

TECHNICAL MANUAL

ORGANIZATIONAL MAINTENANCE MANUAL  
(INCLUDING REPAIR PARTS AND  
SPECIAL TOOLS LISTS)  
FOR

COMPRESSOR UNIT, RECIPROCATING:  
POWER-DRIVEN, FLAMETHROWER,  
3-1/2 CFM,

AN-M4 (Walter Kidde)  
NSN 4310-00-592-8560

AN-M4B (Stewart-Warner)  
NSN 4310-00-848-6075

AN-M4C (Stewart-Warner)  
NSN 4310-00-078-5431

AN-M4D (Walter Kidde)  
NSN 4310-00-181-5054

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HEADQUARTERS, DEPARTMENT OF THE ARMY

JUNE 1977

### **WARNINGS**

**Flammable gasoline and 2,000 psi air pressure are used in the operation of this equipment. Death or severe injury may result if personnel fail to observe warnings.**

**Do not operate a compressor unit in an enclosed area because carbon monoxide can cause death.**

**Do not smoke when servicing a compressor unit.**

**Do not tighten or loosen any air compressor unit connection while the compressor unit is operating or pressurized.**

**Do not adjust or alter the high-pressure relief valve.**

**This compressor unit generates a potentially hazardous noise level of 96 decibels. The operator and others in immediate area will wear earplugs which have been fitted by medical personnel.**

TECHNICAL MANUAL }  
No. 3-4310-100-20&P }

HEADQUARTERS  
DEPARTMENT OF THE ARMY  
WASHINGTON, DC, 24 July 1977

**ORGANIZATIONAL MAINTENANCE MANUAL  
(INCLUDING REPAIR PARTS AND SPECIAL TOOLS LISTS)**

**FOR  
COMPRESSOR UNIT, RECIPROCATING:  
POWER-DRIVEN, FLAMETHROWER, 31/2 CFM,  
AN-M4 (Walter Kidde) NSN 4310-00-592-8560  
AN-M4B (Stewart-Warner) NSN 4310-00-848-6075  
AN-M4C (Stewart-Warner) NSN 4310-00-078-5431  
AN-M4D (Walter Kidde) NSN 4310-00-181-5054)**

**Current as of September 1976**

You can help improve this manual by calling attention to error and by recommending improvements and by stating your reasons for the recommendations. Your letter or DA Form 2028-2 (TEST), Recommended Changes to Equipment Technical Manuals, should be mailed direct to Commander, US Army Armament Materiel Readiness Command, ATTN.: DRSAR-MAS-C, Aberdeen Proving Ground, MD 21010. A reply will be furnished direct to you. For your convenience, preaddressed DA Forms 2028-2 (TEST) are included as final pages of this manual.

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## CHAPTER 1

## INTRODUCTION

Section I. GENERAL

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**1-1. Scope**

These instructions are for use by organizational maintenance personnel. They apply to Compressor Unit. Reciprocating Power-Driven, Flamethrower, 3-1/2 CFM. AN-M4 (Walter Kidde) NSN 4310-00-592-8560; AN-M4B (Stewart-Warner) NSN 4310-00-848-6075; AN-M4C (Stewart-Warner) NSN 4310-00-078-5431 and AN-M4D (Walter Kidde) NSN 4310-00-181-5054.

**1-2. Record and Report Forms**

- a. Equipment maintenance forms and procedures for their use are prescribed in TM-38-750.
- b. Refer to TM 43-0002-31 for destruction instructions on this equipment.
- c. Refer to TM 740-90-1 for administrative storage instructions on their equipment.
- d. Refer to TM 43-0139 for painting instructions on this equipment.

## Section II. DESCRIPTION AND DATA

**1-3. Description**

- a. *General.* A general description of AN-M4, M4 AN-M4B, AN-M4C. and AN-M4D. Compressor unit models. and information on identification plates and

instruction plates are contained in operator's manual TM 3-4310-100-10. The following paragraphs describe the major components of the compressor units (fig. 1-1).

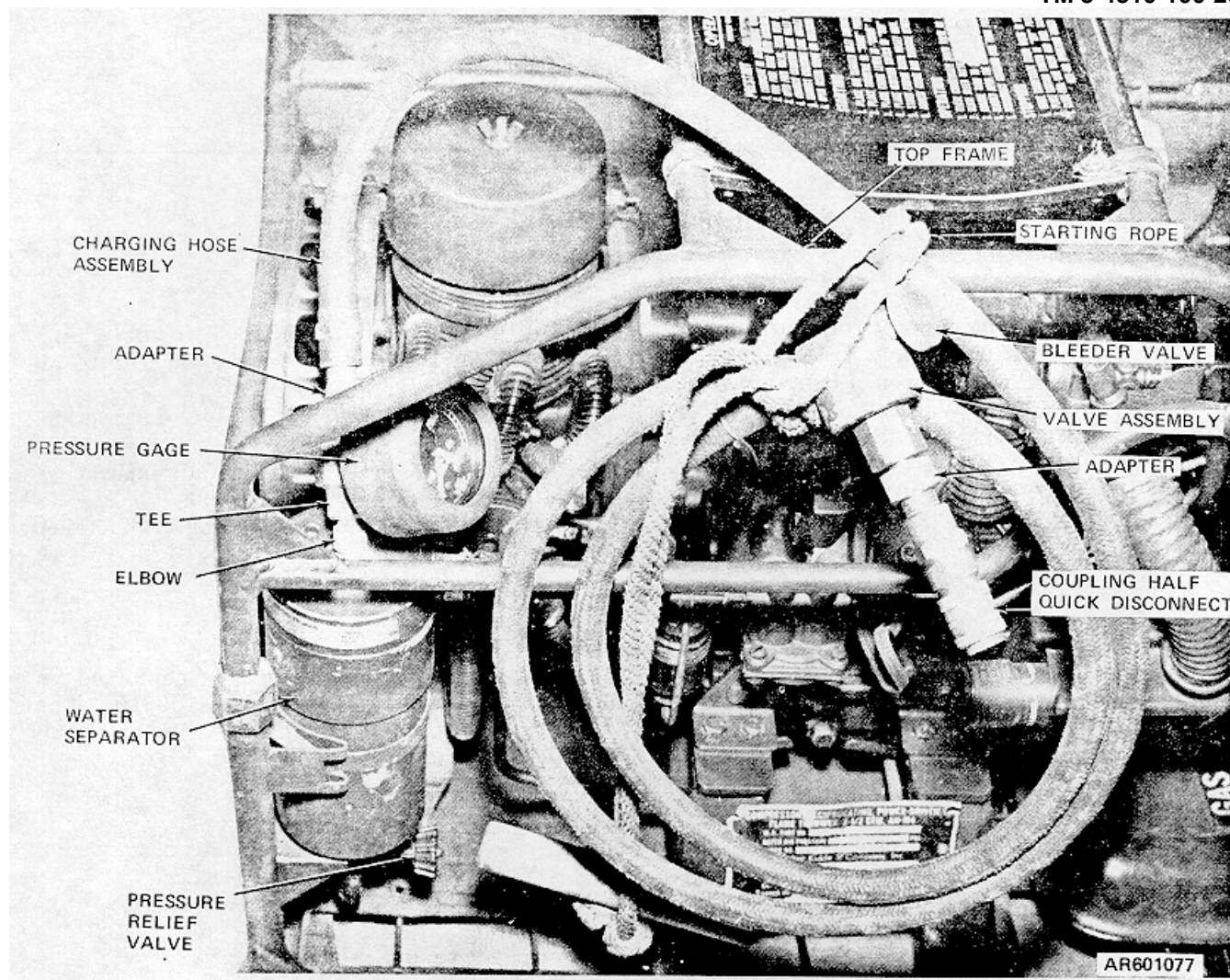


Figure 1-1. A typical AN-M4 Compressor unit model with charging hose assembly connected to water separator.

*b. Components.*

(1) *Air Compressor.* The air compressor is a three stage radial reciprocating compressor that will deliver 3-1/2 CFM of high pressure air at 2,000 psi, when the engine operates at a speed of 3,600 rpm. The compressor operating temperature range is 0 to 100 F.

(2) *Water Separator.* The operating pressure of the water separator is 2,000 psi with a minimum burst pressure of 5,000 psi. The assembly contains a high-pressure relief valve, with a condensate globe valve at the base to permit discharge of accumulated air-water-oil emulsion.

(3) *Pressure Relief Value.* The pressure relief valve has a relief pressure of 2,250 psig, and a reseating pressure of 1,950 psig.

(4) *Gasoline Engine.* The engine is a one-cylinder, 4-cycle, overhead valve, air-cooled type. It will develop 1.5 horse-power at 3,600 rpm. The engine is fungus-proof and fully suppressed to climate radio interference.

(5) *Fuel Tank.* The fuel tank holds approximately 3 quarts of fuel; sufficient for 3 hours of operation.

(6) *Bottom Frame and Top Frame.* The rigid tubular bottom frame provides mounting for the gasoline fuel tank, gasoline engine, compressor, water separator, strap assemblies and the back rest harness. A removable top frame is assembled to the bottom frame to protect both the gasoline engine and air compressor. The top frame also supports the canvas cover.

(7) *Back Rest Harness and Strap Assemblies.* The back rest provides a comfortable support when carrying the compressor unit. The web shoulder and waist strap assemblies are bolted to the bottom frame and are provided with quick release buckles and snaps.

(8) *Canvas Cover.* The cotton duck canvas cover is designed to fit snugly over the

compressor unit top frame when the unit is not in use.  
The cover is held in place by straps and buckles.

(9) *Compressor Alteration Parts (Charging hose assembly).* Alteration of an AN-M4 Compressor unit requires the following parts to be assembled to provided pressurized air for charging commercial air cylinders, portable flamethrowers, and riot control agent disperser air tank.

- (a) Tee, pipe-to-tube (NSN) 10400-00840435)
- (b) Gage, pressure, Dial Indicating (NSN ;6685-00-850-1322 or NSN 6685-00-087-6925)
- (c) Hose Assembly, Rubber NSN 4720-00-289-2630)
- (d) Valve Assembly (NSN) 1040)00-7597352)
- (e) Adapter (NSN 4730-00-618-3410)
- (f) Coupling Half, Quick-Disconnect (NSN 1730()-00-863-0774)
- (g) Elbow, Tube-to-Boss (NSN) 4730-00-933-0723)
- (h) Packing, Preformed (NSN 5330-00-805-2966)
- (i) Adapter, Straight Pipe-to-Tube (NSN 473.-00-00-851-2278)

#### NOTE

**The compressor alteration parts assembled to an AN-M4, AN-M4B, AN-M4C or AN-M4D compressor unit become the charging hose assembly.**

#### 1-4. Tabulated Data (approximate)

##### a. Compressor Unit (all models).

Height.....19 1/4 in.  
Width.....17 5/8 in. (AN-M4 and AN M4D models)  
19 in. (AN- M4B and AN-M4C models)

Length 22 5/8 in.

Weight.....68 lbs

##### b. **Air Compressor.**

Type.....Reciprocating, Radial  
Number of Stages.....3  
Number of Cylinders.....3  
Operating Speed.....3,600 rpm  
Operating Pressure.....2,000 psig  
Lubrication.....Force feed (AN-M4 and AN M4D models)  
Pressure and mist (AN)M4B and AN-M4C models)

Oil Capacity.....1 pt

Operating Temperature ..... 0° to 100 °F

##### c. **Water Separator Assembly.**

Operating Pressure.....2,000 psig  
Proof Pressure.....3,000 psig

##### d. **Rupture Disc.**

Burst Pressure.....4,500 to 5,000 psig (AN-M4B and AN-M4C models)

##### e. **Pressure Relief Valve.**

Operating Pressure.....2,000 psig  
Full Flow Pressure  
(opens).....2,250 psig  
Reseating Pressure  
(closes).....1,950 psig

#### Model

##### f. **Gasoline Engine (Military Standard).**

1A08 2.....AN-M4 and AN-M4B Models  
1A08 3.....AN-M4C and AN-M4D models  
Cylinder.....1  
Horse power.....1.5 at 3,600 rpm  
Fuel Consumption.....1 quart per hour  
Fuel Tank Capacity.....3 quarts

#### 1-5. Difference in Models.

TM 3-4310-100-10 contains the difference between the AN-M4, AN-M4B, AN-M4C and AN-M4D compressor unit models.

#### 1-6. Expendable Items

Appendix F lists expendable items required to maintain and operate the compressor unit models.



## CHAPTER 2

### MAINTENANCE INSTRUCTIONS

#### Section I. SERVICE UPON RECEIPT OF MATERIEL

##### 2-1. New Material

###### WARNING

**This compressor unit generates a potentially hazardous noise level of 96 decibels. The operator and others in the immediate area wear earplugs which have been fitted by medical personnel.**

*a. General.* The AN-M4 compressor units (all models) are shipped with the required technical manuals and gasoline engine lubrication order. The compressor alteration parts are attached to the compressor water separator and become the charging hose assembly.

*b. Unpacking.*

(1) Open the shipping container and remove 11 i( fiberboard spacers.

(2) Remove the compressor unit from the shipping container with' the charging hose assembly attached to the compressor, coiled, and tied to the top frame of the compressor with the starting.

(3) Remove the sealed packages containing the technical manuals and gasoline engine lubrication order from the shipping container. Unbuckle the securing straps on the canvas cover and remove the cover from the compressor.

##### 2-2. Used Equipment

*a.* Used equipment will be received in that condition of processing required by the distance and type of moving.

*b.* Equipment that has been shipped a short distance may not be crated. In this instance, fill the fuel tank with gasoline and the compressor and engine crankcases with oil (para 2-7b).

*c.* Receive equipment, that has been fully processed for shipment, in accordance with paragraphs 2-1. 2-3, 2-4, 2-5, 2-6; 2-7 and 2-8.

##### 2-3. Inspecting and Servicing Equipment

*a.* Verify that all items on the packing list have been received.

*b.* Crank the engine slowly with the starting rope to verify free movement of compressor moving parts.

*c.* Drain the preservation oil from the engine crankcase oil pan before adding operating oil.

*d.* Lubricate the compressor unit (para 2-7).

*e.* Remove the two warning tags attached to the compressor.

*f.* Fill the fuel tank with gasoline (item 6, Appendix F).

*g.* Verify that compressor alteration parts (charging hose assembly) are assembled to the \*compressor and have been tested in accordance with the test requirements contained in TB 742-93-1.

*h.* Verify that the pressure gage has been calibrated in accordance with TB 43-180.

###### NOTE

**Organizational maintenance personnel are authorized to assemble the compressor alteration parts (charging hose assembly) to the compressor and test the assembled compressor and charging hose assembly in accordance with the test requirements contained in TB 742-93-1.**

##### 2-4. Operating Instructions

The operating instructions for AN-M4, AN-M4B, AN-M4C and AN-M4D compressor unit models are contained in TM 3-4310-100-10.

##### 2-5. Assembling Compressor Alteration Parts (charging hose assembly) to AN-M4 Compressor Units (All models).

(fig. 2-1).

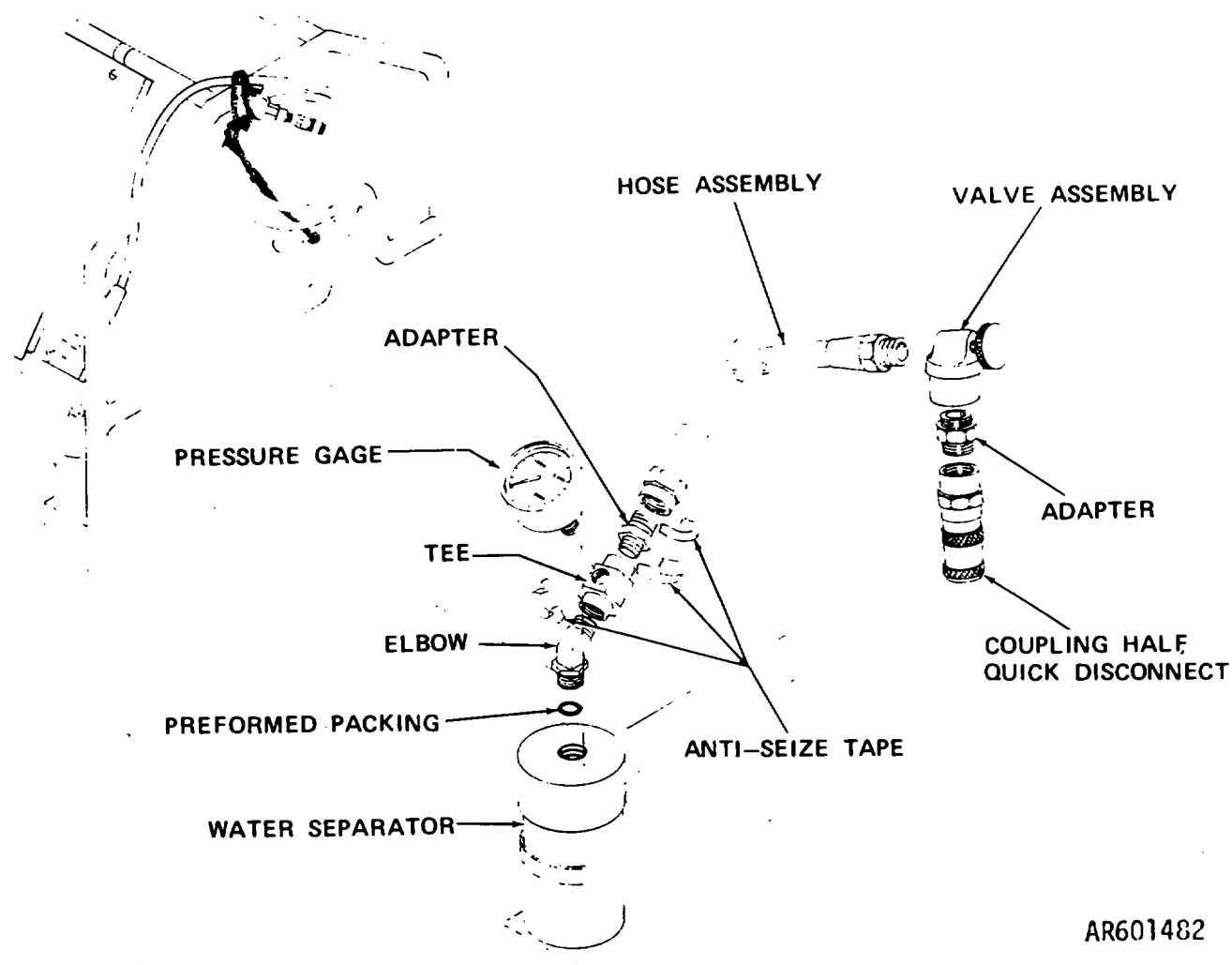


Figure 2-1. Compressor Alteration Parts (charging hose assembly).

a. Remove and discard the existing adapter located on top of the water separator.

b. Install preformed packing NSN 5330-00-805-2966 on elbow NSN 4730-00-933-0723.

c. Install elbow on top of water separator. Position elbow so it points toward the fuel tank. Tighten lock nut.

d. Apply one wrapping of antiseize tape, NSN 8030-00-899-3535, on elbow threads.

e. Screw tee, NSN 4730-00-084-0435, onto elbow until it bottoms. Loosen tee until side hole faces away from fuel tank.

#### NOTE

On AN-M4 compressors move instruction plate away from water separator to allow installation of pressure gage.

f. Remove rubber case from pressure gage. Install pressure gage, NSN 6685-00-087-6925, and tighten.

g. Install rubber case on gage.

h. Apply one wrapping of antiseize tape to threads on both ends of adapter NSN 4730-00-618-3410.

i. Screw adapter into tee and tighten.

j. Screw hose assembly, NSN 4720-00-2i89 to the adapter.

k. Install valve assembly, NSN 1040-00-759-7352 on the hose assembly.

l. Install adapter, NSN 4730-00-851-2278, to valve assembly.

m. Install coupling half, quick-disconnect, NSN 4720-00-863-0774 on adapter.

n. Coil and tie hose to frame with starting rope.

## Section II. LUBRICATION

## 2-6. General

This section contains instructions for lubricating AN-M4, AN-M4B, AN-M4C, and AN-M4D compressor units (fig. 2-2). These instructions must be followed to maintain the equipment in an operational condition.

## 2-7. Compressor Units (all models)

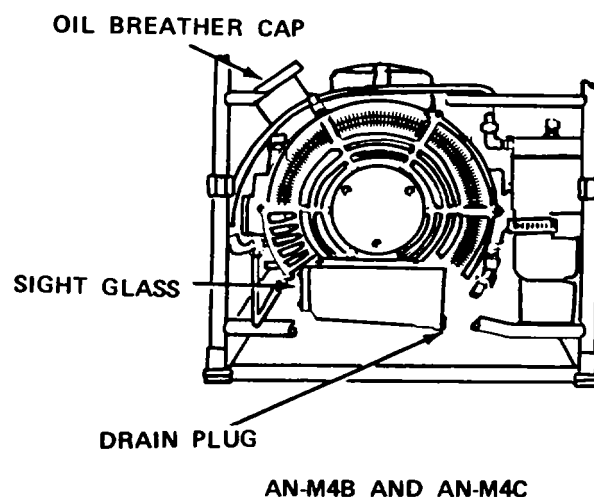
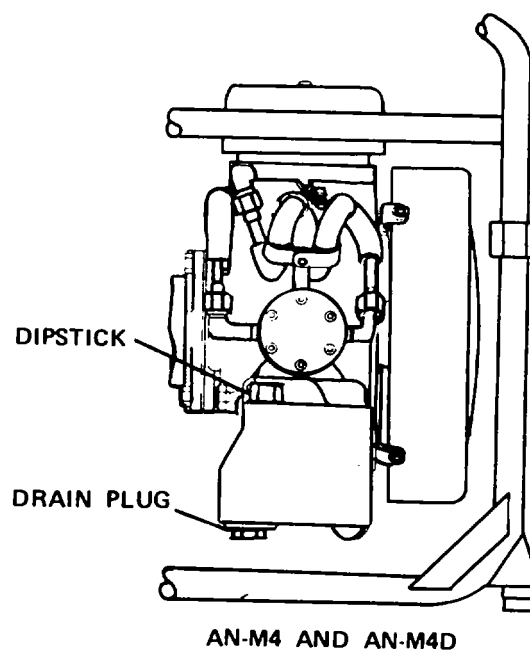
**CAUTION**

Use only air compressor lubricating oil (NSN 9150-00-753-4667) in the compressors. Operating the compressors with any other type of oil will ruin the compressors.

**a. Checking Oil Level.**

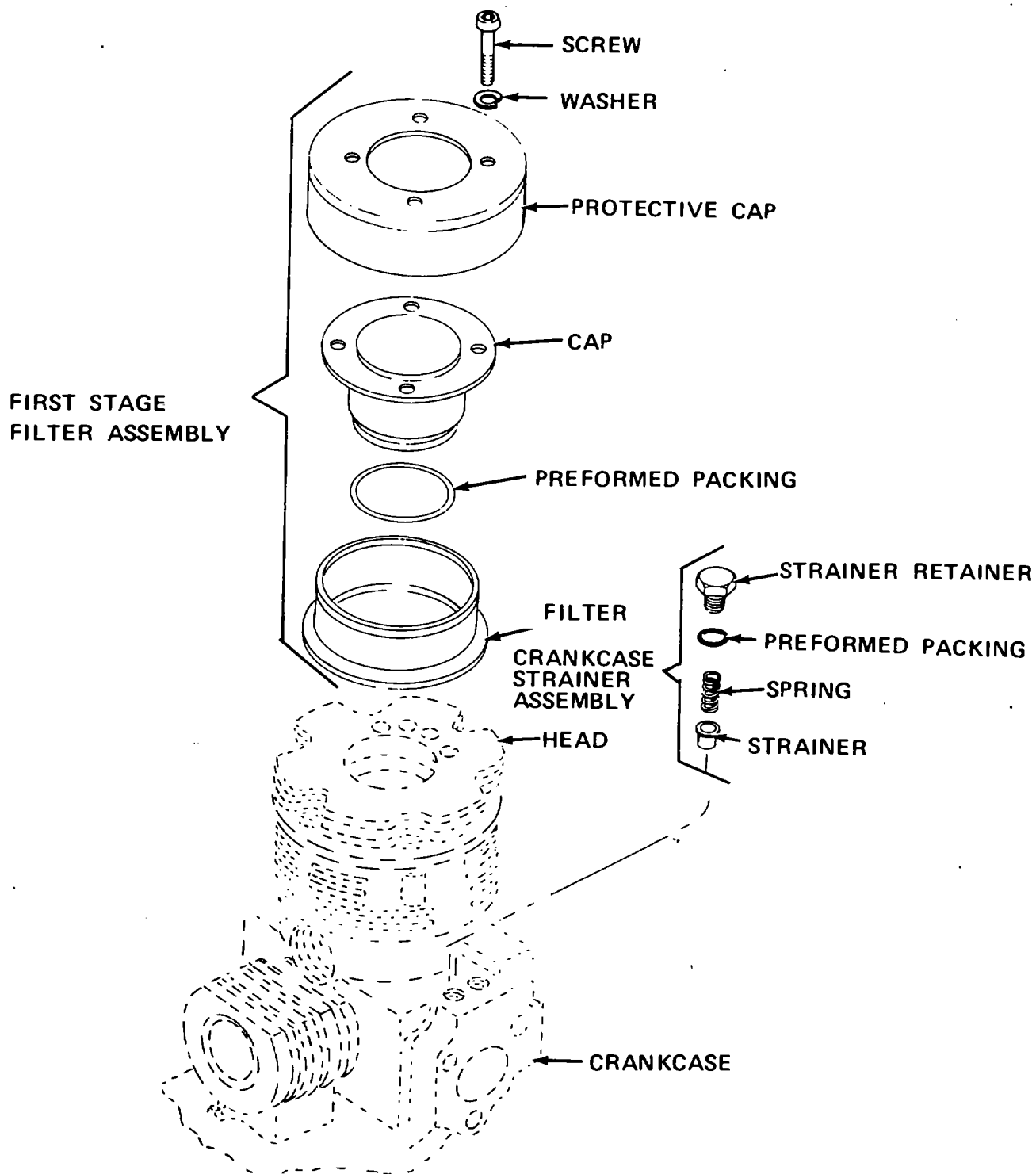
(1) Make sure compressor units are as level as possible.

(2) Check the oil level in the reservoir by observing the oil level sight on the AN-M4B and AN-M4C model compressor units (fig. 2-3). Remove the dipstick on the AN-M4 and AN-M4D model compressor units to observe oil level (fig. 2-4). Add oil as required to maintain the oil level within the oil sight circle or dipstick full mark.



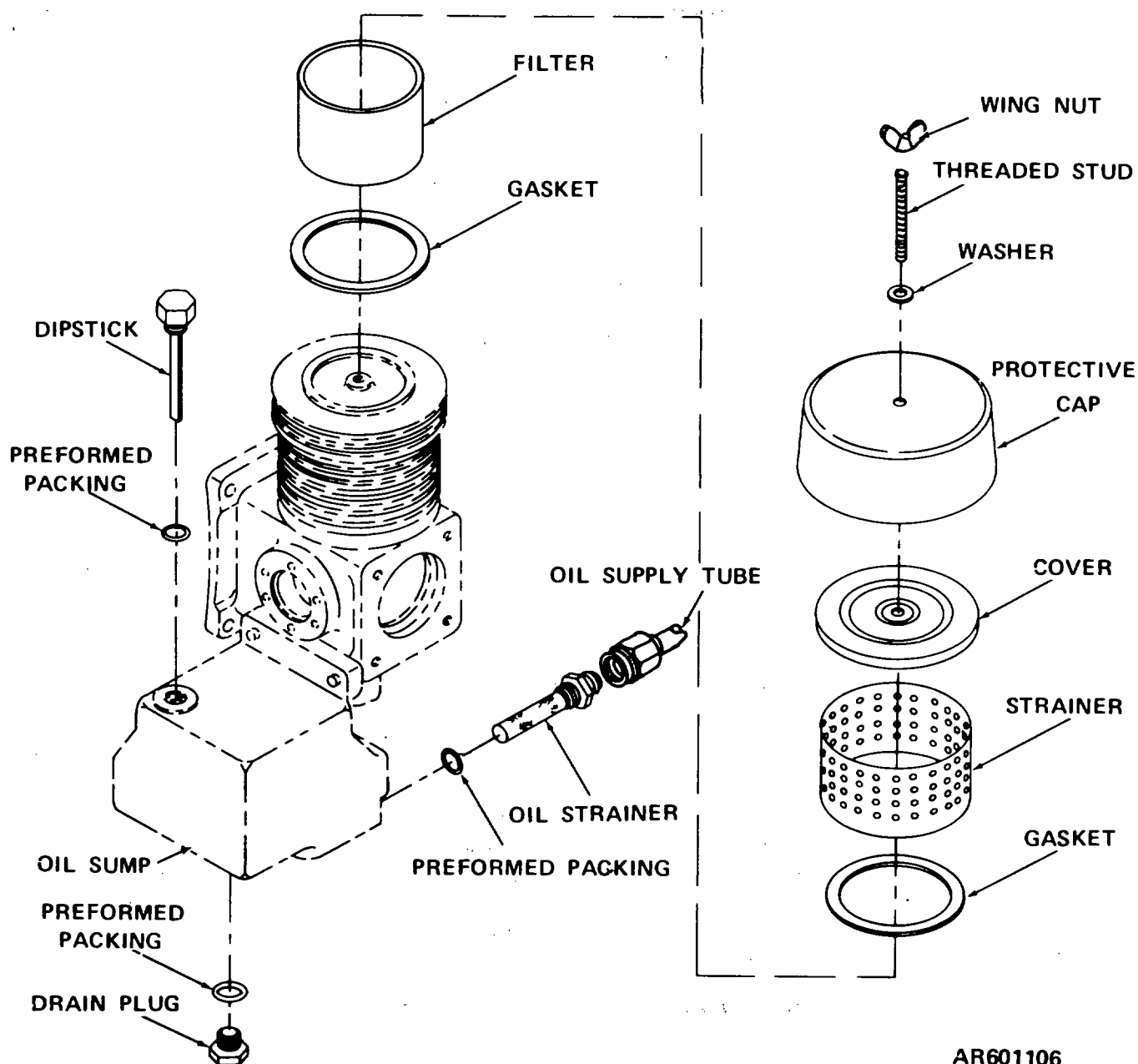
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Figure 2-2. Lubrication Points for AN-M4, AN-M4B, AN-M4C and AN-M4D compressor models.



AR601082

Figure 2-3. First stage filter assembly and crankcase strainer assembly (AN-M4 model only).



AR601106

Figure 2-4. First stage strainer and filter assembly (AN-M4D model only)

#### b. Adding Oil

(1) Remove the oil breather cap or dipstick and wipe with a clean dry cloth.

(2) Add lubricating oil (NSN 9150-00-7534667) to the air compressor as required to raise the level of the oil within the oil level sight circle or on the dipstick full mark.

(3) Replace the oil breather cap or dipstick.

(4) Wipe any spilled oil from the compressor unit.

#### c. Changing Oil

(1) Change the oil in the compressor units after every 50 hours of operation.

#### CAUTION

Excessive high or low ambient temperatures (below 0 F or above 110 F), prolonged periods of operation (two hours or more) or operating in sand or dust will necessitate more frequent change of the lubricant.

(2) The 50-hour operation interval is based on good operating conditions.

(3) Drain the oil reservoir while the compressor is turned off and still hot.

(4) Remove the drain plug (fig. 2-2) and drain the oil from the reservoir.

(5) Reinstall the drain plug.

(6) Remove the oil breather cap. Clean the cap and filter at each oil change in dry cleaning solvent (stoddard solvent) per Federal Specification P-D680. type 1 (AN-M4B and AN-M4C models only). Air dry before replacing the cap.

(7) Fill the reservoir with one pint of air compressor lubricating oil (table 1-1) and reinstall the breather cap or dipstick.

(8) Start the compressor (TM 3-4310-100-10) and operate for 5 minutes. While the compressor is running, look for oil leaks around the drain plug and at

the connection between the engine and compressor. Return compressor units with oil leaks to direct support maintenance personnel. Observe the oil level through the oil level sight or on the dipstick full mark. Keep the oil level at full.

(9) Wipe the spilled oil from the compressor unit.

## 2-8. Gasoline Engine

Refer to TM 5-2805-256-14 and LO 5-2805-256-12 for lubrication instructions on the gasoline engine.

## Section III. PAINTING

### 2-9. General

Organizational maintenance personnel are authorized to paint or touch up all painted exterior surfaces of the compressor unit.

### 2-10. Painting Instructions

a. Remove scratches, rust, scales, chips, and foreign matter from surfaces to be touched up or painted.

b. Prime all worn, scratched, or bare metal surfaces with vinyl-zinc chromate primer (item 2, Appendix F).

c. Touch up all painted exterior surfaces with rust-inhibiting enamel (item 5, Appendix F).

### NOTE

**Additional detail painting instructions for field use are contained in TM 43-0139, Painting Instructions for Field Use.**

## Section IV. PREVENTIVE MAINTENANCE CHECKS AND SERVICES

### 2-11. General

Organizational maintenance personnel are responsible for performing quarterly preventive maintenance checks and services on the compressor units (table 2-1). The numbers under the "Sequence Number" column indicate that the service opposite the number must be performed in the numerical sequence at the prescribed interval. The man-hour time required to perform all the checks

and services for each interval is shown in the work time column. These times are stated in hours and tenths.

### 2-12. Deficiencies

Report all deficiencies beyond the scope of organizational maintenance to direct support maintenance personnel.

*Table 2-1. Preventive Maintenance Checks and Services*

Quarterly

Total Man Hours required: 1.4

Sequence Number	Items To Be Inspected Procedure	Work Time (M/ H)
	<p><b>Section I. CANVAS</b> Man-hours required: CANVAS COVER, BACK REST HARNESS AND STRAP ASSEMBLIES.</p> <p>Check for holes, rips, fraying or other damage. Replace "missing items or items considered unsafe for use. Check for worn, damaged, or loose hardware securing strap assemblies to engine mounting frame. Replace damaged or missing hardware.</p>	0.2
	<p><b>Section II. TOP FRAME AND BOTTOM FRAME</b> Man-hours required:</p> <p>Inspect for cracks, broken welds and missing mounting hardware. Check condition of painted surfaces. Touch up chipped, scratched and rusted painted areas. Check for damaged or missing rubber mounts.</p>	0.2

Table 2-1. Preventive Maintenance Checks and Services-Continued

Q Quarterly

Total Man-Hours required: 1.4

Sequence Number	Items To Be Inspected Procedure	Work Time r (M/ H)
	<b>Section III. GASOLINE ENGINE AND FUEL FILTER ASSEMBLY</b> Man-hours required: 0.4	
3	Check and service the engine in accordance with TM 5-5805-256-14 and L05-2805-256-12. Check for looses or missing engine mounting hardware. Tighten loose engine mounting hardware to between 36 to 18 pound inches. Inspect fuel filter assembly for leaks, damaged components and dirty filter elements.	0.4
	<b>Section IV. COMPRESSOR</b> Man-hours required: 0.3	
4	Check oil level in reservoir and add or change the oil as required. Start the compressor unit (TM 3-4310-100-10) and check for excessive vibration, excessive noise and smoke. If any of the above appear, stop the compressor unit immediately. Check the oil breather cap for clogging and excessive dirt. Clean the oil breather cap with stoddard solvent (table 1-1) and air dry. Replace the oil breather assembly when necessary. Check for loose or missing compressor mounting hardware. Torque loose compressor mounting hardware to between 90 to 108 pound inches. Check aftercooler for bent fins and loose connections. Straighten bent fins by using needle nose pliers. Torque loose connections to between .36 to 60 pound inches. Check air intake filter for clogging, and excessive dirt and damage. Check moisture separator for looseness or damage. Make sure safety seal wire is intact on pressure relief valve.	0.3
	<b>Section V. FUEL TANK AND TUBE ASSEMBLY (FUEL LINE)</b> Man-hours required: 0.1	
5	Inspect for dents, kinks, leaks, distortion or other damage. Tighten loose connections.	0.1
	<b>Section VI. COMPRESSOR ALTERATION PARTS (CHARGING HOSE ASSEMBLY)</b> Man-hours required: 0.2	
6	Check the hose for breaks and loose metal hose connections on both ends of the hose. Check the valve assembly bleeder valve for moveability. Check both adapters, elbow, pressure gage, and quick disconnect coupling half for damaged threads and moveability. Verify that charging hose assembly has been tested in accordance with the test procedures contained in TB 742-91-1 at 6 month intervals.	0.2

**Section V. TROUBLESHOOTING****2-13. General**

This section provides assistance in locating and correcting causes of unsatisfactory operation or failure of the compressor units. Refer to TM 5-2805-256-14 for troubleshooting the gasoline engine.

**2-14. Malfunctions**

Report all malfunctions beyond the scope of organizational maintenance to direct support maintenance personnel. The items subject to troubleshooting are listed in table 2-2.

Table 2-2. Troubleshooting

**MALFUNCTION****TEST OR INSPECTION****CORRECTIVE ACTION****1. ENGINE FAILS TO START**

- Step 1. Improper setting on choke lever and governor.  
Adjust choke level and governor (TM 3-4310-100-10)
- Step 2. Fuel shutoff cock closed.  
Open fuel shutoff cock (TM 3-4310-100-10).
- Step 3. Ignition switch off (AN-M4C and AN-M4D).  
Place ignition switch to RUN (TM 3-4310-100-10).
- Step 4. Fuel filter assembly dirty or defective.  
Clean or replace fuel filter assembly.
- Step 5. Fuel tank empty.  
Add fuel.

Table 2-2. Troubleshooting

MALFUNCTION	
TEST OR INSPECTION	
CORRECTIVE ACTION	
<b>2. ENGINE FAILS TO CONTINUE RUNNING</b>	
Step 1.	Insufficient fuel. Add fuel.
Step 2.	Fuel filter assembly dirty or defective Clean or replace fuel filter assembly.
Step 3.	Fuel fill cap vent valve closed. Open vent valve TM 3-4310-100-10).
<b>3. ENGINE OVERHEATS</b>	
	Improper air circulation. Clean cylinder head (TM 5-2805-256-14).
<b>4. LOW AIR PRESSURE OR LONG FILL TIME</b>	
Step 1.	Engine operating below rated speed. Increase engine speed (TM 3-4310-100-10).
Step 2.	Loose connections or leaks. Tighten loose connections and check for leaks.
Step 3.	Worn compressor. Report to direct support maintenance.
<b>5. COMPRESSOR SMOKING (OVERHEATING)</b>	
Step 1.	Improper air circulation. Operate compressor in open area. Remove objects obstructing free flow of air to compressor fan. Clean mud and dirt from cooling fins of cylinder heads and aftercooler.
Step 2.	Bent or broken fins on intercoolers. Report to direct support maintenance.
Step 3.	Fan loose or broken. Report to direct support maintenance.
<b>6. EXCESSIVE VIBRATION</b>	
Step 1.	Mounting bolts loose. Tighten bolts.
Step 2.	Motor running rough. Adjust carburetor (TM 5-5805-256-14).
Step 3.	Fan bent or out of balance. Report to direct support maintenance.

## Section VI. MAINTENANCE

### 2-15. Compressor Units (all models)

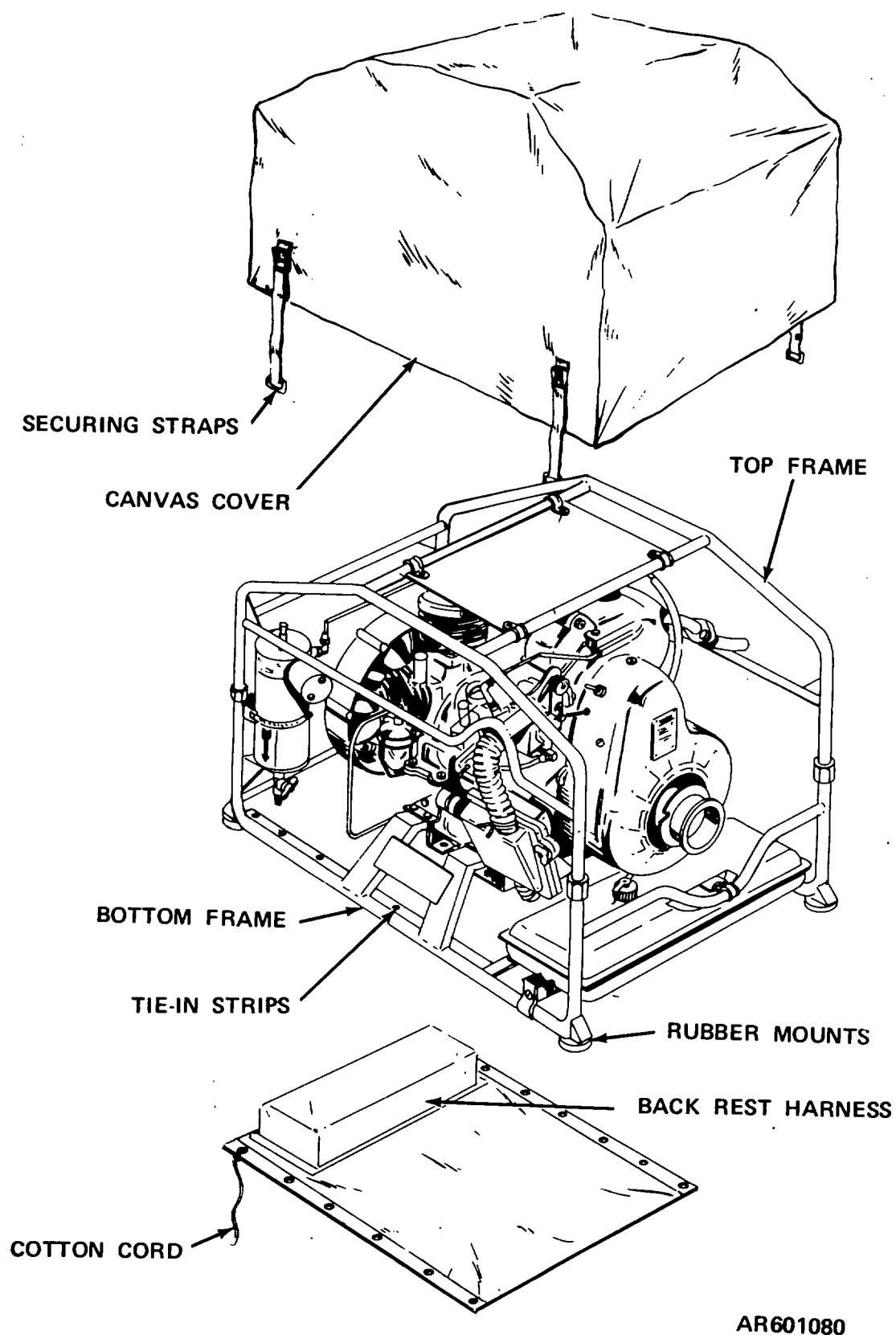
Organizational maintenance. personnel are authorized to replace the. back, rest harness and carrying strap assemblies.

#### a. Back Rest Harness.

(1) Removal.

(a) Unlace the cotton cord (fig. 2-5) securing back rest harness to engine mounting frame.





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Figure 2-5. Canvas cover and back rest harness, exploded view.

(b) Remove back rest harness.

(2) Cleaning and Inspection.

(a) Inspect fabric for dirt, fraying, holes, tears, rips, or other indications of wear and damage which would render the item inadequate for use.

(b) Wash the item in warm soapy water and air-dry.

(3) Installation.

(a) Cut the cotton cord into three-foot lengths, and tie a plain knot on one end of each piece.

(b) Hold the back rest harness with the raised padded portion down and facing away from you.

(c) Thread one length of the cotton cord into each top hole.

(d) Place the back rest harness between tie-in strips with raised padded portion towards the compressor.

(e) Beginning with the first hole of each tie-in strip, lace the back rest harness to the bottom frame keeping an equal distance on each side of the back rest harness.

(f) Pull the cord tight and tie the ends.

**b. Waist Strap.**

(1) Removal.

(a) Unsnap the quick release buckle (fig. 2-6) and slide waist strap loop off the buckle.

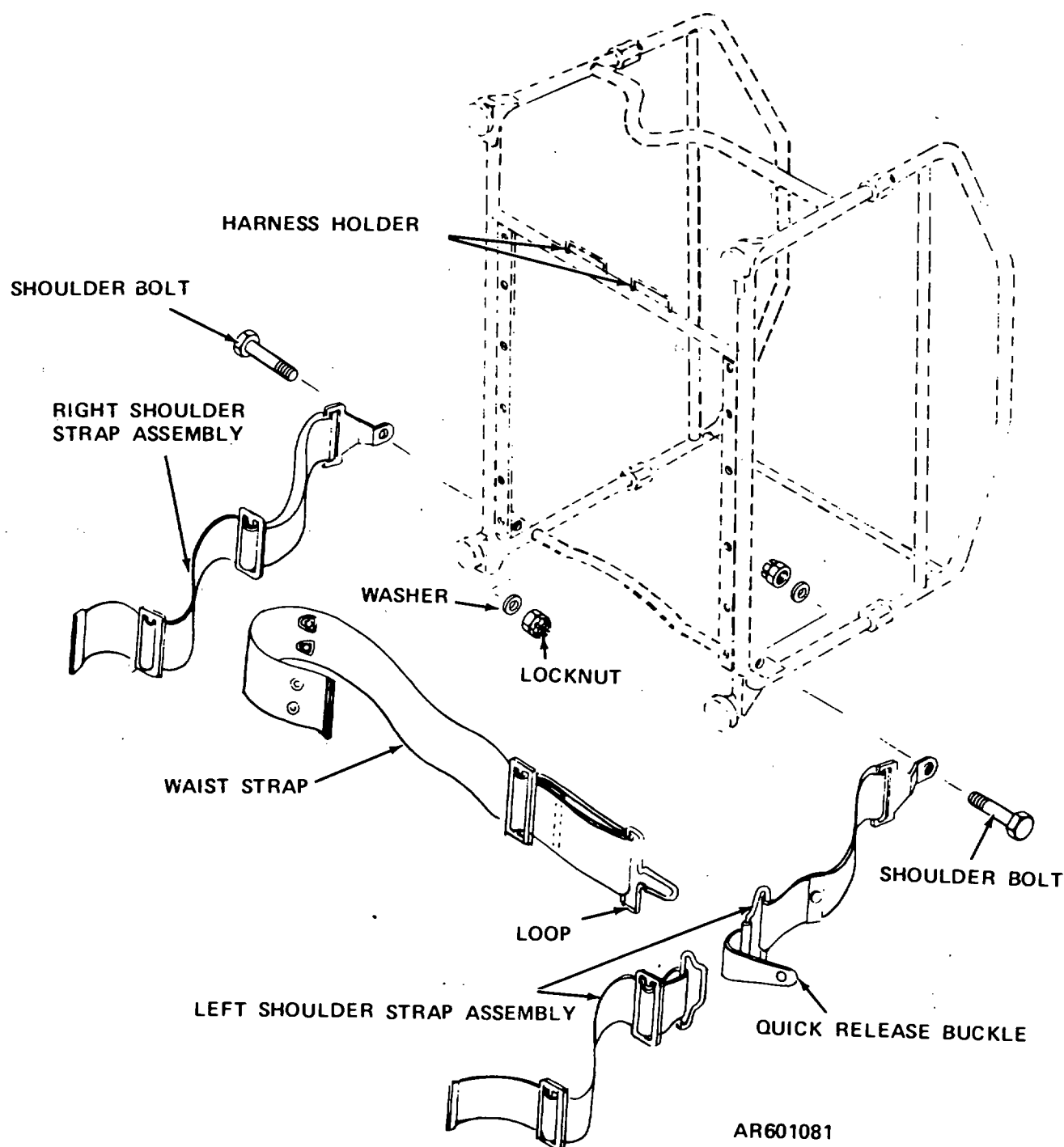


Figure 2-6. Carrying straps, exploded view.

(b) Unsnap two snap fasteners and remove the waist strap from the right shoulder strap.

(2) Cleaning and Inspection.

(a) Inspect the fabric for dirt, tears, rips or other indications of wear and damage which could make the item inadequate for use.

(b) Check all buckles, snap fasteners, and swivel assemblies for corrosion, wear and other damage.

(c) Replace any item considered unsafe for use.

(d) Wash the straps in warm soapy water and air-dry.

(3) *Installation.* Install the components in the reverse order of removal in (1) above.

**c. Left and Right Shoulder Strap Assemblies.**

(1) Removal.

(a) Remove the appropriate end of the waist strap (b above).

(b) Unbuckle the strap from the harness holder (fig. 2-6) and attaching hardware.

(2) Cleaning and Inspection.

(a) Inspect the fabric for dirt, tears, rips, or other indications of wear and damage which would render the item inadequate for use.

(b) Check buckle, snap fasteners and swivel assembly for corrosion, wear, and other damage.

(c) Inspect the shoulder bolt and locknut for damage or wear.

(d) Replace the items considered unsafe for use.

(e) Wash the strap in warm soapy water and air-dry.

(3) Installation. Install the components in the reverse order of removal in (1) above.

## 2-16. Compressor Unit Model AN-M4 (only)

Organizational maintenance personnel are authorized to replace the first stage filter assembly and the crankcase strainer assembly.

### a. First stage Filter Assembly.

(1) Removal.

(a) Remove the four screws (fig. 2-3) and washers securing the first stage filter assembly to the crankcase assembly head.

(b) Remove the protective cap, cap, preformed packing, and filter.

(2) Cleaning and Inspection.

(a) Clean all parts with stoddard solvent and air-dry.

(b) Inspect all parts for damage or deformation.

(3) Installation.

(a) Place the filter on top of the crankcase assembly head.

(b) Position preformed packing on the cap and place the cap on the filter.

(c) Position the protective cap over the cap and align the screw holes of both caps with the holes in the crankcase head.

(d) Attach the first stage filter assembly to the crankcase strainer head with the four screws and washers.

### b. Crankcase strainer Assembly.

(1) Removal.

(a) Unscrew the strainer retainer from the crankcase.

(b) Remove the preformed packing, spring and strainer from the crankcase.

(2) Cleaning and Inspection.

(a) Clean all parts with stoddard solvent and air-dry.

(b) Inspect all parts for damage or deformation. Make sure the strainer is not clogged.

(3) Installation.

(a) Place the strainer into the crankcase hole.

(b) Position the spring into the strainer.

(c) Position preformed packing onto the strainer retainer and install the strainer retainer into the crankcase.

## 2-17. Compressor Units, Models AN-M4B and AN-M4C

Organizational maintenance personnel are authorized to replace the air intake filter, oil breather assembly and drain plug.

a. *Air Intake Filter.* The air intake filter is located on top of the first stage cylinder head and consists of one inner and one outer filter cover, and one inner and one outer filter element. The filter elements filter incoming air to the compressor before air enters the first stage cylinders.

(1) Removal.

(a) Unbuckle four securing straps and remove the canvas cover (fig. 2-5).

(b) Remove the outer filter cover (fig. 2-7) by pressing down, and twisting the cover counterclockwise to disengage the securing slots from the cylinder head.

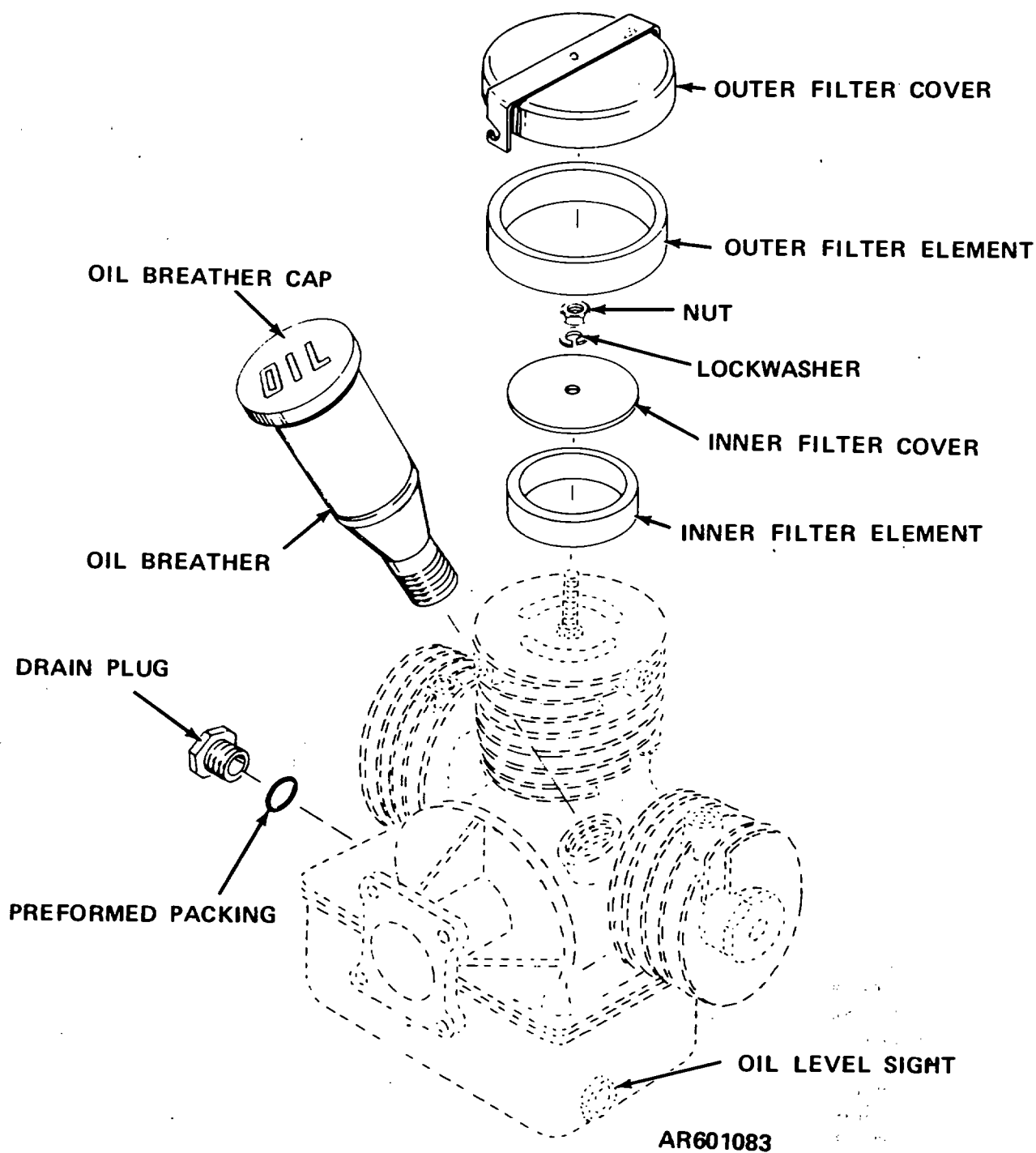


Figure 2-7. Air intake filter, oil breather assembly and drain plug, exploded view. (AN-M4B and AN M4C models only).

- (c) Remove the outer filter element.
- (d) Remove the nut, lockwasher, and inner filter cover.
- (e) Remove the inner filter element.
- (2) Cleaning and Inspection.
- (a) Use stoddard solvent (item 8, Appendix F) to clean all parts.

- (b) Let the filter elements air-dry. Use a clean dry cloth (item 9, Appendix F) to dry metal parts.
- (c) Moisten a clean cloth with stoddard solvent and wipe the top of the cylinder head.
- (d) Visually inspect the filter elements. Replace if elements are chipped, cracked, deformed or excessively dirty.

(3) Installation. Install components in the reverse order of removal in (1) above.

**b. Oil Breather Assembly.** The oil breather assembly consists of the oil breather cap and oil breather (fig. 2-7). To replace, unscrew the defective oil breather assembly and remove it from the compressor crankcase. When installing a new oil breather assembly, be sure not to cross the threads.

**c. Drain Plug.**

(1) Removal.

(a) With a clean cloth (item 9, Appendix F), wipe dirt, grit, and oil from the area surrounding the drain plug (fig. 2-7).

(b) Remove the drain plug and drain the oil from the oil reservoir. Remove the preformed packing.

(2) Cleaning and Inspection.

(a) Use stoddard solvent (item 8, Appendix F) to clean the drain plug. Wipe the drain plug dry with a clean cloth (item 9, Appendix F).

(b) Check for defective threads, distorted or rounded wrenching features. Replace the drain plug if unserviceable.

3. Installation. Installation is the reverse of removal (a above), except for the following procedure:

(a) Discard and replace the preformed packing if damaged.

(b) Lubricate compressor assembly (para 2-7).

## 2-18. Compressor Unit, Model AN-M4D

Organizational Maintenance personnel are authorized to replace the dipstick, drain plug and oil strainer.

**a. Dipstick.**

(1) Removal.

(a) Unscrew and remove dipstick from the top of the compressor oil sump (fig. 2-4).

(b) Remove the preformed packing from the dipstick.

(2) Cleaning and Inspection.

(a) Clean dipstick with a clean dry cloth.

(b) Inspect the preformed packing and dipstick for damage or deformation. Replace preformed packing and dipstick as required.

(3) Installation.

(a) Position preformed packing into packing groove on the dipstick.

(b) Screw the dipstick into the oil fill port on the compressor sump. Hand-tighten the dipstick.

**b. Drain Plug.**

(1) Removal.

(a) Unscrew and remove the drain plug from the bottom of the compressor sump.

(b) Remove the preformed packing from the drain plug.

(2) Cleaning and Inspection.

(a) Clean drain plug with a clean dry cloth.

(b) Inspect the preformed packing and drain plug, for damage or deformation. Replace preformed packing and drain plug as required.

(3) Installation.

(a) Position preformed packing into packing groove on the drain plug.

(b) Screw the drain plug into the bottom of the compressor sump. Tighten the drain plug to  $35 \pm 5$  inch-pounds.

**c. Oil Strainer.**

(1) Removal.

(a) Disconnect the end nut and remove the oil supply tube from the oil strainer.

(b) Unscrew the oil strainer from the compressor sump and discard preformed packing.

(2) Cleaning and Inspection.

(a) Clean the oil strainer in stoddard solvent and air-dry.

(b) Replace the preformed packing and oil strainer, if defective.

(3) Installation.

(a) Reassemble the oil strainer and preformed packing to the compressor sump and torque the oil strainer to  $35 \pm 5$  inch-pounds.

(b) Reassemble the oil supply tube to the oil strainer and torque the oil supply tube end nut to  $70 \pm 10$  inch-pounds.

## 2-19. Gasoline Engine

### WARNING

**Gasoline is highly flammable, and can cause DEATH or severe burns. When removing, cleaning, inspecting and installing the fuel filter, some gas spill will occur. Keep open flame away from working area.**

Organizational maintenance personnel are authorized to replace the fuel filter. Refer to TM 5-2805-256-24P for fuel filter service and accessories.

## CHAPTER 3

### SHIPMENT, ADMINISTRATIVE STORAGE, AND DESTRUCTION TO PREVENT ENEMY USE

#### Section I. SHIPMENT AND ADMINISTRATIVE STORAGE

##### 3-1. Shipment

- a. Drain all lubrication oil from the compressor oil reservoir.
- b. Drain all gasoline from the fuel tank, fuel lines, carburetor, and fuel filter assembly.
- c. Tape or tie a waterproof plastic envelope containing the following publication to the top TM 3-4310-100-20&P Organizational Maintenance Manual (including Repair Parts and Special Tools Lists) for Compressor Unit, Reciprocating; Power Driven, Flamethrower, 3 1/2 CFM, AN-M4 (Walter Kidde) NSN 1040-00-592-8560; AN-M4B (Stewart-Warner) NSN 1040-00-848-075; AN-M4C (Stewart-Warner) NSN

4310-00-078-5431 and AN-M4D (Walter-Kidde) NSN 1040-00-181-5054.

- d. Place the complete compressor unit into a sturdy fiberboard carton or wood box. Install blocking or packing material as required to prevent movement of the compressor unit.

- e. Seal the carton or secure the cover to the box by nailing. Band the complete package with metal straps.

##### 3-2. Administrative Storage

Refer to TM 740-90-1 for administrative storage procedures.

#### Section II. DESTRUCTION TO PREVENT ENEMY USE

##### 3-3 General

When capture of equipment by the enemy is imminent, destroy or render the equipment useless. The military commander will determine when destruction is to be undertaken.

##### 3-4. Methods

Methods for destruction of the AN-M4, AN-M4B, AN-M4C, and AN-M4D compressor unit models are contained in TM 43-0002-31.

## APPENDIX A

## REFERENCES

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LO 5-2805-256-12	Engine, Gasoline, 1 1/2 HP, Military Standard Models (Model 1A08-1), (Model 1A08-2) (Model 1A08-3). To 38G2-102-2LC-1).
LO 3-4310-100-20&P	Flamethrower, 31/2 CFM, AN-M4 Walter Kidde Model No. E74037, AN-M4B Stewart-Warner Model NO. 3260-101-4, AN-M4C Stewart-Warner Model NO. 3260-101-6, AN-M4D Walter Kidde Model NO. 895437.
CTA 50-970	Expendable Items: (Except Medical, Class V, Repair Parts and Heraldic Items).
TB 43-180	Calibration Requirements for the Maintenance of Army Materiel.
TB 742-93-1	Inspection and Test of Air and other Gas Compressors.
TM 3-4310-100-10	Operator's Manual, Compressor Unit, Reciprocating Power-Driven, Flame-thrower, 3 1/2 CFM, AN-M4, AN-M4B, AN-M4C and AN-M4D.
TM 5-2805-256-14	Operator, Organizational, DS, and GS Maintenance Manual: Engine, Gasoline, 1 1/2 HP, Military Standards Models (Model 1A08-1 NSN 2805-00-601-5181) (Model 1A08-2 NSN 2805-00-714-8552) (Model 1A08-3 NSN 2805-4-068-7510) (TO 38G2-102-2/NAVFAC P-8611E/TM 81283-14)
TM 5-2805-256-24P	Organizational, Direct and General Support Maintenance Repair Parts: Engine, Gasoline, 1 1/2 HP; Military Standard Models (Model 1A08-1, NSN 2805-0-601-5181), (Model 1A08-11, NSN 2805-00-714-8552), (Model 1A08-111, NSN 2805-00-068-7510). (SL-4-81283B /T038G2-102-4).
TM 43-0139	Painting Instructions for Field Use.
TM 9-247	Materials Used for Cleaning, Preserving, Abrading and Cementing Ordnance Materiel and Related Materials Including Chemicals.
TM 38-750	The Army Maintenance Management System (TAMMS).
TM 43-0002-31	Destruction of Chemical Weapons and Defense Equipment to Prevent Enemy Use.
TM 740-90-1	Administrative Storage of Equipment.



## APPENDIX B

## MAINTENANCE ALLOCATION

## Section I. INTRODUCTION

**B-1. General**

The maintenance Allocation Chart (section II) lists the authorized maintenance functions assigned the maintenance categories for maintenance of the AN-M4 compressors. This chart is to be used by all levels of maintenance to insure complete support of the equipment.

**B-2. Maintenance functions**

Maintenance functions will be limited to and defined as follows:

**a. Inspect.** To determine the serviceability of an item by comparing its physical, mechanical and/or electrical characteristics with established standards through examination.

**b. Test.** To verify serviceability and detect incipient failure by measuring the mechanical or electrical characteristics of an item and comparing those characteristics with prescribed standards.

**c. Service.** Operations required periodically to keep an item in proper operating condition, i.e., to clean (decontaminate), to preserve, to drain, to paint, or to replenish fuel, lubricants, hydraulic fluids, or compressed air supplies.

**d. Adjust.** To maintain, within prescribed limits, by bringing into proper or exact position, or by setting the operating characteristics to specified parameters.

**e. Align.** To adjust specified variable elements of an item to bring about optimum or desired performance.

**f. Calibrate.** To determine and cause corrections to be made or to adjusted on instructions or test measuring and diagnostic equipments used in precision measurement. Consists of comparisons of two instruments, one of which is a certified standard known accuracy, to detect and adjust any discrepancy in the accuracy of the instrument being impaired.

**g. Install.** The act of emplacing, seating, or fixing into position an item, part, or module (component or assembly) in a manner to allow the proper functioning of an equipment or system.

**h. Replace.** The act of substituting a serviceable like type part, subassembly, or module (component or assembly) for an unserviceable counterpart.

**i. Repair.** The application of maintenance services or other maintenance actions to restore serviceability to an item by correcting specific damage,

fault, malfunction, or failure in a part, subassembly, module (component or assembly), end item, or system.

**j. Overhaul.** That maintenance effort (service/action) necessary to restore an item to a completely serviceable/operational condition as prescribed by maintenance standards (i.e., DMWR) in appropriate technical publications. Overhaul is normally the highest degree of maintenance performed by the Army. Overhaul does not normally return an item to like new condition.

**k. Rebuild.** Consists of those services/actions necessary for the restoration of unserviceable equipment to a like new condition in accordance with original manufacturing standards. Rebuild is the highest degree of material maintenance applied to Army equipment. The rebuild operation includes the act of returning to zero those age measurements (hours/miles, etc.) considered in classifying Army equipments/components.

**B-3. Column entries**

**a. Column 1, Group Number.** Column 1 lists group numbers, the purpose of which is to identify components, assemblies, subassemblies, and modules with next higher assembly.

**b. Column 2, Component/Assembly.** Column 2 contains the noun names of components, assemblies, subassemblies, and modules for which maintenance is authorized.

**c. Column 3, Maintenance Functions.** Column 3 lists the function to be performed on the item listed in Column 2.

**d. Column 4, Maintenance Category.** Column 4 specifies, by the listing of a "work time" figure in the appropriate subcolumn(s), the lowest level of maintenance authorized to perform the function listed in Column 3. This figure represents the active time required to perform that maintenance function at the indicated category of maintenance. If the number or complexity of the tasks within the listed maintenance function vary at different maintenance categories, appropriate "work time"

figures will be shown for each category. The number of man-hours specified by the "work time" figure represents the average time required- to restore an item to a serviceable condition under typical field operating conditions. This time includes preparation time, troubleshooting time, and quality assurance/quality control time in addition to the time required to perform the specific tasks identified for the maintenance functions authorized in the maintenance allocation chart.

e. *Column 5, Tools and Equipment.* Column five (5) specifies by code, those common tool sets and special tools, test, and support equipment required to perform the designated function.

f. *Column 6, Remarks.* Column (6) contains an alphabetic code which leads to the remarks in section IV, remarks, which is pertinent to the item opposite the particular code.

### Section II. MAINTENANCE ALLOCATION CHART AN-M4, AN-M4B, AN-M4C and AN-M4D COMPRESSORS

(1) Group number	(2) Component/assembly	(3) Maint. function	(4) Maint. category					(5) Tool/ equipment	(6) Remarks
			C	O	F	H	D		
100	CANVAS COVER, STRAPS, ETC.	INSPECT REPLACE	0.1	0.2					
200	WATER SEPARATOR	INSPECT TEST REPLACE REPAIR OVERHAUL	0.1		0.4	1.0		1	A
300	COMPRESSOR ASSEMBLY	INSPECT TEST SERVICE REPLACE REPAIR OVERHAUL	0.2			2.0		1	A
400	ENGINE ASSEMBLY		0.1	0.3		2.0			
500	FRAME & FUEL TANK	INSPECT REPLACE	0.1	0.1	0.5	2.0			B
	REPAIR				2.0	12.0			
					1.0	2.0			

\*The subcolumns are as follows:

C - operator/crew  
O -organizational  
F -direct support  
H -general support  
D -depot

### Section III. TOOL AND TEST EQUIPMENT REQUIREMENTS

TOOL OR TEST EQUIPMENT REF CODE	MAINTENANCE CATEGORY	NOMENCLATURE	NATIONAL/NATO STOCK NUMBER	TOOL NUMBER
I	11	TEST BENCH 0-6000 PSI	4940 771 6999 or 1940 980 1620	Model AR 16 Model 3231

### Section IV. REMARKS

Reference Code	Remarks
A	Test in accordance with TB 742-93-1
B	See TM 5-2805-256-14

## APPENDIX C

# ORGANIZATIONAL MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS' LISTS

## Section I. INTRODUCTION

**C-1. Scope**

This appendix lists spares and repair parts; special tools; special test, measurement, and diagnostic equipment (TMDE), and other special support equipment required for performance of organizational, direct support, and general support maintenance of the AN-M4 Compressors. It authorizes the requisitioning and issue of spares and repair parts as indicated by the source and maintenance codes.

**C-2. General**

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 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 numeric sequence, with the parts in each group listed in figure and item number sequence.

**b. Section III. Special Tools List.** Not applicable.

**c. Section IV. National Stock Number and Part Number Index.** A list, in National item identification number (NIIN) sequence, of all National stock numbers (NSN) appearing in the listings, 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. This index is followed by a cross-reference list of reference designators to figure and item numbers.

**C-3. Explanation of Columns**

**a. Illustration.** This column is divided as follows:

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

**(2) Item Number.** The number used to identify item called out in the illustration.

**b. Source, Maintenance, and Recoverability (SMR) Codes.**

**(1) Source Code.** Source codes indicate the manner acquiring support items for maintenance, repair, or overhaul of end items. Source codes are entered in the first and second positions of the Uniform SMR Code format as follows:

**Definitions**

PA--Item procured and stocked for anticipated or known usage.

PB--Item procured and stocked for insurance purpose because essentially dictates that a minimum quantity be available in the supply system.

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, 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 a 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 intermediate levels of maintenance.

<i>Code</i>	<i>Definition</i>
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 the direct support maintenance level.
MH	Item to be manufactured or fabricated at the general support maintenance level.
MD--	Item to be manufactured or fabricated at the depot maintenance level.
AO--	Item to be assembled at organizational level.
AF--	Item to be assembled at Direct Support level.
AH--	Item to be assembled at general support maintenance level.
AD--	Item to be assembled at depot maintenance level.
XA--	Item is not procured or stocked because the requirements for the item will result in the replacement on the next higher assembly.
XB--	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 manufacturer's part number.
XD--	A support item is not stocked. When required, item will be procured through normal supply channels.

#### NOTE

**Cannibalization or salvage may be used as a source of supply for any items 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) The maintenance code entered in the third position will indicate the lowest maintenance level authorized to remove, replace, and use the support item. The maintenance code entered in the third position will indicate one of the following levels of maintenance:

<i>Code</i>	<i>Application/Explanation</i>
C--	Crew or operator maintenance performed within organizational maintenance.
O--	Support item is removed, replaced, used at the organizational level.

b. 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). This position will contain one of the following maintenance codes.

<i>Code</i>	<i>Application/Explanation</i>
O--	The lowest maintenance level capable of complete repair of the support item is the organizational level.
(3) Recoverability Code.	Recoverability codes and 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:

#### Recoverability

<i>Codes</i>	<i>Definition</i>
Z--	Nonreparable item. When unserviceable, condemn and dispose at the level indicated in position 3.

**c. National Stock Number.** Indicates the National stock number assigned to the item and which will be used for requisitioning.

**d. Part Number.** Indicates the primary number used by the manufacturer (individual, company, firm, corporation, or Government activity), which controls the design and characteristics of the item by means of its engineering drawings, specifications, standards, and inspection requirements to identify an item or range of items.

#### NOTE

**When a stock numbered item is requisitioned, the item received may have a different part number than the part being replaced.**

**e. Federal Supply Code for Manufacturer (FSCM).** The FSCM is a 5-digit numeric code listed in SB 708-42 which is used to identify the manufacturer, distributor, or Government agency.

**f. Description.** Indicates the Federal item name and if required, a minimum description to identify -the item.

**g. Unit of Measure (U/M).** Indicates the standard of the basic quantity of the listed item as used in performing the actual maintenance function. This measure is expressed by a two-character alphabetical abbreviation (e.g., ea., in, pr. etc.). 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.

**h. Quantity Incorporated in Unit.** Indicates the quantity of the item used in the breakout shown on the illustration figure, which is prepared for a functional group, subfunctional group, -or an assembly.

#### C-4. Special Information

a. Usable on codes are shown in the description

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

<i>Code</i>	<i>Used On</i>
A---3/2 End Item Code AN-M4D	
B---237 & 239 End Item Code AN-M4B & C	
C---317 End Item Code	

*b.* The illustrations in this manual are identical to those published in 34P. Only those parts assigned the third position SMR maintenance code "C" or "O" are listed in the tabular listing; therefore, there may be a break in the item number sequence. Only illustrations containing organizational authorized items appear in this manual.

#### **C-5. How To Locate Repair Parts.**

##### ***a. When National Stock Number or Part Number Is Unknown:***

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

(2) **Second.** Find the illustration covering the functional group to which the item belongs.

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

(4) **Fourth.** Using the Repair Parts Listing, find the figure and item number noted on the illustration.

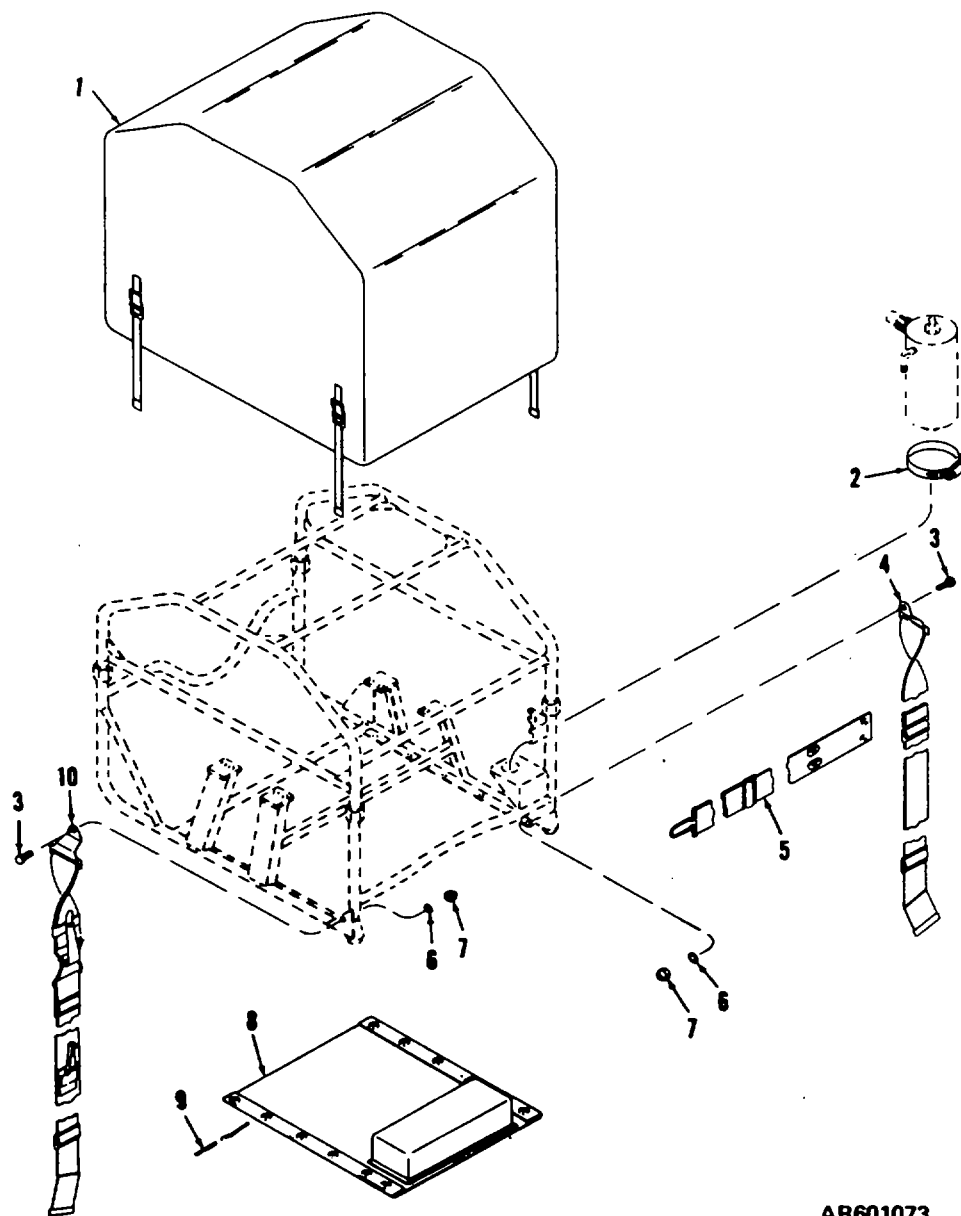
##### ***b. When National Stock Number or Part Number Is Known:***

(1) **First.** Using the Index of National Stock Numbers and Part Numbers, find the pertinent National stock number or part number. This index is in NIIN sequence followed by a list of part numbers in alphameric sequence, cross-referenced to the illustration figure number and item number.

(2) **Second.** After finding the figure and item number. locate the figure and item number in the repair parts list.

#### **C-6. Abbreviations**

<i>Abbreviations</i>	<i>Explanations</i>
Cres	Corrosive Resisting Steel
Dia	Diameter
OD	Outside Diameter
ID	Inside Diameter



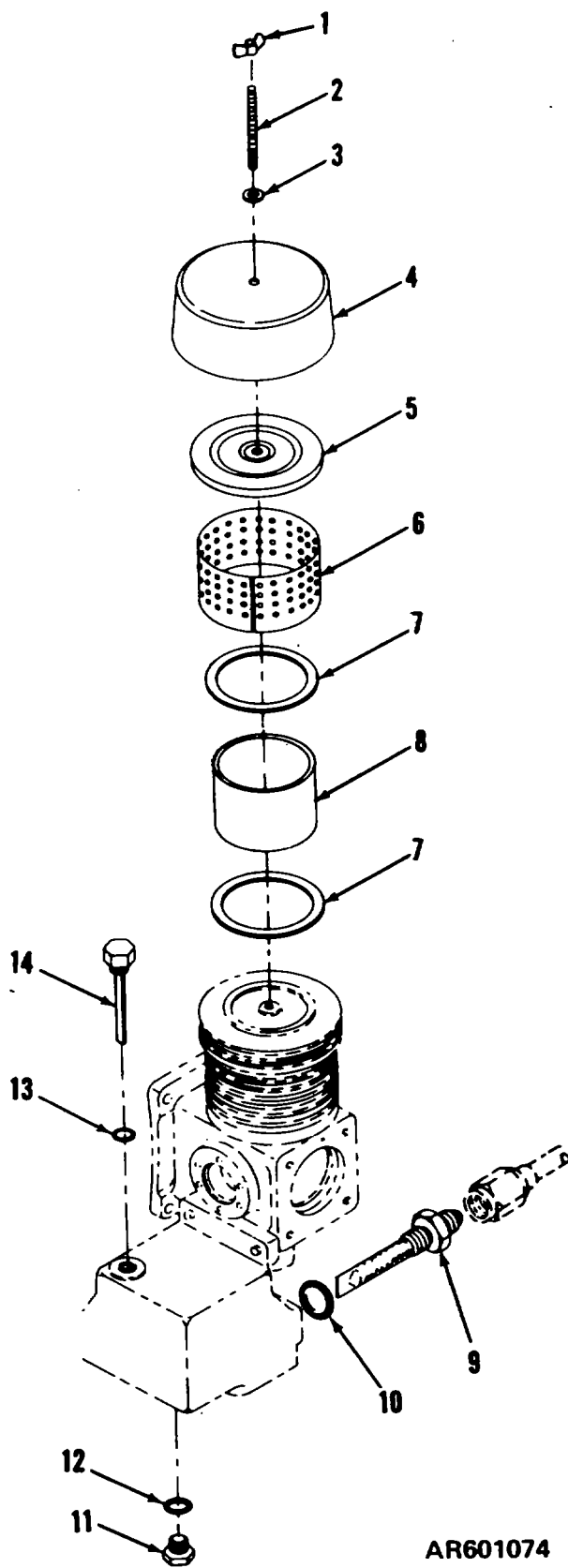
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Figure C-1. Canvas.

## SECTION II

TM 3-4310-100-20&amp;P

(1) ILLUSTRATION		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(a) FIG NO.	(b) ITEM NO.	SMR CODE	NATIONAL STOCK NUMBER	PART NUMBER	FSCM	DESCRIPTION  USABLE ON CODE	U/M	QTY INC IN UNIT
						GROUP 100 - CANVAS		
C-1	1	PAOZZ	1040-00-083-2606	068-13-1551	81361	COVER ASSEMBLY, COMPRESSOR	EA	1
C-1	3	PAOZZ	5306-00-879-2800	B81-1-6878	81361	BOLT, SHOULDER STL, HEX HD, 1/4-28 X .750 IN. LG.	EA	2
C-1	4	PAOZZ	1040-00-083-2607	D81-1-6869-1	81361	STRAP ASSEMBLY, SHOULDER, RIGHT	EA	1
C-1	5	PAOZZ	1040-00-563-7451	D81-1-6876	81361	STRAP ASSEMBLY, WAIST	EA	1
C-1	6	PAOZZ	5310-00-880-5977	MS15795-811	96906	WASHER, FLAT CAPS, 1/4 IN. BOLT SIZE	EA	6
C-1	7	PAOZZ	5310-00-982-4988	MS21045C4	96906	NUT, SELF-LOCKING, HEX. 1/4-28 CRES.	EA	6
C-1	8	PAOZZ	1040-00-083-2614	D68-13-1570	81361	HARNESS, BACK REST	EA	1
C-1	9	PAOZZ	4020-00-233-6555	MILC2533	81349	CORD, FIRBROUS	FT	5
C-1	10	PAOZZ	1040-00-083-2608	D81-1-6872-1	81361	STRAP ASSEMBLY, SHOULDER, LEFT	EA	1
					<b>C-5</b>			



AR601074

Figure C-2. Compressor AN-M4, D Model



## SECTION II

TM 3-4310-100-20&amp;P

(1) ILLUSTRATION		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(a) FIG NO.	(b) ITEM NO.	SMR CODE	NATIONAL STOCK NUMBER	PART NUMBER	FSCM	DESCRIPTION  USABLE ON CODE	U/M	QTY INC IN UNIT
						GROUP 300 - COMPRESSOR		
C-2	1	PAOZZ	5310-00-168-2886	5046-1100	33525	NUT, PLAIN WING	A EA	1
C-2	2	PAOZZ	5307-00-151-8900	257106	33525	STUD	A EA	1
C-2	3	PAOZZ	5310-00-619-1148	MS15795-808	96906	WASHER, FLAT	A EA	1
C-2	4	PAOZZ	5340-00-680-0559	204067	33525	CAP, PROTECTIVE	A EA	1
C-2	5	PAOZZ	4310-00-513-8259	204066	33525	COVER	A EA	1
C-2	6	PAOZZ	4730-00-605-0281	204070	33525	STRAINER ELEMENT, SEDIMENT	A EA	1
C-2	7	PCOZZ	5330-00-605-0280	204068	33525	GASKET	A EA	2
C-2	8	PAOZZ	4310-00-605-0259	204033	33525	FILTER	A EA	1
C-2	9	PAOZZ	1040-00-408-2354	876071	33525	STRAINER, OIL	A EA	1
C-2	10	PCOZZ	5330-00-576-9925	5304-0600	33525	PACKING, PREFORMED	A EA	1
C-2	11	PAOZZ	5365-00-287-0094	AN814-4D	88044	PLUG MACHINE THREAD ALUMN., 1/4 IN. OD TUBE SIZE	A EA	1
C-2	12	PCOZZ	5330-00-983-9840	5304-0400	33525	PACKING PREFORMED	A EA	1
C-2	13	PCOZZ	5330-00-584-0150	5304-0500	33525	PACKING, PREFORMED	A EA	1
C-2	14	PAOZZ	6680-00-237-8250	277976	33525	GAGE ROD, CAP, LIQUID LEVEL	A EA	1
					<b>C-7</b>			

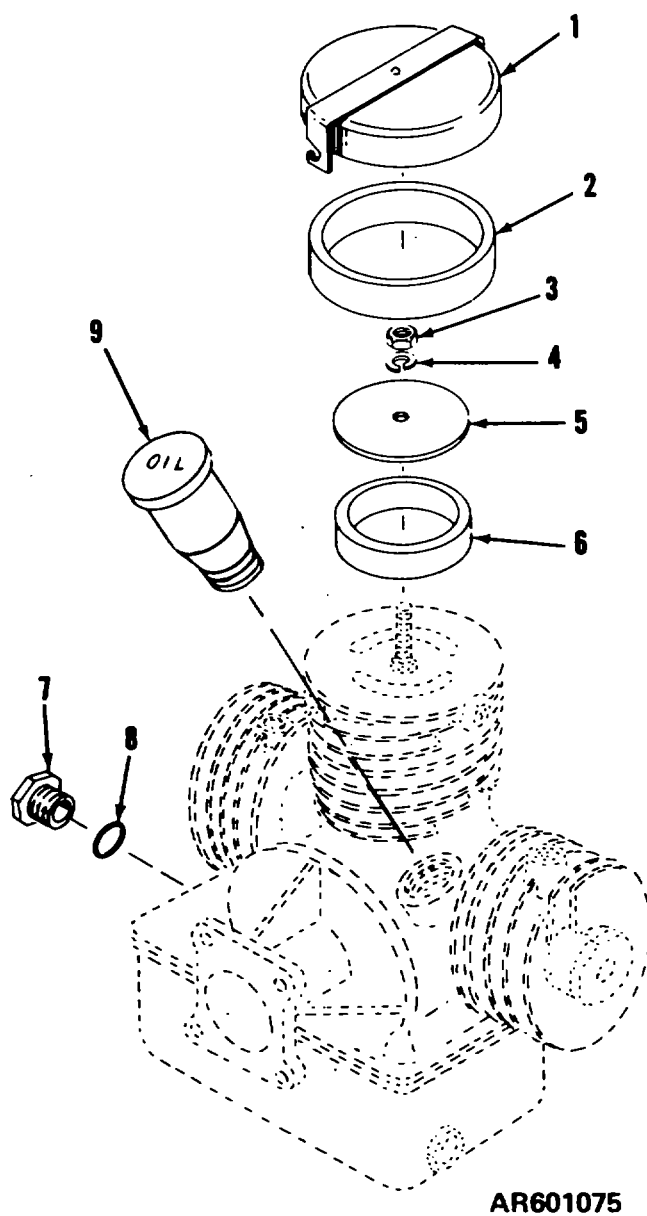


Figure C-3. Compressor AN-M4, B & C Model

## SECTION II

TM 3-4310-100-20&amp;P

(1) ILLUSTRATION		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(a) FIG NO.	(b) ITEM NO.	SMR CODE	NATIONAL STOCK NUMBER	PART NUMBER	FSCM	DESCRIPTION  USABLE ON CODE	U/M	QTY INC IN UNIT
C-3	1	PAOZZ	4310-00-792-1491	3260424	78385	GROUP 300 - COMPRESSOR CONT. COVER, FLUID FILTER	B EA	1
C-3	2	PAOZZ	1040-00-764-5949	4455-0020	78385	FILTER, ELEMENT INTAKE AIR CLEANER, 2,500 IN. OD, 2.140 IN. ID INNER	B EA	1
C-3	3	PAOZZ	5310-00-934-9765	MS35650-304	96906	NUT, PLAIN HEXAGON CRES. NO. 10-32	B EA	1
C-3	4	PAOZZ	5310-00-576-5752	MS35333-39	96906	WASHER, LOCK STL, PLTD, FLAT INT TEETH, NO. 10 BOLT SIZE	B EA	1
C-3	5	PAOZZ	4330-00-773-1216	3260167	78385	COVER, FLUID FILTER	B EA	1
C-3	6	PAOZZ	1040-00-764-5948	4455-0021	78385	FILTER ELEMENT, INTAKE AIR CLEANER, 4.060 IN. OD, 3.500 IN. ID OUTER	B EA	1
C-3	7	PAOZZ	5365-00-287-0092	AN814-5D	88044	PLUG, MACHINE THREAD ALUMINUM ALLOY, 5/8 IN. O/A IG, 1/2-20 THD	B EA	1
C-3	8	PCOZZ	5330-00-582-7289	130A0456	78385	PACKING, PREFORMED SYN RUBBER, 0.412 IN. ID, 0.552, IN. OD, 0.070 IN. H	B EA	1
C-3	9	PAOZZ	1040-00-921-5301	4455-0017	78385	BREATHING ASSEMBLY	B EA	1
					<b>C-9</b>			

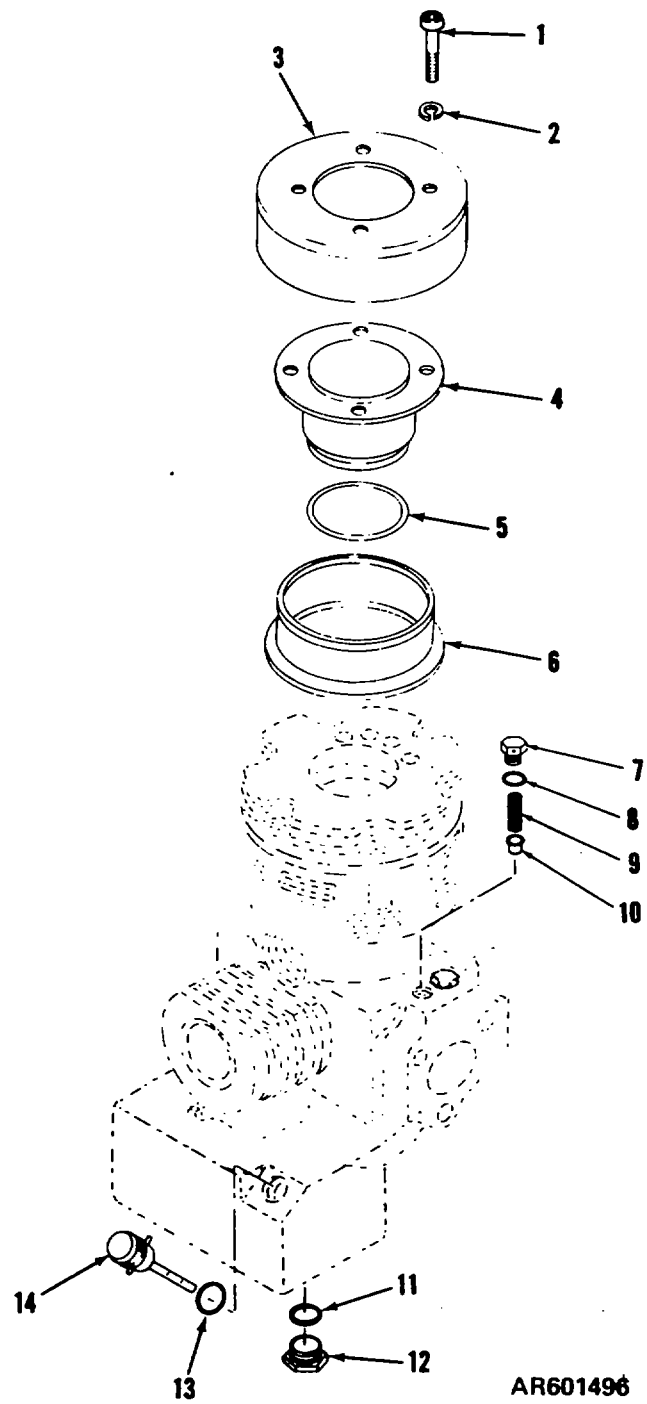
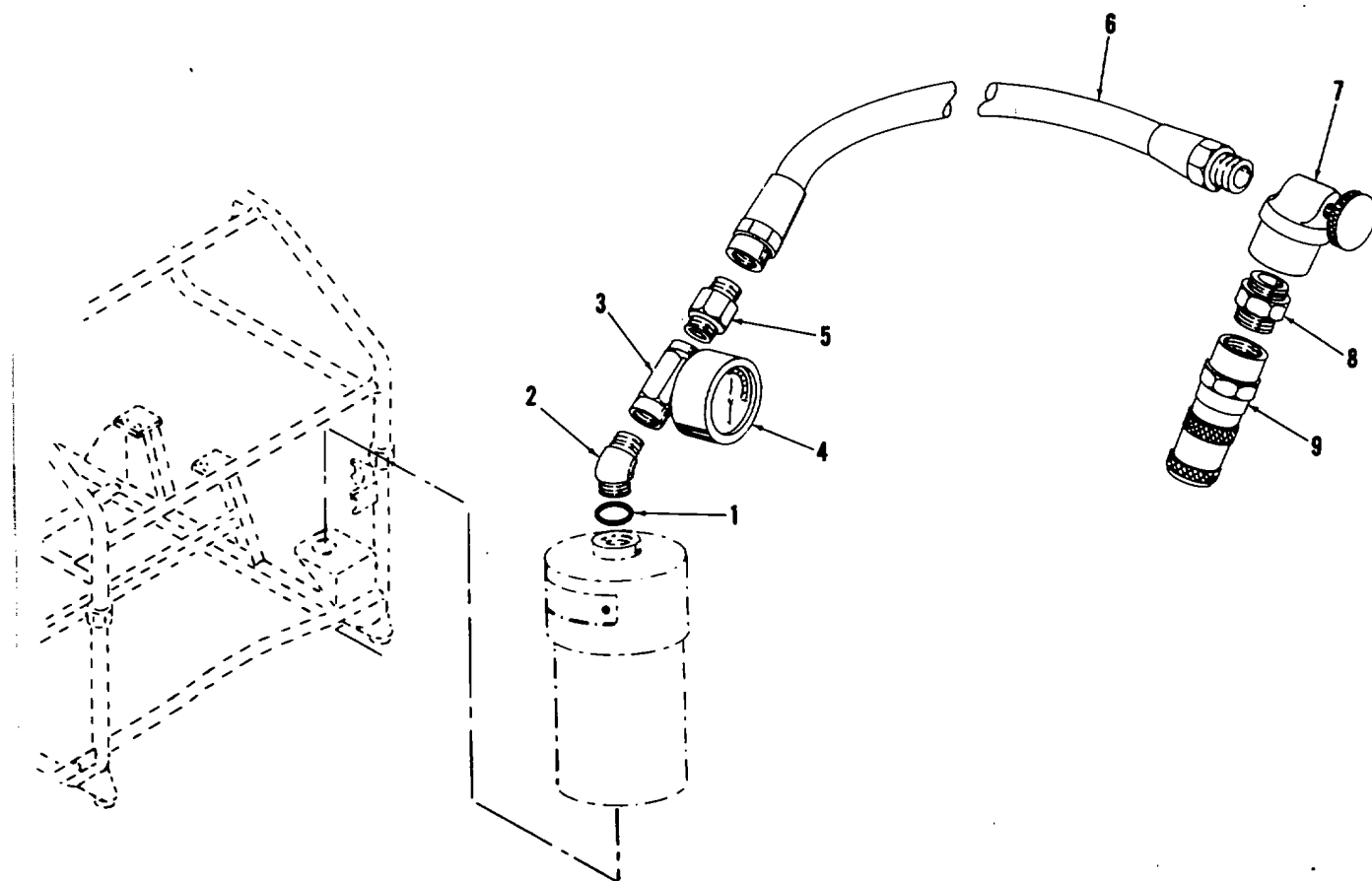


Figure C-4. Compressor AN -M4, Basic Model.

**TM 3-4310-100-20&P**

(1) ILLUSTRATION		(2)	(3)	(4)	(5)	(6) DESCRIPTION	(7)	(8)	
(a) FIG NO.	(b) ITEM NO.	SMR CODE	NATIONAL STOCK NUMBER	PART NUMBER	FSCM	USABLE ON CODE	U/M	QTY INC IN UNIT	
C-4	1	PAOZZ	5305-00-087-2995	MS24677-29	96906	GROUP 300 - COMPRESSOR CONT.  SCREW, CAP, SOCKET HEAD STL, 10-24 X 1.500 LG	C	EA	4
C-4	2	PAOZZ	5310-00-045-3296	MS35338-43	96906	WASHER, LOCK NO. 10 SCREW SIZE	C	EA	4
C-4	3	PAOZZ	1040-00-977-9473	246308	33525	CAP, PROTECTION, FIRST	C	EA	1
C-4	4	PAOZZ	1040-00-971-4923	272198	33525	CAP, FIRST HEAD	C	EA	1
C-4	5	PCOZZ	5330-00-081-5837	213213	33525	PACKING, PREFORMED	C	EA	1
C-4	6	PAOZZ	4310-00-084-2928	842231	33525	FILTER ASSEMBLY, FIRST STAGE	C	EA	1
C-4	7	PAOZZ	5365-00-087-8735	245726	33525	PLUG, MACHINE	C	EA	1
C-4	8	PAOZZ	5330-00-576-9925	5304-0600	33525	PACKING, PREFORMED	C	EA	1
C-4	9	PAOZZ	5360-00-087-4572	213274	33525	SPRING, HELICAL COMPRESSION	C	EA	1
C-4	10	PAOZZ	4310-00-969-6632	842258	33525	STRAINER, ELEMENT SEDIMENT	C	EA	1
C-4	11	PCOZZ	5330-00-953-0559	213840	33525	PACKING, PREFORMED RUBBER, 1.048 IN DIA,0.112 IN THK	C	EA	1
C-4	12	PAOZZ	5365-00-950-2654	245298	33525	PLUG, MACHINE ALUMINUM, 1-1/4-18 THD	C	EA	1
C-4	13	PCOZZ	5330-00-584-0150	5304-0500	33525	PACKING, PREFORMED	C	EA	1
C-4	14	PACZZ	6680-00-970-0004	842172	33525	GAGE, ROD-CAP, LIQUID LEVEL	C	EA	1
					C-11				



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Figure C-5. Charging Hose.

## SECTION II

TM 3-4310-100-20&amp;P

(1) ILLUSTRATION		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(a) FIG NO.	(b) ITEM NO.	SMR CODE	NATIONAL STOCK NUMBER	PART NUMBER	FSCM	DESCRIPTION  USABLE ON CODE	U/M	QTY INC IN UNIT
C-5	1	PAOZZ	5330-00-805-2966	MS28778-4	96906	GROUP 300 - COMPRESSOR CONT. PACKING, PREFORMED	EA	1
C-5	2	PAOZZ	4730-00-933-0723	MS51528-A4	96906	ELBOW, TUBE TO BOSS	EA	1
C-5	3	PAOZZ	4730-00-084-0435	B68-13-1553	81361	TEE, PIPE TO TUBE	EA	1
C-5	4	PAOZZ	6685-00-087-6925	21-25DFM 1-4CBM3000	38508	GAGE, PRESSURE DIAL INDICATING (REF DWG D81-6-376)	EA	1
C-5	5	PAOZZ	4730-00-618-3410	B81-3-30	81361	ADAPTER, STRAIGHT, PIPE TO TUBE	EA	1
C-5	6	PAOZZ	4720-00-289-2630	B81-3-65	81361	HOSE ASSEMBLY, NONMETALLIC	EA	1
C-5	7	PAOZZ	1040-00-759-7352	C81-6-407	81361	VALVE ASSEMBLY	EA	1
C-5	8	PAOZZ	4730-00-851-2278	B81-6-384	81361	ADAPTER, STRAIGHT, PIPE TO TUBE	EA	1
C-5	9	PAOZZ	4730-00-863-0774	2AEF2	95138	COUPLING HALF, QUICK DISCONNECT	EA	1
					<b>C-13</b>			

## Section IV. NATIONAL STOCK NUMBER AND PART NUMBER INDEX

NATIONAL STOCK NUMBER	FIGURE NO.	ITEM NO.	NATIONAL STOCK NUMBER	FIGURE NO.	ITEM NO.		
5310-00-045-3296	C-4	2	4310-00-605-0259	C-2	8		
5330-00-081-5837	C-4	5	5330-00-605-0280	C-2	7		
1040-00-083-2606	C-1	1	4730-00-605-0281	C-2	6		
1040-00-083-2607	C-1	4	4730-00-618-3410	C-5	5		
1040-00-083-2608	C-1	10	5310-00-619-1148	C-2	3		
1040-00-083-2614	C-1	8	5340-00-680-0559	C-2	4		
4730-00-084-0435	C-5	3	1040-00-759-7352	C-5	7		
4310-00-084-2928	C-4	6	1040-00-764-5948	C-3	6		
5305-00-087-2995	C-4	1	1040-00-764-5949	C-3	2		
5360-00-084-4572	C-4	9	4310-00-792-1491	C-3	1		
6685-00-087-6925	C-5	4	4330-00-773-1216	C-3	5		
5365-00-087-8735	C-4	7	5330-00-805-2966	C-5	1		
5307-00-151-8900	C-2	2	4730-00-851-2278	C-5	8		
5310-00-168-2886	C-2	1	4730-00-863-0774	C-5	9		
1020-00-233-6555	C-1	9	5306-00-879-2800	C-1	3		
6680-00-237-8250	C-2	14	5311-00-880-5977	C-1	6		
5365-00-287-0092	C-3	7	1040-00-921-5301	C-3	9		
5365-00-287-0094	C-2	11	4730-00-933-0723	C-5	2		
1720-00-289-2630	C-5	6	5310-00-934-9765	C-3	3		
1040-00-408-2354	C-2	9	5365-00-950-2654	C-4	12		
4310-00-513-8259	C-2	5	5365-00-950-2654	C-4	11		
1040-00-563-7451	C-1	5	4310-00-969-6632	C-4	10		
5310-00-576-5752	C-3	4	6680-00-970-004	C-4	14		
5330-00-576-9925	C-2	10	1040-00-971-4923	C-4	4		
	C-4	8	1040-00-977-9473	C-4	3		
5330-00-582-7289	C-3	8	5310-00-982-4988	C-1	7		
5330-00-584-0150	C-2	13	5330-00-983-9840	C-2	12		
	C-4	13					
PART NUMBER	FSCM	FIG. NO.	ITEM NO.	PART NUMBER	FSCM	FIG. NO.	ITEM NO.
AN814- 4D	88044	C-2	11	204068	33525	C-2	7
AN814-5D	88044	C-3	7	204070	33525	C-2	6
B68- 13- 1553	81361	C-5	3	2125DFM	38508	C-5	4
B81- 1-6878	81361	C-1	3	14CBM3000			
B81- 3-30	81361	C-5	5	213213	33525	C-4	5
B81 -3-65	81361	C-5	6	213274	33525	C-4	9
B181-6-384	81361	C-5	8	213840	33525	C-4	11
C81-6-407	81361	C-5	7	245298	33525	C-4	12
D6- 13-1551	81361	C-1	1	245726	33525	C-4	3
D68-13-1570	81361	C-1	8	257106	33525	C-2	2
1081- 1-6869-1	81361	C-1	4	72198	33525	C-4	4
1081- 1- 6872- 1	81361	C-1	10	27776	33525	C-2	14
101- 1- 6876	81361	C-1	5	3200167	78385	C-3	5
MILC2533	81349	C-1	9	1260424	78385	C-3	1
MS1.5795-808	96906	C-2	3	1455-0017	78385	C-3	9
MS21045C4	96906	C-1	7	4455-0020	78385	C-3	2
MS24677-29	96906	C-4	1	1455-0021	78385	C-3	6
MS28778-4	96906	C-5	1	50146 1100	33525	C-2	1
MS35333-39	96906	C-3	4	5304-0400	33525	C-2	12
MS35338-43	96906	C-4	2	53040-0500	33525	C-2	13
M1S35650-304	96906	C-3	3			C-4	13
MS51528-A4	96906	C-5	2	5304 0600	33525	C-2	10
130A0456	78385	C-3	8			C-4	8
2AEF2	95138	C-5	9	842172	33525	C-4	14
204033	33525	C-2	8	842231	33525	C-4	6
204066	33525	C-2	5	842258	33525	C-4	10
204067	33525	C-2	4	846071	33525	C-2	9



## APPENDIX D

## COMPONENTS OF END ITEM LIST

## Section I. INTRODUCTION

**D-1. Scope**

This appendix lists integral components of and basic issue items for the AN-M4 Compressors to help you inventory items required for safe and efficient operation.

**D-2 General**

This Component of End Item List is divided into the following sections:

*a. Section II. Integral Components of the End Item.* Not applicable.

*b. Section III. Basic Issue Items.* These are the minimum essential items required to place the AN-M4 Compressors in operation, to operate it, and to perform emergency repairs. Although shipped separately packed they must accompany the AN-M4 Compressors during operation and whenever it is transferred between accountable officers. The illustrations will assist you with hard to identify items. This manual is your authority to requisition replacement BII, based on TOE/MTOE authorization of the end item.

**D-3. Explanation of Columns**

*a. Illustration.* This column is divided as follows:

(1) Figure Number. Indicates the figure number of the illustration on which the item is shown.

(2) Item Number. The number used to identify items called out in the illustration.

*b. National Stock Number.* Indicates the National stock number assigned to the item and which will be used for requisitioning.

*c. Part Number.* Indicates the primary number used by the manufacturer, which controls the design and characteristics of the item by means of its engineering drawings, specifications, standards, and inspection requirements to identify an item or range of items.

*d. Description.* Indicates the Federal item name and, if required, a minimum description to identify the item.

*e. Location.* The physical location of each item listed is given in this column. The lists are designed to inventory all items in one area of the major item before moving on to an adjacent area.

*f. Usable on Code.* Usable on codes are included to help you identify which component items are included on the different models. Identification of the codes used in these lists are:

Code	Use On
A-312 End Item Code AN-M4D	
B-237, & 239 End Item Code AN-M4 B&C	
C-317 End Item Code AN-M4	

*g. Quantity Required (Qty Req'd).* This column lists the quantity of each item required for a complete major item.

*h. Quantity.* This column is left blank for use during an inventory. Under the Rcv'd column, list the quantity you actually receive on your major item. The Date columns are for your use when you inventory the major item at a later date; such as for shipment to another site.

## Section III. BASIC ISSUE ITEMS LIST

(1) ILLUSTRATION		(2) National stock no.	(3) Description and Location	(4) Qty Req'd	Rev'd	(5) Quantity		
(a) Figure no.	(b) Item no.		Part no	Usable on code		Date	Date	Date
C-1		1040-00-083-2606	D68. 13-1551 (81361) COVER ASSEMBLY, COMPRESSOR		1			
C-5	8 & 9	1040-00-892-2296	B86. 385 (81361) ADAPTER ASSEMBLY, QUICK COUPLING		1			

## APPENDIX F

## EXPENDABLE SUPPLIES AND MATERIALS LIST

## Section I. INTRODUCTION

**1. Scope**

This appendix lists expendable supplies and materials you will need to operate and maintain the AN-M4 Compressors. These items are authorized to you by CTA 50-970, Expendable items (Except Medical, Class V, Repair Parts, and Heraldic Items).

**2. Explanation of Columns**

*a. Column 1-Item Number.* This number is assigned to the entry in the listing and is referenced in the narrative instructions to identify the material (e.g., "Use cleaning compound, item pp. P D").

*b. Column 2 - Level.* This column identifies the lowest level of maintenance that requires the listed item.

(enter as applicable)

C- Operator/Crew

O-Organizational Maintenance

*c. Column 3-National Stock Number.* This is the National stock number assigned to the item; use it to request or requisition the item.

*d. Column 4-Description.* Indicates the Federal item name and, if required, a description to identify the item. The last line for each item indicates the part number followed by the Federal Supply Code for Manufacturer (FSCM) in parentheses. if applicable.

*e. Column 5-Unit of Measure (U/M).* Indicates the measure used in performing the actual maintenance function. This measure is expressed by a two-character alphabetical abbreviation (e.g., ea, in, pr). If the unit of measure differs from the unit of issue, requisition the lowest unit of issue that will satisfy your requirements.

## Section II. EXPENDABLE SUPPLIES AND MATERIALS LIST

(1)	(2)	(3)	(4)	(5)
ITEM NUMBER	LEVEL	NATIONAL STOCK NUMBER	DESCRIPTION	U/M
1	0	9150-00-753-4667	Air compressor lubricating oil	QT
2	0	8010-00-290-4247	Antifouling paints, vinyl-zinc chromate primer formula 120	GAL
3	0	8030-00-209-8005	Antiseize compound	PT
4	0	8030-00-889-3535	Antiseize tape	EA
5	0	8010-00-290-6648	Enamel (olive drab)	GAL
6	C	9130-00-264-6218	Gasoline	GAL
7	0	Refer to LO5- 2805-256-12	Lubricating Oil (engine)	QT
8	0	6850-00-224-6665	Stoddard solvent	GAL
9	0	7920-00-205-1711	Wiping cloth	LE

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