

**\*ARMY TM 9-2815-253-24P  
AIR FORCE TO 38G1-93-4  
MARINE CORPS TM 2815-24P/1**

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**TECHNICAL MANUAL**

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

**DIESEL ENGINE**

**2815-01-350-2206 MODEL DN4M-1  
FOUR-CYLINDER, FOUR CYCLE, FUEL INJECTED**

\* This manual supersedes TM 9-2815-253-24P/TO 38G1-93-4/TM 2815-24P/1, dated 30 August 1995, including all changes.

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**HEADQUARTERS, DEPARTMENTS OF THE ARMY,  
AIR FORCE, AND HEADQUARTERS U.S. MARINE CORPS**

**30 OCTOBER 1996**



TECHNICAL MANUAL  
NO. 9-2815-253-24P

HEADQUARTERS DEPARTMENTS OF THE ARMY,  
AIR FORCE, AND HEADQUARTERS U.S. MARINE CORPS  
WASHINGTON D.C., 30 OCTOBER 1996

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Current as of 1 October 1996

**REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS**

You can help improve this manual. If you find any mistakes or if you know of a way to improve these procedures, please let us know.

(A) Mail your letter or DA Form 2028 (Recommended Changes to Publications and Blank Forms), or DA Form 2028-2 located in the back of this manual directly to: Commander, US Army Aviation and Troop Command, ATTN: AMSAT-I-MP, 4300 Goodfellow Blvd., St. Louis, MO 63120-1798. You may also submit your recommended changes by E-mail directly to < mpmt%avma28@st-louis-emh7.army.mil>. Instructions for sending an electronic 2028 may be found at the back of this publication immediately preceding the hard copy 2028.

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

**SECTION I. INTRODUCTION**

**1 SCOPE,**

This RPSTL lists and authorizes spares and repair parts; special tools; special test, measurement, and diagnostic equipment (TMDE); and other special support equipment required for performance of unit, direct support, and general support maintenance of the diesel engine. It authorizes the requisitioning, issue, and disposition of spares, repair parts, and special tools as indicated by the source, maintenance and recoverability (SMR) codes.

**2 GENERAL**

In addition to Section I, Introduction, this Repair Parts and Special Tools List is divided into the following sections:

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

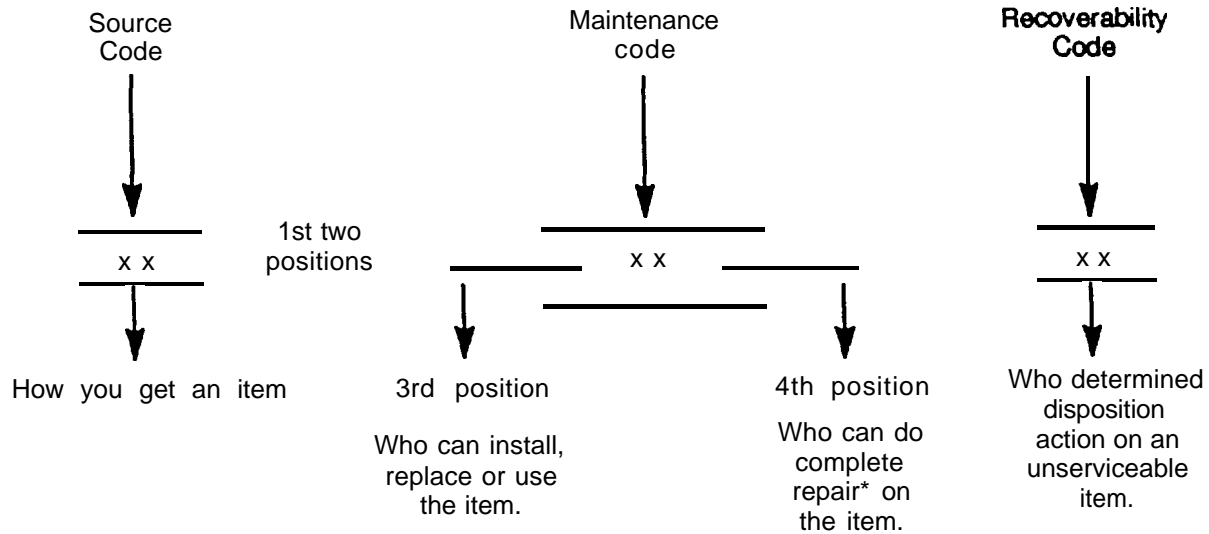
b. Section III Special Tools List, A list of special tools special TMDE and other special support equipment authorized by this RPSTL (as indicated by Basis of Issue (BOI) information in DESCRIPTION AND USABLE ON CODE column) for the Performance of maintenance.

c. Section IV IV. National Stock Number and Part Number index, A list, in National item identification Number (NIIN) sequence, of all national stock numbered items appearing the listing followed by a list in alphanumeric sequence of all pad numbers appearing in the listings. National stock numbers and part numbers are cross-referenced to each illustration figure end item number appearance.

3 EXPLANATION OF COLUMNS (SECTION II AND III).

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

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





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


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

Code	Explanation
PA PB PC ** PD PE PF PG	<p>Stocked items; use the applicable NSN to request/requisition items with these source codes. They are authorized to the category indicated by the code enter in the 3rd position of the SMR code</p> <p>“NOTE: Items coded PC are subject to deterioration.</p>

3 EXPLANATION OF COLUMNS (SECTIONS II AND III) - (Continued)

Code	Explanation
KD KF KB 	Items with these codas are not to be requested/requisitioned individually. They are part of a kit which is authorized to the maintenance category indicated in the 3rd position of the SMR code. The complete kit must be requisitioned and applied.

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

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

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

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

NOTE: Cannibalization or controlled exchange, when authorized, may be used as a source of supply for items with the above source codes, except for those source coded 'XA' or those aircraft support items restricted by requirements of AR 700-42.

(2) Maintenance Code. Maintenance codes tell you the level(s) of maintenance authorized to USE and REPAIR support items. The maintenance codes are entered in the 3rd and 4th positions of the SMR Code as follows:

(a) The maintenance code entered in the 3rd position tells you the lowest maintenance level authorized to remove, replace, and use an item. The maintenance code entered in the 3rd position will indicate authorization to one of the following levels of maintenance.

Code	Application/Explanation
C	-Crew or operator maintenance done within organization or aviation unit maintenance.
O	-Organizational or aviation unit category can remove, replace, and use the item.
F	-Direct support or aviation intermediate level can remove, replace, and use the item.
H	General support level can remove, replace, and use the item.
L	-Specialized repair activity can remove, replace, and use the item.
D	-Depot level can remove, replace, and use the item.

The maintenance code entered in the 4th position tells whether or not the item is to be repaired and identifies the lowest maintenance level with the capability to do complete repair (i.e., perform all authorized repair functions.) (NOTE: Some limited repair may be done on the item at a lower level of maintenance, if authorized by the Maintenance Allocation Chart (MAC) and SMR Codes.) This position will contain one of the following maintenance codes.



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

Code	Application/Explanation
O	Organizational or (aviation unit) is the lowest level that can do complete repair of the item.
F	-Direct support or aviation intermediate is the lowest level that can do complete repair of the item.
H	-General support is the lowest level that can do complete repair of the item.
L	-Specialized repair activity (designate the specialized repair activity) is the lowest level that can do complete repair of the item.
D	-Depot is the lowest level that can do complete repair of the item.
Z	-Nonrepairable. No repair is authorized.
B	-No repair is authorized. (No parts or special tools are authorized for the maintenance of a 'B' coded item). However, the item may be reconditioned by adjusting, lubricating, etc., at the user level.

(3) Recoverability Code Recoverability codes are assigned to items to indicate the disposition action on unserviceable items. The recoverability code is entered in the 5th position of the SMR Code as follows:

Recoverability codes	Application/Explanation
Z	-Nonrepairable item. When unserviceable, condemn and dispose of the item at the level of maintenance shown in 3rd position of SMR Code.
O	-Repairable item. When uneconomically repairable, condemn and dispose of the item at organizational or aviation unit level.

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

F	-Repairable item. When uneconomically repairable, condemn and dispose of the item at the direct support or aviation intermediate level.
H	-Repairable item. When uneconomically repairable, condemn and dispose of the item at the general support level.
D	-Repairable item. When beyond lower level repair capability, return to depot. Condemnation and disposal of item not authorized below depot level.
L	-Repairable item. Condemnation and disposal not authorized below specialized repair activity (SRA).
A	-Item requires special handling or condemnation procedures because of specific reasons (e.g., precious metal content, high dollar value, critical material, or hazardous material). Refer to appropriate manuals/directives for specific instructions.

c. FSCM (Column (3)). The Federal Supply Code for Manufacturer (FSCM) is a 5-digit numeric code which is used to identify the manufacturer, distributor, or Government agency, etc., that supplies the item.

d. PART NUMBER (Column (4)). 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 you use a NSN to requisition an item, the item you receive may have a different part number from the part ordered.

3 **EXPLANATION OF COLUMNS (SECTIONS II AND III) - (Continued)**

e. DESCRIPTION AND USABLE ON CODE (UOC) (Column (5)). This column includes the following information:

- (1) The Federal item name and, when required, a minimum description to identify the item.
- (2) Items that are included in kits and sets are listed below the name of the kit or set.
- (3) Spare/repair parts that make up an assembled item are listed immediately following the assembled item line entry.
- (4) Part numbers for bulk materials are referenced in this column in the line item entry for the item to be manufacture/fabricated.
- (5) When the item is not used with all serial numbers of the same modal, the effective serial numbers are shown on the last line(s) of the description (before UOC).
- (6) The UOC, when applicable (see paragraph 5, Special Information).
- (7) In the Special Tools List section, the Basis of Issue (BOI) appears as the last line(s) 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 BOI, the total authorization is increased proportionately.
- (8) The statement "END OF FIGURE" appears just below the last item description in Column 5 for a given figure in Section II.

f. QTY (Column (6)). The QTY (quantity per figure column) 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 may vary from application to application.

4 EXPLANATION OF COLUMNS (SECTION IV)

a. NATIONAL STOCK NUMBER (NSN) INDEX.

(1) STOCK NUMBER Column This column lists the NSN by National Item identification Number (NIIN) sequence. The NIIN consists of the last nine digits of the NSN

NSN  
\_\_\_\_\_

(i.e., 5305-01-674-1467).      When using this column to locate an item, ignore the first 4 digits of the NSN.

NIIN  
\_\_\_\_\_

However, the complete NSN should be used when ordering items by stock number.

(2) FIG. Column. This column list the number of the figure where the item is identified/located. The figures are in numerical order in Section II and Section III.

(3) ITEM Column. The item number identifies the item associated with the figure listed in the adjacent FIG. Column. This item is also identified by the NSN listed on the same line.

b. PART NUMBER INDEX. Part numbers in this index are listed by part number in ascending alphanumeric sequence (i.e., vertical arrangement of letter and number combination which places the first letter or digit of each group in order A through Z, followed by numbers 0 through 9 and each following letter or digit in like order).

(1) FSCM Column. The Federal Supply Code for Manufacturer (FSCM) is a 5-digit numeric code used to identify the manufacturer, distributor, or Government agency, etc., that supplies the item.

(2) PART NUMBER Column. Indicates the primary number used by the manufacturer (individual, 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.

(3) STOCK NUMBER Column. This column lists NSN for the associated part number and manufacturer identified in the PART NUMBER and FSCM columns to the left.

4 **EXPLANATION OF COLUMNS (SECTION IV).** - (Continued)

(4) FIG. Column. This column lists the number of the figure where the item is identified/located in Section II and III.

(5) ITEM Column. The item number is that number assigned to the item as it appears in the figure referenced in the adjacent figure number column.

5 SPECIAL INFORMATION. Use the following subparagraphs as applicable:

a. USABLE The usable on code appears in the lower left corner of the Description column heading. Usable on codes are shown as "UOC: . . . applicable item description/nomenclature. Uncoded items are applicable to all models. Identification of the usable on codes used in the RPSTL are:

<u>Code</u>	<u>Used On</u>
ERC	Diesel Engine, Model G240PW-28

b. FABRICATION INSTRUCTIONS. Bulk materials required to manufacture items are listed in the Bulk Material Functional Group of this RPSTL. Part numbers for bulk materials are also referenced in the description column of the line item entry for the item to be manufactured/fabricated.. Detailed fabrication instructions for item source codes to be manufactured or fabricated are found in TM 8-2815-254-24.

ASSEMBLY INSTRUCTION. Detail assembly instructions for items source coded to be assembled from component spare/repair parts are found in TM 9-2815-254-24. Items that make up the assembly are listed immediately following the assembly item entry or reference is made to an applicable figure.

d. KITS. Line item entries for repair parts Kits appear throughout Section II.

ASSOCIATED PUBLICATIONS. The publication(s) listed below pertain to Diesel Engine, Model C-240PW-28 and its components:

<u>Publication</u>	<u>Short Title</u>
TM 9-2815-254-24	Maintenance Manual, Diesel Engine, Model No. C-240PW-28

## 6 HOW TO LOCATE REPAIR PARTS.

### a When National Stock Number or Part Number is Not Known

(1) First. Using the Table of Contents, determine the assembly group or subassembly group to which the item belongs. This is necessary since figures are prepared for assembly groups and subassembly groups, and listings are divided into the same groups.

(2) Second, Find the figure covering the assembly group or subassembly group to which the item belongs.

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

(4) Fourth, Refer to the Repair Parts List for the figure to find the part number for the item number noted on the figure.

(5) Fifth Refer to the Part Number Index to find the NSN, if assigned.

### 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. The NSN index is in National Item Identification Number (NIIN) sequence (see 4-a(1)). The part numbers in the Part Number index are listed in ascending alphanumeric sequence (see 4.b). Both indexes cross-reference you to the illustration figure and item number of the item you are looking for.

(2) Second. After finding the figure and item number, verify that the item is the one you're looking for, then locate the item number in the repair parts list for the figure.

7 **ABBREVIATIONS.** (abbreviations must be applicable to specific rpstl and not listed in mil-std-12).

<u>Abbreviations</u>	<u>Explanation</u>
AVIM	Aviation Intermediate Maintenance
AVUM	Aviation Unit Maintenance
BOI	Basis of Issue
DS	Direct Support
GS	General support
MAC	Maintenance Allocation Chart
NIIN	National Item Identification Number (consists of the last 9-digits of the NSN)
NSN	National Stock Number
RPSTL	Repair Parts and Special Tools List
SMR	Source, Maintenance and Recoverability Codes
SRA	Specialized Repair Activity
<b>TMDE</b>	<b>Test, Measurement and Diagnostic Equipment</b>
<b>UOC</b>	Usable on code







ARMY TM 9-2815-253-24P  
AIR FORCE TO 38G1-93-4  
MARINE CORPS TM 2815-24P/1

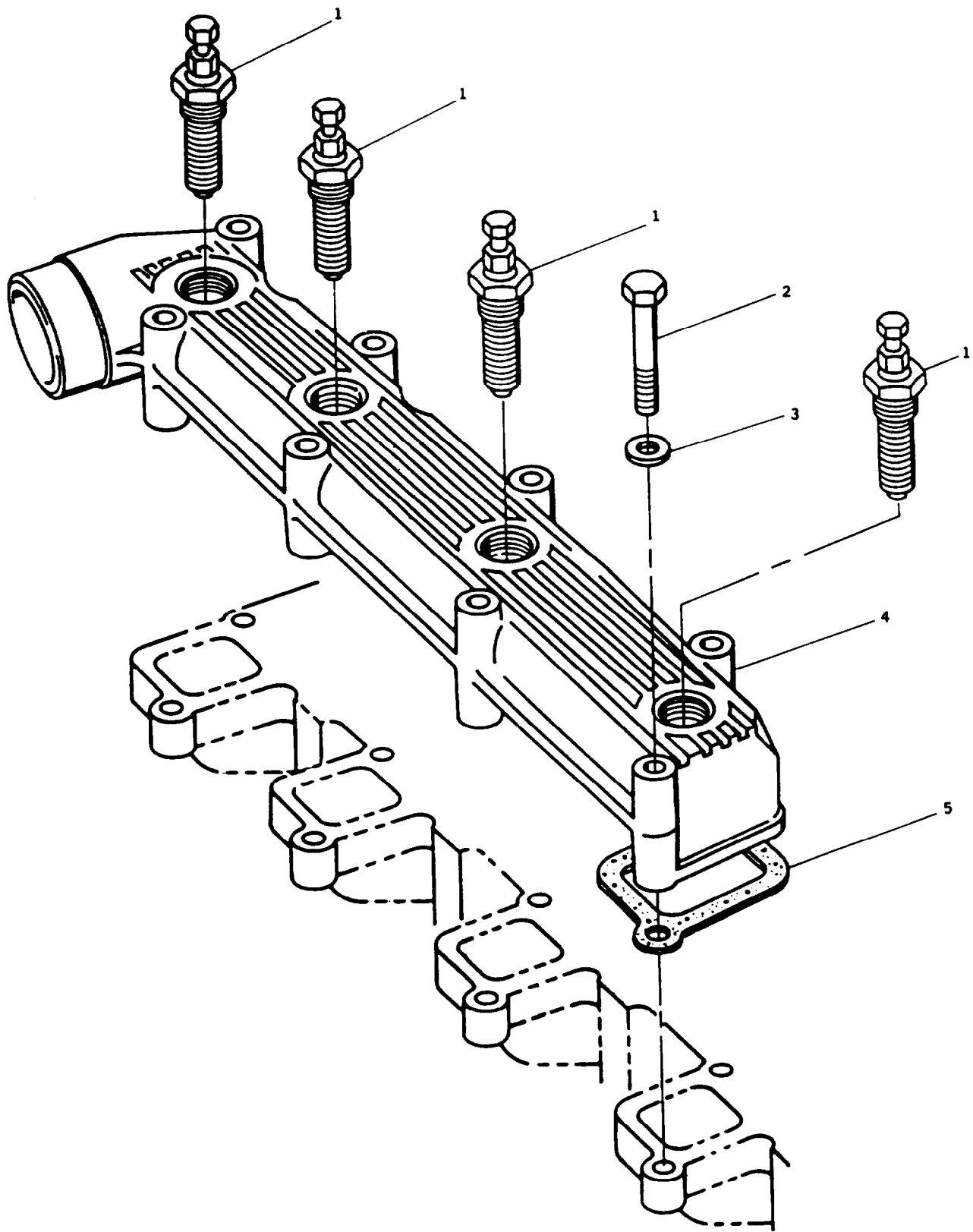


FIGURE 1. Intake Manifold

**ARMY TM 9-2815-253-24P  
AIR FORCE TO 38G1-934  
MARINE CORPS TM 2815-24P/1**

(1)	(2)		(3)		(4)	(5)	(6)	(7)
ITEM	a.	b.	c.	d.	PART	DESCRIPTION AND	QTY	USMC
NO	ARMY	AIR	NAW	USMC	FSCM	USABLE ON CODE (UOC)		QTY
						GROUP 01 - INTAKE AND EXHAUST MANIFOLD		
						FIG. 1 - INTAKE MANIFOLD		
1	PAOZZ	PAOZZ	PAOZZ	44940	186-6264	HEATING ELEMENT,ELE	4	4
2	PAOZZ	PAOZZ	PAOZZ	44940	186-6203	BOLT,MACHINE M6 X 75 MM	8	8
3	PAOZZ	PAOZZ	PAOZZ	44940	186-6015	WASHER,FLAT	8	34
4	XDOZZ	XB	XBOZZ	44940	186-6200	MANIFOLD, INLET	1	1
5	PAOZZ	PAOZZ	PAOZZ	44940	186-6202	GASKET, PART OF KIT P/N 186-6211, KIT P/N 186-6213	4	4

END OF FIGURE

ARMY TM 9-2815-253-24P  
AIR FORCE TO 38G1-93-4  
MARINE CORPS TM 2815-24P/1

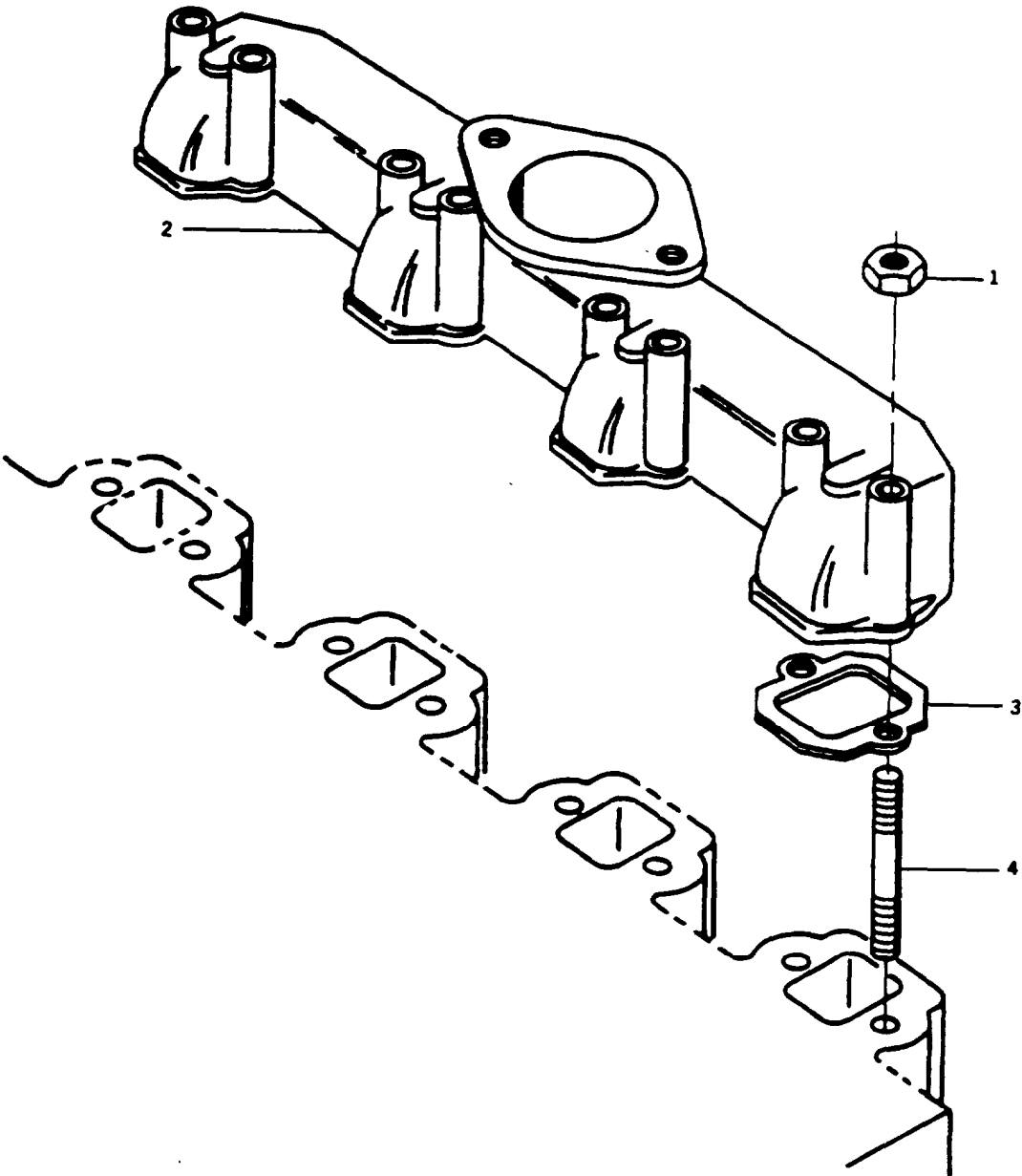


FIGURE 2. Exhaust Manifold

**ARMY TM 9-2815-253-24P**  
**AIR FORCE TO 38G1-93-4**  
**MARINE CORPS TM 2815-24P/1**

(1) ITEM NO.	(2) SMR CODE				(3) USMC FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODE (UOC)	(6) CITY	(7) USMC QTY PER EQUIP
	a. ARMY	b. AIR FORCE	c. NAVY	d.					
							GROUP 01 - INTAKE AND EXHAUST MANIFOLD		
							FIG. 2 - EXHAUST MANIFOLD		
1	PAOZZ	PAOZZ		PAOZZ	44940	186-6209	NUT.PIAIN.HEXAGON	8	12
2	XDOZZ	XB		XBOZZ	44940	186-6205	MANIFOLD, EXHAUST	1	1
3	PAOZZ	PAOZZ		PAOZZ	44940	186-6206	GASKET, PART OF KIT P/N 186-6211, KIT P/N 186-6213	4	4
4	PAOZZ	PAOZZ		PAOZZ	44940	186-6208	STUD.PLAIN	8	8
							END OF FIGURE		

9  
10 AND 11

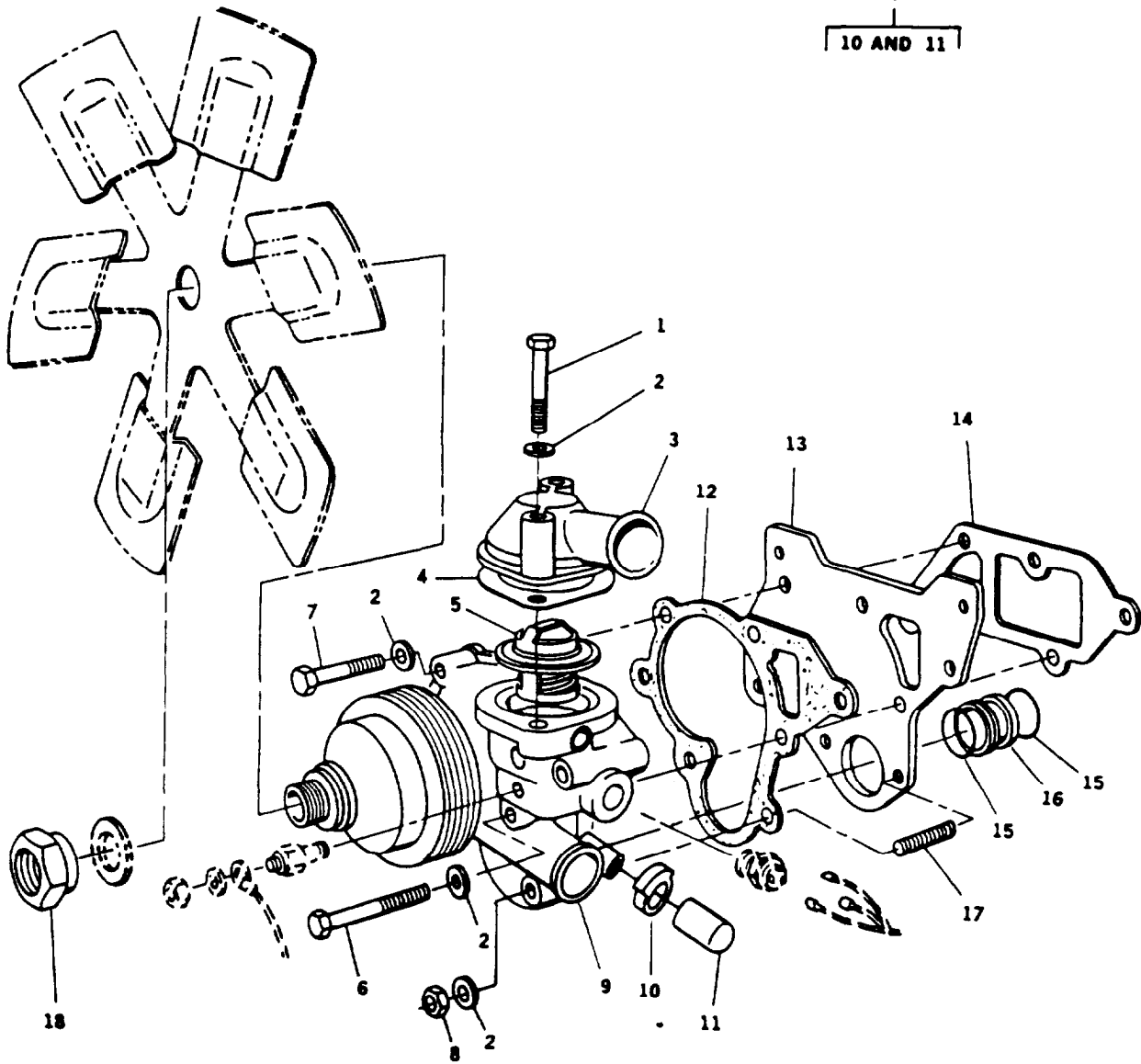


FIGURE 3. Cooling System

**ARMY TM 9-2815-253-248**  
**AIR FORCE TO 38G1-93-4**  
**MARINE CORPS TM 2815-24P/1**

(1)	(2) SMR CODE				(3)	(4)	(5)	(6)	(7)
ITEM NO.	a. ARMY	b. AIR FORCE	c. NAVY	d. USMC	FSCM	PART NUMBER	DESCRIPTION AND USABLE ON CODE (UOC)	QTY	USMC QTY PER EQUIP
GROUP 02 - COOLING SYSTEM									
FIG. 3 - COOLING SYSTEM									
1	PAOZZ	PAOZZ		PAOZZ	56161	10526115	BOLT,MACHINE M8 X 60 MM	2	
2	PAOZA	PAOZA		PAOZA	97947	027-00082	WASHER,FLAT	9	
3	XDOZZ	XB		XBOZZ	44940	186-6189	HOUSING, THERMOSTAT	1	
4	PAOZZ	PAOZZ		PAOZZ	44940	186-6190	GASKET, PART OF KIT P/N 186-6211, KIT P/N 186-6213	1	
5	PAOZZ	PAOZZ		PAOZZ	44940	186-6193	THERMOSTAT,FLOW CON	1	1
6	PAOZZ	PAOZZ		PAOZZ	97947	272-00047	BOLT,MACHINE M8 X 75 MM	3	3
7	PAOZZ	PAOZZ		PAOZZ	44940	186-6186	SCREW,MACHINE M8 X 45 MM	2	2
8	PAOZZ	PAOZZ		PAOZZ	97947	272-00003	NUT MB X 1.25-6H	2	8
9	PAOZZ	PAOZZ		PAOZZ	44940	186-6178	PUMP,WATER	1	1
10	PAOZZ	PAOZZ		PAOZZ	44940	186-6282	CLAMP,LOOP	1	1
11	PAOZZ	PAOZZ		PAOZZ	44940	186-6283	CAP,TUBE	1	1
12	PAOZZ	PAOZZ		PAOZZ	44940	186-6180	GASKET, PART OF KIT P/N 186-6211, KIT P/N 186-6213		1
13	XDOZZ	XB		XBOZZ	44940	186-6181	PLATE, MOUNTING		1
14	PAOZZ	PAOZZ		PAOZZ	44940	186-6182	GASKET , PART OF KIT P/N 186-6211, KIT PIN 186-6213	1	1
15	PAOZZ	PAOZZ		PAOZZ	97947	601-20691	PACKING,PREFORMED , PART OF KIT PIN 186-6211, KIT PIN 186-6213	2	2
16	XDOZZ	XB		XBOZZ	44940	186-6183	SLEEVE.CLINCH	1	1
17	PAOZZ	PAOZZ		PAOZZ	44940	186-6188	STUD,PLAIN M8 X 40 MM	2	2
18	PAOZZ	PAOZZ		PAOZZ	44940	186-6194	NUT,PLAIN.HEXAGON	1	1

END OF FIGURE

ARMY TM 9-2815-253-24P  
AIR FORCE TO 38G1-93-4  
MARINE CORPS TM 2815-24P/1

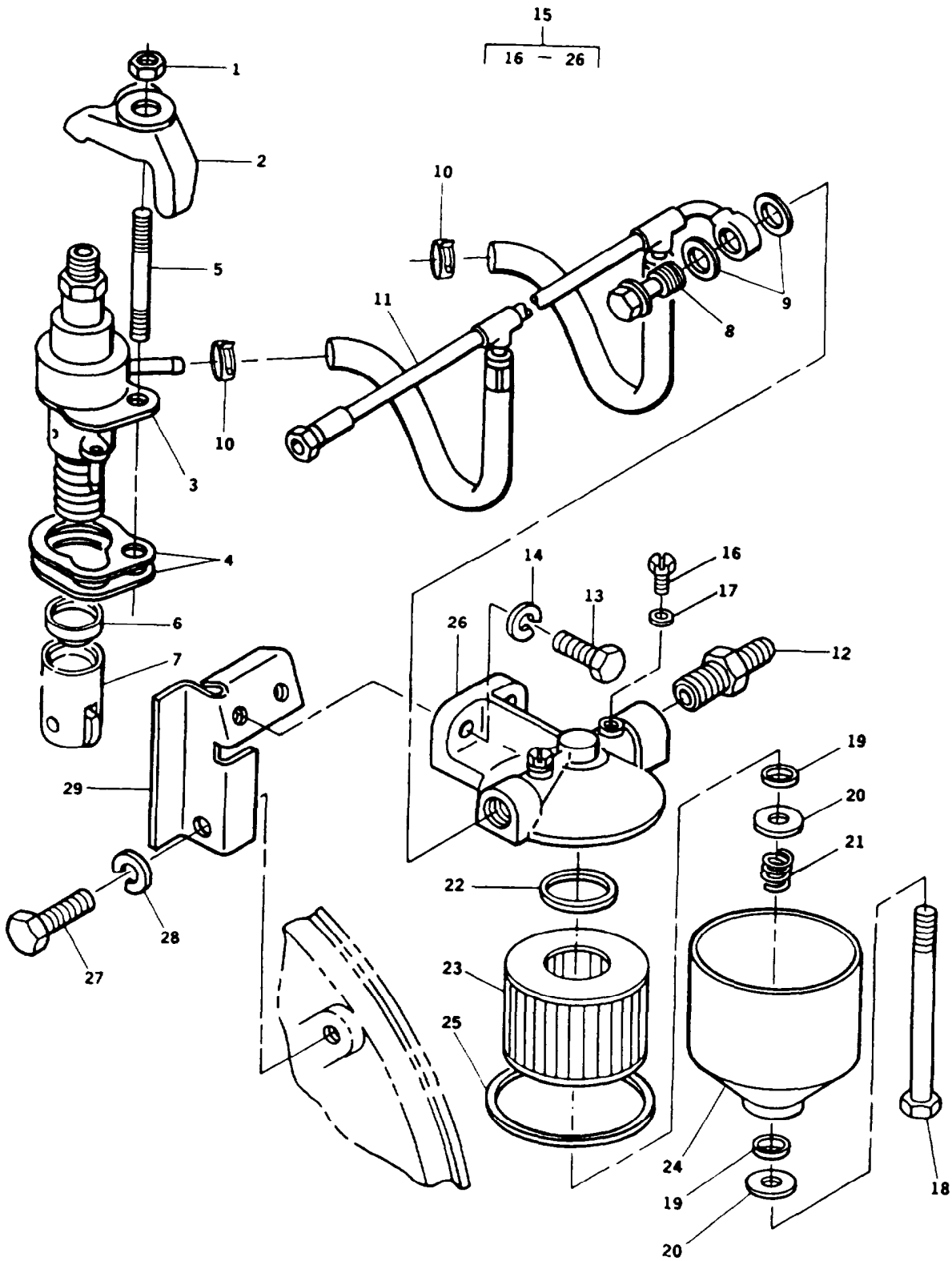


FIGURE 4. Fuel Pump and Lines



**ARMY TM 9-2815-253-24P**  
**AIR FORCE TO 38G1-934**  
**MARINE CORPS TM 2815-24P/1**

(1)	(2)			(3)	(4)	(5)	(6)	(7)
ITEM NO.	SMR CODE		d.	FSCM	PART NUMBER	DESCRIPTION AND USABLE ON CODE (UOC)	QTY	USMC QTY PER EQUIP
	a	b.						
						GROUP 03 - FUEL SYSTEM FIG. 4 - FUEL PUMP AND LINES		
1	PAFZZ	PAOZZ	PAFZZ	44940	186-6154	NUT,PLAIN HEXAGON M8 X 1.25	4	4
2	XDFZZ	XB	XBFZZ	44940	186-6158	CLAMP,FUEL PUMP	4	4
3	PAFZZ	PAOZZ	PAFZZ	44940	186-6151	PUMP,FUEL,METERING	4	4
4	PAFZZ	PAOZZ	PAFZZ	44940	186-6157	SHIM ASSORTMENT	V	V
5	PAFZZ	PAOZZ	PAFZZ	44940	186-6153	STUD,PLAIN M8 X 1.25 X 55MM	4	4
6	PAFZZ	PAOZZ	PAFZZ	44940	186-6290	CUP,THRUST	4	4
7	PBFZZ	PBOZZ	PBFZZ	44940	186-6152	TAPPET.ENGINE POPPE	4	4
8	PAOZZ	PAOZZ	PAOZZ	44940	186-6162	PLUG ASSEMBLY,SEALI	1	1
9	PAOZZ	PAOZZ	PAOZZ	44940	186-6163	SEAL,NONMETALLIC.SP , PART OF KIT P/N 186-6213	2	2
10	PAOZZ	PAOZZ	PAOZZ	44940	186-6161	CLAMP,HOSE	4	4
11	PAOZZ	PAOZZ	PAOZZ	44940	186-6160	TUBE ASSY,METAL	1	1
12	PAOZA	PAOZA	PAOZA	30780	4-4F3BXSS	ADAPTER,STRAIGHT,PI	1	1
13	PAOZZ	PAOZZ	PAOZZ	56161	10503805	SCREW,CAP,HEXAGON H	2	4
14	PAOZZ	PAOZZ	PAOZZ	15526	127-B6	WASHER,LOCK	2	2
15	PBOOZ	PBOOZ	PBOOZ	97947	284359	FILTER,FLUID	1	1
16	KFOZZ	KFOZZ	KFOZZ	44940	186-6293-01	SCREW, VENT, PART OF KIT P/N 393331	2	2
17	KFOZZ	KFOZZ	KFOZZ	44940	186-6289	SEAL, VENT SCREW, PART OF KIT P/N 393331	2	2
18	XAOZZ	XA	XAOZZ	44940	186-6278-03	SCREW, RETURNING	1	1
19	KFOZZ	KFOZZ	KFOZZ	44940	186-6279-03	SEAL, , PART OF KIT P/N 393331, KIT PIN 7961121	2	2
20	KFOZZ	KFOZZ	KFOZZ	44940	186-6293-03	WASHER	2	2
21	KFOZZ	KFOZZ	KFOZZ	44940	186-6293-02	SPRING	1	1
22	KFOZZ	KFOZZ	KFOZZ	44940	186-6279-02	SEAL, ELEMENT, PART OF KIT PIN 393331, KIT P/N 7961121	1	1
23	KFOZZ	KFOZZ	KFOZZ	44940	186-6279-04	ELEMENT, FILTER , PART OF KIT PM 7961121	1	1
24	XAOZZ	XA	XAOZZ	44940	186-6278-02	BOWL, FILTER	1	1
25	KFOZZ	KFOZZ	KFOZZ	44940	186-6279-01	SEAL, BOWL I PART OF KIT P/N 393331, KIT P/N 7961121	1	1
26	XAOZZ	XA	XAOZZ	44940	186-6278-01	HEAD, FILTER	1	1
27	PAOZZ	PAOZZ	PAOZZ	44940	800-0046	SCREW,CAP,HEXAGON H	1	1
28	PAOZZ	PAOZZ	PAOZZ	44940	850-0050	WASHER,LOCK	1	1

ARMY TM 9-2815-253-24P  
 AIR FORCE TO 38G1-9-34  
 MARINE CORPS TM 2815-24P/1

(1)	(2) SMR CODE		(3)	(4)	(5)	(6)	(7)	
ITEM NO.	a. ARMY	b. AIR FORCE	c. NAW	d. USMC	PART FSCM NUMBER	DESCRIPTION AND USABLE ON CODE (UOC)	QTY	USMC Q-W PER EQUIP
29	XDOZZ	XB		XBOZZ	44940 149-2379	BRACKET, FUEL	1	1
	PAOZZ	PAOZZ		PAOZZ	97947 393331	SPARE PACK KIT	1	1
						SCREW,VENT (2) 4-16		
						SEAL,VENT (2) 4-17		
						SEAL (2) 4-19		
						SEAL,ELEMENT (1) 4-22		
						SEAL,BOWL (1) 4-25		
	PAOZZ	PAOZZ		PAOZZ	K0160 201-13117	FUEL FILTER KIT	1	1
						SEAL (2) 4-19		
						SEAL.ELEMENT (1) 4-22		
						ELEMENT,		
						FILTER (1) 4-23		
						SEAL,BOWL (1) 4-25		

END OF FIGURE



ARMY TM 9-2815-253-2413  
AIR FORCE TO 38G1-93-4  
MARINE CORPS TM 2815-24P/1

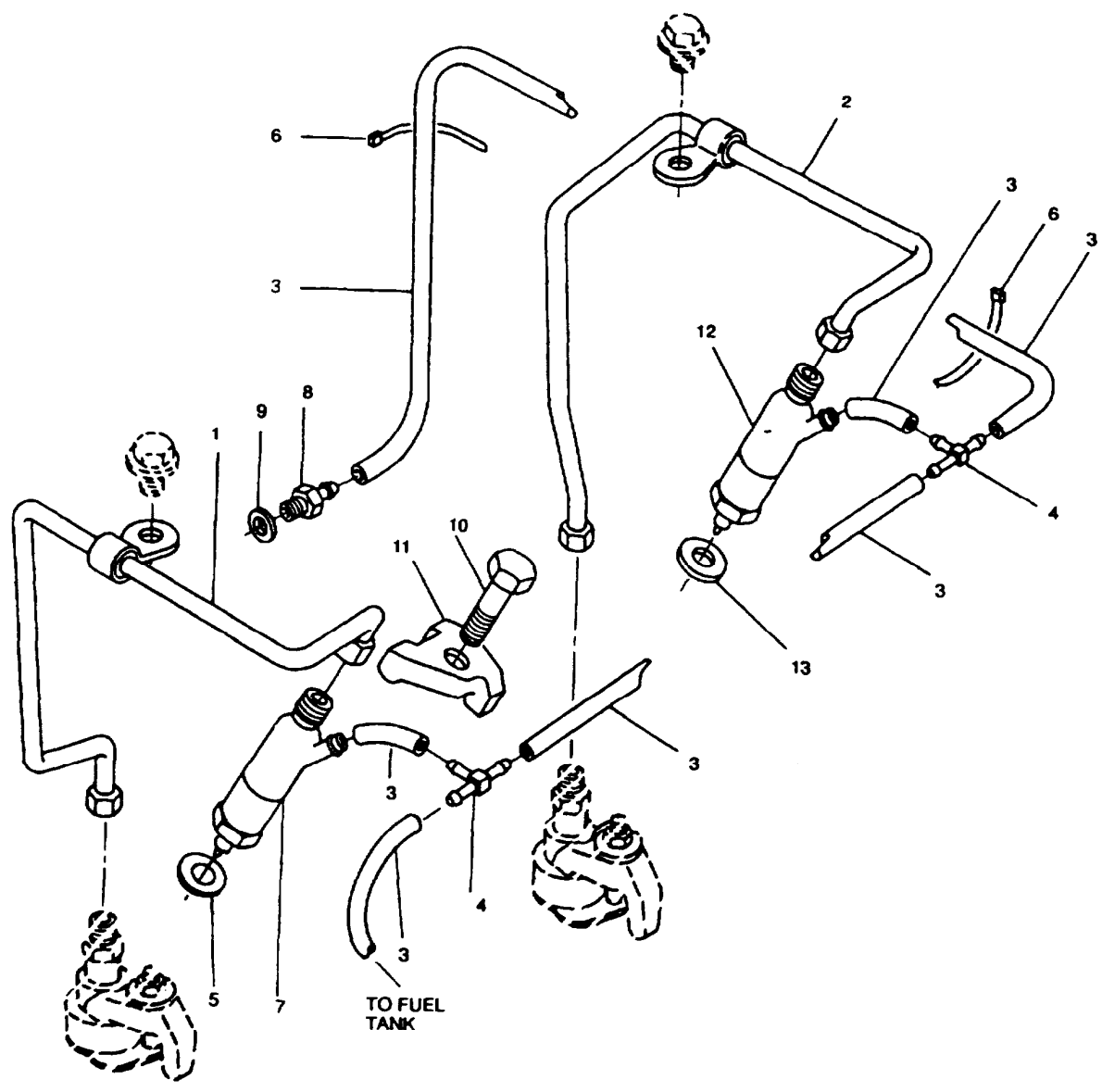


FIGURE 5. Fuel Injector and Lines

**ARMY TM 9-2815-253-24P**  
**AIR FORCE TO 38G1-93-4**  
**MARINE CORPS TM 2815-24P/1**

(1)	(2)				(3)	(4)	(5)	(3)	(7)
ITEM NO.	SMR CODE				FSCM	PART NUMBER	DESCRIPTION AND USABLE ON CODE (UOC)	QTY	USMC QTY PER EQUIP
	a.	b.	c.	d.					
							GROUP 03 - FUEL SYSTEM FIG. 5 - FUEL INJECTOR AND LINES		
1	XDOZZ	XB		XBOZZ	44940	186-6170	PIPE ASSEMBLY,FUEL	3	3
2	XDOZZ	XB		XBOZZ	44940	186-6171	PIPE ASSY, FUEL	1	1
3	MOOZZ	MOO		MOOZZ	44940	503-1052	TUBING,NONMETALLIC MAKE FROM PIN 503-1052 (44940) AS REQUIRED	7	7
4	PAOZZ	PAOZZ		PAOZZ	44940	186-6177	TEE,HOSE	4	4
5	PAFZZ	PAOZZ		PAFZZ	44940	186-6173	WASHER,FLAT , PART OF KIT P/N 186-6211, KIT P/N 186- 6213	4	4
6	PAOZZ	PAOZZ		PAOZZ	96906	MS33674-9	STRAP,TIEDOWN,ELECT	V	V
7	PAFZZ	PAOZZ		PAFZZ	44940	186-6168	PUMP,FUEL METERING	4	4
8	PAOZZ	PAOZZ		PAOZZ	44940	186-6164	UNION,PIPE TO HOSE	1	1
9	PAOZZ	PAOZZ		PAOZZ	44940	186-6165	WASHER,FLAT	1	3
10	PAFZZ	PAOZZ		PAFZZ	44940	186-6174	BOLT,MACHINE	4	4
11	XDFZZ	XB		XBFZZ	44940	186-6172	CLAMP.INJECTOR	4	4

END OF FIGURE

ARMY TM 9-2815-253-24P  
AIR FORCE TO 3861-93-4  
MARINE CORPS TM 2815-24P/1

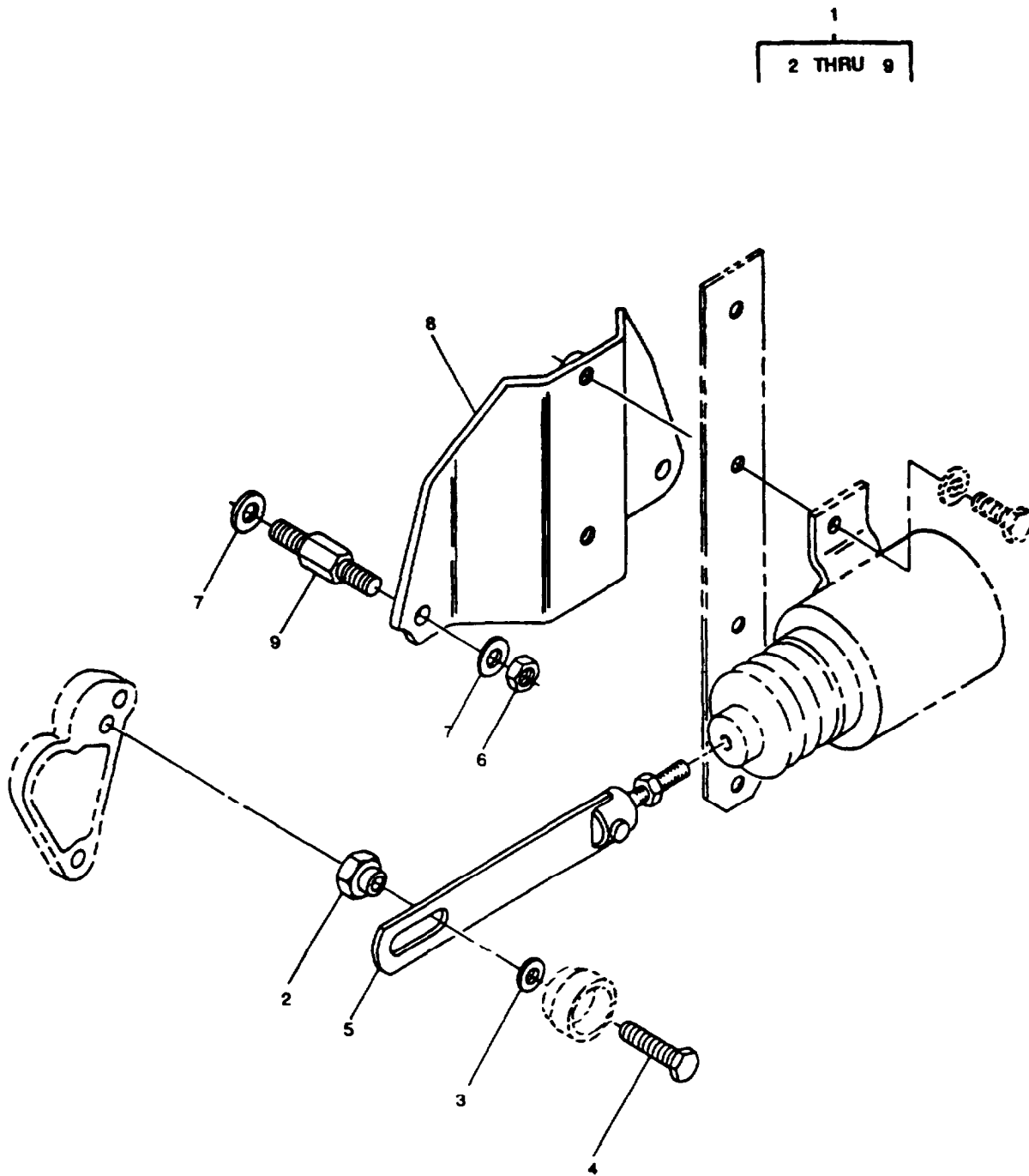


FIGURE 6. Fuel Solenoid Installation

**ARMY TM 9-2815-253-24P**  
**AIR FORCE TO 38G1-93-4**  
**MARINE CORPS TM 2815-24P/1**

(1)	(2)				(3)	(4)	(5)	(6)	(7)
ITEM NO.	SMR CODE				FSCM	PART NUMBER	DESCRIPTION AND USABLE ON CODE (UOC)	QTY	USMC PER EQUIP
	a. ARMY	b. AIR FORCE	c. NAVY	d. USMC					
							GROUP 03 - FUEL SYSTEM		
							FIG. 6 - FUEL SOLENOID INSTALLATION		
1	XDOOO	XB		XBOOO	44940	186-6179	FUEL SOLENOID INSTL	1	1
2	XDOZZ	XB		XBOZZ	44940	186-6252	NUT,RETAINING	1	1
3	PAOZZ	PAOZZ		PAOZZ	44940	186-6233	WASHER,FLAT	1	1
4	PAOZZ	PAOZZ		PAOZZ	44940	800-2010	. SCREW,CAP,HEXAGON H	1	1
5	XDOZZ	XB		XBOZZ	44940	186-6251	LINKAGE FUEL CONTROL	1	1
6	PAOZZ	PAOZZ		PAOZZ	44940	186-6235	NUT,PLAIN,HEXAGON	2	2
7	PAOZZ	PAOZZ		PAOZZ	44940	186-6240	WASHER,FLAT	4	6
8	XDOZZ	XB		XBOZZ	44940	186-6135	BRACKET,ANGLE	1	1
9	XDOZZ	XB		XBOZZ	44940	186-6234	. STUD, SHOULDERED	2	2
							END OF FIGURE		

ARMY TM 9-2815-253-24P  
AIR FORCE TO 38G1-93-4  
MARINE CORPS TM 2815-24P/1

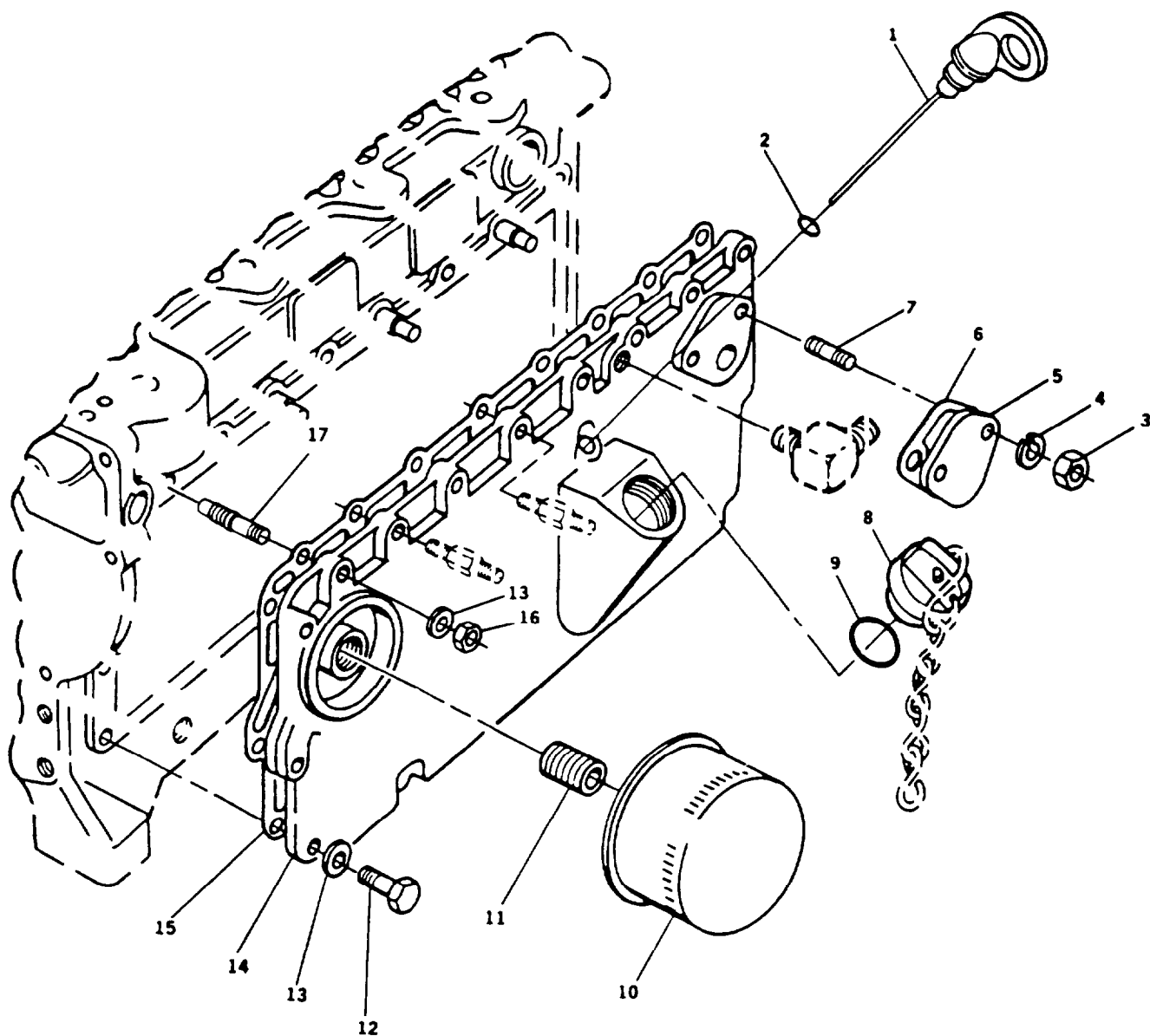


FIGURE 7. Crankcase Cover



**ARMY TM 9-2815-253-24P**  
**AIR FORCE TO 38G1-93-4**  
**MARINE CORPS TM 2815-24P/1**

(1) ITEM NO.	(2) SMR CODE			(3) USMC FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODE (UOC)	(6) QTY	(7) USMC QTY PER EQUIP
	a. ARMY	b. AIR FORCE	c. NAVY					
GROUP 04 - LUBRICATION SYSTEM								
FIG. 7 - CRANKCASE COVER								
1	XDOZZ	XB		XBOZZ	44940 186-6027	DIPSTICK	1	1
2	PAOZZ	PAOZZ		PAOZZ	97947 201-13120	PACKING,PREFORMED	1	1
3	PAOZZ	PAOZZ		PAOZZ	97947 272-00003	NUT M8 X 1.25-6H	2	8
4	PAOZZ	PAOZZ		PAOZZ	44940 186-6019	WASHER,LOCK	2	2
5	XDOZZ	XB		XBOZZ	44940 186-6016	PLATE, BLANKING	1	1
6	PAOZZ	PAOZZ		PAOZZ	44940 186-6017	GASKET, PART OF KIT P/N 186-6213	1	1
7	PAOZZ	PAOZZ		PAOZZ	44940 186-6018	STUD.PLAIN M8 X 25MM	2	2
8	XDOZZ	XB		XBOZZ	44940 186-6023	CAP,OIL FILLER	1	1
9	PAOZZ	PAOZZ		PAOZZ	44940 186-6024	PACKING,PREFORMED	1	1
10	PAOZZ	PAOZZ		PAOZZ	44940 186-6025	FILTER.ELEMENT,FLUI	1	1
11	PAOZZ	PAOZZ		PAOZZ	44940 186-6021	NIPPLE.TUBE	1	1
12	PAOZZ	PAOZZ		PAOZZ	97947 272-00256	BOLT,MACHINE	17	17
13	PAOZZ	PAOZZ		PAOZZ	44940 186-6015	WASHER.FLAT	17	34
14	XDOZZ	XB		XBOZZ	44940 186-6011	DOOR, CRANKCASE	1	1
15	PAOZZ	PAOZZ		PAOZZ	44940 186-6012	GASKET, PART OF KIT P/N 186-6213	1	1
16	PAOZZ	PAOZZ		PAOZZ	44940 186-6209	NUT,PLAIN,HEXAGON M6	4	12
17	PAOZZ	PAOZZ		PAOZZ	44940 1866250	STUD,SHOULDERED	4	4
END OF FIGURE								

ARMY TM 9-2815-253-24P  
AIR FORCE TO 38G1-93-4  
MARINE CORPS TM 2815-24P/1

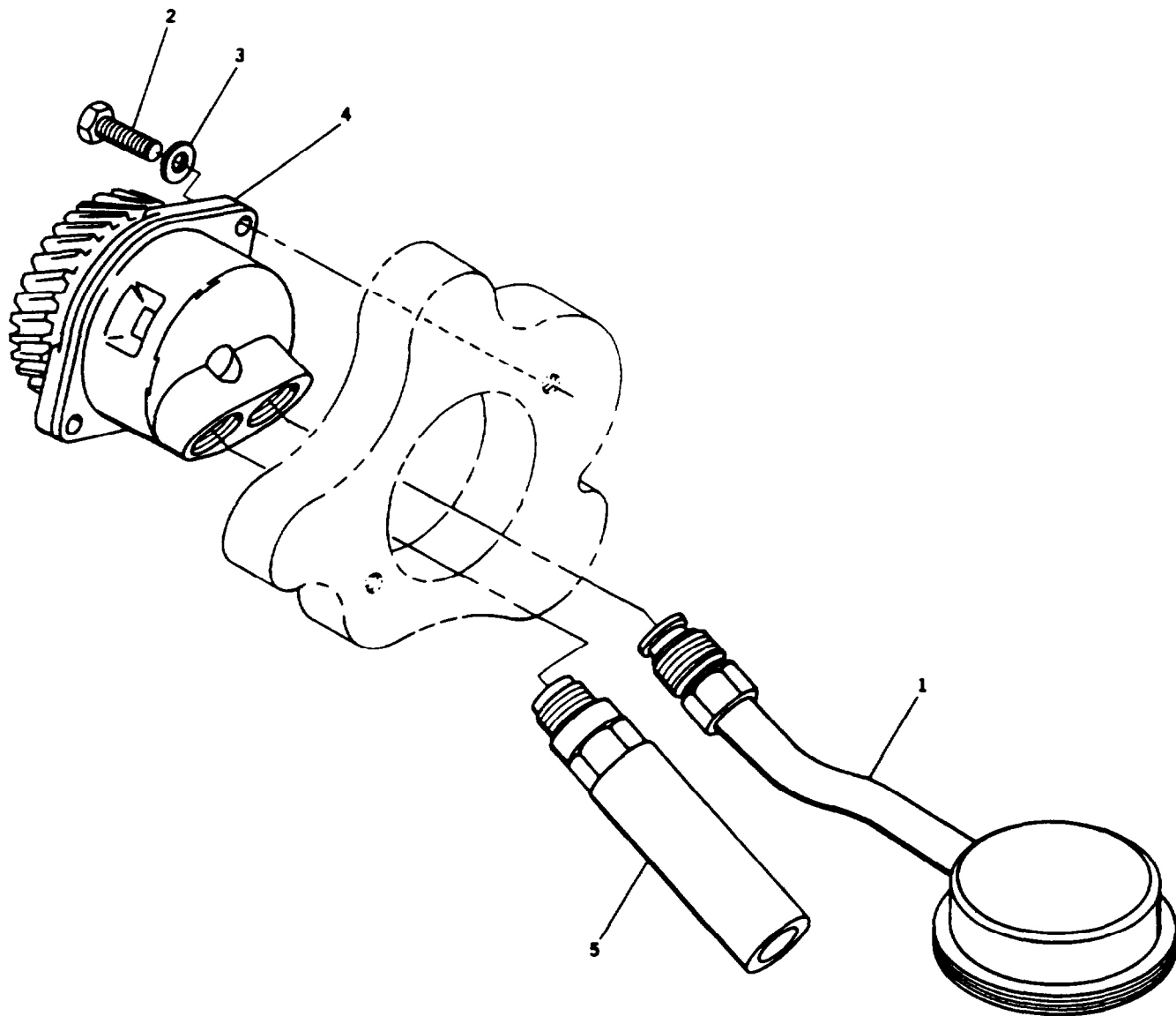


FIGURE 8. Strainer and Oil Pump

**ARMY TM 9-2815-253-24P  
AIR FORCE TO 38G1-93-4  
MARINE CORPS TM 2815-24P/1**

(1) ITEM NO.	a. ARMY	(2) SMR CODE b. AIR	c. NAVY	d. USMC	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODE (UOC)	(6) QTY	(7) USMC QTY PER EQUIP
							GROUP 04 - LUBRICATION SYSTEM FIG. 8 - STRAINER AND OIL PUMP		
1	XDFZZ	XB		XBFZZ	44940	186-6033	OIL STRAINER	1	1
2	PAFZZ	PAOZZ		PAFZZ	56161	10503805	SCREW,CAP.HEXAGON H M6 x 1.0-20 (6G)	2	2
3	PAFZZ	PAOZZ		PAFZZ	44940	186-6015	WASHER,FIAT	2	34
4	PAFZZ	PAOZZ		PAFZZ	44940	186-6030	OIL PUMP ASSEMBLY,E	1	1
5	PAFZZ	PAOZZ		PAFZZ	44940	186-6031	VALVE, SAFETY RELIEF	1	1
							END OF FIGURE		

ARMY TM 9-2815-253-24P  
AIR FORCE TO 38G1-93-4  
MARINE CORPS TM 2815-24P/1

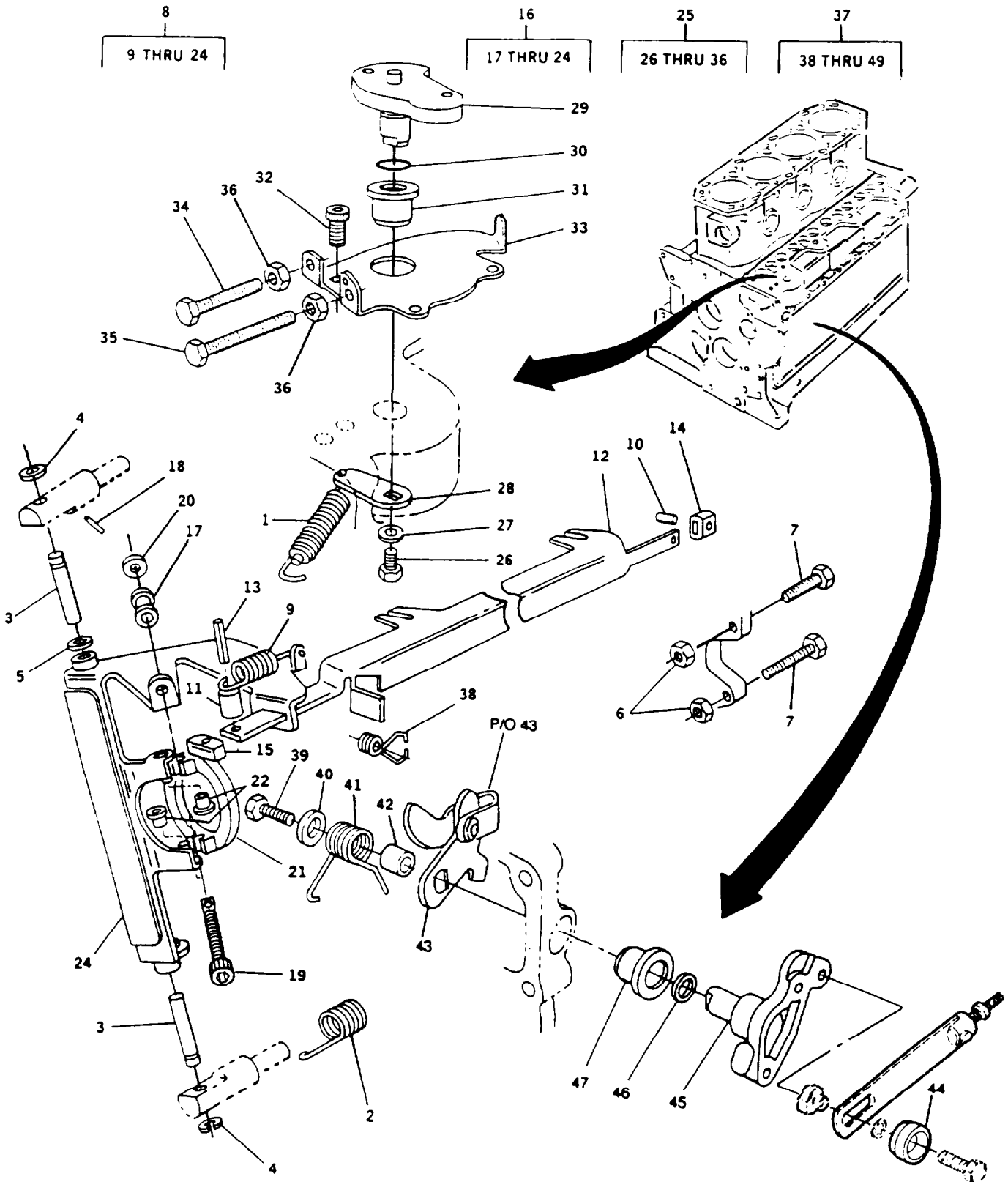


FIGURE 9. Governor System

**ARMY TM 9-2815-253-24P**  
**AIR FORCE TO 38G1-93-4**  
**MARINE CORPS TM 2815-24P/1**

(1)	(2)			(3)	(4)	(5)	(6)	(7)	
ITEM NO.	a.	b.	c.	d.	FSCM	PART NUMBER	DESCRIPTION AND USABLE ON CODE (UOC)	QTY	USMC QTY PER EQUIP
		SMR CODE					GROUP 05 - GOVERNOR SYSTEM		
		AIR FORCE	NAVY	USMC			FIG. 9 - GOVERNOR SYSTEM		
1	PAFZZ	PAOZZ		PAFZZ	44940	186-6138	SPRING,HELICAL,EXT	1	1
2	PAFZZ	PAOZZ		PAFZZ	44940	186-6142	SPRING,HELICAL,EXT	1	1
3	KFFZZ	KFF		KFFZZ	44940	186-6140-1	PIN, PART OF KIT P/N 186-6140-1	2	2
4	PAFZZ	PAOZZ		PAFZZ	44940	186-8141	RING,RETAINING , PART OF KIT P/N 186-6140-1	2	2
5	PAFZZ	PAOZZ		PAFZZ	44940	186-6143	SHIM	V	V
6	PAOZZ	PAOZZ		PAOZZ	15526	934-SX-M5 X 0.8	NUT,PLAIN,HEXAGON M5 X 0.8-6H	2	4
7	PAOZZ	PAOZZ		PAOZZ	56161	10504502	SCREW,CAP,HEXAGON H M5 X0.8-6GX25	2	3
8	XDFFF	XB		XDFFF	44940	186-6120	GOVERNOR LEVER ASSY	1	1
9	PAFZZ	PAOZZ		PAFZZ	44940	186-6121	SPRING,HELICAL,EXT	1	1
10	XAFZZ	XA		XAFZZ	44940	186-6119-03	PIN,STRAIGHT,HEADLE	1	1
11	XAFZZ	XA		XAFZZ	44940	186-6119-04	BUSHING.SPRING	1	1
12	XAFZZ	XA		XAFZZ	44940	186-6120-01	RACK,FUEL PUMP	1	1
13	XAFZZ	XA		XAFZZ	44940	186-6119-06	PIN,SPRING	1	1
14	XAFZZ	XA		XAFZZ	44940	186-6119-02	. BEARING	1	1
15	XAFZZ	XA		XAFZZ	44940	186-6119-05	. TOE	1	1
16	XAFZZ	XA		XAFZZ	44940	186-6267	. LEVER,GOVERNOR	1	1
17	PAFZZ	PAOZZ		PAFZZ	44940	186-6261	.. RETAINER,HELICAL CO	1	1
18	PAFZZ	PAOZZ		PAFZZ	44940	186-6267	PIN,STRAIGHT,HEADED	1	1
19	PAFZZ	PAOZZ		PAFZZ	44940	186-6260	SCREW.DROOP,ADJUSTM	1	1
20	PAFZZ	PAOZZ		PAFZZ	44940	186-6143	SHIM	1	1
21	XAFZZ	XA		XAFZZ	44940	186-6122	.. COLLAR, THRUST	1	1
22	PAFZZ	PAOZZ		PAFZZ	44940	186-6288	BUSHING,SLEEVE	2	2
23	XAFZZ	XB		XAFZZ	44940	186-6119-03	. PIN. SPRING	2	2
24	XAFZZ	XB		XAFZZ	44940	186-6287-01	LEVER, GOVERNOR	1	1
25	XDFFF	XB		XDFFF	44940	186-6123	GOV SPEED ASSEMBLY	1	1
26	PAFZZ	PAOZZ		PAFZZ	97947	702201	BOLT,MACHINE M6X 1.0-6G x 12 (8.8)	1	2
27	PAFZZ	PAOZZ		PAFZZ	44940	186-6131	WASHER,FIAT	1	2
28	XAFZZ	XA		XAFZZ	44940	186-6123-03	LEVER	1	1
29	XAFZZ	XA		XAFZZ	44940	186-6123-02	. QUADRANT,SPEED	1	1
30	PAFZZ	PAOZZ		PAFZZ	44940	186-6129	PACKING,PREFORMED PART OF KIT P/N 186-6213	1	2
31	PAFZZ	PAOZZ		PAFZZ	44940	186-6124	. BUSHING, SLEEVE	1	2
32	PAFZZ	PAOZZ		PAFZZ	44940	186-6125	SCREW,CAP.SOCKET HE M6 x 1.0 - 6G x 12 (12.9)	1	1

**ARMY TM 9-2815-253-24P**  
**AIR FORCE TO 38G1-934**  
**MARINE CORPS TM 2815-24P/1**

(1)	(2) SMR CODE				(3)	(4)	(5)	(6)	(7)
ITEM	a.	b.	c.	d.	FSCM	PART NUMBER	DESCRIPTION AND USABLE ON CODE (UOC)	QTY	USMC QTY PER EQUIP
33	XAFZZ	XA		XAFZZ	44940	186-6123-01	PLATE,BASE	1	1
34	PAFZZ	PAOZZ		PAFZZ	44940	186-6126	SCREW,CAP.HEXAGON.H M5X0.86GX50	1	1
35	PAFZZ	PAOZZ		PAFZZ	44940	186-6127	SCREW,CAP.HEXAGON H M5X0.8-6GX35	1	1
36	PAFZZ	PAOZZ		PAFZZ	15526	934-A4-M5X.8	NUT,PLAIN.HEXAGON M5 X 0.8 6H	2	2
37	XDFFF	XB		XBFFF	44940	186-6132	FUEL PUMP LEVER ASY	1	1
38	PAFZZ	PAOZZ		PAFZZ	44940	186-6136	SPRING,HEICAL TORSI	1	1
39	PAFZZ	PAOZZ		PAFZZ	56161	10504502	SCREW,CAP,HEXAGON H M5X0.8-G6X25	1	1
40	PAFZZ	PAOZZ		PAFZZ	44940	186-6131	WASHER,FLAT	1	2
41	PAFZZ	PAOZZ		PAFZZ	44940	186-6137	SPRING.HELICAL TORS	1	1
42	XAFZZ	XA		XAFZZ	44940	186-6132-03	BUSHING,PIVOT	1	1
43	XAFZZ	XA		XAFZZ	44940	186-6132-02	LEVER,NTERNAL STOP/RUN	1	1
44	XDOZZ	XB		XBOZZ	44940	186-6265	. KNOB	1	1
45	XAFZZ	XA		XAFZZ	44940	186-6132-01	LEVER,EXTERNAL STOP/RUN	1	1
46	PAFZZ	PAOZZ		PAFZZ	44940	186-6129	PACKING,PREFORMED	1	2
47	PAFZZ	PAOZZ		PAFZZ	44940	186-6124	BUSHING, SLEEVE	1	2
	PAFZZ	PAOZZ		PAFZZ	44940	186-6140-1	PIVOT PIN KIT	1	1
							PIN (2) 9-3		
							RETAINER (2) 9-4		

END OF FIGURE

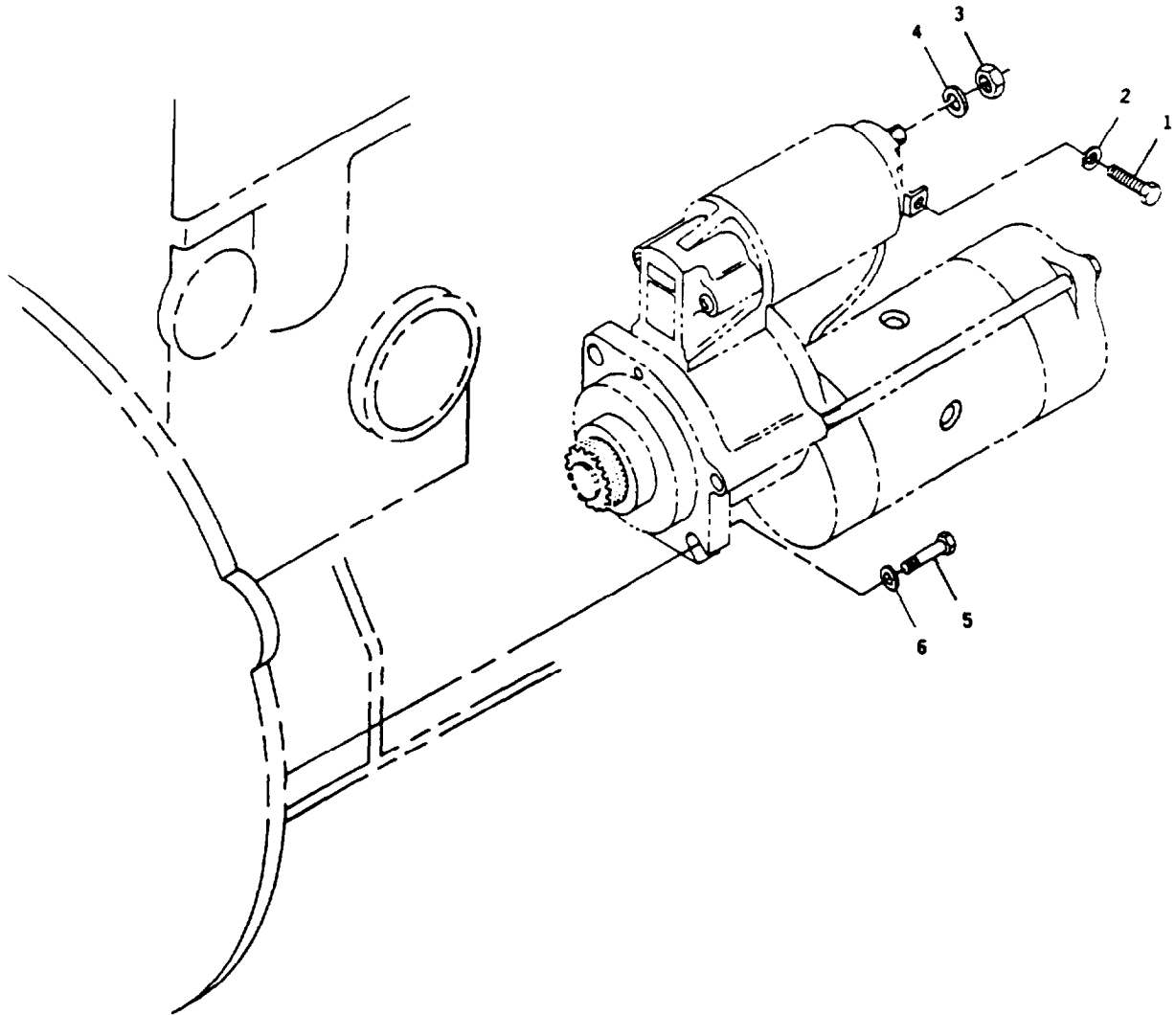


FIGURE 10. Starter and Solenoid (Sheet 1 of 2)

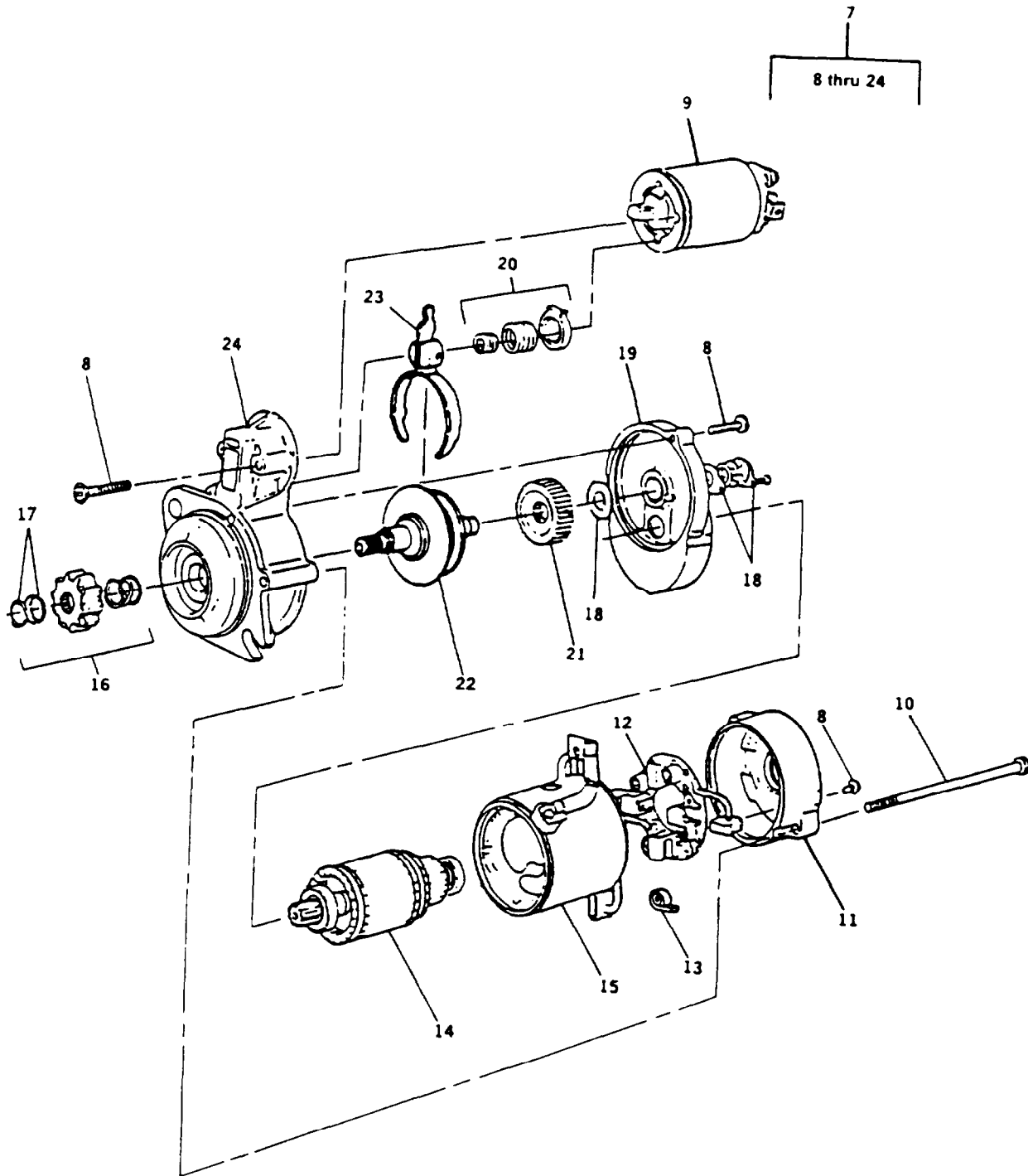


FIGURE 10. Starter and Solenoid (Sheet 2 of 2)



**ARMY TM 9-2815-253-24P  
AIR FORCE TO 38G1-93-4  
MARINE CORPS TM 2815-24P/1**

(1)	(2)			(3)	(4)	(5)	(6)	(7)
ITEM NO.	SMR CODE		d. USMC	FSCM	PART NUMBER	DESCRIPTION AND USABLE ON CODE (UOC)	QTY	USMC QTY PER EQUIP
	a. ARMY	b. AIR FORCE						
						GROUP 06 - STARTER ASSEMBLY FIG. 10 - STARTER AND SOLENOID		
1	PAOZZ	PAOZZ	PAOZZ	44940	C0718100200	SCREW,CAP,HEXAGON H	1	1
2	PAOZZ	PAOZZ	PAOZZ	15434	CO850200500	WASHER,LOCK	1	1
3	PAOZZ	PAOZZ	PAOZZ	44940	860-2008	NUT,PLAIN,HEXAGON	2	2
4	PAOZZ	PAOZZ	PAOZZ	15434	CO850200800	WASHER,LOCK	2	2
5	PAOZZ	PAOZZ	PAOZZ	15434	CO720180600	SCREW	2	2
6	PAOZZ	PAOZZ	PAOZZ	15434	C0740101000	WASHER,FLAT	2	2
7	PAOFF	PAOOO	PAOFF	44940	191-1550	STARTER,ENGINE,ELEC	1	1
8	PAOZZ	PAOZZ	PAOZZ	44940	191-1450	SETSCREW	1	1
9	PAOZZ	PAOZZ	PAOZZ	44940	191-1609	SOLENOID ASSEMBLY	1	1
10	PAFZZ	PAOZZ	PAFZZ	44940	191-1431	BOLT SET	1	1
11	PAFZZ	PAOZZ	PAFZZ	44940	191-1432	BRACKET,REAR	1	1
12	PAFZZ	PAOZZ	PAFZZ	44940	191-1608	HOLDER,ELECTRICAL C	1	1
13	PAFZZ	PAOZZ	PAFZZ	44940	191-1433	SPRING,BRUSH	4	4
14	PAFZZ	PAOZZ	PAFZZ	44940	191-1606	ARMATURE,STARTER	1	1
15	PBFZZ	PBOZZ	PBFZZ	44940	191-1607	HOUSING,ENGINE DRIV	1	1
16	PAFZZ	PAOZZ	PAFZZ	15434	C0191144300	PARTS KIT,STARTER D	1	1
17	PAFZZ	PAOZZ	PAFZZ	44940	191-1442	PARTS KIT,STARTER D	1	1
18	PAFZZ	PAOZZ	PAFZZ	44940	191-1444	PARTS KIT,STARTER D	1	1
19	PAFZZ	PAOZZ	PAFZZ	44940	191-1439	BRACKET,STARTER DRI	1	1
20	PAFZZ	PAOZZ	PAFZZ	44940	191-1440	SPRING ASSORTMENT	1	1
21	PAFZZ	PAOZZ	PAFZZ	44940	191-1446	GEAR,SPUR	1	1
22	PAFZZ	PAOZZ	PAFZZ	44940	191-1445	DRIVE,ENGINE,ELECTR	1	1
23	PBFZZ	PBOZZ	PBFZZ	44940	191-1441	SHIFTER FORK	1	1
24	PBFZZ	PBOZZ	PBFZZ	44940	191-1605	HOUSING,ENGINE DRIV	1	1

END OF FIGURE

ARMY TM 9-2815-253-24P  
AIR FORCE TO 38G1-93-4  
MARINE CORPS TM 2815-24P/1

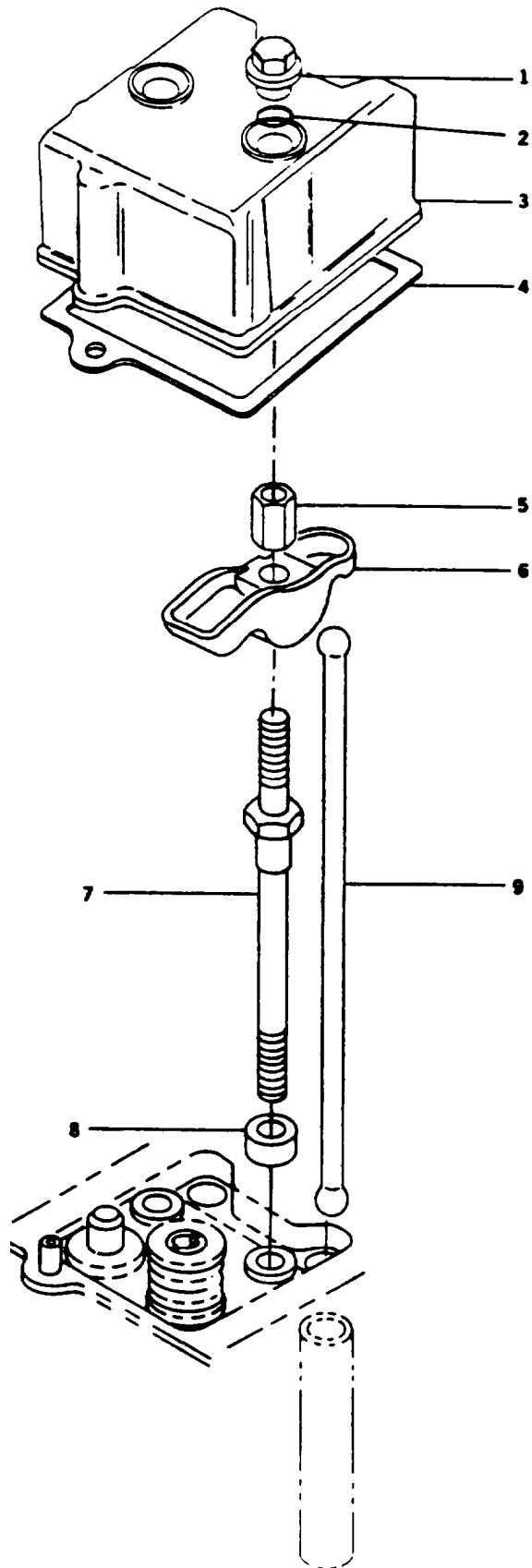


FIGURE 11. Cylinder Cover and Rokcer Lever

**ARMY TM 9-2815-253-24P**  
**AIR FORCE TO 38G1-93-4**  
**MARINE CORPS TM 2815-24P/1**

(1)	(2) SMR CODE				(3)	(4)	(5)	(6)	(7)
ITEM NO.	a. ARMY	b. AIR FORCE	c. NAVY	d. USMC	FSCM	PART NUMBER	DESCRIPTION AND USABLE ON CODE (UOC)	QTY	USMC QTY PER EQUIP
GROUP 07 - ENGINE SUBASSEMBLY									
FIG. 11 - CYLINDER COVER 8									
ROCKER LEVER									
1	PAOZZ	PAOZZ		PAOZZ	44940	166-6118	NUT,PLAIN, CONE SEAT	8	8
2	PAOZZ	PAOZZ		PAOZZ	97947	201-61200	SEAL,SPECIAL , PART OF KIT P/N 186-62 11, KIT P/N 186-6213	8	8
3	XDOZZ	XB		XBOZZ	44940	186-6116	COVER,VALVE	4	4
4	PAOZZ	PAOZZ		PAOZZ	44940	186-6117	GASKET VALVE COVER, PART OF KITS PIN 186-62 11 AND -6213	4	4
5	PAFZZ	PAOZZ		PAFZZ	44940	186-6095	NUT,PLAIN,HEXAGON	8	8
6	PAFZZ	PAOZZ		PAFZZ	44940	186-6094	ROCKER ARM ASSEMBLY	8	8
7	PAFZZ	PAOZZ		PAFZZ	44940	186-6104	BOLT,MACHINE CYLINDER HEAD	8	8
8	PAFZZ	PAOZZ		PAFZZ	44940	186-6107	SPACER,SLEEVE	8	8
9	PAFZZ	PAOZZ		PAFZZ	44940	166-6098	PUSH ROD,ENGINE	8	8
END OF FIGURE									

ARMY TM 9-2815-253-24P  
AIR FORCE TO 38G1-93-4  
MARINE CORPS TM 2815-24P/1

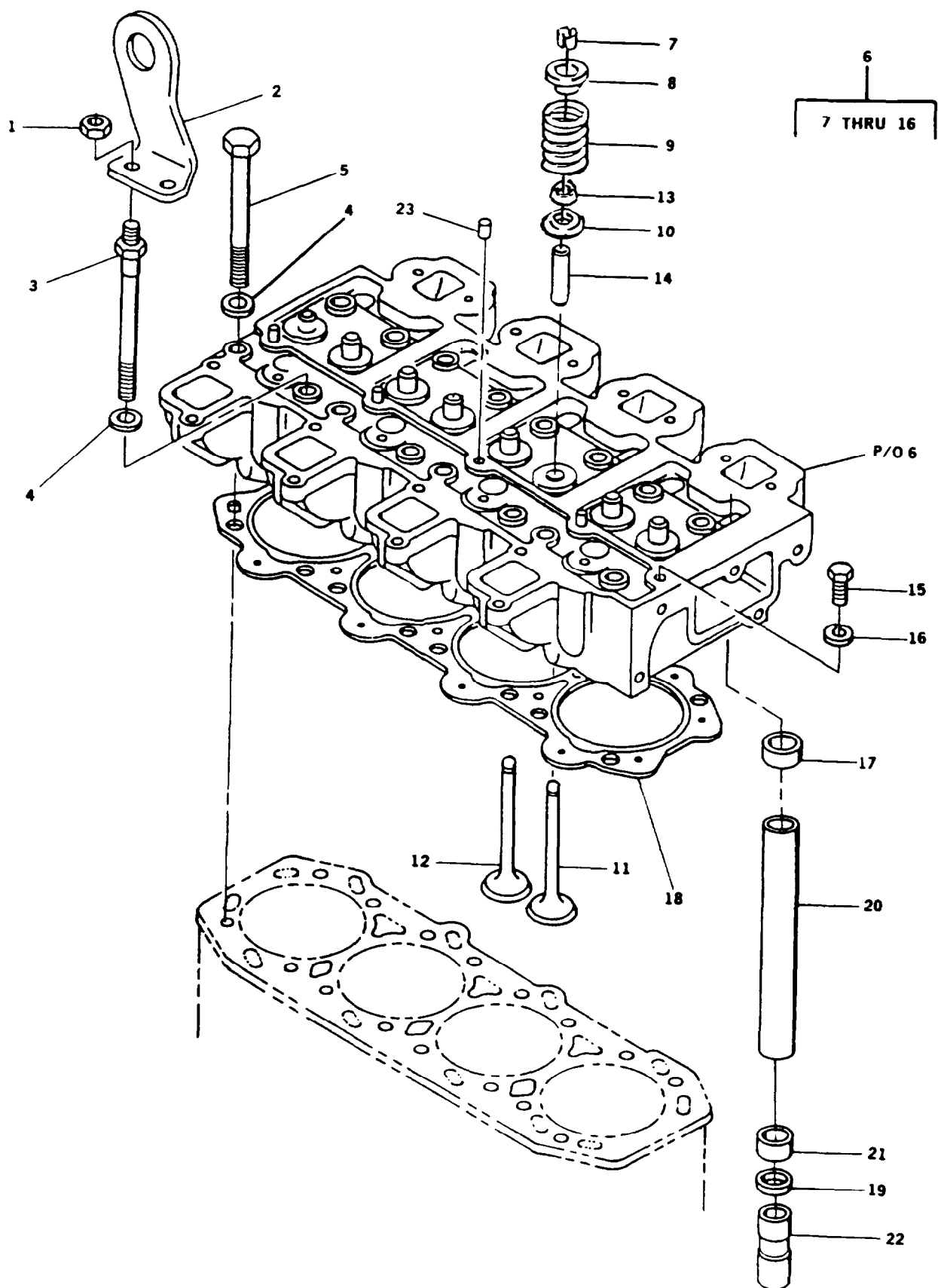


FIGURE 12. Cylinder Head Assembly

**ARMY TM 9-2815-253-24P**  
**AIR FORCE TO 38G1-93-4**  
**MARINE CORPS TM 281524P/1**

(1)	( 2 )		(3)	(4)	(5)	(6)	(7)	
ITEM NO.	a. ARMY	b. AIR FORCE	c. NAVY	d. USMC	FSCM PART NUMBER	DESCRIPTION AND USABLE ON CODE (UOC)	QTY	USMC QTY PER EQUIP
						GROUP 07 - ENGINE SUBASSEMBLY FIG. 12 - CYLINDER HEAD ASSEMBLY		
1	PAFZZ	PAOZZ		PAFZZ	97947 272-00003	NUTM8X1.25-6H	4	REF
2	XDFZZ	XB		XBFZZ	44940 186-6115	EYE,LIFTING	2	2
3	PAFZZ	PAOZZ		PAFZZ	44940 186-6106	BOLT,MACHINE	4	4
4	PAFZZ	PAOZZ		PAFZZ	44940 186-6114	WASHER,FIAT	8	8
5	PAFZZ	PAOZZ		PAFZZ	44940 186-6105	BOLT,MACHINE	4	4
6	PAFFF	PAFFF		PAFFF	44940 186-6085	CYLINDER HEAD,DIESE	1	1
7	PAFZZ	PAOZZ		PAFZZ	57366 04100253	LOCK,VALVE SPRING R	8	8
8	PAFZZ	PAOZZ		PAFZZ	44940 186-6090	RETAINER,HELICAL	8	8
9	PAFZZ	PAOZZ		PAFZZ	44940 186-6089	SPRING,HELICAL COMP	8	8
10	PAFZZ	PAOZZ		PAFZZ	44940 186-6088	SEAT,HELICAL COMPRE	8	8
11	PAFZZ	PAOZZ		PAFZZ	44940 186-6087	VALVE,POPPET,ENGINE 1 EXHAUST	4	4
12	PAFZZ	PAOZZ		PAFZZ	44940 186-6086	VALVE,POPPET,ENGINE 2 iNTAKE	4	4
13	PAFZZ	PAOZZ		PAFZZ	44940 186-6257	SEAL,PLAIN , PART OF KIT P/N 186-6211, KIT P/N 186-6213	8	8
14	PAFZZ	PAOZZ		PAFZZ	44940 186-6092	. GUIDE,VALVE STEM	8	8
15	PAFZZ	PAOZZ		PAFZZ	15434 C0800205200	SCREW,CAP,HEXAGON H M8X 1.25 - 12(8.8)	1	1
16	PAFZZ	PAOZZ		PAFZZ	24439 616-01608	WASHER,FLAT .064 THK. 319 ID, COPPER	1	3
17	KFFZZ	KFFZZ		KFFZZ	44940 186-6102	PUSH ROD TUBE , PART OF KIT P/N 186-6211, KIT PIN 186-6213	8	8
18	PAFZZ	PAOZZ		PAFZZ	44940 186-6111	GASKET 1.35 MM THK	1	1
18	PAFZZ	PAOZZ		PAFZZ	44940 186-6112	GASKET 1.47 MM THK	1	1
18	PAFZZ	PAOZZ		PAFZZ	44940 186-6113	GASKET 1.60 MM THK	1	1
19	KFFZZ	KFFZZ		KFFZZ	44940 186-6101	WASHER,FLAT , PART OF KIT P/N 186-6211, KIT P/N 186-6213	8	8
20	XDFZZ	XB		XBFZZ	44940 186-6099	TUBE,PUSH ROD	8	8
21	PAFZZ	PAOZZ		PAFZZ	97947 201-30261	GROMMET,NONMETALLIC , PART OF KIT P/N 1868211, KIT P/N 186-6213	8	8
22	PAFZZ	PAOZZ		PAFZZ	44940 186-6103	TAPPET,ENGINE POPPE	8	8
23	XDFZZ	XB		XBFZZ	44940 186-6255	TUBE, BREATHER	4	4

ARMY TM 9-2815-253-24P  
 AIR FORCE TO 38G1-93-4  
 MARINE CORPS TM 2815-24P/1

(1)	(2)				(3)	(4)	(5)	(6)	(7)
ITEM NO.	SMR CODE		NAVY	USMC	FSCM	PART NUMBER	DESCRIPTION AND USABLE ON CODE (UOC)	QTY	USMC QTY PER EQUIP
	a. ARMY	b. AIR							
	PAFZZ	PAOZZ		PAFZZ	44940	186-6211	GASKET SET, HEAD	1	1
							GASKET,INLET (4) 1-5		
							GASKET, EXHAUST (4) 2-3		
							GASKET (1) 3-4		
							GASKET (1) 3-12		
							GASKET (1) 3-14		
							PACKING, PREFORMED (2) 3-15		
							WASHER,FLAT (4) 5-5		
							PACKING, PREFORMED (8) 11-2		
							GASKET (4) 11-4		
							SEAL,VALVE STEM (8) 12-13		
							SEAL,PUSH ROD TUBE (8) 12-17		
							WASHER,FLAT (8) 12-19		
							SEAL,PUSH ROD (8) 12-21		
							END OF FIGURE		



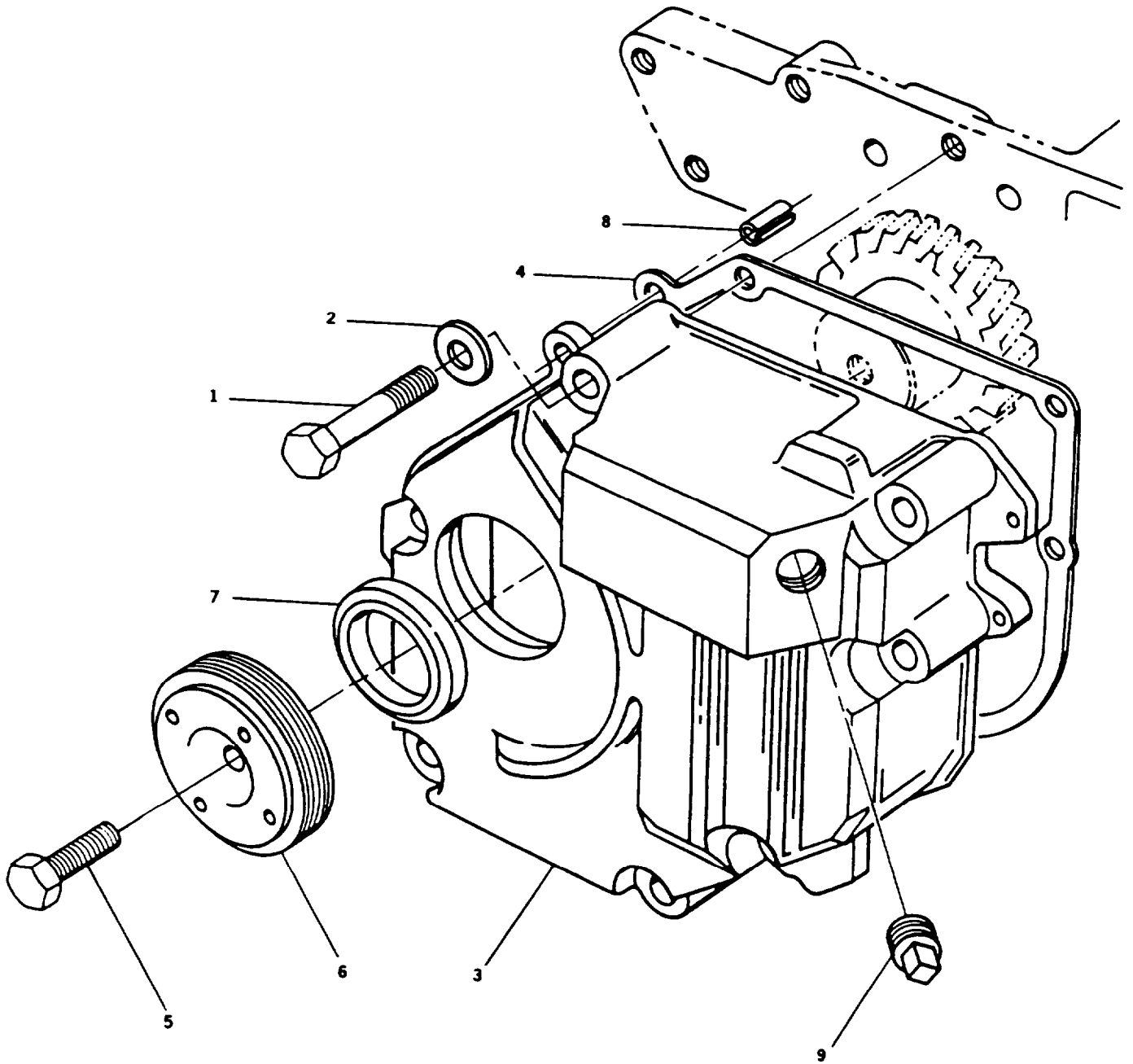


FIGURE 13. Gear End Cover



**ARMY TM 9-2815-253-24P  
AIR FORCE TO 38G1-93-4  
MARINE CORPS TM 2815-24P/1**

(1)	(2)				(3)	(4)	(5)	(6)	(7)
ITEM NO.	a. ARMY	b. AIR FORCE	c. NAVY	d. USMC	FSCM	PART NUMBER	DESCRIPTION AND USABLE ON CODE (UOC)	QTY	USMC QTY PER EQUIP
							GROUP 07 - ENGINE SUBASSEMBLY FIG. 13 - GEAR END COVER		
1	PAFZZ	PAOZZ		PAFZZ	44940	186-6150	SCREW,CAP,HEXAGON H	7	7
2	PAFZZ	PAOZZ		PAFZZ	44940	186-6015	WASHER.FLAT	7	34
3	XDFZZ	XB		XBFZZ	44940	186-6146	COVER, GEAR	1	1
4	PAFZZ	PAOZZ		PAFZZ	44940	186-6147	GASKET, PART OF KIT PIN 186-6213	1	1
5	PBFZZ	PBOZZ		PBFZZ	44940	188-6196	SCREW,CAP.HEXAGON H	1	1
6	XDFZZ	XB		XBFZZ	44940	186-6195	PULLEY, CRANKSHAFT	1	1
7	PAFZZ	PAOZZ		PAFZZ	44940	186-6148	SEAL,PLAIN ENCASED, PART OF KIT P/N 188-6213	1	1
8	XDFZZ	XB		XBFZZ	44940	186-6149	DOWEL		2
9	PAOZZ	PAOZZ		PAOZZ	81348	WW-P471AASBCC	PLUG,PIPE		3
							END OF FIGURE		

ARMY TM 9-2815-253-24P  
AIR FORCE TO 38G1-93-4  
MARINE CORPS TM 2815-24P/1

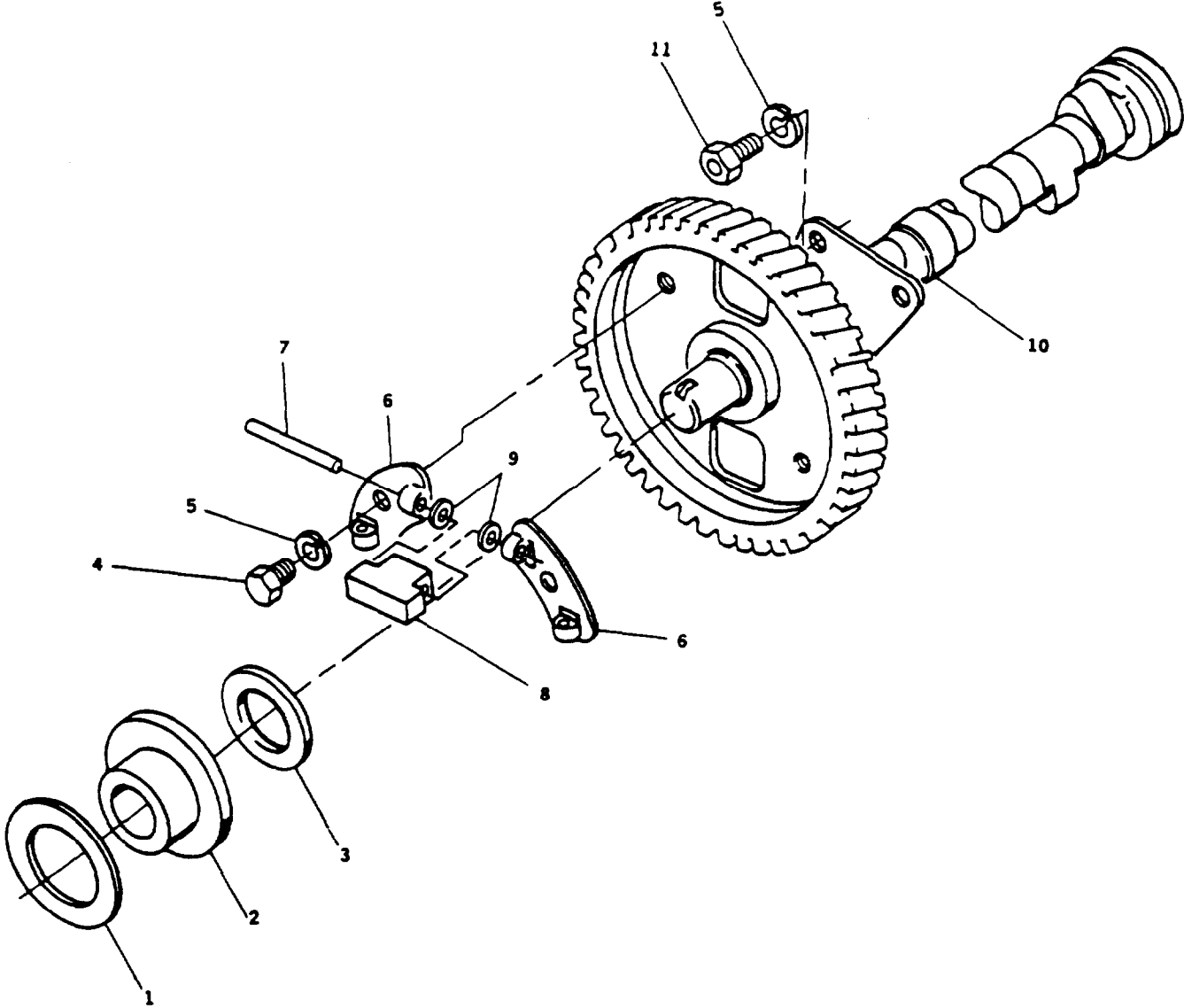


FIGURE 14. Camshaft Assembly

**ARMY TM 9-2815-253-24P  
AIR FORCE TO 38G1-93-4  
MARINE CORPS TM 2815-24P/1**

(1)	(2)		(3)	(4)	(5)	(6)	(7)
ITEM	SMR CODE			PART	DESCRIPTION AND		USMC
NO.	a.	c.	d.	NUMBER	USABLE ON CODE (UOC)	QTY	QTY
	ARMY	AIR FORCE	NAVY	USMC			PER EQUIP
GROUP 07 - ENGINE SUBASSEMBLY FIG. 14 - CAMSHAFT ASSEMBLY							
1	PAFZZ	PAOZZ	PAFZZ	44940 186-6045	WASHER, FLAT	1	1
2	PAFZZ	PAOZZ	PAFZZ	44940 186-6044	BUSHING, SLEEVE	1	1
3	PAFZZ	PAOZZ	PAFZZ	44940 186-6268	WASHER, BEARING, THRU	1	1
4	PAFZZ	PAOZZ	PAFZZ	15526 933-M6-X8	SCREW, CAP, HEXAGON H M6 X 1.0-6G X 8	4	1
5	PAHZZ	PAOZZ	PAHZZ	44940 186-6038	WASHER, LOCK	6	6
6	PAFZZ	PAOZZ	PAFZZ	44940 186-6042	PLATE, RETAINER	4	12
7	PAFZZ	PAOZZ	PAFZZ	44940 186-6040	PIN, STRAIGHT, HEADLE	4	4
8	PAFZZ	PAOZZ	PAFZZ	44940 186-6039	WEIGHT, COUNTERBALAN	4	4
9	PAFZZ	PAOZZ	PAFZZ	44940 186-6143	SHIM	8	V
10	PAHZZ	PAOZZ	PAHZZ	44940 186-6036	CAMSHAFT, ENGINE WITH GEAR AND THRUST PLATE	1	1
11	PAHZZ	PAOZZ	PAHZZ	15526 933-M6X12	SCREW, CAP, HEXAGON H M6 X 1.0 - 6G X 12	2	2

END OF FIGURE

ARMY TM 9-2815-253-24P  
AIR FORCE TO 38G1-93-4  
MARINE CORPS TM 2815-24P/1

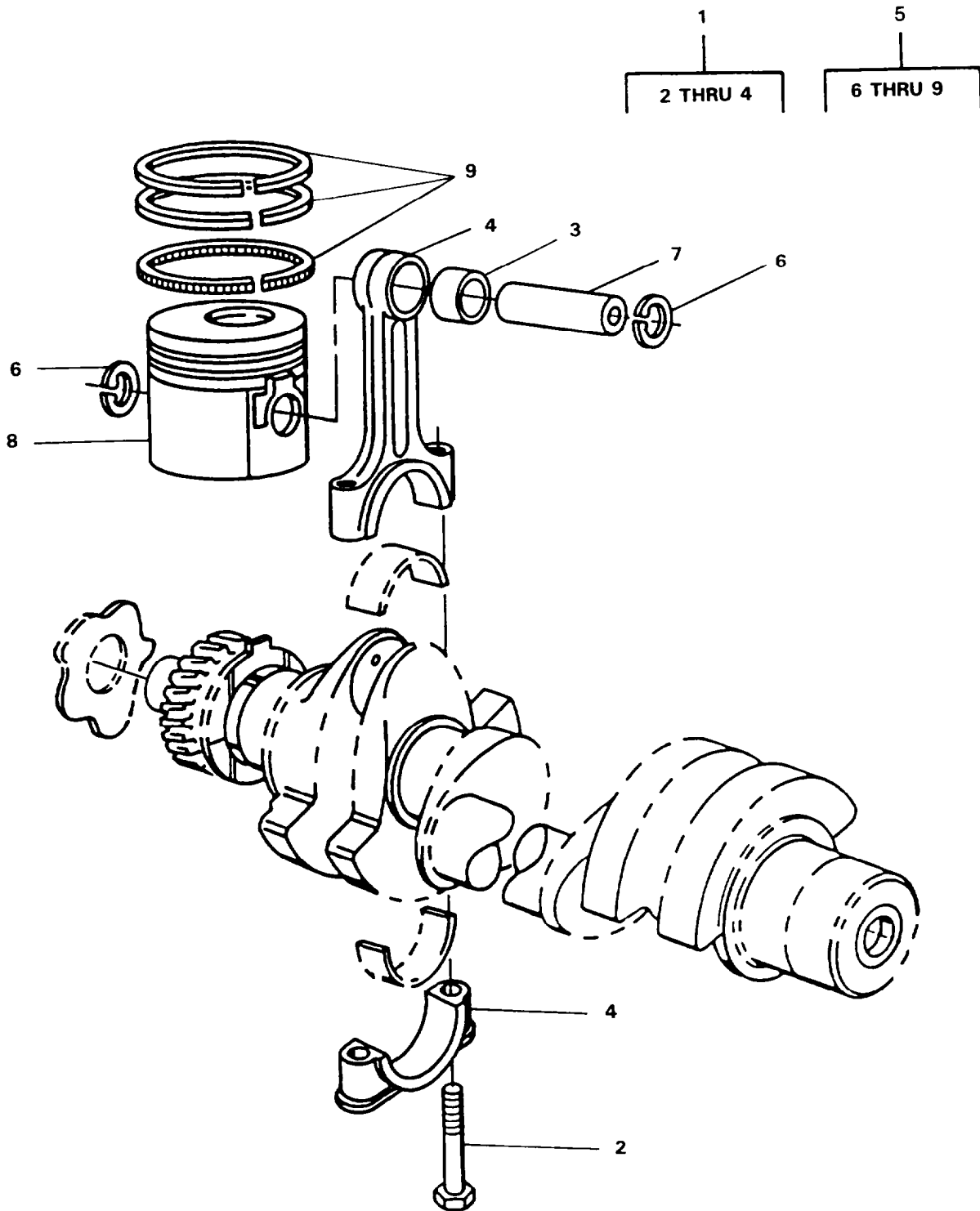


FIGURE 15. Piston and Connecting Rod Assembly

**ARMY TM 9-2815-253-24P**  
**AIR FORCE TO 38G1-93-4**  
**MARINE CORPS TM 2815-24P/1**

(1) ITEM NO.	(2) SMR CODE			(3)		(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODE (UOC)	(6) QTY	(7) USMC QTY PER EQUIP
	a. ARMY	b. AIR FORCE	c. NAVY	d. USMC	FSCM				
							GROUP 07 - ENGINE SUBASSEMBLY FIG. 15 - PISTON AND CONNECTING ROD ASSY		
1	PAHHH	PAOOO		PAHHH	44940	186-6078	CONNECTING ROD, PIST	4	4
2	PAHZZ	PAOZZ		PAHZZ	44940	186-6079	BOLT, MACHINE	2	8
3	PAHZZ	PAOZZ		PAHZZ	44940	186-6080	. BUSHING, SLEEVE	1	4
4	XAHZZ	XA		XAHZZ	44940	186-6078-01	CONNECTING ROD	4	4
5	PAHHH	PAOOO		PAHHH	44940	186-6067	PISTON, INTERNAL COM STANDARD	4	4
5	XDHZZ	XB		XBHZZ	44940	186-6068	PISTON ASSY OVERSIZE .25 MM	4	4
5	XDHZZ	XB		XBHZZ	44940	186-6069	PISTON ASSY OVERSIZE 50MM	4	4
5	XDHZZ	XB		XBHZZ	44940	186-6070	PISTON ASSY OVERSIZE .75 MM	4	4
5	XDHZZ	XB		XBHZZ	44940	186-6071	PISTON ASSY OVERSIZE 1.0 MM	4	4
6	PAHZZ	PAOZZ		PAHZZ	44940	186-6072	RING, RETAINING	2	8
7	XAHZZ	XA		XAHZZ	44940	186-6067-02	PIN, WRIST	1	4
8	XAHZZ	XA		XAHZZ	44940	186-6067-01	. PISTON STANDARD	1	4
8	XAHZZ	XA		XAHZZ	44940	186-6068-01	. PISTON OVERSIZE .25 MM	1	4
8	XAHZZ	XA		XAHZZ	44940	186-6069-01	. PISTON OVERSIZE .50 MM	1	4
8	XAHZZ	XA		XAHZZ	44940	186-6070-01	. PISTON OVERSIZE .75 MM	1	4
8	XAHZZ	XA		XAHZZ	44940	186-6071-02	PISTON OVERSIZE 1.0 MM	1	4
9	PAHZZ	PAOZZ		PAHZZ	44940	186-6073	RING, SET, PISTON STANDARD	1	4
9	XAHZZ	XA		XAHZZ	44940	186-6074	. RING SET OVERSIZE .25 MM	1	4
9	XAHZZ	XA		XAHZZ	44940	186-6075	. RING SET OVERSIZE .50 MM	1	4
9	XAHZZ	XAHZZ		XAHZZ	44940	186-6076	RING SET OVERSIZE .75 MM	1	4
9	XAHZZ	XAHZZ		XAHZZ	44940	186-6077	RING SET	1	4

END OF FIGURE

ARMY TM 9-2815-253-24P  
AIR FORCE TO 38G1-93-4  
MARINE CORPS TM 2815-24P/1

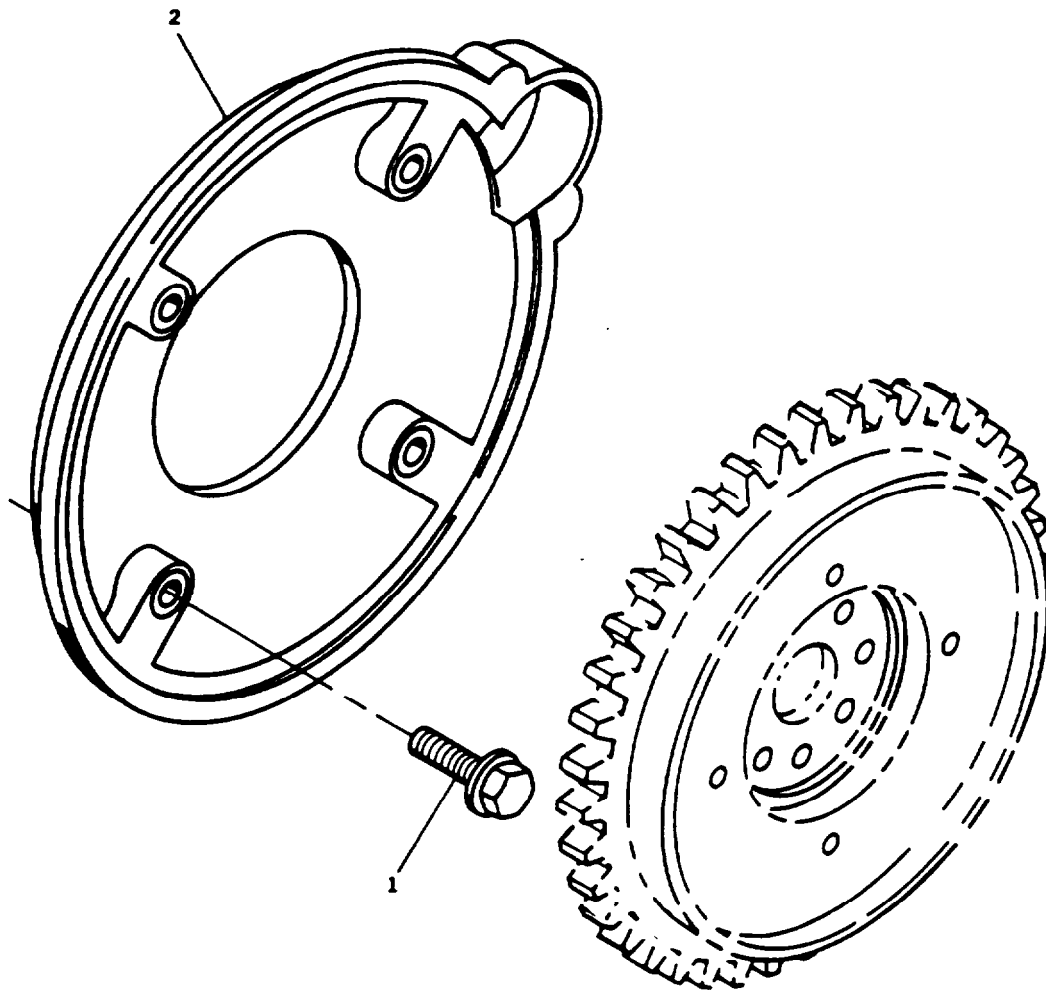


FIGURE 16. Flywheel Housing

**ARMY TM 9-2815-253-24P  
AIR FORCE TO 38G1-93-4  
MARINE CORPS TM 2815-24P/1**

(1)	(2) SMR CODE				(3)	(4)	(5)	(6)	(7)
ITEM NO.	a. ARMY	b. AIR FORCE	c. NAVY	d. USMC	FSCM	PART NUMBER	DESCRIPTION AND USABLE ON CODE (UOC)	QTY	USMC QTY PER EQUIP
							GROUP 07 - ENGINE SUBASSEMBLY		
							FIG. 16 - FLYWHEEL HOUSING		
1	PAHZZ	PAOZZ		PAHZZ	44940	186-6198	SCREW, MACHINE	4	4
2	XDHZZ	XB		XBHZZ	44940	231-0307	HOUSING, FLYWHEEL	1	1
							END OF FIGURE		

ARMY TM 9-2815-253-24P  
AIR FORCE TO 38G1-93-4  
MARINE CORPS TM 2815-24P/1

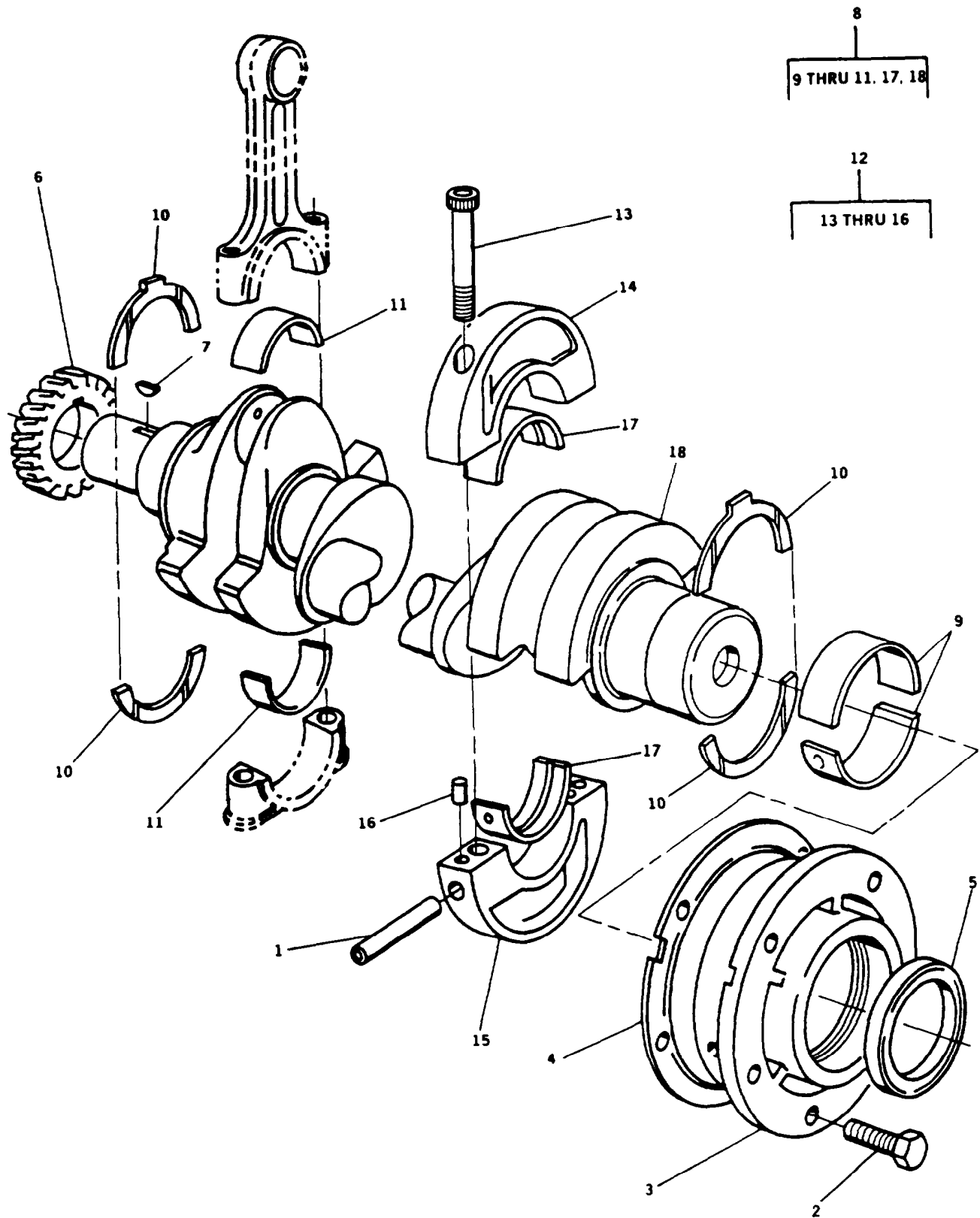


FIGURE 17. Crankshaft Assembly



**ARMY TM 9-2815-253-24P**  
**AIR FORCE TO 38G1-93-4**  
**MARINE CORPS TM 2815-24P/1**

(1) ITEM NO	(2) SMR CODE				(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODE (UOC)	(6) QTY	(7) USMC QTY PER EQUIP
	a. ARMY	b. AIR FORCE	c. NAVY	d. USMC					
GROUP 07 - ENGINE SUBASSEMBLY FIG. 17 - CRANKSHAFT ASSEMBLY									
1	PAHZZ	PAOZZ		PAHZZ	44940	186-6057	PIN, STRAIGHT, HEADLE	3	3
2	PAHZZ	PAOZZ		PAHZZ	97947	272-00039	BOLT, MACHINE M8 X 1.25 X 20	5	5
3	XDHZZ	XB		XBHZZ	44940	186-6058	HOUSING, MAIN BRG	1	1
4	PAHZZ	PAOZZ		PAHZZ	44940	186-6065	SPACER, PLATE .38 MM THK, PART OF KIT P/N 186-6213	1	1
4	PAHZZ	PAOZZ		PAHZZ	44940	186-6066	SPACER, PLATE .5 MM THK, PART OF KIT P/N 186-6213	1	1
5	PAHZZ	PAOZZ		PAHZZ	44940	186-6063	SEAL, PLAIN ENCASED, PART OF KIT P/N 186-6213	1	1
6	PBHZZ	PBOZZ		PBHZZ	44940	186-6054	GEAR, HELICAL	1	1
7	PAHZZ	PAOZZ		PAHZZ	44940	186-6055	KEY, WOODRUFF	1	1
8	PBHZZ	PBOZZ		PBHZZ	44940	186-6047	CRANKSHAFT, ENGINE	1	1
9	PAHZZ	PAOZZ		PAHZZ	44940	186-6060	BEARING, ROLLER	1	1
9	XDHZZ	XB		XBHZZ	44940	186-6061	. BEARING, HALF, SLEEVE UNDERSIZE .25 MM	1	1
9	XDHZZ	XB		XBHZZ	44940	186-6062	. BEARING, HALF, SLEEVE UNDERSIZE .50 MM	1	1
10	PAHZZ	PAOZZ		PAHZZ	44940	186-6056	. BEARING, WASHER, THRU	1	1
11	PAHZZ	PAOZZ		PAHZZ	44940	186-6081	. BEARING, BALL STANDARD	4	4
11	XDHZZ	XB		XBHZZ	44940	186-6082	. BEARING, PLAIN, ROD E UNDERSIZE .25 MM	4	4
11	XDHZZ	XB		XBHZZ	44940	186-6083	. BEARING, PLAIN, ROD E UNDERSIZE .50 MM	4	4
12	XDHHH	XB		XDHHH	44940	186-6048	HOUSING ASSY	3	3
13	PAHZZ	PAOZZ		PAHZZ	44940	186-6050	. SCREW, CAP, HEXAGON	2	6
14	XAHZZ	XA		XAHZZ	44940	186-6048-01	. HOUSING, UPPER	1	1
15	XAHZZ	XA		XAHZZ	44940	186-6048-02	. HOUSING, LOWER	1	1
16	XDHZZ	XB		XBHZZ	44940	186-6049	. PIN, STRAIGHT	2	6
17	PAHZZ	PAOZZ		PAHZZ	44940	186-6051	. BUSHING, BLANK	3	3
17	XDHZZ	XB		XBHZZ	44940	186-6052	. BEARING, HALF, SLEEVE UNDERSIZE .25 MM	3	3
17	XDHZZ	XB		XBHZZ	44940	186-6053	. BEARING, HALF, SLEEVE UNDERSIZE .50 MM	3	3
18	XAHZZ	XA		XAHZZ	44940	186-6047-01	CRANKSHAFT	1	1

ARMY TM 9-2815-253-24P  
 AIR FORCE TO 38G1-93-4  
 MARINE CORPS TM 2815-24P/1

(1) ITEM NO.	a. ARMY	(2) SMR b. AIR	CODE c.	d. USMC	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODE (UOC)	(6) QTY EQUIP	(7) USMC QTY PER PER
	PAHZZ	PAOZZ		PAHZZ	44940	186-6213	GASKET SET, ENGINE	1	1
							GASKET, INLET (4) 1-5		
							GASKET, EXHAUST (4) 2-3		
							GASKET (1) 3-4		
							GASKET (1) 3-12		
							GASKET (1) 3-14		
							PACKING, PREFORMED (2) 3-15		
							SEAL, NONMETAL (2) 4-9		
							WASHER, FLAT (4) 5-5		
							GASKET (1) 7-6		
							GASKET (1) 7-15		
							PACKING, PREFORMED (1) 9-30		
							PACKING, PREFORMED (8) 11-2		
							GASKET (4) 11-4		
							SEAL, VALVE STEM (8) 12-13		
							SEAL, PUSH ROD TUBE (8) 12-17		
							WASHER, FLAT (8) 12-19		
							SEAL, PUSH ROD (8) 12-21		
							GASKET (1) 13-4		
							SEAL, PLAIN (1) 13-7		
							SPACER, PLATE (2) 17-4		
							SEAL, PLAIN (1) 17-5		
							END OF FIGURE		



ARMY TM 9-2815-253-24P  
AIR FORCE TO 38G1-93-4  
MARINE CORPS TM 2815-24P/1

3  
4 THRU 10

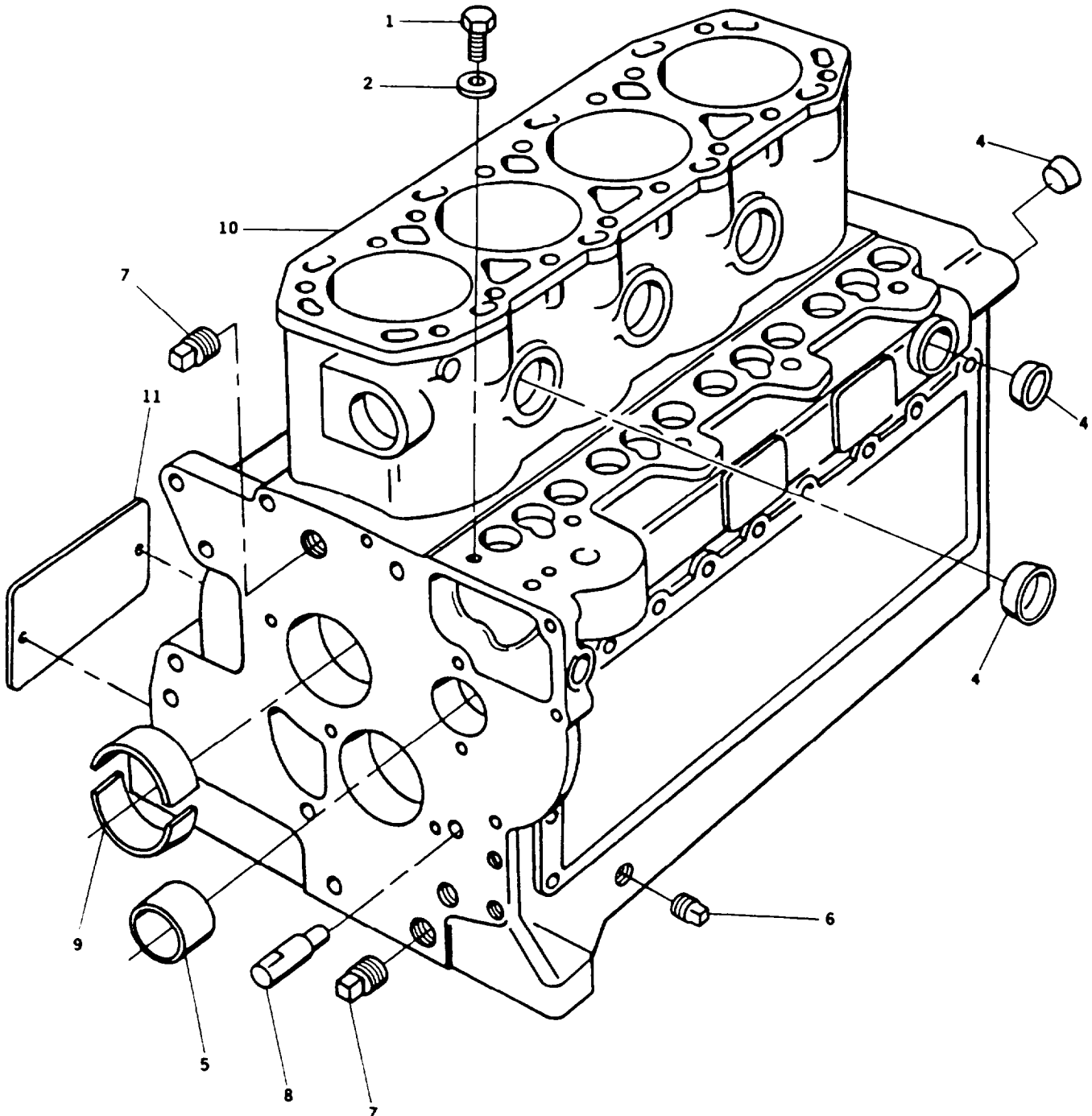


FIGURE 18. Crankcase Assembly

**ARMY TM 9-2815-253-24P**  
**AIR FORCE TO 38G1-93-4**  
**MARINE CORPS TM 2815-24P/1**

(1)	(2)				(3)	(4)	(5)	(6)	(7)
ITEM NO.	SMR CODE				FSCM	PART NUMBER	DESCRIPTION AND USABLE ON CODE (UOC)	QTY	USMC QTY PER EQUIP
	a.	b.	c.	d.					
	ARMY	AIR FORCE	NAVY	USMC					
							GROUP 07 - ENGINE SUBASSEMBLY FIG. 18 - CRANKCASE ASSEMBLY		
1	PAOZZ	PAOZZ		PAOZZ	44940	186-6230	SCREW, CAP, HEXAGON H M8 X 1.25 X 8	2	2
2	PAOZZ	PAOZZ		PAOZZ	24439	616-01608	WASHER, FLAT COPPER	2	2
3	PBHHH	XA		PBHHH	44940	186-6001	ENGINE BLOCK ASSEMB	1	1
4	PAFZZ	PAOZZ		PAFZZ	44940	186-6002	. PLUG, EXPANSION ASSORTMENT	4	1
5	PAHZZ	PAOZZ		PAHZZ	44940	186-6006	. BEARING, SLEEVE	1	1
6	PAOZZ	PAOZZ		PAOZZ	44940	505-0056	. PLUG, PIPE	1	1
7	PAOZZ	PAOZZ		PAOZZ	81348	WW-P-471AASBCC	. PLUG, PIPE	2	3
8	PAFZZ	PAOZZ		PAFZZ	44940	186-6008	. PIN, STRIGHT HEADLES	2	2
9	PAHZZ	PAOZZ		PAHZZ	44940	186-6003	. BEARING, PLAIN STD MAIN BEARING	1	1
9	XDHZZ	XB		XBHZZ	44940	186-6004	. BEARING, HALF, SLEEVE UNDERSIZE .25 MM	1	1
9	XDHZZ	XB		XBHZZ	44940	186-6005	. BEARING, HALF, SLEEVE UNDERSIZE .50 MM	1	1
10	XAHZZ	XA		XAHZZ	44940	186-6001-1	. BLOCK, ENGINE	1	1
11	XDHZZ	XB		XBHZZ	44949	186-6229	PLATE, IDENTIFICATIO ID PLATE SELF-ADHESIVE	1	1

END OF FIGURE



**ARMY TM 9-2815-253-24P  
 AIR FORCE TO 38G1-93-4  
 MARINE CORPS TM 2815-24P/1**

(1)	(2)				(3)	(4)	(5)	(6)	(7)
ITEM	a.	b.	c.	d.	FSCM	PART	DESCRIPTION AND	QTY	USMC
NO.	ARMY	FORCE	NAVY	USMC	FSCM	NUMBER	USABLE ON CODE (UOC)	QTY	EQUIP

1	PAOZZ	PAOZZ		PAOZZ	44940	503-1052			
---	-------	-------	--	-------	-------	----------	--	--	--

FIG. - BULK

HOSE, NONMETALLIC

END OF FIGURE

ARMY TM 9-2815-253-24P  
AIR FORCE TO 38G1-93-4  
MARINE CORPS TM 2815-24P/1

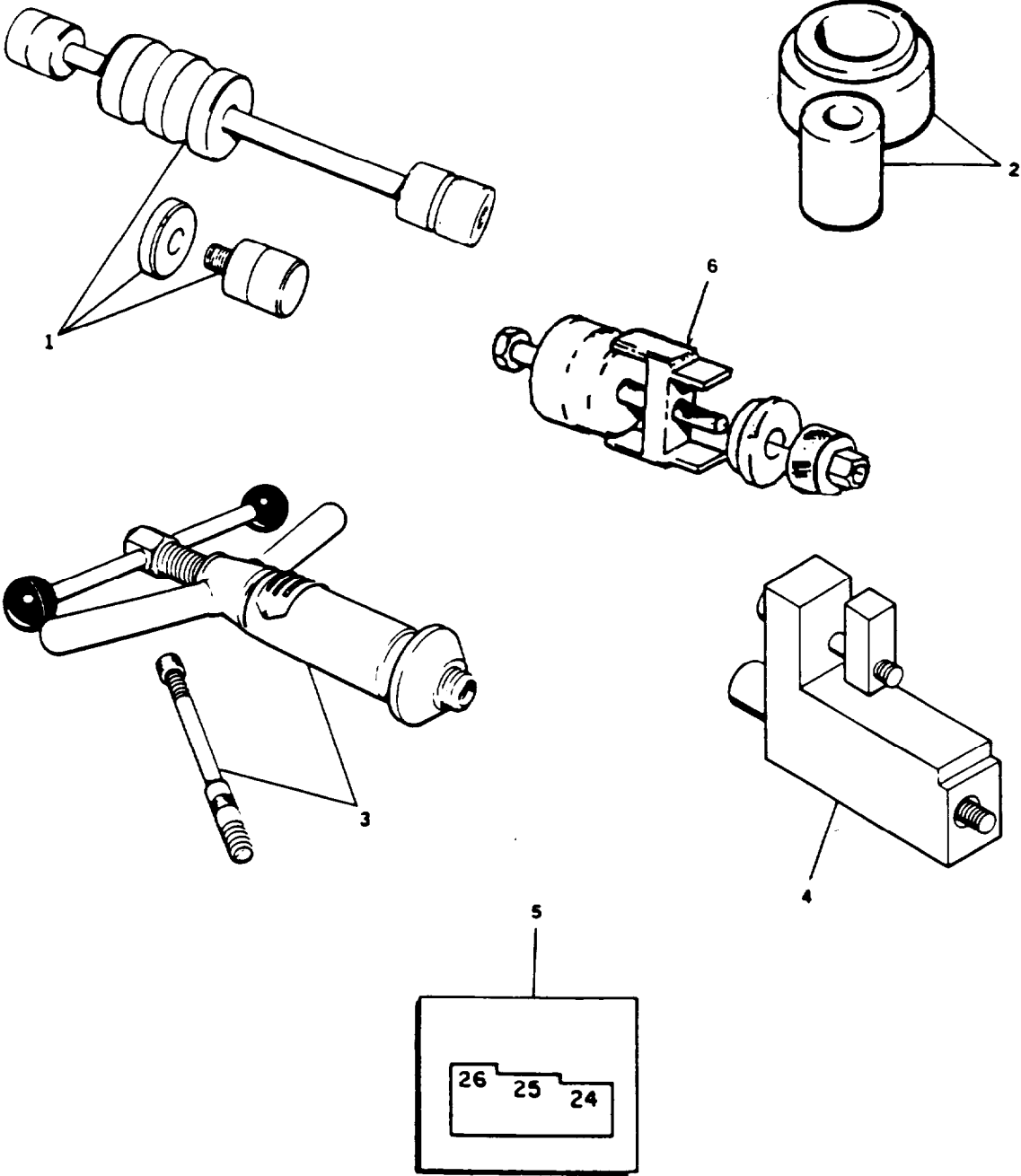


FIGURE 19. Special Tools



**ARMY TM 9-2815-253-24P**  
**AIR FORCE TO 38G1-93-4**  
**MARINE CORPS TM 2815-24P/1**

(1)	(2)				(3)	(4)	(5)	(6)	(7)
ITEM NO.	SMR CODE		NAVY	USMC	FSCM	PART NUMBER	DESCRIPTION AND USABLE ON CODE (UOC)	QTY	USMC QTY PER EQUIP
	a. ARMY	b. AIR							
GROUP 08 - SPECIAL TOOLS									
FIG. 19 - SPECIAL TOOLS									
1	PEHZZ	PEOZZ		PEHZZ	97947	317-50106	INSERTER AND REMOVE USED TO REMOVE/INSTALL CAMSHAFT BUSHING.	1	1
2	PEFZZ	PEFZZ		PEFZZ	97947	317-50108	PULLER, MECHANICAL USED TO INSTALL VALVE GUIDES	1	1
3	PEFZZ	PEFZZ		PEFZZ	97947	317-50033	PULLER, MECHANICAL USED TO REMOVE/INSTALL VALVE GUIDES.	1	1
4	PEFZZ	PEFZZ		PEFZZ	97947	317-50114	GAGE, RACK SETTING USED TO ADJUST FUEL PUMP RACK.	1	1
5	PEFZZ	PEFZZ		PEFZZ	97947	317-50115	GAGE, GOVERNOR SET USED TO SET GOVERNOR STOPS.	1	1
6	PEHZZ	PEOZZ		PEHZZ	97947	317-50111	INSERTER AND REMOVE USED TO REMOVE/INSTALL MAIN BEARINGS.	1	1
END OF FIGURE									



SECTION IV

CROSS REFERENCE INDEXES  
NATIONAL STOCK NUMBER INDEX

STOCKNUMBER	FIG.	ITEM	STOCKNUMBER	FIG.	ITEM
2910-00-099-5467	4		5310-01-276-8608	10	6
4730-00-187-4202	13	9	5306-01-284-3794	3	1
4730-00-187-4202	18	7	4730-01-303-0840	4	12
5975-00-727-5153	5	6	5306-01-314-6734	9	26
4730-00-833-7983	18	6	5310-01-321-3478	10	2
5310-01-018-5472	12	16	5310-01-321-4088	10	4
5310-01-018-5472	18	2	5310-01-333-8085	9	6
5310-01-060-9104	4	28	5310-01-333-8085	9	36
5305-01-061-4892	4	27	5306-01-335-6157	7	12
5310-01-085-1019	3	2	5325-01-336-5227	12	21
5330-01-085-3102	7	2	5306-01-338-0211	17	2
5310-01-086-1527	3	8	5306-01-338-0214	3	6
5310-01-086-1527	7	3	2910-01-355-6028	5	7
5310-01-086-1527	12	1	5340-01-356-6147	4	8
5330-01-087-7373	11	2	5306-01-356-7105	1	2
2815-01-101-2431	12	7	5306-01-356-7106	5	10
2910-01-110-8184	4	15	5306-01-356-7107	11	7
2815-01-139-4010	4		5310-01-356-7108	2	1
5310-01-158-3188	4	14	5310-01-356-7108	7	16
5305-01-158-3207	12	15	5310-01-356-7109	10	3
5305-01-163-5075	14	4	5310-01-356-7110	6	6
5305-01-166-0616	9	7	5330-01-356-7136	1	5
5305-01-166-0616	9	39	5330-01-356-7137	2	3
5305-01-178-7349	4	13	5330-01-356-7138	11	4
5305-01-178-7349	8	2	5310-01-356-7153	6	7
5305-01-184-1937	14	11	5330-01-356-7173	4	9
5330-01-207-7350	3	15	5310-01-356-8341	11	1
5305-01-212-3227	10	5	5305-01-356-9468	6	4
5306-01-212-3228	10	10	5305-01-357-0896	10	1
5305-01-212-3371	10	8	2815-01-357-5448	15	1
2920-01-212-4008	10	14	4730-01-357-8705	5	8
5945-01-213-9233	10	9	4730-01-357-8706	5	4
2920-01-214-6655	10	15	2815-01-357-8793	18	3
5340-01-215-2927	10	11	2815-01-357-8803	15	5
2920-01-219-8200	10	7	2815-01-357-9718	14	10
5340-01-223-8726	10	19	2815-01-357-9719	17	8
2920-01-223-8762	10	24	5315-01-358-3737	14	7
2520-01-223-8780	10	23	5360-01-358-3755	12	9
5977-01-224-2917	10	12	5310-01-358-3905	11	5
2920-01-224-6246	10	18	5310-01-358-4726	14	5
2920-01-224-6247	10	17	5330-01-358-4739	17	5
2920-01-224-8389	10	16	5330-01-358-5435	3	14
3020-01-225-6988	10	21	5330-01-358-5438	13	4
5360-01-227-3195	10	13	5310-01-358-5544	4	1
5360-01-227-6302	10	20	5330-01-358-5554	13	7
2920-01-228-3708	10	22	5330-01-358-5557	7	6

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STOCKNUMBER	FIG.	ITEM	STOCKNUMBER	FIG.	ITEM
5330-01-358-5560	3	4	6685-01-360-9653	3	5
4730-01-358-6994	4	10	2815-01-361-0770	11	9
3120-01-358-7345	14	3	2940-01-361-5161	7	10
2815-01-358-7716	12	6	5330-01-361-5286	12	13
3120-01-358-9596	18	5	5330-01-361-5288	9	30
3110-01-359-0114	17	9	5330-01-361-5288	9	46
5306-01-359-0121	12	3	5310-01-361-5469	6	3
5306-01-359-0122	12	5	5310-01-361-5470	12	4
5365-01-359-0172	15	6	5310-01-361-5471	9	27
5307-01-359-0182	7	7	5310-01-361-5471	9	40
5305-01-359-0185	9	32	5305-01-361-6562	13	5
5305-01-359-0188	9	35	5360-01-361-6954	9	38
5305-01-359-0189	17	13	5307-01-361-6998	2	4
5365-01-359-0205	17	17	2815-01-361-7711	12	12
5305-01-359-1329	9	34	2815-01-361-7737	4	7
5305-01-359-1330	18	1	5340-01-361-7901	9	17
5330-01-359-1499	7	9	4820-01-361-8099	8	5
5306-01-359-4621	15	2	3120-01-361-8381	18	9
3120-01-359-4681	14	2	3020-01-362-1817	17	6
5307-01-359-4688	4	5	3040-01-362-3508	14	8
2815-01-359-4955	8	4	5330-01-362-5941	12	18
2930-01-359-4992	3	9	5330-01-362-6111	12	18
3120-01-359-6762	15	3	5330-01-362-6155	12	
3120-01-359-7002	9	31	2815-01-363-2256	15	9
3120-01-359-7002	9	47	3110-01-369-8672	17	11
5307-01-359-7973	3	17	5340-01-369-9487	14	6
4520-01-359-8114	1	1	5305-01-370-0269	9	19
2815-01-359-8471	12	14	5315-01-370-5550	18	8
2815-01-359-8473	12	22	5330-01-371-3574	12	18
5305-01-359-8790	3	7	5340-01-374-2403	18	4
5305-01-359-8791	13	1	5307-01-378-7028	7	17
5315-01-360-1643	9	18	3040-01-378-8302	4	6
5360-01-360-1952	9	1	5365-01-381-2361	9	4
5360-01-360-1953	9	2	5330-01-381-2837	17	
5360-01-360-1954	9	9	5365-01-381-5165	17	4
5360-01-360-1956	9	41	5365-01-381-6431	17	4
5310-01-360-1982	5	5	4710-01-382-2822	4	11
5365-01-360-2911	9	5	5310-01-382-7683	3	18
5365-01-360-2911	9	20	5310-01-383-1585	5	9
5365-01-360-2911	14	9	5310-01-383-1608	7	4
5365-01-360-2925	4	4	5310-01-383-2019	1	3
2815-01-360-3221	12	11	5310-01-383-2019	7	13
5330-01-360-4778	3	12	5310-01-383-2019	8	3
5305-01-360-5280	16	1	5310-01-383-2019	13	2
2915-01-360-6943	4	3	5315-01-383-3444	17	7
5310-01-360-7885	14	1	5365-01-383-8708	11	8

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STOCK NUMBER	FIG.	ITEM	STOCK NUMBER	FIG.	ITEM
5330-01-383-8834	7	15			
3120-01-383-9112	9	22			
5340-01-383-9379	3	10			
5315-01-383-9717	17				
5340-01-384-2996	12	10			
5120-01-384-6757	19	2			
5120-01-384-6759	19	1			
5120-01-384-6762	19	3			
5120-01-384-6764	19	6			
5210-01-384-8634	19	4			
5340-01-384-9959	12	8			
4730-01-385-1078	3	16			
4730-01-385-1094	7	11			
4730-01-385-5915	3	11			
5210-01-392-5746	19	5			
3120-01-396-8376	17	10			
4720-01-411-4003	BULK				

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FSCM	PARTNUMBER	STOCKNUMBER	FIG.	ITEM
97947	000-06477	4720-01-411-4003	BULK	1
97947	027-00082	5310-01-085-1019	3	2
57386	04100253	2815-01-101-2431	12	7
56161	10503805	5305-01-178-7349	4	13
			8	2
56161	10504502	5305-01-166-0616	9	7
			9	39
56161	10526115	5306-01-284-3794	3	1
15526	127-B6	5310-01-158-3188	4	14
44940	149-2379	-----	4	29
44940	186-6001	2815-01-357-8793	18	3
44940	186-6001-1	-----	18	10
44940	186-6002	5340-01-374-2403	18	4
44940	186-6003	3120-01-361-8381	18	9
44940	186-6004	-----	18	9
44940	186-6005	-----	18	9
44940	186-6006	3120-01-358-9596	18	5
44940	186-6008	5315-01-370-5550	18	8
44940	186-6011	-----	7	14
44940	186-6012	5330-01-383-8834	7	15
44940	186-6015	5310-01-383-2019	1	3
			7	13
			8	3
			13	2
44940	186-6016	-----	7	5
44940	186-6017	5330-01-358-5557	7	6
44940	186-6018	5307-01-359-0182	7	7
44940	186-6019	5310-01-383-1608	7	4
44940	186-6021	4730-01-385-1094	7	11
44940	186-6023	-----	7	8
44940	186-6024	5330-01-359-1499	7	9
44940	186-6025	2940-01-361-5161	7	10
44940	186-6027	-----	7	1
44940	186-6030	2815-01-359-4955	8	4
44940	186-6031	4820-01-361-8099	8	5
44940	186-6033	-----	8	1
44940	186-6036	2815-01-357-9718	14	10
44940	186-6038	5310-01-358-4726	14	5
44940	186-6039	3040-01-362-3508	14	8
44940	186-6040	5315-01-358-3737	14	7
44940	186-6042	5340-01-369-9487	14	6
44940	186-6044	3120-01-359-4681	14	2
44940	186-6045	5310-01-360-7885	14	1
44940	186-6047	2815-01-357-9719	17	8

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FSCM	PART NUMBER	STOCK NUMBER	FIG.	ITEM
44940	186-6047-01	-----	17	18
44940	186-6048	-----	17	12
44940	186-6048-01	-----	17	14
44940	186-6048-02	-----	17	15
44940	186-6049	-----	17	16
44940	186-6050	5305-01-359-0189	17	13
44940	186-6051	5365-01-359-0205	17	17
44940	186-6052	-----	17	17
44940	186-6053	-----	17	17
44940	186-6054	3020-01-362-1817	17	6
44940	186-6055	5315-01-383-3444	17	7
44940	186-6056	3120-01-396-8376	17	10
44940	186-6057	5315-01-383-9717	17	1
44940	186-6058	-----	17	3
44940	186-6060	3110-01-359-0114	17	9
44940	186-6061	-----	17	9
44940	186-6062		17	9
44940	186-6063	5330-01-358-4739	17	5
44940	186-6065	5365-01-381-6431	17	4
44940	186-6066	5365-01-381-5165	17	4
44940	186-6067	2815-01-357-8803	15	5
44940	186-6067-01	-----	15	8
44940	186-6067-02	-----	15	7
44940	186-6068	- - -	15	5
44940	186-6068-01	- - -	15	8
44940	186-6069	- - -	15	5
44940	186-6069-01	- - -	15	8
44940	186-6070	- - -	15	5
44940	186-6070-01	- - -	15	8
44940	186-6071	- - -	15	5
44940	186-6071-02	- - -	15	8
44940	186-6072	5365-01-359-0172	15	6
44940	186-6073	2815-01-363-2256	15	9
44940	186-6074	-----	15	9
44940	186-6075	-----	15	9
44940	186-6076	-----	15	9
44940	186-6077	-----	15	9
44940	186-6078	2815-01-357-5448	15	1
44940	186-6078-01	-----	15	4
44940	186-6079	5306-01-359-4621	15	2
44940	186-6080	3120-01-359-6762	15	3
44940	186-6081	3110-01-369-8672	17	11
44940	186-6082	- - -	17	11
44940	186-6083	- - -	17	11

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FSCM	PARTNUMBER	STOCKNUMBER	FIG.	ITEM
44940	186-6085	2815-01-358-7716	12	6
44940	186-6086	2815-01-361-7711	12	12
44940	186-6087	2815-01-360-3221	12	11
44940	186-6088	5340-01-384-2996	12	10
44940	186-6089	5360-01-358-3755	12	9
44940	186-6090	5340-01-384-9959	12	8
44940	186-6092	2815-01-359-8471	12	14
44940	186-6094	-----	11	6
44940	186-6095	5310-01-358-3905	11	5
44940	186-6098	2815-01-361-0770	11	9
44940	186-6099	-----	12	20
44940	186-6101	-----	12	19
44940	186-6102	-----	12	17
44940	186-6103	2815-01-359-8473	12	22
44940	186-6104	5306-01-356-7107	11	7
44940	186-6105	5306-01-359-0122	12	5
44940	186-6106	5306-01-359-0121	12	3
44940	186-6107	5365-01-383-8708	11	8
44940	186-6111	5330-01-362-5941	12	18
44940	186-6112	5330-01-362-6111	12	18
44940	186-6113	5330-01-371-3574	12	18
44940	186-6114	5310-01-361-5470	12	4
44940	186-6115	-----	12	2
44940	186-6116	-----	11	3
44940	186-6117	5330-01-356-7138	11	4
44940	186-6118	5310-01-356-8341	11	1
44940	186-6119-02	-----	9	14
44940	186-6119-03	- - -	9	10
			9	23
44940	186-6119-04	- - -	9	11
44940	186-6119-05	-----	9	15
44940	186-6119-06	- - - -	9	13
44940	186-6120	-----	9	8
44940	186-6120-01	-----	9	12
44940	186-6121	5360-01-360-1954	9	9
44940	186-6122	-----	9	21
44940	186-6123	-----	9	25
44940	186-6123-01	-----	9	33
44940	186-6123-02	-----	9	29
44940	186-6123-03	-----	9	28
44940	186-6124	3120-01-359-7002	9	31
			9	47
44940	186-6125	5305-01-359-0185	9	32
44940	186-6126	5305-01-359-1329	9	34



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FSCM	PARTNUMBER	STOCKNUMBER	FIG.	ITEM
44940	186-6127	5305-01-359-0188	9	35
44940	186-6129	5330-01-361-5288	9	30
			9	48
44940	186-6131	5310-01-361-5471	9	27
			9	40
44940	186-6132	-----	9	37
44940	186-6132-01	-----	9	45
44940	186-6132-02	-----	9	43
44940	186-6132-03	-----	9	42
44940	186-6135	-----	6	8
44940	186-6136	5360-01-361-6954	9	38
44940	186-6137	5360-01-360-1956	9	41
44940	186-6138	5360-01-360-1952	9	1
44940	186-6140	5315-01-369-7214	9	50
44940	186-6140-1	-----	9	3
44940	186-6141	5365-01-381-2361	9	4
44940	186-6142	5360-01-360-1953	9	2
44940	186-6143	5365-01-360-2911	9	5
			9	20
			14	9
44940	186-6146	-----	13	3
44940	186-6147	5330-01-358-5438	13	4
44940	186-6148	5330-01-358-5554	13	7
44940	186-6149	-----	13	8
44940	186-6150	5305-01-359-8791	13	1
44940	186-6151	2915-01-360-6943	4	3
44940	186-6152	2815-01-361-7737	4	7
44940	186-6153	5307-01-359-4688	4	5
44940	186-6154	5310-01-358-5544	4	1
44940	186-6157	5365-01-360-2925	4	4
44940	186-6158	-----	4	2
44940	186-6160	4710-01-382-2822	4	11
44940	186-6161	4730-01-358-6994	4	10
44940	186-6162	5340-01-356-6147	4	8
44940	186-6163	5330-01-356-7173	4	9
44940	186-6164	4730-01-357-8705	5	8
44940	186-6165	5310-01-383-1585	5	9
44940	186-6166	-----	5	7
44940	186-6168	2910-01-355-6028	5	12
44940	186-6170	-----	5	1
44940	186-6171	-----	5	2
44940	186-6172	-----	5	11
44940	186-6173	5310-01-360-1982	5	13
44940	186-6174	5306-01-356-7106	5	10

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FSCM	PART NUMBER	STOCK NUMBER	FIG.	ITEM
44940	186-6175	-----	5	5
44940	186-6 176	-----	5	3
44940	186-6177	4730-01-357-8706	5	4
44940	186-6178	2930-01-359-4992	3	9
44940	186-6179	-----	6	1
44940	186-6180	5330-01-360-4778	3	12
44940	186-6181	-----	3	13
44940	186-6182	5330-01-358-5435	3	14
44940	186-6183	4730-01-385-1078	3	16
44940	186-6186	5305-01-359-8790	3	7
44940	186-6188	5307-01-359-7973	3	17
44940	186-6189	-----	3	3
44940	186-6190	5330-01-358-5560	3	4
44940	186-8193	6685-01-360-9653	3	5
44940	186-6194	5310-01-382-7683	3	18
44940	186-6195	-----	13	6
44940	186-6196	5305-01-361-6562	13	5
44940	186-6198	5305-01-360-5280	16	1
44940	186-6200	-----	1	4
44940	186-6202	5330-01-356-7136	1	5
44940	186-6203	5306-01-356-7105	1	2
44940	186-6205	-----	2	2
44940	186-6206	5330-01-356-7137	2	3
44940	186-6208	5307-01-361-6998	2	4
44940	186-6209	5310-01-356-7108	2	1
			7	16
44940	186-6211	5330-01-362-6155	12	
44940	186-6213	5330-01-381-2837	17	
44940	186-6229	-----	18	11
44940	186-6230	5305-01-359-1330	18	1
44940	186-6233	5310-01-361-5469	6	3
44940	186-6234	-----	6	9
44940	186-6235	5310-01-356-7110	6	6
44940	186-6240	5310-01-356-7153	6	7
44940	186-6250	5307-01-378-7028	7	17
44940	186-6251	-----	6	5
44940	186-6252	-----	6	2
44940	186-6255	-----	12	23
44940	186-6257	5330-01-361-5286	12	13
44940	186-6260	5305-01-370-0269	9	19
44940	186-6261	5340-01-361-7901	9	17
44940	186-6263	-----	5	14
44940	186-6264	4520-01-359-8114	1	1
44940	186-6265	-----	9	44

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FSCM	PART NUMBER	STOCK NUMBER	FIG.	ITEM
44940	186-6267	5315-01-360-1643	9	18
44940	186-6268	3120-01-358-7345	14	3
44940	186-6278-01	-----	4	26
44940	186-6278-02	-----	4	24
44940	186-6278-03	-----	4	18
44940	186-6279-01	-----	4	25
44940	186-6279-02	-----	4	22
44940	186-6279-03	-----	4	19
44940	186-6279-04	-----	4	23
44940	186-6282	5340-01-383-9379	3	10
44940	186-6283	4730-01-385-5915	3	11
44940	186-6287	-----	9	16
44940	186-6287-01	-----	9	24
44940	186-6288	3120-01-383-9112	9	22
44940	186-6289	-----	4	17
44940	186-6290	3040-01-378-8302	4	6
44940	186-6293-01	-----	4	16
44940	186-6293-02	-----	4	21
44940	186-6293-03	-----	4	20
44940	191-1431	5306-01-212-3228	10	10
44940	191-1432	5340-01-215-2927	10	11
44940	191-1433	5360-01-227-3195	10	13
44940	191-1439	5340-01-223-8726	10	19
44940	191-1440	5360-01-227-6302	10	20
44940	191-1441	2520-01-223-8780	10	23
44940	191-1442	2920-01-224-6247	10	17
44940	191-1444	2920-01-224-6246	10	18
44940	191-1445	2920-01-228-3708	10	22
44940	191-1446	3020-01-225-6988	10	21
44940	191-1450	5305-01-212-3371	10	8
44940	191-1550	2920-01-219-8200	10	7
44940	191-1605	2920-01-223-8762	10	24
44940	191-1606	2920-01-212-4008	10	14
44940	191-1607	2920-01-214-6655	10	15
44940	191-1608	5977-01-224-2917	10	12
44940	191-1609	5945-01-213-9233	10	9
97947	201-13120	5330-01-085-3102	7	2
97947	201-30261	5325-01-336-5227	12	21
97947	201-81200	5330-01-087-7373	11	2
44940	231-0307	-----	16	2
97947	272-00003	5310-01-086-1527	3	8
			7	3
			12	1
97947	272-00039	5306-01-338-0211	17	2

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FSCM	PART NUMBER	STOCK NUMBER	FIG.	ITEM
97947	272-00047	5306-01-338-0214	3	6
97947	272-00256	5306-01-335-6157	7	12
97947	284359	2910-01-110-8184	4	15
97947	317-50033	5120-01-384-6762	19	3
97947	317-50106	5120-01-384-6759	19	1
97947	317-50108	5120-01-384-6757	19	2
97947	317-50111	5120-01-384-6764	19	6
97947	317-50114	5210-01-384-8634	19	4
97947	317-50115	5210-01-392-5746	19	5
97947	393331	2815-01-139-4010	4	
30780	4-4F3BXSS	4730-01-303-0840	4	12
44940	505-0056	4730-00-833-7983	18	6
97947	601-20691	5330-01-207-7350	3	15
24439	616-01608	5310-01-018-5472	12	16
			18	2
97947	702201	5306-01-314-6734	9	26
70040	7961121	2910-00-099-5467	4	
44940	800-0046	5305-01-061-4892	4	27
44940	800-2010	5305-01-356-9468	6	4
44940	850-0050	5310-01-060-9104	4	28
44940	860-2008	5310-01-356-7109	10	3
15526	933-M6-X8	5305-01-163-5075	14	4
15526	933-M6X12	5305-01-184-1937	14	11
15526	934-A4-M5 X .8	5310-01-333-8085	9	36
15526	934-SX-M5 X 0.8	5310-01-333-8085	9	6
52195	APG 1	9150-00-402-2372	BULK	
98308	BRAYC0421C	9150-00-189-6727	BULK	
15434	C0191144300	2920-01-224-8389	10	16
44940	C0718100200	5305-01-357-0896	10	1
15434	C0720180600	5305-01-2 12-3227	10	5
15434	C0740101000	5310-01-276-8608	10	6
15434	C0800205200	5305-01-158-3207	12	15
15434	C0850200500	5310-01-321-3478	10	2
15434	C0850200800	5310-01-321-4088	10	4
			BULK	
81349	MIL-L-2104	9150-01-178-4726	BULK	
96906	MS3367-4-9	5975-00-727-5153	5	6
81348	WW-P-471AASBCC	4730-00-187-4202	13	9
			18	7

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FIGURE AND ITEM NUMBER INDEX

FIG.	ITEM	STOCK NUMBER	FSCM	PARTNUMBER
1	1	4520-01-359-8114	44940	186-6264
1	2	5306-01-356-7105	44940	186-6203
1	3	5310-01-383-2019	44940	186-6015
1	4	-----	44940	186-6200
1	5	5330-01-356-7136	44940	186-6202
2	1	5310-01-356-7108	44940	186-6209
2	2	-----	44940	186-6205
2	3	5330-01-356-7137	44940	186-6206
2	4	5307-01-361-6998	44940	186-6208
3	1	5306-01-284-3794	56161	10526115
3	2	5310-01-085-1019	97947	027-00082
3	3	-----	44940	186-6189
3	4	5330-01-358-5560	44940	186-6190
3	5	6685-01-360-9653	44940	186-6193
3	6	5306-01-338-0214	97947	272-00047
3	7	5305-01-359-8790	44940	186-6186
3	8	5310-01-086-1527	97947	272-00003
3	9	2930-01-359-4992	44940	186-6178
3	10	5340-01-383-9379	44940	186-6282
3	11	4730-01-385-5915	44940	186-6283
3	12	5330-01-3604778	44940	186-6180
3	13	-----	44940	186-6181
3	14	5330-01-358-5435	44940	186-6182
3	15	5330-01-207-7350	97947	601-20691
3	16	4730-01-385-1078	44940	186-6183
3	17	5307-01-359-7973	44940	186-6188
3	18	5310-01-382-7683	44940	186-6194
4	1	5310-01-358-5544	44940	186-6154
4	2	-----	44940	186-6158
4	3	2915-01-360-6943	44940	186-6151
4	4	5365-01-360-2925	44940	186-6157
4	5	5307-01-359-4688	44940	186-6153
4	6	3040-01-378-8302	44940	186-6290
4	7	2815-01-361-7737	44940	186-6152
4	8	5340-01-356-6147	44940	186-6162
4	9	5330-01-356-7173	44940	186-6163
4	10	4730-01-358-6994	44940	186-6161
4	11	4710-01-382-2822	44940	186-6160
4	12	4730-01-303-0840	30780	4-4F3BXSS
4	13	5305-01-178-7349	56161	10503805
4	14	5310-01-158-3188	15526	127-B6
4	15	2910-01-110-8184	97947	284359
4	16	-----	44940	186-6293-01
4	17	-----	44940	186-6289

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CROSS REFERENCE INDEXES  
 FIGURE AND ITEM NUMBER INDEX

FIG.	ITEM	STOCK NUMBER	FSCM	PART NUMBER
4	18	-----	44940	186-6278-03
4	19	-----	44940	186-6279-03
4	20	-----	44940	186-6293-03
4	21	-----	44940	186-6293-02
4	22	-----	44940	186-6279-02
4	23	-----	44940	186-6279-04
4	24	-----	44940	186-6278-02
4	25	-----	44940	186-6279-01
4	26	-----	44940	186-6278-01
4	27	5305-01-061-4892	44940	800-0046
4	28	5310-01-060-9104	44940	850-0050
4	29	-----	44940	149-2379
5	1	-----	44940	186-6170
5	2	-----	44940	186-6171
5	3	-----	44940	503-1052
5	4	4730-01-357-8706	44940	186-6177
5	5	5310-01-360-1982	44940	186-6173
5	6	5975-00-727-5153	96906	MS3367-4-9
5	7	2910-01-355-6028	44940	186-6168
5	8	4730-01-357-8705	44940	186-6164
5	9	5310-01-383-1585	44940	186-6165
5	10	5306-01-356-7106	44940	186-6174
5	11	-----	44940	186-6172
6	1	-----	44940	186-6179
6	2	-----	44940	186-6252
6	3	5310-01-361-5469	44940	186-6233
6	4	5305-01-356-9468	44940	800-2010
6	5	-----	44940	186-6251
6	6	5310-01-356-7110	44940	186-6235
6	7	5310-01-356-7153	44940	186-6240
6	8	-----	44940	186-6135
6	9	-----	44940	186-6234
7	1	-----	44940	186-6027
7	2	5330-01-085-3102	97947	201-13120
7	3	5310-01-086-1527	97947	272-00003
7	4	5310-01-383-1608	44940	186-6019
7	5	-----	44940	186-6016
7	6	5330-01-358-5557	44940	186-6017
7	7	5307-01-359-0182	44940	186-6018
7	8	-----	44940	186-6023
7	9	5330-01-359-1499	44940	186-6024
7	10	2940-01-361-5161	44940	186-6025
7	11	4730-01-385-1094	44940	186-6021
7	12	5306-01-335-6157	97947	272-00256

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CROSS REFERENCE INDEXES  
FIGURE AND ITEM NUMBER INDEX

FIG.	ITEM	STOCKNUMBER	FSCM	PARTNUMBER
7	13	5310-01-383-2019	44940	186-6015
7	14	-----	44940	186-6011
7	15	5330-01-383-8834	44940	186-6012
7	16	5310-01-356-7108	44940	186-6209
7	17	5307-01-378-7028	44940	186-6250
8	1	-----	44940	186-6033
8	2	5305-01-178-7349	56161	10503805
8	3	5310-01-383-2019	44940	186-6015
8	4	2815-01-359-4955	44940	186-6030
8	5	4820-01-361-8099	44940	186-6031
9	1	5360-01-360-1952	44940	186-6138
9	2	5360-01-360-1953	44940	186-6142
9	3	-----	44940	186-6140-1
9	4	5365-01-381-2361	44940	186-6141
9	5	5365-01-360-2911	44940	186-6143
9	6	5310-01-333-8085	15526	934-SX-M5 X 0.8
9	7	5305-01-166-0616	56161	10504502
9	8	-----	44940	186-6120
9	9	5360-01-360-1954	44940	186-6121
9	10	-----	44940	186-6119-03
9	11	-----	44940	186-6119-04
9	12	-----	44940	186-6120-01
9	13	-----	44940	186-6119-06
9	14	-----	44940	186-6119-02
9	15	-----	44940	186-6119-05
9	16	-----	44940	186-6287
9	17	5340-01-361-7901	44940	186-6261
9	18	5315-01-360-1643	44940	186-6267
9	19	5305-01-370-0269	44940	186-6260
9	20	5365-01-360-2911	44940	186-6143
9	21	-----	44940	186-6122
9	22	3120-01-383-9112	44940	186-6288
9	23	-----	44940	186-6119-03
9	24	-----	44940	186-6287-01
9	25	-----	44940	186-6123
9	26	5306-01-314-6734	97947	702201
9	27	5310-01-361-5471	44940	186-6131
9	28	-----	44940	186-6123-03
9	29	-----	44940	186-6123-02
9	30	5330-01-361-5288	44940	186-6129
9	31	3120-01-359-7002	44940	186-6124
9	32	5305-01-359-0185	44940	186-6125
9	33	-----	44940	186-6123-01
9	34	5305-01-359-1329	44940	186-6126

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FIG.	ITEM	STOCKNUMBER	FSCM	PARTNUMBER
9	35	5305-01-359-0188	44940	186-6127
9	36	5310-01-333-8085	15526	934-A4-M5 X.8
9	37	-----	44940	186-6132
9	38	5360-01-361-6954	44940	186-6136
9	39	5305-01-166-0616	56161	10504502
9	40	5310-01-361-5471	44940	186-6131
9	41	5360-01-360-1956	44940	186-6137
9	42	-----	44940	186-6132-03
9	43	-----	44940	186-6132-02
9	44	-----	44940	186-6265
9	45	-----	44940	186-6132-01
9	46	5330-01-361-5288	44940	186-6129
9	47	3120-01-359-7002	44940	186-6124
10	1	5305-01-357-0896	44940	C0718100200
10	2	5310-01-321-3478	15434	C0850200500
10	3	5310-01-356-7109	44940	860-2008
10	4	5310-01-321-4088	15434	C0850200800
10	5	5305-01-212-3227	15434	C0720180600
10	6	5310-01-276-8608	15434	C0740101000
10	7	2920-01-219-8200	44940	191-1550
10	8	5305-01-212-3371	44940	191-1450
10	9	5945-01-213-9233	44940	191-1609
10	10	5306-01-212-3228	44940	191-1431
10	11	5340-01-215-2927	44940	191-1432
10	12	5977-01-224-2917	44940	191-1608
10	13	5360-01-227-3195	44940	191-1433
10	14	2920-01-212-4008	44940	191-1606
10	15	2920-01-214-6655	44940	191-1607
10	16	2920-01-224-8389	15434	C0191144300
10	17	2920-01-224-6247	44940	191-1442
10	18	2920-01-224-6246	44940	191-1444
10	19	5340-01-223-8726	44940	191-1439
10	20	5360-01-227-6302	44940	191-1440
10	21	3020-01-225-6988	44940	191-1446
10	22	2920-01-228-3708	44940	191-1445
10	23	2520-01-223-8780	44940	191-1441
10	24	2920-01-223-8762	44940	191-1605
11	1	5310-01-356-8341	44940	186-6118
11	2	5330-01-087-7373	97947	201-81200
11	3	-----	44940	186-6116
11	4	5330-01-356-7138	44940	186-6117
11	5	5310-01-358-3905	44940	186-6095
11	6	-----	44940	186-6094
11	7	5306-01-356-7107	44940	186-6104



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FIG.	ITEM	STOCK NUMBER	FSCM	PART NUMBER
11	8	5365-01-383-8708	44940	186-6107
11	9	2815-01-361-0770	44940	186-6098
12	1	5310-01-086-1527	97947	272-00003
12	2	-----	44940	186-6115
12	3	5306-01-359-0121	44940	186-6106
12	4	5310-01-361-5470	44940	186-6114
12	5	5306-01-359-0122	44940	186-6105
12	6	2815-01-358-7716	44940	186-6085
12	7	2815-01-101-2431	57386	04100253
12	8	5340-01-384-9959	44940	186-6090
12	9	5360-01-358-3755	44940	186-6089
12	10	5340-01-384-2996	44940	186-6088
12	11	2815-01-360-3221	44940	186-6087
12	12	2815-01-361-7711	44940	186-6086
12	13	5330-01-361-5286	44940	186-6257
12	14	2815-01-359-8471	44940	186-6092
12	15	5305-01-158-3207	15434	C0800205200
12	16	5310-01-018-5472	24439	616-01608
12	17	-----	44940	186-6102
12	18	5330-01-362-5941	44940	186-6111
12	18	5330-01-371-3574	44940	186-6113
12	18	5330-01-362-6111	44940	186-6112
12	19	-----	44940	186-6101
12	20	-----	44940	186-6099
12	21	5325-01-336-5227	97947	201-30261
12	22	2815-01-359-8473	44940	186-6103
12	23	-----	44940	186-6255
13	1	5305-01-359-8791	44940	186-6150
13	2	5310-01-383-2019	44940	186-6015
13	3	-----	44940	186-6146
13	4	5330-01-358-5438	44940	186-6147
13	5	5305-01-361-6562	44940	186-6196
13	6	-----	44940	186-6195
13	7	5330-01-358-5554	44940	186-6148
13	8	-----	44940	186-6149
13	9	4730-00-187-4202	81348	WW-P-471AASBCC
14	1	5310-01-360-7885	44940	186-6045
14	2	3120-01-359-4681	44940	186-6044
14	3	3120-01-358-7345	44940	186-6268
14	4	5305-01-163-5075	15526	933-M6-X8
14	5	5310-01-358-4726	44940	186-6038
14	6	5340-01-369-9487	44940	186-6042
14	7	5315-01-358-3737	44940	186-6040
14	8	3040-01-362-3508	44940	186-6039

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FIG.	ITEM	STOCK NUMBER	FSCM	PART NUMBER
14	9	5365-01-360-2911	44940	186-6143
14	10	2815-01-357-9718	44940	186-6036
14	11	5305-01-184-1937	15526	933-M6X12
15	1	2815-01-357-5448	44940	186-6078
15	2	5306-01-3594621	44940	186-6079
15	3	3120-01-359-6762	44940	186-6080
15	4	-----	44940	186-6078-01
15	5	-----	44940	186-6071
15	5	-----	44940	186-6068
15	5	-----	44940	166-6069
15	5	-----	44940	186-6070
15	5	2815-01-357-8803	44940	186-6067
15	6	5365-01-359-0172	44940	186-6072
15	7	-----	44940	186-6067-02
15	8	-----	44940	186-6071-02
15	8	-----	44940	186-6070-01
15	8	-----	44940	186-6069-01
15	8	-----	44940	186-6068-01
15	8	-----	44940	186-6067-01
15	9	2815-01-363-2256	44940	186-6073
15	9	-----	44940	186-6074
15	9	-----	44940	186-6075
15	9	-----	44940	186-6076
15	9	-----	44940	186-6077
16	1	5305-01-360-5280	44940	186-6198
16	2	-----	44940	231-0307
17	1	5315-01-383-9717	44940	186-6057
17	2	5306-01-338-0211	97947	272-00039
17	3	-----	44940	186-6058
17	4	5365-01-381-5165	44940	186-6066
17	4	5365-01-381-6431	44940	186-6065
17	5	5330-01-3584739	44940	186-6063
17	6	3020-01-362-1817	44940	186-6054
17	7	5315-01-383-3444	44940	186-6055
17	8	2815-01-357-9719	44940	186-6047
17	9	-----	44940	186-6062
17	9	-----	44940	186-6061
17	9	3110-01-359-0114	44940	186-6060
17	10	3120-01-396-8376	44940	186-6056
17	11	-----	44940	186-6083
17	11	-----	44940	186-6082
17	11	3110-01-369-8672	44940	186-6081
17	12	-----	44940	186-6048
17	13	5305-01-359-0189	44940	186-6050

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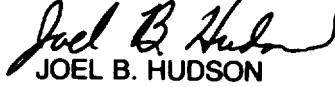
CROSS REFERENCE INDEXES  
 FIGURE AND ITEM NUMBER INDEX

FIG.	ITEM	STOCK NUMBER	FSCM	PART NUMBER
17	14	-----	44940	186-6048-01
17	15	- - - -	44940	186-6048-02
17	16	- - -	44940	186-6049
17	17	- - -	44940	186-6052
17	17	-----	44940	186-6053
17	17	5365-01-359-0205	44940	186-6051
17	18	-----	44940	186-6047-01
18	1	5305-01-359-1330	44940	186-6230
18	2	5310-01-018-5472	24439	616-01608
18	3	2815-01-357-6793	44940	186-6001
18	4	5340-01-374-2403	44940	186-6002
18	5	3120-01-358-9596	44940	186-6006
18	6	4730-00-833-7983	44940	505-0056
18	7	4730-00-187-4202	81348	WW-P-471AASBCC
18	8	5315-01-370-5550	44940	186-6008
18	9	3120-01-361-8381	44940	186-6003
18	9	-----	44940	186-6005
18	9	- - -	44940	186-6004
18	10	-----	44940	186-6001-1
18	11	-----	44940	186-6229
19	1	5120-01-384-6759	97947	317-50106
19	2	5120-01-384-6757	97947	317-50108
19	3	5120-01-384-6762	97947	317-50033
19	4	5210-01-384-8634	97947	317-50114
19	5	5210-01-392-5746	97947	317-50115
19	6	5120-01-384-6764	97947	317-50111
BULK	1	-----	44940	503-1052



By Order of the Secretaries of the Army, Air Force, and Navy (Including the Marine Corps):

Official:



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*Chief of Staff*

Official :

HENRY VICCELLIO, JR.  
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*Navy Facilities Engineering*  
*Command*

D. R. BLOOMER  
Colonel, *USMC*  
*Director, Program Support*  
*Marine Corps Systems Command*

DISTRIBUTION:

To be distributed in accordance with DA Form 12-25-E, block no. 5547, requirements for TM 9-2815-253-24P.



## These are the instructions for sending an electronic 2028

The following format must be used if submitting an electronic 2028. The subject line must be exactly the same and all fields must be included; however only the following fields are mandatory: 1, 3, 4, 5, 6, 7, 8, 9, 10, 13, 15, 16, 17, and 27.

From: "Whomever" <whomever@avma27.army.mil>

To: mpmt%avma28@st-louis-emh7.army.mil

Subject: DA Form 2028

1. **From:** Joe Smith
2. **Unit:** home
3. **Address:** 4300 Park
4. **City:** Hometown
5. **st:** MO
6. **Zip:** 77777
7. **Date Sent:** 19-OCT-93
8. **Pub no:** 55-2840-229-23
9. **Pub Title:** TM
10. **Publication Date:** 04-JUL-85
11. **Change Number:** 7
12. **submitter Rank:** MSG
13. **Submitter FName:** Joe
14. **Submitter MName:** T
15. **Submitter LName:** Smith
16. **Submitter Phone:** 123-123-1234
17. **Problem:** 1
18. **Page:** 2
19. **Paragraph:** 3
20. **Line:** 4
21. **NSN:** 5
22. **Reference:** 6
23. **Figure:** 7
24. **Table:** 8
25. **Item:** 9
26. **Total:** 123
27. **Text:**  
This is the text for the problem below line 27.





RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS



THEN ... JOT DOWN THE DOPE ABOUT IT ON THIS FORM, CAREFULLY TEAR IT OUT, FOLD IT AND DROP IT IN THE MAIL!

**SOMETHING WRONG** WITH THIS PUBLICATION?

**FROM:** (PRINT YOUR UNIT'S COMPLETE ADDRESS)  
 PFC John DOE  
 CO 4 3rd Engineer Bn  
 Ft. Leonardwood, MO 63108

**DATE SENT** 22 August 1992

<b>PUBLICATION NUMBER</b> TM 1-1520-250-10	<b>PUBLICATION DATE</b> 15 June 1992	<b>PUBLICATION TITLE</b> Operator's manual MH60K Helicopter
---	---	--

BE EXACT PIN-POINT WHERE IT IS				IN THIS SPACE, TELL WHAT IS WRONG AND WHAT SHOULD BE DONE ABOUT IT:
PAGE NO	PARA-GRAPH	FIGURE NO	TABLE NO	
6	2-1 a			<p>In line 6 of paragraph 2-1a the manual states the engine has 6 cylinders. The engine on my set only has 4 cylinders. Change the manual to show 4 cylinders.</p> <p>Callout 16 in figure 4-3 is pointed to bolt. In key to figure 4-3, item 16 is called a <u>shim</u>. Please correct one or the other</p>
B1		4-3		

<b>PRINTED NAME, GRADE OR TITLE, AND TELEPHONE NUMBER</b> JOHN DOE, PFC (268) 317-7111	<b>SIGN HERE</b> JOHN DOE <i>John Doe</i>
---	--

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U.S. ARMY AVIATION AND TROOP COMMAND  
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4300 GOODFELLOW BOULEVARD  
ST. LOUIS, MO 63120-1798

TEAR ALONG PERFORATED LINE



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FROM: (PRINT YOUR UNIT'S COMPLETE ADDRESS)

DATE SENT

PUBLICATION NUMBER

TM9-2815-253-24P

PUBLICATION DATE

30 OCTOBER 1996

PUBLICATION TITLE

DIESEL ENGINE, 4 CYLINDER, 4 CYCLE

BE EXACT PIN-POINT WHERE IT IS

IN THIS SPACE, TELL WHAT IS WRONG AND WHAT SHOULD BE DONE ABOUT IT:

PAGE NO

PARA-GRAPH

FIGURE NO

TABLE NO

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# The Metric System and Equivalents

## Linear Measure

1 centimeter = 10 millimeters = .39 inch  
 1 decimeter = 10 centimeters = 3.94 inches  
 1 meter = 10 decimeters = 39.37 inches  
 1 dekameter = 10 meters = 32.8 feet  
 1 hectometer = 10 dekameters = 328.08 feet  
 1 kilometer = 10 hectometers = 3,280.8 feet

## Weights

1 centigram = 10 milligrams = .15 grain  
 1 decigram = 10 centigrams = 1.54 grains  
 1 gram = 10 decigrams = .035 ounce  
 1 dekagram = 10 grams = .35 ounce  
 1 hectogram = 10 dekagrams = 3.52 ounces  
 1 kilogram = 10 hectograms = 2.2 pounds  
 1 quintal = 100 kilograms = 220.46 pounds  
 1 metric ton = 10 quintals = 1.1 short tons

## Liquid Measure

1 centiliter = 10 milliliters = .34 fl. ounce  
 1 deciliter = 10 centiliters = 3.38 fl. ounces  
 1 liter = 10 deciliters = 33.81 fl. ounces  
 1 dekaliter = 10 liters = 2.64 gallons  
 1 hectoliter = 10 dekaliters = 26.42 gallons  
 1 kiloliter = 10 hectoliters = 264.18 gallons

## Square Measure

1 sq. centimeter = 100 sq. millimeters = .155 sq. inch  
 1 sq. decimeter = 100 sq. centimeters = 15.5 sq. inches  
 1 sq. meter (centare) = 100 sq. decimeters = 10.76 sq. feet  
 1 sq. dekameter (are) = 100 sq. meters = 1,076.4 sq. feet  
 1 sq. hectometer (hectare) = 100 sq. dekameters = 2.47 acres  
 1 sq. kilometer = 100 sq. hectometers = .386 sq. mile

## Cubic Measure

1 cu. centimeter = 1000 cu. millimeters = .06 cu. inch  
 1 cu. decimeter = 1000 cu. centimeters = 61.02 cu. inches  
 1 cu. meter = 1000 cu. decimeters = 35.31 feet

## Approximate Conversion Factors

<i>To change</i>	<i>To</i>	<i>Multiply by</i>	<i>To change</i>	<i>To</i>	<i>Multiply by</i>
inches	centimeters	2.540	ounce-inches	newton-meters	.007062
feet	meters	.305	centimeters	inches	.394
yards	meters	.914	meters	feet	3.280
miles	kilometers	1.609	meters	yards	1.094
square inches	square centimeters	6.451	kilometers	miles	.621
square feet	square meters	.093	square centimeters	square inches	.155
square yards	square meters	.836	square meters	square feet	10.764
square miles	square kilometers	2.590	square meters	square yards	1.196
acres	square hectometers	.405	square kilometers	square miles	.386
cubic feet	cubic meters	.028	square hectometers	acres	2.471
cubic yards	cubic meters	.765	cubic meters	cubic feet	35.315
fluid ounces	milliliters	29.573	cubic meters	cubic yards	1.308
pints	liters	.473	milliliters	fluid ounces	.034
quarts	liters	.946	liters	pints	2.113
gallons	liters	3.785	liters	quarts	1.057
ounces	grams	28.349	liters	gallons	.264
pounds	kilograms	.454	grams	ounces	.035
short tons	metric tons	.907	kilograms	pounds	2.205
pound-feet	newton-meters	1.356	metric tons	short tons	1.102
pound-inches	newton-meters	.11296			

## Temperature (Exact)

°F	Fahrenheit	5/9 (after	Celsius	°C
	temperature	subtracting 32)	temperature	

