TECHNICAL MANUAL

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

Paving Machine, Bituminous Material;
Crawler Mounted, Diesel Engine Driven
NSN 3895-01-379-1102
End Item Code (EIC): E47

Ingersoll-Rand Company
Model 780T
Contract DAAE07-93C-0501

DISTRIBUTION RESTRICTION STATEMENT A: Approved for Public Release; Distribution Is Unlimited.

HEADQUARTERS, DEPARTMENT OF THE ARMY

1 FEBRUARY 1996

TECHNICAL MANUAL
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DEPARTMENT OF THE ARMY
WASHINGTON, D.C., 1 FEBRUARY 1996

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CURRENT AS OF 8 JANUARY 1996

REPORTING OF ERRORS

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 Publication and Blank Forms), or DA Form 2028-2 located in the back of this manual direct to: Commander, U.S. Army Tank- automotive and Armaments Command, AMSTA-IM-MMAA, Warren. MI 4X397-5(X)() A reply will be furnished to you.

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SECTION I. INTRODUCTION

1. Scope. This Repair Parts and Special Tools List (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 Paving Machine, Bituminous Material. 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. 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 number sequence, with the parts in each group listed in ascending figure and item number sequence. Bulk materials are listed by item name in FIG BULK at the end of the section. Repair parts kits are listed separately in their own functional group within Section II. Items listed are shown on the associated figures.

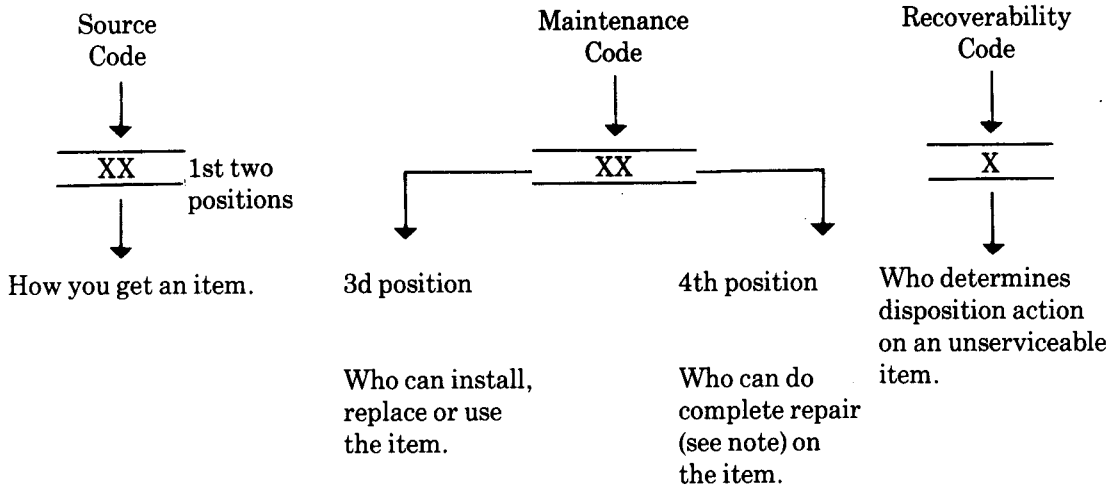
b. Section III - Special Tools List. A list of special tools, special TMDE, and other special support equipment authorized by this RPSTL (as indicated by Basis of Issue (BOI) information in DESCRIPTION AND USABLE ON CODE (UOC) column) for the performance of maintenance.

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

3. Explanation of Columns (Sections II and III).

a. Item No. [Column (I)]. 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.

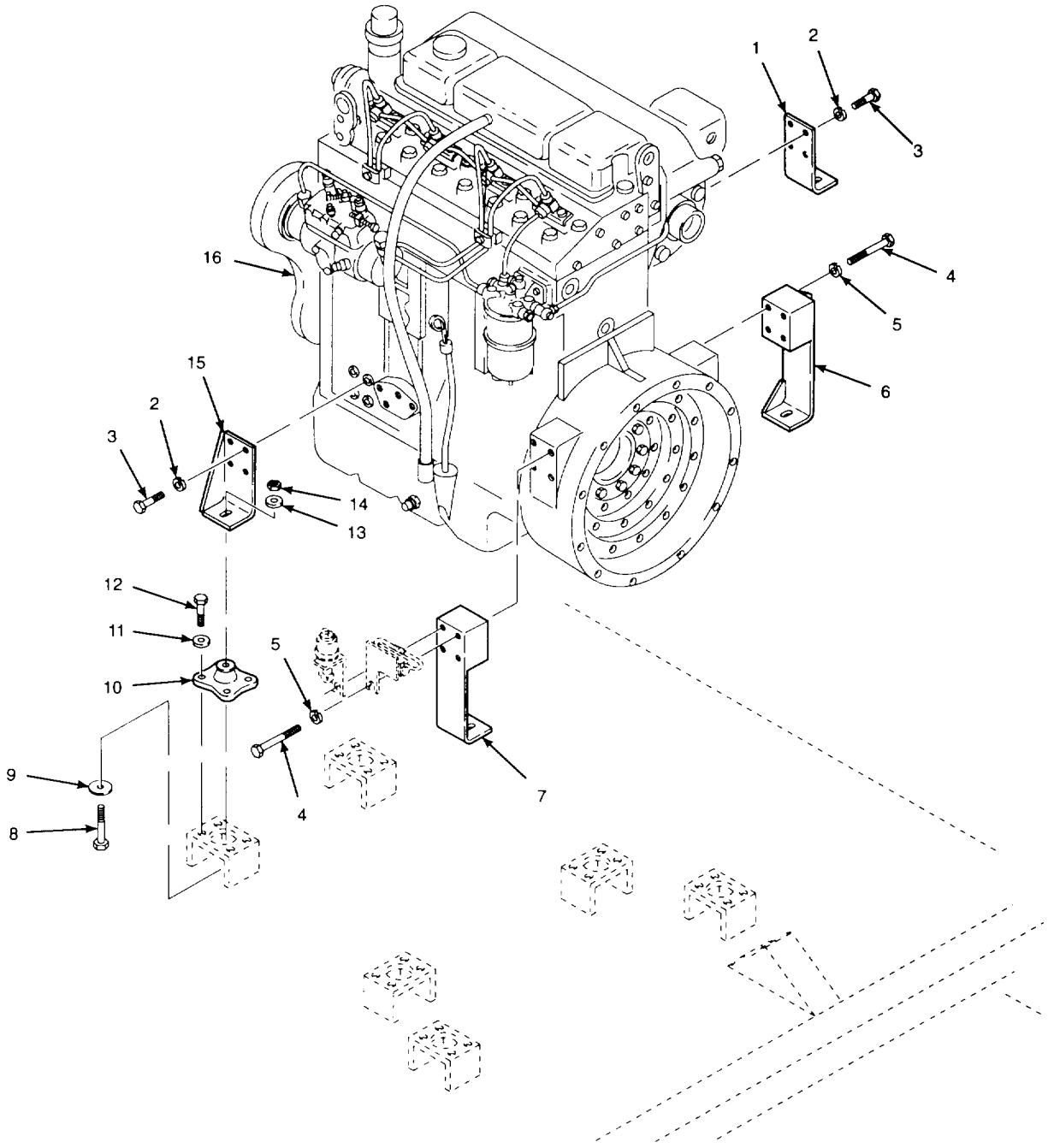


Figure 1. Engine and Engine Mounting Components

(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 AND ENGINE MOUNTING COMPONENTS	
1	XBFZZ	1S654	13071717	BRACKET,MTG-:ENGINE FRONT RIGHT	1
2	PAFZZ	96906	MS51415-8	WASHER,LOCK 7/16 IN NOM ID HELICAL ..... SPRING.....	3
3	PAFZZ	30204	B1821BH044F125N	SCREW,CAP HEXAGON H 7/16-23UNF-2A	8
				x 1 1/4 IN LG GRADE 8.	8
4	PAFZZ	80204	B1B21BH05CC350N	SCREW,CAP,HEXAGON H 1/2-13UNC-2A X..... 3 ½ IN LG GRADE 8	8
5	PAFZZ	96906	MS51415-9	WASHER,LOCK 1/2 IN NOM ID HELICAL ..... SPRING.....	8
6	XBFZZ	1S654	13071725	BRACKET,MTG,ENGINE REAR LEFT.....	1
7	XBFZZ	1S654	13071733	BRACKET,MTG,ENGINE REAR RIGHT	1
8	PAFZZ	80204	B1821BH063C450N	SCREW,CAP,HEXAGON H 5/B-11UNC-2A X ..... 4 1/2 IN LG GRADE 8	4
9	PAFZZ	45152	EE-102273	WASHER,FLAT.....	4
10	XBFZZ	0DG59	17/556 45 DURO	MOUNT,RESILENT	4
11	XBFZZ	1S654	59565036	WASHER,FLAT.....	16
12	PAFZZ	80204	81821BH038C100N	SCREW,CAP,HEXAGON H 3/8-16UNC-2A X..... 1 IN LG GRADE-8.....	16
13	PFFZZ	15854	59565044	WASHE,FL AT	4
14	PFFZZ	72962	21NE-101	NUT,SELF-LOCKHIGHLE 5/8-11UNJC-38	4
15	XBFZZ	15654	13071709	6RACKETVMTGgENGINE FRONT LEFT	1
16	XBFHH	1S654	13077383	ENGINE ASSEMBLY	1
				END OF FIGURE	

1
2 THROUGH 12
2
3 THROUGH 12

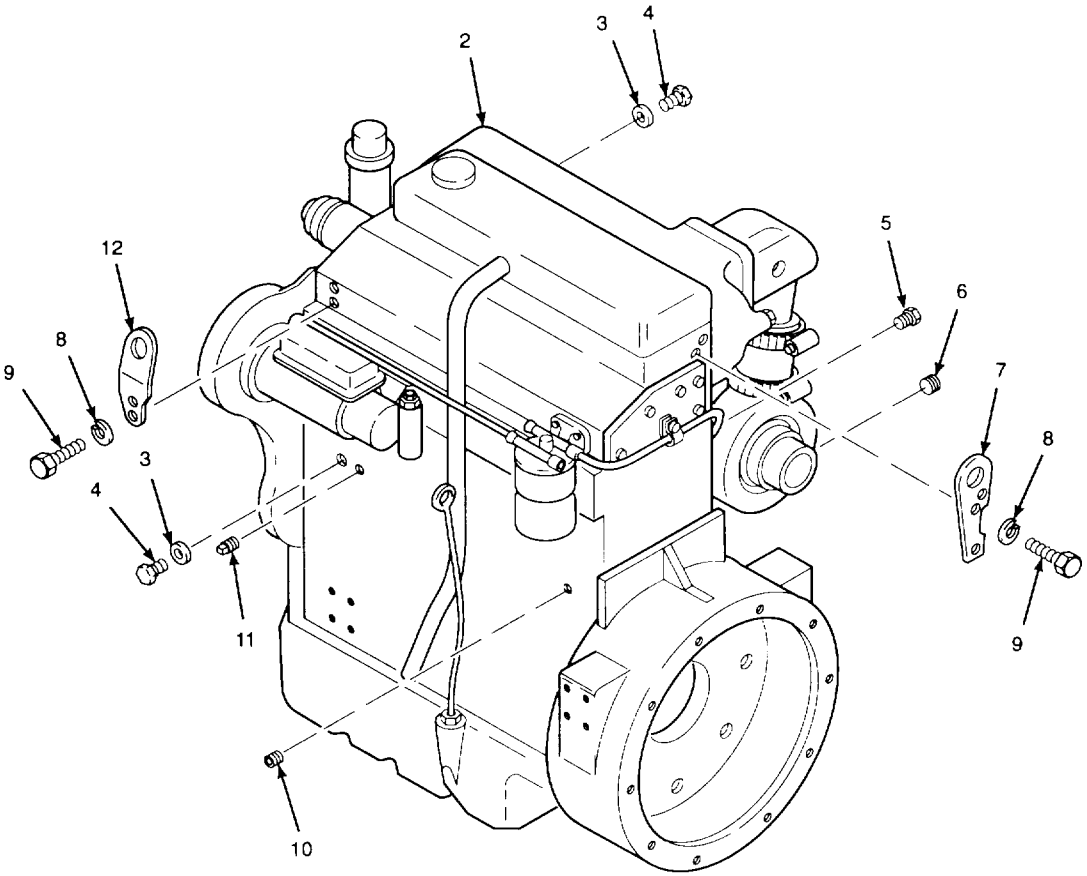


Figure 2. Engine Assembly

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
				GROUP 0100 ENGINE ASS'EMBLY FIG. 2 ENGINE ASS-MBLY	
1	XBFHH	15654	13078746	ENGINE ASSEMBLY	1
2	XAFHH	13446	LJ33836	ENGINE,DIESEL,4 236.....	1
3	PFFZZ	33076	101985	WASHER,FLAT 3/8 IN NOM ID	2
4	XDFZZ	13446	0746451	BOLT,MACHINE 3/.-24UNF X 5/8 IN.....	2
5	PFFZZ	13446	32161114	PLUG,MACHINE THREAD 1/4-18PTF X..... 7/1 6 IN LG BRASS. C	1
6	XBFZZ	13446	0650586	PLUG 3/8 -18PTF X 13/32 IN LG.....	1
7	PFFZZ	30076	161416	PLATE.....	1
8	PFFZZ	13446	0920054	WASHR,LOCK 3/ IN NOM ID	4
9	PFFZZ	13446	0746453	SCREW,CAP,HEXAGON H 3/a-24dNF X ..... 7/8 1N L/.....	4
10	XBFZZ	13446	0650593	PLUG l/4-l>Tf x 13/32 IN LG	1
11	PFFZZ	91348	WW-P-471AASBCA	.PLUG,PIPE 1/8-27PTF X 11/32 IN LG	1
12	PFFZZ	13446	3648C004	BRACKET,ENGINE MOUN	1
				END OF FIGURE	

8
10 AND 11

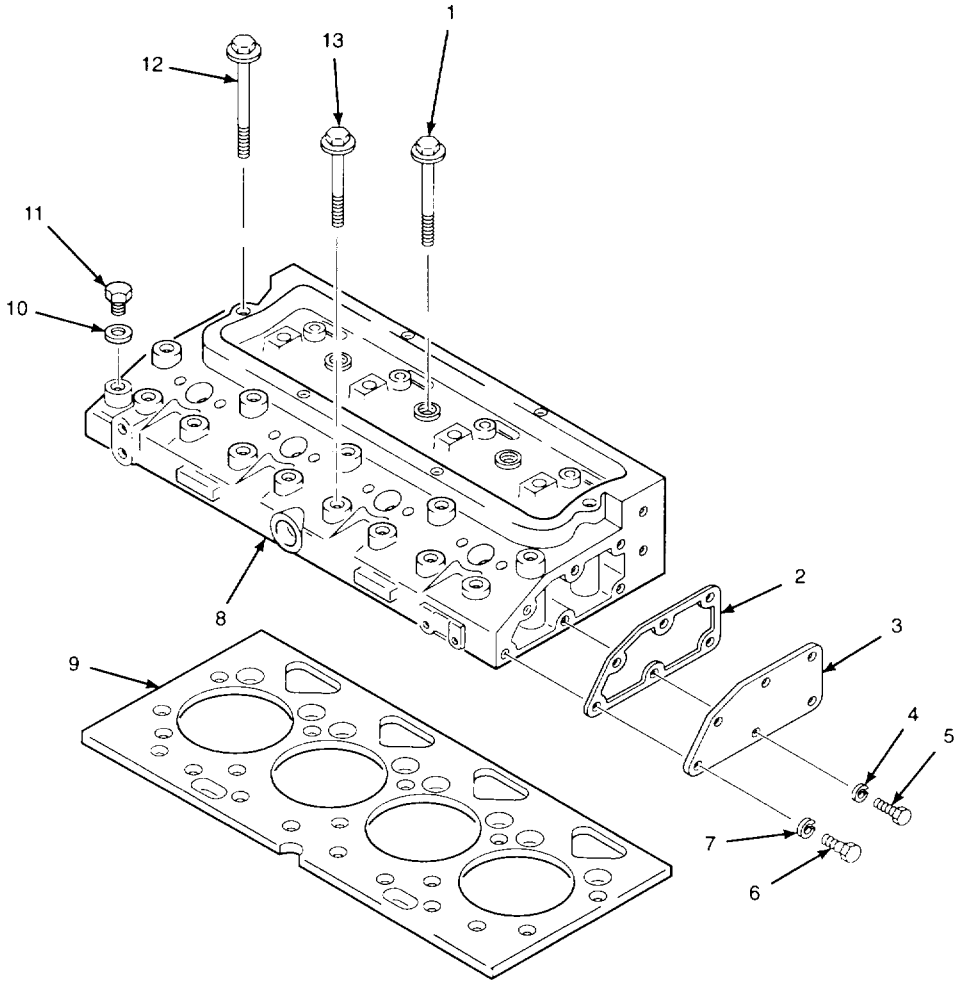


Figure 3. Cylinder Head Assembly

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
				GROUP 0101 BLOCK AND CYLINDER HEAD	
				FIG. 3. CYLINDER HEAD ASSEMBLY	
1	PFFZZ	13446	32166338	BOLT,MACHINE	12
2	PFFZZ	13446	3685R005	GASKET	1
3	PFFZZ	13446	3523K007	END COVER,CYLINDER	1
4	PFFZZ	13446	0920053	WASHER,LCCK 5/16 IN NOM ID HELICAL SPRING	4
5	PFFZZ	13446	0746255	SETSCREW 5/15-24UNF X 7/8 IN L	4
6	PFFZZ	13446	0746452	SETSCREW 3/4-24UNF X 3/4 IN LG	2
7	PFOZZ	13446	0920054	WASHER,LOCK 3/5 IN NOM ID HELICAL SPRING	2
8	X3FHH	13446	ZZ30077	CYLINOER HEAD' ASSY	1
9	KFFZZ	13446	3681E016	HEAD GASKET PA4T JF KIT P/N U5LTD175	1
10	PFFZZ	13446	2411107	WASHER,FLAT 5/8 IN NOM ID	1
11	PFFZZ	13446	0650203	PLUG,MACHINE- THREAD 5/8-18UNF-2A X 5/16 IN LG	1
12	PFFZZ	13446	32166337	BOLT,MACHINE	2
13	PFFZZ	13446	32166339	BOLT,MACHINE	8
				END OF FIGURE	

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2 THROUGH 13

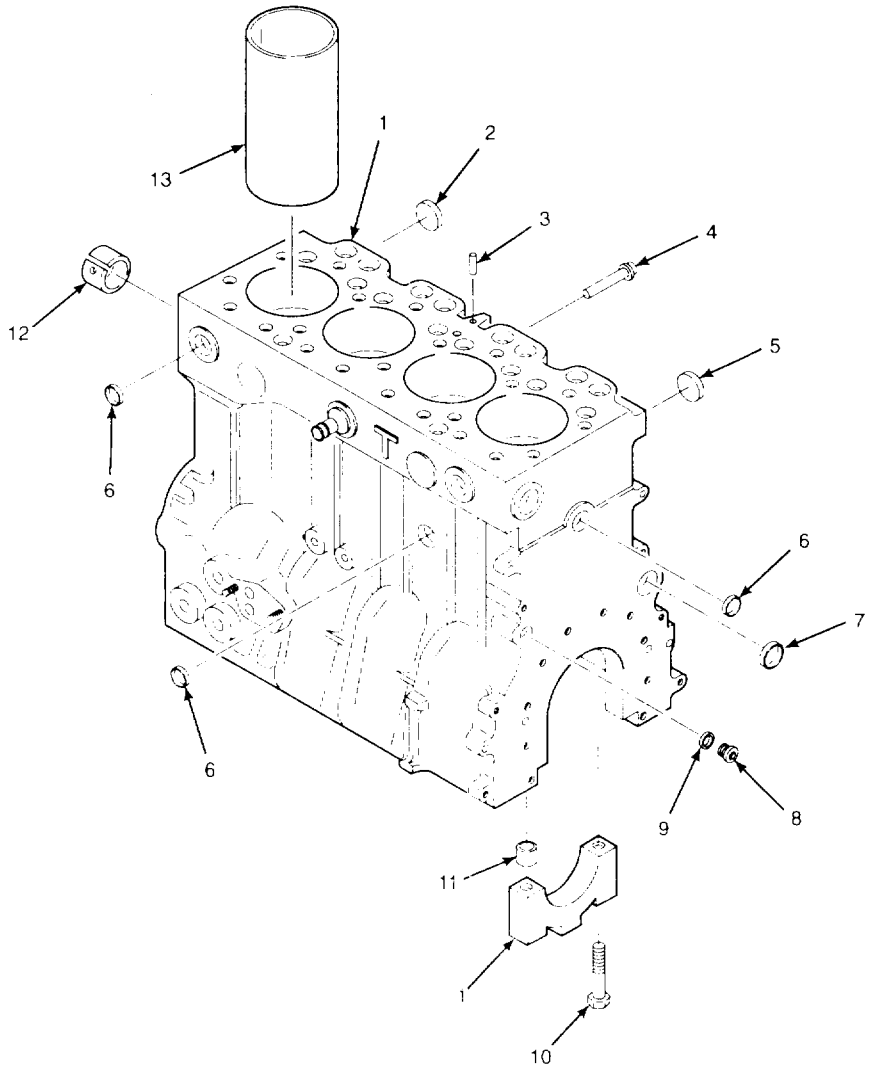

Figure 4. Engine Block Assembly

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
				GROUP 0101 BLOCK AND CYLINDER HEAD	
				FIG. 4. ENGINE BLOCK ASSEMBLY	
1	PFHHH	13446	ZZ 50078	ENGINE BLOCY ASSEMB INCLUDES ..... MACHINED AND MATCHED MAIN B-ARI4NG CAPS, CANNOT PROCURE MAIN BEARING CAPS SEPARATELY.	1
2	PFHZZ	13446	0650577	PLUG,EXPANSION 1.515 IN OD	5
3	PFHZZ	13446	32417134	PLUG,tXPAN'SR'3N 0.3148 IN '3D X ¼	1
4	PFHZZ	13446	2485A204	PLUG SPECIAL	1
5	XBHZZ	13446	32418122	PLUG 1/2 IN OD.....	4
6	XBHZZ	13446	065071D	PLUG,EXPANSION 1 1/4 IN OD	9
7	PFHZZ	13446	32416105	PLUG,EXPANSION 1.977 IN 0D	1
8	PFHZZ	30076	161385	PLUG,MACHINE THREAD	1
9	XBHZZ	13446	3311R003	WASHER 22.7 MM ID X 28 M D03 X 2 ..... MM THK	1
10	XDHZZ	13446	32166329	SET SCREW 5/6-18UNF X 3 3/4 IN LG	10
11	PFHZZ	13446	33142111	THIMBLE,MAIN BEARIN	10
12	XBHZZ	13446	31134164	BUSHING	1
13	PFHZZ	13446	3135X032	CYLINDER SLEEVE SLIP FIT	4
				END OF FIGURE	

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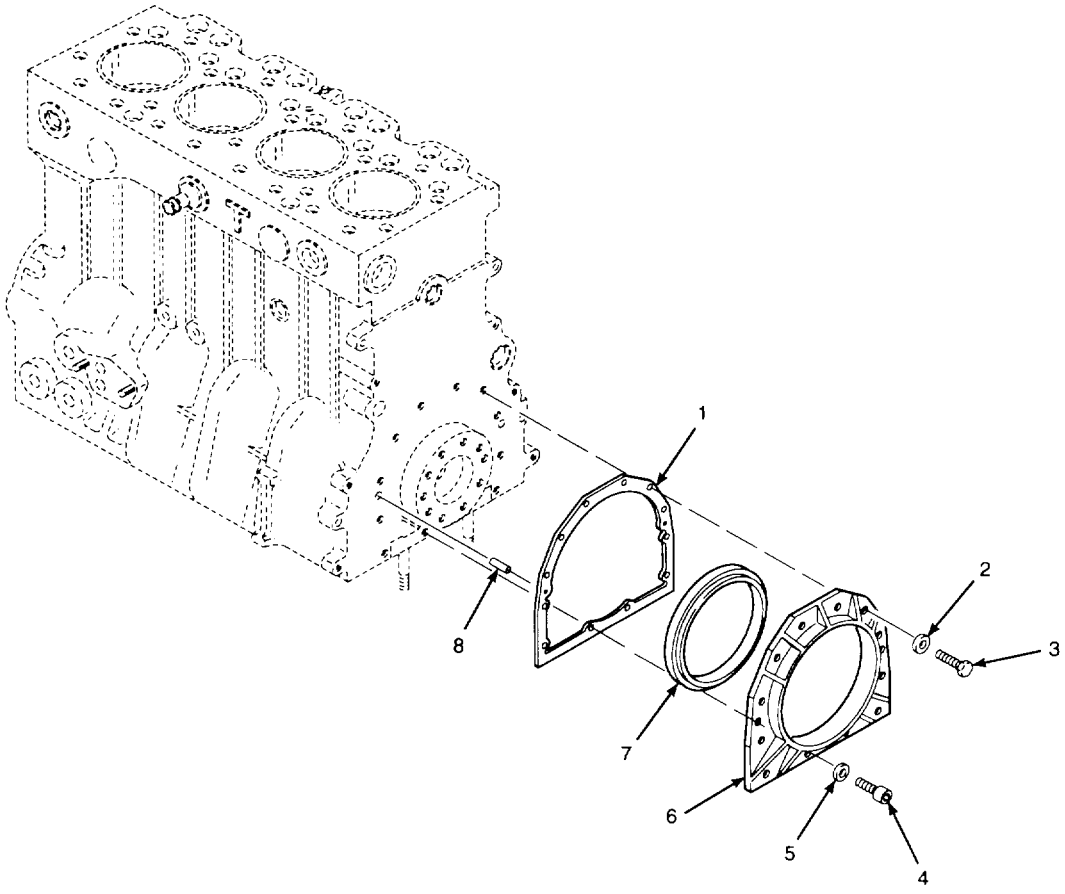

Figure 5. Crankshaft Seal Housing

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
				GROUP 0102 CRANKSHAFT	
				FIG. 5. CRANKSHAFT SEAL HOUSING	
1	PFFZZ	13446	36817165	GASKET	1
2	PFFZZ	13446	0920003	WASHER,FLAT	10
3	PFFZZ	13446	0746211	SCREW 5/16-24JNF X 1 IN LG	10
4	PFFZZ	13446	2172530	SCREW,CAPS,SOCKET HE 5/16-Z4UNF X IN LG	12
5	PFFZZ	13446	33112111	WASHER,FLAT	2
6	X8FFF	13446	4142V064	HOUSING	1
7	PFFZZ	13446	2418F475	SEAL,SPFCIAL	1
8	PFFZZ	30076	158139	PIN	2
				END OF FIGURE	