

DEPARTMENT OF THE ARMY TECHNICAL MANUAL

**ORGANIZATIONAL MAINTENANCE REPAIR PARTS
AND SPECIAL TOOLS LISTS
TEST SET, ROTARY ACTUATOR TS-1663/ASW-12(V) (FSN 6625-973-4185)
AND
FIXTURE, TEST, ROTARY ACTUATOR MX-3719/ASW-12(V) (FSN 6625-987-8530)**

Headquarters, Department of the Army, Washington, D.C.
14 March 1975

Current as of December 1974

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*This manual supersedes TM 11-6625-516-20P, 18 November 1963.

SECTION I

INTRODUCTION

1-1. Scope

This manual lists repair parts and special tools required for the performance of organizational maintenance of the TS-1663/ASW-12(V) and MX-3719/ASW-120. The PCCN for the TS-1663/ASW-12(v) is GANABZ and GANACA for the MX-3719/ASW-12(V).

1-2. General

This repair parts and special tools list is divided into the following sections:

a. Prescribed Load Allowance (PLA) -Section II. Not applicable.

b. Repair Parts List -Section III. A list of repair parts authorized for the performance of maintenance at the organizational level. This repair parts list is arranged in alphabetical order.

c. Special Tools, Test and Support Equipment - Section IV. Not applicable.

d. Index -Federal Stock Number and Reference Number Cross-Reference to Figure and Item Number - Section V. A list, in ascending numerical sequence, of all Federal stock numbers appearing in the listings, followed by a list, in alphanumeric sequence, of all reference numbers appearing in the listings. Federal stock number and reference numbers are cross-referenced to each illustration figure and item number or reference designation appearance.

1-3. Explanation of Columns

The following provides an explanation of columns in the tabular lists -

a. Source, Maintenance, and Recoverability Codes (SMR).

(1) Source code. Indicates the manner of acquiring support items for maintenance, repair, or overhaul of end items. Source codes are —

Code	Explanation
PA —	Item procured and stocked for anticipated or known usage.
PB —	Item procured and stocked for insurance purposes because essentiality dictates that a minimum quantity be available in the supply systems.
PC —	Item procured and stocked and which otherwise would be coded PA except that it is deteriorative in nature.
PD —	Support item, excluding support equipment.

Code	Explanation
	procured for initial issue or outfitting and stocked only for subsequent or additional initial issues or outfittings. Not subject to automatic replenishment.
PE -	Support equipment procured and stocked for initial issue or outfitting to specified maintenance repair activities.
PF -	Support equipment which will not be stocked but which will be centrally procured on demand.
PG -	Item procured and stocked to provide for sustained support for the life of the equipment. It is applied to an item peculiar to the equipment which because of probable discontinuance or shutdown of production facilities would prove uneconomical to reproduce at a later time.
KD -	An item of depot overhaul/repair kit and not purchased separately. Depot kit defined as a kit that provides items required at the time of overhaul or repair.
KF —	An item of a maintenance kit and not purchased separately. Maintenance kit defined as a kit that provides an item that can be replaced at organizational or direct support or general support levels of maintenance.
KB —	Item included in both a depot overhaul/repair kit and a maintenance kit.
MO —	Item to be manufactured or fabricated at organizational level.
MF —	Item to be manufactured or fabricated at direct support maintenance level.
MH —	Item to be manufactured or fabricated at general support maintenance level.
MD —	Item to be manufactured or fabricated at depot maintenance level.
AO —	Item to be assembled at organizational level.
AF —	Item to be assembled at direct support maintenance level.
AH —	Item to be assembled at general support maintenance level.
AD —	Item to be assembled at depot maintenance level.
NA —	Item is not procured or stocked because the requirements for the item will result in the replacement of the next higher assembly.

Code	Explanation
X B -	Item is not procured or stocked. If not available through salvage, requisition.
XC -	Installation drawing, diagram instruction sheet, field service drawing, that is identified by manufacturers' part number.
X D -	Support items can be requisitioned with justification.

NOTE

Cannibalization or salvage may be used as a source of supply for any items source coded above except those coded XA and aircraft support items as restricted by AR 700-42.

(2) **Maintenance code.** Maintenance codes are assigned to indicate the levels of maintenance authorized to USE and REPAIR support items. The maintenance codes are entered in the third and fourth positions of the Uniform SMR Code Format as follows -

(a) **Use (third position).** The maintenance code entered in the third position indicates the lowest maintenance level authorized to remove, replace, and use the support item. The maintenance code entered in the third position indicates one of the following levels of maintenance.

Code	Application/Explanation
O -	Support item is removed, replaced, used at the organizational level of maintenance.

NOTE

A code "C" may be used in this position to denote crew or operator maintenance performed within organizational maintenance.

F -	Support item is removed, replaced, used at the direct support maintenance level.
H -	Support item is removed, replaced, used at the general support maintenance.
D -	Support items that are removed, replaced, used at depot only.

(b) **Repair (fourth position).** The maintenance code entered in the fourth position indicates whether the item is to be repaired and identifies the lowest maintenance level with the capability to perform complete repair (i.e., all authorized maintenance functions). When a maintenance code is not used a dash (-) sign is entered. For multi-service equipment systems or when a code is entered, this position will contain one of the following maintenance codes as assigned by the service(s) that require the code -

Code	Application/Explanation
O -	The lowest maintenance level capable of complete repair of the support item is the organizational level.

Code	Application/Explanation
F -	The lowest maintenance level capable of complete repair of the support item is direct support.
H -	The lowest maintenance level capable of complete repair of the support item is general support.
D -	The lowest maintenance level capable of complete repair of the support item is the depot level.
L -	Repair restricted to designated Specialized Repair Activity.
Z -	Non-repairable. No repair is authorized.
B -	No repair is authorized. The item may be reconditioned by adjusting, lubricating, etc., at the user level. No parts or special tools are procured for the maintenance of this item.

(3) **Recoverability code.** Recoverability codes are assigned to support items to indicate the disposition action on unserviceable items. The recoverability code is entered in the fifth position of the uniform SMR Code Format as follows -

Code	Explanation
Z -	Nonrepairable item. When unserviceable, condemn and dispose at the level indicated in the first digit of the maintenance code.
O -	Repairable item. When uneconomically repairable, condemn and dispose at organizational level.
F -	Repairable item. When uneconomically repairable, condemn and dispose at the direct support level.
H -	Repairable item. When uneconomically repairable, condemn and dispose at the general support level.
D -	Repairable item. When beyond lower level repair capability, return to depot. Condemnation and disposal not authorized below depot level.
L -	Repairable item. Repair, condemnation, and disposal not authorized below depot Specialized Repair Activity level.
A -	Item requires special handling or condemnation procedures because of specific reasons (i.e., precious metal content, high dollar value, critical material or hazardous material).

b. Federal Stock Number. Indicates the Federal stock number assigned to the item.

NOTE

For requisitioning purposes, the Federal stock number must be converted to the

National stock number by adding "-00-" after the Federal stock classification (FSC) code (first four digits). For example, FSN 6625-553-0142 converts to NSN 6625-00-553-0142.

c. Description. Indicates the Federal item name and a minimum description required to identify the item. The last line indicates the reference number followed by the applicable Federal Supply Code for Manufacturer (FSCM) in parentheses. The FSCM is used as an element in item identification to designate manufacturer or distributor or Government agency, etc., and is identified in SB 708-42.

d. Unit of Measure (U/M). Indicates the standard or basic quantity by which the listed item is used in performing the actual maintenance function. This measure is expressed by a two-character alphabetical abbreviation: e.g., ea, in, pr, etc., and is the basis used to indicate quantities and allowances in subsequent columns. When the unit of measure differs from the unit of issue, the lowest **unit of issue** that will satisfy the required units of **measure** will be requisitioned.

e. Quantity Incorporated in Unit. This column indicates the quantity of the item used in the equipment. Subsequent appearances of the same item in the same assembly are indicated by the letters "REF".

f. 15-Day Organizational Maintenance Allowance.

(1) The repair parts indicated by an asterisk in the allowance column represent those authorized for use at the organizational category, and will be requisitioned on an "as required" basis, until stockage is based on demand in accordance with AR 710-2.

(2) Major Army commanders are authorized to approve reduction in the range of support items authorized for use in units within their commands. Recommendations for increase in range of items authorized for use will be forwarded to Commander, US Army Electronics Command, ATTN: AMSEL-MA-AN, Fort Monmouth, N.J., 07703. Any changes approved will be reflected in a revision to the RPSTL.

(3) Allowance quantities are indicated in the special tools list section for special tools, TMDE, and other equipment.

g. Illustration. This column is divided as follows:

(1) *Figure number.* Indicates the figure number of the illustration on which the item is shown in TM 11-6625-516-12.

(2) *Item number.* Indicates the item number or reference designation used to reference the item in the illustration.

1-4. Special Information

a. Usable on codes are included in column 3.

Uncoded items are applicable to all models. Identification of the usable on codes used in this publication are -

Code	Used on
A8E	TS-1663/ASW-12(V)
A8F	MX-3719/ASW-12(V)

b. The following publication pertains to the equipment and its components:

TM 11-6625516-12	Operator and Organizational Maintenance Manual: Test Set, Rotary Actuator TS-1663/ASW-12(V) and Fixture, Test, Rotary Actuator MX-3719/ASW-12(V).
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1-5. Location of Repair Parts

a. This manual contains one cross-reference index (sec V) to be used to locate a repair part when either the Federal stock number or reference number (manufacturer's part number) is known. The first column in the index is prepared in numerical or alphanumeric sequence in ascending order. The reference numbers (manufacturer's part numbers) are listed immediately following the last listed Federal stock number in the index of Federal stock numbers.

b. When the Federal stock number or reference number is known, follow the procedures given in (1) and (2) below.

(1) Refer to the index of Federal stock numbers (sec V) and locate the Federal stock number or reference number. The FSN and reference number are cross-referenced to the applicable figure and item number or reference designation.

(2) Refer to the repair parts list (sec III) and locate the figure number (col 7a) and item number or reference designation (col 7b) as noted in the FSN index.

c. When the figure and item number or reference designation are known, scrutinize columns 7a and 7b of the repair parts list (sec III) until the item is located.

d. When the FSN, reference number, figure number, item number and reference designation are not known, scrutinize column 3 of the repair parts list (sec III), which is arranged in alphabetical order.

1-6. Abbreviations

Not applicable.

1-7. Reporting if Equipment Publication Improvements

The reporting of errors, omissions, and recommenda-

tions for improving this publication by the individual user is encouraged. Reports should be submitted on DA Form 2028 (Recommended Changes to Publications and Blank Forms) and forwarded direct to

Commander, US Army Electronics Command,
ATTN: AMSEL-MA-AN, Fort Monmouth, N.J.,
07703.

SECTION III

SMR CODE	FEDERAL STOCK NUMBER	DESCRIPTION REFERENCE NUMBER & MFR CODE	USABLE ON CODE	(4) UNIT OF MEAS	(5) QTY. INC IN UNIT	(6) 15-DAY ORGANIZATIONAL MAINTENANCE ALW				(7) ILLUSTRATION	
						(a)	(b)	(c)	(d)	(a)	(b)
						1-5	6-20	21-50	51-100	FIGURE NO	ITEM NO
PACZZ	5920-280-3537	FUSE CARTRIDGE NO-REF-DESIG 100 AMP, 250 V.... MAX, 1.250 IN LG X 0.250 IN DIA; MS90078-12-1 (81349) ABE		EA	1	*	*	*	*		
XDCZZ		FUSE, CARTRIDGE NO-REF-DESIG 3.0 AMP, 250V.... MAX, 1.250 IN LG X 0.250 DIA; MS90078-12-1 (81349) ABE		EA	1	*	*	*	*		
XDCZZ		INSULATION SLEEVING ELECTRICAL NO-REF-DESIG.... PLAS BLK, 0.062 IN WALL THK, 2.031 IN LG O/A; Q2BLACK (70945) ABE		EA	4	*	*	*	*		
PACZZ	5355-555-0145	KNUB NO-REF-DESIG SETSCREW TYPE, POINTER..... SHAPE, 1.050 IN LG X 0.715 W X 0.790 IN THK O/A; MS91528-1K28 (81349) ABE		EA	3	*	*	*	*		
XDCZZ		KNOB NO-REF-DESIG SETSCREW TYPE, POINTER..... SHAPE, 1.344 IN LG X 0.928 W X 1.027 THICK O/A; MS91528-2K2D (81349) ABE		EA	1	*	*	*	*		
PACZZ	6240-223-9100	LAMP, GLOW DS2 NEON GAS, 1/25 W, 1.187 MAX H. O/A; NE51 (81349) ABE		EA	1	*	*	*	*	6	DS
PACZZ	6240-155-8714	LAMP, INCANDESCENT DS1 28V, 2-1/4 W, 0.17.... AMP; MS25231-313 (81349) ABE		EA	1	*	*	*	*	6	DS
XDCZZ		STUD, EXTENSION NO-REF-DESIG ALUMINUM,..... 10(0.190) IN M32 EXTERNAL THREAD, 10(.190) IN M32 INTERNAL THREAD .500 IN DIA, 1.250 IN LG O/A; 2518916 (07187) ABE		EA	3	*	*	*	*		
XDCZZ		ADAPTER, SHAFT NO-REF-DESIG .875 IN DIA, 0.343 IN W O/A; 2518915 (07187) ABE		EA	2	*	*	*	*		
PAOZZ	5120-227-8095	ADAPTER, SOCKET WRENCH NO-REF-DESIG MALE TO... FEMALE 1/4 IN MALE, 3/8 FEMALE; MS16235-2 (81349) ABE		EA	1	*	*	*	*	4	29
XDCZZ		BEARING, BALL; ANNULAR NO-REF-DESIG SINGLE.... RDW, RADIAL, .187 BORE DIA, .500 IN OD, .196 IN O/A; SR355462 (70854) ABE		EA	1	*	*	*	*		
PAOZZ	6625-055-3717	CLAMP DRUM ASSEMBLY NO-REF-DESIG P/O EQUIPMENT FURNISHED WITH TEST FIXTURE; 2579697 (07187) ABE		EA	1	*	*	*	*	4	1
PAOZZ	6625-056-0247	CLAMP, GEAR 9 ALUM P/O EQUIP FURN... W/TEST FIXTURE; 2579689 (07187) ABE		EA	1	*	*	*	*	4	21
PAUZZ	6625-055-0248	CLAMP, SHIVEL NO-REF-DESIG STEEL, PROVIDES.... HOLDER INDICATOR ON TEST FIXTURE; 2503174 (07187) ABE		EA	1	*	*	*	*	4	12
XDCZZ		DIAL, SCALE NO-REF-DESIG 0 TO 360CM;..... 610219 (00141) ABE		EA	1	*	*	*	*	4	32
XDCZZ		FITTING ASSEMBLY NO-REF-DESIG P/O EQUIP F/W... TEST FIXTURE; 2579687 (07187) ABE		EA	1	*	*	*	*		
XDCZZ		PAGE, DIAL, INDICATOR NO-REF-DESIG..... 2503139 (07187) ABE		EA	1	*	*	*	*	7	
XDCZZ		GEAR, ASSEMBLY, PINION NO-REF-DESIG C/O GEAR,.. PEN AND HUB, P/O EQUIP F/W TEST FIXTURES; 2555089-003 (07187) ABE		EA	1	*	*	*	*		
PAOZZ	5815-056-0425	GEAR ASSEMBLY, PINION NO-REF-DESIG C/O GEAR... PEN AND HUB P/O EQUIP F/W TEST FIXTURES; 2555089-002 (07187) ABE		EA	1	*	*	*	*		
XDCZZ		GEAR, SPUR NO-REF-DESIG 1.875 IN DIA X .500 IN LG TWO .127 IN DIA HOLES ON 1.125 IN MTG CENTERS; 2555082-001 (07187) ABE		EA	1	*	*	*	*		
XDCZZ		GEAR, ASSEMBLY, PINION NO-REF-DESIG C/O GEAR... PIN AND HUB; 2555089-001 (07187) ABE		EA	1	*	*	*	*		
XDCZZ		GEAR, SPUR NO-REF-DESIG 2.152 IN DIA BY 0.625... IN LG TWO 0.1257 IN DIA HOLES ON 1.125 IN MTG CENTERS; 2555086-001 (07187) ABE		EA	1	*	*	*	*		
XDCZZ		GEAR, SPUR NO-REF-DESIG 2.625 IN DIA BY 0.625... IN LG TWO .127 IN DIA HOLES ON 1.125 IN MTG CENTERS; 2555086-003 (56232) ABE		EA	1	*	*	*	*		
XDCZZ		GEAR, SPUR NO-REF-DESIG 2.375 IN DIA, BY 0.625... IN LG, TWO 0.125 IN DIA HOLES ON 1.125 IN MTG CENTERS; 2555086-002 (07187) ABE		EA	1	*	*	*	*		
XDCZZ		GEAR, SPUR NO-REF-DESIG 2.375 IN DIA X .500 IN LG TWO 1.27 DIA HOLES ON 1.125 MTG CENTERS; 2555082-003 (07187) ABE		EA	1	*	*	*	*		

SECTION III

(1) SWR CODE	(2) FEDERAL CODE	(3) DESCRIPTION REFERENCE NUMBER & MFR CODE	(4) UNIT OF MEAS	(5) QTY INC IN UNIT	(6) 15-DAY ORGANIZATIONAL MAINTENANCE ALW					(7) ILLUSTRATION		
					(a)	(b)	(c)	(d)	(e)	(f)	FIGURE NO	ITEM NO
					1-5	6-20	21-50	51-100				
PAOZZ	6625-056-0252	GEAR, SPUR NO-REF-DESIG 2.187 IN DIA X 0.050.. IN LG THD .127 IN DIA HOLES ON 1.125 MTG CENTERS; 2555082-002 (07187)	EA	1	*	*	*	*				
XDOZZ		KEY, LOCKING NO-REF-DESIG STEEL;..... 2554750 (07187)	EA	1	*	*	*	*	4	34		
XDOZZ		KNOB NO-REF-DESIG 2.250 IN OD, .250 THK O/A;.. 2555084 (07187)	EA	1	*	*	*	*				
XDOZZ		NUT, PLAIN, KNURED NO-REF-DESIG 3/4 (.750) IN M16 NOM SIZE, CLASS 2B THD; 2518917 (07187)	EA	2	*	*	*	*				
XDOZZ		PIN STRAIGHT, HEADLESS NO-REF-DESIG 3.875 IN.. LG O/A, .218 IN NOM DIA; 2518963 (07187)	EA	1	*	*	*	*				
XDOZZ		PIN, STRAIGHT, THREADED NO-REF-DESIG 3.875 IN.. LG O/A, 3.500 IN LG GRIP, .218 IN DIA GRIP, 6M32 CLASS 2A THD; 2518964 (07187)	EA	1	*	*	*	*				
XDOZZ		RING, PULL NO-REF-DESIG .063 IN DIA STOCK,.... PROVIDES PULL HANDLE ON SPRING LOADED TEST EQUIPMENT; 2555194 (58232)	EA	1	*	*	*	*				
PAOZZ	6625-056-0244	SCALE, INSTRUMENT NO-REF-DESIG RANGE 0 TO 15.. LBS; 2503186 (07187)	EA	1	*	*	*	*	4	9		
PAOZZ	5305-754-4310	SCREW, EXTERNALLY RELIEVED BODY NO-REF-DESIG... PANHEAD, SLOT DRIVE, 61037) IN LG; 2518018 (07187)	EA	2	*	*	*	*				
PAOZZ	5305-784-9406	SCREW, SPECIAL NO-REF-DESIG 3.562 IN LG,..... 4(.138) IN M32 THD, .312 IN LG, HEXAGON SECTION, 250 IN ACROSS FLATS, SLOT DRIVE; 2518019 (07187)	EA	2	*	*	*	*				
PAOZZ	5310-057-9536	SPACER, SLEEVE NO-REF-DESIG .191 IN NOM ID,.... .281 IN NOM OD, .047 IN MAX M .043 IN MIN THK; 0362011 (07187)	EA	2	*	*	*	*				
XDOZZ		THUMBSCREW NO-REF-DESIG STEEL, ZINC PL, .750.. IN H OF HEAD, .843 IN W OF HEAD, 10 (.190) IN 24 SIZE DESIGNATION, NC CLASS A THE; 2555195 (07187)	EA	REF	*	*	*	*	4	12		
PAOZZ	5120-585-7706	WRENCH, TORQUE NO-REF-DESIG 3/8 IN MALE DRIVE, 0-100 LB RATED CAP; DR1001 (45225)	EA	1	*	*	*	*	4	5		
PAOZZ	5120-684-0404	WRENCH, TORQUE NO-REF-DESIG 3/8 IN MALE DRIVE, 0-50 LBS RATED CAP; F501 (58332)	EA	1	*	*	*	*	4	6		
PAOZZ	5120-221-7971	WRENCH, TORQUE NO-REF-DESIG 3/8 MALE DRIVE, 0- 25 LB RATED CAPACITY; GGG000686 (81348)	EA	1	*	*	*	*	4	7		
PAOZZ	5120-618-4433	WRENCH, TORQUE NO-REF-DESIG 3/8 DRIVE, PD TO.. 10 LB CAPACITY; F10-1 (58332)	EA	1	*	*	*	*	4	8		

SECTION V

INDEX- FEDERAL STOCK NUMBER AND REFERENCE NUMBER
CROSS-REFERENCE TO FIGURE AND ITEM NUMBER

STOCK NUMBER	FIGURE NO.	ITEM NO.	STOCK NUMBER	FIGURE NO.	ITEM NO.
			5920-280-3537		
5120-221-7971	4	7			
5120-227-8095	4	29	6210-155-8714	6	DS1
5120-585-77066	4	5	6240-223-9100	6	DS2
5120-618-4433	4	8			
5120-684-0604	4	6			
5305-754-4310			6625-056-0244	4	9
5305-784-9405			6625-056-0247	4	21
			6625-056-0248	4	12
5310-057-9536			6625-056-0252		
5355-556-0145			6625-056-3717	4	19

REFERENCE NO.	MFR CODE	FIG. NO.	ITEM NO.	REFERENCE NO.	MFR CODE	FIG. NO.	ITEM NO.
DR1001	45225	4	5	2518963	07187		
F10-1	58332	4	8	2518964	07187		
F501	58332	4	6	2554750	07187	4	34
GGG000000	81348	4	7	2555082-001	07187		
MS16235-2	81349	4	29	2555082-002	07187		
MS25231-313	81349	6	DS1	2555082-003	07187		
MS90078-12-1	81349			2555084	07187		
MS91528-1K2d	81349			2555086-001	07187		
MS91528-2K2D	81349			2555086-002	07187		
NE51	81349	6	DS2	2555086-003	56232		
SH353602	70854			2555089-001	07187		
0302011	07187			2555089-002	07187		
2503139	07187	7		2555089-003	07187		
2503174	07187	4	12	2555194	56232		
2503180	07187	4	9	2555195	07187	4	12
2518018	07187			2579687	07187	4	
2518019	07187			2579689	07187	4	21
2518913	07187			2579697	07187	4	19
2518910	07187			610219	00141	4	32
2518917	07187			628LACK	76545		

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Chief of Staff

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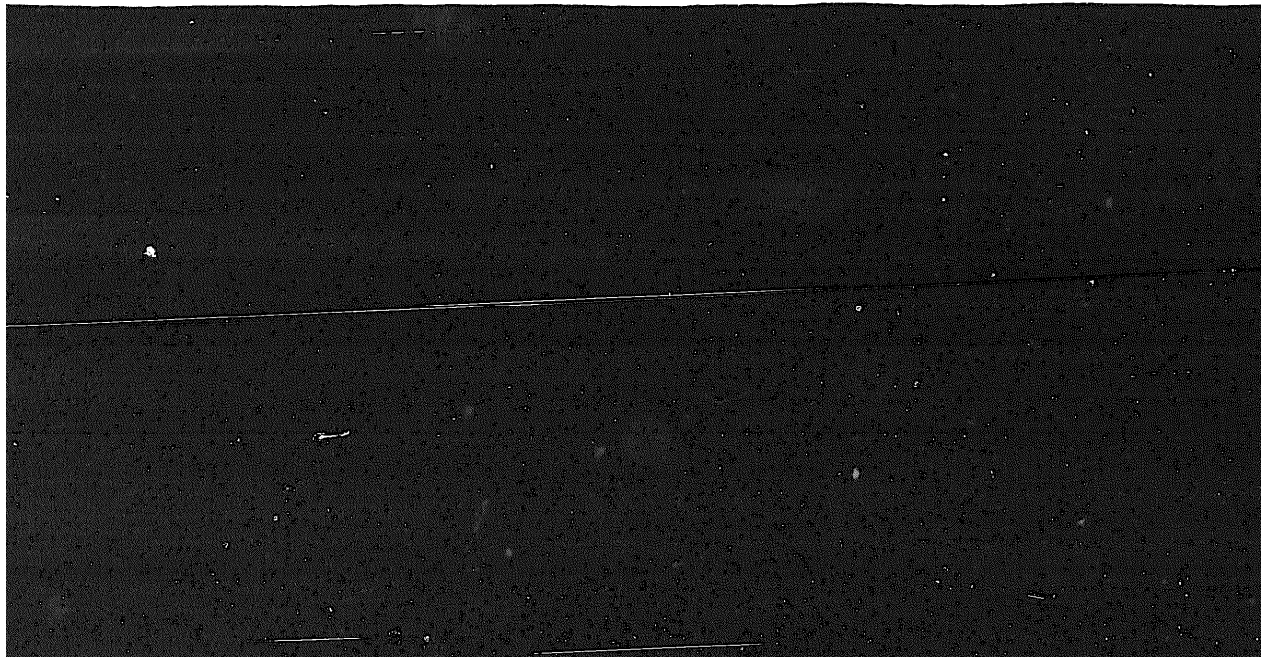
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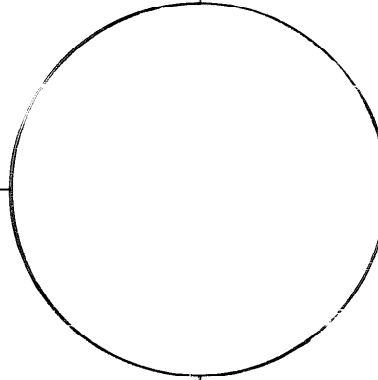
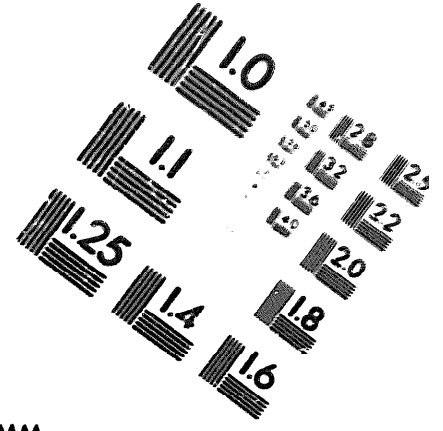
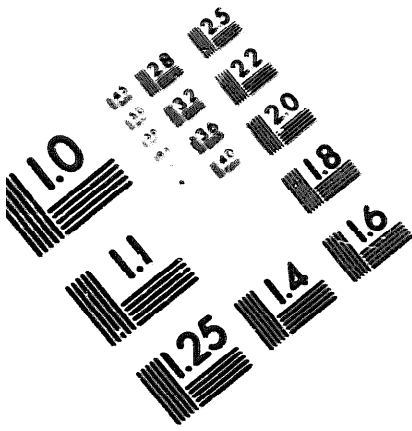
DATE





DEPARTMENT OF THE ARMY

MICROFORM
TEST TARGET



150 MM

1.0 mm (e= 81 mm)

ABCDEFGHIJKLMNQRSTUWXYZ1234567890
abcdefghijklmnopqrstuvwxyz\$%&/'%# 1/2 1/4 3/4 — = + x & @ *

1.5 mm (e= 109 mm)

ABCDEFGHIJKLMNQRSTUWXYZ1234567890
abcdefghijklmnopqrstuvwxyz\$%&/'%# 1/2 1/4 3/4 — = + x & @ *

2.0 mm (e= 1.37 mm)

ABCDEFGHIJKLMNQRSTUWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890\$%&/'%# 1/2 1/4 3/4 — = + x & @ *

2.5 mm (e= 1.77 mm)

ABCDEFGHIJKLMNQRSTUWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890\$%&/'%# 1/2 1/4 3/4 — = + x & @ *

1.0 mm (e= 81 mm)

ABCDEFGHIJKLMNQRSTUWXYZ1234567890
abcdefghijklmnopqrstuvwxyz\$%&/'%# 1/2 1/4 3/4 — = + x & @ *

1.5 mm (e= 1.09 mm)

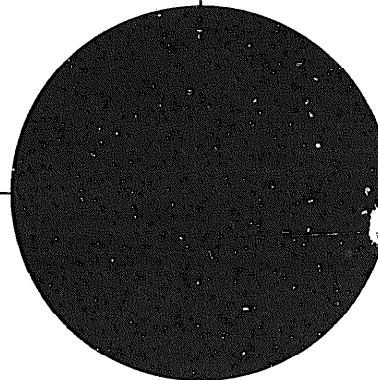
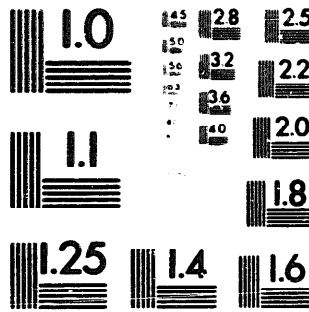
ABCDEFGHIJKLMNQRSTUWXYZ1234567890
abcdefghijklmnopqrstuvwxyz\$%&/'%# 1/2 1/4 3/4 — = + x & @ *

2.0 mm (e= 1.37 mm)

ABCDEFGHIJKLMNQRSTUWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890\$%&/'%# 1/2 1/4 3/4 — = + x & @ *

2.5 mm (e= 1.77 mm)

ABCDEFGHIJKLMNQRSTUWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890\$%&/'%# 1/2 1/4 3/4 — = + x & @ *



200 MM

250 MM

