

TECHNICAL MANUAL

**ORGANIZATIONAL 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**

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HEADQUARTERS, DEPARTMENT OF THE ARMY

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TECHNICAL MANUAL

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DEPARTMENT OF THE ARMY
WASHINGTON, D. C., 26 September 1970**ORGANIZATIONAL MAINTENANCE REPAIR PARTS AND
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36,000 BTU/HR COOLING, 30,000 BTU/HR HEATING:
208 VOLT, 3 PHASE, 50/60 HERTZ, (TRANE MODEL
MAC 6V4040-2) FSN 4120935-5421, 208 VOLT,
3 PHASE, 400 HERTZ (TRAN'E MODEL MAC 4V40-343)
FSN 4120-935-5418**

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SECTION I.

INTRODUCTION

1. Scope

This manual lists repair parts, special tools, test and support equipment required for the performance of organizational maintenance of the air conditioners.

2. General

This Repair Parts and Special Tools List is divided into the following sections:

a. Prescribed Load Allowance (PLA)-Section II. A composite listing of the repair parts, special tools, test and support equipment having quantitative allowances for initial stockage at the organizational level.

b. Repair Parts-Section III. A list of repair parts authorized for the performance of maintenance at the organizational level in figure and item number sequence.

c. Special Tools, Test and Support Equipment-Section IV. (Not Applicable).

d. Federal Stock Number and Reference Number Index-Section V. 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, III, and IV:

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

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

<i>Code</i>	<i>Explanation</i>
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 essentially of the end item dictated that a minimum quantity be available in the supply system.

<i>Code</i>	<i>Explanation</i>
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 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 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 710-50. When so listed, they will be replaced by supply on an exchange basis.

<i>Code</i>	<i>Explanation</i>
S	Repair Parts, Special Tools, Test Equipment and assemblies which are economically reparable at DSU and GSU activities and which normal are furnished by supply on an exchange basis. When items are determined by a GSU to be uneconomically reparable, they will be for evaluation and analysis before final disposition.
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:

<i>Code</i>	<i>Explanation</i>
C.....	Operator/crew
O.....	Organizational maintenance

(3) Recoverability code indicates whether unserviceable items should be returned for recovery or salvage. Items not coded are expendable. Recoverability codes are:

<i>Code</i>	<i>Explanation</i>
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 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 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.

<i>Code</i>	<i>Explanation</i>
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 "we", when used as 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. Fifteen-Day Organizational -Maintenance Allowance.

(1) The allowance columns are divided into four subcolumn. Indicated in each subcolumn opposite the first appearance of each item is the total quantity of items authorized for the number of equipment supported. 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.

(2) The quantitative allowance for organizational level of maintenance represents one initial prescribed load for a 15-day period for the number of equipment supported. Units authorized additional prescribed loads, multiple the number of prescribed loads by the quantity in the appropriate density column to determine the number of repair parts authorized.

(3) To determine allowances when supporting more than 100 of these equipment: First, divide the number of equipment supported by 100 by moving the decimal two spaces left; second, multiply the result by the quantity in the 51-100 density column. Example; authorized allowance for 51-100 equipment is 40; for 150 equipment, multiply 40 by 1.50 or 60 parts authorized.

(4) Subsequent changes to allowances will be limited as follows: No change in the range of items is authorized. If additional items are considered necessary, recommendation should be forwarded to U. S. Army Mobility Equipment Command for exception or revision to the allowance list. Revisions to the range of items authorized will be made by the U. S. Army Mobility Equipment Command based upon engineering experience, demand data, or TAERS information.

g. 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 columns of this publication are: (Applicable only when identifying parts to particular serial number range, or model).

<i>Code</i>	<i>Used on</i>
A	Model MAC 6V40 3402
B	Model MAC 4V40-340-3

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

a. 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 publication pertains to the Air Conditioners and their components.

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

e. The illustrations in this manual are identical to the applicable illustrations published in the -35P, Direct and General Support and Depot Maintenance Repair Parts and Special Tools List manual, and the figure numbers are the same as appear in that manual. The -35P illustrations are given for a better understanding of the parts relationship, however, only those parts assigned maintenance code "O" are listed in the tabular portion

and only these parts are authorized for requisitioning from this manual.

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 and item number of the repair part.

(4) *Fourth.* Using the Repair Part Listing, find the assembly 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 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 of the index is in ascending FSN sequence followed by a list of reference numbers in alpha-numeric sequence cross-referenced to assembly group number.

(2) *Seconds.* 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 belongs.

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.....	Ed Sales, Inc.
56289.....	Sprague Electric Co.
58849.....	Syntron Co.
60532.....	Trane Co., The
61957.....	United Shoe Machinery Corp
64731.....	Welco Industries, Inc.
71296.....	Camloc Fastener Corp
71400.....	Bussman Mfg Division of McGraw-Edison Co.
74193.....	Heinemann Electric Co.
75382.....	Kulka Electric Corp
78189.....	Shakeproof Division of Illinois Tool Works, Inc.

Code

Manufacturer

78553	Tinnerman Products, Inc.
79499	Western Felt Works
80205	National Aerospace Standards Committee Industries Association of America
81349	Military Specifications Promulgated by Standardization Div Directorate of Logistic Services DSA
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
90768	United Carr Fastener Corp.
92578	Pen Controls Inc.
93232	Worthington Corp.
93781	Jackes Evens Manufacturing Co.
94222	South Chester Corp.
96906	Military Specifications 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, AITN: AMSME-MPP, 4300 Goodfellow Boulevard, St. Louis, Mo. 63120.

(1) FEDERAL STOCK NUMBER	(2) DESCRIPTION USABLE ON CODE	(3) 15-DAY ORG. MAINT. ALLOWANCE			
		(a)	(b)	(c)	(d)
		1-5	6-20	21-50	51-100
	SECTION II - PRESCRIBED LOAD ALLOWANCE				
	GROUP 01 - CASING AND RELATED PARTS				
4130-193-8488	FILTER, RETURN AIR AL18-4-5 (31234)			2	2
4130-938-0974	FILTER, FRESH AIR AL27812-5 (31234)			2	2
	GROUP 02 - CONTROL PANEL AND JUNCTION BOX				
5920-280-3175	FUSE F09B250V16-10A (81349)			2	2
5920-939-5442	FUSE KAW5(71400)			2	2
5945-976-3007	RELAY, THERMAL TIME DELAY FR30SNO-24 (06151)				2
	RELAY, SOLENOID: 25 AMP 9565H2B (15605)				2
	GROUP 07 - FANS AND MOTORS				
6105-253-5519	MOTOR, EVAPORATOR FAN: 60 CYCLE 926303 (64731)				2
6105-253-5520	MOTOR, EVAPORATOR FAN: 400 CYCLE 715-22 (64731)				2
6105-401-4616	MOTOR, CONDENSER FAN: 60 CYCLE 7015-4 (64731)				2
	MOTOR, CONDENSER FAN: 400 CYCLE 7025-6 (64731)				2
	1				