
TECHNICAL MANUAL

DIRECT AND GENERAL SUPPORT AND DEPOT MAINTENANCE
REPAIR PARTS AND SPECIAL TOOLS LISTS

AIR CONDITIONER; VERTICAL COMPACT, FLOOR MOUNTED,
36,000 BTU/HR COOLING, 30,000 BTU/HR HEATING;
208 VOLT, 3 PHASE, 50/60 HERTZ,
(TRANE MODEL MAC 6V40-340-2)
FSN 4120-935-5421, 208 VOLT, 3 PHASE, 400 HERTZ
(TRANE MODEL MAC 4V40-340-3)
FSN 4120-935-5418

This copy is a reprint which includes current
pages from Change 1.



DIRECT AND GENERAL SUPPORT AND DEPOT MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS LIST

**AIR CONDITIONER; VERTICAL COMPACT, FLOOR MOUNTED,
36,000 BTU/HR COOLING, 30,000 BTU/HR HEATING; 208
VOLT, 3 PHASE, 50/60 HERTZ, (TRANE MODEL MAC
6V40-340-2) FSN 4120-935-5421, 208 VOLT, 3 PHASE, 400
HERTZ, TRANE MODEL MAC 4V40-3403) FSN 4120-9355418**

Current as of 13 April 1970

		Paragraph	Page
SECTION	I. INTRODUCTION		iii
	Scope	1	iii
	General	2	iii
	Explanation of columns.....	3	iii
	Special information	4	v
	How to locate repair parts.....	5	v
	Abbreviations	6	vi
	Federal supply codes for manufacturers.....	7	vi
	Recommendations for maintenance publications improvements	8	vi
		Listing	Illus.
		Page	Fig.
Group	II. REPAIR PARTS FOR DS, GS, AND DEPOT MAINTENANCE	1	
	01. Casing and Related Parts.....	1	
	Casing, panels, grilles and mist eliminator.....	1	
	Damper control, filter, grille, panel and guard.....	2	
	02. Control Panel & Junction Box.....	7	
	Control panel	3	
	Junction box, transformer and wiring harnesses	4	
	Panel assembly.....	5	
	Filter assembly.....	6	
	03. Compressor	13	
	Compressor assembly.....	7	
	Compressor electrical components.....	8	
	04. Pressure Control Switches	15	
	Pressure control switches.....	9	
	05. Refrigeration Components and Condensate Drain.....	16	
	Evaporator, valves, tubes and fittings.....	10	
	Condenser, dehydrator, receiver, valves, tubes and fittings.....	11	
	06. Heater Assembly	22	
	Heater assembly	12	
	07. Fans and Motors	23	
	Condenser fan and motor.....	13	
	Evaporator fan and motor	14	
	08. Wiring Harnesses.....	25	
SECTION	III. SPECIAL TOOLS, TEST AND SUPPORT EQUIPMENT FOR DS, GS, AND DEPOT MAINTENANCE (Not Applicable)		
	IV. FEDERAL STOCK NUMBER AND REFERENCE NUMBEA INDEX.....	42	

SECTION I. INTRODUCTION

1. Scope

This manual lists repair parts, special tools, test and support equipment required for the performance of direct support, general support, and depot maintenance of the air conditioner

2. General

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

a. Repair Parts-Section II. A list of repair parts authorized for the performance of maintenance at the direct support, general support, and depot level in figure and item number sequence.

b. Special Tools, Test and Support Equipment - Section III. (Not Applicable)

c. Federal Stock Number and Reference Number Index - Section IV. A list of Federal stock numbers in ascending numerical sequence followed by a list of reference numbers in ascending alpha-numeric sequence, cross-referenced to the illustration figure number and item number.

Note Items not illustrated are cross-referenced to group number

3. Explanation of Columns

The following provides an explanation of columns in the tabular lists in sections II and III.

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

(1) Source code indicates the selection status and source for the listed item. Source codes used are:

Code	Explanation
P	Repair Parts, Special Tools and Test Equipment supplied from the G,SA/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 dictated that a minimum quantity be available in the supply system.
M	Repair Parts, Special Tools and Test Equipment which are not procured or stocked, as

Code	Explanation
	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 exchange assemblies at DSU and GSU level. These assemblies will not be stocked above the DS and GS level or returned to depot supply level.
R	Applied to repair parts, (assemblies and components) special tools and test equipment which are considered economically repairable at direct and general support maintenance levels. When the item is no longer economically repairable, 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 710-50. When so listed, they will be replaced by supply on an exchange basis.
S	Repair Parts, Special Tools, Test Equipment and assemblies which are economically repairable at DSU and GSU activities and which normally are furnished by supply on an exchange basis. When items are determined by a GSU to be uneconomically repairable, they will be evacuated to a depot for evaluation and analysis before final disposition.

Code	Explanations
T	Higher 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.

(2) Maintenance code indicates the lowest category of maintenance authorized to install the listed item. Repair parts and special tools assigned maintenance code "C" may be stocked at the operator level of maintenance when authorized by the Unit Commander. The maintenance level codes are:

Code	Explanation
C.....	Operator/crew
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 expendable. Recoverability codes are:

Code	Explanation
R	Applied to repair parts (assemblies and components) which are considered economically reparable at direct and general support maintenance levels. When the maintenance capability to repair these items does not exist, they are 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 710-50. When so listed, they will be replaced by supply on an exchange basis.
S	Repair parts and assemblies which are economically reparable at DSU and GSU activities and which are normally 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 which are subject to special handling and are issued on an exchange basis. Such repair parts normally are repaired or overhauled at depot maintenance activities.
U	Repair parts specifically selected for salvage by reclamation units because of precious metal content, critical materials, or high dollar value reusable casings or castings.

b. *Federal Stock Number.* This column indicates the Federal stock number assigned to the item and will be used for requisitioning purposes.

c. *Description.* This column indicates the Federal item name and any additional description of the item required. Assembly components and subassemblies are indented under major assemblies. The abbreviation "w/e" when used as a part of the nomenclature indicates the Federal stock number includes all armament, equipment, accessories, and repair parts issued with the item. A part number or other reference number is followed by the applicable five-digit Federal supply code for manufacturers in parenthesis. Repair parts quantities included in kits and sets are shown in front of the repair part name. Material required for manufacture or fabrication is identified.

d. *Unit of Measure (U/M)* A two-character alphabetic abbreviation indicating the amount or quantity of the item upon which the allowances are based, e.g., ft, ea, pr, etc.

e. *Quantity Incorporated in Unit.* This column indicates the quantity of the item used in the assembly group. A "V" appearing in this column in lieu of a quantity indicates that a definite quantity cannot be indicated (e.g., shims, spacers, etc.).

f. *Thirty-Day DS/GS Maintenance Allowances.*

Note. Allowances in GS column are for GS maintenance only

(1) The allowance columns are divided into three subcolumns. Indicated in each subcolumn, opposite the first appearance of each item, is the total quantity of items authorized for the number of equipments supported. Subsequent appearances of the same item will have the letters "REF" in the applicable allowance column. To locate the referenced item, locate the FSN or reference number in the index. The earliest figure and item number is the referenced item. Items authorized for use as required but not for initial stockage are identified with an asterisk in the allowance column.

(2) The quantitative allowances for DS/GS levels of maintenance will represent initial stockage for a 30-day period for the number of equipments supported.

(3) To determine allowances when supporting more than 100 of these equipments: First, divide the number of equipments supported by 100 by moving the decimal two places

left; second, multiply the result by the quantity in the 51-100 density column. Example, authorized allowance for 51-100 equipments is 40; for 150 equipments multiply 40 by 1.50 or 60 parts required.

g. One-Year Allowance Per 100 Equipments/Contingency Planning Purposes. This column indicates opposite the first appearance of each item the total quantity required for distribution and contingency planning purposes. The range of items indicates total quantities of all authorized items required to provide for adequate support of 100 equipments for one year. Subsequent appearances of the same item will have the letters "REF" in the allowance column. To locate the referenced item, locate the FSN or reference number in the index. The earliest figure and item number is the referenced item

h. 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. Subsequent appearances of the same item will have the letters "REF" in the allowance column. To locate the referenced item, locate the FSN or reference number in the index. The earliest figure and item number is the referenced item. Items authorized for use as required but not for initial stockage are identified with an asterisk in the allowance column.

i. Illustration. This column is divided as follows:

(1) *Figure number.* Indicates the figure number of the illustration in which the item is shown.

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

4. Special Information

a. Identifications of the usable on codes included in the description column of this publication are: (Applicable only when identifying parts to particular serial number range or model)

Code	Used on
A.....	Model MAC 6V40-340-2
B.....	Model MAC 4V40-340-3

b. Repair parts mortality has been based on 7200 hours operation per year.

c. Parts which require manufacture or assembly at a category higher than that authorized for installation will indicate in the source column the higher category.

d. The following publications pertain to the air conditioners and their component.

TM 5-4120-268-15	Operator, Organizational, DS, GS, and Depot Maintenance Manual
------------------	--

TM 5-4120-268-20P	Organizational Maintenance Repair Parts and Special Tools List
-------------------	--

5. How to Locate Repair Parts

a. *When Federal Stock Number or Reference Number is Unknown:*

(1) *First.* Using the table of contents, determine the assembly group within which the repair part belongs. This is necessary since illustrations are prepared for assembly groups, and listings are divided into the same groups.

(2) *Second.* Find the illustration covering the assembly group to which the repair part belongs.

(3) *Third.* Identify the repair part on the illustration and note the illustration figure number and item number of the repair part.

(4) *Fourth.* Using the Repair Parts Listing, find the Assembly group to which the repair part belongs and locate the illustration figure and item number noted on the illustration.

b. *When the Federal Stock Number or Reference Number is Known:*

(1) *First.* Using the Index of Federal Stock Numbers and Reference Numbers find the pertinent Federal stock number or reference number. This index is in ascending FSN sequence followed by a list of reference numbers in ascending alpha-numeric sequence, cross-referenced to the illustration figure number and item number.

(2) *Second.* Using the Repair Part Listing, find the assembly group of the repair part and the illustration figure number and item number referenced in the Index of Federal Stock Numbers and Reference Numbers.

c. *When the Federal Stock Number or Reference Number is Known and the Repair Part is not Illustrated:*

(1) *First.* Using the Index of Federal Stock Numbers and Reference Numbers find the pertinent Federal stock Number or reference number in the section titled "Items Not Illustrated" and note the group number. This section is in ascending FSN sequence followed by a list of reference numbers in alpha-numeric sequence, cross-referenced to assembly group number.

(2) *Second.* Using the Table of Contents, locate the assembly group number and page number.

(3) *Third.* Using the applicable group number and page number, locate the pertinent stock number or reference number in the Repair Parts Listing. Items which are not illustrated are listed at the end of the assembly group to which they belong.

6. Abbreviations

amp	amperes
assy	assembly
dia	diameter
hex.....	hexagon
hd	head
id.....	inside diameter
in.....	inch (es)
lg	long (length)
mtg	mounting
od	outside diameter
thd	thread
thk.....	thick (ness)

7. Federal Supply Codes for Manufacturers

<i>Code</i>	<i>Manufacturer</i>
06151.....	Dialtron Corp
12881.....	Metex Corp
15605.....	Cutler-Hammer, Inc.
15653.....	Kaynar Mfg Co.
22694.....	Reid Hill Electronic Inc
31234.....	Edco Sales Inc
41947.....	Mueller Brass Co.
56289.....	Sprague Electric Co.
58553.....	Superior Valve and Fittings Co.
58849.....	Syntron Co.
60532	Trane Co., The
61957.....	United Shoe Machinery Corp
64731.....	Welco Industries, Inc.
70255.....	Alco Valve Co.
71286.....	Camloc Fastener Corp
71400.....	Bussman Mfg Division of McGraw Edison Co.

<i>Code</i>	<i>Manufacturer</i>
74193.....	Heinemann Electric Co.
75382.....	Kulka Electric Corp
78189.....	Shakeproof Division of Illinois Tool Works, Inc.
78462.....	Sporlan Valve Co.
78553.....	Tinnerman Products Inc.
79499.....	Western Felt Works
80205.....	National Aerospace Standards Committee
	Aeronautical Industries Association of America
81349.....	Military Specifications Promulgated by Standardization Div., Directorate of Logistic Services DSA
81997.....	Controls Co., of America Appliance and Automotive Division
82646.....	Spencer Safford Loadcraft, Inc.
82647.....	Metals and Controls, Inc, Control Products Group
86797.....	Rogan Co.
88044.....	Aeronautical Standards Group, Dept of Navy and Air Force
90763.....	United Carr Fastener Corp
92164.....	Tested Appliance Co.
92578	Penn Controls, Inc.
93232.....	Worthington Corp
93781.....	Jacks Evans Manufacturing Co.
94222.....	South Chester Corp
96906.....	Military Standards Promulgated by Standardization Div, Directorate of Logistic Services DSA

8. Recommendations for Maintenance Publication Improvements

Report 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 Commanding General, U. S. Army Mobility Equipment Command, ATTN: AMSME-MPP, 4300 Goodfellow Boulevard, St. Louis, Mo. 63120.

(1) SMR CODE	(2) FEDERAL STOCK NUMBER	(3) DESCRIPTION USABLE ON CODE	(4) UNIT OF MEAS	(5) QTY INC IN UNIT	(6) 30 DAY DS MAINT ALLOWANCE			(7) 30 DAY GS MAINT ALLOWANCE			(8) 1-YR ALW PER 100 EQUIP CNTGY	(9) DEPOT MAINT ALW PER 100 EQUIP	(10) ILLUS- TRATION	
					(a) 1-20	(b) 21-50	(c) 51-100	(a) 1-20	(b) 21-50	(c) 51-100			(a) FIG. NO.	(b) ITEM NO.
		SECTION II - REPAIR PARTS FOR DS, GS AND DEPOT MAINTENANCE												
		GROUP 01 - CASING AND RELATED PARTS												
P O	5305-980-6191	SCREW, MACHINE: NO. 8-32 THD SIZE, 5/8 IN. LG MS35206-26 (96906)	EA	39	*	*	*	*	*	*		*	1	1
P O	5310-011-4986	WASHER, FLAT: NO. 8 SCREW SIZE MS27183-7 (96906)	EA	72	*	*	*	*	*	*		*	1	2
X20		TURNLOCK. FASTENER: CANVAS COVER MTG XX78328-20 (90763)	EA	2									1	3
X20		PANEL ASSEMBLY, TOP C4525-549 (60532)	EA	1									1	
P O		RIVET BLIND AK41H (61957)	EA	20	*	*	*	*	*	*		*	1	4
X20		NUT, SELF-LOCKING: PLATE F39155-08 (15653)	EA	10									1	5
X20		NUT, SELF-LOCKING: PLATE, FASTENER MTG, NO. 10-32 THD SIZE F39155-3 (15653)	EA	2									1	6
X1		PANEL B4525-537-1 (60532)	EA	1									1	7
M O		INSULATION: PANELS, CASING C4525-326-1 (606532) MANUFACTURE FROM: INSULATION, SHEET, 1/2 IN. THK, AS REQUIRED, FSN 5640-785-7788											1	8
M O		INSULATION: PANEL MANUFACTURE FROM: INSULATION, SHEET, 5/16 IN. THK, AS REQUIRED, FSN 5640-198-7255											1	9
P O	5305-984-6195	SCREW, MACHINE: NO. 8-32 THD SIZE, 3/4 IN. LG MS35206-217 (96906)	EA	24	*	*	*	*	*	*		*	1	10
X20		GRILLE ASSEMBLY, DISCHARGE A4525-803 (60532)	EA	1									1	11
M O		GASKET, RUBBER: PANELS, GRILLES C4525-703-2 (60532) MANUFACTURE FROM: ROLL, RUBBER, 1/8 X 1 IN., AS REQUIRED, FSN 9320-935-2036											1	12
P O		MIST ELIMINATOR B4525-770 (60532)	EA	1	*	*	2	*	*	2	6	5	1	13
X20		GRILLE ASSEMBLY, INTAKE A4525-00 (60532)	EA	1									1	14
X20		PANEL ASSEMBLY: LOWER FRONT 514525-391 (60532)	EA	1									1	
X20		SCREW ASSEMBLY 12-11-63-12 (94222)	EA	3									1	15
X20		WASHER, RETAINING: PANEL MTG 12-11014-12 (94222)	EA	5									1	16
X20		SCREW ASSEMBLY: PANEL MTG 12-11-504-12 (92222)	EA	2									1	17
X20		PLATE, HOLDING: INSULATION BOARD D4525-231-1 (60532)	EA										1	18