TECHNICAL MANUAL

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

**CRANE-SHOVEL, CRAWLER MOUNTED:
DIESEL ENGINE DRIVEN,
12-1/2 TON CAPACITY,
RATED WITH 3/4 CU YD
(NSN 3810-00-937-3939)**

THEW-LORAIN MODEL L36M

**This manual supersedes TM 5-3810-287-34P, dated 4 June 1985
and TM 5-3810-287-20P, dated 28 May 1985.**

Approved for public release; distribution Is unlimited.

HEADQUARTERS, DEPARTMENT OF THE ARMY

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TECHNICAL MANUAL

HEADQUARTERS
DEPARTMENT OF THE ARMY

*TM 5-3810-287-24

Washington D.C., *26 August 1992*

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Current as of 13 November 1991

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, direct to: Commander, U.S. Army Tank-Automotive Command, ATTN: AMSTA-MB, Warren, MI 48397-5000. A reply will be furnished to you.

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	BULK MATERIEL	BULK-1	BULK

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

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 Crawler Mounted Crane-Shovel. It authorizes the requisitioning, issue, and disposition of spares, repair parts and special tools as indicated by the source, maintenance and recoverability (SMR) codes.

2. General.

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

a. *Section II. 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 kits are listed separately in their own functional group within Section II. Repair parts for reparable special tools are also listed in the 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.

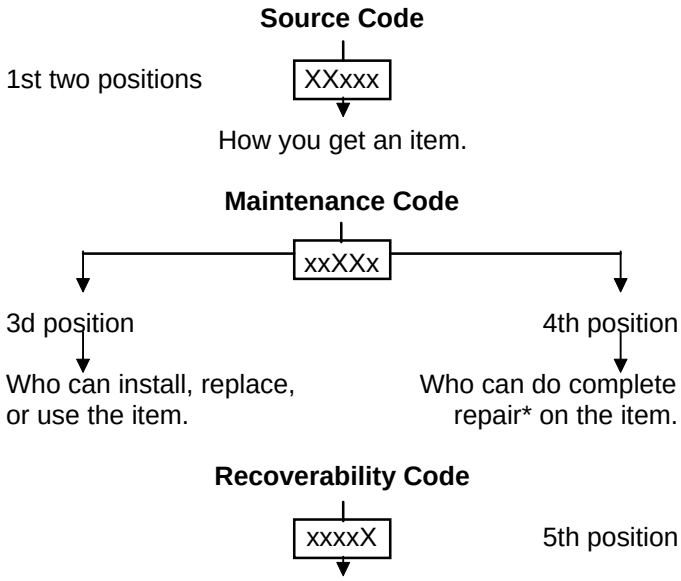
c. *Section IV Cross-reference Indexes.* A list, in National Item Identification Number (NIIN) sequence, of all National stock numbered items appearing in the listing, followed by a list in alphanumeric sequence of all part numbers appearing in the listings. National stock numbers and part numbers are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

The figure and item number index lists figure and item numbers in alphanumeric sequence and cross-reverends NSN, CAGE, and part numbers.

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 instructions, 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:

The figure and item number index lists figure and item numbers in alphanumeric sequence and cross references NSN, CAGE, and part numbers.

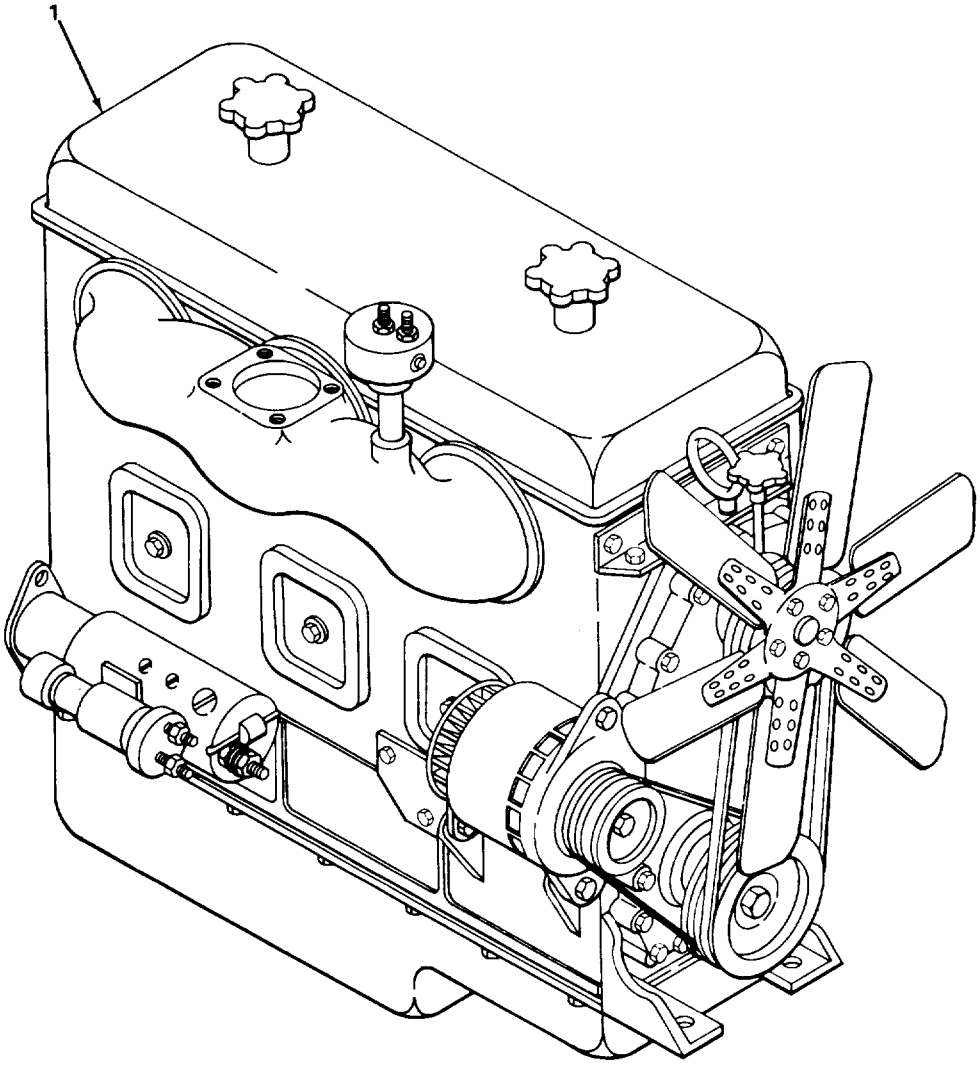


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FIGURE 1. ENGINE.

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
				GROUP 01 ENGINE	
				GROUP 0100 ENGINE ASSEMBLY	
				FIG. 1 ENGINE	
1	PFFFD	72582	1033-7000	ENGINE DIESEL GENERAL MOTORS MODEL GMC 3055C RA,SERIES 3-71.....	1
				END OF FIGURE	

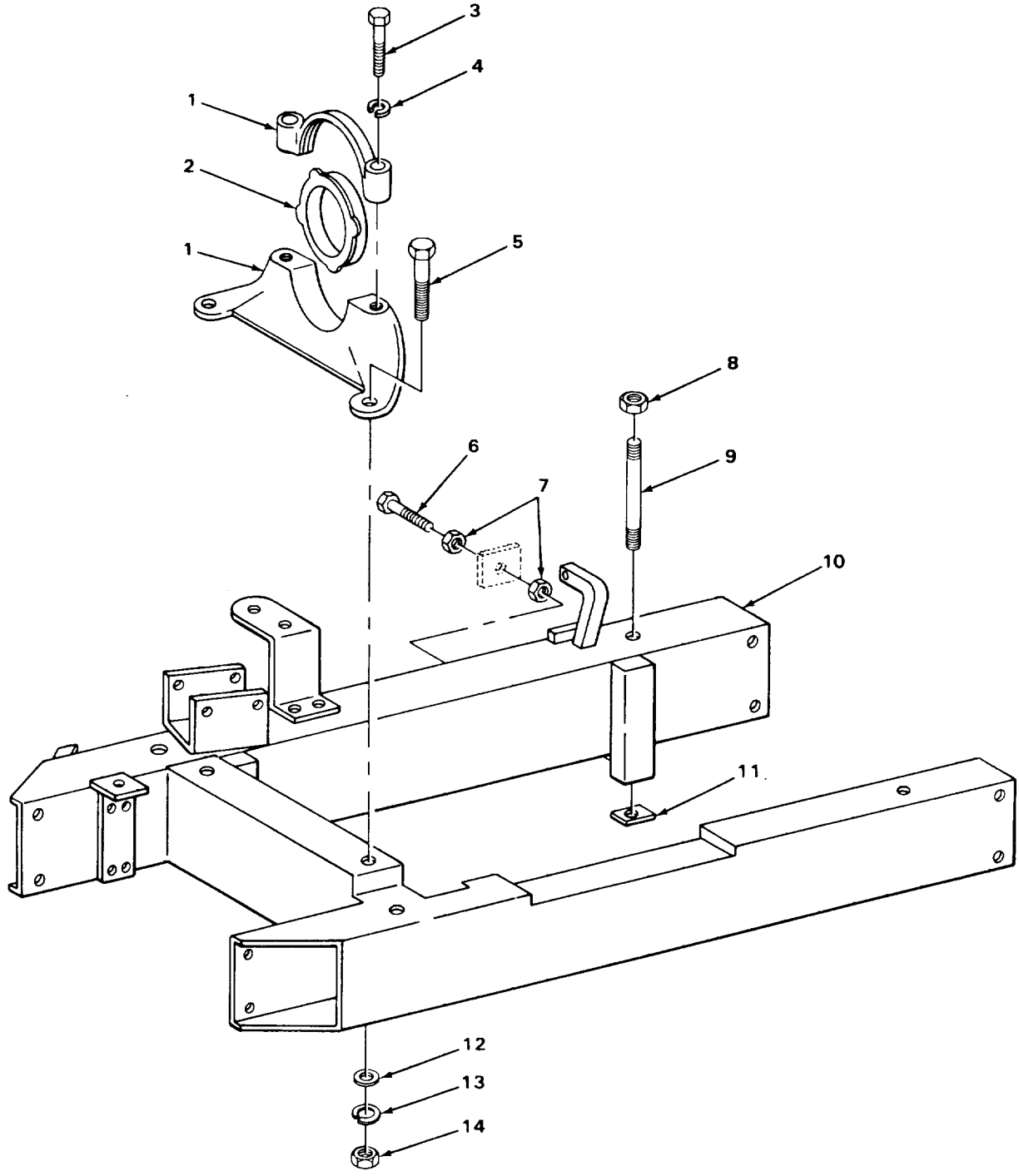

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FIGURE 2. ENGINE RAIL AND COMPONENT PARTS.

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
				GROUP 0100 ENGINE ASSEMBLY	
				FIG. 2 ENGINE RAIL AND COMPONENT PARTS	
1	PAFZZ	72582	5186647	BRACKET,ENGINE MOUN	1
2	PAFZZ	72582	5166864	PACKING,PREFORMED FRONT ENGINE SUPPORT.....	1
3	PAFZZ	96906	MS90728-92	SCREW,CAP,HEXAGONHFRONT ENGINE SUPPORT.....	2
4	PAFZZ	96906	MS35338-47	WASHER,LOCK FRONTENGINE SUPPORT	2
5	PAFZZ	57648	21223	SCREW,CAP,HEXAGON H ENGINE MTG	2
6	XDOZZ	8E499	D12213	BOLT,MACHINE ENGINE RAIL ADJUSTING.....	2
7	XDOZZ	8E499	D161	NUT,PLAIN,HEXAGON ENGINE RAIL ADJUSTING.....	4
8	PFOZZ	72962	41NE126	NUT,SELF-LOCKING,HE ENGINE RAIL MTG	4
9	XBOZZ	8E499	D43846	STUD,PLAIN ENGINE RAIL MTG.....	4
10	XAFZZ	8E499	E125404	RAIL,ENGINE	1
11	XBOZZ	8E499	D11881	NUT,WEDGE SQUARE ENGINE RAIL MTG.....	4
12	XBFZZ	8E495	D200	WASHER,FLAT ENGINE MTG	2
13	XDFZZ	8E499	D165	WASHER,LOCK ENGINE MTG	2
14	PAFZZ	96906	MS35690-1024	NUT,PLAIN,HEXAGON ENGINE MTG	2
				END OF FIGURE	

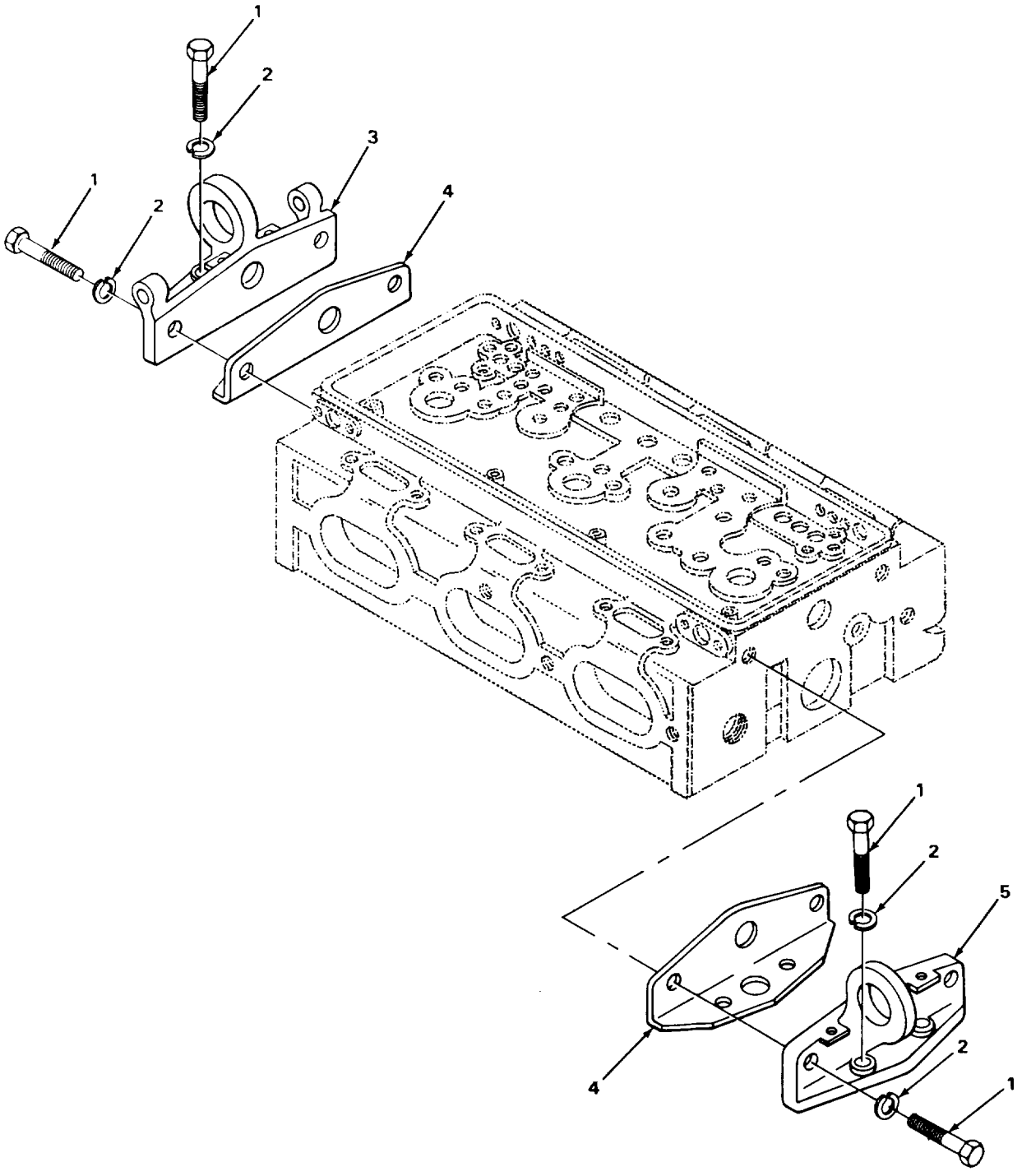

FIGURE 3. LIFTING EYES.

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
				GROUP 0100 ENGINE ASSEMBLY	
				FIG. 3 LIFTING EYES	
1	PAFZZ	96906	MS90728-89	SCREW,CAP, HEXAGON H FRONT AND REAR ENGINE LIFTER BRACKET MTG.....	8
2	PAFZZ	96906	MS35338-47	WASHER LOCK FRONT AND REAR ENGINE LIFTER BRACKET MTG	8
3	PFFZZ	72582	5150051	BRACKET, LIFTING ENGINE LIFTER REAR.....	1
4	PAFZZ	24617	NT10771PC4	GASKET ENGINE LIFTER BRACKET FRONT AND REAR PART OF KIT P/N 5193116	2
5	PFFZZ	72582	5150050	BRACKET,LIFTER ENGINE LIFTER,FRONT.....	1
				END OF FIGURE	

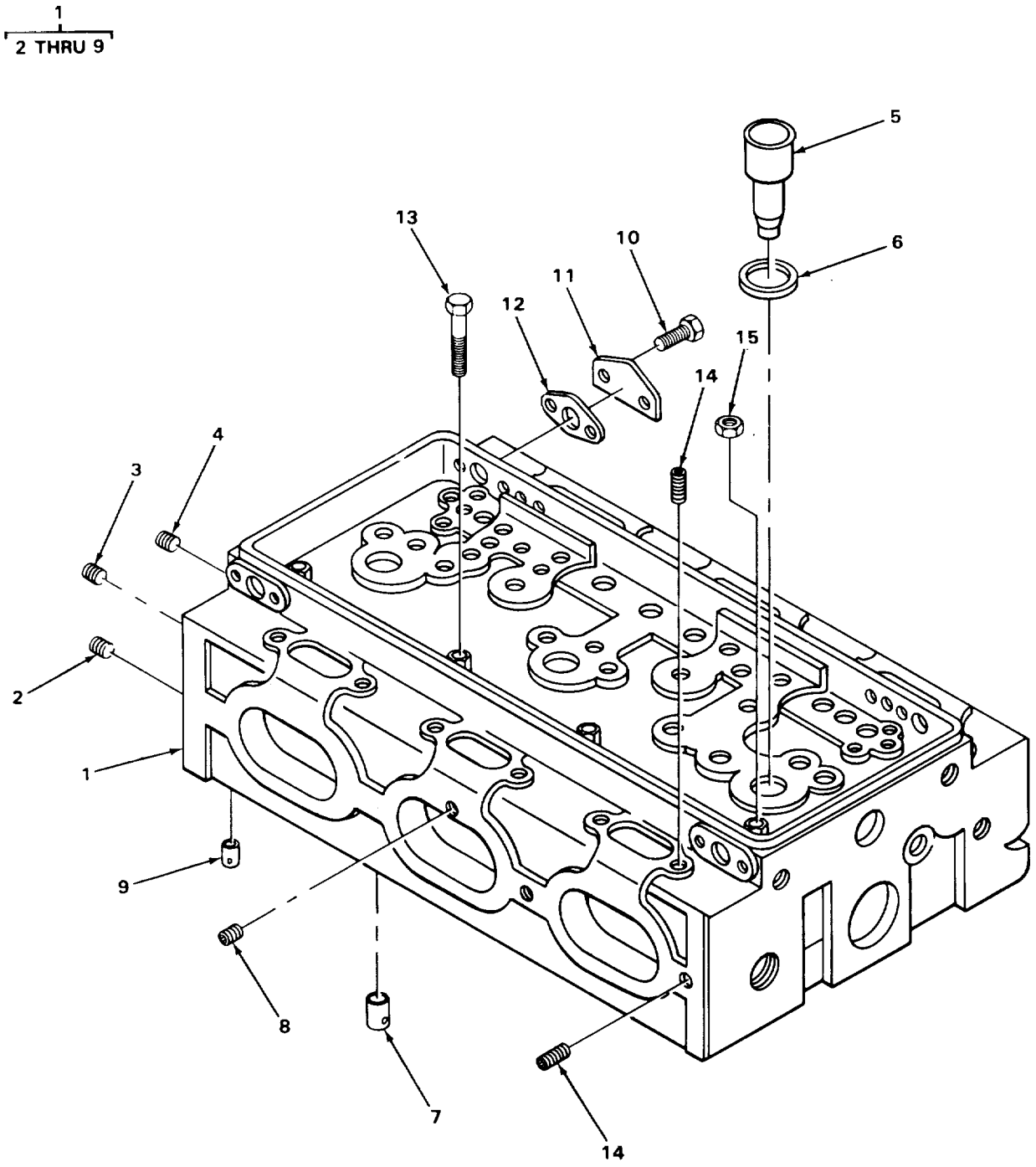

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FIGURE 4. CYLINDER HEAD.

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
				GROUP 0101 CRANKCASE, BLOCK, CYLINDER HEAD	
				FIG. 4 CYLINDER HEAD	
1	PAFFF	72582	5198218	HEAD,CYLINDER	1
2	PAFZZ	24617	444698	.PLUG, PIPE CYLINDER HEAD OIL GALLERY, ALLEN HEAD	3
3	PAFZZ	81348	WW-P-471ACABCB	.PLUG, PIPE CYLINDER HEAD HEXAGON SOCKET HEAD	5
4	PAFZZ	81348	WW-P-471AASBCB	.PLUG.PIPE CYLINDER HEAD SQUARE HEAD, STEEL.	7
5	PAFZZ	72582	5150041	.TUBE, METALLIC	3
6	PAFZZ	24617	5160037	.PACKING PREFORMED INJECTOR HOLE TUBE	2
7	PAFZZ	72582	5172875	.NOZZLE,WATER DOUBLE OUTLET, CYLINDER HEAD	4
8	PAFZZ	72915	5154453	.PLUG,MACHINE THREAD CYLINDER HEAD SLOTTED,HEADLESS	4
9	PAFZZ	72582	5172874	.NOZZLE,WATER SINGLE OUTLET. CYLINDER HEAD	4
10	PAFZZ	96906	MS90725-3	SCREW,CAP.HEXAGON H CYLINCDER HEAD GOVERNOR HOLE COVER	4
11	PFFZZ	72582	5150268	COVER,ACCESS CYLINDER HEAD GOVERNOR HOLE	2
12	PAFZZ	72582	5123812	GASKET GOVERNOR HOLE COVER MTG TO HEAD PART OF KIT P/N 5193116	4
13	PAFZZ	72582	5117303	BOLT EXTERNALLY REL CYLINDER HEAD MTG	4
14	PAFZZ	72582	8925804	STUD PLAIN EXHAUST MANIFOLD TO HEAD	10
15	PAFZZ	72582	5150013	NUT,PLAIN,HEXAGON CYLINDER HEAD STUD	4
				END OF FIGURE	

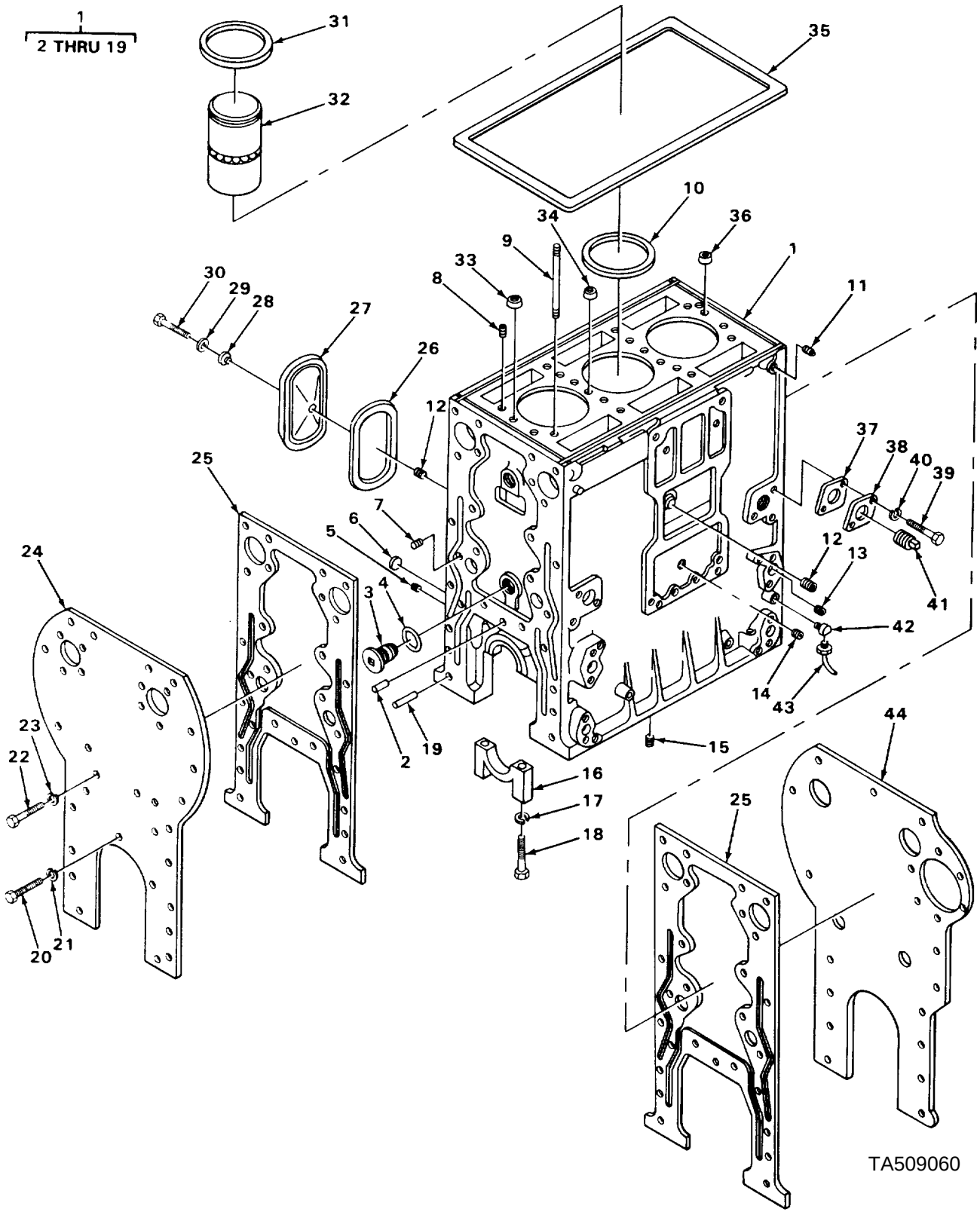

FIGURE 5. ENGINE BLOCK.

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
				GROUP 0101 CRANKCASE, BLOCK, CYLINDER HEAD FIG. 5 ENGINE BLOCK	
1	PAHHH	72582	5197273	BLOCK ASSEMBLY,CYLI	1
2	PAFZZ	72582	5154319	.PIN,STRAIGHT,HEADLE CYLINDER BLOCK	3
3	PAFZZ	72582	5178998	.PLUG,MACHINE THREAD	4
4	XBHZZ	72582	517897	.GASKET	4
5	PAOZZ	73342	444687	.PLUG PIPE	4
6	PAFZZ	72582	5150014	.PLUG,EXPANSION	2
7	PAFZZ	72582	5150130	.PLUG,EXPANSION CYLINDER BLOCK	2
8	PAFZZ	24617	444698	.PLUG.PIPE	1
9	PAFZZ	72582	5183329	.STUD,PLAIN CYLINDER HEAD MTG	2
10	PAFZZ	72582	5184484	.SEAL RIG METAL	3
11	PAFZZ	00501	E7708-S	.PLUG,PIPE	2
12	PAFZZ	81348	6W-P-471AASBCB	.PLUG,PIPE	5
13	PAFZZ	02951	MS49005-8	.PLUG,PIPE	6
14	PAFZZ	89346	9409949	.PLUG,PIPE.	1
15	PAFZZ	72582	444692	.PLUG,PIPE	2
16	PFHZZ	72582	5158674	.CAP,BEARING	4
17	PAHZZ	96906	MS35338-50	.WASHER,LOCK	8
18	PAHZZ	72582	5152149	.BOLT,MACHINE.	8
19	PFFZZ	12582	5151576	.PIN,STRAIGHT,HEADLE FRONT END PLATE	4
20	PAHZZ	96906	MS18154-58	SCREW,CAP,HEXAGON H	12
21	PAHZZ	72582	103221	WASHER,LOCK	12
22	PAHZZ	96906	MS35307-410	SCREW,CAP,HEXAGON H	2
23	PAHZZ	96906	MS35338-47	WASHER,LOCK	2
24	PFHZZ	72582	5152878	PLATE,CYLINDER FRON FRONT END	1
25	PAHZZ	72582	5177798	GASKET PART OF KIT P/N 5193113	2
26	PAOZZ	72582	5150020	GASKET PART OF KIT P/N 5193113	3
27	PFOZZ	72582	5153117	COVER,ACCESS	3
28	PAOZZ	72582	5105451	GASKET PART OF KIT P/N 5193113	3
29	PAOZZ	96906	MS27183-14	WASHER,FLAT	3
30	PAOZZ	24617	187069	SCREW,CAP,HEXAGON H	3
31	KFFZZ	72582	518330	GASKET PART OF KIT P/N 5193116	3
32	PAHZZ	72582	5188868	CYLINDER SLEEVE PART OF KIT P/N 5102315	3
33	PAFZZ	72582	5183305	GASKET PART OF KIT P/N 5193116	2
34	PAFZZ	72582	5186579	GASKET PART OF KIT P/N 5193116	4
35	PAFZZ	24617	5183948	GASKET PART OF KIT P/N 5193116	1
36	PAFZZ	72582	5116122	WASHER,FLAT PART OF KIT P/N 5193116	2
37	PFOZZ	72582	5116357	GASKET PART OF KIT P/N 5193113	1
38	PAOZZ	72582	5164190	COVER,ACCESS	1
39	PAOZZ	24617	189691	BOLT,ASSEMBLED WASH	2
40	PAOZZ	96906	MS35338-45	WASHER,LOCK	2
41	PAOZZ	96906	MS14314-2X	PLUG,PIPE	1
42	PAOZZ	96906	MS51879-5	ELBOW,PIPE TO TUBE	2
43	PFOZZ	72582	5158825	TUBE ASSEMBLY,METAL AIR BOX DRAIN	2
44	PFHZZ	72582	5150060	PLATE,CYLINDER REAR,REAR END	1

END OF FIGURE

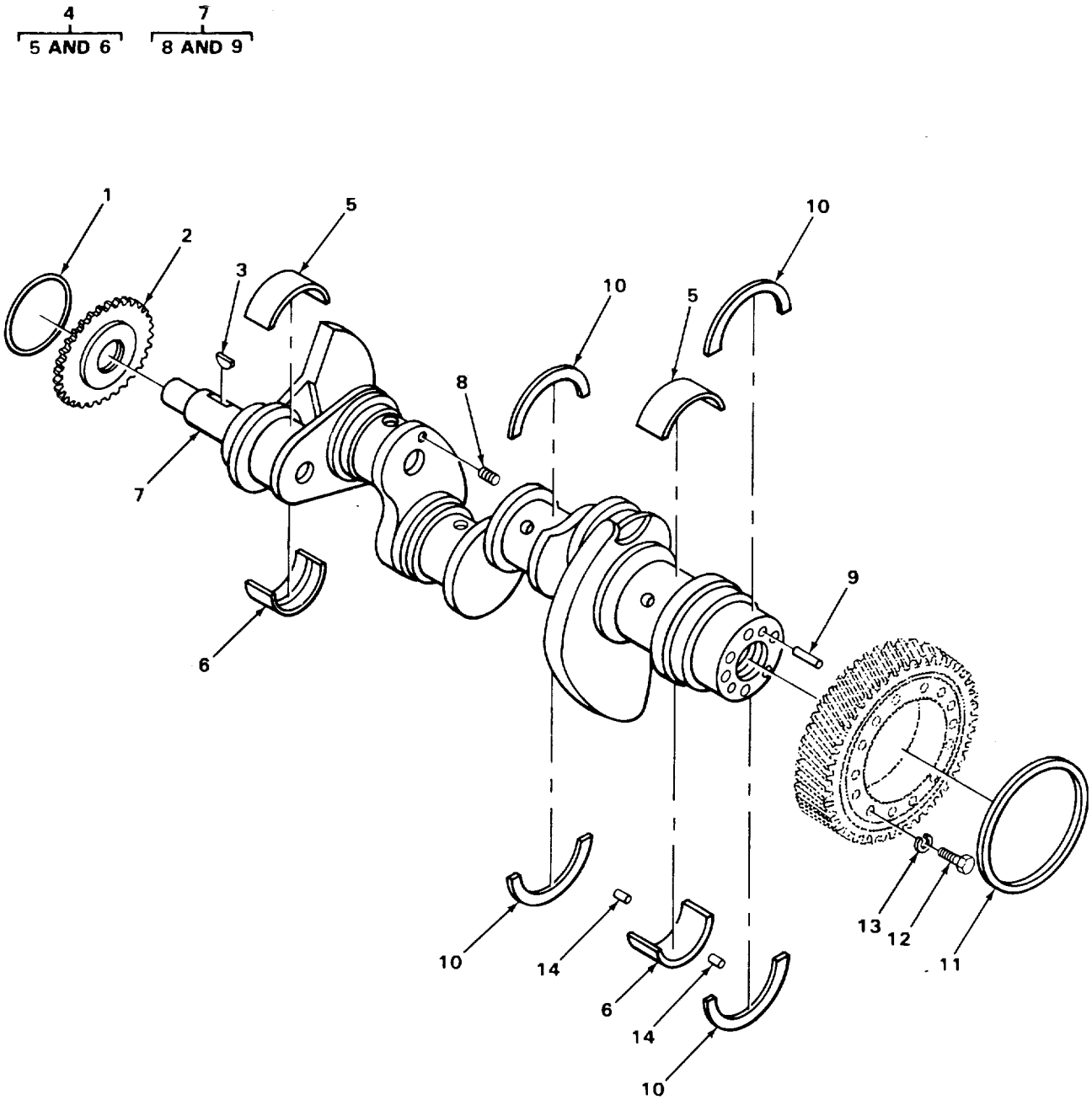

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FIGURE 6. CRANKSHAFT.

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
				GROUP 0102 CRANKSHAFT FIG. 6 CRANKSHAFT	
1	PFHZZ	72582	5150175	DEFLECTOR, DIRT AND CRANKSFAFT OIL, FRONT.....	1
2	PAHZZ	72582	5166821	GEAR,SPUR OIL PUMP DRIVE ON CRANKSHAFT.....	1
3	PFHZZ	72582	124549	KEY,WOODRUFF OIL PUMP DRIVE GEAR TO CRANKSHAFT.....	1
4	PAHZZ	72582	5192874	BEARING HALF SET, SL CRANKSPAFT STD.....	4
5	PFHZZ	72582	5192874	.BEARING HALF SET, SL CRANKSHAFT, UPPER.....	1
6	PFHZZ	72582	5192874	.BEARING HALF SET SL CRANKSHAFT, LOWER.....	1
7	PFHHH	72582	5184215	CRANK SHAFT ENGINE.....	1
8	PAHZZ	73342	444687	.PLUG,PIPE CRANKSHAFT ASSEMBLY	3
9	PFHZZ	72582	5177528	.PIN STRAIGHT, HEADLE CRANKSFAFT	2
10	PAHZZ	72582	5159353	WASHER HALF,THRUST MAIN BEARING CAP.....	4
11	PAHZZ	35311	L12105	SEAL, PLAIN ENCASED CPANKSFAFT OIL, REAR	1
12	PFHZZ	72582	5150271	BOLT,MACHINE CRANKSHAFT GEAR MTG	6
13	PAHZZ	96906	MS35338-8	WASHER,LOCK CRANKSHAFT GEAR MTG	6
14	PAHZZ	83130	CA6391PC20	PIN,STRAIGHT,HEADLE MAIN BEARING THRUST WASHER	4
				END OF FIGURE	