

TECHNICAL MANUAL
ORGANIZATIONAL, AND DIRECT SUPPORT
MAINTENANCE REPAIR PARTS
AND SPECIAL TOOLS LIST

FOR

RECHARGING UNIT, CARBON DIOXIDE
PUMP METHOD MDL SC-5
NSN 3655-01-053-0578

Approved for public release; distribution is unlimited

*This manual supersedes TM 5-3655-221-23P, 10 October 1989, including all changes.

HEADQUARTERS, DEPARTMENT OF THE ARMY
10 MAY 1990

TECHNICAL MANUAL

TM 5-3655-221-23P

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, D.C. 10 May 1990

**Organizational, and Direct Support
Maintenance Repair Parts and Special Tools List**

**RECHARGING UNIT, CARBON DIOXIDE
PUMP METHOD MDL SC-5**

NSN 3655-01-053-0578

Current as of 10 January 1990

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistake or if you know of a way to improve the procedures, please let us know. Mail your letter, DA Form 2028 (Recommended Changes to Publications and Blank Forms, or DA Form 2028-2 located in the back of this manual direct to: Commander, U.S. Army Troop Support Command, ATTN: AMSTR-MCTS, 4300 Goodfellow Boulevard, St. Louis, MO 63120-1798. A reply will be furnished directly to you.

Approved for public release; distribution is unlimited.

TABLE OF CONTENTS

		Page	Illus Figure
Section I.	INTRODUCTION	1	
Section II.	REPAIR PARTS LIST	1-1	
Group 01.	Guard.....	1-1	1
Group 02.	Belt and Pulley.....	2-1	2
Group 03.	Motor Starter Assembly and Cable Assembly.....	3-1	3
Group 04.	Transfer Unit.....	4-1	
	Pump	4-1	4
	Crankcase Assembly and Crosshead Guide	5-1	5
Group 05.	Base	6-1	6
Group 06.	Hose Assembly	7-1	7
Group 07.	Rack Assembly, Tilting.....	8-1	8
Group 08.	Manifold Assembly.....	9-1	9
Group 09.	Accessory Items.....	10-1	10
Section III.	SPECIAL TOOLS LIST (Not applicable)		
Section IV.	Cross Reference Index.....		
	National Stock Number-Index	I-1	
	Part Number Index	I-2	
	Figure and Item Number Index.....	I-5	

* This manual supersedes TM 5-3655-221-23P, 10 October 1989, including all changes.

**ORGANIZATIONAL AND DIRECT SUPPORT MAINTENANCE
REPAIR PARTS AND SPECIAL TOOLS LIST**

**RECHARGING UNIT, CARBON DIOXIDE
PUMP METHOD
MODEL SC-5
(3655-01 053-0578)**

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 organizational and direct support maintenance of the Recharging unit. It authorizes the requisitioning, issue, and disposition of spares, repair parts and special tools as indicated by the source, maintenance and recoverability (SMR) codes.

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

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

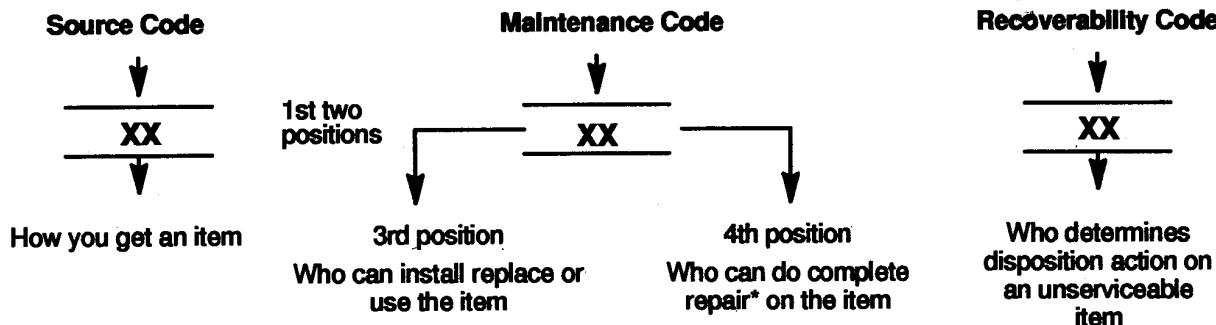
b. Section III. Special Tools List. A list of special tools, special TMDE, and other special support equipment authorized by this RPSTL (as indicated by Basis of Issue (BOI) information in DESCRIPTION AND USABLE ON CODE column) for the performance of maintenance.

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

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

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

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



NOTE

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

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

Code

PA
PB
PC**
PD
PE
PF
PG

Explanation

Stocked items; use the applicable NSN to request/requisition items with these source codes. They are authorized to the category indicated by the code entered in the 3d position of the SMR code.

**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 3d position of the SMR code. The complete kit must be requisitioned and applied.

MO--(Made at org.
AVUM Level
MF--(Made at DS/
AVUM Level
MH--(Made at GS
Level)
ML--Made at Spe-
cialized Repair
Activity (SRA))
MD--(Made at Depot)

Explanation

Items with these codes are not to be requested/requisitioned individually. They must be made from bulk material which is identified by the part number in the DESCRIPTION and USABLE ON CODE (UOC) column and listed in the Bulk Material group of the repair parts list in this RPSTL. If the item is authorized to you by the 3d position code of the SMR code, but the source code indicates it is made at a higher level, order the item from the higher level of maintenance.

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

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

NOTE

Cannibalization or controlled exchange, when authorized, may be used as a source of supply for items with the above source codes, except for those source coded "XA" or those aircraft support items restricted by requirements of AR 7501.

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

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

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

F ---Direct support or aviation intermediate level can remove, replace, and use the item.

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.

- (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 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.

Code	Application/Explanation
0 ---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 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.	

Recoverability Codes	Application/Explanation
0 ---Reparable item.	When uneconomically repairable, condemn and dispose of the item at organizational or aviation unit level
F ---Reparable Item.	When uneconomically repairable, condemn and dispose of the item at the direct support or aviation intermediate 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. **FSCM (Column (3)).** The Federal Supply Code for Manufacturer (FSCM) is a 5digit 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 an NSN to requisition an item, the item you receive may have a different part number from the part ordered.

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) The physical security classification of the item is indicated by the parenthetical entry, e.g., Phy Sec CI - Confidential, Phy Sec CI (S) - Secret, Phy Sec CI (T) - Top Secret.
- (3) Items that are included in kits and sets are listed below the name of the kit or set.
- (4) Spare/repair parts that make up an assembled item are listed immediately following the assembled item line entry.
- (5) Part numbers for bulk materials are referenced in this column in the line item entry for the item to be manufactured/fabricated.
- (6) When the item is not used with all serial numbers of the same model, the effective serial numbers are shown on the last line(s) of the description (before UOC).

- (7) The usable on code, when applicable (see paragraph 5, Special Information).
- (8) 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 basis of issue, the total authorization is increased proportionately.
- (9) 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.
- (10) The indenture, shown as dots appearing before the repair part, indicates that the item is a repair part of the next higher assembly.

f. QTY (Column (6)). The QTY (quantify 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 indicates that the quantity is variable and 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. (5305-01-5741467).
NIIN

When using this column to locate an Item, ignore the first 4 digits of the NSN. However, the complete NSN should be used when ordering 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) **FSCM column.** The Federal Supply Code for Manufacturer (FSCM) is a 5digit 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 the NSN for the associated part number and manufacturer identified in the PART NUMBER and FSCM columns to the left.

- (4) **FIG. column.** This column lists the number of the figure where the item is identified/located in Sections II and 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 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.

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.

- (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 applicable item description/nomenclature. Uncoded Hems are applicable to all models.

- b. **ASSOCIATED PUBLICATIONS.** The publications listed below pertains to the Recharging Unit and its components.

Publication	Short Title
TM 5-3655-221-13	Recharging Unit, Carbon Dioxide

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, H 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 c4a.(1)). The part numbers in the Part Number index are listed in ascending alphanumeric sequence (see paragraph c4.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 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.

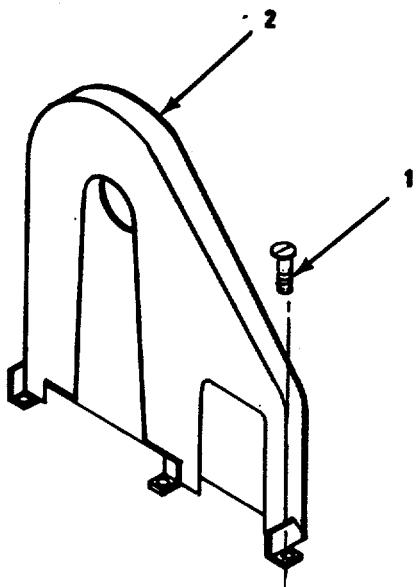


Figure 1. Guard

SECTION II**TM 5-3655-221-23P**

(1) ITEM NO	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
				GROUP 01 GUARD	
				FIG. 1 GUARD	
1	PAOZZ	96906	MS35215-53	SCREW,MACHINE NO.10-32 X 3/8 IN.....	3
2	XBOFF	56043	76039	GUARD	1

END OF FIGURE

1-1

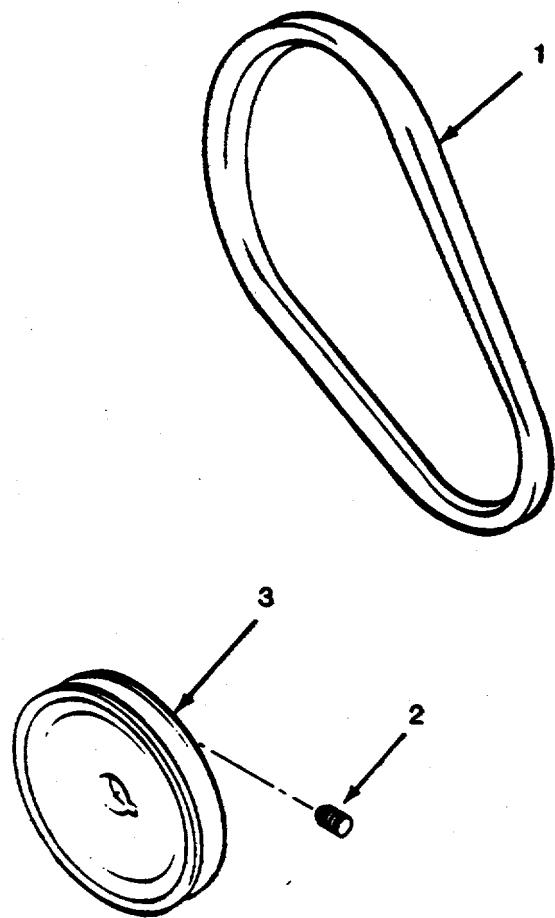


Figure 2. Belt and Pulley.

SECTION II

TM 5-3655-221-23P

(1) ITEM NO	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
GROUP 02 BELT AND PULLEY					
FIG. 2 BELT AND PULLEY					
1	XDOZZ	71176	B36	BELT,V	1
2	PAOZZ	56043	23400	SETSCREW.....	1
3	PAOZZ	71198	BK36	PULLEY,GROOVE NO.2-3/8 IN OD, 7/8 IN BORE	1

END OF FIGURE

2-1

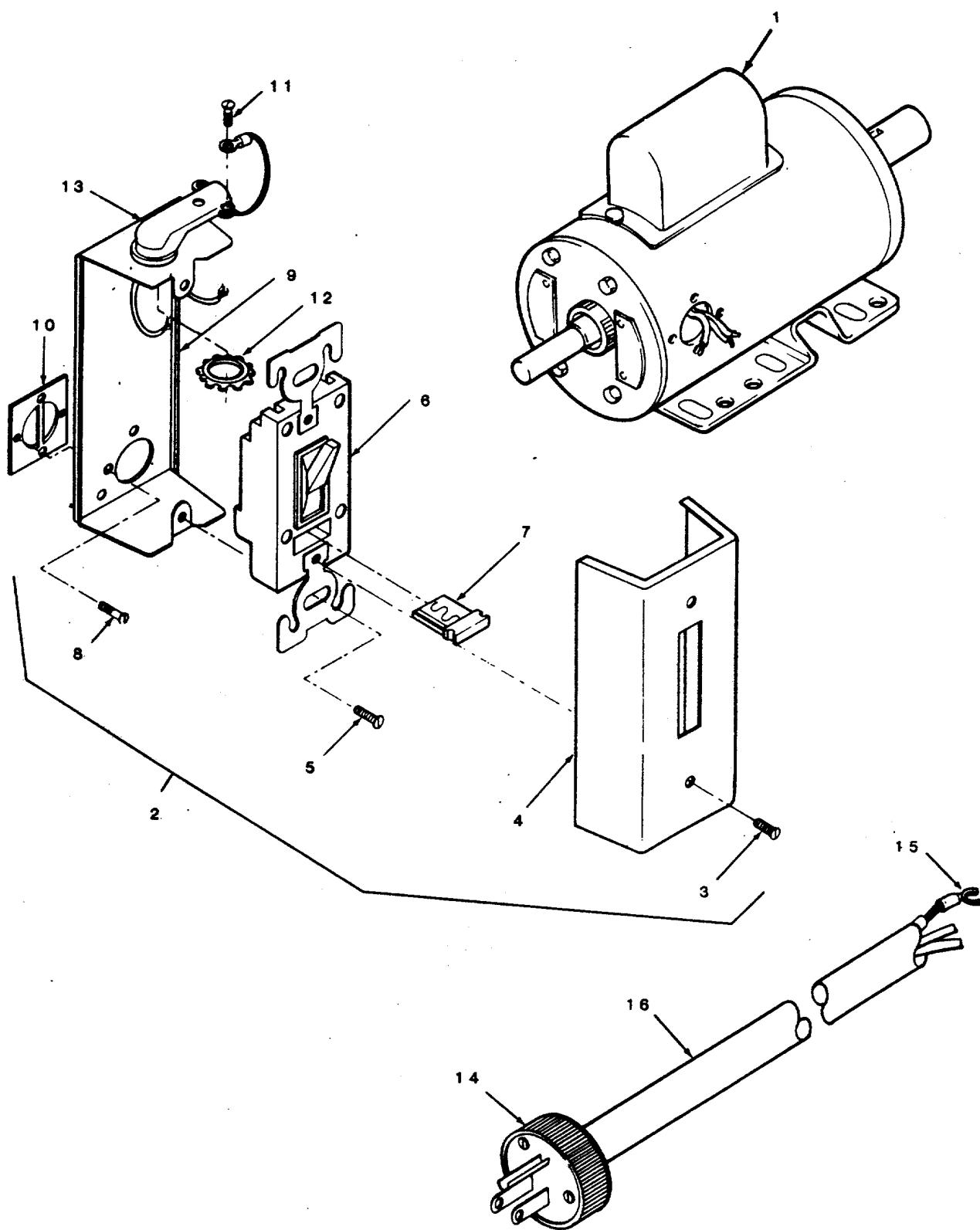


Figure 3. Electric Motor, Motor Starter Assembly and Cable Assembly

SECTION II			TM 5-3655-221-23P		
(1) ITEM NO	(2) SMR CODE	(3) FSCM	(4) PART NUMBER	(5)	(6)
			DESCRIPTION AND USABLE ON CODES (UOC)		
			QTY		
				GROUP 03 ELECTRIC MOTOR, MOTOR STARTER ASSEMBLY AND CABLE ASSEMBLY	
				FIG. 3 ELECTRIC MOTOR, MOTOR STARTER ASSEMBLY AND CABLE ASSEMBLY	
1	PAOZZ	2989	5KC47RG6000	MOTOR,ALTERNATING C	1
2	XCOZZ	12121	CR101Y1	MOTOR,STARTER ASSY.....	1
3	PAOZZ	96906	MS35190-236	SCREW,MACHINE NO.O.138-32 UNC 2A X..... 3/8 IN.....	2
4	XAOZZ	56043	23201	COVER,MOTOR,STARTER.....	1
5	PAOZZ	96906	MS24627-22	SCREW,TAPPING,THREA CD PL,NO.0.138-..... 32 UNC 2A X 3/8 IN.,TYPE F.....	2
6	PAOZZ	01121	600TAX4	STARTER,MOTOR	1
7	PAOZZ	03350	CR123H15.7B	THERMAL UNIT,BATHYT	1
8	PAOZZ	96906	MS51861-45	SCREW,TAPPING,THREA CD PL,NO.0190-..... 16 X 1/2 IN.,TYPE B.....	2
9	XAOZZ	56043	23204	BASE,MOTOR	1
10	XAOZZ	56043	23205	INSULATOR,DISK	1
11	XAOZZ	56043	23206	SCREW,MACHINE CD PL,0.164-32 UNC..... 2A X 5/8 IN.....	2
12	XAOZZ	56043	23207	NUT,SELF-LOCKING,CL	1
13	XAOZZ	03350	2201	CONNECTOR,BOX,RETAI SQUEEZE TYPE,3/..... 8 IN	1
14	XDOZZ	03350	GED0511	PLUG CONNECTOR,ELEC	1
15	PAOZZ	06383	P10-8F	TERMINAL STRIP,GROU TONGUE,NON-..... INSULATED.....	1
16	PAOZZ	81349	CO-03HOF(3/14)05 65	CABLE,SPECIAL PURPO TYPE SO.....	25

END OF FIGURE

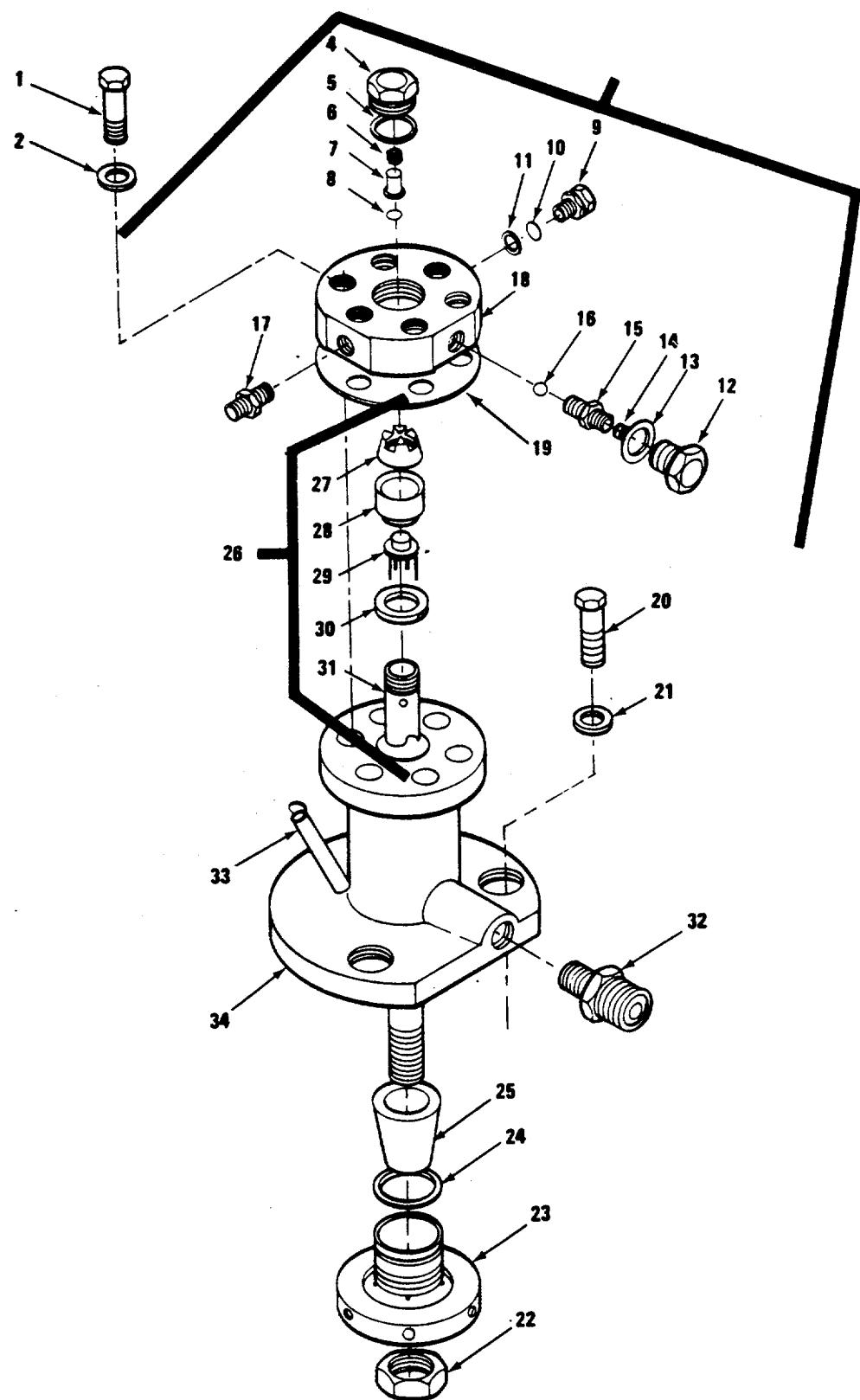


Figure 4. Pump

(1) ITEM NO	SECTION II			(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
	(2) SMR CODE	(3) CAGEC				
					GROUP 4 TRANSFER UNIT	
					FIG. 4 PUMP	
1	XDOZZ 56043	99088			COMPRESSOR	1
1	PAOZZ 96906	MS90726-65			SCREW,CAP,HEXAGON H NO.0.375-24 X	6
2	PAOZZ 96906	MS35338-46			1.75 IN UNF 2A, CD PLTD.	
3	PAOZZ 56043	68702			WASHER,LOCK .375 IN,CD PL	6
4	PAOZZ 56043	53644			.HEAD AS SEMBLY	1
5	PAOZZ 56043	50111			..CONNECTOR,PLUG,ELEC	1
					..WASHER,FLAT 21/32 IN ID X 1132	1
6	PAOZZ 56043	53642			IN THK	
					..SPRING,HELICAL,COMP FREE LG,1-3132 IN	1
7	PAOZZ 56043	53641			..CAM	1
8	PAOZZ 56043	53640			..BEARING,BALL	1
9	PAOZZ 56043	50117			..CONNECTOR,PLUG,ELE	1
10	PAOZZ 56043	50115			..DISC,SAFETY	1
11	PAOZZ 56043	50116			..WASHER,DISC	1
12	PAOZZ 56043	68692			..BODY,CHECK	1
13	XDOZZ 56043	61628			..WASHER,FLAT	1
14	PAOZZ 56043	68691			..SPRING,HELICAL,COMP	1
15	PAOZZ 56043	68690			..RETAINER,PACKING	1
16	PAOZZ 56043	68722			..BALL,BRONZE	1
17	PAOZZ 56043	95297			..ADAPTER,BRASS	1
18	PAOZZ 56043	68718			..HEAD	1
19	PAOZZ 56043	68693			GASKET	1
20	PAOZZ 96906	MS90726-89			SCREW,CAP,HEXAGON H NO.O.4375-20 X	3
					1.5 IN,UNF 2A,CD PLTD.	
21	PAOZZ 96906	MS35338-47			WASHER,LOCK .4375 IN	3
22	PAOZZ 96906	MS35650-3392			NUT,PLAIN,HEXAGON NO.1/2-20,UNF 2B	1
23	XDOZZ 01317	68715			NUT,PACKING	1
24	PAOZZ 56043	92473			PACKING,PREFORMED	1
25	PAOZZ 56043	68717			PACKING,PREFORMED	1
26	PAOZZ 56043	53627			.PISTON ASSEMBLY	1
27	PAOZZ 56043	68688			..RETAINER, PACKING	1
28	PAOZZ 56043	68687			..CHECK, PISTON ROD	1
29	XDOZZ 56043	68686			..PACKING MATERIAL	1
30	PAOZZ 56043	68701			..PISTON	1
31	PAOZZ 56043	68685			..ROD,PISTON	1
32	PAOZZ 56043	53645			ADAPTER	1
33	XDOZZ 24981	00411-0115-1			CUP,OIL,LUBRICATING	1
34	XBOZZ 56043	68706			BODY	1

END OF FIGURE

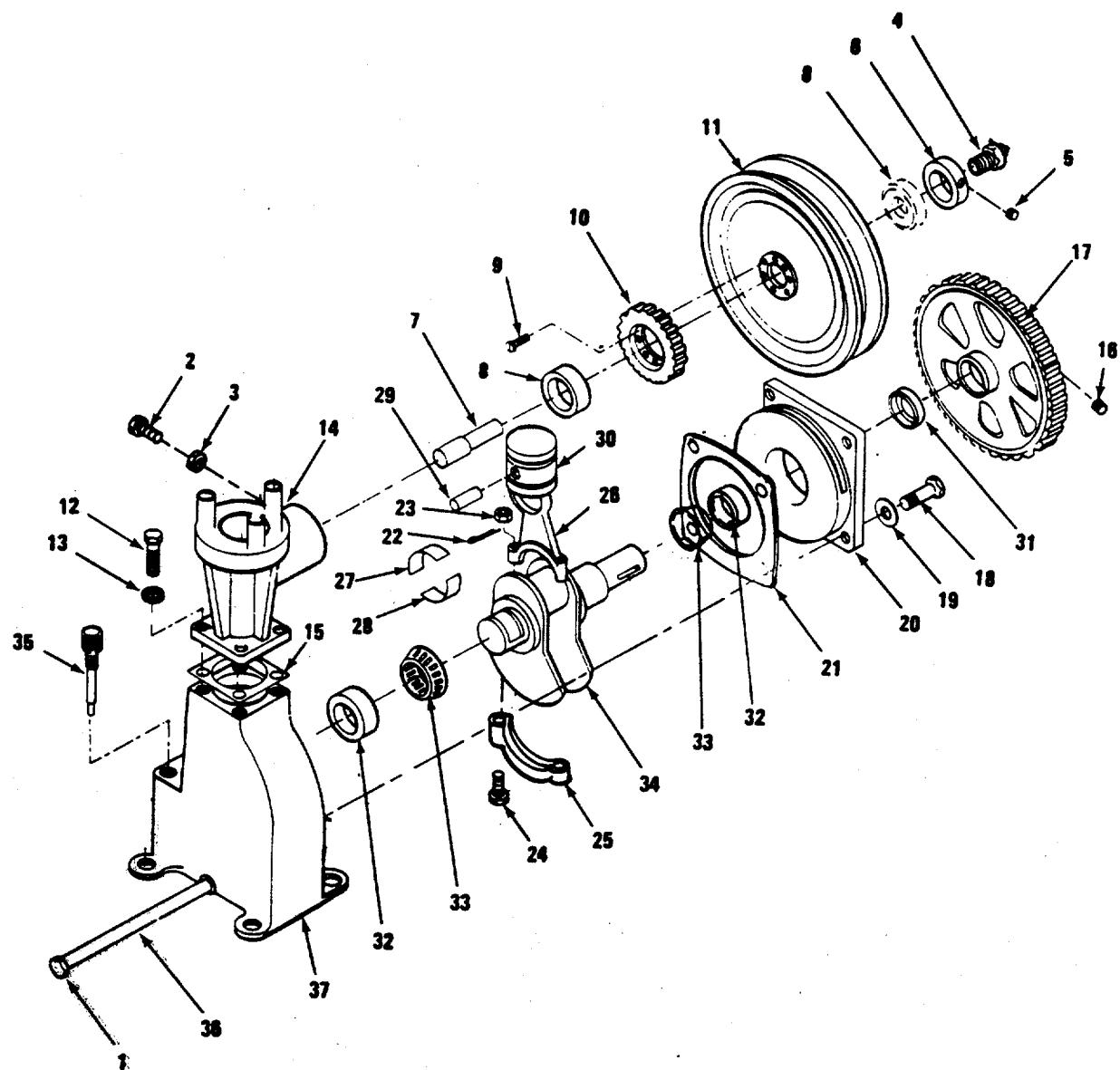


Figure 5. Crankcase Assembly and Crosshead Guide

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
				GROUP 04 FIG. 5 TRANSFER UNIT CRANKCASE ASSEMBLY AND CROSSHEAD GUIDE	
1	XDFZF	56043	53603	CRANKCASE ASSEMBLY	1
1	PAOZZ	56043	23300	.PLUG,PIPE	1
2	PAOZZ	56043	53621	SETSCREW NO.5/16-18 X 1-1/4 IN.,CD	1
				PLTD.	
3	XDOZZ	96906	MS16286-2	.NUT,PLAIN,HEXAGON	1
4	PAOZZ	96906	MS15006-1	.FITTING,LUBRICATION HYDRAULIC,	1
				LEAKPROOF, TYPE VJ.	
5	PAOZZ	56043	57207	.SETSCREW	2
6	PAOZZ	56043	53618	RING,RETAINING	1
7	XDOZZ	56043	53614	.SHAFT,TRANSFER UNIT	1
8	PAOZZ	71041	67069-NR1640DS	.BEARING BALL	2
9	PAOZZ	53604	53620	.SCREW,FLAT HEAD NO.8-32 X 112,CD	6
				PLTD (AP).	
10	PAOZZ	56043	53616R	.GEAR,PINION	1
11	PAOZZ	56043	53615	.PULLEY,GROOVE	1
12	XDOZZ	96906	MS90725-60	.SCREW,CAP,HEXAGON H NO.O.375-16 X 4 1 IN. UNC 2A, CD PLTD.	
13	PAOZZ	96906	MS35338-46	.WASHER,LOCK .3750 IN	4
14	PAOZZ	56043	53681	.GUIDE,CROSHEAD	1
15	PAOZZ	56043	53610	.GASKET	1
16	PAOZZ	56043	57207	.SETSCREW NO. 1/4-20 X 3/8 IN	2
17	PAOZZ	56043	53604R	.GEAR,CRANK	1
18	PAOZZ	96906	MS90725-34	.BOLT,MACHINE 5/16 X 1 IN,CD PL, (CAP).	4
19	XDOZZ	96906	MS35338-45	.WASHER,LOCK NO.0.3125 IN	4
20	PAOZZ	56043	65664	.COVER,END	1
21	PAOZZ	56043	65666	.GASKET	V
22	PAOZZ	96906	MS24665-134	.PIN,COTTER	2
23	XAOZZ	56043	65671	.NUT,CASTELLATED	2
24	XAOZZ	56043	65670	.BOLT,MACHINE	2
25	XAOZZ	56043	23350 .	.CAP,PIPE	1
26	PAFZZ	56043	53675	.ROD,CONNECTING	1
27	XAOZZ	56043	5672	.BEARING HALF,SLEEVE	1
28	XAOZZ	56043	65673	.BEARING,SLEEVE	1
29	XDOZZ	56043	53674	.PIN,WRIST	1
30	PAOZZ	56043	53607	.CROSSHEAD	1
31	PAOZZ	01212	450593	.SEAL,PLAIN	1
32	PAOZZ	60038	15118	.CONE AND ROLLERS,TA	2
33	XDOZZ	60038	15250X	.CUP,TAPERED ROLLER	2
34	PAOZZ	56043	65661	.CRANKSHAFT	1
35	PAOZZ	56043	65660	.PLUG,OIL,FILLER	1
36	PAOZZ	56043	165004	.PIPE,OIL DRAIN	1
37	XBOZZ	56043	CCS2	.CRANKCASE	1
				END OF FIGURE	

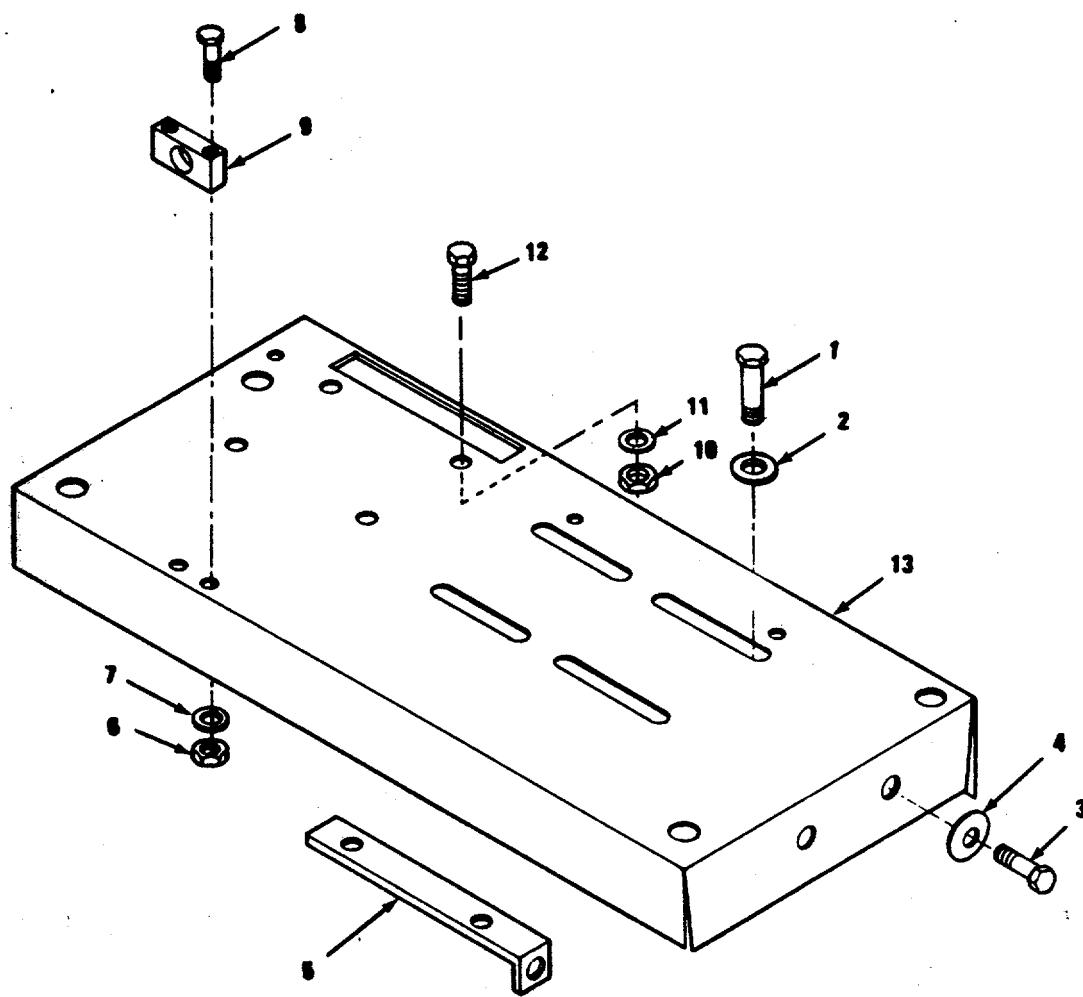


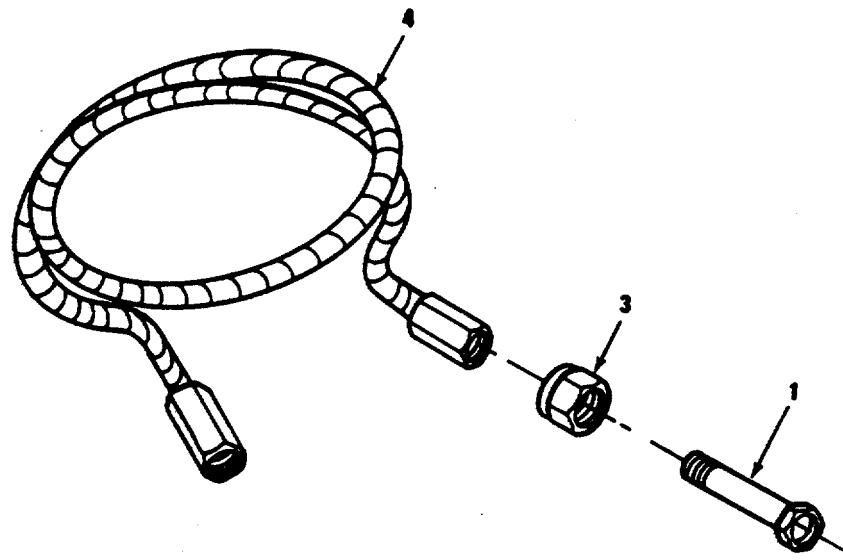
Figure 6. Base

SECTION II

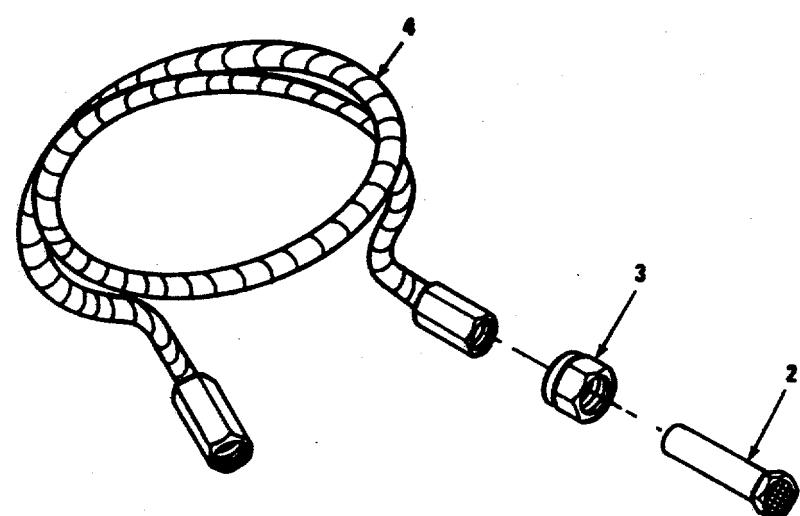
TM 5-3655-221-23P

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
GROUP 05 FIG. 6					BASE BASE
1	PAOZZ	96906	MS90725-60	SCREW,CAP,HEXAGON H CD PLTD,..... NO.0.375-16 X 1 IN. UNC 2A.	4
2	PAOZZ	96906	MS35338-46	WASHER,LOCK 0.375 IN.,CD PLTD	4
3	PAOZZ	96906	MS90725-66	SCREW,CAP,HEXAGON H CD PLTD,	2
4	PAOZZ	96906	MS35338-46	NO.O.375-16 X 2 IN. UNC 2A. WASHER,LOCK NO.0.375 IN., CD PLTD	2
5	XDOZZ	56043	65621	BRACKET, ADJUSTING	2
6	XDOZZ	96906	MS16286-1	NUT,PLAIN,HEXAGON NO.0.25-20 UNF,..... CD PLTD.	2
7	PAOZZ	96906	MS35338-44	WASHER,LOCK NO.0.25-20 UNF,CD PLTD.	2
8	PAOZZ	96906	MS35206-287	SCREW,MACHINE .25-20 UNF	2
9	XBOZZ	56043	240-056	BRACKET,OIL DRAIN	1
10	XDDZZ	96906	MS16286-5	NUT,PLAIN,HEXAGON .5000-13 IN UNC,	4
11	PAOZZ	96906	MS35338-48	CD PL. WASHER,LOCK NO.O.5-13 IN UNC,CD..... PLTD.	4
12	PAOZZ	96906	MS90728-110	SCREW,CAP,HEXAGON H CD PLTD,NO.0.5-	4
13	XDOFF	56043	65620	13 X 1-1/4 IN UNC 2A. BASE1

END OF FIGURE



OUTLET



INLET

Figure 7. Hose Assembly

SECTION II

TM 5-3655-221-23P

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
				GROUP 06 HOSE ASSEMBLY	
				FIG. 7 HOSE ASSEMBLY	
1	XDOZZ	56043	53743	ADAPTER, TAIL PIECE	1
2	PAOZZ	56043	53761	TAILPIECE AND STRAP.....	1
3	PAOZZ	56043	53744	NUT, COUPLING NO.083-14 NGO	2
4	XDOZZ	56043	53776	HOSE WITH COUPLING	2
				END OF FIGURE	

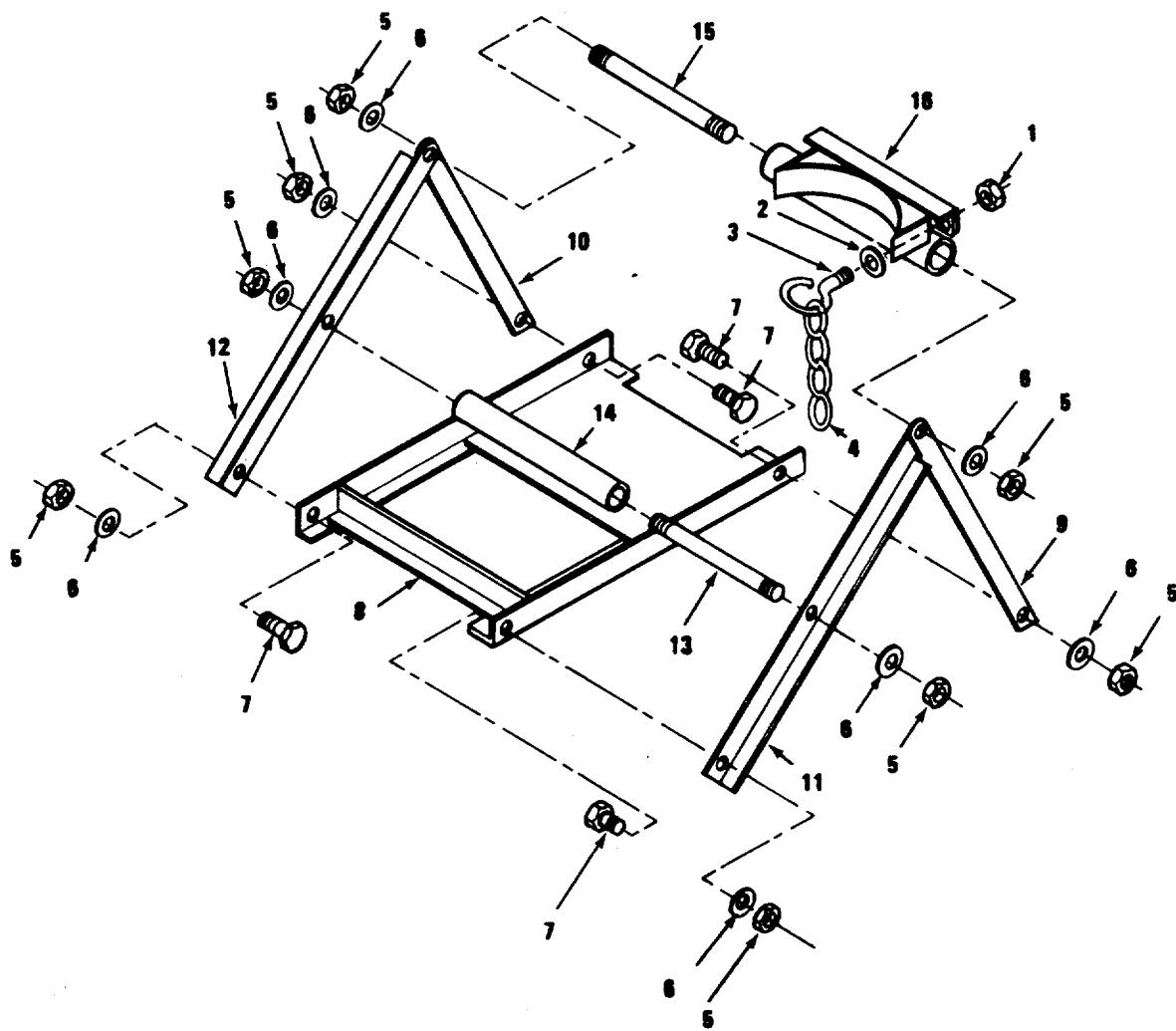


Figure 8. Rack Assembly, Tilting

SECTION II

TM 5-3655-221-23P

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
				GROUP 07 RACK ASSEMBLY	
				FIG. 8 RACK ASSEMBLY, TILTING	
1	PAFFF	56043	95275	TILTING RACK ASSEMB.....	1
	XDOZZ	96906	MS16286-5	.NUT,PLAIN,HEXAGON FINISHED,NO.0.5-	2
2	PAOZZ	96906	MS27183-18	13 UNC.	
3	XAOZZ	56043	95277	.WASHER,FLAT GENERAL PURPOSE,CD PL.	2
5	XDOZZ	96906	MS16286-7	.HOOK LATCH	2
6	PAOZZ	96906	MS35338-50	.NUT,PLAIN,HEXAGON	8
7	PAOZZ	96906	MS90725-160	.WASHER,LOCK.....	8
8	XBOZZ	56043	95290	.SCREW,CAP,HEXAGON H	4
9	XBOZZ	56043	95281	.BASE, TILT RACK	1
10	XBOZZ	56043	95284	.UPRIGHT,RIGHT BACK	1
11	XBOZZ	56043	95282	.UPRIGHT,LEFT BACK.....	11
12	XBOZZ	56043	95283	.UPRIGHT,RIGHT FRONT	1
13	XBOZZ	56043	95285	.UPRIGHT,LEFT FRONT	1
14	XBOZZ	56043	95286	.ROD, TIE	1
15	XBOZZ	56043	95280	.SPACER	1
16	PAOZZ	56043	53792	.ROD,SWIVEL	1
				.SADDLE ASSY	1

END OF FIGURE

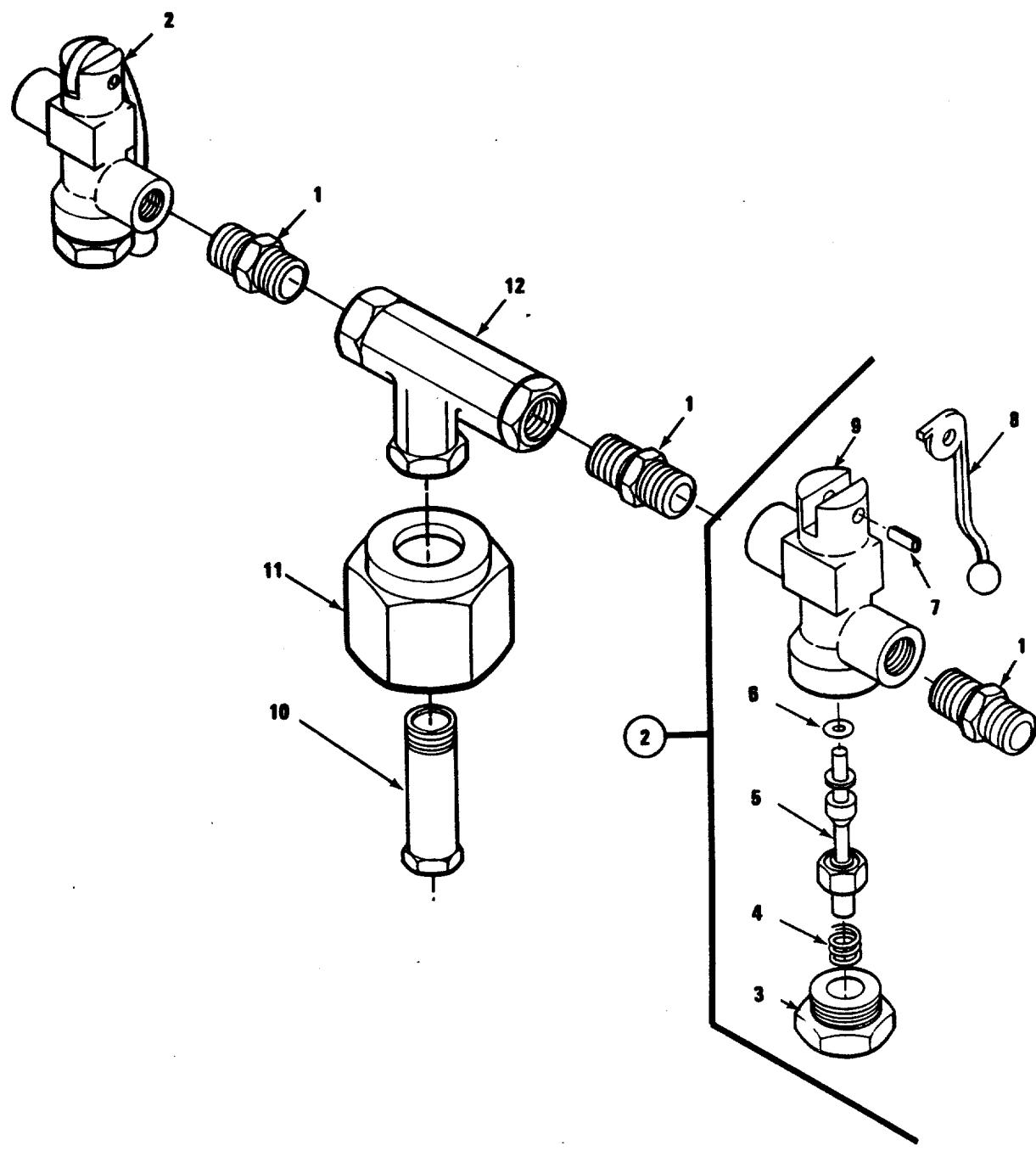
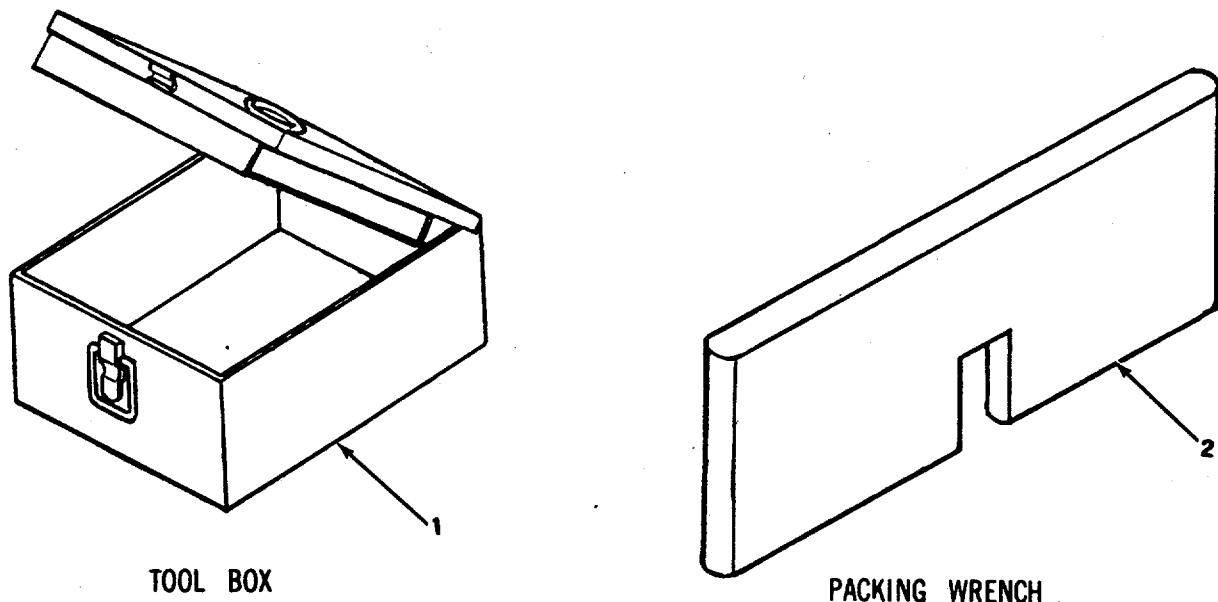


Figure 9. Manifold Assembly

SECTION II

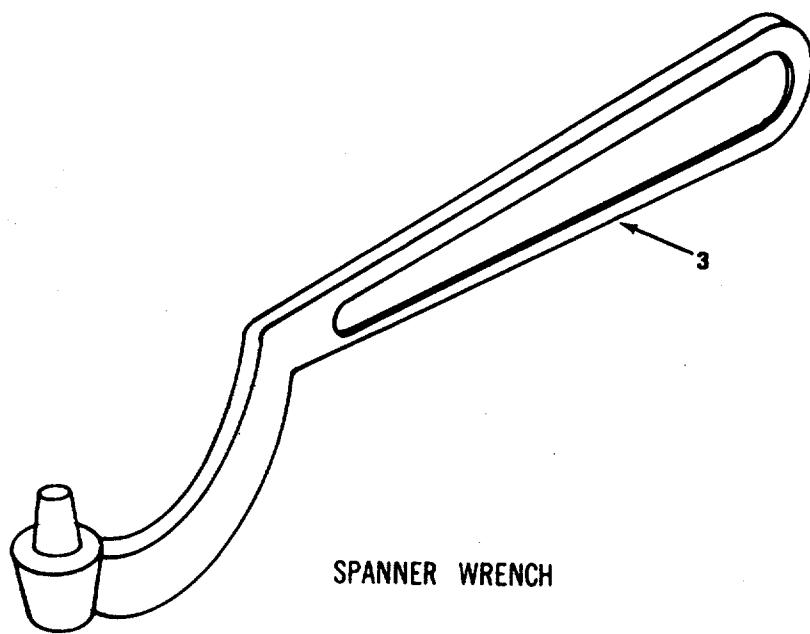
TM 5-3655-221-23P

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
				GROUP 08 MANIFOLD ASSEMBLY	
				FIG. 9 MANIFOLD ASSEMBLY	
1	PAOZZ	56043	95296	MANIFOLD ASSEMBLY.....	1
2	PAOZZ	56043	53645	ADAPTER	3
3	XDOZZ	56043	72185	VALVE,FLIP	2
4	PAOZZ	56043	72190	.PLUG,MACHINE THREAD.....	1
5	PAOZZ	56043	60458	.SPRING	1
6	PAOZZ	56043	72194	.VALVE,CHECK	1
				.PACKING,PREFORMED RBR,0.145 IN ID	1
7	PAOZZ	56043	72962	X 0.070 IN OD.	
8	XDOZZ	56043	72193	.PIN,SPRING	1
9	XBDZZ	56043	72186	.LEVERPRELEASE.....	1
10	XDOZZ	56043	53743	.BODY,VALVE	1
11	PAOZZ	56043	53744	ADAPTER.TAIL PIECE	1
12	PAOZZ	56043	55455	NUT, COUPLING	1
				TEE. PIPE.....	1
				END OF FIGURE	



TOOL BOX

PACKING WRENCH



SPANNER WRENCH

Figure 10. Accessory Items

SECTION II

TM 5-3655-221-23P

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
GROUP 09 ACCESSORY ITEMS					
FIG. 10 ACCESSORY ITEMS					
1	XBOZZ	56043	65617	BOX, TOOL.....	1
2	XDOZZ	56043	53778	WRENCH, PACKING NUT.....	
3	XDOZZ	56043	53755	WRENCH, SPANNER.....	
END OF FIGURE					

10-1

**Section III. SPECIAL TOOLS LIST
(Not Applicable)**

SECTION IV. CROSS REFERENCE INDEXES
NATIONAL STOCK NUMBER INDEX

<u>STOCK NUMBER</u>	<u>FIGURE NO.</u>	<u>ITEM NO.</u>	<u>STOCK NUMBER</u>	<u>FIGURE NO.</u>	<u>ITEM NO.</u>
5310-00-003-4094	6	11	3655-01-205-7242	5	36
5310-00-004-5033	4	2	3655-01-205-7247	8	
5310-00-004-5034	8	6	5360-01-205-7279	4	14
5305-00-044-5503	8	7	5360-01-205-7280	4	6
5315-00-058-9782	9	7	5330-01-205-7281	4	24
6110-00-087-0227	3	6	5330-01-205-7282	4	25
3110-00-100-3158	5	32	4730-01-205-7288	5	1
5310-00-113-3757	4	22	3020-01-205-7289	5	11
4730-00-172-0049	5	4	6150-01-206-4917	4	3
5305-00-206-2508	1	1	5310-01-206-4918	4	11
5310-00-209-0965	4	21	4210-01-206-4919	4	31
5306-00-225-8499	5	18	3655-01-206-4920	5	14
5305-00-269-2808	4	1	5310-01-206-4923	7	3
5305-00-269-3211	6	1		9	11
5305-00-269-3216	6	3	5360-01-206-4924	9	4
5305-00-432-4201	3	8	4210-01-206-4926	4	28
5310-00-582-5965	6	7	5935-01-206-4967	4	4
5310-00-637-9541	5	13	5935-01-206-4968	4	9
	6	2	5365-01-206-4977	9	3
	6	4	4730-01-206-4978	9	12
5305-00-710-4194	4	20	5330-01-206-4984	9	6
5305-00-732-0511	6	12	5330-01-206-4989	5	15
5310-00-8C9-5998	8	2	5330-01-206-4990	5	21
5315-00-839-5820	5	22	4820-01-206-4999	9	5
5305-00-948-7237	3	5	5305-01-206-5008	2	2
5305-00-958-5453	3	3	5305-01-206-5009	5	2
5305-00-988-1728	6	8	5305-01-206-5010	5	5
4310-01-123-6061	5	26		5	16
6145-01-134-2855	3	16	5365-01-206-5011	5	6
5305-01-205-7220	5	9	3020-01-206-5013	2	3
4730-01-205-7221	4	17	5310-01-206-5019	4	5
4310-01-205-7222	9		5330-01-206-5024	4	15
3110-01-205-7224	4	16	5330-01-206-5025	4	27
6150-01-205-7225	4	18	5940-01-206-5029	3	15
3655-01-205-7226	4	30	6655-01-206-5032	3	7
4310-01-205-7227	4	12	5330-01-207-8343	5	31
4310-01-205-7228	5	20	5330-01-207-8347	4	19
4310-01-205-7229	5	34	6105-01-248-3001	3	1
4730-01-205-7230	5	35			
4010-01-205-7231	8	4			
3655-01-205-7232	7	2			
4730-01-205-7233	4	32			
	9	1			
3655-01-205-7234	4	7			
3110-01-205-7235	4	8			
4310-01-205-7236	4	26			
3020-01-205-7237	5	10			
3655-01-205-7238	5	30			
3020-01-205-7239	5	17			
3655-01-205-7241	4	10			

CROSS REFERENCE INDEXES

PART NUMBER INDEX

FSCM	PART NUMBER	STOCK NUMBER	FIG.	ITEM
71198	BK36	3020-01-206-5013	2	3
71176	B36		2	1
56043	CCS2		5	37
81349	C0-03H0F(3/14)05 65	6145-01-134-2855	3	16
12121	CR111Y1		3	2
03350	CR123H15.7B	6655-01-206-5032	3	7
03350	GED0511		3	14
96906	MS15006-1	4730-00-172-0049	5	4
96906	MS16286-1		6	6
96906	MS16286-2		5	3
96906	MS16286-5		6	10
96906	MS16286-7		8	1
96906	MS24627-22	5305-00-948-7237	3	5
96906	MS24665-134	5315-00-839-5820	5	22
96906	MS27183-18	5310-00-809-5998	8	2
96906	MS35190-236	5305-00-958-5453	3	3
96906	MS35206-287	5305-00-988-1728	6	8
96906	MS35215-53	5305-00-206-2508	1	1
96906	MS35338-44	5310-00-582-5965	6	7
96906	MS35338-45		5	19
96906	MS35338-46	5310-00-004-5033	4	2
		5310-00-637-9541	5	13
			6	2
96906	MS35338-47	5310-00-209-0965	4	21
96906	MS35338-48	5310-00-003-4094	6	11
96906	MS35338-50	5310-00-004-5034	8	6
96906	MS35650-3392	5310-00-113-3757	4	22
96906	MS51861-45	5305-00-432-4201	3	8
96906	MS90725-160	5305-00-044-5503	8	7
96906	MS90725-34	5306-00-225-8499	5	18
96906	MS90725-60		5	12
		5305-00-269-3211	6	1
96906	MS90725-66	5305-00-269-3216	6	3
96906	MS90726-65	5305-00-269-2808	4	1
96906	MS90726-89	5305-00-710-4194	4	20
96906	MS90728-110	5305-00-732-0511	6	12
06383	P10-8F	5940-01-206-5029	3	15
24981	00411-0115-1		4	33
60038	15118	3110-00-100-3158	5	32
60038	15250X		5	33
56043	165004	3655-01-205-7242	5	36
03350	2201		3	13
56043	23201		3	4
56043	23204		3	9
56043	23205		3	10
56043	23206		3	11
56043	23207		3	12
56043	23300	4730-01-205-7288	5	1

CROSS REFERENCE INDEXES

PART NUMBER INDEX

FSCM	PART NUMBER	STOCK NUMBER	FIG.	ITEM
56043	23350		5	25
56043	23400	5305-01-206-5008	2	2
56043	240-056		6	9
01212	450593	5330-01-207-8343	5	31
02989	5KC47RG6000	6105-01-248-3001	3	1
56043	50111	5310-01-206-5019	4	5
56043	50115	3655-01-205-7241	4	10
56043	50116	5310-01-206-4918	4	11
56043	50117	5935-01-206-4968	4	9
56043	53603		5	
56043	53604R	3020-01-205-7239	5	17
56043	53607	3655-01-205-7238	5	30
56043	53610	5330-01-206-4989	5	15
56043	53614		5	7
56043	53615	3020-01-205-7289	5	11
56043	53616R	3020-01-205-7237	5	10
56043	53618	5365-01-206-5011	5	6
53604	53620	5305-01-205-7220	5	9
56043	53621	5305-01-206-5009	5	2
56043	53627	4310-01-205-7236	4	26
56043	53640	3110-01-205-7235	4	8
56043	53641	3655-01-205-7234	4	7
56043	53642	5360-01-205-7280	4	6
56043	53644	5935-01-206-4967	4	4
56043	53645	4730-01-205-7233	4	32
			9	1
56043	53674		5	29
56043	53675	4310-01-123-6061	5	26
56043	53681	3655-01-206-4920	5	14
56043	53743		7	1
			9	10
56043	53744	5310-01-206-4923	7	3
			9	11
56043	53755		10	3
56043	53761	3655-01-205-7232	7	2
56043	53776		7	4
56043	53778		10	2
56043	53792		8	16
56043	53799	4010-01-205-7231	8	4
56043	55455	4730-01-206-4978	9	12
56043	5672		5	27
56043	57207	5305-01-206-5010	5	5
			5	16
01121	600TAX4	6110-00-087-0227	3	6
56043	60458	5360-01-206-4924	9	4
56043	61628		4	13
56043	65617		10	1
56043	65620		6	13
56043	65621		6	5
56043	65660	4730-01-205-7230	5	35
56043	65661	4310-01-205-7229	5	34

CROSS REFERENCE INDEXES

PART NUMBER INDEX

FSCM	PART NUMBER	STOCK NUMBER	FIG.	ITEM
56043	65664	4310-01-205-7228	5	20
56043	65666	5330-01-206-4990	5	21
56043	65670		5	24
56043	65671		5	23
56043	65673		5	28
71041	67069-NR164ODS		5	8
56043	68685	4210-01-206-4919	4	31
56043	68686		4	29
56043	68687	4210-01-206-4926	4	28
56043	68688	5330-01-206-5025	4	27
56043	68690	5330-01-206-5024	4	15
56043	68691	5360-01-205-7279	4	14
56043	68692	4310-01-205-7227	4	12
56043	68693	5330-01-207-8347	4	19
56043	68701	3655-01-205-7226	4	30
56043	68702	6150-01-206-4917	4	3
56043	68706		4	34
01317	68715		4	23
56043	68717	5330-01-205-7282	4	25
56043	68718	6150-01-205-7225	4	18
56043	68722	3110-01-205-7224	4	16
56043	72185		9	2
56043	72186		9	9
56043	72189	5330-01-206-4984	9	6
56043	72190	5365-01-206-4977	9	3
56043	72193		9	8
56043	72194	4820-01-206-4999	9	5
56043	76039		1	2
72962	79-040-187-0750	5315-00-058-9782	9	7
56043	92473	5330-01-205-7281	4	24
56043	95275	3655-01-205-7247	8	
56043	95277		8	3
56043	95280		8	15
56043	95281		8	9
56043	95282		8	11
56043	95283		8	12
56043	95284		8	10
56043	95285		8	13
56043	95286		8	14
56043	95290		8	8
56043	95296	4310-01-205-7222	9	
56043	95297	4730-01-205-7221	4	17
56043	99088		4	

CROSS REFERENCE INDEXES

FIG.	ITEM	FIGURE AND ITEM NUMBER INDEX		PART NUMBER
		STOCK NUMBER	CAGEC	
1	1	5305-00-206-2508	96906	MS35215-53
1	2		56043	76039
2	1		71176	B36
2	2	5305-01-206-5008	56043	23400
2	3	3020-01-206-5013	71198	BK36
3	1	6105-01-248-3001	02989	5KC47RG6000
3	2		12121	CR101Y
3	3	5305-00-958-5453	96906	MS35190-236
3	4		56043	23201
3	5	5305-00-948-7237	96906	MS24627-22
3	6	6110-00-087-0227	01121	600TAX4
3	7	6655-01-206-5032	03350	CR123H15.7B
3	8	5305-00-432-4201	96906	MS51861-45
3	9		56043	23204
3	10		56043	23205
3	11		56043	23206
3	12		56043	23207
3	13		03350	2201
3	14		03350	GED0511
3	15	5940-01-206-5029	06383	P10-8F
3	16	6145-01-134-2855	81349	CO-03HOF(3/14)05 65
4			56043	99088
4	1	5305-00-269-2808	96906	MS90726-65
4	2	5310-00-004-5033	96906	MS35338-46
4	3	6150-01-206-4917	56043	68702
4	4	5935-01-206-4967	56043	53644
4	5	5310-01-206-5019	56043	50111
4	6	5360-01-205-7280	56043	53642
4	7	3655-01-205-7234	56043	53641
4	8	3110-01-205-7235	56043	53640
4	9	5935-01-206-4968	56043	50117
4	10	3655-01-205-7241	56043	50115
4	11	5310-01-206-4918	56043	50116
4	12	4310-01-205-7227	56043	68692
4	13		56043	61628
4	14	5360-01-205-7279	56043	68691
4	15	5330-01-206-5024	56043	68690
4	16	3110-01-205-7224	56043	68722
4	17	4730-01-205-7221	56043	95297
4	18	6150-01-205-7225	56043	68718
4	19	5330-01-207-8347	56043	68693
4	20	5305-00-710-4194	96906	MS90726-89
4	21	5310-00-209-0965	96906	MS35338-47
4	22	5310-00-113-3757	96906	MS35650-3392
4	23		01317	68715
4	24	5330-01-205-7281	56043	92473
4	25	5330-01-205-7282	56043	68717
4	26	4310-01-205-7236	56043	53627
4	27	5330-01-206-5025	56043	68688
4	28	4210-01-206-4926	56043	68687

CROSS REFERENCE INDEXES

		FIGURE AND ITEM NUMBER INDEX		PART NUMBER
FIG.	ITEM	STOCK NUMBER	CAGEC	
4	29		56043	68686
4	30	3655-01-205-7226	56043	68701
4	31	4210-01-206-4919	56043	68685
4	32	4730-01-205-7233	56043	53645
4	33		24981	00411-0115-1
4	34		56043	68706
5			56043	53603
5	1	4730-01-205-7288	56043	23300
5	2	5305-01-206-5009	56043	53621
5	3		96906	MS16286-2
5	4	4730-00-172-0049	96906	MS15006-1
5	5	5305-01-206-5010	56043	57207
5	6	5365-01-206-5011	56043	53618
5	7		56043	53614
5	8		71041	67069-NR1640DS
5	9	5305-01-205-7220	53604	53620
5	10	3020-01-205-7237	56043	53616R
5	11	3020-01-205-7289	56043	53615
5	12		96906	MS90725-60
5	13	5310-00-637-9541	96906	MS35338-46
5	14	3655-01-206-4920	56043	53681
5	15	5330-01-206-4989	56043	53610
5	16	5305-01-206-5010	56043	57207
5	17	3020-01-205-7239	56043	53604R
5	18	5306-00-225-8499	96906	MS90725-34
5	19		96906	MS35338-45
5	20	4310-01-205-7228	56043	65664
5	21	5330-01-206-4990	56043	65666
5	22	5315-00-839-5820	96906	MS24665-134
5	23		56043	65671
5	24		56043	65670
5	25		56043	23350
5	26	4310-01-123-6061	56043	53675
5	27		56043	5672
5	28		56043	65673
5	29		56043	53674
5	30	3655-01-205-7238	56043	53607
5	31	5330-01-207-8343	01212	450593
5	32	3110-00-100-3158	60038	15118
5	33		60038	15250X
5	34	4310-01-205-7229	56043	65661
5	35	4730-01-205-7230	56043	65660
5	36	3655-01-205-7242	56043	165004
5	37		56043	CCS2
6	1	5305-00-269-3211	96906	MS90725-60
6	2	5310-00-637-9541	96906	MS35338-46
6	3	5305-00-269-3216	96906	MS90725-66
6	4	5310-00-637-9541	96906	MS35338-46
6	5		56043	65621
6	6		96906	MS16286-1
6	7	5310-00-582-5965	96906	MS35338-44

CROSS REFERENCE INDEXES

FIG.	ITEM	FIGURE AND ITEM NUMBER INDEX		PART NUMBER
		STOCK NUMBER	CAGEC	
6	8	5305-00-988-1728	96906	MS35206-287
6	9		56043	240-056
6	10		96906	MS16286-5
6	11	5310-00-003-4094	96906	MS35338-48
6	12	5305-00-732-0511	96906	MS90728-110
6	13		56043	65620
7	1		56043	53743
7	2	3655-01-205-7232	56043	53761
7	3	5310-01-206-4923	56043	53744
7	4		56043	53776
8		3655-01-205-7247	56043	95275
8	1		96906	MS16286-5
8	2	5310-00-809-5998	96906	MS27183-18
8	3		56043	95277
8	4	4010-01-205-7231	56043	53799
8	5		96906	MS16286-7
8	6	5310-00-004-5034	96906	MS35338-50
8	7	5305-00-044-5503	96906	MS90725-160
8	8		56043	95290
8	9		56043	95281
8	10		56043	95284
8	11		56043	95282
8	12		56043	95283
8	13		56043	95285
8	14		56043	95286
8	15		56043	95280
8	16		56043	53792
9		4310-01-205-7222	56043	95296
9	1	4730-01-205-7233	56043	53645
9	2		56043	72185
9	3	5365-01-206-4977	56043	72190
9	4	5360-01-206-4924	56043	60458
9	5	4820-01-206-4999	56043	72194
9	6	5330-01-206-4984	56043	72189
9	7	5315-00-058-9782	72962	79-040-187-0750
9	8		56043	72193
9	9		56043	72186
9	10		56043	53743
9	11	5310-01-206-4923	56043	53744
9	12	4730-01-206-4978	56043	55455
10	1		56043	65617
10	2		56043	53778
10	3		56043	53755

By Order of the Secretary of the Army:

CARL E. VUONO
General, United States Army
Chief of Staff

Official:

THOMAS F. SIKORA
Brigadier General, United States Army
The Adjutant General

DISTRIBUTION:

To be distributed In accordance with DA Form 12-25A, Unit and Direct Support Maintenance Requirements for Recharging Unit, Carbon Dioxide, 1HP, 115 V, 60 HZ 1 PH Models 12681, 12681-2

*U.S. GOVERNMENT PRINTING OFFICE: 1990 - 754-029/20105

RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS

SOMETHING WRONG WITH PUBLICATION



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

FROM: (PRINT YOUR UNIT'S COMPLETE ADDRESS)

DATE SENT

PUBLICATION NUMBER

PUBLICATION DATE

PUBLICATION TITLE

BE EXACT PIN-POINT WHERE IT IS

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

PAGE NO. PARAGRAPH FIGURE NO. TABLE NO.

TEAR ALONG PERFORATED LINE

PRINTED NAME, GRADE OR TITLE AND TELEPHONE NUMBER

SIGN HERE

DA FORM 1 JUL 79 2028-2

PREVIOUS EDITIONS
ARE OBSOLETE.

P.S.--IF YOUR OUTFIT WANTS TO KNOW ABOUT YOUR
RECOMMENDATION MAKE A CARBON COPY OF THIS
AND GIVE IT TO YOUR HEADQUARTERS.

The Metric System and Equivalents

<i>Linear Measure</i>		<i>Liquid Measure</i>	
Weights		Liquid Measure	
1 centimeter = 10 millimeters = .39 inch		1 centiliter = 10 milliliters = .34 fl. ounce	
1 decimeter = 10 centimeters = .394 inches		1 deciliter = 10 centiliters = 3.38 fl. ounces	
1 meter = 10 decimeters = 39.37 inches		1 liter = 10 deciliters = 33.81 fl. ounces	
1 dekameter = 10 meters = 32.8 feet		1 dekaliter = 10 liters = 2.64 gallons	
1 hectometer = 10 dekameters = 328.08 feet		1 hectoliter = 10 dekaliters = 26.42 gallons	
1 kilometer = 10 hectometers = 3,280.8 feet		1 kiloliter = 10 hectoliters = 264.18 gallons	
Square Measure		Square Measure	
1 centigram = 10 milligrams = .15 grain		1 sq. centimeter = 100 sq. millimeters = .155 sq. inch	
1 decigram = 10 centigrams = 1.54 grains		1 sq. decimeter = 100 sq. centimeters = 15.5 sq. inches	
1 gram = 10 decigrams = .035 ounce		1 sq. meter (centare) = 100 sq. decimeters = 10.76 sq. feet	
1 dekagram = 10 grams = .35 ounce		1 sq. dekameter (are) = 100 sq. meters = 1,076.4 sq. feet	
1 hectogram = 10 dekagrams = 3.52 ounces		1 sq. hectometer (hectare) = 100 sq. dekameters = 2.47 acres	
1 kilogram = 10 hectograms = 2.2 pounds		1 sq. kilometer = 100 sq. hectometers = .386 sq. mile	
1 quintal = 100 kilograms = 220.46 pounds			
1 metric ton = 10 quintals = 1.1 short tons			
Cubic Measure		Cubic Measure	
1 cu. centimeter = 1000 cu. millimeters = .06 cu. inch		1 cu. centimeter = 1000 cu. millimeters = .06 cu. inch	
1 cu. decimeter = 1000 cu. centimeters = 61.02 cu. inches		1 cu. decimeter = 1000 cu. centimeters = 61.02 cu. inches	
1 cu. meter = 1000 cu. decimeters = 35.31 cu. feet		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	grams	gallons	.264
pounds	kilograms	.454	grams	ounces	.035
short 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
-----------------------------------	-------------------------------	------------------------	----

PIN: 058900-000