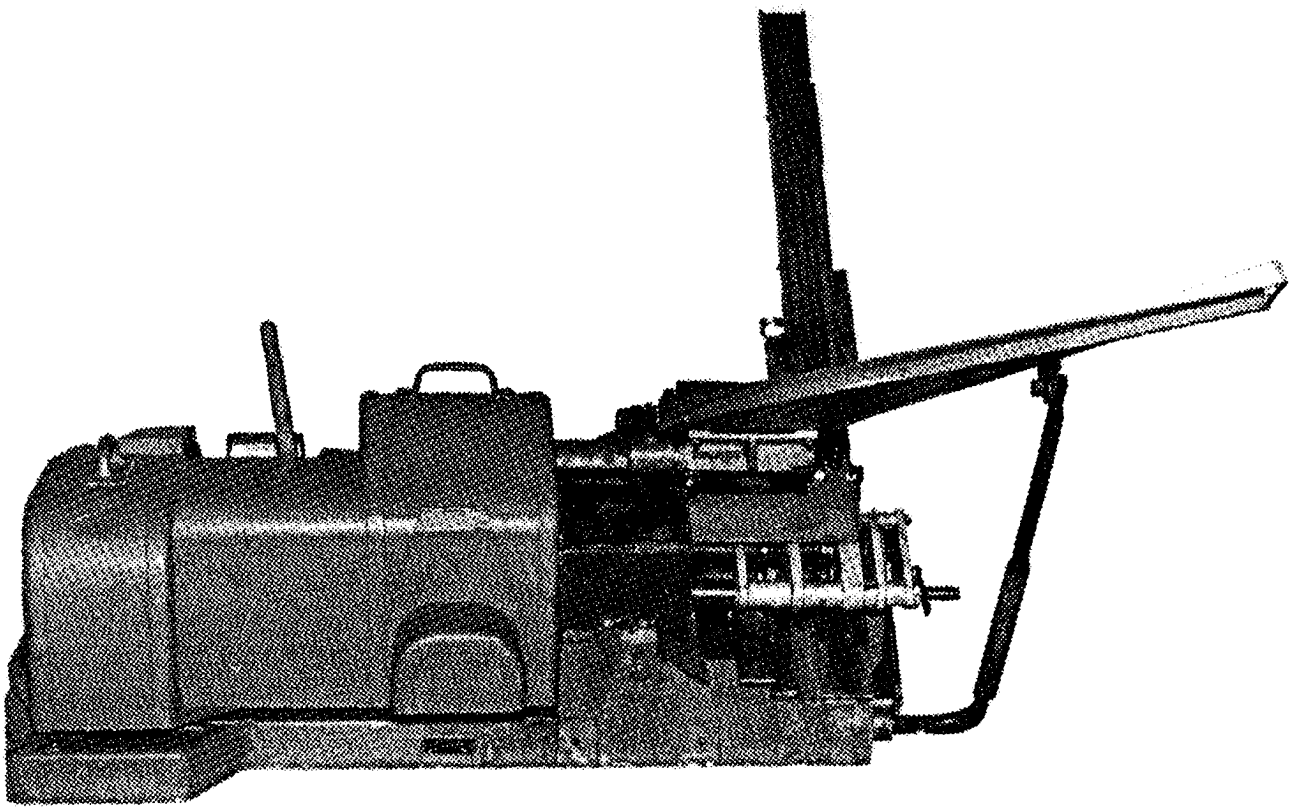
Length	81.5 in.
Width	67 in.
Height	37 in.
Cube	178.0 cu ft
Weight	2053 lbs

Associated Equipment:
APE 1022M1, 1044M1.

Kits:
2146E001 KIT, Projectile Manipulator (155MM, 175MM, 8 Inch Army, 5 Inch Navy, 6 Inch Navy and 8 Inch Navy).

NOTE
Maximum lifting capacity is 230 pounds.

APE 2147--LINKER-DELINKER, POWERED, 20MM



Use:
The linker–delinker is used to link or delink 20MM cartridges with M3, M8E1, M10, or M24 links.

Description:
APE 2147 consists of a cast frame, an electric motor, a drive assembly, and the linking or delinking kit applicable to the links and cartridges being linked or delinked.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	21470000
Unit of Issue	Each
Installation Data:	
Length	54 in.
Width	48 in.
Height	34 in.
Weight	442 lbs

Utilities Required:
110 vac, single phase, 60 Hz, 5.1 amp.
Production Capacity:
Linking--150 cartridges per minute; delinking–-250 cartridges per minute.

Shipping Data:

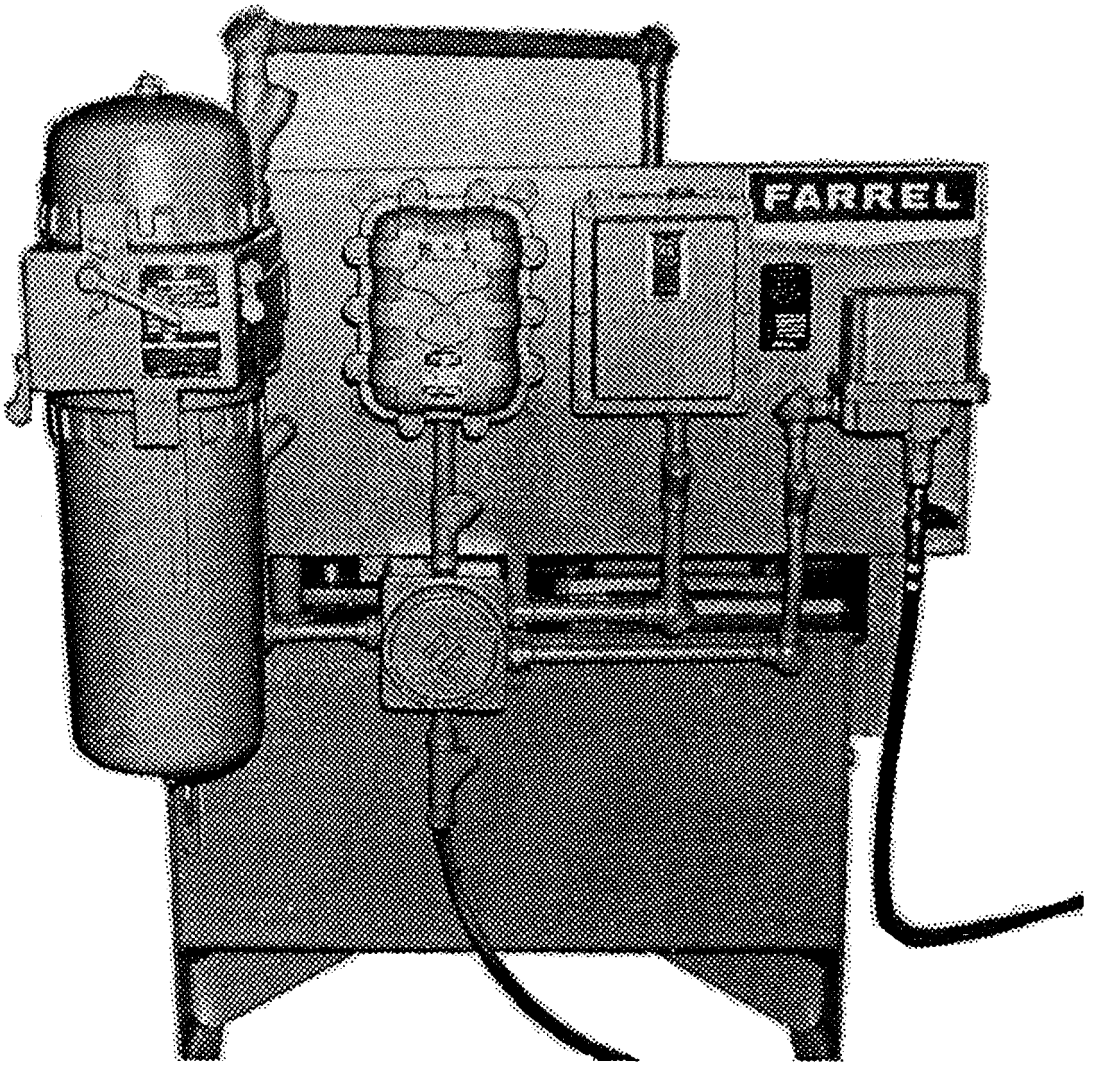
Length	68 in.
Width	29-1/2 in.
Height	26 in.
Cube	30.2 cu ft
Weight	Not available

Associated Equipment:
None.

Kits:

2147E001	KIT, Linking, M3, M8E1 and M10 Link
2147E002	KIT, Delinking, M3, M8E1 and M10 Link
2147E003	KIT, Linking, M24 Link
2147E004	KIT, Delinking, M24 Link

APE 2148M1--MACHINE, CRIMPING, 60 TON



Use:
The crimping machine is used to crimp 105MM projectiles to 105MM cartridge cases, M392 series.

Description:
APE 2148M1 consists of a crimping die assembled to a 60 ton hydraulic press. Pressure is supplied by an electrically operated hydraulic pumping unit.

Difference Between Models:
The APE 2148M1 has been modified to crimp 105MM, M392 cartridge and the original design APE 2148 was designed to crimp 40MM ammunition.

Tabulated Data:

APE No	21480000M1
Unit of Issue	Each
Installation Data:	
PRESS:	
Length	73 in.
Width	25 in.
Height	44 in.
Weight	2242 lbs
PUMP:	
Length	48 in.
Width	54 in.
Height	56 in.
Weight	1596 lbs

Utilities Required:
220/440 Vac, 60 Hz, 3 phase,
51/25.5 amps.
Production Capacity:
Not available

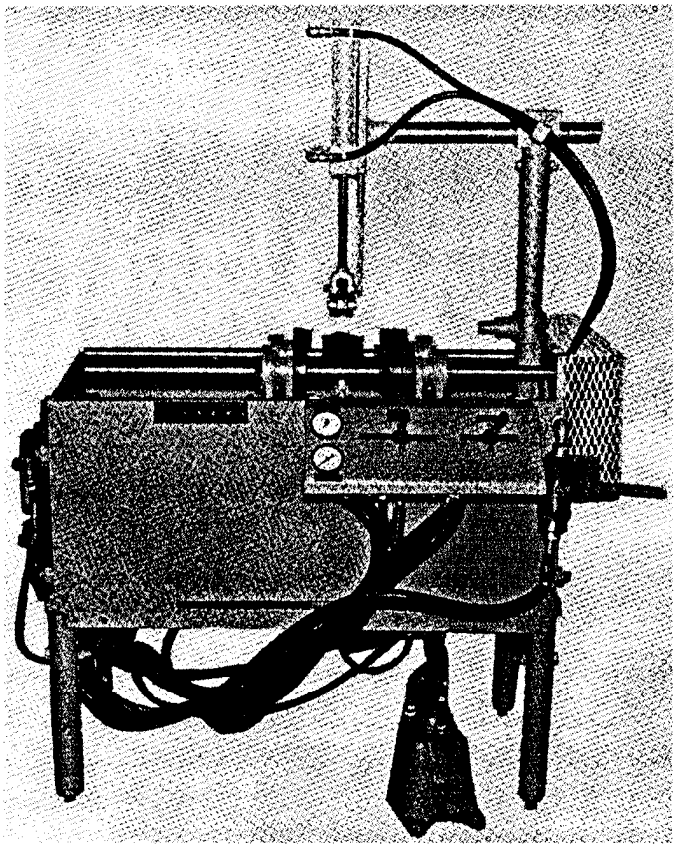
Shipping Data:
PRESS:
Length . . . . . 83 in.
Width . . . . . 45 in.
Height . . . . . 60 in.
Cube . . . . . 130 cu ft
Weight . . . . . 3162 lbs

PUMP:
Length . . . . . 61 in.
Width . . . . . 59 in.
Height . . . . . 70 in.
Cube . . . . . 146 cu ft
Weight . . . . . 2352 lbs

Associated Equipment:
None.

Kits:
None.

APE 2150--DEVICE, PROJECTILES ROTATING



Use:
The rotating device is used to rotate projectiles at 40 to 125 rpm. It can also be used to hold projectiles stationary when the brake is used. The device accommodates loaded 90MM through 9-inch projectiles.

Description:
APE 2150 consists of a metal stand, a frame assembly containing the rotator, a brake assembly and a control panel.

Difference Between Models:
Original design.

Tabulated Data:
- APE No. 21500000
- Unit of Issue . . . . . Each

Installation Data:
- Length . . . . . 45 in.
- Width . . . . . 24 in.
- Height . . . . . 60 in.
- Weight . . . . . 436 lbs

Utilities Required:
Air at 90 psi.

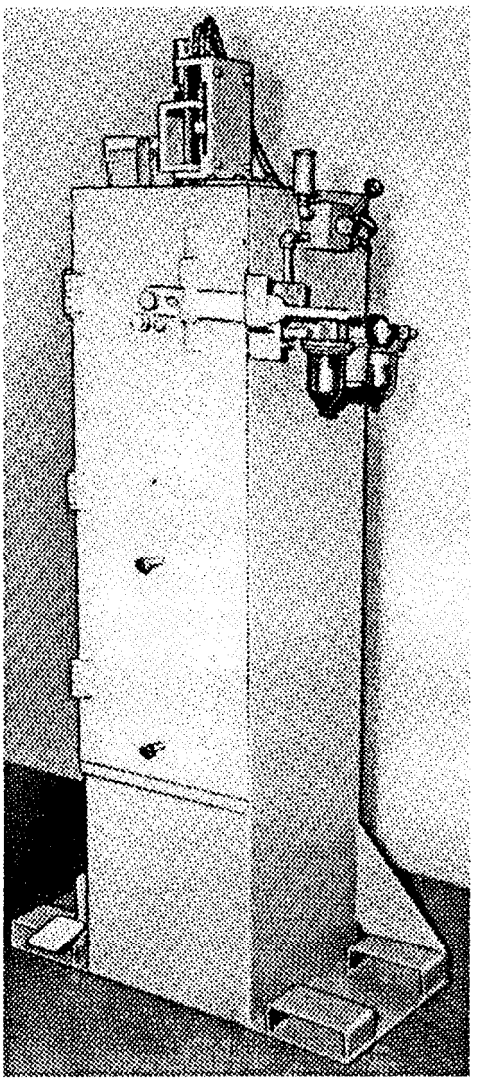
Production Capacity:
Depends on operation being performed.

Shipping Data:
- Length . . . . . 51 in.
- Width . . . . . 27 in.
- Height . . . . . 66 in.
- Cube . . . . . 53 cu ft
- Weight . . . . . 526 lbs

Associated Equipment:
None.

Kits:
None.

APE 2151--MACHINE, PRIMER REMOVER AND INSERTER



Use:
The primer remover and inserter machine was developed to back out screw type primers from artillery cartridge cases; to insert threaded primers into cartridge cases; and to torque the primer on a complete round.

Description:
APE 2151 consists of an operational shield, an air motor and remote controls to operate the machine.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	21510000
Unit of Issue	Each
Installation Data:	
Length	22 in.
Width	34 in.
Height	72 in.
Weight	400 lbs
Utilities Required:	
Air, 25 cfm at 80 psi.	
Production Capacity:	
Partial unthreaded-clean and insert 840 per 8 hour shift; insert primer only--2600 per 8 hour shift.	

Shipping Data:

Length	24 in.
Width	36 in.
Height	84 in.
Cube	42 cu ft
Weight	500 lbs

Associated Equipment:

None.

Kits:

2151E001 KIT, Insert M58 Primer into 76MM Cartridge Case

2151E002 KIT, Insert M58 Primer into 75MM M35 and M35A1 Cartridge Case

2151E003 KIT, Insert M78 and M92 Primers into 90M M371 Cartridge Case

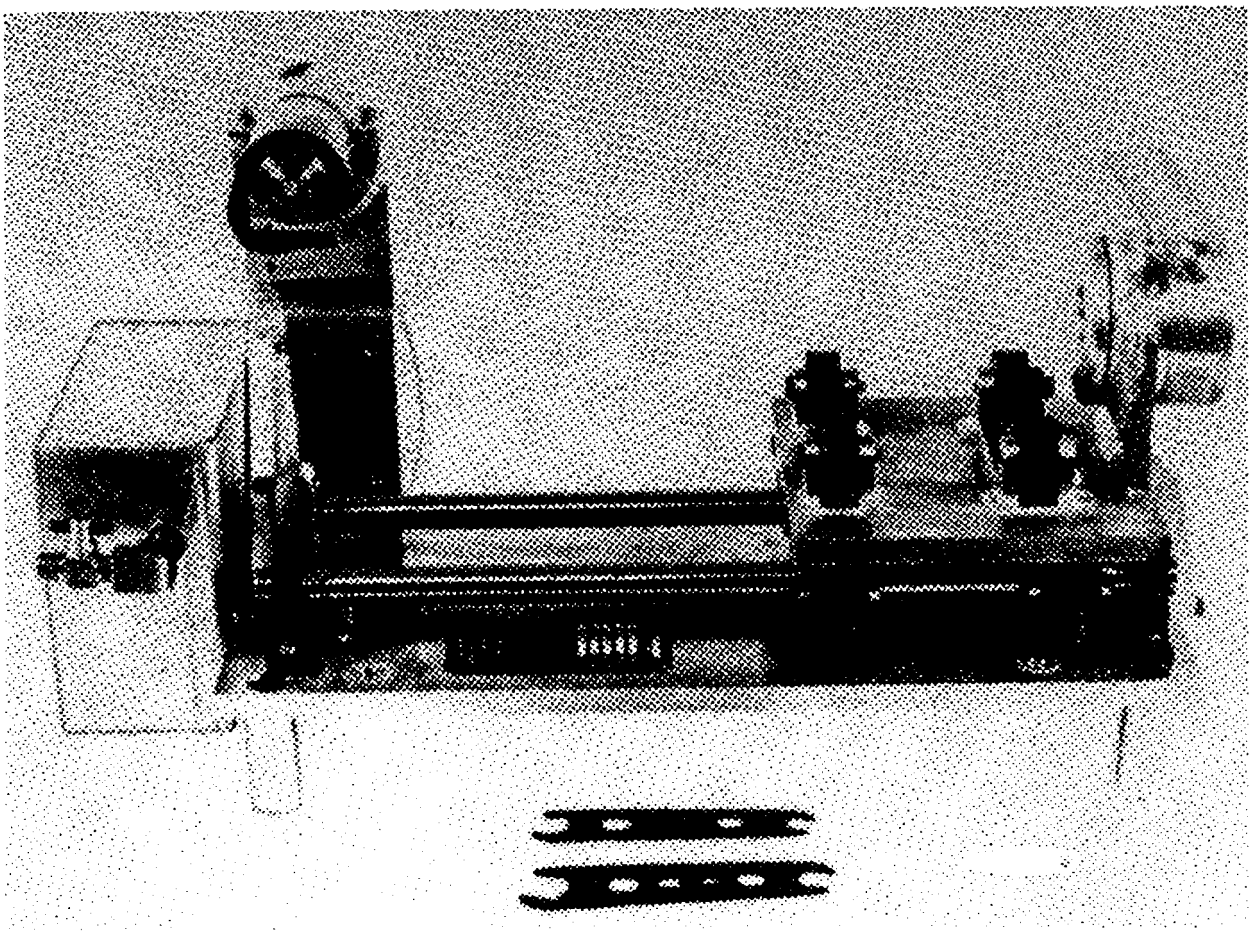
2151E004 KIT, Insert or Remove M80 and M86 Primers on 105MM M115 and M150 Cartridge Cases

2151E005 KIT, Insert or Remove M83 Primer on 105m M148 Cartridge Case

2151E006 KIT, Insert M58 Primer into 90MM M108 and M108B1 Cartridge Case

2151E007 KIT, Insert or Remove M63 Primer on 105MM M341 Cartridge Case

APE 2153--CUTTER, CENTERING BAND



Use:
The cutter is used to cut the plastic centering band from M392A2 (L 36A1) 105MM APDS–T projectiles.

Description:
APE 2153 consists of an aluminum frame, a projectile carriage, and a pneumatically operated cutter.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	21530000
Unit of Issue	Each
Installation Data:	
Length	14-3/8 in.
Width	9-3/4 in.
Height	7 in.
Weight	34 lbs
Utilities Required:	
Air at 90 psi.	
Production Capacity:	
150 bands per hour.	

Shipping Data:

Length	40 in.
Width	18 in.
Height	16 in.
Cube	6-2/3 cu ft
Weight	92 lbs

Associated Equipment:
None.

Kits:
2153E001 ADAPTER, Complete Cartridge

APE 2154--RACK, PROJECTILE HOLDING



Use:
The rack is used to move 105MM projectiles (APFS-T only) from one operation to the next in a maintenance line and to hold projectiles during a cooling cycle.

Description:
APE 2154 is constructed of plywood and hardboard. It holds 30 projectiles. It mounts on the frame of the APE 1176 ammunition cart.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	21540000
Unit of Issue	Each

Installation Data:

Length	33-3/4 in.
Width	28-1/2 in.
Height	4-1/8 in.
Weight	42 lbs

Utilities Required:
None.

Production Capacity:
Not applicable.

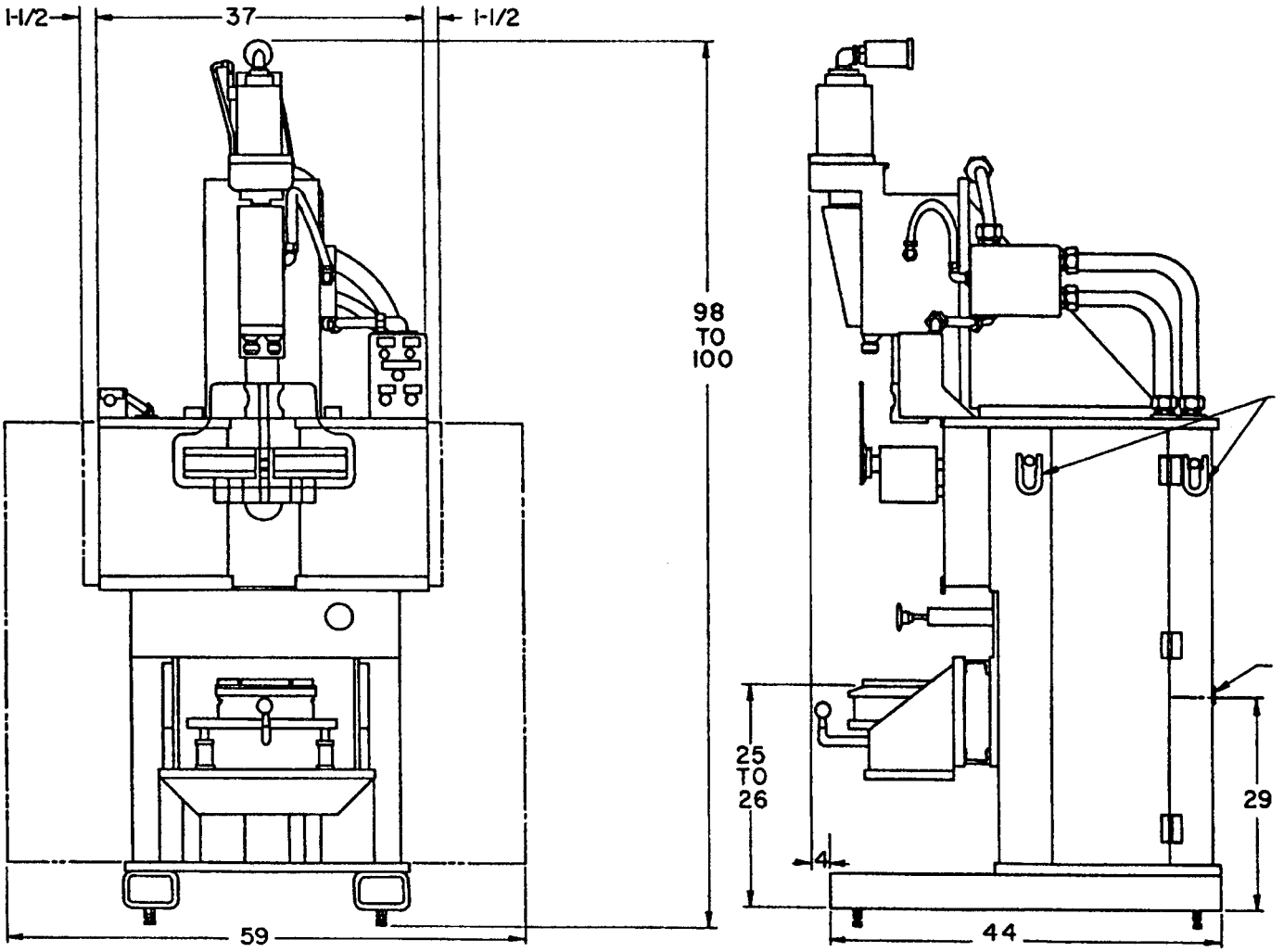
Shipping Data:

Length	36 in.
Width	32 in.
Height	8 in.
Cube	5.3 cu ft
Weight	75 lbs

Associated Equipment:
APE 1176 (only).

Kits:
None.

APE 2155M1--MACHINE, CENTERING BAND TURNING



Use:
The centering band turning machine is used to turn the plastic centering band on M392 series, 105MM APDS-T projectiles. Centering bands can be turned on complete rounds or on projectiles separated from cartridge cases.

Description:
APE 2155M1 consists of a welded metal frame, a turning assembly powered by an air motor, a jaw assembly, a projectile height adjusting assembly, and a pneumatic control assembly.

Difference Between Models:
The original APE 2155 was a standard horizontal lathe with electronic controls and special soft jaws on the chuck.

APE 2155M1 is a vertical model with air control.

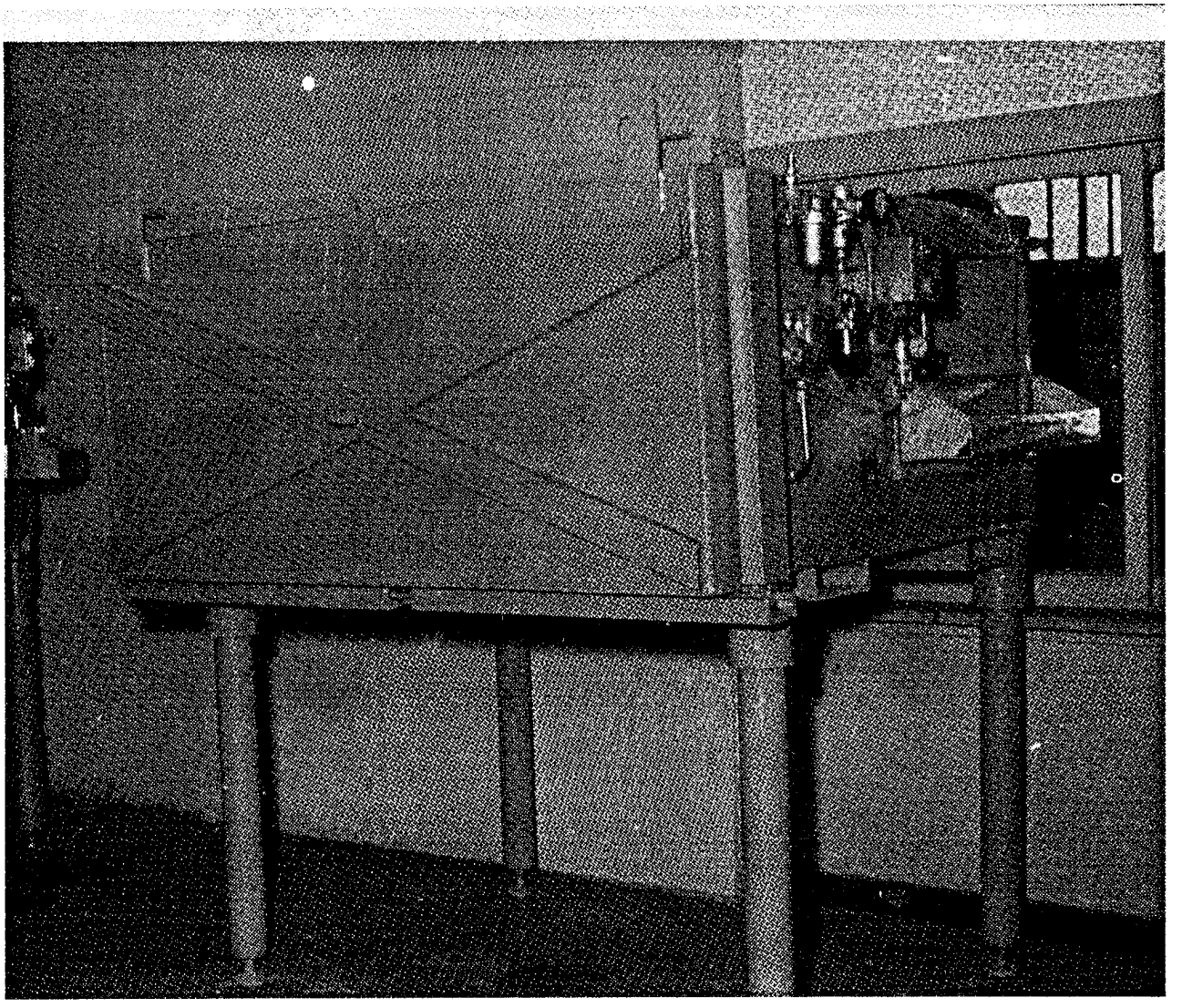
Tabulated Data:
APE No. 21550000M1
Unit of Issue . . . . . Each
Installation Data:
Length . . . . . 38 in.
Width . . . . . 48 in.
Height . . . . . 102 in.
Weight . . . . . 2725 lbs
Utilities Required:
Air at 90 psi and 75 cfm.
Production Capacity:
120 per hour.

Shipping Data:
Length . . . . . 110 in.
Width . . . . . 50 in.
Height . . . . . 64-1/2 in.
Cube . . . . . 205 cu ft
Weight . . . . . 3575 lbs

Associated Equipment:
None.

Kits:
2155E001 KIT, Centering Band Diameter Check
2155E002 KIT, Projectile Support
2155E003 KIT, Machine Setup

APE 2156--MACHINE, HAND GRENADE DEFUZING



Use:
The hand grenade defuzing machine is used to remove grenade fuzes at a high production rate. The actual defuzing operation is accomplished within the operational shield.

Description:
APE 2156 is pneumatically driven and controlled. It consists of a protective barricade, a defuzing mechanism, a grenade transfer system, and a control and drive system. The grenades to be defuzed are manually loaded onto the transport belt on one side of the machine. They are then mechanically transported into the barricade, thru the defuzing mechanism, and out on the opposite side of tile barricade.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	21560000
Unit of Issue	Each
Installation Data:	
Length	52 in.
Width	68 in.
Height less stack)	63 in.
Weight	4400 lbs

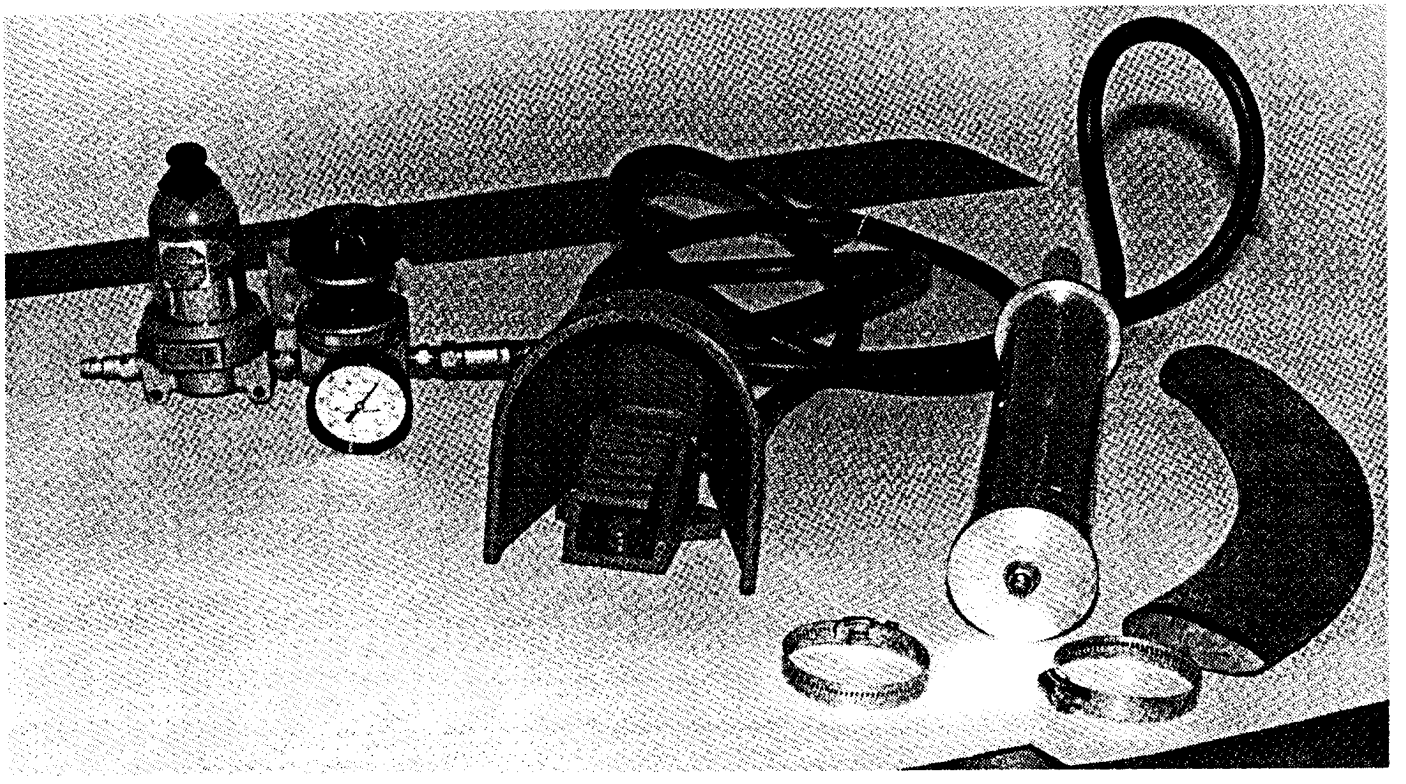
Utilities Required:
Air at 80 psi, 40 cfm.
Production Capacity:
500 grenades per hour.

Shipping Data:
MACHINE:
Length . . . . . 60 in.
Width . . . . . 82 in.
Height . . . . . 72 in.
Cube . . . . . 205 cu ft
Weight . . . . . 5300 lbs
STACK:
Length . . . . . 54 in.
Width . . . . . 35 in.
Height . . . . . 35 in.
Cube . . . . . 38.3 cu ft
Weight . . . . . 400 lbs

Associated Equipment:
APE 1213M1 required for fragmentation grenades only.

Kits:
2156E001 KIT, Remove M213 Delay Fuzes from M33 and M67 Hand Grenades
2156E002 Device, Access Door Lifting
2156E003 KIT, Remove Fuzes from M15 Smoke Grenades
2156E004 KIT, Remove Fuzes from M34 Smoke Grenades

APE 2157--FIXTURE, INSTALLATION CARTRIDGE CASE LINER



Use:
The fixture is used to expand liners against the periphery of cartridge cases.

Description:
APE 2157 consists of a rubber bladder with end caps, a central perforated tube, an air regulator and a foot valve.

Difference Between Models:
Original design.

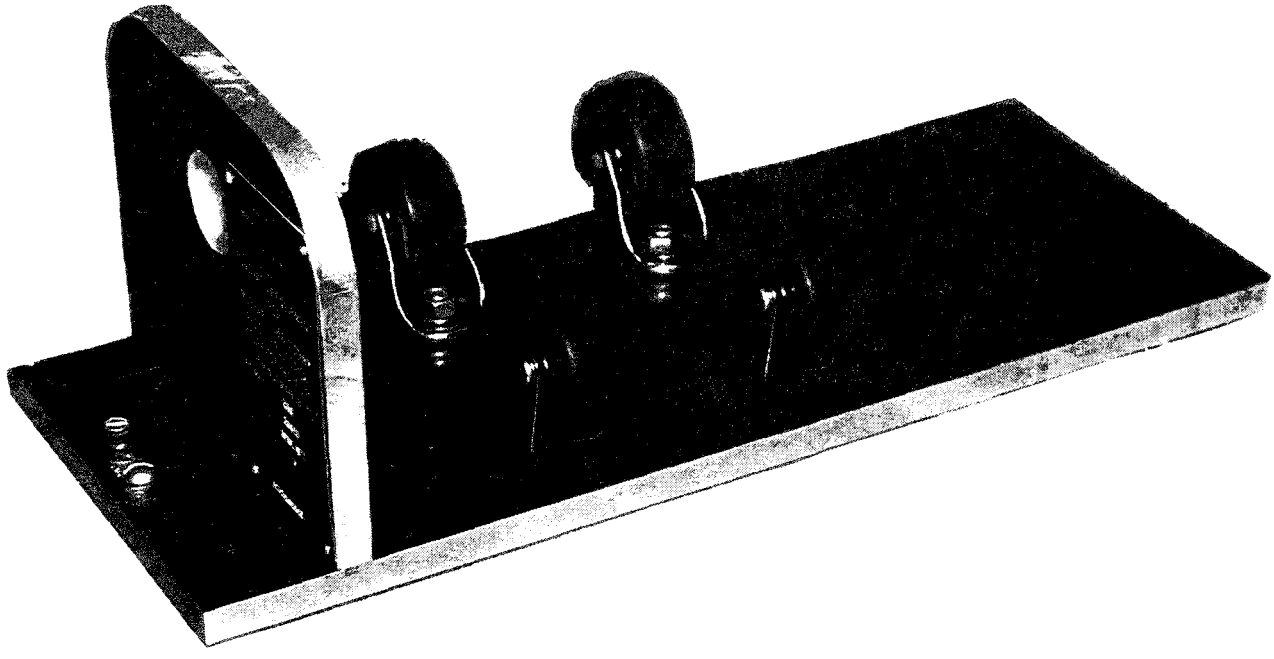
Tabulated Data:
- APE No. 21570000
- Unit of Issue . . . . . Each
- Installation Data:
  - Length . . . . . 2-3/4 in.
  - Width . . . . . 2-3/4 in.
  - Height . . . . . 24 in.
  - Weight . . . . . 4 lbs
- Utilities Required:
  - Air at 90 psi.
- Production Capacity:
  - Not available.

Shipping Data:
- Length . . . . . 26 in.
- Width . . . . . 5 in.
- Height . . . . . 5 in.
- Cube . . . . . 650 cu in
- Weight . . . . . 5 lbs

Associated Equipment:
None.

Kits:
None.

APE 2158–FIXTURE, PROJECTILE TURNING



Use:
The projectile turning fixture is used to support projectiles while the markings are being removed. It is designed for use on projectiles, 105MM, APDS-T, M392A2 (L36).

Description:
APE 2158 consists of a metal base, four modified casters, and a stop for the projectiles.

Difference Between Models:
Original design.

Tabulated Data:

APE No	21580000
Unit of Issue	Each

Installation Data:

Length	16 in.
Width	6-1/2 in.
Height	5-3/4 in.
Weight	8 lbs

Utilities Required:
None.

Production Capacity:
Not applicable.

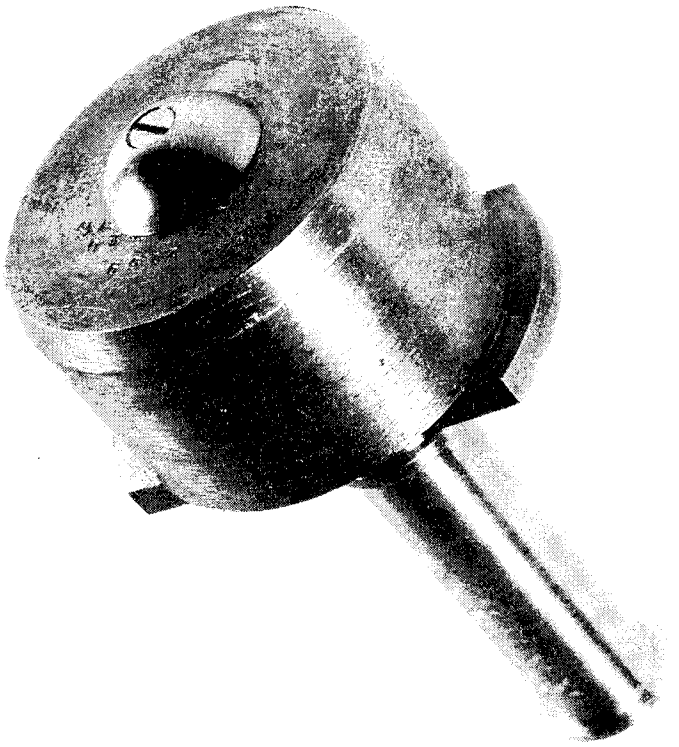
Shipping Data:

Length	18 in.
Width	9 in.
Height	9 in.
Cube	85 cu ft
Weight	12 lbs

Associated Equipment:
None.

Kits:
None.

APE 2159--FIXTURE, PROPELLANT LEVEL CHECK



Use:
The fixture is used to ascertain if there is enough space for insertion of a projectile between the mouth of the cartridge case and the top of the propellant charge in the cartridge case for the 105MM, APDS-T, M392A2. (L36).

Description:
The fixture is a piece of round aluminum bar machined to fit inside a 105MM cartridge case mouth. Stops are provided to tell the operator when the gap is sufficient. A handle is machined on the upper end of the fixture. A grounding clamp is assembled to the fixture.

Difference Between Models:
Original Design

Tabulated Data:
APE No 21590000
Unit of issue . . . . . Each

Installation Data
Length: . . . . . 4-1/4 in.
Width: . . . . . 4-1/4 in.
Height: . . . . . 8-5/8 in.
Weight: . . . . . 4 lbs. 9 oz.

Utilities Required:
None

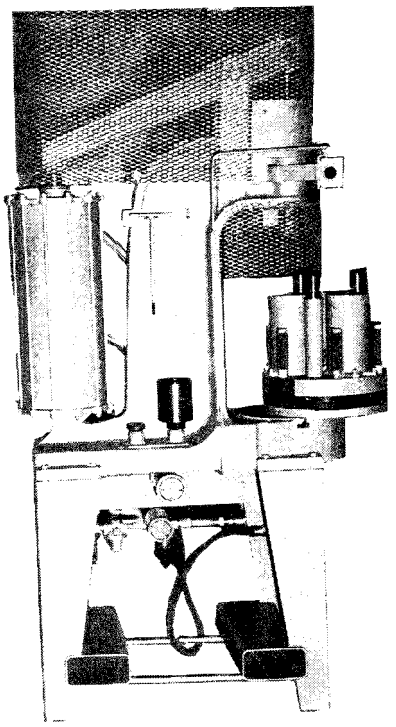
Production Capacity:
Not applicable.

Shipping Data
Length: . . . . . 5 in.
Width: . . . . . 5 in.
Height: . . . . . 9 in.
Cube: . . . . . 225 cu. in.
Weight: . . . . . 6 lbs.

Associated Equipment:
None

Kits:
2159E001, Kit, Extension (2.975 inch gap)

APE 2160–PRESS, AMMUNITION COMPONENT



Use:
The ammunition component press is used to insert the base plug into a 105MM, APDS-T M392A2 projectile and to press and stake pins in the 8 inch M404 projectile.

Description:
APE 2160 is a modified pneumatic arbor press. Features include two hand, anti-tie down controls and guards over the moving parts of the press. Two accessories are required with this press.

Difference Between Models:
Original design.

Tabulated Data:

APE No	21600000
Unit of Issue	Each
Installation Data:	
Length	29 in.
Width	47 in.
Height	90 in.
Weight	1345 lbs

Utilities Required:
Air at 90 psi and 10 cfm.
Production Capacity:
250 projectiles per hour (2 operators).

Shipping Data:

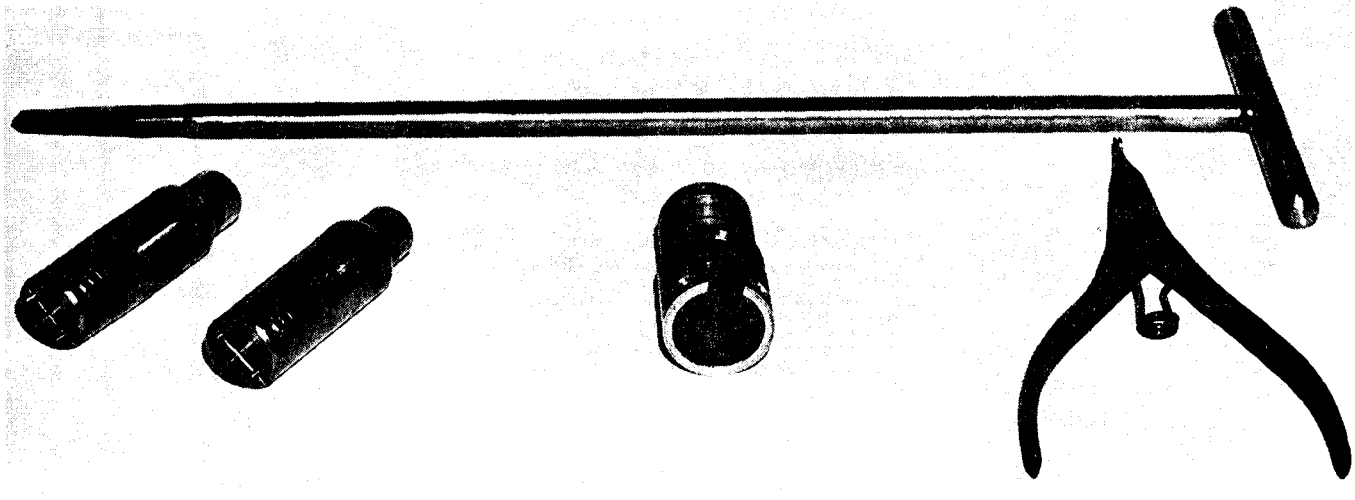
Length	55-1/2 in.
Width	37-1/2 in.
Height	93 in.
Cube	112 cu ft
Weight	2250 1bs

Associated Equipment:
None.

Kits:

2160E001 TABLE, Ammunition Component Indexing
2160E002 KIT, Base Plug Insertion, 105MM APDS-T M392A2 Projectile
2160E003 KIT, Projectile Pinning and Swaging

APE 2161-EQUIPMENT, TRACER REMOVAL AND REPLACEMENT,
105MM, APDS-T, M392A2 PROJECTILES



Use:
The tracer removal and replacement equipment is used to remove and replace M13 tracer in 105MM, ADPS-T, M392A2 projectiles.

Description:

The equipment consists of one plug wrench assembly (0.605 inch to 0.610 inch, one plug wrench assembly (0.623 inch to 0.627 inch), 25 heat shields, one plug extractor, and one pair of lock ring pliers. The user will fabricate a tracer igniting tool, a non-sparking pick to remove closing disc from plug, and a table or holder to hold 25 M392A2 projectiles during tracer burnout.

Difference Between Models:
Original design.

Tabulated Data:
APE No. 21610000
Unit of issue . . . . . Each

Installation Data:
Length: . . . . . Not applicable
Width: . . . . . Not applicable
Height: . . . . . Not applicable
Weight: . . . . . 9 lbs.

Utilities required:
None.

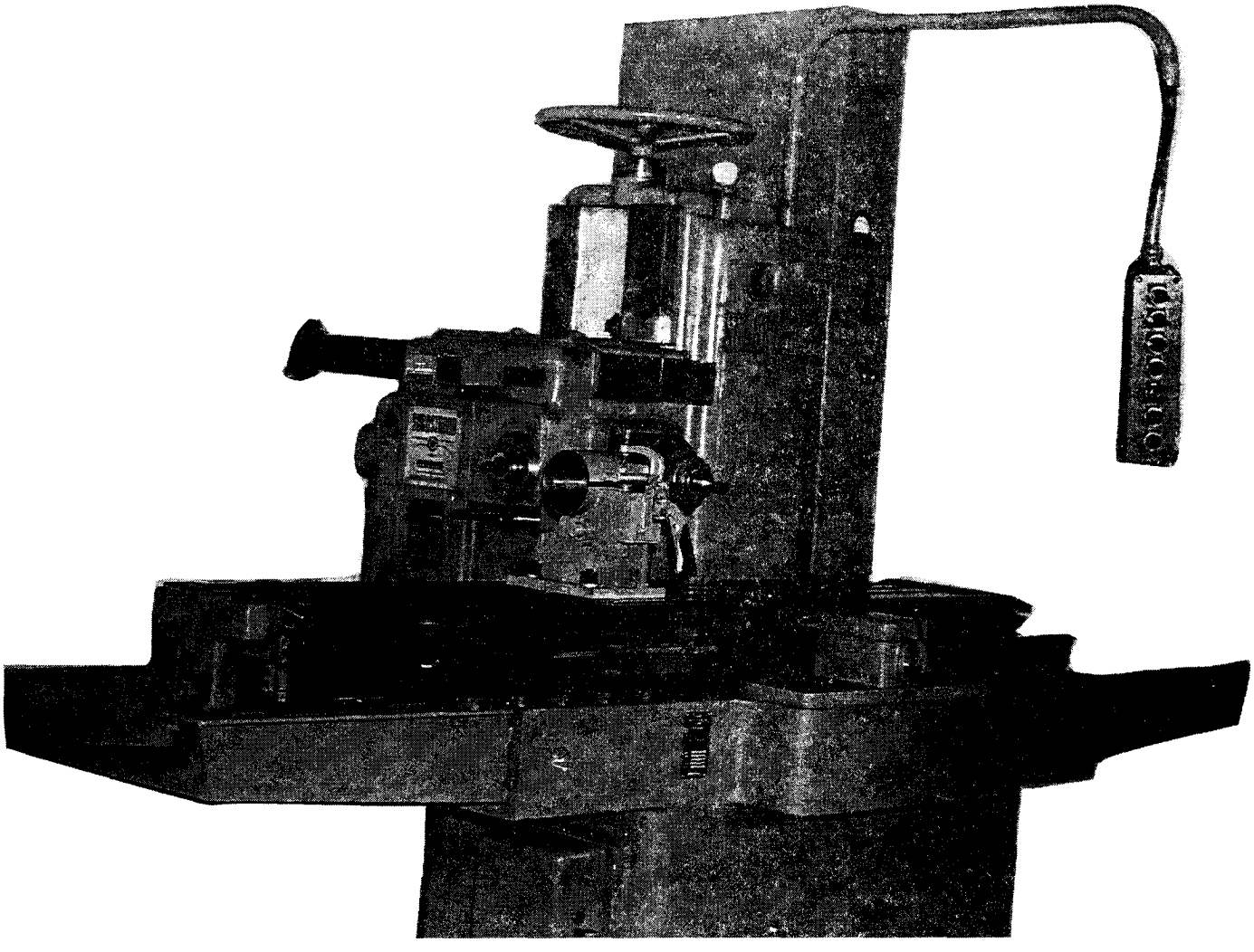
Production capacity:
Not applicable.

Shipping Data:
Length: . . . . . 20-1/2 in.
Width: . . . . . 7-3/4 in
Height: . . . . . 2-1/2 in
Cube: . . . . . 1 cu. ft.
Weight: . . . . . 12 lbs.

Associated Equipment:
None

Kits:
None

APE 2162–EQUIPMENT, ROTATING BAND REPLACEMENT



Use:
The rotating band replacement equipment is used to provide the necessary apparatus to remove and replace the fiber rotating band on the 105MM, APDS-T, M392A2.

Description:
APE 2162 is made up of nine units: a table mounted vise, a rotating band spreader tool, a rotating band facing lathe tooling, rotating band, slot cutting fixture, a milling machine, a base plate torque fixture, a base plate loosening fixture, a bench mounted disassemble/assembly projectile fixture, and a sub-projectile clearance check fixture.

Difference Between Models:
Original design.

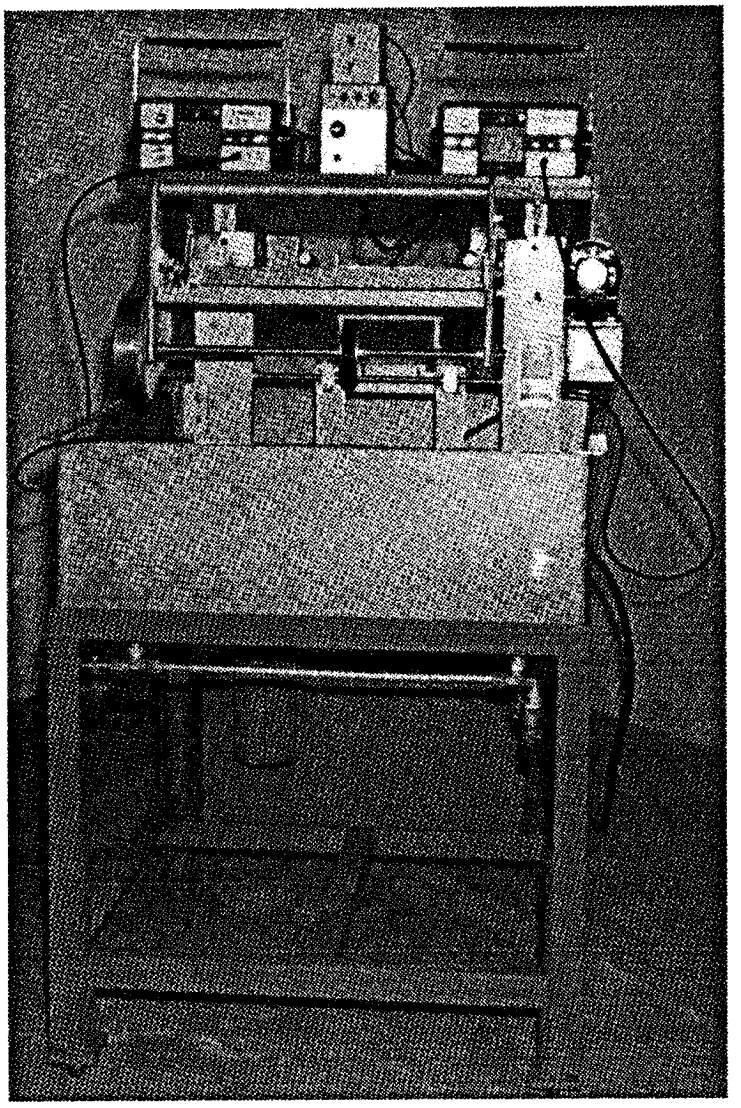
Tabulated Data:
APE No. 21620000
Unit of Issue . . . . . Each
Installation Data:
VISE:
Length . . . . . 32 in.
Width . . . . . 26 in.
Height . . . . . 40 in.
Weight . . . . . 500 lbs
SPREADER:
Length . . . . . 28 in.
Width . . . . . 28 in.
Height . . . . . 33 in.
Weight . . . . . 200 lbs
LATHE:
Length . . . . . 74 in.
Width . . . . . 36 in.
Height . . . . . 54 in.
Weight (tooling only) 26 lbs
CUTTING FIXTURE:
Length . . . . . 9 in.
Width . . . . . 13 in.
Height . . . . . 12 in.
Weight . . . . . 35 lbs
MILLING MACHINE:
Length . . . . . 9 ft
Width . . . . . 6 ft
Height . . . . . 8 ft
Weight . . . . . 8500 lbs
TORQUE FIXTURE:
Length . . . . . 38 in.
Width . . . . . 5 in.
Height . . . . . 4 in.
Weight . . . . . 5 lbs
LOOSENING FIXTURE:
Length . . . . . 35 in.
Width . . . . . 5 in.
Height . . . . . 2 in.
Weight . . . . . 4 lbs
DISASSEMBLE/ASSEMBLE FIXTURE:
Length . . . . . 6 in.
Width . . . . . 5 in.
Height . . . . . 2 in.
Weight . . . . . 7 lbs
CLEARANCE CHECK FIXTURE:
Length . . . . . 13 in.
Width . . . . . 8 in.
Height . . . . . 20 in.
Weight . . . . . 40 lbs
Utilities Required:
Vise - air at 100 psi;
Spreader – air at 100 psi;
Lathe - 220/440 vac, 60 Hz, 3 phase, 15 hp;
Milling Machine - 220/440 vac, 60 Hz, 3 phase, 60 cycle;
Motor sizes - 7.5 hp, 1 hp, .75 hp, .25 hp.
Production Capacity:
600 per 8 hour shift.

Shipping Data:
Length . . . . . Not available
Width . . . . . Not available
Height . . . . . Not available
Cube . . . . . Not available
Weight . . . . . Not available

Associated Equipment:
APE 2155M1.

Kits:
None.

APE 2163--SUBPROJECTILE ULTRASONIC INSPECTION EQUIPMENT



Use:
The Subprojectile ultrasonic inspection equipment is used for ultrasonic non-destructive testing by either direct contact or immersion techniques. It can be used for single or dual transducer testing.

Description:
APE 2163 consists of a portable ultrasonic flow detector, a battery box, twelve batteries, a test block and a manual for the ultrasonic flow detector.

Difference Between Models:
Original design.

Tabulated Data:

APE No. 21630000
Unit of Issue . . . . . Each
Installation Data:
Length . . . . . 14 in.
Width . . . . . 14 in.
Height . . . . . 8 in.
Weight . . . . . 16-1/4 lbs
Utilities Required:
18 vdc.
Production Capacity:
Not applicable.

Shipping Data:

Length	16 in.
Width	18 in.
Height	10 in.
Cube	1.7 cu ft
Weight	21 lbs

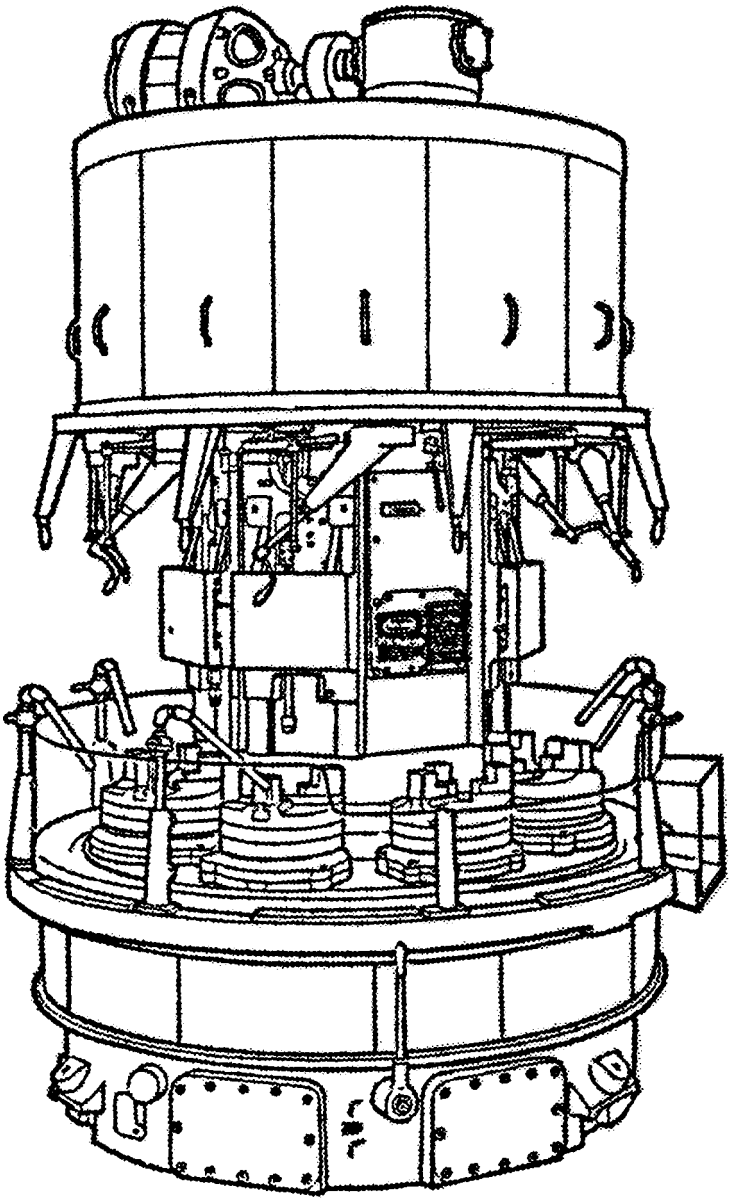
Associated Equipment:

None.

Kits:

2163E001	KIT, Transducer (cylindrical focus)
2163E002	KIT, Transducer (spherical focus)
2163E003	KIT, Waterproof cable
2163E004	KIT, 105MM APDS–T Subprojectile Handling Equipment
2163E005	KIT, Battery Charger
2163E006	KIT, Alarm Light
2163E007	KIT, Alignment Projectile

APE 2165--PROJECTILE FUZEWELL RETHREAD FIXTURING



Use:
The projectile fuzewell rethread fixturing is used to ream and rethread the fuzewell of the 105MM, M84B1 smoke projectile.

Description:
APE 2165 consists of a vertical lathe, a chuck assembly, two projectile locator stop assemblies, a reamer assembly, a tapping assembly and a sling assembly.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	21650000
Unit of Issue	Each

Installation Data:

Length	121 in.
Width	111 in.
Height	151 in.
Weight	36629 lbs

Utilities Required:
220/440 vac, 3 phase, 60 Hz (for 50 hp motor); motor amp draw – 125 amps at 220 vac; 65 amps at 440 vac. Branch circuit protector – 350 amps at 220 vac, 175 amps at 440 vac.

Production Capacity:
Not applicable.

Shipping Data:

BASIC MACHINE:
- Length . . . . . 114 in. dia
- Width . . . . . 114 in. dia
- Height (motor and gear box removed) . . . 128 in.
- Cube . . . . . 756 cu ft
- Weight . . . . . 32796 lbs

CHAIN SLING:
- Length . . . . . 33 in.
- Width . . . . . 32 in.
- Height . . . . . 14 in.
- Cube . . . . . 85 cu ft
- Weight . . . . . 314 lbs

CHAIN SLING:
- Length . . . . . 102 in.
- Width . . . . . 54 in.
- Height . . . . . 48 in.
- Cube . . . . . 153 cu ft
- Weight . . . . . 1562 lbs

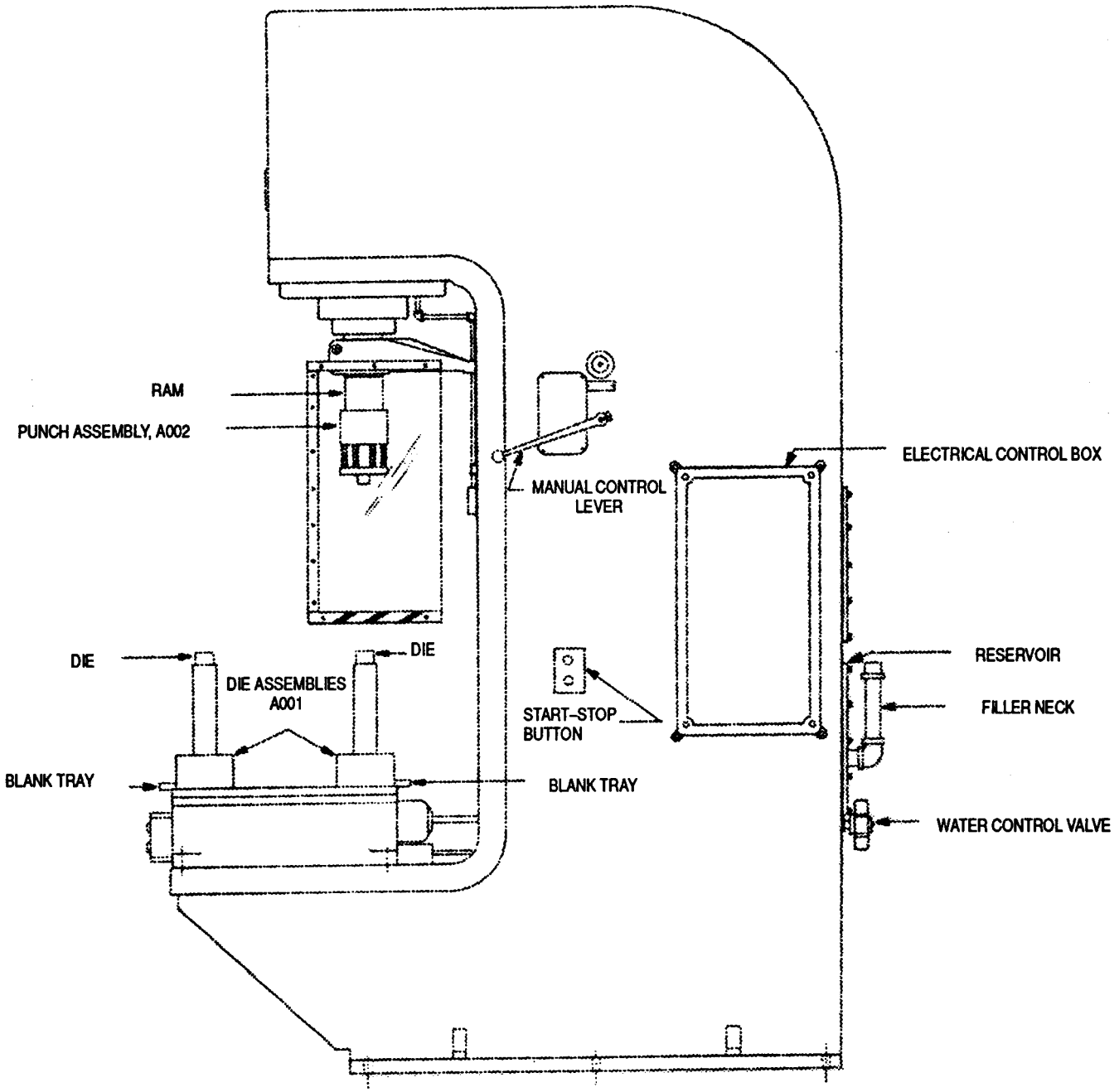
MOTOR:
- Length . . . . . 50 in.
- Width . . . . . 33 in.
- Height . . . . . 32 in.
- Cube . . . . . 30.5 cu ft
- Weight . . . . . 1337 lbs

COOLANT TANK, ELECTRICAL BOX, FILTER, ETC:
- Length . . . . . 72 in.
- Width . . . . . 51 in.
- Height . . . . . 48 in.
- Cube . . . . . 102 cu ft
- Weight . . . . . 620 lbs

Associated Equipment:
APE 2166.

Kits:
None.

APE 2166--FIXTURE, PROJECTILE FUZEWELL BLANKING



Use:
The projectile fuzewell blanking fixture is used to remove the bottom of the fuzewell cavity of the 105MM M84B1 smoke projectile.

Description:
APE 2166 consists of a 100 ton hydraulic press, two die assemblies, a punch assembly, two blanking trays, a table cover, and a guard assembly.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	21660000
Unit of Issue	Each

Installation Data:
- Length . . . . . 103 in.
- Width . . . . . 40 in.
- Height . . . . . 155 in.
- Weight . . . . . 29425 lbs

Utilities Required:
220/440 vac, 3 phase, 60 Hz (for 50 hp motor); motor amp draw – 125 amp at 220 vac, 65 amp at 440 vac. Branch circuit protection – 350 amp at 220 vac, 175 amp at 440 vac.

Production Capacity:
3 projectiles/minute maximum.

Shipping Data:

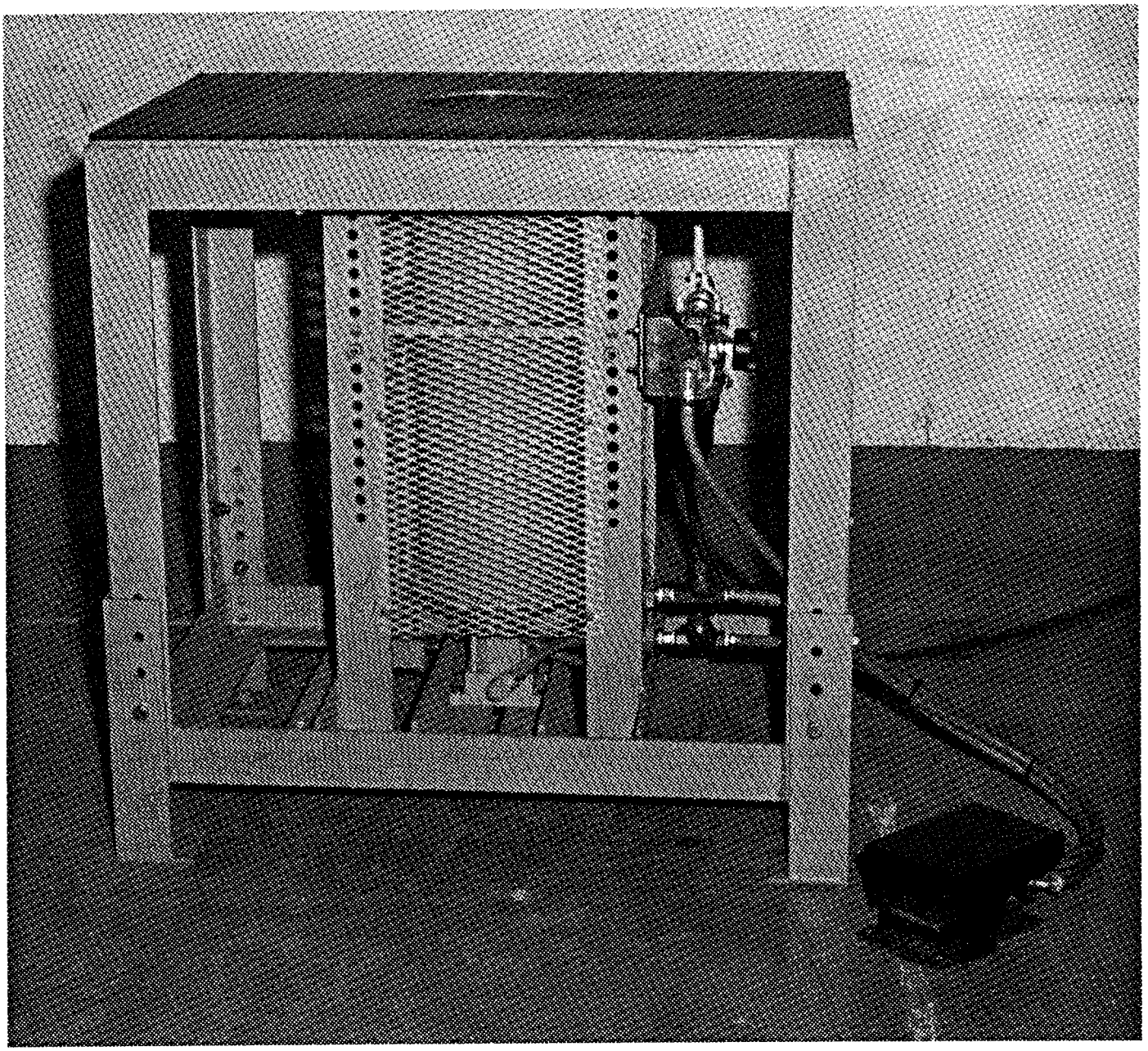
BASIC PRESS:
- Length . . . . . 15 ft
- Width . . . . . 5 ft
- Height . . . . . 9 ft 1 in.
- Cube . . . . . 681 cu ft
- Weight . . . . . 28600 lbs

BOX OF FIXTURES:
- Length . . . . . 39 in.
- Width . . . . . 38 in.
- Height . . . . . 28 in.
- Cube . . . . . 24 cu ft
- Weight . . . . . 825 lbs

Associated Equipment:
None.

Kits:
None.

APE 2168--DEVICE, PROJECTILE LIFT



Use:
The projectile lift device is used to raise and lower heavy projectiles, 155MM through 8–inch, to and from an overhead monorail conveyor.

Description:
APE 2168 consists of a table with a pneumatic operated lift that is actuated by a foot valve. The user must attach 6–inch to 9–inch long chain and hook assemblies to the APE 1044M1 monorail j-hooks when using this device.

Difference Between Models:
Original design.

Tabulated Data:

APE No. 21680000
Unit of Issue . . . . . Each

Installation Data:

Length . . . . . 36 in.
Width . . . . . 24 in.
Height . . . . . 34 in.
Weight . . . . . 627 lbs

Utilities Required:

Air at 80 to 100 psi.

Production Capacity:

Not applicable.

Shipping Data:

Length . . . . . 45 in.
Width . . . . . 32 in.
Height . . . . . 46 in.
Cube . . . . . 53 cu ft
Weight . . . . . 770 lbs

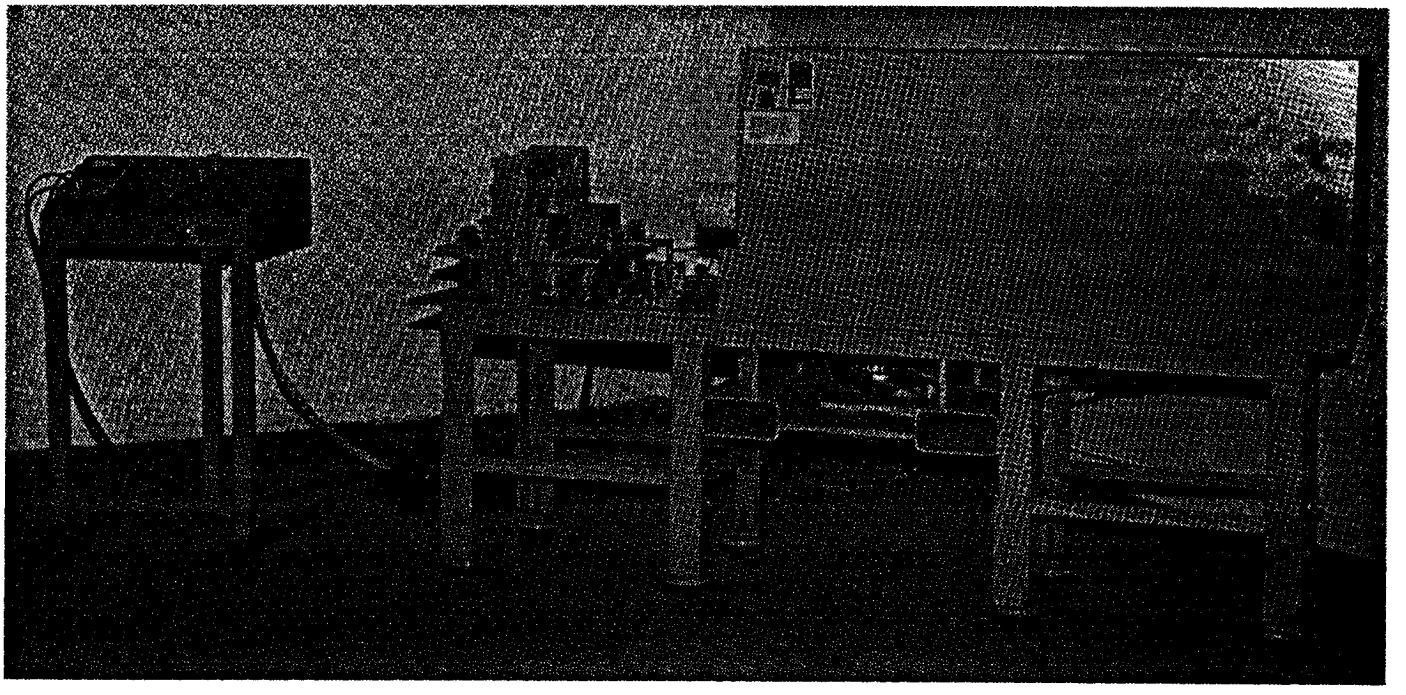
Associated Equipment:

APE 1044M1.

Kits:

None.

APE 2169--EQUIPMENT, WINDSHIELD CAP REMOVAL AND CONTINUITY TEST



Use:
The windshield cap removal machine is used to perform two operations on two 152MM projectiles or cartridges at the same time. The machine removes the windshield cap and power supply from a projectile or cartridge and another projectile or cartridge that has gone through the removal operation has a continuity test performed on it. The two operations are controlled independently at a control console located in a remote site.

Description:
APE 2169 consists of a removal machine and a control console. The removal machine frame houses the clamp assembly, the rotary shaft support assembly assembly, the nose cap removal assembly, and the pneumatic assembly. The clamp assembly has two V–Blocks and is rotated 180 degrees to accomplish the removal and continuity test operations. The control console houses the pneumatic controls for the removal operation and the milliohmeter for the continuity test.

Difference Between Models:
Original design.

Tabulated Data:

APE No. 21690000
Unit of Issue . . . . . Each

Installation Data:

REMOVAL MACHINE:

Length . . . . . 92 in.
Width . . . . . 36 in.
Height . . . . . 56 in.
Weight . . . . . 1605 lbs

CONTROL CONSOLE:

Length . . . . . 28 in.
Width . . . . . 24 in.
Height . . . . . .2 in.
Weight . . . . . 108 lbs

Utilities Required:

Air at 85 psi and 60 cfm.

Production Capacity:

1 projectile per minute.

Shipping Data:

Length . . . . . Not available
Width . . . . . Not available
Height . . . . . Not available
Cube . . . . . Not available
Weight . . . . . Not available

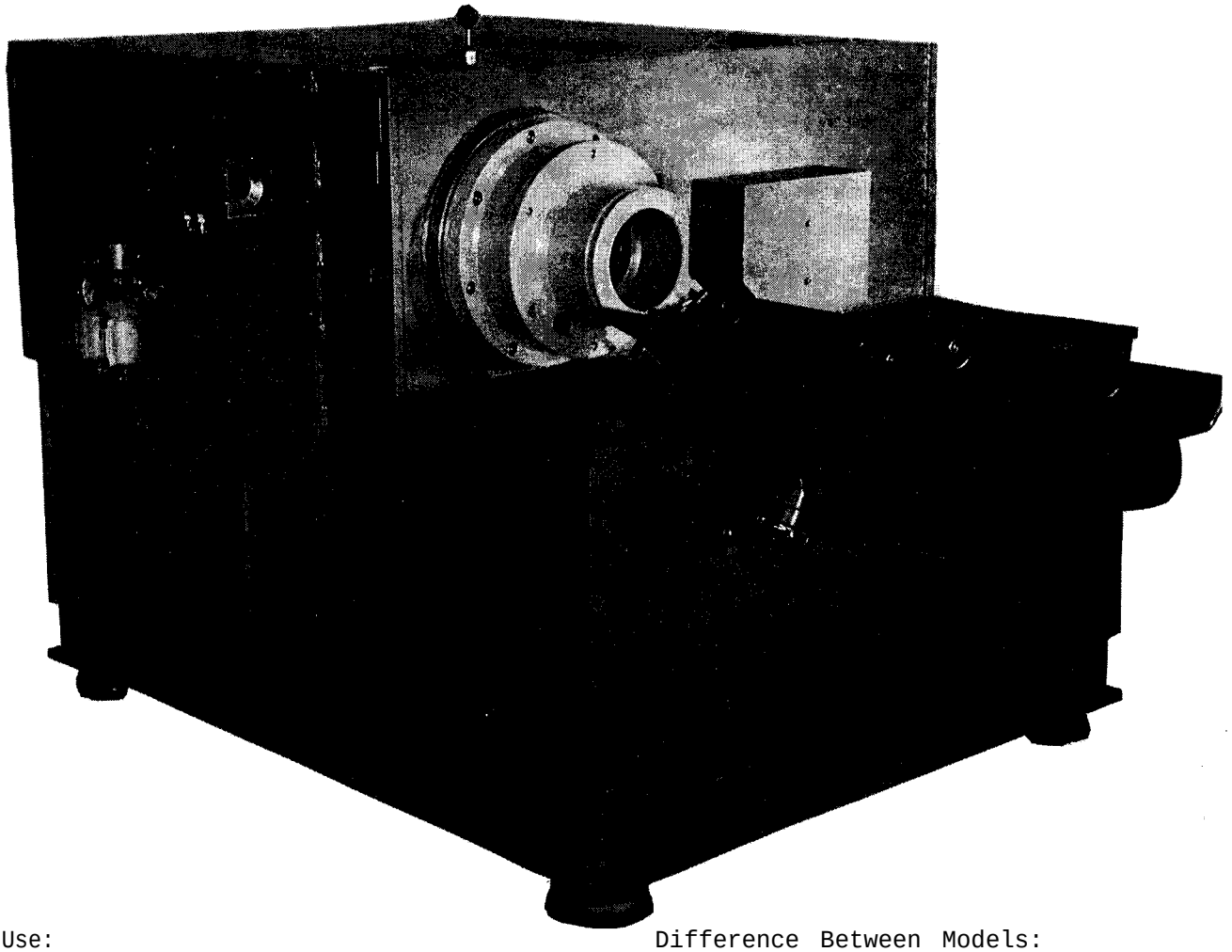
Associated Equipment:

None.

Kits:

2169E001 KIT, Base Plug and Fuze Lock Cup Removal

APE 217M1--CARTRIDGE CASE CUTOFF MACHINE



Use:
The cartridge case cutoff machine is designed to cut combustible cartridge cases to separate them from 152MM M409 and M411 series cartridges with straight or bulbous cases. It will accommodate 152MM M409 series cartridges with the windshield cap removed or installed, and M411 series with the windshield installed.

Description:
The machine is pneumatic and hydraulic operated. Projectiles are loaded into the machine on the cartridge loading tray. The projectile is positioned into the spindle and clamped, the cutoff operation is performed and the projectile and cartridge case removed.

Difference Between Models:
The APE 2170M1 is an improved version of the APE 2170, featuring extensive operational and design improvements.

Tabulated Data:
APE No 21700000M1
Unit of issue: . . . . . Each

Installation Data:
Length: . . . . . 56-3/4 in.
Width: . . . . . 88-5/8 in.
Height: . . . . . 51-13/16 in.
Weight: . . . . . 3710 pounds uncrated

Utilities Required:
Pneumatic:
100 PSI at 20 SCFM

Production Capacity:
Approximately 30 cartridges/hour

Shipping Data:

Length:	101 in
Width:	68 in
Height:	64 in
Cube:	250 cu/ft
Weight:	4680 pounds

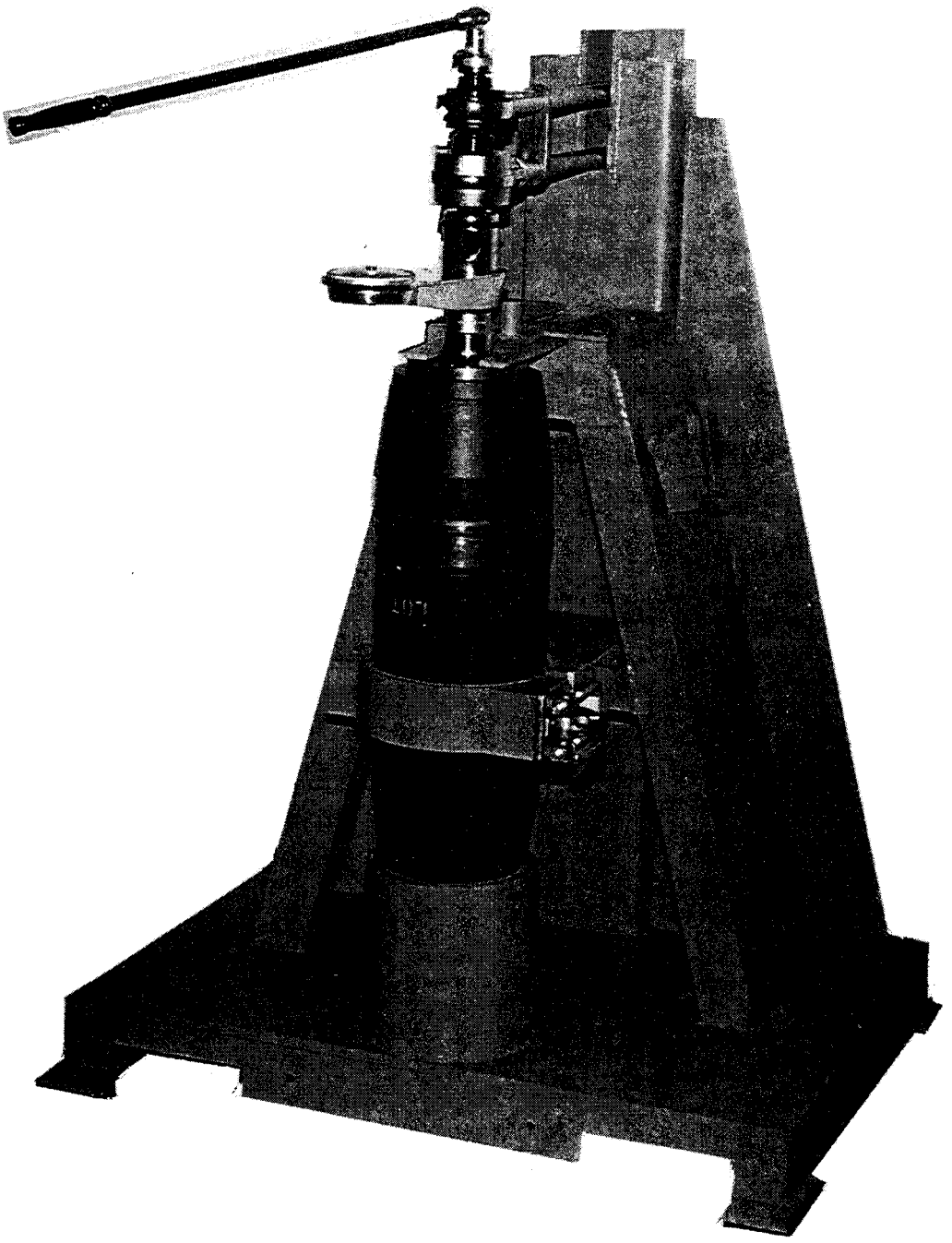
Associated Equipment:

None

Kits:

2170E001	Kit, 120MM Combustible Cartridge Case Cutoff Equipment
2170E002	Kit, 152MM M657 HE-T Combustible Cartridge Case Cutoff Equipment
2170E003	Kit, Interlock Actuator for 120MM M829 Cartridge
2170E004	Kit, Interlock Actuator for 120MM M829A1 Cartridge
2170E005	Kit, Interlock Actuator for 120MM M830 and M831 Cartridge
2170E007	Kit, Interlock Actuator for 120MM M865 Cartridge

APE 2171--TORQUE FIXTURE, PROJECTILE BASE



Use:
The projectile base torque fixture is used to apply a specified assembly torque to the base plug on an 8-inch HE M404 projectile.

Description:
APE 2171 consists of a fixture that holds the projectile securely in a base-up position, a pin-wrench adapter assembly, and a manually operated torquing assembly.

Difference Between Models:
Original design.

Tabulated Data:
- APE No. 21710000
- Unit Of Issue . . . . . Each

Installation Data:
- Length . . . . . 46-1/2 in.
- Width . . . . . 37 in.
- Height . . . . . 54 in.
- Weight . . . . . 655 lbs

Utilities Required:
None.

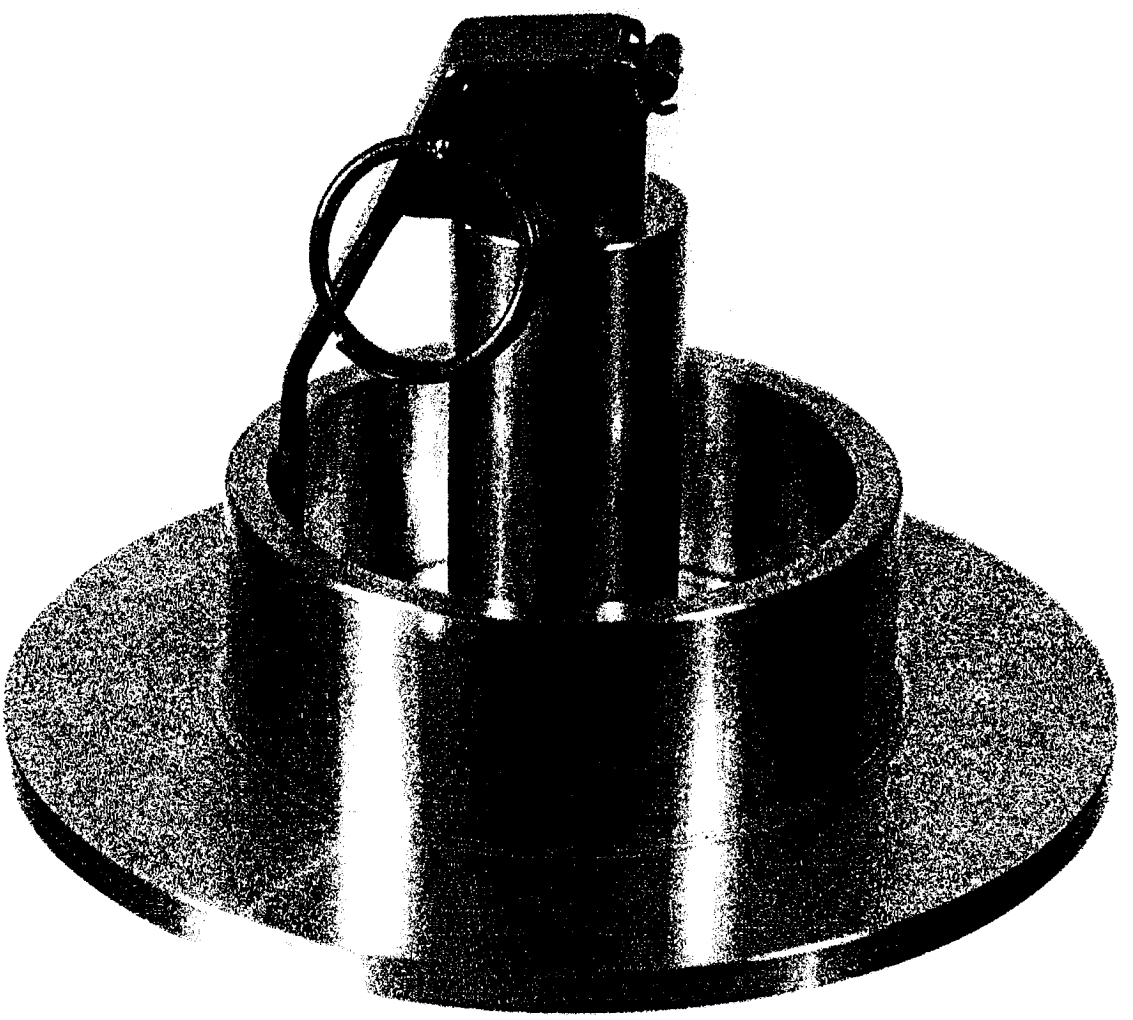
Production Capacity:
Depends on operator skill.

Shipping Data:
- Length . . . . . 43 in.
- Width . . . . . 38 in.
- Height . . . . . 56 in.
- Cube . . . . . 53 cu ft
- Weight . . . . . 770 lbs

Associated Equipment:
None.

Kits:
None.

APE 2172--FIXTURE, HOLDING, GRENADE FUZE M213



Use:
The holding fixture is used to restrain the safety lever of the M213 grenade fuze during replacement of the grenades safety pin and ring. A modified pair of pliers is included and is used to impart a diamond crimp in the replacement safety pin. A clear plexiglass shield is additionally furnished for placement between the operator and the fixture. With the exception of the crimping pliers, all components are designed to be mounted to a work table furnished by the user.

Description:
APE 2172 is constructed primarily of low carbon steel while the shield is constructed of clear plexiglass. The assembly consists of a pedestal located in the center of the fixture that is threaded to accommodate the fuze threads of the M213 fuze. The recessed area of the pedestal accommodates and holds the grenade safety lever while the safety pin is being replaced. The blast defection tube is constructed of 3“ pipe with a baffled opening to direct the blast and fuze fragments away from the operator should it be inadvertently initiated. The crimping pliers are a standard 8 inch pair of commercial pliers that have been modified.

Difference Between Models:
Original design.

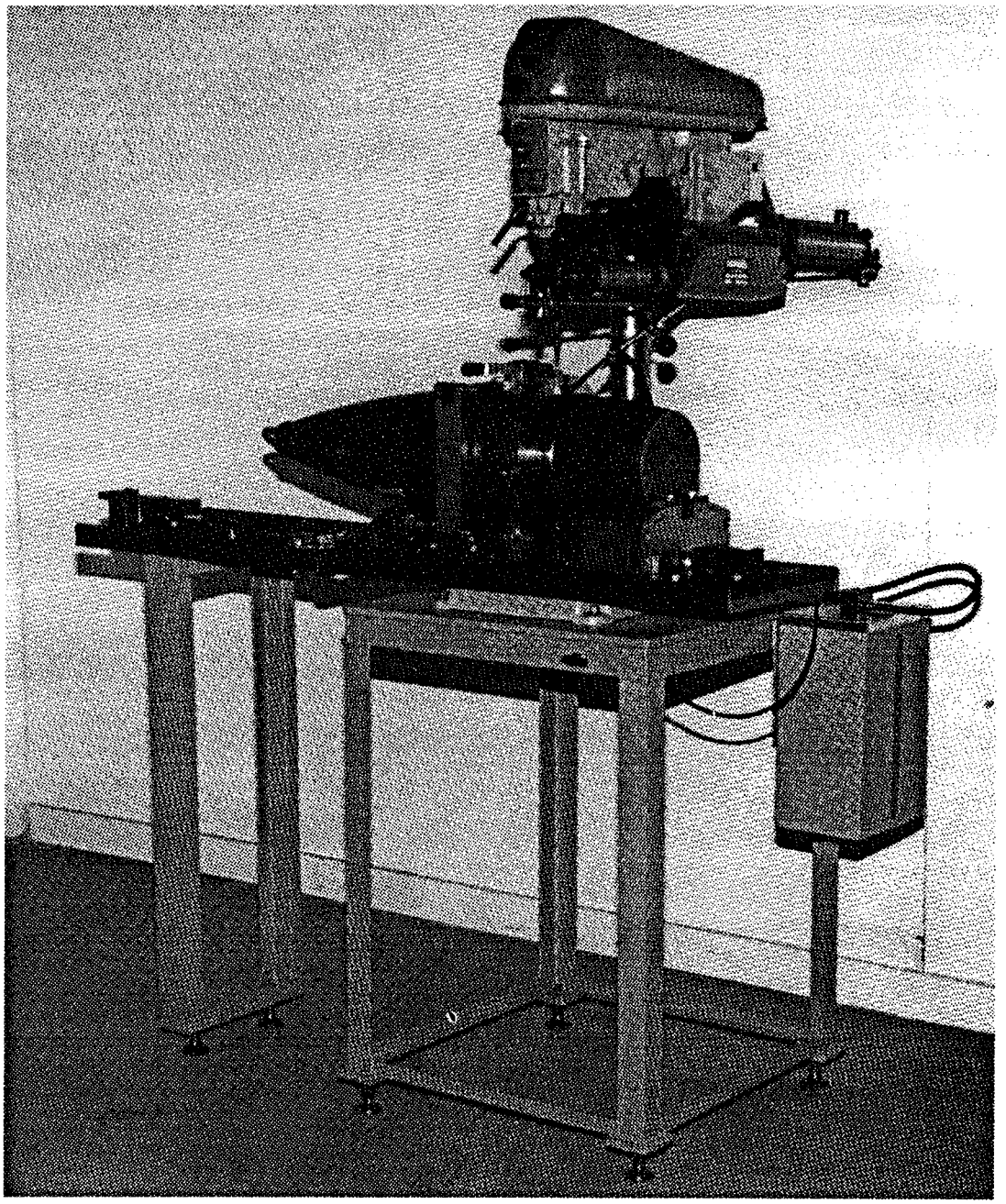
Tabulated Data:
APE No. 21710000
Unit of Issue . . . . . Each
Installation Data:
Length (mounted) . . . . . 30 in.
Width . . . . . 7-1/2 in.
Height . . . . . 25 in.
Weight . . . . . 50 lbs
Floor Space . . . . . Varies with table used
Utilities Required:
None.
Production Capacity:
Not applicable.

Shipping Data:
Length . . . . . 36 in.
Width . . . . . 8 in.
Height . . . . . Not available
Cube . . . . . 1 cu ft
Weight . . . . . 60 lbs

Associated Equipment:
None.

Kits:
None.

APE 2173--EQUIPMENT, PROJECTILE BODY DRILLING



Use:
The projectile body drilling equipment is used to drill six holes in the base of 8-inch M404 projectile bodies for retrofit operations.

Description:
APE 2173 consists of a bench mounted drill press, projectile clamping carriage and carriage guide. The projectile clamping carriage is equipped with a positioning device to equally space the six holes.

Difference Between Models:
Original design.

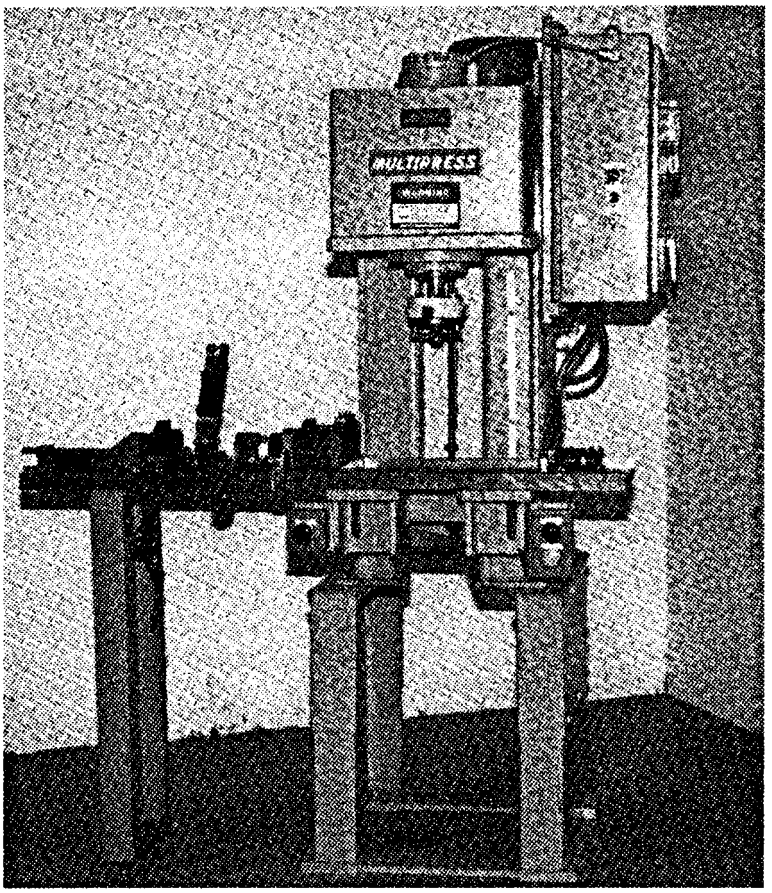
Tabulated Data:
APE No. 21730000
Unit of Issue . . . . . Each
Installation Data:
Length . . . . . 54 in.
Width . . . . . 32 in.
Height . . . . . 70-3/4 in.
Weight . . . . . 600 lbs
Utilities Required:
115 vac, 60 Hz, single phase.
Production Capacity:
15 projectiles per hour.

Shipping Data:
Length . . . . . Not available
Width . . . . . Not available
Height . . . . . Not available
Cube . . . . . Not available
Weight . . . . . Not available

Associated Equipment:
None.

Kits:
2173E001 KIT, Power Feed Attachment
2173E002 KIT, Coolant Unit, Spray Mist
2173E003 KIT, Grinder, Drill Bit

APE 2174--PRESS, PROJECTILE PINNING AND STAKING



Use:
The projectile press is used in pinning and staking operations performed on the 8 inch M404 projectile.

Description:
APE 2174 consists of a bench mounted hydraulic press, projectile clamping carriage and carriage guide. The projectile clamping carriage is equipped with a positioning pin to align the six holes in the projectile with the RAM.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	21740000
Unit of Issue	Each
Installation Data:	
Length	57 in.
Width	27 in.
Height	72 in.
Weight	1400 lbs
Utilities Required:	
230 vac, 60 Hz, 3 phase; 3/8 inch water line.	
Production Capacity:	
15 projectiles per hour.	

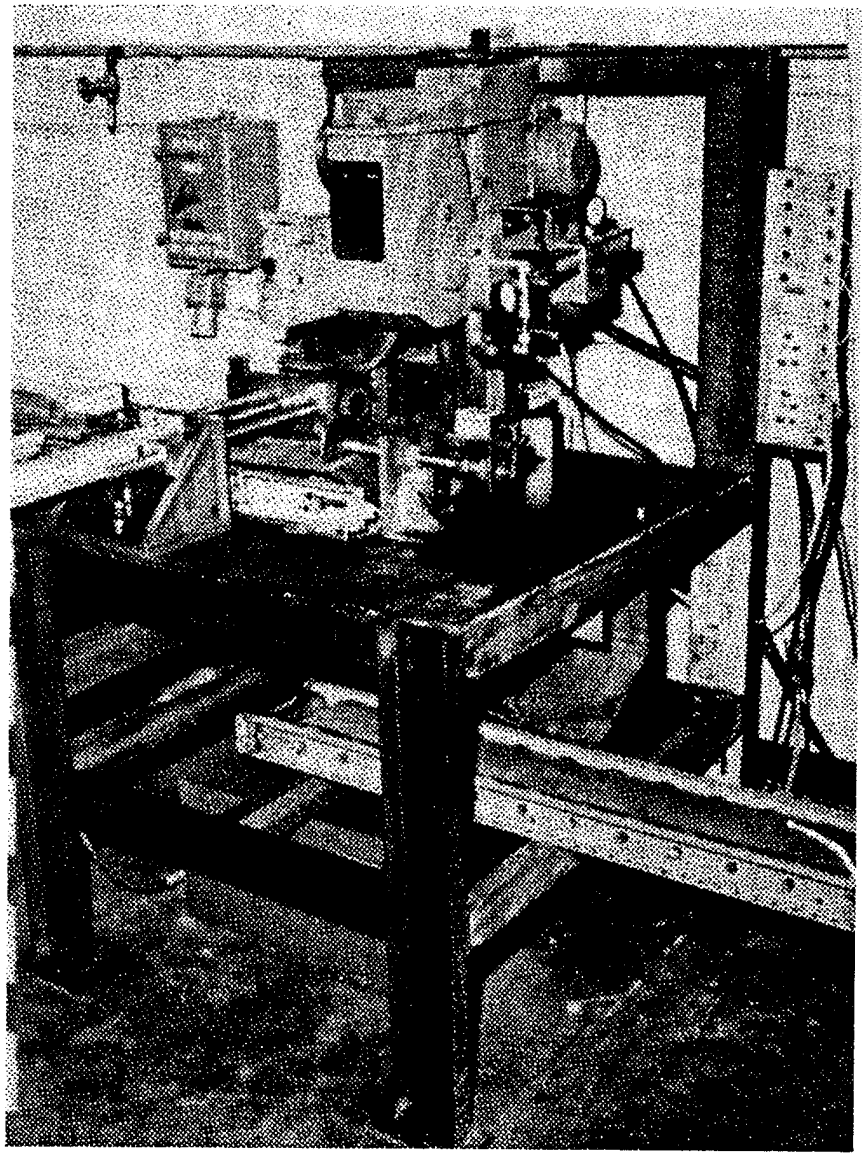
Shipping Data:

Length	Not available
Width	Not available
Height	Not available
Cube	Not available
Weight	Not available

Associated Equipment:
None.

Kits:
None.

APE 2175--MACHINE, PROJECTILE SAW



Use:
The projectile saw machine is used to saw high explosive loaded projectiles for demil ranging in size from 75MM to 120MM.

Description:
APE 2175 is basically a circular cold saw. This type of saw is designed to saw material at low rotational speeds with a liquid coolant. An electronic sequencer (micro processor) is furnished with the machine for automatic and remote operation. Feed and discharge conveyors are also furnished with this machine. Each conveyor is approximately 8 inches wide by 10 feet long.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	2175000
Unit of Issue	Each
Installation Data:	
Length	78 in.
Width	66 in.
Height	84 in.
Weight	1500 lbs

Utilities Required:
208 vac, 3 phase, 60 Hz.
Production Capacity:
One projectile (90MM) per minute.

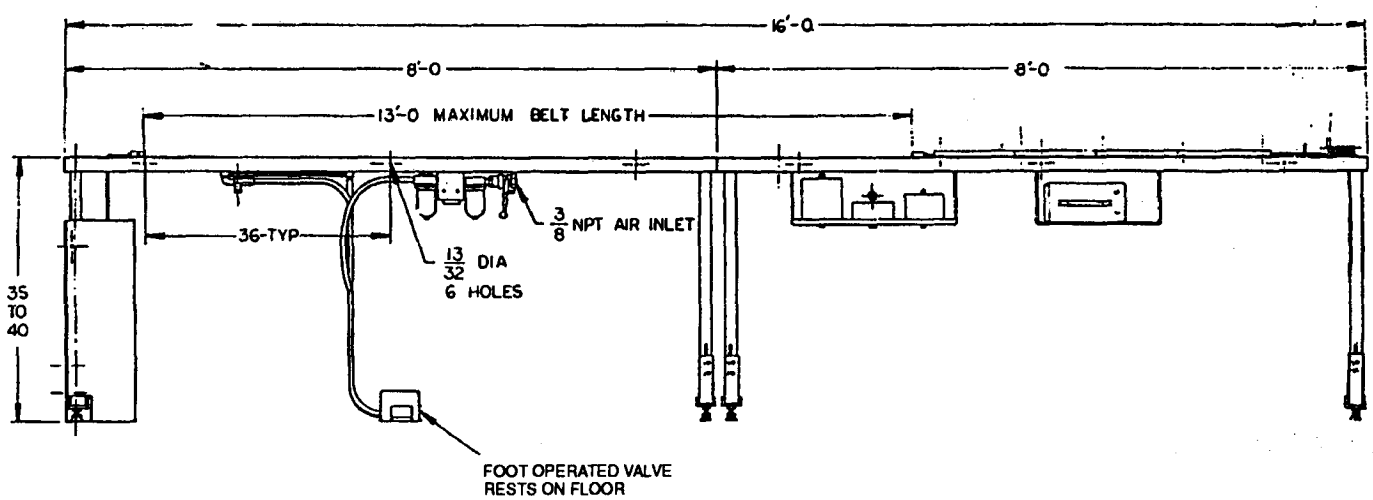
Shipping Data:
MACHINE:
Length . . . . . 90 in
Width . . . . . 78 in.
Height . . . . . 92 in.
Cube . . . . . 374 cu ft
Weight . . . . . 2100 lbs

CONVEYORS:
Length . . . . . 125 in
Width . . . . . 16 in.
Height . . . . . 18 in.
Cube . . . . . 21 cu ft
Weight . . . . . 250 lbs

Associated Equipment:
None.

Kits:
None.

APE 2176--PRODUCTION TEST EQUIPMENT FOR BELTED SMALL ARMS AMMUNITION



Use:
The test equipment is designed to apply a specified tension to belted lengths of small arms ammunition in order to detect weak links.

Description:
APE 2176 consists of: a free standing table of adjustable height, fourteen 10 pound weights, one 5 pound weight, an air cylinder providing foot pedal operation of the test weights, and connectors with connector blocks for caliber .30-M1 links, 5.56MM-M29 links, 7.62MM-M13 links, caliber 50-M2 links, M9 links, M25A2 links, 20MM-M10 links, M12 links, M14 links, M17 links, DM-1 links, M24 links, M22 links, MK6 links, 25MM M28 links.

Difference Between Models:
Original design.

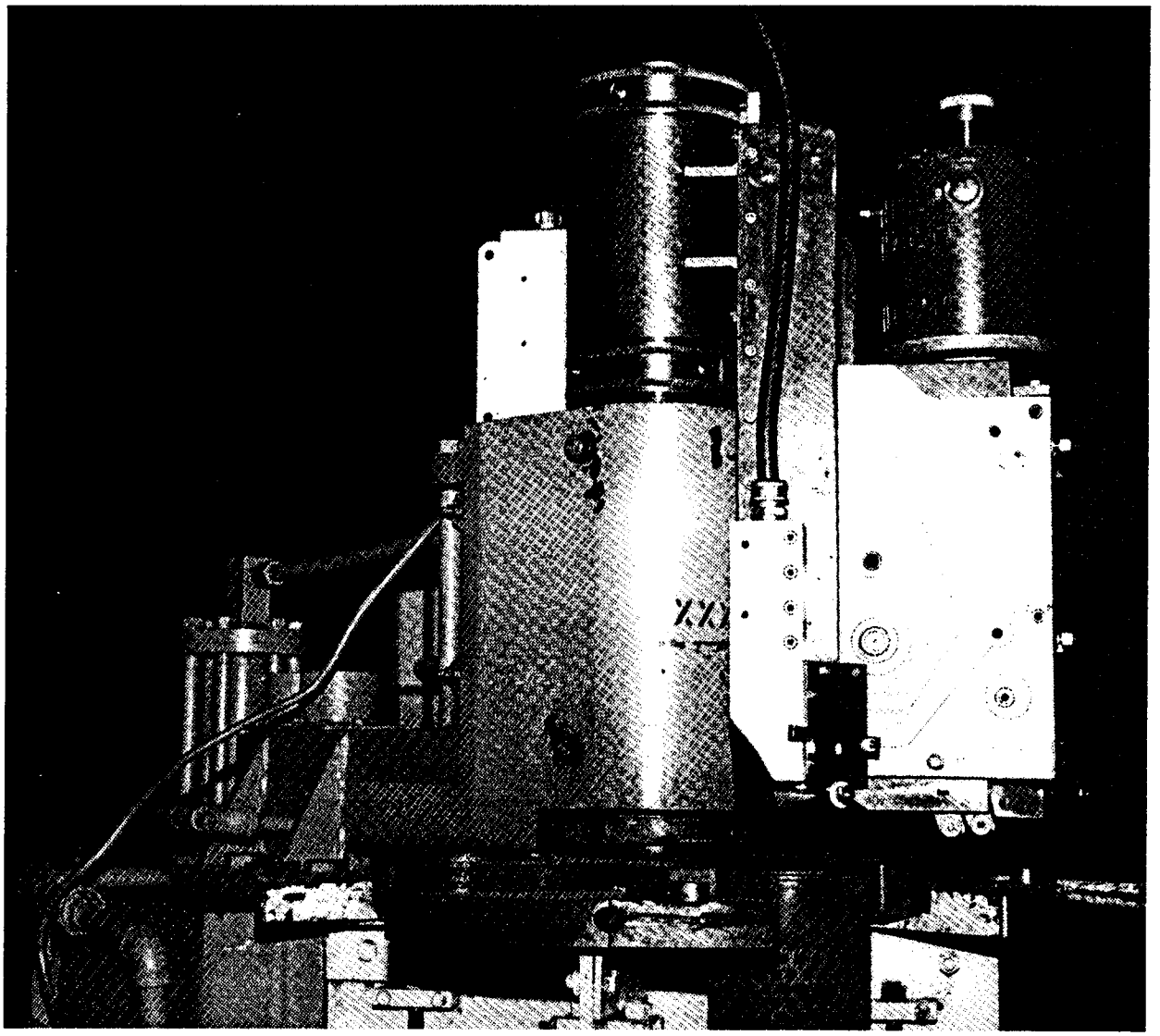
Tabulated Data:
APE No. 21760000
Unit of Issue . . . . . Each
Installation Data:
Length . . . . . 192 in.
Width . . . . . 12 in.
Height . . . . . 35 to 45 in.
Weight . . . . . 457 lbs
Utilities Required:
Air at 90 psi.
Production Capacity:
Not available.

Shipping Data:
Length . . . . . 105 in.
Width . . . . . 43 in.
Height . . . . . 50 in.
Cube . . . . . 131 cu ft
Weight . . . . . 1112 lbs

Associated Equipment:
None.

Kits:
None.

APE 2178--FIXTURE, CARTRIDGE CASE BASE MARKING, 37MM THRU 6-INCH



Use:
The cartridge case base marking fixture is used to automatically stencil the base of 37MM through 6–inch cartridge cases. The fixture is used on the APE 1106 or the APE 1229. The fixture stencils cartridge cases while they are contained at the second station of the prime/deprime machine.

Description:
APE 2178 consists of a commercial printing head which is modified to interface with APE 1106 or APE 1229. The fixture is modified to be operated pneumatically. The stencil equipment operates automatically and does not require operator attendance except for checking marking quality.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	21780000
Unit of Issue	Each
Installation Data:	
Length	24 in.
Width	20 in.
Height	26 in.
Weight	220 lbs

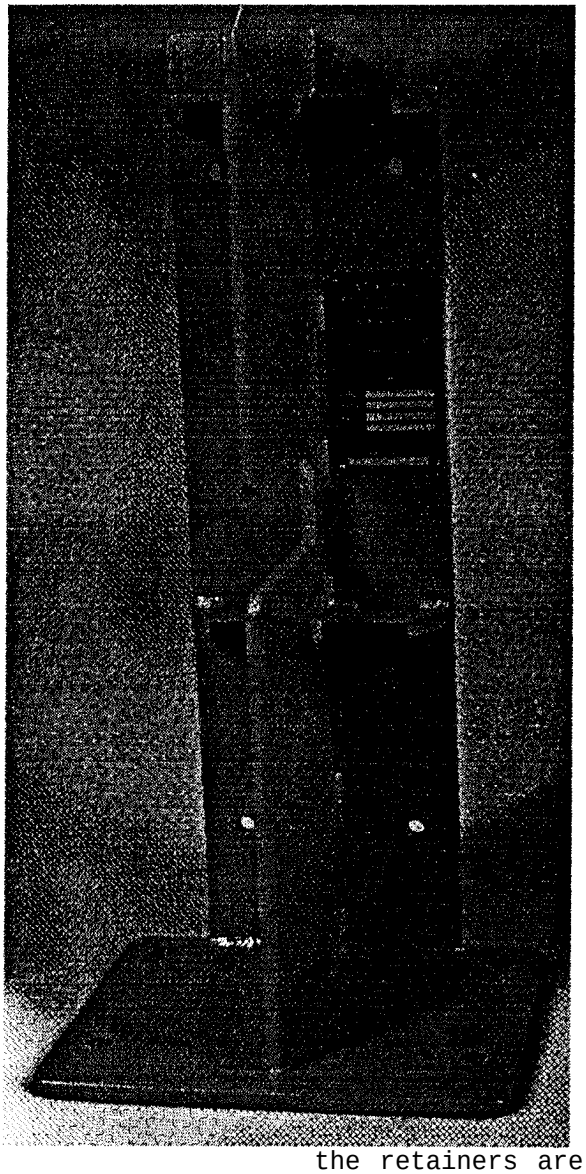
Utilities Required:
Air at 80 psi.
Production Capacity:
Not available.

Shipping Data:
Length . . . . . Not available
Width . . . . . Not available
Height . . . . . Not available
Cube . . . . . Not available
Weight . . . . . Not available

Associated Equipment:
None.

Kits:
None.

APE 2179--FIXTuRE, CLIP HOLDING



Use:
The clip holding fixture is used to hold the M74, 66MM incendiary rocket four round clips during assembly and disassembly operations. (The clip handling fixture kit is used to prevent the rockets from falling from the clip assembly during operations where the rocket retainers are removed from the clip assembly.

Description:
APE 2179 is a welded structure which supports the rocket clip. Eight retainer petals expanding rings used to expand the retainer peals on the rocket retainers when the retainers are being temperature conditioned are included with the fixture.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	21790000
Unit of Issue	Each
Installation Data:	
FIXTURE:	
Length	10 in.
Width	8 in.
Height	21–3/8 in.
Weight	36 lbs

KIT:
Length . . . . . 8 in.
Width . . . . . 8 in.
Height . . . . . 10-1/2 in.
Weight . . . . . 5 lbs

Utilities Required:
None.

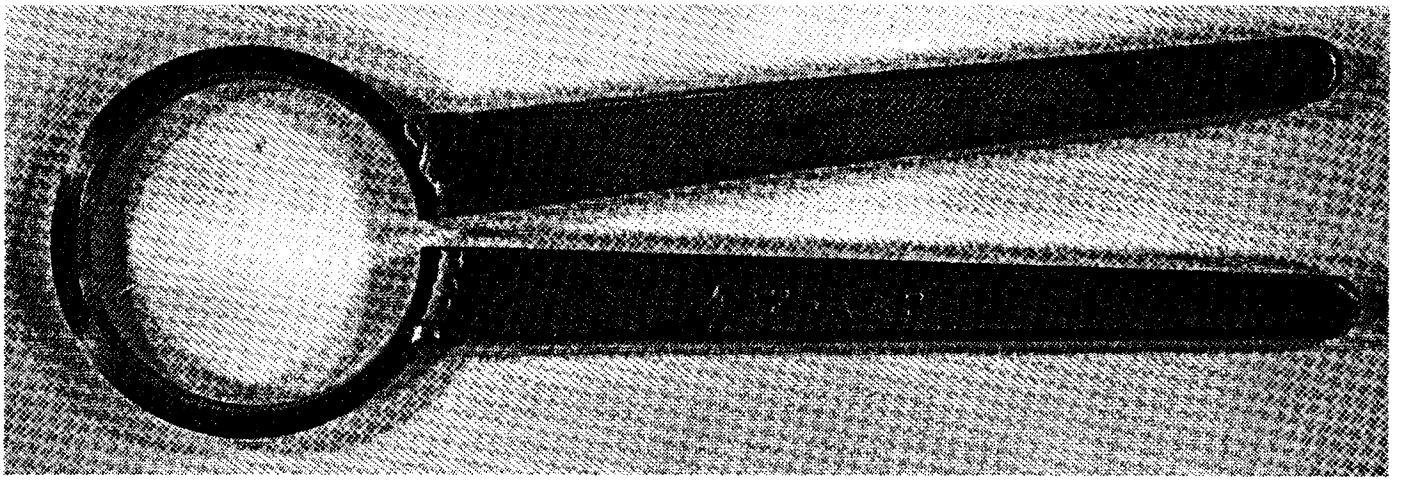
Production Capacity:
Not available.

Shipping Data:
Length . . . . . Not available
Width . . . . . Not available
Height . . . . . Not available
Cube . . . . . Not available
Weight . . . . . Not available

Associated Equipment:
APE 2180, 2181, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2193, 2194, and 2021M1.

Kits:
2179E001 KIT, Clip Handling Fixture

APE 2180--WRENCH, RETAINER REMOVAL



Use:
The retainer removal wrench is used to remove the plastic rocket retainer from the M74, 66MM incendiary rocket four round clip.

Description:
APE 2180 consists of a circular gripping device with two handles.

Difference Between Models:
Original design.

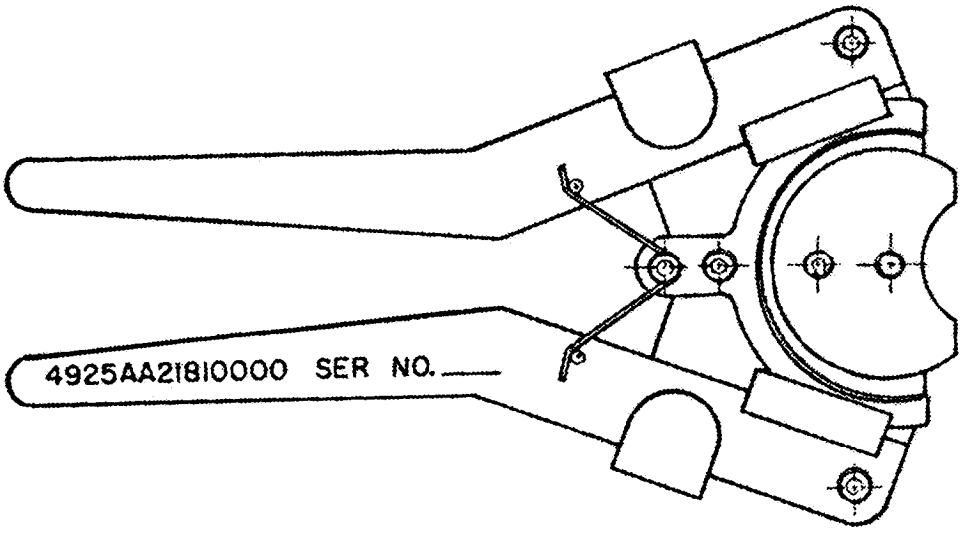
Tabulated Data:
- APE No. 21800000
- Unit of Issue . . . . . Each
- Installation Data:
  - Length . . . . . 9-1/4 in.
  - Width . . . . . 2-7/8 in.
  - Height . . . . . 1/4 in.
  - Weight . . . . . 1 lb
- Utilities Required:
  - None.
- Production Capacity:
  - Not applicable.

Shipping Data:
- Length . . . . . 9-3/4 in.
- Width . . . . . 3-3/8 in.
- Height . . . . . 3/4 in.
- Cube . . . . . .01 cu ft
- Weight . . . . . 1-1/2 lbs

Associated Equipment:
APE 2179, 2181, 2184, 2185,2186, 2187, 2188, 2189, 2190, 2193, 2194, and 2021M1.

Kits:
None.

APE 2181--WRENCH, TUBE CAP REMOVAL



Use:
The tube cap removal wrench is used to remove the tube cap from the M74, 66MM incendiary rocket four round clip without distorting the tube cap.

Description:
APE 2181 consists of two handles connected to a tube cap jaw and operated by a torsion spring. When the handles are squeezed together, the tube cap is gripped for removal.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	21810000
Unit of Issue	Each

Installation Data:

Length	10 in.
Width	5-1/2 in.
Height	1 in.
Weight	2 lbs

Utilities Required:
None.

Production Capacity:
Not applicable.

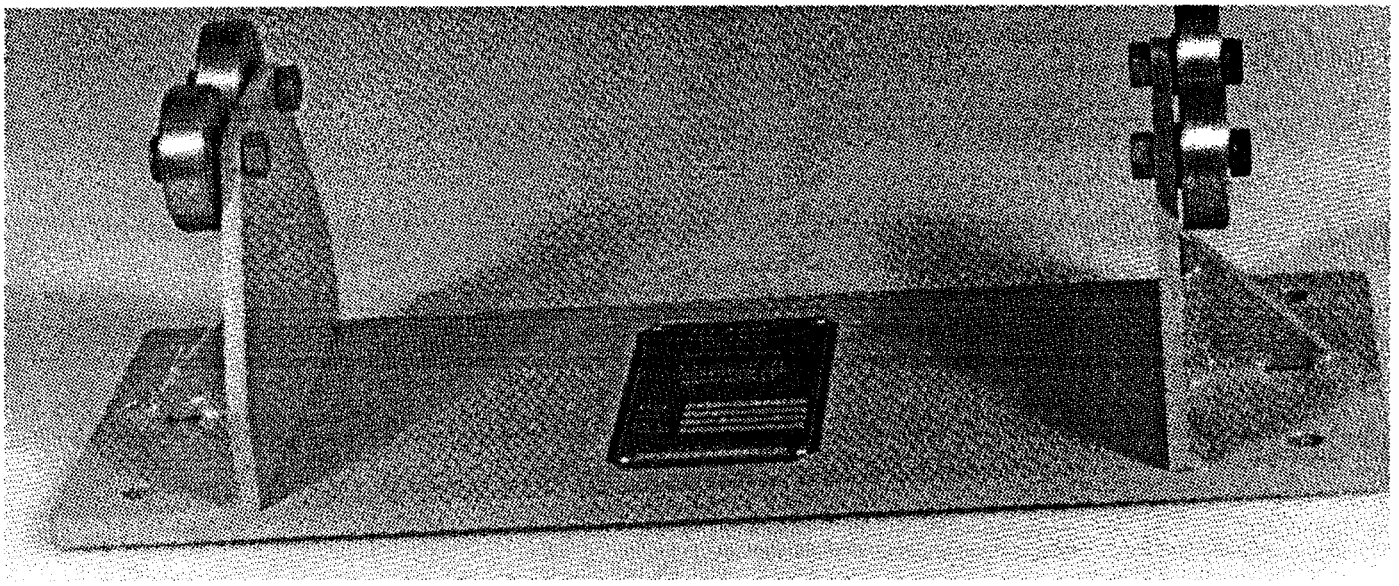
Shipping Data:

Length	10–1/2 in.
Width	6 in.
Height	1-1/2 in.
Cube	.05 cu ft
Weight	2–1/2 lbs

Associated Equipment:
APE 2179, 2180, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2193, 2194, and 2021M1.

Kits:
None.

APE 2184--FIXTURE, VISUAL INSPECTION



Use:
The visual inspection fixture is used to support the individual M74, 66MM incendiary rockets during the visual inspection phase of the screening operation.

Description:
APE 2184 consists of a base and two sets of rollers to support the rockets. Included with the fixture are 40 fin retaining tubes to be used on a rocket when it is removed from four round clip tube.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	21840000
Unit of Issue	Each
Installation Data:	
FIXTURE:	
Length	16 in.
Width	6 in.
Height	5 in.
Weight	5 lbs
TUBES:	
Length	2-7/8 in.
Width	2-7/8 in.
Height	2 in.
Weight	1/2 lb

Utilities Required:
None.

Production Capacity:
Not applicable.

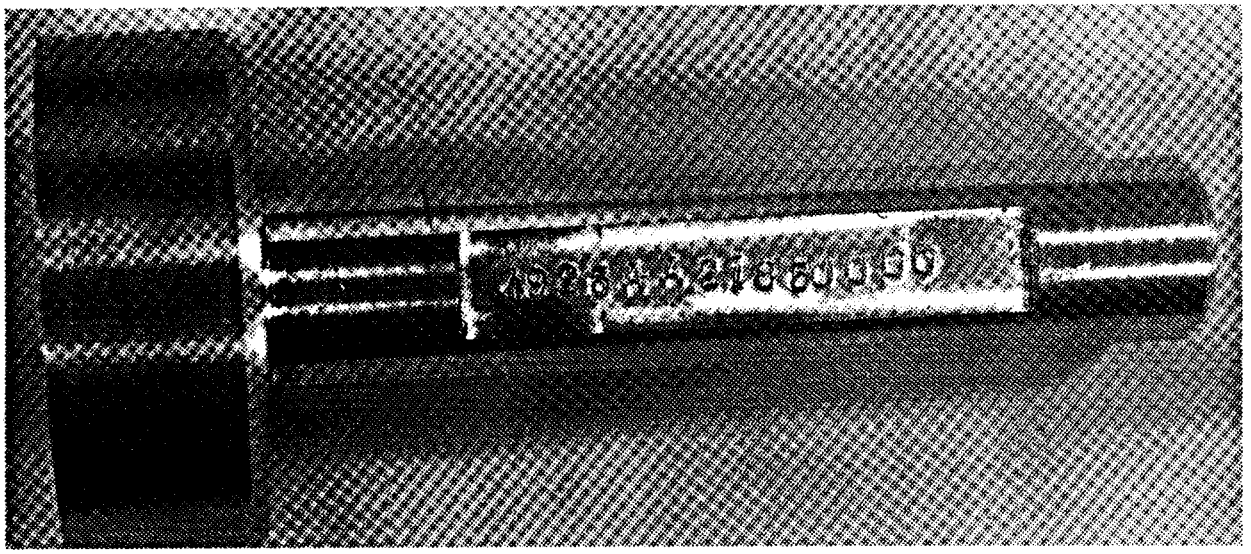
Shipping Data:

Length	Not available
Width	Not available
Height	Not available
Cube	Not available
Weight	Not available

Associated Equipment:
APE 2179, 2180, 2181, 2185, 2186, 2187, 2188, 2189, 2190, 2193, 2194, and 2021M1.

Kits:
None.

APE 2185--TOOL, RETAINER ASSEMBLY



Use:
The retainer assembly tool is used to install the plastic rocket retainer into the tube cap on an M74, 66MM incendiary rocket when the rocket is in the four round clip.

Description:
APE 2185 consists of a metal disk with a handle welded on it.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	21850000
Unit of Issue	Each
Installation Data:	
Length	2-11/16 in.
Width	2-11/16 in.
Height	6 in.
Weight	1 lb
Utilities Required:	
None.	
Production Capacity:	
Not applicable.	

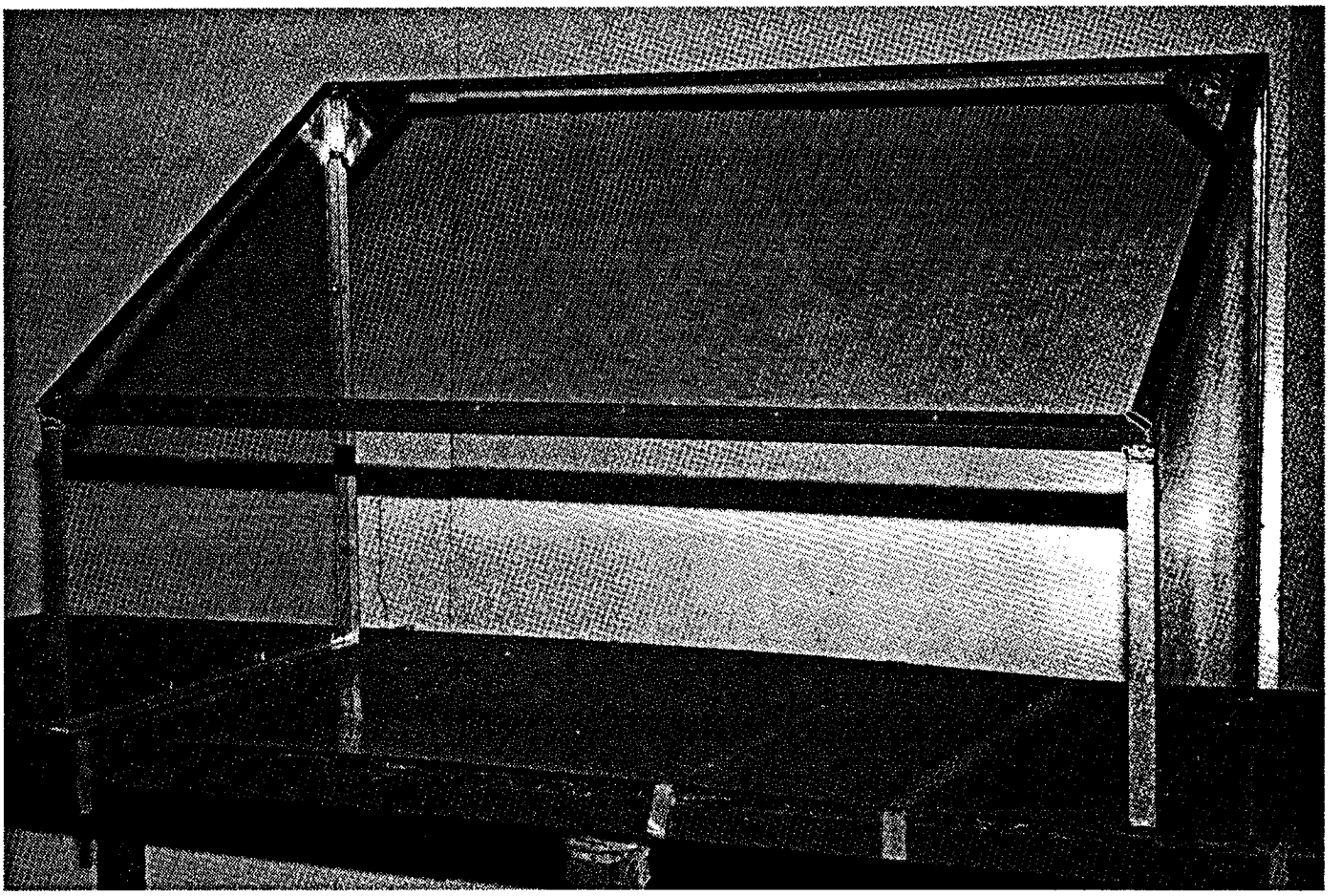
Shipping Data:

Length	2-1/2 in.
Width	3-1/2 in.
Height	6-1/2 in.
Cube	.05 cu ft
Weight	1-1/2 lbs

Associated Equipment:
APE 2179, 2180, 2181, 2184, 2186, 2187, 2188, 2189, 2190, 2193, 2194, and 2021M1.

Kits:
None.

APE 2186--SHIELD AND KNIFE, POLYSTYRENE BOX



Use:
The shield and knife are used to open polystyrene boxes containing an M74, 66MM four round clip. The shield is used to protect the operator from facial exposure to flame if leaking warhead contents should ignite upon exposure to air during the opening of the polystyrene box.

Description:
APE 2186 is a commercial utility knife. The shield consists of an aluminum angle frame with transparent nonflammable plastic sides and top.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	21860000
Unit of Issue	Each
Installation Data:	
Length	49 in.
Width	26-1/2 in.
Height	30 in.
Weight	29 lbs
Utilities Required:	
None.	
Production Capacity:	
185 to 192 clips per 8 hour shift.	

Shipping Data:

Length	Not available
Width	Not available
Height	Not available
Cube	Not available
Weight	Not available

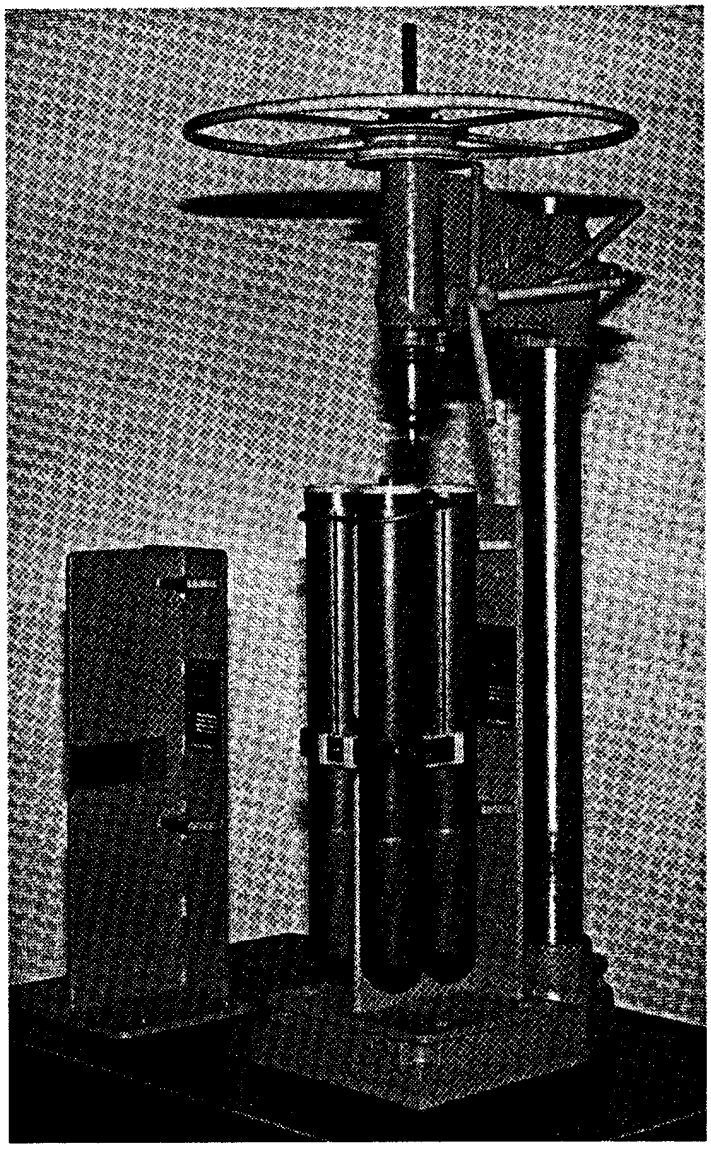
Associated Equipment:

APE 2179, 2180, 2181, 2184, 2185, 2187, 2188, 2189, 2190, 2193, 2194, and 2021M1.

Kits:

None.

APE 2187--PRESS, RETAINING SCREW REMOVAL



Use:
The retaining screw removal press is used to remove the cross–recess head screw in the manifold cover assembly of an M74, 66MM incendiary rocket four round clip.

Description:
APE 2187 is a standard bench model drill press which has been modified for manual operation and has had the column lengthened. The press should be fastened to a user furnished table.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	21870000
Unit of Issue	Each
Installation Data:	
Length	18 in.
Width	21 in.
Height	45–1/2 in.
Weight	150 lbs
Utilities Required:	
None.	

Production Capacity:
185 to 192 clips per 8 hour shift.

Shipping Data:

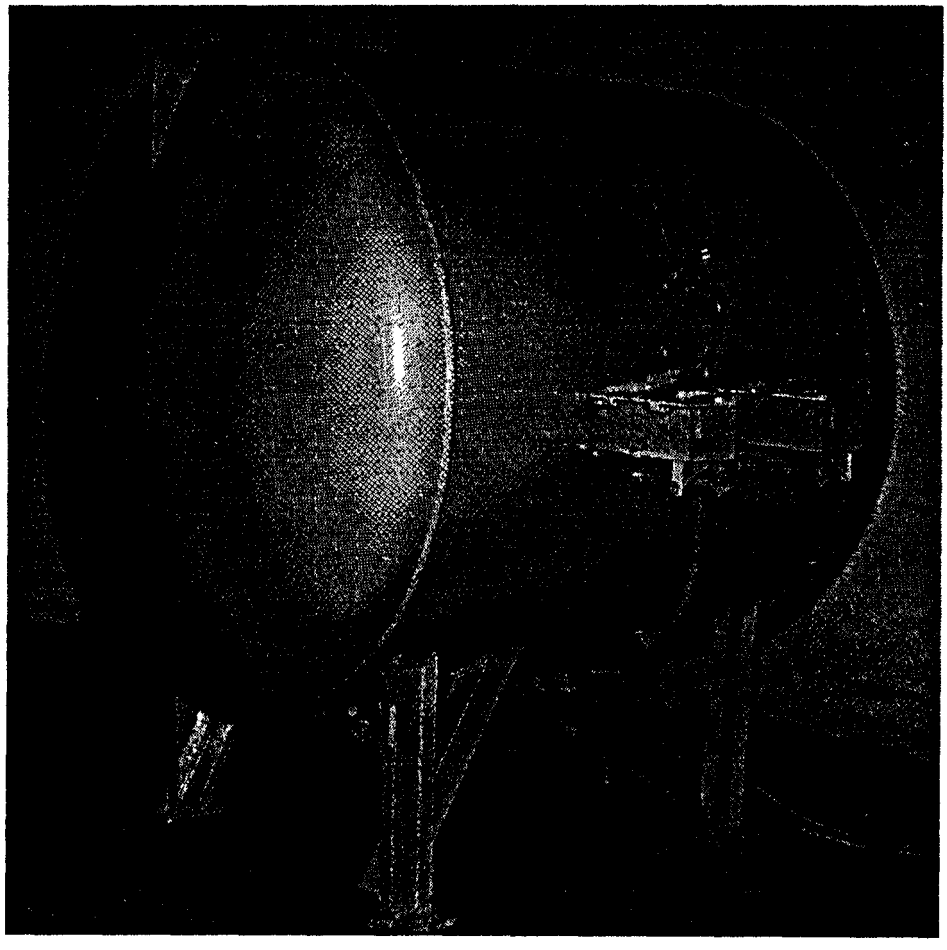
Length	Not available
Width	Not available
Height	Not available
Cube	Not available
Weight	Not available

Associated Equipment:
APE 2179, 2180, 2181, 2184, 2185, 2186, 2188, 2189, 2190, 2193, 2194, and 2021M1.

Kits:

2187E001	DRILL JIG for Removing Cover Screw on Rocket, Incendiary, 66MM, TPA, 4 Round Clip, M74.

APE 2196--MACHINE, SMALL ITEMS SHEAR



Use:
The small items shear machine is used to punch holes in explosive items to facilitate better control of demil in the APE 1236 deactivation furnace. The machine will process defuzed M26 grenades, standard contour artillery fuzes with boosters, M21A4 boosters, M42 grenades, 40MM M384 and M406 grenades.

Description:
APE 2196 consists of two separate shear stations housed in an operational shield. Once loaded, the operation of transferring to the shear station, punching, and ejecting are all controlled by a microprocessor. Hydraulic power is supplied by a separate power unit, included with the machine.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	21960000
Unit of Issue	Each
Installation Data:	
MACHINE:	
Length	73 in.
Width	63 in.
Height	69 in.
Weight	5000 lbs
POWER UNIT:	
Length	46 in.
Width	39 in.
Height	33 in.
Weight	750 lbs
Utilities Required:	
110 vac, 60 Hz, single phase, and 208 vac, 60 Hz, 3 phase.	

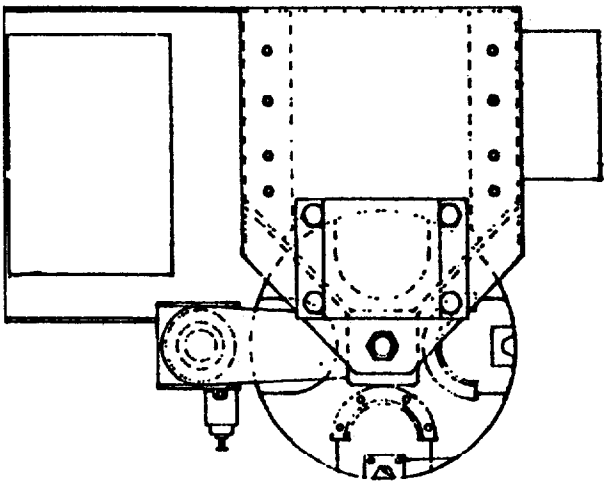
Production Capacity:
Six items per minute.

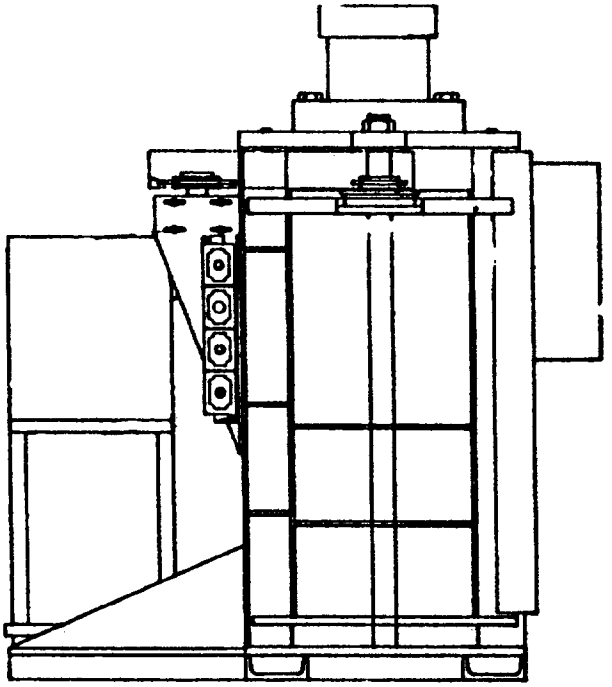
Shipping Data:
MACHINE:
Length . . . . . 84 in.
Width . . . . . 72 in.
Height . . . . . 78 in.
Cube . . . . . 273 cu ft
Weight . . . . . 5500 lbs
POWER UNIT:
Length . . . . . 54 in.
Width . . . . . 48 in.
Height . . . . . 36 in.
Cube . . . . . 54 cu ft
Weight . . . . . 1000 lbs

Associated Equipment:
APE 1236M1.

Kits:
2196EO01 KIT, M21A4 Booster
2196EO02 KIT, 40MM, M406
2196EO03 KIT, 40MM, M384
2196EO04 KIT, M500A1 (Series) Fuze w/M21A4 Booster
2196EO05 KIT, M26 Hand Grenade Unfuzed
2196EO06 KIT, M42 and M46 Grenade - ICM

APE 2197--MACHINE, DEPRIME





Use:
The deprime machine is used to remove screw-type primers from Navy 3"/50 through 8-inch and Army 105MM and 120MM cartridge cases prior to cartridge case salvage and remove press primers from cases to be re-used.

Description:
APE 2197 design incorporates a 1/2 inch thick steel operational shield with a four station index turntable. A hydraulic power unit supplies hydraulics to operate a 100 ton punch cylinder, hydraulic motor and other machine cylinders. 110 vac electrical operates and controls the functioning of various micro-switches positioned on the machine.

Difference Between Models:
Original design.

Tabulated Data:

APE No. 21970000
Unit of Issue . . . . . Each

Installation Data:

Length . . . . . 60 in.
Width . . . . . 62 in.
Height . . . . . 84 in.
Weight . . . . . 6640 lbs

Utilities Required:

208 vac, 3 phase, 15 hp hydraulic pump motor; 110 vac to operate machine controls. Alternate supply source 17 kva.

Production Capacity:

3 cartridge cases per minute.

Shipping Data:

Length . . . . . 66 in.
Width . . . . . 84 in.
Height . . . . . 92 in.
Cube . . . . . 181 cu ft
Weight . . . . . .7730 lbs

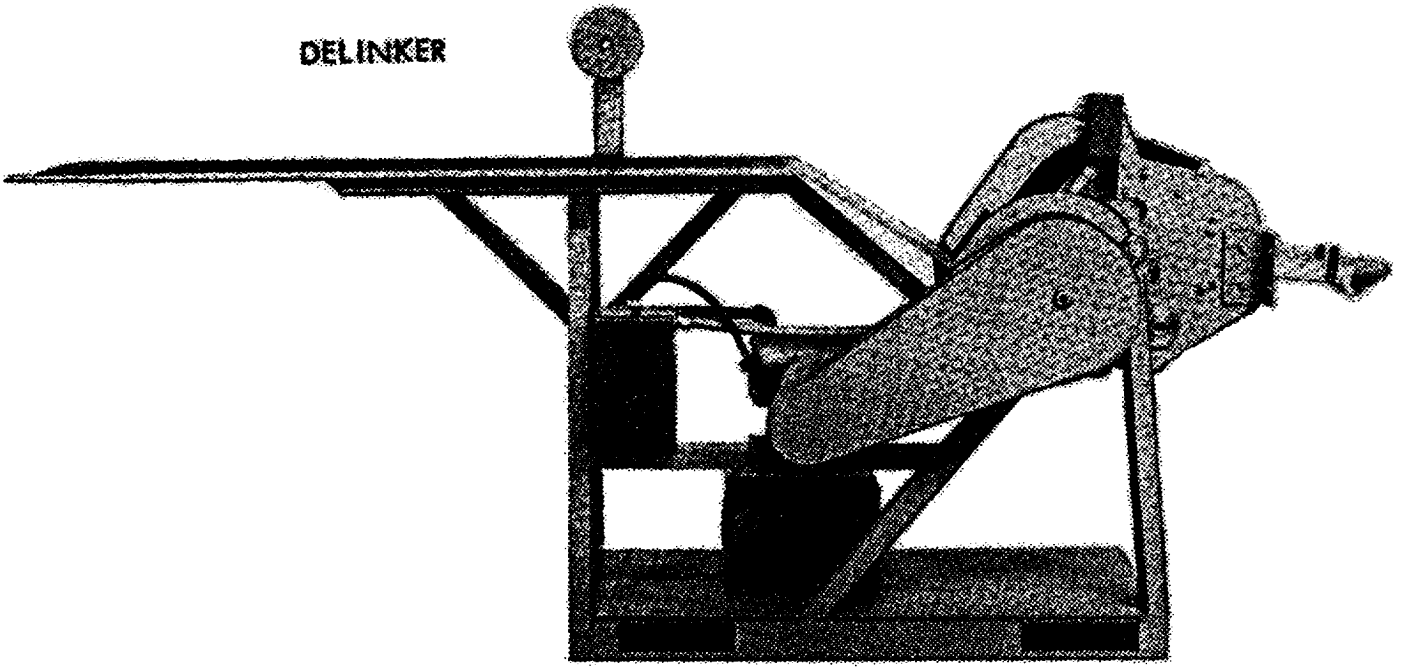
Associated Equipment:

None.

Kits:

2197EO01	KIT, Deprime 8"/55 Cartridge Cases MK1, MOD-0, MOD-1 and MOD-2
2197EO02	KIT, Deprime 120MM, M109 an XM111 Cartridge Cases
2197EO03	KIT, Deprime 5"/38 MK5 MOD 0 and MOD 1, MK8 MOD 0, MK10 MOD 0 an MOD 1, MK11 MOD 1, and 5"/54 MK6 MOD 0, MK7 MOD 0, MK9 MOD 0 and MOD 1 Cartridge Cases
2197EO04	KIT, Deprime 6"/47 MK4 MOD 0, MK6 MOD 0 and MOD 1, MK7 MOD 0 Cartridge Cases
2197EO05	KIT, Deprime 3"/50 MK3 MOD 0, MOD 2, and MOD 3, MK7 MOD 0, MOD 1, and MOD 2, MK9 MOD 0 Cartridge Cases
2197EO06	KIT, Deprime 105MM M115, M148, and M150 Cartridge Cases with M80, M83, M86 Primers

APE 2198--DELINKER, 7.62MM



Use:
The delinker is used to delink 7.62MM cartridges belts for ratio changing or one hundred percent delink. The machine may be combined with the APE 1217M1, 7.62MM linker, to delink and replace cartridges into five sequence ratio packs or straight pack ammunition belts, in one continuous operation.

Description:
APE 2198 consists of a metal frame, a power operated rotating drum, cam driven ejector pins, a cartridge belt feed guide and optional use cartridge sorting wheels.

Difference Between Models:
Original design.

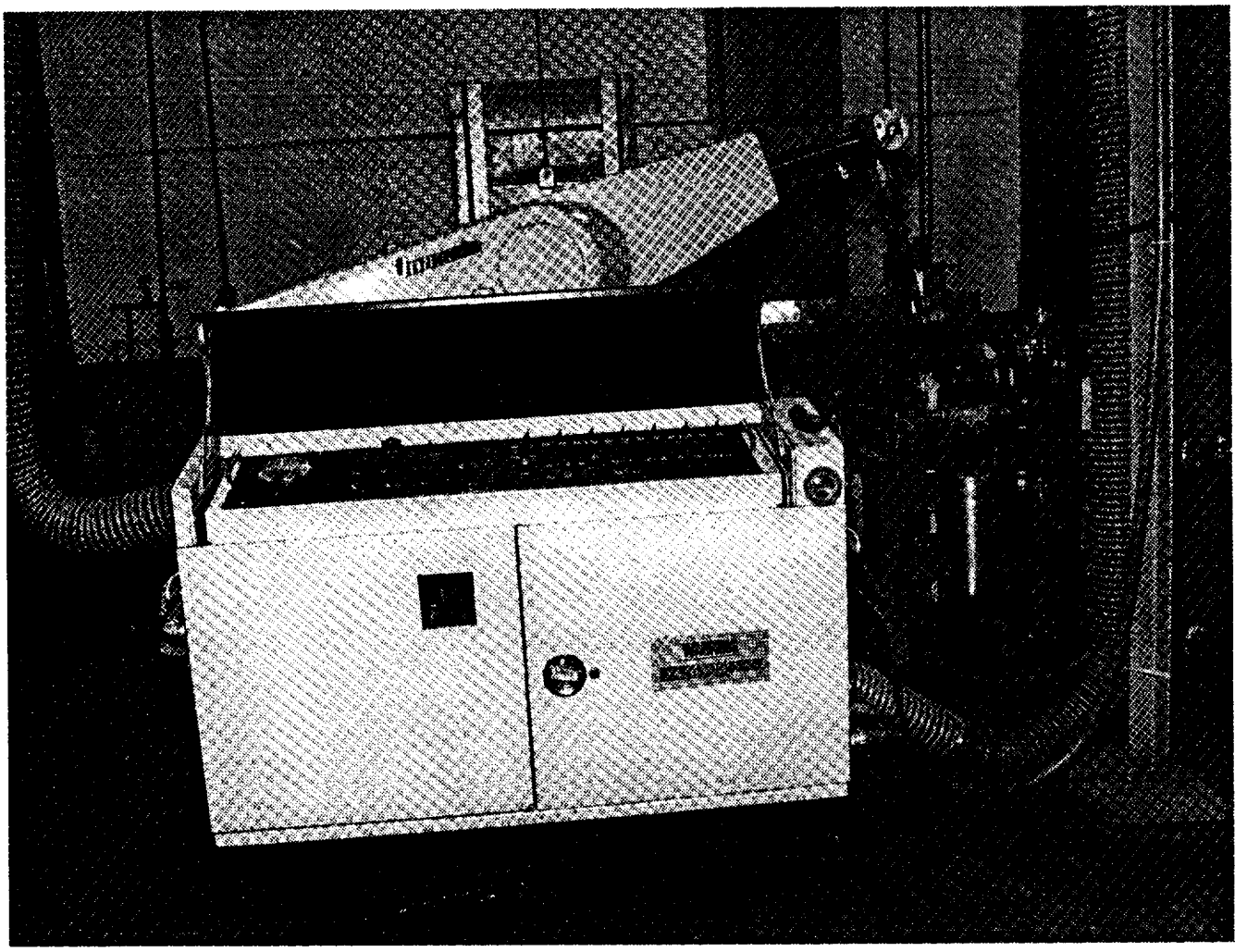
Tabulated Data:
APE No. 21980000
Unit of Issue . . . . . Each
Installation Data:
Length . . . . . 83 in.
Width . . . . . 26 in.
Height . . . . . 40 in.
Weight . . . . . 503 lbs
Cube . . . . . 50 cu ft
Floor Space . . . . . 15 Sq ft
Utilities Required:
115/230 vac, 9.2/4.6 amps, 60 Hz, single phase.
Production Capacity:
400 rounds per minute

Shipping Data:
Length . . . . . 98 in.
Width . . . . . 34 in.
Height . . . . . 47 in.
Cube . . . . . 133 cu ft
Weight . . . . . 1200 lbs

Associated Equipment:
APE 1217M1, Linker, 7.62 (for combined delink and linking operations only).

Kits :
2198E001 KIT, Delink 7.62 100 percent delink without cartridge sorting

APE 2200--ROBOT



Use:
The robot was developed to be interfaced with pieces of Ammunition Peculiar Equipment. The robot is presently interfaced with the APE 1002M2 defuzing machine w/ E014 kit. The robot is used to replace a person in explosive hazard situations.

Description:
APE 2200 consists of a hydraulic system with electrically control servos, core memory system with encoders, electrical power circuit with electrical sensors and an electro magnet as a pick up device.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	22000000
Unit of Issue	Each
Installation Data:	
Length	80 in.
Width	160 in.
Height	60 in.
Weight	3500 lbs

Utilities Required:
230 or 460 vac, 3 phase, 60 Hz, 11.5 kva; 220 or 440 vac, 3 phase, 50 Hz, 12 kva.

Production Capacity:
2400 projectiles per 8 hour shift (40MM). Capable of rounds from 20MM to 90MM.

Shipping Data:

Length	70 in.
Width	54 in.
Height	60 in.
Cube	Not available
Weight	3900 lbs

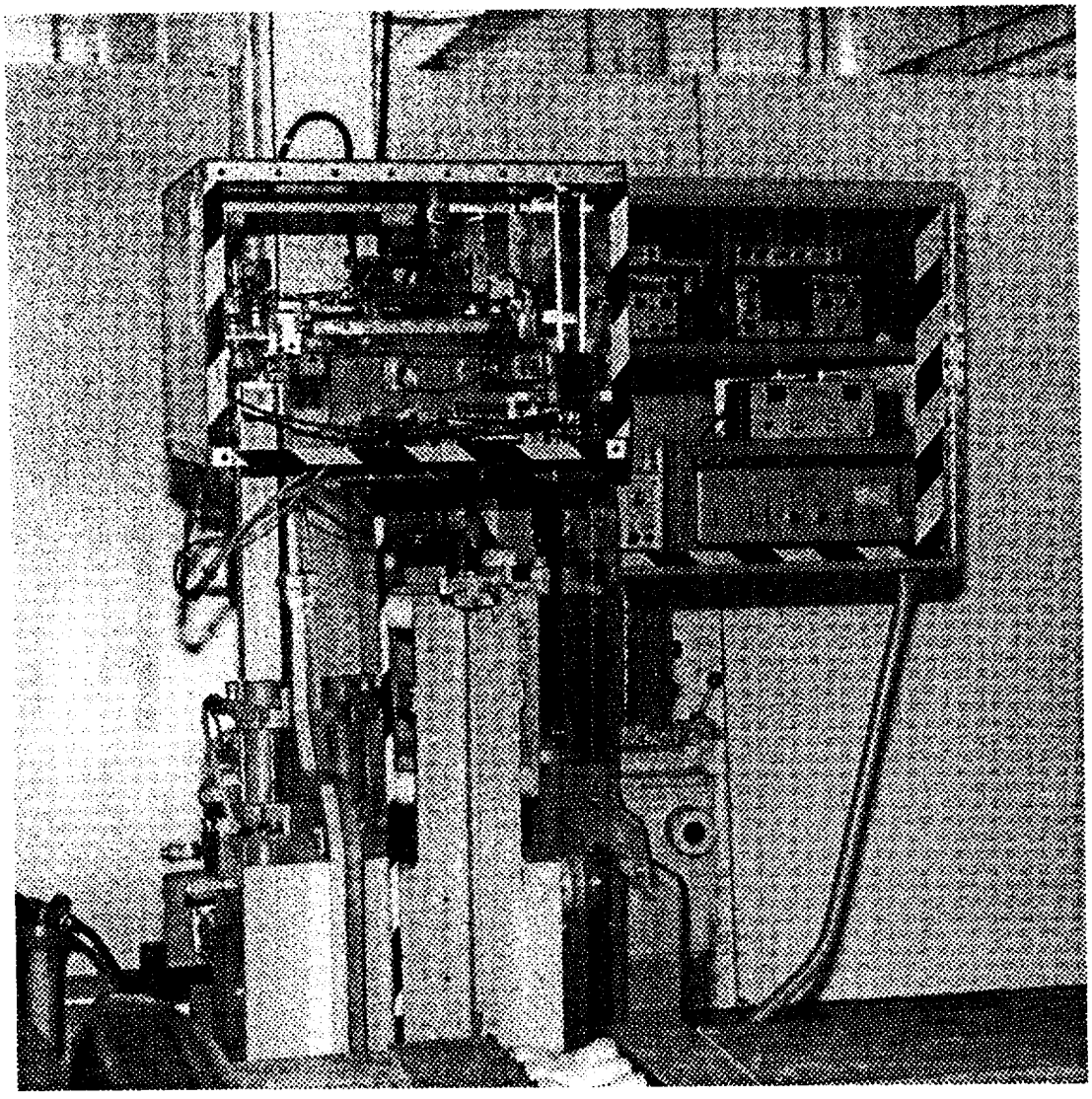
Associated Equipment:

Is interfaced with various APE depending on operation.

Kits:

None.

APE 2205--MACHINE, 155MM: M483A1 SINGLE STATION SCREENING



Use:
The single station screening machine is used to screen 155MM: M483A1 projectiles for cracks in the projectile base.

Description:
APE 2205 consists of a mechanical handling system that automatically positions a projectile after it has been manually inserted; recirculating supply of couplant for ultrasonic scanning; two ultrasonic testers with flaw alarms; one eddy current tester with flaw alarm; and, automatic rotation and scan cycling for the transducers and eddy current probe.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	22050000
Unit of Issue	Each
Installation Data:	
Length	56 in.
Width	96 in.
Height	64 in.
Weight	Not available
Utilities Required:	
120 vac, 50 or 60 Hz, 20 amp, single phase; air at 100 psi.	

Production Capacity:
Not available.

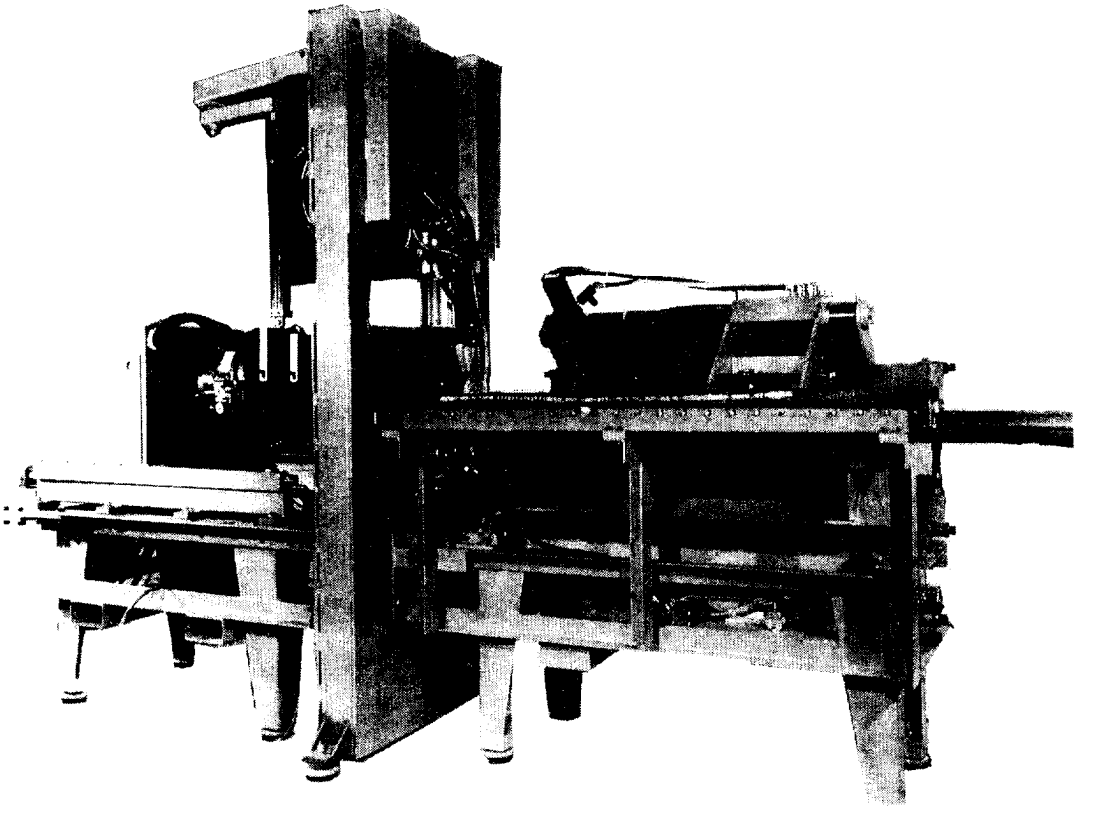
Shipping Data:
Length . . . . . Not available
Width . . . . . Not available
Height . . . . . Not available
Cube . . . . . Not available
Weight . . . . . Not available

Associated Equipment:
None.

Kits:

None.

APE 2206--ROCKET ASSISTED PROJECTILE DISASSEMBLY MACHINE



Use:
The Rocket Assisted Projectile Disassembly Machine, is designed to remotely remove the rocket motor from the 155MM, M549 and M549A1 projectile

Description:
The machine consists of four components each with a separate function and interfaced together by hose and cable which supply the hydraulic, pneumatic, and intrinsically safe electrical power needed to operate the machine from an electrical control panel, a remote control panel, and a machine control panel. Their basic description and operation are as follows: Projectile Positioning Table Frame is attached to the Projectile Clamp and is designed to restrain and position the projectile into the Projectile Clamp

The Projectile Clamp is attached between the Projectile Positioning Table Frame and the Hydraulic Motor Carriage and is designed to clamp the projectile during rocket motor removal. When the projectile has been automatically positioned into the Projectile Clamp the six jaw circumferential clamp is automatically energized and physically restrains the projectile. The Hydraulic Motor Carriage is attached to the Projectile Clamp and is designed to remove the rocket motor from the warhead. The Hydraulic Power Unit is located in an adjacent bay and is designed to provide the hydraulic power to operate the machine. Mounted to the Hydraulic power Unit is the Electrical Control Box which provides the electrical service to the entire machine.

Difference Between Models:
Original Design

Tabulated Data:
APE No . . . . . 22060000.
Unit of issue: . . . . . Each

Installation Data:

Length: . . . . . 16 feet 4 inches
Width: . . . . . 4 feet 1 inch
Height: . . . . . 9 feet 5 inches
Weight: . . . . . 10,850 lbs

Utilities required:
Air:
85-95 PSI
Electricity:
440V, 3 Phase, 100 AMP service

Production Capacity:
2 minutes per projectile.

Shipping Data:
5 crates

Shipping Data Crate 1:
Length: . . . . . 57 inches
Width: . . . . . 49 inches
Height: . . . . . 87 inches
Cube: . . . . . 141 cu ft
Weight: . . . . . 2000 pounds

Shipping Data Crate 2:
Length: . . . . . 92 inches
Width: . . . . . 63 inches
Height: . . . . . .77 inches
Cube: . . . . . 260 cu ft
Weight: . . . . . 2700 pounds

Shipping Data Crate 3:
Length: . . . . . 52 inches
Width: . . . . . 60 inches
Height: . . . . . 36 inches
Cube: . . . . . 65 cu ft
Weight: . . . . . 200 pounds

Shipping Data Crate 4:
Length: . . . . . 120 inches
Width: . . . . . 56 inches
Height: . . . . . 34 inches
Cube: . . . . . 132 cu ft
Weight: . . . . . 4000 pounds

Shipping Data Crate 5:
Length: . . . . . 104 inches
Width: . . . . . 53 inches
Height: . . . . . 79 inches
Cube: . . . . . 252 cu ft
Weight: . . . . . 2800 pounds

Associated Equipment:
Closed Circuit Television System for Hazardous Environment, APE 1072M3

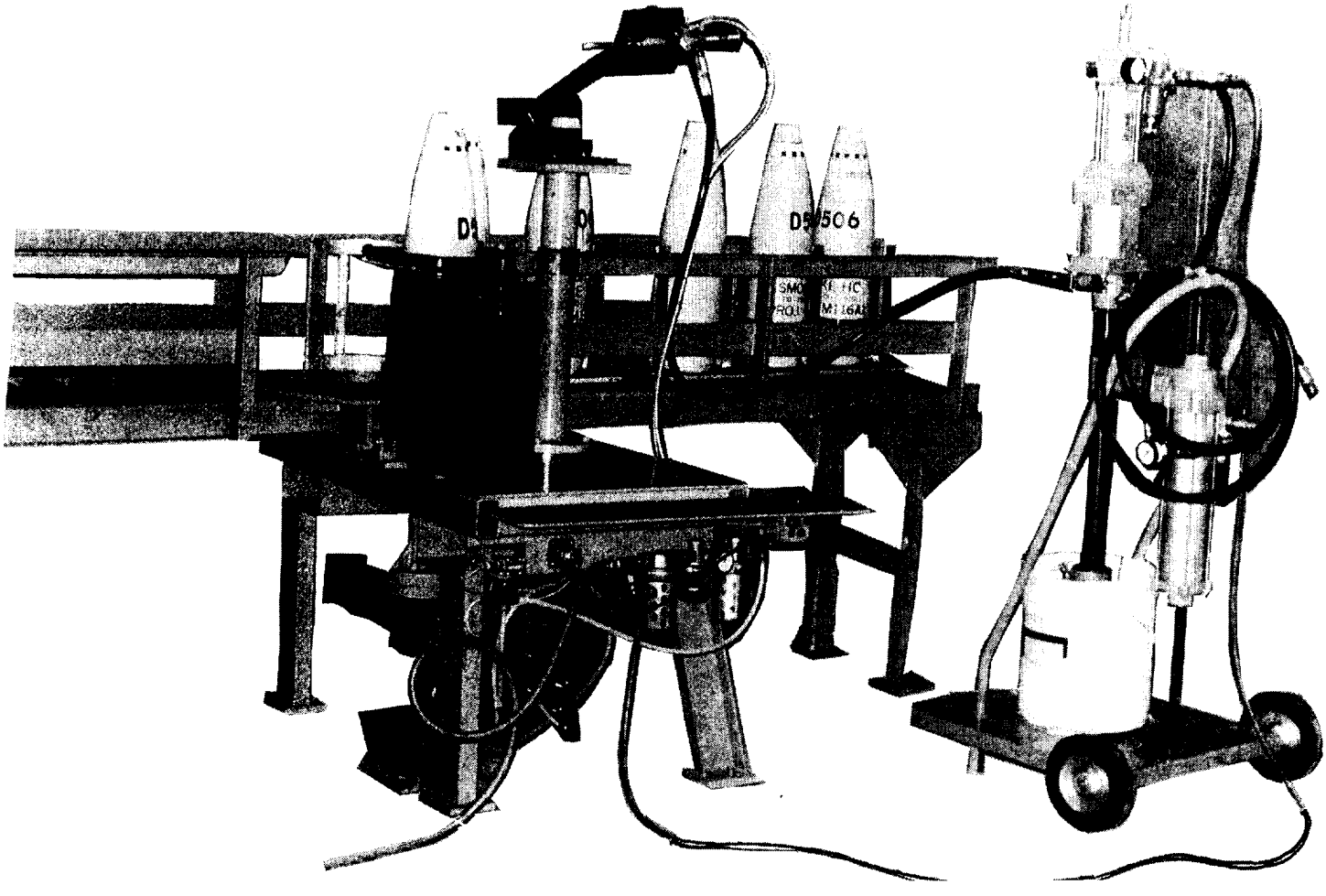
Projectile Elevator, APE 2232

Kits:
2206E001 Vacuum Removal Kit

2206E002 Rocket Motor Delay Removal Kit,

2206E003 8-Inch Rocket Assisted Projectile Disassembly Kit

APE 2211—RTV SEALANT DISPENSING EQUIPMENT



Use:
The RTV sealant dispensing equipment, is designed to put a seal of Room Temperature Vulcanizing (RTV) silicone sealant between the expelling charge cup and the fuze well cavity of the 155MM M116A1 smoke projectile.

Description:
APE 2211 consists of the following assemblies:

a. The three-projectile carrier provided to move three projectiles along the projectile conveyor assembly and into position to be loaded and unloaded into the chuck assembly.

b. The chuck assembly which clamps the projectile into position and rotates the projectile so RTV sealant can be applied.

c. The dispensing assembly holds the palm gun and allows the dispensing nozzle to be lowered into the projectile for the sealing operation.

Difference Between Models:
Original design.

Tabulated Data:

APE No. 22110000
Unit of Issue . . . . . Each

Installation Data:

TABLE AND CONVEYOR ASSEMBLIES:

Length . . . . . 120 in.
Width . . . . . 57 in.
Height . . . . . 73 in.
Weight . . . . . Not available

RTV PUMP:

Length . . . . . 35 in.
Width . . . . . 35 in.
Height . . . . . 60 in.
Weight . . . . . Not available

Utilities Required:
Not available.

Shipping Data:

TABLE AND CONVEYOR ASSEMBLIES:

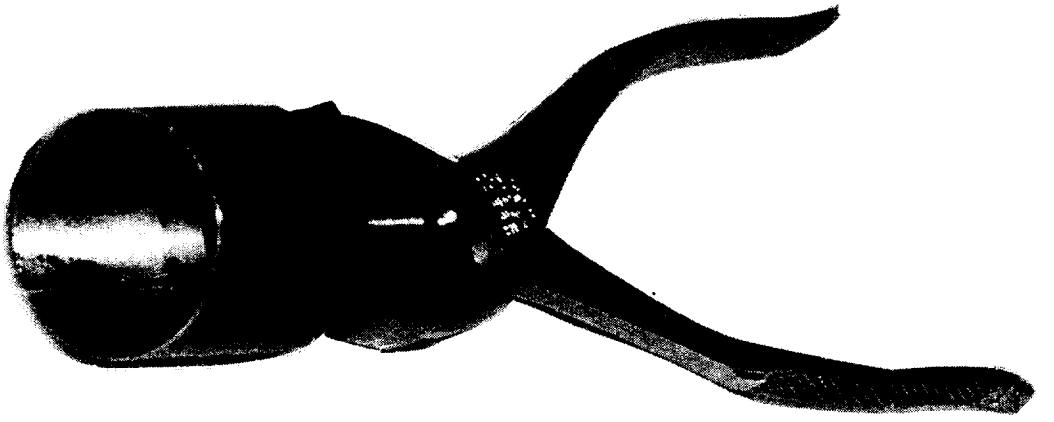
Length . . . . . Not available
Width . . . . . Not available
Height . . . . . Not available
Cube . . . . . Not available
Weight . . . . . 2185 lbs

Associated Equipment:
None.

Kits:

None.

APE 2212-M36 BURSTER REMOVAL TOOL



Use
The tool is designed to remove the M36 burster from a 115MM M55 Chemical Rocket Warhead after the fuze has been removed and before the adapter is removed.

Description:
The tool consists of an eight inch slip joint pliers with a tube welded between the open jaws that is used to remove the burster.

Difference Between Models:
Original design.

Tabulated Data:
APE No 22120000
Unit of issue . . . . . Each

Installation Data
Length: . . . . . Not available.
Width : . . . . . Not available
Height : . . . . . Not available
Weight: . . . . . Not available

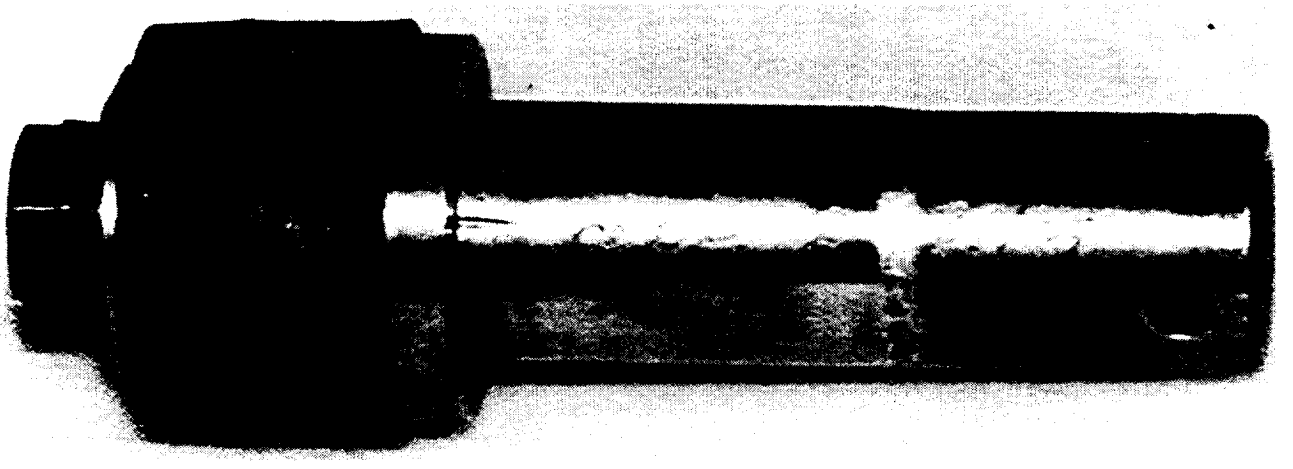
Utilities Required:
None

Production Capacity:
Not applicable.

Associated Equipment:
None

Kits:
None

APE 2213-M34 BURSTER REMOVAL TOOL



Use
The tool is designed to remove the M34 Chemical Rocket Warhead after the fuze, M36 burster and adapter have been removed.

Description:
The tool consists of a expandable rubber burster gripper attached to a shaft with al/2 inch socket drive.

Difference Between Models:
Original design.

Tabulated Data:
APE No 2213000
Unit of issue: . . . . . Each

Installation Data
Length: . . . . . 5 in.
Width: . . . . . 1-1/2 in.
Height : . . . . . 5 in.
Weight : . . . . . 1 lbs.

Utilities Required:
None

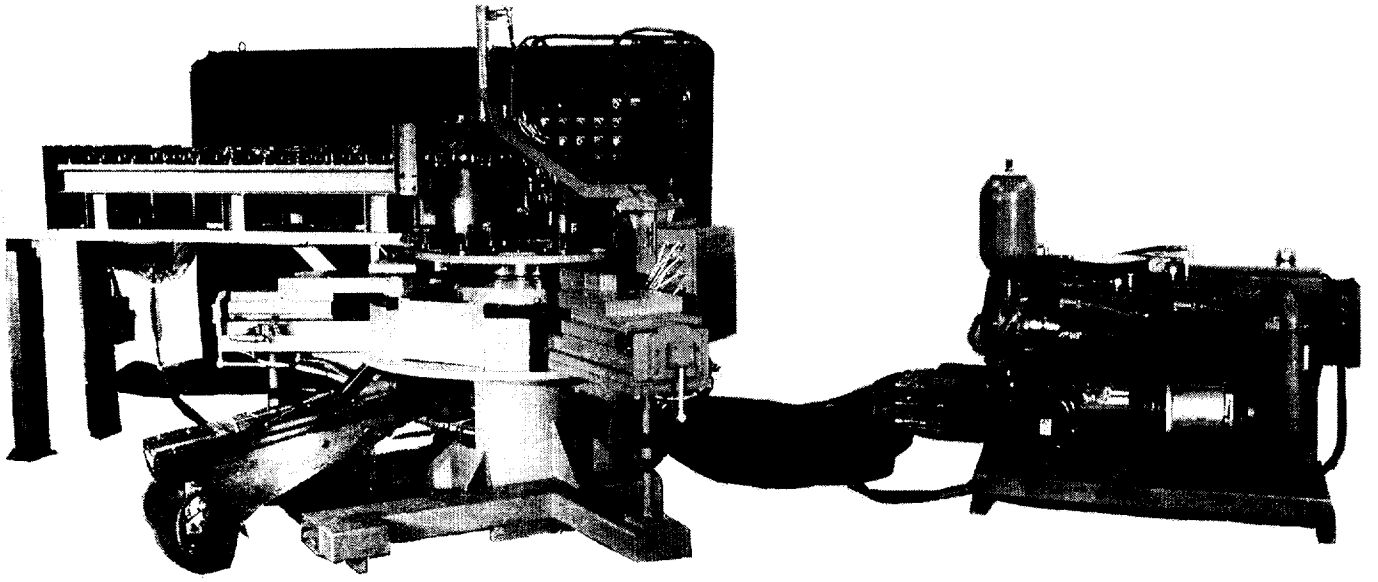
Production Capacity:
Not applicable.

Shipping Data:
Length: . . . . . 6 in.
Width: . . . . . 2 in.
Height : . . . . . 6 in.
Cube: . . . . . Not available.
Weight : . . . . . 1–1/21bs.

Associated Equipment:
None

Kits:
None

APE 2214–30MM BREAKDOWN EQUIPMENT



Use:
The 30MM breakdown equipment is designed to break down and segregate the component parts of 30MM ammunition, APIT, PGU-14/B and API, PGU-14A/B and PGU-14B/B; HEI, PGU-13/B; T, PGU-15/B. The objective of this breakdown process is to do so without damage to the projectile. The products of the process are the cartridge propellant, cartridge case (in two pieces), a primer, flashtube and an undamaged projectile.

Description:
APE 2214 major assemblies are:

a. The programmed controller which governs the application of the power systems inputs to the other major components to integrate and sequence their functioning.

b. The power systems, which include pneumatic, electrical and hydraulic systems.

c. The cartridge delivery assembly which is rotated by the transfer drive to deliver the cartridge to the breakdown center.

d. The breakdown center where a cartridge is processed. The major assemblies of the breakdown center are:

(1) Indexing Table Assembly which is rotated counterclockwise by a hydraulically driven top plate drive index table and which supports and delivers projectiles as they are broken down by the five processing stations.

(2) Cartridge Load Station, consists of a pneumatic cylinder that powers a pushrod which pushes a cartridge down from the cartridge delivery assembly into a cartridge cup assembly mounted on the indexing table.

(3) Projectile Breakout Station, consists of a hydraulically driven projectile breakout station slide on which are mounted two rollers that crimp the cartridge when the slide advances. This action breaks the cartridge case, forces out the projectile and allows the propellant to drain.

(4) Cartridge Case Shear Station, consists of a hydraulically driven shear station slide on which is mounted a shear station cutter. The shearing cutter cuts off the deformed portion of the cartridge case when the slide advances so the remainder of the cartridge case can be removed from the cartridge cup later.

(5) Primer Removal Station, consists of a hydraulic cylinder that powers a pushrod which pushes a primer from the cartridge case. The station also has a solenoid operated air jet system which blows the primer into a primer removal chute.

(6) Cartridge Case Unload Station consists of a hydraulically powered cylinder that powers a pushrod which pushes the remainder of the cartridge case from the cartridge case cup and robotic gripper hand which grasps the cartridge case and drop it onto the third conveyor belt for removal.

Difference Between Models:
Original design.

Tabulated Data:
APE No. 22140000
Unit of Issue: . . . . . Each
Installation Data:
CONTROLLER ASSEMBLY:
Length . . . . . 117-1/2 in.
Width . . . . . 19-3/8 in.
Height . . . . . 72-1/8 in.
Weight . . . . . Not available.
CARTRIDGE DELIVERY ASSEMBLY AND CARTRIDGE BREAKDOWN CENTER:
Length . . . . . 131-11/16 in.
Width . . . . . 66-1/8 in.
Height . . . . . 74-3/16 in.
Weight . . . . . Not available
HYDRAULIC POWER UNIT ASSEMBLY:
Length . . . . . 67-7/8 in.
Width . . . . . 47-1/2 in.
Height . . . . . 38-1/4 in.
Weight . . . . . Not available
Hydraulic Oil
Capacity . . . . . 60 gal
PROGRAMMER:
Length . . . . . 19-1/2 in.
Width . . . . . 8-1/2 in.
Height . . . . . 17 in.
Weight . . . . . Not available
Utilities Required:
440 to 460 vac, 60 Hz, 70 amps, 3 phase; 25 cfm and 80 psi minimum to 100 psi maximum.

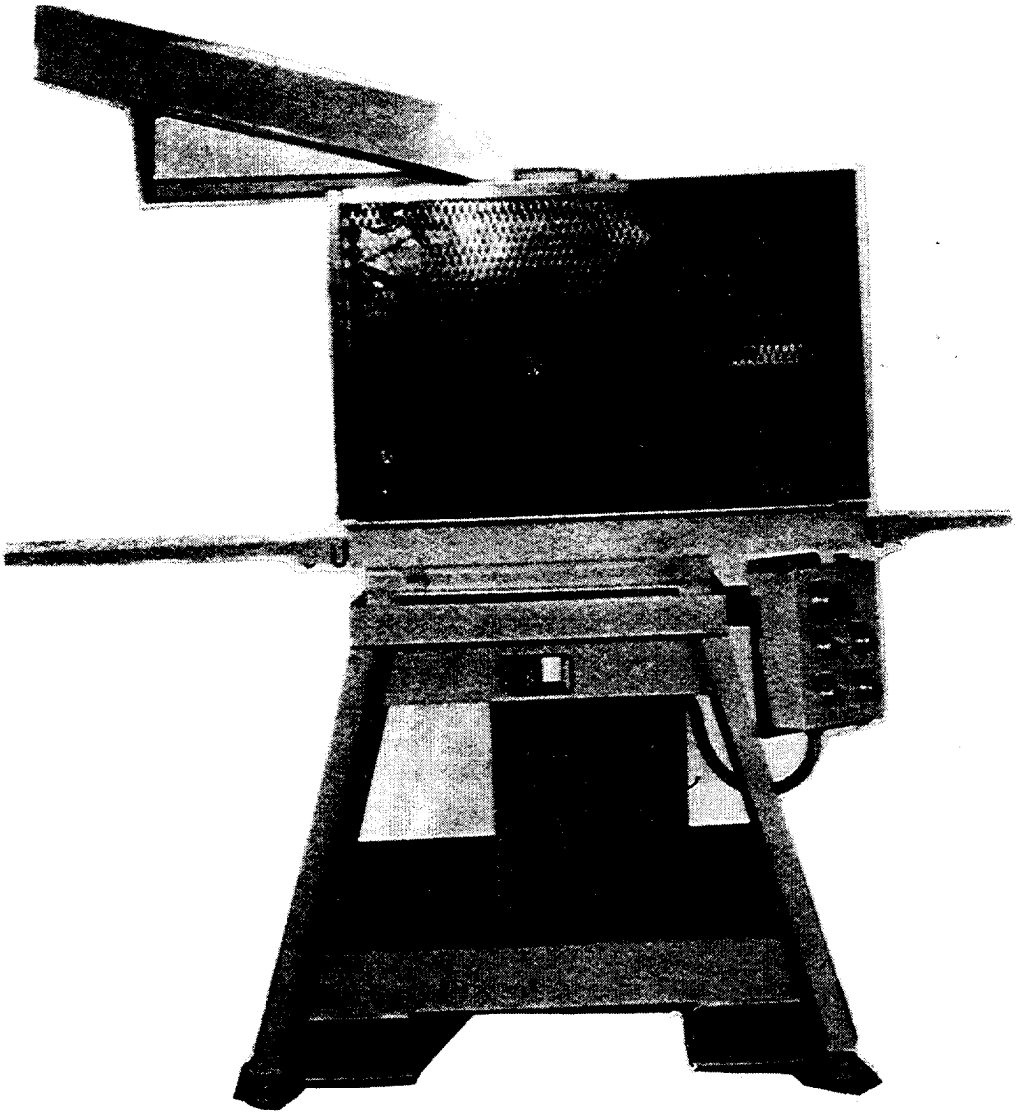
Production Capacity:
7100 cartridges/8 hour shift.

Shipping Data:
Length . . . . . Not available
Width . . . . . Not available
Height . . . . . Not available
Cube . . . . . Not available
Weight . . . . . Not available

Associated Equipment:
Conveyors, closed circuit TV, powder draw-off vacuum system.

Kits:
2214E001 KIT, 30MM, M788, M789, M833
2214E002 KIT, 25MM, M791, M792 w/Fuze PDSD, M578, M793

APE 2215–LINK-DELINK MACHINE, 25MM



Use:
The link-delink machine is designed to link or delink 25MM cartridges and M28 Links .

Description:
The APE 2215 is a hand fed, air/electrical powered machine consisting of a frame assembly or structural support, a link-delink wheel and a circuit control box. The machine is equipped to link cartridges into belts ranging in length from one cartridge to ten thousand cartridges. The machine will continuously delink cartridge belts and deposit the links and cartridges into separate retrieval areas.

Difference Between Models:
Original design.

Tabulated Data:

APE No. 22150000
Unit of Issue . . . . . Each

Installation Data:

Length . . . . . 13 ft
Width . . . . . 64 in.
Height . . . . . 6 ft
Weight . . . . . Not available

Utilities Required:
Not available.

Production Capacity:
30 to 300 rounds per minute.

Shipping Data:

Length	Not available
Width	Not available
Height	Not available
Cube	Not available
Weight	Not available

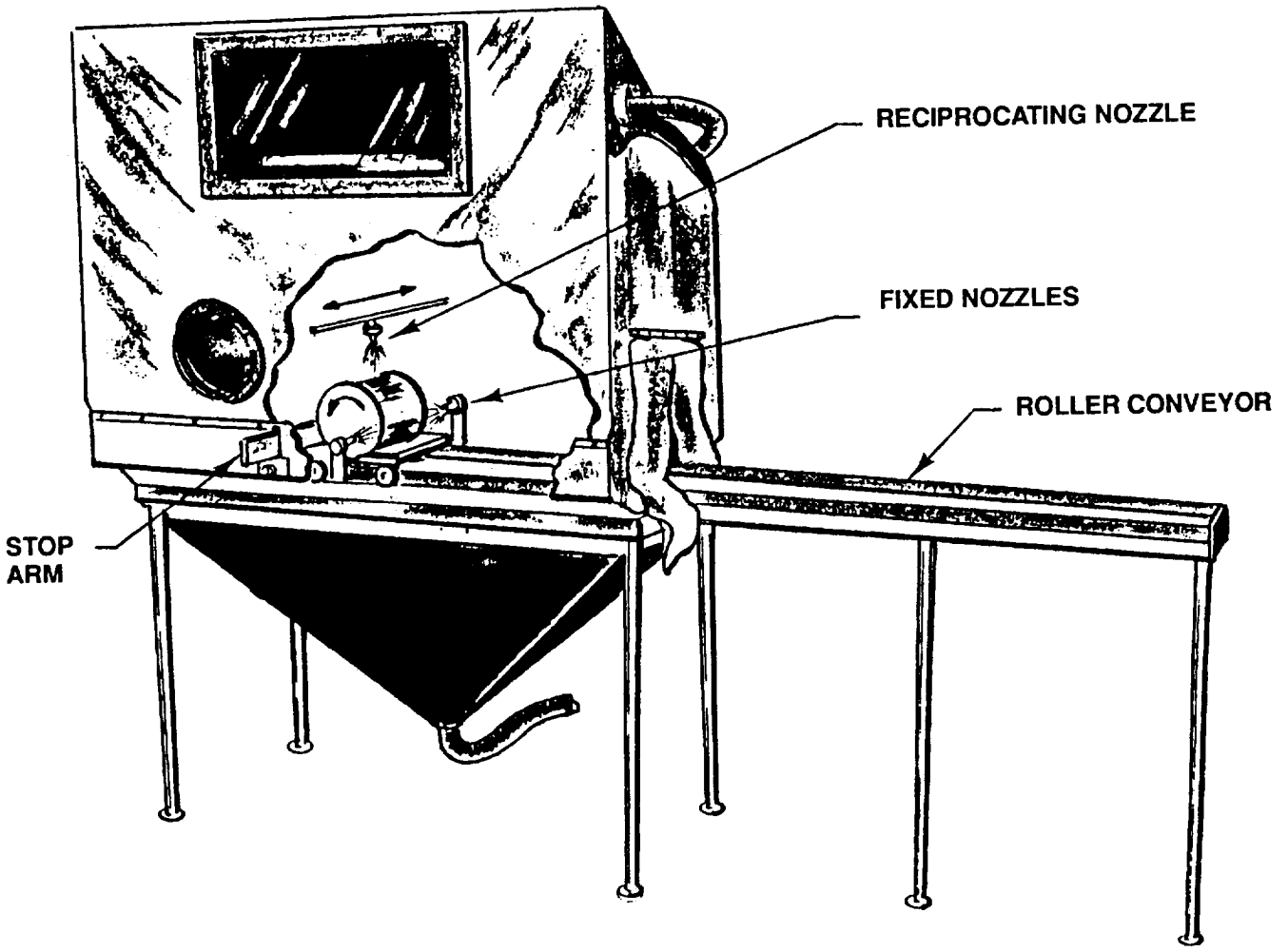
Associated Equipment:

None.

Kits:

None.

APE 2216--MACHINE, SMOKE POT DERUSTING



Use:
The smoke pot derusting machine is used for cleaning M4A1, ABC-MS and M1 HC smoke pots.

Description:
APE 2216 is a free standing, air operated machine, consisting of a protective operational cabinet, air filter, device for rotating smoke pots, and blast cleaning air nozzles. In operation, smoke pots are rotated while the surface is cleaned with an abrasive blast cleaning medium.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	22160000
Unit of Issue	Each
Installation Data:	
Length	60 in.
Width	48 in.
Height	120 in.
Weight	2300 lbs

Utilities Required:
Compressed air at 90 psi; 110 vac, 2 phase.

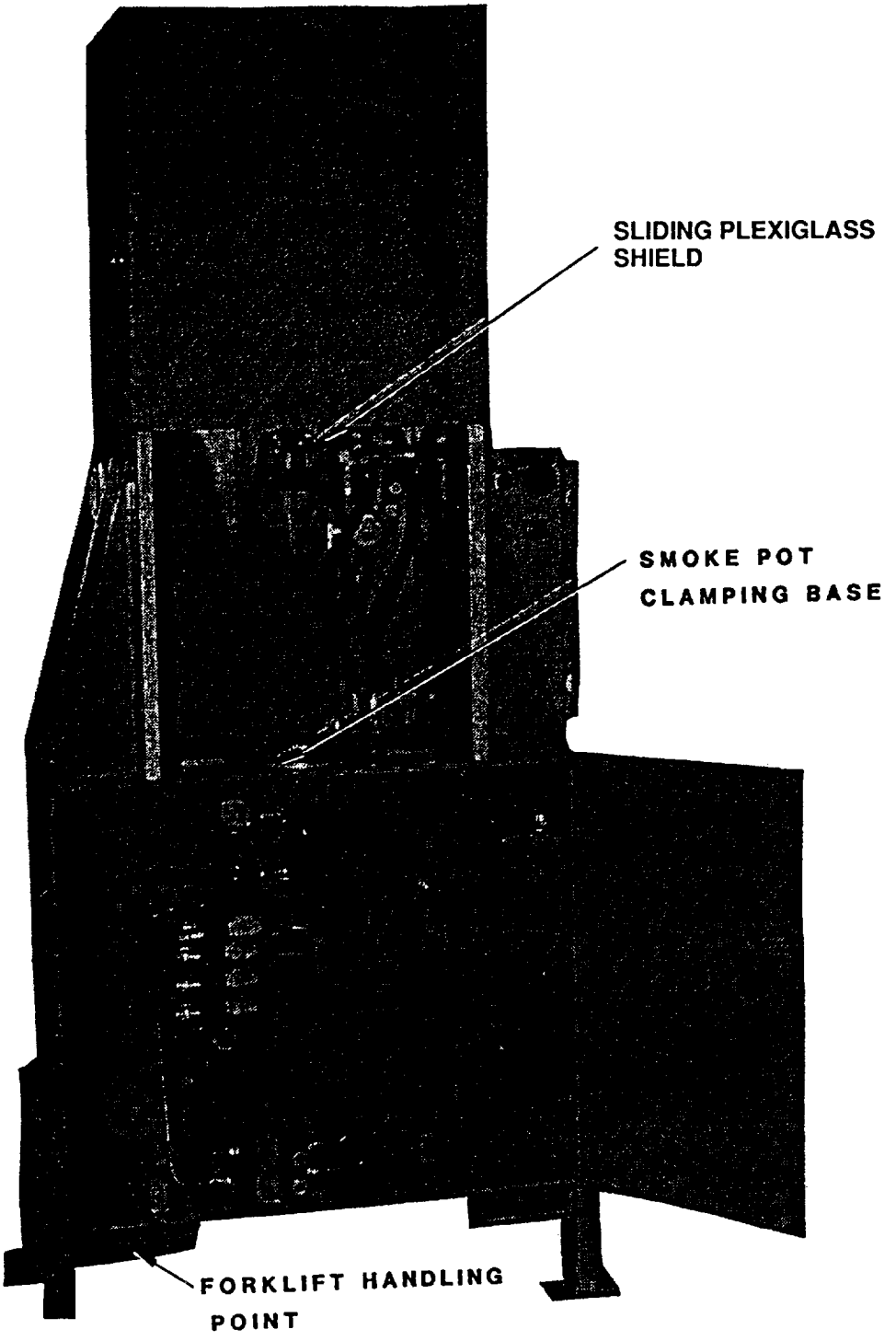
Production Capacity:
60 smoke pots per hour.

Shipping Data:
Length . . . . . Not available
Width . . . . . Not available
Height . . . . . Not available
Cube . . . . . 200 cu ft
Weight . . . . . 2500 lbs

Associated Equipment:
None.

Kits:
None.

APE 2217--MACHINE, SMOKE POT DEFUZING



Use:
The smoke pot defuzing machine is used in maintenance and renovation operations that require removal of fuzes from smoke pots.

The machine is designed to remove M207A1 fuzes from M4A2 smoke pots.

Description:
APE 2217 is a free standing, hydraulic operated, programmable logic controlled controlled machine, consisting of a protective operational cabinet, defuzing mechanism, and a clamping device. In operation, smoke pots are clamped at their base while a wrench head grips the fuze and rotates to remove the fuze.

Difference Between Models:
Original design.

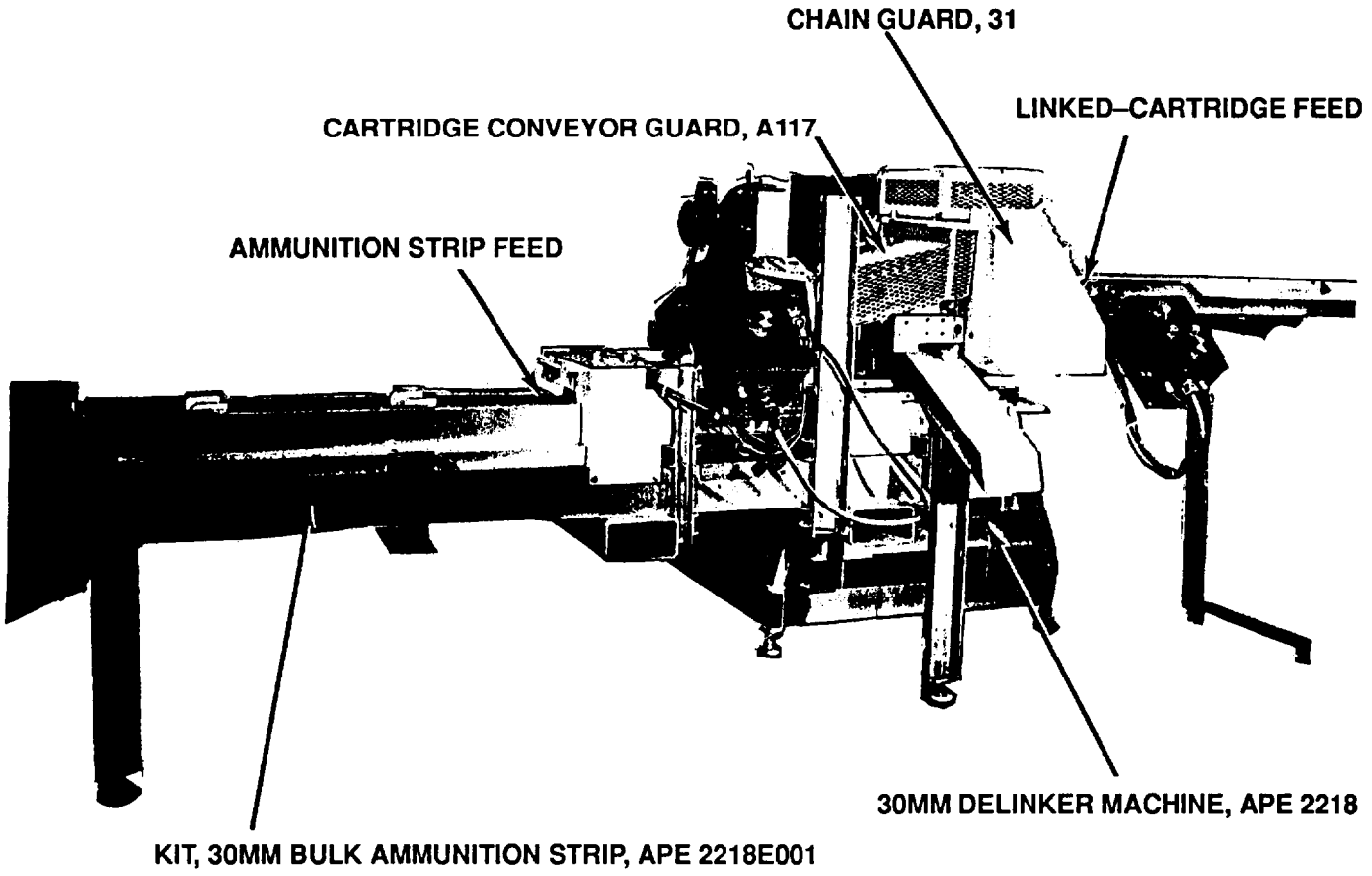
Tabulated Data:
APE No. 22170000
Unit of Issue . . . . . Each
Installation Data:
Length . . . . . 37 in.
Width . . . . . 20 in.
Height . . . . . 89 in.
Weight . . . . . 1000 lbs
Utilities Required:
208 vac, 3 phase.
Production Capacity:
120 smoke pots per hour.

Shipping Data:
Length . . . . . Not available
Width . . . . . Not available
Height . . . . . Not available
Cube . . . . . 37.5 cu ft
Weight . . . . . 1200 lbs

Associated Equipment:
None.

Kits:
None.

APE 2218--30MM DELINKER MACHINE



Use:
The delinker machine is designed to delink 30MM M788 and 30MM M789 cartridges from M29 links and load them into a 30MM Metallic Ammunition Strip using the kit, 30MM bulk ammunition strip, APE 2218E001.

Description:
The APE 2218 and APE 2218E001 are electrically integrated, requiring them to be used together. The system is hand fed and electrically powered, and consists of two assemblies: one delinker assembly and one ammunition strip loader assembly. The delinker assembly removes the cartridges from the linked belt. The ammunition strip loader assembly is devised to load the cartridges into ammunition strips. The system is equipped with limit switches and proximity sensors to shut down the equipment upon detection of any cartridge jams, link jams or ammunition strip jams. The system requires a support operation such as conveyors for efficient operation.

Difference Between Models:
Original design.

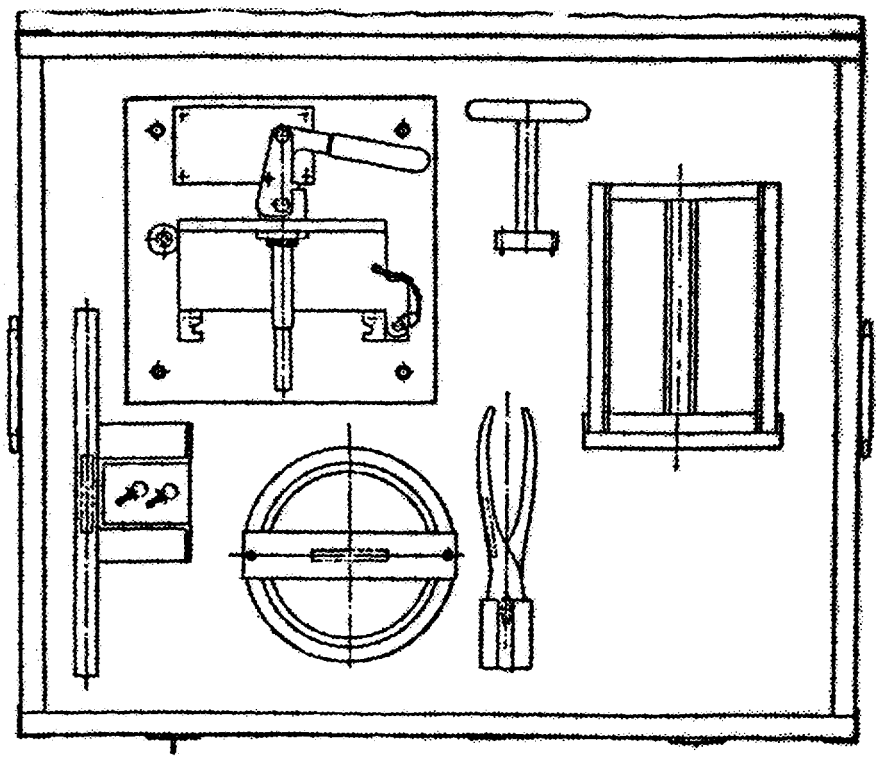
Tabulated Data:
APE No. 2180000
Unit of Issue . . . . . Each
Installation Data:
BASIC MACHINE:
Length . . . . . 8 ft
Width . . . . . 7 ft
Height . . . . . .5 ft
Weight . . . .1851 lbs
KIT:
Length . . . . . 10 ft
Width . . . . . 2-1/2 ft
Height . . . . . 5 ft
Weight . . . . . 671 lbs
Utilities Required:
120 vac, 60 Hz, 40 amp.
Production Capacity:
Dependent upon drive dial setting, anywhere from 118 cartridges per minute to 232 cartridges per minute.

Shipping Data:
BASIC MACHINE:
Length . . . . . 102 in.
Width . . . . . 51 in.
Height . . . . . 70 in.
Cube . . . . . 211 cu ft
Weight . . . . . 2585 lbs
KIT:
Length . . . . . 127 in.
Width . . . . . 35 in.
Height . . . . . 65 in.
Cube . . . . . 167 cu ft
Weight . . . . . 1522 lbs

Associated Equipment:
None.

Kits:
2218E001 KIT, 30NM Bulk Ammunition Strip (required to be used with APE 2218)

APE 2219--TooL SET, DEMILITARIZATION OF M180 DEMOLITION KIT



Use:
The tool set is designed for specific rocket motor disassembly operations necessary in the demilitarization of M180 demolition kit.

Description:
APE 2219 consists of the following hand tools:

a. Detonator holding fixture which holds the detonator in a fixed position for removal of the blasting cap. The fixture has a plunger type mechanism to push the blasting cap out for removal by the operator.

b. The rocket motor head lifting handle to provide a grasping point for the operator to lift the head out of the motor case.

c. Retaining ring container which fits over the rim of the rocket motor case and prevents internal retaining rings from springing out when being removed.

d. The propellant disassembly fixture acts as a receptacle for holding the combined propellant and motor head in place for motor head removal.

e. The booster removal tool to grasp and remove the booster from the protector body of the detonator assembly.

f. The rocket protector retainer removal tool is used to unscrew the protector retainer from the detonator.

g. The tools are contained in a case for shipping and storage.

Difference Between Models:
Original design.

Tabulated Data:
APE No. 22190000
Unit of Issue . . . . . Each
Installation Data:
HOLDING FIXTURE:
Length . . . . . 5-3/8 in.
Width . . . . . 10 in.
Height . . . . . 10 in.
Weight . . . . . 5 lbs
LIFTING HANDLE:
Length . . . . . 3-3/4 in.
Width . . . . . 12 in.
Height . . . . . 1/2 in.
Weight . . . . . 2 lbs
RETAINING RING CONTAINER:
Length . . . . . 2-1/2 in.
Width . . . . . 7 in.
Height . . . . . 7 in.
Weight . . . . . 5 lbs
DISASSEMBLY FIXTURE:
Length . . . . . 8-5/8 in.
Width . . . . . 6-1/4 in.
Height . . . . . 6-1/4 in.
Weight . . . . . 5 lbs
BOOSTER REMOVAL TOOL:
Length . . . . . 12 in.
Width . . . . . 1-5/8 in.
Height . . . . . 1–5/8 in.
Weight . . . . . 2 lbs
RETAINER RING REMOVAL TOOL:
Length . . . . . 5-1/8 in.
Width . . . . . 4 in.
Height . . . . . 4 in.
Weight . . . . . 3 lbs
STORAGE CASE:
Length . . . . . 8 in.
Width . . . . . 27 in.
Height . . . . . 23 in.
Weight . . . . . 10 lbs (empty)
Utilities Required:
None.
Production Capacity:
Not available.

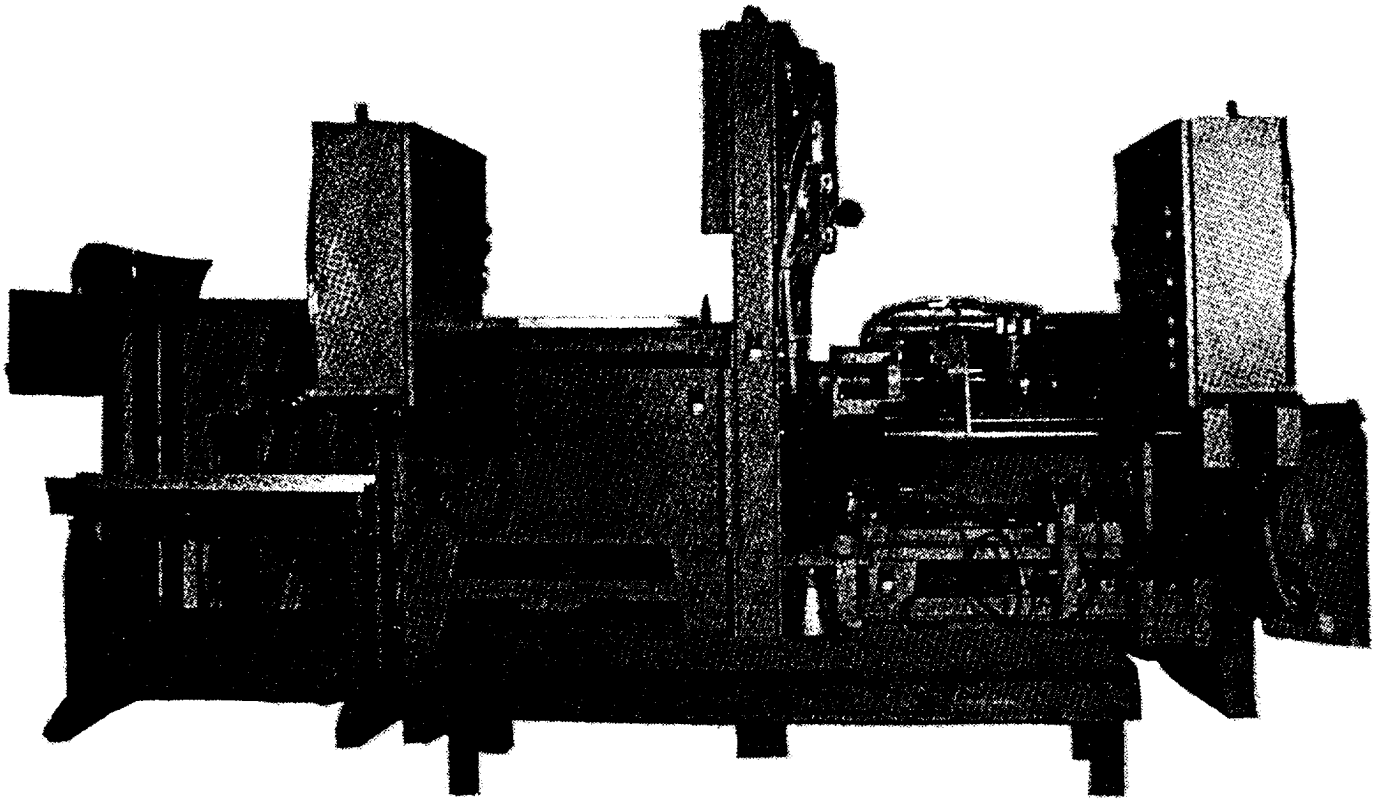
Shipping Data (in storage case):
Length . . . . . 27 in.
Width . . . . . 23 in.
Height . . . . . 8 in.
Cube . . . . . 3 cu ft
Weight . . . . . 32 lbs

Associated Equipment:
APE 7041M1, 0–6 Ton Bench Type Hydraulic Staking Machine, in conjunction with APE7041E001, Kit Igniter Remover, Demilitarization of M180 Demolition Kit.

APE 7023M1, Vise, Projectile, Navy, in conjunction with APE 7023E001, Kit, Jaw, M180 Demolition Kit.

Kits:
None.

APE 2220--OGIVE REMOVAL SYSTEM



Use :
The APE 2220 Projectile Ogive Replacement System is air operated and designed to remove ogives from 155MM M483A1, M718, and M741 projectiles and replace them with new ogives. The ogives removed in this operation cannot be re-used.

Description:
APE 2200 consists of three major assemblies:

a. The projectile positioning table assembly used to position the projectile into the projectile clamp assembly. This assembly consists of a control panel, associated valving, two conveyors, a projectile platform and framework.

b. The projectile clamp assembly is attached between the projectile positioning table and the ogive removal impact table assembly. It is used to clamp the projectile during ogive removal and replacement. The projectile clamp assembly consists of a six jaw circumferential clamp, two airfeed drilling units, associated valving and framework.

c. The ogive removal impact table assembly is attached to the projectile clamp assembly to remove the ogive for replacement of a new ogive onto the projectile. The assembly consists of a control panel, associated valving, an ogive removal impact wrench, rails and an ogive removal chuck attached to the removal impact wrench. A die grinder with wire brush, new ogive replacement adapter and a new ogive installation impact wrench are provided for replacement of new ogives.

Difference Between Models:
Original design.

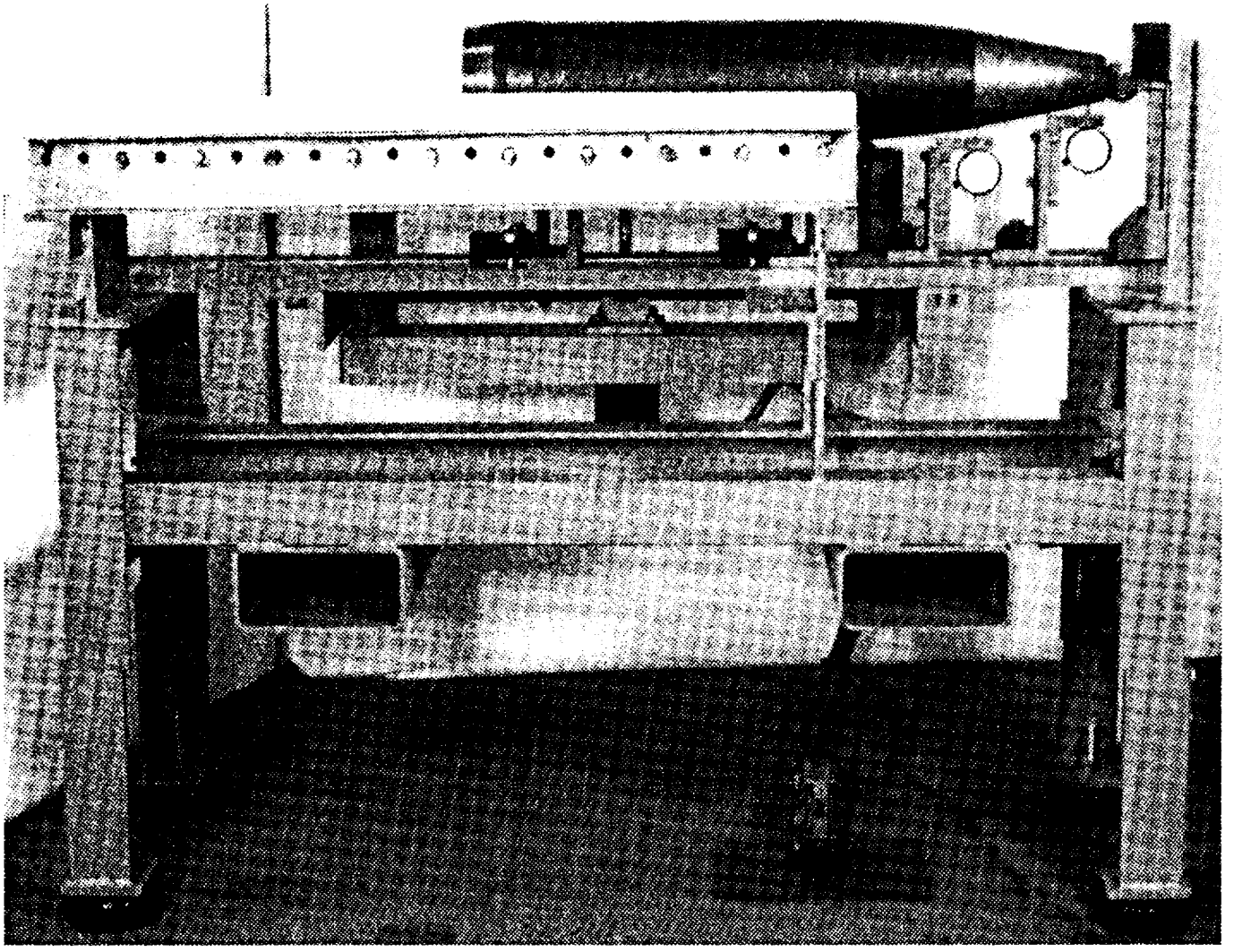
Tabulated Data:
APE No. 22200000
Unit of Issue . . . . . Each
Installation Data:
Length . . . . . 15 ft 5 in.
Width . . . . . 6ft 8 in.
Height . . . . . 9 ft 3 in.
Weight . . . . . 7200 lbs
Utilities Required:
Air at 90 minimum psi to 125 maximum psi.
Production Capacity:
Machine operation – 2–1/2 minutes per projectile.

Shipping Data:
CRATE 1:
Length . . . . . 87 in.
Width . . . . . 47 in.
Height . . . . . 39 in.
Cube . . . . . 92 cu ft
Weight . . . . . 1316 lbs
CRATE 2:
Length . . . . . 120 in.
Width . . . . . 56 in.
Height . . . . . 34 in.
Cube . . . . . 132 cu ft
Weight . . . . . 4150 lbs
CRATE 3:
Length . . . . . 90 in.
Width . . . . . 53 in.
Height . . . . . 77 in.
Cube . . . . . 213 cu ft
Weight . . . . . 3807 lbs
CRATE 4:
Length . . . . . 104 in.
Width . . . . . 53 in.
Height . . . . . 79 in.
Cube . . . . . 252 cu ft
Weight . . . . . 2777 lbs

Associated Equipment:
APE 2232.

Kits:
None.

APE 2221--TEST FIXTURE, OGIVE CONCENTRICITY



Use:
The test fixture is used to insure that the projectile body and the replaced ogive on the 155MM M483A1 projectile are concentric.

Description:
APE 2221 consists of the following assemblies: A metal support frame: a projectile roller assembly for manual movement of projectiles; a pneumatically operated projectile lift assembly which lowers the projectile from the roller assembly into position for testing; A vertical ogive alignment assembly used to center the projectile; a large diameter concentricity gage and a small diameter concentricity gage for performing the concentricity test.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	22210000
Unit of Issue	Each
Installation Data:	
Length	51 in.
Width	21-1/2 in.
Height	30 in.
Weight	620 lbs
Utilities Required:	
Air at 90 psi.	

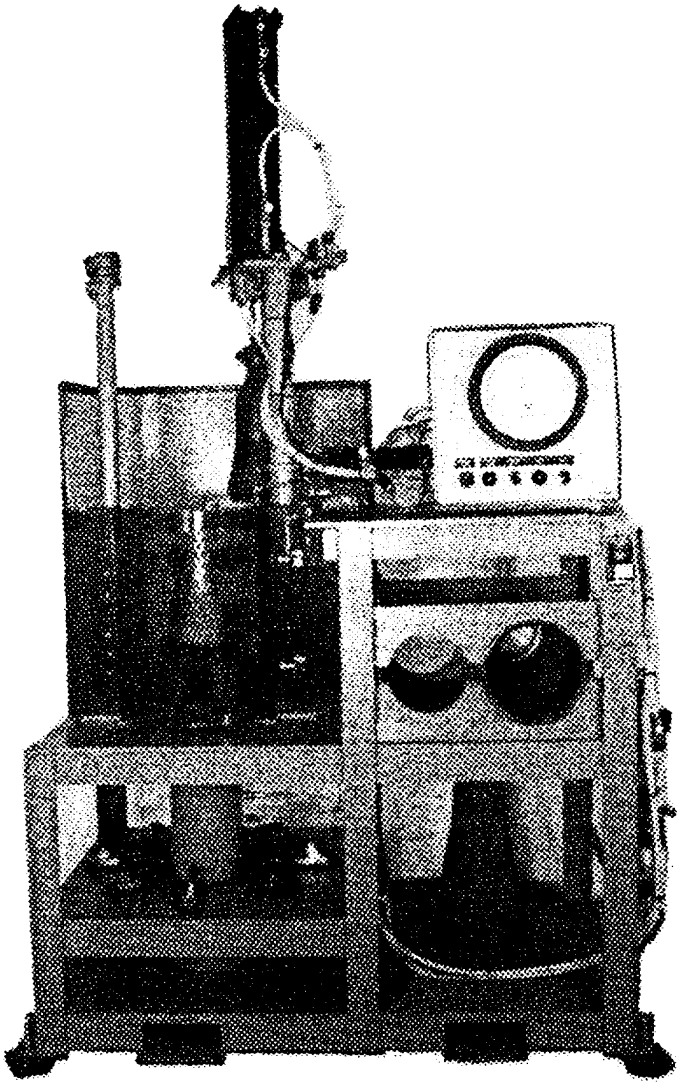
Production Capacity:
Not applicable.

Shipping Data:
Length . . . . . 63 in.
Width . . . . . 45 in.
Height . . . . . 53 in.
Cube . . . . . 87 cu ft
Weight . . . . . 1278 lbs

Associated Equipment:
None.

Kits:
None.

APE 2222--AIR TEST DEVICE, PROJECTILE



Use:
The air test device is used to insure that an airtight seal has been achieved between the ogive and projectile and the base plate and the projectile during renovation operations . The device is designed to test the 155MM M483A1 projectile and with the use of APE 2222E001 may be used to test 8 inch projectiles.

Description:
APE 2222 consists of the following major parts and assemblies: A frame assembly for structural support; A pressure chamber cover assembly and pressure chamber base which combine to form an airtight container for the projectile; A push button operated pneumatic control enclosure assembly provides automated movement for the chamber cover, automatic pressurization and depressurization of the chamber and provides housing for the air pressure gage; The air pressure gage is used to determine the validity of the ogive seal: a drop in the air pressure indicates a leak in the seal, if tight the air pressure will remain constant; Two projectile standards (leaking and non-leaking) are provided to assure reliability of test operations.

Difference Between Models:
Original design.

Tabulated Data:
APE No 22220000
Unit of Issue . . . . . Each
Installation Data:
Length. . . . . 65 in.
Width . . . . . 37 in.
Height . . . . . 8 ft 9 in.
Weight . . . . . 1965 lbs
Utilities Required:
Air at 90 psi.
Production Capacity:
Not available.

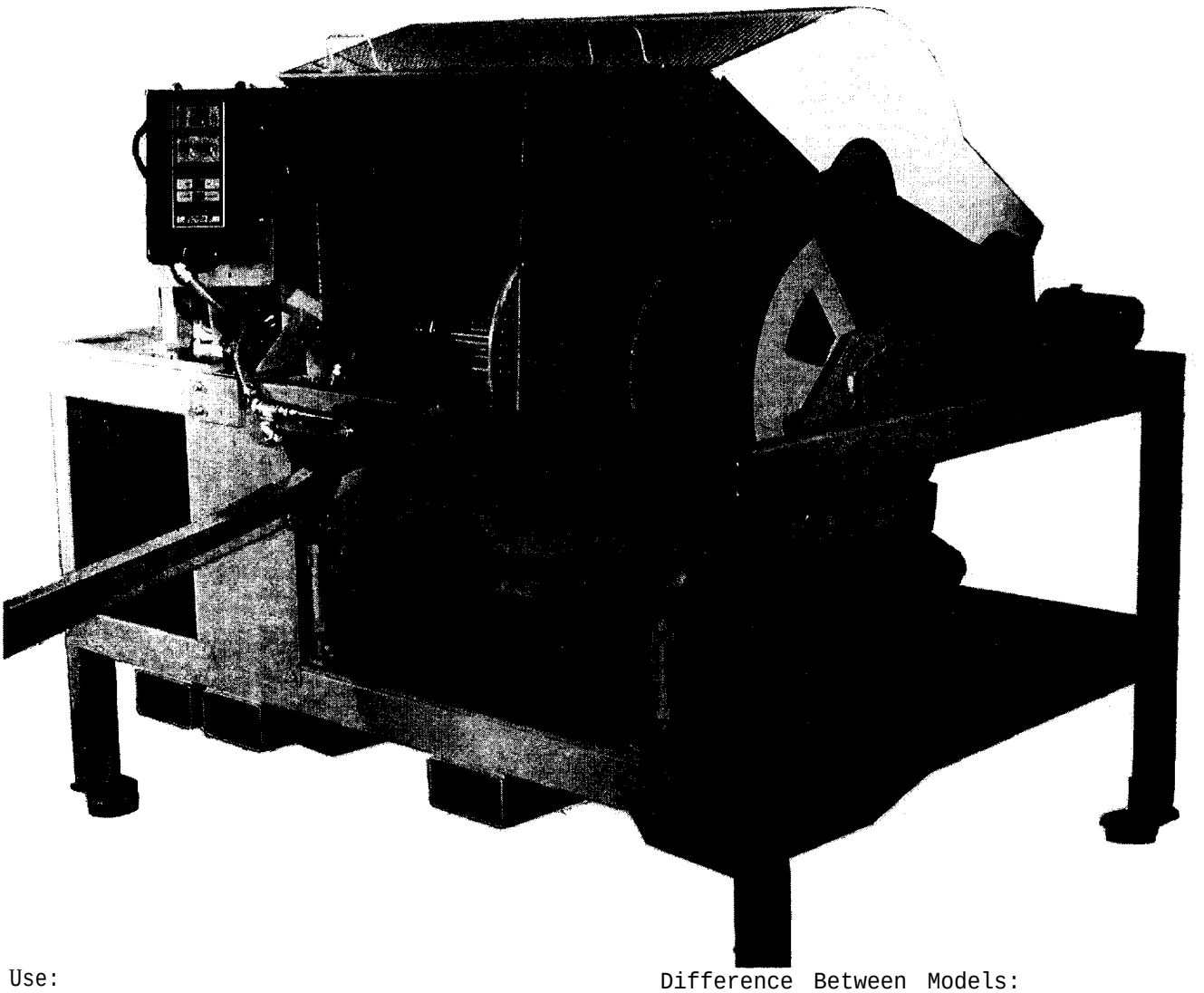
Shipping Data:
Length . . . . . 73 in.
Width . . . . . 55 in.
Height . . . . . 93 in.
Cube . . . . . 216 cu ft
Weight . . . . . 2747 lbs

Associated Equipment:
None.

Kits:

2222E001 KIT , 8 Inch Projectile Air Test

APE 2225--CALIBER .50 DELINKING MACHINE



Use:
The APE 2225 is designed to mechanically separate M15 series links from caliber .50 belted ammunition.

Description:
The machine is a large production model electric powered, chain driven delinker. A variable speed drive controller features controls for operating the system. Belted ammunition is fed into the machine at the feed drive where it is driven into the delinker drum and the cartridges are extracted from the links. Cartridges are expelled from the machine on a powered conveyor, and the links are removed down a chute.

Difference Between Models:
Original design

Tabulated Data:
APE No 22250000
Unit of issue: . . . . . Each

Installation Data:
Length: . . . . . 164 in.
Width: . . . . . 85-1/2 in.
Height : . . . . . 67 in.

Utilities Required:
Electrical:
120VAC @ 20 Amperes, 50/60 Hertz
Pneumatic:
90 PSI @70 SCFM

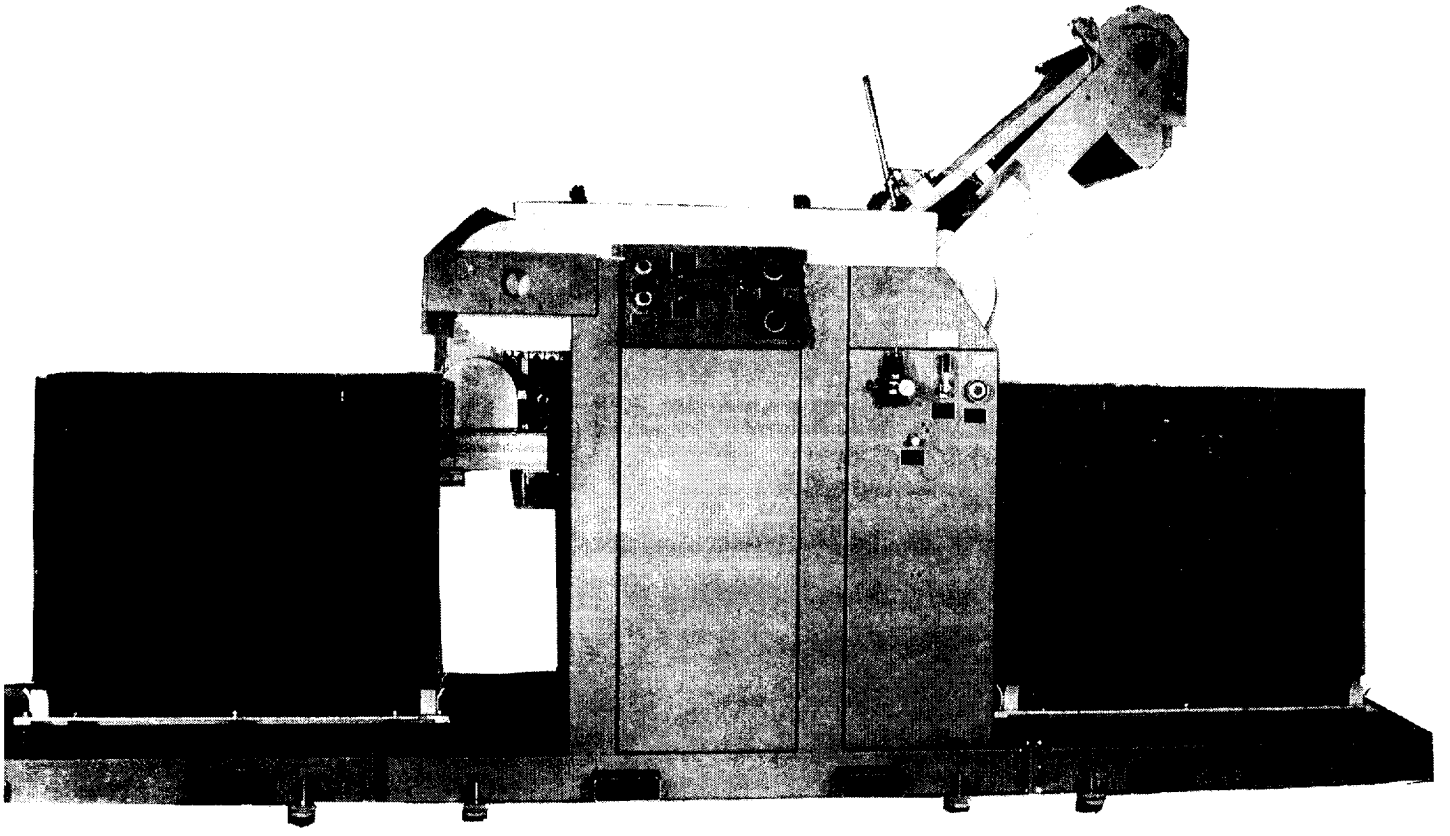
Production Capacity:
600 cartridges/minute maximum

Shipping Data:
Length: . . . . . 93 in.
Width: . . . . . 78 in.
Height: . . . . . 78 in.
Cube: . . . . . 328 cu ft
Weight: . . . . . 4740 pounds (crated)

Associated Equipment:
None

Kits:
None

APE 2226--30MM DETUBER



Use:
The detuber is designed to remove GAU-8/A ammunition (individual or mixed combinations) from linked tube carriers (LTC'S) belted together by fabric loops.

Description:
The detuber is a pneumatically powered, chain driven machine. It is an automated system operated by pneumatic controls. It is equipped with an emergency stop circuit to stop operation if an adverse condition occurs. The design also provides retubing capability for use in surveillance inspection operations. Two pneumatic timers at the control panel can be programed for a prescribed count when the machine is used for surveillance. A mechanical totalizing counter displays the total nunber of cartridges processed.

Difference Between Models:
Original design

Tabulated Data:
APE No 22260000
Unit of issue: . . . . . Each
Installation Data:
Length: . . . . . 17 ft 5-1/4 inches
Width: . . . . . 62 inches
(with drawbar drive guard closed)
. . . . . 82 inches
(with drawbar drive guard open)
. . . . . 52 inches
(machine base)
Height: . . . . . 8 ft 7 inches
(with pickup in uppermost position)
. . . . . 9 ft 6 inches
(with cover on pickup open and and pickup in uppermost position)

Utilities required:
Air: . . . . . 100 PSi
Production Capacity:
60 ammunition containers/8 hour shift.

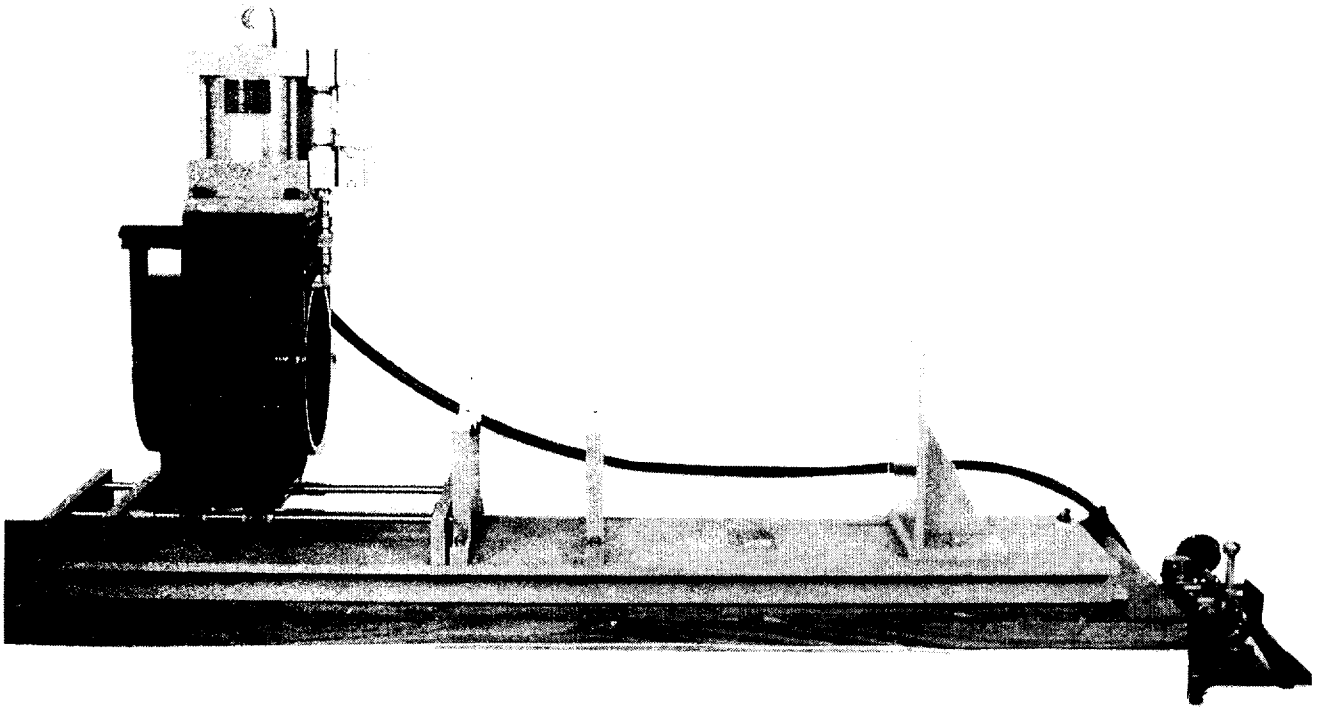
Shipping Data:
The machine is shipped in two crates. The larger crate contains the main machine. The smaller crate contains the frame extensions, the drawbar assembly and the transfer trucks.

	Large crate	Small crate
Length:	137 inches	75 inches
Width:	84 inches	64 inches
Height:	103 inches	44 inches
Cube:	686 cu. ft.	123 cu. ft.
Weight:	6810 pounds	1574 pounds

Associated Equipment:
None

Kits:
2226E001 30MM Surveillance Inspection Kit

APE 2229--REMOVAL FIXTURE, OBTURATOR



Use:
The obturator removal fixture is designed to remove obturators from the 155MM and 8 inch projectiles. The manually operated, pneumatically powered fixture is mounted on a user supplied bench and holds one manually placed projectile in a horizontal position for obturator removal operations. The user must choose a kit suitable.

Description:
APE 2229 consists of the following principal parts:

a. The obturator removal fixture base which provides structural support.

b. Two adjustable v-block projectile support assemblies which hold and align the projectile during obturator removal operations.

c. The obturator cutting tool severs the obturator for removal.

d. The filter/regulator/lockout assembly provides the air supply controls of the fixture. The assembly is mounted on a separate bracket to allow the user a choice of locations appropriate to the worksite.

Difference Between Models:
Original design.

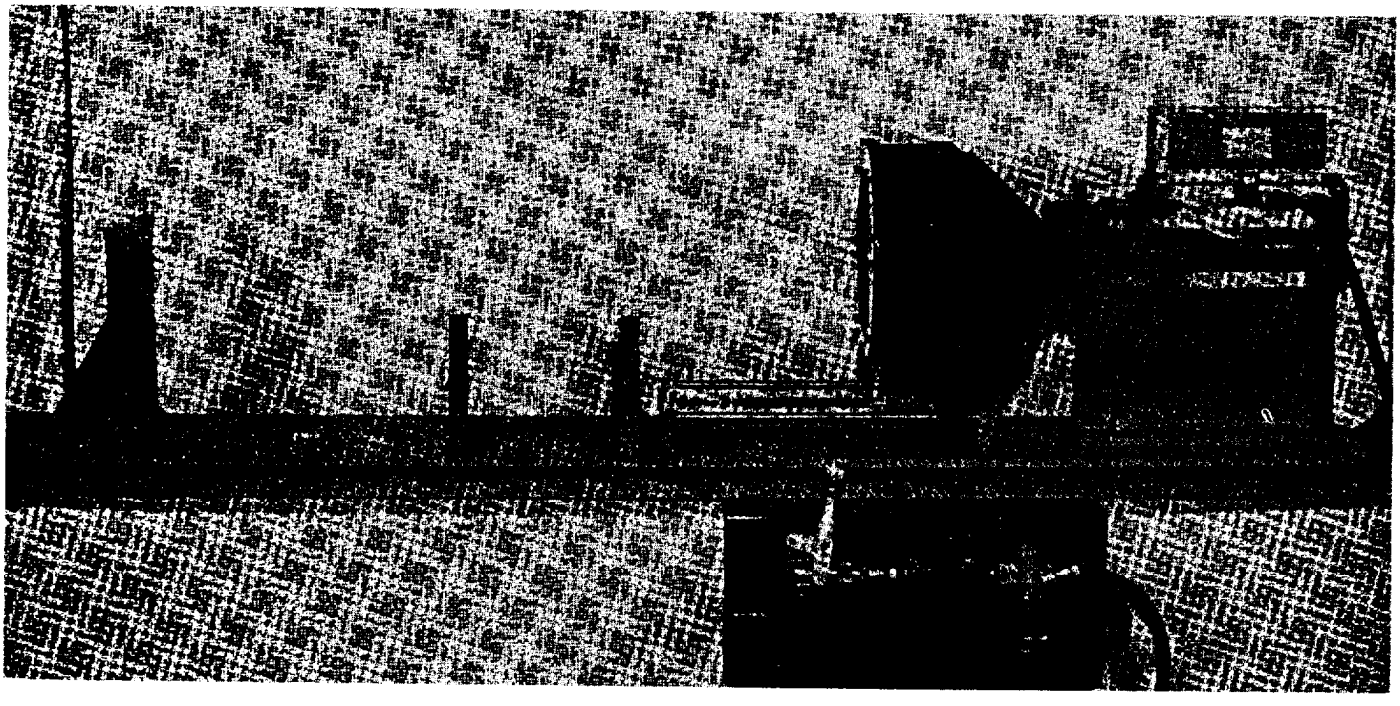
Tabulated Data:
APE No. 22290000
Unit of Issue . . . . . Each
Installation Data:
Length . . . . . 60-5/8 in.
Width . . . . . 12 in.
Height . . . . . 30 in.
Cube . . . . . 12.63 cu ft
Weight . . . . . 258 lb
Utilities Required:
Oil free air (minimum) 85 psi at 5 cfm.
Production Capacity:
500 rounds per 8 hour shift.

Shipping Data:
Length . . . . . 83 in.
Width . . . . . 56 in.
Height . . . . . 42 in.
Cube . . . . . 113 cu ft
Weight . . . . . 978 lbs

Associated Equipment:
None.

Kits:
2229E001 KIT, Cutter, Obturator, 155MM Projectiles, M549 and M549A1 HERA.
2229E002 KIT, Cutter, Obturator, 155MM Projectiles, M483A1, M587, M692, M718, M731, M741, and M795
2229E003 KIT, Cutter, Obturator, 8 Inch Projectiles, M509 and M650

APE 2230--FIXTURE, OBTURATOR INSTALLATION



Use:
The obturator installation fixture is designed to install obturators on the 155MM and 8–inch projectiles. A dual push button, pneumatic control unit actuates a cylinder which moves the obturator positioning jaw set (APE 2230E001, 2230E002, 2230E003), forward to push the obturator in place on the projectile. The fixture is mounted on a user provided bench and holds one manually placed projectile in a horizontal position for obturator installation. The user must choose a kit suitable to the obturator installation operation being performed.

Description:
The APE 2230 consists of the following principal parts:

a. The obturator installation fixture base which provides structural support.

b. The two adjustable v–block projectile support assemblies which hold the projectile and align it with the jaw set.

c. The filter/regulator/lockout assembly provides the air supply controls of the fixture. The assembly is mounted on a separate bracket to allow the user a choice of locations appropriate to the worksite.

Difference Between Models:
Original design.

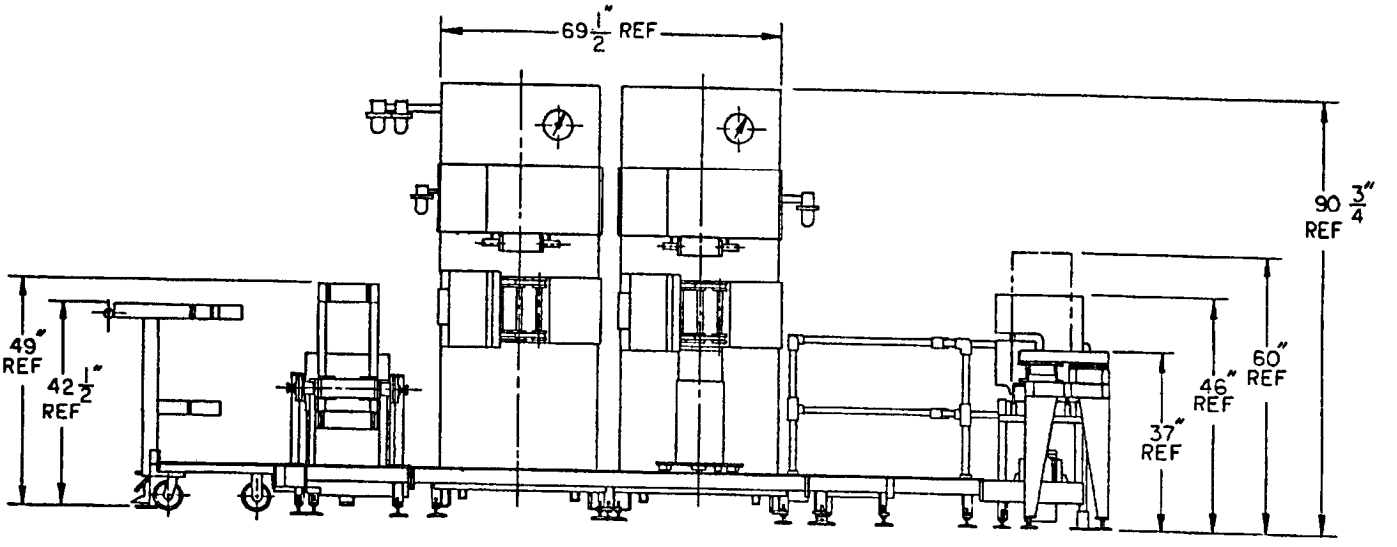
Tabulated Data:
APE No. 22300000
Unit of Issue . . . . . Each
Installation Data:
Length . . . . . 77 in.
Width . . . . . 12 in.
Height . . . . . 22-1/2 in.
Cube . . . . . 12 cu ft
Weight . . . . . 173 lbs
Utilities Required:
Oil free air (minimum) 80 psi at 1 cfm.
Production Capacity:
500 rounds per 8 hour shift.

Shipping Data:
Length . . . . . 83 in.
Width . . . . . 56 in.
Height . . . . . 42 in.
Cube . . . . . 113 cu ft
Weight . . . . . 978 lbs

Associated Equipment:
APE 1278M2, Tank, Hot Water Conditioning; APE 1278E003, Kit, Obturator Holding Rack; APE 2229, Obturator Removal Fixture.

Kits:
2230E001 KIT, Jaw, Obturator Positioning, 155MM Projectiles, M549 and M59A1 HERA
2230E002 KIT, Jaw, Obturator Positioning, 155MM Projectiles, M483A1, M587, M692, M718, M731, M741, and M795
2230E003 KIT, Jaw, Obturator positioning, 8 Inch Projectiles, M509 and M650

APE 2231--PR0JECTILE BASE PLUG SYSTEM



Use:
The projectile base plug system is designed to remove defective base plugs from 155MM M483A1 projectiles and replace them with new serviceable base plugs. The APE 2231 is pneumatically and hydraulically powered. The system is a single unit of equipment with individual stations for the performance of projectile handling, base plug removal, thread cleaning, shim stack test, base plug replacement and torque test operations.

Description:
The APE 2231 consists of the following major parts and assemblies:

a. The track and frame assembly provides the structure for the operation stations. The operation stations are mounted to the frame, which is surrounded by the track.

b. Eight projectile truck assemblies are supplied for transportation of projectiles about the track.

c. A projectile transfer cart and the transfer station exit lock assembly are provided for the removal of projectiles prior to the completion of the operation.

d. The conveyor section assembly and the upend station assembly are combined to form the incoming and outgoing station for projectiles.

e. The projectile clamp assembly is made up of jointed segments, which close around the projectile and pneumatically lock it into place during base plug removal, stack height test, base plug replacement and torque test operations.

f. Two identical stations are provided for base plug removal operations. Each station consists of a clamp assembly, a projectile base plug removal tool assembly with a base plug removal tool adapter a ratchet wrench assembly and base plug removal hydraulic pump assembly.

g. The thread cleaning station has a pneumatically powered tilt fixture which tilts the projectile truck thirty degrees to provide the operator with a better working and viewing angle. The threads of the projectile are cleaned using the thread cleaning equipment, which consists of an air powered cleaning brush and vacuum.

h. The stack height test station consists of a projectile clamp assembly, the 1000 pound stack height test hydraulic cylinder assembly and stack height test hydraulic pump assembly.

i. The torque station is used to perform the base plug replacement operation and to test the tightness of the thread engagement between the base plug and the projectile. The station consists of a projectile clamp assembly, the torque station assembly and the torque station hydraulic pump assembly.

j. The torque verification fixture assembly with a calibrated tension ring force gauge is supplied to insure that torque is measured accurately.

k. The stack test verification assembly with a calibrated compression ring force gauge is supplied to insure the accuracy of the projectile cargo stack test measurement.

Difference Between Models:
Original design.

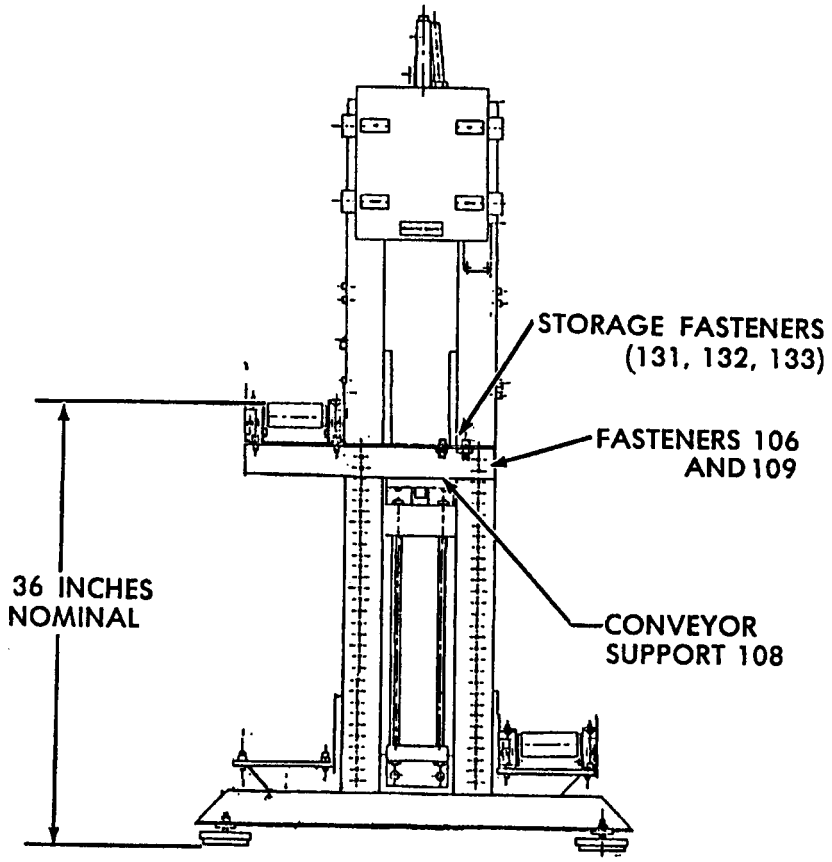
Tabulated Data:
APE No. 22310000
Unit of Issue . . . . . Each
Installation Data:
Length . . . . . 201-1/2 in.
Width . . . . . 146 in.
Height . . . . . 91 in.
Weight . . . . . Not available
Floor space . . . . . 29419 sq in.
Utilities Required:
Air (minimum) at 80 psi.
Production Capacity:
185 projectiles per 8 hour shift.

Shipping Data:
FRAME (WITH ATTACHED TRACK):
Length . . . . . 89 in.
Width . . . . . 71 in.
Height . . . . . 100 in.
Cube . . . . . 365.7 cu ft
Weight . . . . . 5285 lbs
UPEND (WITH CONVEYOR TABLE) :
Length . . . . . 106 in.
Width . . . . . 53 in.
Height . . . . . 60 in.
Cube . . . . . 195 cu ft
Weight . . . . . 2210 lbs
END TRACKS (AND SMALL ASSEMBLIES):
Length . . . . . 83 in.
Width . . . . . 53 in.
Height . . . . . 59 in.
Cube . . . . . 150.2 cu ft
Weight . . . . . 1791 lbs
EIGHT PROJECTILES TRUCKS:
Length . . . . . 113 in.
Width . . . . . 45 in.
Height . . . . . 39 in.
Cube . . . . . 113.8 cu ft
Weight . . . . . 1520 lbs

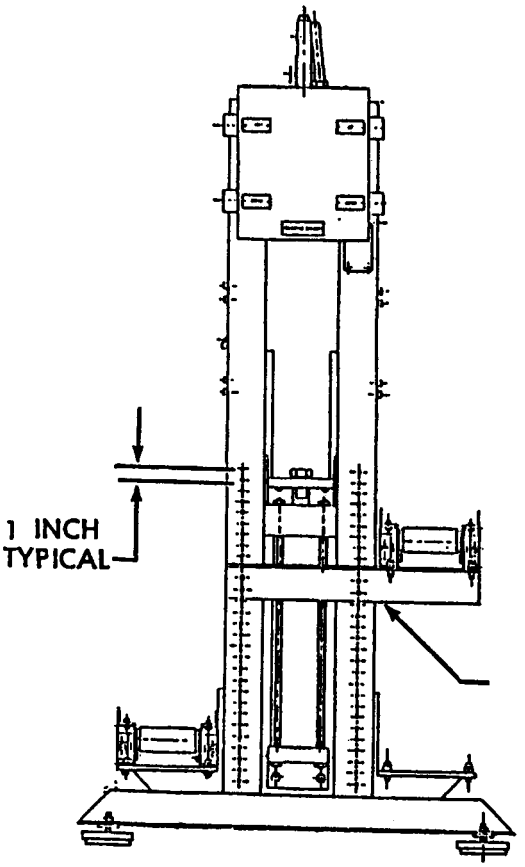
Associated Equipment:
APE 2234, Projectile Base Plug Drilling Machine

Kits:
2231E001 KIT, 155MM RAAMs Projectile Stack Height Test Equipment, Remove and Replace 155MM RAAMS Projectile Base Plugs

APE 2232--PROJECTILE ELEVATOR



NO. 2



NO. 3

Use:
The projectile elevator is designed to lift 155MM M483A1, M718, M741 and 8 Inch projectiles from lower levels to an operating height at a higher level. The elevator is the primary transportation equipment for the Projectile Ogive Replacement System, APE 2220.

Description:
APE 2232 is pneumatically powered and manually loaded. Dual projectile conveyor assemblies are lifted by a cylinder and chain mechanism that raise from eleven nominal inches above floor level to a height of 64 nominal inches. Both projectile conveyor assemblies are raised and lowered simultaneously. Height adjustment conveyor supports provide a means of changing the beginning height level of either one (not both in the same operation set-up) of the conveyors from eleven and one half nominal inches to 36 nominal inches. A movable operator's control box allows for variation in operation set-ups. The load limit of the elevator is 225 pounds per conveyor. The projectile elevator consists of the following major parts and assemblies:

a. The frame which provides the structural support for the elevator.

b. The tracks which provide alignment for the conveyor lifters.

c. The conveyor lifters which hold the projectile conveyors as they are moved up or down.

d. The control box assembly which allows the operator to select the up or down direction of the elevator.

e. Two conveyor assemblies, located on opposite sides of the elevator,which provide for horizontal movement of the projectile. Each conveyor assembly is made up of a roller conveyor section which is 51 inches long and nine inches wide.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	22320000
Unit of Issue	Each
Installation Data:	
Length	76 in. (pivot arm extended)
Width	40 in.
Height	75-1/2 in.
Weight	1017 lbs
Utilities Required:	
Air at 90 psi.	
Production Capacity:	
Not applicable.	

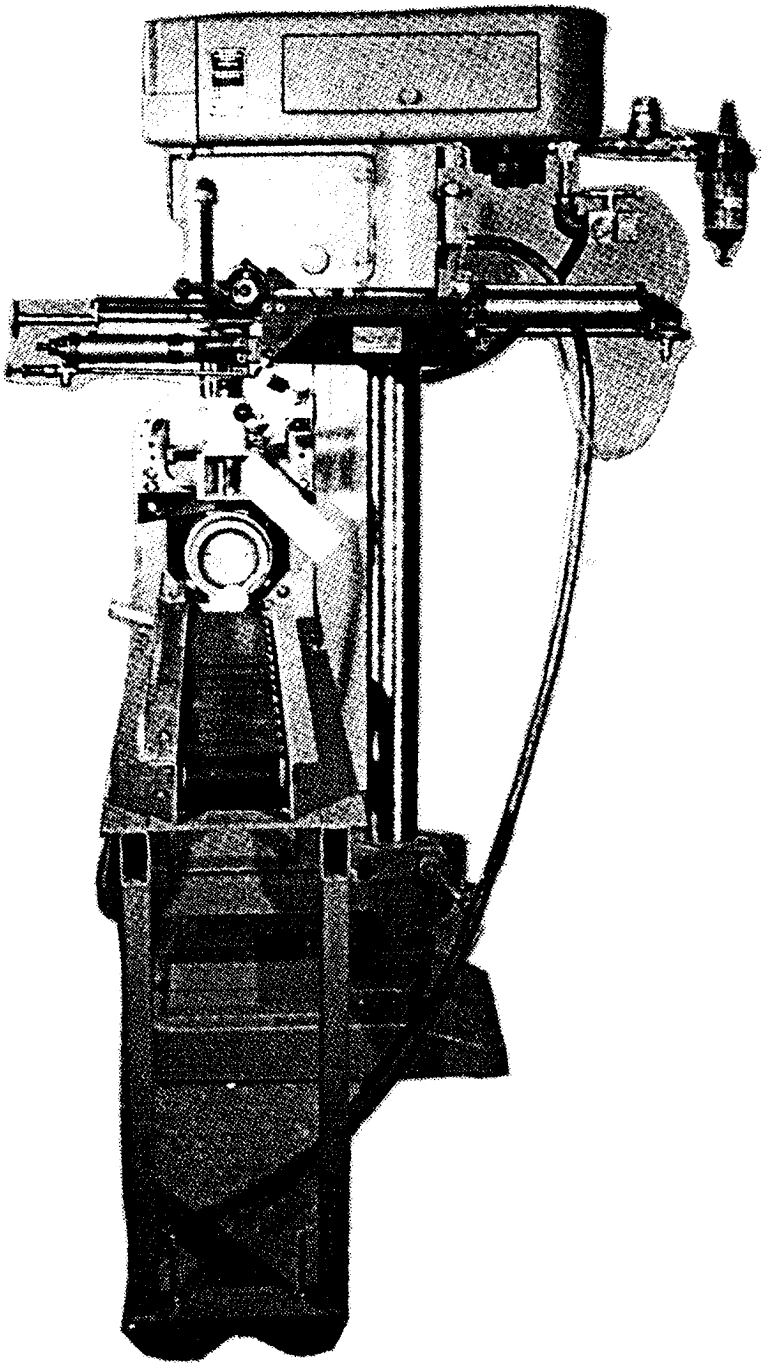
Shipping Data:

Length	85 in.
Width	83 in.
Height	54 in.
Cube	220 cu ft
Weight	2228 lbs

Associated Equipment:
APE 2220.

Kits:
None.

APE 2234--PROJECTILE BASE PLUG DRILLING MACHINE



Use:
The projectile base plug drilling machine is designed to drill two holes in-line through the walls of the 155MM M483A1 projectile base plug. The APE 2234 is pneumatically powered and manually operated. The machine will drill one hole through one wall of the projectile base plug, the projectile is then manually rotated 180 degrees and locked in place to allow the second hole to be drilled. The APE 2234 is used as associated equipment with the Projectile Base Plug Replacement System, APE 2231, to provide gripping points for base lug removal operations.

Description:
The APE 2234 consists of the following major parts and assemblies:

a. The drill press is a floor model drill press for a No. 3 morse taper. The drill is powered by a 4.6 horsepower rotary vane air motor, with variable reversible speed and operating speeds of 300 RPMS to 3000 RPMS.

b. A manually controlled power feed unit provides the ON/OFF controls and the up or down movement of the modified drill bit.

c. The table assembly has an incoming conveyor section, two pneumatically powered projectile clamps and forwarding conveyor section.

d. The projectile alignment fixture provides a means of aligning the projectile in the clamp to insure that both holes are drilled 180 degrees apart and on the same center line.

e. The drill bit chip guard keeps the base plug and work area free of chips during the drilling operation.

Difference Between Models:
Original design.

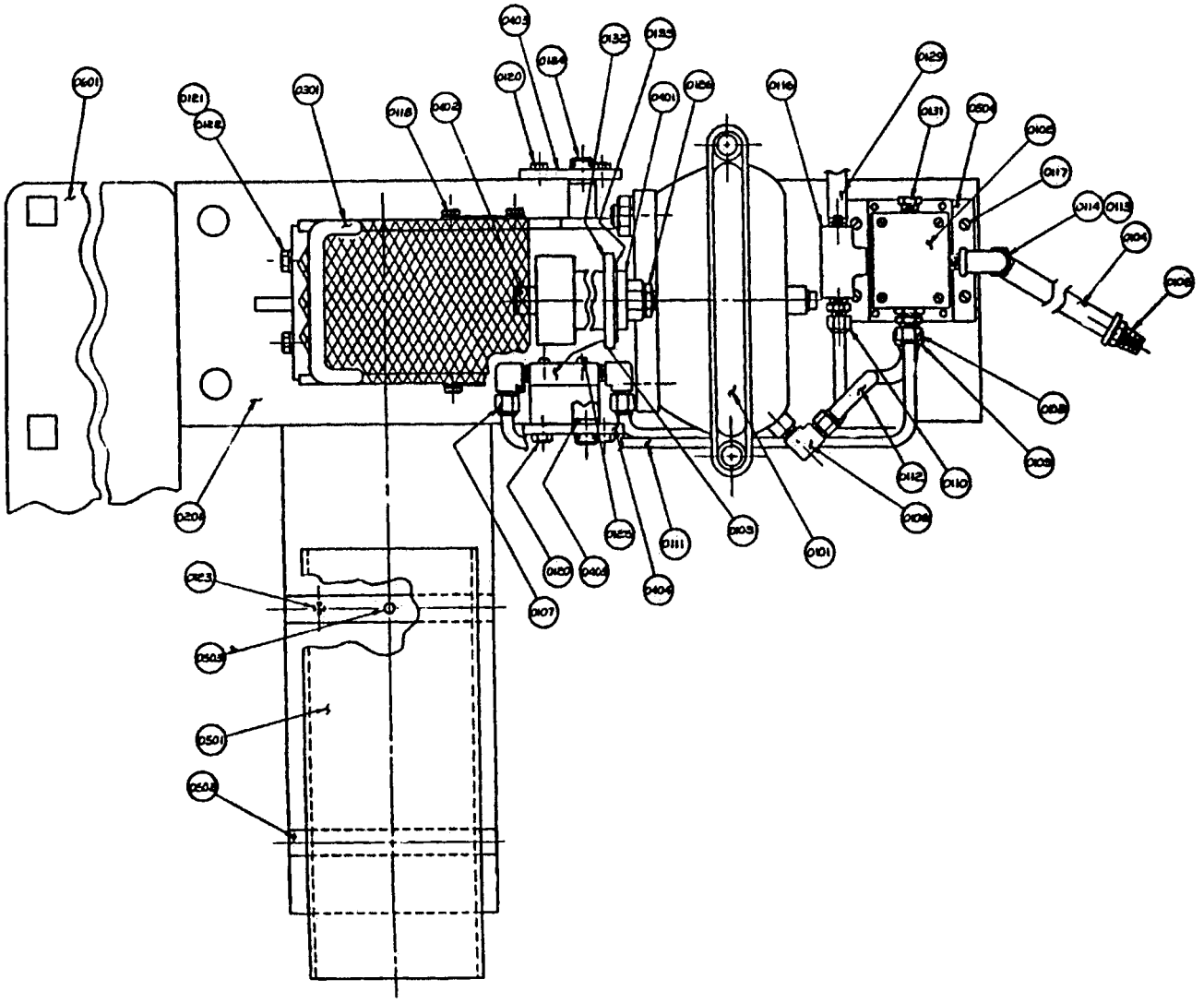
Tabulated Data:
APE No. 22340000
Unit of Issue . . . . . Each
Installation Data:
Length . . . . . 100-1/2 in.
Width . . . . . 46-1/2 in.
Height . . . . . 69 in.
Weight . . . . . Not available
Floor space . . . . . 4648.125 sq in.
Utilities Required:
Air at 80 psi.
Production Capacity:
Not available.

Shipping Data:
Length . . . . . 108 in.
Width . . . . . 58 in.
Height . . . . . 87 in.
Cube . . . . . 315 cu ft
Weight . . . . . 2125 lbs

Associated Equipment:
APE 2231, Projectile Base Plug Replacement System.

Kits:
None.

APE 2235--MACHINE, DOWNLOAD



Use:
The download machine is used for removing smoke grenades from the M176 Grenade launcher.

Description:
APE 2235 consists of an APE 1065 Pneumatic Vise modified by welding to it a base plate which holds a sabot holding tube. Additional components include a tubing cutter for cutting the launcher end cap off, and a spanner wrench for removing the impulse cartridge. The launcher is held in the pneumatic vise while performing these operations and while sliding the grenade-holding sabot into the sabot holding tube for removal of the grenades.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	22350000
Unit of Issue	Each
Installation Data:	
Length	21 in.
Width	24 in.
Height	12 in.
Weight	55 lbs
Utilities Required:	
Air at 10 psi.	

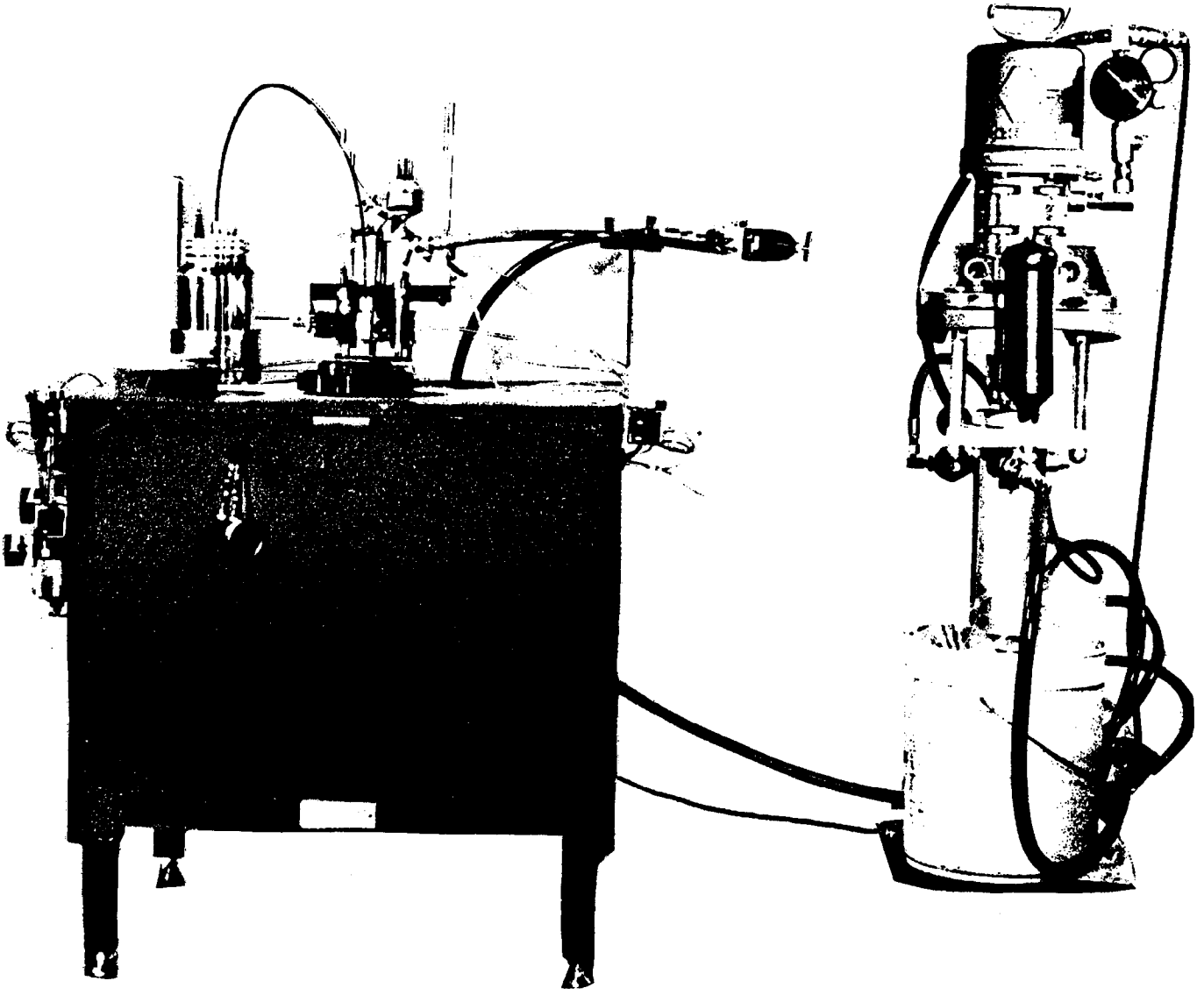
Production Capacity:
12 launchers per hour.

Shipping Data:
Length . . . . . 23 in.
Width . . . . . 28 in.
Height . . . . . 15 in.
Cube . . . . . 5.8 cu ft
Weight . . . . . 70 lbs

Associated Equipment:
None.

Kits:
None.

APE 2244--ADHESIVE DISPENSING EQUIPMENT



Use:
The adhesive dispensing equipment is used to dispense adhesive to the shoulder and the threads of the new base plug prior to threading it into the 155MM M483A1 projectiles.

Description:
APE 2244 consists of air–operated equipment that dispenses adhesive to the base plug shoulder and threads simultaneously. After the projectile is manually loaded onto the rotary turntable, the cycle is initiated by a two–hand operated actuator. The application of the adhesive is performed automatically by two independently operated dispensing heads mounted on the dispensing assembly base. The speed of the turntable is adjustable, within a defined range, to assure bead application is as required. The free-standing pumping unit for the silicone compound (shoulder application) is located adjacent to the turntable while the pressure vessel for the anerobic compound (thread application) is mounted on the dispensing assembly base with the turntable.

Difference Between Models:
Original design.

Tabulated Data:
APE No 22440000
Unit of Issue . . . . . Each

Installation Data:

ROTARY TURNTABLE:
Length . . . . . 30 in.
Width . . . . . 24 in.
Height . . . . . 45 in.
Weight . . . . . Not available

PNEUMATIC RAM ASSEMBLY:
Length . . . . . 15 in.
Width . . . . . 15 in.
Height . . . . . 50 in.
Weight . . . . . Not available

Utilities Required:
Air at 80 psi.

Production Capacity:
120 per hour.

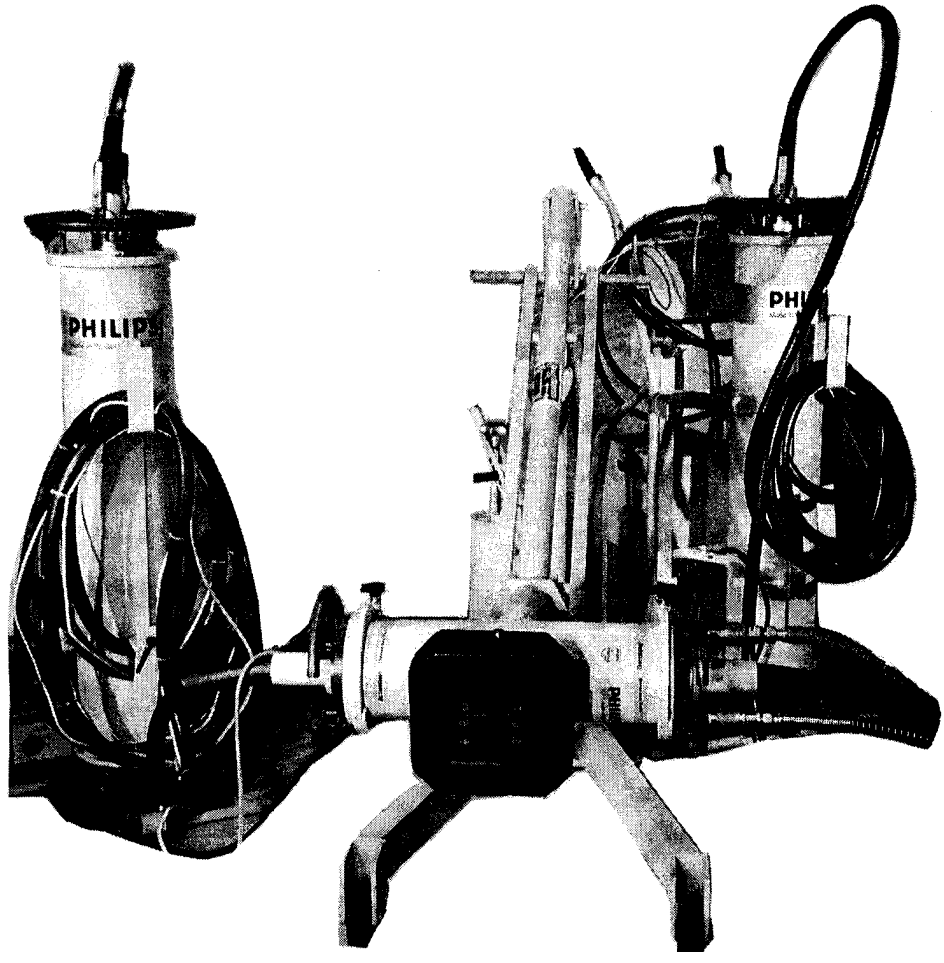
Shipping Data:
Length . . . . . 58 in.
Width . . . . . 45 in.
Height . . . . . 62 in.
Cube . . . . . 94 cu ft
Weight . . . . . 1040 lbs

Associated Equipment:
None.

Kits:

None.

APE 2248- 320 KV MOBILE X-RAY SYSTEM



Use:
The 320 KV Mobile X-ray System is used to provide a source of X-rays for Radiography (Film and Radioscopic Real Time) of ammunition and ammunition components having a density up to the equivalency of three inches of steel.

Description:
The Mobile X-ray System is designed to be assembled or disassembled and transported to different Government locations. Components may be moved by one person from one position to another within a building and can be easily disassembled for packing into suitable crates for shipment or storage.

The complete system consists of the following components:

1. Control Console Unit
2. Anode and Cathode Transformers in separate Tanks.
3. Separate Two Wheeled Dollies for transportation of Anode and Cathode Transformers.
4. X-ray Tube Assembly with small and Large Focal Spot Size.
5. Remote Controlled Tube Shutter Collimator.
6. Oil Cooling Unit
7. Laser Beam Centering Device.
8. Wheeled, Hydraulic Raising and Lowering X-ray Tube Assembly Support
9. High and Low Voltage Cables.
10. Oil Hoses

Tabulated Data:

APE No 22480000
Unit of issue: . . . . . Each

Installation Data:

Length: . . . . . Not available
Width: . . . . . Not available
Height: . . . . . Not available
Weight: . . . . . Not available
Cube: . . . . . Not available
Weight: . . . . . Not available

Utilities Required:

Electricity:
Control Box: 220 VAC +/- 10%, single phase, 6Taps for 208V and 240V
Power Frequency: 50/60 Hz
Maximum Current Input: 12, 5 Amperes
Power Fuze Rating: 16A (slow blow)
Production Capacity:
Not applicable.

Shipping Data:

Length: . . . . . Not available
Width: . . . . . Not available
Height: . . . . . Not available

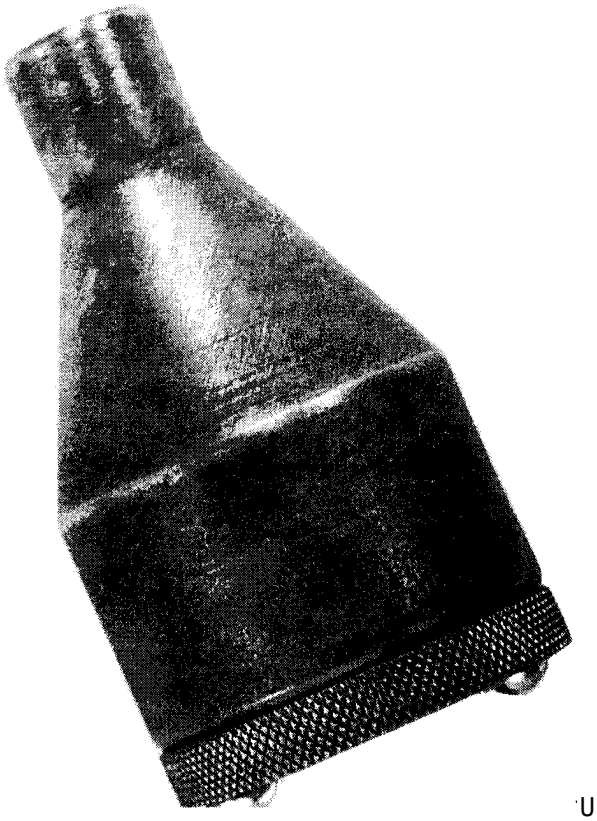
Associated Equipment:

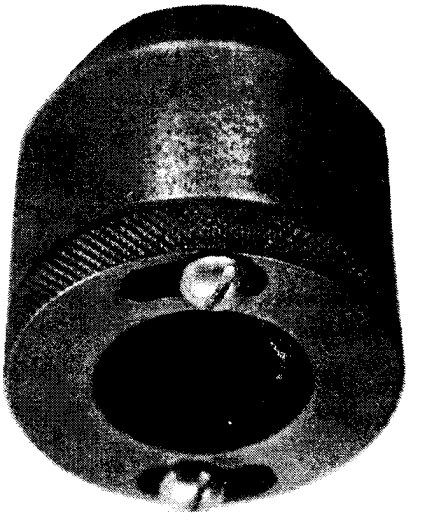
None

Kits:

None

APE 2249--TORQUE ADAPTER FOR 4.2 INCH MORTAR CARTRIDGE CONTAINERS





Use:
The Torque Adapter is used to assemble, disassemble, or torque cartridge containers, cartridge container extensions or striker nuts on 4.2 inch mortars.

Description:
The Torque Adapter is designed with rollers inside which adjust to grip the cartridge container or cartridge container extension as the adapter end cap is turned. The Torque Adapter will fit onto a 1/2 inch drive.

Difference Between Models:
Original design.

Tabulated Data:
APE No 22490000
Unit of issue: . . . . . Each

Installation Data:
Length: . . . . . 4-1/16 in.
Width: . . . . . 2-1/2 in. dia.
Weight: . . . . . 3 lbs.

Utilities Required:
None

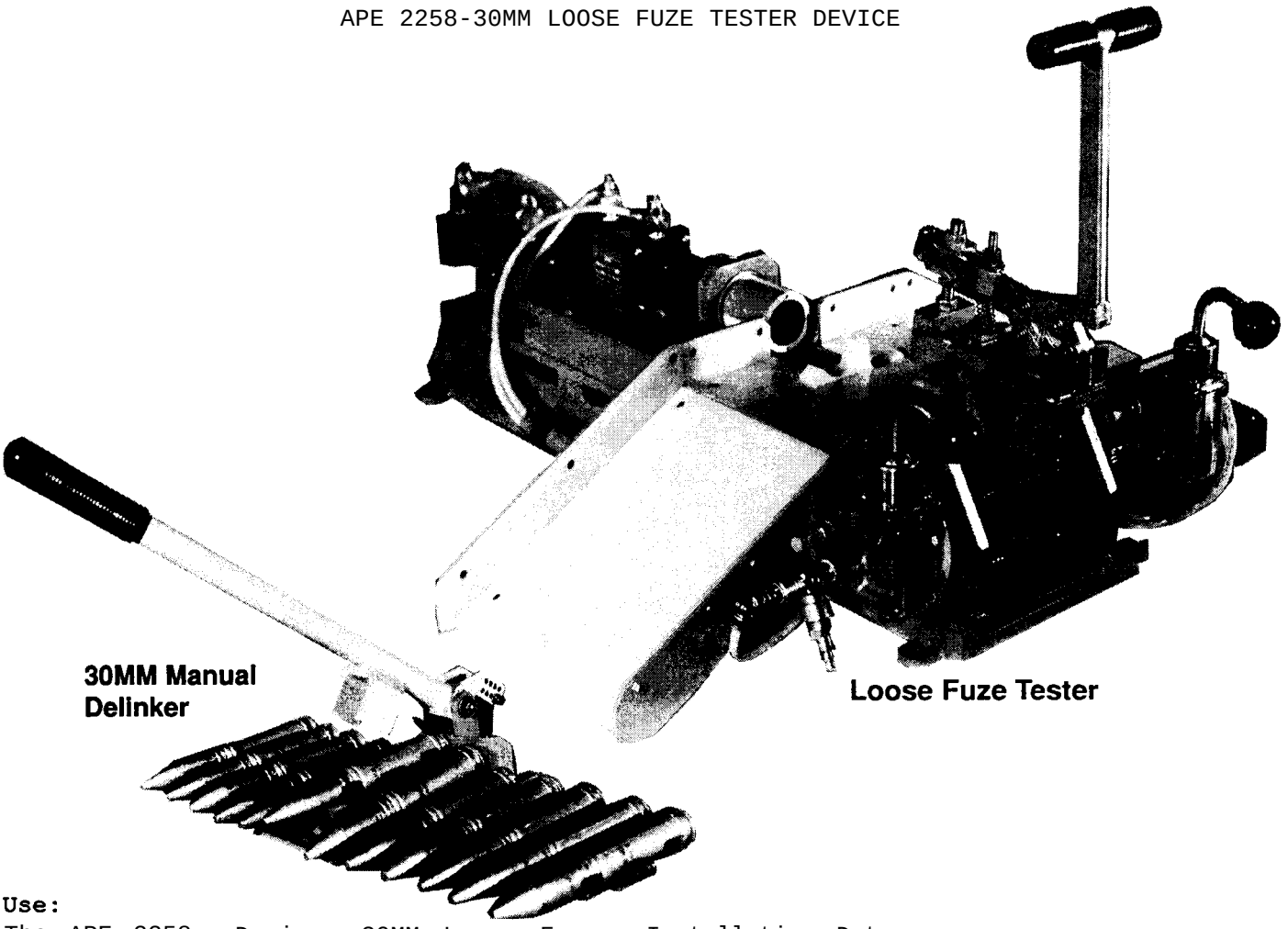
Production Capacity:
Not applicable.

Shipping Data:
Length: . . . . . 5 in.
Width: . . . . . 3 in.
Weight: . . . . . 3 lbs.

Associated Equipment:
None

Kits:
None

APE 2258-30MM LOOSE FUZE TESTER DEVICE



Use:
The APE 2258, Device, 30MM Loose Fuze Tester, is designed for detecting loose fuzes in 30MM M789 HEDP cartridges and removing the defective cartridges from the link belt.

Description:
The device consists of two pieces of equipment: A loose fuze tester to detect loose fuzes. The tester is manually operated and pneumatically powered. A 30MM manual delinker assembly to remove defective cartridges (cartridges with loose fuzes) from the link belt.

Difference Between Models:
Original design.

Tabulated Data:
APE No 22580000
Unit of issue: . . . . . Each

Installation Data:
Loose Fuze Tester

Length: . . . . . 34 inches
Width: . . . . . 27 inches
Height: . . . . . 17 inches
Weight: . . . . . 130 pounds

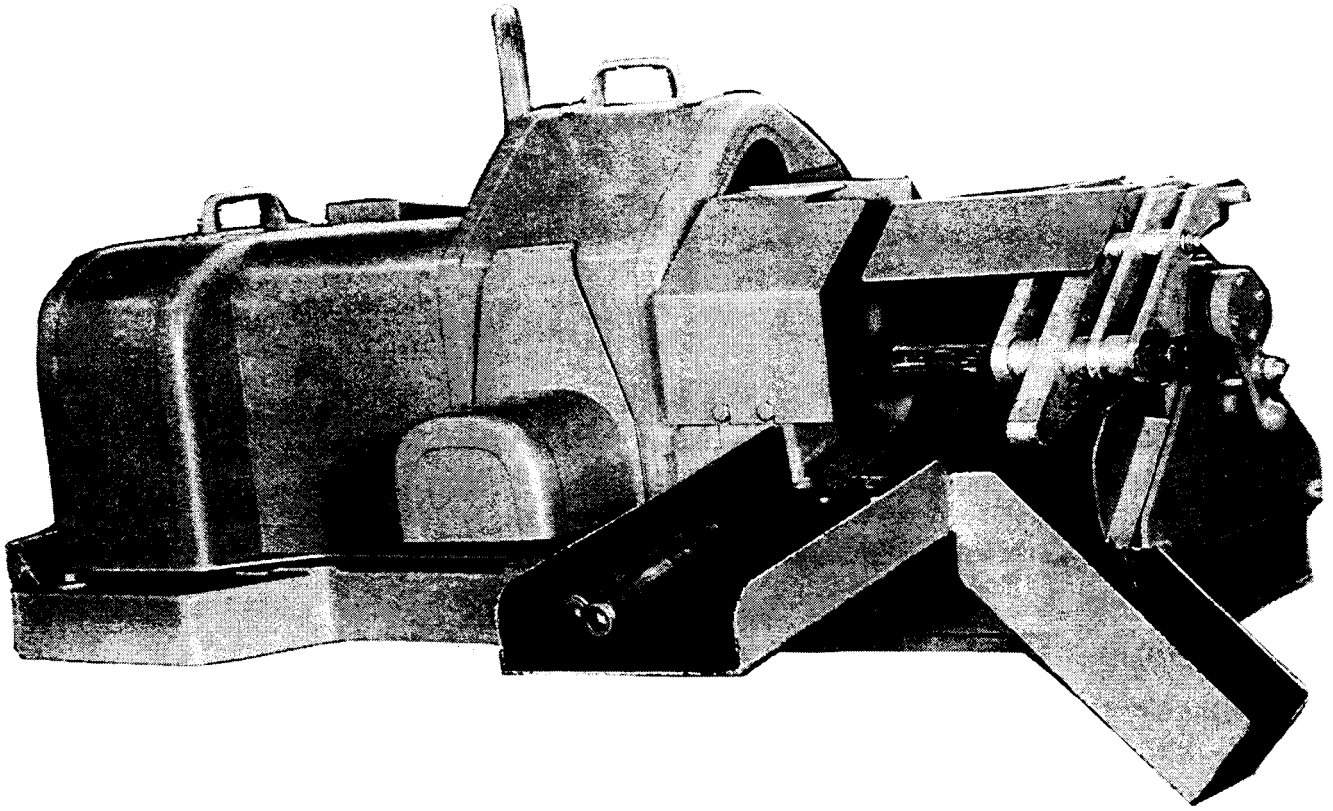
30MM Manual Delinker
Length: . . . . . 20-1/2 inches
Width: . . . . . 5 inches
Height: . . . . . 17 inches
Weight: . . . . . 7 pounds

Utilities Required:90 PSI air supply
Production Rate: 300 cartridges/hour.

Associated Equipment:
None

Kits:
None

APE 3002A–LINKING MACHINE, POWERED, 20MM, M16



Use:
The linking machine is used to link 20MM cartridges with M3 or M10 links. Machine can also delink.

Description:
APE 3002A is a portable machine with a 1/4 horsepower motor, an ammunition tray, link chute, link loading wheel guide, ammunition feed assembly and two pushers. A special attachment is used to delink.

Difference Between Models:
Original design.

Tabulated Data:

APE No	30020000A
Unit of Issue	Each

Installation Data:

Length	55 in.
Width	48 in.
Height	34 in.
Weight	300 lbs

Utilities Required:
115 230 vac, 60 Hz, single phase.
Production Capacity:

Shipping Data:

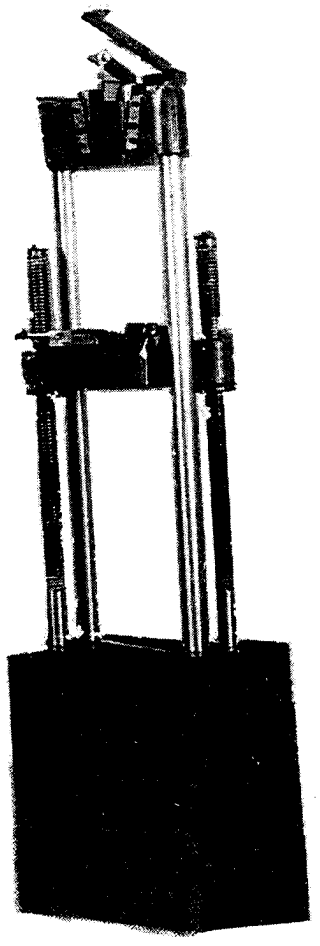
Length	66 in.
Width	60 in.
Height	28 in.
Cube	64 cu ft
Weight	400 lbs

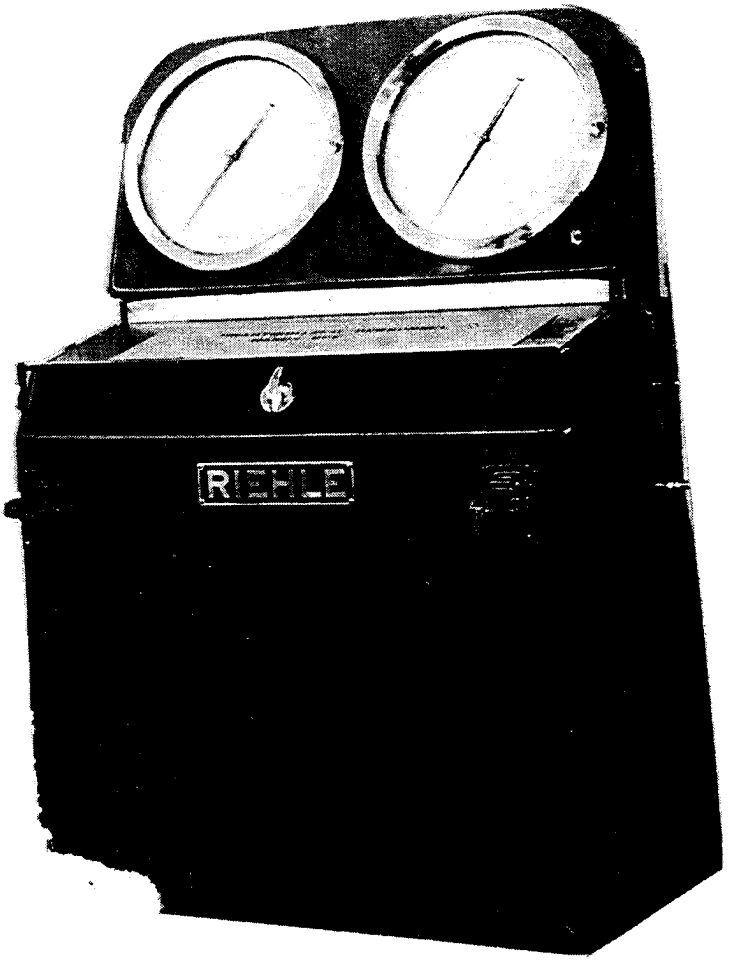
Associated Equipment:

None.

Kits:

APE 3022–MACHINE PULL TEST





Use:
The pull test machine is used to ascertain the pressure necessary to pull the projectile from the cartridge case after crimping.

Description:
APE 3022 is made up of two units. The loading unit consists of a metal base, four uprights an upper cross head assembly and a lower cross head assembly. The indicating unit consists of a console with indicating gages, controls and hydraulic pump inside the console.

Difference Between Models:
Original design.

Tabulated Data:

APE No 30220000
Unit of Issue . . . . . Each

Installation Data:

LOADING UNIT:

Length . . . . . 24-1/4 in.
Width . . . . . 14 in.
Height . . . . . 84 in.
Weight . . . . . 1800 lbs

INDICATING UNIT:

Length . . . . . 41 in.
Width . . . . . 22 in.
Height . . . . . 67 in.
Weight . . . . . 1100 lbs

Utilities Required:
220 vac, 3 phase, 60 Hz.
Production Capacity:
Not applicable.

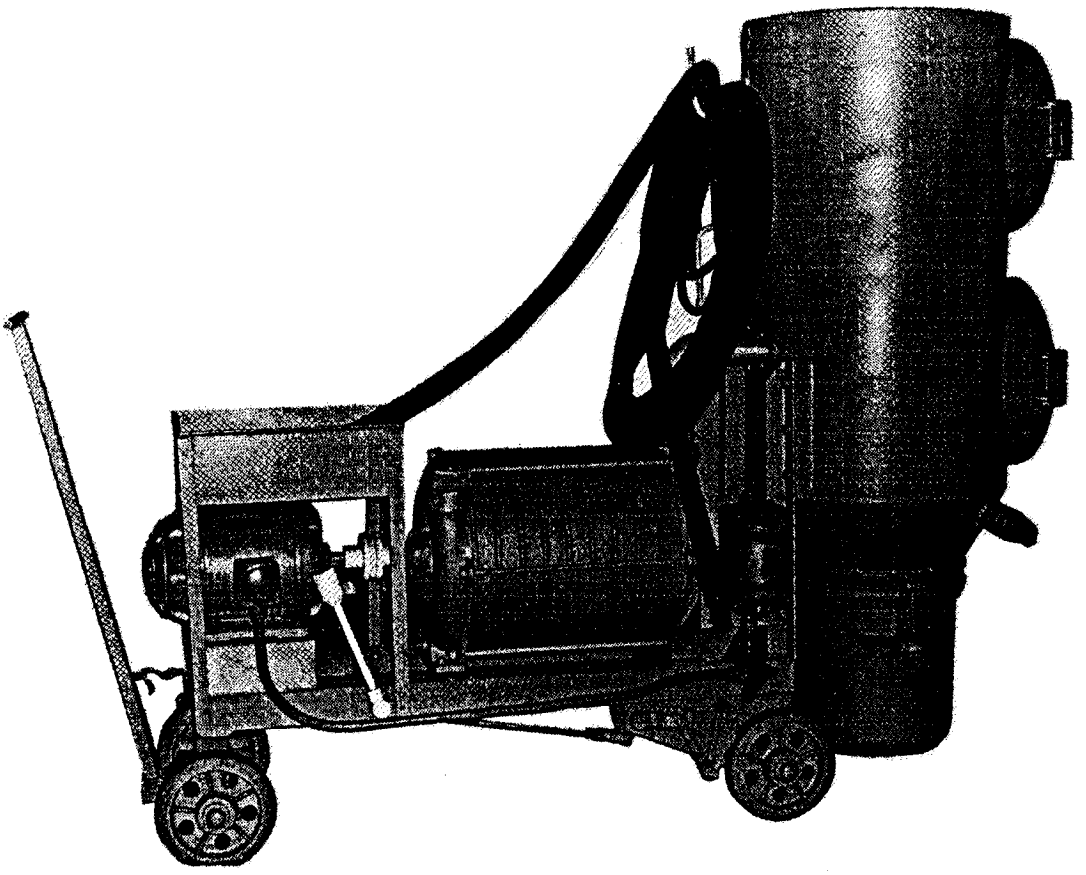
Shipping Data:
LOADING UNIT:
Length . . . . . 45 in.
Width . . . . . 45 in.
Height . . . . . 91 in.
Cube . . . . . 106.6 cu ft
Weight . . . . . 2195 lb

INDICATING UNIT:
Length . . . . . 42 in.
Width . . . . . 45 in.
Height . . . . . 74 in.
Cube . . . . . 100 cu ft
Weight . . . . . 1400 lbs

Associated Equipment:
None.

Kits:
3022E001 KIT, Pull Test M392A2 (L36A1) 105MM

APE 3041A--CLEANER, PORTABLE VACUUM



Use:
The vacuum cleaner is used with military ammunition oriented equipment for the pick up of explosive dusts and explosive material.

Description:
APE 3041A is a modified commercial type with enclosed filter. It cleans by suction only and is powered by a 5 horsepower motor. The unit is mounted on a four wheel cart.

Difference Between Models:
APE 3041A is a model PC–5 which was manufactured by United States Hoffman Machine Corporation of Syracuse, New York. This item is being replaced by APE 2043.

Tabulated Data:

APE No	30410000A
Unit of Issue	Each

Installation Data:

Length	84 in.
Width	25 in.
Height	72 in.
Weight	950 lbs

Utilities Required:
220/440 vac, 3 phase, 60 Hz.

Production Capacity:
Not applicable.

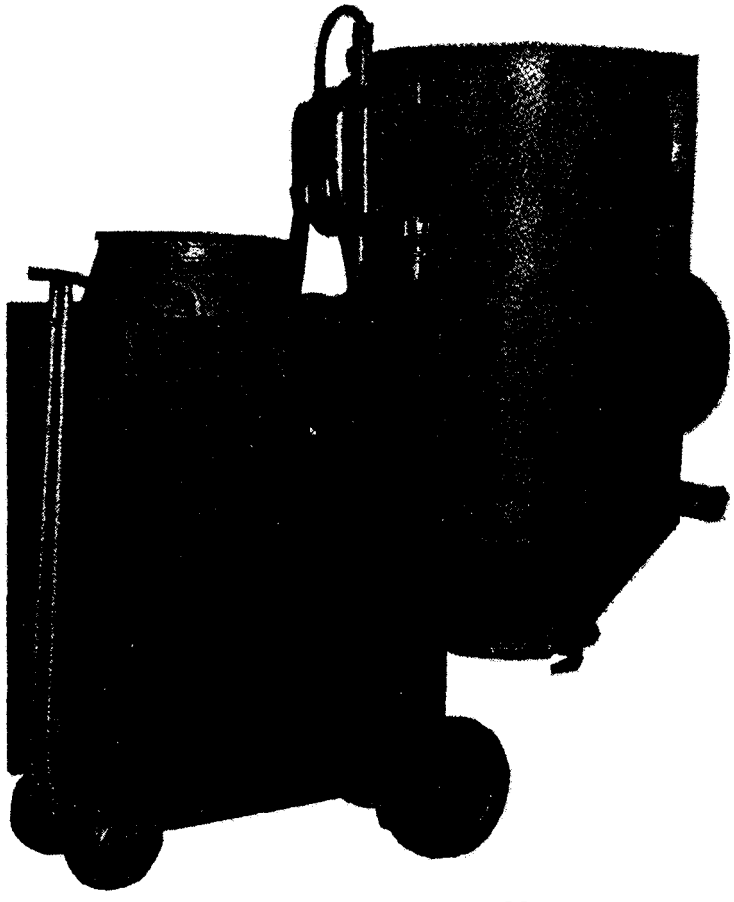
Shipping Data:

Length	88 in.
Width	29 in.
Height	80 in.
Cube	118 cu ft
Weight	1225 lbs

Associated Equipment:
APE 2042.

Kits:
None.

APE 3041B--CLEANER, PORTABLE VACUUM



Use:
The vacuum is used with military ammunition oriented equipment for the pick up of explosive dust and explosive material.

Description:
APE 3041B is a modified commercial type with enclosed filter. It cleans by suction only and is powered by a 5 horsepower motor. The unit is mounted on a three wheel cart.

Difference Between Models:
APE 3041B is a model P-5 which was manufactured by Allen Billmyre Corporation of South Norwalk, Connecticut. This item is being replaced by APE 2043.

Tabulated Data:

APE No.	30410000B
Unit of Issue	Each

Installation Data:

Length	67 in.
Width	29 in.
Height	70 in.
Weight	875 lbs

Utilities Required:
220/440 vac, 3 phase, 60 Hz.

Production Capacity:
Not applicable.

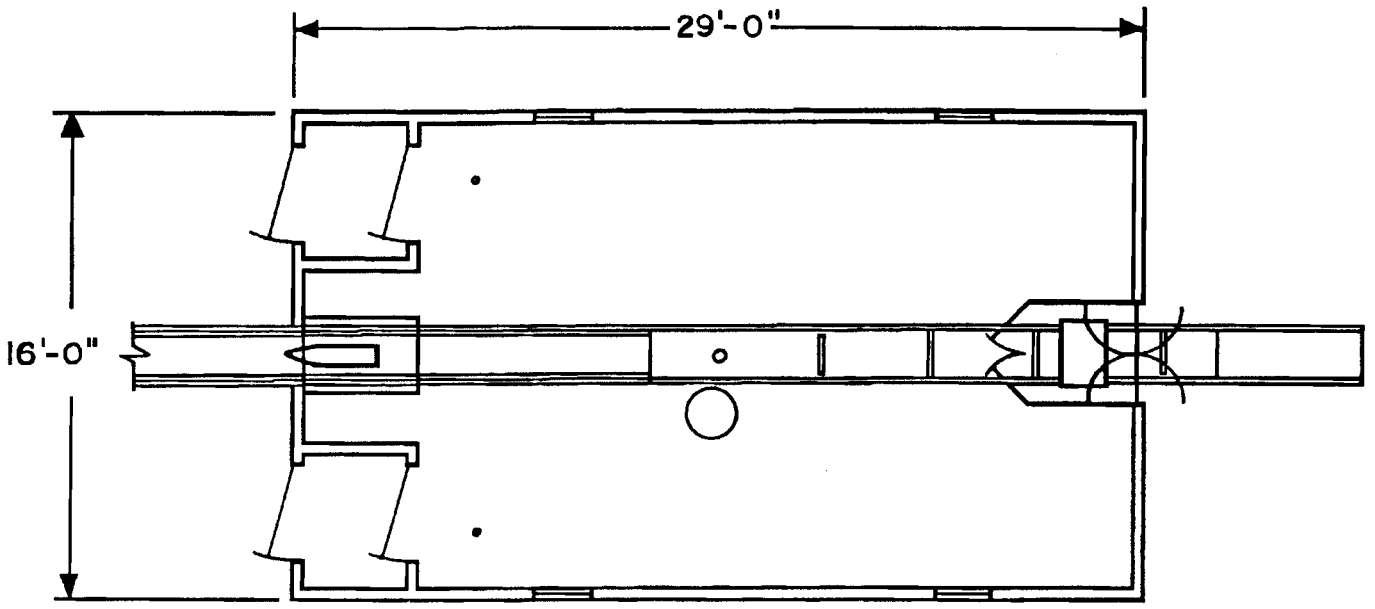
Shipping Data:

Length	72 in.
Width	33 in.
Height	78 in.
Cube	108 cu ft
Weight	1175 lbs

Associated Equipment:
APE 2042.

Kits:
None.

APE 5015M1--BOOTH, INSPECTION



Use:
The inspection booth is used to inspect and perform agent leak tests on chemical munitions during their unpack for P&P or maintenance. The inspection booth is designed to operate under a slight negative pressure. This prevents escape of the agent from the booths in the event a leaker is found during leak testing.

Description:
APE 5015M1 consists of a prefabricated, free standing steel structure. It is equipped with two personnel airlocks to maintain negative pressure inside the booth during personnel entry and egress. Two drench type showers are provided for decontamination of personnel. Chemical munitions are introduced into the booth by means of a sloped roller conveyor located on the far end of the booth. A .5 ton jib crane and electric hoist are provided for handling munitions inside the booth. Inspected munitions exit out of the front of the booth by means of an APE 1022M1 power conveyor. Both the munition input and output conveyor openings are fitted with airlocks to prevent escape of agent if leaking munitions are found. A negative pressure of .05 - .10 H can be maintained inside the booth during operations using three M6A1 gas particulate filters (filters are furnished by user). Required interior ventilation ducting is furnished with the booth.

Difference Between Models:
The APE 5105 booth differs from the APE 5015M1 in that the munition input conveyor is located on the right rear side of the booth instead of the back end of the booth. The 5015 booth is furnished with shower pans to collect contaminated shower water.

Tabulated Data:

APE No. 50150000M1
Unit of Issue . . . . . Each

Installation Data:

Length . . . . . 29 ft
Width . . . . . 16 ft
Height . . . . . 9′ 9′′ overall (9″ inside, usable height)
Weight (approx) . . . . . 7500 lbs

Utilities Required:

110 vac - 1 phase - 22 amps; 208 vac - 3 phase - 9 amps. Water from a 1" supply line.

Production Capacity:

Not applicable.

Shipping Data:

Length . . . . . Not available
Width . . . . . Not available
Height . . . . . Not available
Cube . . . . . Not available
Weight . . . . . 9500 lbs

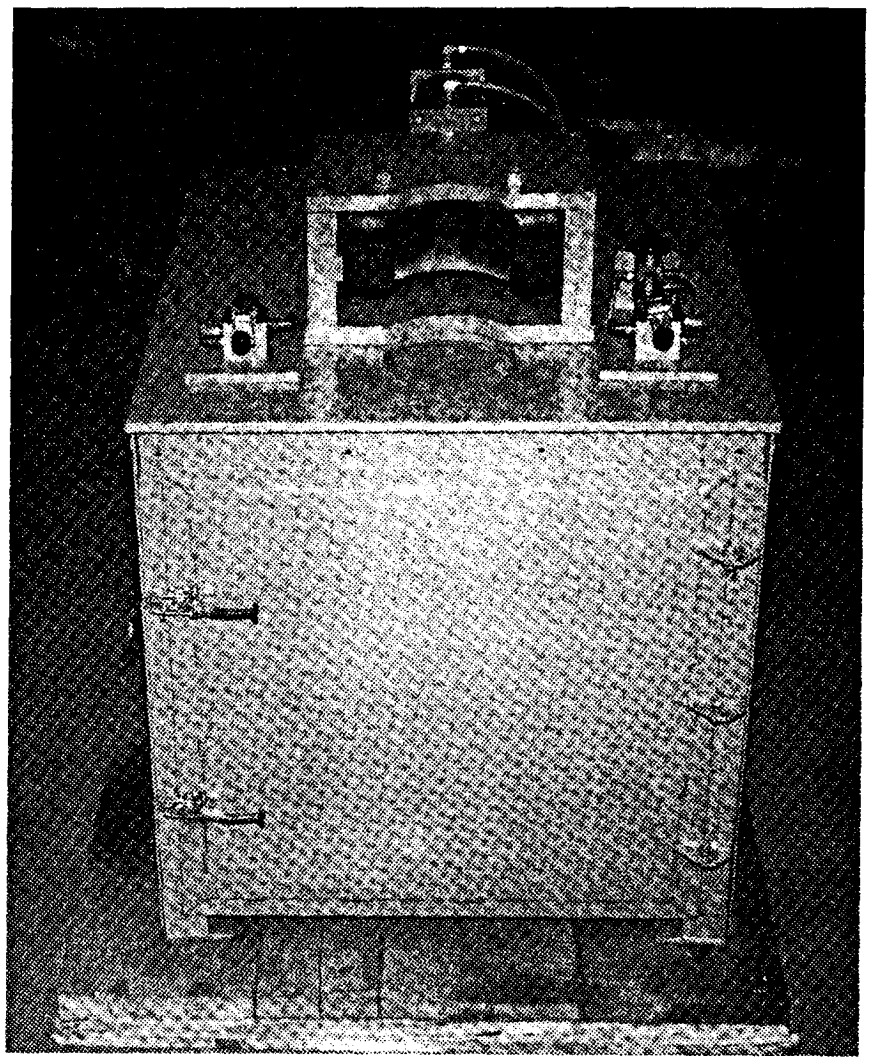
Associated Equipment:

M6A1 electric particulate filters.

Kits:

None.

APE 7007--VISE, NAVY PROJECTILE, VERTICAL MOUNT W/TABLE AIR



Use:
The vise is hand operated, pneumatically powered vise designed to hold a 3, 4, 5 or 6 inch projectile in a vertical position.

Description:
APE 7007 consists of a power clamp assembly mounted on top of an open/back table assembly. An emergency trap door that is open while a base-ejection type projectile with expelling charge is clamped in the vise, and which is directly above a water-filled container, is mounted on the table top directly below the clamp jaws. Two hand-operated levers are mounted on the table top on either side of the clamp assembly.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	70070000
Unit of Issue	Each
Installation Data:	
Length	38 in.
Width	33 in.
Height	44 in.
Weight	1015 lbs

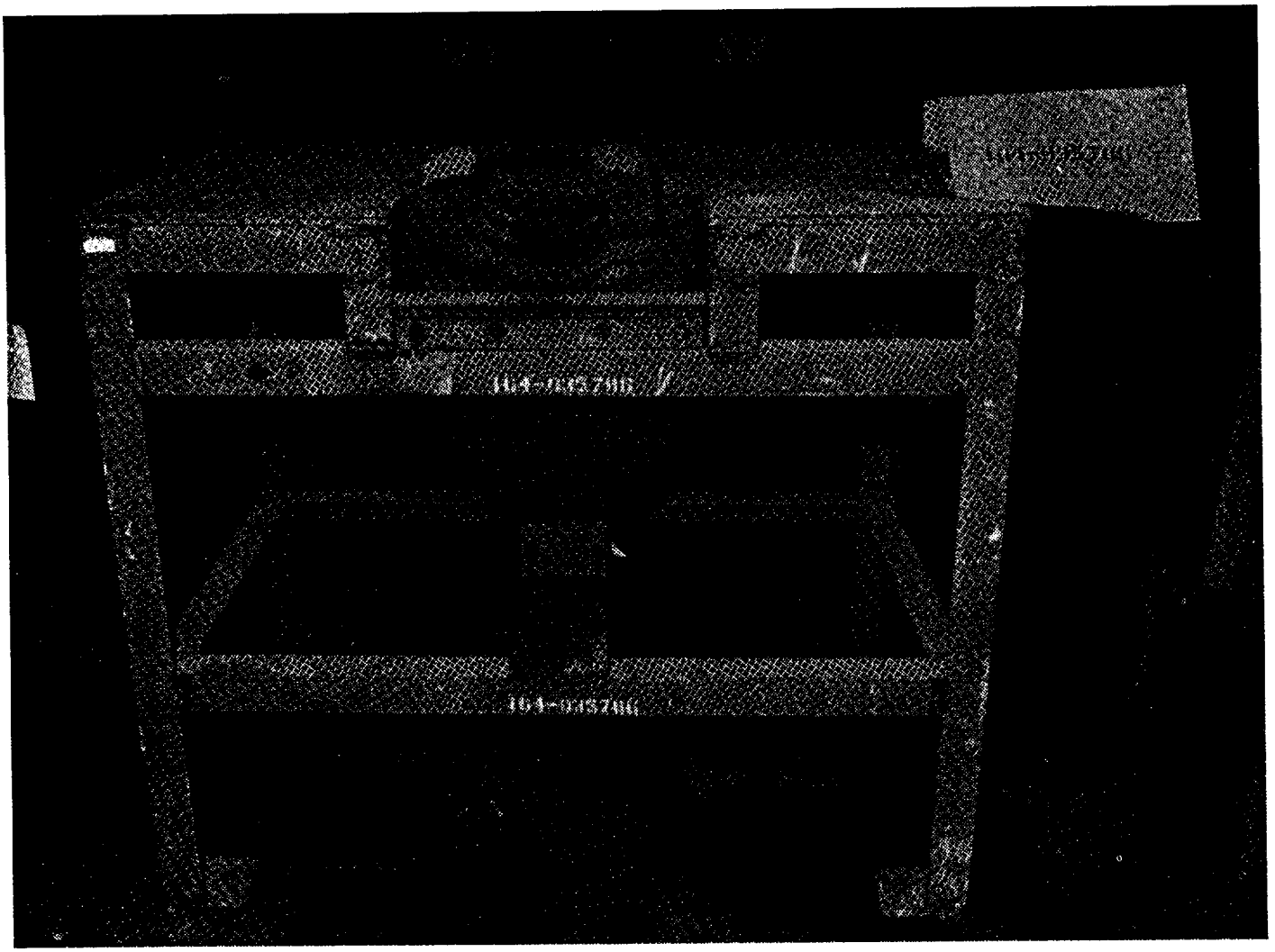
Utilities Required:
Air at 2 cfm, 90 psi.
Production Capacity:
Not applicable.

Shipping Data:
Length . . . . . Not available
Width . . . . . Not available
Height . . . . . Not available
Cube . . . . . 36.0 cu ft
Weight . . . . . 650 lbs

Associated Equipment:
None.

Kits:
None.

APE 7014--VISE, PROJECTILE, 5“, ANGULAR MOUNTING



Use:
The 5“ projectile angular mounting vise is used to hold 5“ projectiles for windshield assembly.

Description:
APE 7014 consists of two circular jaws powered by a 5 inch stroke air cylinder. The vise is mounted at a 55 degree angle from horizontal on a steel table.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	70140000
Unit of Issue	Each
Installation Data:	
Length	48 in.
Width	30 in.
Height	48 in.
Weight	250 lbs

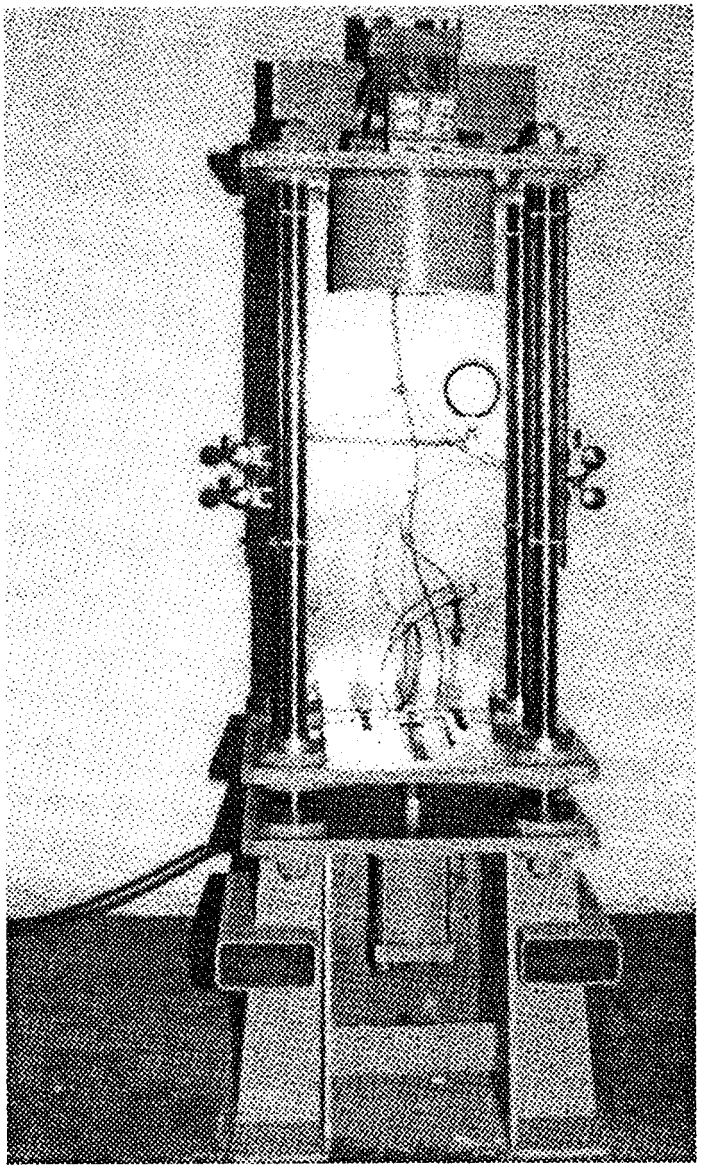
Utilities Required:
Air at 100 psi.
Production Capacity:
Not applicable.

Shipping Data:
Length . . . . . Not available
Width . . . . . Not available
Height . . . . . Not available
Cube . . . . . 40.0 cu ft
Weight . . . . . 250 lbs

Associated Equipment:
None.

Kits:
None.

APE 7019--CRIMPER, 5"/38 AND 5"/54 CARTRIDGE CASE



Use:
The case crimper is used to crimp a plug into the 5"/38 and 5"/54 propelling charges. The crimper can also be used to pull plugs from the propelling charge cartridge cases.

Description:
APE 7019 consists of a base, movable platen and a crimping head assembly. The machine is operated by compressed air using a hydraulic circuit powered by an air over oil booster unit.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	70190000
Unit of Issue	Each
Installation Data:	
Length	39-1/4 in.
Width	33-3/4 in.
Height	90 in.
Weight	2600 lbs
Utilities Required:	
Air at 100 psi.	

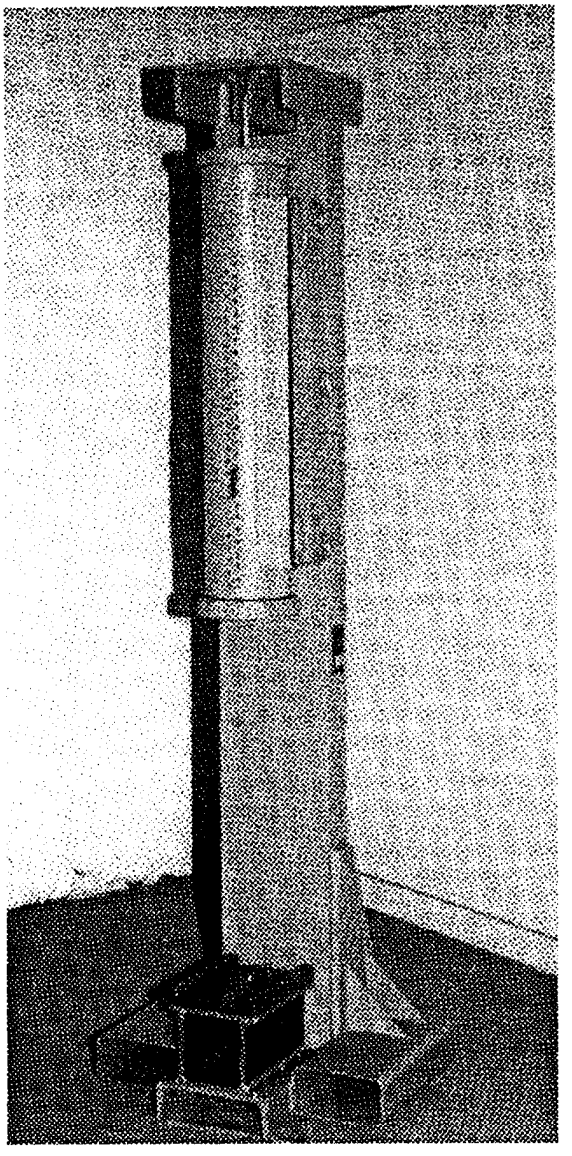
Production Capacity:
200 per hour crimping.
125 per hour pull apart.

Shipping Data:
Length . . . . . 53 in.
Width . . . . . 57 in.
Height . . . . . 100 in.
Cube . . . . . 175 cu ft
Weight . . . . . 3270 lbs

Associated Equipment:
None.

Kits:
None.

APE 7020--FIXTURE, IMPACT TESTING



Use:
The impact testing fixture is used to impact test 5"/38 and 5"/54 propelling charges to assure proper securing of the plug to the cartridge case.

Description:
APE 7020 consists of a frame, a barrel assembly with a piston assembly for the impact testing and a cartridge case support for both the 5"/38 and 5"/54 propelling charges.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	70200000
Unit of Issue	Each
Installation Data:	
Length	24 in.
Width	26 in.
Height	85-1/2 in.
Weight	610 lbs
Utilities Required:	
None.	

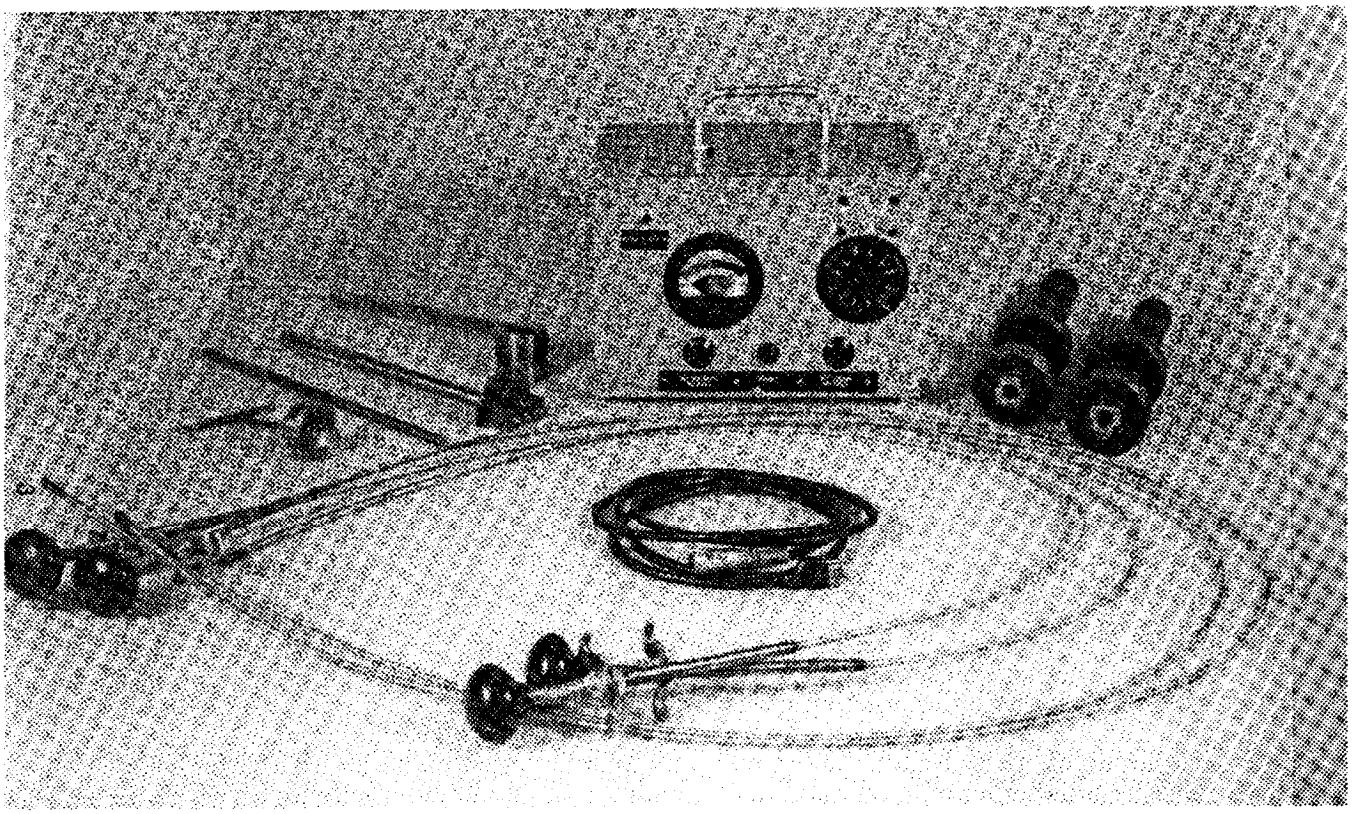
Production Capacity:
60 per hour.

Shipping Data:
Length . . . . . Not available
Width . . . . . Not available
Height . . . . . Not available
Cube . . . . . 74.0 cu ft
Weight . . . . . 1108 lbs

Associated Equipment:
None.

Kits:
None.

APE 7021M1--TESTER, BOMB FUZE CABLE



Use:
The bomb fuze cable tester consists of two units. The low voltage tester is used to make continuity tests on cable assemblies in bombs containing high explosives. The high voltage tester is used for continuity tests and electrical leakage tests on cable assemblies prior to insertion of the cable assembly into the loaded bomb.

Description:
APE 7021M1 consist of a low voltage tester, a high voltage tester, two cable inserting tools, a retaining clip removal tool, a lock ring inserting tool and a retaining clip insertion tool.

Difference Between Models:
APE 7021M1 redesigned high voltage tester which incorporates newer solid state circuitry.

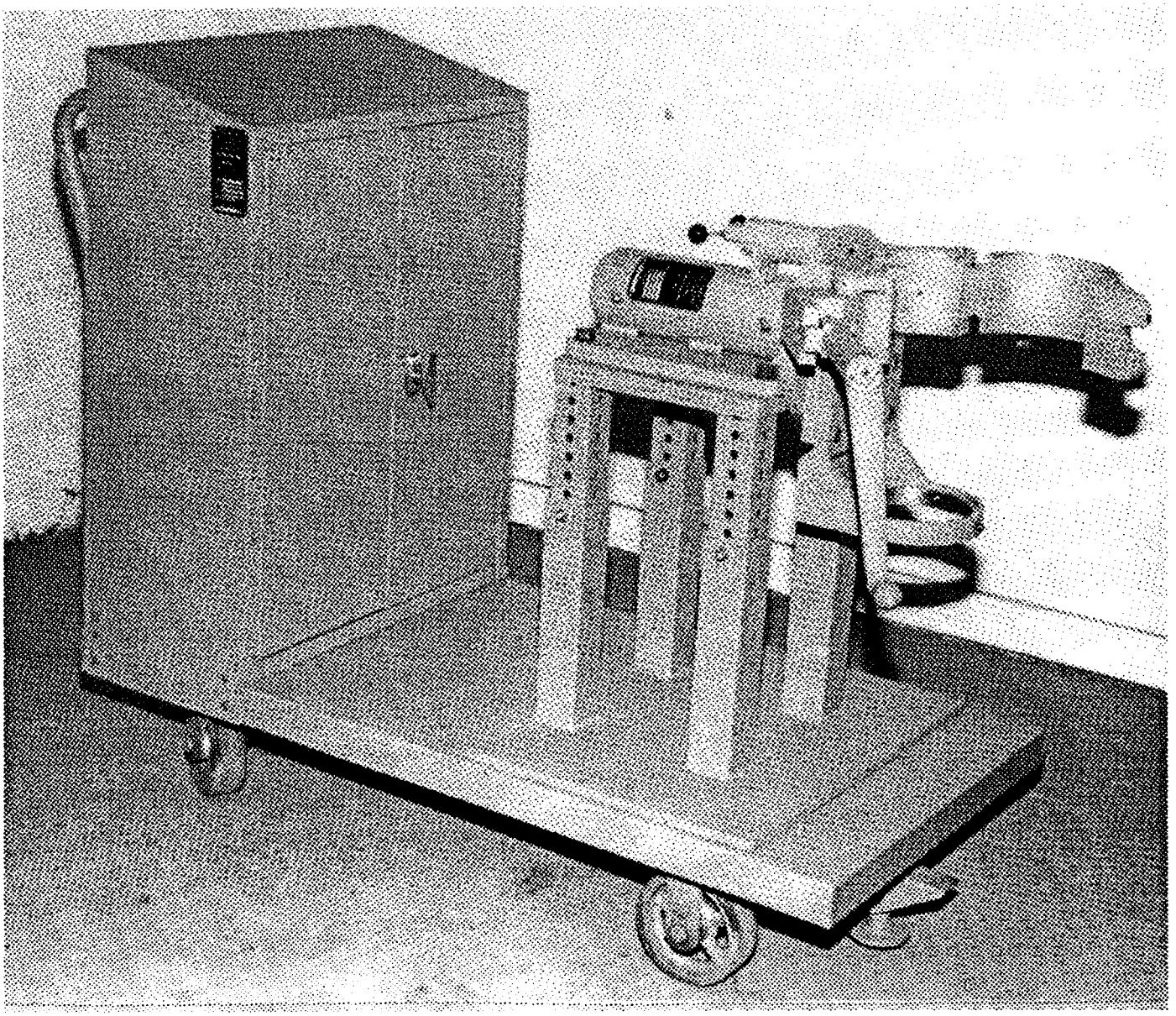
Tabulated Data:
APE No. 70210000
Unit of Issue . . . . . Each
Installation Data:
Length . . . . . Not available
Width . . . . . Not available
Height . . . . . Not available
Weight . . . . . Not available
Utilities Required:
Leakage test voltage - 500 vdc. Low voltage - dry cell batteries 1.5 v.
Production Capacity:
Not available.

Shipping Data:
Length . . . . . Not available
Width . . . . . Not available
Height . . . . . Not available
Cube . . . . . Not available
Weight . . . . . Not available

Associated Equipment:
None.

Kits:
None.

APE 7023M1--VISE, PROJECTILE, NAVY



Use:
The Navy projectile vise is used to hold 3"/50, 5" and 6" projectiles while performing various assembly and disassembly operations. The vise may be removed from the cart and mounted on a table if required.

Description:
APE 7023M1 consists of the vise with six sets of jaws, nine nose adapters, two loeating brackets and a cart assembly with storage cabinet. The vise rotates 360 degrees and locks at 90 degree intervals.

Difference Between Models:
The APE 7023M1 was made with new components of welded and machined construction to replace cast components on the original design. It is now mounted on a cart and a cabinet is provided for storage of the jaws, adapters and brackets.

Tabulated Data:

APE No. 70230000M1
Unit of Issue . . . . . Each

Installation Data:

VISE:

Length . . . . . 32 in.
Width . . . . . 14 in.
Height . . . . . 15 in.
Weight . . . . . 190 lbs

VISE AND CART:

Length . . . . . 62 in.
Width . . . . . 24 in.
Height . . . . . 43-1/2 in.
Weight . . . . . 600 lbs

Utilities Required:

None.

Production Capacity:

Not applicable.

Shipping Data:

Length . . . . . 63 in.
Width . . . . . 34 in.
Height . . . . . 45 in.
Cube . . . . . 62 cu ft
Weight . . . . . 875 lbs

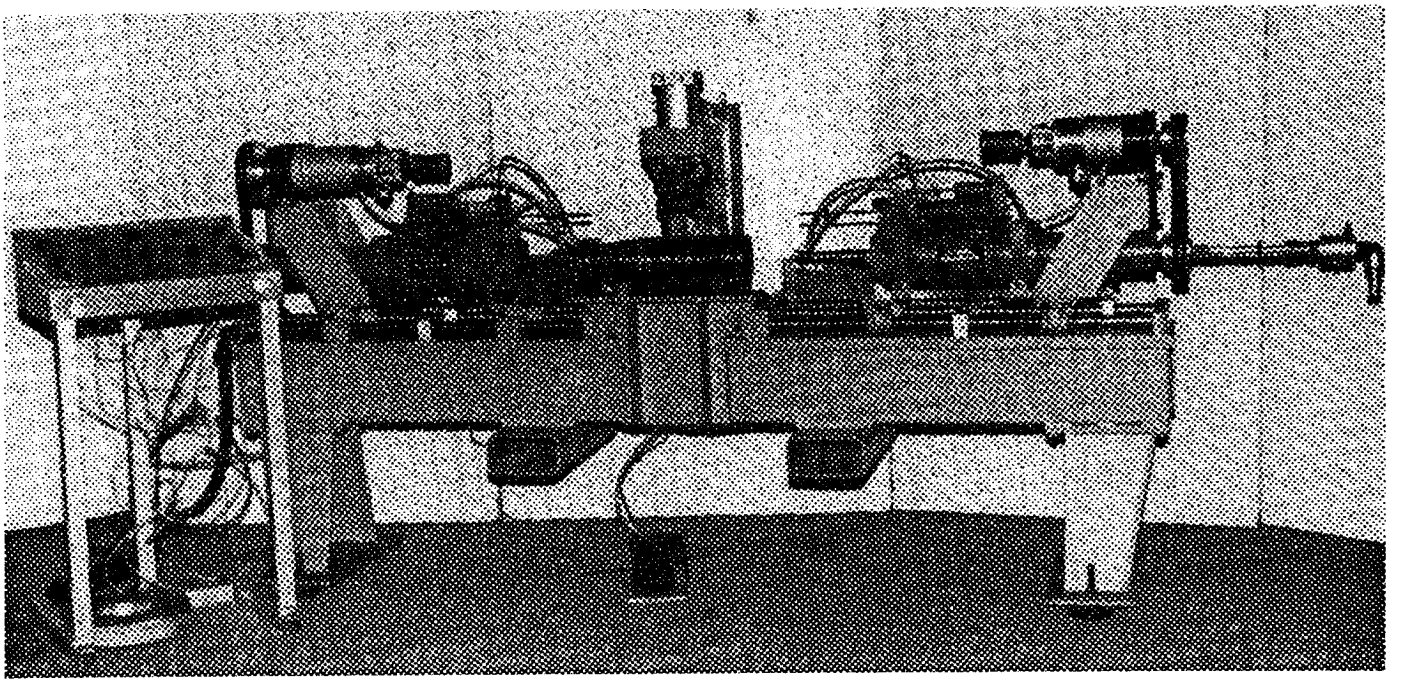
Associated Equipment:

None.

Kits:

7023E001 KIT, Jaw, M180 Demolition Kit

APE 7025--PROJECTILE CAVITY DRILLING EQUIPMENT



Use:
The projectile cavity drilling equipment is a pneumatically powered double-end cavity drill that is used to drill fuze cavities in the nose and/or base end of explosive loaded Army and navy projectiles.

Description:
APE 7025 consists of a drilling table assembly with a pneumatic drill unit positioned at each end and a holding fixture with a pneumatic clamp assembly in the center, which provide vertical pressure for holding a projectile during drilling operations. The nose end fixed drill assembly is bolted in place on the drilling table. An air cylinder, located under the base end of the drilling table, moves the base end sliding drill assembly back and forth. This action provides the horizontal force to hold a projectile during a drilling operation. Both drill assemblies are designed such that the rotational speeds of the quills cannot exceed the constraints of AMC-R-385-100. They are also designed to be connected to a vacuum system, which will collect the explosive as it is drilled from a projectile. The vacuum system is interlocked with the pneumatic system so the machine will not operate if the vacuum system is not operating. The machine is connected to a remote control console assembly by a pneumatic connector assembly, which permits a separation up to 100 feet between the machine and control console. Interchangeable large projectile handling components and small projectile handling components are furnished as parts for the cradle, positioner and clamp assemblies. The handling components are used to accommodate these assemblies for operations on the various sizes of projectiles.

The following projectiles are those for which this machine and its associated kits are designed:

a. Army – 90MM, 105MM, 4.2 inch 155MM and 8 inch;

b. Navy – 3 inch/50 caliber, 5 inch/38 caliber, 5 inch/54 caliber, 5 inch/47 caliber and 8 inch/55 caliber.

Difference Between Models:
Original design.

Tabulated Data:
APE No. 70250000
Unit of Issue . . . . . Each
Installation Data:
DRILLING TABLE ASSEMBLY:
Length . . . . . 150 in.
Width . . . . . 34 in.
Height . . . . . 60 in.
Weight . . . . . 3000 lbs
Cube . . . . . 177 cu ft
Floor space . . . . . 35.4 sq ft
CONTROL CONSOLE ASSEMBLY:
Length . . . . . 30 in.
Width . . . . . 23 in.
Height . . . . . 38 in.
Weight . . . . . 200 lbs
Cube . . . . . 15.2 cu ft
Floor space . . . . . 5 sq ft
PNEUMATIC CONNECTION ASSEMBLY:
Length . . . . . 100 ft
Utilities Required:
Air at 80 to 100 psi and 200 cu ft per minute minimum volume.
Production Capacity:
Approximate drilling time, 1 minute per 1 round.

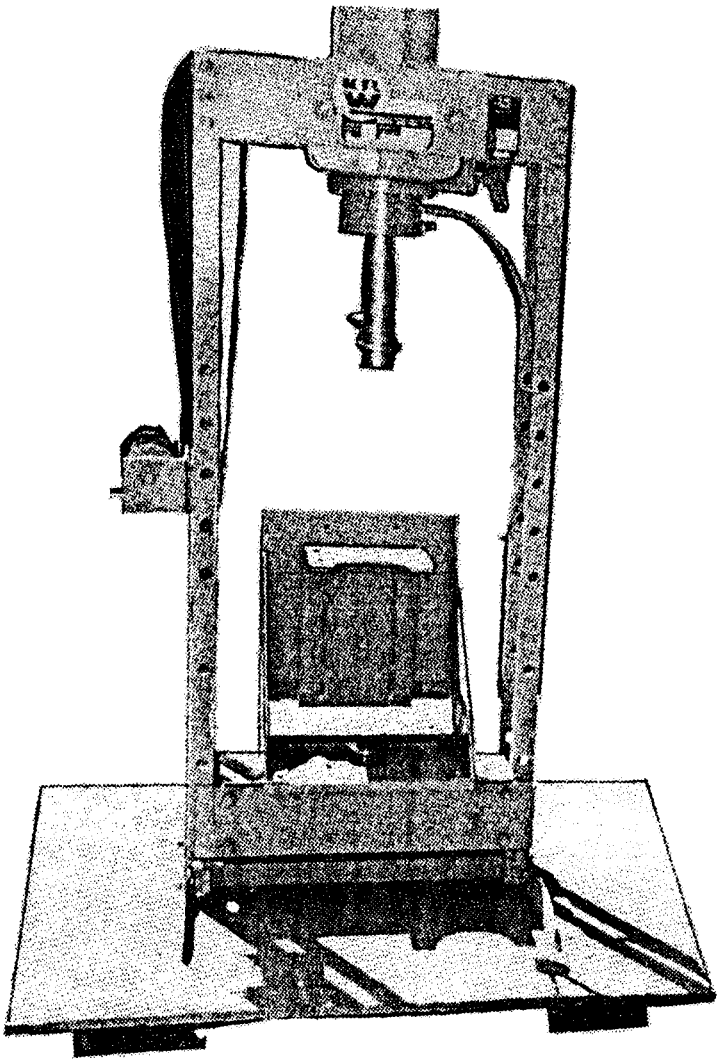
Shipping Data:
Not available

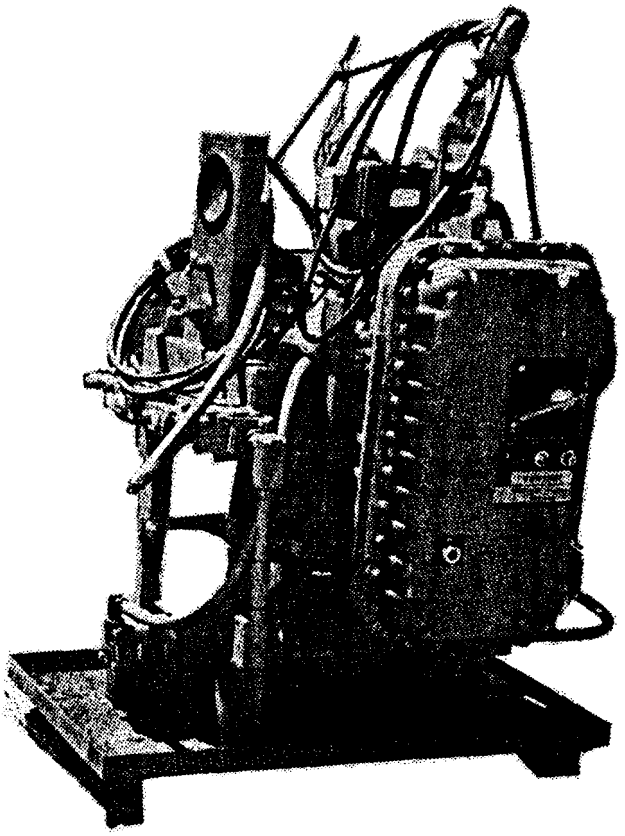
Associated Equipment:
Vacuum draw-off system, 200 cubic feet per minute with suction of 6.0 inches of mercury.

Kits:

7025E001	KIT, 5"38 IR, 5/38" VT MK51 MOD, 5"/54 VT MK41 MOD 0 Cutter Head
7025E002	KIT, 5"/38 Recap Cutter Head
7025E003	KIT, 5"/38 HE-CVT MK66 and MK379 ADF Cutter Head
7025E004	KIT, 5"/54 MK64, MK65 and MK396 ADF Cutter Head
7025E005	KIT, 5"/54 AAC MK61 MOD 0 Cutter Head
7025E006	KIT, 5"/54 FCL VT MK73 and MK360, MK361 and MK362 VT
7025E007	KIT, 5"/54 and 5"/38 MK54 ADF Cutter Head
7025E008	KIT, Army Projectile Cutter Head
7025E009	KIT, 3"/50, 6"47 and 8"/55 MK44 and MK52 Cutter Head
7025E010	KIT, 5"/38 and 5"/54 MK83 cutter Head
7025E011	KIT, 3"/50, 6"/47 and 8"/55 MK54 and MK55 ADF Cutter Head
7025E012	KIT, Navy Base Fuze Cutter Head
7025E014	KIT, 90MM Army Setup Tooling
7025E015	KIT, 105MM Army Setup Tooling
7025E016	KIT, 155MM Army Setup Tooling
7025E017	KIT, 8 inch Army Setup Tooling
7025E018	KIT, 3 Inch Navy Setup Tooling
7025E019	KIT, 5"/38 and 5"/54 Navy Tooling
7025E020	KIT, 6 Inch Navy Setup Tooling
7025E021	KIT, 8 Inch Navy Setup Tooling
7025E022	KIT, 5"/54 Projectile Nose End Drill Bushing
7025E023	KIT, 5"/38, 6 Inch and 8 Inch Navy Projectile Nose End Drill Bushing
7025E024	KIT, 3"/50 and Army Projectile Nose End
7025E025	KIT, Thread Chaser (chases threads of all other kits)
7025E026	KIT, Mortar Set-up, Tooling 4.2 in.

APE 7026--PRESS, GAS CHECK SEAL





Use:
The gas check seal press is used for inserting gas check seals into 5"/38, 5"/54 and 6"/47 Navy projectile bases.

Description:
APE 7026 is hydraulic operated, with work table and holding fixtures for projectiles, and a hydraulic ram for pressure–forming copper gas check seals around the base fuzes. The press has a separate, free–standing hydraulic pump unit.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	70260000
Unit of Issue	Each
Installation Data:	
PRESS:	
Length	36 in.
Width	36 in.
Height	84 in.
Weight	Not available

PUMP UNIT:
- Length . . . . . 48 in.
- Width . . . . . 41 in.
- Height . . . . . 72 in.
- Weight . . . . . Not available

Utilities Required:
208 vac, 3 phase, 60 Hz.

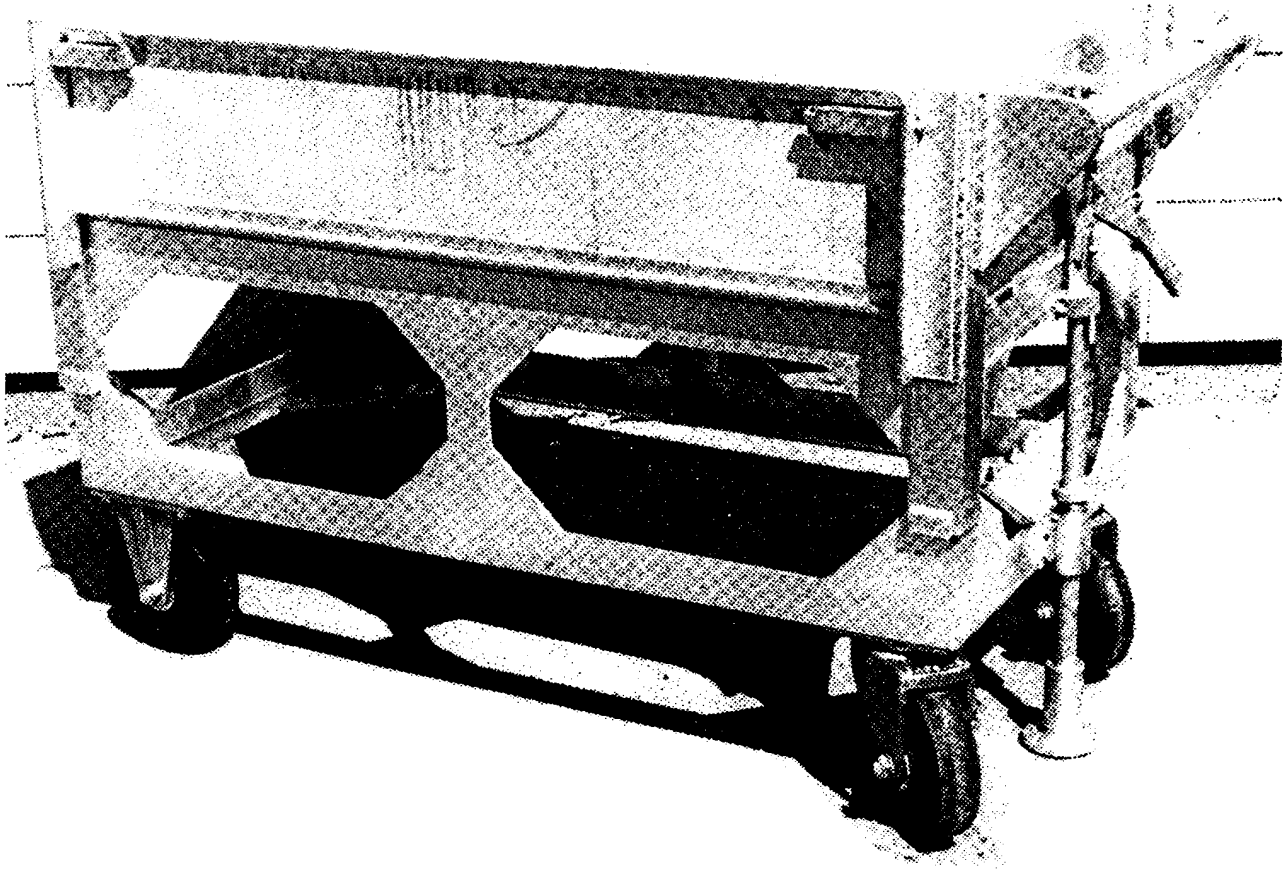
Production Capacity:
Not available.

Shipping Data:
- Length . . . . . Not available
- Width . . . . . Not available
- Height . . . . . Not available
- Cube . . . . . Not available
- Weight . . . . . 3000 lbs

Associated Equipment:
None.

Kits:
None.

APE 7031--CART, PROJECTILE, NAVY



Use:
The projectile cart is used in plant movement of heavy munition items or components, especially Navy 5" and 6" projectiles.

Description:
APE 7031 is an aluminum fabricated cart with casters and brake. Bed of cart measures 25 inches by 50 inches.

Difference Between Models:
Original design.

Tabulated Data:
- APE No. 70310000
- Unit of Issue . . . . . Each

Installation Data:
- Length . . . . . 57 in.
- Width . . . . . 28 in.
- Height . . . . . 36-3/4 in.
- Weight . . . . . Not available

Utilities Required:
None.

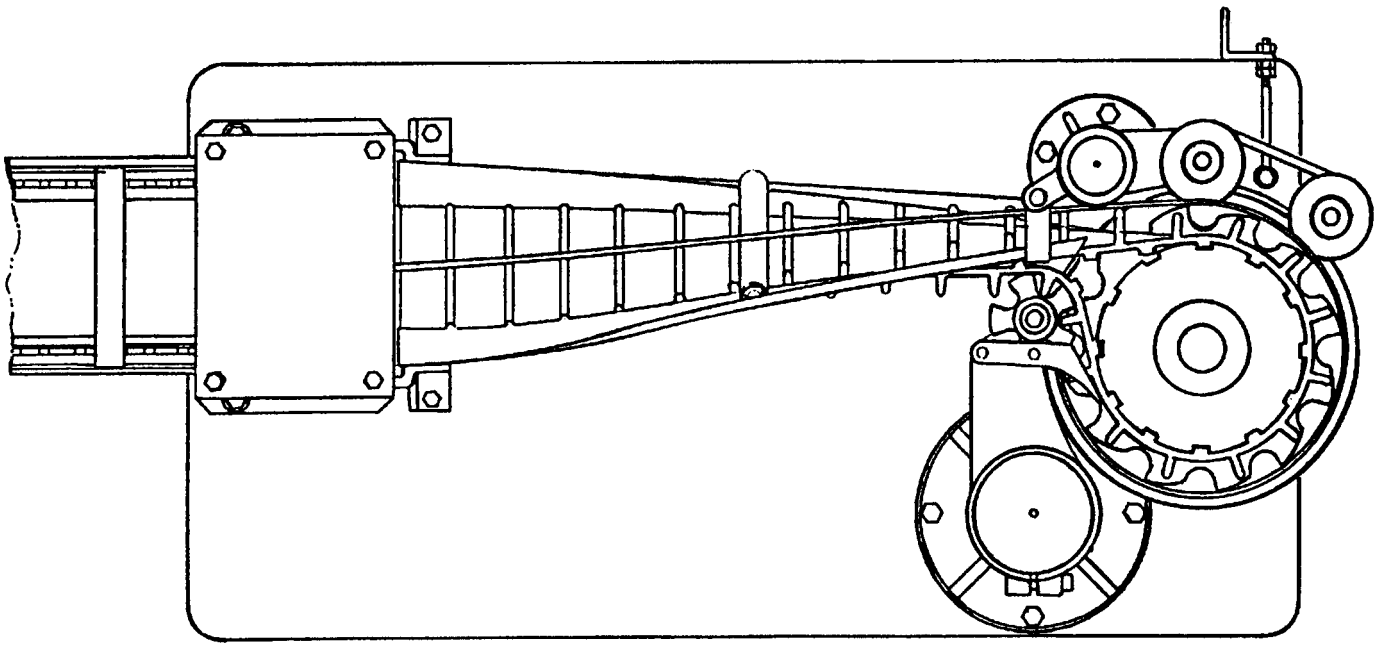
Production Capacity:
Not applicable.

Shipping Data:
- Length . . . . . 62 in.
- Width . . . . . 32 in.
- Height . . . . . 42 in.
- Cube . . . . . 48 cu ft
- Weight . . . . . Not available

Associated Equipment:
None.

Kits:
None.

APE 7033--MACHINE, DISASSEMBLY, 20MM, NAVY



Use:
The disassembly machine is used to separate Navy 20MM projectiles from the cartridge case and dump the propellant. The machine removes the rounds from the shipping tubes before the breakdown process.

Description:
APE 7033 consists of a base assembly, presser arm assembly, stripper idler assembly, breakoff assembly and air assembly. The operation is automatic.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	70330000
Unit of Issue	Each

Installation Data:

Length	4 ft
Width	3 ft
Height	6 ft
Weight	800 lbs

Utilities Required:
Air at 90 psi.

Production Capacity:
180 rounds per minute.

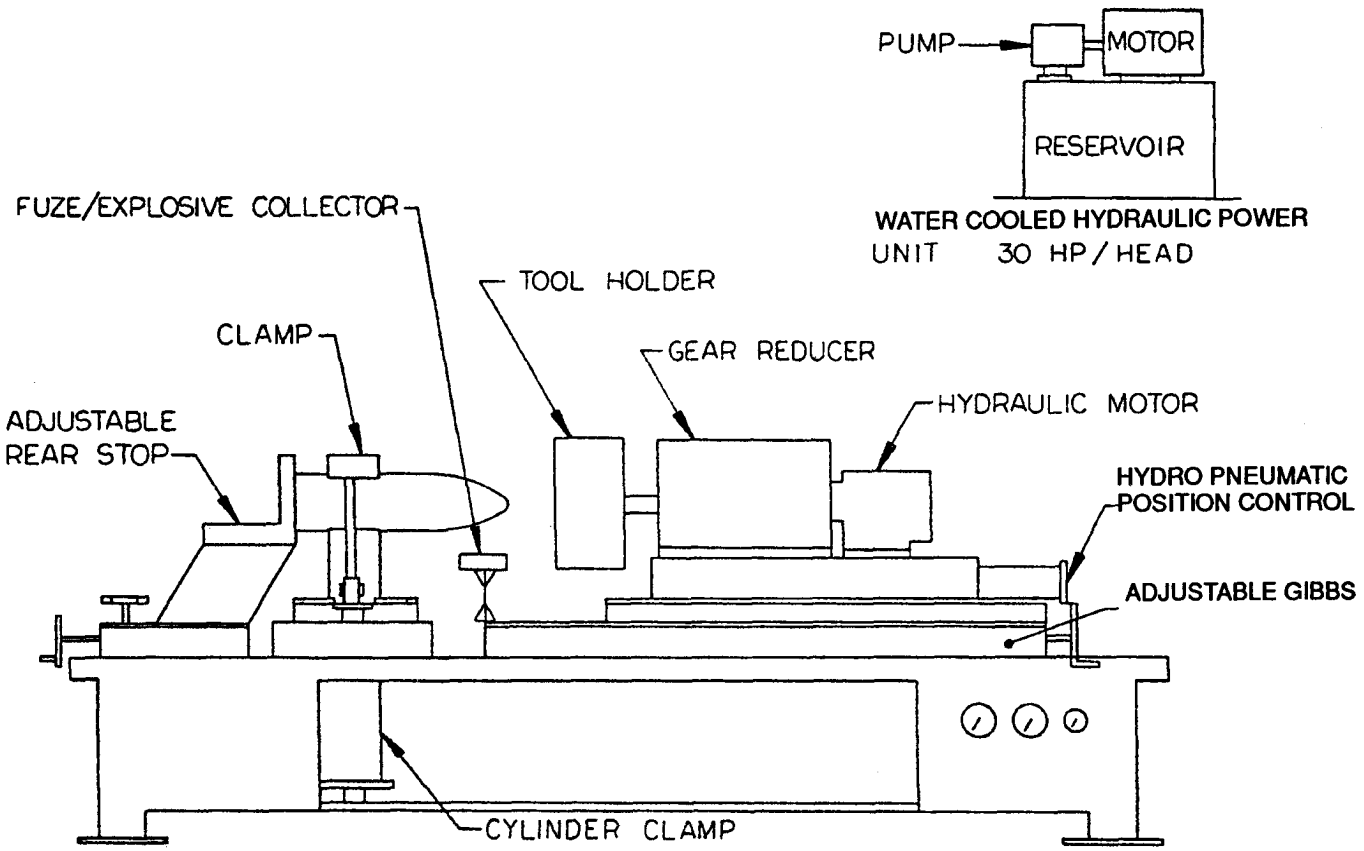
Shipping Data:

Length	Not available
Width	Not available
Height	Not available
Cube	Not available
Weight	Not available

Associated Equipment:
None.

Kits:
None.

APE 7040--MEDIUM CALIBER DEFUZE-DEPLUG MACHINE



Use:
The defuze-deplug machine is a remotely operated horizontal double spindle machine designed to remove the nose fuze, adapter with auxiliary detonating fuze, base fuze, and base plate with fuze from Navy medium caliber ammunition (3-inch/50 caliber, 5-inch/38 caliber, 5-inch/54 caliber, and 6-inch/47 caliber projectiles), also the nose fuze from Army 76MM, 90MM, and 105MM projectiles.

Description:
The APE 7040 is computer programmed and a variety of programs are available for the different combinations of projectile sizes and fuze combinations. The machine has two work stations designated SIDE A and SIDE B. This allows the loading of two projectiles on the machine and simultaneously removes fuzes from both projectiles. The APE 7040 consists of five components each with a separate function and interfaced together by hose and cable assemblies which supply the pneumatic, electrical, and hydraulic power needed to operate the machine from the controller assembly. Various tooling has been prepared in lieu of kits. The user should specify projectile models and operations to be performed; the proper tooling will be fitted to the machine prior to shipment. The major functional components of the APE 7040 are:

a. The power systems which include pneumatic, electrical, and hydraulic systems.

b. The controller assembly, which is computer programmed and governs the application of the power systems inputs and outputs of the other major functional components to integrate and sequence their functioning. Included on the controller assembly are the controls to remotely operate the machine in manual, or auto mode.

c. The hydraulic power unit assembly, which provides the power to all the hydraulic valves and the two hydraulic motors that drive the spindles and removes the fuzes from the projectile.

d. The air dryer assembly, which prevides clean dry air to the machines pneumatic components.

e. The intrinsically safe valve cabinet assembly, which houses the air solenoid valves that pilot the hydraulic valves and sequence their functioning on the machine.

Difference Between Models:
Original design.

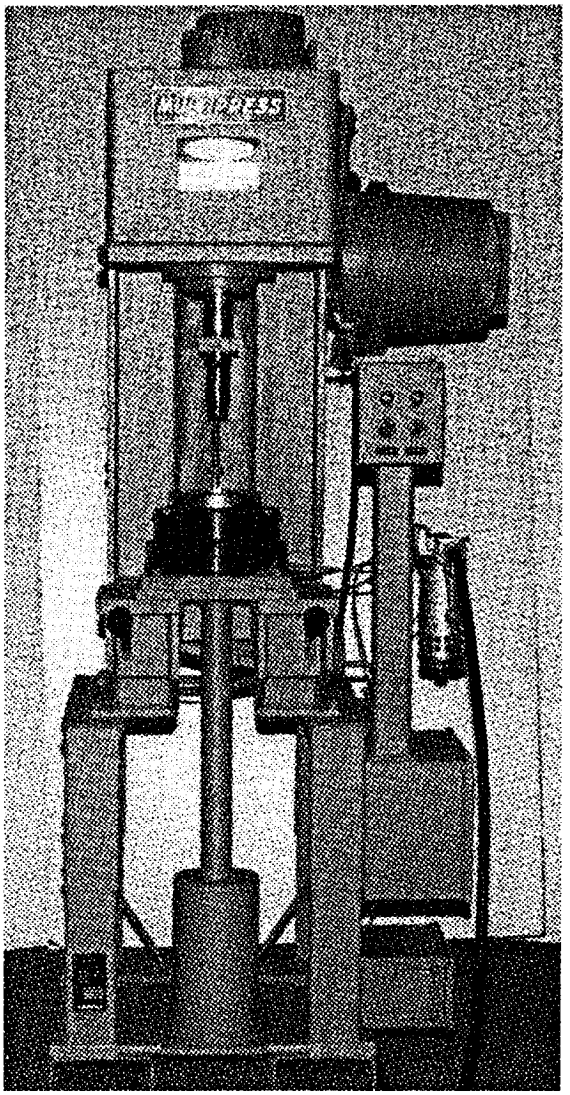
Tabulated Data:
APE No. 70400000
Unit of Issue . . . . . Each
Installation Data:
BASIC:
Length . . . . . 112 in.
Width . . . . . 115 in.
Height . . . . . 58 in.
Weight . . . . . Not available
CONTROLLER ASSEMBLY:
Length . . . . . 60 in.
Width . . . . . 33 in.
Height . . . . . 56 in.
Weight . . . . . Not available
HYDRAULIC POWER UNIT:
Length . . . . . 65 in.
Width . . . . . 67 in.
Height . . . . . 83 in.
Weight . . . . . Not available
AIR DRYER ASSEMBLY:
Length . . . . . 12 in.
Width . . . . . 12 in.
Height . . . . . 70 in.
Weight . . . . . Not available
SAFE VALVE CABINET ASSEMBLY:
Length . . . . . 21 in.
Width . . . . . 31 in.
Height . . . . . 37 in.
Weight . . . . . Not available
Utilities Required:
Air at 85–95 psi and 18 cfm;
440 vac, 3 phase, 100 amp.
Production Capacity:
5 minutes per projectile.

Shipping Data:
Length . . . . . Not available
Width . . . . . Not available
Height . . . . . Not available
Cube . . . . . 400 cu ft
Weight . . . . . 14000 lbs

Associated Equipment:
None.

Kits:
None.

APE 7041M1--MACHINE, HYDRAULIC STAKING, 0-6 TON BENCH TYPE



Use:
APE 7041M1 is designed to stake an auxiliary detonating fuze (ADF) to a fuze adapter for use in Navy projectiles. The machine is used to stake the following ADFs and adapters: 2.65 inch external thread diameter adapter (Drawing No. 434045) to ADFs model numbers MK54 MOD 2 (Drawing No. 490100) and MK89 MOD 0 (Drawing No. 180359); 2.35 inch external thread diameter adapter (Drawing No. 434054) to ADFs model numbers MK43 MOD 0 & 1 (Drawing No. 394538), MK54 MOD 0 & 1 (Drawing No. 438127), and MK55 MOD 0 & 1 (Drawing No. 438127); 2.20 inch external thread diameter adapter (Drawing No. 2838990) to ADF model number MK54 MOD 2 (Drawing No. 2838991).

Description:
APE 7041M1 consists of: A hydraulic press staking machine, with inching wheel; A pneumatically operated precision work holder which retains and aligns the ADF and its adapter to within 0.002 inch diameter; The staking head which stakes the fuze body into the adapter; A hydraulic/pneumatic control assembly which interfaces between the hydraulic operated

staking machine and the pneumatically operated work holder assembly to insure that the work holder is engaged before the staking machine can function and that the staking operation is complete before the work holder can be disengaged.

Difference Between Models:
The bench press of the APE 7041 has an 18 inch daylight opening. The bench press of the APE 7041M1 has a 20 inch daylight opening. The pneumatic controls for the APE 7041M1 were changed to incorporate model changes in the manufacturer's components.

Tabulated Data:

APE No. 70410000M1
Unit of Issue . . . . . Each

Installation Data:

Length . . . . . 37-1/2 in.
Width . . . . . 32-3/4 in.
Height . . . . . 83-5/8 in.
Weight . . . . . 1620 lbs
Floor space . . . . . 8.5 sq ft
Cube . . . . . 59.4 cu ft

Utilities Required:
230/460 vac, 3 phase, 60 Hz;
air at 90 psi; water at 45 psi.

Production Capacity:
120 per hour.

Shipping Data:

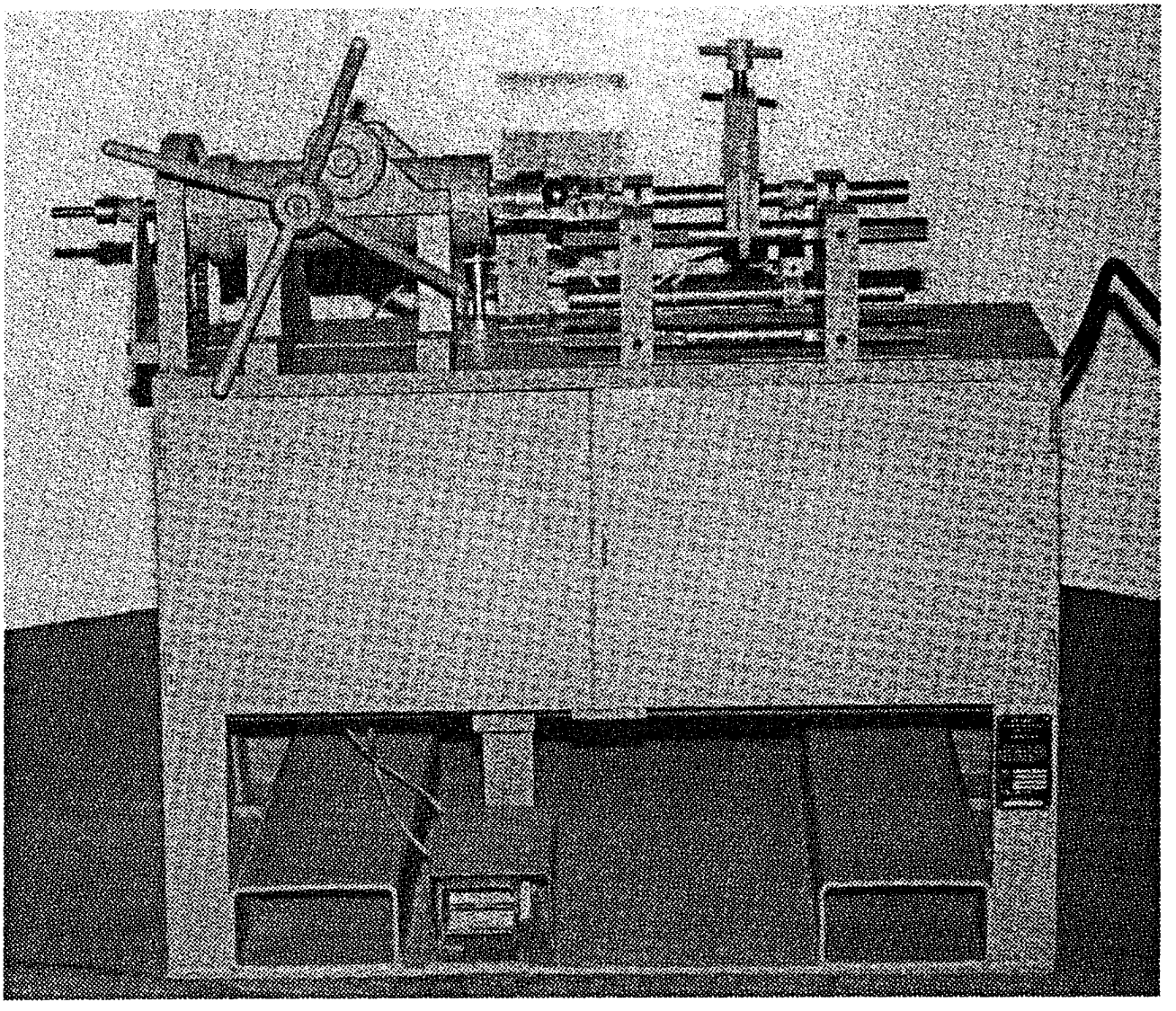
Length . . . . . Not available
Width . . . . . Not available
Height . . . . . Not available
Cube . . . . . Not available
Weight . . . . . Not available

Associated Equipment:
None.

Kits:

7041E001 KIT, Igniter Remover Demilitarization of M180 Demolition Kit
7041E002 KIT, Staking, Expulsion Charge Cup, 155MM (M483) Ogive

APE 7042--MACHINE, PROJECTILE GAS CHECK GASKET REMOVAL
5-INCH, 6-INCH AND 8-INCH NAVY GUN PROJECTILES



Use:
The gas check gasket removal machine is used to cut the gas check gasket for removal from the projectile.

Description:
APE 7042 is a horizontal, manually–operated, air-driven machine that locates and clamps a projectile in a cradle vise to prevent its rotation during the cutting cycle. The cutting head, powered by an air motor, is designed to enable the operator to aline the hole pins of the locking head with the in holes of the projectile base fuze or base fuze hole plug.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	70420000
Unit of Issue	Each
Installation Data:	
Length	48 in.
Width	24 in.
Height	44 in.
Weight	458.5 lbs

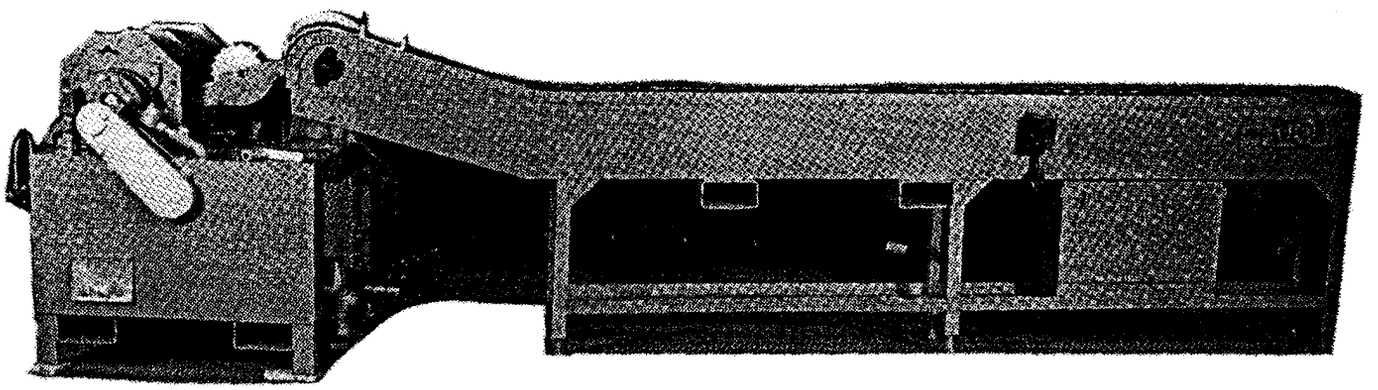
Utilities Required:
Air at 90 psi and 30 cfm.
Production Capacity:
Not available.

Shipping Data:
Length . . . . . Not available
Width . . . . . Not available
Height . . . . . Not available
Cube . . . . . Not available
Weight . . . . . Not available

Associated Equipment:
None.

Kits:
None.

APE 7043--20MM LINK DELINK MACHINE



Use:
The link delink machine is designed to link or delink 20MM ammunition belts containing M50 configuration ammunition with MK7 links.

Description:
APE 7043 consists of the following major assemblies:

a. The table frame assembly which provides an operational table for linking/delinking and structural support.

b. The drum assembly, grooved to accept the 20MM cartridge and with the guidance provided by the adjustable cartridge guide assembly that conveys the cartridge and links through the operational link/delink assembly.

c. The electrical assembly which includes a 3/4 horsepower motor that drives a series of gears, sprockets, chains, pulleys and belts.

d. The pneumatic assembly which includes a pneumatic clutch that will stall-out the drum assembly when the torque loads become excessive.

e. A 20MM ammunition conveyor assembly which has color coded trays for ratio-packing, and delivers ammunition to the machine for the linking operation.

Difference Between Models:
Original design.

Tabulated Data:
APE No. 70430000
Unit of Issue . . . . . Each
Installation Data:
LINK/DELINK
ASSEMBLY:
Length . . . . . 4 ft 3 in.
Width . . . . . 4 ft 2 in.
Height . . . . . 3 ft 10-1/2 in.
Weight . . . . . Not available
CONVEYOR ASSEMBLY:
Length . . . . . 12 ft 8 in.
Width . . . . . 2 ft
Height . . . . . 3 ft 10-3/8 in.
Weight . . . . . Not available
LINK/DELINK ASSEMBLY
AND CONVEYOR
ASSEMBLY:
Length . . . . . 16 ft
Width . . . . . 4 ft 5 in.
Height . . . . . 3 ft 10-3/8 in.
Weight . . . . . 2763 lbs
Floor space . . . . . 71 sq ft
Utilities Required:
120 vac, 60 Hz, 25 amp; air at
80 psi and 25 cfm.
Production Capacity:
Not available.

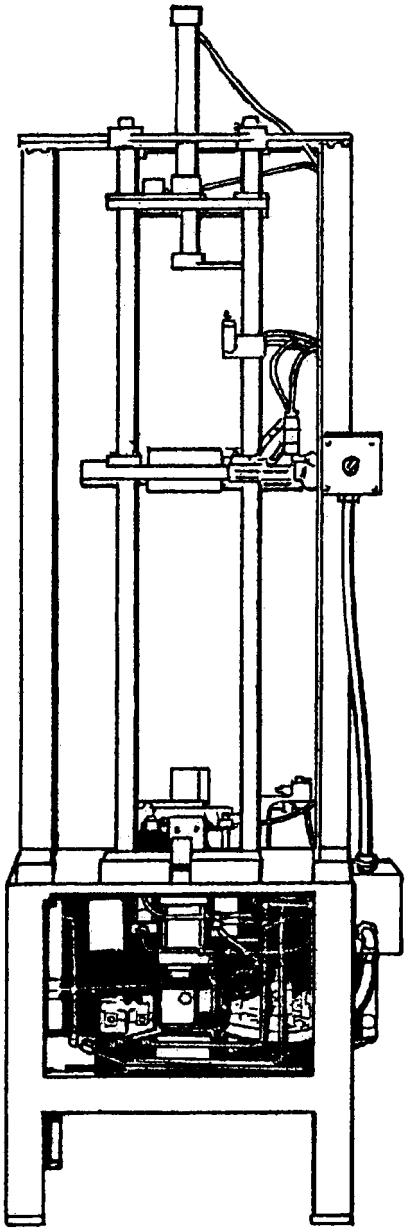
Shipping Data:
Length . . . . . Not available
Width . . . . . Not available
Height . . . . . Not available
Cube . . . . . Not available
Weight . . . . . Not available

Associated Equipment:
None.

Kits:

7043E001	KIT, MK 2 Linking
7043E002	KIT, MK 2 Delinking
7043E003	KIT, MK 6 Linking
7043E004	KIT, MK 6 Delinking
7043E005	KIT, M14 Linking
7043E006	KIT, M14 Delinking

APE 7057--MACHINE, CARTRIDGE VIBRATOR AND PROJECTILE SEATING, 106MM



Use:
The cartridge machine is used to seat 106MM projectile, HEAT M344A1, in the 106MM M93B1 cartridge case.

Description:
The APE 7057 is a vertical, pneumatically powered and controlled cartridge assembly machine.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	70570000
Unit of Issue	Each
Installation Data:	
Length	22 in.
Width	30 in.
Height	84 in.
Weight	425 lbs

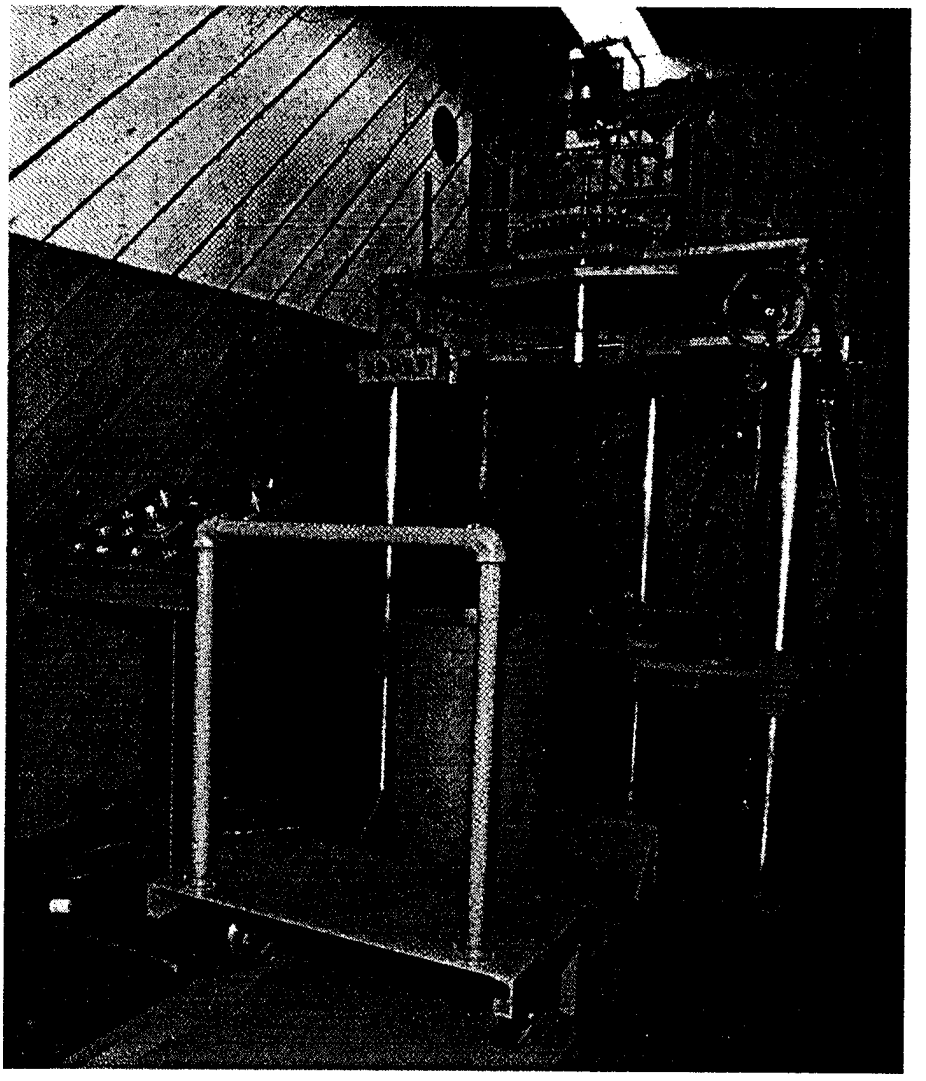
Utilities Required:
Air at 90 psi and 25 cfm.
Production Capacity:
400 per 8 hour shift (estimate)

Shipping Data:
Length . . . . . 30 in.
Width . . . . . 36 in.
Height . . . . . 90 in.
Cube . . . . . 56 cu ft
Weight . . . . . 500 lbs

Associated Equipment:
Approved barricade.

Kits:
None.

APE 7066--Defusing MACHINE 8"/55 AND 16"/50 PROJECTILES



Use:
The defuzing machine is used to remove base fuzes, nose fuzes and an auxiliary adapter, from 8"/55 and 16"/50 Navy projectiles.

Description:
APE 7066 consists of a base plate and three columns; an upper table that can be elevated or lowered to a desired height, with three screw jactuators, for base or nose fuze removal; a table which is elevated or lowered, using an air-driven hydraulic pump for clamping the projectile; four lever-operated valves to manually control machine functioning; and a pedestal–mounted control panel used for remote machine control.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	70660000
Unit of Issue	Each
Installation Data:	
MACHINE:	
Length	60 in.
Width	49 in.
Height	119 in.
Cube	202 cu ft
Weight (est)	3200 lbs
Floor space	20 sq ft

AMMUNITION CART:
Length . . . . . 54 in.
Width . . . . . 36 in.
Height . . . . . 50 in.
Cube . . . . . 56.25 cu in.
Weight (est) . . . . . 525 lbs

Utilities Required:
Air at 100 psi and 80 cfm; 110 vac, 60 Hz, single phase, 20 amp.

Production Capacity (est):
2 rounds per hour.

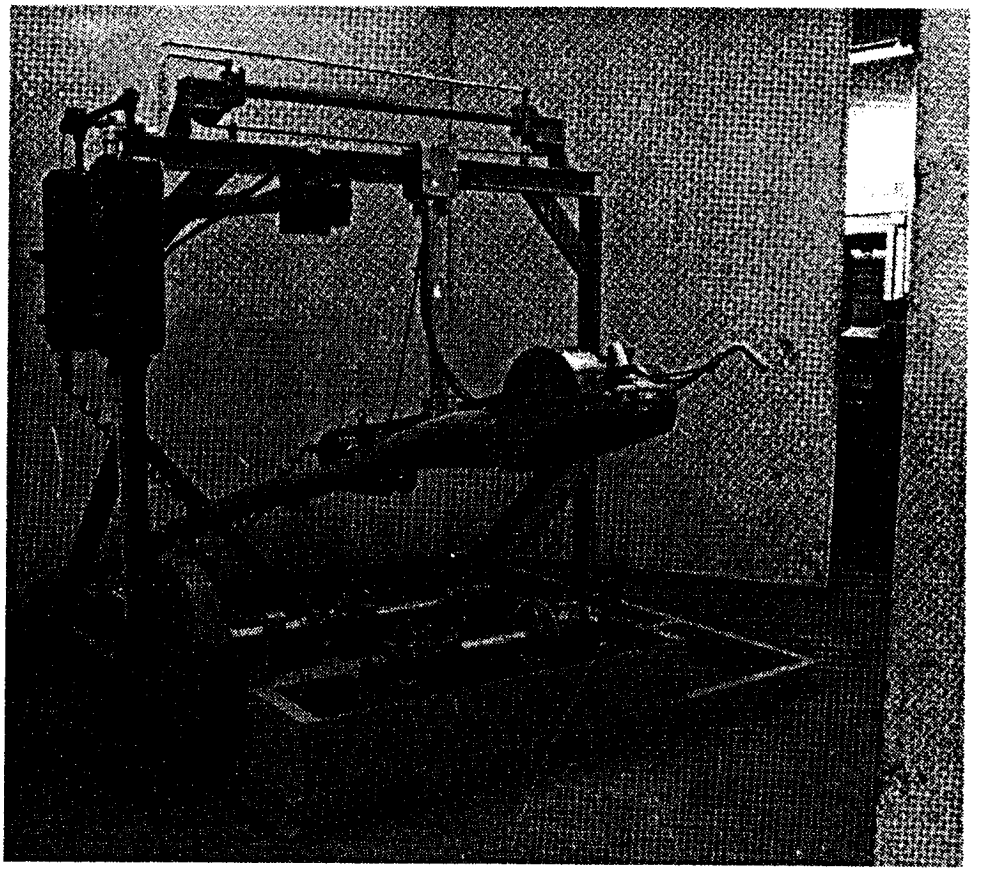
Shipping Data:
MACHINE:
Length . . . . . 66 in.
Width . . . . . 54 in.
Height . . . . . 125 in.
Cube . . . . . 257 cu ft
Weight . . . . . 3550 lbs

AMMUNITION CART:
Length . . . . . 60 in.
Width . . . . . 40 in.
Height . . . . . 56 in.
Cube . . . . . 77 cu ft
Weight . . . . . 725 lbs

Associated Equipment:
APE 7067, 7068.

Kits:
7066E001 KIT, for Removing Fuze from 8"/55

APE 7067--MACHINE, SWING BRUSH, 16"/50



Use:
The swing brush machine is used to clean and derust 16"/50 MK13, MK14, and MK8 Navy projectiles.

Description:
APE 7067 consists of a base plate, four trunnion rollers, a support roller to cradle the projectile during cleaning and derusting processes. a Tol-o-matic cylinder to traverse the swing brush longitudinally along the projectile, and a dust collector system.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	70670000
Unit of Issue	Each

Installation Data:

Length	90 in.
Width	88 in.
Height	89 in.
Weight	2000 lbs

Utilities Required:
Air at 100 psi and 80 cfm;
220 vac, 3 phase.

Production Capacity:
Depends on condition of item being cleaned or de-rusted.

Shipping Data:

Length	96 in.
Width	92 in.
Height	96 in.
Cube	490 cu ft
Weight	2500 lbs

Associated Equipment:
None.

Kits:
1105E001 KIT, Dust Collector

APE 7068--RENOVATION TOOLING FOR NAVY GUN AMMUNITION

Use:
The renovation tools are used to manually renovate Navy gun ammunition.

Description:
APE 7068 consists of forty-nine separate tooling items, required for use on renovation of Navy gun ammunition. These tooling items are standardized as APE component assemblies to the APE 7068, but will not be issued as a complete end item.

Difference Between Models:
Original design.

Assemblies:

- 7068A001 Torque Wrench Adapter for Projectile Adapter 434045 used on 5"/38, 6"/47, 8"/55 and 16"/45-50
- 7068A002 Pick, Explosive "D" Thread Cleaning (All projectiles)
- 7068A003 Nose, Fuze Adapter Wrench (Vise Grip) for 5"/38, 6"/47 SP, 16" and 8"/55 Projectiles
- 7068A004 ADF Staking Tool for 3"/50, 5"/38-54, 6"/47 SP - 47 DP, 8"/55, and 16"/45-50
- 7068A005 ADF Stake Removal Tool for 3"/50, 5"/38-54, 6"/47 DP, 8"/55, and 16"/45-50
- 7068A006 Tracer/Tracer Cavity Plug Removal Tool
- 7068A007 Wrench, Install/Remove Projectile Adapters on 5"/38, 6"/37 SP, 8"/55, and 16"/45–50
- 7068A008 ADF Holder, Install/Remove Projectile Adapter on 3"/50, 5"/38, and 5"/54
- 7068A009 Torque Wrench Adapter for Torquing mK31/MK83 BDF and Base Fuze Hole Plugs to 5"/38
- 7068A010 Sealing Cup Removal Tool for 3"/50, 5"/38, and 5"/54 SCs Not Having Soldered Cover Discs or are Stuck
- 7068A011 Sealing Cup Removal Tool for 3"/50, 5"/38, and 5"/54 During SC Replacement Procedures
- 7068A012 Wrench, Remove, Install and Torque ADF Body Plug in Projectile Adapters on 3"/50, 5"/38, and 5"/54
- 7068A013 Wrench, MK2 Spanner, Remove Waterproof Protective Cap from 5"/38 and 5"/54
- 7068A014 Wrench, Install/Remove MK29 or MK66 PDF on 5"/38 and 16"/50
- 7068A015 Wrench, Remove/Install Dummy Nose Plug in 16” Projectile
- 7068A016 Gas Check Seal Installation Tool for 16"/50
- 7068A017 Trunnion Band, for Handling 16"/50 Projectiles
- 7068A018 Tool, Lipping, for Repairing Minor Dents on 16"/50 Rotating Band
- 7068A019 Reamer,Resize Base Fuze Cavity
- 7068A020 Sling, for Handling 16"/50 Projectiles
- 7068A021 Adapter, Remove, Install/Torque MK29 or MK30 PD Fuze
- 7068A022 Heating Device, Remove Windshields from 5", 6", and 8" Projectiles
- 7068A023 Holding Fixture, Holds Projectile Adapters in 5", 6", and 8" Projectiles During Fuze Installation/Removal
- 7068A024 Fixture, Spinning, for Painting and Striping 3", 105MM, 5"/38, 5"/54, and 6"
- 7068A025 Wrench, Remove MK393-0 MT/PD Fuze from 5"/54 Projectile
- 7068A026 Wrench, Set Sleeve on MK15, MK18, MK22, MK1l, M1907, and MK57-1 Time Fuzes
- 7068A027 Torque Adapter, for Torquing MK29 PD Fuze to 5"/38 Projectile
- 7068A028 Holding Fixture, Holds ADF During Removal/Installation of Projectile Adapter on 3"/50, 5"/38, and 5"/54
- 7068A029 Holding Fixture, for Staking ADF and Holding ADF/Adapter during Installation/Removal of PDF on 3"/50, 5"/38, and 5"/54
- 7068A030 Tool, Install/Remove Body Plug in ADF during SCA Replacement on 3"/50, 5"/38, and 5"/54

7068A031 Adapter, Torque CFT Fuze Windshield on 5"/38 and 5"/54

7068A032 Wrench, Remove/Install CVT Fuze Windshield on 5"/38 and 5"/54

7068A033 Adapter, Torque Fuze Adapter or Dummy Nose Plug to 3"/50 and 5"/38 Projectiles

7068A034 Wrench, Remove/Install Fuze Cavity Liner in 3"/50, 5"/38, and 5"/54

7068A035 Wrenches, Remove/Install Nose Fuze, Base Plug, and Waterproof Protective Cap on 5"/38

7068A036 Wrench, Remove 3", 5", and 6" Cartridge Tank Lid

7068A037 Wrench, MK3-0, Remove Waterproof Protective Cap from 5"/38 and 5"/54 Projectiles

7068A038 Wrench, Remove/Install 5"/38 Common Windshield

7068A039 Adapter, Wrench, Remove/Install 5"/38 Adapter Assembly

7068A040 Wrench, Set Fuzes on 5"/38 and 5"/54 Projectiles

7068A041 Tool, Press Gas Check Seals on 5"/38 and 5"/54

7068A042 Wrench, Remove MK66 PD Fuze from 5" Ammunition

7068A043 Wrench, Remove/Install Lids on 5" MK6, Class 2, Type 2 Cartridge Tanks

7068A044 Tool, Remove Pyralin/Plastic/Polyethylene Wads from 3", 5", and 6" Propelling Charges

7068A045 Wrench, Remove Tracer/Base plug from MK27 and MK29 3"/50 and MK34 3"/70 BL and P/T Projectile

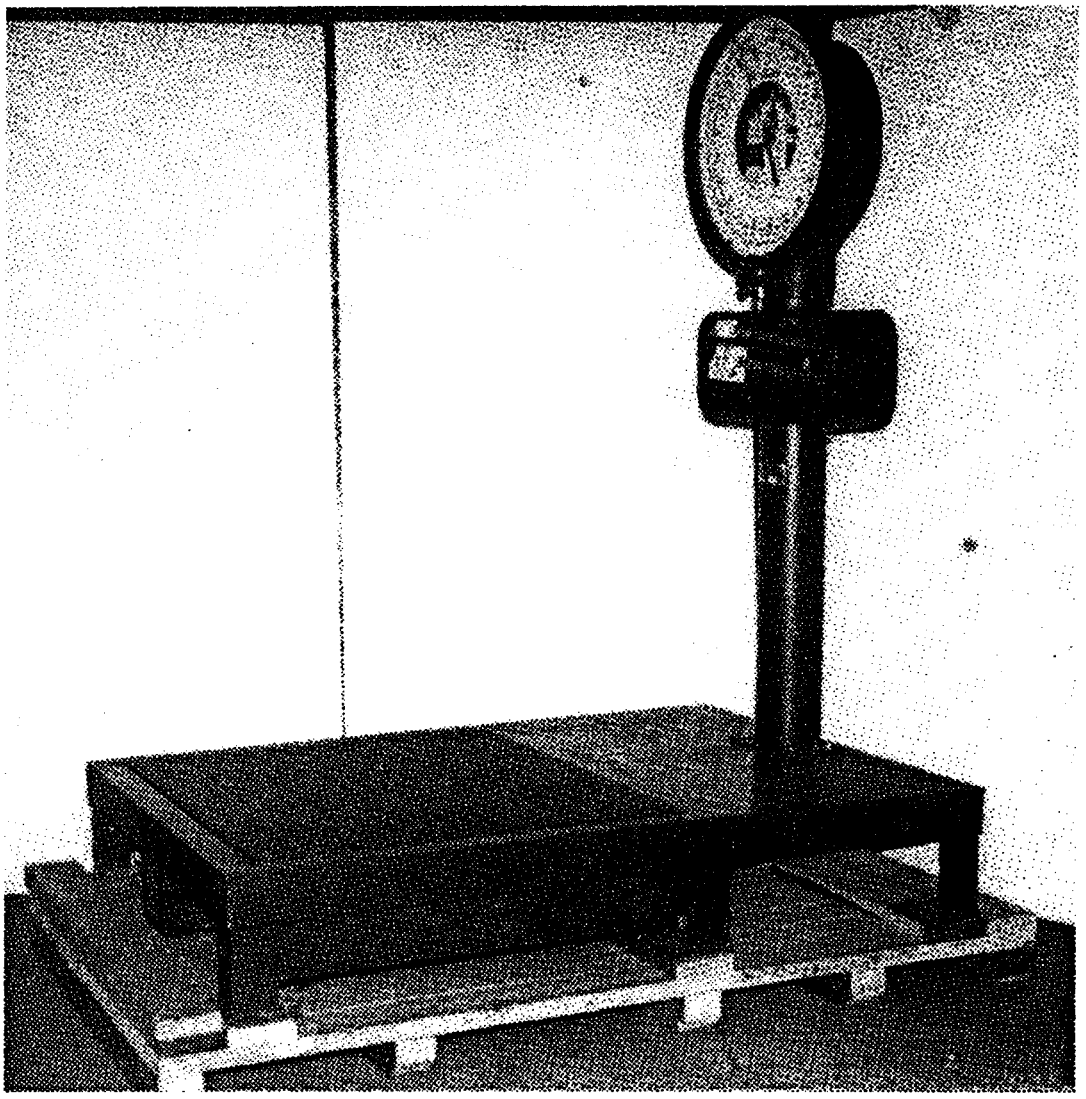
7068A046 Tool, Lipping, for Repairing Minor Dents on Medium Caliber Rotating Bands

7068A047 Wrench, Install BDFs MK20, 21, 28, 31, 48, 64 and Tracer Adapter 434100

7068A048 Adapter, Holds Adapter 2494081 while Assembling M514A1 CVT Fuze-MK357–362, MK365-367, MK369-371

7068A049 Socket, Assemble and Torque Holding Ring to CVT Fuze and Adapter MK357-362, MK365–367, MK369–371

APE 7069--SCALE, PROJECTILE WEIGHING



Use:
The projectile weighing scale is used to weigh renovated 16"/50 projectiles and other munitions to meet the accuracy requirements of the applicable DMWRS.

Description:
APE 7069 is a commercial platform scale. The scale has the capacity and tare functions needed to weigh items up to 4500 pounds. The dial indicates 0 to 2000 pounds. Use of the tar poise and capacity poise permits the scale to weigh up to the 4500 pound level.

Difference Between Models:
Original design.

Tabulated Data:

APE No. 70690000
Unit of Issue . . . . . Each
Installation Data:
SCALE:
Length . . . . . 70 in.
Width . . . . . 52-3/4 in.
Height . . . . . 72-5/8 in.
Weight . . . . . Not available
SCALE MOUNTED ON PALLET:
Length . . . . . 93 in.
Width . . . . . 59 in.
Height . . . . . 78-1/2 in.
Weight . . . . . 1432 lbs

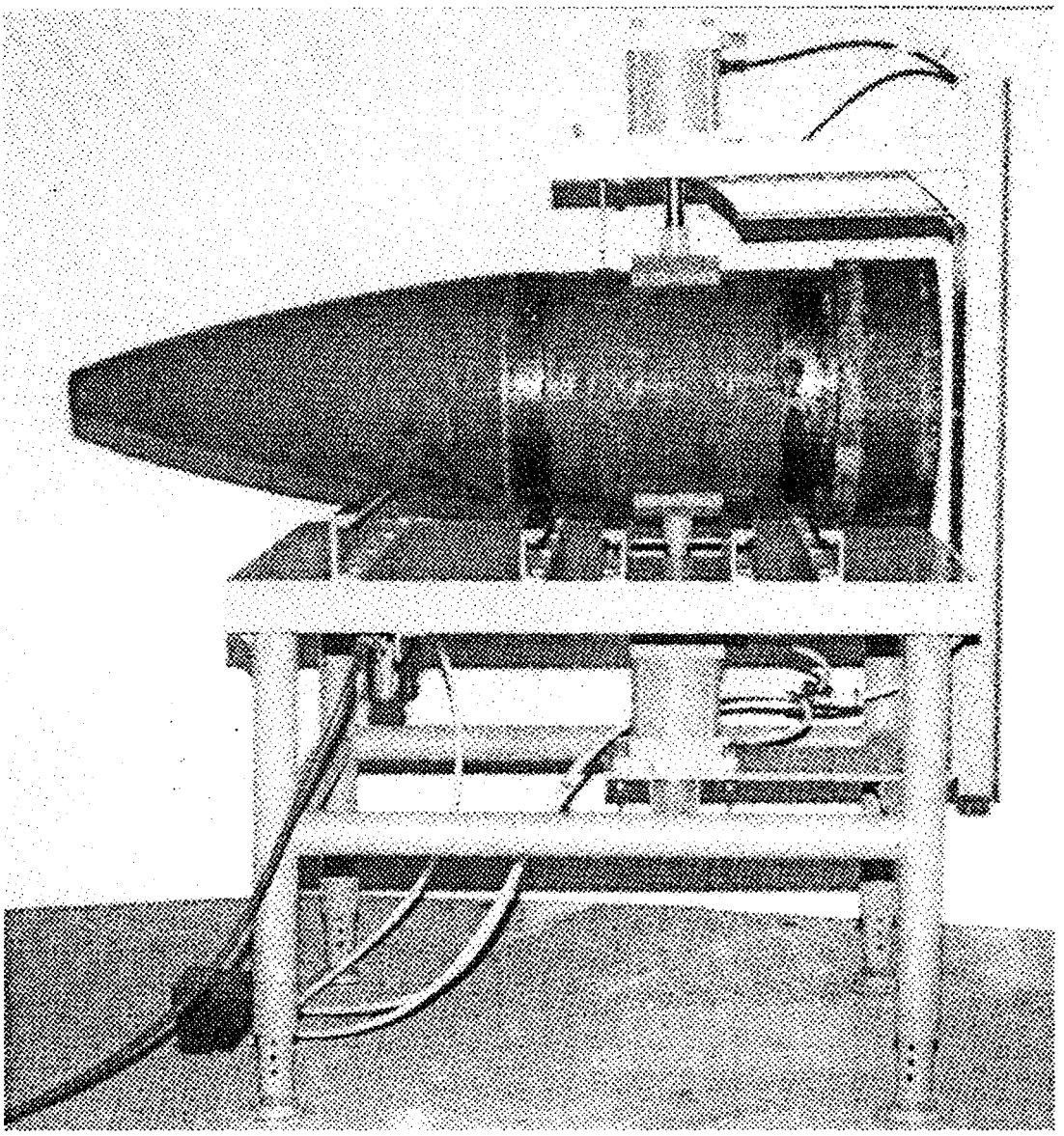
Utilities Required:
None.
Production Capacity:
Not applicable.

Shipping Data:
Length . . . . . 85 in.
Width . . . . . 59 in.
Height . . . . . 48 in.
Cube . . . . . 139 cu ft
Weight . . . . . 1827 lbs

Associated Equipment:
None.

Kits:
None.

APE 7070--VISE, 16"/50 PROJECTILE



Use:
The projectile vise is used to hold and restrain the movement of a 16"/50 projectile. The vise is used while applying the torque required to seat the adapter subassembly (adapter and auxiliary detonating fuze) to the projectile nose container.

Description:
APE 7070 consists of a table, two vise jaws and a vise jaw support. Guide rails on the aluminum table top are used to roll the projectile into position in the jaws and then to roll the projectile from the vise table. The upper and lower jaws are operated by two air cylinders activated by a foot air valve. The upper jaw support can be lowered for use with the accessory, 7070E001 kit.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	70700000
Unit of Issue	Each

Installation Data:
Length . . . . . 50 in.
Width . . . . . 36 in.
Height . . . . . 78 in.
Weight . . . . . 790 lbs

Utilities Required:
Air at 100 psi.

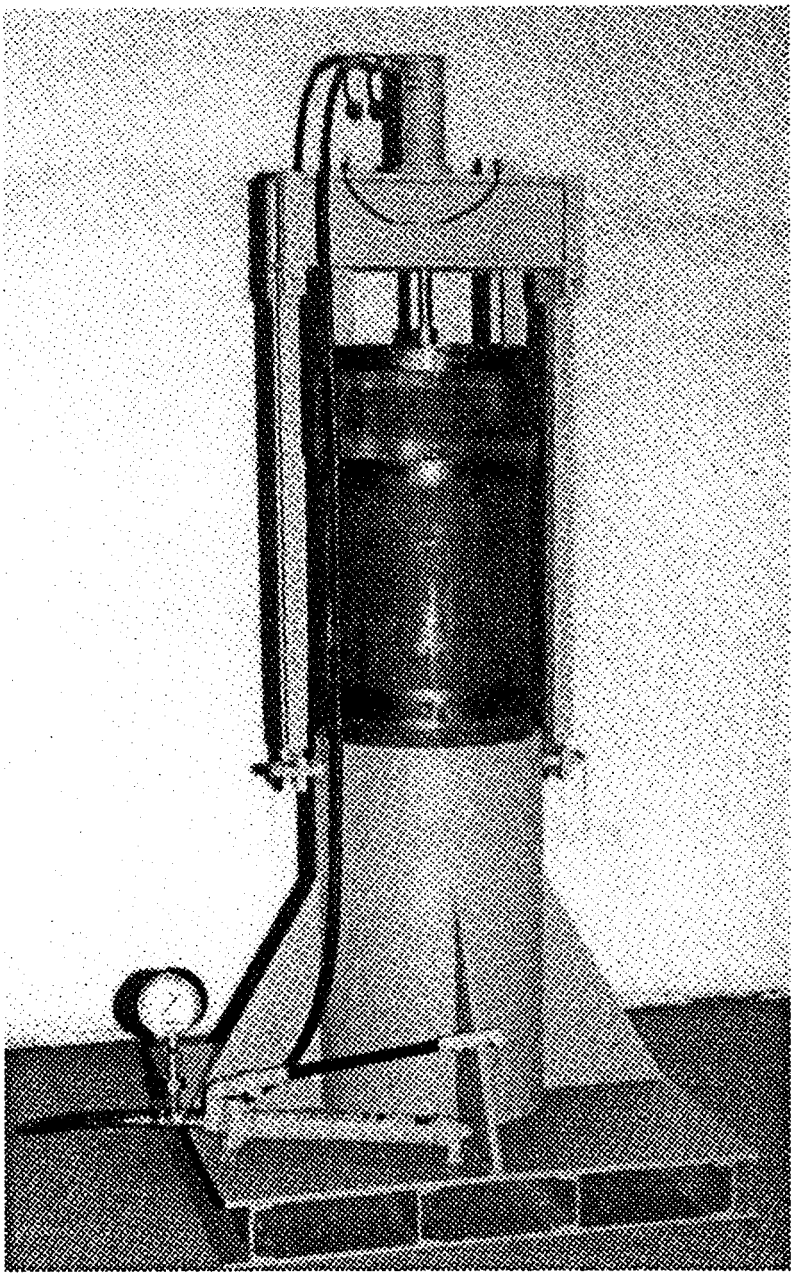
Production Capacity:
Not applicable.

Shipping Data:
Length . . . . . Not available
Width . . . . . Not available
Height . . . . . Not available
Cube . . . . . Not available
Weight . . . . . Not available

Associated Equipment:
None.

Kits:
7070E001 KIT, 8 Inch Projectile

APE 7071-–PRESS, GAS CHECK SEAL, 16"/50 PROJECTILE BASE FUZE



Use:
The gas check seal press is used to press a gas check seal into the gas check groove on the base end of a 16"/50 H.C. projectile.

Description:
APE 7071 consists of a base that accommodates the nose end of the projectile; a press frame that sits on the base of the projectile and supports the gas check tool; two legs that provide the distance needed to mount the press frame above the projectile; and a hydraulic cylinder for operation of the press.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	70710000

Unit of Issue . . . . . Each

Installation Data:

Length . . . . . 40 in.
Width . . . . . 40 in.
Height . . . . . 99 in.
Weight . . . . . 1462 lbs

Utilities Required:

None.

Production Capacity:

Not applicable.

Shipping Data:

Length . . . . . Not available
Width . . . . . Not available
Height . . . . . Not available
Cube . . . . . Not available
Weight . . . . . Not available

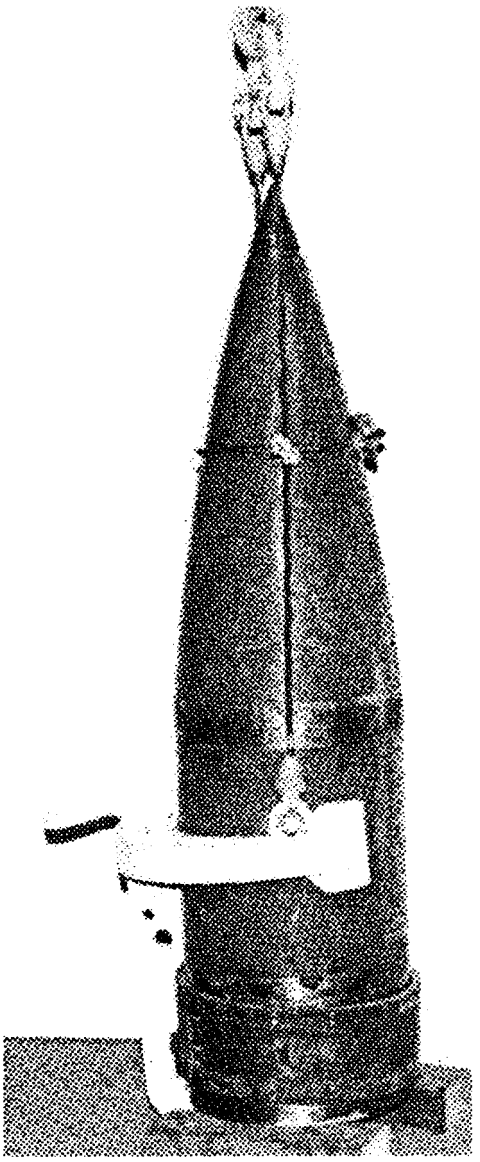
Associated Equipment:

None.

Kits:

7071E001 KIT, 16"/50 A.P. Projectile Gas Check Seal Press

APE 7072--CARRIER, 16"/50 PROJECTILE, HC AND AP



Use:
The projectile carrier is used to carry a 16"/50 H.C. and A.P. projectile in a vertical or horizontal position. The carrier is secured around the projectile and suspended from an appropriately load tested lifting device.

Description:
APE 7072 consists of the yoke assembly that encircles and holds the projectile. The yoke and projectile are lifted by attachment of a lifting device to either the horizontal lifting eye on the yoke or the wire rope vertical lifting assembly that attaches to the yoke.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	70720000
Unit of Issue	Each
Installation Data:	
Length	17-1/2 in.
Width	22 in.
Height	78 in.
Weight	136 lbs

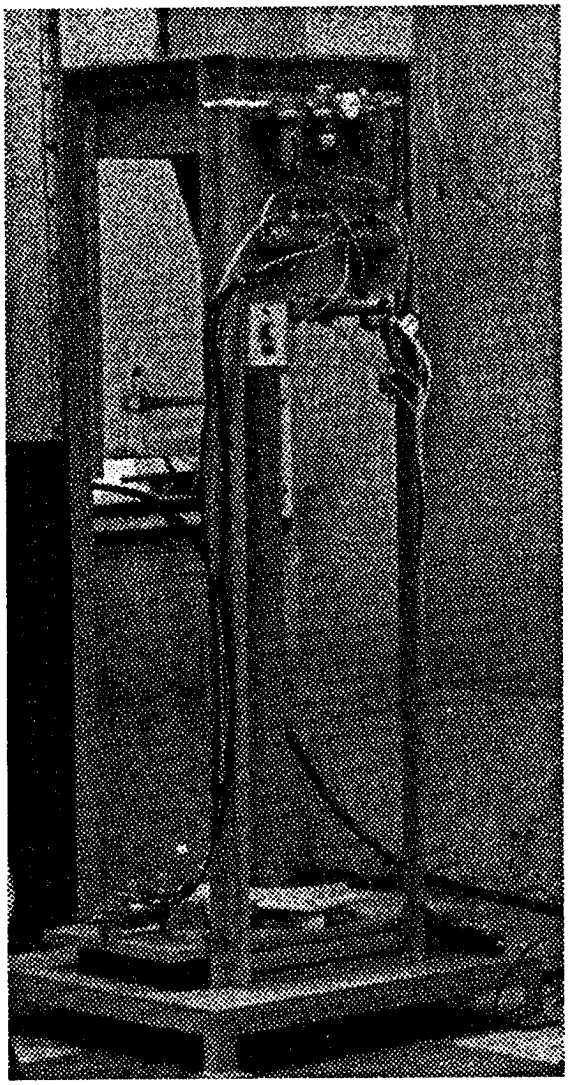
Utilities Required:
None.
Production Capacity:
Not applicable.

Shipping Data:
Length . . . . . Not available
Width . . . . . Not available
Height . . . . . Not available
Cube . . . . . Not available
Weight . . . . . Not available

Associated Equipment:
None.

Kits:
7072E001 KIT, 16"/50 A.P. Projectile Carrier

APE 7073--PROPELLANT SETTLING DEVICE



Use:
The propellant settling device is designed to settle propellants to the correct (PPD) production picking depth for Navy cartridge cases:

76MM/62 Caliber
3"/50 Caliber
5"/38 Caliber
5"54 Caliber
6"/47 Caliber
8"/55 Caliber

Designed for assembly line operations, but capable of filling a single cartridge case without difficulty. The device is pneumatically operated creating no explosive problems when operated in an explosive dust environment.

Description:
APE 7073 is seven feet tall, consisting of a propellant hopper that can be raised and lowered. A jaw and shoe assembly holds the cartridge case in place during filling operations. A timer located on the frame of the device controls the length of time each cartridge case is vibrated to settle the propellant.

Difference Between Models:
Original design.

Tabulated Data:
APE No. 70730000
Unit of Issue . . . . . Each
Installation Data:
Length (Base) . . . . . 37-1/2 in.
Width (Base) . . . . . 37–1/2 in.
Height (with hopper attached - minimum) . . . 96 in.
Weight . . . . . Not available
Floor Space . . . . . 63 cu ft
Utilities Required:
Not available
Production Capacity:
200 cartridge cases per 8 hour shift

Shipping Data:
Length . . . . . Not available
Width . . . . . Not available
Height . . . . . Not available
Cube . . . . . Not available
Weight . . . . . Not available

Associated Equipment:
Air compressor
Conveyor.

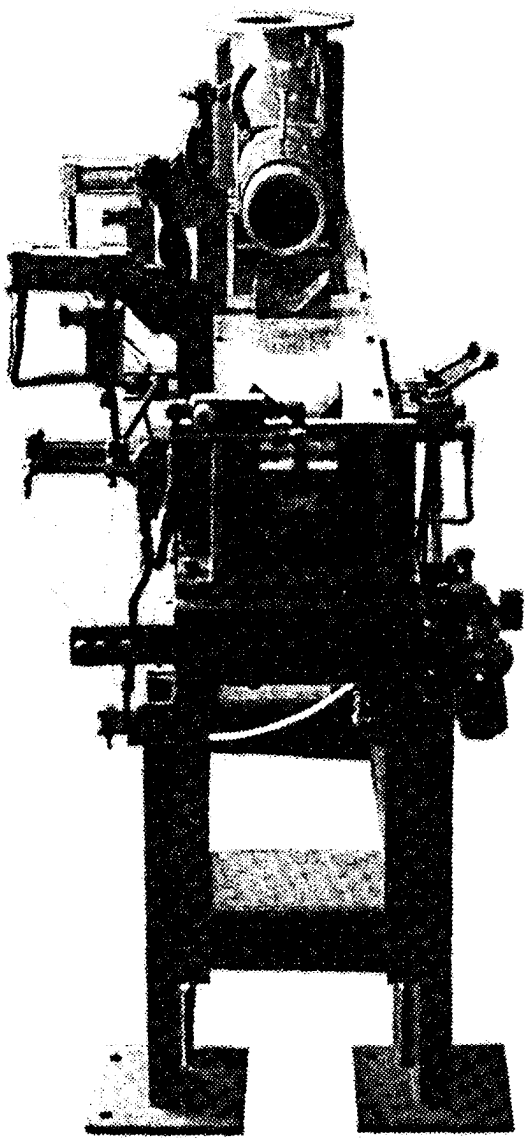
Kits:

7073E001	KIT for 5"/38 and 5"/54 Cartridge Cases
7073E002	KIT for 6"/47 Cartridge Cases
7073E003	KIT for 76MM Cartridge Case
7073E004	KIT for 3"/50 Cartridge Case

NOTE

The jaw/shoe assembly for the 8"/55 cartridge case is not a kit, but a basic part of the machine to which the other kits can be attached.

APE 7074--FIXTURE, CONTINUITY TEST 5" ZUNI ROCKET MOTOR



Use:
The continuity test fixture is used to check the continuity of 5" Zuni rocket motors. The continuity testing is done remotely from behind a substantial dividing wall.

Description:
APE 7074 consists of the machine frame, two clamping cylinders and clamping fixtures, rocket motor positioning fixture, two hydraulic reservoirs, continuity test probes and cylinder, remote control panel w/continuity tester, exhaust fixture and pneumatic controls.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	70740000
Unit of Issue	Each
Installation Data:	
Length	117 in.
Width	12 in.
Height	25 in. (min)
Cube	20.3 cu ft
Weight	900 lbs
Utilities Required:	
Air at 60 psi.	

Production Capacity:
Not available.

Shipping Data:
Length . . . . . Not available
Width . . . . . Not available
Height . . . . . Not available
Cube . . . . . Not available
Weight . . . . . Not available

Associated Equipment:
None.

Kits:
None.

APE 7076--THE MEDIUM CALIBER NAVY PROJECTILE GAS CHECK PRESS

ILLUSTRATION NOT AVAILABLE

Use:
The projectile gas check press is designed for the purpose of installing gas check gaskets on projectile base of fuzes of 5"/54 Navy projectiles which have the dummy nose plug or nose fuze removed. The APE 7076 is a replacement for the APE 7026.

Description:
APE 7076 is composed of a double acting hydraulic cylinder, a hydraulic pump unit, a nose adapter and a projectile support bracket assembly that position each projectile in alignment with the hydraulic ram. Two pins, one for each side of the machine table frame, for positioning the press bed at the elevation required. Copper gas check gaskets are pressure conformed around the base fuze of projectiles by pressure exerted through machine ram. The gas check head assembly on the hydraulic cylinder ram is of a self-centering type that allows it to center on the projectile. Two punches are available for installing either 1.50 inch or 2.00 inch type gaskets.

Difference Between Models:
Original design.

Tabulated Data:

APE No.	70760000
Unit of Issue	Each

Installation Data:

Length	40-1/2 in.
Width	30 in.
Height	76 in.
Weight	Not available

Utilities Required:
Not available.

Production Capacity:
Not available.

Shipping Data:

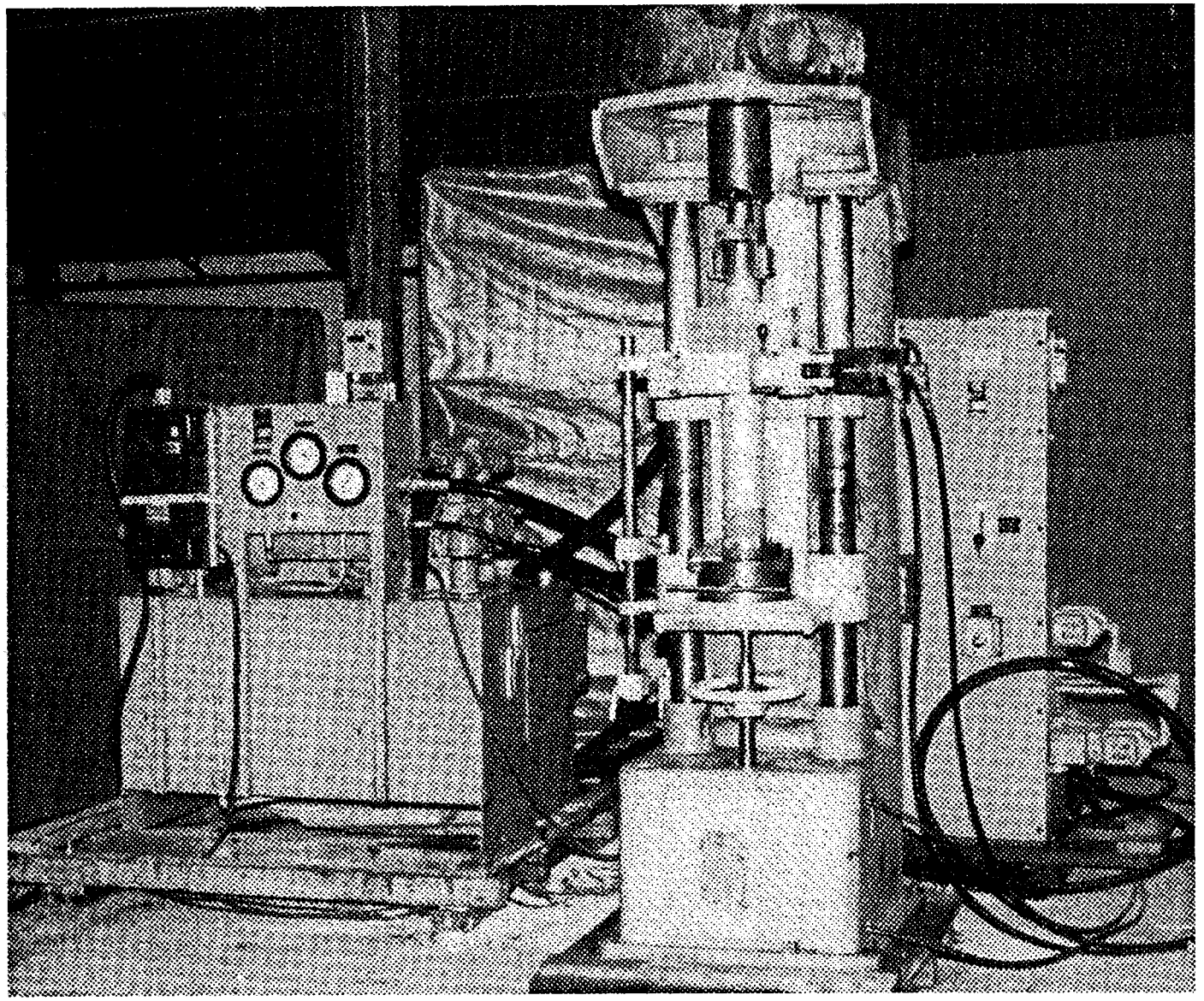
Length	Not available
Width	Not available
Height	Not available
Cube	Not available
Weight	Not available

Associated Equipment:
None.

Kits:
7076E001 KIT, 6"/47 Projectile, Unfuzed
7076E002 KIT, 5"/38 Projectile, Unfuzed
7076E003 KIT, 5"/54 and 6"/47 Projectile, Fuzed

NOTE
Where there is a requirement for installing gas check gaskets on projectile base fuzes of 6"/47 Navy projectiles which have the dummy nose plug or nose fuze installed, APE 7076E001 and APE 7076E003 must be used together.

APE 7079--MACHINE, MEDIUM CALIBER DEFUZE-DEPLUG



Use:
The defuze-deplug machine is used to remove fuzes, plugs, or adapters from medium caliber projectiles in a remote operation.

Description:
APE 7079 consists of the defuzing-deplugging machine that accommodates projectiles in the vertical position. A lift bed raises the projectile, clamped in a vise, into proximity of the tool holder. The hydraulically operated tool holder, fitted with tooling appropriate to the removal task being performed, engages the fuze/plug and rotates at a predetermined speed to remove fuze/plug. The machine is powered by a hydraulic power unit equipped with door interlock switches, and operated from a hydraulic control panel located remotely from the machine.

Difference Between Models:
Original design.

Tabulated Data:
APE No. 70790000
Unit of Issue . . . . . Each
Installation Data:
DEFUZER/DEPLUGGER:
Length . . . . . 48 in.
Width . . . . . 36 in.
Height . . . . . 106 in.
Weight . . . . . Not available
CONTROL PANEL:
Length . . . . . 40 in.
Width . . . . . 20 in.
Height . . . . . 66 in.
Weight . . . . . Not available
HYDRAULIC POWER UNIT:
Length . . . . . 60 in.
Width . . . . . 52 in.
Height . . . . . 54 in.
Weight . . . . . Not available
Utilities Required:
220/440 vac, 60 Hz, 3 phase.

Production Capacity:
Not available.

Shipping Data:
5 CRATES:
Length . . . . . Not available
Width . . . . . Not available
Height . . . . . Not available
Cube . . . . . Not available
Weight . . . . . Not available

Associated Equipment:
None.

Kits:
7079E002 KIT, M55 Chemical Rocket Warhead Fuze Removal
7079E002 KIT, M55 Chemical Rocket Warhead Adapter Removal

CHAPTER 3

NONSTANDARD AMMUNITION PECULIAR EQUIPMENT

Nonstandard APE are approved, locally designed and fabricated tools, jigs and fixtures used to supplement standard APE in ammunition operations.

The following listing includes the nonstandard APE in sequence according to the designated ammunition item and component that it supports. The listing also includes the assigned non-standard APE number, nomenclature, description or purpose, and the drawing photo or sketch numbers of the installation designing the item.

AMMUNITION ITEM AND COMPONENT	NON-STANDARD APE NO.	NOMENCLATURE - DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
FSC 1305 Small Arms Ammunition thru 30MM Component - Complete Round or Item	0223	**FIXTURE, DEMILITARIZATION** - remove control, air operated fixture used to demil cartridge 30MM T.P. Operation is viewed by use of mirrors.	Savanna Depot Activity AMXSV-7512A
	0258	**TRASH SEPARATOR** - used to separate trash from small arms ammunition field returns	Red River Army Depot AMXRR – 6712F
	0538	**PULL APART ATTACHMENT, CARTRIDGE 30MM GAU 9/A** - used in conjunction with APE 1001M1 vertical pull apart machine to pull apart 30MM cartridge for reclamation of the propellant for air force use	Anniston Army Depot ANAD 0538
	0614	**MACHINE, MAGNET SORTING** - used to separate ferrous and non–ferrous metal from deactivation furnace	Reserve Storage Activity Miesau RSAM A–410
FSC 1305 Small Arms Ammunition thru 30MM Component - Work Tables, Benches, Etc	0552	**TABLE, SMALL ARMS AMMUNITION PULL TEST** – used to pull test belted 7.62MM small arms ammunition	McAlester Army Ammunition Plant McAlester Dwg D–1917
FSC 1305 Small Arms Ammunition thru 30MM Component – Links, Belt, Clips	0086	**TABLE, PULL TEST** - used to perform pull testing of linked metallic belts of various small arms ammunition	Naval Ammunition Production Engr Center NAPEC SK-466

ANMUNITION ITEM AND COMPONENT	NON-STANDARD APE NO.	NOMENCLATURE - DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
FSC 1305 Small Arms Ammunition thru 30MM Component - Links, Belt, Clips -- Continued	0143	**EXTRACTOR, LINKED BELT** - used to break continuous linked metallic belts of caliber .30 ammunition into proper lengths	Letterkenny Army Depot AMXLE-6905A
	0144	**EXTRACTOR, LINKED BELT** - used to break continuous linked metallic-belts of caliber .50 ammunition into proper lengths	Letterkenny Army Depot AMXLE-6905B
	0157	**PACKING TEMPLATE** - used to arrange caliber .30 ammo (linked) in proper orientation for packing in ammunition box	Letterkenny Army Depot AMXLE-7008A
	0412	**DELINKER, SINGLE ROUND** - used for removing a caliber .50 round from linked belts of caliber .50 in M15A2 links	Red River Army Depot AMXRR-6704E
	0438	**ROUND COUNTER, CALIBER .50 IN M2 LINKS** - used to assure that 100 rounds of caliber .50 ammunition are in a linked unit for packing	Red River Army Depot AMXRR-6903A Local Dwg 1010153
	0439	**ROUND COUNTER, CALIBER .50 IN M15A2 LINKS** - used to assure that exactly 90 rounds of caliber .50 ammunition are in a linked unit for packing	Red River Army Depot AMXRR-6903B Local Dug 10110152
	0442	**DECLIPPING ATTACHMENT, CARTRIDGE 7.62MM** - augments APE 1114 machine to declip 7.62MM ammunition	McAlester Army Ammunition Plant McAlester Dug
	0448	**TABLE, PULL TEST** - used to perform pull testing of linked metallic belts of various small arms ammunition	Red River Army Depot SDSRR-7801A
	0454	**MACHINE, LINK FEED** - used in conjunction with APE 1259 or 1114 to expedite feeding of links for cartridge 7.62MM	Umatilla Depot Activity AMXMU-7203A
	0520	**LINKER, HAND, SINGLE ROUND, CALIBER .50** - used to link individual rounds of caliber .50 in M9 links	Savanna Depot Activity AMXSV-6704B

AMMUNITION ITEM AND COMPONENT	NON-STANDARD APE NO.	NOMENCLATURE - DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
	0605	**LINKER-DELINKER, 25MM W/M28 LINK HAND-** used to link–delink 25MM car–tridges	AMCCOM 28620
	0611	**LINKER-DELINKER, CALIBER .50 - M15 LINKS** - used to hand link or delink .50 caliber with M15 links	U.S. Army Defense Ammuni-tion Center and School NSA 0611
FSC 1305 Small Arms Ammu-nition thru 30MM Component – Metal & Wood Containers	0220	**TOOL, TEAR STRIP REMOVAL** - used with any drill to engage and remove the tear strip from hermetically sealed metal cans (small arms cans, fuze cans, etc.)	Savanna Depot Activity AMXSV-7112A (Local sketch SK-160)
	0336	**ADAPTER, AIR DRILL** - used to remove wing nuts from small arms packing cases	Sierra Army Depot AMXSE-710C
	0337	**ADAPTER, AIR DRILL** - engages tear strip on metal container and is turned by air drill to remove the strip on SAA containers	Sierra Army Depot AMXSI-710D
	0338	**TOOL, HAND, TERNE PLATE LINER REMOV-AL** - used to remove terne late liner lids by hand methods	Sierra Army Depot AMXSI-710E
	0493	**TOOL, TERNE PLATE LINER** - used to open terne plate liners in M1917 boxes	Seneca Army Depot AMXSE-7208A
	0629	**DEVICE, 20MM DETUBING** - used to re-move cardboard tube form Navy car-tridges without nose fuze	
FSC 1305 Small Arms Ammu-nition thru 30MM Component – Work Tables, Benches, Etc	0552	**TABLE, SMALL ARMS AMMUNITION PULL TEST** - used to pull test belted 7.62MM small arms ammunition	McAlester Army Ammunition Plant McAlester Dwg D-1917
FSC 1310 Ammunition 30MM to 75MM Component - Complete Round or Item	0217	**MACHINE, PULL APART, HORIZONTAL** - a barricaded horizontal pull apart ma-chine for fixed artillery ammuni-tion. This machine is replaced by standard APE 1001M1 or 2000 machines which are vertical orientation.	Savanna Depot Activity AMXSV-7002B

AMMUNITION ITEM AND COMPONENT	NON-STANDARD APE NO.	NOMENCLATURE - DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
FSC 1310 Ammunition 30MM to 75MM Component - Complete Round or Item -- Continued	0244	**EQUIPMENT, DISASSEMBLY, REMOTE CONTROL** - used to disassemble fuzes and tracers from projectiles, plugs from bombs, rocket heads, etc (single spindle machine similar to APE 1002M2).	Red River Army Depot AMXRR-7104A
	0247	**ADAPTER, CONVEYOR (MONORAIL) HANGER** - used to adapt various type hangers to the APE 1044 monorail conveyor	Red River Army Depot AMXRR-6711E
	0255	**MACHINE, PROJECTILE STENCILING** - similar to APE 1175 for marking projectiles	Red River Army Depot AMXRR-6712C
	0275	**TORQUE ADAPTER, PROJECTILE TO CARTRIDGE CASE ASSEMBLY, 57MM** - used to check the torque on the crimp of the projectile to cartridge case assembly on 57MM cartridges	Red River Army Depot AMXRR-6805G
	0440	**EXTRACTOR, PROFILE & ALIGNMENT GAGE** - used to extract stuck 40MM complete rounds from the chamber gage	Red River Army Depot AMXRR-6904A Local Dwg 1050872
FSC 1310 Ammunition 30MM to 75MM Component - Cartridge Case & Liners	0201	**TOOL, PLASTIC LINER REMOVAL** - used to remove the plastic liner from 57MM cartridge cases	Lexington-Blue Grass Depot Activity AMXLX-7303E
	0203	**FIXTURE, PLASTIC LINER INSTALLATION** - used to install the plastic liner in the 57MM cartridge cases	Lexington-Blue Grass Depot Activity AMXLX-7202G
	0221	**PUNCH, CARTRIDGE CASE MUTILATION** - used in conjunction with APE 1042 to mutilate empty and deprimed cartridge cases	Savanna Depot Activity AMXSV-7304A Local Dwg SK-188
	0270	**TOOL, PLASTIC LINER INSERTION** - used to install the plastic liner in the 57MM cartridge case	Red River Army Depot AMXRR-6805A
	0308	**HOLDING JAW, CARTRIDGE CASE MUTILATION** - used to hold 30MM thru 125MM cartridge cases for mutilation in APE 1002M2 machine	Sierra Army Depot AMXSI-7212B

AMMUNITION ITEM AND COMPONENT	NON-STANDARD APE NO.	NOMENCLATURE - DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
	0544	**PRESS, DEPRIME, CARTRIDGE CASE** - used to deprime fired primers from cases returned from posts, camps (forts), and stations. Cases may be dirty, rusty, or mutilated and obligated for salvage only	Red River Army Depot (photograph only)
FSC 1310 Ammunition 30MM to 75MM Component - Primers	0028	**WRENCH, PRIMER REMOVAL** - used to remove M32, M34, and M71 primers from 60MM and 81MM mortars	Naval Ammunition Production Engr Center WPEC Dwg 2253
	0165	**DEVICE, PRIMER REMOVAL** - used to remove tight primers from the 57MM M90A1 fuze	Letterkenny Army Depot AMXLE-7107B Local Dwg A–70499
	0259	**PRIMER PROTECTOR, 40MM** - used to protect primers on 40MM clipped ammunition	Red River Army Depot AMXRR-6801A
	0281	**PRIMER PROTECTOR, 40MM** - used to protect primers on 40MM clipped (M1 clip) ammunition	Red River Army Depot AMXRR-6810A
	0286	**PRIMER PROTECTOR, 57MM** - used to protect primers on 57MM M30A1B1 cartridge cases while round is in an unpacked configuration	Red River Army Depot AMXRR-6811A
	0384	**PIN WRENCH, MORTAR PRIMER** - used to prime live and deprime fired primers on 60MM and 81MM mortars	Red River Army Depot AMXRR-SA-6701H Local Dwg 1020534
	0447	**PRESS, CARTRIDGE CASE DEPRIME (SALVAGED CASES)** - used for depriming salvaged cartridge cases returned from overseas (fired primers only)	Red River Army Depot DRXRR-7702A
	0544	**PRESS, DEPRIME, CARTRIDGE CASE** - used to deprime fired primers from cases returned from posts, camps (forts), and stations. Cases may be dirty, rusty, or mutilated and obligated for salvage only	Red River Army Depot (photograph only)
	0582	**COVER, PRIMER PROTECTOR** - used to protect primer on cartridge case base when in an unpacked condition NAPEC 1438	Naval Ammunition Production Engineering Center

AMMUNITION ITEM AND COMPONENT	NON-STANDARD APE NO.	NOMENCLATURE - DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
FSC 1310 Ammunition 30MM to 75MM Component - Fuzes	0151	**VISE, PNEUNATIC W/MOTOR** - used for remote control deboostering of 60MM and 81MM mortar fuzes	Savanna Depot Activity AMXSV-6804A
	0165	**DEVICE, PRIMER REMOVAL** - used to remove tight primers from the 57MM M90A1 fuze	Letterkenny Army Depot AMXLE-7107B Local Dwg A-70499
	0173	**THREAD DIE, FUZE THREAD CLEANING** - used for cleaning fuze threads on M52 series fuzes for 60MM & 81MM mortar	Letterkenny Army Depot AMXLE-7003D Local Dwg A-70399
	0174	**THREAD DIE, FUZE THREAD CLEANING** - used for cleaning fuze threads on fuze, PD, M51, M500 series, and M557	Letterkenny Army Depot AMXLE-7003E Local Dwg A-70404
	0254	**HANGER, MONORAIL CONVEYOR, FUZED PROJECTILES** - used to suspend 57MM thru 106MM fuzed projectiles from a monorail conveyor	Red River Army Depot AMXRR-6712B
	0358	**WRENCHED, FUZE REMOVAL** - used for the removal of M500 series fuzes from various projectiles	Lexington–Blue Grass Depot Activity AMXLX-AP-2-6702B Local Dwg LBAD 9–145
	0476	**BARRICADE** - used for transporting reject 40MM rounds with partially armed fuzes to disposal site	Anniston Army Depot AMXAN-6804A Local Dwg E-33-65
	0595	**WRENCH, FUZE** - used to assemble, torque and disassemble fuzes from mortar rounds	Naval Ammunition Production Engineering Center NAPEC 0440
FSC 1310 Ammunition 30MM to 75MM Component – Fin & Fin Kits	0207	**THREAD CHASER, FIN THREADS** - used to chase the internal threads on 60MM mortar fins	Red River Army Depot AMXRR-6701T

AMMUNITION ITEM AND COMPONENT	NON-STANDARD APE NO.	NOMENCLATURE - DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
	0381	**WRENCH, FIN REMOVAL** - used to remove fins from 60MM mortar rounds	Red River Army Depot AMXRR-6701D Local Dwg RRAD 1010136
	0516	**TOOL, FIN REMOVAL & ASSEMBLY** - used to remove and assemble to M2 fin to the 60MM mortar rounds	Letterkenny Army Depot AMXLE-7106A
FSC 1310 Ammunition 30MM to 75MM Component - Projectiles	0274	**HOLDING FIXTURE, FUZED PROJECTILE 57MM** - used to hold a fuzed 57MM projectile in a horizontal position for drilling stakes between fuze and projectile	Red River Army Depot AMXRR-6805F
	0310	**DRILL, AIR, THREAD CLEANING** - used with an adapter for a bronze wire brush to clean threads in various size	Seneca Army Depot AMXSE-6803I
	0319	**THREAD CHASER, PROJECTILE FUZE THREADS** - used to chase threads in nose fuzewell by hand operation for projectiles 57MM thru 106Mm	Sierra Army Depot AMXSI-6902A
	0481	**BUFFING MACHINE, PROJECTILES 57MM THRU 106MM** - used for powered brush cleaning of projectiles and other components	Anniston Army Depot SDSAN-7709A
FSC 1310 Ammunition 30MM to 75MM Component - Propellant & Holders	0335	**CABINET, ARTILLERY PROPELLANT COL-LECTION** - used on collection of artillery propellant in lieu of APE 1028	Sierra Army Depot AMXSI-7104B
FSC 1310 Ammunition 30MM to 75MM Component - Fuzewell and Liner	0331	**DIAL DEPTH GAGE - FUZEWELL** - used to gage the depth of cavities in rounds which have been deep drilled	Sierra Army Depot AMXSU-7009B
	0422	**WRENCH, FUZEWELL LINER (POWERED)** - used for insertion and removal of fuzewell liners	Red River Army Depot AMXRR-6710B
	0537	**FIXTURE, FUZEWELL LINER REMOVAL** - used to remove fuzewell liners from projectiles that cannot be removed using APE 1128 or 1140	Lexington-Blue Grass Activity SDSLX-7708A

AMMUNITION ITEM AND COMPONENT	NON-STANDARD APE NO.	NOMENCLATURE - DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
FSC 1310 Ammunition 30MM to 75MM Component - Supplementary Charge	0152	**TOOL, SUPPLEMENTARY CHARGE REMOVAL DEEP CAVITY SHELLS** - used to remove paper lined supplementary charges from all deep cavity shells	Savanna Depot Activity AMXSV-6805A (Dwg ORDJ-115)
FSC 1310 Ammunition 30MM to 75MM Component Safety Clips	0582	**COVER, PRIMER PROTECTOR** - used to protect primer on cartridge case base when in an unpacked condition	Naval Ammunition Production Engineering Center NAPEC 1438
FSC 1310 Ammunition 30MM to 75MM Component - Boosters	0151	**VISE, PNEUMATIC W/MOTOR** - used for remote control deboostering of 60MM and 81MM mortar fuzes	Savanna Depot Activity AMXSV-6804A
		DEBOOSTERING MACHINE, FUZE - used on fuzes that are difficult to deboost-ter in APE 1118 (mortar fuzes 60MM and 81MM)	Red River Army Depot AMXRR-6701C
FSC 1310 Ammunition 30MM to 75MM Component - Percussion Primers	0582	**COVER, PRIMER PROTECTOR** - used to protect primer on cartridge case base when in an unpacked condition	Naval Ammunition Production Engineering Center NAPEC 1438
FSC 1310 Ammunition 30MM to 75MM Component - Fiber & Plastic Containers	0149	**LID PULLER, FIBER CONTAINERS, ARTILLERY AMMUNITION** - modification kit to APE 1003 to pull a single lid	Savanna Depot Activity AMXSV-6705A
	0155	**DEVICE, PAINTING, FIBER CONTAINER CHEMICAL AMMUNITION** - used for painting chemical stripes on M253 fiber containers	Letterkenny Army Depot AMXLE-7007G
	0178	**KNIFE, TAPE CUTTING** - knife with a disc guard used to cut the sealing tape on fiber container end cap to body joint	Lexington–Blue Grass Depot Activity AMXLX-6705B Local Dwg LBAD 9–147
	0238	**TURNTABLE, AIR POWERED,FIBER CONTAINER PAINTING** - used to rotate fiber containers for ease in painting. Used on cntrs model M201A1, M263, M251, M171A1, M202A1, M166A2, M105A2, M451	Red River Army Depot AMXRR-6708J

AMMUNITION ITEM AND COMPONENT	NON-STANDARD APE NO.	NOMENCLATURE - DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
	0266	**HANGER, PAINT FOR FIBER CONTAINERS** - used to hold fiber container on monorail conveyor or a suspended hook for painting	Red River Army Depot AMXRR-6802G
	0267	**TIMER, TAPING MACHINE** - used w/APE 1004 (basic) to determine speed of taping machine head to allow an increase or decrease of speed	Red River Army Depot AMXRR-6803A
	0312	**TAPING MACHINE, HAND OPERATED** - used for sealing fiber containers 57MM thru 106MM with acetate tape	Seneca Army Depot AMXSE-6803H
	0340	**TOOL, CARTRIDGE REMOVAL, SWELLED FIBER CONTAINERS** - hand tool that fits over cartridge case head enabling operator to pull round from container	Sierra Army Depot AMXSI-7112A
FSC 1310 Ammunition 30MM to 75MM Component - Metal & Wooden Containers	0220	**TOOL, TEAR STRIP REMOVAL** - used with any drill to engage and remove the tear strip from hermetically sealed metal cans (small arms cans, fuze cans, etc)	Savanna Depot Activity AMXSV-7112A (local sketch SK-160)
FSC 1310 Ammunition 30MM to 75MM Component - Dummy Nose Plug, Nose Plug or Closing Plug	0581	**WRENCH, HAND, NOSE PLUG AND TRACER** - used to remove the nose plug or tracer from 40MM projectile	Naval Ammunition Production Engineering Center NAPEC 1443-2
FSC 1310 Ammunition 30MM to 75MM Component - Chamber Gage	0176	**TOOL, REMOVAL** - used to remove misaligned 60MM mortar rounds from the chamber gage	Lexington-Blue Grass Depot Activity AMXLX-6705A Local Dwg LBAD 9-149
	0280	**FIXTURE, P&A GAGE EXTRACTOR, 57MM** - holds gage and extracts the 57MM cartridge from the gage	Red River Army Depot AMXRR-6809A
	0290	**FIXTURE, P&A GAGE EXTRACTOR, 40MM** - holds gage and extracts the 40MM cartridge from the gage	Red River Army Depot AMXRR-6903C
	0295	**FIXTURE, P&A GAGE EXTRACTOR, 40MM** - removes stuck rounds from the 40MM P&A gage	Red River Army Depot AMXRR-7109A

AMMUNITION ITEM AND COMPONENT	NON-STANDARD APE NO.	NOMENCLATURE - DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
FSC 1310 Ammunition 30MM to 75MM Component - Chamber Gage -- Continued	0409	**EXTRACTOR, CHAMBER GAGE, ARTILLERY PROJECTILES** - used to remove cartridges from the chamber gage after gaging is complete	Red River Army Depot AMXRR-6701AM
FSC 1310 Ammunition 30MM to 75MM Components - Mortar Primers	0028	**WRENCH, PRIMER REMOVAL** - used to remove M32, M34 and M71 primers from 60MM and 81MM mortars	Naval Ammunition Production Engineering Center WPEC Dwg 2253
	0378	**HOLDING FIXTURES, MORTAR PRIMER** - used for disassembly of 60MM mortar primer assembly	Red River Army Depot AMXRR-SA-6701A
	0384	**PIN WRENCH, MORTAR** - used for priming live and depriming fired mortar primers	Red River Army Depot AMXRR-SA-6701H Local Dwg 1020534
FSC 1310 Ammunition 30MM to 75MM Component - Fuze Pull Cords, Mortar Fuzes	0190	**TOOL, CRIMPING, MORTAR FUZE PULL CORD** - used to crimp the pull cord on 60MM and 81MM (M52A2) mortar fuzes	Letterkenny Army Depot AMXLE-7003C
	0206	**TOOL, CRIMPING, MORTAR FUZE PULL CORD** - used to crimp the pull cord on 60MM and 81MM (M52A2) mortar fuzes	Red River Army Depot AMXRR-6701Q
FSC 1310 Ammunition 30MM to 75MM Component - Rotating Bands	0317	**MACHINE, ROTATING BAND CLEANING & TAPING** - removes corrosion and tapes rotating band on 37MM thru 8 inch projectiles prior to painting	Sierra Army Depot AMXSI-6811C
FSC 1315 Ammunition 75MM to 125MM Component - Complete Round or Item	0217	**MACHINE, PULL APART, HORIZONTAL** - a barricaded horizontal pull apart machine for fixed artillery ammunition. This machine is replaced by standard APE 1001M1 or 2000 machines which are vertical orientation	Savanna Depot Activity AMXSV-7002B
	0244	**EQUIPMENT, DISASSEMBLY, REMOTE CONTROL** - used to disassemble fuzes and tracers from projectiles, plugs from bombs, rocket heads, etc. (single spindle machine similar to APE 1002M2)	Red River Army Depot AMXRR-7107A

AMMUNITION ITEM AND COMPONENT	NON-STANDARD APE NO.	NOMENCLATURE - DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
	0246	**HANGER, PAINTING** - used to suspend the 81MM practice mortar for painting purposes	Red River Army Depot AMXRR-6711D
	0247	**ADAPTER, CONVEYOR (MONORAIL) HANGER** - used to adapt various type hangers to the APE 1044 monorail conveyor	Red River Army Depot AMXRR-6711E
	0255	**MACHINE, PROJECTILE STENCILING** - similar to APE 1175 for marking projectiles	Red River Army Depot AMXRR-6712C
	0366	**MACHINE, BASE-PLUG TORQUE** - used to torque base plugs of projectile 105MM M84A1	Lexington-Blue Grass Depot Activity SDSLX–7807A
	0630	**FIXTURE, 81MM HOLDING** - used to hold cartridge in hose-down position while propellant increments are being attached	Red River Army Depot Dwg 1020610
FSC 1315 Ammunition 75MM to 125MM Component - Cartridge Case & Liners	0018	**COVER, PRIMER PROTECTION, 3"/50 CARTRIDGE CASES** - used for primer protection of 3"/50 propelling charge when in an unpacked configuration	Naval Ammunition Production Engineering Center NAPEC Dwg 0409
	0126	**FIXTURE, LOADING PLUG REMOVAL, 106MM M344A1 CARTRIDGE** - used to remove the loading plug from cartridge case base of the M93, M93B1 and M94B1 cartridge cases	Anniston Army Depot AMXAN-7303A
	0135	**TOOLER, LINER INSERTION, CARTRIDGE 106MM HEP-T M346** - used to assemble spacer, inner & outer liner, to seat cartridge case liners and to hold speed nut while primer is being assembled into cartridge case	Lexington-Blue Grass Depot Activity AMXLX-7407A Local Dwg LBAD 9-153
	0141	**PULLER, PLASTIC LINERS, CARTRIDGE 75MM** - used for pulling elastic liners from the 75MM cartridge cases	Savanna Depot Activity AMXSV-7005A
	0221	**PUNCH, CARTRIDGE CASE MUTILATION** - used in conjunction with APE 1042 to mutilate empty and deprimed cartridge cases	Savanna Depot Activity AMXSV-7304A Local Dwg SK-188
	0308	**HOLDING JAW, CARTRIDGE CASE MUTILATION** - used to hold 30MM thru 125MM cartridge cases for mutilation in APE 1002M2 machine	Sierra Army Depot AMXSI-7212B

AMMUNITION ITEM AND COMPONENT	NON-STANDARD APE NO.	NOMENCLATURE - DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
FSC 1315 Ammunition 75MM to 125MM Component - Cartridge Case & Liners ---Continued	0488	**PUNCH, PRIMER, 105MM M148A1 CARTRIDGE CASE** - used to punch out the large fired screw type primers	Seneca Army Depot AMXSE-6808A
	0544	**PRESS, DEPRIME, CARTRIDGE CASE** - used to deprime fired primers from cases returned from posts, camps (forts), stations. Cases may be dirty, rusty, or mutilated and obligated for salvage only	Red River Army Depot (photograph only)
FSC 1315 Ammunition 75MM to 125MM Component - Primers	0017	**PRIMER PROTECTOR, 81MM MORTAR (EXCEPT ILLUMINATING)** - protects mortar primers during maintenance operations	Naval Ammunition Production Engineering Center NAPEC Dwg 0386
	0018	**COVER, PRIMER PROTECTION, 3"/50 CARTRIDGE CASES** - used for primer protection of 3"/50 propelling charge when in an unpacked configuration	Naval Ammunition Production Engineering Center NAPEC Dwg 0409
	0025	**CHUCK, TABLE TOP** - used to hold 81MM M374, M375 while removing primer	Naval Ammunition Production Engineering Center WPEC Dwg 2307
	0028	**WRENCH, PRIMER REMOVAL** - used to remove M32, M34 and M71 primers from 60MM and 81MM mortars	Naval Ammunition Production Engineering Center WPEC Dwg 2253
	0033	**COVER, PRIMER PROTECTION, 105MM CARTRIDGE CASES** - used to protect primer on 105MM cartridge cases when items are in an unpacked configuration	Crane Army Ammunition Activity NAD Crane Dwg 7260
	0110	**COVER, PRIMER PROTECTION, 76MM/62 CALIBER CARTRIDGE** - used to protect primer whenever cartridge is in an unpacked configuration	Crane Army Ammunition Activity CAAA Dwg 7722
	0136	**TOOL, SPEED NUT SEATING** - used to seat speed nut inside cartridge case of 106MM HEP-T M346 round after priming is completed	Lexington-Blue Grass Depot Activity AMXLX-7407B Local Dwg LBDA 9-152

AMMUNITION ITEM AND COMPONENT	NON-STANDARD APE NO.	NOMENCLATURE - DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
	0332	**ADAPTER, PRIMER TORQUE TEST** - used with an approved torque wrench for testing M58 primer torque in 90MM cartridge cases	Sierra Army Depot AMXSI-7010A
	0384	**PIN WRENCH, MORTAR PRIMER** - used to prime live and deprime fired primers on 60MM and 81MM mortars	Red River Army Depot AMXRR-SA-6701H Local Dwg 1020534
	0385	**CHAMBER, FIRING, 81MM MORTAR PRIMER** - a deactivation chamber to fire mortar primers prior to deprime operation	Red River Army Depot AMXRR-67011 Local Dwg 10500784
	0410	**NEST, HOLDING, 81MM MORTAR PRIMER** - used to hold the 81MM M57A1 mortar while removing primer from the M4A1 fin	Red River Army Depot AMXRR-6704C
	0447	**PRESS, CARTRIDGE CASE DEPRIME (SALVAGED CASES)** - used for depriming salvaged cartridge cases returned from overseas (fired primers only)	Red River Army Depot DRXRR-7702A
	0448	**PUNCH, PRIMER, 105MM M148A1 CARTRIDGE CASE** - used to punch out the large fired screw type primers	Seneca Army Depot AMXSE-6808A
	0544	**PRESS, DEPRIME, CARTRIDGE CASE** - used to deprime fired primers from cases returned from posts, camps (forts), stations. Cases may be dirty, rusty, or mutilated and obligated for salvage only	Red River Army Depot (photograph only)
FSC 1315 Ammunition 75MM to 125MM Component - Fuzes	0022	**FIXTURE, STAKING** - used for staking the closing screw on the M48A3 PD fuze	Naval Ammunition Production Engineering Center NAPEC Dwg 1202
	0024	**STAND, VISE, FUZING & DEFUZING, 3"/50** - used to hold the 3"/50 projectile for fuzing/defuzing operation	Naval Ammunition Production Engineering Center WPEC Dwg 1850
	0035	**WRENCH, TORQUE, M91 BD FUZE** - used to torque the M91 BD fuze to the projectile during renovation of cartridge 105MM, HEP–T, M327	Naval Ammunition Production Engineering Center Hawthorne AAP Dwg 74-41

AMMUNITION ITEM AND COMPONENT	NON-STANDARD APE NO.	NOMENCLATURE - DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
FSC 1315 Ammunition 75MM to 125MM Component - Fuzes -- Continued	0041	**REMOVAL TOOL** - used to remove the adapter and the auxiliary detonating fuze from the projectile	Naval Ammunition Production Engineering Center NAPEC Dwg 0291-A
	0042	**ADAPTER HOLDING FIXTURE 3"/50 AMMUNITION** - used as a holding fixture for staking the ADF to the adapter. Also used to hold the ADF/adapter during installation or removal of the PDF	Naval Ammunition Production Engineering Center NAPEC Dwg 0291–B
	0043	**EQUIPMENT, STAKE REMOVAL, 3"/50 AMMUNITION** - a jig and drill press used to drill out the retaining pins when removing the PDF from the adapter	Naval Ammunition Production Engineering Center NAPEC Dwg 0291-c
	0046	**TOOL, REMOVAL, ADF/ADAPTER** - used to remove adapter 1227710 and ADF from the projectile. See NAPEC Dwg 0291 item #21. Used on 3"/50 ammunition	Naval Ammunition Production Engineering Center NAPEC Dwg 0291–F
	0095	**TOOL, FUZE LIFTING** - used to remove PIBD FUZE M509Al from the 120MM projectile	Naval Ammunition Production Engineering Center NAPEC Dwg 432
	0119	**DRIVE ADAPTER** - used in conjunction with a Navy defuzing machine to remove VT-FR fuzes from 3"/50 and 3"/70 cartridge	Naval Ammunition production Engineering Center NAPEC Dwg 1326
	0120	**WRENCH, BODY** - used in conjunction with a Navy defuzing machine to remove VT–IR fuzes from 3"/50 and 3"/70 cartridge	Naval Ammunition production Engineering Center NAPEC Dwg 1328
	0123	**WRENCH, DEFUZING** - used to remove M91 BDF from 105MM HEP–T cartridge	Crane Army Ammunition Activity NAD Crane Dwg 7535
	0124	**WRENCH, FUZE** - used to remove the M66 fuze from 3"/50 and 3"/70 cartridges	Naval Ammunition Production Engineering Center ALPEC Dwg 599–A-6
	0151	**VISE, PNEUMATIC W/MOTOR** - used for remote control deboostering of 60MM and 81MM mortar fuzes	Savanna Depot Activity AMXSV-6804A

AMMUNITION ITEM AND COMPONENT	NON-STANDARD APE NO.	NOMENCLATURE - DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
	0173	**THREAD, DIE, FUZE THREAD CLEANING** - used for cleaning fuze threads on M52 series fuzes for 60MM and 81MM mortar	Letterkenny Army Depot AMXLE-7003D Local Dug A-70399
	0174	**THREAD, DIE, FUZE THREAD CLEANING** - used for cleaning fuze threads on fuze, PD, M51, M500 series and M557	Letterkenny Army Depot AMXLE-7003E Local Dug A-70404
	0254	**HANGER, MONORAIL CONVEYOR, FUZED PROJECTILES** - used to suspend 57MM thru 106MM fuzed projectiles from a monorail conveyor	Red River Army Depot AMXRR-6712B
	0358	**WRENCH, FUZE REMOVAL** - used for removal of M500 series fuzes from various projectiles	Lexington-Blue Grass Depot Activity AMXLX–AP-2-6702B Local Dug LBAD 9-145
	0370	**SHIELD, OPERATIONAL** - used for removal of fuze from 81MM TP M43 mortar	Pueblo Depot Activity AMXPU-6802A
	0588	**WRENCH, FUZE (FLAT TYPE W/INSERTS)** - used to remove and install VT fuzes and dummy nose plugs from projectiles	Naval Ammunition Production Engineering Center NAPEC 0411-9
	0589	**WRENCH, FUZE (FLAT TYPE W/INSERTS)** - used to remove and install CVT, MTF PDT, fuzes and dummy nose fuzes	Naval Ammunition Production Engineering Center NAPEC 0411-10
	0590	**WRENCH, FUZE (FLAT TYPE W/INSERTS)** - used to remove and install MTF fuzes and dummy nose plugs	Naval Ammunition Production Engineering Center NAPEC 0411-11
	0591	**WRENCH, FUZE (FLAT TYPE W/INSERTS)** - used to remove and install Mt/PDF and PD/PD delay fuzes	Naval Ammunition Production Engineering Center NAPEC 0411-12
	0592	**WRENCH, FUZE (FLAT TYPE W/INSERTS)** - used to remove and install, torque and the MK149 nose fuze from projectiles	Naval Ammunition Production Engi–neering Center NAPEC 0411-13

AMMUNITION ITEM AND COMPONENT	NON-STANDARD APE NO.	NOMENCLATURE - DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
FSC 1315 Ammunition 75MM to 125MM Component - Fuzes -- Continued	0593	**WRENCH, FUZE** - used to assemble, torque and disassemble fuzes from mortar rounds	Naval Ammunition Production Engineering Center NAPEC 0440
	0595	**WRENCH, FUZE** - used to assemble, torque and disassemble fuzes from mortar rounds	Naval Ammunition Production Engineering Center NAPEC Dwg 0440
FSC 1315 Ammunition 75MM to 125MM Component - Fin & Fin Kits	0003	**WRENCH, 81MM, MORTAR BOOM** - used to install/remove boom assembly of 81MM M362 series mortar during production, renovation, rework	Naval Ammunition Production Engineering Center NAPEC Dwg 0065
	0023	**WRENCH, FIN** - used to assemble/disassemble the fin assembly M149, M170, M4A1 from the 81MM mortar RDS	Naval Ammunition Production Engineering Center NAPEC Dwg 1208
	0098	**TOOL, FIN ASSENBLY** - used for removal of fin assembly on 120MM projectile	Naval Ammunition Production Engineering Center NAPEC Dwg 977
	0325	**TOOLS, HAND, MORTAR** - used for assembly of the fin and propellant system to 81MM mortar detecting set seismic, AN/GSQ 136	Sierra Army Depot AMXSI-6907A
	0354	**ADAPTER, TORQUE WRENCH, MORTAR FIN** - used in conjunction with a torque wrench for assembling fins to 81MM mortar bodies	Lexington-Blue Grass Depot Activity AMXLX-6701C Local Dwg (LBDA 9-137)
	0355	**VISE, AIR FIN HOLDING** - used to hold 81MM mortar fins during deprime-reprime operation	Lexington-Blue Grass Depot Activity AMXLX-6701A
	0356	**WRENCH, MORTAR FIN REMOVAL** - used to remove fins from 81MM mortar bodies	Lexington-Blue Grass Depot Activity AMXLX-6701B
	0379	**WRENCH, FIN REMOVAL** - used for removing 81MM mortar fins M3, M4A1, M141	Red River Army Depot AMXRR-6701B Local Dwg 1020533

AMMUNITION ITEM AND COMPONENT	NON-STANDARD APE NO.	NOMENCLATURE - DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
	0386	**HOLDING FIXTURE, 81MM** - used to hold the 81MM mortar for assembly of the M141 fin	Red River Army Depot AMXRR-6701J Local Dug 1030586
	0390	**FIN WRENCH, M3 MORTAR FIN** - used for assembly and torque of the M3 fin to the 81MM mortar projectile	Red River Army Depot AMXRR-6701N Local Dug 1020566
FSC 1315 Ammunition 75MM to 125MM Component - Projectile	0065	**HANGING JIG, OVERHEAD CONVEYOR** - used for hanging fuzed or plugged projectile from an overhead conveyor. Used on 75MM, 76MM, 90MM, 105MM, 3"/50	Anniston Army Depot SDSAN Dug AS-1–78
	0292	**HANGER, MONORAIL, PROJECTILE** - used to suspend the 105MM plugged projectile from the monorail conveyor for painting (nose down)	Red River Army Depot AMXRR-6908A
	0310	**DRILL, AIR, THREAD CLEANING** - used with an adapter for a bronze wire brush to clean threads in various size projectile fuze cavities	Seneca Army Depot ANXSE-6803I
	0319	**THREAD CHASER, PROJECTILE FUZE** THREADS - used to chase threads in noze fuzewell by hand operation for projectiles 57MM thru 106Mm	Sierra Army Depot AMXSI-6902A
	0481	**BUFFING MACHINE, PROJECTILES 57MM THRU 106MM** - used for powered brush cleaning of projectiles and other components	Anniston Army Depot SDSAN-7709A
	0519	**GAGE, V-BLOCK (TMDE)** - used to check the concentricity of the XM1O tracer assembled to 90MM M71A1 projectile	Savanna Depot Activity AMXSV-6704A
FSC 1315 Ammunition 75MM to 125MM Component - Ignition Cartridge	0170	**TOOL, IGNITION CARTRIDGE REMOVAL** . used to remove the ignition cartridge from cartridge 4.2 inch M329 (shielded opn)	Letterkenny Army Depot AMXLE-6908A Local Dug # A-70371
	0271	**TORQUE ADAPTER, IGNITION CARTRIDGE HOUSING** - used for torquing the ignition cartridge housing on 4.2" mortars	Red River Army Depot AMXRR-6805B

AMMUNITION ITEM AND COMPONENT	NON-STANDARD APE NO.	NOMENCLATURE - DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
FSC 1315 Ammunition 75MM to 125MN Component - Ignition Cartridge -- Continued	0341	**TOOL, IGNITION CARTRIDGE HOUSING REMOVAL** - used to remove the ignition cartridge housing from 81MM M362 & M374 mortar cartridges	Sierra Army Depot (photograph only)
FSC 1315 Ammunition 75MM to 125MM Component - Propellant & Holders	0172	**TOOL, INCREMENT HOLDER SEATING** - used to seat increment holders on cartridge 4.2″ M329	Letterkenny Army Depot AMXLE-6909A Local Dwg # B70377
	0335	**CABINET, ARTILLERY PROPELLANT COLLECTION** - used on collection of artillery propellant in lieu of APE 1028	Sierra Army Depot AMXSI-7104B
FSC 1315 Ammunition 75MM to 125MM Component - Cartridge Extension	0171	**TOOL, CARTRIDGE CENTER EXTENSION REMOVAL** - used for removing tight cartridge container extension from 4.2″ M329A1	Letterkenny Army Depot AMXLE-6812C Local Dwg # A-70386
	0219	**WRENCH, CARTRIDGE EXTENSION** - used to assemble, disassemble or torque cartridge center extension on 4.2″ M329 round	Savanna Depot Activity AMXSV-7012B Local Dwg SK 128
	0341	**TOOL, IGNITION CARTRIDGE HOUSING REMOVAL** - used to remove the ignition cartridge housing from 81MM M362 & M374 mortar cartridges	Sierra Army Depot (photographs only)
	0391	**WRENCH, SPANNER, CARTRIDGE HOUSING ASSEMBLY** - used for assembly of the cartridge housing to the 81MM M362 mortar	Red River Army Depot AMXRR-6701-0 Local Dwg 1020565
	0392	**WRENCH, SPANNER, CARTRIDGE HOUSING DISASSEMBLY** - used for disassembly of the cartridge housing from the 81MM M362 mortar	Red River Army Depot AMXRR-6701-P Local Dwg 1020564
	0542	**EQUIPMENT, DISASSEMBLY, STRIKER NUT & CENTER EXTENSION** - accessory to APE 1210 to remove frozen cartridge center extensions and frozen striker nuts	Caerwent Depot Activity AERUK-7710A

AMMUNITION ITEM AND COMPONENT	NON-STANDARD APE NO.	NOMENCLATURE - DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
FSC 1315 Ammunition 75MM to 125MM Compo–nent - Fuzewell & Liner	0331	**DIAL DEPTH GAGE - FUZEWELL** - used to gage the depth of cavities in rounds which have been deep drilled	Sierra Army Depot AMXSI-7009B
	0422	**WRENCH, FUZEWELL LINER, POWERED** - used for insertion and removal of fuzewell liners	Red River Army Depot AMXRR-6701B Local Dwg 1020343
	0537	***FIXTURE,* FUZEWELL LINER REMOVAL** - used to remove fuzewell liners from projectiles that cannot be removed using APE 1128 or 1140	Lexington-Blue Grass Depot Activity SDSLX-7708A
FSC 1315 Ammunition 75MM to 125MM compo-nent - Bursters & Wells	0011	**TOOL, BURSTER REMOVAL** - used to re-move bursters from Marine Corps 90MM, 105MM and 106MM ammunition	Naval Ammunition Production Engi-neering Center NAPEC Dwg 0320
	0210	**MACHINE, CLEANING AND DERUSTING** - used for cleaning and derusting burster wells in 105MM GB M360 pro-jectiles	Tooele Army Dept AMXTE 7206A
FSC 1315 Ammunition 75MM to 125NM Compo-nent - Supplemen-tary Charge	0152	**TOOL, SUPPLEMENTARY CHARGE REMOVAL** - used for removing supplementary charge paper liners from all deep cavity shells	Savanna Depot Activity AMXSV-6805A Local Dwg ORD-JU–115
FSC 1315 Ammunition 75MM to 125MM Compo-nent - Closing Plugs	0094	**WRENCH, CLOSING PLUG** - used for re-moving the M99 closing plug on 120MM propellant charge assembly	Naval Ammunition Production Engi-neering Center NAPEC Dwg 431
FSC 1315 Ammunition 75MM to 125MM Compo–nent - Closing Plugs	0096	**HOLDING FIXTURE** - used to hold prop charge while removing closure plug on 120MM prop charge assembly	Naval Ammunition Production Engi-neering Center NAPEC Dwg 433
	0130	**WRENCH, ADAPTER,** NOSE PLUG REMOVAL - used to remove dummy nose plug from 3“/50 MK 27 & 3“/70 MK 34 projec-tiles	Naval Ammunition Production Engi-neering Center ALPEC Dwg 328-H-11

ANMUNITION ITEM AND COMPONENT	NON-STANDARD APE NO.	NOMENCLATURE - DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
FSC 1315 Ammunition 75MM to 125MM Component – Base Plates	0122	**TOOL, BASE PLUG & LOAD REMOVAL** - used to remove the base plug and illuminating load from 3"/50 and 3"/70 projectiles	Naval Ammunition Production Engineering Center NAPEC Dwg 1203
	0366	**MACHINE TORQUING, BASE PLUG** - used to assemble and torque the base plug to 105MM M84 Al projectiles	Lexington–Blue Grass Depot Activity SDSLX-7807A
FSC 1315 Ammunition 75MM to 125MM Component – Cartridges	0603	**ADAPTER, PRESSURE PLATE NUT TORQUE** - used to torque the pressure plate nut on 4.2 in. mortar HE M329 to 70 in. pound	Red River Army Depot Local Dwg 1030648
FSC 1315 Ammunition 75MM to 125MM Component – Boosters	0030	**DRILL FIXTURE, BOOSTER** - used to drill a new stake notch on the M125A1 booster	Crane Army Ammunition Activity NAD Crane Dwg 6916
	0032	**FIXTURE, HOLDING** - used to hold the M48 series fuze in place to assemble booster prior to staking	Crane Army Ammunition Activity NAD Crane Dwg 7158
	0151	**VISE, PNEUMATIC W/MOTOR** - used for remote control deboostering of 60MM and 81MM mortar fuzes	Savanna Depot Activity AMXSU-6804A
	0380	**DEBOOSTERING MACHINE, FUZE** - used on fuzes that are difficult to deboost-ter in APE 1118 (mortar fuzes 60MM & 81MM)	Red River Army Depot AMXRR-6701C Local Dwg 1050741
FSC 1315 Ammunition 75MM to 125MM Component – Parachute	0122	**TOOL, BASE PLUG & LOAD REMOVAL** - used to remove the base plug and illuminating load from 3"/50 and 3"/70 projectiles	Naval Ammunition Production Engineering Center NAPEC Dwg 1203
FSC 1315 Ammunition 75MM to 125MM Component – Closing Screw	0029	**WRENCH, FUZE** - used to install/remove the bottom closing screw	Crane Army Ammunition Activity NAD Crane Dwg 6833
	0031	**FIXTURE, HOLDING** - used to hold the M48 series fuze while drilling out the bottom closing screw stakes	Crane Army Ammunition Activity NAD Crane Dwg 7149

ANMUNITION ITEM AND COMPONENT	NON-STANDARD APE NO.	NONENCLATURE - DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
FSC 1315 Ammunition 75MM to 125MM Component - Adapters - Nose Adapter & Base Adapter	0099	**ADAPTER, REMOVAL DEVICE** - used for removal of adapter assembly and pulling auxiliary detonating fuze on 5"/54 Comp A projectiles or 4.5" rocket head	Crane Army Ammunition Activity Crane Dwg 2932
	0228	**WRENCH, BOOSTER ADAPTER** - used to remove nose adapter from projectiles that have booster remaining in adapter after disassembly	Red River Army Depot AMXRR-6701I
FSC 1315 Ammunition 75MM to 125MM Component - Fiber & Plastic Containers	0149	**LID PULLER, FIBER CONTAINERS, ARTILLERY ANMUNITION** - modification kit to APE 1003 to pull a single lid	Savanna Depot Activity AMXSV-6705A
	0155	**DEVICE, PAINTING, FIBER CONTAINER, CHEMICAL ANMUNITION** - used for painting chemical stripes on M253 containers	Letterkenny Army Dept AMXLE-7007G
	0178	**KNIFE, TAPE CUTTING** - knife with a disc guard used to cut the sealing tap on fiber container end cap to body joint	Lexington–Blue Grass Depot Activity AMXLX-6705B Local Dwg LBAD 9–147
	0238	**TURNTABLE, AIR POWERED, FIBER CONTAINER PAINTING** - used to rotate fiber containers for ease in painting. Used on containers model M201A1, M263, M251, M71A1, M202A1, M166A2, M105A2, M451	Red River Army Depot AMXRR-6708J
	0266	**HANGER, PAINTING FOR FIBER CONTAINERS** - used to hold fiber container on a monorail conveyor or suspended hook for painting	Red River Army Depot AMXRR-6802G
	0267	**TIMER, TAPING MACHINE** - used with APE 1004 (basic) to determine speed of taping machine head to allow an increase or decrease of speed	Red River Army Depot AMXRR-6803A
	0312	**TAPING MACHINE, HAND OPERATED** - used for sealing fiber containers 57MM thru 106MM with acetate tape	Seneca Army Depot AMXSE-6803H

AMMUNITION ITEM AND COMPONENT	NON-STANDARD APE NO.	NOMENCLATURE - DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
FSC 1315 Ammunition 75MM to 125MM Component - Fiber & Plastic Containers –– Continued	0340	**TOOL, CARTRIDGE REMOVAL, SWELLED FIBER CONTAINERS** - hand tool that fits over cartridge case head enabling operator to pull round from container	Sierra Army Depot AMXSI-7107A
	0436	**TORQUE ADAPTER, PLASTIC CONTAINER LIDS** - used to tighten lids on plastic containers, 81MM M513, to a specified assembly torque	Red River Army Depot AMXRR-6805H Local Dwg 1020576
	0437	**FIXTURE, HOLDING, PLASTIC CONTAINER** - used to hold the 81MM M513 container for removal of lid	Red River Army Depot AMXRR-6805I Local Dwg 1030603
	0487	**TORQUE ADAPTER, PLASTIC CONTAINER LIDS** - used to tighten caps on plastic containers for cartridge 81MM, HE M374 to a specified torque	Seneca Army Depot AMXSE-6803L
FSC 1315 Ammunition 75MM to 125MM Component – Barrier Bags	0004	**FIXTURE, BARRIER BAG EXPANDER** - used to insert fiber containers for 90MM, 105MM & 106MM into barrier bags. Fixture minimizes possibility of tearing the bag while inserting the fiber container	Naval Ammunition Production Engineering Center NAPEC Dwg 0174
FSC 1315 Ammunition 75MM to 125MM Component – Packing Supports	0535	**EXTRACTOR, WOODEN SUPPORT RING** - used to remove binding wooden support rings from the M574A1, 105MM rap round fiber container to enable upack of the projectile	Red River Army Depot (photograph description only)
FSC 1315 Ammunition 75MM to 125MM Component - Tracers	0100	**WRENCH, TRACER REMOVAL** - used for removing the M5A2B1 tracer from the 120MM projectile	Crane Army Ammunition Activity Crane Dwg 7588
	0329	**WRENCH, TRACER REMOVAL** - used with a pneumatic wrench to remove the M5A2B1 tracer from 90MM HVAP RDS	Sierra Army Depot AMXSI-7001B
	0451	**TORQUE WRENCH, TRACER ADAPTER, 90MM** - used to torque the tracer into the 90MM projectile base	Tooele Army Depot TEAD Sketch SK-90-1

AMMUNITION ITEM AND COMPONENT	NON-STANDARD APE NO.	NOMENCLATURE - DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
	0519	**GAGE, V-BLOCK (TMDE)** - used to check the concentricity of the XM10 tracer assembled to the 90MM M71A1 projectile	Savanna Depot Activity AMXSV-6704A
	0541	**TOOL, TRACER ELEMENT REMOVAL** - used to remove the MS series tracer element from the 120MM T16E3 smoke projectile	Tooele Army Depot TEAD Sketch AC-SK-82-05-A
	0618	**TOOL TRACER REMOVAL** - used to remove M13 tracer on 90MM projectiles, M318 & M353	Naval Ammunition Production Engineering Center NAPEC 1374
	0619	**WRENCH, HAND, TRACER REMOVAL** - used to remove M3, M5A2, M5A2B1 and M10 tracers	TMX 30125
FSC 1315 Ammunition75MM to 125MM Component - Base Plugs	0079	**WRENCH ASSEMBLY FOR BASE FUZE HOLE PLUG** - used to remove and install base fuze hole plugs in projectiles	Naval Ammunition Production Engineering Center ALPEC Dwg 335-B-1
	0122	**TOOL, BASE PLUG & LOAD REMOVAL** - used to remove the base plug and illuminating load from 3"/50 and 3"/70 projectiles	Naval Ammunition Production Engineering Center NAPEC Dwg 1203
	0225	**WRENCH, EASE PLUG, 105MM PROJECTILE** - used to remove and assemble the base plug on 105MM projectile	Red River Army Depot AMXRR-6704B
	0366	**MACHINE, BASE PLUG TORQUE** - used to torque base plugs of projectiles 105MM M84A1	Lexington-Blue Grass Depot Activity SDSLX-7807A
FSC 1315 Ammunition 75MM to 125MM Component - Expelling Charges	0075	**DEVICE, EXPELLING CHARGE REMOVAL** - used to remove plastic cased expelling charges from 105MM M84A1 smoke rounds by push out of charge thru nose. Cylinder piston pushes cartridge through body	USAGH Akizuki, Japan Pictorial & Description
	0175	**PROBE, EXPELLING CHARGE REMOVAL** - used to remove stuck expelling charges from the 105MM M84 leaflet rounds	Lexington-Blue Grass Depot Activity

AMMUNITION ITEM AND COMPONENT	NON-STANDARD APE NO.	NOMENCLATURE - DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
FSC 1315 Ammunition 75MM to 125MM Component - Fuze Lock Plug	0097	**WRENCH, LOCK PLUG** - used to remove the fuze lock plug from the 120MM projectiles	Naval Ammunition Production Engineering Center NAPEC Dwg 434
FSC 1315 Ammunition 75MM to 125MM Component - Cartridge Case Loading Plug	0126	**FIXTURE, LOADING PLUG REMOVAL, 106MM M344A1 CARTRIDGES** - used to remove the loading plug from cartridge case base of the M93, M93B1 and M94B1 cartridge cases	Anniston Army Depot AMXAN-7303A
FSC 1315 Ammunition 75MM to 125MM Component – Dummy Nose Plug or Nose Plug	0130	**WRENCH, ADAPTER, NOSE PLUG REMOVAL** - used to remove dummy nose plug from 3“/50 MK27 & 3“/70 MK34 projectiles	Naval Ammunition Production Engineering Center ALPEC Dwg 328-H-11
	0589	**WRENCH, FUZE (FLAT TYPE W/INSERTS)** - used to remove and install CVT, MTF, PDF fuzes and dummy nose plugs	Naval Ammunition Production Engineering Center NAPEC 0411–10
	0590	**WRENCH, FUZE (FLAT TYPE W/INSERTS)** - used to remove and install MTF fuzes and dummy nose plugs	Naval Ammunition Production Engineering Center NAPEC 0411-11
FSC 1315 Ammunition 75MM to 125MM Component - Chamber Gage	0134	**CHAMBER GAGE EXTRACTOR** - used to push the cartridge from the chamber gage by applying pressure to nose end of projectile	Letterkenny Army Depot AMXLE-6803A Local Dwg # A–70177
	0409	**EXTRACTOR, CHAMBER GAGE, ARTILLERY PROJECTILES** - used to remove cartridge from the chamber gage after gaging is complete	Red River Army Depot AMXRR-6701AM
FSC 1315 Ammunition 75MM to 125MM Component - Mortar Primers	0028	**WRENCH, PRIMER REMOVAL** - used to remove M32, M34 and M71 primers from 60Mm and 81MM mortars	Naval Ammunition Production Engineering Center WPEC Dwg 2253
	0162	**TOOL, STAND & FIRING, T-68 PRIMERS** - used to fire T-68 primers when they cannot be easily removed from the M141 fin assembly	Letterkenny Army Depot AMXLE-7011B Local Dwg B-70480

AMMUNITION ITEM AND COMPONENT	NON-STANDARD APE NO.	NOMENCLATURE - DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
	0364	**DEVICE, FIRING, MORTAR PRIMER** - a remote control method for firing primers in 81MM mortar fins for safer removal	Lexington–Blue Grass AMXLX-7107D
	0384	**PIN WRENCH, MORTAR** - used for priming live and depriming fired mortar primers	Red River Army Depot AMXRR-SA6701H Local Dwg 1020534
	0517	**TOOL, PRIMER REMOVAL, M34 PRIMER** - used for removal and assembly of M34 primer from cartridge, 81MM: M43A1, M56A1 and M57A1	Letterkenny Army Depot AMXLE-7107A
FSC 1315 Ammunition 75MM to 125MM Component - Fuze Pull Cords, Mortar Fuzes	0190	**TOOL, CRIMPING, MORTAR FUZE PULL CORD** - used to crimp the pull cord on 60MM & 81MM (M52A2) mortar fuzed	Letterkenny Army Depot AMXLE-7003C
	0206	**TOOL, CRIMPING, MORTAR FUZE PULL CORD** - used to crimp the pull cord on 60MM and 81MM (M52A2) mortar fuzes	Red River Army Depot AMXRR-6701Q
FSC 1315 Ammunition 75MM to 125MM Component - Bulk Propellant Powder	0194	**FIXTURE, PROPELLANT SETTING** - attachment to APE 2020 to settle propellant	Lexington–Blue Grass Depot Activity AMXLX-7107C
FSC 1315 Ammunition 75MM to 125MM Component - Rotating Bands	0253	**MACHINE, ROTATING BAND CLEANING** - used to clean the rotating band on projectiles 75MM thru 8 inch	Red River Army Dept AMXRR-6712A
	0317	**MACHINE, ROTATING BAND CLEANING AND TAPING** - removes corrosion and tapes rotating band on 37MM thru 8 inch projectiles prior to painting	Sierra Army Depot AMXSI-6811C
FSC 1320 Ammunition 125MM to 16 inch Component - Complete Round or Item	0217	**MACHINE, PULL APART, HORIZONTAL** - used to pull apart fixed artillery ammunition oriented in a horizontal configuration	Savanna Depot Activity AMXSV-7002B

AMMUNITION ITEM AND COMPONENT	NON-STANDARD APE NO.	NOMENCLATURE - DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
FSC 1320 Ammunition 125MM to 16 inch Component - Complete Round or Item -- Continued	0244	EQUIPMENT, DISASSEMBLY, REMOTE CONTROL - used to disassemble fuzes and tracers from projectiles, plugs from bombs, rocket heads, etc (single spindle machine similar to APE 1002M2)	Red River Army Depot AMXRR-7107A
	0247	ADAPTER, CONVEYOR (MONORAIL) HANGER - used to adapt various type hangers to the APE 1044 monorail conveyor	Red River Army Depot AMXRR-6711E
	0255	MACHINE, PROJECTILE STENCILING - similar to APE 1175 for marking projectiles	Red River Army Dept AMXRR-6712C
	0489	AIR VISE, PROJECTILE 8 INCH - used for holding 8 inch projectiles for torquing the eyebolt lifting plugs or cleaning of threads	Seneca Army Depot AMXSE-6902A
	0608	FIXTURE, PROJECTILE OGIVE CLEANING - uses glass beads as shot blast to remove rust from 155MM ogives	Reserve Storage Activity Carewent RSAC Dwg 84-33 RSAC Dwg 84-36 RSAC Dwg 84-37 RSAC Dwg 84-35
FSC 1320 Ammunition 125MM to 16 inch Component – Cartridge Case & Liners	0221	PUNCH, CARTRIDGE CASE MUTILATION - used in conjunction with APE 1042 to mutilate empty and deprimed cartridge cases	Savanna Depot Activity AMXSV-7304A Local Dwg SK-188
	0571	COVER, 5 IN PROPELLING CHARGE CHARGE OR CARTRIDGE CASE PRIMER PROTECTIVE - used to protect the primer from accidental initiation while the propelling charge/cartridge case is removed from the propelling charge tank	Naval Ammunition Production Engineering Center NAPEC 1410
	0572	COVER, 6 IN PROPELLING CHARGE CHARGE OR CARTRIDGE CASE PRIMER PROTECTIVE - used to protect the primer from accidental initiation while the propelling charge/cartridge case is removed from the propelling charge tank	Naval Ammunition Production Engineering Center NAPEC 1411

ANMUNITION ITEM AND COMPONENT	NON-STANDARD APE NO.	NOMENCLATURE - DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
	0573	**COVER, 8 IN PROPELLING CHARGE CHARGE OR CARTRIDGE CASE PRIMER PROTECTIVE** - used to protect the primer from accidental initiation while the propelling charge/cartridge case is removed from the propelling charge tank	Naval Ammunition Production Engineering Center NAPEC 1412
FSC 1320 Ammunition 125MM to 16 inch Component - Primer	0571	**COVER, 5 IN PROPELLING CHARGE CHARGE OR CARTRIDGE CASE PRIMER PROTECTIVE** - used to protect the primer from accidental initiation while the propelling charge/cartridge case is removed from the propelling charge tank	Naval Ammunition Production Engineering Center NAPEC 1410
	0572	**COVER, 6 IN PROPELLING CHARGE CHARGE OR CARTRIDGE CASE PRIMER PROTECTIVE** - used to protect the primer from accidental initiation while the propelling charge/cartridge case is removed from the propelling charge tank	Naval Ammunition Production Engineering Center NAPEC 1411
	0573	**COVER, 8 IN PROPELLING CHARGE CHARGE OR CARTRIDGE CASE PRIMER PROTECTIVE** - used to protect the primer from accidental initiation while the propelling charge/cartridge case is removed from the propelling charge tank	Naval Ammunition Production Engineering Center NAPEC 1412
FSC 1320 Ammunition 125MM to 16 inch Component - Fuze	0022	**FIXTURE, STAKING** - used for staking the closing screw on the M48A3 PD Fuze	Naval Ammunition Production Engineering Center NAPEC Dwg 1202
	0027	**ADAPTER, TORQUE WRENCH** - used for torque of BDF MK31, 83 and base fuze hole plugs BUORD 881163 & 1152944 in 5“/38 and 16’’/50 projectiles	Naval Ammunition Production Engineering Center WPEC Dwg 2442
	0087	**WRENCHES & PULLER** - used to remove fuzes and adapters from 5“ and 6“ Navy projectiles	Naval Ammunition Production Engineering Center ALPEC 335-A-1
	0174	**THREAD DIE, FUZE THREAD CLEANING** - used for cleaning fuze threads on fuze, PD, M51, M500 series and M557	Letterkenny Army Depot AMXLE-7003E Local Dwg A 70404

AMMUNITION ITEM AND COMPONENT	NON-STANDARD APE NO.	NOMENCLATURE - DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
FSC 1320 Ammunition 125MM to 16 inch Component - Fuze -- Continued	0344	**WRENCH, DEFUZING F/REMOTE OPERATION** - used for remote de fuzing (with a defuzing machine) of BD fuzes MK21 & MK48 from 16''/50 projectiles	Crane Army Ammunition Activity NAD Crane Dwg 2168
	0358	**WRENCH, FUZE REMOVAL** - used for the removal of M500 series fuzes from various projectiles	Lexington–Blue Grass Depot Activity AMXLX-AP-2-6702B Local Dwg LBAD 9-145
	0583	**WRENCH, FUZE SETTING** - used to setting sleeve on time fuzes	Naval Ammunition Production Engineering Center BUORD 510361
	0585	**WRENCH, FUZE (BELL-TYPE)** - used to remove, torque and install the MK174 VT fuze to projectile	Naval Ammunition Production Engineering Center NAPEC 0411-6A
	0586	**WRENCH, FUZE (FLAT TYPE - W/INSERTS)** - used to remove and install VT fuze to projectile	Naval Ammunition Production Engineering Center NAPEC 0411–7
	0587	**WRENCH, FUZE (FLAT TYPE W/INSERTS)** - used to remove and install VT fuzes and adapters to projectile	Naval Ammunition Production Engineering Center NAPEC 0411-8
	0588	**WRENCH, FUZE (FLAT TYPE - W/INSERTS)** - used to remove and install VT fuzes and dummy nose plugs from projectiles	Naval Ammunition Production Engineering Center NAPEC 0411-9
	0589	**WRENCH, FUZE (FLAT TYPE - W/INSERTS)** used to remove and install CVT, MTF, PDF fuzes and dummy nose plugs	Naval Ammunition Production Engineering Center NAPEC 0411-10
	0590	**WRENCH, FUZE (FLAT TYPE - W/INSERTS)** - used to remove and install NTF fuzes and dummy nose fuzes	Naval Ammunition Production Engineering Center NAPEC 0411-11
	0591	**WRENCH, FUZE (FLAT TYPE - W/INSERTS)** - used to remove and install the MT/PDF and PD/PO delay fuzes	Naval Ammunition Production Engineering Center NAPEC 0411-12

AMMUNITION ITEM AND COMPONENT	NON-STANDARD APE NO.	NOMENCLATURE - DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
	0592	**WRENCH, FUZE (FLAT** TYPE - W/INSERTS) - used to remove, torque and remove the MK149 nose fuze from projectile	Naval Ammunition Production Engineering Center NAPEC 0411-13
	0593	**WRENCH, FUZE (FLAT TYPE - W/INSERTS) -** used to remove, torque and remove the MK174 VT fuze	Naval Ammunition Production Engineering Center NAPEC 0411-14
FSC 1320 Ammunition 125MM to 16 inch Component - Projectiles	0026	**TABLE, MOUNTING, PROJECTILE VISE -** used to mount projectile vise, ALPEC Dwg 424-A (non standard APE 0020)	Naval Ammunition Production Engineering Center WPEC Dwg 2409
	0104	**FIXTURE, 155MM PROJECTILE HOLDING -** used to hold the projectile during removal and replacement of the fuze adapter on the 155MM, VX, M121A1 round	Anniston Army Depot ANAD Dwg E-2-81
	0169	**ADAPTER, COLLAR, SEPARATE LOADING PROJECTILE -** used to lift & rotate 155MM projectile during the washout operation	Letterkenny Army Depot AMXLE-7403A Local Dwg B-70564
	0310	**DRILL, AIR, THREAD, CLEANING -** used with an adapter for a bronze wire brush to clean threads in various size projectile fuze cavities	Seneca Army Depot AMXSE-6803I
	0319	**THREAD CHASER, PROJECTILE FUZE THREADS -** used to chase threads in nose fuzewell by hand operation for projectiles 57MM thru 106MM	Sierra Army Depot AMXSI-6902A
	0345	**TRUCK, HAND, PROJECTILE, MK 2 MOD 4 -** used to handle and transport single projectiles, 16’’/50 in size, on ships, docks or any hard surface, NSN 4925–00-389-4522	Naval Sea Systems Command BUORD Dwg 466404
FSC 1320 Ammunition 125MM to 16 inch Component - Obturator, Pressure Plate & Assembly	0612	**TOOL, OBTURATOR REMOVAL -** used to remove the obturator ring from projectile	CAERWENT AERUK RSAC 84-26 RSAC–84-27 RSAC-84–28
	0613	**TOOL, OBTURATOR REPLACEMENT -** used to replace the obturator ring on the projectile	CAERWENT AERUK RSAC 85-28

ANMUNITION ITEN AND COMPONENT	NON-STANDARD APE NO.	NOMENCLATURE - DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
FSC 1320 Ammunition 125MM to 16 inch Component - Fuzewell & Liner	0034	**45 DEGREE POSITIONING CLAMP** - used to hold the projectile during removal or installation of the burster, fuzewell cup, lifting plugs and processing of fuze threads	Crane Army Ammunition Activity NAD Crane Dwg 7547
	0331	**DIAL DEPTH GAGE - FUZEWELL** - used to gage the depth of cavities in rounds which have been deep drilled	Sierra Army Depot AMXSI-7009B
	0357	**WRENCH, FUZEWELL LINER REMOVER** - designed to remove shallow cavity liners from M104 and M110 WP projectiles	Lexington–Blue Grass Depot Activity AMXLX-6702A Local Dwg LBAD–BCD9-1099
	0422	**WRENCH, FUZEWELL LINER, POWERED** - used for insertion and removal of fuzewell liners	Red River Army Depot AMXRR-6710B Local Dwg 1020343
	0459	**TOOL, HAND, FUZE SEAT LINER** - used for tightening fuze seat liners in 155MM and 175MM projectiles	Sierra Army Depot AMXSI-6804A
	0478	**TOOL, FUZEWELL LINER & BOOSTER CUP REMOVAL** - used to remove booster cups and fuzewell liners from 155MM projectiles	Anniston Army Depot AMXAN-7111A
	0537	**FIXTURE, FUZEWELL LINER REMOVAL** - used to remove fuzewell liners from projectiles that cannot be removed using APE 1128 or 1140	Lexington–Blue Grass Depot Activity SDSLX-7708A
FSC 1320 Ammunition 125MM to 16 inch Component – Burster & Wells	0034	**45 DEGREE POSITIONING CLAMP** - used to hold the projectile during removal or installation of the burster, fuzewell cup, lifting plugs and processing of fuze threads	Crane Army Ammunition Activity NAD Crane Dwg 7547
	0137	**TOOL, BURSTER REMOVAL** - used for removing M6 burster from the projectile 155MM, smoke, WP, M110	Lexington–Blue Grass Depot Activity AMXLX-7107A
	0339	**TOOL, BURSTER CHARGE REMOVAL** - tool slides over end of M54 burster charge and when tipped slightly will remove the charge	Sierra Army Depot AMXSI-7106M

AMMUNITION ITEM AND COMPONENT	NON-STANDARD APE NO.	NOMENCLATURE - DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
FSC 1320 Ammunition 125MM to 16 inch Component - Supplementary Charges	0152	**TOOL, SUPPLEMENTARY CHARGE REMOVAL** - used for removing supplementary charge paper liners from all deep cavity shells	Savanna Depot Activity AMXSV-6805A Local Dwg ORDJU-115
	0414	**CUTTER, PAPER (PUNCH & DIE) -** used for cutting paper disc supplementary charge spacers on 155MM projectiles	Red River Army Depot AMXRR-6707A
	0530	**PNEUMATIC PICK F/SUPPL CHARGE DISC REMOVAL -** used to remove the aluminum disc from stuck supplementary charges	Savanna Depot Activity AMXSV-7211A
	0531	**PNEUMATIC DRILL, STUCK SUPPL CHGE REMOVAL -** used to drill supplementary charges which are stuck in rounds	Savanna Depot Activity AMXSV-7211B
FSC 1320 Ammunition 125MM to 16 inch Component - Closing Plugs	0105	**CORK PLUG CUTTING MACHINE -** used to remove cork plugs that cannot be removed in APE 7019 or that break off during attempted removal w/APE 7019 from propelling charge assemblies on 5"/38, 5"/54 and 6"/47 ammunition	Naval Ammunition Production Engineering Center NAPEC Dwg 2420
	0574	**PULLER, 5 INCH CARTRIDGE CASE PLUG -** used to remove only the polyurethane plugs with igniter hole in plug from 5 inch propelling charge assemblies (will not work on cork or solid polyurethane plugs)	Naval Ammunition Production Engineering Center NAPEC 1364
	0575	**BOLT, CLOSING PLUG EXTRACTOR -** used to remove cork or polyurethane plugs from 5 inch propelling charge by inserting extractor bolt into igniter hole in plug	Naval Weapon Station Charlestown NSW Charlestown 05-47
	0576	**BOLT, CLOSING PLUG EXTRACTOR-** used to remove cork or polyurethane plugs from 5 inch propelling charge by inserting extractor	McAlester Army Ammunition Plant NAD McAlester B-1904
FSC 1320 Ammunition 125MM to 16 inch Component - Baseplates	0426	**PIN WRENCH -** used to hold the base plug from 155MM projectiles	Red River Army Depot AMXRR-6711G Local Dwg 1020514
FSC 1320 Ammunition 125MM to 16 inch Component - Booster	0032	**FIXTURE, HOLDING -** used to hold the M48 series fuze in place to assemble booster prior to staking	Crane Army Ammunition Activity NAD Crane Dwg 7158

AMMUNITION ITEM AND COMPONENT	NON-STANDARD APE NO.	NOMENCLATURE - DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
FSC 1320 Ammunition 125MM to 16 inch Component – Closing Screw	0029	**WRENCH, FUZE -** used to install/remove the bottom closing screw	Crane Army Ammunition Activity NAD Crane Dwg 6833
	0031	**FIXTURE, HOLDING -** used to hold the M48 series fuze while drilling out the bottom closing screw stakes	Crane Army Ammunition Activity NAD Crane Dwg 7149
FSC 1320 Ammunition 125MM to 16 inch Component - Percussion Primer	0571	**COVER, 5 INCH PROPELLING CHARGE CHARGE OR CARTRIDGE CASE PRIMER PROTECTIVE -** used to protect the primer from accidental initiation while the propelling charge/cartridge case is removed from the propelling charge tank	Naval Ammunition Production Engineering Center NAPEC 1410
	0572	**COVER, 6 INCH PROPELLING CHARGE CHARGE OR CARTRIDGE CASE PRIMER PROTECTIVE -** used to protect the primer from accidental initiation while the propelling charge/cartridge case is removed from the propelling charge tank	Naval Ammunition Production Engineering Center NAPEC 1411
	0573	**COVER, 8 INCH PROPELLING CHARGE CHARGE OR CARTRIDGE CASE PRIMER PROTECTIVE -** used to protect the primer from accidental initiation while the propelling charge/cartridge case is removed from the propelling charge tank	Naval Ammunition Production Engineering Center NAPEC 1412
FSC 1320 Ammunition 125MM to 16 inch Component - Adapters - Nose Adapter & Base Adapter	0080	**WRENCH ASSEMBLY, NOSE FUZE ADAPTER -** used for assembly of the nose fuze adapter on 5"/38 projectiles and also on the 6"/47 MK 34 projectile	Naval Ammunition Production Engineering Center ALPEC Dwg 335-C-1
	0081	**WRENCH ASSEMBLY, NOSE FUZE ADAPTER -** used for assembly of nose fuze adapter 5"/54 – 6"/47 BUORD Dwg 434054 Rev "F", 5"/54 adapter BUWEPS Dwg 2662963, Rev C	Naval Ammunition Production Engineering Center ALPEC Dwg 335-D-1
	0087	**WRENCHES & PULLER** - used to remove fuzes and adapters from 5" and 6" Navy projectiles	Naval Ammunition Production Engineering Center ALPEC Dwg 335-A-1

AMMUNITION ITEM AND COMPONENT	NON-STANDARD APE NO.	NOMENCLATURE - DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
FSC 1320 Ammunition 125MM to 16 inch Component - Cartridge Case Plugs (Cork & Plastic)	0574	**PULLER, 5 INCH CARTRIDGE CASE PLUG -** used to remove only the polyurethane plugs with igniter hole in plug from 5 inch propelling charge assemblies (will not work on cork or solid polyurethane plugs)	Naval Ammunition Production Engineering Center NAPEC 1364
	0575	**BOLT, CLOSING PLUG EXTRACTOR -** used to remove cork or polyurethane plugs from 5 inch propelling charge by inserting extractor bolt into igniter hole in plug	Naval Weapon Station Charlestown NSW Charlestown 05-47
	0576	BOLT, CLOSING PLUG EXTRACTOR - used to remove cork or polyurethane plugs from 5 inch propelling charge by inserting extractors	McAlester Army Ammunition Plant NAD McAlester B–1904
FSC 1320 Ammunition 125MM to 16 inch Component - Fiber & Plastic Containers	0149	**LID PULLER, FIBER CONTAINERS, ARTILLERY AMMUNITION** - modification kit to APE 1003 to pull a single lid	Savanna Depot Activity AMXSV-6705A
	0155	**DEVICE, PAINTING, FIBER CONTAINER, CHEMICAL AMMUNITION** - used for painting chemical stripes on M253 fiber containers	Letterkenny Army Depot AMXLE-7007G
	0178	**KNIFE, TAPE CUTTING** - knife with a disc guard used to cut the sealing tape on fiber container end cap to body joint	Lexington-Blue Grass Depot Activity AMXLX-6705D
	0312	**TAPING MACHINE, HAND OPERATED** - used for sealing fiber containers 57MM thru 106MM with acetate tape	Seneca Army Depot AMXSE-6803H
FSC 1320 Ammunition 125MM to 16 inch Component - Ammunition Cart	0345	**TRUCK, HAND, PROJECTILE, MK 2 MOD 4** - used to handle and transport single projectiles, 16’’/50 inch size, on ships, docks, or any hard surface, NSN 4925-00-389-4522	Naval Sea Systems Command BUORD Dwg 466404
FSC 1320 Ammunition 125MM to 16 inch Component - Propellant Charge Containers	0128	**RESIZING MACHINE, PROPELLANT CONTAINER** - used to remove dents from walls of the 175MM propelling charge container	Anniston Army Depot SDSAN-7710A Local Dwg E-48–77

AMMUNITION ITEM AND COMPONENT	NON-STANDARD APE NO.	NOMENCLATURE - DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
FSC 1320 Ammunition 125MM to 16 inch Component - Propellant Charge Containers -- Continued	0511	**TOOL, AIR TEST PLUG** - used to remove air test plugs on powder containers or from propelling charge container lids	Letterkenny Army Depot AMXLE-7007H
	0596	**WRENCH, POWER TANK** - used to remove and tighten tank lid cover on 16 inch powder tanks MKIII	Naval Ammunition Production Engineering Center BUORD 204245
FSC 1320 Ammunition 125MM to 16 inch Component - Slings, Hangers, Restraining Devices	0346	**TRUNNION BAND, PROJECTILE** - used in conjunction with a sling to handle 16’’/50 projectile	Crane Army Ammunition Activity NAD Crane 2958
	0532	**LIFTING & ROTATING DEVICE** - used to lift and rotate 280MM projectiles for washout	Savanna Depot Activity AMXSV-7303A
	0597	**CARRIER, 16 INCH PROPELLANT TANK MK2-0-** used to lift and carry empty or loaded propellant tanks	
FSC 1320 Ammunition 125MM to 16 inch Component – Lifting Plugs	0034	**45 DEGREE POSITIONING CLAMP** - used to hold the projectile during removal or installation of the burster fuzewell cup, lifting plugs and processing of fuze threads	Crane Army Ammunition Activity NAD Crane Dwg 7547
	0218	**DEVICE, PRESSURE TEST, 155MM ICM AMMUNITION** - used to pressure test the modified eyebolt lifting plug assembled to ICM rounds	Savanna Depot Activity AMXSV-7006A
	0252	**ADAPTER, MONORAIL CONVEYOR, EYEBOLT LIFTING PLUG** - adapts projectiles 155MM, 175MM, 8-inch with eyebolt lifting plugs to hooks on the monorail conveyor	Red River Army Depot AMXRR-6711J
	0359	**ADAPTER, TORQUE WRENCH** -“used for torque of lifting plugs on 155MM, 175MM or 8-inch projectiles. Plugs may be with or without air sampling plugs	Lexington-Blue Grass Depot Activity AMXLX-6705B Local LBAD 9-146
	0417	**TORQUE ADAPTER, EYEBOLT LIFTING PLUG** - used for removal, insertion and torquing of eyebolt lifting plugs on 155MM, 175MM & 8-inch projectiles	Red River Army Depot AMXRR-6707G

AMMUNITION ITEM AND CONPONENT	NON-STANDARD APE NO.	NOMENCLATURE - DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
	0588	**WRENCH, FUZE (FLAT TYPE W/INSERTS)** - used to remove and install VT fuzes and dummy nose plugs from projectiles	Naval Ammunition Production Engineering Center NAPEC 0411-9
FSC 1320 Ammunition 125NM to 16 inch Component - Base Plugs	0078	BASE PLUG WRENCH - used to remove the base plug w/fuze from the projectile base on 5“/38 and 6“/47 projectiles	Crane Army Ammunition Activity Crane Dug 2987
	0079	**WRENCH ASSEMBLY FOR BASE FUZE HOLE PLUG** - used to remove and install base fuze hole plugs in projectiles	Naval Ammunition Production Engineering Center ALPEC Dug 335-B-1
	0082	**WRENCH, EASE FUZE W/O TRACER** - used for removal/installation of base fuzes (w/o tracer element) in 5“ and 6“ projectiles	Naval Ammunition Production Engineering Center ALPEC Dug 335-E-1
	0083	**WRENCH, EASE FUZE W/TRACER** - used for removal/installation of base fuzes (with tracer element) in 5“ and 6“ projectiles	Naval Ammunition Production Engineering Center ALPEC Dug 335-E-1
	0084	**WRENCH ASSEMBLY, BASE PLUG** - used to remove/install base plugs in 5“ and 6“ projectiles	Naval Ammunition Production Engineering Center ALPEC Dug 335-G-1
	0099	**DEVICE, ADAPTER REMOVAL** - used for removal of adapter assembly and pulling auxiliary detonating fuze on 5“/54 comp A projectile	Crane Army Ammunition Activity Crane Dug 2932
	0233	**THREAD CHASER** - used to chase threads in the 155MM projectile base plug cavity	Red River Army Depot AMXRR-6708D
	0249	**WRENCH, PIN, EASE PLUG** - used for removal/installation of the base plug on 155MM separate loading projectiles	Red River Army Depot AMXRR-6711G
FSC 1320 Ammunition 125MM to 16 inch Component - Expelling Charge	0584	**TORQUE WRENCH AND ADAPTER/EXPELLING CHARGE** - used to torque the expelling charge assembly to the ballast	Crane Army Ammunition Activity NAD Crane 6039

AMMUNITION ITEM AND COMPONENT	NON-STANDARD APE NO.	NOMENCLATURE - DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
FSC 1320 Ammunition 125MM to 16 inch Component - Gas Check Seals	0131	**PRESS, GAS CHECK SEAL** - used to press gas check seals into the 8"/55 HC projectile	Naval Ammunition Production Engineering Center NAPEC Dwg 0066
FSC 1320 Ammunition 125MM to 16 inch Component - Dummy Nose Plug or Nose Plug	0589	**WRENCH, FUZE (FLAT TYPE W/INSERTS)** - used to remove and install CVT, MTF, PDF fuzes and dummy nose plug	Naval Ammunition Production Engineering Center NAPEC 1411-10
	0590	**WRENCH, FUZE (FLAT TYPE W/INSERTS)** - used to remove and install the NTF fuzes and dummy nose plugs	Naval Ammunition Production Engineering Center NAPEC 1411-11
FSC 1320 Ammunition 125MM to 16 inch Component – Chamber Gaue	0409	**EXTRACTOR, CHAMBER GAGE, ARTILLERY PROJECTILES** - used to remove cartridges from the chamber gage after gaging is complete	Red River Army Depot AMXRR-6701AM
FSC 1320 Ammunition 125MM to 16 inch Component - Rotating Bands	0245	**PROTECTOR, ROTATING BAND** - used for protecting the rotating band during sand blast and/or painting of the projectiles	Red River Army Depot AMXRR-6711B
	0253	**MACHINE, ROTATING BAND CLEANING** - used to clean the rotating band on projectiles 75MM to 8 inch	Red River Army Depot AMXRR-6712A
	0317	**MACHINE, ROTATING BAND CLEANING & TAPING** - removes corrosion and tapes rotating band on 37MM thru 8 inch projectiles prior to painting	Sierra Army Depot AMXSI-6811C
FSC 1325 Bombs - Component - Complete Round or Item	0244	**EQUIPMENT, DISASSEMBLY, REMOTE CONTROL -** used to disassemble fuzes and tracers from projectiles, plugs from bombs , rocket heads, etc (single spindle machine similar to APE 1002M2)	Red River Army Depot AMXRR-7107A
	0561	**TABLE, BOMB DISASSEMBLY -** hold bomb for removal of boosters, fuzewell liners, fuze cables, cavity maintenance, etc	Cane Army Ammunition Activity NAD Crane 5735

AMMUNITION ITEM AND COMPONENT	NON-STANDARD APE NO.	NOMENCLATURE - DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
FSC 1325 Bombs - Components - Fuzes	0142	**DEBOOSTERING DEVICE -** augments APE 1002M2 to perform a remote booster removal operation on bomb V.T. fuzes	Letterkenny Army Depot AMXLE-6902A Local Dwg A-70337
	0327	**PRESS, ARBOR, BOOSTER CHARGE REMOVAL -** used to remove lead booster from M147A1	Sierra Army Depot AMXSI-6911A
	0562	**TOOL, CABLE LOCK RING -** used to remove the lock ring from the bomb fuze cable	Crane Army Ammunition Activity NAD Crane 6071
	0563	**TOOL, CABLE REMOVAL -** used to remove the fuze cable from the bomb body	Crane Army Ammunition Activity NAD Crane 6072
	0564	**WRENCH, CHARGING WELL SHIPPING PLUG -** used to remove the shipping plug from the charging well	Crane Army Ammunition Activity NAD Crane 6713
	0565	**HEATER, STEAM CAVITY LINER -** used to melt explosives around the cavity liner for removal	Crane Army Ammunition Activity NAD Crane 7551
	0566	CUTTER BOMB CHARGING TUBE - used to cut the charging tube loose from the bomb body	Naval Ammunition Production Engineering Center NAPEC 0430
	0567	**WRENCH, CHARGING TUBE FITTING NUT -** used to remove the fitting nut which affixes the charging tube to the bomb body	Crane Army Ammunition Activity NAD Crane 6217
	0578	**WRENCH, FUZE T -** used to remove the explosive lead and housing assembly from base of MK 339 fuze	Naval Ammunition Production Engineering Center NAPEC 2X0194-Y3
FSC 1325 Bombs - Component - Fin & Fin Kits	0579	**CLAMP, SAFETY, DISPENSER TAIL FIN -** used to restrain the tail cone assembly while working around or with this item	Naval Ammunition Production Engineering Center NAPEC 2X0194-Y4
FSC 1325 Bombs - Component - Fuzewell & Liner	0234	**TOOL, BOMB FUZEWELL ADAPTER -** used to insert the bomb fuzewell adapter into the bomb body	Red River Army Depot AMXRR-6708E
	0565	**HEATER, STEAM CAVITY LINER -** used to melt explosives around the cavity liner for removal	Crane Army Ammunition Activity NAD Crane 7551

AMMUNITION ITEM AND COMPONENT	NON-STANDARD APE NO.	NOMENCLATURE - DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
FSC 1325 Bombs - Component - Fuzewell & Liner -- Continued	0566	**CUTTER BOMB CHARGING TUBE** - used to cut the charging tube loose from the bomb body	Naval Ammunition Production Engineering Center NAPEC 0430
	0567	**WRENCH, CHARGING TUBE FITTING NUT** - used to remove the fitting nut which affixes the charging tube to the bomb body	Crane Army Ammunition Activity NAD Crane 6217
	0577	**TOOL, CAVITY LINER REMOVER -** used to remove the nose fuzewell cavity liner from bombs to allow steam out of the filler through the bomb nose end	Naval Ammunition Production Engineering Center NAPEC 1425
FSC 1325 Bombs - Component - Burster & Wells	0577	**TOOL, CAVITY LINER REMOVAL** - used to remove the nose fuzewell cavity liner from bombs to allow steam out of the filler through the bomb nose end	Naval Ammunition Production Engineering Center NAPEC 1425
FSC 1325 Bombs - Component - Body	0561	**TABLE, BOMB DISASSEMBLY** - hold bomb for removal of boosters, fuzewell liners, fuze cables, cavity maintenance, etc	Crane Army Ammunition Activity NAD Crane 5735
FSC 1325 Bombs - Component - Closing Plugs	0213	**ADAPTER, TORQUE WRENCH** - used to remove the nose plug from 750 # bombs	Savanna Depot Activity AMXSV-6810A
	0214	**ADAPTER, TORQUE WRENCH** - used to remove the tail plug from 750 # bombs	Savanna Depot Activity AMXSV-6810B
FSC 1325 Bombs - Component – Suspension Lugs & Bands	0037	**LOAD TESTER, SUSPENSION LUG** - used to pull–test Heli–coil inserts in the suspension lug wells of the MK 80 series low drag bombs	NAVAIR Systems Command SA 2810670
	0055	**LOAD TESTER, HOISTING LUG** - used to pull–test heli-coil insert in the hoisting lug well of MK 80 series low drag bombs	NAVAIR Systems Command SA 2810670
	0607	**DEVICE 500 LB GP BOMB SUSPENSION** - used for hoisting and suspending bombs from APE 1035 BSR	Red River Army Depot (photograph only)
FSC 1325 Bombs - Component – Clustering Adapters	0148	**HOLDING FIXTURE, DOWNLOADING, BOMB CLUSTER ADAPTER** - holds the ADU 253/B cluster adapter while downloading bomblets from adapter	Savanna Depot Activity AMXSV-7005B

ANMUNITION ITEM AND COMPONENT	NON-STANDARD APE NO.	NOMENCLATURE-DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
FSC 1325 Bombs – Component - Baseplates	0243	WRENCH, BOMB, BASEPLATE - used to install/remove baseplates on the 4000 # M56 bomb	Red River Army Depot AMXRR-7206A
FSC 1325 Bombs - Component - Explosive Leads Arming Wire Cable	0578	WRENCH, FUZE T - used to remove the explosive lead and housing assembly from base of MK 339 fuze	Naval Ammunition Production Engineering Center NAPEC 2X0194–Y3
FSC 1325 Bombs - Component - Dispensers & Tubes	0216	PLUG GAGE SUU-14A/A DISPENSER - used to gage inside diameter of the SSU-14A/A dispenser tubes	Savanna Depot Activity AMXSI-7002A
	0326	TOOL, DENT REMOVAL, SUU-14A/A OR SUU-25 DISPENSER - used to remove dents from empty SUU-14A/A o SUU-25 dispenser tubes	Sierra Army Depot AMXSI-6907B
	0579	CLAMP, SAFETY, DISPENSER TAIL FIN - used to restrain the tail cone assembly while working around or with this item	Naval Ammunition Production Engineering Center NAPEC 2X0194-Y4
FSC 1325 Bombs - Component – Bomblets or Payload	0333	CART, MODIFIED FOR DOWNLOAD - UPLOAD CABINET - a modified cart used with a cabinet to download - upload. BLU-17/B bomblets into SUU-14 dispensers	Sierra Army Depot AMXSI-7010B
	0334	SHIELD FOR T-162 CABINET - shield used with NSA # 0333 during download upload of BLU-17/B WP bomblets	Sierra army Depot AMXSI-7011A
	0526	BARRICADE, BOMBLET - used for transporting armed BLU-3/B fragmentation bomblets to the demolition area	Savanna Depot Activity AMXSV-7003A
	0536	EQUIPMENT, DOWNLOADING, CBU-25A/A & CBU-25B/A - gravity type download device to safely unload the BLU-24/B bomblets from the SU-14A/A dispenser	Sierra Army Depot (photographs only)
	0579	CLAMP, SAFETY, DISPENSER TAIL FIN - used to restrain the tail cone assembly while working around or with this item	Naval Ammunition Production Engineering Center NAPEC 2X0194-Y4
FSC 1325 Bombs - Component - Adapter Boosters	0195	HOLDING FIXTURE - used w/APE 1206 to remove booster casing on adapter booster, bomb tail, M147	Lexington-Blue Grass Depot Activity AMXLX-7111A

AMMUNITION ITEM AND COMPONENT	NON-STANDARD APE NO.	NOMENCLATURE - DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
FSC 1325 Bombs - Component - Adapter Boosters -- Continued	0425	**PIN WRENCH -** used for removal of the adapter booster bushing from 750# bombs by remote control	Red River Army Depot
FSC 1325 Bombs - Component - Cable Assemblies	**0049**	**TOOL, INSERTING, CABLE, T7 -** used to install the fuze control cable assembly into MK 80 series low drag bombs	Harry Diamond Labs Dwg 10400011
	0050	**TOOL, INSERTING, CABLE, T6 -** used to install the fuze control cable assembly into MK 80 series low drag bombs	Harry Diamond Labs Dwg 10400012
FSC 1325 Bombs-Component - Boosters	0142	**DEBOOSTERING DEVICE -** augments APE 1002M2 to perform a remote booster removal operation on bomb V.T. fuzes	Letterkenny Army Depot AMXLE-6902A Local Dwg A-70337
	0327	**PRESS, ARBOR, BOOSTER CHARGE REMOVAL -** used t.o remove lead booster from M147A1 fuze	Sierra Army Depot AMXSI-6911A
	0578	**WRENCH, FUZE T -** used to remove the explosive lead and housing assembly from base of MK 339 fuze	Naval Ammunition Production Engineering Center NAPEC 2x0194-Y3
FSC 1325 Bombs – Component - Shipping Plugs	**0226**	**WRENCH, HAND -** used to remove and assemble the shipping plug from tritonal bombs	Red River Army Depot AMXRR-6707D
	0564	**WRENCH, CHARGING WELL SHIPPING PLUG** - used to remove the shipping plug from the charging well	Crane Army Anvnunition Activity NAD Crane 6713
FSC 1325 Bombs - Component - Adapters Nose Adapter & Base Adapter	**0524**	**ADAPTER, SPANNER WRENCH -** used to retorque the adapter in the tail of 750# M117A1 bombs after removal of the tail plug	Savanna Depot Activity AMXSV-6812A
FSC 1325 Bombs – Component - Metal & Wooden Containers	**0328**	**HANDLING DEVICE, CBU CONTAINERS -** used to handle empty or packed metal containers containing CBUS by pushing or pulling - not lifting in rail cars	Sierra Army Depot AMXSI-6912D

AMMUNITION ITEM AND COMPONENT	NON-STANDARD APE NO.	NOMENCLATURE - DESCRIPTION OR PURP0SE	DESIGN ACTIVITY IDENTIFICATION NO.
FSC 1325 Bombs - Component - Slings, Hangers, Restraining Devices	0347	**HANDLING SLING, BOMB** - used to handle bombs up to 1000# gross weight	Crane Army Ammunition Activity NAD Crane Dwg 4193 Rev B
FSC 1325 Bombs - Component - Work Tables, Benches, etc	0561	**TABLE, BOMB DISASSEMBLY** - hold bomb for removal of boosters, fuzewell liners, fuze cables, cavity maintenance etc	Crane Army Ammunition Activity NAD Crane 5735
FSC 1325 Bombs - Component - Lifting Plug	0262	**PLUG, LIFTING, EYEBOLT, BOMB** - used for lifting the 4000# bomb by the nose end	Red River Army Depot AMXRR-6801E
FSC 1325 Bombs - Component - Base Plugs	0227	**WRENCH, BOMB, BASE & NOSE PLUG** - used to remove and assemble base and nose plugs for bombs	Red River Army Depot AMXRR-6707J
	0232	**WRENCH, BOMB, BASE & NOSE PLUG (REMOTE CONTROL)** - used in conjunction with a remote control disassembly machine to remove nose and base plugs	Red River Army Depot AMXRR-6708C
FSC 1325 Bombs - Component - Dummy Nose Plug or Nose Plug	0213	**ADAPTER, TORQUE WRENCH** - used to remove the nose plug from 750# bombs	Savanna Depot Activity AMXSV-6810A
	0214	**ADAPTER, TORQUE WRENCH** - used to remove the tail plug from 750# bombs	Savanna Depot Activity AMXSV-6810B
	0227	**WRENCH, BOMB, BASE & NOSE PLUG** - used to remove and assemble base and nose plugs for bombs	Red River Army Depot AMXRR-6707J
	0231	**WRENCH, BOMB, NOSE PLUG** - used to remove and assemble bomb nose plugs and to torque whenever necessary	Red River Army Depot AMXRR-6708B
	0232	**WRENCH, BOMB, BASE & NOSE PLUG (REMOTE CONTROL)** - used in conjunction with a remote control disassembly machine to remove nose and base plugs	Red River Army Depot AMXRR-6708C
FSC 1325 Bombs - Component - Retaining Clips	0059	**TOOL, REMOVAL, RETAINING CLIP** - used to remove the retaining clip during replacement of the fuze control cable assembly on MK80 series Low Drag Bombs. This item is now a component part of APE 7021	Naval Sea Systems Command BUORD Dwg 1180471

AMMUNITION ITEM AND COMPONENT	NON-STANDARD APE NO.	NOMENCLATURE - DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
FSC 1325 Bombs – Component - Retaining Clips -- Continued	0060	TOOL, REMOVAL, RETAINING CLIP - used to insert the retaining clip during replacement of the fuze control cable assembly on MK80 series Low Drag Bombs. This item is now a component part of APE 7021	Harry Diamond Labs Command HDL Dwg 10402535
FSC 1325 Bombs - Component - Fin Lock Nut	0235	WRENCH, SPANNER FOR BOMB FIN LOCK NUT - used to loosen or tighten the fin lock nut on bombs	Red River Army Depot AMXRR-6708F
FSC 1330 Hand & Rifle Grenades Component - Complete Round or Item	0242	FIXTURE, RIFLE GRENADE DISASSEMBLY - fixture for pull apart of the M31 Rifle Grenade. Used in conjunction with APE 1001	Red River Army Depot AMXRR-7203A
	0244	EQUIPMENT, DISASSEMBLY, REMOTE CONTROL - used to disassemble fuzes and tracers from projectiles, plugs from bombs , rocket heads, etc (single spindle machine similar to APE 1002M2)	Red River Army Dept AMXRR-7104A
	0305	BARRICADE, PITCH IN, HAND GRENADE FUZE - used to dispose of M213 grenade fuzes which may become armed	Red River Army Depot AMXRR-7505A
	0350	PITCH-IN CONTAINER - used to dispose of WP M15 or M34 hand grenades in emergency situations	Tooele Army Depot SK-81–30F
FSC 1330 Hand & Rifle Grenades Component – Fuze	0108	TOOL, WASHER INSERTION - hand tool used for inserting a rubber washer in a metal washer retainer for the M213 hand grenade fuze prior to assembly to the M67 grenade	Red River Army Depot (photograph only)
	0187	HOLDING FIXTURE GRENADE - used to hold the M26 grenade in an upright position for fuzing	Letterkenny Army Depot AMXLE-6912A
	0204	FIXTURE, FUZING DEFUZING, M18 COLORED SMOKE GRENADE - used to fuze-defuze the M18 smoke grenade	Lexington-Blue Grass Depot Activity AMXLX-7303H
	0224	TOOL, GRENADE SLEEVE ASSEMBLY - used to insert a fiberglass sleeve over the stem of the M204 fuze	Red River Army Depot AMXRR-6701Y

AMMUNITION ITEM AND COMPONENT	NON-STANDARD APE NO.	NOMENCLATURE - DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
	0360	**ADAPTER, TORQUE WRENCH** - used for defuzing–refuzing M26 hand grenades	Lexington-Blue Grass Depot Activity AMXLX-6705C
	0395	**FIXTURE, TORQUE** - used for torquing hand grenade fuzes to the M26 grenade body	Red River Army Depot AMXRR-6701U local Dwg 1010115
	0396	**TORQUE WRENCH HOLDER** - used to hold the M26 grenade in position for torquing fuze	Red River Army Depot AMXRR-6701V Local Dwg 1050728
	0397	**TRAY, SHIELDED FUZE** - a combination tray and shield for transporting and temporary storage when fuzes are removed from hand grenades	Red River Army Depot AMXRR-6701W Local Dwg 1020456
	0429	**FIXTURE, VIBRATING** - used during fuzing of MK 2 grenades to shake grenade body	Red River Army Depot AMXRR-6801C Local Dwg 0150849
FSC 1330 Hand & Rifle Grenades Component - Fuzewell & Liner	0297	**DRILL, HAND** - used to drill the fuzewell cavity 1/16″ deeper in the M67 grenade	Red River Army Depot AMXRR-7110B
	0306	**TOOL, CAVITY GAGE** - used to gage the fuze cavity on M67 hand grenades	Red River Army Depot AMXRR-7509A
	0449	**CLEANER, GRENADE FUZEWELL THREAD** - used to clean the fuzewell thread on M59 hand grenades	Red River Army Depot SDSRR-7810A
FSC 1330 Hand & Rifle Grenades Component - Body	0263	**HANGER, PAINTING** - used to suspend the M26 grenade body (w/o fuze) for painting	Red River Army Depot AMXRR-6802B
	0568	**FIXTURE, HAND GRENADE HOLDING** - used to hold the hand grenade body while the fuze is torqued	Reserve Storage Activity, CAEWENT RSAC 82-2

AMMUNITION ITEM AND CONPONENT	NON-STANDARD APE NO.	NOMENCLATURE - DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
FSC 1330 Hand & Rifle Grenades Component - Body -- Continued	0569	CABINET, GRENADE BODY DRYING - used to dry defuzed grenade bodies prior to refuzing	Reserve Storage Activity, CAEWENT RSAC 82-37B & 82-39 Local RSAS-8331
FSC 1330 Hand & Rifle Grenades Component - Safety Clips	0146	**TOOL, SAFETY CLIP SPREADER** - used to spread the legs of the safety clip (cotter pin) to the required angle on hand grenades	Letterkenny Army Depot AMXLE-6905F
	0192	**GAGE, GO-NO-GO** - used for checking the spread of the cotter pin legs on grenade safety clips for MK 2 & M26 grenades	Letterkenny Army Depot AMXLE-7007E
	0208	**GAGE, GRENADE COTTER KEY SPREAD** - used to check the angle of spread on the cotter pin safety device of grenade fuzes	Red River Army Depot AMXRR-6701X
FSC 1330 Hand & Rifle Grenades Component - Fiber & Plastic Containers	0211	**MACHINE, STENCIL, FIBER CONTAINER** - used for stenciling fiber containers for the WP M34 hand grenade	Tooele Army Depot AMXTE-7303A
	0294	FIXTURE, TAPE CUTTER, FIBER CONTAINER - tape cutting fixture for use in tape sealing the M415A1 grenade fiber container used on M33 grenade packout	Red River Army Depot AMXRR-7108A
FSC 1330 Hand & Rifle Grenades Component - Metal & Wooden Containers	0220	**TOOL, TEAR STRIP REMOVAL** - used with any drill to engage and remove the tear strip from hermetically sealed metal cans (small arms cans, fuze cans, rocket igniters, etc)	Savanna Depot Activity AMXSV-7112A Local Sketch SK-160
FSC 1330 Hand & Rifle Grenades Component - Slings, Hangers, Restraining Devices	0604	**FIXTURE, HAND GRENADE HOLDING** - used to hold grenade while pull test safety clip	Savanna Depot Activity (photograph only)
FSAC 1330 Hand & Rifle Grenades Component - Grenade Fuze	0192	**GAGE, GO-NO-GO** - used for checking the spread of the cotter pin legs on grenade safety clips for MK 2 and M26 grenades	Letterkenny Army Depot AXMLE-7007E

AMMUNITION ITEM AND COMPONENT	NON-STANDARD APE NO.	NOMENCLATURE - DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
	0224	**TOOL, GRENADE SLEEVE ASSEMBLY** - used to insert a fiberglass sleeve over the stem of the M204 fuze	Red River Army Depot AMXRR-6701Y
	0616	**FIXTURE, HOLDING, W/TORQUE ADAPTER M7A3 FOR GS GRENADE** - used to secure grenade during torquing of the M201 series fuze	U.S. Army Defense Ammunition Center and School NSA 0616
FSC 1330 Hand & Rifle Grenades Component - Delay Fuze Grenade Housing	0256	**CLAMP WRENCH, DELAY HOUSING GRENADE FUZE** - holds M204A1 fuze by clamping the delay housing of the fuze	Red River Army Depot AMXRR-6712D
FSC 1340 Rockets Component - Complete Round or Item	0167	**TRAY, HOLDING, ROCKET ASSEMBLY** - used to hold the complete 3.5″ M29A2 rocket	Letterkenny Army Depot AMXLE-7209B Local Dwg A-70524
	0229	**FIXTURE, HOLDING** - used to hold the 66MM (LAW) rocket in a fixed position	Red River Army Depot AMXRR-6707F
	0241	**MACHINE, PULL TEST, PNEUMATIC** - used to perform a pull test on the (LAW) rocket separating warhead from closure	Red River Army Depot AMXRR-7009A
	0244	**EQUIPMENT, DISASSEMBLY, REMOTE CONTROL** - used to disassemble fuzes and tracers from projectiles, plugs from bombs , rocket heads, etc (single spindle machine similar to APE 1002M2)	Red River Army Depot AMXRR-7104A
	0247	**ADAPTER, CONVEYOR (MONORAIL) HANGER** - used to adapt various type hangers to the APE 1044 monorail conveyor	Red River Army Depot AMXRR-6711E
	0466	**FLASH SHIELD** - used with rocket disassembly machine APE 1215 to disassemble only the M29A2 practice rocket	Sierra Army Depot AMXSI-7005A
FSC 1340 Rockets Component - Fuzes	0529	**FIXTURE, ROCKET FUZE** - used to remove boosters from the M404 3.5″ rocket fuzes (accessory to APE 1002) (remote control only)	Savanna Depot Activity AMXSV-7203A

AMMUNITION ITEM AND COMPONENT	NON-STANDARD APE NO.	NOMENCLATURE - DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
FSC 1340 Rocket Component - Fuzes – Continued	0606	**FIXTURE, 2.75" WARHEAD FUZE REMOVAL ADAPTION** - used to remove the M427 fuze from the 2.75" M151 warhead in conjunction with APE 1153M1	McAlester Army Ammunition Plant Local Dwg D-2018
FSC 1340 Rockets Component – Fin & Fin Kits	0161	**TOOL, FIN & NOZZLE** - used to assemble and remove fins and nozzles on 2.75" rocket motors	Letterkenny Army Depot AMXLE-7011A Local Dwg A70479
FSC 1340 Rockets Component - Windshield	0594	**WRENCH, FUZE (FLAT TYPE W/INSERTS)** - used to install and remove the ogive nose on a rocket head	Naval Ammunition Production Engineering Center NAPEC 0411-15
FSC 1340 Rockets Component - Fuzewell & Liner	0315	**TOOL, ROCKET, FUZEWELL LINER REMOVAL** - used to remove fuzewell liners from 2.75" rocket warheads	Seneca Army Depot AMXSE-7303A
FSC 1340 Rockets Component - Closing Plugs	0160	**TOOL, CLOSING PLUG REMOVAL, 5" ROCKET** - used to remove the 3/4" square drive closing plug on 5" rockets	Letterkenny Army Depot AMXLE-70lF
	0222	**TOOL, CLOSURE DISC REMOVAL, 5" ROCKET MOTORS** - used to remove the front closure disc	Savanna Depot Activity AMXSV-7506A
	0293	**TOOL, CLOSING PLUG REMOVAL** - used for removing closing plugs on 5" rockets with 1/2" square drive plugs	Letterkenny Army Depot AMXLE-7010G
FSC 1340 Rockets Component – Primer Detonators	0472	**TOOL, DETONATOR REMOVAL** - presses out the detonator from the detonator housing on 3.5" rockets	Fort Wingate Depot Activity AMXFW-7010B FWAD 896
FSC 1340 Rockets Component - Igniters	0114	**FIXTURE, HOLDING** - used to hold the MK 165 MODS 0, 1 igniters	Anniston Army Depot AMXAN-7012A
FSC 1340 Rockets Component - Safety Clips	0117	**SHORTING CLIP** - used to short the 5" Zuni rocket motor by installing clip over contact band and detent groove as rocket motor is removed from launcher tube	Naval Ammunition Production Engineering Center NAPEC Dwg 0079
FSC 1340 Rockets Component - Launcher	0237	**FIXTURE, ROCKET LAUNCHER** - used for seating the aft end cover of the 66MM rocket launcher	Red River Army Depot AMXRR-6708I
	0291	**DIE, 66MM ROCKET TRIGGER COVER** - retainer clip die for 66MM rocket trigger cover	Red River Army Depot AMXRR-6905A

AMMUNITION ITEM AND COMPONENT	NON-STANDARD APE NO.	NOMENCLATURE - DESCRIPTION OR PURP0SE	DESIGN ACTIVITY IDENTIFICATION NO.
FSC 1340 Rockets Component - Warhead	0115	**WRENCH, PLUG, MK 2, 3 -** used to remove nose shipping plugs on 5" rocket warheads MK 6 mods 1, 4	Naval Ammunition Production Engineering Center ALPEC Dwg 328-H-22
	0450	**WRENCH, TORQUE, WARHEAD -** used to assemble the WDU4A/A warhead to the 2.75″ rocket motor	Red River Army Depot AMXRR-7507A Local Dwg PE-5831
	0494	**KIT, DISASSEMBLY, 5" ROCKET HEAD -** used for disassembly of 5" rocket heads MK 25	Seneca Army Depot AMXSE-7211A
	0551	**FIXTURE, 2.75" ROCKET WARHEAD AND MOTOR TORQUE** - used to torque rocket warhead to motor without a fuze installed	Red River Army Depot RRAD 1030647
	0594	**WRENCH, FUZE (FLAT TYPE W/INSERTS) -** used to install and remove the ogive nose on a rocket head	Naval Ammunition Production Engineering Center NAPEC 0411-15
FSC 1340 Rockets Component - Motor	0074	**TOOL, REMOVAL, FRONT CLOSURE SUBASSEMBLY** - used to remove the front closure subassembly during demil of 5" rocket motor MK 10	Hawthorne Army Ammunition Plant NAD Hawth RDD-1-29-79
	0089	**DOLLY HAWK MISSILE** - hold & transport missile	Red River Army Depot Dwg 1050949
	0166	**TRAY, HOLDING** - used for holding “inert” 3.5” M29A2 motors	Letterkenny Army Depot AMXLE-7209A Local # A 70523
	0222	**TOOL, CLOSURE DISC REMOVAL 5" ROCKET MOTORS -** used to remove the front closure disc	Savanna Depot Activity AMXSV-7506A
	0268	**HANGER, PAINTING, FOR ROCKET MOTOR -** used to suspend the M8 rocket motor for painting items suspended on monorails and run thru a standard paint booth	Red River Army Depot AMXRR-6803C
	0273	**HANGER, PAINTING FOR ROCKET MOTOR -** used to suspend the 5" MK 10 & MODS rocket motors for painting	Red River Army Depot AMXRR-6805E

AMMUNITION ITEM AND COMPONENT	NON-STANDARD APE NO.	NOMENCLATURE - DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
FSC 1340 Rockets Component - Motor -- Continued	0296	**HANGER, MONORAIL -** suspension device used to hand 2.75″ rocket motors from a monorail conveyor	Red River Army Depot AMXRR-7110A
	0477	**CRIMPING TOOL, PNEUMATIC -** used to tighten rivets on the 3.5″ rocket motor	Anniston Army Depot AMXAN-6804B Local Dwg AS-1-68
	0551	**FIXTURE 2.75″ ROCKET WARHEAD AND MOTOR TORQUE -** used to torque rocket warhead to motor without a fuze installed	Red River Army Depot RRAD 1030647
	0620	**HOLDING FIXTURE FOR 2.75″ ROCKET NOZZLE -** used to hold rocket on table while the ground clip is being assembled	Red River Army Depot two photo Local Dwg 1050972
	0621	**TOOL, SEATING, GROUND CLIP 2.75″ ROCKET** - used to seat the ground clip on 2.75″ rocket nozzle	Red River Army Depot one photo Local Dwg 1020601
	0622	**HANGER FOR 2.75″ ROCKET WARHEAD -** used to suspend the 2.75″ warhead on hooks for overhead conveyor	Red River Army Depot one photo Local Dwg 1020600
FSC 1340 Rockets Component - Tube Closure	0154	**WRENCH, CLOSURE NUT** -used to remove the closure nut on JATO 14DS1000, MK 4 MOD 2	Savanna Depot Activity AMXSV-6808A
FSC 1340 Rockets Component - Shorting Clips & Plugs	0117	SHORTING CLIP - used to short the 5" Zuni rocket motor by installing clip over contact band and detent, groove as rocket motor is removed from launcher tube	Naval Ammunition Production Engineering Center NAPEC Dwg 0079
FSC 1340 Rockets Component - Boosters	0070	**TOOL, BOOSTER CUP REMOVAL -** used to remove the booster assembly from the warhead following washout of the explosive cavity in the MK 25 rocket warhead	Hawthorne Army Ammunition Plant NAD Hawthorne SA 2458829

AMMUNITION ITEM AND COMPONENT	NON-STANDARD APE NO.	NOMENCLATURE - DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
	0072	**WRENCH, BOOSTER CASE COVER -** used to remove the booster case cover when the booster assembly cannot be re–moved with the booster cup removal tool for the MK 32 rocket warhead	Hawthorne Army Ammunition Plant NAD Hawthorne SA 2458044
	0471	**TOOL, BOOSTER CUP MILL -** used to mill the top of booster cup for 3.5″ rocket fuze	Fort Wingate Depot Activity AMXFW-7010A
	0473	**TOOL, BOOSTER CUP REMOVAL -** used for removal of booster cup and booster from holder assembly on 3.5″ rockets	Fort Wingate Depot Activity AMXFW-7012A
	0529	**FIXTURE, ROCKET FUZE -** used to re-move boosters from the M404 3.5″ rocket fuzes (accessory to APE 1002) (remote control only)	Savanna Depot Activity AMXSV-7203A
FSC 1340 Rockets Component – Shipping Plug	0073	**WRENCH, NOSE SHIPPING PLUG -** used to remove the nose shipping plug and gasket during demil of the MK 25 rocket warhead	Hawthorne Army Ammunition Plant NAD Hawthorne SA 2458061
	0099	**ADAPTER REMOVAL DEVICE -** used for removal of adapter assembly and pulling auxiliary detonating fuze on 5"/54 comp C projectile or 4.5″ rocket head	Crane Army Ammu-nition Activity Crane Dwg 2932
FSC 1340 Rockets Component - Ogive	0594	**WRENCH, FUZE (FLAT TYPE W/INSERTS) -** used to install and remove the ogive nose on a rocket head	Naval Ammunition Production Engi-neering Center NAPEC 0411-15
FSC 1340 Rockets Component - Adapters, Nose Adapters Base Adapters	0099	**ADAPTER REMOVAL DEVICE -** used for removal of adapter assembly and pulling auxiliary detonating fuze on 5"/54 comp C projectile or 4.5″ rocket head	Crane Army Ammu-nition Activity Crane Dwg 2932
FSC 1340 Rockets Component - Fiber & Plastic Containers	0550	**MACHINE, FIBER CONTAINER TAPING -** used to tape fiber container up to 68″ long	Red River Army Depot RRAD photo
FSC 1340 Rockets Component – Metal & Wooden Containers	0088	**PULLER, END CAP -** used to remove the end cap from M55 - 115MM rocket con-tainers (chemical item)	Lexington-Blue Grass Depot Activity LBAD Dwg 9–157

AMMUNITION ITEM AND COMPONENT	NON-STANDARD APE NO.	NOMENCLATURE - DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
FSC 1340 Rockets Component - Metal & Wooden Containers -- Continued	0220	**TOOL, TEAR STRIP REMOVAL -** used with any drill to engage and remove the tear strip from hermetically sealed metal cans (small arms cans, fuze cans, rocket igniters, etc)	Savanna Depot Activity AMXSV-7112A (local sketch SK-160)
	0324	**TOOL - DENT REMOVAL -** used for removing dents from 2.75 inch rocket containers and CBU dispensers	Sierra Army Depot AMXSI-6903B
FSC 1340 Rockets Component - Packing Supports	0441	**EQUIPMENT, STUCK ROCKET REMOVAL -** used to remove M229 rockets stuck in fiber containers due to adhesive bond between container & horseshoe washer	**Tooele Army** Depot TEAD SK 82-06F
FSC 1340 Rockets Component - Slings, Hangers, Restraining Devices	0424	**PAINT HANGER, MONORAIL CONVEYOR -** used to hold 5" rockets MK 10 mods from a monorail conveyor for painting in a paint booth	Red River Army Depot AMXRR-6805E
FSC 1340 Rockets Component - Base Plugs	0067	**WRENCH, BASE PLUG -** used to remove the case plug from the case base on the MK 25 rocket warhead	Hawthorne Army Ammunition Plant SA 2458058
FSC 1340 Rockets Component - Initiators	0068	**EXTRACTOR, INITIATOR CASE LOCKING PLUG -** used to remove the initiator assembly on the MK 25 rocket warhead	Hawthorne Army Ammunition Plant SA 2458800
	0069	**WRENCH, INITIATOR, CASE LOCKING PLUG -** used to remove the initiator case locking ring prior to removing the initiator case	Hawthorne Army Ammunition Plant NAD Haw (Dwg SA 2458814)
FSC 1340 Rockets Component - Base	0071	**WRENCH, BASE ADAPTER -** used to remove the warhead base during disassembly of the MK 32 rocket whd	Hawthorne Army Ammunition Plant NAD Hawthorne SA 2458039
FSC 1345 Land Mines Component - Complete Round or Item	0453	**EQUIPMENT FOR DISASSEMBLY OF MINE M2A4 -** used for disassemble M2A4 mines for demil. Accessory to APE 1001M1 for remote operation	Umatilla Depot AMXUM-6711A
	0492	**EQUIPMENT FOR DISASSEMBLY OF MINE M2** SERIES - used to remove the cap from mine M2 series. Accessory to APE 1001M1 for remote operation	Seneca Army Depot AMXSE-7202A
FSC 1345 Land Mines Component – Fuze	0209	**THREAD CHASING DIE & WIRE BRUSH -** used for cleaning fuze adapter on mine, land, gas, VX, M23	Tooele Army Depot AMXTE-6712A

AMMUNITION ITEM AND COMPONENT	NON-STANDARD APE NO.	NOMENCLATURE - DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
FSC 1345 Land Mines Component – Fuzewell & Liner	0230	**FIXTURE, FUZE CAVITY CLEANING -** used for cleaning the M605 fuze cavity in M16 series mines	Red River Army Depot AMXRR-6708A
FSC 1345 Land Mines Component - Burster & Wells	0109	**BUSHING ADAPTER** - used to check the disassembly torque of the bushing in M16 series AP mines	Savanna Depot Activity Sketch only
FSC 1345 Land Mines Component – Mine Body	0180	CAP PULLER, AP MINE - used to pull cap of AP M2 series mines. Used in conjunction with APE 101 remote control	Lexington-Blue Grass Depot Activity AMXLX-6912A
	0193	**DEVICE, CLOSING DISC REMOVAL -** used to remove the closing disc in M3 AP mines by remote control utilizing an air cylinder (remote operation)	Lexington-Blue Grass Depot Activity AMXLX-7107B
	0307	**JAW, HOLDING -** used to hold the M2 series mine while mutilating mine case in APE 1002M2 machine	Sierra Army Depot AMXSI-7212A
FSC 1345 Land Mines Component - Boosters	0365	**DISASSEMBLY MACHINE** - a holding fixture for removal of the housing relay booster from the projectile. Used w/APE 1206 and 1001–E001 shield	Lexington-Blue Grass Depot Activity AMXLX-7206A
FSC 1365 Military Chemical Agents Component - Filler (Explosive, Chemical, Smoke, etc)	0196	**MOUNT** - mounts the M12A1 decontamination apparatus for use with a ten ton trailer, & other associated decontamination items such as a quick fill hopper	Lexington–Blue Grass Depot Activity AMXLX-7204A
FSC 1365 Military Chemical Agents Component - Metal & Wooden Containers	0040	**FIXTURE, HANDLING, ONE-TON CONTAINER** - used to rotate 1-ton container for valve changes and sample access. Tube replaced by standard APE 1982 ton container, plug & valve replacement equipment	Tooele Army Depot RMA Dwg-E10-7-15
	0617	**FORKLIFT ADAPTER FOR M1 LIFTING BEAM** - used for transfer one-ton container	DACS
FSC 1370 Pyrotechnics Components - Complete Round or Item	0570	**CLAMP, OUTER TUBE CRADLE -** used to hold the signal while cutting the outer tube for removal of the fuze and expellant assembly	Naval Ammunition Production Engineering Center NAPEC 1344

AMMUNITION ITEM AND COMPONENT	NON-STANDARD APE NO.	NOMENCLATURE - DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
FSC 1370 Pyrotechnics Components - Complete Round or Item -- Continued	0600	**FLARE CRADLE -** restrains the MK 45-0 flare and orients flare so end to be drilled is facing the end shield	Naval Ammunition Production Engineering Center NAPEC 1264
	0601	**FIXTURE, FLARE HOLDING -** holds the flare in an upright position to remove and replace the MK 364 fuze	Naval Ammunition Production Engineering Center NAPEC 1245
FSC 1370 Pyrotechnics Components - Fuze	0558	**FIXTURE, FUZE BODY AND GUIDE SHOE -** used in the disassembly of the fuze and propellant assembly	Crane Army Ammunition Activity NAD Crane 4770
	0559	**TOOL, NUT HAND** - used in the disassembly of the fuze and propellant assembly	Crane Army Ammunition Activity NAD Crane 4999
	0560	**TOOL, INSULATOR HAND -** used in the removal of insulator form the squib and battery assembly	Crane Army Ammunition Activity NAD Crane 5003
	0601	**FIXTURE, FLARE HOLDING -** holds the flare in an upright position to remove and replace the MK 364 fuze	Naval Ammunition Production Engineering Center NAPEC 1245
FSC 1370 Pyrotechnics Components - Closing P lug	0570	**CLAMP, OUTER TUBE CRADLE -** used to hold the signal while cutting the outer tube for removal of the fuze and expellant assembly	Naval Ammunition Production Engineering Center NAPEC 1344
FSC 1370 Pyrotechnical Components - Timers	0553	**RAM AND HOLDER** - used to hold upper carrier assembly for removing the timer by pressing out with arbor press ram	Naval Ammunition Production Engineering Center NAPEC Dwg 1347
FSC 1370 Pyrotechnics Components - Firing Devices	0398	**FIXTURE, TRIP FLARE ASSEMBLy -** used to assemble the firing mechanism to the M49A1 trip flare (springs, levers, striker assemblies)	Red River Army Depot AMXRR-6701AA
FSC 1370 Pyrotechnics Components - Ogive	0554	**PULLER, OUTER TUBE NOSE** - used to pull the nose end of the signal from the outer tube	Naval Ammunition Production Engineering Center NAPEC Dwg 1348
	0555	**PULLER, UPPER CARRIER NOSE** - used to pull the signal nose from the upper carrier assembly	Naval Ammunition Production Engineering Center NAPEC Dwg 1349

AMMUNITION ITEM AND COMPONENT	NON-STANDARD APE NO.	NOMENCLATURE - DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
	0556	**TOOL, UPPER CARRIER REMOVAL -** used to remove the upper carrier from the outer tube	Crane Army Ammunition Activity NAD Crane 5505
FSC 1370 Pyrotechnics Components – Work Table, Bench, etc	0090	**TABLE, STANDARD -** standard table used for the repack of MK 24 mods 3 & 4 A/C flares	Crane Army Ammunition Activity NAD Crane Dwg 3333
FSC 1375 Demolition Materials Component - Fuzewell & Liner	0156	**TOOL, BORE BRUSH -** used to hold cal .30 and .50 caliber bore brushes to clean detonator wells for Bangalore torpedoes and demolition charges	Letterkenny Army Depot AMXLE-7007I
FSC 1375 Demolition Materials Component - Firing Devices	0153	**TOOL, EXERCISING, FIRING DEVICE -** used to exercise firing device, demolition, pull-release, type M3	Savanna Depot Activity AMXSV-6805B
	0260	**SHIELD, FIRING DEVICE -** provides a flash tube when working on firing devices	Red River Army Depot AMXRR-6801B
	0283	**GAGE, GO-NO-GO FIRING DEVICE** - go-no-go gage for use on the M3 firing device	Red River Army Depot AMXRR-681OC
	0284	**FIXTURE, HOLDING, FIRNG DEVICE -** used to hold the M3 firing device for hand reaming operation	Red River Army Depot AMXRR-6810D
	0285	**TOOL, SPACING, FIRING DEVICE -** used for spacing the firing pin slots on M3 firinq device	Red River Army Depot AMXRR-6810E
	0287	REAMER - used with a stop and guide to ream the body of the M3 firing device	Red River Army Depot AMXRR-6811B
FSC 1375 Demolition Materials Component - Blasting Caps	0101	**SHIELD, ELECTRIC BLASTING CAP TESTING -** protects operator during testing of electric blasting caps	Savanna Depot Activity un-numbered sketch
FSC 1375 Demolition Materials Component - Linear Charge	0168	**FIXTURE, DEMIL -** used for demil of charge demolition linear, M2A1 & M3 by cutting rolled edge of charge container	Letterkenny Army Depot AMXLE-7303A
FSC 1376 Bulk Explosives Component – Propellant & Holders	0427	**AIR TEST LID -** used for conducting an air test on powder cans in storage	Red River Army Depot AMXRR-6711H

AMMUNITION ITEM AND COMPONENT	NON-STANDARD APE NO.	NOMENCLATURE - DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
FSC 1376 Bulk Explosives Component - Filler (Explosive, Chemical, Smoke, etc)	0257	**TOOL, FLUME CLEANING -** shovel used for cleaning flume in the APE 1300 washout plant	Red River Army Depot AMXRR-6712E
FSC 1376 Bulk Explosives Component – Metal & Wooden Containers	0250	**FIXTURE, AIR TEST -** used for air test of powder cans with a spider type lid	Red River Army Depot AMXRR-6711H
FSC 1376 Bulk Explosives Component – Propellant Charge Containers	0159	**TOOL, AIR TEST -** used to air test bulk powder containers	Letterkenny Army Depot AMXLE-7010D Local Dwg D–150
	0511	**TOOL, AIR TEST PLUG -** used to remove air test plugs on propellant charge containers	Letterkenny Army Depot AMXLE-7007H
	0514	**TOOL, AIR TEST -** used for air testing of small powder containers	Letterkenny Army Depot AMXLE-7010E
FSC 1377 Cartridge Actuated Devices/Propellant Actuated Devices Component – Initiators	0112	**FIXTURE, FUNCTION TEST, IGNITER -** fixture used in conducting a surveillance function test of ignition cylinders flamethrower, M1	Anniston Army Depot AMXAN-7011A
	0139	**FIXTURE, FUNCTION TEST, IGNITER -** fixture used in conducting a surveillance function test of ignition cylinders flamethrower, M1	Pueblo Depot Activity AMXOU-7202A
FSC 1390 Fuzes & Primers Component - Complete Round or Item	0383	**TORQUE WRENCH ADAPTER -** used to torque M500 series, and M519, M521, M524, M526 mortar fuzes	Red River Army Depot AMXRR-6701F Local Dwg 1020459
FSC 1390 Fuzes & Primers Component - Primer	0299	**DEVICE, FIRING PIN, PRIMER TESTING -** used in con-junction with APE 1931 to test fire M92 primers	Red River Army Depot AMXRR-7312A
	0300	DEVICE, FIRING IN, PRIMER TESTING - used in conjunction with APE 1931 to test fire M38 primers	Red River Army Depot AMXRR-7312B

AMMUNITION ITEM AND COMPONENT	NON-STANDARD APE NO.	NOMENCLATURE - DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
	0301	**DEVICE , INSPECTION, PRIMER -** inspection mirror for use in inspecting the M58 primer	Red River Army Depot AMXRR-7401A
	0332	**ADAPTER, PRIMER TORQUE TEST** - used with an approved torque wrench for testing M58 primer torque in 90MM cartridge cases	Sierra Army Depot AMXSI-7010A
	0372	**DRILL GUIDE AND PRIMER REMOVER** - used for removal and replacement of the M29A1 primer assembly for the M501 series fuze	Pueblo Army Depot AMXPU-6911A
	0373	**PRIMER INSERTER -** used for installing new M29A1 primer in M501 fuze	Pueblo Army Depot AMXPU-6911B
	0374	**PRIMER STAKING GUIDE -** used for staking new M29A1 primer assemblies in M501 fuze	Pueblo Army Depot AMXPU-6911C
	0479	**PRIMER TESTER HOLDER -** used for function testing of primer assembly M29A1 (augments APE 1931)	Anniston Army Depot AMXAN-7312A
FSC 1390 Fuzes & Primers Component - Fuzes	0125	**MACHINE, STAKING** - used for staking of M520 series fuze assemblies	Anniston Army Depot AMXAN-7210A
	0127	**FIXTURE, POSITIONING -** used to position paint & heat shields on VT fuzes prior to coating	Anniston Army Depot AMXAN-7407A Local Dwg E–27–74
	0132	**TOOL, BOOSTER REMOVAL -** used to de-booster the M514, M517 VT fuzes by use of a hand wheel. Augments APE 1196	Letterkenny Army Depot AMXLE-6905E Local Dwg D–70258 & one photo
	0138	**VISE, AIR ACTIVATED, PORTABLE -** used to hold and turn fuze for removing the detonator housing	Fort Wingate Depot Activity AMXFW-7011A
	0140	**FIXTURE, STAKING -** fixture used for staking lower cap to fuze body of fuze MTSQ M52 series	Pueblo Army Depot AMXPU-7304A

ANMUNITION ITEM AND COMPONENT	NON-STANDARD APE NO.	NOMENCLATURE - DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
FSC 1390 Fuzes & Primers Component - Fuzes -- Continued	0142	**DEBOOSTERING DEVICE** - augments APE 1002M2 to perform a remote booster removal operation on bomb V.T. fuzes	Letterkenny Army Depot AMXLW-6902A Local Dwg A-70399
	0145	**TOOL, RETAINING RING REMOVAL** - used to remove retaining rings from V.T. fuze boosters to remove pellet charges	Letterkenny Army Depot AMXLE-6905J
	0173	**THREAD DIE, FUZE THREAD CLEANING -** used for cleaning fuze threads on M52 series fuzes for 60MM and 81MM mortar	Letterkenny Army Depot AMXLE-7003D Local Dwg A-70399
	0174	**THREAD DIE, FUZE THREAD CLEANING -** used for cleaning fuze threads on fuze, P.D. M51, M500 series, and M557	Letterkenny Army Depot AMXLE-7003E Local Dwg A-70404
	0181	**HOLDER, FUZE STAKING & DRILLING** - holds M500 series fuzes for drilling stakes from fuze and for staking fuze	Letterkenny Army Depot AMXLE-6907C
	0197	**WRENCH, BOOSTER ASSEMBLY** - used for assembling booster assembly of M90A1 fuze	Lexington-Blue Grass Depot Activity AMXLX-7303A
	0198	**THREAD CHASER** - used to chase thread for booster cavity on the M90A1 fuze	Lexington-Blue Grass Depot Activity AMXLX-7303B
	0199	**TOOL, CLEANING** - used for cleaning bottom of M56 stab primer of M90 fuze	Lexington-Blue Grass Depot Activity AMXLX-7303C
	0200	**TOOL, FACING** - used on the M56 stab primer for the M90A1 fuze	Lexington–Blue Grass Depot Activity AMXLX-7303D
	0202	**TOOL, PRIMER REMOVAL** - used for removal of M56 stab primer of M90A1 fuze (shielded operation)	Lexington-Blue Grass Depot Activity AMXLX-7303F

AMMUNITION ITEM AND COMPONENT	NON-STANDARD APE NO.	NOMENCLATURE - DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
	0205	**CLEANING FIXTURE, FUZE OGIVE -** used to clean the ogive of the M57 PD fuze	Lexington-Blue Grass Depot Activity AMXLX-7401A
	0248	**THREAD CHASER, FUZE -** used to dress the threads on M48A3 and M572 fuzes	Red River Army Depot AMXRR-6711F
	0269	**WRENCH, TORQUE ADAPTER -** used to assemble, disassemble and torque test the M503 P.D. fuze (57MM)	Red River Army Depot AMXRR-6804F
	0282	**WRENCH, TORQUE ADAPTER -** used for torque test of MK 27 fuze used on 40MM projectile (used in conjunction of APE 1065 or 1204)	Red River Army Depot AMXRR-6810B
	0309	**CLEANING DEVICE, FUZE -** used to clean artillery fuzes. Similar to APE 1243	Seneca Army Depot AMXSE-6702
	0311	**DRILL PRESS W/PLEXIGLASS SHIELD -** used for drilling stake marks from booster to fuze assembly	Seneca Army Depot AMXSE-6803J
	0313	**ADAPTER, TORQUE, FUZE HEAD ASSEMBLY** - used to torque the M557 fuze head to the flash tube	Seneca Army Depot AMXSE-6803F
	0314	**FIXTURE, TORQUE, FUZE BOOSTER -** used to test the disassembly torque of the booster to the fuze	Seneca Army Depot AMXSE-6803E
	0318	**WRENCH, FUZE -** used to loosen the MK 312 MOD O, 2 fuze while warhead section is in lower half of shipping container	Sierra Army Depot AMXSI-6901C
	0369	**MACHINE, BOOSTER REMOVAL -** used to debooster M51A5 fuzes that cannot be deboostered in APE 1118	Pueblo Depot Activity AMXPU-6712A Local Dwg OAC 109-114
	0372	**DRILL GUIDE AND PRIMER REMOVER -** used for removal and replacement of the M29A1 primer assembly for the M501 series fuze	Pueblo Army Depot AMXPU-6911A
	0373	**PRIMER INSERTER** - used for installing new M29A1 primer in M501 fuze	Pueblo Army Depot AMXPU-6911B

AMMUNITION ITEM AND COMPONENT	NON-STANDARD APE NO.	NOMENCLATURE - DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
FSC 1390 Fuzes & Primers Component - Fuzes -- Continued	0374	**PRIMER STAKING GUIDE** - used for staking new M29A1 primer assemblies in M501 fuze	Pueblo Army Depot AMXPU-6911C
	0406	**ADAPTER, TORQUE WRENCH** - used to torque the M500 series, M519, M524, M526, M572 fuze to their boosters	Red River Army Depot AMXRR-6701AJ Local Dwg 1020459
	0408	**SCALE, DIAL INDICATING, OVER-UNDER** - used to weigh M572 epoxy filled fuzes	Red River Army Depot AMXRR-6701AL
	0416	**TORQUING FIXTURE** - used with a standard torque wrench when necessary to torque fuze heads on mortar fuze bodies	Red River Army Depot AMXRR-6707E
	0485	**GAGE, FUZE** - used to gage the M557 fuze assembly	Seneca Army Dept AMXSE-6803B
	0505	**HOLDER, FUZE** - holds fuze while removing excess tetryl from the base of the fuze	Letterkenny Army Depot AMXLE-6907F
	0512	**BARRICADE, FUZE** - used for deboostering V.T. fuzes	Letterkenny Army Depot AMXLE-7008B
	0518	**TOOL, FUZE REMOVAL** - used to remove the M90A2 fuze from the rubber collet of the wrench head of APE 1153 vertical disassembly machine	Letterkenny Army Depot AMXLE-7108A
FSC 1390 Fuzes & Primers Component – Windshield	0183	**HOLDER, FUZE** - used to hold the M48, M51 series M557 fuzes while tightening loose windshields	Letterkenny Army Depot AMXLE-6910A
	0185	**HOLDER, FUZE** - used to hold the M48, M51 series M557 fuzes while staking the windshield to the head assembly	Letterkenny Army Depot AMXLE-6910C
	0401	**FUZE NEST** - nest for drilling the windshield of M51A5 fuze for conversion to M572 fuzes	Red River Army Depot AMXRR-6701AF Local Dwg 1050778
	0407	**EQUIPMENT, EPOXY DISPENSING** - used to epoxy fill the windshield of converted M572 fuzes	Red River Army Depot AMXRR-6701AK

ANMUNITION ITEM AND COMPONENT	NON-STANDARD APE NO.	NOMENCLATURE - DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
FSC 1390 Fuzes & Primers Component – Fuze-well & Liner	0322	**TOOL, HAND, FUZE SEAT LINER** - used to remove the shallow fuze seat liners from various projectiles	Sierra Army Depot AMXSI-6902D
	0323	**ADAPTER, PLUG & LINER REMOVAL -** used to remove nose plugs and fuze seat liners from projectiles by remove control	Sierra Army Depot AMXSI-6902E
FSC 1390 Fuzes & Primers Component - Body	0456	**FIXTURE, PAINT MASK REMOVAL -** used in removing painting masks from proximity fuzes on static fuze lines	Tooele Army Depot AMXTE-7401A
FSC 1390 Fuzes & Primers Component - Adapter Booster	0133	**TOOL, BOOSTER ADAPTER** - used to remove the booster adapter from artillery rounds with 2" threads	Letterkenny Army Depot AMXLE-6703A Local Dwg B-70261
FSC 1390 Fuzes & Primers Component – Boosters	0132	**TOOL, BOOSTER REMOVAL** - used to de-booster the M514, M517 VT fuzes by use of a hand wheel. Augments APE 1966	Letterkenny Army Depot AMXLE-6905E Local Dwg 70258 & 1 photo
	0142	**DEBOOSTERING DEVICE** - augments APE 1002M2 to perform a remote booster removal operation on bomb V.T. fuzes	Letterkenny Army Depot AMXLE-6902A Local Dwg A-70337
	0197	**WRENCH, BOOSTER ASSEMBLY** - used fOr assembling booster assembly of M90A1 fuze	Lexington-Blue Grass Depot Activity AMXLX-7303A
	0198	**THREAD CHASER** - used to chase thread for booster cavity on the M90A1 fuze	Lexington-Blue Grass Depot Activity AMXLX-7303B
	0316	**TOOL, BOOSTER REMOVAL** - used with a brace or ratchet for hand removal operation. Can be adapted for remote operation on M21A4 boosters	Seneca Army Depot AMXSE-6907A
	0369	**MACHINE, BOOSTER REMOVAL** - used to debooster M51A5 fuzes that cannot be deboostered in APE 118	Pueblo Depot Activity AMXPU-6712A Local Dwg OAC-109-114

AMMUNITION ITEM AND COMPONENT	NON-STANDARD APE NO.	NOMENCLATURE - DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
	0380	**DEBOOSTERING MACHINE, FUZE** - used on fuzes that are difficult to deboos-ter in APE 1118 (mortar fuzes 60MM & 81MM)	Red River Army Depot AMXRR-6701C Local Dwg 1050741
	0382	**WRENCH, DEBOOSTERING** - used for de-boostering M500 & M51A5 fuzes	Red River Army Depot AMXRR-6701E Local Dwg 1020428
	0399	**NEST, ARTILLERY FUZE -** nest used for holding fuzes while drilling stakes on M500 series fuze booster adapter	Red River Army Depot AMXRR-6701AB Local Dwg 1030518
	0403	**FUZE NEST** - used for staking M572 fuze and booster assembly	Red River Army Depot AMXRR-6701AG Local Dwg 1020511
	0505	**HOLDER, FUZE** - holds fuze while re-moving excess tetryl from the base of the fuze	Letterkenny Army Depot AMXLE-6907F
	0521	**EQUIPMENT, STAKING, BOOSTER CUP -** used for staking booster cup of M125A1 booster to the booster body	Savanna Depot Activity AMXSV-6708A
FSC 1390 Fuzes & Primers Component – Clos-ing Screw	0147	**FIXTURE, CLOSING SCREW REMOVAL -** used for removal of closing screw on P.D. M48, M51, M557 P.D. fuzes	Savanna Depot Activity AMXSV-6712A
	0184	**WRENCH, BOTTOM CLOSING SCREW** - used to assemble or disassemble the bot-tom closing screw from the fuze body on M48, M51, M557 fuzes	Letterkenny Army Depot AMXLE-6910B
	0212	**FIXTURE, CLOSING SCREW REMOVAL -** used to remove the closing screw from M48, M51, M551 fuzes	Red River Army Depot AMXRR-6701AC
	0261	**FIXTURE, CLOSING SCREW REMOVAL** - used for removal of closing screw from body of M48, M51, M557, M572 fuzes	Red River Army Depot AMXRR-6801D

AMMUNITION ITEM AND COMPONENT	NON-STANDARD APE NO.	NOMENCLATURE DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
	0277	**FIXTURE, HOLDING, FUZE** - used to hold fuze while drilling stakes on bottom closing screw of artillery fuzes	Red River Army Depot AMXRR-6806A
	0320	**AIR OPERATED DRILL PRES -** used for drilling stakes (booster to fuze) (closing screw) on artillery fuzes	Sierra Army Depot AMXSI-6902B
FSC 1390 Fuzes & Primers Component - Head Assembly	0186	**TOOL, HEAD ASSEMBLY** - used to remove/assemble fuze heads from flash tubes	Letterkenny Army Depot AMXLE-6910D
	0272	**WRENCH, TORQUE ADAPTER** - used to torque the fuze head assembly to the flash tube on M48, M51, M557, M572 fuzes	Red River Army Depot AMXRR-6805C
FSC 1390 Fuzes & Primers Component - Delay Plungers	0265	**DEVICE, TESTING, DELAY PLUNGER** - drop test device for the Ml delay plunger used in M48A3, M51 series, M557 series, M572 fuze	Red River Army Depot AMXRR-6802D
FSC 1390 Fuzes & Primers Component – Ogive	0205	**CLEANING FIXTURE, FUZE OGIVE -** used to clean the ogive of the M57 PD fuze	Lexington-Blue Grass Depot Activity AMXLX-7401A
	0304	**RESIZING DIE, OGIVE** - used for resizing the ogive on fuze P.I. M90A1	Red River Army Depot AMXRR-7401A
FSC 1390 Fuzes & Primers Component – Percussion Primers	0199	**TOOL, CLEANING** - used for cleaning bottom of M56 stab primer of M90 fuze	Lexington-Blue Grass Depot Activity AMXLX-7303C
	0200	**TOOL, FACING** - used on the M56 stab primer for the M90A1 fuze	Lexington-Blue Grass Depot Activity AMXLX-7303D
	0202	**TOOL, PRIMER REMOVAL** - used for removal of M56 stab primer from M90A1 fuze (shielded opn)	Lexington-Blue Grass Depot Activity AMXLX-7303F
FSC 1390 Fuzes & Primers Component - Fiber & Plastic Containers	0321	**EQUIPMENT, PUZE CONTAINER MODIFICATION -** used for modification of upper and lower styrofoam fuze packaging containers by putting vent holes in containers utilizing soldering irons and tips	Sierra Army Depot AMXSI-6902C

AMMUNITION ITEM AND COMPONENT	NON-STANDARD APE NO.	NOMENCLATURE - DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
FSC 1390 Fuzes & Primers Component - Fiber & Plastic Containers -- Continued	0404	PRESS, PUNCH - used for punching circulation holes in packing materials for M572 fuze	Red River Army Depot AMXRR-6701H Local Dwg 1050789
	0405	PUNCH & DIE SET - used for punching packing material for M572 fuze (hardwood punch)	Red River Army Depot AMXRR-6701A1 Local Dwg 1050790
FSC 1390 Fuzes & Primers Component - Metal & Wooden Containers	0191	HOLDING JIG, METAL CAN - used to hold M87, M10, M21 small arms packs and also standard contour fuze metal cans while removing tear strips	Letterkenny Army Depot AMXLE-7007C
	0220	TOOL, TEAR STRIP REMOVAL - used with any drill to engage and remove the tar strip from hermetically sealed metal cans (small arms cans, fuze cans, rocket ignites, etc)	Savanna Depot Activity AMXSV-7112A Local Sketch SK 160
FSC 1390 Fuzes & Primers Component – Metal & Plastic Containers	0484	STRAPPER & SEALER FOR 1-1/4″ STRAPS - used to strap pallet and unit loads of boxed ammunition and component	Seneca Army Depot AMXSE-6803A
FSC 1390 Fuzes & Primers Component - Metal Fuze Containers	0182	TEAR STRIP REMOVER - used to remove the metal tear strips on fuze containers	Letterkenny Army Depot AMXLE-6907D
	0191	HOLDING JIG, METAL CAN - used to hold M8, M10, M21 small arms packs and also standard contour fuze metal cans while removing tear strips	Letterkenny Army Depot AMXLE-7007C
	0220	TOOL, TEAR STRIP REMOVAL - used with any drill to engage and remove the tear strip from hermetically sealed metal cans (small arms cans, fuze cans, rocket igniters, etc)	Savanna Depot Activity AMXSV-7112A Local Sketch SK-160
FSC 1390 Fuzes & Primers Component - Retaining Clips	0145	TOOL, RETAINING RING REMOVAL - used to remove retaining rings from V.T. fuze boosters to remove pellet charges	Letterkenny Army Depot AMXLE-6905J

AMMUNITION ITEM AND COMPONENT	NON-STANDARD APE NO.	NOMENCLATURE-DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
FSC 1390 Fuzes & Primers Component – Dummy Nose Plug or Nose Plug	0323	**ADAPTER, PLUG & LINER REMOVAL** - used to remove nose plugs and fuze seat liners from projectiles by remote control	Sierra Army Depot AMXSI-6902E
FSC 1390 Fuzes & Primers Component – Booster Pelor Cup	0188	**TOOL, PELLET CHARGE REMOVAL** - used to remove the pellet charge from M513, M514 V.T. fuze by remote control	Letterkenny Army Depot AMXLE-7001B
	0521	**EQUIPMENT, STAKING BOOSTER CUP** - used for staking booster cup of M125A1 booster to the booster body	Savanna Depot Activity
FSC 1336-1338 Missile Ammunition Component - Fin & Fin Kits	0288	**TOOL, INSERTION & SEPARATION FIN BRACKET** - used for inserting and separating of the fin bracket dust cover (boot) on the chaparral missile guidance section	Red River Army Depot AMXRR-6811C
	0433	**CART, HANDLING, CHAPARRAL MISSILE FINS** - used to hold and transport chaparral missile fins and wings during painting operations	Red River Army Depot AMXRR-6804C Local Dwg 1050857
FSC 1336-1338 Missile Ammunition Component - Warhead	0239	**FIXTURE, WARHEAD** - used for bonding of the hawk warhead assures alignment of inserts and prevents movement during curing of adhesive	Red River Army Depot AMXRR-6708K
	0432	**CART, HANDLING, WARHEAD** - used to hold and transfer the chaparral missile warhead and target detection section during painting operations	Red River Army Depot AMXRR-6804B Local Dwg 1050856
	0557	**DEVICE, NIKE HERCULES WARHEAD HANDLING** - used to move the M17A1 warhead between bays in an operating building	Letterkenny Army Depot LEAD 0557
FSC 1336–1338 Missile Ammunition Component - Motor	0089	**DOLLY FOR HAWK MISSILE** - used to hold and transport the missile	Red River Army Depot RRAD Dwg 1050949
	0276	**FIXTURE, SCREW REMOVAL** - used for removing forward hanger from chaparral motor	Red River Army Depot AMXRR-6805J

AMMUNITION ITEM AND COMPONENT	NON-STANDARD APE NO.	NOMENCLATURE - DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
FSC 1336–1338 Missile Ammunition Component - Motor –- Continued	0278	**HOLDING DEVICE -** holds motor while performing continuity tests	Red River Army Depot AMXRR-6806B
	0289	**SHORTING BLOCK, MISSILE MOTOR** - used to short the firing squib and the motor body on the chaparral missile while body is being modified in a lathe	Red River Army Depot AMXRR-6902A
	0371	**LIFTING DEVICE, M42 CLUSTER MOTOR** - used to handle the Nike–Hercules M42 cluster motor in an unpacked configuration	Pueblo Depot Activity AMXPU-6901A
	0435	**CART, HANDLING, CHAPARRAL MOTOR** - used to hold and transport the chaparral missile motor section during painting operations	Red River Army Depot AMXRR-6804E Local Dwg 1050854
FSC 1336-1338 Missile Ammunition Component - Missile Containers	0461	**LIFTING BEAM, M30 MOTOR** - used for lifting the lids on the M30 (Hercules) rocket motor container	Sierra Army Depot AMXSI-6903A
	0240	**PRESS, PUNCH, HYDRAULIC, PORTABLE -** used for elongation of the stacking pad container bracket on the XM430 container (HAWK missile)	Red River Army Depot AMXRR-6709A
	0251	**DEHUMIDIFIER, MISSILE CONTAINER** - used for removing moisture when pressurizing a missile container	Red River Army Depot AMXRR-6711I
FSC 1336-1338 Missile Ammunition Component - S&A Device	0302	**OPERATIONAL SHIELD, TESTING** - used for electrical test of the M100 S&A device for the improved HAWK missile	Red River Army Depot AMXRR-7405A
FSC 1336-1338 Missile Ammunition Component - Guidance & Control	0434	**CART HANDLING, CHAPARRAL G&C** - used to hold and transport the Chaparral missile guidance and control section during painting operations	Red River Army Depot AMXRR-6804D Local 1050855
FSC 4925 Ammunition Peculiar Equipment Component - Cartridge Extension	0542	**EQUIPMENT DISASSEMBLY, STRIKER NUT & CENTER EXTENSION** - accessory to APE 1210 to remove frozen cartridge center extensions and frozen striker nuts	Caerwent Depot Activity AERUK-7710A

AMMUNITION ITEM AND COMPONENT	NON-STANDARD APE NO.	NOMENCLATURE-DESCRIPTION OR PURPOSE	DESIGN ACTIVITY IDENTIFICATION NO.
FSC 4925 Ammunition Peculiar Equipment Component - Fiber & Plastic Containers	0149	**LID PULLER, FIBER CONTAINERS, ARTILLERY AMMUNITION -** modification kit to APE 1003 to pull a single lid	Savanna Depot Activity AMXSV-6705A
FSC 4925 Ammunition Peculiar Equipment Component - Bulk Propellant Powder	0194	**FIXTURE, PROPELLANT SETTLING -** attachment to APE 2020 to settle propellant	Lexington-Blue Grass Depot Activity AMXLX-7107C
All FSCS Ammunition General Workshop Equipment	0627	**TABLE FOUR FOOT WORKSHOP -** for use in surveillance workshop during inspection operations	U.S. Army Defense Ammunition Center and School NSA 0627
	0628	**TABLE FOUR FOOT WORKSHOP -** for use in surveillance workshop during inspection operations	U.S. Army Defense Ammunition Center and School NSA 0627

APPENDIX A

DELETED ITEMS

The following Ammunition Peculiar Equipment are deleted items. They are not be used in ammunition operations; they are superseded, obsolete or are no longer required.

APE Number	Items
APE 1005	Primer Press Machine
APE 1006	Debagging Machine
APE 1007	Heat Exchanger
APE 1008	Ammunition Projectile Cart
APE 1008A	Ammunition Complete Round Cart
APE 1008B	Ammunition Small Items Cart
APE 1009M4	Furnace, Deactivation
APE 1012	Flashing Furnace
APE 1013	Explosive Washout Plant
APE 1014	Pickling Unit, 6-Tank
APE 1015	Picking Unit, 9-Tank
APE 1016	Deactivation Furnace Facility
APE 1017	Washout Facility
APE 1018	Bomb Head Break Off Machine
APE 1019	Propellant Beaker
APE 1020	Bomb Washout Fixture
APE 1023	Paint Spray Booth
APE 1026	Fuze Removing Machine, 37MM M56 PD Fuze
APE 1027	Priming and Depriming Machine, Fulcrum Lever Type
APE 1029	Machine, Abrasive Blast Cleaning
APE 1030M1	Machine Powered Strapping
APE 1031	Warm Air Makeup System
APE 1033	Marking Machine
APE 1034	Box Repair Machine
APE 1035	Machine, Abrasive Blast Cleaning
APE 1036	Booth, Paint Spray BSR
APE 1037	System, Warm Air Make-up BSR
APE 1038	Doors, Armor Plate, BSR
APE 1039	Hoist, Electric BSR
APE 1040	Storage Hopper
APE 1041	Pitch in Protective Barricade
APE 1043	Drill, Pneumatic, Deep Cavity

APE Number	Items
APE 1046	Small Arms Brass Storage Tank
APE 1047	Mutilation Machine
APE 1048	Abrasive Blast Machine
APE 1049	Vacuum Collection System
APE 1050	Machine, Rotary Heating
APE 1051	Centrifugal Pump for Washout System
APE 1052	Kit, Air Test
APE 1053	Crimping Machine, M1 and M2 Detonators
APE 1054	Vacuum Collection System
APE 1057	Retainer Ring Wrench, M15 Land Mines
APE 1058	Monorail Tow Conveyor
APE 1059	Disassembly Machine, M52A2 Fuze
APE 1060	Barricade Doors, Sliding Type
APE 1062	Defuzing and Torquing Machine, M26 Hand Grenade
APE 1063	Ammunition Surveillance Workshop
APE 1064	Breakdown Machine, 20MM
APE 1067	Normal Maintenance Building
APE 1068	Preservation Building
APE 1071	Equipment Layout, RRA Building No. 10
APE 1073	Device, Propellant Collection
APE 1074	Alinement Gage for Vertical Pull Apart Machine
APE 1075	Monorail Conveyor System
APE 1076	Sump Pump
APE 1077	Care and Preservation Building Doors
APE 1078	Flat Belt Powered Conveyor, 18-Inch
APE 1079	Loading System, Trolley Conveyor
APE 1080	Unloading System, Trolley Conveyor
APE 1081	Trolley Conveyor System Guides
APE 1082	Melt Unit Grid
APE 1083	Signal Renovation Equipment, M127
APE 1084	Slide Valve, Non Sparking
APE 1085	Small Arms Demilitarization Plant
APE 1087	Fuze Assembly Machine, M52A2 Fuze
APE 1088	Machine, Hole Punching
APE 1089	Electronic Removal of Explosives
APE 1090	Surveillance Function Test Equipment
APE 1091	Concentricity Plug Gage
APE 1092M1	System, Paint Spray, Stationary
APE 1093M1	Machine, Paint Spray, Portable
APE 1094	Debelting Machine

APE Number	Items
APE 1095	Conveyor Sections, 18-Inch
APE 1096	Inert Brass Cooler
APE 1097	Primer Drill Out Machine
APE 1098	Declipper, Hand, 5-Round
APE 1100	Monorail System
APE 1101	Piping, Vacuum Collection System
APE 1102	Primer Punch Out Machine
APE 1103	Cyclone Type Primary Separator
APE 1104	Mast Type Tow Cart
APE 1107	Press, Caulking, Hydraulic
APE 1108	Staked Rotor Cover Remover
APE 1109	Mobile Normal Maintenance Plant
APE 1110	Lightweight Disassembly Barricade
APE 1111	Crimping Machine, 8 Stab
APE 1112	Air Hoist, 6,000 Pound Capacity
APE 1113	Vapor Collector
APE 1115	Fuze Propositioning Machine
APE 1116	TNT Probe Machine
APE 1117	Small Arms Conveyor System
APE 1119	Ball Transfer Table
APE 1120	Heat Sealer, Portable
APE 1120-1	Heat Sealer, Barrier Materials
APE 1121, 1121M2	Drill, Ream and Tap Machine
APE 1125	Conveyor, Abrasive Blast Machine
APE 1122	Set, Mortar Fuze Renovation Tool
APE 1126	Impact Wrench
APE 1127	Maintenance Stand, Special Weapons, H-4204
APE 1129	Propellant Separator, Small Arms Brass
APE 1130	Lid Removal Machine, M142 Atomic Explosive Simulator
APE 1131	Plug Removal Device, 105MM: M341
APE 1132	Lid Removal Machine
APE 1133	Monorail Conveyor System
APE 1134	Holding Device, Large Items
APE 1135	Safety Device, Profile & Alignment Gage
APE 1136	Propellant Weighing Machine, Automatic
APE 1138	Prime and Deprime Machine, Screw Type Primers
APE 1139	Electronic Scale
APE 1141	Warhead Handling Sling, Honest John
APE 1142	Link and Delink Machine, Caliber .50, M15A1 and M15E1 Link

APE Number	Items
APE 1143	Tester, Pressurized Container Leakage
APE 1144	Taping Machine, Large Containers
APE 1145	Device, Fuze Inerting
APE 1146	Machine Obliterating
APE 1147	Machine, Fuze Marking
APE 1149	Pettman Cement Applicator
APE 1150	Surveillance Function Test Facilities
APE 1152	Fuze Disassembly Machine, M524 Fuze
APE 1154	Profile and Alinement Gage
APE 1155	Painting Equipment
APE 1156	Surveillance Workshop, Special Weapons
APE 1157	Tester, Primer Sensitivity
APE 1158	Surveillance Workshop, Special Ammunition
APE 1160	Defuzing Machine, Hand Grenade
APE 1161	Bomb Base Plate Removal Machine
APE 1162	Machine. 90MM/105MM Cartridge Case Trimming
APE 1163	Fuzed Projectile Hanger
APE 1165	Primer Removal Machine
APE 1166	Booster Cup Removal Machine
APE 1167	Torque Adapter for M500 Series Fuzes
APE 1168	Fuze Removal Wrench
APE 1169	Disposal Equipment, 4.2-Inch CG Filled Cartridges
APE 1170	Mouth Dedenting and Forging Machine
APE 1172	Scarfing Equipment
APE 1173	Ignition Removal Machine, M2 Series AP Mine
APE 1174	Gage, Plug and Ring
APE 1175	81MM Mortar Marking Device
APE 1179	Wrench, Booster Cup
APE 1180	Mobile Ammunition Maintenance Plant
APE 1181	Support Trailer (MAMP)
APE 1182	Maintenance Trailer (MAMP)
APE 1183	Maintenance Trailer (MAMP)
APE 1184	Cleaning Trailer (MAMP)
APE 1185	Painting Trailer (MAMP)
APE 1186	Disassembly Trailer (MAMP)
APE 1187	Reassembly Trailer (MAMP)
APE 1188	Service Trailer (MAMP)
APE 1190	Overhead Monorail Conveyor
APE 1191	Sealing Machine, Electrical, Jaw Type
APE 1192	Sealing Machine, Heat, Continuous Sealing Type
APE 1193	Rotary Heating Machine, Oil Fired
APE 1194	Rotary Heating Machine, Gas Fired

APE Number	Items
APE 1196	Shield, Portable, Small Items
APE 1197	Tongs for Removal of M524 Fuze from Fiber Container
APE 1198	Can Sealer
APE 1199	Fluoroscope, Gage 90MM: M371
APE 1201	Device, Suspension Lug Testing
APE 1203	Renovation System, 40MM
APE 1207	Fixture, Primer Removal - Replaced by APE 1148
APE 1211	Ignition Tester, M201A1 Grenade Fuze
APE 1216	Equipment for PD M78 Fuze
APE 1218	Disassembly Machine, Pull Type
APE 1219	Deactivation Furnace
APE 1225	Ammunition Small Items Dud Retriever
APE 1226	Fixture, Drill Windshield, M500 Series Fuze
APE 1228	Removal Fixture, Closing Screw & Booster
APE 1230	Assembly Machine, M456, Ammunition
APE 1232	Operational Shield for Hazardous Ammunition Items
APE 1233	Disassembly Machine, Pull Apart, Horizontal
APE 1234	Replacement of 40MM Tracer
APE 1235	Demilitarization plant, 115MM: M55
APE 1237	Machine, Primer Inserting
APE 1238	Adapter, Fuze, Hand Grenade
APE 1239	Disassembly Machine for M21A4 Booster Components
APE 1241	Device, Leak Detector
APE 1242	Declipping Fixture, Remove Ogive From M90A1 Fuze
APE 1244	Removal Fixture, Primer, M90A1 Fuzes
APE 1245	Continuity Test Shield
APE 1246	Wrench. Fuze Assembly
APE 1248	Renovation System, 105MM: M393A1, HEP-T
APE 1249	Shallow Fuzewell Liner Removal Tool
APE 1252	Tester, Vacuum Test
APE 1253	Shield, Operational
APE 1255	Leak Tester, M513 Plastic Container
APE 1256	Abrasive Cleaning Machine, Skew Roll Type
APE 1257	Primer Replacer Machine, 90MM: M371 Series
APE 1258	Disassembly Machine, Fuze Booster Cover
APE 1260	Eye Ring Crimping Machine
APE 1261	Primer Inserter, Screw Type, Hand Operated

APE Number	Items
APE 1262	Prime and Deprime Machine, 90MM: M371
APE 1264	Removal Fixture, Closing Screw
APE 1265	Punch Press, Disassembly Booster Cup for M174 Bomb Fuze
APE 1266	Modification of BLU32/B Fire Bomb System
APE 1267	Primer Height Gaging System
APE 1268	Automatic Taping Machine, Small Items
APE 1269	Fuze Removal Machine, Chemical Grenades
APE 1270	Automatic Lid Removal Machine
APE 1271	Marking Machine, Automatic
APE 1273	Punch Press Machine
APE 1274	Heat Induction Unit
APE 1275	Punch Press Machine, Five Ton
APE 1276	Air Pollution Control System
APE 1279	Renovation System, 105MM Ammunition
APE 1281	Rupturing Machine, Plastic Container 120MM and 155MM
APE 1282	Inflatable Holding Fixture for Ammunition Items
APE 1284	Horizontal Pull Apart Machine
APE 1285	Multispur Machine Bit Kit
APE 1287	Downloading Cabinet, CBU 22
APE 1289	Crimping Machine, Ogive
APE 1290	Thread Cleaner, Fuzewell Threads
APE 1291	Hydraulic Crimper, 60 Ton, 40MM
APE 1292	Rocket Continuity Test Holder Fixture
APE 1293	Inert Filler Removal Fixture, 750 Pound Bomb
APE 1296	Holding Fixture, Insert Fuzes Into Projectiles
APE 1297	Box Marking Equipment
APE 1298	Marking Equipment for Shells, Mortars, and Rockets
APE 1328	Trailer, Explosive Disposal
APE 1331	Test Kit for Recovered TNT
APE 1333	Fuzewell Liner Extractor Tool
APE 1500	Liner Removal Fixture
APE 1501	Set, XM390E1 Projectile Modification Tool
APE 1502	Assembly and Cocking Fixture, M605 Mine Fuze
APE 1503	Powered Aluminum Liner Removal Fixture
APE 1506	Machine, Abrasive Blast Cleaning
APE 1515	Tool Set, Modification, Fuze M500 to M520A1
APE 1900	Surveillance Function Test Equipment
APE 1904	Chamber, Temperature Test
APE 1909	Fixture. Holding and Fuze Breakoff
APE 1910	Stop Watch, 1/10 Second

APE Number	Items
APE 1911	Stop Watch, 1/100 Second
APE 1912	Thermometer, Cup Cased
APE 1913	Meter, Sound Level
APE 1914	Anemometer
APE 1915	Wind Speed Indicator
APE 1917	Gage, Push Pull
APE 1919	Tool, Closing Plug Removal
APE 1924	Tension Testing Gage for Steel Strapping
APE 1927	Holding Device for Function Testing M16 Mines
APE 1928	Equipment, Mortar Component Test
APE 1929	Pendulum Tester, Rocket Recoil
APE 1930	Microfilm Reader Printer
APE 1932	Tester, Tracer
APE 1933	Device, Altitude and Drift
APE 1935	Tester. Continuity and Function FMU 7A/B
APE 1936	Gun Mount for Function Testing Signals and Simulators
APE 1941	Primer Drop Tester
APE 1942	Smoke Shell and Grenade Signal Tester
APE 1943	Point Detonating Fuze Tester
APE 1944	Equipment for Function Testing Mechanical Time Fuzes
APE 1945	Equipment for Function Testing Base Detonating Fuzes
APE 1946	Equipment for Function Testing Point Initiating Base Detonating Fuzes
APE 1947	Air Leakage Tester, Barrier Bag
APE 1948	Continuity Tester, 115MM Rocket
APE 1950	Electric Preconditioning Oven
APE 1952	Test Equipment, Lightening Protection System
APE 1959	Unit Agent Sampling for Chemical Munitions
APE 1961	Fixture, Subcaliber Torque Test
APE 1966M1	Closing Door, Suppressive Shield Hand Grenade Barricade
APE 2002	Small Arms Demilitarization Operation, Typical Layout
APE 2003	Small Arms Demilitarization Operation, Letterkenny Army Depot
APE 2004	Paint Agitator
APE 2005	Link Unscrambler
APE 2007	Speed Changer Kit for Caliber .50 Delinking Machine
APE 2010	Delinker, Debelter, Caliber .30, Modification M1919A4 Machine Gun
APE 2018	Liner Hoist
APE 2019	Liner Cutting Saw
APE 2021	Hopper, Feeder (Single)

APE Number	Items
APE 2022	Segregator, Metal Component Caliber .50
APE 2023	Vacuum Draw Off Chute
APE 2025	Debander, 155MM, 8-Inch, and 240MM
APE 2028	Enclosure, Operational
APE 2029	Tray Adapter for Feeding Blank Ammunition
APE 2033	Tooling and Handling Equipment for Turning Band, 155MM
APE 2034	Cartridge Aliner, Caliber .30
APE 2035	Clip Gaging Machine, 8-Round, Caliber .30
APE 2036	Automatic Labeling Machine
APE 2037	Cartridge Aliner, Caliber .50
APE 2039	Torque Wrench
APE 2047	Scale, Over-Under, Bench Style
APE 2048	Flashing Furnace, Metal Parts
APE 2049	Strapping Machine, Powered (Gerrard Mfg)
APE 2051	Ball Transfer Table
APE 2054	Machine, Caliber .50 Five Station Linking
APE 2056	Obliterating Machine, Powered
APE 2059	Machine, Caliber .30/7.62MM Declipping
APE 2060	Machine, 20MM Link-Delink
APE 2063	Mustard Gas Furnace
APE 2064	Clip Loader, 8-Round, 7.62MM
APE 2065	Strapping Machine, Power Driven
APE 2066	Scale, Shadowgraph, 0 to 2.5 Pound
APE 2067	Operational Shield, Box Type
APE 2069	Link-Delink Machine, 5.56MM
APE 2070	Link-Delink Machine, 7.62MM, Pull Type
APE 2071	Machine, Clip-Loading, 5.56MM 10 Round
APE 2072	Carton Pack, 10-Round, 5.56MM
APE 2073	Rotate Fiber Container Obliterating Device
APE 2075M1	Torque Fixture, 2.75 Inch Rocket Warhead
APE 2076	Assembly Tools for M48A3 Fuze
APE 2078	Delink and Carton Pack Caliber .30 Links
APE 2079	Lesco Small Arms Demilitarization Machine
APE 2080	Segregator and Regimentor for M16A2 Links
APE 2082	Delinker with Link Packager, Caliber .30
APE 2084	Powered Conveyor
APE 2085	Clip Loading Machine, Caliber .30, 5-Round
APE 2087	Tester, Projectile Hardness
APE 2089	Scale, 75MM Thru 120MM Zone Weighing

APE Number	Items
APE 2090	Scale, 155MM Thru 240MM Zone Weighing
APE 2092	Ultrasonic Test Set, 81MM Mortar Cartridges
APE 2093	Universal Cartridge Test Unit
APE 2095	Scale Platform Support
APE 2096	Clip Loading Machine, 7.62MM, 5-Round
APE 2098	Ammunition Weighing Scale, 75MM thru 120MM Projectiles
APE 2100	Stuck Supplementary Charge Removal Fixture
APE 2108	Vacuum Cleaner, Portable
APE 2109	Fuzewell Liner Expander
APE 2110	Linker-Delinker, 5.56MM, Hand Operated
APE 2111	Tank, Steel Pickling
APE 2112	Debander, Projectile
APE 2113	Conveyor with Magnetic Separator
APE 2114	Linking Machine, Caliber .30
APE 2115	Drying Oven
APE 2116	Portable Multi-Purpose Barricade
APE 2117	Horizontal Disassembly Machine, Screw Type, Three Spindle
APE 2118	Hot Dip Tank, Electrically Heated
APE 2119	Hot Dip Tank, Steam Jacket Bottom
APE 2120	Electrical Test Rack for Conventional Ammunition
APE 2121	Oscillograph Amplifier
APE 2122	Bristol/Dynamaster Recorder, M161 Volt Meter
APE 2123	Microphone Tester
APE 2124	Machine, Automatic Strapping
APE 2125	Anununition Thread Chaser, Hand Adjustable
APE 2127	Pallet Tipper
APE 2129	Automated Taping Machine
APE 2131	Small Arms Aliner
APE 2133	Crimping Machine for Percussion Primer: M28A2
APE 2135	Link-Delink Machine, 7.62MM (DM-6 German Link)
APE 2137	Lift, Projectile (Conveyor-Monorail)
APE 2138	Power Driven Wrench, Assemble Warhead to Fuze, 3.5-Inch Rocket
APE 2141	Anti-Static Coating System
APE 2142	Barricade Drop In
APE 2144	Engineered System for Linking 7.62MM Ammunition
APE 2149	Tester, Hardness, Artillery ProjectileAPE 2149 Machine, Epoxy Application
APE 2152	Eye Ring Crimper
APE 2155	Machine, Centering Band Turning

APE Number	Items
APE 2164	Fixture, Cartridge Case Neck Resize
APE 2165	Projectile Fuzewell Rethread Fixturing
APE 2167	Fixture, 105MM, M84 Projectile ID Resize
APE 2170	Cartridge Case Cutoff Machine
APE 2177	Machine, Burster Well Cleaning
APE 2182	Retainer Petals Expending Ring
APE 2183	Fin Retaining Tube
APE 2188	Sealer, Portable, Continuous Heat
APE 2189	Holder, Polystyrene Box Assembly
APE 2190	Tool, Fin Spring Replacement
APE 2191	Hand Grenade Pitch In Barricade
APE 2193	Dispenser, RTV
APE 2194	Shaker, Box Packing
APE 2203	Machine, Primer-Deprime, Screw Type Primer
APE 2236	Machine, Outer Container Removal
APE 2237	Device, Remove-Install Bushing
APE 2238	Device, Remove-Install Delay Assembly
APE 2239	Tooling, Install Delay Assembly
APE 2040	Press, Propelling Charge Housing Installation
APE 2241	Device, Mine Container Opening
APE 2243	Device, Remote Control Detonator Removal
APE 3000	Steel Pickling Tank
APE 3001	Linking Machine, Caliber .50, Five Station Feed
APE 3003	Linking Machine, Caliber .30
APE 3004	Fluoroscope, Automatic Loading
APE 3005	Abrasive Blast Cleaning Machine
APE 3006	Debanding Machine, 37MM through 105MM Projectiles
APE 3008	Fuze Assembly and Tensioning Machine
APE 3009	Depriming Machine, Screw Type
APE 3010	Booster Breakdown Machine
APE 3011	Fuze and Booster Disassembly Machine
APE 3012	Fuze Removal Machine for 20 Pound Fragmentation Bomb
APE 3013	Induction Heating Units
APE 3014	Primer Inserting Fixtur
APE 3015	Clip Loading Machine, Caliber .30, 8-Round
APE 3016	Dent Remover Press
APE 3017	Powder Weighing Machine, Duplex, Automatic
APE 3018	Clip Loader Machine, Caliber .30, 5-Round
APE 3019	Primer Inserting and Marking Machine
APE 3020	Horizontal Pull Apart Machine, 37MM through 105MM

APE Number	Items
APE 3021	Polishing and Buffing Machine, Automatic
APE 3022	Machine, Pull Test
APE 3023	Powered Belt Type Conveyor
APE 3024	Powered Monorail Conveyor
APE 3025	Universal Taping Machine, Single and Double Roll
APE 3026	TNT Flaking Machine
APE 3027	Vibrox Packer, BF Gump Company
APE 3028	Fuze Cutting Machine, 57MM
APE 3029	Powered Declipping Machine, 5 and 8– Round
APE 3030	Portable Powered Conveyor
APE 3031	Conveyor with Magnetic Separator
APE 3032	Powered Shaker
APE 3033	Multi Wash Dust Collector
APE 3034	Lead Recovery Furnace
APE 3035	Delinking and Segregating Machine, Caliber .30 and Caliber .50
APE 3036	Banding Machine, 90MM and 105MM Projectiles
APE 3037	Hydraulic Broaching Machine, 75MM Projectile
APE 3038	Press for Inserting Gas Seal, Fuze: M62A1
APE 3039	Heat Sealing Equipment
APE 3040	Pneumatic Staking Machine with Compression Riverter for Copper Slugging
APE 3045	Deep Cavity Drill, Vertical
APE 3046	Cartridge Cut–Off Machine, 37MM through 8–Inch
APE 3047	Powered Resizing Press
APE 3048	Air Hoists
APE 3049	Metal Bucket Conveyor, Piano Hinge Type
APE 3050	Bucket Conveyor, Tunnel Type
APE 3052	Paint Spray Booth, Dry Type
APE 3053	Debanding Machine, 8–Inch and 240MM Projectiles
APE 3054	Power Measure, Lyman No. 55
APE 3055	Linking Machine, Hand Operated, Caliber .30
APE 3056	Linking Machine, Hand Operated, Caliber .50
APE 3057	Automatic Can Opener, Electric Operated
APE 3058	Sump Pump, German Rupp, Model 6262, Size 2-1/2
APE 3059	Booster Stake Removing Machine
APE 3060	Chemical Cleaning System
APE 3061	Paint Spray Booth, Wet Type
APE 3062	Sand Blasting Machine
APE 3064	Salt Spray Cabinet
APE 3065	Carton Packing Machine, Caliber .50, 10-Round
APE 3066	Denver Lathe
APE 3067	Carton Packing Machine, Caliber .50, 10–Round

APE Number	Items
APE 3021	Polishing and Buffing Machine, Automatic
APE 3022	Machine, Pull Test
APE 3023	Powered Belt Type Conveyor
APE 3024	Powered Monorail Conveyor
APE 3025	Universal Taping Machine, Single and Double Roll
APE 3026	TNT Flaking Machine
APE 3027	Vibrox Packer, BF Gump Company
APE 3028	Fuze Cutting Machine, 57MM
APE 3029	Powered Declipping Machine, 5 and 8– Round
APE 3030	Portable Powered Conveyor
APE 3031	Conveyor with Magnetic Separator
APE 3032	Powered Shaker
APE 3033	Multi Wash Dust Collector
APE 3034	Lead Recovery Furnace
APE 3035	Delinking and Segregating Machine, Caliber .30 and Caliber .50
APE 3036	Banding Machine, 90MM and 105MM Projectiles
APE 3037	Hydraulic Broaching Machine, 75MM Projectile
APE 3038	Press for Inserting Gas Seal, Fuze: M62A1
APE 3039	Heat Sealing Equipment
APE 3040	Pneumatic Staking Machine with Compression Riverter for Copper Slugging
APE 3045	Deep Cavity Drill, Vertical
APE 3046	Cartridge Cut–Off Machine, 37MM through 8–Inch
APE 3047	Powered Resizing Press
APE 3048	Air Hoists
APE 3049	Metal Bucket Conveyor, Piano Hinge Type
APE 3050	Bucket Conveyor, Tunnel Type
APE 3052	Paint Spray Booth, Dry Type
APE 3053	Debanding Machine, 8–Inch and 240MM Projectiles
APE 3054	Power Measure, Lyman No. 55
APE 3055	Linking Machine, Hand Operated, Caliber .30
APE 3056	Linking Machine, Hand Operated, Caliber .50
APE 3057	Automatic Can Opener, Electric Operated
APE 3058	Sump Pump, German Rupp, Model 6262, Size 2-1/2
APE 3059	Booster Stake Removing Machine
APE 3060	Chemical Cleaning System
APE 3061	Paint Spray Booth, Wet Type
APE 3062	Sand Blasting Machine
APE 3064	Salt Spray Cabinet
APE 3065	Carton Packing Machine, Caliber .50, 10–Round
APE 3066	Denver Lathe
APE 3067	Carton Packing Machine, Caliber .50, 10–Round

APE Number	Items
APE 7012	Machine, Horizontal Pull-Apart
APE 7013	Machine, 2-Spindle Defuzing
APE 7016	Machine, 3-Inch/50 Cartridge Reassembly
APE 7018	Machine, 5-Inch Propelling Charge Case Resizing
APE 7022	Furnace, Deactivation, Small
APE 7029	Machine, Rotating Grit Blast
APE 7030	Machine, Abrasive Blast Cleaning
APE 7032	Machine, Grit Blast
APE 7034	Machine, Disassembly
APE 7035	Machine, Caliber .50 Linking
APE 7036	Booth, Paint Spray
APE 7037	Booth, Paint Spray
APE 7038	Booth, Paint Spray
APE 7039	Booth, Paint Spray
APE 7041	Machine, Hydraulic Staking 0-6 Ton Bench Type
APE 7046	Machine, Medium Caliber, Navy, Defuze/Deplug
APE 7048	Press, Gas Check Seal, Medium Caliber Navy Projectile
APE 7055	Conveyor, Powered Belt
APE 7059	Conveyor, Monorail
APE 7060	Machine, Gas Check Gasket Removal
APE 7061	Machine, Gas Check Seal Press
APE 7075	Machine, Washout and Defuze 16-Inch/50

APPENDIX B

OPERATIONAL INDEX

This appendix contains a cross reference between ammunition items and the APE items needed for function testing, inspecting, maintenance, renovation and demilitarization of the ammunition item.

Section I. SURVEILLANCE FUNCTION TESTS

Items Tested	Equipment Used For Test	
	APE No.	Nomenclature
AMMUNITION FUNCTION TESTING	1937/1905	Shelter, Personnel Protection
	1908	Measuring Device Altitude and Drift
	1983	Range and Elevation Measuring Equipment
BOMB, FIRE FMU 7A/B, FMU 7B/B, AND 7C/B: Fuze Assembly, Initiator Assembly, and Cable Assembly	1935	Test Equipment Continuity and function FMU 7A/B Fire Bomb
CAP, BLASTING ELECTRIC:	1901	Tank, Immersion
	1903	Table, Testing, Function
	1903E007	KIT, Electric Blasting Cap Tester
	1916M1	Oven Preconditioning
	1980	Universal Resistance Test Instrument
	1984	Instrument, Electric Firing
CAP, BLASTING NONELECTRIC: M7 Special: Type 1 (J-1) (PETN or RDX) No. 6 and 8, Instantaneous Tetryl, Type A	1903	Table, Testing
	1903E005	KIT Function Test Nonelectric Blasting Caps
	1916M	Oven, Preconditioning
CARTRIDGE, PHOTOFLASH:	1902M2	Device Holding, Function Test
M112 Series (1, 2, and 4 Second Delay)	1908	Measuring Device, Altitude and Drift
Practice M121 and M124	1921M2	Device, Photoflash, Cartridge Test
M112, M112A1, M121 Ctgs	1921E001	KIT, Testing
CARTRIDGE 40MM:	1902M2	Device Holding, Function Test

Items Tested	Equipment Used For Test	
	APE No.	Nomenclature
CARTRIDGE 40MM:	1902M2	Device Holding, Function Test
Riot Control, CS, M674 Red Smoke, RS, M675 Tactical, CS, XM651E1	1902E004	KIT, Mount M79 Grenade Launcher
Launcher, M176 Grenade	1915M1	Launcher, Test Equipment, M176 and M226 Grenade
	1963	Unit, Electronic Control, M176 and M226 Grenade
DETONATOR FRICTION: 8 Second Delay, M2 (A1), and 15 Second Delay, M1 (A1)	1901	Tank, Immersion
	1903	Table Testing
	1916M1	Oven, Preconditioning
DETONATOR PERCUSSION: 15 Second Delay, M1A2 (M1E1) and 8 Second Delay, M2A1 (M2E1)	1901	Tank, Immersion
	1903	Table, Testing
DETONATION SIMULATOR EXPLOSIVE M80:	1903	Table, Testing
FIRING DEVICE DEMOLITION: Delay Type, M1 (All Delays)	1916M1	Oven, Preconditioning
	1949	Device, Automatic Timing
FIRING DEVICE DEMOLITION: Pressure Type, M1 and M1A1	1903	Table, Testing
	1907	Device, Pressure Testing
	1907E005	KIT, Firing Device, Demolition, Pressure type, M1
FIRING DEVICE DEMOLITION: Pull Type, M1, and Pull–Release Type, M3	1903	Table, Testing
	1907	Device, Pressure Testing
	1907E008	KIT, Function Test Firing Device, Pull-Release Type, M3
FIRING DEVICE DEMOLITION: Release Type, M1, and Pressure Release Type, M5	1903	Table, Testing
	1907	Device, Pressure Testing
	1907E003	KIT, Firing Device, Demolition, Pressure Release Type, M5

Items Tested	Equipment Used For Test	
	APE No.	Nomenclature
	1907E004	KIT, Firing Device, Demolition Release Type, M1
FLARE SURFACE: Trip, M49 and M49A1	1901	Tank, Immersion
	1903	Table, Testing
	1093E001	KIT, Function Test M49 and M49A1 Trip Flares
	1903E003	KIT, Remove Cap from M49 and M49A1 Trip Flares
FLARE SURFACE: Trip, Parachute, M48	1901	Tank, Inunersion
	1903	Table, Testing
	1907	Device, Pressure Testing
	1908	Measuring Device, Altitude and Drift
FUSEE, WARNING RAILROAD: Red, 20 Minute, M72	1901	Tank, Inmmersion
	1903	Table, Testing
	1916M1	Oven, Preconditioning
FUZE, 30MM CARTRIDGE M789	2258	Table Testing
FUZE, HAND GRENADE: Practice, M10 Series and M205 Series, M213 and M215	1901	Tank, Immersion
	1903	Table, Testing
	1903E002	KIT, Function Test M6, M10, M204, M205, M206, and M213 Hand Grenade Fuzes
FUZE, HAND GRENADE: M204, M205, M206, M213, M215	1955	Grenade Fuze Tester
FUZE, HAND GRENADE	1906	Tester, Fuze Igniting
FUZE, MINE: Combination, M6A1	1901	Tank, Immersion
	1903	Table, Testing
	1907	Device, Pressure Testing
	1907E002	KIT, Function Test M6A1 Fuze, With Cocking Device

Items Tested	Equipment Used For Test	
	APE No.	Nomenclature
GRENADE, HAND, FRAGMENTATION: With Fuze, Delay	1901	Tank, Immersion
	1916M1	Oven Preconditioning
	1920	Shield, Operational
	1922M1	Launcher, Pneumatic Grenade
	1922E001	KIT, MK23 Grenade
	1922E002	KIT, M26, M57, and M61 Grenade
	1922E005	KIT, M33, M33A1, M59, M67 & M68 Grenade
	1922E006	KIT, Static Test M26A2, M33A1, M57, M59 & M68 Grenades
	1922E008	KIT, Function Test MK3A2 Grenade
	1976	Pneumatic Actuation System
GRENADE, HAND, RIOT: M6 Series, M7 Series, M25 Series	1922M1	Launcher, Pneumatic Grenade
	1922E007	KIT, Function Test M25 Grenade
	1922E011	KIT, Function Test M6 & M7 Series Grenade
	1976	Pneumatic Actuation System
GRENADE, HAND, SMOKE M18; HC, AN-M8 WP; M15 AND M34	1922M1	Launcher, Pneumatic Grenade
	1922E010	KIT, Function Test M34 Grenade
	1922E009	KIT, Function Test M47 & M48 Grenade
	1922E011	KIT, Function Test M6, M7, M8, M14, M15 & M18 Grenade
	1976	Pneumatic Actuation System
GRENADE, HAND ILLUMINATING: MK1, with Fuze	1901	Tank, Immersion
	1903	Table, Testing
	1903E004	KIT, Function Test MK1 Illuminating Grenade
	1916M1	Oven, Preconditioning
GRENADE, HAND, RIOT: Pocket, CS XM58	1922M1	Launcher, Pneumatic Grenade

Items Tested	Equipment Used For Test	
	APE No.	Nomenclature
GRENADE RIFLE: Smoke, M22 and M22A2 (Violet, Green, Red and Yellow)	1902M1/ 1902M2	Device, Holding, Function Test
	1902E001	KIT, Mount M1 or M14 Rifle
GRENADE RIFLE: Smoke, Colored Streamer, M23 and M23A1 (Violet, Green, Red, and Yellow)	1902M2	Holding Device
	1902E001	KIT, Mount M1 or M14 Rifle
IGNITER BLASTING FUSE: Weatherproof, M2	1903	Table, Testing
IGNITER TIME BLASTING FUSE: M1, Friction	1903	Table, Testing
IGNITER TIME BLASTING FUSE: Weatherproof, M60	1901	Tank, Immersion
	1903	Table, Testing
IGNITION ASSEMBLY: Primer and Ignition Cartridge; Mortar, 60MM and 81MM	1928	Test Equipment, Mortar Component
	1928E002	KIT, Ignition Assembly Firing Stand
MINE ANTIPERSONNEL: M2 Series, with Fuze, Mine, Combination M6A1	1901	Tank, Immersion
	1903	Table, Testing
	1907	Device, Pressure Testing
	1909	Fixture, Holding and Fuze Breakoff
	1909E002	KIT, Break Off Fuze on M2 Mines
	1920	Shield, Operational
MINE ANTIPERSONNEL: M3, with Fuze, Mine, Combination, M7A1	1901	Tank, Immersion
	1903	Table, Testing
	1907	Device, Pressure Testing
	1920	Shield, Operational
MINE, ANTIPERSONNEL: M16 Series with Fuze, Mine, Combination, M605	1901	Tank, Immersion
	1903	Table, Testing

Items Tested	Equipment Used For Test	
	APE No.	Nomenclature
MINE, ANTIPERSONNEL: M16 Series with Fuze, Mine, Combination, M605 (Continued)	1907	Device, Pressure Testing
	1907E007	KIT, Function Test M605 Mine Fuze
	1920	Shield, Operational
	1940M3	Testing Fixture, Mine AP: M16
M26 Mine	1940E001	KIT, Function Test
	1976	Pneumatic Activation System
	1978	Mine Test Monitoring Equipment
	1124	Tool, Retainer Ring Expander
	2061	Assembly and Disassembly Machine M605 Mine Fuze
M14 Nonmetallic Mine w/Integral Fuze	1985	Equipment, Nonmetallic Mine Testing
M1B1A2, M28B2, M32, M34, M57, M58, M60A1, M71E1, M82, AND MK2A4	1931M1	Tester, Percussion Primer
	1931E001	KIT, Primer Piercing Fixture
	1931E002	KIT, Continuity Test for MK42 Primer
SIGNAL, ILLUMINATION:	1901	Tank, Immersion
Red Star, Distress	1916M1	Over, Preconditioning
Parachute, M131	1918M2	Device, Holding, Hand signal
	1918E002	KIT, Test M131 Signals
SIGNAL, ILLUMINATION AIRCRAFT:	1901	Tank, Immersion
Yellow Tracer, Red–Yellow Star, AN-M53 Series; Green Tracer, Red–Red Star, AN-M54 Series; Green Tracer, Green–Red Star	1902M2	Device, Holding
	1908	Measuring Device, Altitude and Drift
SIGNAL, ILLUMINATION, AIRCRAFT:	1901	Tank, Immersion
DOUBLE STAR:	1902M2	Device, Holding
Red-Red, AN-M37 Series; Yellow–Yellow, AN-M38 Series; Green–Green, AN-M39 Series; Red-Yellow, AN-M40 Series; Red–Green, AN-M41 Series; Green–Yellow, AN-M42 Series	1908	Measuring Device, Altitude and Drift

Items Tested	Equipment Used For Test	
	APE No.	Nomenclature
SIGNAL, ILLUMINATION, AIRCRAFT:	1901	Tank, Immersion
SINGLE STAR:	1902M2	Device, Holding
Red, AN-M43A1 and A2; Yellow, AN-M44A1 and A2; Green, AN-M45A1 and A2	1908	Measuring Device, Altitude and Drift
SIGNAL, ILLUMINATION GROUND:	1901	Tank Immersion
Parachute, Red Star, M126 Series and White Star, M127 Series	1908	Measuring Device, Altitude and Drift
	1916M2	Over, Preconditioning
	1918M1	Device, Holding, Hand Signal
	1918E001	KIT, Test M125, M126, and M127 Signals
SIGNAL, ILLUMINATION GROUND:	1901	Tank, Immersion
Star Cluster, Green, M125 Series; Red, M158 and White, M159	1908	Measuring Device, Altitude and Drift
	1916M1	Oven, Preconditioning
	1918M2	Device, Holding, Hand Signal
	1918E001	KIT, Test M125, M126 and M127 Signals
SIGNAL, ILLUMINATION GROUND:	1901	Tank, Immersion
Star Cluster, Green, M125 Series; Red, M158 and White, M159	1908	Measuring Device, Altitude and Drift
	1916M1	Oven, Preconditioning
	1918M2	Device, Holding, Hand Signal
	1918E001	KIT, Test M125, M126 and M127 Signals
SIGNAL, ILLUMINATION GROUND:	1901	Tank, Immersion
Star Cluster, White, M18 Series; Green, M20 Series; Amber, M22 Series and Red, M52 Series	1902M2	Device, Holding
	1902E001	KIT, Mount M1 or M14 Rifle
	1908	Measuring Device, Altitude and Drift

Items Tested	Equipment Used For Test	
	APE No.	Nomenclature
SIGNAL, ILLUMINATION GROUND:	1901	Tank, Immersion
Star, Parachute, White, M17 Series; Green, M19 Series; Amber, M21 Series; and Red, M51 Series	1902M2	Device, Holding
	1902E001	KIT, Mount M1 of M14 Rifle
	1908	Measuring Device, Altitude and Drift
SIGNAL, ILLUMINATION MARINE: Two Star, Red,AN-M75	1901	Tank, Immersion
	1903	Table, Testing
	1908	Measuring Device, Altitude and Drift
SIGNAL, KIT, PERSONNEL, DISTRESS: M185 THRU M190	1901	Tank, Immersion
	1903	Table, Testing
	1908	Measuring Device, Altitude & Drift
	1916M1	Over, Preconditioning
	1920	Shield, Operational
	1937	Shelter, Personnel Protection
	1967M1	Function Test Equipment, Signals M185 thru M190
	1967E001	KIT, Force Indicator, Firing Pin for Projector Signal
SIGNAL, SMOKE AND ILLUMINATION MARINE: AN-MK13 Mod 0	1901	Tank, Immersion
	1903	Table, Testing
SIGNAL, SMOKE GROUND:	1901	Tank, Immersion
Parachute, Green, M128 Series; Red, M129 Series	1908	Measuring Device, Altitude and Drift
	1916M1	Oven, Preconditioning
	1918M2	Device, Holding, Hand Signal
	1918E001	KIT, Test M125, M126 and M127 Signals
SIGNAL, SMOKE GROUND:	1901	Tank, Immersion
Red, M62; Yellow, M64; Green, M65; Violet, M66	1902M2	Device, Holding
	1902E001	KIT, Mount M1 or M14 Rifle
	1908	Measuring Device, Altitude and Drift

Items Tested	Equipment Used For Test	
	APE No.	Nomenclature
SIGNAL, SMOKE GROUND:	1908	Measuring Device, Altitude and Drift
White, M166; Green, M167, Red, M168; Yellow, M169	1916M1	Oven, Preconditioning
	1938	Chamber, Low Temperature
SIMULATOR, BOOBY TRAP:	1903	Table, Testing
Flash, M117	1926	Device, Lanyard Quick Release
SIMULATOR, BOOBY TRAP:	1903	Table, Testing
Illuminating, M118	1926	Device, Lanyard Quick Release
SIMULATOR, BOOBY TRAP:	1903	Table, Testing
Whistling, M110	1926	Device, Lanyard Quick Release
SIMULATOR, HAND GRENADE:	1903	Table, Testing
M116, M116A1	1916M1	Oven, Preconditioning
SIMULATOR, PROJECTILE, AIR BURST: Charge, Smoke, Puff, White	1903	Table, Testing
SIMULATOR, PROJECTILE AIR BURST: M27	1903	Table, Testing
	1908	Measuring Device, Altitude and Drift
SIMULATOR, PROJECTILE AIR BURST: M27A1B1	1901	Tank, Immersion
	1902M2	Device, Holding
	1902E001	KIT, Mount M1 or M14 Rifle
		Measuring Device, Altitude and Drift
SIMULATOR, PROJECTILE, AIR BURST: M74 Series	1901	Tank, Immersion
	1902M2	Device, Holding
	1908	Measuring Device, Altitude and Drift
SIMULATOR, PROJECTILE GROUND BURST: M115 SERIES	1903	Table, Testing
	1916M1	Oven, Preconditioning
SMALL ARMS TRACER AMMUNITION:	1923	Combination Gun Mount for Tracer Small Arms Ammunition
	1923E001	KIT, Mount Cal .30 Machine Gun, M37
	1923E003	KIT, Mount 7.62MM Machine Gun, M60

Item Tested	Equipment Used For Test	
	APE No.	Nomenclature
SMALL ARMS TRACER AMMUNITION: (Continued)	1923E004	KIT, Mount Cal .50 Spotting Rifle, M8C
	1923E005	KIT, Mount Cal .30 Carbine, M1 or M2
	1923E006	KIT, Graze Impact Table
	1923E010	KIT, Mount 7.62MM Machine Gun M240
	1923E011	KIT, Mount 7.62MM Machine Gun M219
	1923E012	KIT, Mount 7.62MM Machine Gun M134
	1923E013	KIT, Chronograph and Ballistic Screens
	1923E014	Power Supply for Kits E011 & E015
	1923E015	KIT, Mount Cal .50 Machine Gun M85
	1923E016	KIT, Function Testing 5.56MM M16A1 Rifle or 64MM Ammunition
	1923E017	KIT, Mounting, M16 Rifle with M203 Launcher or M79 Launcher
	1963	Electronic Control Unit
	1923E017	KIT, Mounting, M16 Rifle with M203 Launcher or M79 Launcher
PRIMERS	1931M1	Disassemble and Function Test M28B2, M32, M34, M57, M58, M60A1, M71A1E1, M82, MK2A4, M1B1A2, MK15, MK22, M38, M90, and M92E1 Percussion Primers and M80A1, M83, and M86 Electric Primers
	1931E001	Fixture, Primer Piercing
	1931E002	KIT, Continuity Test for MK42 Primer

Section II. INSPECTION AND SPECIAL TESTS

Items Tested	Equipment Used For Test	
	APE No.	Nomenclature
CARTRIDGE, 40MM: M384 with M16 Links	1277	Link and Delink Tool, 40MM, M16 Link
FUZES, ARTILLERY:	1223	Torque Fixture, M54, M55, and M500 Series Fuzes
	1928	Test Equipment, Mortar Component
	1939M1	Test Equipment, Continuity and Resistance
GRENADES:	1213M1	Barricade, Pitch-In
M176 & M226 Grenade Launchers	1906	Tester, Fuze, Grenade Igniting
M176 & M226 Grenade Launchers	1951M1	Test Equipment
	1963	Electronic Control Unit
M239 & M250 Grenade Launchers	1974	Test Equipment for L8 Series Grenade
	1974E002	KIT, M76 Grenade Launcher Continuity Test
	1974E003	KIT, M76 Grenade Launcher Function
	1983	Range and Elevation Measuring Equipment
MINES: M605 Mine Fuze	2061	Assembly and Disassembly Machine, M605 Mine Fuze
MORTAR AMMUNITION:	2128M1	Wrench, Disassembly, 81MM Mortar Fin
PROJECTILES:	1925M1	Disassembly Equipment, 4.2": M335; 155MM: M118
	1960M1	Fixture, Concentricity Check 105MM: L36, M392A2
	1961	Fixture, Torque Test Subprojectile, 105MM, L36, M392A2
	1962M1	Fixture, Torque Test Primer 105MM, L36, M392A2
	1962E004	KIT, Continuity Test
	1962E005	KIT, F/5"/54 Cartridge
	1962E006	KIT, F/MK42 Primer
	2132	Ultrasonic Inspection Equipment

Items Tested	Equipment Used For Test	
	APE No.	Nomenclature
PROJECTILES: (Continued)	2205	Machine 155MM M483A1 Single Station Screening
	2221	Ogive Concentricity Test Fixture
	2222	Air Test Device for Projectile
PROPELLING CHARGE:	1052M1	KIT, Air Test
	1919	Tool, Closing Plug Removal
ROCKETS AND ROCKET MOTORS:	1189	Test Equipment, Continuity
	1189E001	KIT, Continuity Test 2.75-Inch Rocket Motors w/Press Type Closures
	1189E002	KIT, Continuity Test 3.5-Inch Rocket Motors
	1189E003	KIT, Continuity Test 5-Inch Rocket
	1189E004	KIT, Continuity Test 2.75-Inch Rockets with Solid Bulkhead closures or with XM229 or M151 Warheads
	1189E011	KIT, Continuity Test 5-Inch M3 JATO Rocket Motor
	1189E012	KIT, Accessory, Shunt Clip Elimination from 3.5-inch Rocket
	1189E015	KIT, Accessory for Continuity Testing 2.75-Inch Rocket Motor MK40 with Warhead M151, M156, M229, M249, WTU/1B & WTU-4/A/A (Remote Operation Only) without manual removal of Shorting Clip
	1189E016	KIT, Accessory for Continuity Testing 2.75 inches Rocket Motor MK40 only without manually removing Shorting Clip. Machine Tests for proper Shorting Lifts Clip and Tests Continuity, replaces Shorting Clip and ensures Shortings by remote operation
	1189E017	KIT, Accessory for Continuity Testing of MK66 - 2.75 inch Rocket Motor
	1272	Gage, Dial Indicating
	1956	66MM Rocket Function Test Equipment
	1972	Meter, Warhead Conductivity Test, M74 Rocket
	2062	Ultrasonic Test Equipment

Items Tested	Equipment Used For Test	
	APE No.	Nomenclature
ROCKETS AND ROCKETS MOTORS (CONTINUED):	2062E001	KIT, 66MM: M72 LAW Fuze Closure
	2062E002	KIT, Hollow Core eyebolt Lifting Plug
	7074	Continuity Test of 5" Zuni Rocket Motor
SMALL ARMS AMMUNITION:	1099	Declipper, Hand, Eight Round
	1958M2	Device, Test, Can Leak
	1958E003	M548 and M590 Cans
TRACER:	1932	Tester, Tracer
TOXIC CHEMICAL FILLED MUNITIONS:	2053M3	Device, Air Sampling
	1934	Sampling Unit, Chemical Bombs
	1957	Tank, Detoxification
	1959M1	Sampling Unit, Chemical Ammo
	1964	Test for presence of Mustard Agent in igloos
	1510	Transfer and glove box for toxic chemical ammo
	5015M1	Inspection booth for toxic chemical ammo
	1981	Chemical Agent Munitions Sampling Unit
ITEMS COMMON TO VARIOUS SURVEILLANCE ACTIVITIES:	1086	Tank, Hot Dip portable
	1953	Conductive Floor and Shoe Tester
	1953E001	KIT, Compression Test Fixture
	1953E003	KIT, Aircraft Ground Testing
	1958M1	Device, Test, Can Leak
	2050M1	Table, Surveillance Work
	2050E001	KIT, 20MM Inspection
	2050E002	KIT, 25MM Inspection
	2068M2	Baltograph Machine
	2074	Facility, Radiographic Inspection

SECTION III. MAINTENANCE, RENOVATION AND DEMILITARIZATION

End Item	Operations Performed	APE No.
CARTRIDGE 5.56MM	Pull bullet from cartridge	2011
	KIT, Bullet pull	2011E003
	Panel Board assembly	2013M2
	Clip cartridges into 10-round clips	2071
	Declip cartridges from 10-round clips	2077
	KIT, Center guide	2077E001
	Delink/link M27 link	2086
CARTRIDGE 7.62MM	Aline cartridges	2012
	Feed chute	2012E001
	Cartridge guide	2012E002
	Molin roll stand	2012E003
	Panel board assembly	2013M2
	control feed rate of cartridges	2020
	Control demilitarization operation	2013M2
	Convey cartridges and components	2032
	Declip cartridges from 5-round clips by power operation	2077
	KIT, Center guide	2077E002
	Declip cartridges from 8-round clips by hand operation	1099
	Declip cartridges from 5-round and 8-roundclips by power operation	2059
	Delink of cartridges from M13 links	2198
	Link cartridges into M13 links by power	1259
	Link cartridges into M13 links and delink cartridges from M13 links by power operation	1217M1/1114
	KIT, Blank adapter	1114E001
	Pack two 750-round belts into M548 Containers	2134
	Production pull test of belts	2176
	Pull bullet from cartridge	2011
	KIT, Bullet pull	2011E002

End Items	Operations Performed	APE No.
	Store cartridges, dual outlet	2031
	Store cartridges, dual outlet	2021M1
CARTRIDGE CALIBER .30	Aline cartridges	2012
	Molin roll stand	2012E003
	Control feed rate of cartridges	2020
	Convey cartridges and components	2032
	Debelt or delink cartridges from web belts or M1 links	2008
	Declip cartridges from 5-round clips by power operation	2077
	KIT, Center guide	2077E002
	Declip cartridges from 8-round clips by hand operation	1099
	Delink cartridges from M1 links	2009
	Link cartridges into M1 links and delink cartridges from M1 links by power operation	1025
	Production pull test of belts	2176
	Pull bullet from cartridge	2011
	KIT, Bullet pull	2011E001
	Store cartridges, dual outlet,	2031
	Store cartridges, single outlet	2021
CARTRIDGE CALIBER .50	Aline cartridges	2017
	Collect propellant	1028
	Control feed rate of cartridges	2020
	Conveyor, 8" Wd Belt	2032
	Decore bullets	2126
	Delink cartridges from M2 and M9 links by power operation	1024M2/2006M1
	Delink cartridges from M15 links	2225
	Delink cartridges from M15A2 links by power operation	2030
	Enclose decoring machine	2028M1
	Feed bullets to decoring machine	2015M1
	Feed bullets to automatic feeders	2024

End Items	Operations Performed	APE No.
CARTRIDGE CALIBER .50 (Continued)	Link cartridges into M15A2 links by power operation	2027M4
	Link cartridges into M2 and M9 links and delink cartridges from M2 and M9 links by power operation	1024M2/2026
	KIT, Blank round linking	1024E001
	KIT, Delinking attachment	2026E001
	Production pull test of belts	2176
	Pull bullet from cartridges	2016
	Store cartridges, dual outlet	2031
	Store cartridges, single outlet	2021
CARTRIDGE 20MM	Break down cartridges	2001M1 2001E001 2001E002 2001E003
	Machine, Disassembly	7033
	Collect explosives vacuum	2043/3041A/3041B
	Collect explosives, separator	2042
	Collect propellant	1028
	Link cartridges into M12 or M14 links and delink cartridges from M12 or M14 links by power operation	2060
	Link cartridges into M12, M14 or M17 links and delink cartridges from M12, M14 or M17 links by power operation	2140
	Link cartridges into M3, M8E1, M10 or M24 linksand delink cartridges from M3, M8E1, M10 or M24 links by power operation	2147
	Link cartridges into M3, M8E1 or M10 links	2147E01/3002A
	Delink cartridges from M3, M8E1 or M10 links	2147E002/3002A
	Link cartridges into M24 links	2147E003
	Delink cartridges from M24 links	2147E004
	Production pull test of belts	2176
	Machine, 20MM link/delink	7043
	KIT, MK2 linking	7043E001
	KIT, MK2 delinking	7043E002

End Items	Operations Performed	APE No.
	KIT, MK6 linking	7043E003
	KIT, MK6 delinking	7043E004
	KIT, MK14 linking	7043E005
	KIT, MK14 delinking	7043E006
CARTRIDGE 25M4	Link/delink cartridges into M28 links	2215
CARTRIDGE 30MM	Link/delink cartridge to/from M29 links	2218
	Break down and segregate components of APIT, PGU-14B, API, PGU-14A/B and PGU-14B/B, HEI PGU-13/B; T, PGU-15/B	2214
	Remove GAU-8/A ammunition from linked tube	2226
	carriers belted together by fabric loops.	
CARTRIDGE 37MM	Pull projectile from cartridge case	1001M1
	Deluge, w/shield KIT, Basic, pull apart M54, M59, M63 and M92 with M16 cartridge case	1001E091 1001E019 1001E020
	M54, M59, M63 and M92 with M17 cartridge case	1001E021
	Cartridge with self-destroying tracer	1001E081
	Prime/deprime	1229M1/1106M1/ 1001M1
	M17 cartridge case	1106E003
	MK1, MK2 and M16 cartridge case	1106E004
	KIT, Prime and deprime operation Hold projectile	1001E050 1204/1204E002/
	M51B1A1, M54, M54A1,M55A1,M59, M59A1 and	1065E002/1204E002
	M63	
	Resize cartridge case	1001M1
	Deluge, w/shield	1001E091
	M16 and M17 cartridge case	1001E038
	Stop for drilling operation	1171
	Mark cartridge case base	2178
	Weigh propellant	2102
	Assemble and crimp cartridge	1001M1
	Deluge, w/shield	1001E091
	Crimping and assembly cartridge	1001E019
	M16 cartridge case	1001E060

End Items	Operations Performed	APE No.
CARTRIDGE 37MM (Continued)	M17 cartridge case	1001E061
	KIT, Pull test calibration	1001E011
CARTRIDGE 40MM	Delink M384 cartridges w/M16 links	1277
	Pull projectile from cartridge case	1001M1
	Deluge, w/shield	1001E091
	KIT, Pull test calibration	1001E011
	KIT, Basic, pull apart	1001E019
	MK2 cartridge case	1001E073
	MK2, MK11, M81 & M91 cartridge	1001E022
	Cartridge with self-destroying tracer	1001E081/2000
	M81, M91, MK2 and MK11 cartridges	2000E002/l106M1
	M25 cartridge case	1106E005/1229M1
	KIT, Prime and deprime	1229E001
	Deprime cartridge case	1001M1
	Deluge, w/shield	1001E091
	Hold projectile	1204/1065
	M81 and M81A1 cartridge	1204E003/1065E003
	Remove tracer from projectile	1002M2
	MK HEI-T projectile	1002E041
	Resize cartridge case	1001M1
	Deluge w/shield	1001E091
	KIT, Resize cartridge case	1001E003
	KIT, Basic, resize	1001E019
	M25 and MK2 cartridge cases	1001E039
	Mark cartridge case base	2178
	Stop for drilling operations	1171
	Weigh propellant	2102
	Assemble and crimp	1001M1
	Deluge, w/shield	1001E091
	KIT, Assembly and crimp	1001E019
	Cartridge cases, M25 & MK2	1001E062

End Items	Operations Performed	APE No.
	Cartridge cases, MK2	1001E073
	Cartridge with self-destroying tracer	2148
	Link M384 cartridges w/M16 links	1277
	Pull test	1299M1
	MK2, MK11, M81 and M91 cartridges	1299E001
CARTRIDGE 57MM	Pull projectile from cartridge case	1001M1/2000
	Deluge w/shield	1001E091
	KIT, Basic, pull apart	1001E019
	M306, M307, and M308 cartridges	1001E023/2000E003
	M303 cartridge	1001E024
	Prime and deprime	1229M1/1106M1
	Deluge w/shield	1001E091
	M30 cartridge case	1106E006
	M23 cartridge case	1106E007
	M30 cartridge case	1229E002
	M23 cartridge case	1229E003
	Hold projectile	1065/1204
	T18E1, M303, M307, and M307A1 cartridge	1065E012/1204E004 1002M2
	Remove closing plug M307A1	1002E039
	Remove base detonating fuze from projectile	1002E002
	M306A1 cartridge	1002E031/1153M1
	M307A1 cartridge	1153E019
	Resize cartridge case	1001M1/1164
	Deluge w/shield	1001E091
	KIT, Flue roller assembly for 57MM, 75MM, 76MM, 105MM, and 106MM recoilless	1001E100
	rifle cartridge cases	
	M306 and M307 cartridges	1001E007
	KIT, basic, resize cartridge case	1001E019
	M30 cartridge case	1164E003
	M23 cartridge case	1164E004
	Mark cartridge case base	2178

End Items	Operations Performed	APE No.
CARTRIDGE		
57MM (Continued)	Stop for drilling operations	1171
	Weigh propellant	2103
	Assemble and crimp	1001M1/1010M2/1220
	Deluge w/shield	1001E091
	KIT, basic, assembly and crimping	1001E019
	M23 cartridge case	1001E063
	M306 and m307 cartridges	1010E010
	M307 cartridge	1220E010
	Pull test	1299M1
	Pull test M303, M306, M307 and M308	1299E002/1001M1
	KIT, Bullet pull test calibration	1001E011
CARTRIDGE	Hold projectile	1065/1204/2097
60MM		
	M49A2 and M50A2 cartridges	1065E009/1204E012
	M302 Series, M49 Series, M50 Series, M720, M722, and M88 cartridge	1204E017
	Remove fin assembly	1153M1
	M2 and M5 fins	1153E014
	Remove fuze from projectile	1002M2/1153
	M49 and M50 cartridges	1002E014
	M302 cartridge	1002E015
	KIT, Disassemble M720 cartridge	1002E007
	Remove primer from cartridge	1153M1
	M49A2, M83, and M302 cartridges	1153E001
	Remove/insert primer or ignition cartridge from fin assembly	1148/1222
	Derust projectile	1200/2038
	KIT, Clean mortar	1200E001
	Stop, for drilling operations	1171
CARTRIDGE	Pull projectile from cartridge case	1001M1
75MM		
	Deluge w/shield	1001E091
	KIT, Bullet pull test calibration	1001E011
	KIT, Basic, pull apart	1001E019

End Items	Operations Performed	APE No.
	M48, M61, M64, M66 and M338 cartridges	1001E025
	M309, M310 and m311 cartridges	1001E026
	M349 cartridge	1001E027
	M334 cartridge	1001E028
	Prime and deprime	1001M1
	Deluge, w/shield	1001E091
	KIT, Holding shoe for cartridge case	1021E001/1106M1
	M35 cartridge case	1106E007
	MS, M9, and M18 cartridge cases	1106E008
	Prime and deprime	1229M1/2151
	M35 cartridge case	1229E003
	M5, M9 and M18 cartridge cases	1229E004
	M31 cartridge case	1229E005
	M35 cartridge	2151E002
	Hold projectile	1065/1204
	M48, M64, T65E11, M66, M88A1, M309, M309A, M309A1, M311, M311A1, M334, and M349	1065E005/1204E005/ 2097
	Assemble and disassemble fuze from projectiles	1250
	Remove fuze from projectile	1002M2/1153M1
	Base detonating fuze	1002E003
	Point detonating fuze (except M344 projectile)	1002E005
	M334 cartridge	1002E006
	M349 cartridge	1153E006
	Drill fuzewell cavities	1283/1043
	Remove fuzewell liner	1128M11140M2
	Expand fuzewell liners	2107
	Remote control	2107E001
	Remove M21A4 booster from projectile	1002M2
	M309A1 projectile	1002E036
	Projectile shape charge disassembly	1224
	Resize cartridge case	1001M1/1164

End Items	Operations Performed	APE No.
CARTRIDGE 75MM (Continued)	Deluge w/shield	1001E091
	KIT, Resize cartridge case	1001E003
	KIT, Basic, resize	1001E019
	KIT, Flue roller assembly for 57MM, 75MM, 76MM, 105MM, and 106MM recoilless rifle cartridge cases	1001E100
	M31A1 cartridge case	1164E001
	M35 cartridge case	1164E005
	M18 cartridge cartridge case	1164E006
	M9A1 cartridge case	1164E007
	Stop for drilling operations	1171
	Weigh propellant	2104
	Mark cartridge case base	2178
	Assemble and crimp	1001M1/1010M2/1220
	Deluge w/shield	1001E091
	KIT, Basic, assembly and crimping	1001E019
	M35 cartridge case	1001E065
	KIT, Assembly and crimp	1010E001
	M48, M61, M66, or M338 with M18 cartridge case	1220E001
	TSO, M312 and M334 to cartridge case M35	1220E002
	Hold cartridges	1294
	Level black powder in blank cartridges M338, M349 and T165E11 cartridges	1123
	Derust projectile	1105M2
	KIT, Derust 75MM thru 155MM projectiles	1105E001
	Rotate cartridges for painting adapter	2130M2
	KIT, 75MM or 76MM shield	2130E002
	Pull test (bullet pull)	1299
	M48, M61, M64, M66 and M388 cartridges	1299E003
	M309, M310 and M311 cartridges	1299E004
	M344 cartridge	1299E005
	M349 cartridge	1299E006

End Items	Operations Performed	APE No.
CARTRIDGE 76MM	Pull projectile from cartridge case	1001M1
	Deluge w/shield	1001E091
	KIT, Bullet pull test calibration	1001E011
	KIT, basic, pull apart	1001E019
	M42, M62, M93, M312 and M315 cartridges	1001E029
	M319, M339, M340, M352 and M361 cartridges	1001E030
	Prime and deprime	1229M1
	KIT, Prime and deprime M26 cartridge case	1229E003
	KIT, Prime and deprime M88 and M101 cartridge cases	1229E006
	Derust projectile	1105M2
	KIT, Derust 75MM thru 155MM projectiles	1105E001
	Prime and deprime	1021M4
	KIT, Holding shoes	1021E001
	Prime and deprime	1106M1/1229M1
	M26 cartridge case	1106E007/1229E006
	M88 and M101 cartridge cases	1106E009/1229E008
	Prime and deprime	2151
	M58 primer	2151E001
	Hold projectiles	1065/1204/2097
	M42A1, M62, M62A1, M93A1, M166E2, M312, M312B1, M315, M339, M340A1, M352, and M361 cartridqes	1065E006/1204E006
	Remove fuze from projectile	1002M2/1153M1
	Base detonating	1002E004
	Point detonating	1002E007
	Base detonating M9A1, M66A1, M66A2 & M68	1153E006
	Remove M5 series tracer from M319	1153E006
	Drill fuzewell cavities	1283/1043
	Remove fuzewell liners	1128M1/1140M2
	Expand fuzewell liners	2107
	Remove booster	1002M3
	KIT, Remove M21A4 booster	1002E036

End Items	Operations Performed	APE No.
CARTRIDGE 76MM (Continued)	Resize cartridge case	1001M1/1164
	Deluge w/shield	1001E091
	KIT, basic, resize cartridge case	1001E019
	KIT, Flue roller assembly for 57MM, 75MM, 76MM, 105MM recoilless rifle cartridge cases	1001E100
	M88 cartridge case	1164E002
	M26 cartridge case	1164E008
	M101 cartridge case	1164E009
	Stop for drilling operations	1171
	Weigh propellant	2047/2105/1032
	Mark cartridge case base	2178
	Assemble and crimp	1001M1/1010M2/1220
	Deluge w/shield	1001E091
	KIT, Basic, assembly & crimping	1001E019
	M88 and M101 cartridge cases	1001E067
	KIT, Assembly and crimp	1010E003
	M26 cartridge case w/.l5O crimp groove	1220E003
	M88 cartridge case	1220E004
	M26 cartridge case w/.050 crimp groove	1220E005
	Hold cartridges	1294
	Level black powder in blank cartridge	1123
	Rotate cartridges for painting	2130M2
	KIT, 75MM or 76MM shield	2130E003
	Pull test (bullet pull)	1299M1
	M42, M62, M93, M312 and M315 cartridges	1299E007
	M319, M339, M340, M352 and M361 cartridges	1299E008
CARTRIDGE 76MM/62 CALIBER	Pull apart cartridge	1001M1
	Deluge, w/shield	1001E091
	KIT, Basic, pull apart	1001E019
	KIT, Basic, accessories for pull apart	1001E088
	Gage, VPA alinement	1001E089

End Items	Operations Performed	APE No.
	Crimp case to projectile	1010M2
	KIT, Assembly and crimp 76MM	1010E003
	Rotate cartridges for painting	2130M2
	Shield	2130E004
	Propellant settling device	7073
	KIT, jaw/shoe	7073E003
CARTRIDGE 3 INCH/50 CALIBER	Defuze cartridge	1002M2
	KIT, Remote control	1002E042
	Pull apart cartridge	1001M1/2000
	Deluge, w/shield	1001E091
	KIT, Basic, pull apart	1001E019
	Gage, VPA alinement	1001E089
	KIT, Pull apart	1001E090
	KIT, Pull apart	2000E009
	Prime and deprime	2197/1229M1/ 1011M5/1106Ml/2203
	KIT, Deprime 3"/50 cartridge case	2203E003
	KIT, Deprime 3"/50 screw primer	1011E003
	KIT, Prime/deprime 3"/50 MK 7-0 press primer	1106E013
	MK 7-0 press primer	1229E010
	KIT, Deprime MK3, MK7 & MK9 cartridge cases	2197/2197E005/7032
	Mark cartridge case base	2178
	Hold projectile	7007/2097/1294/ 1204/1065/7023M1
	KIT, Secure	1065E006
	KIT, Jaw	1204E006
	Stake auxiliary detonating fuze to fuze adapter	7041M1
	Propellant settling device	7073
	KIT, Jaw/shoe	7073E004
	Drill Fuzewell cavities	7025
	KIT, Cutter head	7025E009
	KIT, ADF cutter head	7025E011

End Items	Operations Performed	APE No.
CARTRIDGE 3 INCH/50 CALIBER (Continued)	KIT, Base fuze butterhead	7025E012
	KIT, Setup tooling	7025E018
	KIT, Nose end	7025E024
CARTRIDGE 81MM	Hold projectile	
	M43A1 and M43A1B1 cartridges	1204E009
	M57, M362, M370,M374 and M375 series cartridges	1204E014
	KIT, Secure, M43A1	1065E010
	KIT, Secure, M57 & M362	1065E013
	Remove ignition cartridge from fin assemble of M374 and M375 cartridge	2040
	Remove ignition cartridge housing M362 cartridges	1153M1
	M362, M362A1, M370, M374, M374A2, M375A1 & M375A2 cartridges	1153E029
	M301A3 cartridge	1153E031
	Remove/insert primer or ignition cartridge M43A1, M56, M57, M57A1, M301A1 and M301A2	1153M1
	M301A3, M362, M362A1, M370, M374, M374A2, M375, M375A1 and M375A2 cartridges	1153E032/1148
	M43A1 cartridge	1222
	Remove fin assembly M3 and M6 fins	1153M1/1153E014/ 2128M1
	Remove fuze from projectile	1002M2
	M43A1B1 cartridge	1002E016
	M362 cartridge	1002E017
	M362, M374 and M375 cartridges	1002E018/1153M1
	KIT, Defuze	1153E024
	KIT, Remove M524 fuze from M362 cartridge	1153E020
	Resize fuze cavity, M362 cartridge	2052
	Replace obturating band	2136
	Stop for drilling operation	1171
	Derust projectile	2038

End Items	Operations Performed	APE No.
CARTRIDGE 90MM	Pull projectile from cartridge case	1001M1/2000
	Deluge, w/shield	1001E091
	KIT, Bullet pull test calibration	1001E011
	KIT, Basic, pull apart M71, M77, M79, M82, M133, M304, M313, M317, M318, M319, M332, M336 and M431 cartridges	1001E019 1001E031
	M371 cartridge	1001E075
	M71 cartridge	2000E004
	Prime and deprime	2151/1153/1021M4/ 1229M1/1106M1
	KIT, Prime/deprime M19, M27 and M108 cartridge case	1229E007
	KIT, Holding shoes for cartridge case	1021E001
	M19, M27 or M108 cartridge cases	1106E010
	Deprime M371 HEAT cartridge	1153E002/1229M1
	M19, M27 or M108 cartridge cases	1229E009
	M112 cartridge cases	2151E003
	M108 cartridge cases	2151E006
	Hold projectiles	1204
	M33, M71, M77, T91, T142E5, M304, M304A1, M313, M317A2, M318A1, M332, M333, M336, M353 and M382	1204E007/1065/ 1065E007/2097
	M371 boom adapter removal	1065E015
	Remove fuze from projectile	1002M2
	Point detonating (except T142 series projectile	1002E008/1002E010/ 1002E011/1153M1
	Remove PD fuze	1153E005
	Remove BD fuze M82, M332A1 & M142E3	1153E006
	Remove nose cap from projectile	2081/1283/1043/ 7025
	KIT, Cutter head	7025E008
	KIT, Setup tooling	7025E014
	KIT, Projectile nose end	7025E024
	Expand fuzewell liners	2107

End Items	Operations Performed	APE No.
CARTRIDGE 90MM (Continued)	Remove fuzewell liner	1128M1/1140M2
	Projectile shape charge disassembly	1224
	Remove boom adapter from boom assembly	1065
	M371 cartridge	1065E015
	Remove fin and boom from projectile	1227
	M371 cartridge	1227E001
	Remove tracer	1153M1
	KIT, Remove MS tracer	1153E006
	Assemble fuze to projectile	1247/1164
	Assemble and torque nose cap	1250
	Resize cartridge case	1001M1
	Deluge w/shield	1001E091
	37MM thru 106MM	1001A003
	KIT, Basic, resize cartridge case	1001E019
	KIT, Flue roller assembly for 90MM cartridge case	1001E099
	M19, T24 and M108 cartridge cases	1164E010
	M112 cartridge cases	1164E015
	Stake primer to cartridge cases	1254M1
	M58 primer into M108 cartridge case and continuity test	1254E002
	Stop for drilling operations	1171
	Weigh propellant	2105/1032
	Level black powder in blank cartridges	1123
	Mark cartridge case base	2178
	Assemble and crimp	1010M2/1001M1/1220
	Deluge w/shield	1001E091
	KIT, Basic, assembly and crimping	1001E019
	KIT, Assembly and crimp	1010E004
	M371 cartridges	1010E008
	M71 cartridge	1220E006
	M307 cartridge	1220E007
	Pull test (bullet pull)	1299M1

End Items	Operations Performed	APE No.
	M77, M79, M82, M133, M304, M313, M317, M319, M332 and M336 cartridges	1299E009
	M71 cartridge	1229E010
	Rotate cartridges for painting	2130M2
	Shield	2130E001
CARTRIDGE 105MM	Pull projectile from cartridge case	1001M1/2000
	Deluge w/shield	1001E091
	KIT, Basic, pull apart	1001E019
	M323 and M325 cartridges	1001E005
	M456 Cartridge	1001E006
	KIT, Bullet pull test calibration	1001E011
	M341 cartridge	1001032
	M326 cartridge	1001E033
	M345 cartridge	1001E034
	M393A1, M416 and M494 cartridges	1001E074
	M392 and M728 cartridges	1001E087/2000
	M323, M324 and M325 cartridges	2000E008
	M393 and M416 cartridges	2000E007
	M392, M724 and M728 cartridge	2000E006
	Collect propellant	1028
	KIT, Exhauster, centrifugal	1028E001
	KIT, Control system, propellant discharge, pneumatic	1028E003
	Prime and deprime	1229M1/1011M5/ 2151/2197/ 1001M1/2203
	Deluge w/shield	1001E091
	KIT, Basic, assembly	1001E019
	M80 and M86 primers on M115 and M150 cartridge cases	2151E004
	M83 primer on M148 cartridge case	2151E005
	M63 primer on M341 cartridge case	2151E007
	M80, M83 and M86 primers from M115, M148 and M150 cartridge cases	2197E006

End Items	Operations Performed	APE No.
CARTRIDGE 105MM (Continued)	Primer (screw type) remove from cartridge cases	
	M86 primer from M115, M148 and M150 cartridge cases	1011E011/2203E001
	L4 primers from L36 cartridge case	1011E002/2203E002
	M115, M148 and M150 cartridge cases	1021M4/1021E002
	Primer (press type) remove from cartridge case	
	M32, M90 and M95 cartridge cases	1229E007
	M14 and M15 cartridge cases	1229E008
	Hold projectile	1204/1065
	M1, M45, M60, M67, M84B1, M84B2, T319E44, M314A2B1, M325, M326, M327, M328 and M360 cartridges	1204E016/1065E008/ 2970
	Ammunition component press	2160
	Table, ammunition component indexing	2160E001
	Insert base plug in M392A2 projectile	2160E002
	Remove fuze from projectile	1002M2
	Kit, remove PD fuze	1002E009
	M92 BD fuze (except T139E45 cartridge)	1002E012
	T139E45 cartridge	1002E013
	Remove fuze from cartridges	1153M1
	PD fuzes	1153E005
	BD fuzes from M326 cartridge and/or M5 tracers	1153E006
	Remove base fuze and/or tracers from projectiles	1002M2
	BD fuze M534	1002E024
	Remove fuzewell liner	1128M1/1140M2
	Remove M13 tracer from M392A2 projectile	2161
	Remove base plate from projectile	1002M2
	M84 projectile	1002E022
	KIT, Puller, base plug for M314	1001E096
	Remove centering band from projectile, M392A2 (L36A1)	2153
	Remove rotating band from M392A2 projectile	2162

End Items	Operations Performed	APE No.
	Turning projectile centering band M392A2	2155M1
	KIT, Centering band diameter check	2155E001
	KIT, Projectile support	2155E002
	KIT, Machine setup	2155E003
	Hold projectile	1065
	Remove boom adapter from boom assembly: M341 cartridge	1065E017
	Ultrasonic inspection M392A2 sub–projectile	2163
	Transducer (cylindrical focus)	2163E001
	Transducer (spherical focus)	2163E002
	Waterproof cable	2163E003
	APDS–T Subprojectile handling equipment	2153E004
	Battery charger	2163E005
	Alarm light kit	2163EO06
	Alinement projectile	2163E007
	Remove fin & boom from projectile	1227
	M341 cartridge	1227E002
	Projectile with shaped charge disassembly	1224
	Projectile holding rack	2154
	Projectile turning fixture, M392A2	2158
	Projectile concentricity check L36, M392A2	1960M1
	Adapter, standard projectile setup	1960E002
	Torque, test APDS-T projectile	1961
	Drill fuzewell cavities	1283/1043/7025
	KIT, Powered thread cleaner	1283E001
	KIT, Butterhead	7025E008
	KIT, Setup tooling	7025E015
	KIT, Projectile nose end	7025E024
	Expand fuzewell liners	2107
	KIT, Remote control	2107E001
	Remove bottom of fuzewell cavity of smoke projectile (M84B1)	2166
	Resize canister cavity of smoke projectile (M84)	2167

End Items	Operations Performed	APE No.
CARTRIDGE 105MM (Continued)	Assemble fuze to projectile	2249A008
	Resize cartridge case	1001M1
	Deluge w/shield	1001E091
	T43, M90 and M95 cartridge cases	1001E004
	KIT, Basic, resize	1001E019
	KIT, Flue roller assembly for 57MM, 75MM, 76MM, 105MM, and 106MM recoilless rifle cartridge cases	1001E100
	M148, M148A1B1 and M150 cartridge cases	1001E079
	M115 cartridge case	1001E083
	KIT, Alignment for 105MM cartridge case	2164E001
	Machine, cartridge case neck resizing	1164
	M32 cartridge case	1164E011
	T43 cartridge case	1164E012
	M90 and M95 cartridge cases	1164E013
	Fixture, install cartridge case liner	2157
	Stake primer to cartridge case and continuity tests	1254M1
	M115 and M148 cartridge cases	1254E001
	M148A1B1 cartridge case w/M20 primer	1254E004
	Torque test primer, M392A2	1962M1
	KIT, Torque adapter, M80A1, round pin	1962E002
	Device, Shaker, black powder	1123
	KIT, Torque adapter, M80A1, slotted	1962E003
	KIT, Continuity test	1962E004
	Mark cartridge case base	2178
	Weigh propellant	1032/2105
	Propellant check level (M392A2)	2159
	KIT, Extension	2159E001
	Assemble and crimp	1001M1/1010M2/1220
	Deluge w/shield	1001E091
	KIT, basic, assembly and crimping	1001E019
	M32 cartridge case	1001E069

End Items	Operations Performed	APE No.
	M90 and M95 cartridge cases	1001E070
	M392A1 cartridge with M115B1 cartridge case	1001E077
	KIT, Assembly for 105MM M60 smoke cartridge	1001E098
	M456A1 cartridge	1001E080
	KIT, Assembly and crimp	1010E005
	M456A1 cartridge	1010E009
	M325 and M326 cartridges	1220E008
	M456 cartridge	1220E009
	Assemble and crimp (rubber die type F/USAF Howitzer)	1213
	Cartridge, concentricity check M392	1960M1
	Adapter, complete cartridge	1960E001
	Adapter, standard complete cartridge setup	1960E003
	Pull test (bullet pull)	1299
	M456 cartridge	1299E011
	M323 and M325 cartridges	1299E012
	M344 cartridge	1299E013
	M326 cartridge	1299E014
	M341 cartridge	1299E015
	M345 cartridge	1299E016
	M392 cartridge	1299E017
	KIT, Disassemble M581 APERS-T cartridge	1002E045
	M393 cartridge	1299E019
	Calibration	1299E018
	Stop for drilling operations	1171
CARTRIDGE 106MM	Pull projectile from cartridge case	1001M1
	Deluge w/shield	1001E091
	KIT, Bullet pull test calibration	1001E011
	KIT, Basic, part apart	1001E019
	M344 cartridge	1001E035
	M346 cartridge	1001E036

End Items	Operations Performed	APE No.
CARTRIDGE 106MM (Continued)	Prime and deprime	1229M1/1001M1/ 1011M5/1106M1
	Deluge w/shield	1001E091
	M93 and M94 cartridge cases	1106E010
	M93 and M94 cartridge cases	1229E007
	Resize cartridge case	1164/1001M1
	Deluge w/shield	1001E091
	KIT, Resize cartridge case	1001E003
	M93 and M94 cartridge cases	1001E004
	KIT, Basic, resize	1001E019
	KIT, Flue roller assembly for 57MM, 75MM, 76MM, 105MM, and 106MM recoilless rifle cartridge cases	1001E100
	M93 and M94 cartridge cases	1164E013
	Double crimped cartridge cases	1164E014
	Weigh propellant	1032/2105
	Mark cartridge case base	2178
	Hold projectile	1204
	KIT, Jaw, hold projectile	1204E016
	Hold projectile	2097
	Remove fuze from projectile	1002M2/1153M1
	T139E47 cartridge	1002E013
	M344 cartridge	1002E023
	M346A1 cartridge	1153E006
	Drill fuzewell cavities	1283
	Expand fuzewell cavities	2107
	Remove base plug from projectile	1002M2
	M345 cartridge	1002E021
	Assemble fuzes to projectiles	1247
	Vibrate cartridge and seat projectile	7057
	Hold cartridge	1294
	Assemble and crimp	1001M1/1010M2
	Deluge w/shield	1001E091
	KIT, Basic, assembly and crimping	1001E019

End Items	Operations Performed	APE No.
	M94 cartridge case	1001E070
	KIT, Assembly and crimp	1010E005
	M94B1 cartridge case	1010E011
	Pull test (bullet pull)	1299
	M346 cartridge	1299E016
CARTRIDGE 4.2 INCH	Hold projectile	1204/1065/2097
	KIT, Jaw	1204E016
	KIT, Secure M329	1065E008
	Remove fuze from projectile	1153M1
	KIT, Defuze	1153E024
	Remove stuck supplementary charge	1504
	M329, M329A1 and M329B	11504E001
	M329A2 base cone adapter	1504E002
	KIT, Remove M8 fuze from M14 burster	1153E033
	Remove fuzewell liner	1128M1/1140M2
	Drill fuzewell cavities	1283/1043/2052
	Expand fuzewell liners	2107/7025
	Remove propelling charge	1002M3
	KIT, Remove propelling charge	1002E046
	Remove parachute and illuminating canister	1925M1
	KIT, Conversion for M335 series 4.2 inch cartridges	1925E001
	Stop for drilling operations	1171
	Assemble fuze to projectile	1247
	Zone weight projectile	2089
	Derust projectile	2038
	KIT, Mortar set-up - tooling	7025E026
CARTRIDGE 120MM	Hold projectile	1065
	T15E1, T16E1, M61A1, M73, T115E3, T116E6, T147E5, M358 and M359 projectile	1065E011/1204
	KIT, Jaw	1204E001/2097
	Drill fuzewell cavities	1283

End Items	Operations Performed	APE No.
CARTRIDGE 120MM (Continued)	KIT, Powered thread cleaner	1283E001/1043
	Expand fuzewell cavities	2107
	KIT, remote control	2107E001
	Remove fuzewell liner	1128M1/1140M2
	Prime and deprime	1021M4/1229M1
	KIT, Holding shoes	1021E001/2197
	KIT, Prime/deprime M34, M24 and M109 cartridge cases	1229E009
	M109 and XM111 cartridge cases	2197E002
	Remove closing plug	1003M1
	M2E3 closing plug	1003E005
	Remove M2E3, M5, M6 and M7 closing plugs	1919
	Mark cartridge case base	2178
	Stop for driling operations	1171
PROJECTILE AND PROPELLING CHARGE ASSEMBLY 5 INCH 38 & 54 CALIBER	Hold projectile	2097/7007/7014/ 7023M1
	Defuze - deplug	7040
	Remove gas check gasket	7042
	Drill projectile fuze cavities (5"/38)	7025
	KIT, Recap cutter head	7025E002
	HE-CVT MK 66 and MK 379 ADF cutter head	7025E003
	KIT, Nose end drill bushing	7025E023
	Drill projectile fuze cavities (5"/54)	
	MK 64, MK 65 and MK 396 ADF cutter head	7025E004
	MK 61 Mod 0 cutter head	7025E005
	MK 360, MK 361 and MK 362 VT & FCL VT MK 73	7025E006
	KIT, Nose end drill bushing	7025E022
	Drill 5"/38 & 5"/54 projectile fuze cavities	
	MK 51 Mod, VT & IR and MK 41 Mod 0, VT cutter head	7025E001
	MK 54 ADF cutter head	7025E007

End Items	Operations Performed	APE No.
	MK 83 cutter head	7025E010
	KIT, Base fuze cutter head	7025E012
	KIT, Setup tooling	7025E019
	KIT, Thread chaser	7025E025
	Press gas check sea17026	
	Stake auxiliary detonating fuze adapter	7041M1
	Remove plug from cartridge case	7019
	Prime - deprime cartridge cases	2197
	5"/38 MK 5, MK 8, 10 & 11 and 5"/54 MK 6, 7 & 9 cartridge cases	2197E003
	Prime - deprime cartridge cases (screw-type)	2203
	5"/38 and 5"/54	2203E004
	Primer stake	1245M1
	KK, Primer stake and continuity test 5"/54	1245E003
	Resize cartridge case	1001M1
	Deluge w/shield	1001E091
	KIT, Basic, resize	1001E019
	Gage, alinement	1001E089
	5"/38 cartridge case	1001E093
	5"/54 cartridge case	1001E094
	KIT, Resizing, basic for 5"/38, 5"/54 and 6"/47	1001E095
	Primer (screw type)	1021M4
	KIT, Holding shoe for cartridge case	1021E001
	Production packing depth for cartridge cases	7073
	KIT, Jaw/shoe	7073E001
	Crimp plug to cartridge cases	7019
	Mark cartridge case base	2178
	Primer torque test	1962M1
	KIT, Holder	1962E005
	KIT, MK 42 Primer resistance test	1962E006
	Impact test propelling charge assemblies	7020

End Items	Operations Performed	APE No.
PROJECTILE AND PROPELLING CHARGE ASSEMBLY 5 INCH 38 & 54 CALIBER (Continued)	Transfer projectiles	7031
	Press gas check seal	7026/7076
	Remove rotating band	1042E004
CARTRIDGE 152MM	Cartridge case cutoff	2170M1
	Remove cartridge case	1002M2
	Locking ring	1002E043
	Remove windshield cap and continuity test	2169
PROJECTILE AND PROPELLING CHARGE 6-INCH 47 CALIBER	Hold projectile	7023M1/2097/7007
	Remove gas check gasket	7042
	Drill projectile fuze cavities	7025
	KIT, cutter head	7025E009
	ADF, cutter head	7025E011
	KIT, Base fuze butterhead	7025E012
	KIT, Setup tooling	7025E020
	KIT, Nose end drill bushing	7025E023
	Stake auxiliary detonating fuze to fuze adapter	7041M1
	Prime - deprime cartridge cases	2197/2203
	MK 4, MK 6 and MK 7 cartridge cases	2197E004
	KIT, Deprime-prime cartridge case	2203E005
	Resize cartridge case	1001M1
	Deluge w/shield	1001E091
	KIT, Basic, resize	1001E019
	Gage, Alinement	1001E089
	KIT, Resize cartridge case	1001E092
	Prime (screw type)	1021M4
	KIT, Holding shoe for cartridge case	1021E001
	Production packing depth for cartridge cases	7073

End Items	Operations Performed	APE No.
	KIT, Jaw/shoe	7073E002
	Mark cartridge case base	2178
	Transfer projectiles	7031
	Press gas check seal	7026
PROJECTILE AND PROPELLING ASSEMBLY 8-INCH 55 CALIBER	Hold projectile	2097
	Remove gas check gasket	7042
	Defuze (remote control) nose & base fuzes	7066
	KIT, Fuze remover	7066E001
	Drill projectile fuze cavities	7025
	KIT, Cutter head	7025E009
	KIT, ADF cutter head	7025E011
	KIT, Base fuze cutter head	7025E012
	KIT, Setup tooling	7025E021
	KIT, Nose end drill bushing	7025E023
	KIT, Thread chaser	7025E025
	Prime-deprime cartridge case	2197
	MK 1 Mod 0, 1 and 2	2197E001
	Clean exterior of cartridge case	7032
	Production packing depth for cartridge cases	7073
PROJECTILE 16-INCH 50 CALIBER	Carrier, projectile	7072
	KIT, AP projectile	7072E001
	Hold projectile	7070
	Defuze nose and base fuze	7066
	Tooling, renovation	7068
	Press gas check seal	7071
	KIT, AP projectile	7071E001
	Clean projectile (swing brush)	7067
	KIT, Dust collector	7067E001
	Stake auxiliary detonating fuze to fuze adapter	7041M1
	Scale, projectile weighing	7069

End Items	Operations Performed	APE No.
PROJECTILE 37MM THRU 280 MM	Clean projectiles	1105M1
	75MM through 155 projectiles	1105E001
	8-inch through 240MM projectiles	1105E002
	KIT, duster collector	1105E004/1200
	KIT, 60MM projectile	1200E001
	Drillout/resize projectile fuze cavities	1283
	KIT, Thread cleaner	1283E001
	Expand fuzewell cavities	2107
	KIT, Remote control	2107E001/1043
	Remove ogive from 155MM M483A1 Projectile	2220
	Remove base plug from 155MM M483A1 projectile	2231
	Base plug drilling machine,for 155MM M483A1	2234
PROJECTILE 37MM THRU 280 MM	Projectile elevator for 155MM and 8 inch	2232
	Adhesive dispensing equipment for 155MM M483A1 base plug	2244
	Drill, stuck supplementary charge	1504
	KIT, 155MM M549 supplementary charge removal	1504E003
	Torque, base plug on projectile 8-inch, HE, M404	2171
	Zone weigh projectiles, 75MM thru 120MM	2089
	Zone weigh projectiles, 155MM thru 240MM	2090
	Device, locking, scale platform	2094
	Push base from projectile, 155MM, M118	1925M1
	Test air tight seal between ogive & projectile (155MM M483A1)	2222
	KIT, 8-inch projectile	2222E001
	Remove obturator from 155MM M549 & M549A1 projectiles	2229
	Install obturator to 155MM M549/M549A1 projectiles	2230
	Lift and position projectiles	2146
	KIT, Projectile manipulator 155MM, 8“ Army, 5“, 6“, 8“ Navy	

End Items	Operations Performed	APE No.
BOMBS	Test fuze cables (MK80 thru M84 bombs)	7021
	Defuze and remove fuzewell plug from 20 to 23 pound fragmentation bomb	1002M2
	Fuze	1002E019
	Fuzewell plug	1002E020
	Toxic agent sampling	1934
	KIT, Accessory for TMU-28/B spray tank	1934E001
	KIT, Accessory for M116, MK 94, and MO1 bombs	1934E003
GRENADE	Hold grenades or fuzes for x-ray	1288
	Barricade, pitch-in (fragmentation grenades)	1213M1
	KIT, Dud removal	1213E002
	Barricade, pitch-in (fragmentation arenades)	2252
	Remove fuze from grenade	1202M1
	M26, M26A1 and M61 hand grenades	1202E003
	MK2 hand greande	1202E004
	M34 WP smoke grenade	1202E005
	M6, M7, M8, M14 and M18 chemical grenades	1202E006
	M15 WP smoke grenade	1202E007
	MK3A2 offensive hand grenade	1202E009
	M33 and M67 delay frag grenades and M67 practice grenade	1202E010/2156
	M33 and M67 hand grenades	2156E001
	Device, access door lifting	2156E002
	M15 smoke grenade	2156E003
	M34 smoke greande	2156E004
	M213 hand greande fuze	2172
	KIT, Staking, expulsion charge cup for 155MM M483 ogive	7041E002
	Remove fin assembly	1153M1
	M19 rifle grenade	1153E028
	Stake grenade fuze	1065
	M204A1 fuze	1065E001

End Item	Operations Performed	APE No.
ROCKET 66MM, M74	Open polystyrene box	2186
	Hold four round	2179
	Clip handling fixture	2179E001
	Remove tube cap	2181
	Remove retaining screw	2187
	Remove cover screw	2187E001
	Remove retainer	2180
	Tools for fin spring	2190
	Clip hole location	1971
	Warhead OD Comparator	1970
	Conductivity test warhead	1972
	KIT, digital thermocouple readout meter	1972E001
	Oven, Preconditioning	1916M1
	Fixture, visual inspection	2184
	Retainer assembly	2185
	Dispenser vermiculite	2021M1
	KIT, Vermiculite dispense	2021E001
	Vacuum cleaner	2043
	Box assembly holder	2189
	Stop for drilling operation	1171
ROCKET 66MM, M72	Hold rocket	1065
	KIT, Accessory	1065E049
	Pull warhead from motor	1001M1
	Deluge w/shield	1001E091
	KIT, Pull apart	1001E082
	Gage wall thickness	1272
	Renovate rocket	1215M1
	KIT, Hand tool for assembly rocket	1215E049
	KIT, Disassembly rocket	1215E050
	Ultrasonic test fuze closure	2062
	KIT, Fuze closure	2062E001
	Stop for drilling operation	1171

End Items	Operations Performed	APE No.
ROCKET, 2.36 INCH	Disassemble rocket	1002M2
	KIT, M10 rocket	1002E030
ROCKET, 2.75 INCH	Continuity test for rocket motor	1001M1/1189
	Deluge w/shield	1001E091
	Hold rocket	1204
	KIT, Jaw, 2.75 inch rocket warhead	1204E011
	KIT, Jaw 2.75 inch rocket motor	1204E015
	KIT, Continuity testing for rocket motor	1189E001
	KIT, Rocket motor w/solid bulkhead closure w/XM229 or M151warheads	1189E004
	KIT, Rocket motor MK40 w/warhead	1189E015
	KIT, Rocket motor MK40	1189E016
	KIT. Rocket mtoro MK66 Mod 1	1189E017
	Stop for drilling operation	1171
	KIT, Disassembly for 2.75 inch M27 warhead	1001E097
ROCKET, 3.5 INCH	Continuity test for rocket motors	1001M1
	Deluge w/shield	1001E091
	Holding accessories for testing	1001E013
	Modification shield	1001E015
	Rocket motor continuity test	1001E016
	Hold rocket motor on warhead	1204/1065
	M28A2 and M29 rocket warhead	1204E010/1065E004
	Renovate rocket	1215
	Replace igniter M20A1B1 from rocket	1215E002
	Tighten or replace rivets rocket motor	1215E003
	Hand tools to assembly rocket	1215E004
	Contain burster on M30 rocket	1215E012
	Perform continuity test	1189
	Rocket motor	1189E002
	Shunt accessory	1189E012
	Disassemble rocket M30 WP	2099
	Weight propellant	2102/1032

End Item	Operations Performed	APE No.
ROCKET, 3.5 INCH (Continued)	Disassemble rocket	1002M2
	M28, M29 and M30	1002E025
	M28, M29 and M30 rockets between motor & fuze	1002E034
	M28, M29 and M30 rockets between warhead & fuze or between motor & fuze	1002E035
	KIT, Renovation	1002E037
	stop for drilling operation	1171
ROCKET, 4.5 INCH	Remove warhead from rocket	1240/1210
	KIT, Remove warhead from rocket	1210E002
	ROCKET, 115MMRemove warhead from rocket	1240
	Remove M36 burster from chemical rocket	2212
	Remove M34 burster from chemical rocket	2213
ROCKET, 5 INCH	Continuity test for rocket	1189
	KIT, Rocket motor	1189E003
	KIT, Rocket M3 JATO motor	1189E011
ROCKET, HONEST JOHN SPIN ROCKET	Continuity test for spin rocket	1189
	M37 and M37A1 spin rocket	1189E013
	M7A2B1 spin rocket	1189E014
SMOKE POTS	Clean and derust M482, ABC-MS and M1 HC smoke pots	2216
	Defuze M207A1 from M4A2 smoke pot	2217
FUZE	Remove M21A1 booster and tracer from base fuze	1002M2
	Tracer and base fuze M534	1002E024
	Booster from 75MM, M309Al projectile	1002E036
	Booster from standard contour fuze	1002E038
	Remove booster from fuze	1118M2
	AN-M103, M139, M140, M163, M164, M165 and M167 fuzes	1118E001
	M145 fuze	1118E003
	M110, M158 and M193 fuzes	1118E004
	M120 and M170 fuzes	1118E005

End Items	Operations Performed	APE No.
	M147 and M155 fuzes	1118E006
	M52 fuze	1118E007
	M51A5, M500, M502A1, M508 and M518 fuzes	1118E012
	M524 fuze	1118E020
	Remove booster cup from fuze	1153M1
	M52A2 fuze	1153E016
	Remove booster and/or cup from standard contour fuzes	1153E027
	Crimp ogive on fuze	1220
	M90	1220E011
	Clean fuze thread	1243
	Deburr standard contour fuze	1251
	Stake booster to fuze	2057
	Stake auxiliary detonating fuze to fuze adapter 3“/50, 5“/38, 5“/54 and 16’’/50	7041M1
	Stop for drilling operation	1171
	Assemble or disassemble M605 mine fuze	1171
	Obliterate stamp markings	1146/2055
	Remove bottom screw from M78 PD fuze	1153E025
	Demilitarize booster	1229M1
	M21A4 (90MM)	1229E011
	Torque booster to fuze	1263
	Torque M54, M55 and M500 service fuze	1223
	Test T361E2 fuze container for leaks	1252
	KIT, Container tester	1252E002
	Remove fuzes, plugs and adapters from hose/base of projectile	7040
	Remove rocket warhead fuze and adapter	7040A
	M55 chemical rocket warhead fuze	7040E001
	M55 chemical rocket warhead adapter	7040E002
	Remove auxiliary booster from fuze	1118M2
	M90 fuze	1118E017
	Separate booster cup from booster M21A41	118E013
	Remove booster from M52 fuze	1206

End Items	Operations Performed	APE No.
FUZE (Continued)	Remove bottom closing screw assembly from fuze	1118M2
	M78 fuze	1118E010
	Remove and replace bottom closing screw assembly from fuze	
	M48, M51 and M500 fuzes	1118E011
	Disassemble M404A2 rocket fuze	1118M2/1229M1/1215
	Remove M41 detonator	1118E018/1229E020
	Remove detonator cap housing	1118E019/1215E006
	Drill stake marks from M404A2 fuze	1215E005
	Thread chasing and holding device	1215E007
	Hand tools for changing setback sleeve	1215E008
	Staking gun, guide, and holding fixture	1215E009
	Remove head assembly from standard contour fuze	2083
	Remove head from fuze	1118M2
	M52A2 fuze	1118E002
	Remove head from adapter	1153M1
	M519 fuze	1153E003
	Remove fuze body from base detonating fuze head	1118M2
	M62 base detonating fuze	1118E016
	Remove windshield of ogive from M90A1 fuze	2139
DEMILITARIZATION EQUIPMENT	Breakdown 20MM cartridges	2001M1
	M187 and M204 cartridge cases	2001E001
	M103 cartridge case	2001E002
	M21 cartridge case	2001E003
	Navy 20MM cartridges	7033
	Breakdown 25MM	2214
	KIT, for M791, M792 with fuze PDSD M758, M793	2214E002
	KIT, for M788, M789, and M883	2214E001
	Panel, fire control-demolition	1055M3
	Cartridge case cutoff, 152MM and 120MM	2170M1

End Items	Operations Performed	APE No.
	Furnace, deactivation	1236M1
	White phosphorus-phosphoric acid plant	1400
	Deband projectiles 37MM thru 106MM	1208
	90MM projectiles, M71	1208E001
	57MM projectiles	1208E002
	75MM and 76MM projectiles	1208E003
	37MM and 40MM projectiles	1208E004
	105MM and 106MM projectiles	1208E005
	Deband projectiles 120MM thru 280MM	1212M1
	280MM projectiles	1212E001
	8-inch and 240MM projectiles except 8" M106	1212E002
	155MM projectiles	1212E003
	175MM projectiles	1212E004
	120MM projectiles	1212E005
	Deband projectiles 57MM thru 155MM	1042M3/2242
	3"/50, 76MM and 57MM projectiles	1042E001
	75MM projectiles	1042E005
	105MM Gun and 90MM projectiles	1042E002
	106MM rifle and 105MM projectiels	1042E004
	155MM and 120MM projectiles	2242E001
	5" and 6" Navy projectiles	2242E002
	Pick-up fine particles of explosives	1061/2043/3041A/
	Projectile saw (75MM to 120MM)	2175
	Remove windshield cap & continuity test, 152MM	2169
	Small item shear	2196
	M21A1 boosters	2196E001
	40MM, M406 grenades	2196E002
	40MM, M386 grenades	2196E003
	M505A1 fuze w/M21A4 boosters	2196E004
	Unfuze M26 hand greandes	2196E005
	M42 and M46 ICM grenades	2196E006

End Item	Operations Performed	APE No.
DEMILITARIZATION EQUIPMENT (Continued)	Trap explosive dust in water	2042
	View hazardous disassemble operations	1072M2
	Washout explosives from projectiles, bomb, mine, etc.	1300M1
	Disassembly rocket motor from demolition kit (M180)	2219
	Disassemble rocket motor from warhead	1240
	KIT, Separate motor from warhead, 115MM M55	1240E001
	KIT, Separate motor from warhead, 2.75 inch APERS	1240E002
CARTRIDGE AND PROPELLANT STORAGE CASE	75MM through 8 inch cartridge storage cases	1105E003
	KIT, Dust collector	1105E004
	Download M176 grenade launcher	2235
FIBER CONTAINERS	Punch pressure relief holes in fiber containers	1088/1221
	Hold small container when removing lid and sealing tape	1195
	Remove lids from small containers	1159
	Pull lids from fiber containers	1103M1/1270M1
	40MM through 57MM containers	1003E001
	40MM through 60MM containers	1270E012
	75MM through 81MM containers	1003E002/1270E002
	90MM through 105MM containers (except HEAT ammunition)	1003E003
	90MM through 4.2″ mortar	1270E003
	120MM conatiners	1003E004
	Apply sealing tape to fiber and metal containers	1137
	KIT, Tape cutter	1137E001/1209M1
	KIT, Apply three wraps of tape	1209E001
	KIT, 2.75″ rocket (up to 68″ length)	1209E003/1004M1
	Hermetically seal M20 and M22 containers	1066

End Items	Operations Performed	APE No.
GENERAL AMMUNITION MAINTENANCE EQUIPMENT	Collect propellant	1028
	KIT, Exhauster, centrifugal	1028E001
	KIT, Control system, propellant discharge pneumatic	1028E003
	Ammunition cleaning	1200
	Clean 3" to 16" diameter powder cans (NAVY)	7032
	Heat sealing compound for dip coating	1086
	Pneumatic lid remover	1003M1
	40MM thru 57MM fiber containers	1003E001
	75MM thru 81MM fiber containers	1003E002
	90MM thru 105MM (except 105MM HEAT) fiber containers	1003E003
	120MM fiber containers	1003E004
	KIT, Modify control system	1003E006
	Jungle pack ammunition	1278M1
	KIT, Centering band holding rack for 105MM	1278E001
	Install obturator	1278M2
	KIT, Obturator holding rack for 155MM	1278E003
	KIT, Obturator holding rack 8 inch	1278E004
	Test metal containers for leaks	1052M1/1252/1958M
	M548 and M549 metal container	1958E001
	M621 container liner	1958E002
	View hazardous disassembly operations	1072M2
	Weigh various items and components	2044M1/2045M1/ 2046/2089/2090/ 2094/2101/2102/ 2103/2104/2105/ 2106/1032/7069
	Paint projectiles and storage containers	1045M1/1069M1/ 1070M1/1205M1/ 1213M1/1280M1/ 2130M2
	KIT, 90MM shield	2130E001
	KIT, 75MM or 76MM shield	2130E002
	KIT, Foot valve	2130E003

End Items	Operations Performed	APE No.
GENERAL AMMUNITION MAINTENANCE EQUIPMENT (Continued)	76MM complete round (NAVY)	2130E004
	3"/50 comlete round	2130E005
	Remove rust, corrosion and paint from projectiles and bombs	1507
	Pull test ammunition	1299/3022
	KIT, Extend pull test capability to 20,000 pounds maximum	1299E021
	Clean and derust projectiles and storage containers	1105M1
	KIT, Derust 75MM thru 155MM projectiles	1105E001
	KIT, Derust 8-inch thru 240MM projectiles	1105E002
	KIT, Derust cartridge storage cases (75MM thru 8-inch)	1105E003
	KIT, Dust collector	1105E004
	Remove rust, corrosion and paint from small items	1243
	Seal metal can	1066/2091
	Remove fiber container tear strip Conveyor, powered belt	1151/1295 1022M1/2032
	Lifting device, 155MM thru 8 inch	2168/2232
TOXIC CHEMICAL AMMUNITION EQUIPMENT	Device, agent sampling	1957
	Unit, surveillance agent sampling Device, chemical agent detection	1959 1964
	Container, agent sampling fixture for one ton	1969
	Unit, agent sampling	1981
	Equipment, replace one ton plug and valve	1982
	Device, air sampling	2053M2

APPENDIX C

PREPARATION AND HANDLING OF AMMUNITION PECULIAR EQUIPMENT FOR SHIPMENT AND STORAGE

Section I. INTRODUCTION

C-1. Scope.

a. This appendix contains instructions for the preparation and handling of Ammunition Peculiar Equipment (APE) for shipment and storage. It applies to equipment which has been inspected, tested and determined to be suitable for retention in the APE system. The procedures and methods contained herein provide uniform guidance on the minimum requirements for disassembly, inspection, cleaning, preservation-packaging, packing, marking, blocking, bracing and skidding prior to shipment or storage. Storage requirements include maintenance and surveillance of equipment throughout the storage period.

b. The provisions of this appendix apply to all organizations controlling APE to be shipped, placed in storage, or layed away for future use.

C-2 . Definitions.

For the purpose of this appendix, the following definitions apply.

a. Cleaning. Cleaning is a process accomplished by a variety of methods, and techniques, to remove all sludge, chips, abrasives, dirt, rust and other harmful foreign matter.

b. Compressed air, moisture-free. Moisture–free compressed air is obtained by utilizing properly maintained traps, filters and desiccators in the source system.

c. Disassembly. Disassembly means the removal of only those major and minor assemblies and components, required to provide access to machine areas for inspection, cleaning, preservation and preparation for shipment.

d. Documentation. Documentation consists of packing lists, inspection and test reports, decontamination certification, operating and installation instructions, diagrams of electrical, fluidic, pneumatic and hydraulic systems and utility connections. When specified, the documentation shall include photographs, manufacturing procedures and other required technical data.

e. Equipment, nonseverable. A type of plant equipment which, due to size or design, cannot be removed economically from its installed position for storage or shipment.

f. Exercising. Periodic operation of a machine under no-load conditions to distribute lubricants or preservatives.

g. Shipping Document. A document, prepared on DD form 1149, Requisition and Invoice/Shipping Document, or DD Form 1348, Single Line Item Requisition System Document, which directs or authorizes movement, and transfer of accountability of APE items reportable to AMCCOM.

h. Owning Agency. The organization which has accountability for APE.

C-2. Definitions (Cont).

i. **Packing List.** A packing list is a document used to identify unitized loads packed with unlike items, or a single stock numbered item comprised of unlike items, where full description of the contents is not authorized, or cannot be shown on the container.

j. **Preservation.** The application or use of adequate protective measures to prevent deterioration due to environmental conditions.

k. **Standby-in-Place.** Equipment stored in its original, or last, operational Position and connected to power.

l. **Adjacent Storage.** Storage of equipment in the vicinity of the premises of the user.

m. **Storage-on-Site.** Equipment stored on the premises of the user, but removed from operating position.

n. **User.** The government activity or contractor operating, or proposing to operate, equipment.

o. **Decontamination.** Removal of explosives/hazardous substances to a xxx degree to render equipment safe for maintenance by experienced personnel and to a xxxxx degree prior to release to general public or transfer to Defense Reutilization and Marketing Offices.

Section II. GENERAL REQUIREMENTS

C-3. Program Requirements.

WARNING

ANY EXPLOSIVE CONTAMINATION MUST BE REMOVED FROM APE PRIOR TO CRATING AND SHIPMENT IAW DIRECTIVES IN DOD 5160.65-M AND PROCEDURES CONTAINED IN TB 700-4. EQUIPMENT WILL BE CERTIFIED FREE OF EXPLOSIVES AND TAGGED WITH DD FORM 2271. DECONTAMINATION IS NECESSARY TO PRECLUDE EXCLUSIVE HAZARDS.

The degree of protection to be applied to APE for shipment or storage depends on the conditions which can be foreseen and those which can be reasonably anticipated. Adequate, but not excessive, protection shall be provided to prevent damage or deterioration. Levels of protection are prescribed with the objective of providing selective standards for preservation packaging and packing appropriate to the conditions to be encountered. Items shall be preserved-packaged and packed for shipment in accordance with level/method specified in the shipping document. Items previously prepared to a higher level shall not be reworked to conform to any lower level(s) specified in the shipping document with the possible exception of packing of items for air shipment. Items previously prepared at a lower level shall be processed to conform to any higher level(s) specified in the shipping document. It is essential that decisions concerning actions in accordance with this appendix be made by, or based on the recommendations of, qualified personnel thoroughly trained and experienced in this field.

C-4. Levels of Protection.

Unless otherwise specified, the following levels shall apply equally to preservation-packaging and packing.

a. **Level A.** This level is the degree of preservation or packing required for protection of materiel against the most severe conditions known or anticipated to be encountered during shipment, handling and storage. Preservation and packing

designated level A will be designed to protect materiel against direct exposure to extremes of climate, terrain, operational and transportation environments without protection other than that provided by the pack. Normally, level A protection is provided for overseas shipment of APE and retention in uncontrolled storage.

b. Level B. This level is the degree of preservation or packing required for protection of materiel under known favorable conditions during shipment, handling and storage.

c. Industrial. This level may be utilized whenever logistical conditions justify and may be also used to satisfy level A or B requirements whenever the technical design details of the package meet all conditions of the level of protection specified. Industrial packaging must protect items against physical and environmental damage during shipment, handling and storage.

d. Selection of Levels. If no level of protection is specified, selection of the appropriate level shall be made in accordance with Joint Regulation "Preservation-Packaging, Packing and Marking of Items of supply" (AR 700-15; NAVSUP 4030.28; AFT 71-6; MCO 4030.33; DLAR 4145.7), using the level most suited to the circumstances. When a combination of conditions used for determination of levels falls within more than one level, the highest of these levels shall apply.

C-5. Basic Requirements.

Certain requirements are applicable to all programs involving shipment or storage of APE. The following steps are common to, and shall be performed under, all programs:

a. Thorough cleaning and preservation, internal and external, immediately following or during shutdown. All rust, sludge; chips and other contaminants shall be removed.

b. Assembly of all manuals, installation drawings, other documentation, replacement parts, accessories and attachments.

c. Performance of inspection services to determine compliance with the applicable preservation-packaging and packing requirements of this appendix.

d. Completion of historical, property and inspection records in accordance with instructions in DA PAM 738–705.

e. Installation of dust shields when experience or judgement indicates dust or other material accretion on machines is significant.

Section III. DETAIL RECUIREMENTS

C-6. Cleaning and Preservation-Packaging.

Ammunition Peculiar Equipment, component parts, accessories, repair parts and tools shall be cleaned, preserved and packaged as specified herein. All cleaning and preservation shall be in accordance with MIL-P-116. All machines and tools require thorough cleaning and preservation immediately following shutdown, with special attention to coolant, hydraulic, pneumatic and lubrication systems to eliminate the necessity for later major disassembly to remove contaminants which may congeal during an idle period.

a. Processing Facilities. Preservation-packaging shall be accomplished within buildings which are rainproof and will prevent, substantially, all infiltration of wind–blown dust. The processing area shall be heated and equipped with adequate

C-6. Cleaning and Preservation-Packaging (Cont).

processing equipment such as spray booths, preservative tanks, etc. Equipment brought into processing areas shall be allowed to reach ambient temperature before processing.

b. Materials. Materials shall be as specified herein or as specified in the referenced packaging or material specifications. All materials shall be free of defect affecting serviceability.

c. Preservatives. Preservatives specified herein and the methods of application shall be in accordance with MIL-P–116.

d. Cleaning. Thorough cleaning and drying shall be accomplished prior to the application of preservatives . Unless otherwise specified, all surfaces of the item(s) shall be cleaned by process Cl, MIL-P-116, and drying shall be accomplished by one or more of the drying procedures also listed therein. Cleaning, drying, inspections, fingerprint removal, and the application of preservatives shall comprise an uninterrupted series of operations, holding the total elapsed time to the absolute minimum. If cleaned surfaces tend to rust before preservation, the entire process from cleaning through preservation shall be confined to small sections, or the solvent used (P-D–680) for the final wiping of small cleaned areas shall contain about 5 percent of P-10, type I, grade 30, preservative. Prior to cleaning machines with solvents, exposed precision bearings. fluidic components, motors, control panels, other electrical systems, electronic systems, and items containing organic materials shall be covered or removed to prevent damage or contamination.

e. Fingerprint Removal. After cleaning and drying, and before the application of preservatives, critical operating surfaces and other machined surfaces shall be treated for the removal of fingerprint and perspiration residue. The compound shall conform to MIL-C-15074 and the procedures shall be in accordance with MIL-P-116.

f. Preservation. Preservatives shall be applied to clean interior and exterior unpainted surfaces by spraying, brushing, dipping, operating the machine under power at lowest speed for circulating the preservative, or other applicable methods specified in MIL-P–116. Care shall be taken to cover only the required surfaces, with minimum overlap on adjacent painted surfaces. After draining liquid preservatives from internal systems, all trapped pools of preservative shall be removed by suction pump or other appropriate means.

g. Maintenance of Preservative Film. Caution shall be exercised to insure that the preservative is not rubbed off after application. Areas with discontinuous preservation shall be recoated with the same type of preservative. Where blocking or bracing comes in contact with preserved areas, grease-proof paper conforming to MIL–B-121, grade A, type I, shall be inserted, with double thickness fold, at the point of contact. The barrier materials shall extend approximately 1/2-inch beyond the edge of the block.

h. Disassembly. Equipment shall be disassembled only to the extent necessary to permit inspection, cleaning and preservation-packaging. All disassembly and reassembly shall be accomplished by technically qualified personnel knowledgeable of the types of machines involved. Care shall be exercised in the handling of parts to avoid damage and conditions which promote the formation of corrosion. Parts and assemblies removed during disassembly shall be properly identified to permit reassembly. Fasteners shall be reinstalled in their respective locations in one of the mating parts to prevent loss, or improper selection, during reassembly. Do not disassemble high speed spindle heads.

i. Matchmaking. Prior to disassembly, each part and assemble requiring reassembly in a precise position with

respect to mating part (s) , shall be matchmarked. Matchmarked parts shall be identified by use of type B, class 2, shipping tags, conforming to UU-T-81, attached to the mating parts. When required, the marked tags shall be waterproofed in accordance with MIL-STD-129.

j. **Disconnections.** Wiring, piping and tubing shall never be cut. All disconnections shall be made at proper disconnect points, e.g., junction boxes, terminals or fittings. Disconnected wires, pipes and tubing shall be clearly identified to permit proper reassembly.

k. **Furnaces and Ovens.** Furnaces and ovens shall be cleaned and preserved–packaged in accordance with MIL–F–3296.

l. **Large Furnaces.** Prior to movement of any large furnace, an evaluation shall be made by qualified government personnel to determine severability. If movement action is required and inspection has disclosed that movement of the furnace from its installed position is economically feasible, only qualified government personnel, assisted by a manufacturer's representative when required, shall make the decision. Subassemblies, attachments and accessories shall be removed to avoid damage or reduce cubage. Major members Of a furnace shall not be cut. Installation and operating instructions shall be placed in a waterproof and greaseproof envelope constructed of barrier material conforming to MIL-B-121, grade A, class I, marked "Installation and Operating Instructions," and security attached to the furnace.

m. **Compressors and Vacuum Pumps.** Compressors and vacuum pumps shall be cleaned and preserved-packaged in accordance with MIL-C-3600.

n. **Electrical and Electronic Equipment.** Electrical and electronic equipment shall be cleaned and preserved-packaged in accordance with MIL-E-17555. Electron tubes subject to damage, if left in place during transportation, shall be removed. Tubes removed and mating sockets shall be marked as necessary to permit correct tube installation at time of reassembly. Additional instructions for delicate electronic and electrical equipment is contained in paragraph C–12.

o. **Engines, Gasoline and Diesel.** Gasoline and diesel engines shall be cleaned and preserved–packaged in accordance with MIL-E-10062.

p. **Abrasive Products.** Abrasive items and materials shall be removed from the equipment and, if in excellent condition, shall be prepared in accordance with MIL-A-3816 for shipment with the parent item.

q. **Hose and Hose Fittings.** Hose and hose fittings not installed shall be cleaned and preserved–packaged in accordance with MIL-H-775.

r. **Technical Publications.** Technical manuals, pamphlets, handbooks and other documentation shall be packaged submethod 1C-1 in accordance with MIL-P-116.

s. **Levels.** Preservation–packaging shall be level A, B, or Industrial, as specified. If no level is specified, selection shall be made in accordance with the criteria contained in C-4d.

C-7. Level A and Level B Cleaning and Preservation-Packaging

Applicable requirements of paragraph C-6 above and the following shall apply.

a. **Critical Items and Surfaces.** Basic units, parts, or components meeting the critical definitions in section 6, MIL-P–116, shall be protected by an applicable submethod of method II, MIL-P–116.

b. **Painting.** Surfaces where paint is missing shall be touched up or repainted. The basic purpose served by painting equipment is preservation. The color and workmanship of paint application shall be such that appearance is maintained and enhanced as much as practicable. The choice between touch-up and complete painting shall be made primarily on the basis of economy, but if either the number of spots

C-7. **Level A and Level B Cleaning and Preservation-Packaging (Cont).**

or the total area requiring touch-up is excessive, the item shall be completely painted.

(1) Paint surface preparation. All loose paint shall be removed. All edges of old paint shall be feather-edged. In areas to be painted, old paint shall be sufficiently abraded, normally by sanding, to insure firm adhesion of the new coating. Surfaces to be painted shall be thoroughly clean.

(2) Painting requirement. One coat of primer shall be applied to all areas not already fully primed. Primer shall conform to TT-P-636. After the primer is dry, two coats of semi-gloss enamel shall be applied, allowing time for the first coat to dry thoroughly before starting the second coat. Enamel shall conform to TT-E-489. For touch-up, the enamel shall match the existing color of the item. For complete repainting, the color shall be no. 24260, FED-STD-595. Hazardous areas of APE shall be painted per instructions in AR 385-30.

(3) Application of paint. Paint should be applied by spraying, but may be applied by brush or other methods. Coating shall be uniform and complete without sags, runs, voids, or blisters.

c. **Filters and Way Wipers.** All cleanable filters shall be cleaned and replaceable filter elements renewed. Way wipers shall be removed and replaced.

d. **Cable, Cord and Wire Assemblies. After** cleaning, cable, cord and wire assemblies shall be coiled to a safe diameter and, when feasible, placed in a fiberboard container conforming to PPP-B-636. Closure of the containers shall be with PPP–T-76 tape.

e. **External Surfaces.** Prior to cleaning, remove all accessories and any assemblies which cannot be cleaned and/or preserved/packaged on the machine. After cleaning, preserve all machined surfaces of the basic item, accessories and/or assemblies with P-2 or P-19 preservative. Rotate parts as necessary to insure complete coverage.

f. **Driving Belts and Pulleys.** Belts shall be removed from the equipment or released from tension. The faces or grooves of all ferrous metal pulleys shall be coated with primer conforming to TT-P-664. Removed belts shall be packaged method III in accordance with MIL–P-116 and secured to the equipment.

g. **Lubricating Systems.** Prior to cleaning other systems, remove all oil possible from the reservoir and fill with P-10, type I, grade 30 oil. After other internal systems have been cleaned and preserved, remove the oil; no further cleaning or preservation is required.

h. **Other Internal Systems and Mechanism.** Fluid carrying systems and gear boxes shall be cleaned and preserved with the machine operating under power, except when not economically feasible, to insure circulation of solvents and preservatives throughout the various systems. Operation shall be at the lowest speed, and no longer than necessary to insure thorough cleaning or coating with preservative. If power operation is not feasible, an auxiliary pump may be used for this operation. When specified herein, solution A shall be used for cleaning internal systems. Containers for the used solution shall not be re-used for purposes other than cleaning like systems.

SOLUTION A

One part lubricating oil, P-10, type I, grade 30, and nine parts cleaning solvent, P-D-680.

(1) Hydraulic systems. The reservoir shall be drained to remove all sludge, corrosion and other foreign matter. If initial draining indicates the system to be free of sludge, corrosion, and other foreign matter, preserve system by filling with lubricating oil, P–10, type I, grade

10, circulate thoroughly, drain the oil and close all openings. If the initial drain indicates contamination, fill with solution At circulate thoroughly until system is clean, drain completely and preserve in the identical manner specified herein for an uncontaminated system.

(2) Gear Cases. Gear cases, including variable speed mechanisms, shall be drained. Whenever practicable, the cases shall be opened and all sludge, corrosion, and other foreign matter removed therefrom. Fill with solution A, shift gears into all possible positions while operating machine, then drain the solution. Preserve by filling with lubrication oil, P-lo, type I, grade 30, shift gears into all possible positions while operating the machine, then drain the oil and close all openings.

(3) Coolant systems (soluble oils and cutting oils). Drain the system of all coolants. Open the system to the extent practicable and remove all sludge, corrosion, and other foreign matter. Fill with solution A, circulate, and drain. Preserve by filling with preservative P-10, type I, grade 10, circulate, drain, and close all openings.

(4) Water cooling chambers, water jackets, steam lines, air lines, and related systems. Drain all water, and dry with moisture-free compressed air.

(5) Pneumatic systems. Drain all water and dry with moisture free compressed air. Fill lubricator with spindle oil having a SSU rating of 80 to 120 at 100 degrees Fahrenheit . Adjust lubricator to maximum flow and operate machine to coat interior of pneumatic system.

(6) Caution tag. When applicable, a waterproof tag conforming to UU-T-81 shall be attached to each machine. The tag shall state: “Machine has been preserved for shipment/storage. Before putting in operation, service all reservoirs and lubricate completely .“

i. **Bearings.** Open–type (nonsealed) ball and roller bearings which have been removed from operating positions shall be cleaned and dried without spinning the bearing. Sealed bearings shall not be cleaned except by wiping. Bearings in operating positions are not required to be cleaned. Preserve open–type bearings with P-11 grease or P10, type I, grade 30 oil, as applicable. Preserve high speed spindle bearings with P-9 oil. When current-carrying bearing assemblies are cleaned and reinstalled, or replaced, bearings shall be charged with lubricants specified by the manufacturer.

j. **Journals.** Oil-lubricated journals shall be drained, cleaned, redrained, and refilled with lubricating oil, P-10, type I, grade 10 or grade 30, as applicable.

k. **Air Cylinders.** Leave installed, if possible. Clean and dry the internal surfaces of cylinder and the operating system, and fog completely with P-10, type I, grade 30 oil. Inspect and replace organic packing, if necessary.

l. **Organic Packing.** Organic packing in coolant, lubricating, hydraulic, and other liquid carrying systems shall not be removed unless necessary for replacement purposes.

m. **Nonlubricated Interior Machined Surfaces.** Mechanism screws, exposed gears, etc, which cannot be easily depreserved, shall be coated with P–2 preservative. This includes but it is not limited to screws and exposed gears.

n. **Closed Dial Indicators.** No preservative is required. Cushion adequately with material conforming to PPP-C-843, type II, grade B, or PPP-C-1797, held in place with PPP-T-60 tape. The indicators shall be packaged submethod 1A–8 or 1A-15 in accordance with MIL-P-116.

o. **Gages and Measuring Instruments.** Gages shall not be removed unless they protrude or are otherwise subject to

C-7. Level A and Level B Cleaning and Preservation-Packaging (Cont).

damage and cannot be properly protected in-place. Gages and instruments other than closed dial indicators, including unit gages, fixture gages, and other measuring instruments, shall be coated with P–9 preservative oil. Loose gages and instruments shall be wrapped in MIL-B–121, grade A, barrier material, and packaged submethod 1C-1 or 1A-15, MIL–P-116.

p. **Tools and Tool Accessories.** Tools and accessories shall be prepared for shipment and storage in accordance with PPP-T-1150.

q. Consolidated Packaging. Except as otherwise specified herein, all preserved items not attached to the equipment shall be wrapped in barrier material MIL-B-121, grade A, type I or II, class 2, and secured with PPP-T-60 tape. Wrapped and packaged items shall be placed in containers conforming to PPP–B-601 overseas type, style optional, PPP-B-621, class 2, styled optional, W5C of PPP–B–636, or PPP–B-640, class 1 or 2, as applicable. Other items detached from the equipment which do not require a contact preservative shall be packaged in the same manner. All items placed in a container shall be cushioned, and blocked and braced in accordance with MIL–P-116 or MIL-STD-1186, as applicable. Closure of the containers shall be in accordance with the applicable container specification or the appendix thereto.

r. **Frames, Tanks, Paint Spray Booths, Conveyor Systems, etc.** Each item of this type shall be handled as a unit, or disassembled to the extent necessary for cleaning and preservative to conserve storage or shipping space. Unpainted ferrous metal surfaces shall be coated with P-2 or P-19 preservative. Bearings and fittings shall be charged with P–11 grease.

s. **Closure of Openings.** Small openings which will admit dust or water (except vents and louvers installed for ventilation purposes) shall be sealed with tape conforming to PPP–T–60, type II, class 1. Large openings shall be covered with waterproof paper conforming to PPP–B–1055, class E–1. The paper shall be secured with tape specified above. When very large openings are covered, or when the location of an opening renders the covering vulnerable to puncture, the covering or seal shall be protected by wood, plywood, or metal. The open ends of all piping and fittings shall be properly closed with pipe fittings to prevent the entrance of foreign material. The pipe fittings shall be the same material as the part being plugged or capped; plastic caps or plugs conforming to MIL-C-5501 may be used.

C-8. Industrial Level Cleaning and Preservation-Packaging.

Applicable requirements of paragraph C-6. above and the following shall be adhered to.

a. **Draining System.** Equipment cleaned and preserved at this level shall be shipped without draining the operating fluids from hydraulic systems, lubricating systems, and gear cases except when:

(1) Draining prior to shipment has been specifically directed.

(2) Such shipment of fluids is determined to be uneconomical for the government.

(3) Any reservoir cannot be secured against spillage during shipment.

b. **External Surfaces.** Remove all chips, dirt, oils and other contaminants from the basic item, its attachments, accessories and components. Clean all external surfaces with P-D–680. Apply P-2 or P-10 to all unpainted surfaces. Preserve attachments, accessories, and components removed from the basic equipment, wrap in barrier material MIL–B–121, grade A, type I or II, and secure with PPP–T-60 tape.

c. **Lubricating Systems, Hydraulic Systems, and Gear Cases.** After draining, if required in paragraph C-8a. above, close all valves and vents.

d. Coolant Systems (soluable oils and cutting oils). Clean and preserved as specified in paragraph C–7.h. (3) above.

e. Caution Tag. When applicable, a waterproof tag conforming to UU-T-81 shall be attached to each machine. The tag shall state: "Machine has been preserved for shipment/storage. Before putting in operation, service all reservoirs and lubricate completely."

C-9. Preparation for Shipment.

Unless otherwise specified, decontamination, cleaning, preservation, and packaging requirements contained in this appendix shall have been accomplished prior to the operations contained in this paragraph.

a. Records. Prior to loading, the equipment shall be inspected to insure that all required records are packaged submethod 1C-1, MIL–P–116, and attached to the basic unit. Historical records shall be complete and include all available data pertinent to each item of equipment. Inspection forms shall be available for review of the results of the last inspection, and shall contain available space to record results of subsequent inspections performed during the storage period. Packing lists shall be utilized in accordance with MIL-STD-129. These are minimum record requirements. When available, photographs, installation and foundation drawings, manufacturer's parts manuals, and other manufacturer's data related to operation, maintenance, and lubrication shall be retained with the equipment. These records and data shall be available for inspection at point of storage and shall be shipped with equipment to which they pertain.

b. Inspection Requirements. Prior to shipment, the equipment shall be inspected to verify that the material has been prepared for shipment in accordance with the requirements specified in this appendix.

c. Blocking and Bracing. Machine heads shall be locked in lowest position. Movable parts shall be removed or carefully locked in position and braced to prevent movement in transit or handling. All equipment shall be completed assembled when being prepared for shipment whenever weight and size permit, provided all necessary blocking can be accomplished to assure adequate protection for all components, attachments, and accessories. When it is not considered feasible to ship a machine assembled, the attachments, accessories, and components shall be packed according to weight as specified herein. Relieve all tension from cables, etc. Detailed requirements for blocking and bracing of equipment are contained in MIL-HDBK–701.

(1) Tables, ball-screw driven mechanisms, and parts. Tables or other components moving on ball bearings or other types of high efficiency, low friction ball or roller bearing assemblies, shall be removed or blocked and all components treated in such a manner that neither the way(s) surface(s) nor the anti-friction devices will be subject to damage. The bearing(s) preload, when required, shall be relieved. Recirculating ball-screw driven components shall have the ball nut(s) disconnected and the complete mechanism shall be protected to prevent damage during shipment and handling. Slides, counterbalances, motors, hydraulic tables, and any movable components shall be securely braced.

(2) Counterweights. Counterweights shall be blocked in place to relieve the load on the supporting device(s) and secured to prevent movement in any direction. If complete immobilization in place is not possible, remove and mount securely outside the machine.

d. Skidding. Skidding instructions are contained in MIL–HDBK–701. In preparing APE for domestic shipment, skidding rather than crating or boxing is considered to be economically advantageous, especially when aluminum skids are used. Inspect skids prior to shipment or storage and replace if necessary.

C-9. Preparation for Shipment (Cont) .

e. **Shipping Covers and Shrouds.** After equipment has been loaded and secured, a visual examination shall be made to detect any disturbance of preservatives on machine surfaces. The integrity of the preservative(s) shall be verified and, if touch-up procedures are required, the same type of preservative shall be applied to the bare area. when open–type transportation is utilized, equipment which is not otherwise fully protected against the natural elements shall be protected from water, dirt, etc, by shrouding with waterproof tarpaulins, or vinyl-coated nylon fabric conforming to MIL-C-43006, or nylon-reinforced laminated plastic sheet conforming to L-P-00524. All covers shall be of sufficient strength to provide adequate protection throughout the transit period, and shall be secured in a manner to insure that such protection is achieved. Covers constructed from waterproof paper shall not be used. All sharp corners and projections shall be padded or cushioned before shrouding. Shrouds shall be draped in a manner to completely cover the item and arranged to avoid the formation of water pockets. When closed-type transportation is utilized, dust shields shall be used, when required, to prevent dust or other material from collecting on critical surfaces.

f. **Packing.** Packing shall be accomplished in accordance with paragraph C-10.

C-10. Packing.

Except as provided in paragraphs C-10.a. and C–10.b. below, the following requirements apply, and packing shall be at level A, B, or industrial as specified. If no level is specified, selection shall be made in accordance with paragraph C-4.d. Equipment not covered herein shall be treated in accordance with the applicable commodity specification, or the methods herein for other items most similar to the specific equipment being processed.

a. **Air Shipment.** Equipment to be transported by air shall be prepared for shipment in accordance with MIL-A-25175.

b. **Specific Equipment.** Except as provided in paragraph C-10.a. above, the following types of items shall be packed at the required level in accordance with the document cited:

(1) Compressors and vacuum pumps, MIL-C-3600.

(2) Electronic and electrical equipment, MIL-E-17555 (also see paragraph C-12.).

(3) Engines, gasoline and diesel, MIL–E–10062.

(4) Furnaces and ovens, MIL-F-3296.

(5) Abrasives, MIL-A-3816.

(6) Hose and fittings, MIL-P-775.

c. **Level A Pack.**

(1) Equipment not exceeding 1,000 pounds. Each item, complete with attachments, accessories, and components, weighing 1,000 pounds or less, shall be packed in a box conforming to PPP-B-601 (overseas type) , or to PPP–B-621, class 2, style 2, 2-1/2 or 3, as applicable. Each container with contents weighing more than 200 pounds shall be modified by the installation of skid runners in accordance with the applicable container specification. Contents of each container shall be secured, waterproofed, cushioned, blocked, and braced in accordance with MIL–STD-1186. Containers shall be strapped with zinc-coated strapping conforming to QQ-S-781. Size and number of straps shall be in accordance with the appendix to the box specification.

(2) Equipment not exceeding 30,000 pounds. Each item, complete with attachments, accessories and components, weighing more than 1,000 pounds but not exceeding 30,000 pounds shall be packed in a crate conforming to MIL-C-104. Blocking, bracing, anchoring, cushioning, and waterproofing shall be in accordance with MIL-STD–1186. Closure and strapping shall be in accordance with the appendix to the crate specification (MIL-C-104) except strapping shall be zinc–coated.

(3) Equipment weighing over 30,000 pounds. APE weighing over 30,000 pounds, or dimensionally in excess of the limitations specified in MIL-C–104, shall be shipped in accordance with directions issued by the organization directing the shipment. Blocking, bracing, anchoring, cushioning, and waterproofing shall be in accordance with MIL–STD-1186.

d. Level B Pack.

(1) Equipment not exceeding 1,000 pounds. Each item, complete with attachments, accessories and components, weighing 1,000 pounds or less, shall be packed in a box conforming to PPP-B–601 (domestic type) or PPP-B-621, class 1, style as applicable. Each box with contents weighing more than 200 pounds shall be modified by the installation of skid runners in accordance with the applicable container specification. Contents of each container shall be cushioned, blocked, and braced in accordance with MIL-STD-1186. Boxes shall be strapped in accordance with the applicable container specification or the appendix thereto.

(2) Equipment not exceeding 16,000 pounds. Each item, complete with attachments, components and accessories, weighing more than 1,000 pounds but not exceeding 16,000 pounds shall be packed in open crates conforming to PPP-C–650 or MIL-C-3774, style optional depending on weight, size and dimensions of the unit to be packed. Blocking, anchoring, bracing closure and strapping shall be in accordance with the appendix to the applicable crate specification.

(3) Equipment weighing over 16,000 pounds. APE weighing over 16,000 pounds but not exceeding 30,000 pounds shall be packed in accordance with paragraph C-10.C.(2). Equipment weighing over 30,000 pounds, or in excess of the limitations specified in MIL-C–104, shall be shipped in accordance with directions issued by the organization directing the shipment.

e. Industrial Level. APE accessories, attachments, and components shall be packed in a manner that will prevent deterioration and damage during shipment, handling, and storage. Containers and packing shall comply with Uniform Freight Classification Rules or National Motor Freight Classification Rules as applicable.

f. Marking. Marking shall be in accordance with MIL-STD–129.

g. Packing List. Packing list shall be prepared in accordance with MIL-STD–129.

C-11. Storage.

Sound engineering practices shall be observed in the storage of APE. In addition to other protective measures prescribed in this appendix, proper support of machine tools base(s) is required to prevent distortion. Skids shall provide proper load points for machine support members and load transfer points shall be maintained in storage (see para C-11.c.). Equipment mounted on wooden skids is subject to stresses caused by the warping of skid components in varying humidity environments. These loadings can distort precision machinery and in extreme cases, structural damage may occur. Machine anchor bolt holes (when provided) are used to secure machines to skids. After a machine has been located in storage, the machine bolt hold–down nuts shall be loosened a minimum of 1/2–inch from the machine base and the bolt threads preserved with P–2 preservative. Other machine–to-skid retention devices shall be similarly adjusted. Machines mounted on aluminum skids do not require unloading adjustments of the hold–down bolts or other retention configurations.

CAUTION

It is imperative that the machine-to-skid retention devices, whatever the configuration, ARE properly tightened and secured PRIOR to movement of equipment.

a. Types of Storage. The term “controlled” used herein applies only to the levels of relative humidity maintained in deterioration–retarding storage climates.

C-11. Storage (Cont).

(1) Controlled storage. Types of controlled storage areas are as follows:

(a) Type A. Controlled humidity (CH) storage: Dynamic dehumidification, enclosed building or hutment. Relative humidity maintained at 50% or less.

(b) Type B. Heated storage: temperature-regulated relative humidity, enclosed building or hutment. Relative humidity maintained at 50% or less.

(2) Uncontrolled storage. Storage areas with no relative humidity control. Such spaces may be as follows:

(a) Enclosed buildings.

(b) Outdoors, under cover (shed, lean-to).

(c) Outdoors, no cover structure, or similar protection from the elements.

Outdoor storage is satisfactory for specified APE items, e.g., APE 1937 and APE 2074.

b. Skids, Crates and Boxes. Skids, crates and boxes containing APE shall be inspected when received. When required, complete repacking, recrating, or reskidding shall be accomplished prior to storage or shipment. However, an item on skids, or in a container, neither of which meets the requirements of this appendix, shall not be reskidded or placed in a new container provided safe handling and storage is assured and carrier requirements are met by the existing skid or container.

c. Leveling. The leveling requirements herein are for the primary purpose of assuring that all machine support members are uniformly loaded to prevent distortion of precision-alined elements. All equipment having ways or other precision-alined elements over 6 feet long, horizontally, shall be maintained in a level position by shimming supporting members as required. Leveling of equipment on wooden skids shall be accomplished by placing shims between the skid and the machine base when required to assure load transfer to the skid, and between the skid and the floor at the same points if the skid is not bearing solidly on the floor. Equipment on aluminum skids shall be leveled by placing shims between the skid and the floor. In the event that equipment is stored without skidding, leveling may be accomplished by shims between the machine base and the floor, or by adjusting the leveling screws. If it becomes necessary to move equipment which requires leveling, the equipment shall be releveled upon relocation (see para C-11.).

d. Aisle Space. Equipment shall be arranged to provide adequate aisle space for inspection and to provide adequate room for the removal of equipment The size of removal aisles should be governed by the size of equipment stored and the facilities available for handling. When practicable aisles should be continuous to promote a straight–line traffic pattern.

e. Accessories. Boxed and crated accessories and attachments shall be placed on the skid with the related equipment, if possible, and contact of wood with preserved surfaces avoided. When the above requirements are not practicable, boxed and crated accessories may be block-stacked separately from the basic item, provided they are identified to the item on which they belong. An appropriate notation shall be made on the record of the item to indicate that such accessories are stored in a particular location and are identified to the item.

f. Maintenance, Surveillance, and Inspection. Equipment in storage shall be free of deterioration. This includes the equipment retained in lay–away packages as standby-in-place, on-site and nearby. An inspection plan, acceptable to the NICP, shall be established at each storage location. The plan shall contain provisions to insure adequacy of equipment preservation in each of the types of storage used (see para C-11.a.). The plan shall include inspection of gear cases and other internal mechanisms to insure the items are

properly preserved and free of contamination. Sampling inspection shall be performed in accordance with MIL-STD-105. Inspection results shall be used in determining the frequency of inspections. Corrective actions shall be taken immediately when unsatisfactory conditions are found.

C-12. Electrical and Electronic Equipment and Components.

Except as otherwise indicated herein, the following applies for all levels of preservation-packaging and packing.

a. **General.** In addition to the requirements contained in MIL–E-17555, the following detailed requirements apply when preparing delicate electrical and electronic equipment for shipment. Typical examples, control panels, pendants, automatic machine control consoles, X–ray machines, electro-limit gages, comparators, machine control units and memory units are of such fabrication as to place them in a separate category with respect to cleaning, preservation-packaging, and packing. Equipment of this type depends heavily on the integrity of the electrical/electronic systems which demand special care in disassembly and reassembly. This is particularly true with respect to the many electrical conductors which interconnect separable components. When essential to preparation for shipment, handling, and storage, components may be disconnected and removed from the parent machine. Cable assemblies and conductor bundles shall be carefully removed from conduits (when applicable) and guided through routing access holes (when existent) during disassembly and reassembly. In-place immobilization is preferable when the proper degree of protection cannot be assured. The complexity of the designs and circuits, particularly of control panels, necessitates processing as assembled units, using only those methods of cleaning that will not damage delicate systems components and materials. Solvent flushing shall not be used in the cleaning of electrical circuits. Low pressure moisture–free compressed air, vacuum cleaning, or wiping with a lint-free cloth may be used for cleaning. Further cleaning–preservation is not required.

b. **Cushioning, Blocking, and Bracing.** It is of paramount importance that adequate cushioning, blocking and bracing be accomplished in preparing delicate electronic and electrical equipment for shipment. Vibration which can cause extensive damage to internal and external components, shall be held to a minimum. Cushioning, blocking and bracing shall be in accordance with MIL–STD–1186 and MIL–E-17555. Heavy components shall be adequately blocked and braced or removed. Many heavy components do not have adequate internal support to insure safe delivery. Therefore, consideration shall be given to removing these items and shipping separately. Particular attention shall be given to possible removal of heavy items, e.g., transformers and motors, which might break loose and cause damage. When components are removed from the equipment, disconnection shall be in accordance with paragraph C–6.i. and the components shall be marked and identified to assure correct reinstallation. All screws and bolts used to secure circuits, panels, shelves, etc, shall be tightened to prevent movement of the components during transportation and handling.

c. **Electron Tubes.** Electron tubes shall be handled in accordance with the requirements of paragraph C-6.n.

d. **Packaging.** Parts which have been removed shall be packaged in accordance with paragraph 3.3, MIL–E–17555. Packaged items shall be placed in containers conforming to PPP–B-601, PPP-B-621, PPP-B-636, PPP–B–640, or PPP–C-650. Cabinet doors shall be locked and secured with banding conforming to QQ-S-781. Adequate cushioning shall be used to prevent the banding from scratching or otherwise damaging the cabinet.

e. **Packing.** Each basic unit, together with removed parts packaged in accordance with paragraph C-12.d. above, shall be placed in a closed exterior container conforming to one of the applicable specifications listed in paragraph C-12.d. An

C-12. Electrical and Electronic Equipment and Components (Cont).

adequate amount of cushioning material shall be applied to the top, bottom, and all sides of the item to absorb shock and prevent damage.

f. **Marking.** Marking shall be in accordance with MIL–STD–129; additional precautionary markings, e.g., "Fragile", "Handle with care", "This side up", shall be applied, as required.

g. **Transportation Mode.** Due to the high susceptibility of delicate electronic and electrical items to damage from vibration and shock, these items should b shipped on specialized equipment available from carriers for the movement of fragile items . For shipment of specialized equipment to a user utilizing industrial level packing, the requirements in paragraph C–12.e. above may be relaxed at the discretion of the shipped if evaluation by responsible government personnel indicates that boxing or crating is not required and safe delivery and handling can be assured.

C-13. Inspection Procedures.

The inspection of equipment shall be performed in a manner, and to the degree, that will assure acceptance of only approved methods and materials; requirements include complete inspection records. Inspection shall be performed by qualified personnel who, by training and experience, are familiar with the design, assembly, and operation of the type of equipment involved.

a. **Inspection After Disassembly and Cleaning.** The equipment shall be inspected to confirm that thorough cleaning has been accomplished and that all damaged or missing parts have been, or are scheduled to be, replaced. Disassembly and cleaning shall be accomplished in accordance with the requirements contained in paragraphs C–6., C–7., and C–8.

b. **Inspection After Preservation.** The equipment shall be inspected to insure that correct reassembly was accomplished after cleaning and that all surfaces requiring a preservative have been treated as required in paragraphs C–6., C-7., and C-8.

c. **Inspection of Preservation-Packaging, Packing, Skidding, Marking, Shrouding, and Loading.** Inspection shall be performed to assure that all accessories, attachments, and components, have been properly cleaned, preserved, packaged, or installed on the machine on which they are used. When items are not installed on the machine, they shall be packaged in accordance with instructions in this standard, identified with the machine on which they are used, and stored with the parent machine when possible. Packing lists shall be checked to insure conformance to MIL-STD-129. Inspection of the skidding, packing, shrouding, and loading shall be performed to insure conformance to the requirements contained in paragraphs C-9. and C-10.

d. **Identification of Containers.** Unless otherwise specified, all containers and packaged material shall be marked in accordance with MIL-STD-129.

INDEX

	APE Number	PAGE
A		
Abrasive Blast Cleaning Machine	1507	2-122
Abrasive Cleaning Machine	1243	2-95
Actuation System, Pneumatic	1976	2-180
Adapter, Nose Cap	1250	2.96.1
Adhesive Dispensing Equipment	2244	2-370
Agent Sampling Unit for Chemical Bombs	1934	2-148
Agent Sampling Unit, for Chemical Munitions	1959M1	2-166
Agent Sampling Unit, One Ton Container	1969	2-176
Air Sampling Device	2053M3	2-230.2
Air Test Kit	1052M1	2-26
Air Vise, Navy Projectile, Vertical Mount w/Table	7007	2-382
Altitude and Drift Measuring Device	1908	2-134
Ammunition, Cart, Complete Round	1177	2-60
Ammunition Cart Projectile, 37MM Thru 105MM	1176	2-59
Ammunition Cart, Small Items	1178	2-61
Ammunition Cleaning Machine	1200	2-65
Annnunition Component Press	2160	2-289
Assembly and Crimp Machine	1010M2	2-12
Assembly and Disassembly Machine, M605 Mine Fuze	2061	2-235
Automatic Feed Machine, Caliber .50 Decoring	2015M1	2-205
Automatic Lid Removal Machine	1270M1	2-100.2
Automatic for Firing Device, Timing Device, Demolition Delay Type M1	1949	2-154
B		
Backout Depriving Machine	1011MS	2-14
Band Turning Equipment	2041	2-223
Barricade, Grenade Pitch-In	1213M1	2-76
Base Plug Projectile Drilling Machine	2234	2-366
Base Plug, Projectile, Replacement System	2231	2-362
Belted Small Arms Ammunition Production Test Equipment	2176	2-314
Black Powder Shaker Device	1123	2-48
Bomb Fuze Cable Tester	7021M1	2-390
Booth, Inspection	5015M1	2-380

	APE Number	PAGE
B (Continued)		
Booth, Paint Spray, 7 Ft. Face	1069M1	2-34.2
Booth, Paint Spray, 10 Ft. Face	1045M1	2-24
Booth, Paint Spray, 12 Ft. Face	1070M1	2-34.4
Booth, Paint Spray, 15 Ft. Face	1205M1	2-68.2
Booth, Paint Spray, 19 Ft. Face	1214M1	2-76.2
Booth, Paint Spray, 32 Ft. Face	1280M1	2-108
Breakdown Equipment, 30MM	2214	2-340
Breakdown Machine, 20MM	2001M1	2-198
C		
Caliber .50 Delinking Machine	2225	2-358
Can Leak Test Device	1958M1	2-164
Can Sealing Machine	1066	2-34
Can Sealing Machine	2091	2-246
Carrier, Projectile, 16''/50 HC and AP	7072	2-424
Cart, Ammunition, Complete Round	1177	2-60
Cart, Ammunition, Projectile, 37MM Thru 105MM	1176	2-59
Cart, Ammunition, Small Items	1178	2-61
Cart, Projectile, Navy	7031	2-398
Cartridge, Aliner, Caliber .30 and 7.62MM	2012	2-203
Cartridge Aliner, Caliber .50	2017	2-207
Cartridge, Box Packer, Linked, 7.62MM	2134	2-264
Cartridge Case Base Marking Fixture, 37MM Thru 6-Inch	2178	2-316
Cartridge Case Cutoff Machine	2170M1	2-302
Cartridge Case Liner Installation Fixture	2157	2-286
Cartridge Case Resizing Machine	1164	2-56
Cartridge Removal Fixture, Ignition	2040	2-222
Cartridge Test Device, Photoflash	1921M2	2-138
Cartridge Vibratory Feeder	2020	2-208
Cartridge Vibrator and Projectile Sealing Machine, 106MM	7057	2-410
Centering Band Cutter	2153	2-280
Center Band Turning Machine	2155M1	2-282
Central Feed Hopper	2024	2-211
Chamber, Low Temperature	1938	2-151
Chemical Agent Detection Device	1964	2-173
Chemical Agent Munition Sampling Unit	1981	2-186
Chemical Munitions Agent Sampling Device	1957	2-163
Clip Holding Fixture	2179	2-318
Clip Loading Machine, 8-Round Caliber .30	2058	2-234
Combination Gun Mount for Tracer Testing Small Arms Ammunition	1923	2-142
Collector, Dust and TNT	1061	2-30

	APE Number	Page
C (Continued)		
Complete Round, 75MM Thru 90 MM, Powered Rotator	2130M1	2-260
Conductive Floor and Conductive Shoe Test Equipment	1953	2-158
Continuity and Resistance Test Equipment	1939M1	2-152
Continuity Test Equipment	1189	2-62
Continuity Test Fixture, 5" Zuni Rocket Motor	7074	2-428
Conveyor, Powered Belt	1022M1	2-17
Crimper, 5"/38 and 5"/54 Cartridge Case	7019	2-386
Crimping Machine, Rubber Die, 150 Ton	1231	2-90
Crimping Machine, Vertical	1220	2-82
Crimping Machine, 60-Ton	2148M1	2-274
Cutter, Centering Band	2153	2-280
D		
Debander-Rebander, 81MM Mortar	2136	2-266
Demanding Machine	1042M3	2-22
Debanding Machine, 120MM Thru 280MM Projectiles	1212M1	2-74
Declipper Hand, Eight Round	1099	2-39
Declipper, 10-Round, 5.56MM; 5-Round, 7.62MM and 5-Round, Caliber .30	2077	2-241
Decoring Machine, Caliber .50	2126	2-258
Deep Cavity Drill and Resize Machine	1283	2-108.2
Defuze-Deplug Machine, Medium Caliber	7040	2-402
Defuze-Deplug Machine, Medium Caliber	7079	2-431
Defuzing Machine, 8"/55 and 16"/50 Projectiles	7066	2-412
Defuzing Machine, Hand Grenade	1202	2-66
Delinker, 7.62MM	2198	2-332
Delinker-Debelter, Caliber .30	2008	2-200
Delinker Machine, 30MM	2218	2-348
Delinking Machine, Caliber .30	2009	2-201
Delinking Machine, Caliber .50	2006M1	2-199
Delinking Machine, Caliber .50, M15A2 Link	2030	2-216
Delinking Machine Caliber . 50	2225	2-358
Demilitarization of M180 Demolition Kit Tool Set	2219	2-350
Deprime Machine	2197	2-330
Depriving Machine, Backout	1011M5	2-14
Derust Machine	2038	2-220
Detection Device, Chemical Agent	1964	2-173
Detuber, 30MM	2226	2-358.2
Device, Air Sampling	2053M3	2-230.2
Device, Air Test Projectile	2222	2-356
Device, Chemical Munition Agent Sampling	1957	2-163
Device, Holding, Function Test	1902M2	2-128

	APE Number	PAGE
D (Continued)		
Device, Holding, Hand Signal	1918M2	2-136
Device, Lanyard, Quick Release	1926	2-144
Device, Lifting and Positioning	2146	2-270
Device, Locking, Scale Platform	2094	2-247
Device, Loose Fuze Tester	2258	2-374.1
Device, Measuring, Altitude and Drift	1908	2-134
Device, Positive Stop	1171	2-58
Device, Photoflash, Cartridge Test	1921M2	2-138
Device, Pressure Testing	1907	2-133
Device, Projectile Holding	2097	2-248
Device, Projectile, Lift	2168	2-298
Device, Projectiles Rotating	2150	2-276
Device, Shaker, Black Powder	1123	2-48
Device, Test, Can Leak	1958M1	2-164
Device, Vertical Lid Removal	1359	2-54
Dial Indicating Gage	1272	2-102
Demanding Machine, Vertical	1208	2-70
Disassembly Equipment 155MM M118 and 4.2″ M335	1925	2-143
Disassembly Machine, Vertical	1153M1	2-52
Disassembly Machine, Vertical	1227	2-87
Disassembly Machine, 3.5 Inch Rocket, W.P.	2099	2-250
Disassembly Machine, 20MM, Navy	7033	2-400
Disassembly Machine, 155MM M116, 4.5″ Rocket Warhead	1210	2-72
Download Machine	2235	2-368
Drill, Stuck Supplementary Charge	1504	2-120
Drilling Machine, Base Plug Projectile	2234	2-366
Dust and TNT Collector	1061	2-30
E		
Elevator, Projectile	2232	2-364
Equipment, Adhesive Dispensing	2244	2-370
Equipment, Band Turning	2041	2-223
Equipment, Breakdown, 30MM	2214	2-340
Equipment, Conductive Floor and Conductive Shoe Test	1953	2-158
Equipment, Continuity and Resistance Test	1939M1	2-152
Equipment, Continuity Test	1189	2-62
Equipment, Disassembly, 155MM: M118 and 4.2′″ M335	1925	2-143
Equipment, Mine Test Monitoring	1978	2-182
Equipment, Production Test, Belted Small Arms Ammunition	2176	2-314
Equipment, Projectile Body Drilling	2173	2-308
Equipment, Range and Elevation Measuring	1983	2-190
Equipment, Rotating Band Replacement	2162	2-290.2

	APE Number	PAGE
E (Continued)		
Equipment, Testing Nonmetallic M14 Mine	1985	2-194
Equipment, Ton Container Plug and Valve Replacement	1982	2-188
Equipment, Tracer Removal and Replacement, 105MM, APDS-T, M392A2 Projectiles	2161	2-290
Equipment, Ultrasonic Inspection	2132	2-262
Equipment, Windshield Cap Removal and Continuity Test	2169	2-300
Electric Firing Instrument	1984	2-192
Electronic Control Unit	1963	2-172
Explosive Separator, Liquid Type, Portable	2042	2-224
Explosive Washout Plant	1300M1	2-114
F		
Facility, Radiographic Inspection	2074	2-240
Feed Hopper, Central	2024	2-211
Feeder Hopper (Double)	2031	2-217
Feeder Hopper (Single)	2021	2-209
Feeder Hopper Single (Modified)	2021M1	2-210
Feeder, Vibratory, Cartridge	2020	2-208
Fiber Container Tape and Lid Remover	1195	2-64
Fire Control Panel	1055M3	2-28
Firing Instrument, Electric	1984	2-192
Fixture, Cartridge Case Base Marking, 37MM Thru 6-Inch	2178	2-316
Fixture, Clip Holding	2179	2-318
Fixture, Continuity Test, 5"Zuni Rocket Motor	7074	2-428
Fixture, Fuze Head Removal, M48A3 Fuze	2083	2-243
Fixture, Holding, Grenade, Fuze M213	2172	2-306
Fixture, Holding, Grenade X-ray	1288	2-109
Fixture, Ignition Cartridge Removal	2040	2-222
Fixture, Impact Testing	7020	2-388
Fixture, Installation, Cartridge Case Liner	2157	2-286
Fixture, Obturator Installation	2230	2-360
Fixture, Primer Removal and Insertion	1148	2-50.1
Fixture, Primer Torque Test	1962M1	2-170
Fixture, Projectile Concentricity Check	1960M1	2-168
Fixture, Projectile Fuzewell Blanking	2166	2-296
Fixture, Projectile Turning	2158	2-287
Fixture, Propellant Level Check	2159	2-288
Fixture, Subcaliber Torque Test	1961	2-169
Fixture, Visual Inspection	2184	2-322
Function Test Equipment, Signals M185 Thru M190	1967M1	2-174
Function Test Holding Device	1902M2	2-128
Function Testing Table	1903	2-130

	APE Number	PAGE
F (Continued)		
Fuze Deburring Machine	1251	2-96.2
Fuze Disassembly Machine	1118M2	2-46
Fuze Head Removal Fixture, M48A3 Fuze	2083	2-243
Fuzewell Liner Expansion Tool	2107	2-257
Fuzewell Liner Wrench	1128M1	2-48.2
Fuzewell Liner Removal	1140M2	2-50
G		
Gage, Dial Indicating	1272	2-102
Gas Check Press, Medium Caliber Navy Projectile	7076	2-430
Gas Check Seal Press	7026	2-396
Gas Check Seal Press, 16"/50 Projectile Base Fuze	7071	2-422
Glove Box and Transfer Conveyor	1510	2-124
Grenade Fuze Tester	1955	2-160
Grenade Holding Fixture, Fuze M213	2172	2-306
Grenade Holding Fixture, X-ray	1288	2-109
Grenade Igniting Fuze Tester	1906	2-132
Grenade Launcher Test Equipment, M176 and M226	1951M1	2-156
Grenade Pitch-In Barricade	1213M1	2-76
Grenade Pneumatic Launcher	1922M1	2-140
Grenade Test Equipment for L8 Series	1974	2-178
Gun Mount, Combination, for Tracer Testing Small Arms Ammunition	1923	2-142
H		
Hand Grenade Defuzing Machine	2156	2-284
Hand Grenade Defuzing Machine	1202	2-66
Hand Signal Holding Device	1918M2	2-136
Hazardous Environment, Closed Circuit Television System	1072M3	2-36
Hazardous Waste Incinerator	1236M1	2-92
Holding Device, Function Test	1902M2	2-128
Holding Device, Projectile	2097	2-248
Hole Punch Machine	1221	2-84
Hopper, Feeder (Double)	2031	2-217
Hopper Feeder (Single)	2021	2-209
Hopper Feeder Single (Modified)	2021M1	2-210
Hot Dip Tank, Jungle Pack Ammunition	1278M1	2-104
Hot Dip Tank, Portable	1086	2-38
Hot Water Tank, Conditioning	1278M2	2-106
Hydraulic Staking Machine, 0-6 Ton Bench Type	7041M1	2-404

	APE Number	PAGE
I		
Ignition Cartridge and Primer Remover	1222	2-85
Ignition Cartridge Removal Fixture	2040	2-222
Immersion Tank	1901	2-126
Impact Testing Fixture	7020	2-388
Incendiary Rocket Test Equipment, 66MM	1956	2-162
Incinerator, Hazardous Waste	1236M1	2-92
Inspection Booth	5015M1	2-380
Inspection Equipment, Subprojectile Ultrasonic	2163	2-292
K		
Kit, Air Test	1052M1	2-26
Knife, and Shield, Polystyrene Box	2186	2-324
L		
Lanyard Device, Quick Release	1926	2-144
Launcher Pneumatic, Grenade	1922M1	2-140
Lid Removal Device, Vertical	1159	2-54
Lid Remover, Pneumatic	1003M1	2-8
Lifting and Positioning Device	2146	2-270
Linker-Delinker, Powered, Caliber .30	1025	2-19
Linker-Delinker, Powered, Caliber .50	1024M2	2-18
Linker-Delinker, Powered, 20MM	2147	2-272
Linking Machine, Caliber .50, M15A2 Link	2027M4	2-214
Linking Machine, Powered, Caliber .50, M2 or M9 Link	2026	2-212
Linking Machine, Powered, 20MM, M16	3002A	2-375
Linking Machine, 7.62MM	1217M1	2-80
Linking Machine, 7.62MM	1259	2-100
Link-Delink Machine, 20MM	2140	2-269
Link-Delink Machine, 20MM	7043	2-408
Link-Delink Machine, 25MM	2215	2-342
Link-Delink Machine, 5.56MM	2086	2-244
Link-Delink Machine, 7.62MM	1114	2-44
Loose Fuze Tester Device,	2258	2-374.1
Low Temperature Chamber	1938	2-151
M		
Machine, Abrasive Cleaning	1243	2-95
Machine, Abrasive Blast Cleaning	1507	2-122
Machine, Ammunition Cleaning.	1200	2-65

	APE Number	PAGE
M (Continued)		
Machine, Assembly and Crimp	1010M2	2-12
Machine, Assembly and Disassembly, M605 Mine Fuze	2061	2-235
Machine, Automatic Feed, Caliber .50 Decoring	2015M1	2-205
Machine, Automatic Lid Removal	1270	2-100.2
Machine, Breakdown, 20MM	2001M1	2-198
Machine, Can Sealing	1066	2-34
Machine, Can Sealing	2091	2-246
Machine, Cartridge Case Cutoff	2170	2-302
Machine, Cartridge Case Resizing	1164	2-56
Machine, Cartridge Vibrator and Projectile Seating 106MM	7057	2-410
Machine, Centering Band Turning	2155M1	2-282
Machine, Clip Loading, 8-Round, Caliber .30	2058	2-234
Machine, Crimping, Rubber Die, 15 Ton	1231	2-90
Machine, Crimping Vertical	1220	2-82
Machine, Crimping, 60-Ton	2148M1	2-274
Machine, Debanding	1042M3	2-22
Machine, Debanding, 120MM Thru 280MM Projectiles	1212M1	2-74
Machine, Decoring, Caliber .50	2126	2-258
Machine, Deep Cavity, Drill and Resize	1283	2-108.2
Machine, Defuzing, 8"/55 and 16"/50 Projectiles	7066	2-412
Machine, Hand Grenade Defuzing	1202	2-66
Machine, Delinking, Caliber .30	2009	2-201
Machine, Delinking, Caliber .50	2006M1	2-199
Machine, Delinking, Caliber .50, M15A2 Link	2030	2-216
Machine, Deprime	2197	2-330
Machine, Depriving, Backout	1011M5	2-14
Machine, Derust	2038	2-220
Machine, Disassembly, Shaped Charge Munitions	1224	2-86.1
Machine, Disassembly, 155MM M116, 4.5" Rocket Warhead	1210	2-72
Machine, Disassembly, 20MM, Navy	7033	2-400
Machine, Disassembly, 3.5 Inch Rocket, W.P.	2099	2-250
Machine, Fuze Debarring	1251	2-96.2
Machine, Fuze Disassembly	1118M2	2-46
Machine, Hand Grenade Defuzing	2156	2-284
Machine, Hole Punch	1221	2-84
Machine, Hydraulic Staking, 0-6 Ton Bench Type	7041M1	2-404
Machine, Linking, Caliber .50, M15A2 Link	2027M4	2-214
Machine, Linking, Caliber Powered, .50, M2 or M9 Link	2026	2-212
Machine, Linking, Powered, 20MM, M16	3002A	2-375
Machine, Linking, 7.62MM	1217M1	2-80
Machine, Linking, 7.62MM	1259	2-100
Machine, Link-Delink, 20MM	2140	2-269
Machine, Link-Delink, 20MM	7043	2-408

	APE Number	PAGE
M (Continued)		
Machine, Link-Delink, 25MM	2215	2-342
Machine, Link-Delink, 5.56MM	2086	2-244
Machine, Link-Delink, 7.62MM	1114	2-44
Machine, Medium Caliber Defuze-Deplug	7040	2-402
Machine, Medium Caliber Defuze-Deplug	7079	2-431
Machine, Obliterating	2055	2-232
Machine, Pneumatic Staking	2057	2-233
Machine, Prime and Deprime	1106M1	2-42
Machine, Prime and Deprime	1229M1	2-88
Machine, Primer, Inserting	1021M4	2-16
Machine, Primer Remover and Inserter	2151	2-278
Machine, Primer Staking and Continuity Testing	1254M1	2-98
Machine, Projectile, Gas Check Gasket Removal, 5", 6" and 8" Navy Gun Projectiles	7042	2-406
Machine, Projectile Saw	2175	2-312
Machine, Pull Test	3022	2-376
Machine, Rocket Disassembly	1215M1	2-78
Machine, Rotary Bullet Pull, Caliber .30, 5.56MM and 7.62MM	2011	2-202
Machine, Rotary Bullet Pull, Caliber .50	2016	2-206
Machine, Single Purpose, Pull Test	1299M1	2-112
Machine, Single Station Screening, 155MM: M483A1	2205	2-336
Machine, Small Items, Shear	2196	2-328
Machine, Swing Brush	1105M2	2-40
Machine, Swing Brush 16"/50	7067	2-414
Machine, Taping	1004M1	2-10
Machine, Taping	1209M1	2-71
Machine, Taping Small Items	1137M1	2-49
Machine, Two-Spindle Defuzing	1002M3	2-6
Machine, Three-Spindle Disassembly	1206	2-69
Machine, Vertical Demanding	1208	2-70
Machine, Vertical Disassembly	1153M2??	2-52
Machine, Vertical Disassembly	1227	2-87
Machine, Vertical Pull Apart (with Deluge with Shield)	1001M1	2-2
Machine, Vertical Pull Apart, Rotating	2000	2-196
Machine, X-ray	2068M2	2-238
Measuring Device, Altitude and Drift	1908	2-134
Meter, Warhead Conductivity Test	1972	2-177
Mine Test Monitoring Equipment	1978	2-182
Mine Testing Fixture, AP, M16	1940M3	2-153
Mobile X-Ray System, 320 RV	2248	2-372
Monorail Conveyor System	1044M1	2-23
Motor from Warhead Separator	1240	2-94
Mortar Debander-Rebander, 81MM	2136	2-266

	APE Number	PAGE
N		
Navy Gun Ammunition, Renovation Tooling for	7068	2-416
O		
Obturator Installation Fixture	2230	2-360
Obturator Removal Fixture	2229	2-358.4
Obliterating Machine	2055	2-232
Ogive Concentricity Test Fixture	2221	2-354
Ogive Removal System	2220	2-352
Operational Shield	1920	2-137
Oven, Preconditioning	1916M1	2-135
Over-Under Scale, Dial Indicating	2046	2-228
Over-Under Scale, (0 to 40 ounces)	2101	2-251
Over-Under Scale, (0-1 Pound)	2102	2-252
Over-Under Scale, (0-3 Pound)	2103	2-253
Over-Under Scale, (0-6 Pound)	2104	2-254
Over-Under Scale, (0-12 Pound)	2105	2-255
Over-Under Scale, (0-22 Pound~	2106	2-256
P		
Packer, Box, Linked 7.62MM Cartridges	2134	2-264
Panel Board Assembly	2013M2	2-204
Panel, Fire Control	1055M3	2-28
Percussion Primer Tester	1931M1	2-146
Personnel Protection Shelter	1937	2-150
Photoflash Cartridge Test Device	1921M2	2-138
Plant, White Phosphorus	1400	2-118
Pneumatic Actuation System	1976	2-180
Pneumatic Staking Machine	2057	2-233
Pneumatic Vise	1065	2-32
Pneumatic Vise	1204	2-68
Pneumatic Vise, Complete Round	1294	2-110
Portable Vacuum Cleaner	3041A	2-378
Portable Vacuum Cleaner	3041B	2-379
Powered Belt Conveyor	1022M1	2-17
Powered Belt Conveyor	2032	2-218
Preconditioning Oven	1916M1	2-135
Press, Ammunition Component	2160	2-289
Press, Gas Check Seal	7026	2-396
Press, Gas Check Seal, 16”50 Projectile Base Fuze	7071	2-422
Press, Medium Caliber Navy Projectile Gas Check	7076	2-430

	APE Number	PAGE
P (Continued)		
Press, Projectile Pinning and Staking	2174	2-310
Press, Retaining Screw Removal	2187	2-326
Pressure Testing Device	1907	2-133
Prime and Deprime Machine	1106M1	2-42
Prime and Deprime Machine	1229M1	2-88
Primer Inserting Machine	1021M4	2-16
Primer Removal and Insertion Fixture	1148	2-50.1
Primer Remover and Inserter Machine	2151	2-278
Primer Staking and Continuity Testing Machine	1254M1	2-98
Primer Torque Test Fixture	1962M1	2-170
Projectile, Air Test Device	2222	2-356
Projectile, Base Plug Drilling Machine	2234	2-366
Projectile Base Plug Replacement System	2231	2-362
Projectile Base Torque Fixture	2171	2-304
Projectile Body Drilling Equipment	2173	2-308
Projectile Carrier, 16″/50 HC and AP	7072	2-424
Projectile Cart, Navy	7031	2-398
Projectile Cavity Drilling Equipment	7025	2-394
Projectile Concentricity Check Fixture	1960M1	2-168
Projectile Defuzing Machine, 8″/55 and 16′″/50	7066	2-412
Projectile Elevator	2232	2-364
Projectile Fuzewell Blanking Fixture	2166	2-296
Projectile Fuzewell Rethread Fixturing	2165	2-294
Projectile Gas Check Gasket removal Machine, 5", 6" and 8″ Navy Gun Projectiles	7042	2-406
Projectile Holding Device	2097	2-248
Projectile Holding Rack	2154	2-281
Projectile Lift Device	2168	2-298
Projectile Pinning and Staking Press	2174	2-310
Projectile Rotating Device	2150	2-276
Projectile Saw Machine	2175	2-312
Projectile Turning Fixture	2158	2-287
Projectile Vise, Navy	7023M1	2-392
Projectile Vise, 5", Angular Mounting	7014	2-384
Projectile Vise, 16" "/50	7070	2-420
Projectile Weighing Scale	7069	2-418
Propellant, Settling Device	7073	2-426
Pull Apart Machine, Vertical (with 1001E091 Deluge with Shield)	1001M1	2-2
Pull Apart Machine, Vertical, Rotating	2000	2-196
Pull Test Machine	3022	2-376
Pull Test Machine, Single Purpose	1299M1	2-112

	APE Number	PAGE
Q		
Quick Release Lanyard Device	1926	2-144
R		
Rack, Projectile Holding	2154	2-281
Radiographic Inspection Facility	2074	2-240
Range and Elevation Measuring Equipment	1983	2-190
Removal Fixture, Obturator	2229	2-358.4
Removal System, Ogive	2220	2-352
Remover, Ignition Cartridge and Primer	1222	2-85
Remover, Tape and Lid, Fiber Container	1195	2-64
Remover, Tear Strip	1151	2-51
Remover, Tear Strip	1295	2-111
Remover, Windshield, M90A1 Fuze	2139	2-268
Renovation Tooling, Navy Gun Ammunition	7068	2-416
Retainer Assembly Tool	2185	2-323
Resistance, Universal, Test Instrument	1980	2-184
Retainer Removal Wrench	2180	2-320
Retaining Screw Removal Press	2187	2-326
Rethread Fixturing, Projectile Fuzewell	2165	2-294
Robot	2200	2-334
Rocket Assisted Projectile Disassembly Machine	2206	2-336.2
Rocket Disassembly Machine	1215M	2-78
Rotary Bullet Pull Machine, Caliber .30, 5.56MM and 7.62MM	2011	2-202
Rotary Bullet Pull Machine, Caliber .50	2016	2-206
Rotating Band Replacement Equipment	2162	2-290.2
Rotator, Powered, Complete Round, 75MM Thru 90MM	2130M1	2-260
RTV Sealant Dispensing Equipment	2211	2-336.4
Rubber Die Crimping Machine, 150 Ton	1231	2-90
S		
Scale, Oven-Under, Dial Indicating	2046	2-228
Scale, Oven-Under, (0 to 4 Ounces)	2101	2-251
Scale, Oven-Under, (0-1 pound)	2102	2-252
Scale, Oven-Under, (0-3 Pound)	2103	2-253
Scale, Oven-Under, (0-6 Pound)	2104	2-254
Scale, Oven-Under, (0-12 pound)	2105	2-255
Scale, Oven-Under, (0-22 Pound)	2106	2-256
Scale, Projectile Weighing	7069	2-418
Scale, Zone Weighting (75MM Thru 120MM)	2044M1	2-226
Scale, Zone Weighting (155MM Thru 8 Inch)	2045M1	2-227
Scale Platform Locking Device	2094	2-247

	APE Number	PAGE
S (Continued)		
Sealant, RTV, Dispensing Equipment	2211	2-336.4
Separator, Explosives, Liquid Type, Portable	2042	2-224
Separator, Motor from Warhead	1240	2-94
Settling Propellant Device	7073	2-426
Shear Machine, Small Items	2196	2-328
Shelter, Personnel Protection	1937	2-150
Shield and Knife, Polystyrene Box	2186	2-324
Shield, Operational	1920	2-137
Single Station Screening Machine, 155MM: M483A1	2205	2-336
Smoke Pot Defuzing Machine	2217	2-346
Smoke Pot Derusting Machine	2216	2-344
Stuck Supplementary Charge Drill	1504	2-120
Subprojectile Ultrasonic Inspection Equipment	2163	2-292
Surveillance Worktable	2051M1	2-229
Swing Brush Machine	1105M2	2-40
Swing Brush Machine, 16"/50	7067	2-414
System, Monorail Conveyor	1044M1	2-23
System, Vacuum Collection	1028	2-20
T		
Table, Surveillance Work	2050M1	2-229
Table, Testing, Function	1903	2-130
Tank, Immersion	1901	2-126
Tank, Hot Dip, Jungle Pack Ammunition	1278M1	2-104
Tank, Hot Dip, Portable	1086	2-38
Tank, Hot Water, Conditioning	1278M2	2-106
Taping Machine	1004M1	2-10
Taping Machine	1209M1	2-71
Taping Machine, Small Items	1137M1	2-49
Tear Strip Remover	1151	2-51
Tear Strip Remover	1295	2-111
Television System, Closed Circuit, for Hazardous Environment	1072M3	2-36
Test Equipment, Continuity, for L8 Series Grenade	1974	2-178
Test Equipment, M176 and M226 Grenade Launcher	1951M1	2-156
Test Equipment 66MM Incendiary Rocket	1956	2-162
Test Fixture, Ogive Concentricity	2221	2-354
Test Set, Ultrasonic	2062	2-236

	APE Number	PAGE
T (Continued)		
Tester, Bomb Fuze Cable	7021M1	2-390
Tester, Fuze, Grenade Igniting	1906	2-132
Tester, Percussion Primer	1931M1	2-146
Testing Equipment for Nonmetallic M14 Mine	1985	2-194
Testing Fixture, Mine, AP, M16	1940M3	2-153
Three-Spindle Disassembly Machine	1206	2-69
Timing Device, Automatic for Firing Device, Demolition:		
Delay Type M1	1949	2-154
Tool, Burster Removal M34	2213	2-339
Tool, Burster Removal M36	2212	2-338
Tool, Cavity Resizing	2052	2-230
Tool, Fuzewell Liner Expansion	2107	2-257
Tool, Fuzewell Link 40MM M16 Link	1277	2-103
Tool, Retainer Assembly	2185	2-323
Tool, Retainer Expander	1124	2-48.1
Tool Set, Demilitarization of M180 Demolition Kit	2219	2-350
Ton Container Plug and Valve Replacement Equipment	1982	2-188
Torque Adapter for 4.2 Inch Mortar Cartridge Containers	2249	2-374
Torque Fixture, Fuze Booster	2163	2-100.1
Torque Fixture, Projectile Base	2171	2-304
Torque Fixture, M54, M55, and M500 Series Fuzes	1223	2-86
Transfer Conveyor and Glove Box	1510	2-124
Tube Cap Removal Wrench	2181	2-321
Two-Spindle Defuzing Machine	1002M3	2-6
U		
Ultrasonic Inspection Equipment	2132	2-262
Ultrasonic Test Set	2062	2-236
Unit, Agent Sampling, for Chemical Bombs	1934	2-148
Unit, Agent Sampling, for Chemical Munitions	1959M1	2-166
Unit, Agent Sampling, One Ton Container	1969	2-176
Unit, Chemical Agent Munitions Sampling	1981	2-186
Unit, Electronic Control	1963	2-172
Universal Resistance Test Instrument	1980	2-184
V		
Vacuum Cleaner (Electric Portable)	2043	2-225
Vacuum Cleaner, Portable	3041A	2-378
Vacuum Cleaner, Portable	3041B	2-379

	APE Number	PAGE
V (Continued)		
Vacuum Collection System	1028	2-20
Vertical Demanding Machine	1208	2-70
Vertical Disassembly Machine	1153M1	2-52
Vertical Disassembly Machine	1227	2-87
Vertical Lid Removal Device	1159	2-54
Vertical Pull Apart Machine (with 1001E091 Deluge with Shield)	1001M1	2-2
Vertical Pull Apart Machine, Rotating	2000	2-196
Vise, Air, Navy Projectile, Vertical Mount w/Table	7007	2-382
Vise, Pneumatic	1065	2-32
Vise, Pneumatic	1204	2-68
Vise, Pneumatic, Complete Round	1294	2-110
Vise, Projectile, Navy	7023M1	2-392
Vise, Projectile, 5“, Angular Mount	7014	2-384
Vise, Projectile, 16’’/50	7070	2-420
Visual Inspection Fixture	2184	2-322
W		
Warhead Conductivity Test Meter	1972	2-177
White Phosphorus Plant	1400	2-118
Windshield Cap Removal and Continuity Test Equipment	2169	2-300
Windshield Remover, A90A1 Fuze	2139	2-268
Wrench, Fuze, Pneumatic	1247	2-96
Wrench, Fuzewell Liner	1128	2-48.2
Wrench, 81MM Mortar Fins, Disassembly Assembly	2128	2-259
Wrench, Nose Cap Removal, 90MM: M371	2081	2-242
Wrench, Retainer Removal	2180	2-320
Wrench, Tube Cap Removal	2181	2-321
X		
X-ray Machine	2068M2	2-238
X-ray 320 KVMobile X-Ray System	2248	2-372
Z		
Zone Weighing Scale (75MM Thru 120MM)	2044M1	2-226
Zone Weighing Scale (155MM Thru 8Inch)	2045M1	2-227

★U.S. GOVERNMENT PRINTING OFFICE: 1995 - 646-048/00114

By Order of the Secretary of the Army:

GORDON R. SULLIVAN
General, United States Army
Chief of Staff

Official:

MILTON H. HAMILTON
Administrative Assistant to the
Secretary of the Army
05674

DISTRIBUTION:

To be distributed in accordance with DA Form 12-34-E, block 0857, requirements for TM 43–0001–47.

*U.S. G.P.O.: 1993-546-042:80109

RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS



SOMETHING WRONG WITH THIS PUBLICATION?

FROM: (PRINT YOUR UNIT'S COMPLETE ADDRESS)

DATE SENT

PUBLICATION NUMBER	PUBLICATION DATE	PUBLICATION TITLE
TM 43-0001-47	22 Dec 1993	AMMUNITION PECULIAR EQUIP

BE EXACT. . .PIN-POINT WHERE IT IS

PAGE NO	PARA-GRAPH	FIGURE NO	TABLE NO
2-450	USE		

IN THIS SPACE TELL WHAT IS WRONG AND WHAT SHOULD BE DONE ABOUT IT:

Strap should read strapped

SAMPLE

PRINTED NAME, GRADE OR TITLE AND TELEPHONE NUMBER

John Smith 793-0989

SIGN HERE

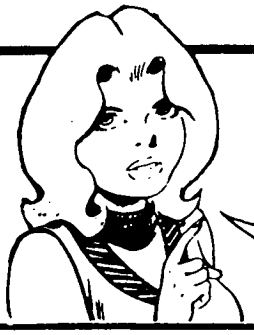
Signed

DA FORM 1 JUL 79 2028-2

PREVIOUS EDITIONS ARE OBSOLETE.

P.S.--IF YOUR OUTFIT WANTS TO KNOW ABOUT YOUR RECOMMENDATION MAKE A CARBON COPY OF THIS AND GIVE IT TO YOUR HEADQUARTERS.

RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS



SOMETHING WRONG WITH THIS PUBLICATION?

FROM (PRINT YOUR UNIT'S COMPLETE ADDRESS)

DATE SENT

PUBLICATION NUMBER	PUBLICATION DATE	PUBLICATION TITLE
TM 43-0001-47	December 1993	Ammunition Peculiar Equipment

BE EXACT PIN-POINT WHERE IT IS

PAGE NO	PARAGRAPH	FIGURE NO	TABLE NO

IN THIS SPACE TELL WHAT IS WRONG AND WHAT SHOULD BE DONE ABOUT IT:

PRINTED NAME, GRADE OR TITLE, AND TELEPHONE NUMBER

SIGN HERE

DA FORM 1 JUL 79 2028-2

PREVIOUS EDITIONS ARE OBSOLETE.

AMSMC OP-103-85

P.S.--IF YOUR OUTFIT WANTS TO KNOW ABOUT YOUR RECOMMENDATION MAKE A CARBON COPY OF THIS AND GIVE IT TO YOUR HEADQUARTERS

TEAR ALONG PERFORATED LINE

REVERSE OF DA FORM 2028-2 AMSMC OP 103-85

FILL IN YOUR UNIT'S ADDRESS

DEPARTMENT OF THE ARMY

OFFICIAL BUSINESS

NO POSTAGE NECESSSARY IF MAILED IN THE UNITED STATES

BUSINESS REPLY MAIL

FIRST CLASS PERMIT NO. 82 ROCK ISLAND IL

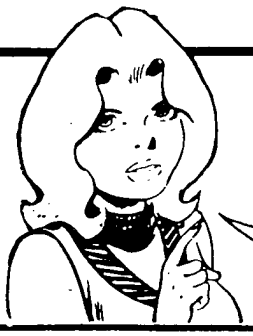
POSTAGE WILL BE PAID BY ROCK ISLAND ARSENAL

COMMANDER
U.S. ARMY ARMAMENT, MUNITIONS
AND CHEMICAL COMMAND
ATTN AMSMC-MAS
ROCK ISLAND IL 61201-9948

TEAR ALONG PERFORATED LINE

TEAR ALONG PERFORATED LINE

RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS



THEN JOT DOWN THE DOPE ABOUT IT ON THIS FORM, CAREFULLY TEAR IT OUT, FOLD IT AND DROP IT IN THE MAIL.

SOMETHING WRONG WITH THIS PUBLICATION?

FROM (PRINT YOUR UNIT'S COMPLETE ADDRESS)

DATE SENT

PUBLICATION NUMBER	PUBLICATION DATE	PUBLICATION TITLE
TM 43-0001-47	December 1993	Ammunition Peculiar Equipmen

BE EXACT PIN-POINT WHERE IT IS

PAGE NO	PARA-GRAPH	FIGURE NO	TABLE NO

IN THIS SPACE TELL WHAT IS WRONG AND WHAT SHOULD BE DONE ABOUT IT:

PRINTED NAME, GRADE OR TITLE, AND TELEPHONE NUMBER

SIGN HERE

DA FORM 1 JUL 79 2028-2

PREVIOUS EDITIONS ARE OBSOLETE.

AMSMC OP-103-85

P.S.--IF YOUR OUTFIT WANTS TO KNOW ABOUT YOUR RECOMMENDATION MAKE A CARBON COPY OF THIS AND GIVE IT TO YOUR HEADQUARTERS

REVERSE OF DA FORM 2028-2 AMSMC OP 103-85

FILL IN YOUR UNIT'S ADDRESS

DEPARTMENT OF THE ARMY

OFFICIAL BUSINESS

NO POSTAGE NECESSSARY IF MAILED IN THE UNITED STATES

BUSINESS REPLY MAIL

FIRST CLASS PERMIT NO. 82 ROCK ISLAND IL

POSTAGE WILL BE PAID BY ROCK ISLAND ARSENAL

COMMANDER
U.S. ARMY ARMAMENT, MUNITIONS
AND CHEMICAL COMMAND
ATTN AMSMC-MAS
ROCK ISLAND IL 61201-9948

TEAR ALONG PERFORATED LINE

RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS



SOMETHING WRONG WITH THIS PUBLICATION?

FROM (PRINT YOUR UNIT'S COMPLETE ADDRESS)

DATE SENT

PUBLICATION NUMBER	PUBLICATION DATE	PUBLICATION TITLE
TM 43-0001-47	December 1993	Ammunition Peculiar Equipment

BE EXACT PIN-POINT WHERE IT IS

PAGE NO	PARA-GRAPH	FIGURE NO	TABLE NO

IN THIS SPACE TELL WHAT IS WRONG AND WHAT SHOULD BE DONE ABOUT IT:

PRINTED NAME, GRADE OR TITLE, AND TELEPHONE NUMBER

SIGN HERE

TEAR ALONG PERFORATED LINE

DA FORM 1 JUL 79 2028-2

PREVIOUS EDITIONS ARE OBSOLETE.

AMSMC OP-103-85

P.S.--IF YOUR OUTFIT WANTS TO KNOW ABOUT YOUR RECOMMENDATION MAKE A CARBON COPY OF THIS AND GIVE IT TO YOUR HEADQUARTERS

REVERSE OF DA FORM 2028-2 AMSMC OP 103-85

FILL IN YOUR
UNIT'S ADDRESS

DEPARTMENT OF THE ARMY

OFFICIAL BUSINESS

NO POSTAGE
NECESSSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY MAIL

FIRST CLASS PERMIT NO. 82 ROCK ISLAND IL

POSTAGE WILL BE PAID BY ROCK ISLAND ARSENAL

COMMANDER
U.S. ARMY ARMAMENT, MUNITIONS
AND CHEMICAL COMMAND
ATTN AMSMC-MAS
ROCK ISLAND IL 61201-9948

TEAR ALONG PERFORATED LINE

THE METRIC SYSTEM AND EQUIVALENTS

LINEAR MEASURE

1 Centimeter = 10 Millimeters = 0.01 Meter = 0.3937 Inch
1 Decimeter = 10 Centimeters = 3.94 Inches
1 Meter = 10 Decimeters = 100 Centiimeters
= 1000 Millimeters = 39.37 Inches
1 Dekameter = 10 Meters = 32.8 Feet
1 Hectometer = 10 Dekameters = 328.08 Feet
1 Kilometer = 10 Hectometers = 1000 Meters
= 0.621 Mile = 3,280.8 Feet
Millimeters = Inches times 25.4
Inches = Millimeters divided by 25.4

WEIGHTS

1 Centigram = 10 Milligrams = 0.154 Grain
1 Decigram = 10 Centigrams = 1.543 Grains
1 Gram = 0.001 Kilogram = 10 Decigrams
= 1000 Milligrams = 0.035 Ounce
1 Dekagram = 10 Grams = 0.353 Ounce
1 Hectogram = 10 Dekagrams = 3.527 Ounces
1 Kilogram = 10 Hectograms = 1000 Grams = 2.205 Pounds
1 Quintal = 100 Kilograms = 220.46 Pounds
1 Metric Ton = 10 Quintals = 1000 Kilograms = 1.1 Short Tons

LIQUID MEASURE

1 Milliliter = 0.001 Liter = 0.034 Fluid Ounce
1 Centiliter = 10 Milliliters = 0.34 Fluid Ounce
1 Deciliter = 10 Centiliters = 3.38 Fluid Ounces
1 Liter = 10 Deciliters = 1000 Millileters = 33.82 Fluid Ounces
1 Dekaliter = 10 Liters = 2.64 Gallons
1 Hectoliter = 10 Dekaliters = 26.42 Gallons
1 Kiloliter = 10 Hectoliters = 264.18 Gallons

SQUARE MEASURE

1 Sq Centimeter = 100 Sq Millimeters = 0.155 Sq Inch
1 Sq Decimeter = 100 Sq Centimeters = 15.5 Sq Inches
1 Sq Meter (Centare) = 10 Sq Decimeters
= 10,000 Sq Centimeters = 10.764 Sq Feet
1 Sq Dekameter (Are) = 100 Sq Meters = 1,076.4 Sq Feet
1 Sq Hectometer (Hectare) = 100 Sq Dekameters = 2.471 Acres
1 Sq Kilometer = 100 Sq Hectometers = 1,000,000 Sq Meters
= 0.386 Sq Mile

CUBIC MEASURE

1 Cu Centimeter = 1000 Cu Millimeters = 0.061 Cu Inch
1 Cu Decimeter = 1000 Cu Centimeters = 61.02 Cu Inches
1 Cu Meter = 1000 Cu Decimeters = 1,000,000 Cu Centimeters
= 35.31 Cu Feet

TEMPERATURE

5/9 (°F – 32°) = °C
9/5 (°C+ 32°) = °F
–35° Fahrenheit is equivalent to –37° Celsius
0° Fahrenheit is equivalent to –18° Celsius
32° Fahrenheit is equivalent to 0° Celsius
90° Fahrenheit is equivalent to 32.2° Celsius
100° Fahrenheit is equivalent to 38° Celsius
212° Fahrenheit is equivalent to 100° Celsius

APPROXIMATE CONVERSION FACTORS

TO CHANGE	TO	MULTIPLY BY
Inches	Centimeters	2.540
Feet	Meters	0.305
Yards	Meters	0.914
Miles	Kilometers	1.609
Square Inches	Square Centimeters	6.451
Square Feet	Square Meters	0.093
Square Yards	Square Meters	0.836
Square Miles	Square Kilometers	2.590
Acres	Square Hectometers	0.405
Cubic Feet	Cubic Meters	0.028
Cubic Yards	Cubic Meters	0.765
Fluid Ounces	Milliliters	29.573
Pints	Liters	0.473
Quarts	Liters	0.946
Gallons	Liters	3.785
Ounces	Grams	28.349
Pounds	Kilograms	0.454
Short Tons	Metric Tons	0.907
Pound–Feet	Newton–Meters	1.356
Pounds–Inches	Newton–Meters	0.11375
Pounds per Square Inch	Kilopascals	6.895
Ounce–Inches	Newton–Meters	0.007062
Miles per Gallon	Kilometers per Liter	0.425
Miles per Hour	Kilometers per Hour	1.609
Centimeters	Inches	0.394

TO CHANGE	TO	MULTIPLY BY
Meters	Feet	3.280
Meters	Yards	1.094
Kilometers	Miles	0.621
Square Centimeters	Square Inches	0.155
Square Meters	Square Feet	10.764
Square Meters	Square Yards	1.196
Square Kilometers	Square Miles	0.386
Square Hectometers	Acres	2.471
Cubic Meters	Cubic Feet	35.315
Cubic Meters	Cubic Yards	1.308
Milliliters	Fluid Ounces	0.034
Liters	Pints	2.113
Liters	Quarts	1.057
Liters	Gallons	0.264
Grams	Ounces	0.035
Kilograms	Pounds	2.205
Metric Tons	Short Tons	1.102
Newton–Meters	Pound–Feet	0.738
Kilopascals	Pounds per Square Inch	0.145
Kilometers per Liter	Miles per Gallon	2.354
Kilometers per Hour	Miles per Hour	0.621
°Fahrenheit	°Celsius	°C = (°F–32)x5/9
°Celsius	°Fahrenheit	°F = (9/5x°C)+32