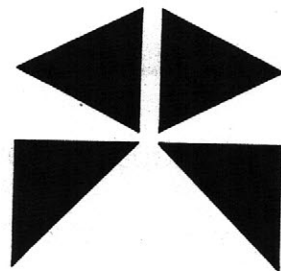


**CONTINENTAL
MODEL TMD27
WITH CAV**

**ILLUSTRATED
PARTS
CATALOG**



 **WIS-CON
TOTAL POWER CORP.**

SERVICE FACILITIES

WIS-CON TOTAL POWER Distributors and Service Centers, located throughout the U.S. and foreign countries, have been carefully selected to insure complete and efficient repair and inspection service to owners of WIS-CON TOTAL POWER Engines. These service centers, equipped and staffed for complete engine repair, also stock engine parts to facilitate immediate delivery for the complete line of WIS-CON TOTAL POWER Engines.

Order parts from the WIS-CON TOTAL POWER Distributor or Service Center in your locality. Refer to the Yellow Pages of the Telephone Directory under ENGINES, or write to WIS-CON TOTAL POWER for a free copy of a list of authorized Distributors and Service Centers. Do not order parts from WIS-CON TOTAL POWER in Memphis, TN.

The MODEL, SPECIFICATION and SERIAL NUMBER of your engine must be given when ordering parts. The MODEL and SPECIFICATION number are on the name plate. The SERIAL NUMBER is stamped either on the crankcase or the engine's identification tag.

Copy the MODEL, SPECIFICATION and SERIAL NUMBER in the spaces provided below so that it will be available when ordering parts.

MODEL	SPECIFICATION
<input type="text"/>	<input type="text"/>
SERIAL NUMBER	
<input type="text"/>	

To insure prompt and accurate service, the following information must also be given:

1. State EXACTLY the quantity of each part and part number.
2. State definitely whether parts are to be shipped by express, freight or parcel post.
3. State exact mailing address.

INTRODUCTION

This catalog is designed to identify Continental parts.

When ordering parts, it is always advisable to list the engine model, specification number and serial number. With this information, we can check your order for any incorrect part numbers.

Use your "Customer Specification" to insure proper part number and nomenclature identification.

WIS-CON TOTAL POWER reserves the right to modify, alter and improve engines and parts. Part numbers and the structure of parts may change from those shown in this catalog.

Table of Contents

Engine Service Kits, Engine Service Information	2
Crankcase, Bearing Caps and Oil Filter	3-4
Cylinder Head, Cover and Valves	5-6
Camshaft and Rocker Arm	7-8
Crankshaft and Pulley	9-10
Piston and Connecting Rods	11-12
Oil Pump	13-14
Gear Cover	15-16
Flywheel, Housing and Starter	17-18
Intake and Exhaust	19-20
Water Pump Assembly	21-22
Water Header and Thermostat.....	23-24
Alternator and PCV System	25-26
Injection Pump and Fuel Filter	27-30
<u>Accessories Section:</u>	
Starter	33-34
Engine Service Kits Components	35

NOTES

ENGINE SERVICE KITS

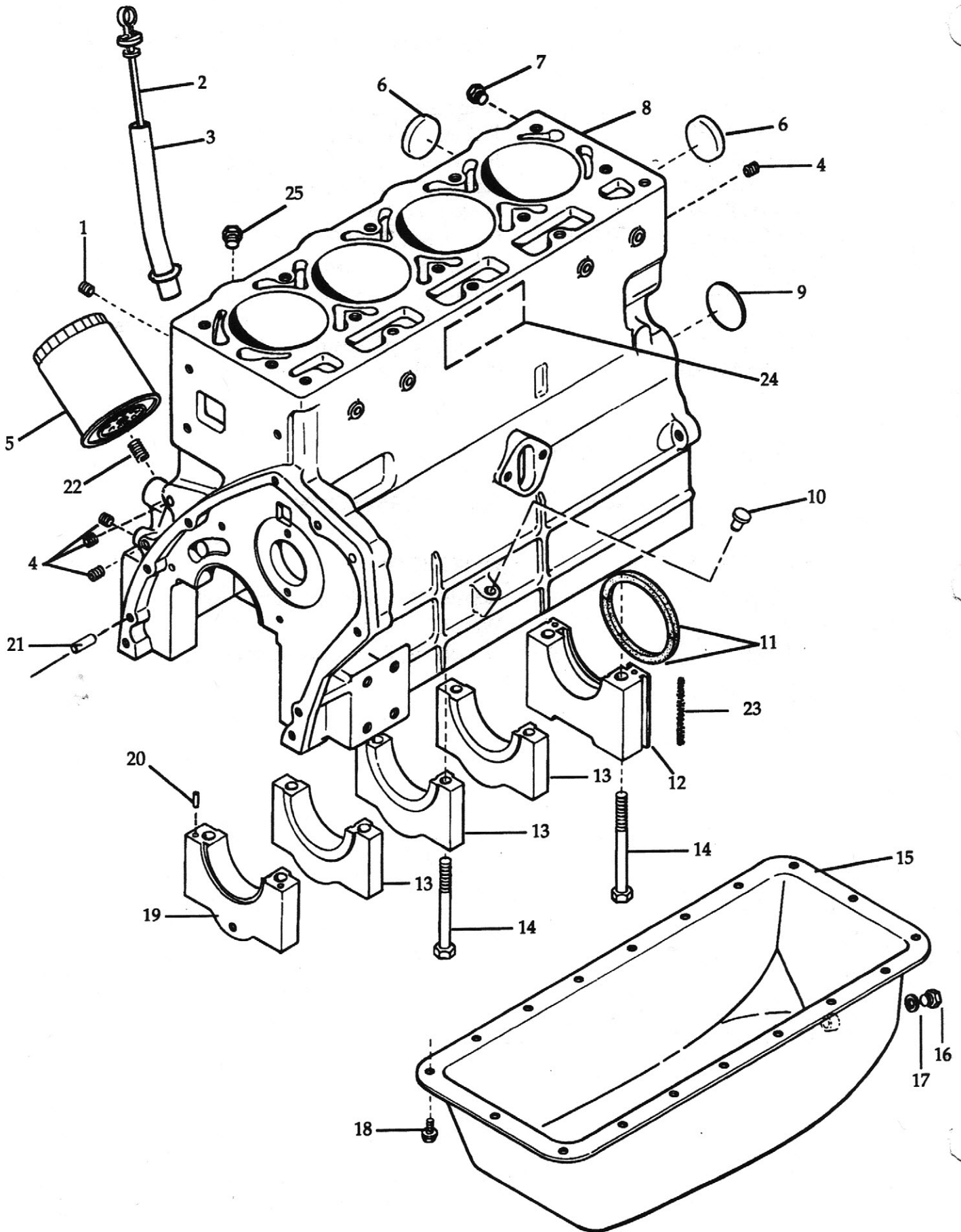
KIT NUMBER	DESCRIPTION
TMD20T00201	Ring Set (single piston)
TMD27A05031E	Piston, Pin & Retaining Rings
TMD27T00216 ^a	Nozzle Holder & Tip Assembly with Heat Shield
TMD27T00217 ^a	Nozzle Tip with Heat Shield
TMD27U01006 ^a	Gasket Set, Top End
TMD27U02002 TMD27U ² 2003	Gasket Set, Front End
TM20T00102	Bearing Set, Connecting Rod (single rod)
TM27T00102	Bearing Kit, Crankshaft (engine set)
TM27T00107	Kit, Oil Pan Gasket & Rear Bearing Sealing
TM27T01001 ^a	Water Pump Repair Kit
NOT AVAILABLE	Cam Bushing

NOTE: ^a See Page #35 for Components.

ENGINE SERVICE INFORMATION

PART NUMBER	DESCRIPTION
TTP10099	Repair Manual & Operators Guide
X10058	Wiring Diagram
TTP00086	Handbook, Preventive Maintenance

CRANKCASE, BEARING CAPS AND OIL FILTER

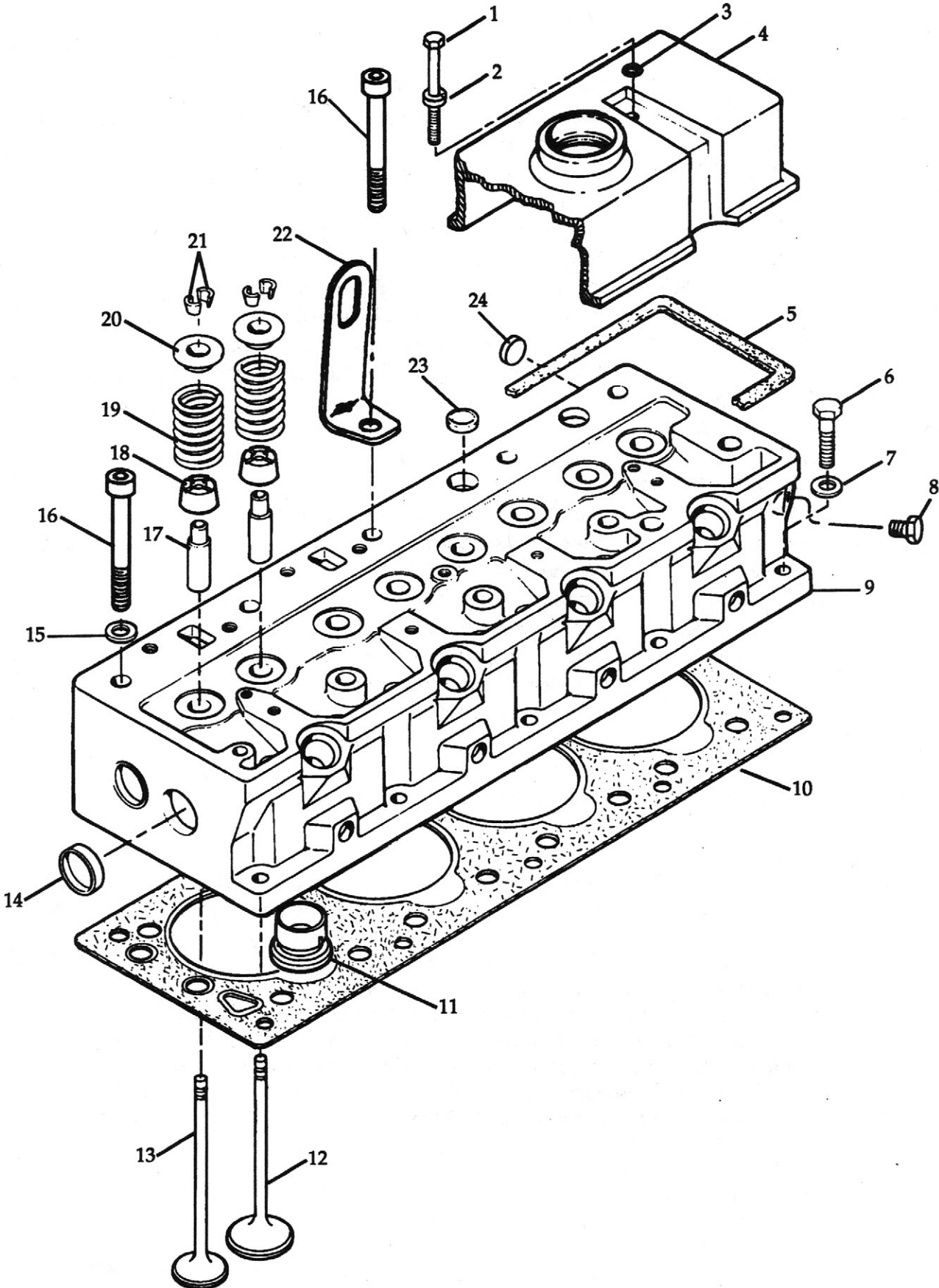


CRANKCASE, BEARING CAPS AND OIL FILTER

ITEM	PART NO.	DESCRIPTION	QTY
1	26XX00110	Plug, crankcase (3/8" pipe)	1
2	TM27L00426	Rod & cap, oil gauge <i>TM27L00439</i>	1
3	TM27L00311	Tube, oil filler	1
4	26XX00137A	Plug, crankcase (1/4" pipe)	4
5	F600L03750	Filter - oil, full flow <i>(VHFA)</i>	1
6	X13304	Plug, cup, crankcase core hole, right side & rear	5
7	26XX26129	Plug, hex head, crankcase (1/8" pipe)	1
8	^{a,c} TMD27A610601R	Short block (Service "R" Assembly)	1
—	^{b,c} TMD27A610803S	Long block (Service "S" Assembly)	1
9	X02208	Plug, expansion, crankcase at rear cam bearing	1
10	X07663	Plug, crankcase, left side, oil gauge rod hole	1
11	^d TM27L00513	Seal, oil, rear crankshaft	2
12	TM27B00500	Cap & filler block, rear bearing	1
13	TMD27B00403	Cap, crankshaft bearing, intermediate	3
14	XM32078 <i>XM32137</i>	Screw, bearing cap to crankcase	10
15	TM27B05021	Pan, oil (includes items 16 & 17)	1
16	F400B00282	Plug, oil pan drain	1
17	X14583	Washer, oil pan drain plug	1
18	XM32077	Screw & washer, oil pan to crankcase	18
19	TMD27B00402	Cap, crankshaft, front bearing	1
20	TM27B00322	Dowel - bushing, bearing cap, front & rear	4
21	X17025	Pin, dowel, gear cover to crankcase	2
22	TM27L00202	Adapter, oil filter	1
23	^e X07840	Insert - Curing, Rear Bearing cap - side	2
24	—	Nameplate (normal location)	1
25	26XX26167	Plug - Hex Hd (1/4" Pipe)	1

- NOTE:
- ^a Typically includes crankcase assembly, bearing caps, tappets, camshaft, main and rod bearings, crankshaft assembly, oil slinger — crankshaft, pistons, piston pins, piston rings, connecting rods, thrust plate, cam gear, crankshaft gear, injection pump driver gear, cover-fuel pump hole, oil pump assembly w/inlet tube assembly, lifting bracket, miscellaneous hardware and service gasket set.
 - ^b Typically includes all items in short block service "R" assembly (Note ^a) plus cylinder head (includes valve train), rocker arm shaft assembly, push rods, cylinder head cover, oil filler cap, gear cover assembly and oil pan assembly.
 - ^c Use the "R" & "S" assembly part numbers shown on your "Customer Specification" if different from part numbers listed here.

CYLINDER HEAD, COVER AND VALVES



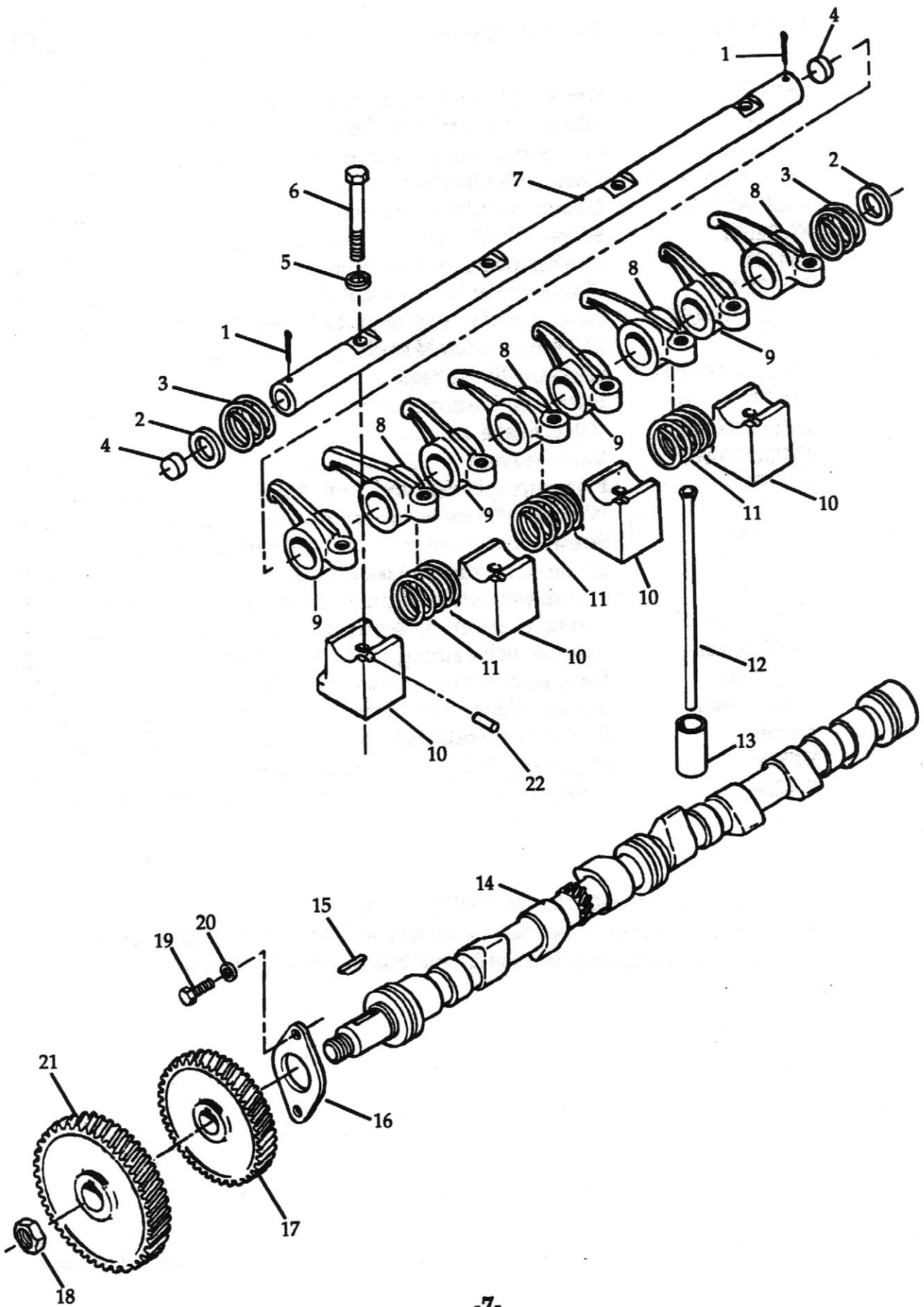
CYLINDER HEAD, COVER AND VALVES

ITEM	PART NO.	DESCRIPTION	QTY
1	XM32072	Screw, cylinder head cover to cylinder head	3
2	^a X14596	Washer, plain, cylinder head cover to cylinder head	3
3	^a XM39000	O-ring, cylinder head cover to cylinder head	3
4	TM27A00610	Cover, cylinder head	1
5	^a TM27A00502	Gasket, cylinder head cover	1
6	XM32021	Screw, cylinder head to crankcase	5
7	X14141	Washer, plain, cylinder head to crankcase	5
8	26XX26129	Plug, cylinder head, oil gallery	1
9	TMD27A06031	Head, cylinder, service (includes items 11-14, 17-21, 23, 24 and manifold studs)	1
10	^a TMD27A00610A	Gasket, cylinder head	1
11	TMD27A00500	Insert, combustion chamber	4
12	TMD27I00502	Valve, intake	4
13	TMD27I00501	Valve, exhaust	4
14	X02583	Plug, cup, cylinder head, front & rear	4
15	XM37003	Washer, cylinder head to crankcase	9
16	^b XM32134	Screw, socket head, cylinder head to crankcase	10
17	TM27I00316	Guide, valve stem, intake & exhaust	8
18	TMD27I00401	Guard, valve stem oil, intake & exhaust (Valve seals)	8
19	TM27I00309	Spring, valve, intake & exhaust	8
20	TM27I00300	Retainer, valve spring, intake & exhaust	8
21	CVT03234	Lock, valve spring retainer, intake & exhaust	16
22	^b TM27Z00402	Bracket, lifting, cylinder head #2 to crankcase	1
23	X07689	Plug, cup, cylinder head top	2
24	X07606	Plug, cross drill holes, cylinder head	4
—	X06226	Label, fan, warning; cylinder head cover - top front	1

NOTE: ^a Included in Top End Gasket Set TMD27U01006.

^b On older model engines, see Service Bulletin #90-391, 90-403 & Newsletter C89-15 concerning lifting bracket & head bolt changes & torques.

CAMSHAFT AND ROCKER ARM



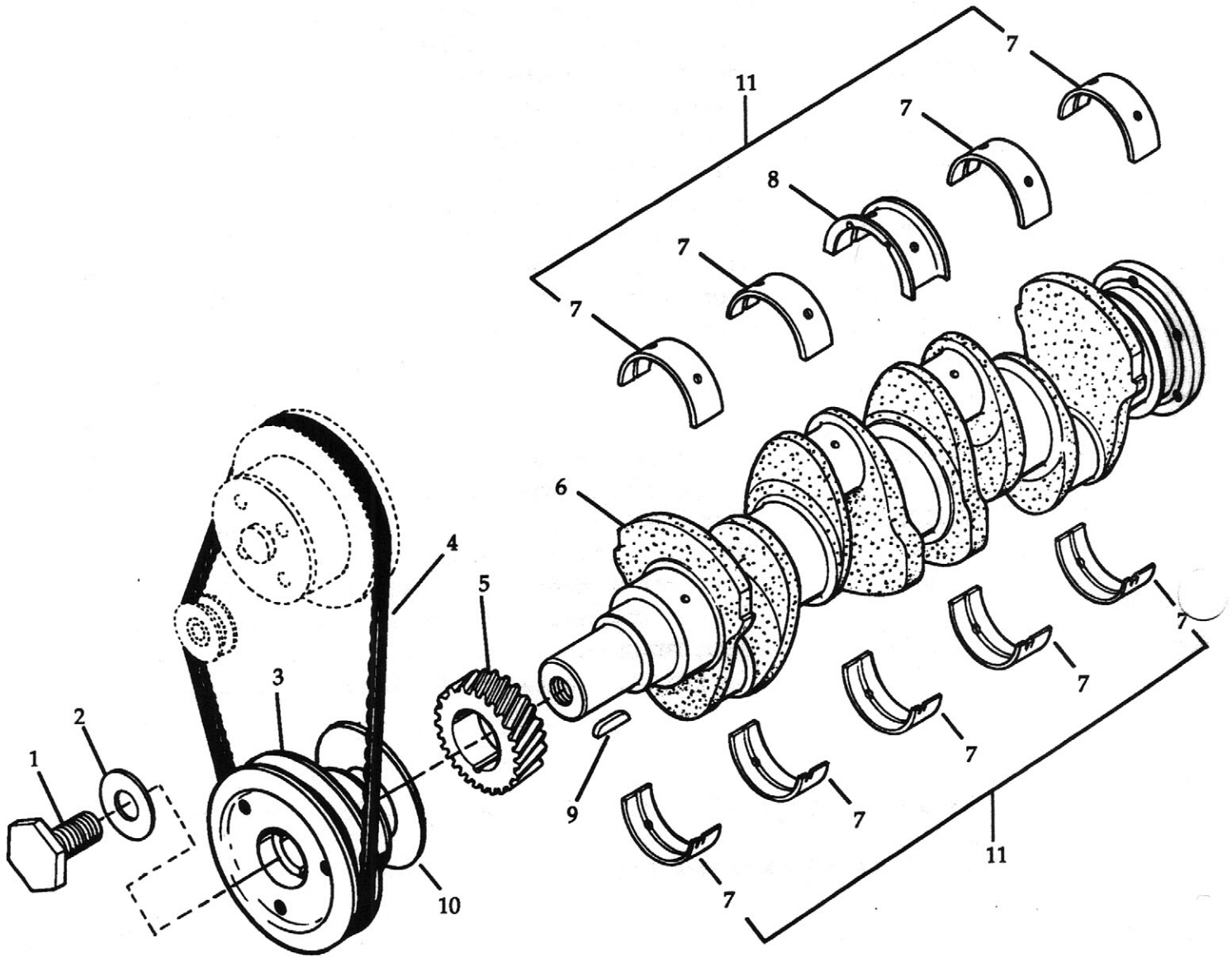
CAMSHAFT AND ROCKER ARM

ITEM	PART NO.	DESCRIPTION	QTY
1	X00623	Pin-cotter, rocker shaft-ends	2
2	X14589	Washer, plain, rocker shaft-ends	2
3	TM27I00313	Spring, rocker shaft-ends	2
4	X07815	Plug, rocker shaft-ends	2
5	XM37005	Washer, flat, rocker arm shaft to cylinder head	4
6	XM32031	Screw, rocker arm shaft to cylinder head	4
7	^a TM27I05162	Shaft, rocker arm, w/ plugs (includes item 4)	1
8	TM27I05150	Arm assembly, rocker, intake	4
9	TM27I05140	Arm assembly, rocker, exhaust	4
10	TM27I00314	Support, rocker arm shaft	4
11	TM27I00303	Spring, rocker arm shaft	3
12	TM27I00403	Rod, push	8
13	TM27I00305	Tappet, valve	8
14	TMD27I00402	Camshaft	1
15	X00599D	Key, cam gear to camshaft	1
16	F400I00246	Plate, camshaft thrust	1
17	TMD27H00402	Gear, injection pump	1
18	X18498	Nut, cam gear to crankshaft	1
19	XM32019	Screw, thrust plate to crankcase	2
20	XM37012	Washer, lock, thrust plate to crankcase	2
21	^b TMD27H00503	Gear, camshaft	1
22	X17066	Pin, grooved, front support to shaft	1

NOTE: ^a TM27I05162 Complete Rocker Arm Shaft Assembly (includes items 1-6, 8-11 & 22).

^b SEE: SPB# 83-340 Rev. Sept. 1992.

CRANKSHAFT AND PULLEY

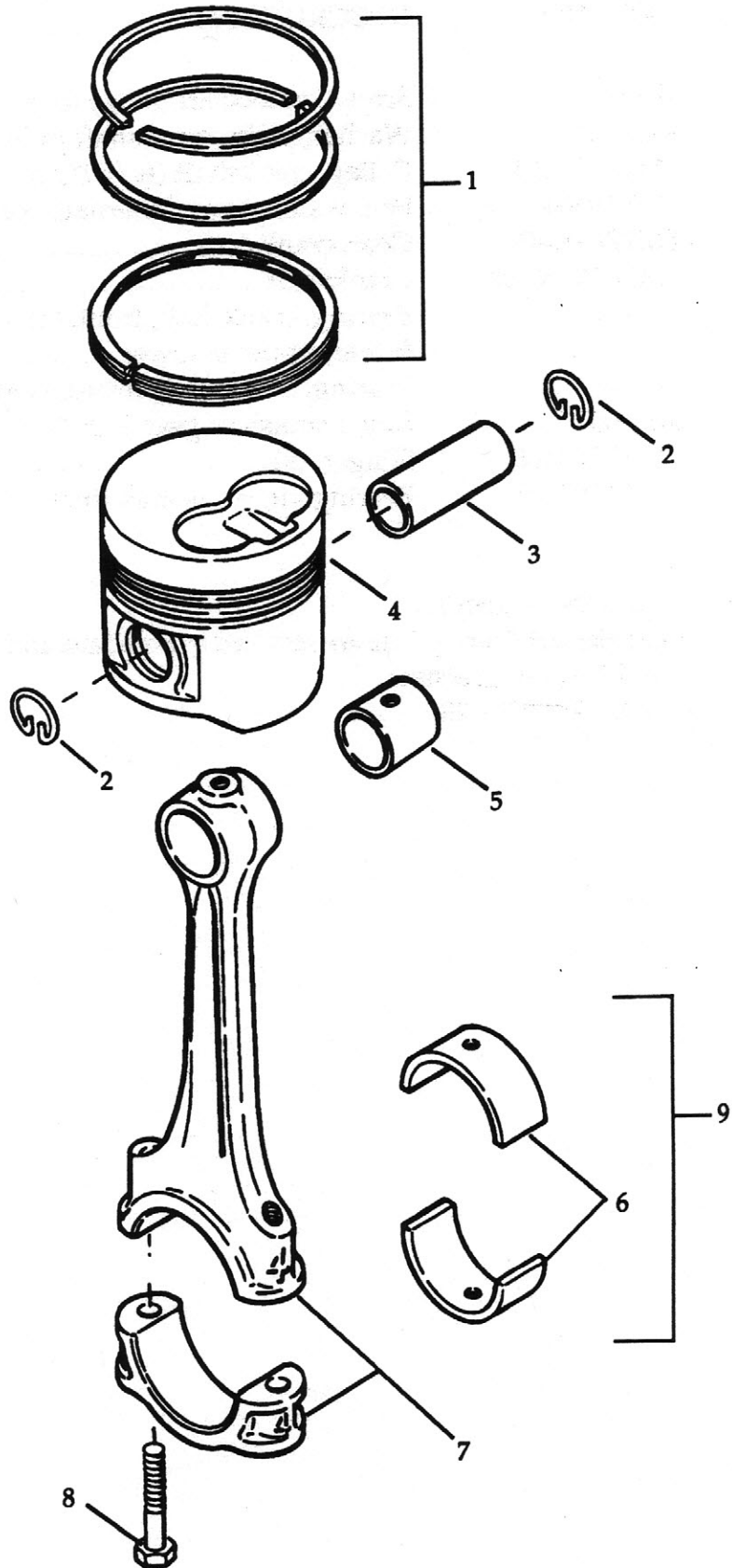


CRANKSHAFT AND PULLEY

ITEM	PART NO.	DESCRIPTION	QTY
1	XM32064	Screw, crankshaft pulley to crankshaft	1
2	XM37014	Washer, plain, crankshaft pulley to crankshaft	1
3	TM27C00401	Pulley, crankshaft (w/PTO machining)	1
4	X27019504	Belt, water pump/alternator drive	1
5	TM27H00407	Gear, crankshaft	1
6	TMD27C00300	Crankshaft	1
7	^a _____	Bearing, crankshaft, front, intermediate & rear, upper & lower	9
8	^a _____	Bearing, crankshaft, thrust, center upper	1
9	X00666	Key, crankshaft gear & pulley to crankshaft	1
10	^c TM27C00408	Slinger, oil	1
11	^b TM27T00102	Bearing kit, crankshaft (includes items 7 & 8)	1

- NOTE:**
- ^a Included in item 11.
 - ^b Crankshaft Bearing Kits are serviced in Standard and 0.25mm, 0.50mm, 0.75mm and 1.00mm oversizes.
 - ^c SEE: SPB #93-429.

PISTON AND CONNECTING RODS



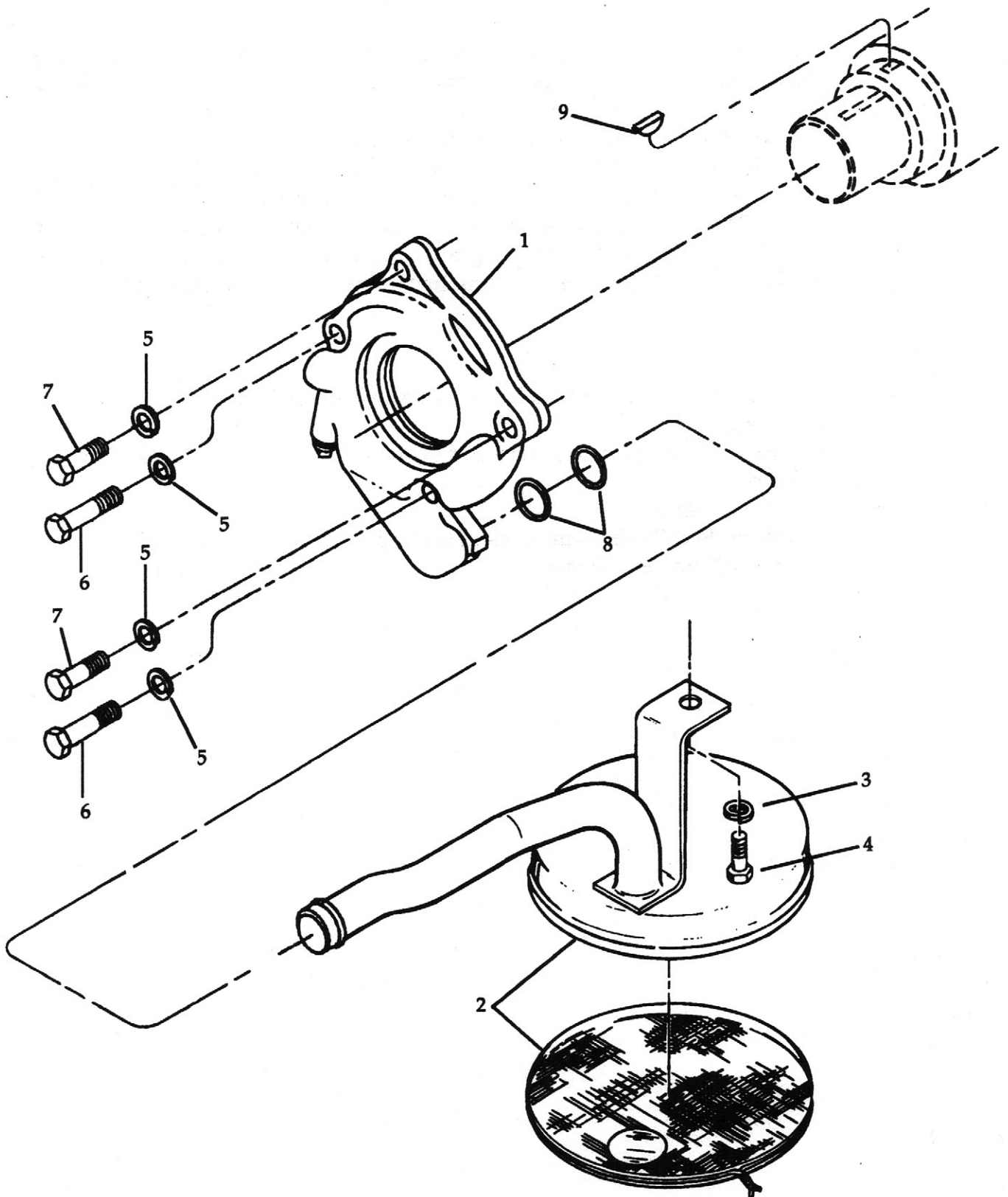
PISTON AND CONNECTING RODS

ITEM	PART NO.	DESCRIPTION	QTY
1	^a TMD20T00201	Ring set (single piston)	4
2	K800A00203	Ring, retaining, piston pin	8
3	TMD27A00300	Pin, piston	4
4	^b TMD27A05031E	Piston (includes items 2 & 3)	4
5	TM27G00303	Bushing, piston pin	4
6	^c _____	Bearing, connecting rod, upper & lower	8
7	TMD27D03001	Rod assembly, connecting (includes items 5 & 8)	4
8	Z145D00300	Bolt, connecting rod	8
9	^d TM20T00102	Bearing set, connecting rod (single rod, includes item 6)	4

- NOTE:**
- ^a Piston Ring Sets are serviced in Standard and oversized 0.50mm, 0.75mm & 1.00mm.
 - ^b Pistons are serviced in Standard and oversized 0.50mm, 0.75mm & 1.00mm.
 - ^c Included in item 9.
 - ^d Connecting Rod Bearings are serviced in standard and undersized 0.25mm, 0.50mm, 0.75mm & 1.00mm.

.25 MM = .010
 .50 MM = .020
 .75 MM = .030
 1.00 MM = .040

OIL PUMP

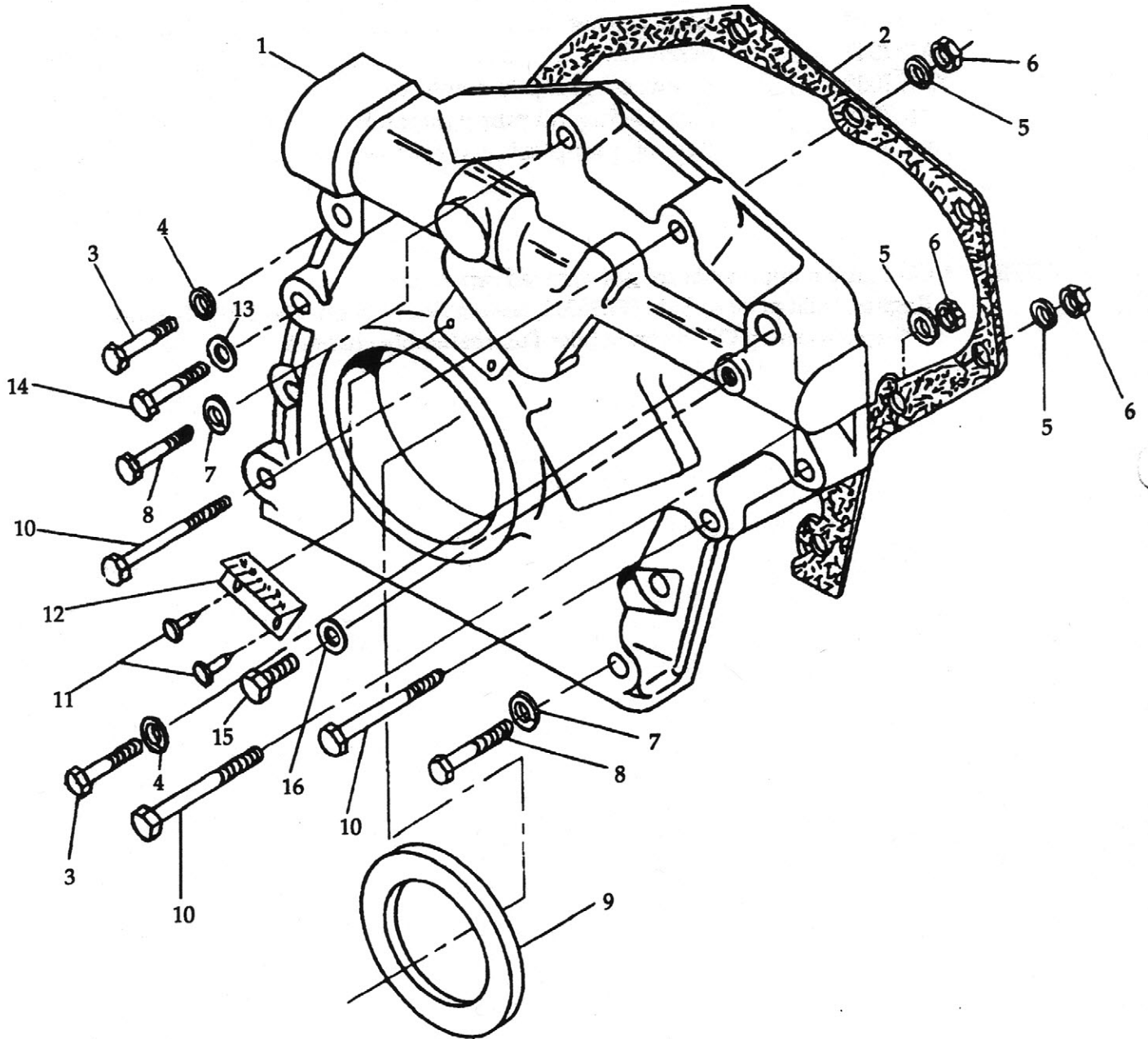


OIL PUMP

ITEM	PART NO.	DESCRIPTION	QTY
1	^{a,b} TM27L06050	Pump assembly, oil (complete)	1
2	^b TM27L05180	Tube assembly, oil pump inlet	1
3	XM37001	Washer, lock, tube to center bearing cap	1
4	XM32052	Screw, tube to center bearing cap	1
5	XM37002	Lock washer	4
6	XM32041	Screw	2
7	XM32039	Screw, oil pump to crankcase	2
8	X01673	Seal, O-ring, oil pump inlet tube	2
9	X00692	Key, oil pump drive, crankcase	1

- NOTE:**
- ^a Oil Pump components are **not** serviced separately.
 - ^b Engines built prior to S/N 88096321, see Service Bulletin # 88-379 & Newsletter C89-6 concerning Oil Pump & Inlet Tube assembly changes.

GEAR COVER

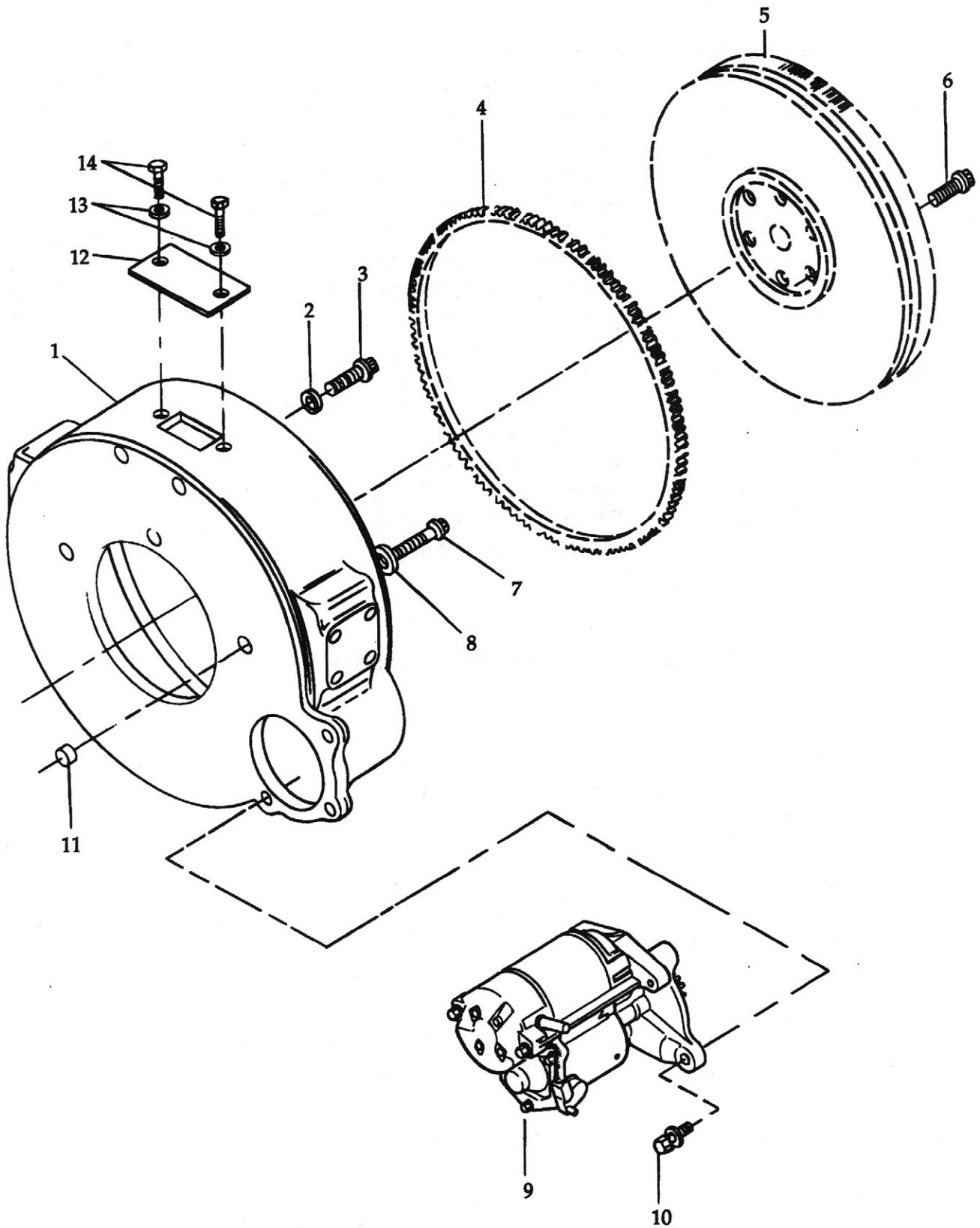


GEAR COVER

ITEM	PART NO.	DESCRIPTION	QTY
1	TMD27B05141	Cover assembly gear (includes items 9, 11, 12, 15, & 16).....	1
2	^a TM27B00517	Gasket, gear cover	1
3	XM32115	Screw, gear cover to crankcase, upper right & left	2
4	XM37001	Washer, lock, gear cover to crankcase, upper right & left	2
5	XM37001	Washer, lock, gear cover thru crankcase to adapter	3
6	XM35000	Nut, hex, gear cover thru crankcase to adapter	3
7	XM37001	Washer, gear cover to crankcase	3
8	XM32026	Screw, gear cover to crankcase	3
9	^a X07845	Seal, crankshaft oil	1
10	XM32068	Screw, gear cover thru crankcase	3
11	X13012	Rivet, timing pointer to gear cover	2
12	TM27B00416	Timing pointer plate	1
13	X14134	Washer, gear cover to crankcase-right center	1
14	XM32026	Screw, gear cover to crankcase-right center	1
15	XM32019	Screw, timing hole plug	1
16	X14590	Washer, plain, timing pointer hole plug screw	1

NOTE: ^a Included in Front End Gasket Set TMD27U02002.

FLYWHEEL, HOUSING AND STARTER

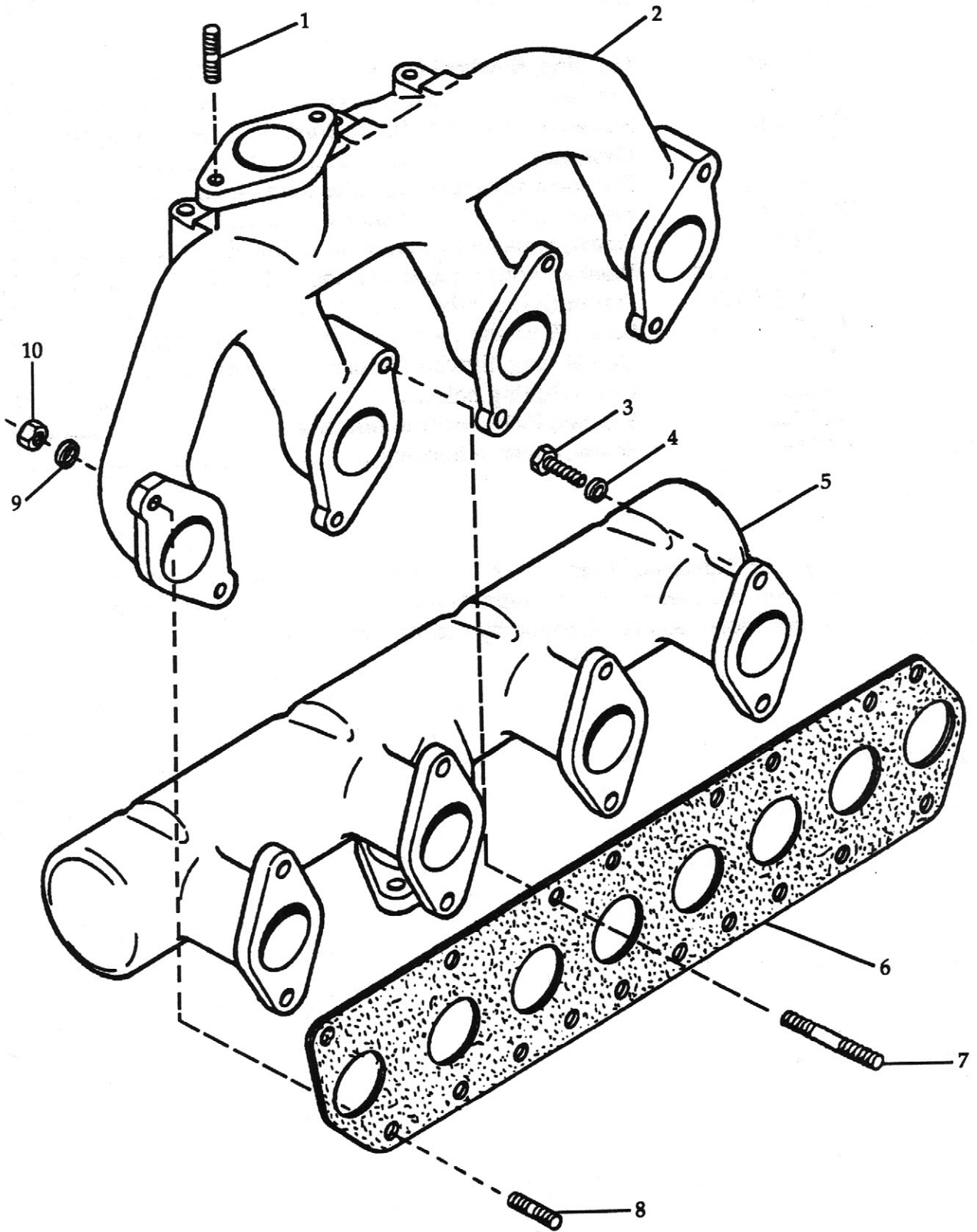


FLYWHEEL, HOUSING AND STARTER

ITEM	PART NO.	DESCRIPTION	QTY
1	TM27B06072	Housing, flywheel (includes items 12-14).....	1
2	X14323	Washer, plain, housing to crankcase, center & upper.....	3
3	XM32086	Screw, flanged, housing to crankcase, center & upper	3
4	^a _____	Gear, ring	1
5	^a _____	Flywheel assembly (includes item 4)	1
6	XM32036	Screw, flywheel to crankcase	6
7	XM32021	Screw, housing to crankcase at dowel	2
8	X14141 ¹⁷	Washer, housing to crankcase at dowel	2
9	^b TMD27M00504	Starter (Nippondenso)	1
10	X03979	Screw & washer, starter to flywheel housing	2
11	X07005	Dowel, ring, flywheel housing to crankcase	2
12	TM27B00304	Cover, timing hole	1
13	X00202B	Washer, lock, cover to housing	2
14	X03236	Screw, cover to housing	2

NOTE: ^a See your "Customer Specification" to determine Flywheel Assembly part number, then see Service Bulletin #91-416 for Ring Gear part number.
^b See accessories section at rear of this manual for service parts.

INTAKE AND EXHAUST MANIFOLD



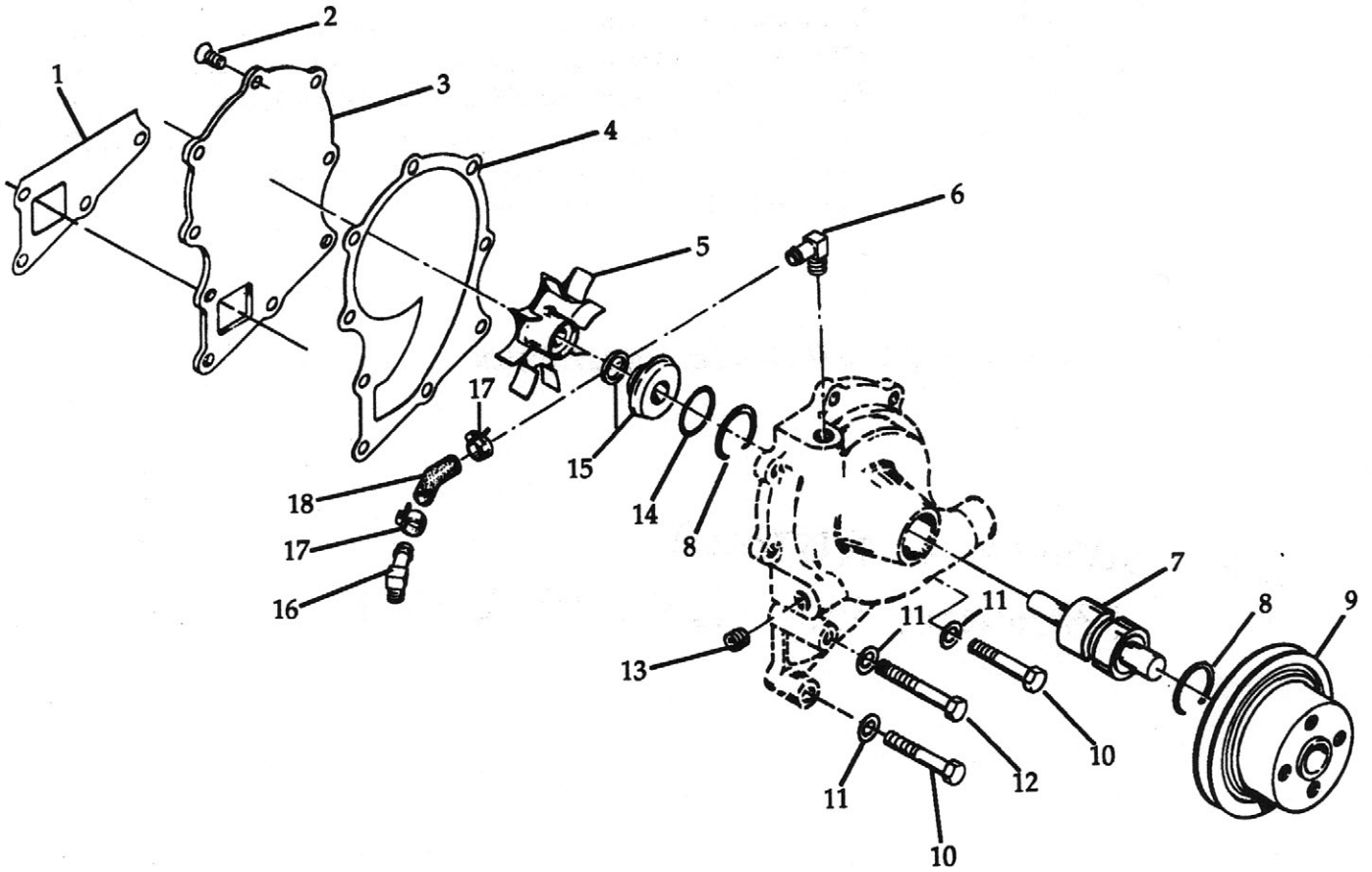
INTAKE AND EXHAUST

ITEM	PART NO.	DESCRIPTION	QTY
1	XM32048	Stud, exhaust outlet flange.....	2
2	TMD27E00501	Manifold, exhaust.....	1
3	XM32039	Screw, intake manifold to cylinder head	8
4	XM37005	Washer, flat, intake manifold to cylinder head	8
5	TMD27F00601	Manifold, intake.....	1
6	^a TM27E00502	Gasket, manifold, intake & exhaust.....	1
7	XM32050	Stud, exhaust manifold to cylinder head	2
8	XM32022	Stud, exhaust manifold to cylinder head	6
9	XM37005	Washer, flat exhaust manifold to cylinder head	8
10	24XXM35002	Nut, exhaust manifold to cylinder	8
—	X06234	Label-Ether Warning, affix to intake manifold-top between intake flange & front end.....	1

NOTE: ^a Included in Top End Gasket Set TMD27U01006.

Ex. Gasket → X07804
(Between Ex. manifold & Pipe)

WATER PUMP ASSEMBLY

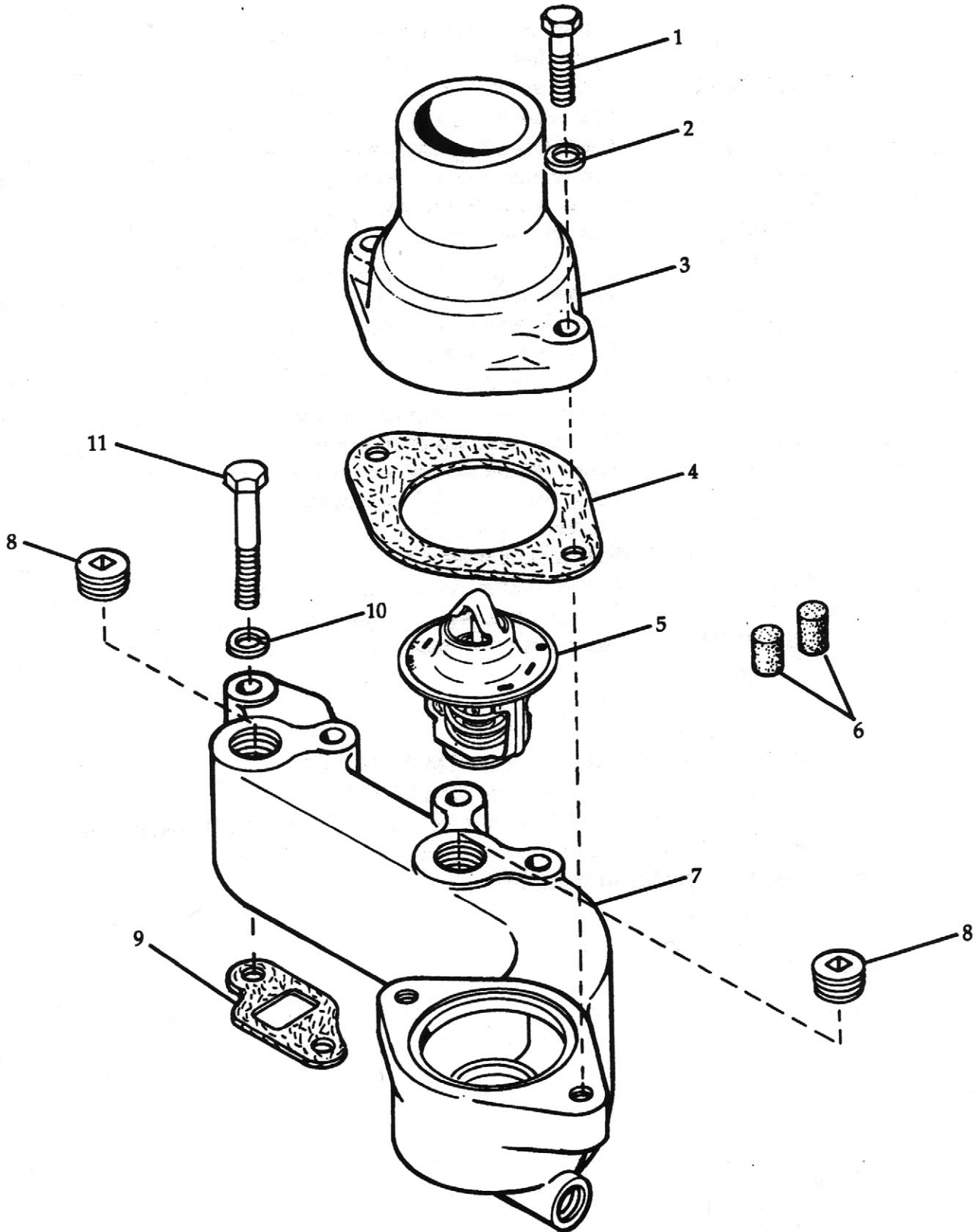


WATER PUMP ASSEMBLY

ITEM	PART NO.	DESCRIPTION	QTY
—	TM27K06015 103	Pump assembly, water, complete (includes items 2-5, 7-9, & 13-15).....	1
—	TM27K06012 105	Pump assembly, water, for service, complete (includes items 1-5, 7, 8 & 13-15).....	1
1	^{a,b} TM27K00301	Gasket, water pump to crankcase	1
2	XM32106	Screw, backplate to water pump	6
3	TM27K00405	Plate, water pump back	1
4	^b TM27K00403	Gasket, water pump back plate	1
5	^b TM27K00418	Impeller, water pump	1
6	X26176	Elbow, hose, water pump body	1
7	^b TM27K00306	Shaft & bearing assembly	1
8	^b X07047	Ring, snap, shaft & bearing	2
9	^c TM27K00406	Pulley, water pump	1
10	XM32011	Screw, water pump to crankcase.....	2
11	XM37001	Washer, lock, water pump to crankcase	3
12	XM32108	Screw, water pump & alternator strap to crankcase	1
13	X26166	Plug, water pump body, side.....	1
14	^b K600K00220	Gasket, water pump seal	1
15	^b OA200K03040	Seal & Seat assembly	1
16	X26176	Elbow, water by-pass, water header.....	1
17	X02376	Clamp, hose, water by-pass hose	2
18	TM27K00309	Hose, water by-pass	1

- NOTE:**
- ^a Included in Front End Gasket Set TMD27U02002.
 - ^b Included in Water Pump Repair Kit TM27T01001.
 - ^c Water Pump Pulley Installation Instructions, Form X30078, packaged with service pump and water pump repair kit, must be followed when assembling pulley to pump.

WATER HEADER AND THERMOSTAT

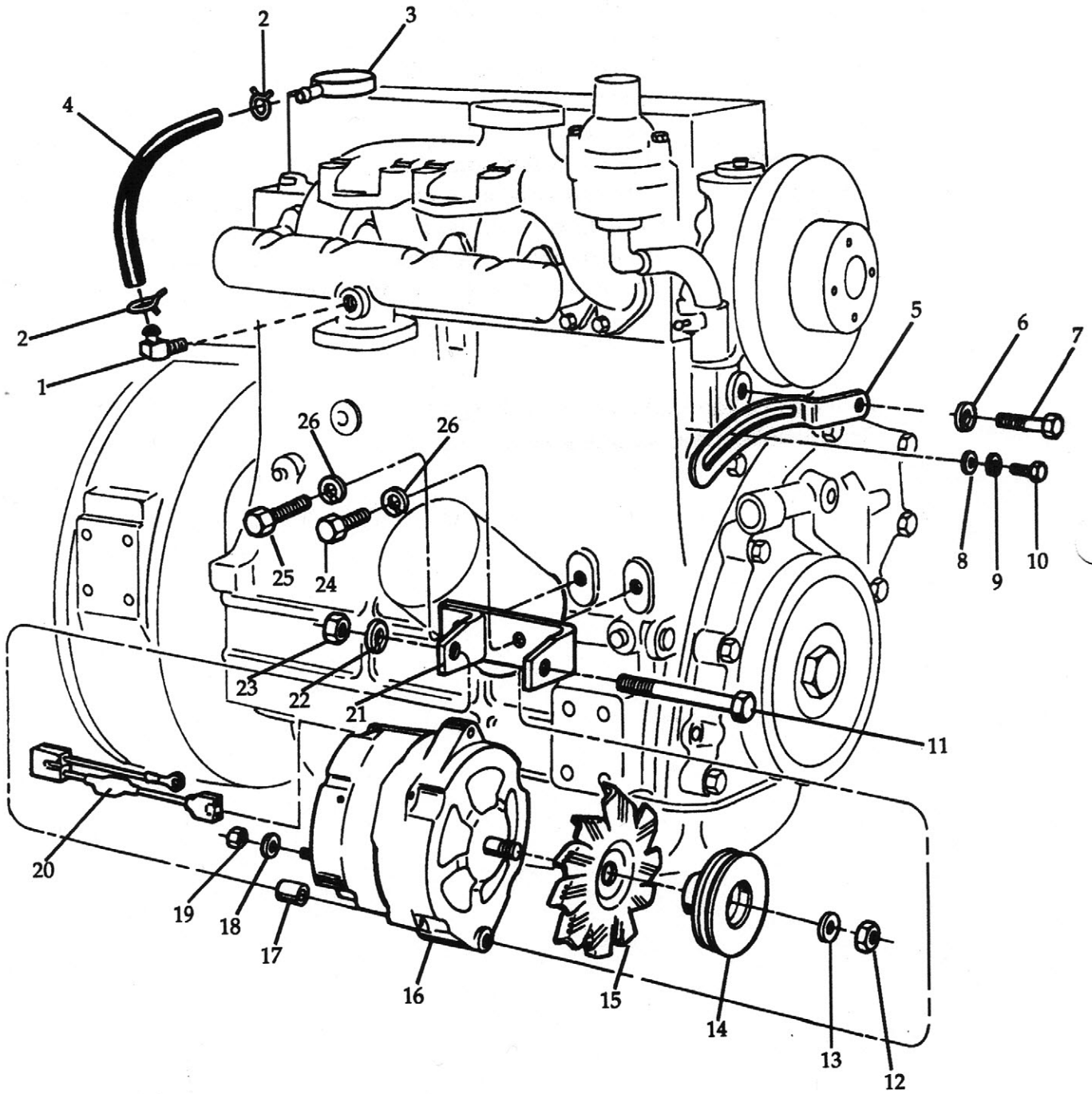


WATER HEADER AND THERMOSTAT

ITEM	PART NO.	DESCRIPTION	QTY
1	XM32039	Screw, water outlet elbow to water header	2
2	XM37002	Washer, lock, water outlet elbow	2
3	TM27K00404	Elbow, water outlet	1
4	^a X07854	Gasket, water outlet elbow	1
5	TM27K00402	Thermostat	1
6	^b X05695	Conditioner, coolant	2
7	TM27K00503	Header, water outlet	1
8	26XX00101B	Plug, water header, top	2
9	^a TM27K00202	Gasket, water outlet header	2
10	XM37002	Washer, lock, water header to cylinder head	4
11	XM32038	Screw, water header to cylinder head	4

NOTE: ^a Included in Top End Gasket Set TMD27U01006.
^b Replenish anytime cooling system is serviced.

ALTERNATOR AND PCV SYSTEM

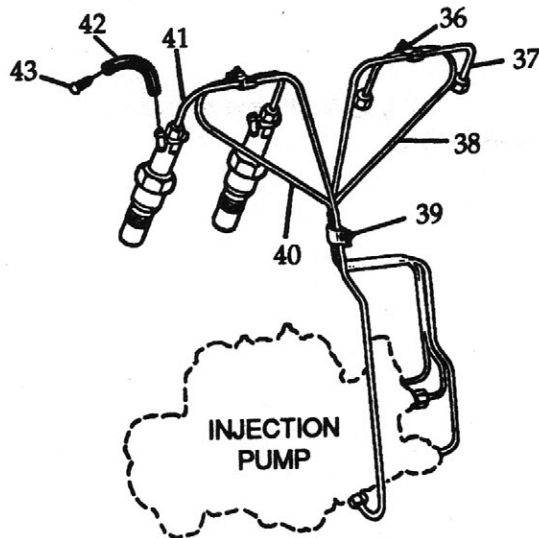
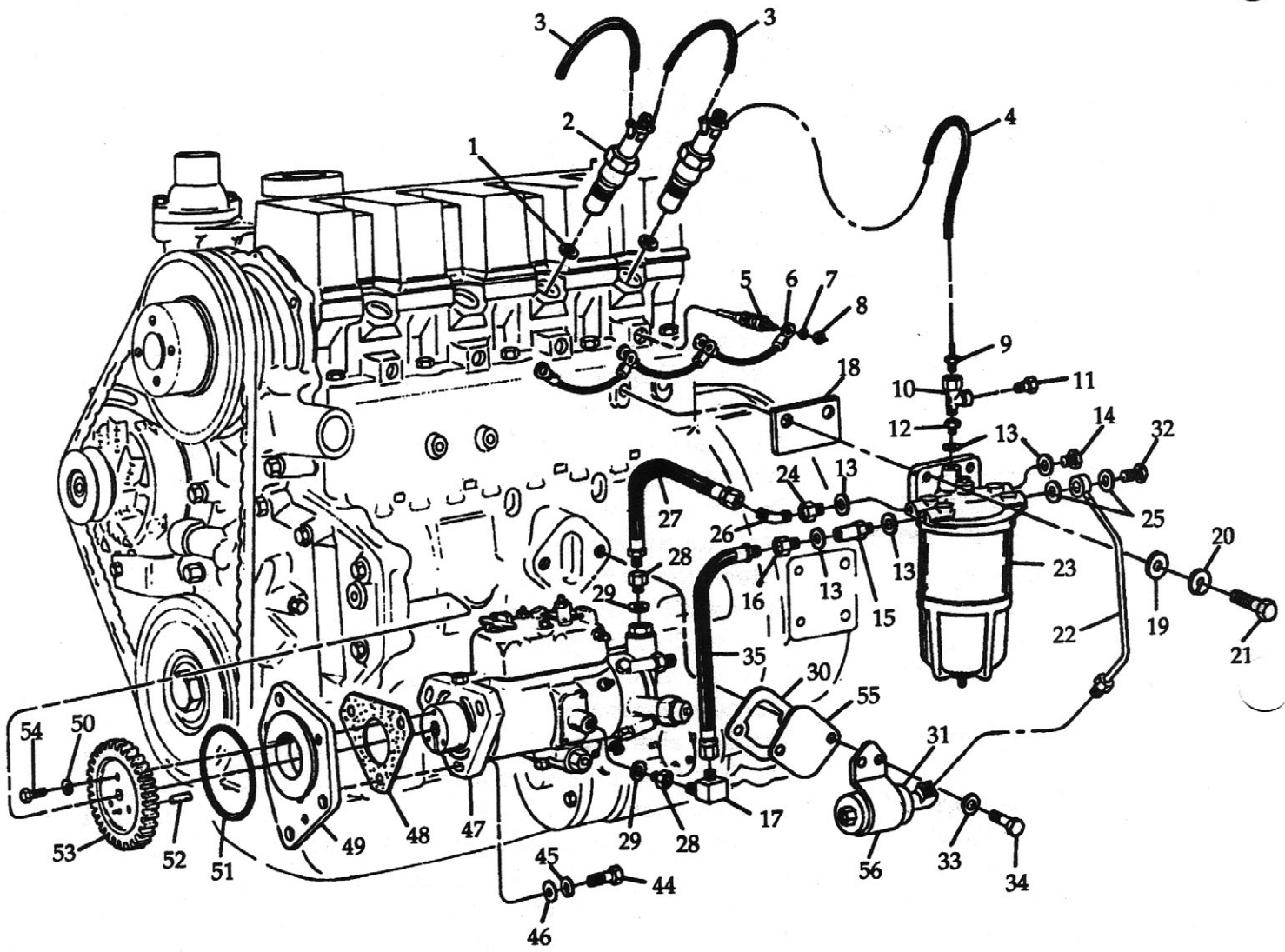


ALTERNATOR AND PCV SYSTEM

ITEM	PART NO.	DESCRIPTION	QTY
1	X26136	Elbow, intake manifold	1
2	X02751	Clamp, hose	2
3	TM27L00412	Cap, oil filler, top of cylinder head cover	1
4	X08253200	Hose, elbow to oil filler cap	1
5	TM27M00301	Strap, adjusting, alternator	1
6	_____	Washer, lock (see item 11, page 22)	1
7	_____	Screw (see item 12, page 22)	1
8	X14141	Washer, plain, adjusting strap to alternator	1
9	XM37002	Washer, lock, adjusting strap to alternator	1
10	XM32039	Screw, adjusting strap to alternator	1
11	XM32007	Screw, alternator to bracket	1
12	_____	Nut, pulley & fan to alternator (part of alternator)	1
13	_____	Washer, pulley & fan to alternator (part of alternator)	1
14	F600M00379	Pulley, alternator	1
15	HD277M00407	Fan, alternator pulley	1
16	^{a,b} F401M00358	Alternator (Delco #1101282, includes items 12 & 13)	1
17	X14234	Spacer, alternator to bracket, rear	1
18	13XXM37013	Washer, lock, alternator battery terminal	1
19	13XXM35001	Nut, alternator battery terminal	1
20	F401M00332	Harness, alternator	1
21	TM27M00411	Bracket, alternator	1
22	XM37001	Washer, lock, alternator to bracket	1
23	XM35000	Nut, alternator to bracket	1
24	XM32045	Screw, alternator bracket to crankcase	1
25	XM32046	Screw, alternator bracket to crankcase	1
26	XM37008	Washer, lock, alternator bracket to crankcase	2
—	X06163	Decal, warning label (apply to alternator)	1

NOTE: ^a Alternator components are not serviced separately.
^b Alternator See SPB #92-419.

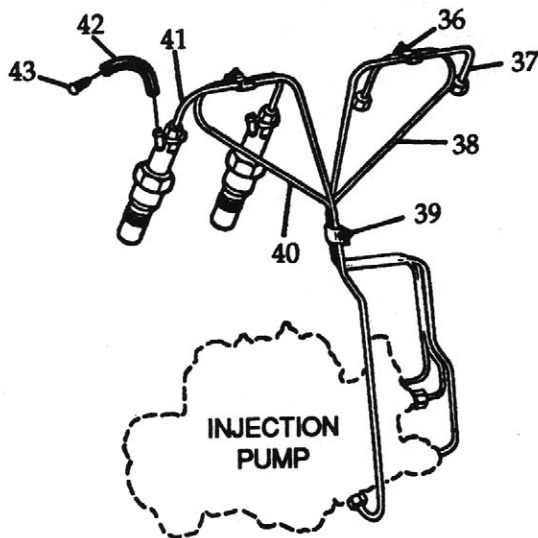
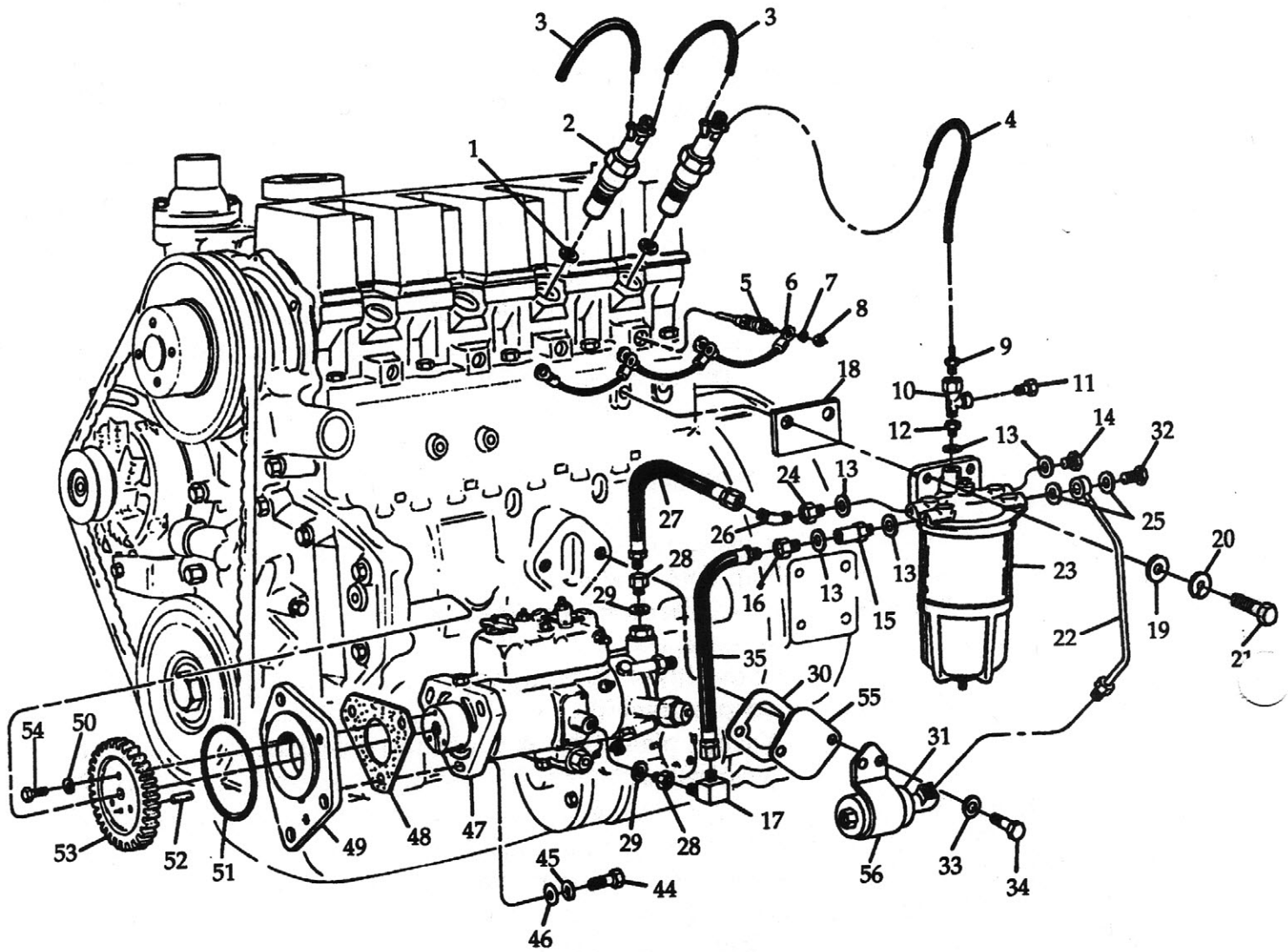
INJECTION PUMP AND FUEL FILTER



INJECTION PUMP AND FUEL FILTER

ITEM	PART NO.	DESCRIPTION	QTY
1	TMD27F00301	Shield, heat, injector	4
2	TMD27T00216	Kit - Nozzle holder & tip assembly (includes item 1)	4
—	TMD27T00217	Kit - Tip, nozzle (service) (includes item 1)	1
3	XM38003054	Hose, fuel, leak-off, #1 to #2, #2 to #3, & #3 to #4.....	3
4	XM38003054	Hose, fuel, #4 leak-off to filter	1
5	TMD27F00306-434	Plug, glow	4
6	LW00203042	Wire, between glow plugs	3
7	13XX00200B	Lockwasher, wire to glow plug	4
8	13XXM35004	Nut, wire to glow plug	4
9	X26175	Adapter, fuel leak-off, top of tee	1
10	X12671	Tee, fuel leak-off, top to tee	1
11	26XX26129	Plug, fuel leak-off, side of tee.....	1
12	XM40000	Adapter, fuel leak-off, top	1
13	X14434	Washer, copper, fuel filter & water separator, inlets & outlets	5
14	TMD27F00214	Plug, fuel filter #4	1
15	TMD27F00405	Valve, check, filter inlet #2 return	1
16	X26140	Adapter, assemble to check valve	1
17	X12489	Elbow, injection pump return.....	1
18	TMD27F00305	Adapter, fuel filter	1
19	X14472	Washer, plain, filter & adapter to crankcase	2
20	XM37001	Lockwasher, filter & adapter to crankcase	2
21	XM32090	Screw, filter & adapter to crankcase	2
22	TMD27F05200	Tube, fuel pump to filter #3 inlet.....	1
23	TMD27F00506	Filter, fuel & water separator	1
—	TMD27F00212	Element, fuel filter (service)	1
24	X26140	Adapter, fuel filter #1.....	1
25	TMD27F00309	Washer, banjo bolt to #3 inlet	2
26	X12502	Elbow, 45°, filter adapter #1.....	1
27	X08016064	Hose, filter to injection pump inlet	1

INJECTION PUMP AND FUEL FILTER



INJECTION PUMP AND FUEL FILTER (CONT'D.)

ITEM	PART NO.	DESCRIPTION	QTY
28	X26140	Adapter, injection pump inlet & return	2
29	X14434	Washer, injection pump inlet & return	2
30	X07861	Gasket, fuel pump	1
31	TMD20F00506	Pump assembly, fuel — solenoid (electric).....	1
32	TMD27F00308	Bolt, banjo to fuel filter inlet #3	1
33	XM37002	Lockwasher, fuel pump & cover to crankcase	2
34	XM32105	Screw, fuel pump & cover to crankcase	2
35	X08016120	Hose, injection pump to filter #2.....	1
36	a TMD27F00221	Clamp, fuel lines #1 & #2 and #3 & #4.....	2
37	a TMD27F05120	Tube assembly, fuel injection #4.....	1
38	a TMD27F05110	Tube assembly, fuel injection #3.....	1
39	a TMD27F00220	Clamp, injection lines.....	1
40	a TMD27F05100	Tube assembly, fuel injection #2.....	1
41	a TMD27F05090	Tube assembly, fuel injection #1.....	1
42	XM38003020	Hose, fuel, #1 leak-off end.....	1
43	X26138	Plug, leak-off line, #1.....	1
44	XM32037	Screw, injection pump to adapter	3
45	XM37012	Lockwasher, injection pump to adapter	3
46	XM37005	Washer, plain, injection pump to adapter	3
47	TMD27F00224	Pump, diesel, fuel injection (CAV #3042F012A).....	1
48	^b TMD27B00300	Gasket, injection pump	1
49	TMD27B00404	Adapter, fuel injection pump	1
50	X00202B	Lockwasher, gear to injection pump	3
51	^b X07837	O-ring, adapter, fuel injection pump	1
52	TMD27F00200	Pin, gear to injection pump	1
53	TMD27H00403	Gear, injection pump driven	1
54	X22132	Screw, gear to injection pump	3
55	F600B00234	Cover, fuel pump hole	1
56	TMD27F00311	Clamp, electric fuel pump	1

NOTE: ^a Included in Fuel Injection Tube Set # TMD27F05080.
^b Included in Front End Gasket Set TMD27U02002.

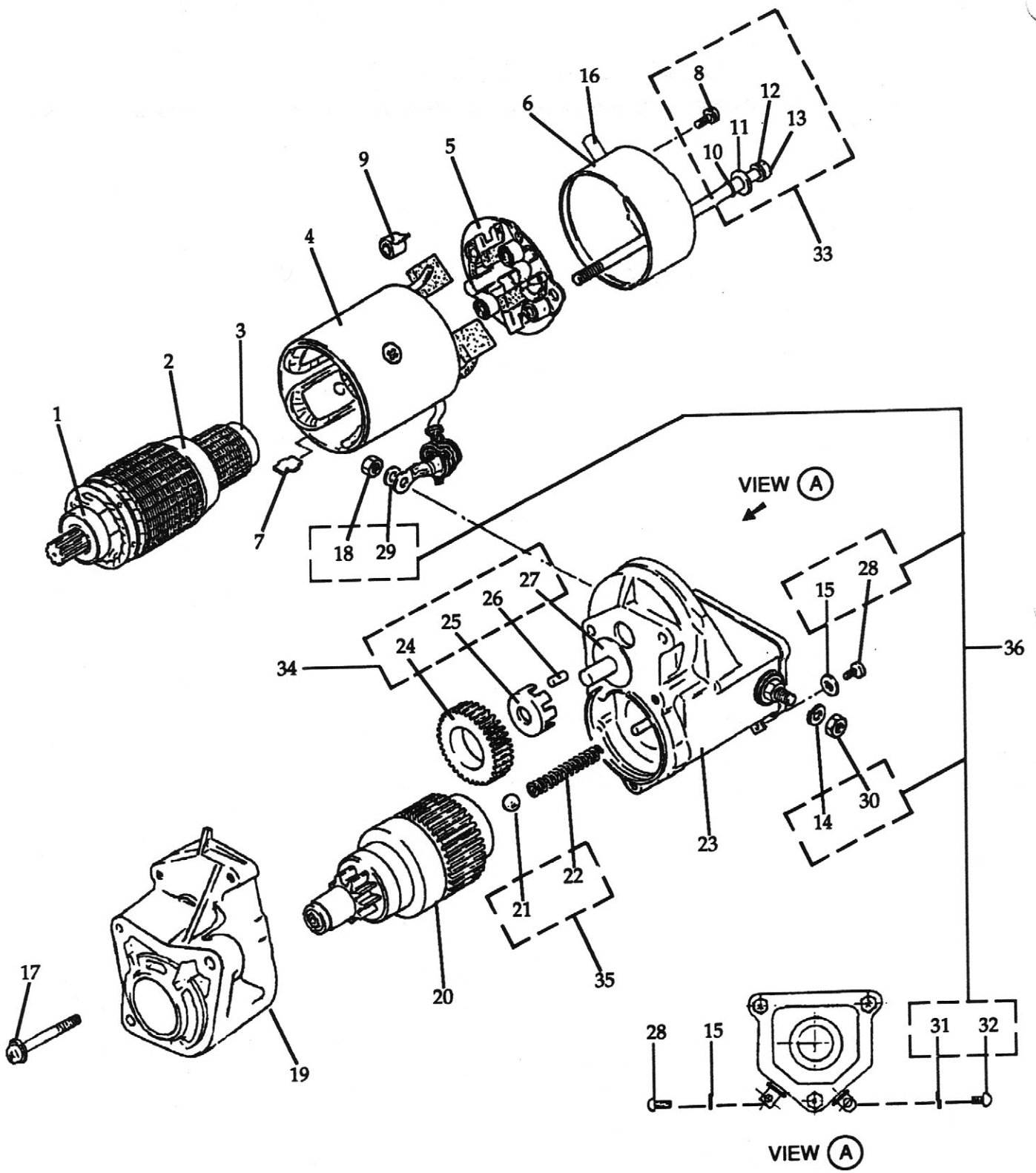
NOTES

Accessories Section

SERVICE PARTS LISTS

- Starter

TMD27M00504 STARTER



TMD27M00504 STARTER
(NIPPONDENSO P/N: 128000-1780)

ITEM	PART NO.	DESCRIPTION	QTY
1	10120018	Bearing, ball (drive end)	1
2	a _____	Armature assembly	1
3	10120019	Bearing, ball (dommutator end)	1
4	a _____	Yoke assembly, starter	1
5	a _____	Brush holder assembly, starter	1
6	a _____	Frame, starter end	1
7	10120021	Plate, lock	1
8	a,b _____	Screw w/washer	2
9	a _____	Spring, brush spiral	4
10	a,b _____	"O"-ring	2
11	a,b _____	Washer	2
12	a,b _____	Washer, spring	2
13	a,b _____	Bolt, through	2
14	a,e _____	Washer, spring	1
15	a,e _____	Washer, toothed	1
16	10120020	Cover, vent	1
17	10120030	Screw w/washer	3
18	a,e _____	Nut, hex.....	1
19	a 10120029	Housing assembly, starter	1
20	10120023	Clutch sub-assembly	1
21	a,d _____	Ball, steel	1
22	a,d _____	Spring, compression coil	1
23	10120026	Switch assembly, magnetic	1
24	a,c _____	Pinion, starter	1
25	a,c _____	Retainer	1
26	a,c _____	Roller, clutch	5
27	a,c _____	Washer	1
28	a,e _____	Screw, pan head (cross recess).....	1
29	a,e _____	Washer, wave	1
30	a,e _____	Nut, hex.....	1
31	a,e _____	Washer, spring	1
32	a,e _____	Screw, pan head (cross recess).....	1
33	10120022	Starter kit, hardware (includes items 8 & 10-13)	1
34	10120024	Starter kit (includes items 24-27)	1
35	10120025	Starter kit (includes items 21 & 22)	3
36	10120028	Starter kit, hardware (includes items 14, 15, 18 & 28-32)	1

NOTE: a Not serviced separately.
 b Included in item 33.
 c Included in item 34.
 d Included in item 35.
 e Included in item 36.

ENGINE SERVICE KITS COMPONENTS

KIT NUMBER	PART NUMBER	DESCRIPTION	QTY
TMD20T00216	TMD27F02030	KCO - Nozzle ASM	1
	TMD27F00301	Shield Heat	1
TMD27T00217	TMD27F00306	KCO - Tip	1
	TMD2700301	Shield Heat	1
✱ TMD27U01006	TMD27A00613	Gasket - Cyl Head	1
	TM27A00502	Gasket Head Cover	1
	X14596	Washer - Plain	3
	XM39000	O-Ring	3
	TM27E00502	Gasket - Manifold	1
	TM27K00202	Gasket - Water Outlet Header	2
	X07854	Gasket - Water Outlet Elbow	1
	TM27F00206	Gasket - Carburetor	1
	TM27F00308	Gasket - Carburetor	1
	X14192	Washer - Copper	2
	F401M00219	Gasket Dist.	1
	TTP10121	TM/TMD Cyl Hd. Torque Chart	1
TMD27U02002	TM27B00517	Gasket - G/C	1
	TM27K00301	Gasket - Water Pump	1
	X07845	Seal - Oil	1
	TM27L00513	Seal - Oil	2
	TMD27B00300	Gasket - Injection Pump	1
	X07837	O-Ring	1
TM27T00107	TM27B00305	Syringe	1
	X07818	Gasket Form-RTV	1
	X07840	Insert Cure	2
	X30194	Sheet - Instruction	1
TM27T01001	TM27K00306	Bearing and Shaft Water Pump	1
	X07047	Ring - Snap	2
	OA200K03040	Seal - Water Pump	1
	K600K00220	Gasket - Water Pump Seal	1
	TM27K00403	Gasket - Water Pump	1
	TM27K00301	Gasket - Water Pump	1
	TM27K00418	Impeller Water Pump	1
	X30078	Sheet - Instruction	1

SERVICE AND PARTS
Available from your Authorized
WIS-CON TOTAL POWER
Service Center

 **WIS-CON**
TOTAL POWER CORP.

HEADQUARTERS:

3409 Democrat Road P.O. Box 181160 Memphis, Tennessee 38181
Phone: (901) 365-3600 TELEX: 462-1058 (ITT) FAX NO: (901) 369-4050

EUROPEAN:

Rue Joseph Defandre, 13 B-4053 Chaudfontaine (Liege) Belgium
Phone: (32) (41) 675320 TELEX: 42631 TDY TP B FAX NO: (32) (41) 677987

MAY/1993
LIT10179