

**TECHNICAL MANUAL**

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

**PUMPING ASSEMBLY, FLAMMABLE  
LIQUID, BULK TRANSFER,  
50 GPM, DIESEL-ENGINE DRIVEN  
MODEL M2D88**

**NSN 4320-01-286-5181**

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**HEADQUARTERS, DEPARTMENT OF THE ARMY  
1 FEBRUARY 1994**

TECHNICAL MANUAL  
NO 10-4320-311-24P

HEADQUARTERS  
DEPARTMENT OF THE ARMY  
WASHINGTON, D C, 1  
February 1994

## TECHNICAL MANUAL

Unit, Direct Support and General Support  
Maintenance Repair Parts and Special Tools List  
PUMP ASSEMBLY, FLAMMABLE LIQUID,  
BULK TRANSFER, 50 GPM,  
DIESEL ENGINE DRIVEN  
MODEL M2D88  
NSN 4320-01-286-5181

**Current as of 15 December 1993**

### 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 the procedures, please let us know. Mail your letter, DA Form 2028 (Recommended Changes to Publications and Blank Forms), or DA Form 2028-2 located in the back of this manual directly to Commander, US Army Aviation and Troop Command, ATTN AMSAT-I-MP, 4300 Goodfellow Blvd., St Louis, MO 63120-1798. A reply will be furnished directly to you.

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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 Pumping Assembly, Flammable Liquid, Bulk Transfer, 50 GPM, Diesel-Engine Driven, Model M2D88. It authorizes the requisitioning, issue, and disposition of spares, repair parts and special tools as indicated by the source, maintenance and recoverability (SMR) codes.

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

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

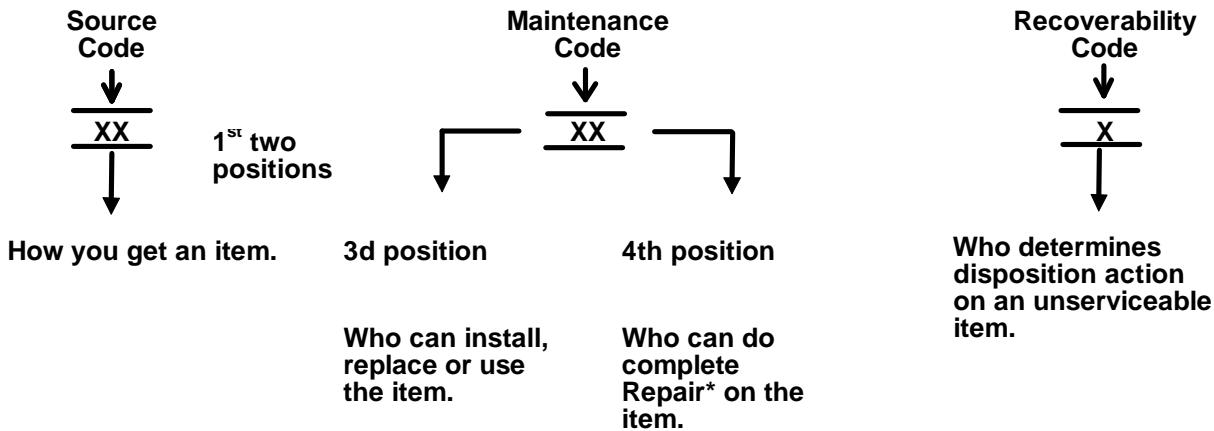
b. Section III Special Tools List. A list of special tools, special TMDE, and other special support equipment authorized by this RPSTL (as indicated by Basis of Issue (BOI) information in DESCRIPTION AND USABLE ON CODE column) for the performance of maintenance.

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

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

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

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



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

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

<b>Source Code</b>	<b>Explanation</b>
PA PB PC** PD PE PF PG	Stocked items, use the applicable NSN to request/requisition items with these source codes. They are authorized to the category indicated by the code entered in the 3rd position of the SMR code.  **NOTE Items coded PC are subject to deterioration.
KD KF KB	Items with these codes are not to be requested/requisitioned individually. They are part of a kit which is authorized to the maintenance category indicated in the 3rd position of the SMR code. The complete kit must be requisitioned and applied.
MO - (Made at Unit/AVUM Level) MF - (Made at DS/AVUM Level) MH - (Made at GS Level) ML - (Made at Specialized Repair Activity (SRA)) 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 Unit/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 items are assembled at a higher level, order the item from the higher level of maintenance.
XA - XB - XC - XD -	<p>Do not requisition "XA"-coded item. Order its next higher assembly (Refer to the NOTE below).</p> <p>If an "XB" item is not available from salvage, order it using the CAGEC and part number given.</p> <p>Installation drawing, diagram, instruction sheet, field service drawing, that is identified manufacturer's part number.</p> <p>Item is not stocked. Order an "XD"-coded item through normal supply channels using the CAGEC and part number given, if no NSN is available.</p>

**NOTE**

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

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

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

**Maintenance****Code****Application/Explanation**

- C - Crew or operator maintenance done within unit/AVUM maintenance.
- O - Unit level/AVUM maintenance can remove, replace, and use the item.
- F - Direct support/AVIM maintenance can remove, replace, and use the item.
- H - General support maintenance can remove, replace, and use the item.
- L - Specialized repair activity can remove, replace, and use the item.
- D - Depot can remove, replace, and use the item.

(b) The maintenance code entered in the fourth 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 an item at a lower level of maintenance, if authorized by the Maintenance Allocation Chart and SMR codes.

**Maintenance****Code****Application/Explanation**

- O - Unit/AVUM is the lowest level that can do complete repair of the item.
- F - Direct support/AVIM 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 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 - Nonreparable. 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 fifth position of the SMR Code as follows:

**Recoverability****Codes****Application/Explanation**

- Z - Nonreparable item. When unserviceable, condemn and dispose of the item at the level of maintenance shown in 3d position of SMR Code.
- O - Reparable item. When not economically repairable, condemn and dispose of the item at unit or AVUM level.
- F - Reparable item. When uneconomically repairable, condemn and dispose of the item at the direct support or AVIM level.
- H - Reparable item. When uneconomically repairable, condemn and dispose of the item at the general support level
- D - Reparable item. When beyond lower level repair capability, return to depot. Condemnation and disposal of item not authorized below depot level.
- L - Reparable 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 CAGEC (Column (3)). The Commercial and Government Entity Code (CAGEC) is a 5-digit numeric code which is used to identify the manufacturer, distributor, or Government agency/activity 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 an NSN to requisition an item, the item you receive may have a different part number from the number listed.

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) Part numbers of bulk materials are referenced in this column in the line entry to be manufactured/fabricated.
- (3) The statement "END OF FIGURE" appears just below the last item description in Column (5) for a given figure in both Section II and Section III.

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 instead of a quantity indicates that the quantity is variable and may vary from application to application.

#### 4. EXPLANATION OF INDEX FORMAT AND COLUMNS (SECTION IV)

a NATIONAL STOCK NUMBER (NSN) INDEX

(1) STOCK NUMBER Column This column lists the NSN in national item identification number (NIIN) sequence. The NIIN consists of the last nine digits of the NSN, i e:

NSN
5305-01-574-1467
NIIN

When using this column to locate an item, ignore the first four digits of the NSN. Use the complete NSN (13 digits) when requisitioning items by stock number.

(2) FIG. Column. This column lists 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 the numbers 0 through 9, and each following letter or digit In like order).

(1) CAGEC Column The Commercial and Government Entity Code (CAGEC) Is a 5-digit numeric code used to identify the manufacturer, distributor, or Government agency/activity 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 the NSN for the associated part number and manufacturer identified In the PART NUMBER and CAGEC columns to the left.

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

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

c. FIGURE AND ITEM NUMBER INDEX

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

(2) 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.

(3) STOCK NUMBER Column This column lists the NSN for the Item.

(4) CAGEC Column The Commercial and Government Entity Code (CAGEC) Is a 5-digit numeric code used to identify the manufacturer, distributor, or Government agency/activity that supplies the item.

(5) 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.

## 5 SPECIAL INFORMATION

a. USABLE ON CODE. The usable on code appears In the lower left corner of the Description Column heading. Usable on codes are shown as "UOC ...". in the Description Column (justified left) on the last line of the applicable item description/nomenclature. Uncoded Items are applicable to all models.

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 entry for the item to be manufactured/fabricated. Detailed fabrication Instructions for Items source coded to be manufactured or fabricated are found In TM10-4320-311-14

c. INDEX NUMBERS Items which have the word BULK in the figure column will have an index number shown In the item number column This index number is a cross-reference between the National Stock Number/Part Number Index and the bulk material list in Section II.

d. ASSOCIATED PUBLICATIONS The publications listed below pertain to the 50 GPM Pumping Assembly

<u>Publication</u>	<u>Short Title</u>
LO10-4320-311-12	Lubrication Order
TM10-4320-311-14	Operator, Unit, Direct Support and General Support Maintenance Manual

## 6 HOW TO LOCATE REPAIR PARTS

### a When National Stock Numbers or Part Numbers are NOT Known.

(1) First Using the table of contents, determine the assembly 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 use the Figure and Item Number Index to find the NSN.

### b. When National Stock Number or Part Number is Known

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

(2) Second Turn to the figure and item number, verify that the item is the one you are looking for, then locate the item number in the repair parts list for the figure.

## 7 ABBREVIATIONS. Abbreviations used in this manual are listed In MIL-STD-12.

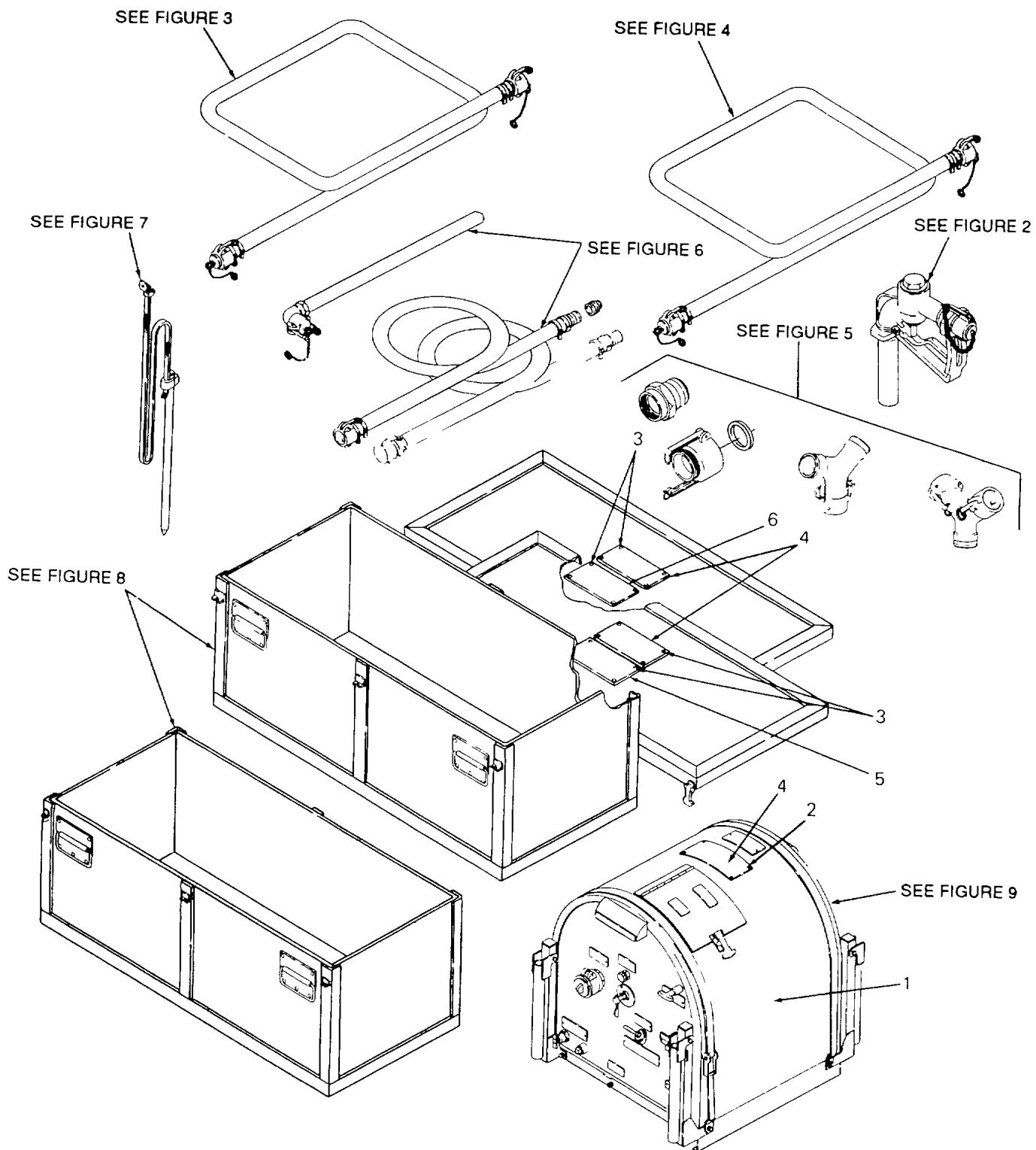


Figure 1. Diesel-Engine Driven 50 GPM Bulk Transfer Flammable Liquid Pumping Assembly, Model M2D88

SECTION II			TM10-4320-311-24&P	(5)	(6)
ITEM NO	(1) SMR CODE	(3) FSCM	(4) PART NUMBER	DESCRIPTION AND USABLE ON CODES(UOC)	QTY
GROUP 00 DIESEL ENGINE DRIVEN 50 GPM BULK TRANSFER LIQUID PUMPING ASSEMBLY, MODEL M2D88					
FIGURE 1. DIESEL ENGINE DRIVEN 50 GPM BULK TRANSFER LIQUID LIQUID PUMPING ASSEMBLY, MODEL M2D88					
1. PBOHH	97403	13229E9445	PUMPING ASSEMBLY .....	1	
2. XBOZZ	81349	M24243/1B402	RIVET,BLIND .....	4	
3. XBOZZ	81349	M24243/1B403	RIVET,BLIND .....	16	
4. XBOZZ	97403	13229E8228	PLATE, IDENTIFICAT PUMPING ASSY 1.....	3	
5. XBOZZ	97403	13229E8225-1	1/2 IN FLAM LIQUID 50 GPM 100 FT HEAD .....		
6. XBOZZ	97403	13229E8225-2	PLATE, INFORMATION ...PUMP ACCESSORIES	1	
			PLATE, INFORMATION ...PUMP ACCESSORIES	1	

END OF FIGURE

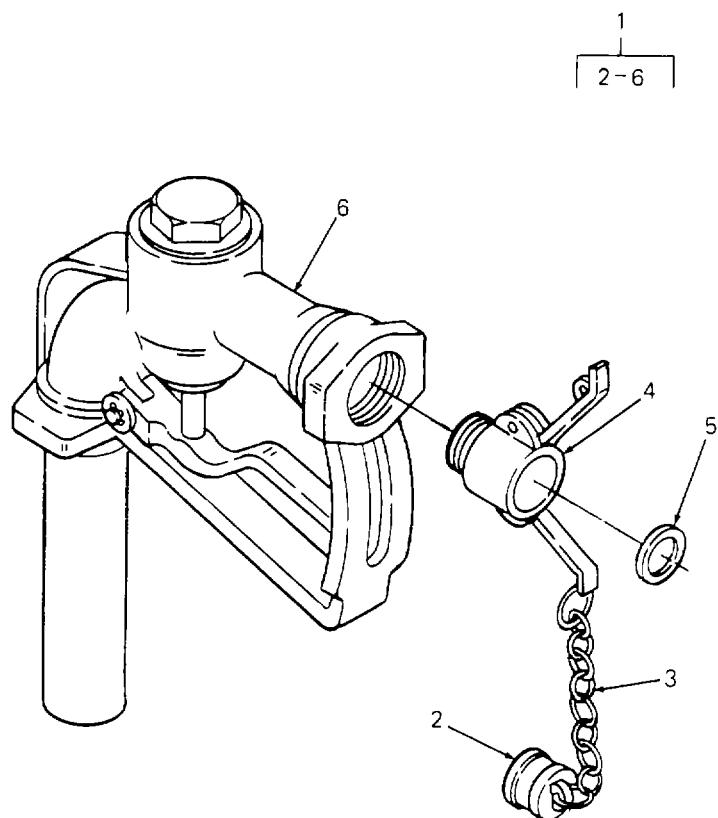


Figure 2. Nozzle Assemblies.

SECTION II			TM10-4320-311-24&P	(5)	(6)
(1) ITEM NO	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	DESCRIPTION AND USABLE ON CODES(UOC)	QTY

GROUP 01 NOZZLE ASSEMBLIES

FIG. 2 NOZZLE ASSEMBLIES

1. PAOZZ	97403	13226E1303-2	NOZZLE ASSEMBLY FOR .....	2
2. XBOZZ	96906	MS27029-9	.PLUG, QUICK DISCONNE .....	1
3. XBOZZ	96906	MS87006-3	.HOOK, CHAINS .....	1
4. PAOZZ	96906	MS27026-9	.COUPLING HALF, QUICK 01.5 INCH NOM. ....	1
5. PAOZZ	96906	MS27030-5	.GASKET .....	1
6. PAOZZ	81349	MIL-M-52116	.NOZZLE .....	1

END OF FIGURE

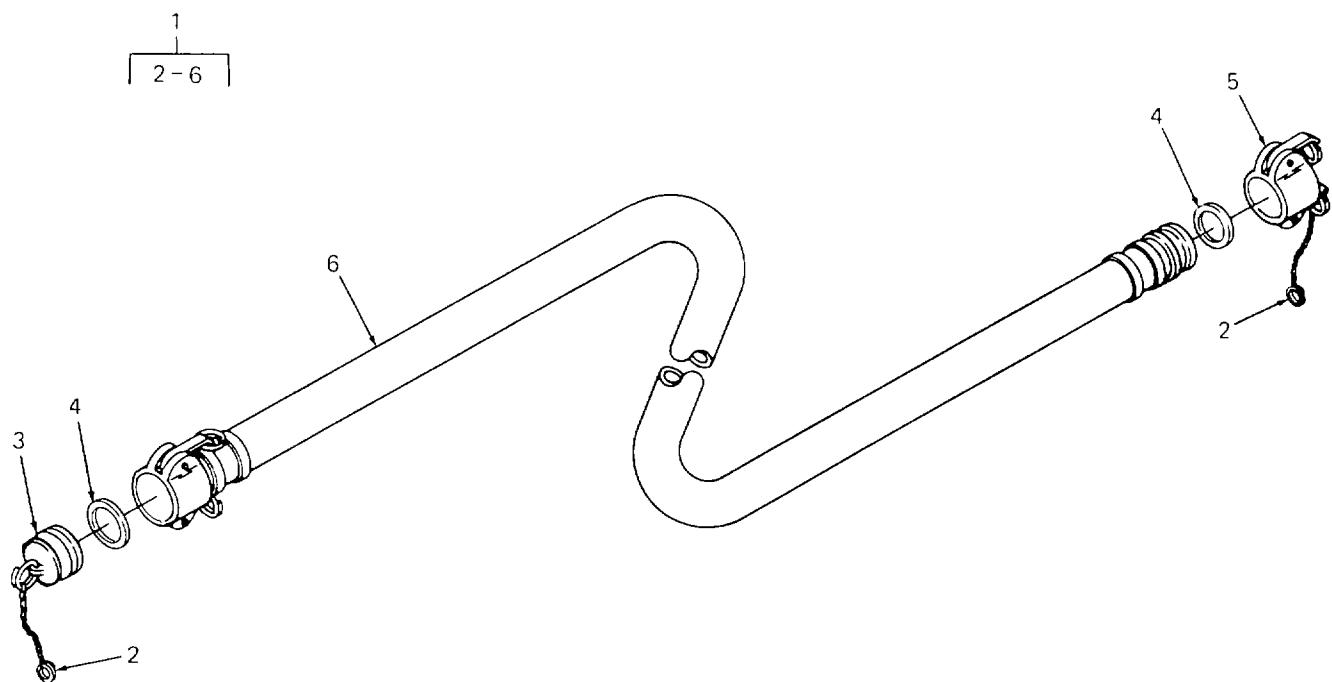


Figure 3. Suction Hose Assembly

SECTION II		TM10-4320-311-24&P		(5)	(6)
ITEM NO	SMR CODE	FSCM	PART NUMBER	DESCRIPTION AND USABLE ON CODES(UOC)	QTY
1. PAOZZ	97403	13226E1301	HOSE ASSEMBLY, NONME .....	3	
2. XBOZZ	96906	MS87006-3	.HOOK, CHAIN,S .....	2	
3. XBOZZ	96906	MS27029-9	.PLUG, QUICK DISCONNE .....	1	
4. PAOZZ	96906	MS27030-5	.GASKET 01.500 NOM .....	2	
5. PAOZZ	96906	MS27028-9	.CAP, QUICK DISCONNEC .....	1	
6. PAOZZ	97403	13218E0152	.HOSE ASSEMBLY .....	1	

FIG. 3 SUCTION HOSE ASSEMBLY

1. PAOZZ	97403	13226E1301	HOSE ASSEMBLY, NONME .....	3
2. XBOZZ	96906	MS87006-3	.HOOK, CHAIN,S .....	2
3. XBOZZ	96906	MS27029-9	.PLUG, QUICK DISCONNE .....	1
4. PAOZZ	96906	MS27030-5	.GASKET 01.500 NOM .....	2
5. PAOZZ	96906	MS27028-9	.CAP, QUICK DISCONNEC .....	1
6. PAOZZ	97403	13218E0152	.HOSE ASSEMBLY .....	1

END OF FIGURE

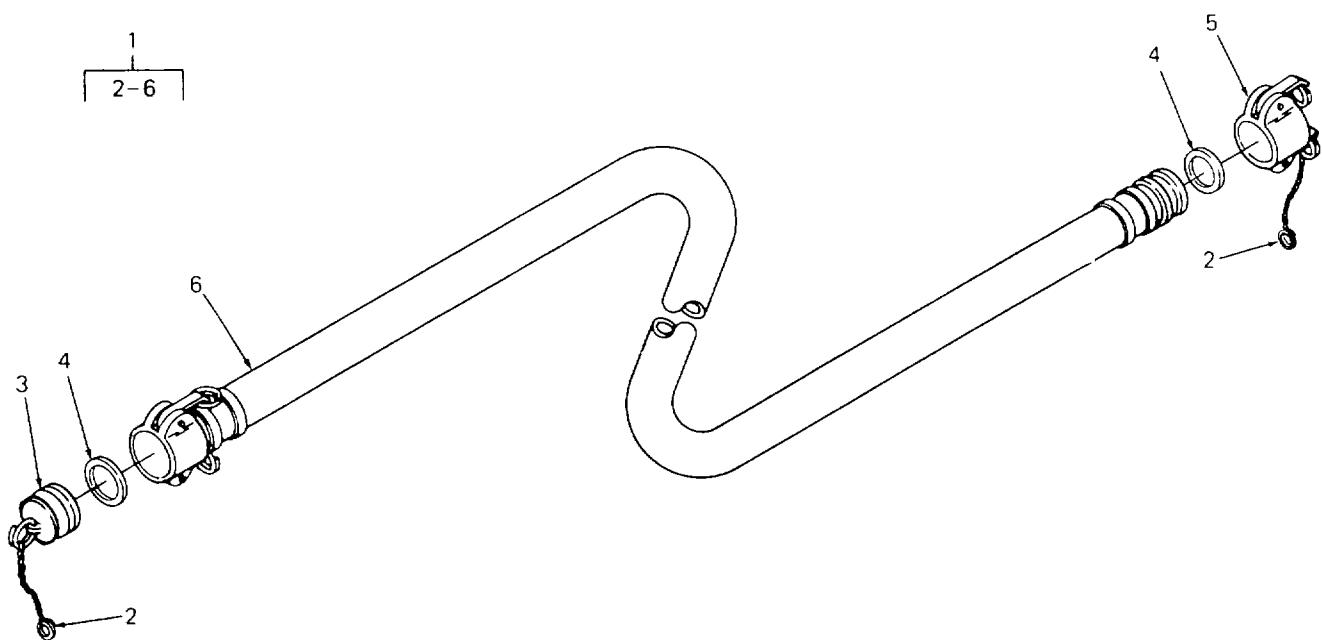


Figure 4. Discharge Hose Assembly

SECTION II			TM10-4320-311-24&P	(5)	(6)
ITEM NO	(1) SMR CODE	(3) FSCM	(4) PART NUMBER	DESCRIPTION AND USABLE ON CODES(UOC)	QTY

GROUP 03 DISCHARGE HOSE ASSEMBLY

FIG. 4 DISCHARGE HOSE ASSEMBLY

1. PAOZZ	97403	13226E1302	HOSE ASSEMBLY,DISC .....	3
2. XBOZZ	96906	MS87006-3	.HOOK, CHAIN,S .....	2
3. XBOZZ	96906	MS27029-9	.PLUG, QUICK DISCONNE .....	1
4. PAOZZ	96906	MS27030-5	.GASKET.....	2
5. XBOZZ	96906	MS27028-9	.CAP, QUICK DISCONNEC .....	1
6. PAOZZ	81349	M11588-03-07	.HOSE ASSEMBLY METAL .....	1

END OF FIGURE

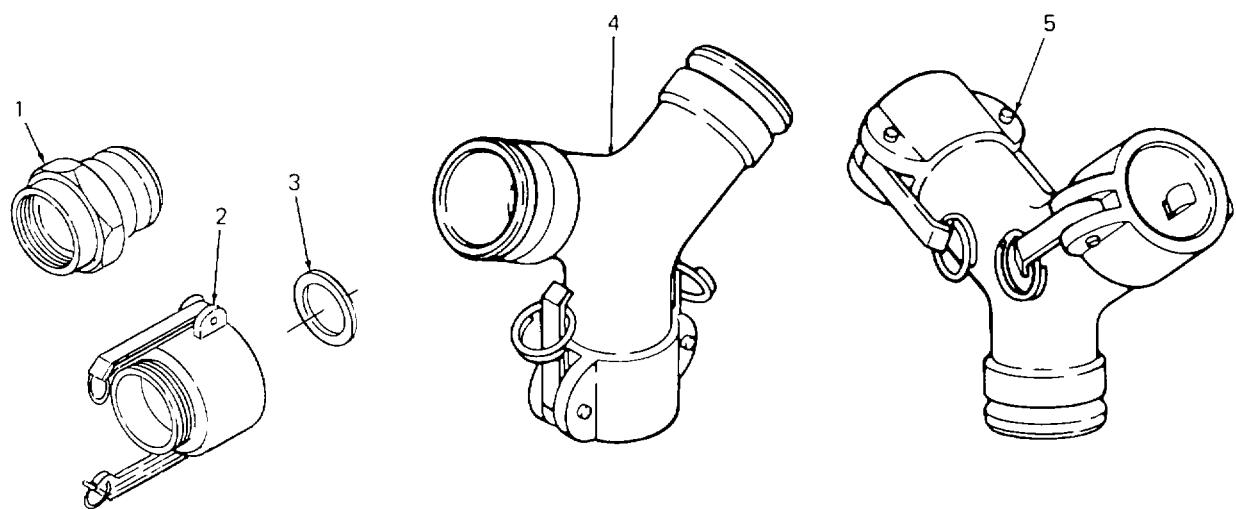


Figure 5. Y-Connectors (Male and Female) and Couplings

SECTION II		TM10-4320-311-24&P			
(1) ITEM NO	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5)	(6)
DESCRIPTION AND USABLE ON CODES(UOC)					QTY
GROUP 04 Y-CONNECTOR (MALE AND FEMALE) AND COUPLINGS					
1. PAOZZ	96906	MS70095-3	COUPLING HALF, QUICK .....	1	
2 PAOOO	96906	MS70096-3	COUPLING HALF, FEMA .....	1	
3 PAOZZ	96906	MS27030-5	GASKET .....	1	
4 PAOZZ	81718	319-K-1-1/2	CONNECTOR, Y, DBL M .....	1	
5 PAOZZ	81718	00319L-0150	CONNECTOR, SET, ELEC .....	1	

END OF FIGURE

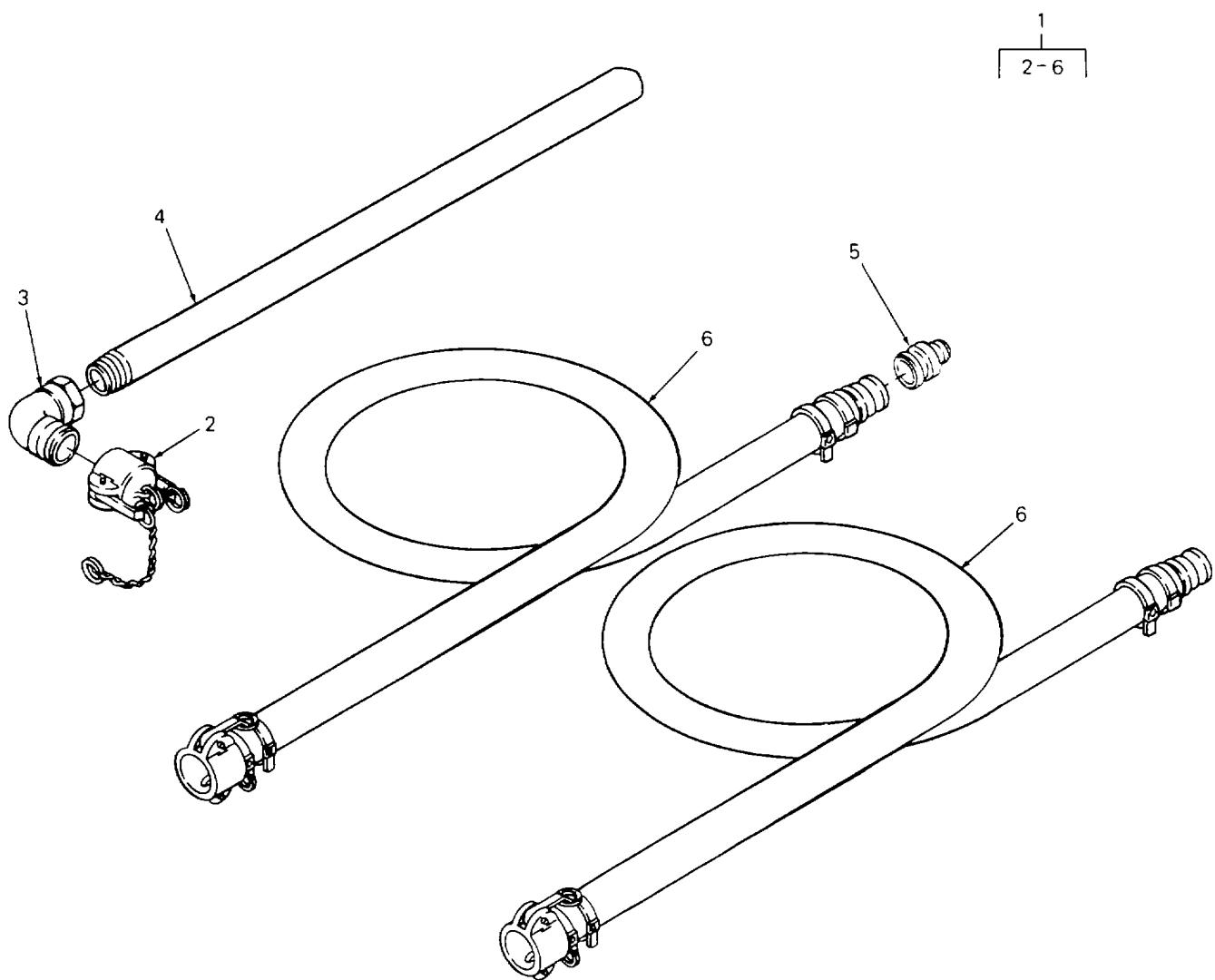


Figure 6. Drum Suction Stub Unloader Assembly

SECTION II				TM10-4320-311-24&P		
(1) ITEM NO	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5)	(6)	

DESCRIPTION AND USABLE ON CODES(UOC) QTY

GROUP 05 DRUM SUCTION STUB  
UNLOADER ASSEMBLY

FIG. 6 DRUM SUCTION STUB UNLOADER  
ASSEMBLY

1. PAOZZ	97403	13217E2987
2 PAOZZ	96906	MS27028-9
3 PAOZZ	24869	150A90
4 PAOZZ	97403	13217E2985
5 XBOZZ	81718	633-AAS
6 PAOZZ	97403	13218E0152

DRUM HOSE REEL .....	1
.CAP, UICK DISCONNEC .....	1
.COUPLING HALF, QUICK 90 DEGREE .....	1
.STUB, SUCTION .....	1
.ADAPTER .....	1
.HOSE ASSEMBLY .....	2

END OF FIGURE

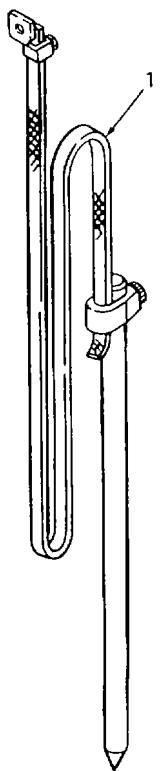


Figure 7. Ground Rod and Attaching Hardware

SECTION II		TM10-4320-311-24&P			
(1) ITEM NO	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5)	(6)
				DESCRIPTION AND USABLE ON CODES(UOC) QTY	
GROUP 06 GROUND ROD AND ATTACHING HARDWARE					
FIG. 7 GROUND ROD AND ATTACHING HARDWARE					
1. PAOZZ	81349	MIL-W-R-550 II CLB		TYPE ROD, GROUND, WITH A .....	1

END OF FIGURE

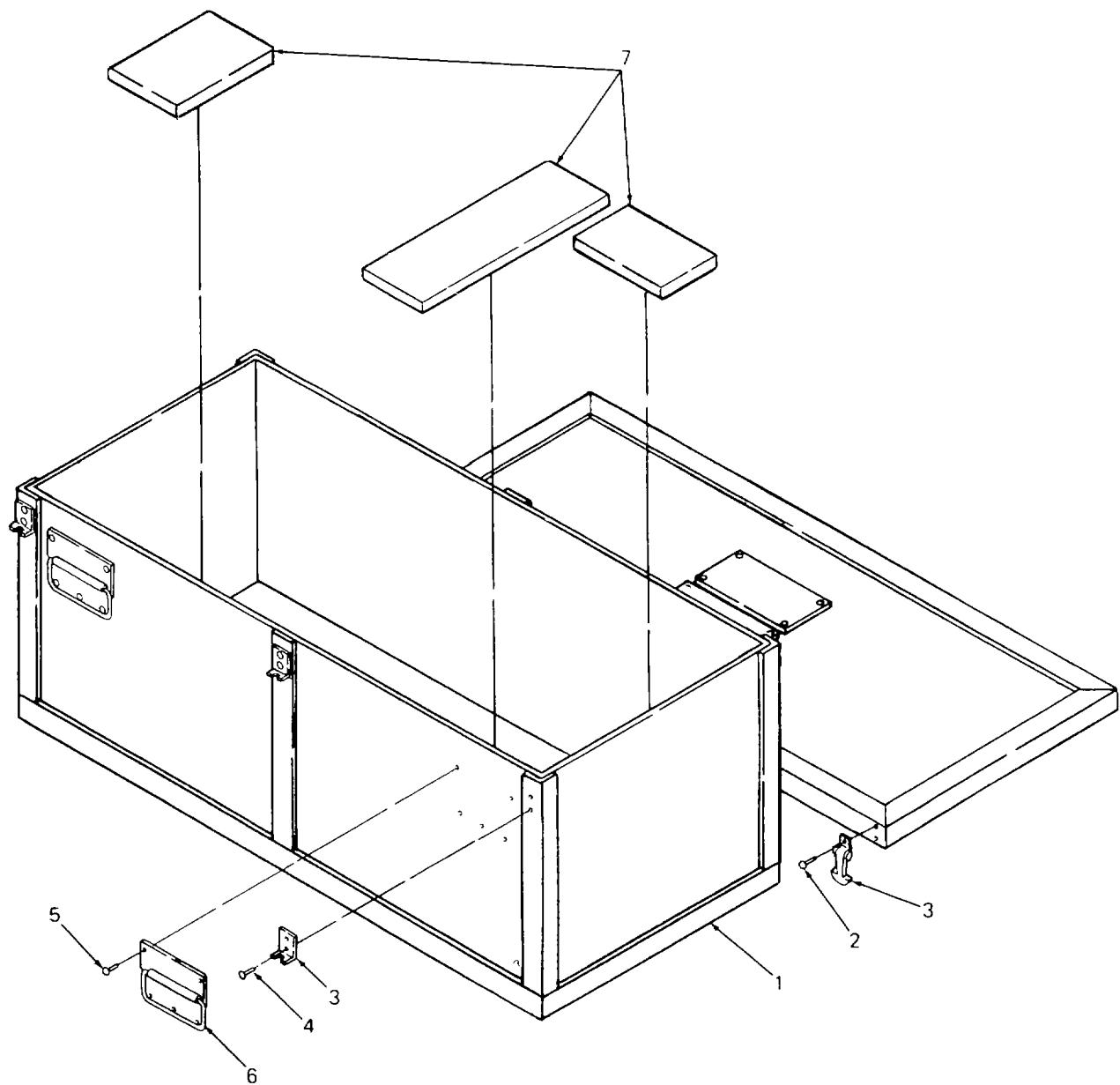
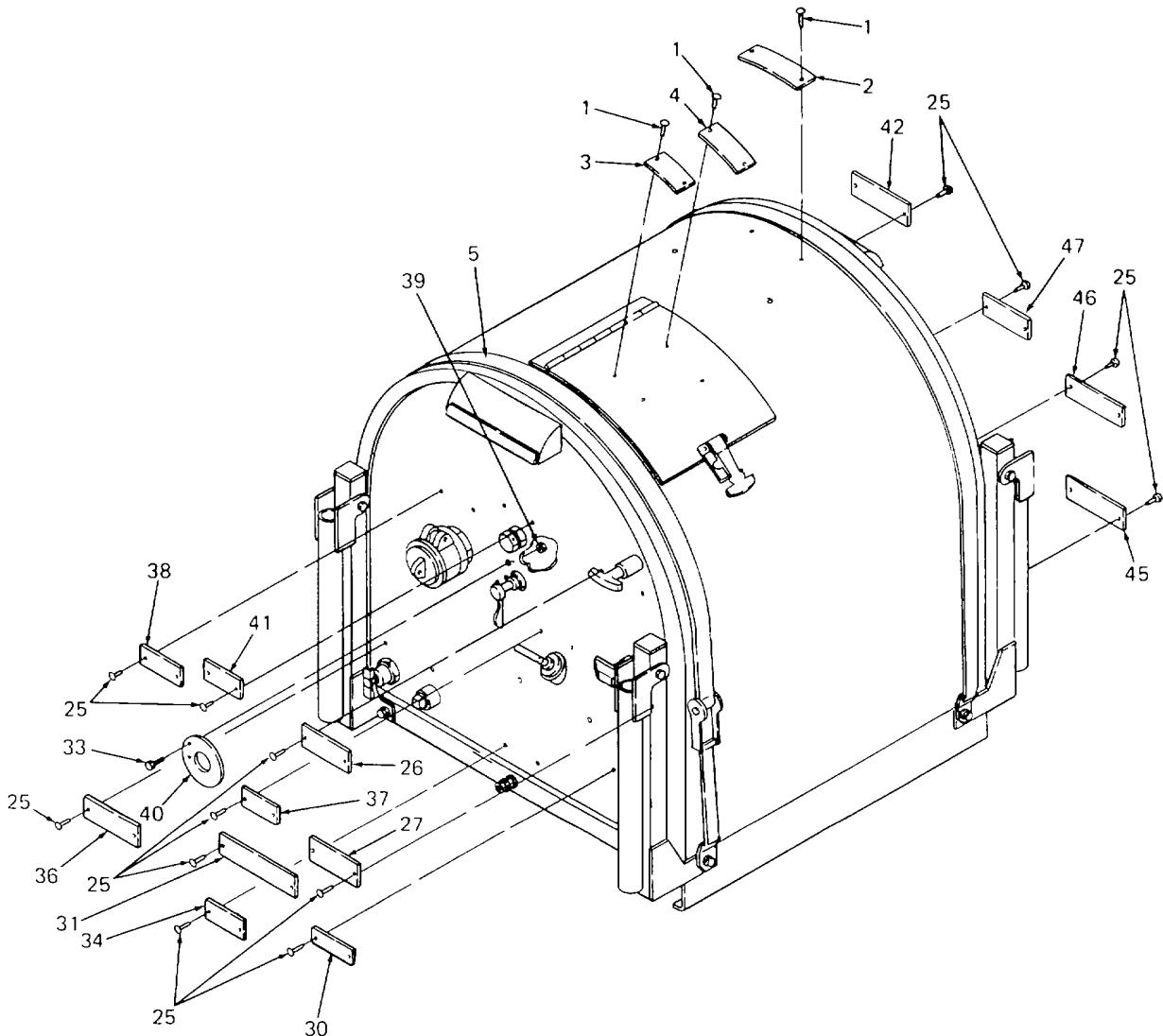


Figure 8. Storage Chests and Information and Identification Plates

SECTION II			(4)	(5)	(6)
ITEM NO	(2) SMR CODE	(3) CAGEC	PART NUMBER	DESCRIPTION AND USABLE ON CODES (UOC)	QTY
GROUP 07 STORAGE CHEST AND INFORMATION AND IDENTIFICATION PLATES					
FIG. 8 STORAGE CHEST AND INFORMATION AND IDENTIFICATION PLATES					
1	PBFFF	97403	13229E9443	STORAGE,UNIT .....	2
2	XBOZZ	96906	MS20426AD4-6	.RIVET,SOLID .....	20
3	XBFZZ	66173	089-0100A	.LATCH ASSY, TEE HAN .....	6
4	PAOZZ	81349	M24243/1B405	.RIVET,BLIND .....	12
5	PAOZZ	96906	MS20426AD6-8	.RIVET,SOLID .....	20
6	XBFZZ	97403	13229E9443-13	.HANDLE .....	4
7	MOFZZ	97403	13229E6785-2	.FOAM, PLASTIC, OPEN BRACKET TOP, MAKE FROM BULK CAGE 62408 P/N..... 763/4750/9425-1.00 54 108.....	V

END OF FIGURE



**Figure 9. Centrifugal Pump (Sheet 1 of 2)**

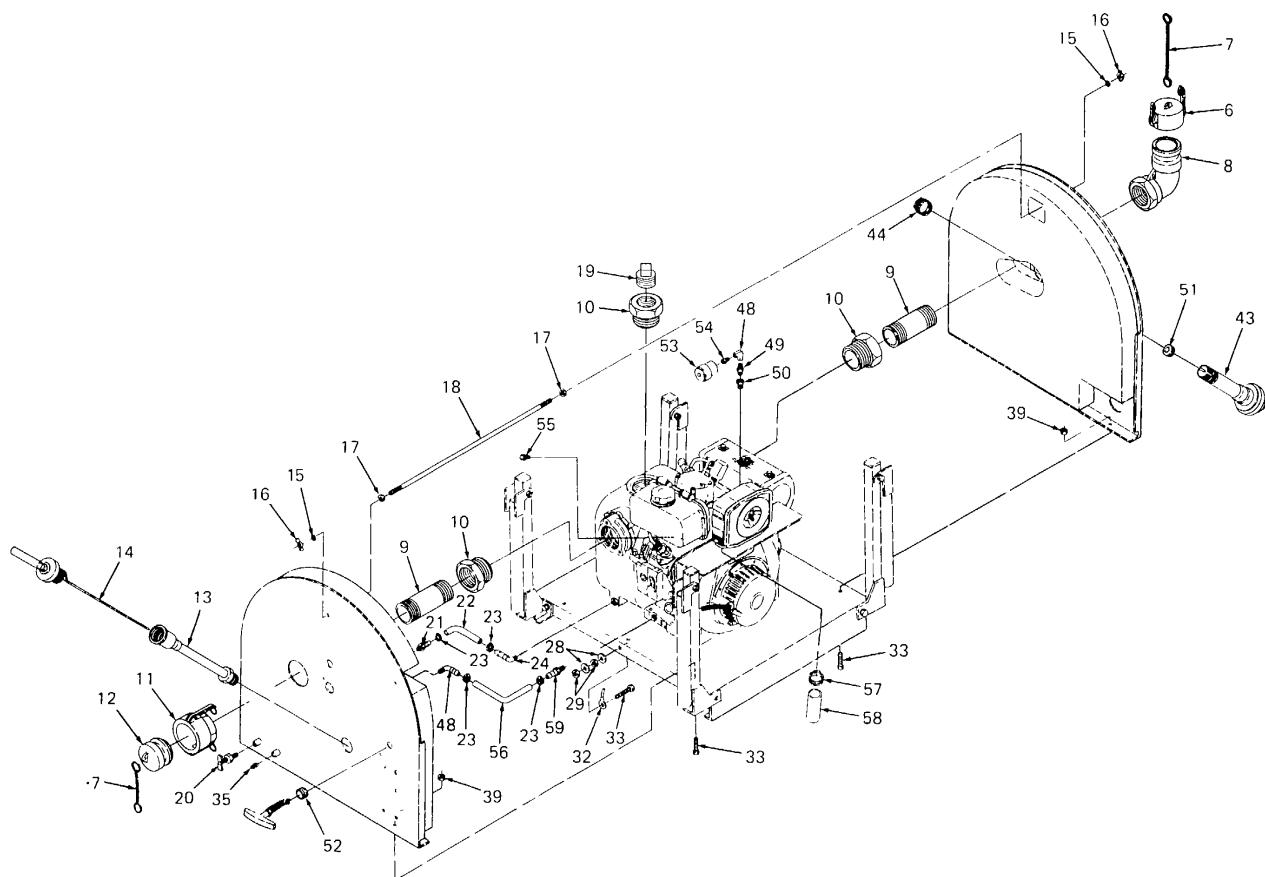


Figure 9. Centrifugal Pump (Sheet 2 of 2)

SECTION II			(4)	(5)	(6)
(1) ITEM NO	(2) SMR CODE	(3) CAGEC	PART NUMBER	DESCRIPTION AND USABLE ON CODES (UOC)	QTY

## GROUP 08 CENTRIFUGAL PUMP UNIT

FIG. 9 CENTRIFUGAL PUMP UNIT

1	PAOZZ	81349	M24243/1B402	.RIVET,BLIND .....	6
2	XBOZZ	97403	13229E8221-2	.PLATE, INFORMATION HAND LIFT.....	1
3	XBOZZ	97403	13229E8230-5	ENCLOSURE ONLY. ....	
4	XBOZZ	97403	13229E8221-3	.PLATE, INFORMATION DIESEL FUEL.....	1
				ONLY.....	
5	PAOZZ	76371	A-RI-IQ-IQ-9/63	.PLATE, INFORMATION FUEL TANK AND	
6	PAOZZ	96906	MS27028-9	DECOMPRESSION LEVER ACCESS.....	1
7	XBOZZ	96906	MS87006-3	.TIEDOWN,ELEC .....	2
8	PAOZZ	24869	150A90-5	.CAP,QUICK DISC ONNEC .....	1
9	PAOZZ	96906	MS51846-142	.HOOK,CHAIN,S .....	2
10	PAOZZ	96906	MS14315-22X	.COUPLING HALF,QUICK .....	
11	PAOZZ	96906	MS27024-9	.NIPPLE,PIPE .....	2
12	XBOZZ	96906	MS27029-9	.BUSHING,PIPE .....	3
13	XBOZZ	97403	13229E9452	.COUPLING HALF,QUICK .....	
14	PAOZZ	63513	V-190	.PLUG,QUICK DISCONNE .....	1
15	PAOZZ	96906	MS35335-33	.HOUSING ASSEMBLY, D .....	1
16	PAOZZ	96906	MS35425-70	.FILLER .NECK .....	1
17	PAOZZ	96906	MS51967-2	.WASHER,LOCK .....	4
18	PAOZZ	97403	13229E9444-56	.NUT,PLAIN,WING .....	2
19	PAOZZ	96906	MS14314-8Y	.NUT,PLAIN,HEXAGON .....	8
20	PAOZZ	93061	DC604-6	.ROD THREADED END .....	1
21	PAOZZ	93061	68HB-6-6	.PLUG, PIPE, SQUARE .....	1
22	MOOZZ	17506	821-6	.COCK,DRAIN .....	1
				.ADAPTER,STRAIGHT,PI .....	1
				.HOSE,PUMP DRAIN HOSE, MAKE FROM	
				BULK CAGE 17506 P/N 821-6.....	1
23	PAOZZ	96906	MS35842-10	.CLAMP,HOSE .....	7
24	PAOZZ	93061	269HB-6-6	.ELBOW,PIPE .....	2
25	PAOZZ	81349	M24243/IB403	.RIVET,BLIND .....	26
26	XBOZZ	97403	13229E8221-4	.PLATE, INFORMATION THROTTLE PULL	
				OUT TO START/RUN .....	1
27	XBOZZ	97403	13229E8223-2	.PLATE, INFORMATION HEATER CONTROL	
				OIL AIR.....	1
28	XBOZZ	76371	5700347000	.WASHER, FLAT .....	8
29	XBOZZ	96906	MS17829-4C	.NUT,SELF-LOCKING,HE .....	4
30	XBOZZ	97403	13229E8230-4	.PLATE, INFORMATION PUSH TO RESET.....	1
31	XBOZZ	97403	13229E9453	.PLATE, INFORMATION USE CLASS CD .....	1
				HI DETERGENT SAE 15W40 OIL.....	
32	PAOZZ	97403	13229E8226	.LEAD,ELECTRICAL MAKE FROM MS25036-	
				114, M5086/1-10-9, MS25036-157.....	9
33	PAOZZ	96906	MS90725-7	.SCREW,CAP,HEXAGON H .....	9
34	XBOZZ	97403	13229E8230-7	.PLATE, INFORMATION GROUND HERE .....	1
35	PAOZZ	96906	MS20913-3J	.PLUG,PIPE .....	1
36	XBOZZ	97403	13229E8223-1	.PLATE, INFORMATION DRAINS PUMP OIL.....	1
37	XBOZZ	97403	13229E8230-3	.PLATE, INFORMATION ENGINE OIL.....	1
				LEVEL/FILL.....	
38	XBOZZ	97403	13229E8230-6	.PLATE, INFORMATION SUCTION .....	1

SECTION II			(4)	(5)	(6)
ITEM NO	(2) SMR CODE	(3) CAGEC	PART NUMBER	DESCRIPTION AND USABLE ON CODES (UOC)	QTY
39	PAOZZ	96906	MS17829-4C	.NUT,SELF-LOCKING,HE .....	8
40	XBOZZ	97403	13229E8229	.PLATE, INFORMATION AUX FUEL.....	1
41	XBOZZ	97403	13229E8230-1	.PLATE, INFORMATION.....	1
42	XBOZZ	97403	13229E8224	.PLATE, INFORMATION DISCHARGE .....	1
				PRIME HERE.....	
43	PAOZZ	97403	13229E8227	.SPARK,EXHAUST .....	1
44	PAOZZ	96906	MS35842-12	.CLAMP,HOSE ELECTRICAL .....	1
				INTERVEHICLE CONNECTOR.....	
45	XBOZZ	97403	13229E8221-1	.PLATE, INFORMATION.....	1
46	XBOZZ	97403	13220E8222	.PLATE, INFORMATION FOUR SOLDIER .....	1
				LIFT.....	
47	XBOZZ	97403	13229E8230-2	.PLATE, INFORMATION HOT .....	1
48	PAOZZ	93061	2202-P-2-2	.ELBOW,PIPE .....	2
49	PAOZZ	96906	MS51846-1	.NIPPLE,PIPE .....	1
50	PAOZZ	81352	AN910-1	.COUPLING,HOSE .....	1
51	PAOZZ	03296	NMC557-12C	.GROMMET,METALLIC .....	1
52	PAOZZ	96906	MS35489-147	.GROMMET,NONMETALLIC .....	1
53	PAOZZ	97403	13206E0820	.INDICATOR,PRESSURE .....	1
54	PAOZZ	97403	13212E6128	.ADAPTER, FILTER .....	1
55	PAOZZ	93061	125HBL-5-2	.ADAPTER,STRAIGHT,PI .....	1
56	MOOZZ	17506	821-6	.HOSE, OIL DRAIN HOSE, MAKE FROM..... BULK CAGE 17056 P/N 821-6.	1
57	PAOZZ	96906	MS35842-12	.CLAMP,HOSE .....	1
58	PAOZZ	97403	13228E9862	.HOSE,AIR INTAKE .....	1
59	PAOZZ	97403	13229E6792-3	.HOSE,ASSY NONMETALL .....	1

END OF FIGURE

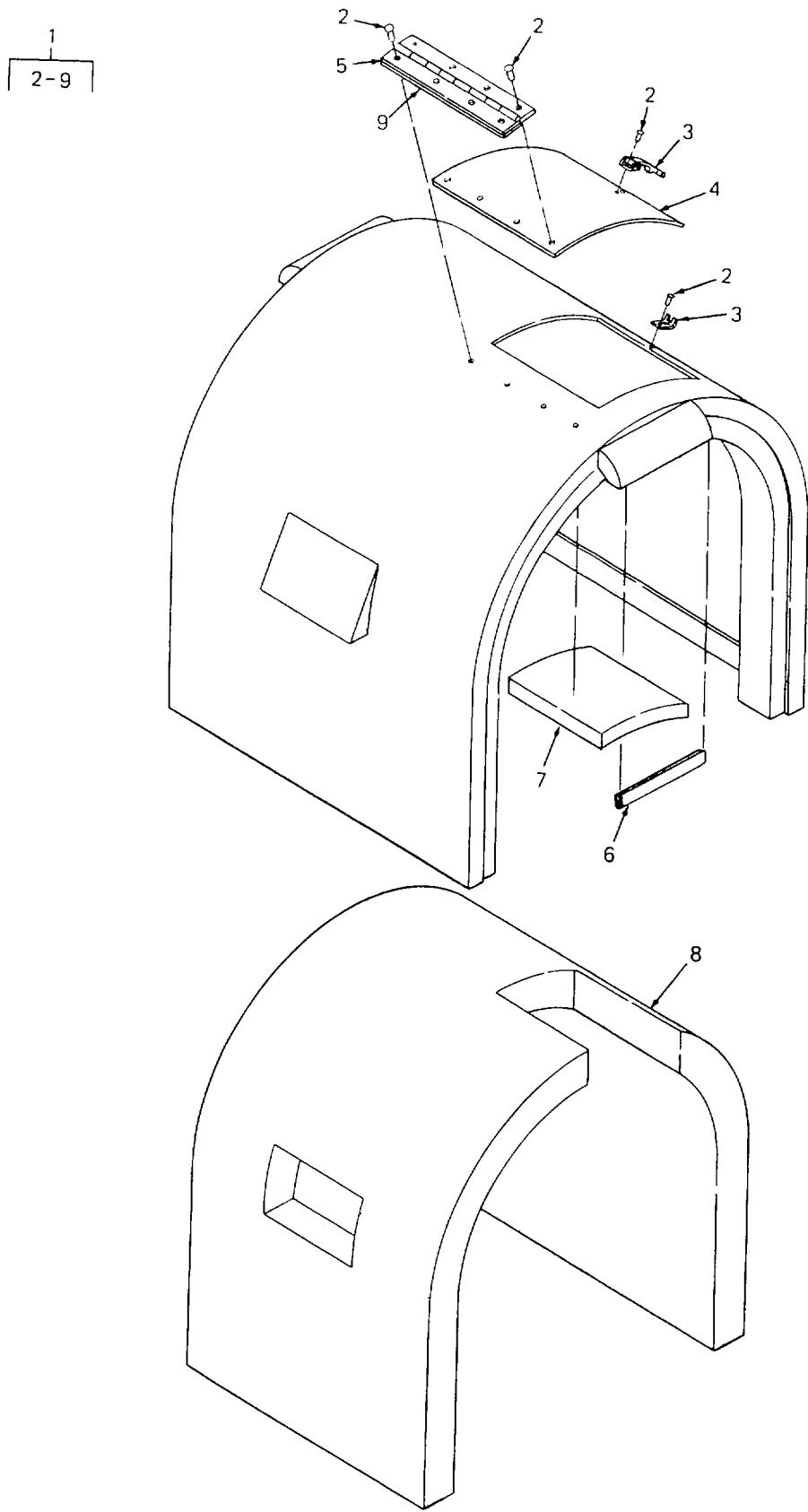
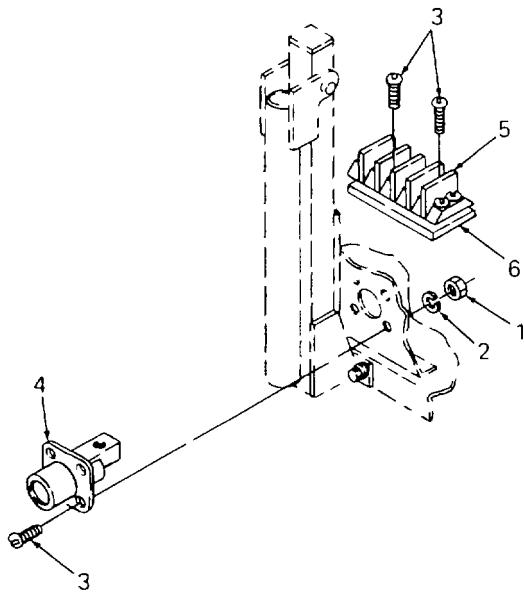


Figure 10. Sound Enclosure Cover

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
GROUP 08 CENTRIFUGAL PUMP UNIT					
FIG. 10 SOUND ENCLOSURE COVER					
1	PAOZZ	97403	13229E9447	.COVER,SOUND RECORDE .....	1
2	PAOZZ	81349	M24243/1B403	..RIVET,BLIND .....	8
3	PAOZZ	57137	ADDC0089-0100A	..LEVER,MANUAL CONTRO .....	1
4	XBOZZ	97403	ASTM B209	..DOOR ASSY DOOR, MAKE FROM BULK CAGE 01276 P/N A-703.....	1
5	XBOZZ	96906	MS20257-4-800	..HINGE HINGE, MAKE FROM BULK CAGE 96906 P/N MS20257-4-800.....	1
6	MOOZZ	97403	13229E9447-10	..TRIM, HANDLE, SOUND TRIM, HANDLE, MAKE FROM BULK CAGE 66173 P/N.....	2
7	MOOZZ	97403	13229E6785-4	750-1/16-B-ZALUM..... ..INSULATION, DOOR DOOR, MAKE FROM BULK CAGE 2408 P/N.....	1
8	MOOZZ	97403	13229E6785-4	763/4750/9425 2.0 54 108..... ..INSULATION, COVER COVER, MAKE FROM BULK CAGE 2408 P/N.....	1
				763/4750/9425 2.0 54 108.....	

END OF FIGURE



**Figure 11. Electrical Intervehicle Connector and Related Components**

## SECTION II

TM10-4320-311-24P

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
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GROUP 08 CENTRIFUGAL PUMP UNIT

FIG. 11 ELECTRICAL INTERVEHICLE  
CONNECTOR RETAILED  
COMPONENTS

1	PAOZZ	76371	FF-N-836	.NUT,PLAIN,HEXAGON .....	8
2	PAOZZ	96906	MS35335-32	.WASHER,LOCK .....	8
3	PAOZZ	96906	MS35206-266	.SCREW,MACHINE .....	8
4	PAOZZ	96906	MS52131	.CONNECTOR,PLUG,ELEC .....	1
5	PAOZZ	81349	39TB6F	.TERMINAL BOARD .....	1
6	PAOZZ	76371	5700314001	.STRIP,MARKER .....	1

END OF FIGURE

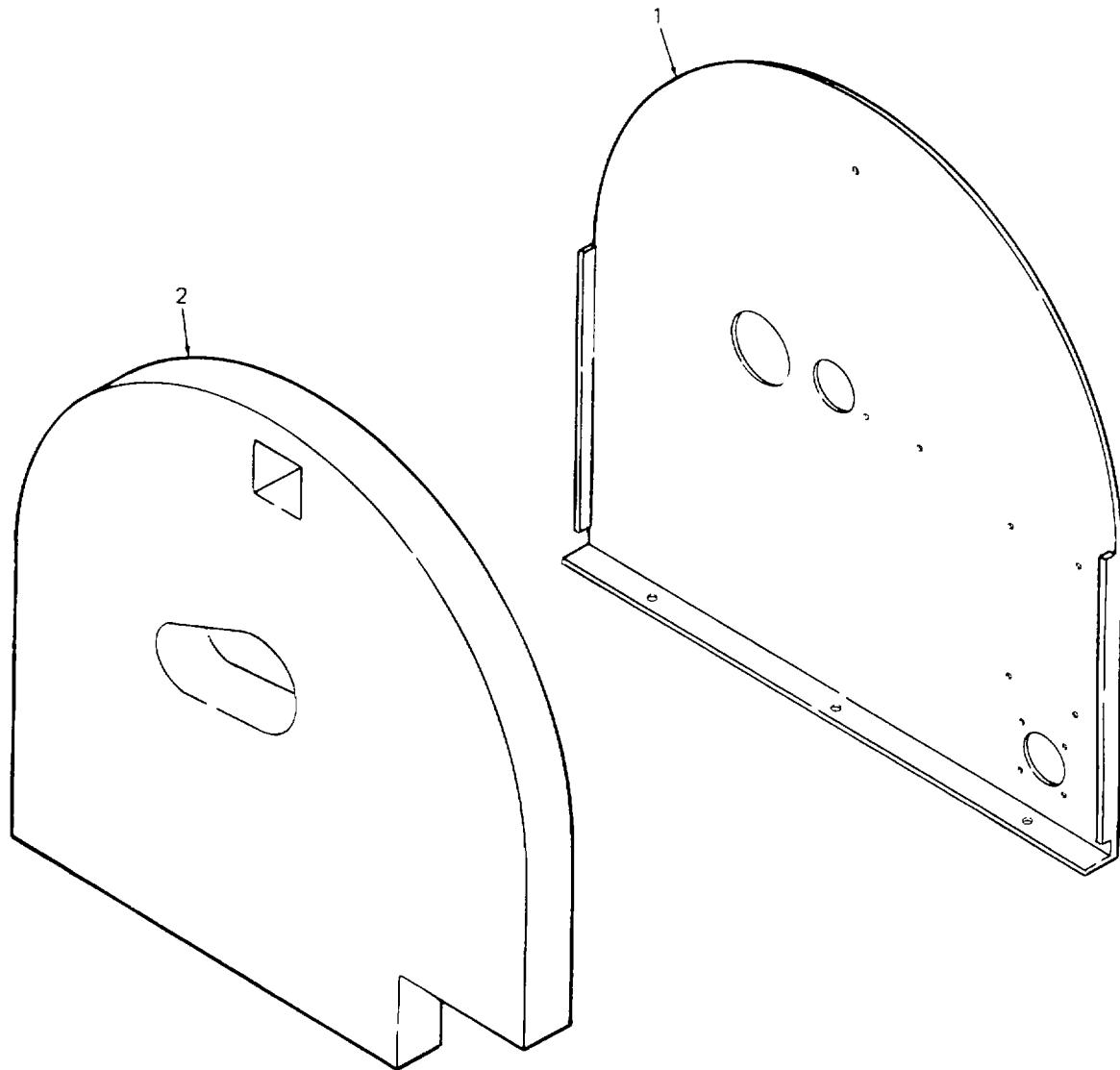


Figure 12. Sound Enclosure Rear Panel Assembly

SECTION II			TM10-4320-311-24P		
(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
1 XBOZZ 97403	13229E9450				
2 MOOZZ 97403	13229E6785-4				

GROUP 08 CENTRIFUGAL PUMP UNIT

FIG. 12 SOUND ENCLOSURE REAR PANEL ASSEMBLY

.PANEL ASSEMBLY, ENC .....	1
..INSULATION, REAR, P INSULATION,.....	1
MAKE FROM BULK CAGE 2408 P/N.....	
763/4750/9425 2.0 54 108. ....	

END OF FIGURE

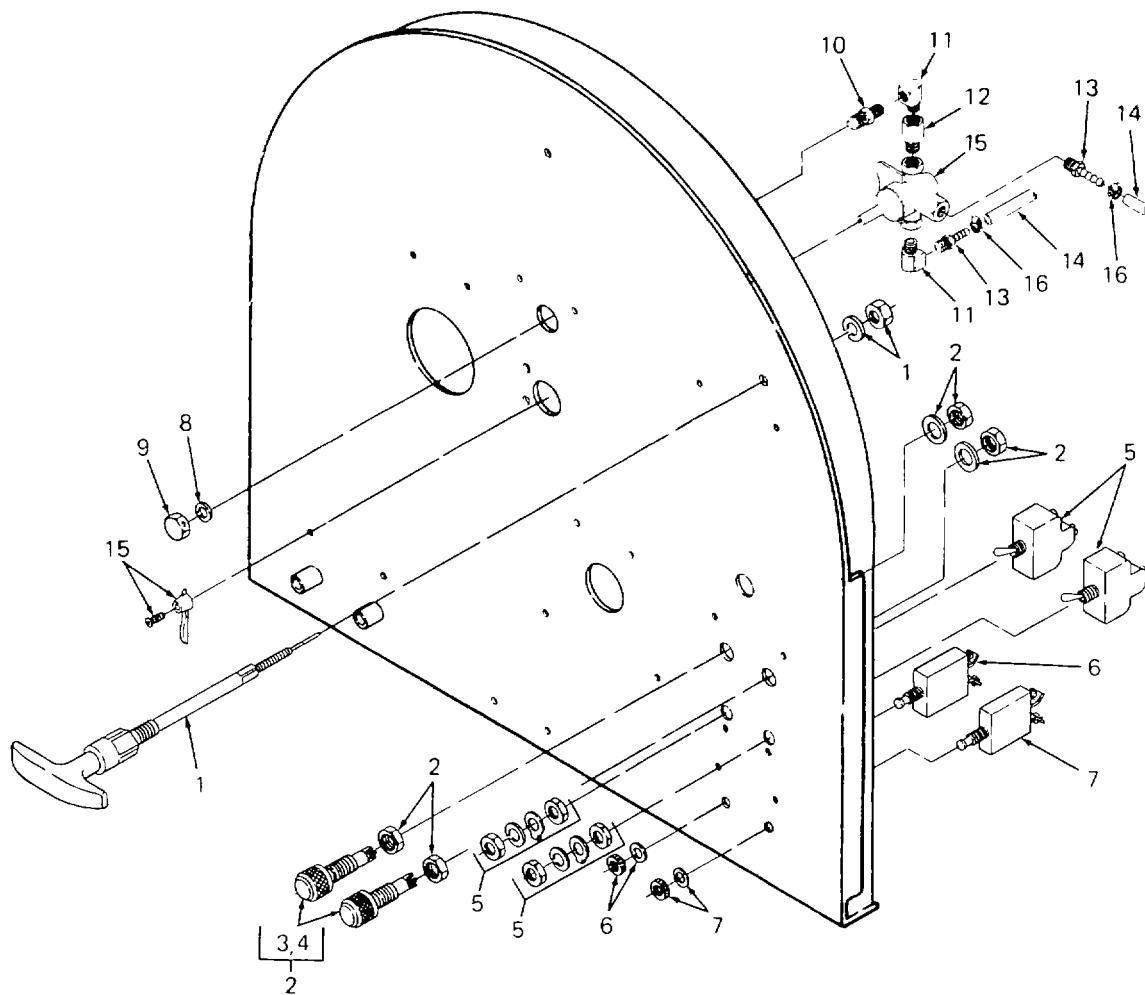


Figure 13. Electrical Controls and Indicators

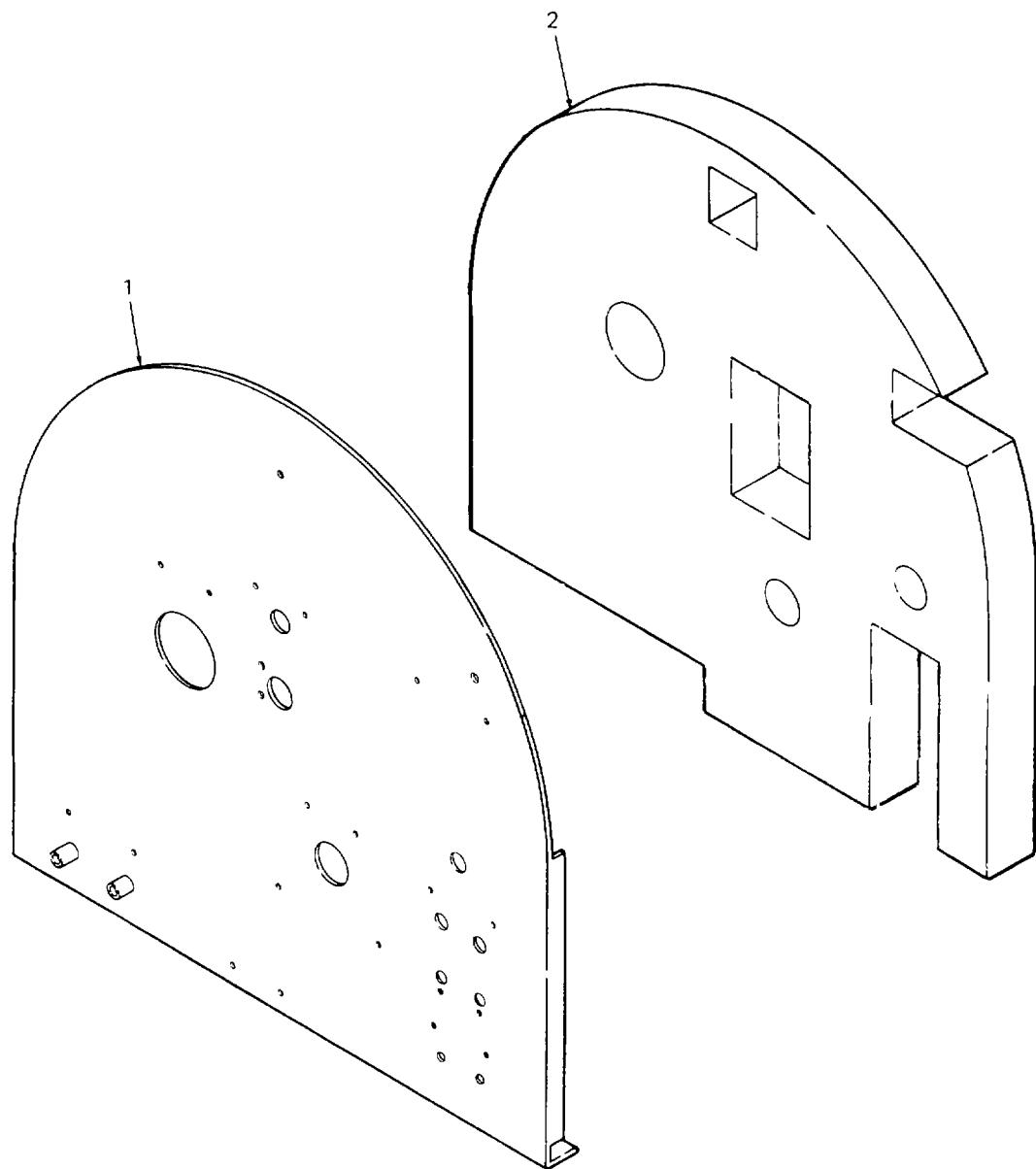
SECTION II			TM10-4320-311-24P		
(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY

GROUP 08 CENTRIFUGAL PUMP UNIT

FIG. 13 ELECTRICAL CONTROLS AND INDICATORS

1 PAOZZ 70436	112-032-103	.CATCH,CLAMPING .....	1
2 PAOZZ 96906	MS25331-3-313S	.LIGHT ASSEMBLY,IND .....	2
3 PAOZZ 76371	5700313000	..LAMP, INCANDESCENT.....	
4 PAOZZ 96906	MS25331-3	..LIGHT, INDICATOR .....	
5 PAOZZ 96906	MS24523-22	.SWITCH,TOGGLE .....	2
6 PAOZZ 77342	W23XIAIG-5	.CIRCUIT BREAKER .....	1
7 PAOZZ 77342	W23XIAIG-20	.CIRCUIT BREAKER .....	1
8 PAOZZ 93061	2GF-5	.GASKET .....	1
9 PAOZZ 93061	640F-5	.CAP,TUBE .....	1
10 XBOZZ 93061	222P-4-4	.COUPLING,PIPE .....	1
11 XBOZZ 93061	2202P-4-4	.ELBOW,PIPE .....	2
12 XBOZZ 93061	48F-5-4	.CONNECTOR, MALE .....	1
13 XBOZZ 93061	125HBL-5-4	.ADAPTER,STRAIGHT,PI .....	2
14 PAOZZ 97403	SAE30R7	.HOSELINE OUTFIT FUE .....	1
15 PAOZZ 93061	V406P-4	.VALVE,REGULATING,FL .....	1
16 PAOZZ 96906	MS35842-10	.CLAMP,HOSE .....	1

END OF FIGURE



**Figure 14. Sound Enclosure Front Panel Assembly**

## SECTION II

TM10-4320-311-24P

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
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GROUP 08 CENTRIFUGAL PUMP UNIT

FIG. 14 SOUND ENCLOSURE FRONT PANEL  
ASSEMBLY

1 XBOZZ 97403	13229E9449	.PANEL ASSY, FRONT .....	1
2 MOOZZ 97403	13229E6785-4	..INSULATION, FRONT P INSULATION, .....	1
		MAKE FROM BULK CAGE 2408 P/N.....	
		763/4750/9425 2.0 54 108 .....	

END OF FIGURE

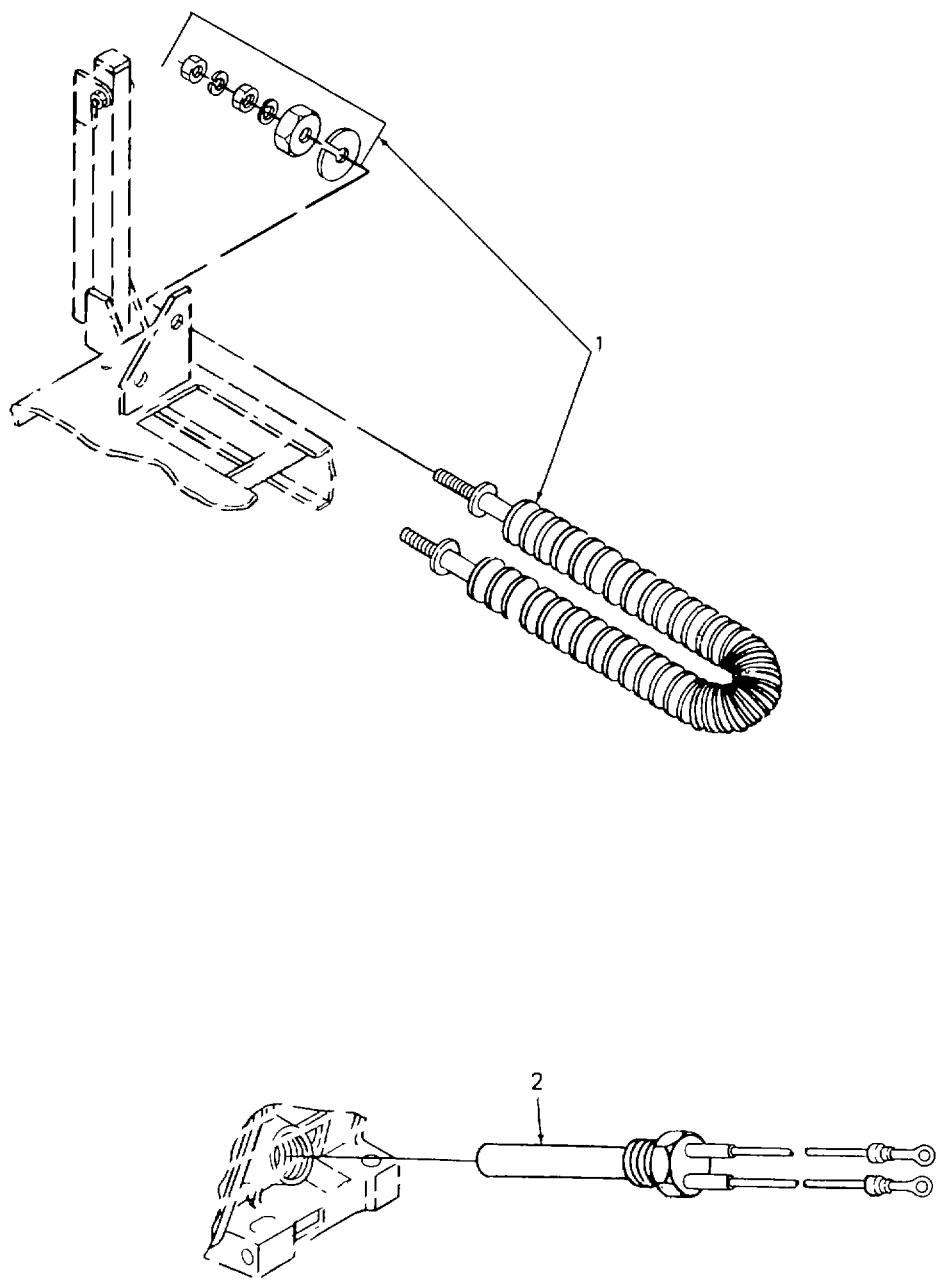


Figure 15. Air Intake and Oil Immersion Heaters

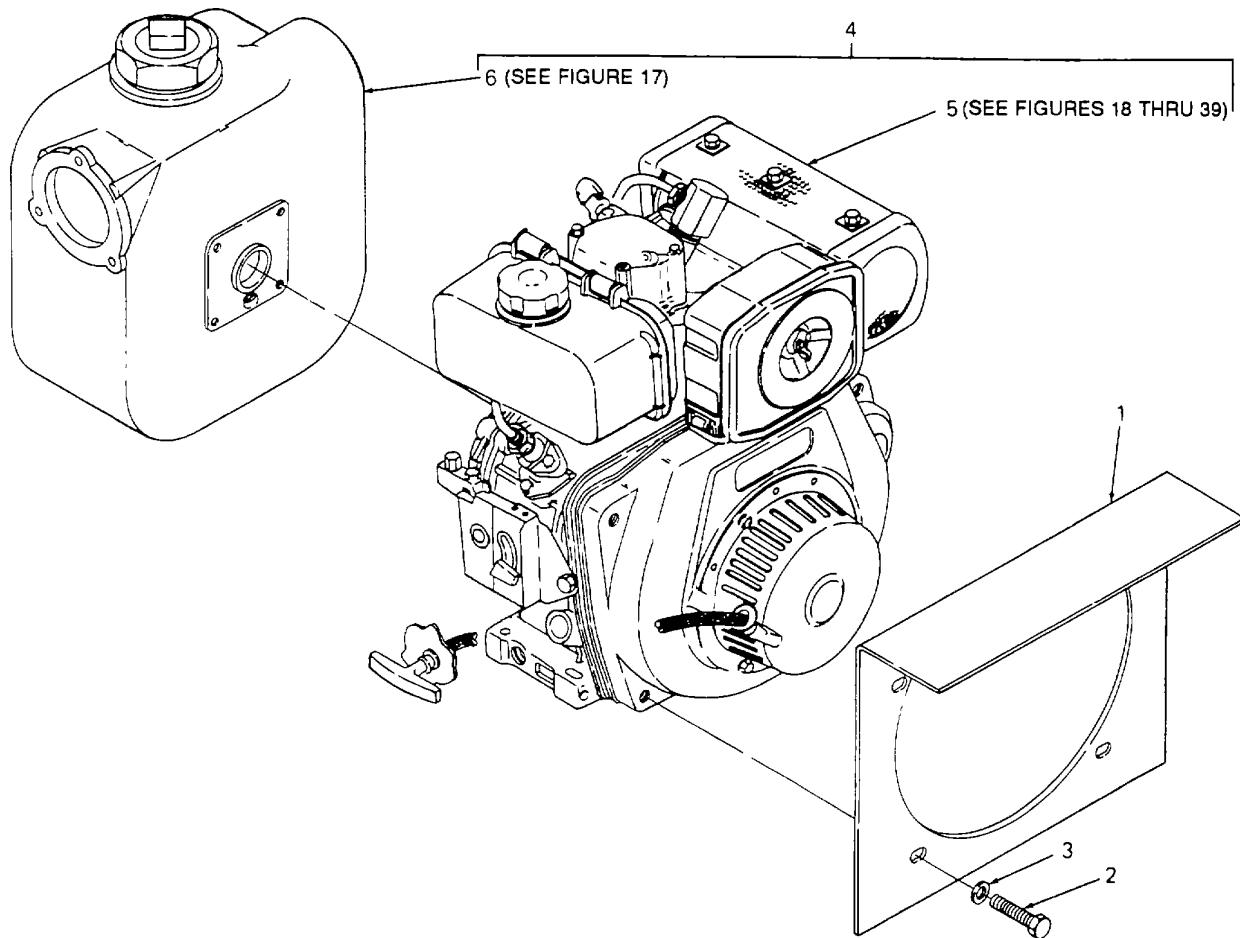
SECTION II			TM10-4320-311-24P		
(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
1 PAOZZ	13905	FB2Z-1321	.HEATING ELEMENT,ELE .....	1	
2 PAOZZ	97403	13229E9451	.HEATER,IMMERSION,LI .....	1	

GROUP 08 CENTRIFUGAL PUMP UNIT

FIG. 15 AIR INTAKE AND OIL  
IMMERSION HEATERS

1 PAOZZ	13905	FB2Z-1321	.HEATING ELEMENT,ELE .....	1
2 PAOZZ	97403	13229E9451	.HEATER,IMMERSION,LI .....	1

END OF FIGURE



**Figure 16. Engine Pump**

SECTION II			(4)	(5)	(6)
ITEM NO	(2) SMR CODE	(3) CAGEC	PART NUMBER	DESCRIPTION AND USABLE ON CODES (UOC)	QTY
GROUP 08 CENTRIFUGAL PUMP UNIT					
FIG. 16 ENGINE PUMP					
1	PAOZZ	97403	13229E9448	.BAFFLE,ENGINE AIRFL .....	1
2	PAOZZ	OAK42	26476-060252	.BOLT, METRIC, HEX .....	4
3	PAOZZ	OAK42	160120-76940	.WASHER,FLAT .....	4
4	PAFFF	97403	13230E4819	.PUMP,COOLING SYSTEM .....	1
5	PBFFF	97403	13228E9863	..ENGINE,DIESEL,AIR ALTER P/N..... 13228E9849 .....	1
6	PAFFF	97403	13230E4820	SEE FIGURE 17 ITEMS 18-39..... FOR BREAKDOWN..... ..PUMP ASSY,CNTFGL SEE FIGURE 17 .....	1
				FOR BREAKDOWN.....	

END OF FIGURE

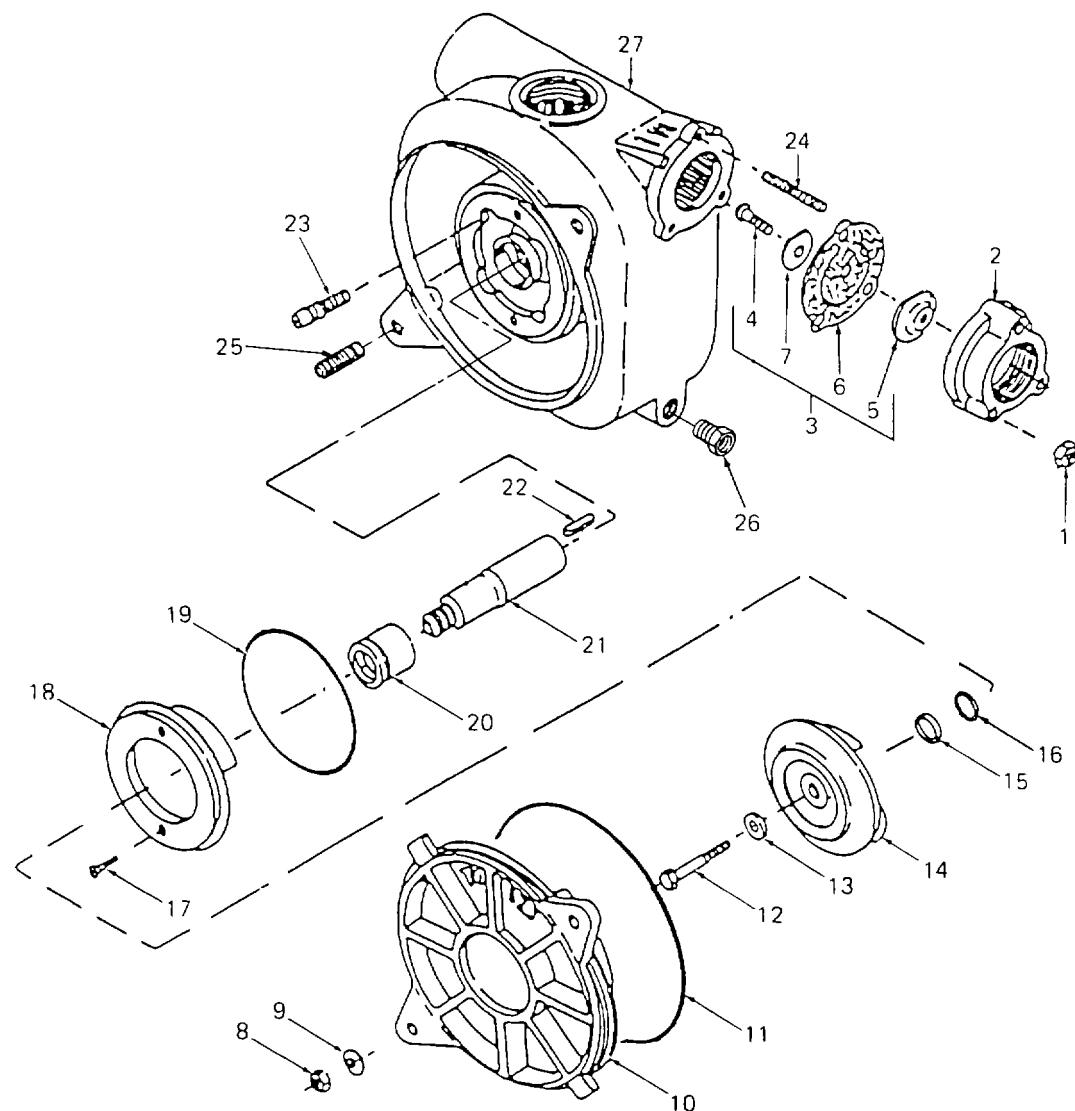


Figure 17. Centrifugal Pump Assembly

## SECTION II

TM10-4320-311-24P

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
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## GROUP 08 CENTRIFUGAL PUMP UNIT

FIG. 17 CENTRIFUGAL PUMP ASSEMBLY

1	PAOZZ	96906	MS51968-5	...NUT,PLAIN,HEXAGON .....	3
2	PAOZZ	97403	13200E8814	...FLANGE,PIPE .....	1
3	PAOOZ	97403	13200E8810	...DISK,VALVE .....	1
4	PAOZZ	76371	ANSB18-6.3	....SCREW, MACH & NUT .....	1
5	PAOZZ	97403	13200E8812	....WEIGHT,CHECK VALVE, .....	1
6	PAOZZ	97403	13200E8813	....GASKET .....	1
7	PAOZZ	97403	13200E8811	....WEIGHT,CHECK VALVE .....	1
8	PAOZZ	96906	MS51968-14	...NUT,PLAIN,HEXAGON .....	2
9	PAOZZ	96906	MS27183-18	...WASHER,FLAT .....	2
10	PAOZZ	97403	13200E8809	...VOLUTE,PUMP .....	1
11	PAOZZ	96906	MS29513-273	...PACKING,PREFORMED .....	1
12	PAFZZ	96906	MS90726-45	...BOLT,MACHINE .....	1
13	PAFZZ	97403	13200E8802	...RETAINER,PACKING .....	1
14	XBFZZ	97403	13200E8808	...IMPELLER,PUMP,CENTR .....	1
15	PAFZZ	97403	13200E8807-1	...SHIM .....	1
16	PAFZZ	97403	13200E8807-2	...WASHER,FLAT .....	1
17	PAFZZ	96906	MS35198-70	...SCREW,MACHINE .....	2
18	PAFZZ	97403	13200E8815	...PLATE,WEAR,ROTARY P .....	1
19	PAFZZ	96906	MS29513-253	...PACKING,PREFORMED .....	1
20	PAFZZ	67209	21-106-13	...SEAL ASSEMBLY PUMP .....	1
21	PAFZZ	97403	13200E8804	...SHAFT,SHOULDERED .....	1
22	PAFZZ	96906	MS20066-163	...KEY,MACHINE .....	1
23	PAFZZ	97403	13228E9869	...SCREW,CAP,SOCKET HE .....	4
24	PAFZZ	96906	MS51864-103-18	...STUD .....	3
25	PAFZZ	96906	MS51864-106-20	...STUD,PLAIN .....	2
26	PAFZZ	96906	MS14315-4X	...PIPE FITTING, BUSHI .....	1
27	PAFZZ	97403	13200E8803	...HOUSING,LIQUID PUMP .....	1

END OF FIGURE

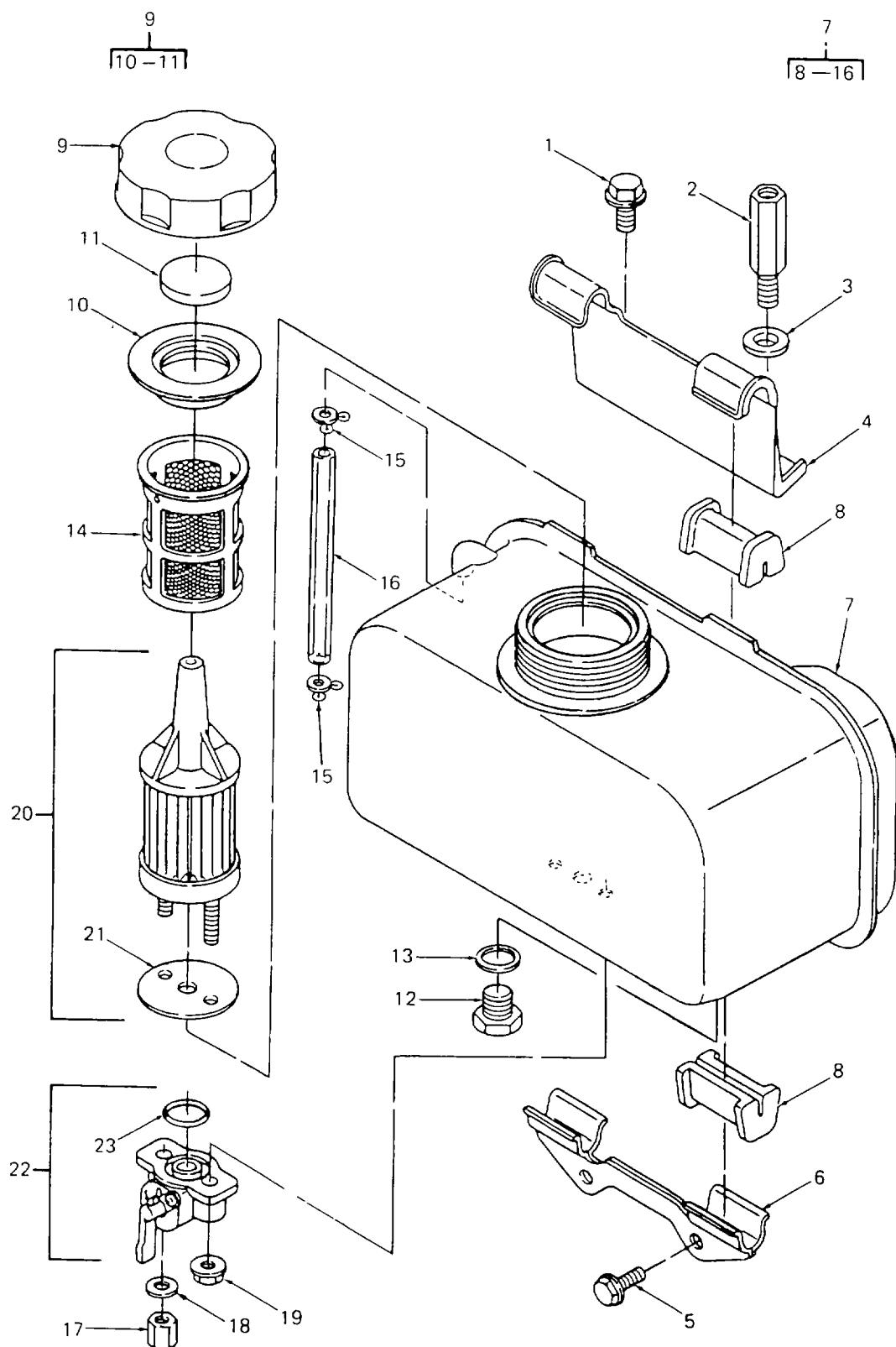


Figure 18. Fuel Tank

## SECTION II

TM10-4320-311-24P

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
GROUP 08      CENTRIFUGAL PUMP UNIT					

FIG. 18 FUEL TANK

1	PAOZZ	OAK42	26106-080452	...BOLT, MACHINE.....	1
2	PAOZZ	OAK42	114650-55810	...BOLT, MACHINE.....	1
3	PAOZZ	OAK42	22117-080000	...WASHER, FLAT 8MM.....	1
4	PAOZZ	OAK42	114252-55231	...BOW, VEHICULAR TOP .....	1
5	XBOZZ	OAK42	26476-060142	...BOLT, MACHINE.....	2
6	XBOZZ	OAK42	114250-55211	...STAY, BOTTOM.....	1
8	XBOZZ	OAK42	714350-55701	...TANK ASSEMBLY, FUEL.....	1
7	XBOZZ	OAK42	114250-55201	...DAMPER .....	4
9	PAOZZ	OAK42	114250-55041	...CAP, FILLER OPENING.....	1
10	PAOZZ	OAK42	114250-55050	....GASKET.....	1
11	PAOZZ	OAK42	114250-55060	....SEAL, PLAIN .....	1
12	PAOZZ	OAK42	23887-120002	....PLUG, EXPANSION .....	1
13	PAOZZ	OAK42	23414-120000	....PACKING, PREFORMED.....	1
14	PAOZZ	OAK42	114250-55100	....FILTER, GAS .....	1
15	PAOZZ	OAK42	124722-59050	....CLAMP, LOOP .....	2
16	XBOZZ	OAK42	114350-55150	....PIPE, GUAGE .....	1
17	PAOZZ	OAK42	114252-55800	....NUT, PLAIN, HEXAGON .....	1
18	PAOZZ	OAK42	22117-060000	....WASHER, FLAT 6MM .....	1
19	PAOZZ	OAK42	26366-060002	....NUT, PLAIN, HEXAGON .....	1
20	PAOZZ	OAK42	114350-55120	....FILTER, GAS .....	1
21	PAOZZ	OAK42	114250-55130	....GASKET.....	1
22	PBOZZ	97403	13229E9442	....COCK, POPPET DRAIN V ALTER P/N .....	1
23	PAOZZ	OAK42	24341-000150	114250-55300..... ....PACKING, PREFORMED.....	1

END OF FIGURE

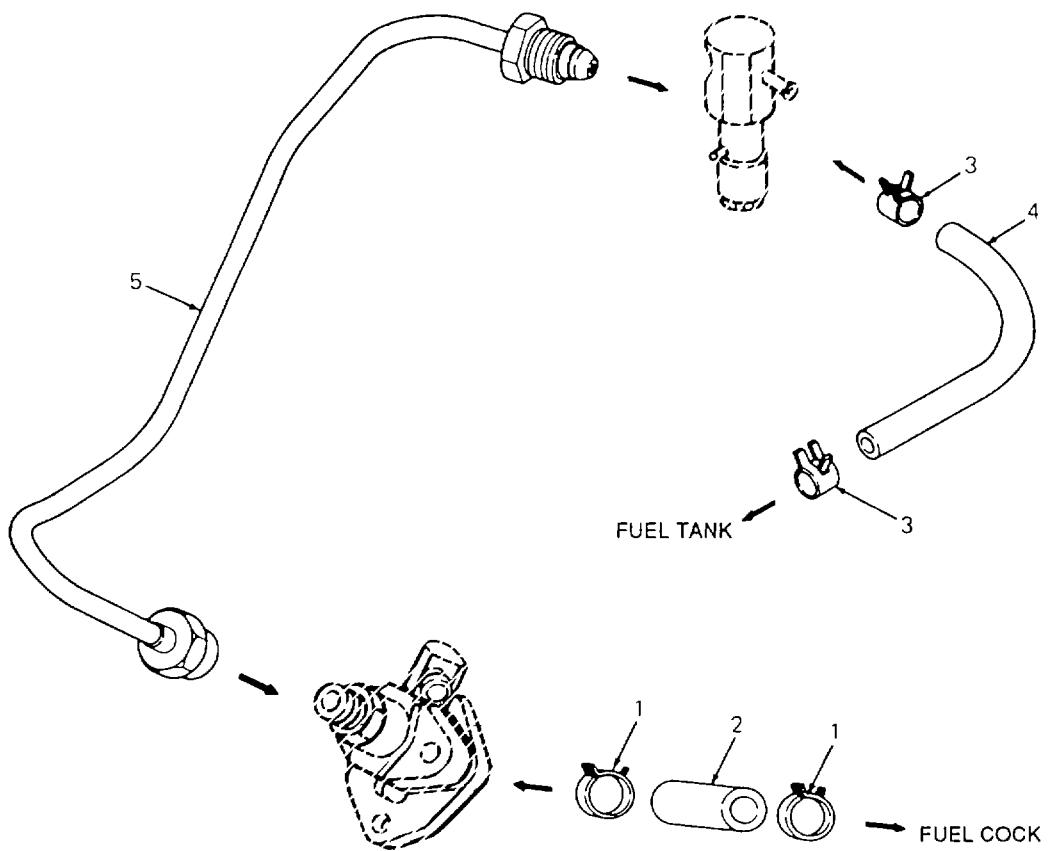


Figure 19. Fuel Injection Pipe

SECTION II			TM10-4320-311-24P		
(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
GROUP 08      CENTRIFUGAL PUMP UNIT					
FIG. 19 FUEL INJECTION PIPE					
1	PAOZZ	OAK42	106990-44660	...CLAMP, LOOP .....	2
2	XBOZZ	OAK42	114250-59050	...HOSE, FUEL OIL .....	1
3	PAOZZ	OAK42	124722-59050	...CLAMP, LOOP .....	2
4	PAOZZ	OAK42	114250-59060	...HOSE, NONMETALLIC .....	1
5	XBOZZ	OAK42	114250-59800	...PIPE, FUEL .....	1

END OF FIGURE

1  
[ 2 — 10 ]

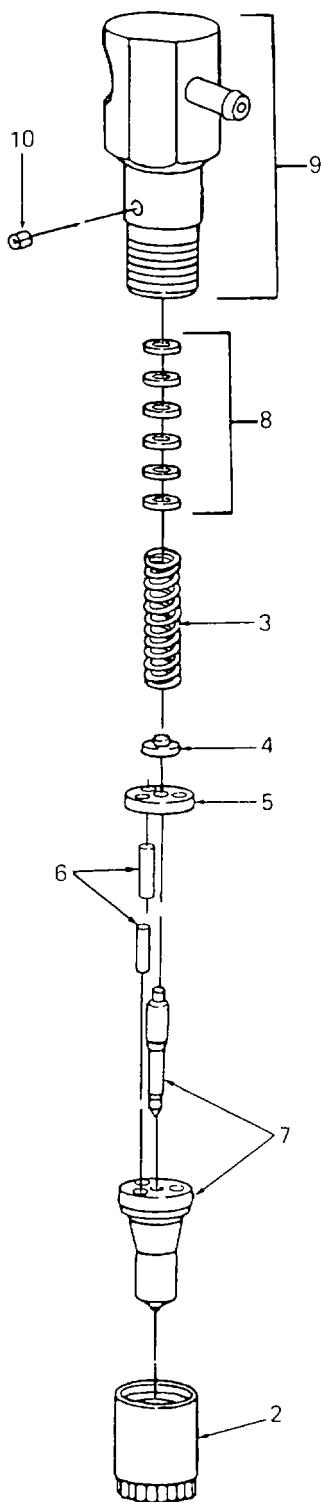


Figure 20. Injection Nozzle

SECTION II		TM10-4320-311-24P		(5)	(6)
ITEM NO	SMR CODE	(3) CAGEC	(4) PART NUMBER	DESCRIPTION AND USABLE ON CODES (UOC)	QTY
GROUP 08      CENTRIFUGAL PUMP UNIT					
FIG. 20 INJECTION NOZZLE					
1	PAFZZ	OAK42	714250-53101	....PUMP, FUEL, METERING .....	1
2	XAFZZ	OAK42	114250-53080	....NUT, NOZZLE .....	1
3	XAFZZ	OAK42	114250-53120	....SPRING, HELICAL, COMP .....	1
4	XAFZZ	OAK42	114250-53130	....RETAINER, HELICAL CO .....	1
5	XAFZZ	OAK42	114250-53140	....PLATE, VALVE STOP .....	1
6	XAFZZ	OAK42	114250-53210	....PIN .....	2
7	XAFZZ	OAK42	114250-53001	....NOZZLE, FUEL INJECTI.....	1
8	XAFZZ	OAK42	114250-53400	....SHIM SET .....	1
9	XAFZZ	OAK42	114250-53300	....HOLDER ASSEMBLY,.....	1
10	XAFZZ	OAK42	114250-53331	....PIN, SPRING.....	1

END OF FIGURE

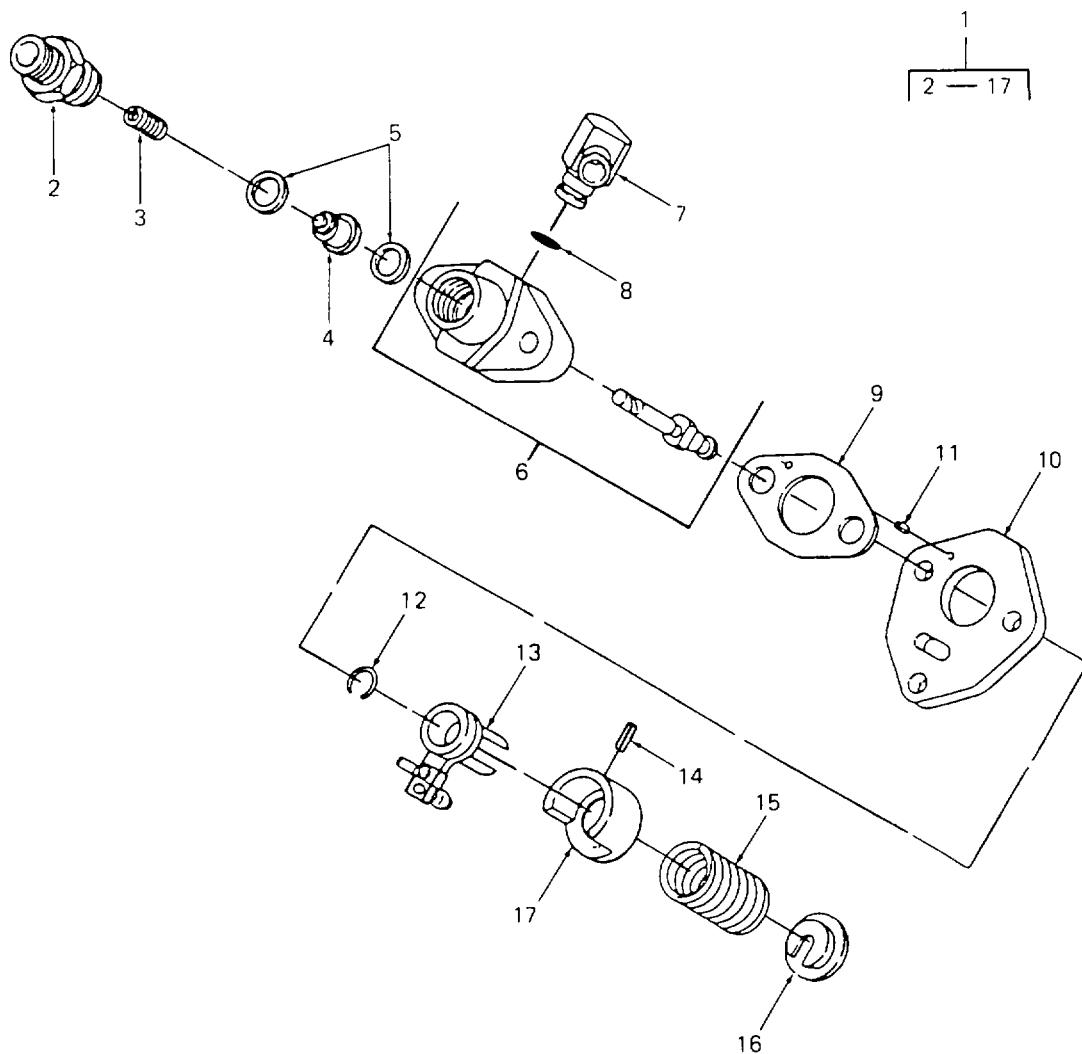


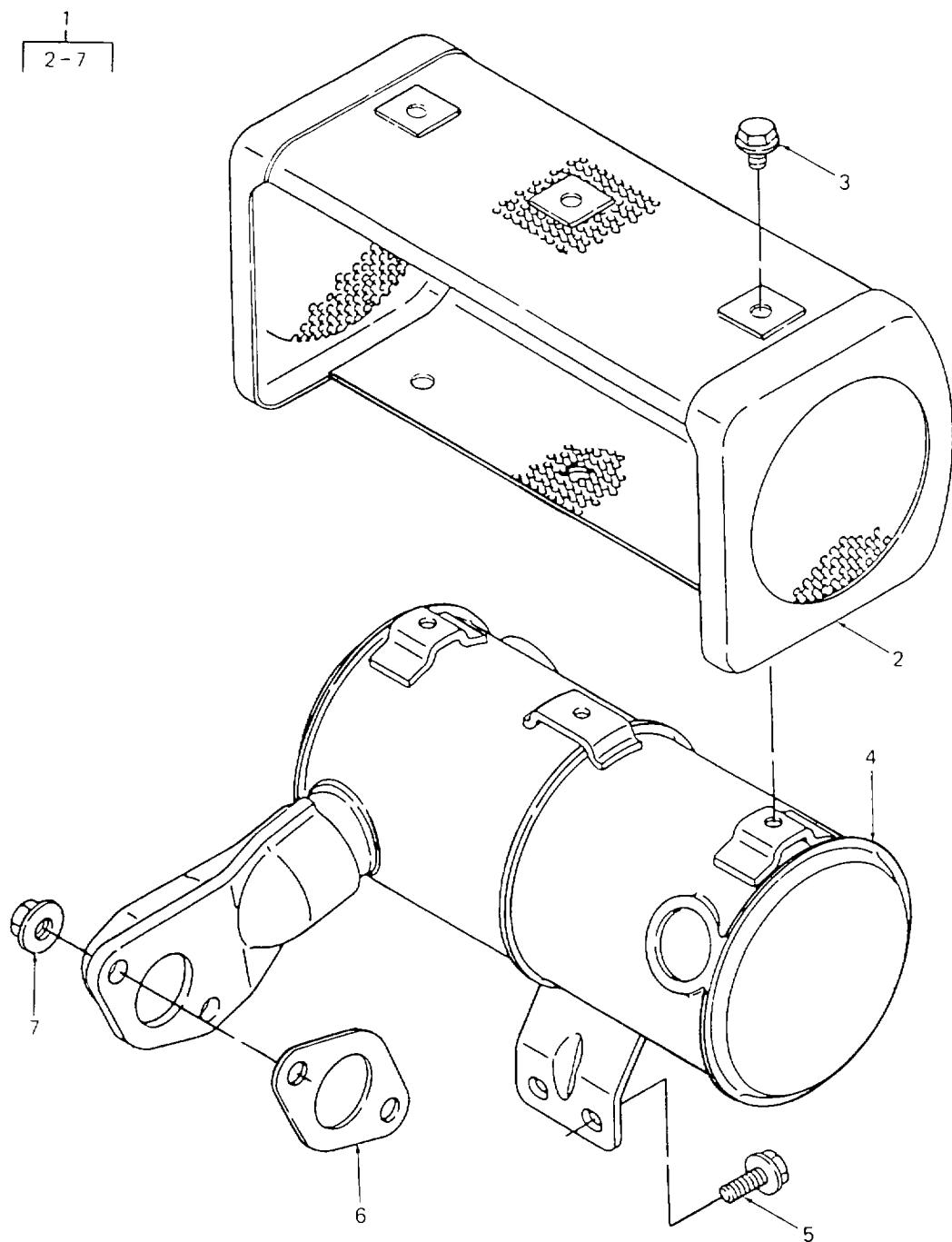
Figure 21. Injection Pump

## SECTION II

TM10-4320-311-24P

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
GROUP 08      CENTRIFUGAL PUMP UNIT					
FIG. 21 INJECTION PUMP					
1	PAFZF	OAK42	714250-51701	...PUMP, FUEL, METERING .....	1
2	XAFZZ	OAK42	114250-51340	....HOLDER .....	1
3	XAFZZ	OAK42	105546-51330	....SPRING, HELICAL, COMP .....	1
4	XAFZZ	OAK42	114250-51300	....VALVE, ASSEMBLY .....	1
5	XAFZZ	OAK42	124550-51350	....GASKET.....	2
6	XAFZZ	OAK42	114250-51400	....BODY ASSY, PUMP .....	1
7	XAFZZ	OAK42	114250-51180	....JOINT .....	1
8	XAFZZ	OAK42	114250-51190	....PACKING, PREFORMED .....	1
9	XAFZZ	OAK42	105546-51020	....GASKET .....	1
10	XAFZZ	OAK42	114250-51080	....PLATE .....	1
11	XAFZZ	OAK42	22351-020006	....PIN, SPRING 2 X 6MM .....	1
12	XAFZZ	OAK42	114250-51150	....RING, RETAINING .....	1
13	XAFZZ	OAK42	114250-51600	....LEVER ASSEMBLY, .....	1
14	XAFZZ	OAK42	22351-030008	....PIN, SPRING .....	1
15	XAFZZ	OAK42	114250-51160	....SPRING, HELICAL, COMP .....	1
16	XAFZZ	OAK42	114250-51650	....SEAT, SPRING .....	1
17	XAFZZ	OAK42	114250-51640	....SEAT, SPRING .....	1

END OF FIGURE



**Figure 22. Exhaust Silencer**

SECTION II		TM10-4320-311-24P		(5)	(6)
ITEM NO	SMR CODE	CAGEC	PART NUMBER	DESCRIPTION AND USABLE ON CODES (UOC)	QTY
GROUP 08				CENTRIFUGAL PUMP UNIT	
FIG. 22 EXHAUST SILENCER					
1	XBOZZ	OAK42	114250-13521	...SILENCER ASSEMBLY.....	1
2	XBOZZ	OAK42	114250-13701	....COVER, SILENCER .....	1
3	XBOZZ	OAK42	26106-060082	....BOLT, METRIC, HEX .....	6
4	XBOZZ	OAK42	114250-13531	....SILENCER .....	1
5	XBOZZ	OAK42	26106-060122	....BOLT, METRIC, HEX .....	2
6	XBOZZ	OAK42	114250-13200	....GASKET.....	
7	XBOZZ	OAK42	26366-080002	...NUT, PLAIN, HEXAGON .....	2

END OF FIGURE

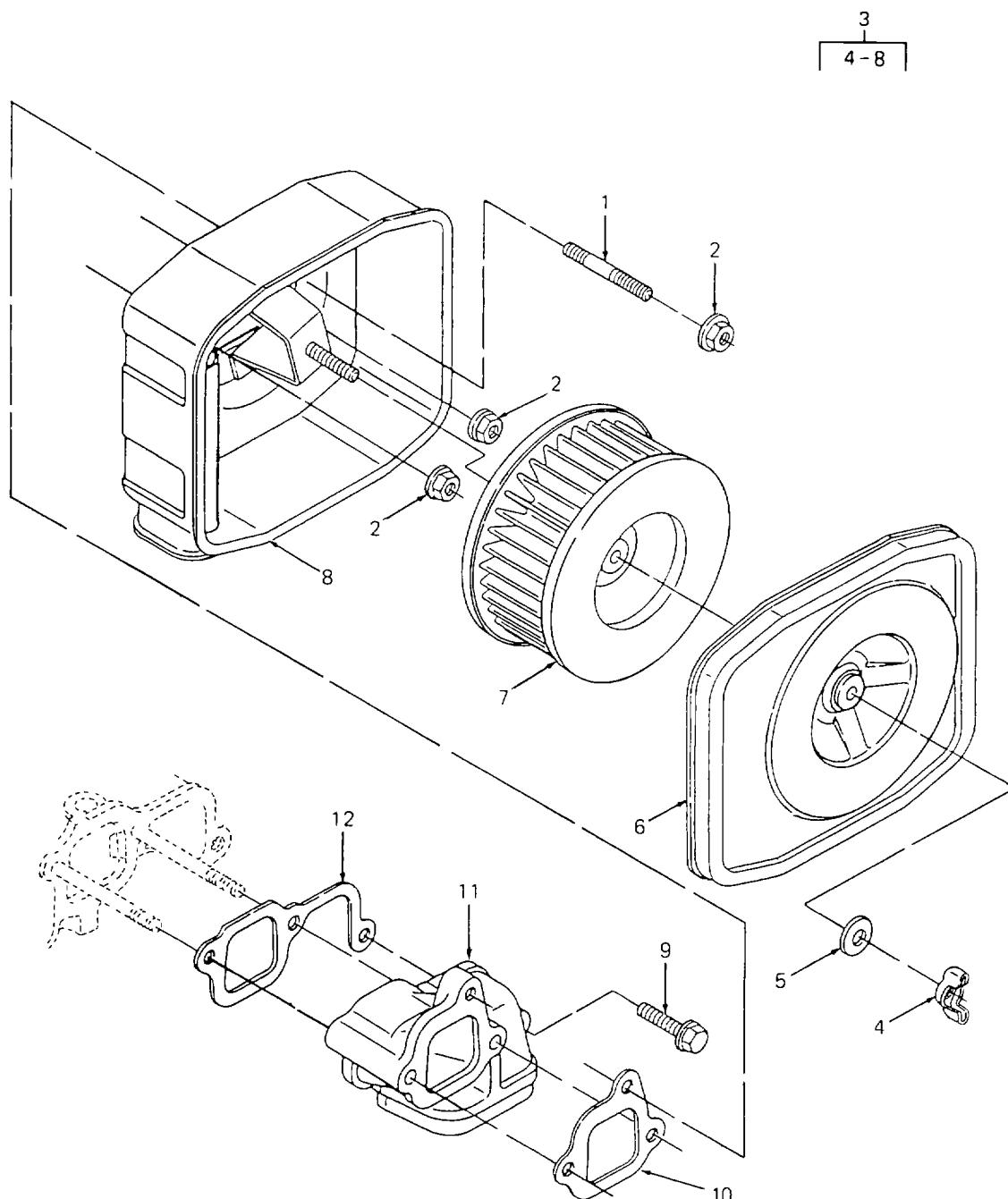


Figure 23. Air Cleaner and Intake Bend

## SECTION II

TM10-4320-311-24P

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
GROUP 08      CENTRIFUGAL PUMP UNIT					
FIG. 23 AIR CLEANER AND INTAKE BEND					
1	XBOZZ	OAK42	26226-060142	...STUD .....	1
2	PAOZZ	OAK42	26366-060002	...NUT, PLAIN, HEXAGON FLANGED, 6MM.....	3
3	PAOZF	OAK42	714250-12560	...AIR CLEANER, INTAKE .....	1
4	PAOZZ	OAK42	114250-12550	....NUT, PLAIN, HEXAGON .....	1
5	PAOZZ	OAK42	114250-12560	....WASHER, SEAL .....	1
6	PAOZZ	OAK42	114250-12520	....COVER, ACCESS .....	1
7	PAOZZ	OAK42	114250-12580	....FILTER ELEMENT, INTA .....	1
8	PAOZZ	OAK42	114250-12530	....CRANKCASE, AIR CLEA .....	1
9	PAOZZ	OAK42	26106-060252	....BOLT, METRIC, HEX HD .....	1
10	PAOZZ	OAK42	114250-12210	....PACKING, PREFORMED .....	1
11	XBOZZ	OAK42	114250-12010	....PIPE, AIR INTAKE .....	1
12	PAOZZ	OAK42	114250-12200	....GASKET.....	1

END OF FIGURE

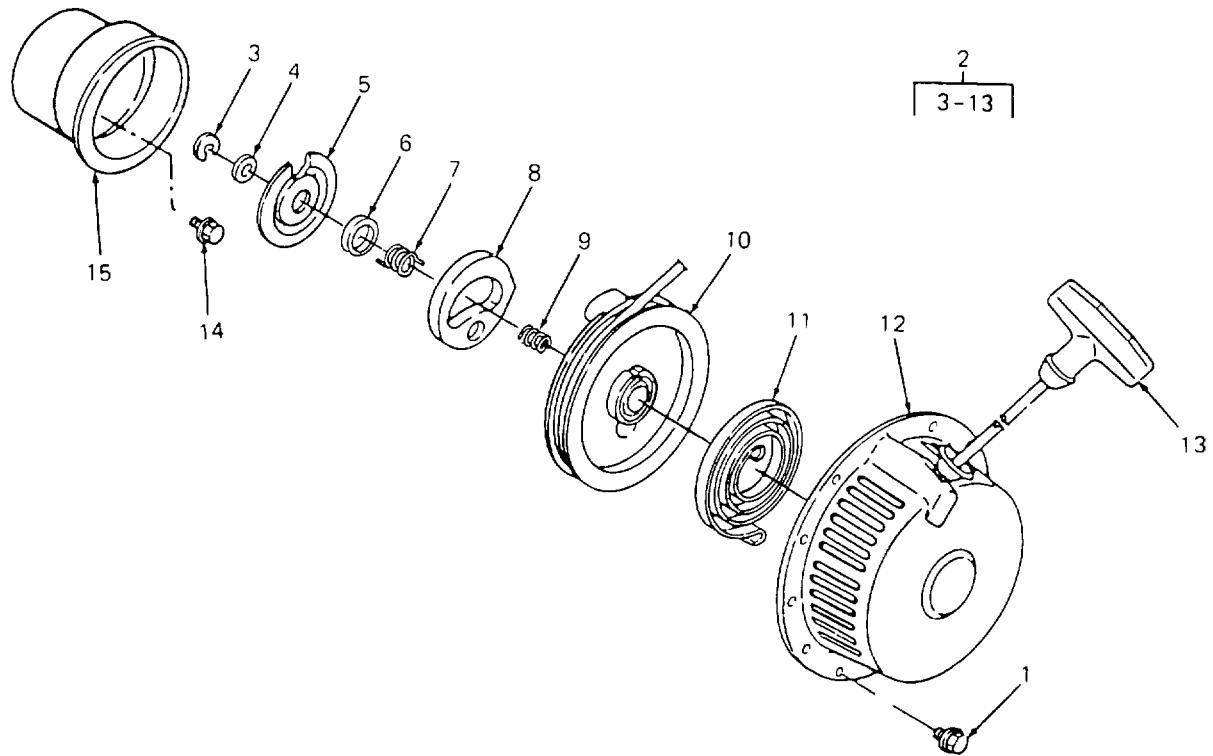


Figure 24. Recoil Starter

## SECTION II

TM10-4320-311-24P

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
GROUP 08      CENTRIFUGAL PUMP UNIT					
FIG. 24 RECOIL STARTER					
1	PAOZZ	OAK42	26106-060082	...SCREW, CAP, HEXAGON H.....	4
2	PBOOF	OAK42	714260-76820	...STARTER, ENGINE, HAND .....	1
3	XAOZZ	OAK42	160260-76600	....CLIP, RETAINING .....	1
4	XAOZZ	OAK42	160260-76550	....WASHER, FLAT .....	1
5	XAOZZ	OAK42	160260-76590	....PLATE, FRICTION .....	1
6	XAOZZ	OAK42	160260-76580	....COVER, SPRING .....	1
7	XAOZZ	OAK42	160290-76570	....SPRING, HELICAL, COMP .....	1
8	XAOZZ	OAK42	160260-76530	....RATCHET .....	1
9	XAOZZ	OAK42	160260-76560	....SPRING, HELICAL, COMP .....	1
10	XAOZZ	OAK42	160260-76520	....REEL .....	1
11	XAOZZ	OAK42	160260-76540	....SPRING, HELICAL, TORS .....	1
12	XAOZZ	OAK42	714260-76830	....CASE, STARTER .....	1
13	PAOZZ	OAK42	160260-76620	....HANDLE, STARTING ROP .....	1
14	XAOZZ	OAK42	26106-060122	...BOLT, METRIC, HEX .....	3
15	XAOZZ	OAK42	114250-76590	...PULLEY, STARTER.....	1

END OF FIGURE

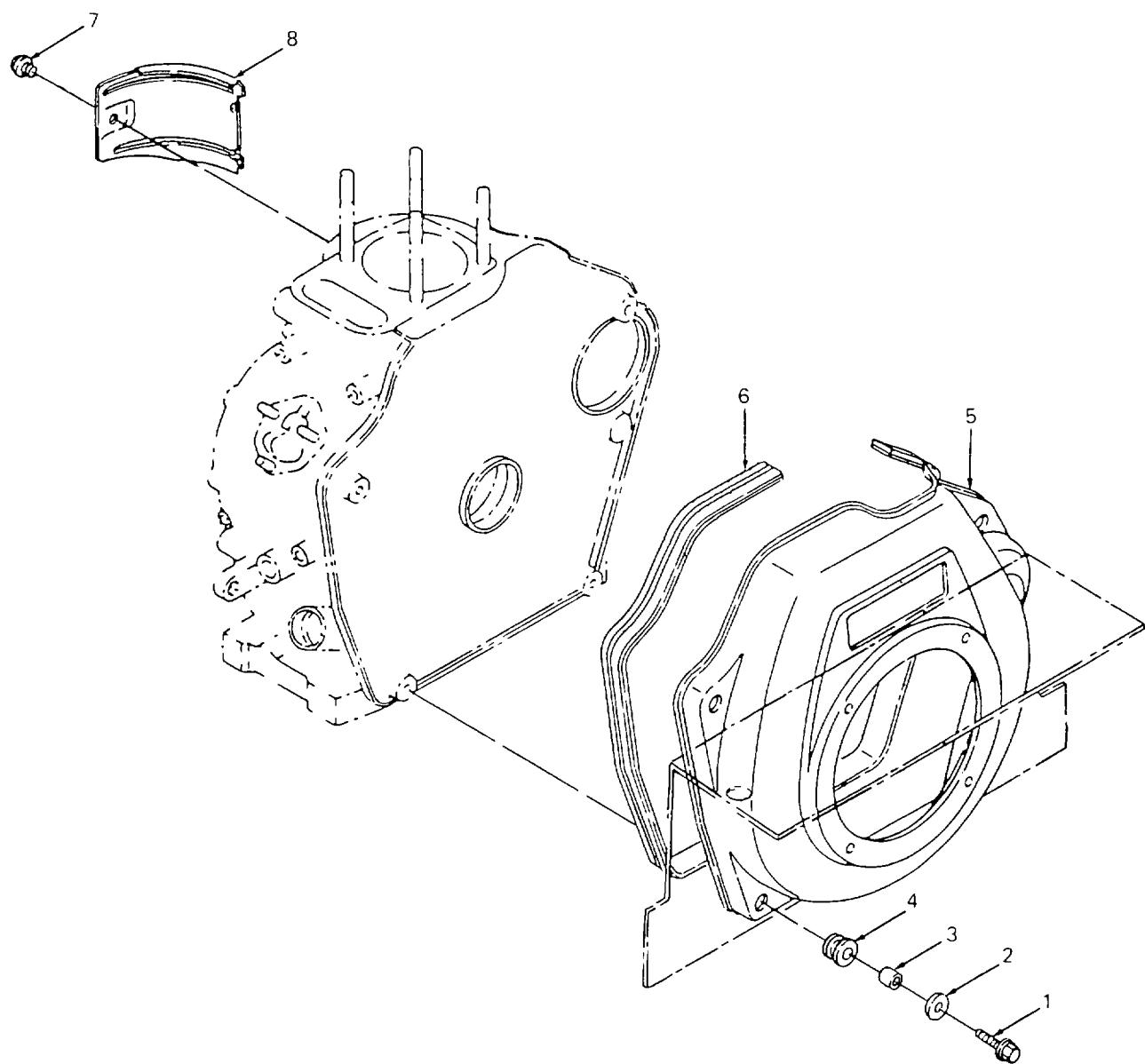


Figure 25. Flywheel Cover

## SECTION II

TM10-4320-311-24P

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
GROUP 08      CENTRIFUGAL PUMP UNIT					
FIG. 25 FLYWHEEL COVER					
1	PAOZZ	OAK42	26476-060252	...BOLT, METRIC, HEX .....	4
2	PAOZZ	OAK42	160120-76940	...WASHER, FLAT .....	4
3	PBOZZ	OAK42	114250-45310	...COUPLING, CLAMP, GROO .....	4
4	PBOZZ	OAK42	114250-45300	...RETAINER, ENGINE .....	4
5	XBOZZ	OAK42	114780-45100	...CASE, FLYWHEEL .....	1
6	PAOZZ	OAK42	114250-45330	...SEAL, PLAIN ENCASED .....	1
7	PAOZZ	OAK42	26476-060142	...BOLT, MACHINE .....	1
8	PAOZZ	OAK42	114250-45211	...COVER, ACCESS .....	1

END OF FIGURE

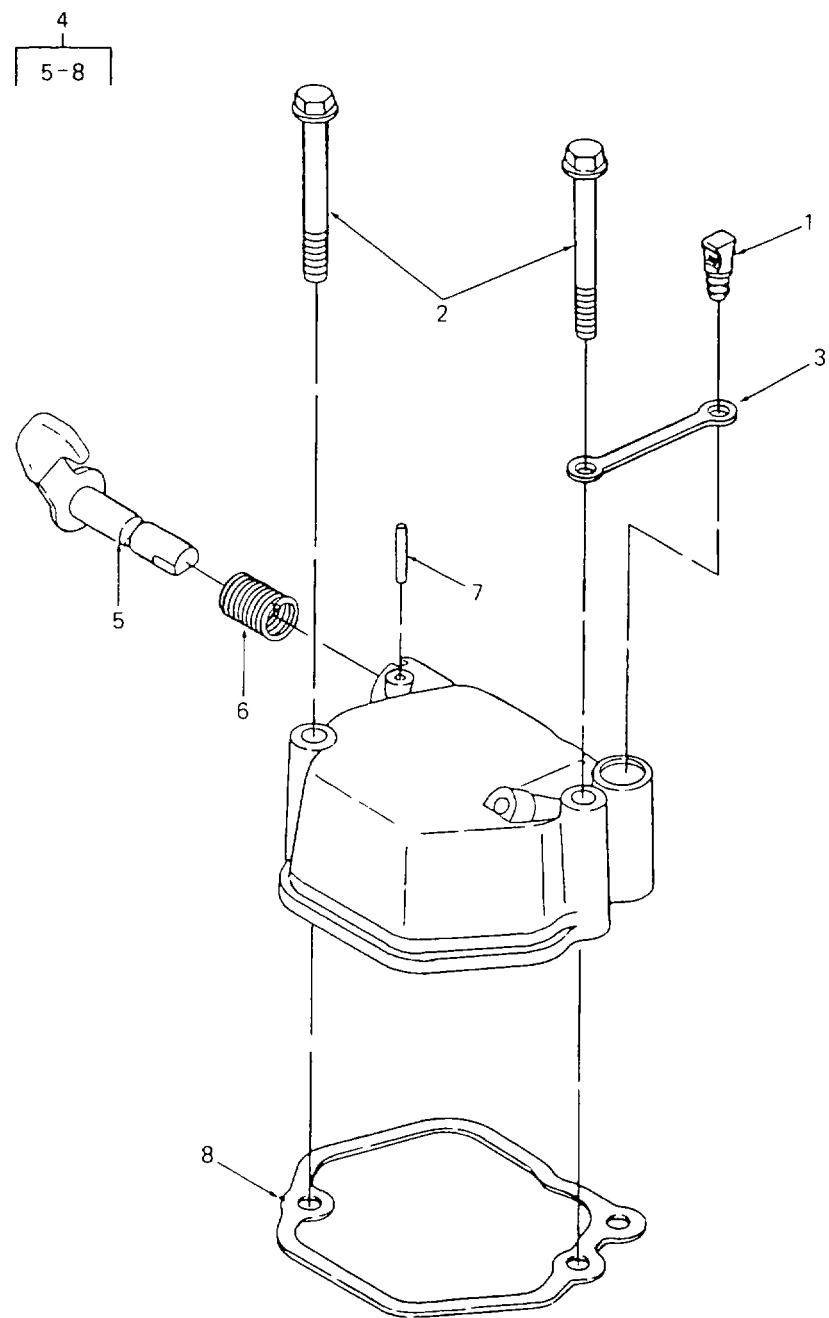


Figure 26. Cylinder Head and Valve Assembly

SECTION II		TM10-4320-311-24P		(5)	(6)
ITEM NO	SMR CODE	(3) CAGEC	(4) PART NUMBER	DESCRIPTION AND USABLE ON CODES (UOC)	QTY
GROUP 08      CENTRIFUGAL PUMP UNIT					
FIG. 26 CYLINDER HEAD AND VALVE ASSEMBLY					
1	XBOZZ	OAK42	114250-76600	...PLUNGER .....	1
2	PBOZZ	OAK42	26106-060552	...BOLT, MACHINE.....	2
3	XBOZZ	OAK42	114250-76610	...HOLDER .....	1
4	XBOZZ	OAK42	114250-11951	...COVER ASSEMBLY .....	1
5	XBOZZ	OAK42	114250-03591	...LEVER, DECOMPRESSION .....	1
6	XBOZZ	OAK42	114250-03640	...SPRING .....	1
7	XBOZZ	OAK42	22312-030160	...PIN, STRAIGHT, HEADLE .....	1
8	XBOZZ	OAK42	114250-11310	...GASKET .....	1

END OF FIGURE

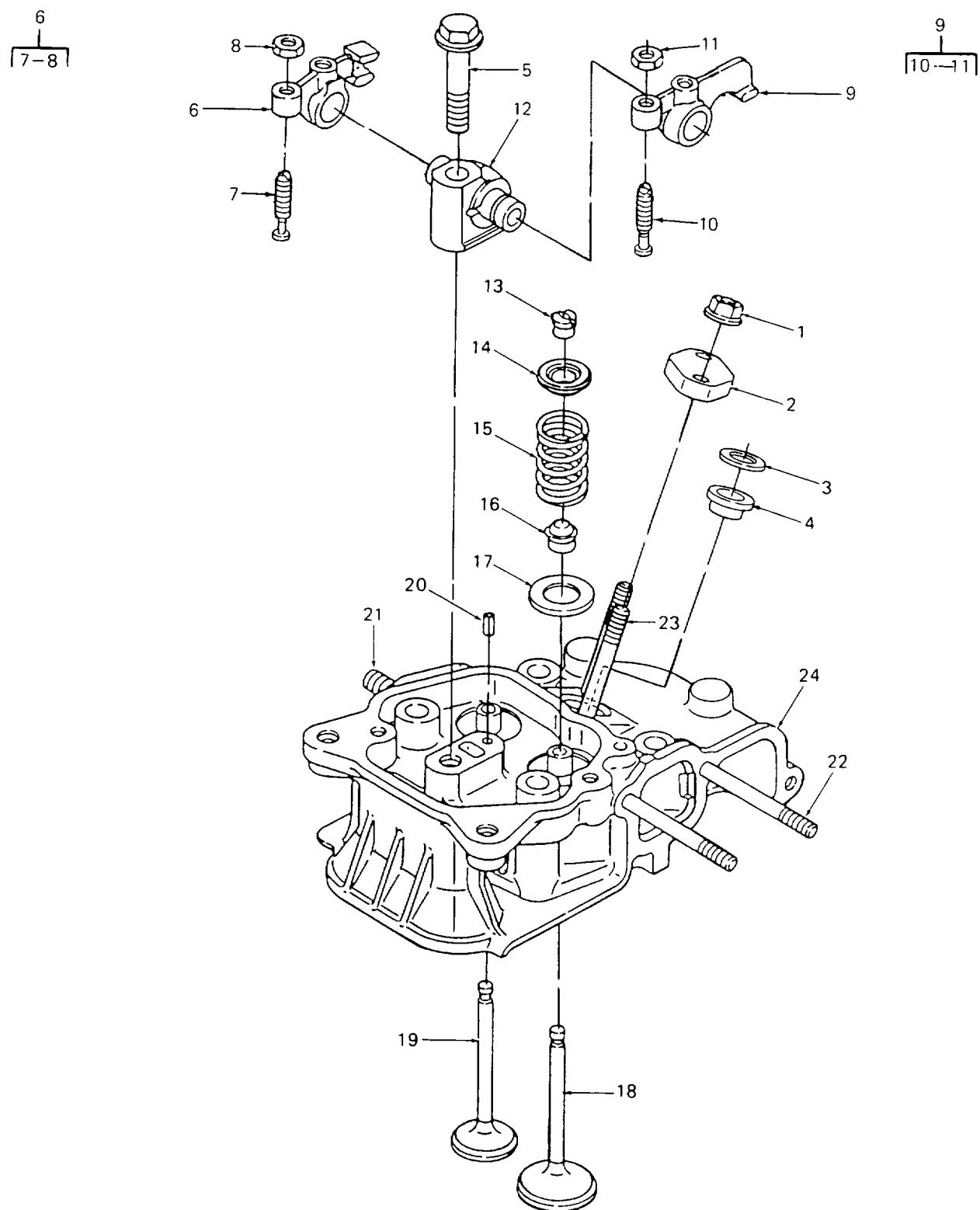


Figure 27. Rocker Arm Assembly

## SECTION II

TM10-4320-311-24P

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
GROUP 08      CENTRIFUGAL PUMP UNIT					
FIG. 27    ROCKER ARM ASSEMBLY					
1	XBHZZ	OAK42	26366-060002	...NUT, PLAIN, HEXAGON HEAD, FLANGED, ..... 6MM .....	2
2	PBHZZ	OAK42	114250-11900	...RETAINER, DIESEL ENG .....	1
3	XBHZZ	OAK42	114350-11470	...SPACER, SLEEVE .....	1
4	XBHZZ	OAK42	114250-11460	...GASKET .....	1
5	XBHZZ	OAK42	26106-080452	...BOLT, MACHINE .....	1
6	XBHZZ	OAK42	714270-11660	...ARM ASSY, VALVE EXHAUST .....	1
7	XBHZZ	OAK42	114250-11240	...SCREW, VALVE .....	1
8	XBOZZ	OAK42	26756-060002	...NUT, PLAIN, HEXAGON .....	1
9	XBHZZ	OAK42	114250-11651	...ARM ASSY, VALVE ROCKER (INTAKE) .....	1
10	XBHZZ	OAK42	114250-11240	...SCREW, VALVE (INTAKE) .....	1
11	XBOZZ	OAK42	26756-060002	...NUT, PLAIN, HEXAGON .....	1
12	XBHZZ	OAK42	114250-11290	...SUPPORT, ROCKER ARM .....	1
13	XBHZZ	OAK42	714250-11570	...LOCK, VALVE SPRING R .....	2
14	XBHZZ	OAK42	114250-11180	...SEAT, HELICAL COMPRE .....	2
15	XBHZZ	OAK42	114250-11120	...SPRING, VALVE .....	2
16	XBHZZ	OAK42	114250-11340	...PACKING, PREFORMED .....	2
17	XBHZZ	OAK42	114250-11600	...WASHER, FLAT .....	2
18	XBHZZ	OAK42	114250-11101	...VALVE, INTAKE .....	1
19	XBHZZ	OAK42	114250-11113	...VALVE, EXHAUST .....	1
20	XBHZZ	OAK42	22351-040008	...PIN, SPRING .....	1
21	XBHZZ	OAK42	26216-080182	...STUD, PLAIN 8MM X 18, PLATED .....	2
22	XBHZZ	OAK42	26226-060552	...STUD, PLAIN 6MM X 5 .....	2
23	XBHZZ	OAK42	26226-060502	...STUD, PLAIN 6MM X 50 .....	2
24	XBHZZ	OAK42	114250-11020	...HEAD, CYLINDER.....	1

END OF FIGURE

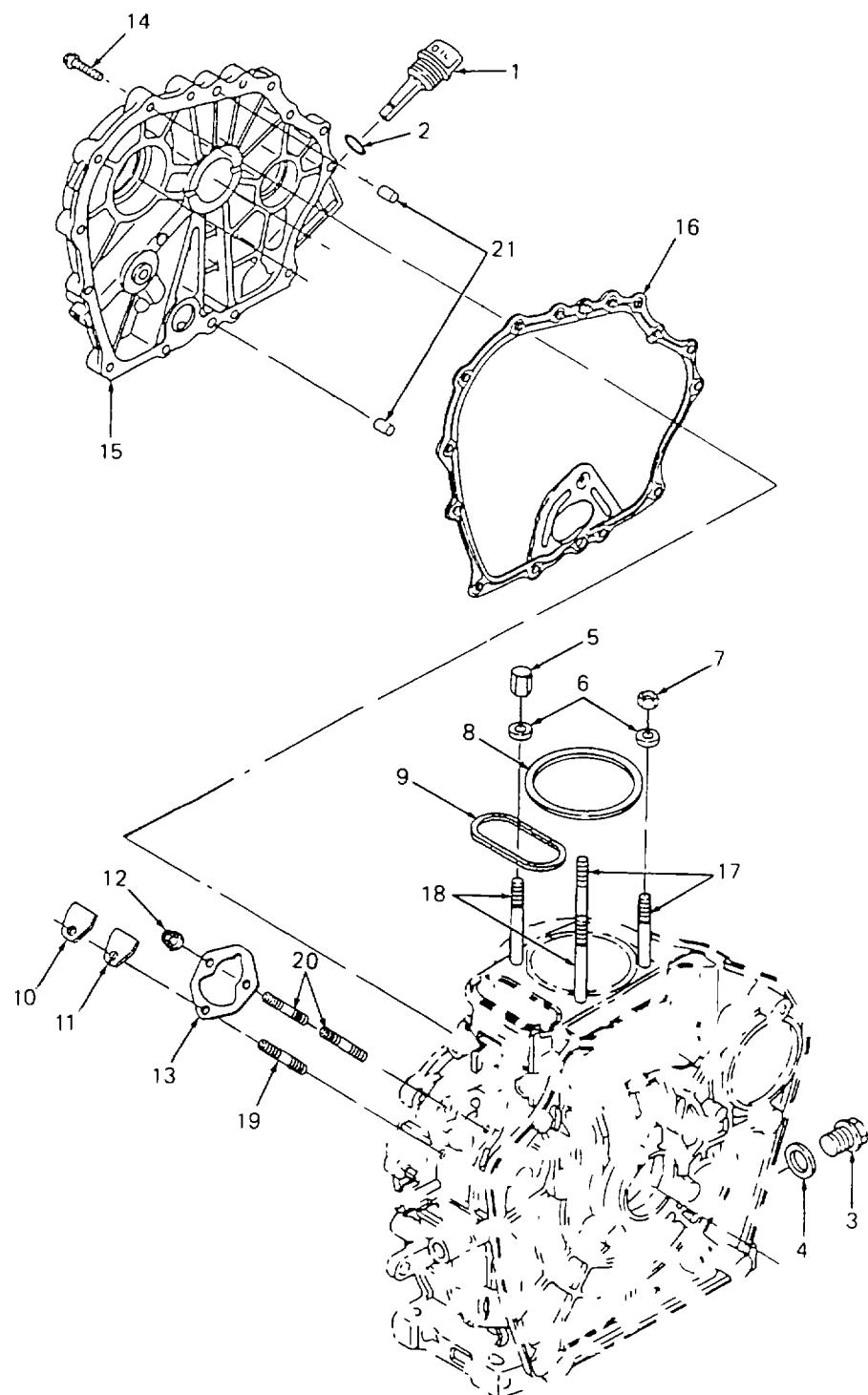


Figure 28. Crankcase Cover

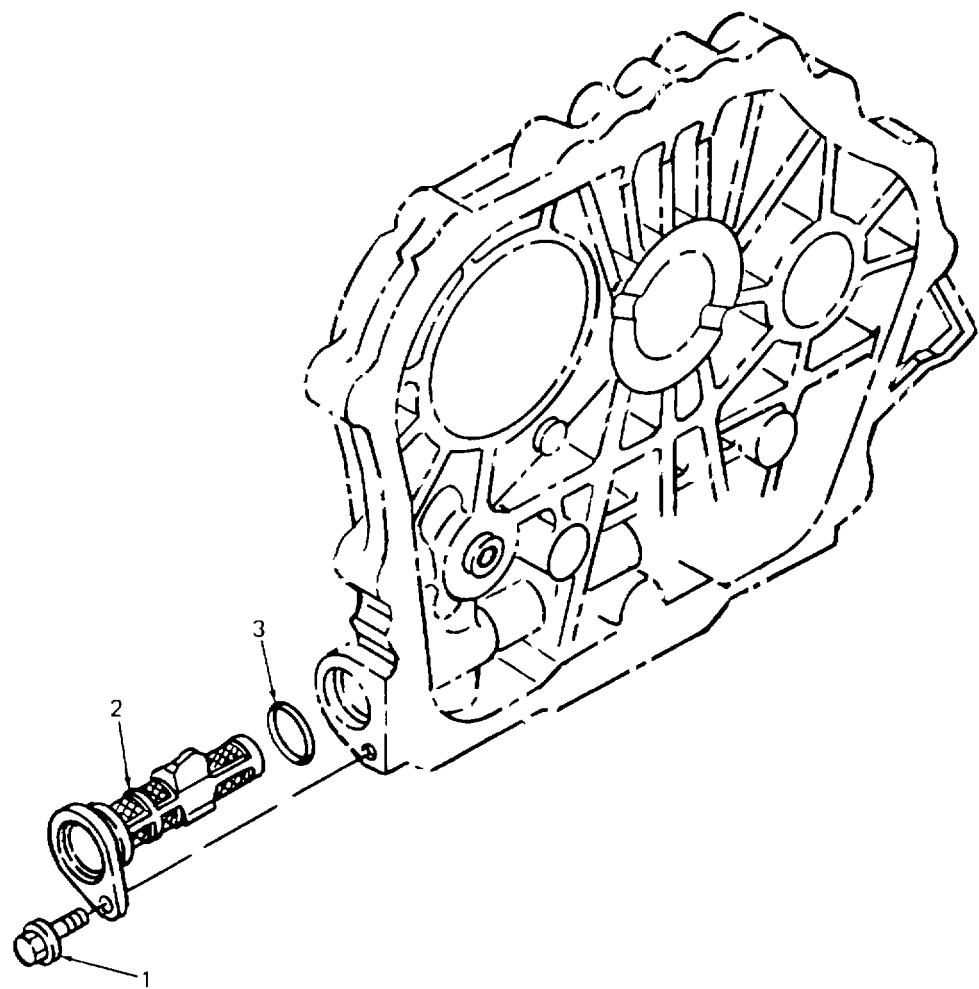
## SECTION II

TM10-4320-311-24P

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
GROUP 08      CENTRIFUGAL PUMP UNIT					

1	XBOZZ	OAK42	160710-01760	...CAP, FILLER.....	1
2	XBOZZ	OAK42	24311-000180	...PACKING, PREFORMED.....	1
3	XBOZZ	OAK42	105425-01690	...PLUG .....	1
4	XBOZZ	OAK42	43400-500490	...GASKET.....	1
5	XBHZZ	OAK42	114250-01220	...NUT, PLAIN, HEXAGON 8MM .....	2
6	XBHZZ	OAK42	124950-01250	...WASHER, FLAT.....	4
7	XBHZZ	OAK42	114250-01250	...NUT, PLAIN, HEXAGON .....	2
8	XBHZZ	OAK42	114250-01340	...GASKET.....	1
9	XBHZZ	OAK42	114250-01380	...PACKING, PREFORMED.....	1
10	XBFZZ	OAK42	114250-01830	...COVER .....	1
11	XBFZZ	OAK42	114250-01840	...GASKET.....	1
12	XBFZZ	OAK42	26366-060002	...NUT, PLAIN, HEXAGON HEAD, FLANGED, 6MM .....	3
13	XBFZZ	OAK42	114250-01800	...SHIM SET .....	1
14	XBFZZ	OAK42	26106-060252	...BOLT, METRIC, HEX .....	14
15	XBHZZ	OAK42	114260-01453	...COVER, CRANKCASE .....	1
16	PAHZZ	OAK42	114250-01412	...GASKET.....	1
17	XBHZZ	OAK42	114250-01210	...STUD, CYLINDER HEAD .....	2
18	XBHZZ	OAK42	114250-01200	...STUD, CYLINDER HFAD .....	2
19	XBHZZ	OAK42	26226-060182	...STUD 6MM X 18, PLATED .....	1
20	XBHZZ	OAK42	26226-060222	...STUD 6MM X 22, PLATED .....	2
21	XBHZZ	OAK42	22312-080120	...PIN, PARALLEL, .....	2

END OF FIGURE



**Figure 29. Oil Strainer**

SECTION II				TM 10-4320-311-24P			
(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5)	(6)		
				DESCRIPTION AND USABLE ON CODES (UOC)			
				GROUP 08      CENTRIFUGAL PUMP UNIT			
				FIG. 29      OIL STRAINER			
1 PAOZZ	OAK42	26106-060162		...SCREW,CAP,HEX HEAD .....		1	
2 XBHZZ	OAK42	114250-35070		...STRAINER, LUBE OIL .....		1	
3 XBOZZ	OAK42	24341-000224		...PACKING,PREFORMED .....		1	

END OF FIGURE

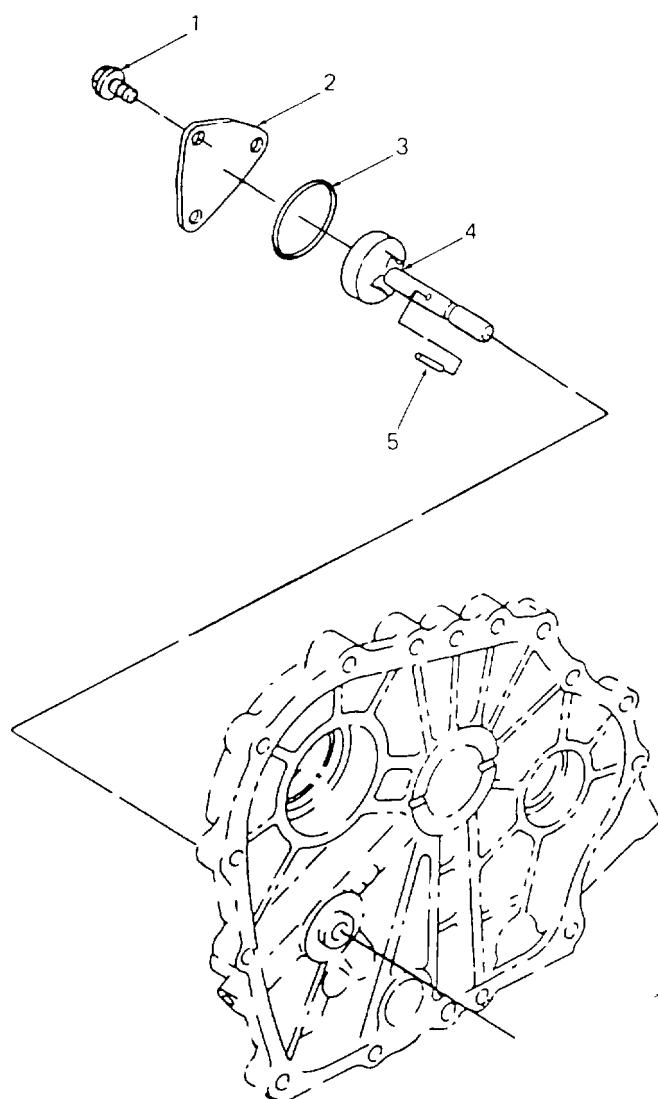


Figure 30. Lube Oil Pump

SECTION II			(4)	(5)	(6)
ITEM NO	(2) SMR CODE	(3) CAGEC	PART NUMBER	DESCRIPTION AND USABLE ON CODES (UOC)	QTY
			GROUP 08	CENTRIFUGAL PUMP UNIT	
			FIG. 30	LUBE OIL PUMP	
1	XBHZZ	OAK42 26476-060142		...BOLT,MACHINE .....	3
2	XBHZZ	OAK42 114250-32070		...COVER .....	1
3	PBHZZ	OAK42 103338-32570		...PACKING,PREFORMED .....	1
4	PBHZZ	OAK42 114250-32010		...PUMP,ROTARY .....	1
5	XBHZZ	OAK42 22312-030160		...PIN,STRAIGHT,HEADLE 6MM X 14.....	1

END OF FIGURE

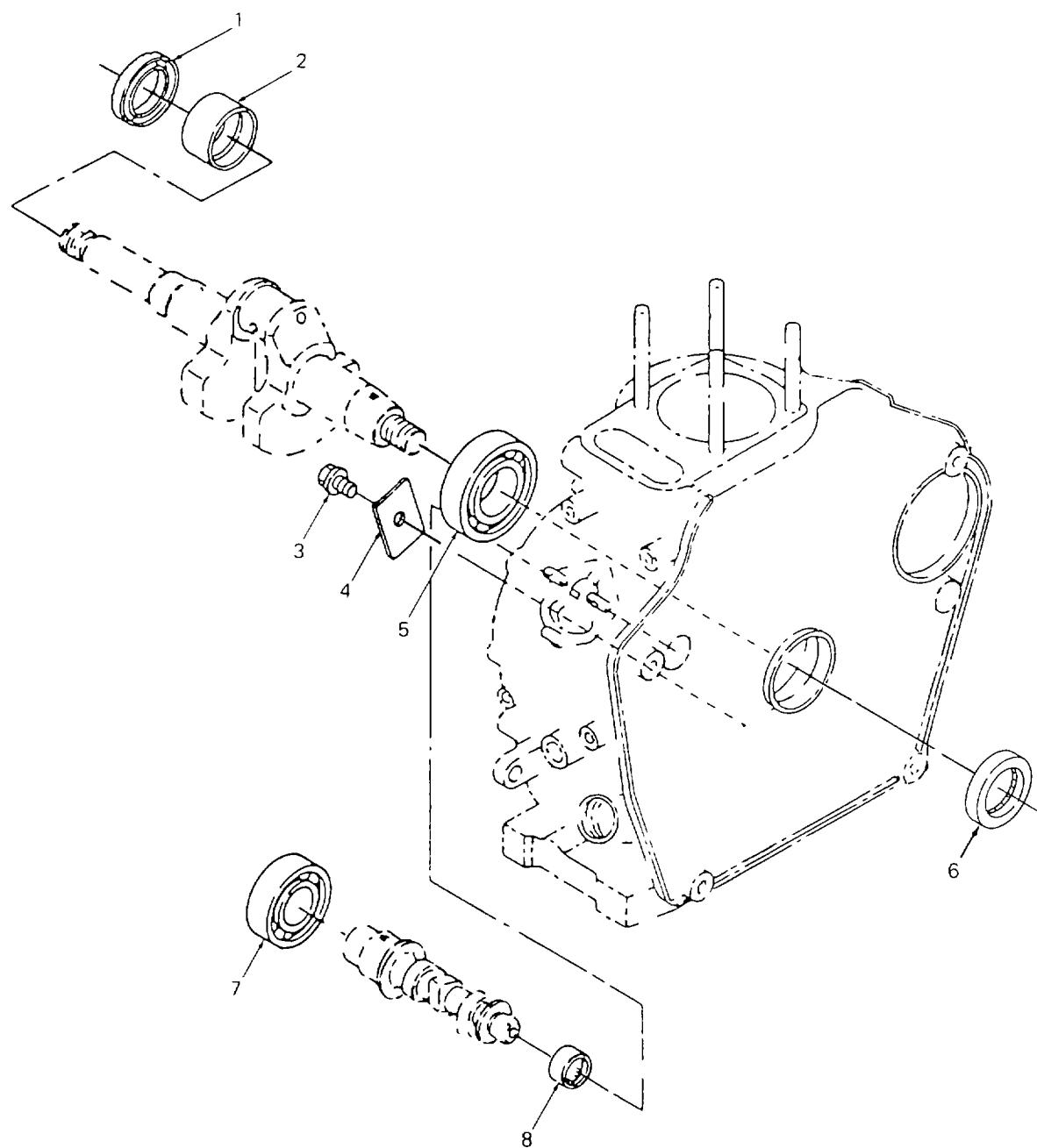


Figure 31. Crankcase

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
				GROUP 08 CENTRIFUGAL PUMP UNIT	
				FIG. 31 CRANKCASE	
1	XBHZZ	OAK42	160210-02220	...SEAL,PLAIN ENCASED .....	1
2	PBHZZ	OAK42	114250-02100	...BEARING,SLEEVE.....	1
3	XBHZZ	OAK42	26106-080122	...BOLT,MACHINE.....	1
4	XBHZZ	OAK42	114250-02030	...RETAINER,BALL,BEARI .....	1
5	PBHZZ	OAK42	114250-02113	...BEARING,BALL,ANNULA.....	1
6	PBHZZ	OAK42	160110-02220	...SEAL,PLAIN ENCASED .....	1
7	PBHZZ	OAK42	24101-062050	...BEARING,BALL,ANNULA.....	1
8	PBHZZ	OAK42	24162-152112	...BEARING,ROLLER,NEED .....	1

END OF FIGURE

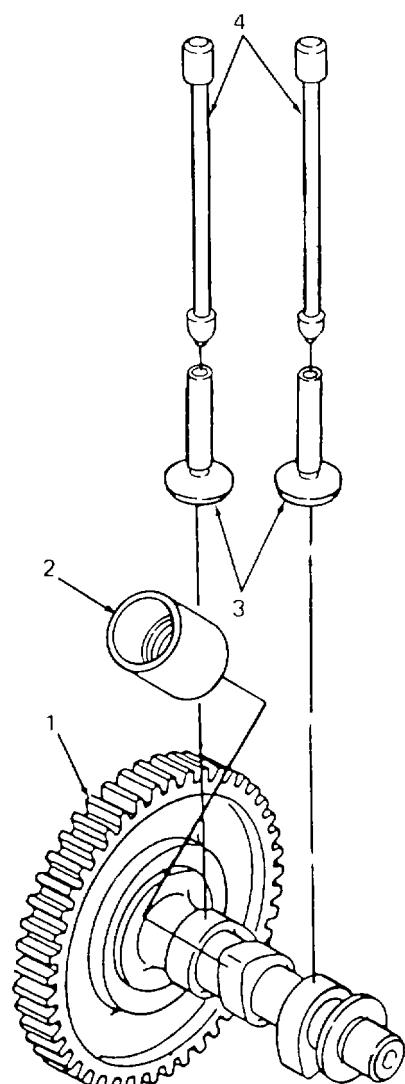
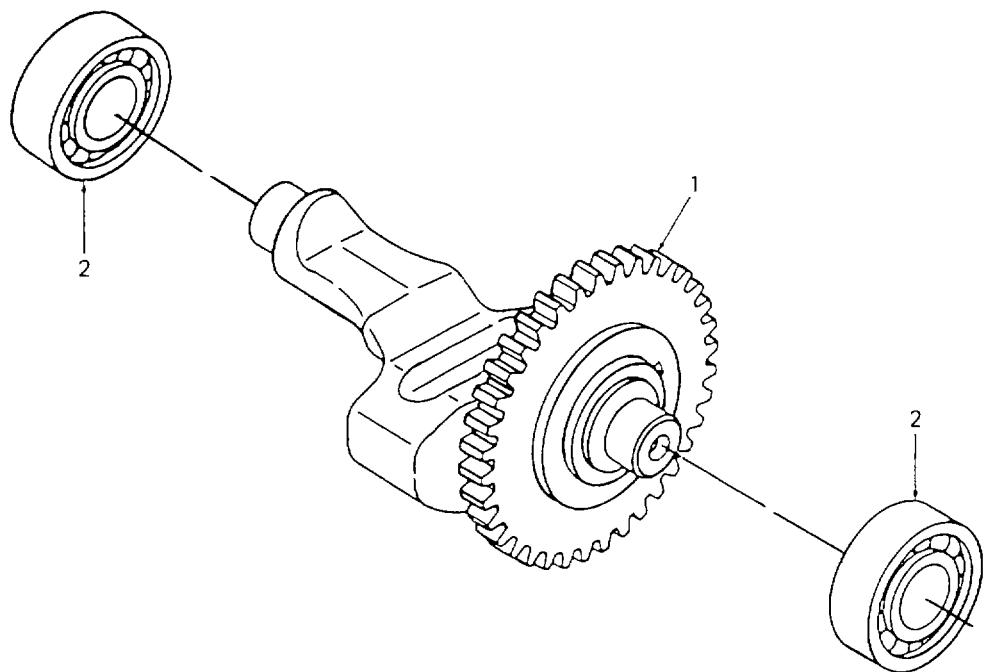


Figure 32. Camshaft

SECTION II			(4)	(5)	(6)
ITEM NO	(2) SMR CODE	(3) CAGEC	PART NUMBER	DESCRIPTION AND USABLE ON CODES (UOC)	QTY
			GROUP 08	CENTRIFUGAL PUMP UNIT	
			FIG. 32	CAMSHAFT	
1	PBHZZ	OAK42	714780-14580	...CAMSHAFT,ENGINE .....	1
2	PBHZZ	OAK42	114250-14260	...TAPPET,ENGINE POPPE .....	1
3	PBHZZ	OAK42	114250-14200	...TAPPET,ENGINE POPPE .....	2
4	PBHZZ	OAK42	114250-14450	...ROD,PUSH.....	2

END OF FIGURE



*Figure 33. Balancer Shaft*

SECTION II			(4)	(5)	(6)
ITEM NO	(2) SMR CODE	(3) CAGEC	PART NUMBER	DESCRIPTION AND USABLE ON CODES (UOC)	QTY
			GROUP 08	CENTRIFUGAL PUMP UNIT	
			FIG. 33	BALANCER SHAFT	
1	PBHZZ	OAK42	714250-28510	...SHAFT,ASSY FLEXIBLE .....	1
2	PBHZZ	OAK42	24101-062024	...BEARING,BALL,ANNULA .....	2

END OF FIGURE

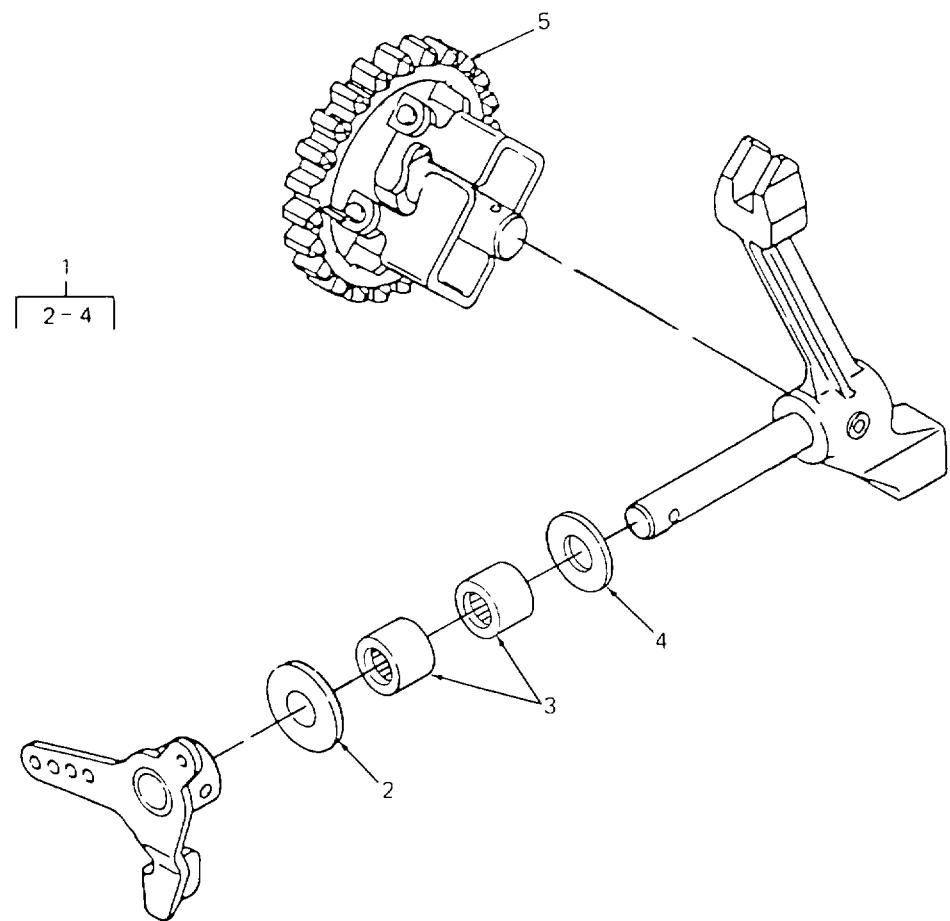


Figure 34. Governor and Speed Control Device

SECTION II			(4)	(5)	(6)
ITEM NO	(2) SMR CODE	(3) CAGEC	PART NUMBER	DESCRIPTION AND USABLE ON CODES (UOC)	QTY
			GROUP 08	CENTRIFUGAL PUMP UNIT	
			FIG. 34	GOVERNOR AND SPEED CONTROL DEVICE	
1	PBHZZ OAK42	714250-61500		...LEVER ASSEMBLY, .....	1
2	PBHZZ OAK42	114250-61900		....THRUST PLATE,TRANSM .....	1
3	PBHZZ OAK42	121450-61520		....BEARING, NEEDLE .....	2
4	PBHZZ OAK42	22137-080000		....WASHER,FLAT 8MM .....	1
5	PBHZZ OAK42	714770-61700		...OVERNOR,DIESEL ENG .....	1

END OF FIGURE

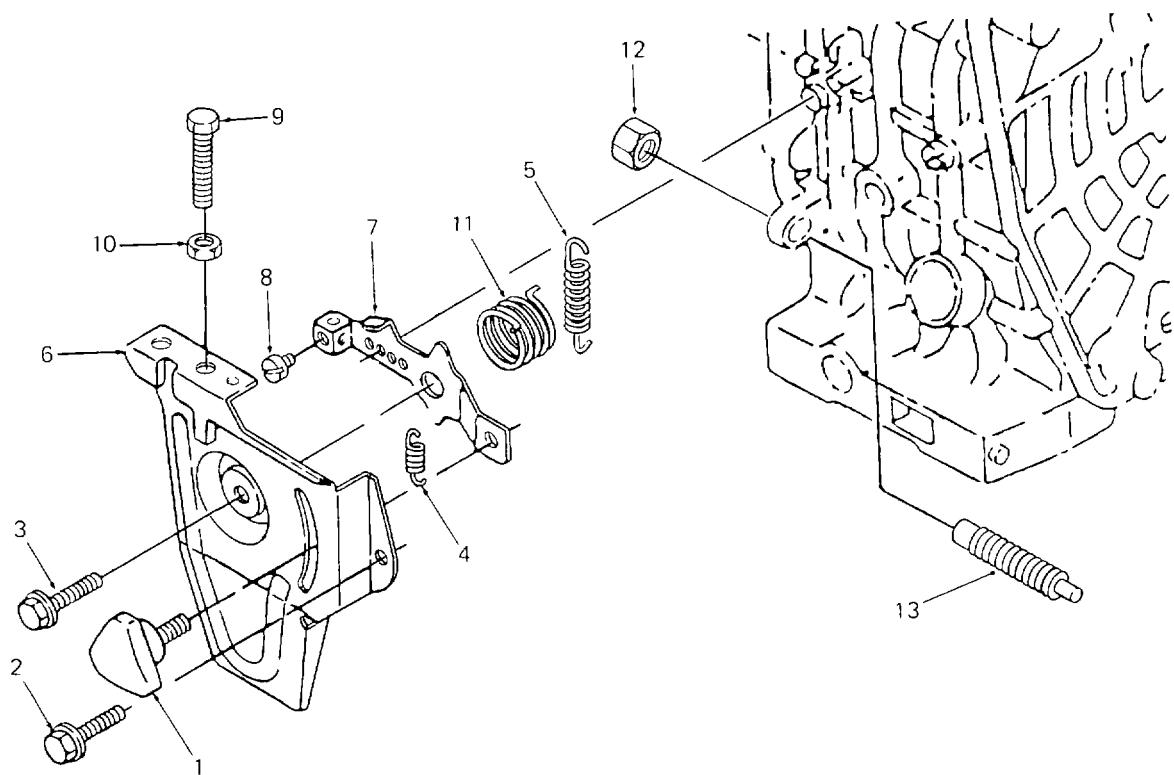


Figure 35. Speed Control and Regulator Assembly

ITEM NO	SECTION II (1) SMR CODE	(2) CAGEC	(3)	(4) PART NUMBER	(5)	(6) QTY
DESCRIPTION AND USABLE ON CODES (UOC)						
				GROUP 08	CENTRIFUGAL PUMP UNIT	
				FIG. 35	SPEED CONTROL AND REGULATOR ASSEMBLY	
1	XBHZZ	OAK42	160725-78350	...HANDLE,MANUAL CONTR .....		1
2	XBHZZ	OAK42	26476-060142	...BOLT,MACHINE .....		1
3	XBHZZ	OAK42	26106-060202	...BOLT,MACHINE.....		1
4	XBHZZ	OAK42	114250-66200	...SPRING, RETURN .....		1
5	XBHZZ	OAK42	114250-66010	...SPRING, REGULATOR .....		1
6	XBHZZ	OAK42	714268-66500	...BRACKET, REGULATOR.....		1
7	XBHZZ	OAK42	114250-66050	...HANDLE, REGULATOR .....		1
8	XBHZZ	OAK42	26116-040088	...BOLT,MACHINE.....		1
9	XBHZZ	OAK42	114250-66440	...BOLT,MACHINE .....		1
10	XBHZZ	OAK42	26756-060002	...NUT,PLAIN,HEXAGON .....		2
11	XBHZZ	OAK42	114252-66252	...SPRING,HELICAL,COMP.....		1
12	XBHZZ	OAK42	26696-100002	...NUT,PLAIN,HEXAGON 100MM .....		1
13	XBHZZ	OAK42	114250-66550	...CONTROLLER .....		1

END OF FIGURE

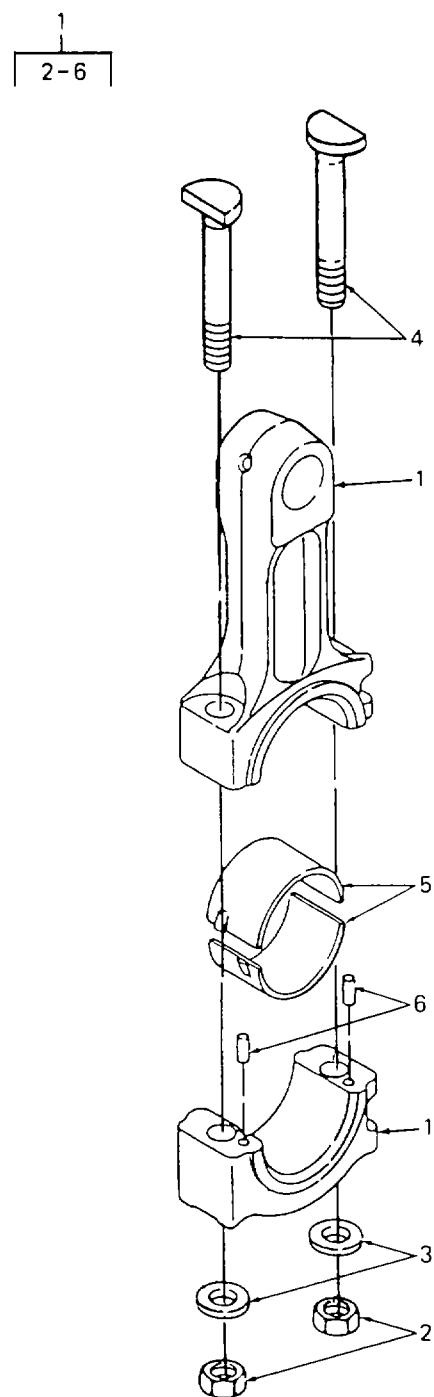


Figure 36. Connecting Rod Assembly

SECTION II			(4)	(5)	(6)
ITEM NO	(2) SMR CODE	(3) CAGEC	PART NUMBER	DESCRIPTION AND USABLE ON CODES (UOC)	QTY
				GROUP 08    CENTRIFUGAL PUMP UNIT	
				FIG. 36    CONNECTING ROD ASSEMBLY	
1	PAHHH	OAK42	714250-23703	....CONNECTING ROD,ITST .....	2
2	XBHZZ	OAK42	114250-23220	....NUT,PLAIN,HEXAGON .....	2
3	XBHZZ	OAK42	114250-23250	....WASHER,FLAT .....	2
4	XBHZZ	OAK42	114250-23200	....BOLT, ROD .....	2
5	XBHZZ	OAK42	714250-23600	....BEARING,SLEEVE .....	1
6	XBHZZ	OAK42	22312-030080	....PIN,STRAIGHT,HEADLE.....	2

END OF FIGURE

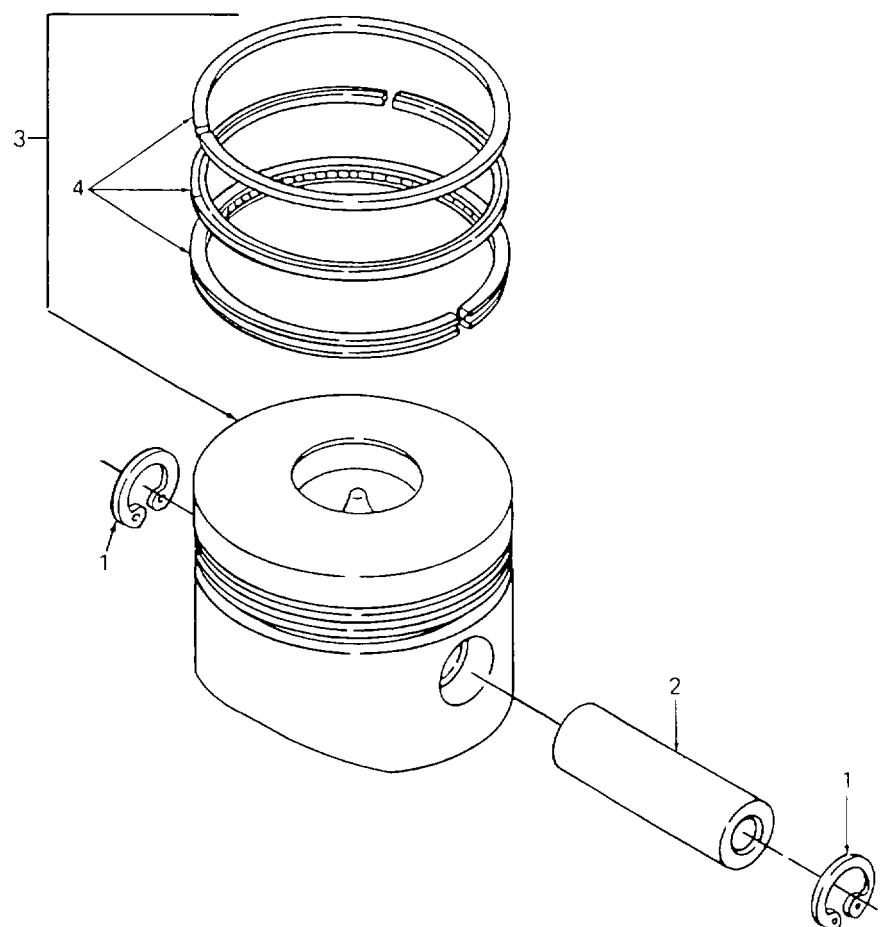


Figure 37. Piston Assembly

SECTION II			(4)	(5)	(6)
ITEM NO	(2) SMR CODE	(3) CAGEC	PART NUMBER	DESCRIPTION AND USABLE ON CODES (UOC)	QTY
GROUP 08 CENTRIFUGAL PUMP UNIT					
FIG. 37 PISTON ASSEMBLY					
1	PBHZZ	OAK42	22252-000190	...RING,RETAINING .....	2
2	PBHZZ	OAK42	114250-22302	...PIN,PISTON .....	1
3	PAHHH	OAK42	714280-22720	...PISTON,INTERNAL COM .....	2
4	PBHZZ	OAK42	714250-22502	....RING SET,PISTON .....	1

END OF FIGURE

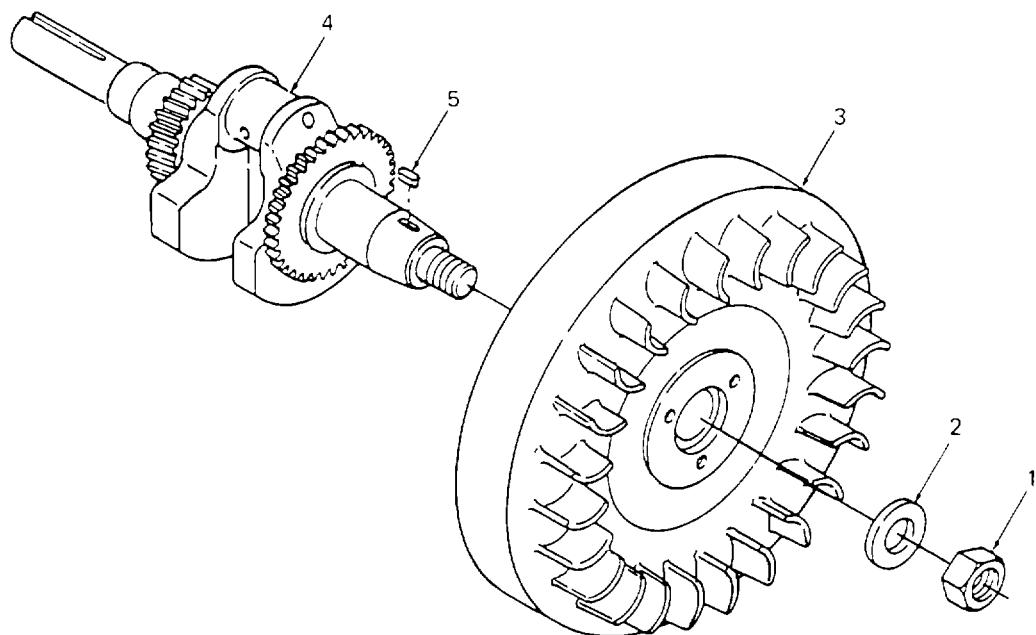


Figure 38. Flywheel

SECTION II			(4)	(5)	(6)
ITEM NO	(2) SMR CODE	(3) CAGEC	PART NUMBER	DESCRIPTION AND USABLE ON CODES (UOC)	QTY
				GROUP 08      CENTRIFUGAL PUMP UNIT	
				FIG. 38      FLYWHEEL	
1	PBHZZ	OAK42	103854-01221	...NUT, CRANKSHAFT .....	1
2	XBHZZ	OAK42	114259-21550	...WASHER .....	1
3	XBHZZ	OAK42	114780-21400	...FLYWHEEL .....	1
4	PBHZZ	OAK42	714288-21700	...CRANKSHAFT,ENGINE .....	1
5	PBHZZ	OAK42	160642-21150	...KEY,MACHINE 4MM X 12 .....	1

END OF FIGURE

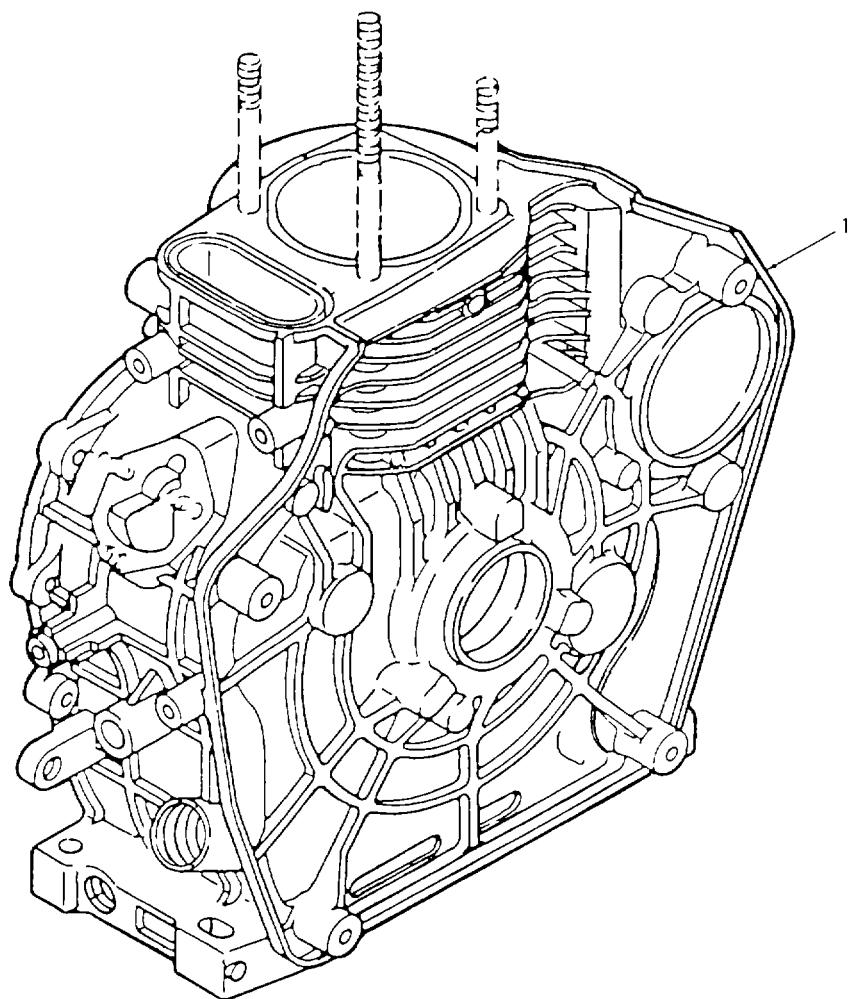


Figure 39. Crankcase Cylinder Block

SECTION II			(4)	(5)	(6)
(1) ITEM NO	(2) SMR CODE	(3) CAGEC	PART NUMBER	DESCRIPTION AND USABLE ON CODES (UOC)	QTY
				GROUP 08      CENTRIFUGAL PUMP UNIT FIG. 39      CRANKCASE CYLINDER BLOCK	
1	XBHZZ	OAK42	714271-01560	...BLOCK, CYLINDER .....	1

END OF FIGURE

**39-1**

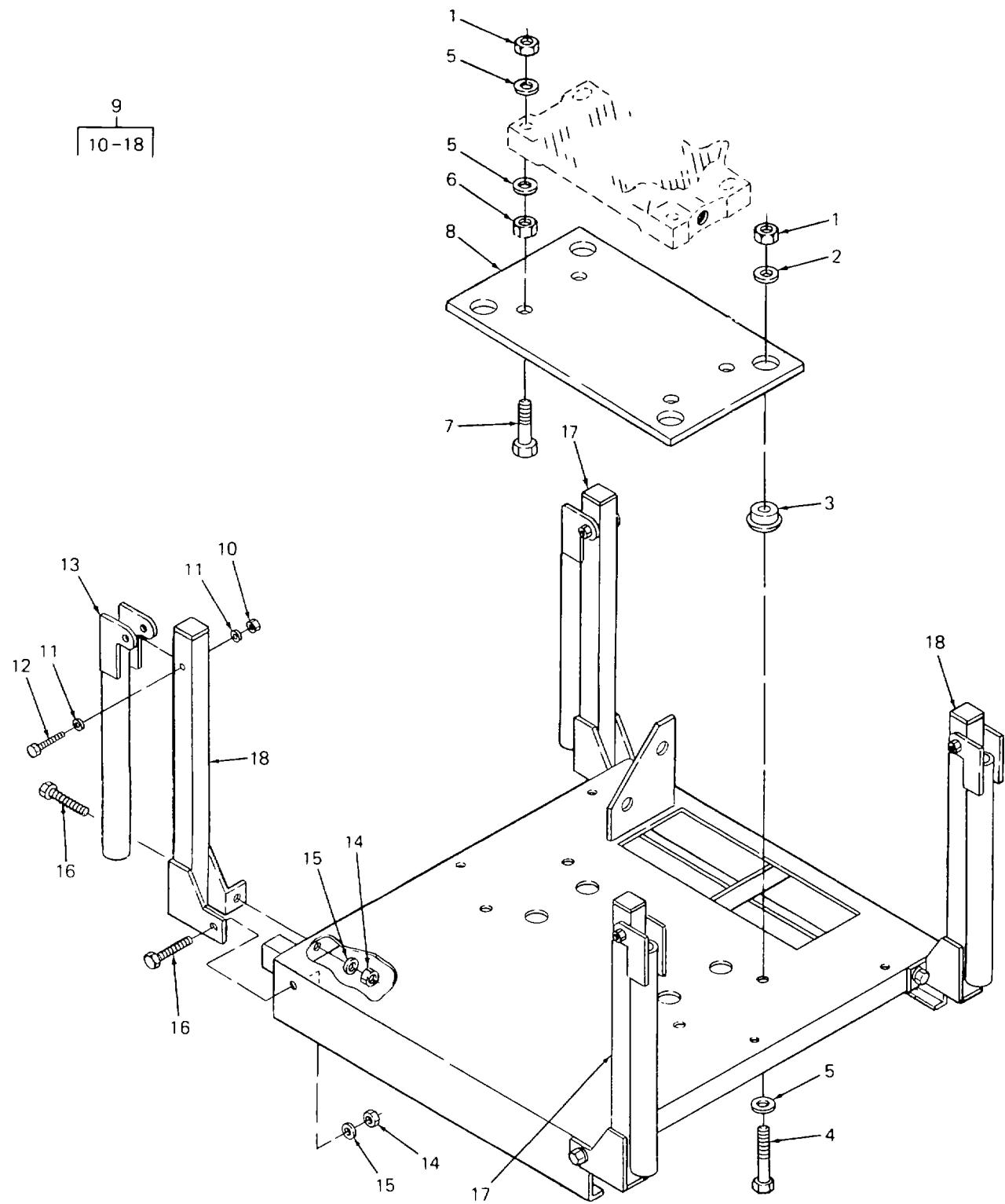


Figure 40. Frame and Handles, Base Shock Mounts

## SECTION II

TM10-4320-311-24P

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
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GROUP 08 CENTRIFUGAL PUMP UNIT

FIG. 40 FRAME AND HANDLES, BASE  
AND SHOCK MOUNTS

1	XBFZZ	96906	MS17829-6C	.NUT,SELF-LOCKING,HE .....	8
2	XBFZZ	88044	AN970-7	.WASHER, FLAT .....	4
3	XBFZZ	97403	13200E8819	.MOUNT,RESILIENT .....	4
4	XBFZZ	80204	B1821BH0O38C200N	.SCREW,CAP,HEXAGON H .....	4
5	XBFZZ	96906	MS27183-14	.WASHER,FLAT .....	12
6	XBFZZ	96906	MS51967-8	.NUT, HEX .....	4
7	XBFZZ	76371	5700183000	.BOLT, HEX .....	4
8	XBFZZ	97403	13228E9865	.PLATE, ENGINE MOUNT .....	1
9	XBOZZ	97403	13229E9446	.FRAME ASSEMBLY .....	1
10	XBOZZ	96906	MS17829-4C	..NUT,SELF-LOCKING,HE .....	4
11	XBOZZ	76371	5700347000	..WASHER, FLAT .....	8
12	XBOZZ	96906	MS90725-14	..SCREW,CAP,HEXAGON H .....	4
13	XBOZZ	97403	13229E9446-103	..POST ASSEMBLY .....	2
14	XBOZZ	96906	MS17829-6C	..NUT,SELF-LOCKING,HE .....	8
15	XBOZZ	96906	MS27183-14	..WASHER,FLAT .....	16
16	XBOZZ	80204	B1821BHO38C125N	..SCREW,CAP,HEXAGON H .....	8
17	XBOZZ	97403	13229E9446-101	..POST ASSEMBLY .....	2
18	XBOZZ	97403	13229E9446-102	..POST ASSEMBLY .....	2

END OF FIGURE

## SECTION II

TM10-4320-311-24P

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
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GROUP 09 BULK MATERIALS LIST

FIG. BULK

1 PAOZZ 30327 C405 RUBBER HOSE LOW PRESSURE ..... 1

END OF FIGURE

**BULK-1**

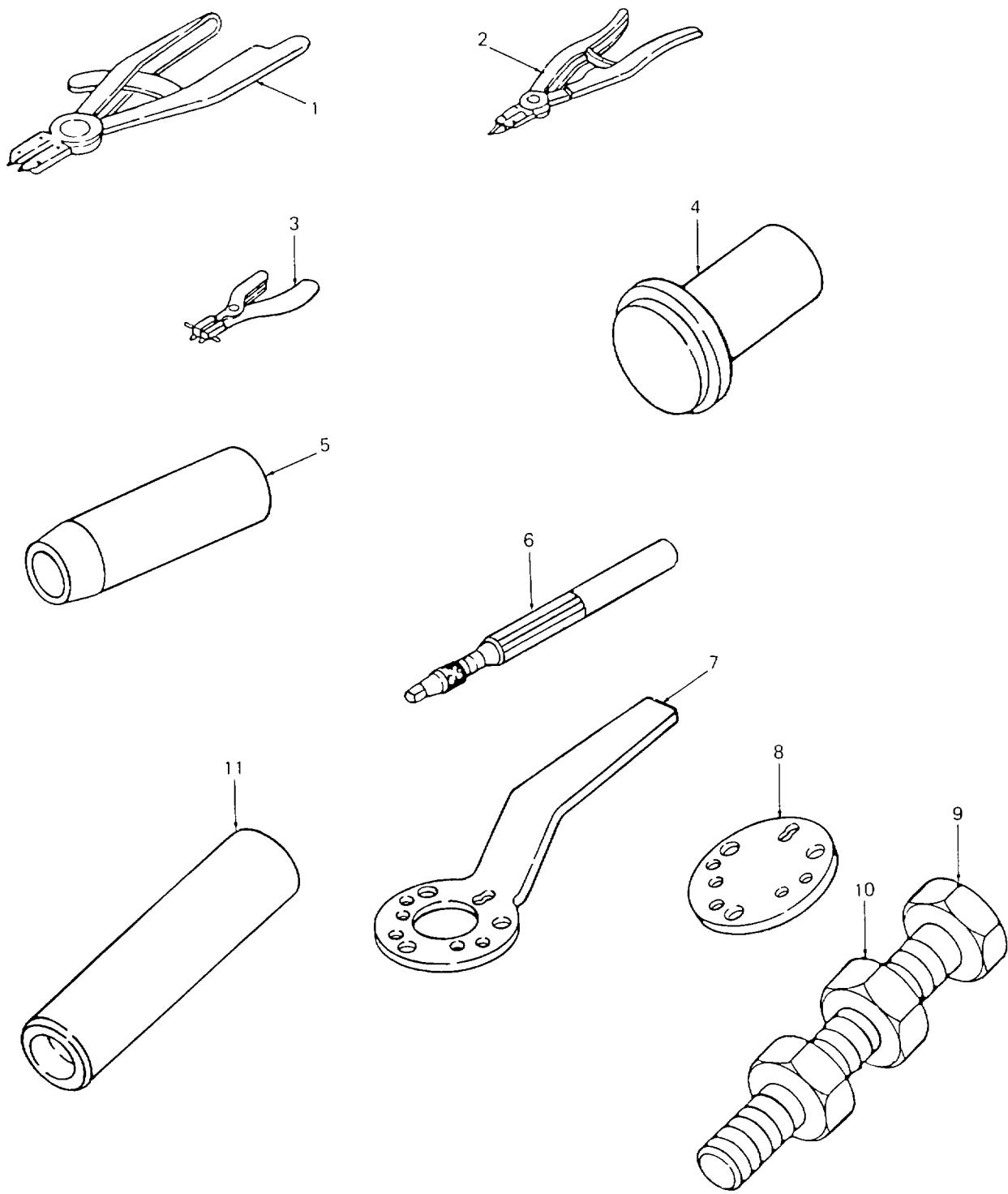
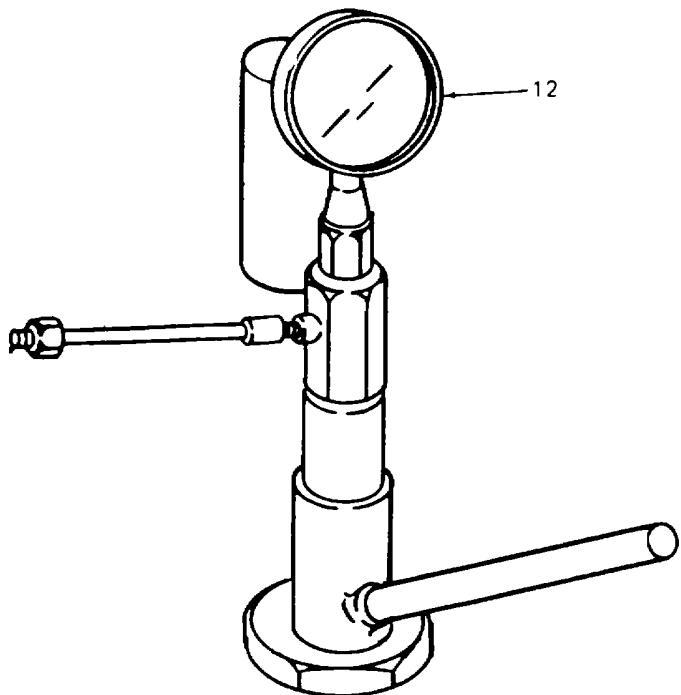


Figure 41. Special Tools (Sheet 1 of 2)



REVOLVING BODY

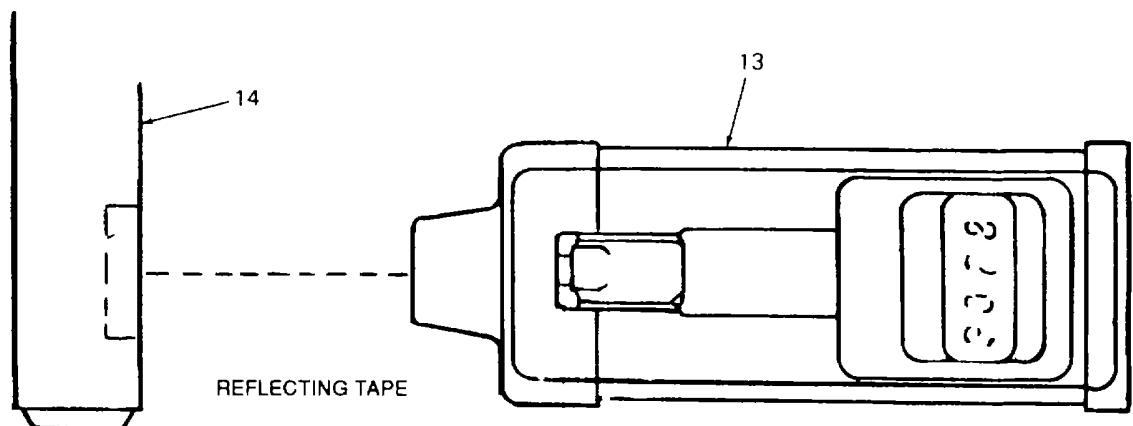


Figure 41. Special Tools (Sheet 2 of 2)

SECTION II			TM10-4320-311-24P		
(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5)	(6)
				DESCRIPTION AND USABLE ON CODES (UOC)	QTY

GROUP 10 SPECIAL TOOLS LIST

FIG. 41 SPECIAL TOOLS LIST

1 PEHZZ OAK42	28190-000130	PLIERS,BORE.....
2 PEHZZ OAK42	28190-000020	PLIERS,SHAFT.....
3 PEHZZ OAK42	135410-92140	REMOVER,PISTON.....
4 PEHZZ OAK42	114250-92311	TOOL,FITTING,OIL.....
5 PEHZZ OAK42	114268-92300	GUIDE,FITTING,OIL.....
6 PEHZZ OAK42	28210-000010	TOOL, CLEANING.....
7 PEHZZ OAK42	114250-92101	HANDLE,TIGHTENING.....
8 PEHZZ OAK42	114250-92121	EXTRACTOR,FLYWHEEL.....
9 PEHZZ OAK42	26116-060454	BOLT,MACHINE.....
10 PEHZZ OAK42	26716-060002	NUT,PLAIN,HEXAGON .....
11 PEHZZ OAK42	114250-92350	TOOL,FITTING.....
12 PEFZZ OAK42	737600-93502	TESTER,NOZZLE.....
13 PEFZZ OAK42	95500-001043	TAC OMETER.....
14 PEFZZ OAK42	95560-001041	TAPE,REFLECTIVE .....

END OF FIGURE

## CROSS-REFERENCE INDEXES

NATIONAL STOCK NUMBER INDEX					
STOCK NUMBER	FIG.	ITEM	STOCK NUMBER	FIG.	ITEM
5320-00-052-1972	8	4	4730-00-908-3195	13	16
5925-00-074-9180	13	6	4510-00-919-2660	17	5
5320-00-117-7288	8	5	4320-00-930-8726	17	7
6685-00-179-8632	9	53	4730-00-980-9411	9	11
4730-00-196-2026	9	9	5940-00-983-6101	11	5
4730-00-203-1010	2	4	5305-00-984-6213	11	3
5305-00-206-3689	17	17	4320-00-991-6514	17	27
5310-00-209-0786	9	15	4320-00-991-6515	17	10
5305-00-225-3840	9	33	4730-00-991-6516	17	2
5-06-00-225-9100	17	12	4820-00-991-6517	17	3
4730-00-230-1996	9	49	5307-01-013-7888	17	24
4730-00-260-8285	13	9	5307-01-016-4423	17	25
5330-00-263-8015	17	11	5310-01-064-8787	9	16
4730-00-268-7479	9	10	5305-01-069-8235	16	2
4820-00-276-9041	9	20		25	1
4730-00-277-7904	9	55	5305-01-163-5075	24	1
4720-00-278-1092	BULK	1	4730-01-180-7711	6	3
5330-00-360-0595	2	5	4930-01-188-3241	6	4
	3	4	5325-01-213-8434	9	52
	4	4	4730-01-245-9148	5	1
	5	3	5305-01-255-6548	23	9
5925-00-399-5055	13	7	2940-01-310-4495	23	7
5310-00-483-8792	9	39	2910-01-310-4522	20	1
5320-00-510-7823	9	1	5330-01-318-8200	18	21
5330-00-551-3963	17	19	5365-01-322-8679	37	1
4730-00-580-6740	9	35	5310-01-322-8696	18	18
5310-00-596-7691	11	2	5310-01-322-8747	23	5
4730-00-639-9730	9	48	3110-01-322-9532	33	2
5930-00-683-1628	13	5	2815-01-323-0286	37	2
4730-00-706-7761	9	54	4320-01-323-0298	30	4
5365-00-712-5972	17	15	2990-01-323-0307	24	2
5330-00-712-7730	17	13	2815-01-323-0351	36	1
5310-00-712-7731	17	16	2815-01-323-0352	32	3
5315-00-730-4713	17	22	2815-01-323-0353	32	2
5310-00-732-0560	17	8	2990-01-323-1322	24	14
5310-00-761-6882	9	17	5310-01-323-2683	18	17
4320-00-790-6357	17	20	2940-01-323-3289	23	3
5330-00-792-6213	17	6	5306-01-323-5440	26	2
4320-00-792-8185	i7	21	5340-01-323-7785	18	12
4320-00-792-8186	17	18	5340-01-323-7844	18	15
5310-00-809-5998	17	9		19	3
4730-00-869-5246	3	5	5340-01-323-7845	19	1
	6	2	5340-01-323-7866	25	3
	9	6	5340-01-323-7879	23	6
5310-00-880-7746	17	1	3110-01-324-5719	34	3
5320-00-904-4136	9	25	3120-01-324-5762	31	2
	10	2	2815-01-324-6801	27	2
4730-00-908-3193	9	44	5330-01-324-8254	31	6
	9	57	5330-01-324-8279	30	3
4730-00-908-3195	9	23	5330-01-324-8287	23	12

## CROSS-REFERENCE INDEXES

STOCK NUMBER	FIG.	ITEM	NATIONAL STOCK NUMBER INDEX		FIG.	ITEM
			STOCK NUMBER	FIG.		
3110-01-324-8815	31	7				
3110-01-324-8817	31	8				
2815-01-324-9200	25	4				
5330-01-325-5806	18	11				
5330-01-325-5810	18	23				
5330-01-325-5821	18	10				
5330-01-326-4773	23	10				
5310-01-327-0778	23	4				
4240-01-327-4604	18	20				
4240-01-328-4878	18	14				
5330-01-330-9564	25	6				
5330-01-330-9612	18	13				
2815-01-348-5888	32	1				
2815-01-348-5889	38	4				
5330-01-353-6007	28	16				
2990-01-353-7531	34	5				
2815-01-353-9785	37	3				
2910-01-358-5930	21	1				

## CROSS-REFERENCE INDEXES

CAGEC	PART NUMBER	PART NUMBER INDEX	FIG.	ITEM
		STOCK NUMBER		
76371	A-RI-IQ-IQ-9/63		9	5
57137	ADDC0089-O100A		10	3
76371	ANSB18-6.3		17	4
81352	AN910-1		9	50
88044	AN970-7		40	2
97403	ASTM B209		10	4
80204	B1821BH038C125N		40	16
80204	B1821BH038C200N		40	4
30327	C405	4720-00-278-1092	BULK	1
93061	DC604-6	4820-00-276-9041	9	20
13905	FB2Z-1321		15	1
76371	FF-N-836		11	1
81349	MIL-M-52116		2	6
81349	MIL-W-R-550 TYPE II CLB		7	1
96906	MS14314-8Y		9	19
96906	MS14315-22X	4730-00-268-7479	9	10
96906	MS14315-4X		17	26
96906	MS17829-4C	5310-00-483-8792	9	29
			9	39
96906	MS17829-6C		40	10
			40	1
			40	14
96906	MS20066-163	5315-00-730-4713	17	22
96906	MS20257-4-800		10	5
96906	MS20426AD4-6		8	2
96906	MS20426AD6-8	5320-00-117-7288	8	5
96906	MS20913-3J	4730-00-580-6740	9	35
96906	MS24523-22	5930-00-683-1628	13	5
96906	MS25331-3		13	4
96906	MS25331-3-313S		13	2
96906	MS27024-9	4730-00-980-9411	9	11
96906	MS27026-9	4730-00-203-1010	2	4
96906	MS27028-9	4730-00-869-5246	3	5
			4	5
			6	2
96906	MS27029-9		9	6
			2	2
			3	3
			4	3
96906	MS27030-5	5330-00-360-0595	9	12
			2	5
			3	4
			4	4
96906	MS27183-14		5	3
96906	MS27183-18	5310-00-809-5998	40	5
96906	MS29513-253	5330-00-551-3963	40	15
96906	MS29513-273	5330-00-263-8015	17	9
96906	MS35198-70	5305-00-206-3689	17	19
			17	11
			17	17

## CROSS-REFERENCE INDEXES

CAGEC	PART NUMBER	PART NUMBER INDEX	FIG.	ITEM
		STOCK NUMBER		
96906	MS35206-266	5305-00-984-6213	11	3
96906	MS35335-32	5310-00-596-7691	11	2
96906	MS35335-33	5310-00-209-0786	9	15
96906	MS35425-70	5310-01-064-8787	9	16
96906	MS35489-147	5325-01-213-8434	9	52
96906	MS35842-10	4730-00-908-3195	9	23
			13	16
96906	MS35842-12	4730-00-908-3193	9	44
			9	57
96906	MS51846-1	4730-00-230-1996	9	49
96906	MS51846-142	4730-00-196-2026	9	9
96906	MS51864-103-18	5307-01-013-7888	17	24
96906	MS51864-106-20	5307-01-016-4423	17	25
96906	MS51967-2	5310-00-761-6882	9	17
96906	MS51967-8		40	6
96906	MS51968-14	5310-00-732-0560	17	8
96906	MS51968-5	5310-00-880-7746	17	1
96906	MS52131		11	4
96906	MS70095-3	4730-01-245-9148	5	1
96906	MS70096-3		5	2
96906	M587006-3		2	3
			3	2
			4	2
			9	7
96906	MS90725-14		40	12
96906	MS90725-7	5305-00-225-3840	9	33
96906	MS90726-45	5306-00-225-9100	17	12
81349	M11588-03-07		4	6
81349	M24243/1B402		1	2
		5320-00-510-7823	9	1
81349	M24243/1B403		1	3
		5320-00-904-4136	9	25
			10	2
81349	M24243/1B405	5320-00-052-1972	8	4
03296	NMC557-12C		9	51
97403	SAE30R7		13	14
63513	V-190		9	14
93061	V406P-4		13	15
77342	W23X1A1G-20	5925-00-399-5055	13	7
77342	W23X1AIG-5	5925-00-074-9180	13	6
81718	00319L-0150		5	5
66173	089-0100A		8	3
0AK42	103338-32570	5330-01-324-8279	30	3
0AK42	103854-01221		38	1
0AK42	105425-01690		28	3
0AK42	105546-51020		21	9
0AK42	105546-51330		21	3
0AK42	106990-44660	5340-01-323-7845	19	1
70436	112-032-103		13	1
0AK42	114250-01200		28	18
0AK42	114250-01210		28	17

## CROSS-REFERENCE INDEXES

CAGEC	PART NUMBER	PART NUMBER INDEX	FIG.	ITEM
		STOCK NUMBER		
OAK42	114250-01220		28	5
OAK42	114250-01250		28	7
OAK42	114250-01340		28	8
OAK42	114250-01380		28	9
OAK42	114250-01412	5330-01-353-6007	28	16
OAK42	114250-01800		28	13
OAK42	114250-01830		28	10
OAK42	114250-01840		28	11
OAK42	114250-02030		31	4
OAK42	114250-02100	3120-01-324-5762	31	2
OAK42	114250-02113		31	5
OAK42	114250-03591		26	5
OAK42	114250-03640		26	6
OAK42	114250-11020		27	24
OAK42	114250-11101		27	18
OAK42	114250-11113		27	19
OAK42	114250-11120		27	15
OAK42	114250-11180		27	14
OAK42	114250-11240		27	7
			27	10
OAK42	114250-11290		27	12
OAK42	114250-11310		26	8
OAK42	114250-11340		27	16
OAK42	114250-11460		27	4
OAK42	114250-11600		27	17
OAK42	114250-11651		27	9
OAK42	114250-11900	2815-01-324-6801	27	2
OAK42	114250-11951		26	4
OAK42	114250-12010		23	11
OAK42	114250-12200	5330-01-324-8287	23	12
OAK42	114250-12210	5330-01-326-4773	23	10
OAK42	114250-12520	5340-01-323-7879	23	6
OAK42	114250-12530		23	8
OAK42	114250-12550	5310-01-327-0778	23	4
OAK42	114250-12560	5310-01-322-8747	23	5
OAK42	114250-12580	2940-01-310-4495	23	7
OAK42	114250-13200		22	6
OAK42	114250-13521		22	1
OAK42	114250-13531		22	4
OAK42	114250-13701		22	2
OAK42	114250-14200	2815-01-323-0352	32	3
OAK42	114250-14260	2815-01-323-0353	32	2
OAK42	114250-14450		32	4
OAK42	114250-22302	2815-01-323-0286	37	2
OAK42	114250-23200		36	4
OAK42	114250-23220		36	2
OAK42	114250-23250		36	3
OAK42	114250-32010	4320-01-323-0298	30	4
OAK42	114250-32070		30	2
OAK42	114250-35070		29	2
OAK42	114250-45211		25	8

## CROSS-REFERENCE INDEXES

CAGEC	PART NUMBER	PART NUMBER INDEX	FIG.	ITEM
		STOCK NUMBER		
OAK42	114250-45300	2815-01-324-9200	25	4
OAK42	114250-45310	5340-01-323-7866	25	3
OAK42	114250-45330	5330-01-330-9564	25	6
OAK42	114250-51080		21	10
OAK42	114250-51150		21	12
OAK42	114250-51160		21	15
OAK42	114250-51180		21	7
OAK42	114250-51190		21	8
OAK42	114250-51300		21	4
OAK42	114250-51340		21	2
OAK42	114250-51400		21	6
OAK42	114250-51600		21	13
OAK42	114250-51640		21	17
OAK42	114250-51650		21	16
OAK42	114250-53001		20	7
OAK42	114250-53080		20	2
OAK42	114250-53120		20	3
OAK42	114250-53130		20	4
OAK42	114250-53140		20	5
OAK42	114250-53210		20	6
OAK42	114250-53300		20	9
OAK42	114250-53331		20	10
OAK42	114250-53400		20	8
OAK42	114250-55041		18	9
OAK42	114250-55050	5330-01-325-5821	18	10
OAK42	114250-55060	5330-01-325-5806	18	11
OAK42	114250-55100	4240-01-328-4878	18	14
OAK42	114250-55130	5330-01-318-8200	18	21
OAK42	114250-55201		18	7
OAK42	114250-55211		18	6
OAK42	114250-59050		19	2
OAK42	114250-59060		19	4
OAK42	114250-59800		19	5
OAK42	114250-61900		34	2
OAK42	114250-66010		35	5
OAK42	114250-66050		35	7
OAK42	114250-66200		35	4
OAK42	114250-66440		35	9
OAK42	114250-66550		35	13
OAK42	114250-76590		24	16
OAK42	114250-76600		26	1
OAK42	114250-76610		26	3
OAK42	114250-92101		41	7
OAK42	114250-92121		41	8
OAK42	114250-92311		41	4
OAK42	114250-92350		41	11
OAK42	114252-55231		18	4
OAK42	114252-55800	5310-01-323-2683	18	17
OAK42	114252-66252		35	11
OAK42	114259-21550		38	2
OAK42	114260-01453		28	15

## CROSS-REFERENCE INDEXES

CAGEC	PART NUMBER	PART NUMBER INDEX	FIG.	ITEM
		STOCK NUMBER		
OAK42	114268-92300		41	5
OAK42	114350-11470		27	3
OAK42	114350-55120	4240-01-327-4604	18	20
OAK42	114350-55150		18	16
OAK42	114650-55810		18	2
OAK42	114780-21400		38	3
OAK42	114780-45100		25	5
OAK42	121450-61520	3110-01-324-5719	34	3
OAK42	124550-51350		21	5
OAK42	124722-59050	5340-01-323-7844	18	15
			19	3
OAK42	124950-01250		28	6
93061	125HBL-5-2	4730-00-277-7904	9	55
93061	125HBL-5-4		13	13
97403	13200E8802	5330-00-712-7730	17	13
97403	13200E8803	4320-00-991-6514	17	27
97403	13200E8804	4320-00-792-8185	17	21
97403	13200E8807-1	5365-00-712-5972	17	15
97403	13200E8807-2	5310-00-712-7731	17	16
97403	13200E8808		17	14
97403	13200E8809	4320-00-991-6515	17	10
97403	13200E8810	4820-00-991-6517	17	3
97403	13200E8811	4320-00-930-8726	17	7
97403	13200E8812	4510-00-919-2660	17	5
97403	13200E8813	5330-00-792-6213	17	6
97403	13200E8814	4730-00-991-6516	17	2
97403	13200E8815	4320-00-792-8186	17	18
97403	13200E8819		40	3
97403	13206E0820	6685-00-179-8632	9	53
97403	13212E6128	4730-00-706-7761	9	54
97403	13217E2985	4930-01-188-3241	6	4
97403	13217E2987		6	1
97403	13218E0152		3	6
			6	6
97403	13220E8222		9	46
97403	13226E1301		3	1
97403	13226E1302		4	1
97403	13226E1303-2		2	1
97403	13228E9862		9	58
97403	13228E9863		16	5
97403	13228E9865		40	8
97403	13228E9869		17	23
97403	13229E6785-2		8	7
97403	13229E6785-4		10	7
			10	8
			12	2
			14	2
97403	13229E6792-3		9	59
97403	13229E8221-1		9	45
97403	13229E8221-2		9	2
97403	13229E8221-3		9	4

## CROSS-REFERENCE INDEXES

CAGEC	PART NUMBER	PART NUMBER INDEX	FIG.	ITEM
		STOCK NUMBER		
97403	13229E8221-4		9	26
97403	13229E8223-1		9	36
97403	13229E8223-2		9	27
97403	13229E8224		9	42
97403	13229E8225-1		1	5
97403	13229E8225-2		1	6
97403	13229E8226		9	32
97403	13229E8227		9	43
97403	13229E8228		1	4
97403	13229E8229		9	40
97403	13229E8230-1		9	41
97403	13229E8230-2		9	47
97403	13229E8230-3		9	37
97403	13229E8230-4		9	30
97403	13229E8230-5		9	3
97403	13229E8230-6		9	38
97403	13229E8230-7		9	34
97403	13229E9442		18	22
97403	13229E9443		8	1
97403	13229E9443-13		8	6
97403	13229E9444-56		9	18
97403	13229E9446		40	9
97403	13229E9446-101		40	17
97403	13229E9446-102		40	18
97403	13229E9446-103		40	13
97403	13229E9447		10	1
97403	13229E9447-10		10	6
97403	13229E9448		16	1
97403	13229E9449		14	1
97403	13229E9450		12	1
97403	13229E9451		15	2
97403	13229E9452		9	13
97403	13229E9453		9	31
97403	13230E4819		16	4
97403	13230E4820		16	6
OAK42	135410-92140		41	3
24869	150A90	4730-01-180-7711	6	3
24869	150A90-5		9	8
OAK42	160110-02220	5330-01-324-8254	31	6
OAK42	160120-76940		16	3
			25	2
OAK42	160210-02220		31	1
OAK42	160260-76520		24	10
OAK42	160260-76530		24	8
OAK42	160260-76540		24	11
OAK42	160260-76550		24	4
OAK42	160260-76560		24	9
OAK42	160260-76580		24	6
OAK42	160260-76590		24	5
OAK42	160260-76600		24	3
OAK42	16026,0-76620	2990-01-323-1322	24	14

## CROSS-REFERENCE INDEXES

CAGEC	PART NUMBER	PART NUMBER INDEX	FIG.	ITEM
		STOCK NUMBER		
OAK42	160290-76570		24	7
OAK42	160642-21150		38	5
OAK42	160710-01760		28	1
OAK42	160725-78350		35	1
93061	2GF-5		13	8
67209	21-106-13	4320-00-790-6357	17	20
93061	2202-P-2-2	4730-00-639-9730	9	48
93061	2202P-4-4		13	11
OAK42	22117-060000	5310-01-322-8696	18	18
OAK42	22117-080000		18	3
OAK42	22137-080000		34	4
93061	222P-4-4		13	10
OAK42	22252-000190	5365-01-322-8679	37	1
OAK42	22312-030080		36	6
OAK42	22312-030160		26	7
			30	5
OAK42	22312-080120		28	21
OAK42	22351-020006		21	11
OAK42	22351-030008		21	14
OAK42	22351-040008		27	20
OAK42	23414-120000	5330-01-330-9612	18	13
OAK42	23887-120002	5340-01-323-7785	18	12
OAK42	24101-062024	3110-01-322-9532	33	2
OAK42	24101-062050	3110-01-324-8815	31	7
OAK42	24162-152112	3110-01-324-8817	31	8
OAK42	24311-000180		28	2
OAK42	24341-000150	5330-01-325-5810	18	23
OAK42	24341-000224		29	3
OAK42	26106-060082		22	3
		5305-01-163-5075	24	1
OAK42	26106-060122		22	5
			24	15
OAK42	26106-060162		29	1
OAK42	26106-060202		35	3
OAK42	26106-060252	5305-01-255-6548	23	9
			28	14
OAK42	26106-060552	5306-01-323-5440	26	2
OAK42	26106-080122		31	3
OAK42	26106-080452		18	1
			27	5
OAK42	26116-040088		35	8
OAK42	26116-060454		41	9
OAK42	26216-080182		27	21
OAK42	26226-060142		23	1
OAK42	26226-060182		28	19
OAK42	26226-060222		28	20
OAK42	26226-060502		27	23
OAK42	26226-060552		27	22
OAK42	26366-060002		18	19
			23	2
			27	1

## CROSS-REFERENCE INDEXES

CAGEC	PART NUMBER	PART NUMBER INDEX	FIG.	ITEM
		STOCK NUMBER		
OAK42	26366-060002		28	12
OAK42	26366-080002		22	7
OAK42	26476-060142		18	5
			25	7
			30	1
			35	2
OAK42	26476-060252	5305-01-069-8235	16	2
			25	1
OAK42	26696-100002		35	12
OAK42	26716-060002		41	10
OAK42	26756-060002		27	8
			27	11
			35	10
93061	269HB-6-6		9	24
OAK42	28190-000020		41	2
OAK42	28190-000130		41	1
OAK42	28210-000010		41	6
81718	319-K-1-1/2		5	4
81349	39TB6F	5940-00-983-6101	11	5
OAK42	43400-500490		28	4
93061	48F-5-4		13	12
76371	5700183000		40	7
76371	5700313000		13	3
76371	5700314001		11	6
76371	5700347000		9	28
			40	11
81718	633-AAS		6	5
93061	640F-5	4730-00-260-8285	13	9
93061	68HB-6-6		9	21
OAK42	714250-11570		27	13
OAK42	714250-12560	2940-01-323-3289	23	3
OAK42	714250-22502		37	4
OAK42	714250-23600		36	5
OAK42	714250-23703	2815-01-323-0351	36	1
OAK42	714250-28510		33	1
OAK42	714250-51701	2910-01-358-5930	21	1
OAK42	714250-53101	2910-01-310-4522	20	1
OAK42	714250-61500		34	1
OAK42	714260-76820	2990-01-323-0307	24	2
OAK42	714260-76830		24	12
OAK42	714268-66500		35	6
OAK42	714270-11660		27	6
OAK42	714271-01560		39	1
OAK42	714280-22720	2815-01-353-9785	37	3
OAK42	714288-21700	2815-01-348-5889	38	4
OAK42	714350-55701		18	8
OAK42	714770-61700	2990-01-353-7531	34	5
OAK42	714780-14580	2815-01-348-5888	32	1
OAK42	737600-93502		41	12
17506	821-6		9	22
			9	56

## CROSS-REFERENCE INDEXES

CAGEC	PART NUMBER	PART NUMBER INDEX		FIG.	ITEM
		STOCK NUMBER			
OAK42	95500-001043			41	13
OAK42	95560-001041			41	14

## CROSS REFERENCE INDEXES

FIG.	ITEM	FIGURE AND ITEM NUMBER INDEX		PART NUMBER
		STOCK NUMBER	CAGEC	
BULK	1	4720-00-278-1092	30327	C405
1	2		81349	M24243/1B402
1	3		81349	M26243/1B403
1	4		97403	13229E8228
1	5		97403	13229E8225-1
1	6		97403	13229E8225-2
2	1		97403	13226E1303-2
2	2		96906	MS27029-9
2	3		96906	MS87006-3
2	4	4730-00-203-1010	96906	MS27026-9
2	5	5330-00-360-0595	96906	MS27030-5
2	6		81349	MIL-M-52116
3	1		97403	13226E1301
3	2		96906	MS87006-3
3	3		96906	MS27029-9
3	4	5330-00-360-0595	96906	MS27030-5
3	5	4730-00-869-5246	96906	MS27028-9
3	6		97403	13218E0152
4	1		97403	13226E1302
4	2		96906	MS87006-3
4	3		96906	MS27029-9
4	4	5330-00-360-0595	96906	MS27030-5
4	5		96906	MS27028-9
4	6		81349	M11588-03-07
5	1	4730-01-245-9148	96906	MS70095-3
5	2		96906	MS70096-3
5	3	5330-00-360-0595	96906	MS27030-5
5	4		81718	319-K-1-1/2
5	5		81718	00319L-0150
6	1		97403	13217E2987
6	2	4730-00-869-5246	96906	MS27028-9
6	3	4730-01-180-7711	24869	150A90
6	4	4930-01-188-3241	97403	13217E2985
6	5		81718	633-AAS
6	6		97403	13218E0152
7	1		81349	MIL-W-R-550 TYPE II CLB
8	1		97403	13229E9443
8	2		96906	MS20426AD4-6
8	3		66173	089-0100A
8	4	5320-00-052-1972	81349	M24243/1B405
8	5	5320-00-117-7288	96906	MS20426AD6-8
8	6		97403	13229E9443-13
8	7		97403	13229E6785-2
9	1	5320-00-510-7823	81349	M24243/1B402
9	2		97403	13229E8221-2
9	3		97403	13229E8230-5
9	4		97403	13229E8221-3
9	5		76371	A-RI-IQ-IQ-9/63
9	6	4730-00-869-5246	96906	MS27028-9
9	7		96906	MS87006-3

## CROSS REFERENCE INDEXES

FIG.	ITEM	FIGURE AND ITEM NUMBER INDEX		PART NUMBER
		STOCK NUMBER	CAGEC	
9	8		24869	150A90-5
9	9	4730-00-196-2026	96906	MS51846-142
9	10	4730-00-268-7479	96906	MS14315-22X
9	11	4730-00-980-9411	96906	MS27024-9
9	12		96906	MS27029-9
9	13		97403	13229E9452
9	14		63513	V-190
9	15	5310-00-209-0786	96906	MS35335-33
9	16	5310-01-064-8787	96906	MS35425-70
9	17	5310-00-761-6882	96906	MS51967-2
9	18		97403	13229E9444-56
9	19		96906	MS14314-8Y
9	20	4820-00-276-9041	93061	DC604-6
9	21		03061	68HB-6-6
9	22		17506	821-6
9	23	4730-00-908-3195	96906	MS35842-10
9	24		93061	269HB-6-6
9	25	5320-00-904-4136	81349	M24243/1B403
9	26		97403	13229E8221-4
9	27		97403	13229E8223-2
9	28		76371	5700347000
9	29		96906	MS17829-4C
9	30		97403	13229E8230-4
9	31		97403	13229E9453
9	32		97403	13229E8226
9	33	5305-00-225-3840	96906	MS90725-7
9	34		97403	13229E8230-7
9	35	4730-00-580-6740	96906	MS20913-3J
9	36		97403	13229E8223-1
9	37		97403	13229E8230-3
9	38		97403	13229E8230-6
9	39	5310-00-483-8792	96906	MS17829-4C
9	40		97403	13229E8229
9	41		97403	13229E8230-1
9	42		97403	13229E8224
9	43		97403	13229E8227
9	44	4730-00-908-3193	96906	MS35842-12
9	45		97403	13229E8221-1
9	46		97403	13220E8222
9	47		97403	13229E8230-2
9	48	4730-00-639-9730	93061	2202-P-2-2
9	49	4730-00-230-1996	96906	MS51846-1
9	50		81352	AN910-1
9	51		03296	NMC557-12C
9	52	5325-01-213-8434	96906	MS35489-147
9	53	6685-00-179-8632	97403	13206E0820
9	54	4730-00-706-7761	97403	13212E6128
9	55	4730-00-277-7904	93061	125HBL-5-2
9	56		17506	821-6
9	57	4730-00-908-3193	96906	MS35842-12
9	58		97403	13228E9862

## CROSS REFERENCE INDEXES

FIG.	ITEM	FIGURE AND ITEM NUMBER INDEX		PART NUMBER
		STOCK NUMBER	CAGEC	
9	59		97403	13229E6792-3
10	1		97403	13229E9447
10	2	5320-00-904-4136	81349	M24243/1B403
10	3		57137	ADDC0089-OIOOA
10	4		97403	ASTM B209
10	5		96906	MS20257-4-800
10	6		97403	13229E9447-10
10	7		97403	13229E6785-4
10	8		97403	13229E6785-4
11	1		76371	FF-N-836
11	2	5310-00-596-7691	96906	MS35335-32
11	3	5305-00-984-6213	96906	MS35206-266
11	4		96906	MS52131
11	5	5940-00-983-6101	81349	39TB6F
11	6		76371	5700314001
12	1		97403	13229E9450
12	2		97403	13229E6785-4
13	1		70436	112-032-103
13	2		96906	MS25331-3-313S
13	3		76371	5700313000
13	4		96906	MS25331-3
13	5	5930-00-683-1628	96906	MS24523-22
13	6	5925-00-074-9180	77342	W23XIA1G-5
13	7	5925-00-399-5055	77342	W23X1AIG-20
13	8		93061	2GF-5
13	9	4730-00-260-8285	93061	640F-5
13	10		93061	222P-4-4
13	11		93061	2202P-4-4
13	12		93061	48F-5-4
13	13		93061	125HBL-5-4
13	14		97403	SAE30R7
13	15		93061	V406P-4
13	16	4730-00-908-3195	96906	MS35842-10
14	1		97403	13229E9449
14	2		97403	13229E6785-4
15	1		13905	FB2Z-1321
15	2		97403	13229E9451
16	1		97403	13229E9448
16	2	5305-01-069-8235	0AK42	26476-060252
16	3		0AK42	160120-76940
16	4		97403	13230E4819
16	5		97403	13228E9863
16	6		97403	13230E4820
17	1	5310-00-880-7746	96906	MS51968-5
17	2	4730-00-991-6516	97403	13200E8814
17	3	4820-00-991-6517	97403	13200E8810
17	4		76371	ANSB18-6.3
17	5	4510-00-919-2660	97403	13200E8812
17	6	5330-00-792-6213	97403	13200E8813
17	7	4320-00-930-8726	97403	13200E8811
17	8	5310-00-732-0560	96906	MS51968-14

## CROSS REFERENCE INDEXES

FIG.	ITEM	FIGURE AND ITEM NUMBER INDEX		PART NUMBER
		STOCK NUMBER	CAGEC	
17	9	5310-00-809-5998	96906	MS27183-18
17	10	4320-00-991-6515	97403	13200E8809
17	11	5330-00-263-8015	96906	MS29513-273
17	12	5306-00-225-9100	96906	MS90726-45
17	13	5330-00-712-7730	97403	13200E8802
17	14		97403	13200E8808
17	15	5365-00-712-5972	97403	13200E8807-1
17	16	5310-00-712-7731	97403	13200E8807-2
17	17	5305-00-206-3689	96906	MS35198-70
17	18	4320-00-792-8186	97403	13200E8815
17	19	5330-00-551-3963	96906	MS29513-253
17	20	4320-00-790-6357	67209	21-106-13
17	21	4320-00-792-8185	97403	13200E8804
17	22	5315-00-730-4713	96906	MS20066-163
17	23		97403	13228E9869
17	24	5307-01-013-7888	96906	MS51864-103-18
17	25	5307-01-016-4423	96906	MS51864-106-20
17	26		96906	MS14315-4X
17	27	4320-00-991-6514	97403	13200E8803
18	1		0AK42	26106-080452
18	2		0AK42	114650-55810
18	3		0AK42	22117-080000
18	4		0AK42	114252-55231
18	5		0AK42	26476-060142
18	6		0AK42	114250-55211
18	7		0AK42	114250-55201
18	8		0AK42	714350-55701
18	9		0AK42	114250-55041
18	10	5330-01-325-5821	0AK42	114250-55050
18	11	5330-01-325-5806	0AK42	114250-55060
18	12	5340-01-323-7785	0AK42	23887-120002
18	13	5330-01-330-9612	0AK42	23414-120000
18	14	4240-01-328-4878	0AK42	11425U-55100
18	15	5340-01-323-7844	0AK42	124722-59050
18	16		0AK42	114350-55150
18	17	5310-01-323-2683	0AK42	114252-55800
18	18	5310-01-322-8696	0AK42	22117-060000
18	19		0AK42	26366-060002
18	20	4240-01-327-4604	0AK42	114350-55120
18	21	5330-01-318-8200	0AK42	114250-55130
18	22		97403	13229E9442
18	23	5330-01-325-5810	0AK42	24341-000150
19	1	5340-01-323-7845	0AK42	106990-44660
19	2		0AK42	114250-59050
19	3	5340-01-323-7844	0AK42	124722-59050
19	4		0AK42	114250-59060
19	5		0AK42	114250-59800
20	1	2910-01-310-4522	0AK42	714250-53101
20	2		0AK42	114250-53080
20	3		0AK42	114250-53120
20	4		0AK42	114250-53130

## CROSS REFERENCE INDEXES

FIG.	ITEM	FIGURE AND ITEM NUMBER INDEX	
		STOCK NUMBER	CAGEC
20	5		OAK42
20	6		OAK42
20	7		OAK42
20	8		OAK42
20	9		OAK42
20	10		OAK42
21	1	2910-01-358-5930	OAK42
21	2		OAK42
21	3		OAK42
21	4		OAK42
21	5		OAK42
21	6		OAK42
21	7		OAK42
21	8		OAK42
21	9		OAK42
21	10		OAK42
21	11		OAK42
21	12		OAK42
21	13		OAK42
21	14		OAK42
21	15		OAK42
21	16		OAK42
21	17		OAK42
22	1		OAK42
22	2		OAK42
22	3		OAK42
22	4		OAK42
22	5		OAK42
22	6		OAK42
22	7		OAK42
23	1		OAK42
23	2		OAK42
23	3	2940-01-323-3289	OAK42
23	4	5310-01-327-0778	OAK42
23	5	5310-01-322-8747	OAK42
23	6	5340-01-323-7879	OAK42
23	7	2940-01-310-4495	OAK42
23	8		OAK42
23	9	5305-01-255-6548	OAK42
23	10	5330-01-326-4773	OAK42
23	11		OAK42
23	12	5330-01-324-8287	OAK42
24	1	5305-01-163-5075	OAK42
24	2	2990-01-323-0307	OAK42
24	3		OAK42
24	4		OAK42
24	5		OAK42
24	6		OAK42
24	7		OAK42
24	8		OAK42
24	9		OAK42

## CROSS REFERENCE INDEXES

FIG.	ITEM	FIGURE AND ITEM NUMBER INDEX		PART NUMBER
		STOCK NUMBER	CAGEC	
24	10		OAK42	160260-76520
24	11		OAK42	160260-76540
24	12		OAK42	714260-76830
24	14	2990-01-323-1322	OAK42	160260-76620
24	15		OAK42	26106-060122
24	16		OAK42	114250-76590
25	1	5305-01-069-8235	OAK42	26476-060252
25	2		OAK42	160120-76940
25	3	5340-01-323-7866	OAK42	114250-45310
25	4	2815-01-324-9200	OAK42	114250-45300
25	5		OAK42	114780-45100
25	6	5330-01-330-9564	OAK42	114250-45330
25	7		OAK42	26476-060142
25	8		OAK42	114250-45211
26	1		OAK42	114250-76600
26	2	5306-01-323-5440	OAK42	26106-060552
26	3		OAK42	114250-76610
26	4		OAK42	114250-11951
26	5		OAK42	114250-03591
26	6		OAK42	114250-03640
26	7		OAK42	22312-030160
26	8		OAK42	114250-11310
27	1		OAK42	26366-060002
27	2	2815-01-324-6801	OAK42	114250-11900
27	3		OAK42	114350-11470
27	4		OAK42	114250-11460
27	5		OAK42	26106-080452
27	6		OAK42	714270-11660
27	7		OAK42	114250-11240
27	8		OAK42	26756-060002
27	9		OAK42	114250-11651
27	10		OAK42	114250-11240
27	11		OAK42	26756-060002
27	12		OAK42	114250-11290
27	13		OAK42	714250-11570
27	14		OAK42	114250-11180
27	15		OAK42	114250-11120
27	16		OAK42	114250-11340
27	17		OAK42	114250-11600
27	18		OAK42	114250-11101
27	19		OAK42	114250-11113
27	20		OAK42	22351-040008
27	21		OAK42	26216-080182
27	22		OAK42	26226-060552
27	23		OAK42	26226-060502
27	24		OAK42	114250-11020
28	1		OAK42	160710-01760
28	2		OAK42	24311-000180
28	3		OAK42	105425-01690
28	4		OAK42	43400-500490
28	5		OAK42	114250-01220

## CROSS REFERENCE INDEXES

FIG.	ITEM	FIGURE AND ITEM NUMBER INDEX		PART NUMBER
		STOCK NUMBER	CAGEC	
28	6		OAK42	124950-01250
28	7		OAK42	114250-01250
28	8		OAK42	114250-01340
28	9		OAK42	114250-01380
28	10		OAK42	114250-01830
28	11		OAK42	114250-01840
28	12		OAK42	26366-060002
28	13		OAK42	114250-01800
28	14		OAK42	26106-060252
28	15		OAK42	114260-01453
28	16	5330-01-353-6007	OAK42	114250-01412
28	17		OAK42	114250-01210
28	18		OAK42	114250-01200
28	19		OAK42	26226-060182
28	20		OAK42	26226-060222
28	21		OAK42	22312-080120
29	1		OAK42	26106-060162
29	2		OAK42	114250-35070
29	3		OAK42	24341-000224
30	1		OAK42	26476-060142
30	2		OAK42	114250-32070
30	3	5330-01-324-8279	OAK42	103338-32570
30	4	4320-01-323-0298	OAK42	114250-32010
30	5		OAK42	22312-030160
31	1		OAK42	160210-02220
31	2	3120-01-324-5762	OAK42	114250-02100
31	3		OAK42	26106-080122
31	4		OAK42	114250-02030
31	5		OAK42	114250-02113
31	6	5330-01-324-8254	OAK42	160110-02220
31	7	3110-01-324-8815	OAK42	24101-062050
31	8	3110-01-324-8817	OAK42	24162-152112
32	1	2815-01-348-5888	OAK42	714780-14580
32	2	2815-01-323-0353	OAK42	114250-14260
32	3	2815-01-323-0352	OAK42	114250-14200
32	4		OAK42	114250-14450
33	1		OAK42	714250-28510
33	2	3110-01-322-9532	OAK42	24101-062024
34	1		OAK42	714250-61500
34	2		OAK42	114250-61900
34	3	3110-01-324-5719	OAK42	121450-61520
34	4		OAK42	22137-080000
34	5	2990-01-353-7531	OAK42	714770-61700
35	1		OAK42	160725-78350
35	2		OAK42	26476-060142
35	3		OAK42	26106-060202
35	4		OAK42	114250-66200
35	5		OAK42	114250-66010
35	6		OAK42	714268-66500
35	7		OAK42	114250-66050
35	8		OAK42	26116-040088

## CROSS REFERENCE INDEXES

FIG.	ITEM	FIGURE AND ITEM NUMBER INDEX	
		STOCK NUMBER	CAGEC
35	9		OAK42
35	10		OAK42
35	11		OAK42
35	12		OAK42
35	13		OAK42
36	1	2815-01-323-0351	OAK42
36	2		OAK42
36	3		OAK42
36	4		OAK42
36	5		OAK42
36	6		OAK42
37	1	5365-01-322-8679	OAK42
37	2	2815-01-323-0286	OAK42
37	3	2815-01-353-9785	OAK42
37	4		OAK42
38	1		OAK42
38	2		OAK42
38	3		OAK42
38	4	2815-01-348-5889	OAK42
38	5		OAK42
39	1		OAK42
40	1		96906
40	2		88044
40	3		97403
40	4		80204
40	5		96906
40	6		96906
40	7		76371
40	8		97403
40	9		97403
40	10		96906
40	11		76371
40	12		96906
40	13		97403
40	14		96906
40	15		96906
40	16		80204
40	17		97403
40	18		97403
41	1		OAK42
41	2		OAK42
41	3		OAK42
41	4		OAK42
41	5		OAK42
41	6		OAK42
41	7		OAK42
41	8		OAK42
41	9		OAK42
41	10		OAK42
41	11		OAK42
41	12		OAK42

## CROSS REFERENCE INDEXES

FIG.	ITEM	FIGURE AND ITEM NUMBER INDEX	
		STOCK NUMBER	CAGEC
41	13		0AK42
41	14		0AK42

By Order of the Secretary of the Army

Official

**GORDON R SULLIVAN**  
*General, United States Army*  
*Chief of Staff*

**MILTON H HAMILTON**  
*Administrative Assistant to the*  
*Secretary of the Army*  
06185

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PREVIOUS EDITIONS  
ARE OBSOLETE.

## 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 cu. feet

## Approximate Conversion Factors

To change	To	Multiply by	To change	To	Multiply by
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 temperature	5/9 (after subtracting 32)	Celsius temperature	°C

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