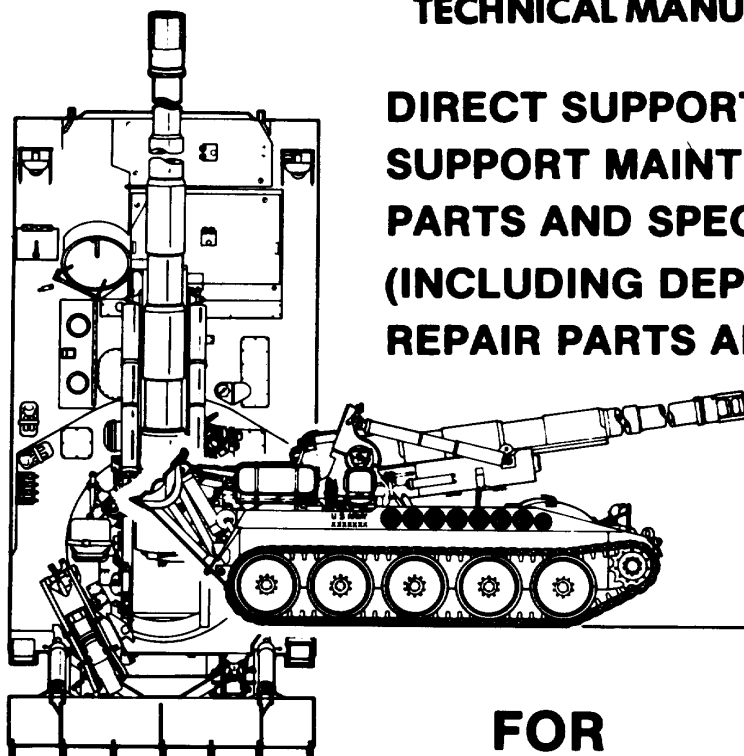


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TECHNICAL MANUAL



**DIRECT SUPPORT AND GENERAL
SUPPORT MAINTENANCE REPAIR
PARTS AND SPECIAL TOOLS LISTS
(INCLUDING DEPOT MAINTENANCE
REPAIR PARTS AND SPECIAL TOOLS)**

FOR

**HOWITZER, HEAVY,
SELF-PROPELLED:
8-INCH, M110A2**

(2350-01-041-4590)

HULL AND RELATED COMPONENTS

HEADQUARTERS, DEPARTMENT OF THE ARMY

JULY 1980

DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE
REPAIR PARTS AND SPECIAL TOOLS LIST
(INCLUDING DEPOT MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS)

HULL AND RELATED COMPONENTS

FOR

HOWITZER, HEAVY, SELF-PROPELLED

8-INCH, M110A2
(2350-01-041-4590)

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Section I. INTRODUCTION

1. Scope.

This manual lists spares and repair parts and special tools required for performance of direct support, and general support maintenance of the 8-inch howitzer M110A2, hull and related components.

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 ascending numerical sequence, with the parts in each group listed in figure and item number sequence. Bulk materials are listed in NSN sequence.

b. Section III, Special Tools List. A list of special tools authorized for the performance of maintenance.

(1) The lowest authorized level of issue and use is indicated by the third position of the SMR code. See paragraph 3b for explanation of codes.

(2) Tools authorized and issued to lower levels of maintenance are authorized and issued to all higher levels also.

c. Section IV, National Stock Number and Part Number Index. A list, in ascending national item identification number (NIIN) (last nine numerals) 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.

3. Explanation of Columns.

The following provides an explanation of columns found in the tabular listings:

a. 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.* The number used to identify each item called out in the illustration.

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

(1) *Source code.* Source codes are assigned to support items to indicate the manner of 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:

Code	Definition
PA-Item	procured and stocked for anticipated or known usage.
PB-Item	procured and stocked for insurance purpose because essentiality 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 issue 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.
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 maintenance 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 or the item will result in the replacement of 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 that 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 position 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:

Code	Application/Explanation
C-Crew	or operator maintenance performed within organizational maintenance.
O-Support item	is removed, replaced, used at the organizational level.
F-Support item	is removed, replaced, used at the direct support level.
H-Support item	is removed, replaced, used at the general support level.
D-Support items	that are removed, replaced, used at depot, mobile depot, or specialized repair activity only.

(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:

Code	Application/Explanation
O-The lowest maintenance level	capable of complete repair of the support item is the organizational level.
F-The lowest maintenance level	capable of complete repair of the support item is the direct support level.
H-The lowest maintenance level	capable of complete repair of the support item is the general support level.
D-The lowest maintenance level	capable of complete repair of the support item is the depot level, performed by depot or specialized repair activity.
L-Repair restricted to designated	specialized repair activity.
Z-Nonreparable.	No repair is authorized.
B-No repair is authorized.	The item may be reconditioned by adjusting, lubricating, etc., at the user level. No parts or special tools are procured for the maintenance of this item.

(3) *Recoverability code.* Recoverability codes are assigned to support items to indicate the disposition action on unserviceable items. The recoverability code is entered in the fifth position of the uniform SM R code format as follows:

Recoverability Codes

Definition

- Z-Nonreparable item.** When unserviceable, condemn and dispose at the level indicated in position 3.
- O-Reparable item.** When uneconomically reparable, condemn and dispose at organizational level.
- F-Reparable item.** When uneconomically reparable, condemn and dispose at the direct support level.
- H-Reparable level.** When uneconomically reparable, condemn and dispose at the general support level.
- D-Reparable item.** When beyond lower level repair capability, return to depot. Condemnation and disposal not authorized below depot level.
- L-Reparable item.** Repair, condemnation and disposal not authorized below depot/specialized repair activity level.
- A-Item requires special handling or condemnation procedures** because of specific reasons (i.e., precious metal content, high dollar value, critical material or hazardous material). Refer to appropriate manuals/directives for specific instructions.

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

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, etc.

f. Description. Indicates the Federal item name and, if required, a minimum description to identify the item. Items that are included in kits and sets are listed below the name of the kit or set with the quantity of each item in the kit or set indicated in the quantity incorporated in unit column. In the Special Tools List, the initial basis of issue (BOI) appears as the last line in the entry for each special tool, special TMDE, and other special support equipment. When density of equipments supported exceeds density spread indicated in the basis of issue, the total authorization is increased accordingly.

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., 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. A "V" appearing in this column in lieu of a quantity indicates that no specific quantity is applicable, (e.g., shims, spacers, etc.).

4. Special Information

a. Usable on codes are shown in the description column. Vehicle items not updated by PIP Kit 5 and other product improvement changes are identified in the RPSTL as "O" items. Those that have been updated by PIP Kit 5 and other product improvement changes are identified as "N" items.

Uncoded items are common to both improved and unimproved vehicles.

b. Detailed manufacturing instructions for items source coded to be manufactured or fabricated are found in TM 9-2350-304-20 and TM 9-2350-30434-1 maintenance manuals. Bulk materials required to manufacture items are listed in the bulk material group of this manual.

c. Detailed assembly instructions for items source coded to be assembled are found in TM 92350-304-20 maintenance manual. Assembly components are listed immediately following the item to be assembled.

d. Repair parts kits and gasket sets appear as the last entries in the repair parts listing for the figure in which its parts are listed as repair parts.

Note

"P" source coded items with missing National stock numbers are items which are not recorded in the Army master date file (AMDF) and cannot be requisitioned from the supply system. When these stock numbers are broadcast in the AMDF, they will be provided by a change to the manual. If justified, these items may be requisitioned on an exception basis using the Army parts number or manufacturer's part number and code.

e. The following publications pertain to M110A2 vehicle and its components.

LO 9-2350-304-12

Lubrication Order Howitzer, Heavy, Self- Propelled: 8-Inch, M110A2 (2350-01-0414590).

TM 9-2350-304-10

Operator's Manual for Howitzer, Heavy, SelfPropelled:8-Inch, M110A2 (2350-01-0414590).

TM 9-2350-304-20

Organizational Maintenance Manual for Howitzer, Heavy, Self-Propelled: 8-Inch, M110A2 (2350-01-041-4590).

TM 9-2350-304-34-1

Direct and General Support Maintenance Manual: Howitzer, Heavy, Self-Propelled: 8-Inch, M110A2 (2350-01-041-4590) Hull and Related Components.

TM 9-2350-304-34-2

Direct Support and General Support Maintenance Manual: Howitzer, Heavy, Self-Propelled: 8-Inch, M110A2 (2350-01-041-4590) Armament and Turret Components.

TM 9-2350-304-20P

(To be published.) Organizational Maintenance Repair Parts and Special Tools List for Howitzer, Heavy, Self-Propelled: 8-Inch, M110A2 (2350-01-0414590).

TM 9-2350-304-34P-2 (To be published.)

Direct Support and General Support Maintenance Repair Parts and Special Tools List (Including Depot Maintenance Repair Parts and Special Tools): Howitzer, Heavy, Self-Propelled: 8-Inch, M110A2 (2350-01-041-4590) Armament and Turret Components.

TM 9-2520-234-34P (To be published.)

Direct Support and General Support Maintenance Repair Parts and Special Tools List (Including Depot Maintenance Repair Parts and Special Tools) for Power Train Assembly (8351100) (Allison Model XTG-411-2A) Composed of: Transfer Assembly, Transmission Input (2520-00-894-9535) Transmission Assembly (252000-894-9533) Drive Assembly, Transmission Output, Vehicle Left (2520-00-894-9534) Drive Assembly, Transmission Output, Vehicle Right (2520-00-8949532).

TM 9-2520-234-35

Field and Depot Maintenance Manual for Power Train Assembly (8351100) (Allison Model XTG-411-2A) Composed of: Transfer Assembly, Transmission Input (2520-8949535); Transmission Assembly (2520-8949535); Drive Assembly, Transmission Output, Vehicle Left (2520-894-9534); Drive Assembly, Transmission Output, Vehicle Right (2520-894-9532).

TM 9-2815-202-34&P

Direct Support and General Support Maintenance Manual including Repair Parts and Special Tools Lists (Including Depot Mainte

nance Allowances) for Engine, Diesel: Turbocharged, Fuel Injected, Liquid Cooled, "V" type, 8-cylinder, W/Container, Assembly, Detroit Diesel-GMC Series-8V71T, Model 7083-7398 (2815-762-4500 and 2815-9367659) and Detroit Diesel-GMC Series 8V71T, Model 7083-7399 (2815-134-4845).

TM 9-2920-22435

Direct and General Support Maintenance Manual (Including Repair Parts List), Generator Assembly, Engine (300 amp) Lear Siegler (formerly Jack and Heintz) Models G22-2 (6115-629-1149); G-22-3 (2920-795-6627), G22-6F (2920-830-6660) G22-7F (2920-8301293); and G22-9 (2920-563-0299).

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 subgroup within which the repair part belongs. This is necessary since illustrations are prepared for functional subgroups, and listing are divided into the same groups.

(2) *Second.* Find the illustration covering the subgroup 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 Parts Listing, find the figure and item number noted on the illustration.

b. *When National Stock Number Part 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 ascending NIIN (last nine numerals) sequence, followed by a list of part numbers in ascending alpha-numeric 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.

6. Abbreviations.

The abbreviations used in this publication are common in trade practice and MIL-STD-12, military standard abbreviations for use on drawings, specifications, standards and in technical documents.

Abbreviation/Explanation

ADJ	Adjust	MFD	Manufactured
ALUM	Aluminum	MPH	Miles Per Hour
ALY	Alloy	MTG	Mounting
AMP	Amperage	NC	National Coarse
ANPT	Aeronautical National Taper Pipe Threads	NDL	Needle
		NEG	Negative
ARR	Arrangement	NF	National Fine
ASSY	Assembly	NO	Number
BHD	Bulkhead	NOM	Nominal
BRG	Bearing	NPN	No Part Number
BTRY	Battery	NPT	National Taper Pipe
CC	Cubic Centimeters	NPTF	Tight Joints
COP	Copper	NSN	National Stock Number
CRES	Corrosion- Resistant Steel	OD	Outside Diameter
CTSK	Countersunk	OZ	Ounce
CYL	Cylinder	PN	Part Number
DBL	Double	POS	Positive
DEG	Degree	PSI	Pounds Per Square Inch
DIA	Diameter		
DRLD	Drilled	PT	Point
ELEC	Electrical	PTO	Power Take-Off
EXT	External	R	Right
EXTL	External	RD HD	Round Head
FIG	Figure	REC	Recessed
FILH	Fillister Head	RGLR	Regular
FL	Flat	RH	Right Hand
FLH	Flat Head	RPM	Revolutions Per Minute
FT	Foot		
FWD	Forward	RTNG	Retaining
GA	Gage	SAE	Society of Automotive Engineers
GPM	Gallons Per Minute		
GR	Grade	SCH	Socket Head
HD	Head	SHLDR	Shoulder
HDLS	Headless	SLVG	Sleeving
HEX	Hexagon	SQ	Square
HEX HD	Hexagon Head	STL	Steel
HEX SCH	Hexagonal Socket Head	STR	Straight
		THD	Thread
HEX SKT	Hexagon Socket	THK	Thick
HEX SOCH	Hexagon Socket Head	UN	Unified
		UNC	Unified Coarse Thread
ID	Inside Diameter	UNF	Unified Fine Thread
IN	Inch	UNS	Unified Special Thread
INT	Internal		
INTL	Internal	V	Variable
L	Left	V	Voltage
LG	Length	VDC	Volt Direct Current
LH	Left Hand	W/	With
LT	Light	WG	Wire Gage
LUBE	Lubrication	XMSN	Transmission
LUBT	Lubricant		
MACH	Machine		
MAG	Magnetic		
MC	Multiple-Contact		

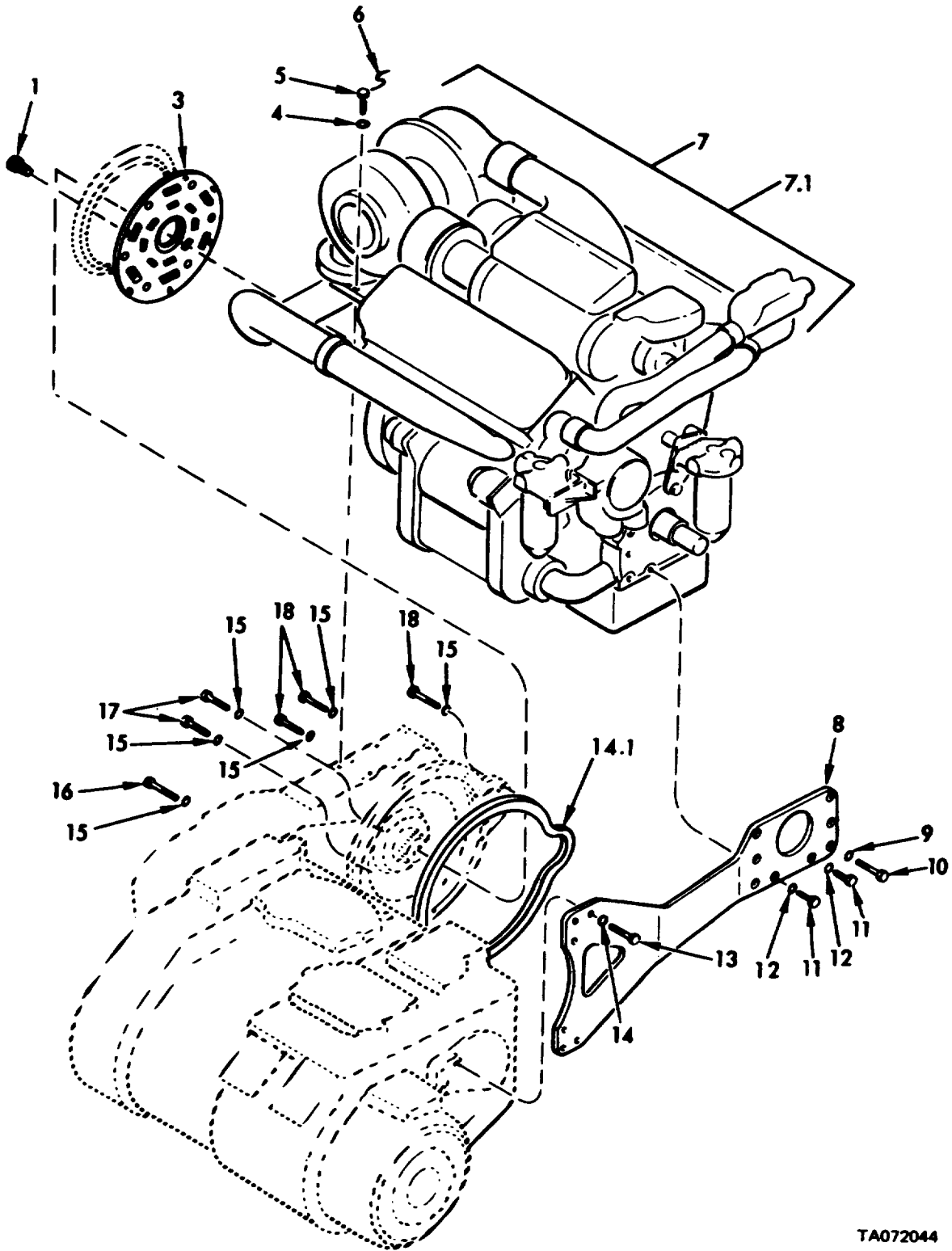


Figure 1. Engine and related parts.

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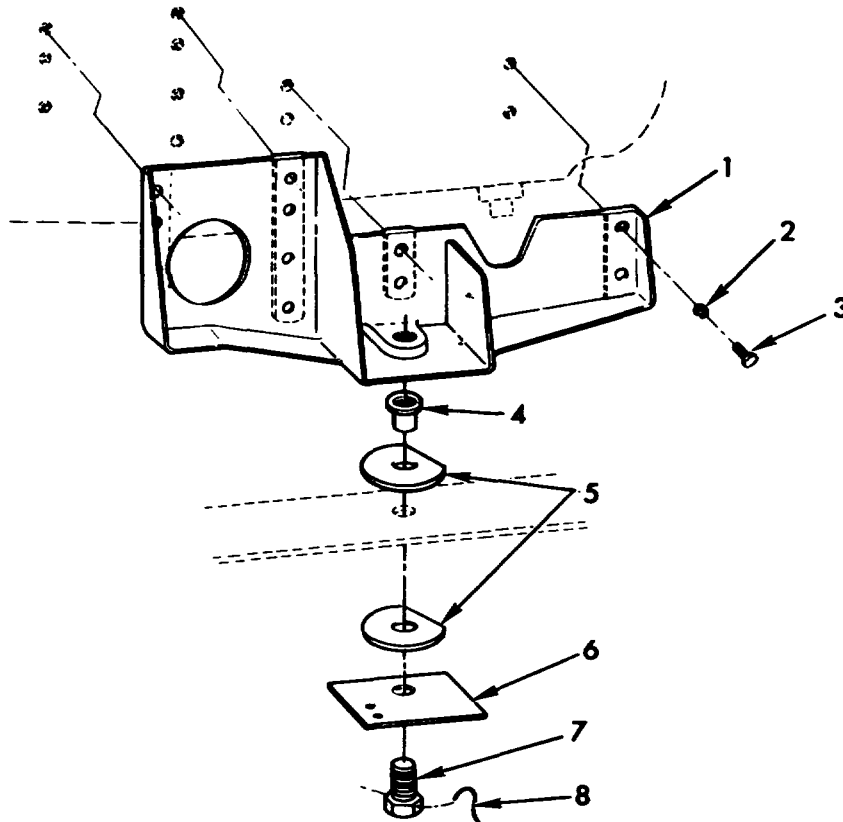
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Section II. REPAIR PARTS LIST

(1) ILLUSTRATION		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(a) FIG NO.	(b) ITEM NO.	SMR CODE	NATIONAL STOCK NUMBER	FSCM	PART NUMBER	DESCRIPTION USABLE ON CODE	U/M	QTY INC IN UNIT
1	1	PAFZZ	5306-01-056-5440	96906	MS535764-1291	GROUP 0100 ENGINE AND RELATED PARTS BOLT, SELF-LOCKING, HEXAGONH, 3/8-16 X .875.....	EA	12
1	2					DELETED		
1	3	PAHZZ	3010-00-432-7236 19207	1166276	COUPLING, SHAFT,	FLEX ENGINE TO POWER TRAIN.....	EA	1
1	4	PAFZZ	5310-00-809-4061	96906	MS27183-15	WASHER, FLAT .438 10, 1.00 OD, .083 THK.....	EA	4
1	5	PAFZZ	5305-00-904-4057	96906	MS51096-362	SCREW., CAP, HEXAGON H 3/8-24UNF X 1.500	EA	4
1	6	NFFZZ		96906	MS20995F41AR	WIRE, NONELECTRICAL NFD FROM 9505-00-248-9849.....	ST	V
1	7	PAFDD	2815-00-407-2773	19207	11642837	ENGINE, DIESEL DIESEL TURDOCHARGED, FUEL INJECTED LIQUID..... COOLED V TYPE 8 CYL DETROIT DIESEL-GHC SERIES-8V71T N007083-7398 (FOR REPAIR PARTS SEE TH 9-2815-202-34)	EA	1
1	7	PAFDD	2915-00-762-4530	19207	5703768	ENGINE AND CONTAINER NOT ILLUSTRATED (FOR REPAIR PARTS, SEE TM 9-2815-202-34.....	EA	1
1	7	PAFDD	8145-00-064-6734	19207	10909159	SHIPPING AND STORAGE ENGINE SHIPPING AND STORAGE, REUSABLE (NOT ILLUSTRATED) (FOR REPAIR PARTS, SEE TM 9-2815-202-34)	EA	1
1	7.1	PAFDD	2815-01-043-7091	19207	5705020	ENGINE AND CONTAINER	EA	1
1	7.1	PAFDD	2815-01-043-7093	19207	12253952	ENGINE, DIESEL DIESEL TURDOCHARGED FUEL INJECTED, LIQUID..... COOLED, V TYPE B-CYLINDER DETROIT DIESEL- GHC SERIES-8Y71T OD7083-7395 (FOR REPAIR PARTS, SEE TM 9-2815-202-34)	EA	1
1	8	PAFZZ	2520-00-087-7267	19207	10904375	SUPPORT, TRANSMISSION ENGINE TO TRANSMISSION.....	EA	1
1	9	PAFZZ	5310-00-584-5272	96906	MS35338-48	WASHER, LOCK 1/2 RON SIZE	EA	4
1	10	PAFZZ	5305-00-071-1776	96906	NS90725-123	SCREW, CAP, HEXAGON H 1/2-13UNC X 4.000	EA	4
1	11	PAFZZ	5305-00-543-2419	96906	NS90728-61	SCREW, CAP, HEXAGON H 3/8-16UNC X 1.125 LG	EA	2
1	12	PAFZZ	5310-00-637-9541	96906	4535338-46	WASHER, LOCK 3/8 NOM SIZE	EA	2
1	13	PAFZZ	5305-00-051-0827	96906	NSN0725-164	SCREW, CAP, HEXAGON H 5/8-11UNC X 2.000	EA	6
1	14	PAFZZ	5310-00-820-6653	96906	NS35338-50	WASHER, LOCK 5/8 NOM SIZE	EA	6
1	14.1	PAFZZ	5330-01-167-8094	19207	12289974	GASKET	EA	1
1	15	PAFZZ	5310-00-209-0965	96906	MS35338-47	WASHER, LOCK 7/16 NOON SIZE	EA	14
1	16	PAFZZ	5305-00-069-5580	96906	N590725-96	SCREW, CAP, HEXAGON H 7/16-14UNC X 3.250.....	EA	2
1	17	PAFZZ	5305-00-050-1076	96906	NS90725-89	SCREW, CAP, HEXAGON H 7/16-14UNC X 1.500.....	EA	9
1	16	PAFZZ	5305-00-069-5576	96906	5S90725-92	SCREW, . CAP, HEXAGON 7/16-14UNC X 2.250.....	EA	3

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Section II. REPAIR PARTS LIST

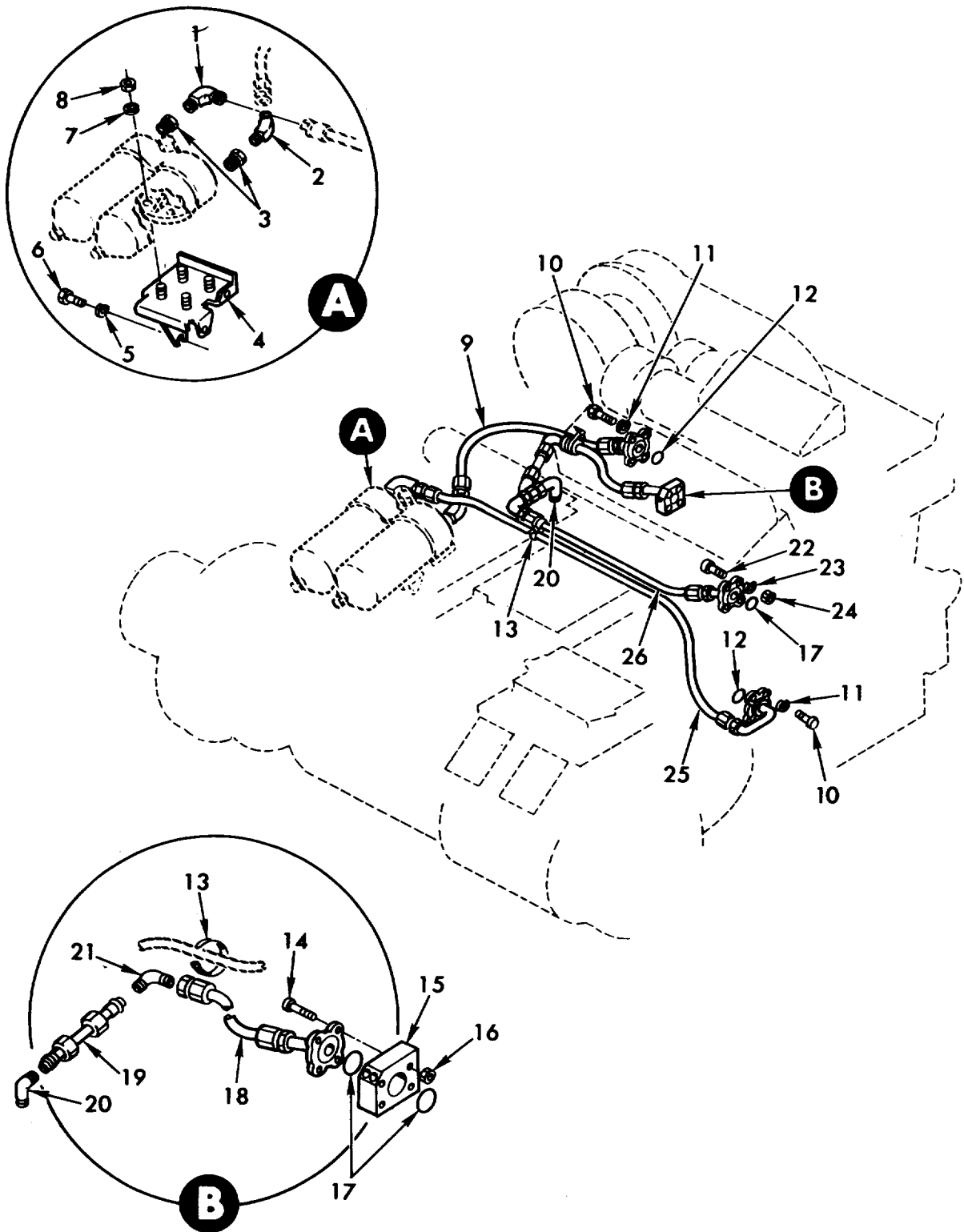


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Figure 2. Engine mount.

(1) ILLUSTRATION		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(a) FIG NO.	(b) ITEM NO.	SMR CODE	NATIONAL STOCK NUMBER	FSCM	PART NUMBER	DESCRIPTION USABLE ON CODE	U/M	QTY INC IN UNIT
2	1	PAOZZ	2805-00-420-5043	19207	11631501	MOUNT, ENGINE SUPPOR ENGINE	EA	1
2	2	PAOZZ	5310-00-637-9541	96906	NS35338-46	WASHER, LOCK 3/8 NON SIZE	EA	12
2	3	PAOZZ	5305-00-068-0511	96906	N590728-62	SCREW, CAP, HEXAGON H 3/8-16UNC X 1.250	EA	12
2	4	PAOZZ	2815-00-937-1322	19207	10898445	TUBE, SPACER MOUNT, P SPACER	EA	1
2	5	PAOZZ	2990-00-980-1737	19207	10882021	MOUNT, ENGINE ENGINE MOUNT.....	EA	2
2	6	PAOZZ	2805-00-221-9182	19207	10882022	WASHER, ENGINE MOUNT LOCK WIRE PLATE	EA	1
2	7	PAOZZ	5305-00-904-4003	96906	N551096-513	SCREW, CAP, HEXAGON H 1.0-12UNF X 3.00	EA	1
2	8	MOOZZ		96906	NS20995F91AR	WIRE, NONELECTRICAL NFD FROM 9605-00-825-7579.....	FT	1

Section II. REPAIR PARTS LIST



TA071742

Figure 3. External oil lines and fittings (upper engine).

Section II. REPAIR PARTS LIST

(1) ILLUSTRATION		(2)	(3)	(4)	(5)	(6) DESCRIPTION	(7)	(8) QTY INC IN UNIT
(a) FIG. NO.	(b) ITEM NO.	SMR CODE	NATIONAL STOCK NUMBER	PART NUMBER	FSCM	USABLE ON CODE	U/M	
						GROUP 0106 EXTERNAL OIL LINES AND FITTINGS (UPPER ENGINE1		
3	1	PAOZZ	473001-020-1107	MSS51815-14	96906	ELBOW, 90 DEG. 3/4NPTF PIPE TO 3/4 TUBE (ASSY REPLACES DETAIL PART FOR REPAIR)	EA	1
3	2	PAOZZ	4730-00-088-8894	10917222-6	19207	ELBOW PIPE TO TUBE. OIL FILTEK COOLER HOSE	EA	1
3	3	PAOZZ	4730-00-227-6935	144059	21450	REDUCER. PIPE, 1-1/4 X 3/4 NPE.....	EA	2
3	4	PAOZZ	2940-00-522-7574	11642652	19207	BRACKET, OIL FILTER.....	EA	1
3	5	PAOZZ	5310-00-637-9541	MS35338-46	96906	WASHER, LOCK 3/8 NO" SIZE	EA	1
3	6	PAOZZ	5305-00-269-32L1	MS590725-60	96906	SCREW, CAP, HEX HD 3/8-16UNC X 1.00	EA	1
3	7	PAOZZ	5310-00-595-7237 M	MS535333-42	96906	WASHER, LOCK, INT-TOOTH 3/8 NON SIZE	EA	4
3	8	PAOZZ	5310-00-732-059	MS551968-8	96906	NUT, PLAIN, HEX 3/8-24UNF, SEL GR B	EA	4
3	9	PAOZZ	4720-00-846-0398	10906363	19207	HOSE ASSEMBLY, RUBBER, OIL FILTER COOLER.....	EA	1
3	10	PAOZZ	5305-00-045-1988	MS590725-81	96906	SCREW, CAP HEX HO 7/16-14UNC X 1.250.....	EA	8
3	11	PAOZZ	5310-00-209-0965	MS535338-47	96906	WASHER, LOCK /L16 NOH SIZE	EA	8
3	12	PAOZZ	5330-00-297-9990	MS28775-222	96906	PACKING, PREFORMED 1.484 10, 1.762 OJ.....	EA	2
3	13	PAOZZ	9905-00-027-4594	10921769	19207	STRAP, RETAINING, OIL HOSES.....	EA	2
3	14	PAOZZ	5305-00-716-8132	MS590726-129	96906	SCREW, CAP HEX HJ 1/2-20UNF X 6.01).....	EA	4
3	15	PAOZZ	2520-00-918-6171	10914794	19207	MANIFOLD OIL RESERVOIR	EA	1
3	16	PAOZZ	5310-00-877-5795	MS21044N	96906	NUT, SELF-LOCKING HEX 1/2-20UNJF.....	EA	4
3	17	PAOZZ	5330-00-807-8993	MS28775-228	96906	PACKING. PREFORMED 2.234 ID, 2.512 OD.....	EA	3
3	18	PAOZZ	2520-00-986-6987	8712200	19207	HOSE ASSEMBLY. RUBBER, XMSN TO OIL COOLER.....	EA	1
3	19	PAOZZ	4710-00-986-6986	10881937	19207	TUBE ASSEMBLY, PREFORMED X4SN OIL TO COOLER.....	EA	1
3	20	PAOZZ	4730-00-278-5578	MS51815-18	96906	ELBOW, 90 DEG 1.ONPTF PIPE TO 1.0 TUBE (ASSY REPLACES DETAIL PART FOR REPAIR)	EA	2
3	21	PAOZZ	4730-00-821-5218	MS21904-16	96906	ELBOW, 90 DEG FLARELESS TUBE 1.0 TUBE UJ	EA	1
3	22	PAOZZ	5305-00-716-8176	MS90726-122	96906	SCREW CAP HEX HO 1/2-ZJUNF X 3.750.....	EA	4
3	23	PAOZZ	5310-00-58-5272	MS3538-4, 8	96906	WASHER, LOCK 1/2 NOM SIZE.....	EA	4
3	24	PAOZZ	5310-00-732-0560	N551968-14	96906	NUT, PLAIN HEX 1/2-20UNF STL GR 8.....	EA	4
3	25	PAOZZ	4720-00-846-0399	10906360	19207	HOSE ASSEMBLY, RUBBER, ENGINE OIL FILTER	EA	1
3	26	PAOZZ	4720-00-086-6T23	10914574	19207	HOSE ASSEMBLY, XMSN TO OIL COOLER.....	EA	1

Section II. REPAIR PARTS LIST

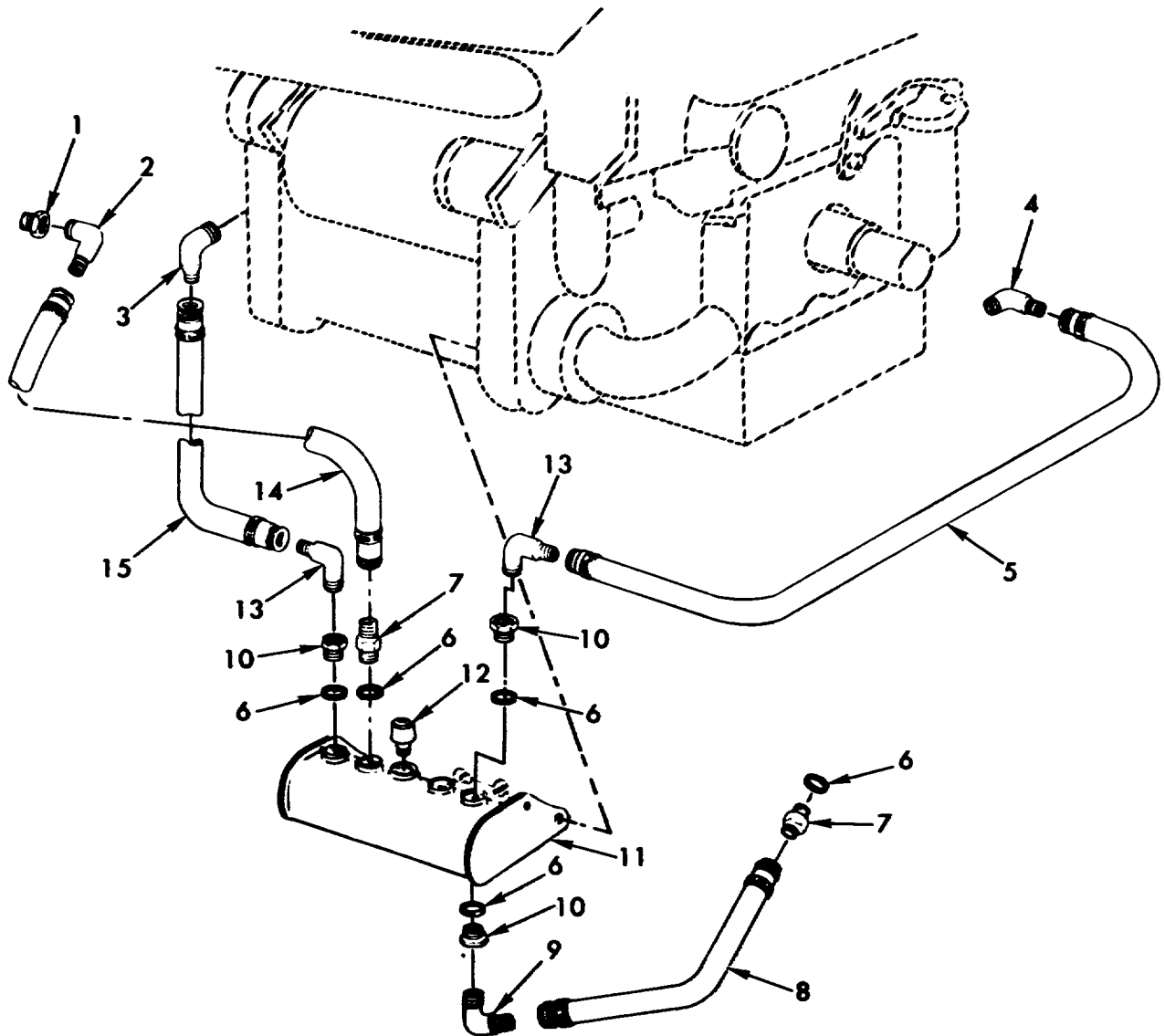


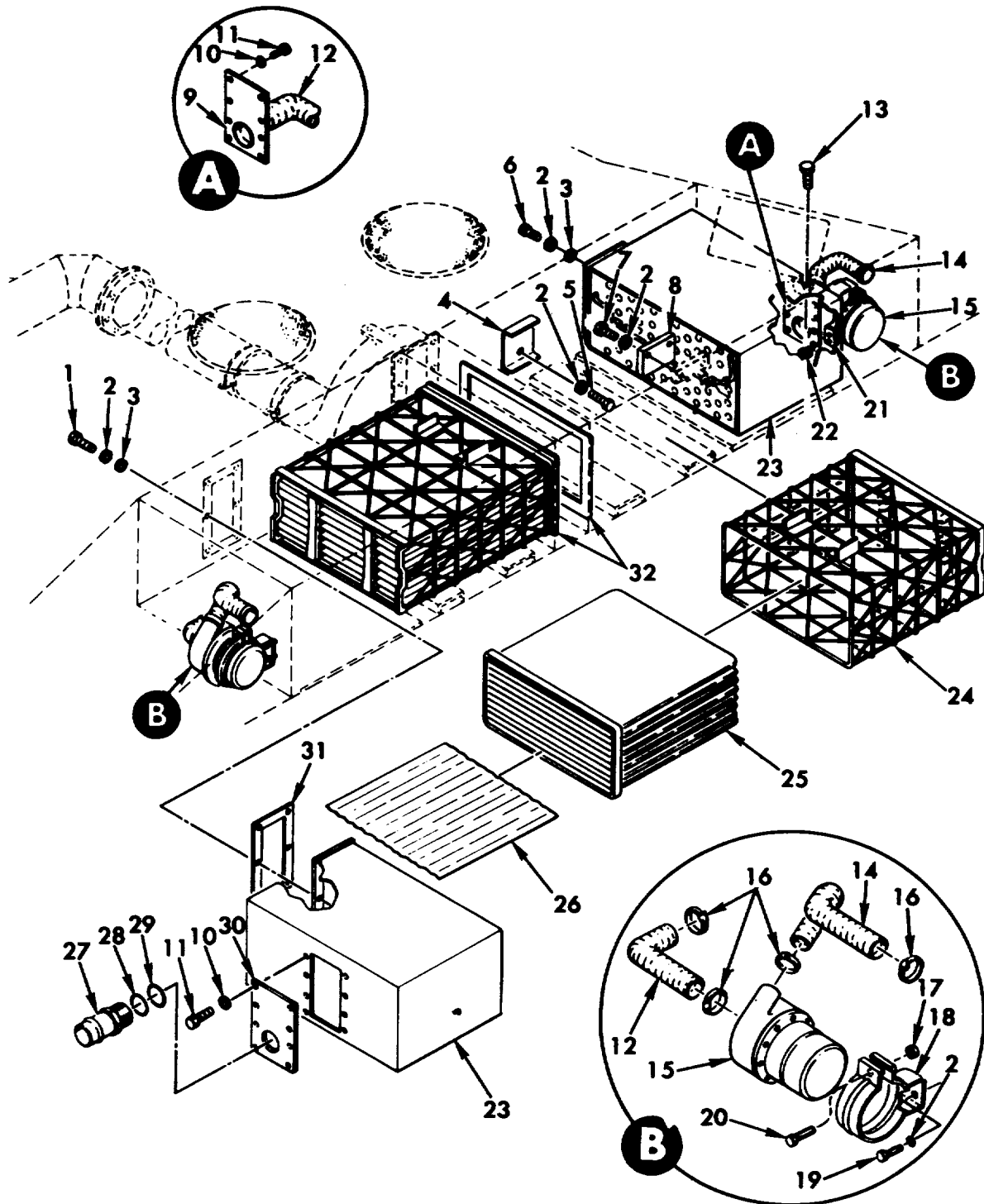
Figure 4. External oil lines and fittings (scavenger reservoir).

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Section II. REPAIR PARTS LIST

(1) ILLUSTRATION		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(a) FIG NO.	(b) ITEM NO.	SMR CODE	NATIONAL STOCK NUMBER	FSCM	PART NUMBER	DESCRIPTION USABLE ON CODE	U/M	QTY INC IN UNIT
						GROUP 0106		
						EXTERNAL OIL LINES AND FITTING (SCAVENGER RESERVOIR)		
4	1	PAOZZ		96906	5518S7-32	BUSHING SHOULOER, HEX HD, 3/8 X 1/4 NPT	EA	1
4	2	PAOZZ	4730-00-096-8331	96906	MS511S81-5	ELBOW. 90 DEG, 1/4NPTF PIPE TO 1/4 TUBE (ASSY REPLACES DETAIL PART FOR REPAIR).....	EA	1
4	3	PAOZZ	4730-00-096-8756	96906	MS1815-3	ELBOW. 90 DEG, 1/8NPTF PIPE TO 1/4 TUBE (ASSY REPLACES DETAIL PART FOR REPAIR).....	EA	1
4	4	PAOZZ	4730-00-043-2494	19207	10917222-1	ELBOW. PIPE TO TUBE ENGINE BLOCK DRAIN.....	EA	1
4	5	PAOZZ	4720-00-845-0515	19207	10906356	HOSE ASSEMBLY, RUBBER ENGINE BLOCK DRAIN.....	EA	1
4	6	PAOZZ	6330-00-805-2966	96906	H528778-4	PACKING, PREFORMED .361 ID 495 , OD.....	EA	5
4	7	PAOZZ	4730-00-640-0461	96906	MS521902-4	NIPPLE, FLARELESS TUBE 1/4 TUBE OD.....	EA	2
4	8	PAOZZ	4720-00-812-7757	19207	10911012	HOSE ASSEMBLY, RUBBER, RESERVOIR DRAIN.....	EA	1
4	9	PAOZZ	4730-00-554-9180	96906	M521907-4	ELBOW, 45 DEG. BULKHEAD UNIV 1/4 TUBE OD.....	EA	1
4	10	PAOZZ	4730-00-277-6372	88044	AN6289-4	NUT, FLARED TUBE FITTING 7/16-20UNF.....	EA	3
4	11	PAOZZ	2815-00-411-5790	19207	10904381	RESERVOIR	EA	1
4	12	PAOZZ	2520-00-391-3065	19207	10915154	FILTER, BREATHER.....	EA	1
4	13	PAOZZ	4730-00-541-6479	96906	MS21908-4	ELBOW. 90 DEG, BULKHEAD UNIV 1/4 TUBE OD.....	EA	2
4	14	PAOZZ	4720-00-537-0947	19207	10913170	HOSE ASSEMBLY, RUBBER, TRANSFER CASE DRAIN.....	EA	1
4	15	PAOZZ	4720-00-812-7825	19207	10913169	NOSE ASSEMBLT, RUBBER, ENGINE CONDENSATION	EA	1

Section II. REPAIR PARTS LIST



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Figure 5. Engine air cleaner system.

Section II. REPAIR PARTS LIST

(1) ILLUSTRATION		(2)	(3)	(4)	(5)	(6) DESCRIPTION	(7)	(8) QTY INC IN UNIT
(a) FIG. NO.	(b) ITEM NO.	SMR CODE	NATIONAL STOCK NUMBER	PART NUMBER	FSCM	USABLE ON CODE	U/M	
						GROUP 0304 ENGINE AIR CLEANER SYSTEM		
5	1	PAOZZ	5305-00-269-3236	MS90727-60	96906	SCREW CAP HEX HO 3/8-24UNF X 1.00	EA	6
5	2	PAOZZ	5310-00-637-9541	MS35338-46	96906	WASHER, LOCK 3/8 NON SIZE	EA	24
5	3	PAOZZ	5310-00-080-6004	MS527183-14	96906	WASHER FLAT .406 D1 .812 00, .065 THK	EA	12
5	4	PAOZZ	2940-00-801-1052	10956784	19207	STOP, INTAKE AIR CLEANER BASKET	EA	2
5	5	PAOZZ	5305-00-269-2798	MS90726-55	96906	SCREW, CAP, HEX HD 3/8-24UNF X .500	EA	4
5	6	PAOZZ	5305-00-269-3234	MS90727-58	96906	SCREW, CAP. HEX HO 3/8-24UNF X .750	EA	6
5	7	PAOZZ	5305-00-269-2801	MS190726-58	96906	SCREW, CAP. HEX HO 3/8-24UNF X .750	EA	4
5	8	PAOZZ	5340-00-453-9179	11643005	19207	STOP BASKET PLACEMENTS GUIOE	EA	2
5	9	PAOZZ	2510-00-442-5930	10919794	19207	DOOR AFT AIR SEPARATOR SLOWER ADAPTER	EA	1
5	10	PAOZZ	5310-00-582-5965	MS35338-44	96906	WASHER, LOCK 1/4 NON SIZE	EA	16
5	11	PAOZZ	5305-00-068-0501	MS90725-5	96906	SCREW, CAP. HEX HO 1/4-20UNC X .625	EA	16
5	12	MAOZZ		872473-6	19207	HOSE, 8BLOWER INLET, HFD FROM 4720-00-914-7314	EA	2
5	13	PAOZZ	5305-00-269-2806	MS590726-63	96906	SCREW, CAP HEX HD 3/8-24UNF X 1.375	EA	1
5	14	MOOZZ		8724783-10	19207	HOSE, BLOWER OUTLET. HFJ FROM 4120-00-914-7313	EA	2
5	15	PAOFF	4140-00-016-2615	10905010	19207	BLOWERASSEMBLY.AIR CLEANER	EA	2
5	16	PAOZZ	4730-00-90B-3193	MS35842-12	96906	CLAMP HOSE 1.063 TO 2.00 ID	EA	8
5	17	PAOZZ	5310-00-088-0553	MS21044N5	96906	NUT SELF-LOCKING. HEX 5/16-24UNJF	EA	2
5	18	PAOZZ	2940-00-947-5776	10934628	19207	BRACKET.AIRCLEANER BLOWER	EA	2
5	19	PAOZZ	5305-00-269-2800	MS90726-57	96906	SCREW, CAP HEX HO 3/8-2 1/2UNF X .625	EA	4
5	20	PAOZZ	5305-00-225-9091	MS90726-36	96906	SCREW,CAP.HEXHD 5/16-24UNF X 1.250	EA	2
5	21	PAOZZ	5330-00-882-7120	8762879	19207	PADO	EA	1
5	22	PAOZZ	5310-00-842-1488	M5S35692-21	96906	NUT. SLOTTED. HEX 3/8-24UNF	EA	1
5	23	PAOFF	2590-00-932-4995	10913222	19207	SEPARATOR ASSEMBLY. AIR INTAKE	EA	2
5	24	PAOLZ	2940-00-147-5292	11643006	19207	BASKET ASSEMBLY AIR CLEANER FILTER BAG	EA	2
5	25	PAOZZ	2940-00-537-1070	10913223	19207	BAG, INTAKE AIR CLEANER FILTER	EA	2
5	26	PAOLZ	2940-00-537-1071	L0913224	19207	SPACER. INTAKE AIR CLEANER BASKEI	EA	20
5	27	PAOZZ	4730-00-999-9639	10919791	19207	OUTLET. STRAIGHT, HOSE TO BOSS, FWD AIR SEPARATOR END PLATE	EA	1
						DOOR		
5	28	PAOZZ	5330-00-947-5760	10956619	19207	GASKET. FOD AIR SEPARATCR OUTLET ADAPTER	EA	1
5	29	PAOZZ	5310-00-205-7997	AN960-2616	88044	WASHER, FLAT 1.640 10, 2.375 00 090 THK	ER	1
5	30	PAOZZ	2510-00-443-0210	10919793	19207	DOOR, FHD AIR SEPARATOR BLOWER ADAPTER	EA	1
5	31	PAOZZ	5330-00-992-9268	10934570	19207	GASKET AIR SEPARATOR INLET	EA	2
5	32	PAOZZ	5330-00-859-0418	10891899	19207	SEAL FILTER BASKET AIR OUTLET	EA	2