ORGANIZATIONAL, DIRECT SUPPORT, AND GENERAL SUPPORT MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS LISTS (INCLUDING DEPOT MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS) HYDROGEN GENERATOR ML-303/TM AND HYDROGEN GENERATOR SET AN/TMQ-3 FSN 3655-408-4683

Headquarters, Department of the Army, Washington, D.C. 30 July 1973

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st This manual supersedes so much of TM 11-2413, 17 August 1956, as pertains to repair parts and special tools lists.

SECTION I

1-1. Scope

This manual lists repair parts and special tools required for the performance of organizational, direct support, general support, and depot maintenance of the ML-303/TM and AN/TMQ-3. The PCCN for the equipments is GESAAN for all models.

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. Repair Parts List-Section V. A list of repair parts authorized for the performance of maintenance at the direct support, general support, and depot level.
- e. Special Tools, Test and Support Equipment Section VI. Not applicable.
- f. Index-Federal Stock Number and Reference Number Cross-Reference to Figure and Item Number—Section VII. A list, in ascending numerical sequence, of all Federal stock numbers appearing in the listings, followed by a list, in alphameric 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 found in the tabular list.

- a. Source, Maintenance, and Recoverability Codes (SMR).
- (1) Source code. Indicates the source for the listed items. Source codes are—

Code

Explanation

- P— Repair parts, special tools and test equipment supplied from the GSA/DSA or Army supply system and authorized for use at indicated maintenance categories.
- P2— Repair parts, special tools and test equipment which are procured and stocked for insurance purposes because the combat or military essentiality of the end item

Code Explanation

- dictates that a minimum quantity be available in the supply system.
- P9— Assigned to items which are NSA design controlled: unique repair parts, special tools, test, measuring, and diagnostic equipment which are stocked and supplied by the Army COMSEC Logistic System and which are not subject to the provisions of AR 380-41.
- P10— Assigned to items which are NSA design controlled: special tools, test, measuring, and diagnostic equipment for COMSEC support which are accountable under the provisions of AR 380-41 and which are stocked and supplied by the Army COMSEC Logistic System.
- M— Repair parts, special tools and test equipment which are not procured or stocked as such in the supply system but are to be manufactured at indicated maintenance levels.
- A Assemblies which are not procured or stocked as such but are made up of two or more units. Such component units carry individual stock numbers and descriptions, are procured and stocked separately, and can be assembled to form the required assembly at indicated maintenance categories.
- X Parts and assemblies that are not procured or stocked because the failure rate is normally below that of the applicable end item or component. The failure of such part or assembly should result in retirement of the end item from the supply system.
- X1— Repair parts which are not procured or stocked. The requirement for such items will be filled by the next higher assembly or component.
- X2— Repair parts, special tools and test equipment which are not stocked and have no foreseen mortality. The indicated maintenance category requiring such repair parts will attempt to obtain the parts through cannibalization or salvage. The item may be requisitioned, with exception data, from the end item manager for immediate use.
- G Major assemblies that are procured with PEMA funds for initial issue only as ex-

change assemblies at DS and GS level. These assemblies will not be stocked above DS and GS level or returned to depot supply level.

Explanation

NOTE

Cannibalization or salvage may be used as a source of supply for any items source coded above except those coded X1 and aircraft support items as restricted by AR 700-42.

(2) Maintenance code. Indicates the lowest category of maintenance authorized to install the listed item. Capabilities of higher maintenance categories are considered equal or better. Maintenance codes are—

Code

Explanation

C Crew/operator
$O\ .\ .\ .\ .\ .\ .$. Organizational maintenance
F Direct support maintenance
H General support maintenance
D Depot maintenance

(3) Recoverability code. Indicates whether unserviceable items should be returned for recovery or salvage. Items not coded are nonrecoverable. Recoverability codes are—

Code

Explanation

- R— Repair parts (assemblies and components), special tools and test equipment which are considered economically reparable at direct and general support maintenance levels. When the item is no longer economically reparable, it is normally disposed of at the GS level. When supply considerations dictate, some of these repair parts may be listed for automatic return to supply for depot level repair as set forth in AR 710-1. When so listed, they will be replaced by supply on an exchange basis.
- S— Repair parts, special tools and test equipment, and assemblies which are economically reparable at DS and GS activities and which normally are furnished by supply on an exchange basis. When items are determined by a GSU to be uneconomically reparable, they will be evacuated to a depot for evaluation and analysis before final disposition.
- T High dollar value recoverable repair parts, special tools and test equipment which are subject to special handling and are issued on an exchange basis. Such items will be repaired or overhauled at depot

- maintenance activities only. No repair may be accomplished at lower levels.
- U Repair parts, special tools and test equipment specifically selected for salvage by reclamation units because of precious metal content, critical materials, high dollar value, or reusable casings or castings.
- b. Federal Stock Number. Indicates the Federal stock number assigned to the item and will be used for requisitioning purposes.
- 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
 - f. 15-Day Organizational Maintenance Allowances.
- (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: AMSELMA-SNV, Fort Monmouth, N.J., 07703.
- (3) Allowance quantities are indicated in the special tools list section for special tools, TMDE, and other support equipment.
 - g. 30-Day DS/GS Maintenance Allowances.

NOTE

Allowances in GS column are for GS maintenance only.

 $\hspace{1.5cm} \textbf{(1)} \hspace{0.2cm} \textbf{The repair parts indicated by asterisk entries in separate allowance columns for DS and GS} \\$

represent those authorized for use at that category of maintenance to be requisitioned on an "as required" basis, until stockage is based on demand in accordance with AR 710-2.

- (2) Allowance quantities are indicated in the special tool lists section for special tools, TMDE, and other support equipment.
- h. 1-Year Allowances Per 100 Equipments/Contingency Planning Purposes. Column intentionally left blank.
- i. Depot Maintenance Allowance Per 100 Equipments. This column indicates opposite the first appearance of each item the total quantity authorized for depot maintenance of 100 equipments.
 - j. Illustration.
- (1) Figure number. Indicates the figure number of the illustration on which the item is shown in TM 11-2413.
 - (2) Item number. Not applicable.

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 ANR AN/TMQ-3

b. The following publications pertain to the ML-303/TM and AN/TMQ-3 and its components:
 TM 11-2413 Hydrogen Generator ML-303/TM

and Hydrogen Generator
AN/TMQ-3, Including Repair
Parts and Special Tools List.

1-5. Location of Repair Parts

a. This manual contains one cross-reference index (see VII) 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 (see VII), 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 V) and locate the figure number (col 7a-20P, 10a 34P) and item number or reference designation (col 7b-20P, 10b-34P) as noted in the FSN index.
- c. When the figure and item number or reference designation are known, scrutinize columns 7a and 7b—20P and 10a and 10b—34P, of the repair parts list (sec III and V) until the item is located.
- d. When the FSN, reference number, figure number, and item number are not known, scrutinize column 3 of the repair parts list (sec III and V), which is arranged in alphabetical order.

1-6. Abbreviations

Not applicable.

1-7. Reporting of Equipment Publication Improvements

The reporting of errors, omissions, and recommendations for improving this publication by the individual user is encouraged. Reports should be submitted on DA Form 2028 (Recommended Changes to Publications) and forwarded direct to Commander, US Army Electronics Command, ATTN: AMSEL-MA-SNV, Fort Monmouth, N.J., 07703.

(Next page is 6)

SECTION									(=)	
(1)	(2)	(3)	(4)	(5)	(6)				(7)	
				QTY	15-DAY ORGANIZATIONAL				ILLUSTRA	
	FEDERAL	DESCRIPTION	UNIT	INC		NANCE ALW			(a)	(b)
SMR	STOCK		OF	IN	(a)	(b)	(c)	(d)	FIGURE	ITEM
CODE	NUMBER	REFERENCE NUMBER & MFR CODE USABLE ON CODE	MEAS	UNIT	1-5	6-20	21-50	51-100	NO	NO
PAOZZ	4730-408-4671	ADAPTER, STRAIGHT, PIPE TO TUBE NO-REF-DESIG OUTLET TUBE STEEL CAP 3-7/8 IN LG O/A SCD7431ITEM2 (80063)	EA	4	*	*	*	*	2	
PAOHD	6660-500-4671	CASE CY-219/TMQ-3 NO-REF-DESIG 12 IN H X 18 IN WD 27 IN DEEP APPROX 20 LBS CY219TMQ3 (80058)	EA	1	*	*	*	*	4	
PAOZZ	5330-189-8897	GASKET NO-REF-DESIG 1-3/4 IN OD X 1-1/32 IN ID X 1/16 IN THK SCD7431-3 (80063)	EA	4	*	*	*	*	4	
PAOZZ	4720-263-3306	HOSE NO-REF-DESIG RUBBER 1/2 IN ID X 3/4 IN OD, 12 FT LONG HEAVY WALL ZZT83LBAMEND2GRX (ZZZZZ)	FT	12	*	*	*	*	4	
PAOHD	3655-408-4669	HYDROGEN GENERATOR ML-303/TM NO-REF-DESIG FOR CALCIUM HYDRIDE CHARGE 5-1/8 IN DIA X 15 IN H MILH11127 (81349)	EA	4	*	*	*	*	4	
PAOHD	3655-408-4699	MANIFOLD ML-344/TMQ-3 NO-REF-DESIG $10-9/16$ IN SQUARE PLATE $1/16$ IN THK	EA	1	*	*	*	*	4	

ML344TMQ3 (80038)

SCA7433 (80063)

PUNCH, SADDLERS NO-REF-DESIG

PAOHO

5110-322-6112

SECTION	V													
(1)	(2)	(3)		(5)	(6)		(7)		(8) 1-YR	(9) DEPOT	(10) ILLUSTRATION			
				QTY	30-DAY	30-DAY DS MAINT		30-DAY GS MAINT			ALW PER	MAINT		
	FEDERAL	DESCRIPTION	UNIT	INC	ALLOWAN	ICE		ALLOWAN	CE		100	ALW PER	(A)	(B)
SMR	STOCK		OF	IN	(a)	(b)	(c)	(A)	(B)	(C)	EQUIP	100	FIGURE	ITEM
CODE	NUMBER	REFERENCE NUMBER & MFR CODE USABLE ON CODE	MEAS	UNIT	20-Jan	21-50	51-100	20-Jan	21-50	51-100	CNTGCY	EQUIP	NO.	NO.
PAOZZ	4730-408-4671	ADAPTER, STRAIGHT, PIPE TO TUBE NO-REF DESIG OUTLET TUBE STEEL CAP 3-7/8 IN LG O/A SCD74311TEM2 (80063)	EA	4	*	*	*	*	*	*		4	2	
PAOHD	6660-500-4671	CASE CY-219/TMQ-3 NO-REF-DESIG 12 IN H. X 18 IN WD 27 IN DEEP APPROX 20 LBS CY219TMQ3 (80058)	EA	1	*	*	*	*	*	*		3	4	
PAOZZ	5330-189-8897	GASKET NO-REF-DESIG 1-3/4 IN OD X 1- 1/32 IN ID X 1/16 IN THK SCD7431-3 (80063)	EA	4	*	*	*	*	*	*		5	4	
PAOZZ	4720-263-3306	HOSE NO-REF-DESIG RUBBER 1/2 IN ID X 3/4 IN OD, 12 FT LONG HEAVY WALL ZZT83LBAMEND2GRX (ZZZZZ)	FT	12	*	*	*	*	*	*		3	4	
PAOHD	3655-408-4669	HYDROGEN GENERATOR ML-303/TM NO-REF- DESIG FOR CALCIUM HYDRIDE CHARGE 5-1/8 IN DIA X 15 IN H MILHIll27 (81349)	EA	4	*	*	*	*	*	*		3	4	
PAOHD	3655-408-4699	MANIFOLD ML-344/TMQ-3 NO-REF-DESIG 10- 9/16 IN SQUARE PLATE 1/16 IN THK ML344TMQ3 (80038)	EA	1	*	*	*	*	*	*		3	4	
PAOHD	5110-322-6112	PUNCH, SADDLERS NO-REF-DESIG SCA7433 (80063)	EA	1	*	*	*	*	*	*		3	4	

INDEX - FEDERAL STOCK NUMBER AND REFERENCE NUMBER

STOCK NUMBER	FIGURE NO.	ITEM NO.	STOCK NUMBER	FIGURE NO.	ITEM NO.		
3655-408-4669	4		5110-322-6112	4			
3655-408-4699	4		5330-189-8897	4			
4720-263-3306	4		6660-500-4671	4			
4730-408-4671	2						
REFERENCE	MFR	FIG.	ITEM	REFERENCE	MFR	FIG.	ITEM
NO.	CODE	NO.	NO.	NO.	CODE	NO.	NO.
CY219TMQ3	80058	4		SCD7431-3	80063	4	
MILH11127	81349	4		SCD7431ITEM2	80063	2	
ML344TMQ3	80038	4		ZZT83LBAMEND2GRX	ZZZZZ	4	
SCA7433	80063	4					

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 $\begin{tabular}{ll} USACDCEC & (5) \\ NG: None \\ USAR: None \\ For explanation of abbreviations used, see AR 310-50. \\ \end{tabular}$

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