

TECHNICAL MANUAL

**UNIT, DIRECT SUPPORT AND
GENERAL SUPPORT MAINTENANCE
REPAIR PARTS AND SPECIAL TOOLS LIST**

FOR

**AIR CONDITIONER, HORIZONTAL, COMPACT,
18,000 BTU/HR**

208-VOLT, 3 PHASE, 50/60 HERTZ

**MODEL F18H-3S NSN 4120-01-165-1125
MODEL F18H-3SA NSN 4120-01-237-4663
MODEL F18H-3SB NSN 4120-01-268-4451**

AND

230-VOLT, SINGLE PHASE, 60 HERTZ

MODEL F18H-1S NSN 4120-01-268-4450

Approved for public release. Distribution is unlimited.

***This manual supersedes TM 5-4120-384-24P dated 7 July 1987.**

HEADQUARTERS, DEPARTMENT OF THE ARMY

22 MAY 1989

TM 5-4120-384-24P

TECHNICAL MANUAL
No. 5-4120-384-24P

HEADQUARTERS
DEPARTMENT OF THE ARMY
Washington, D.C., 22 May 1989

Unit, Direct Support and General Support Maintenance
Repair Parts and Special Tools List

For

AIR CONDITIONER, HORIZONTAL, COMPACT, 18,000 BTU/HR
208-Volt, 3 Phase, 50/60 Hertz
MODEL F18H-3A NSN 4120-01-165-1125
MODEL F18H-3SA NSN 4120-01-237-4663
MODEL F18H-3SB NSN 4120-01-268-4451
and
230-Volt, Single Phase, 60 Hertz
MODEL F18H-1S NSN 4120-01-268-4450

Current as of 11 January 1989

Approved for public release. Distribution is unlimited.

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistake or if you know of a way to improve the procedures, please let us know. Mail your letter, 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 Troop Support Command, ATTN: AMSTR-MCTS, 4300 Goodfellow Boulevard, St. Louis, MO 63120-1798. A reply will be furnished directly to you.

TABLE OF CONTENTS

	Page	Illus Figure
Section I. INTRODUCTION	1	
Section II. REPAIR PARTS LIST.....	1-1	
Group 01 Housing Covers, Panels, Grilles, Screens, and Information Plates.....	1-1	
Fabric Cover.....	1-1	1
Top, Front, and Side Covers, Louvers, and Instruction Plates.....	2-1	2
Rear Guards and Louvers.....	3-1	3
Group 02 Air Circulating and Condensate Drain System	4-1	
Air Filter and Mist Eliminator.	4-1	4
Damper Controls, Linkages and Fittings	5-1	5
Condensate Drain Tubes.....	6-1	6

TABLE OF CONTENTS (Continued)

	Page	Illus Figure	
Group 03	Electrical	7-1	
	Control Module	7-1	7
	Junction Box ,	8-1	8
	Wiring Harnesses and Terminal Boards	9-1	9
	Transformer and Rectifier Assembly	10-1	10
	Capacitors and Relay	11-1	11
Group 04	Evaporator Fan, Motor and Heater	12-1	
	Evaporator Fan Assembly	12-1	12
	Motor Assembly, Evaporator Fan	13-1	13
	Heater Elements and Thermostat	14-1	14
Group 05	Condenser Fan and Motor	15-1	
	Condenser Fan and Housing Assembly	15-1	15
	Motor Assembly, Condenser Fan	16-1	16
Group 06	Refrigeration System	17-1	
	Evaporator Coil and Piping...	17-1	17
	Pressure Switches, Charging Valves, and Relief Valve	18-1	18
	Condenser Coil and Piping...	19-1	19
	Compressor	20-1	20
Group 07	Housing	21-1	
	Housing	21-1	21
Group 08	Accessory/Loose Items	22-1	
	Accessory/Loose Items	22-1	22
	Accessory/Electromagnetic Pulse (EMP) Kit	23-1	23
Group 09	Bulk Material	Bulk-1	
Section III	SPECIAL TOOLS LIST (Not Applicable)		
Section IV	CROSS-REFERENCE INDEXES		
	National Stock Number Index	I-1	
	Part Number Index	I-2	
	Figure and Item Number Index.	I-31	

UNIT, DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE
REPAIR PARTS AND SPECIAL TOOLS LIST

SECTION I. INTRODUCTION

1. **SCOPE.** This Repair Parts and Special Tools List (RPSTL) lists and authorizes spares and repair parts; special tools; special test, measurement, and diagnostic equipment (TMDE); and other special support equipment required for performance of unit, direct support and general support maintenance of the Air Conditioner, 18,000 BTU/HR. It authorizes the requisitioning, issue, and disposition of spares, repair parts and special tools as indicated by the source, maintenance and recoverability (SMR) codes.

2. **GENERAL.** In addition to this section, Introduction, this Repair Parts and Special Tools List is divided into the following sections:

a. **Section II. Repair Parts List.** A list of spares and repair parts authorized by this RPSTL for use in the performance of maintenance. The list also includes parts which must be removed for replacement of the authorized parts. Parts lists are composed of functional groups in ascending alphanumeric sequence, with the parts in each group listed in ascending figure and item number sequence. Bulk materials are listed in item name sequence. Repair parts kits are listed separately in their own functional group within Section II. Repair parts for repairable special tools are also listed in this section. Items listed are shown on the associated illustration(s)/figure(s).

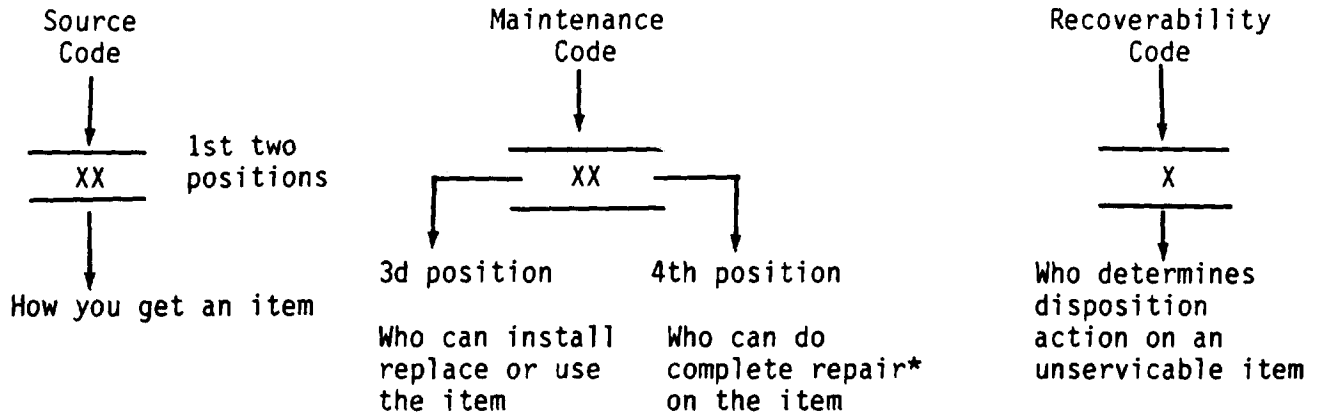
b. **Section III. Special Tools List.** A list of special tools, special TMDE, and other special support equipment authorized by this RPSTL (as indicated by Basis of Issue (BOI) information in DESCRIPTION AND USABLE ON CODE column) for the performance of maintenance.

c. **Section IV. Cross-references Indexes.** A list, in National Item Identification Number (NIIN) sequence, of all National stock numbered items appearing in the listing, followed by a list in alphanumeric sequence of all part numbers appearing in the listings. National stock numbers and part numbers are cross-referenced to each illustration figure and item number appearance. The figure and item number index lists figure and item number in alphanumeric sequence and cross-references NSN, FSCM and part number.

3. **EXPLANATION OF COLUMNS (SECTIONS II AND III).**

a. **ITEM NO. (Column (1)).** Indicates the number used to identify items called out in the illustration.

b. **SMR Code (Column (2)).** The Source, Maintenance, and Recoverability (SMR) code is a 5-position code containing supply/requisitioning information, maintenance category authorization criteria, and disposition instruction, as shown in the following breakout:



*Complete Repair: Maintenance capacity, capability, and authority to perform all corrective maintenance tasks of the "Repair" function in a use/user environment in order to restore serviceability to a failed item.

(1) **Source Code.** The source code tells you how to get an item needed for maintenance, repair, or overhaul of an end item/equipment. Explanations of source codes follows:

Code	Explanation
PA PB PC** PD PE PF PG	Stocked items; use the applicable NSN to request/requisition items with these source codes. They are authorized to the category indicated by the code entered in the 3d position of the SMR code.
KD KF KB	Items with these codes are not to be requested/requisitioned individually. They are part of a kit which is authorized to the maintenance category indicated in the 3d position of the SMR code. The complete kit must be requisitioned and applied.

	Explanation
MO-- (Made at org. AVUM Level)	Items with these codes are not to be requested/requisitioned individually. They must be made from bulk material which is identified by the part number in the DESCRIPTION and USABLE ON CODE (UOC) column and listed in the Bulk Material group of the repair parts list in this RPSTL. If the item is authorized to you by the 3d position code of the SMR code, but the source code indicates it is made at a higher level, order the item from the higher level of maintenance.
MF-- (Made at DS/ AVUM Level)	
MH-- (Made at GS Level)	
ML--Made at Specialized Repair Activity (SRA))	
MD-- (Made at Depot)	

Code	Explanation
AO-- (Assembled by org/AVUM Level)	Items with these codes are not to be requested/requisitioned individually, The parts that make up the assembled item must be requisitioned or fabricated and assembled at the level of maintenance indicated by the source code. If the 3d position code of the SMR code authorizes you to replace the item, but the source code indicates the items are assembled at a higher level, order the item from the higher level of maintenance.
AF-- (Assembled by DS/AVIM Level)	
AH-- (Assembled by GS Category)	
AL-- (Assembled by SRA)	
AD-- (Assembled by Depot)	

Code	Explanation
XA--	Do not requisition an "XA"-coded item. Order its next higher assembly. (Also, refer to the NOTE below.)
XB--	If an "XB" item is not available from salvage, order it using the FSCM and part number given.
XC--	Installation drawing, diagram, instruction sheet, field service drawing, that is identified by manufacturer's part number.
XD--	Item is not stocked. Order an "XD"-coded item through normal supply channels using the FSCM and part number given, if no NSN is available.

NOTE

Cannibalization or controlled exchange, when authorized, may be used as a source of supply for items with the above source codes, except for those source coded "XA" or those aircraft support items restricted by requirements of AR 750-1.

(2) Maintenance Code. Maintenance codes tells you the level(s) of maintenance authorized to USE and REPAIR support items. The maintenance codes are entered in the third and fourth positions of the SMR code as follows:

(a) The maintenance code entered in the third position tells you the lowest maintenance level authorized to remove, replace, and use an item. The maintenance code entered in the third position will indicate authorization to one of the following levels of maintenance.

Code	Application/Explanation
C	--Crew or operator maintenance done within organizational or aviation unit maintenance.
O	--Organizational or aviation unit category can remove, replace, and use the item.
F	--Direct support or aviation intermediate level can remove, replace, and use the item.