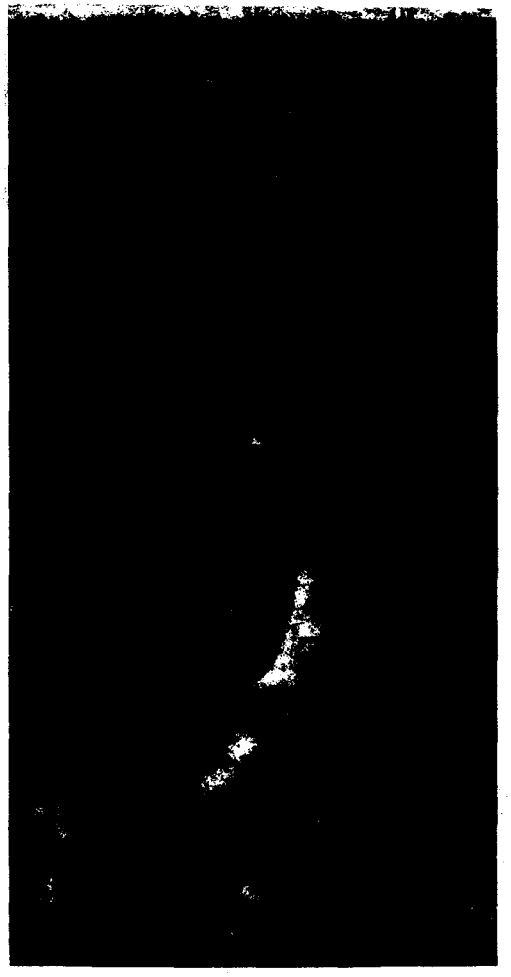
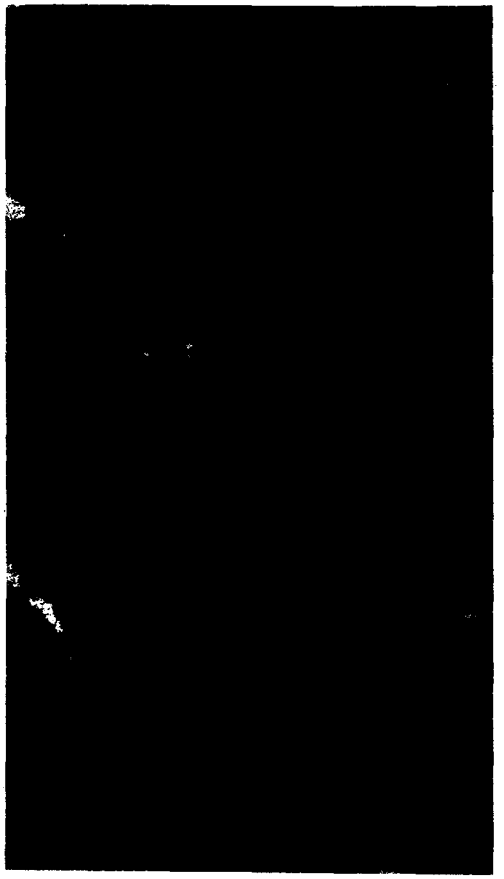
NAPB #54
APRIL, 1975



Perkins engines

4.108 MARINE



WITH NORTH AMERICAN ACCESSORIES

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The quantity shown in the quantity column is the number of parts used on the engine, except where parts are offset in the description column; in this case, the quantity is the number required for the preceding assembly or sub-assembly. For certain parts, such as kits, washers, etc., an "X" will be shown in the quantity column. This "X" indicates that the quantity is "as required".

INFORMATION REQUIRED

Whenever parts are ordered, it is essential that full information is given to ensure correct identification. Descriptions and part numbers should always be stated, and in the case of parts required for an individual engine, the engine type or serial number should be supplied. For example:

> "Please supply for the 4.108 Marine Engine, (1) of 84418 Crankshaft Kit."

Such an order supplies all the information needed to enable your requirements to be identified accurately and your order will receive prompt attention.

SCREW THREADS

All screw threads on this engine, except on certain items of proprietary equipment, are unified series and American pipe series.

The items described in this book are correct at the time of publication. As developments are made, we reserve the right to alter or withdraw items at any time and you would be advised of the changes. This information should be entered in the appropriate pages as soon as it is received to keep your book up-to-date with the latest information.

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	PAGES
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CYLINDER HEAD Plugs, guides, inlet and exhaust valves, seals, springs, caps, cotters, inserts, exhaust manifold & outlet flange, front lifting plate	3
CRANKSHAFT Main and connecting rod bearing sets, thrustwashers, crankshaft gear & pulley, oil thrower flange, connecting rod, piston, ring pack	4
CYLINDER HEAD COVER Seal, lube oil filler cap, rocker shaft, springs, brackets, levers, oil feed pipe, push rods, tappets	5
AIR INDUCTION SYSTEM Induction manifold, air filter, ether starting adaptor	6
TIMING GEAR Camshaft & gear, idler gear & hub, retaining plate, timing gear housing, engine timing pin	7
LUBE OIL SYSTEM Lube oil pan, lube oil pump, suction pipe, strainer, delivery pipe, lube oil dipstick and tube	8
LUBE OIL FILTER Bracket, adaptor, reducer, connections	9
OIL COOLER Hoses, pipe, mounting bracket, elbows, strap, connections ...	10
SEA WATER PUMP Connections, drive shaft, hoses, pipe	11
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FUEL OIL LIFT PUMP Rocker arm, body, cover & valve, diaphragm & pull rod, push rod, non-return valve, repair kit	13
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FUEL INJECTION SYSTEM Fuel injection pump, drive gear & hub, bracket, injection pipes, injector, leak-off pipe	15

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ELECTRICAL EQUIPMENT Alternator c/w regulator, cooling fan, pulley, bracket, belt, lever	18
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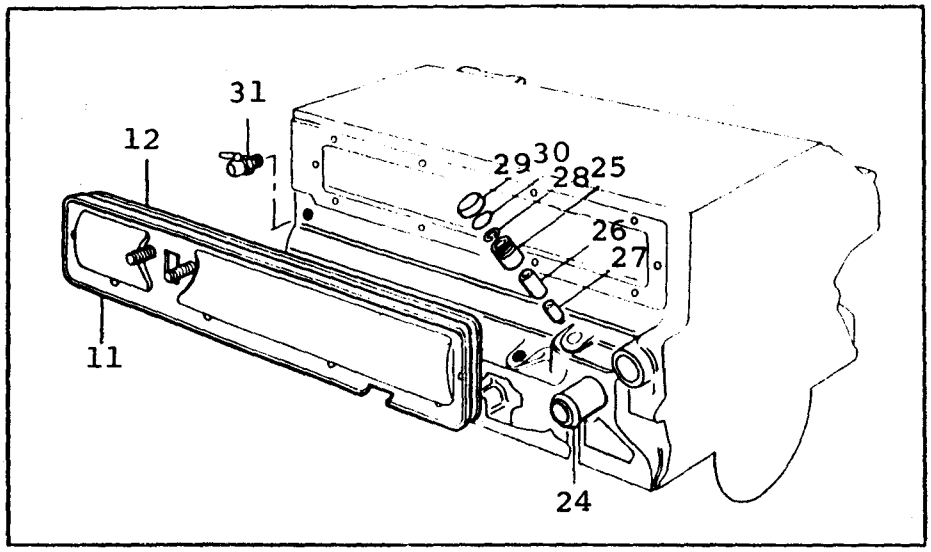
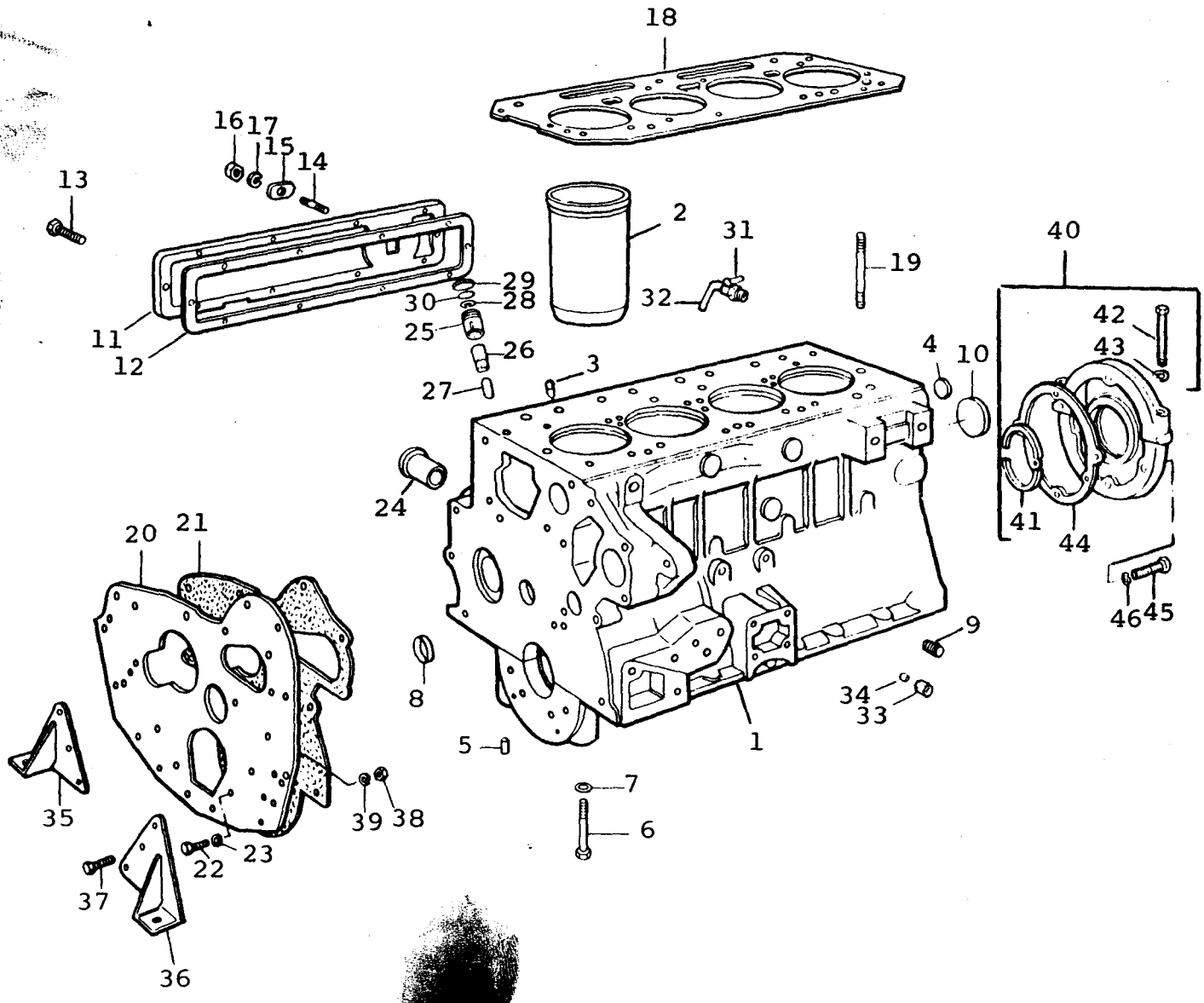
- CYLINDER BLOCK -

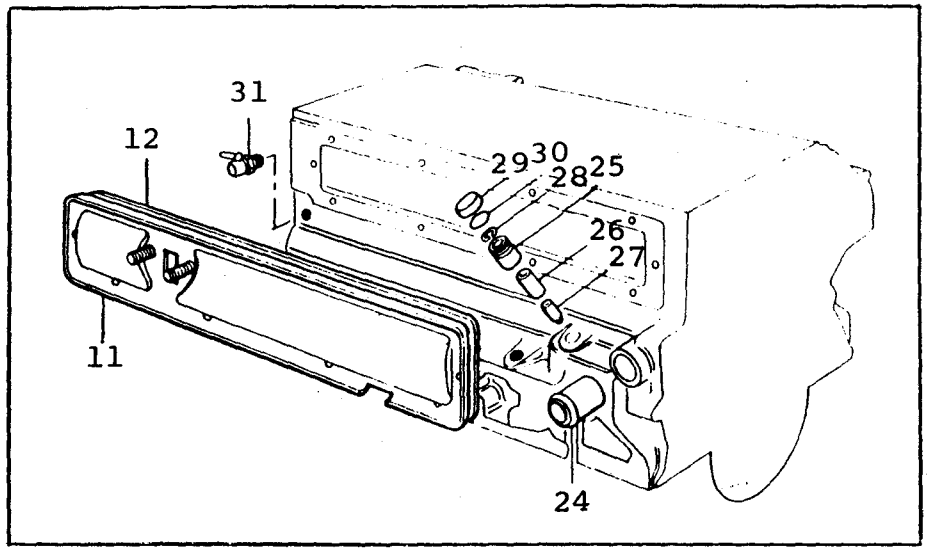


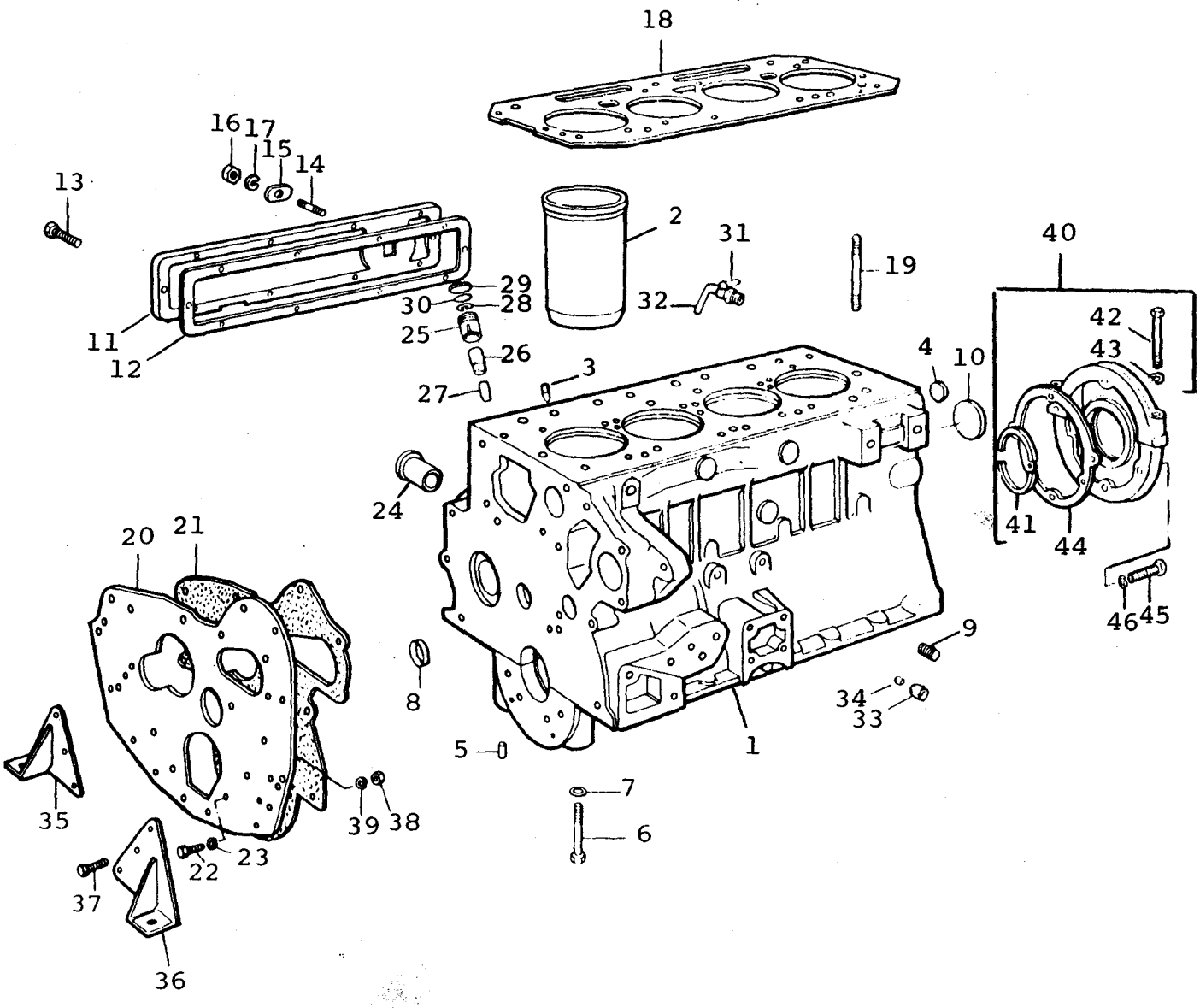


- CYLINDER BLOCK -

NOTE	REF. NO.	PART NO.	DESCRIPTION	QTY.
	1	93651	CYLINDER BLOCK (ASSEMBLY)	1
			Includes:	
	2	31358117	LINER, cylinder block	4
	-	0650710	PLUG, block - front & rear face ..	2
	3	0650710	PLUG, block - water jacket	3
	4	0650692	PLUG, block - water jacket	1
	5	0350014	DOWEL, main brg. cap to block ...	6
	6	0745163	SETSCREW, main brg. cap to block .	6
	7	33115408	WASHER, shim - main brg. cap setscrew	6
	-	2431102	PLUG, block - alt. draincock position	1
	-	0726403	PLUG, block - alt. dipstick position.	1
	8	0650717	PLUG, block - pressure rail - front and rear	2
	9	0650594	PLUG, block - pressure switch boss ..	2
	-	32114481	PLUG, block - L.H.S. bearer facing ..	2
	10	0650777	PLUG, block - camshaft chamber - rear end	1
	11	37554591	COVER, tappet inspection	1
	12	36846412	GASKET, cover to cylinder block	1
	13	0746254	SETSCREW, cover to block - front and rear holes	2
	14	0826249	STUD, cyl. block to t/insp. cover ..	8
	15	36151505	WASHER, elongated	10
	16	0576002	NUT, tappet insp. cover retaining ..	8
	17	0920053	WASHER, spring	10
	18	36812134	GASKET, cylinder head	1
	19	32524148	STUD, cyl. block to cylinder head ..	18
	20	36256733	PLATE, timing gear cover	1
	21	0490740	GASKET, cyl. block to cover plate ..	1
	22	0746254	SETSCREW, cover plate to cyl. block .	4
	23	0920053	WASHER, spring	4
	24	0201297	CONNECTION, water inlet - cyl. block.	1
	25	0770101	SLEEVE, tachometer drive	1
	26	0050358	BEARING, tachometer drive	1
	27	33473107	SHAFT, tachometer drive	1
	28	0170052	SNAP RING, shaft retaining	1
	29	32417114	CAP NUT, tachometer drive blanking ..	1
	30	32811104	WASHER, plain	1
	31	32351	DRAIN COCK, water - cyl. block	1
	32	33242409	PIPE, cyl. block drain cock	1
	33	0576113	NUT, drain cock pipe	1
	34	0566004	FERRULE, drain cock pipe	1

- CYLINDER BLOCK -

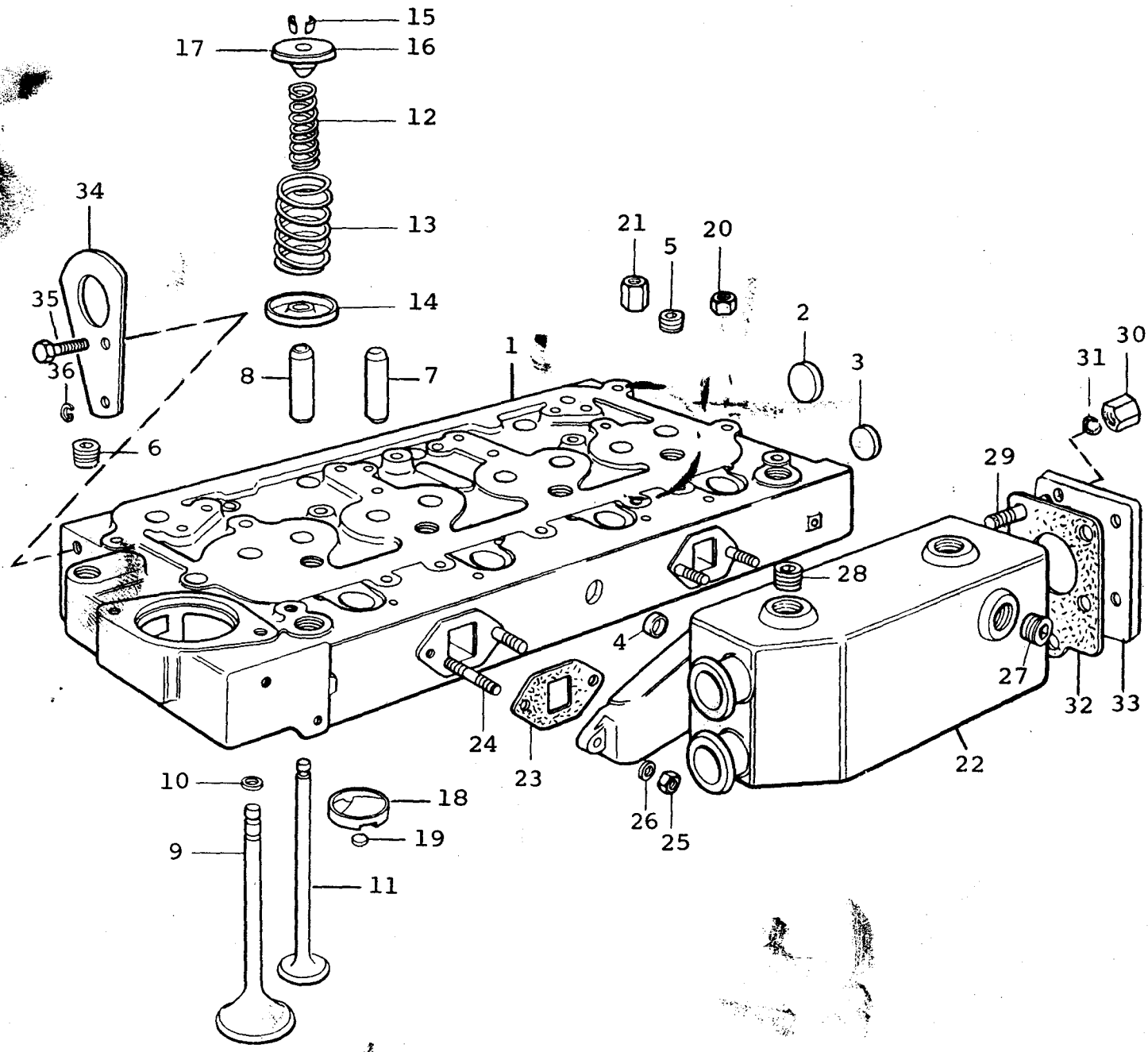




NOTE	REF. NO.	PART NO.	DESCRIPTION	QTY.
	35	38124242	BRACKET, engine front mounting - (port)	1
	36	38124243	BRACKET, engine front mounting - (starboard)	1
	37	0746254	BOLT, front mounting bracket to front mounting plate	6
	38	0576002	NUT, front mounting bracket retaining	6
	39	0920053	WASHER, spring	6
(A)	40	90990	REAR OIL SEAL HOUSING (ASSEMBLY) ... Includes:	1
	41	36883107	SEAL, cyl. block to housing	2
	42	0096238	SETSCREW, oil seal cover - top to bottom	2
	43	0920053	WASHER, spring	2
	44	36826114	GASKET, cyl. block to rear oil seal cover	1
	45	0746259	SETSCREW, oil seal cover to cylinder block bearing cap	6
	46	0920053	WASHER, spring	6

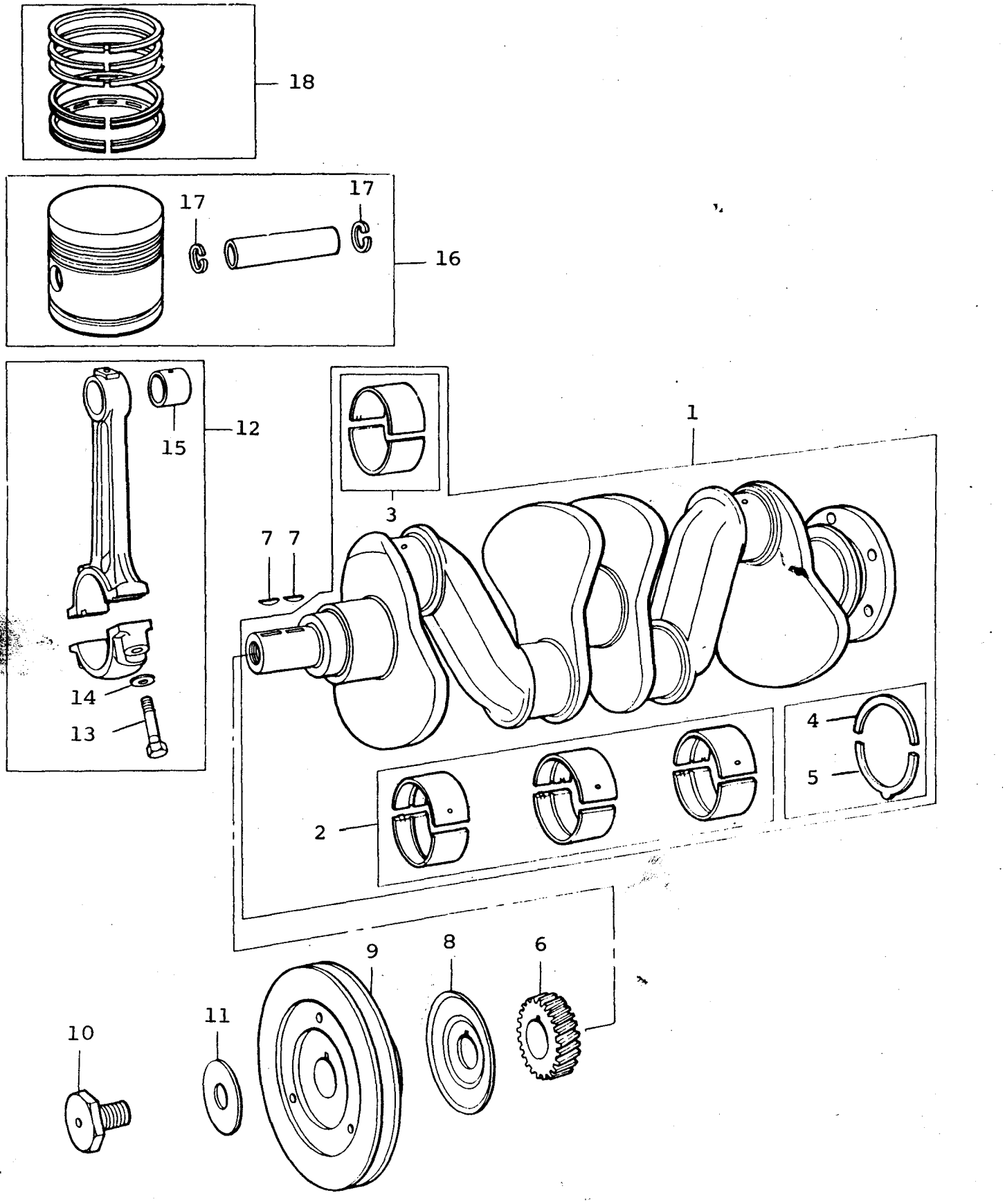
Note:
(A) Replaces Assembly #55281.

- CYLINDER HEAD -



- CYLINDER HEAD -

NOTE	REF. NO.	PART NO.	DESCRIPTION	QTY.
	1	89188	CYLINDER HEAD (ASSEMBLY)	1
			Includes:	
	2	0650710	PLUG, cyl. head - rear face	1
	3	0650713	PLUG, cyl. head - rear face	1
	4	0650692	PLUG, cyl. head - fuel pump side .	1
	5	2431103	PLUG, cylinder head	4
	6	0650540	PLUG, cylinder head	2
	-	0650203	PLUG, top face temp. sender	1
	-	2411157	WASHER, cylinder head plug	1
	7	33261741	GUIDE, inlet valve	4
	8	33261723	GUIDE, exhaust valve	4
	9	0910064	VALVE, inlet	4
	10	0640116	SEAL, inlet valve	4
	11	0910061	VALVE, exhaust	4
	12	31744129	SPRING, inner - exh. & inlet valve	8
	13	31745118	SPRING, outer - exh. & inlet valve	8
	14	0921117	SEAT, valve spring	8
	15	0230001	COTTER, valve spring retaining ..	8 Pr.
	16	0150143	CAP, valve spring inlet valve ...	4
	17	0150129	CAP, valve spring exhaust valve ..	4
	18	37443591	INSERT, combustion chamber	4
	19	0921249	WASHER, combustion chamber	4
	20	33221317	NUT, cylinder head retaining	13
	21	33531117	NUT, cylinder head retaining	5
	-	33115411	WASHER, retaining nut	18
	22	37785211	MANIFOLD, exhaust	1
	23	0490656	GASKET, manifold to cylinder head ..	2
	24	0826260	STUD, manifold to cylinder head	4
	25	0576064	NUT, exhaust manifold retaining	4
	26	0920003	WASHER, plain	4
	27	2431105	PLUG, exhaust manifold	1
	28	0650540	PLUG, exhaust manifold	2
	29	0826477	STUD, exh. manifold to outlet flange.	5
	30	0576065	NUT, outlet flange retaining	5
	31	0920004	WASHER, plain	5
	32	36855108	GASKET, exh. manifold to flange	1
	33	37586071	FLANGE, exhaust outlet	1
	34	36255538	PLATE, engine lifting - front	1
	35	0096431	SETSCREW, front lifting plate to cylinder head	2
	36	0920054	WASHER, spring	2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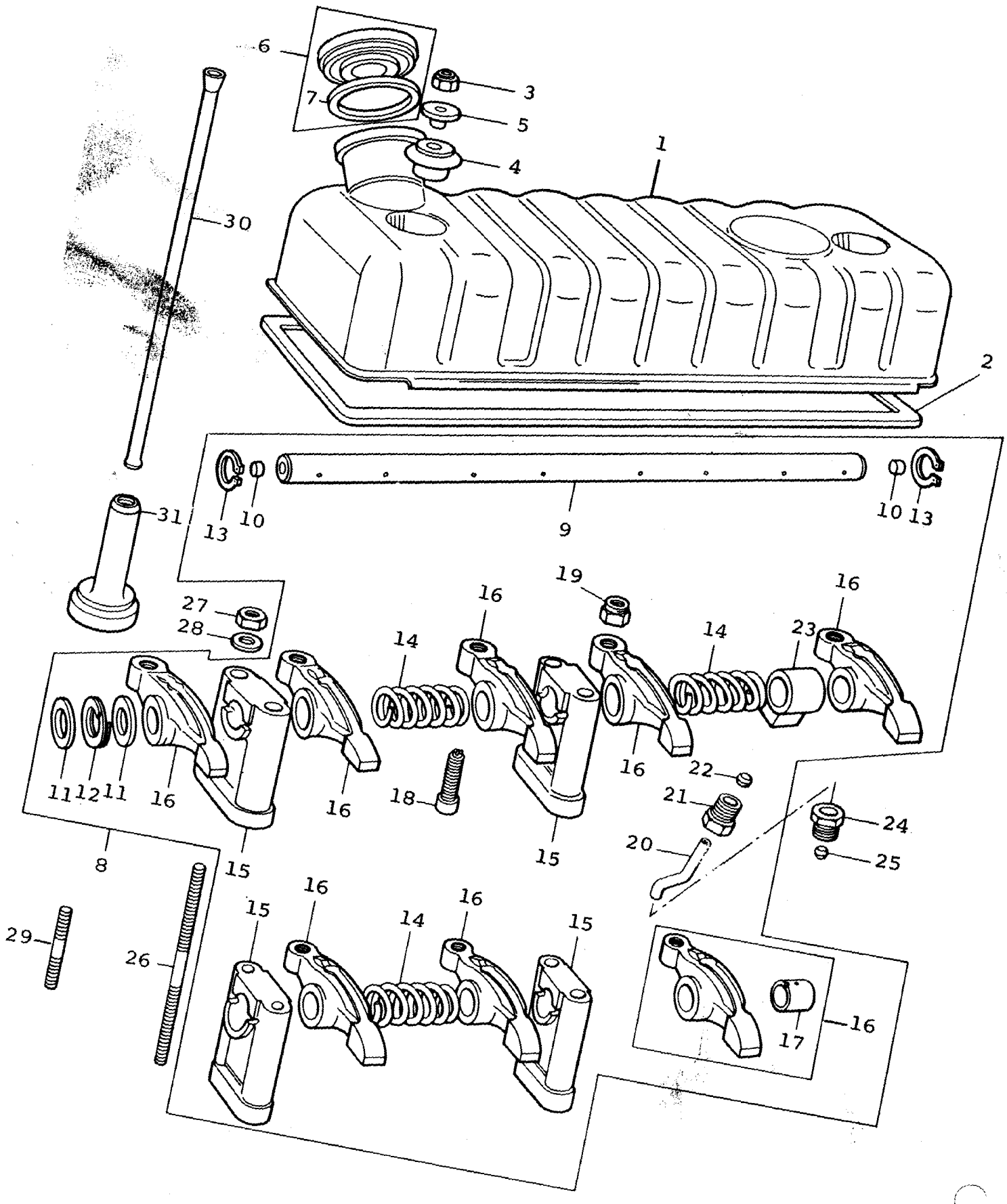
- CRANKSHAFT -

NOTE	REF. NO.	PART NO.	DESCRIPTION	QTY.
	1	84418	CRANKSHAFT KIT (ASSEMBLY)	1
			Includes:	
	2	84992	BEARING SET, main (std.)	1
	3	85037	BEARING SET, conn. rod (std.) ...	1
	4	0921120	THRUSTWASHER, top (std.)	2
	5	0921118	THRUSTWASHER, bottom (std.)	1
	2	84992-A	BEARING SET, crankshaft main (-.010")	X
	2	84992-B	BEARING SET, crankshaft main (-.020")	X
	2	84992-C	BEARING SET, crankshaft main (-.030")	X
	3	85037-A	BEARING SET, connecting rod (-.010").	X
	3	85037-B	BEARING SET, connecting rod (-.020").	X
	3	85037-C	BEARING SET, connecting rod (-.030").	X
	4	0921120-A	THRUSTWASHER, top (+.007")	X
	5	0921118-A	THRUSTWASHER, bottom (+.007")	X
	6	31171245	GEAR, crankshaft	1
	7	0500006	KEY, crankshaft gear and pulley	2
	8	33474003	FLANGE, crankshaft oil thrower	1
	9	31147637	PULLEY, crankshaft	1
	10	32162316	SCREW, pulley retaining	1
	11	33124119	WASHER, pulley retaining screw	1
	12	83417	CONNECTING ROD (ASSEMBLY)	1
			Includes:	
	13	0095314	SETSCREW, conn. rod cap	2
	14	33115121	WASHER, setscrew	2
	15	31134145	BUSHING, conn. rod - small end ..	1
	16	85017	PISTON, STD. (ASSEMBLY)	1
			Includes:	
	17	2721124	SNAP RING, pin retaining	2
	18	84953	RING PACK, STD.	1

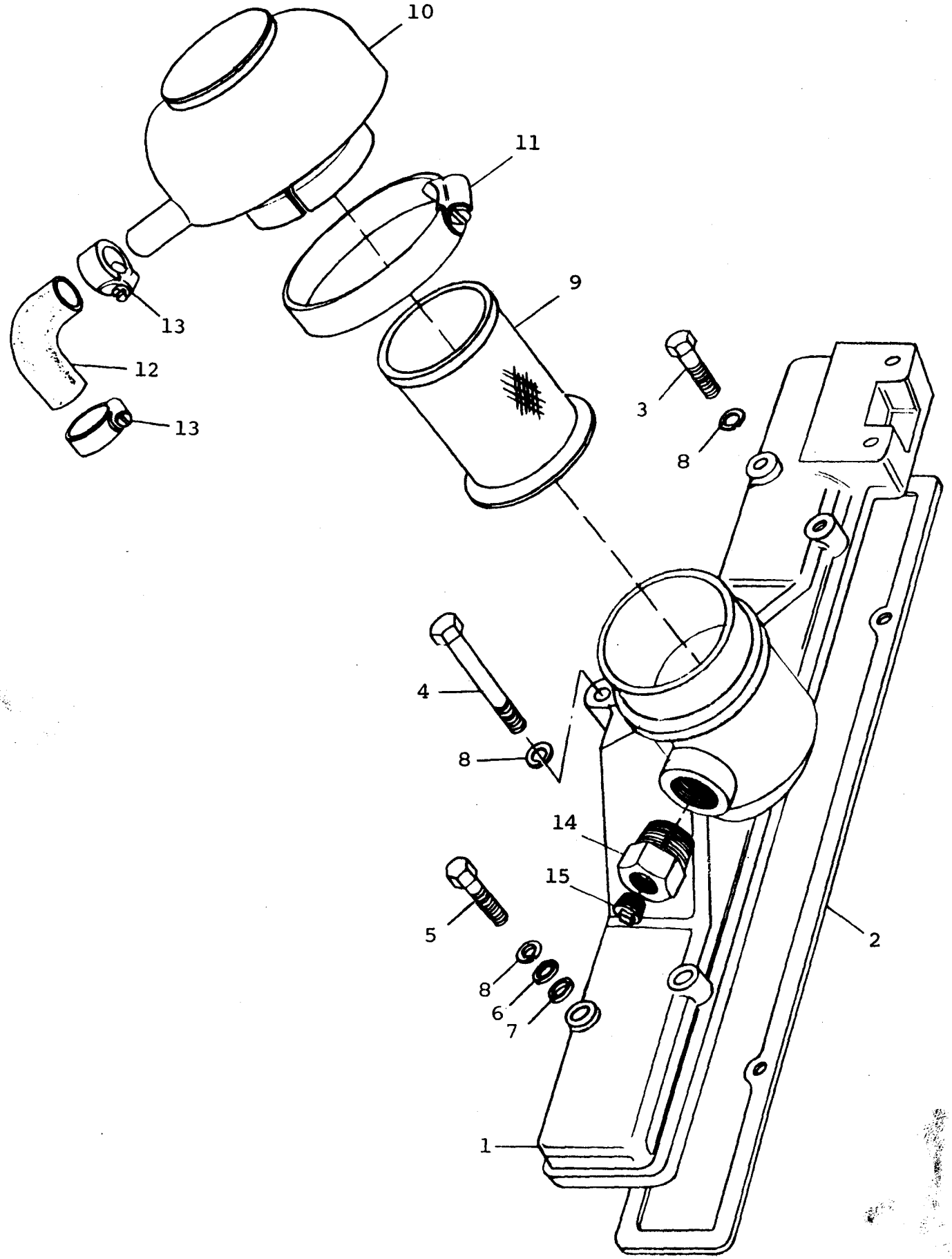
- CYLINDER HEAD COVER -



- CYLINDER HEAD COVER -

NOTE	REF. NO.	PART NO.	DESCRIPTION	QTY.
	1	37188171	COVER, cylinder head	1
	2	0490724	GASKET, cylinder head cover	1
	3	0576102	NUT, cover retaining	2
	4	0730116	SEAL, cylinder head cover	2
	5	0921116	WASHER, cover seal	2
	6	2487845	CAP, lube oil filler	1
			Includes:	
	7	24870001	GASKET, filler cap	1
	8	58529	ROCKER SHAFT (ASSEMBLY)	1
			Includes:	
	9	55286	SHAFT, rocker	1
			Includes:	
	10	0650507	PLUG, rocker shaft end	2
	11	0920485	WASHER, rocker shaft end	4
	12	0921122	WASHER, spring - r/shaft end	2
	13	0170033	SNAP RING, shaft retaining	2
	14	0780261	SPRING, rocker shaft	3
	15	0102202	BRACKET, rocker shaft	4
	16	54926	LEVER, rocker shaft	8
			Includes:	
	17	0050132	BUSHING, rocker lever	1
	18	0720790	SCREW, tappet adjusting	8
	19	0576151	LOCKNUT, t/adjusting screw	8
	20	34414122	PIPE, rocker shaft oil feed	1
	21	0571351	NUT, oil feed pipe	1
	22	0566002	FERRULE, oil feed pipe	1
	23	0201318	CONNECTION, oil feed pipe	1
	24	0571351	NUT, rocker shaft oil feed pipe	1
	25	0566002	FERRULE, oil feed pipe	1
	26	0825219	STUD, rocker shaft bracket to cylinder head	2
	27	0576302	NUT, bracket retaining	2
	28	0920003	WASHER, plain	2
	29	0826250	STUD, rocker shaft bracket to cylinder head	6
	27	0576302	NUT, bracket retaining	6
	28	0920003	WASHER, plain	6
	30	31434306	PUSH ROD	8
	31	31434152	TAPPET	8

- AIR INDUCTION SYSTEM -

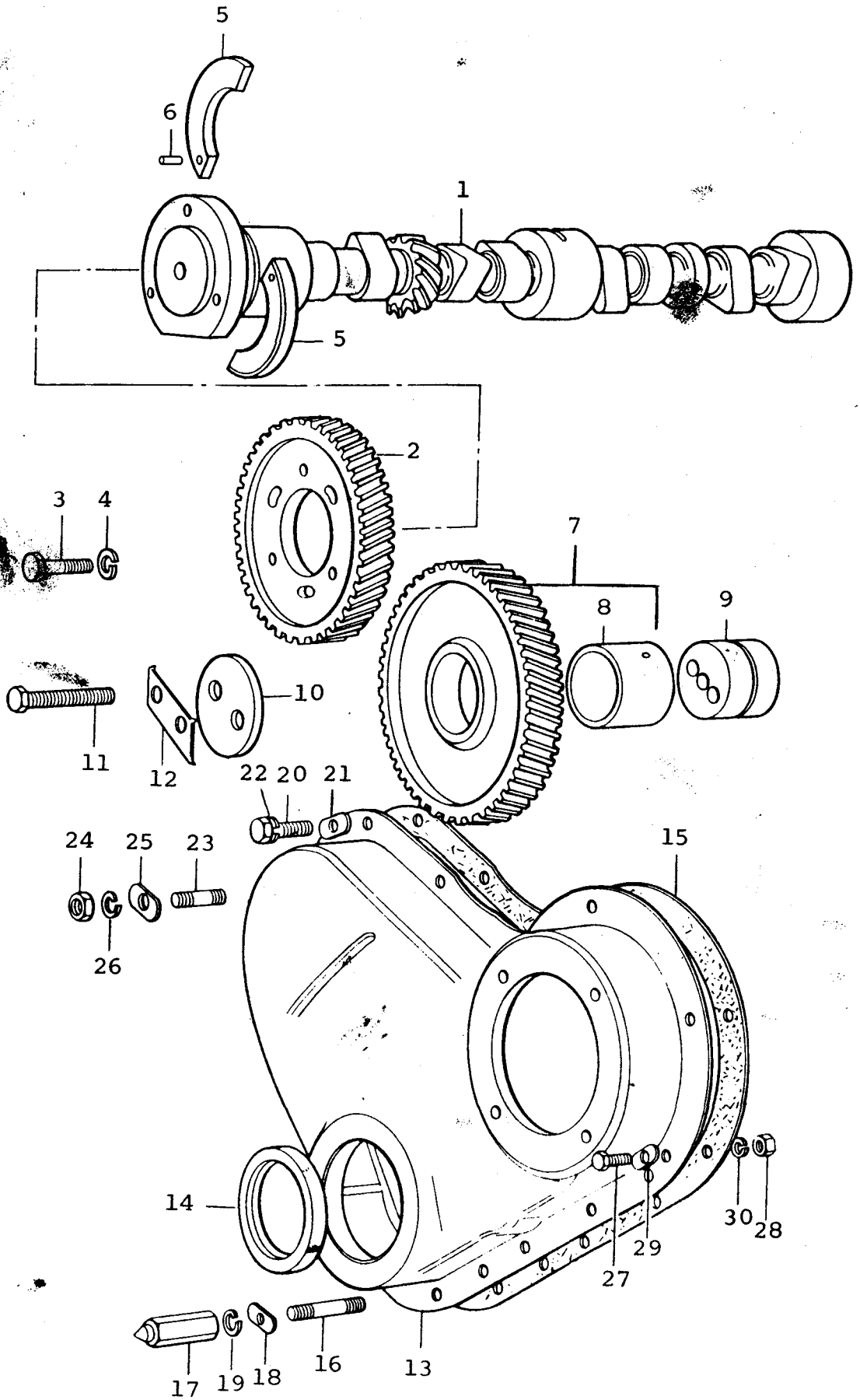


- AIR INDUCTION SYSTEM -

NOTE	REF. NO.	PART NO.	DESCRIPTION	QTY.
(A)	1	37786662	MANIFOLD, induction	1
(B)	1	37786664	MANIFOLD, induction	1
(A)	2	0490652	GASKET, induction manifold to head ..	1
(B)	2	36846415	GASKET, induction manifold to head ..	1
(B)	3	0096231	SETSCREW, manifold to cyl. head	2
	3	0096233	SETSCREW, manifold to cyl. head	2
	4	0096240	SETSCREW, manifold to cyl. head	1
	5	0096236	SETSCREW, manifold to cyl. head	2
	6	0920497	WASHER, plain - fitted between alt. brkt. and ind. manifold	2
	7	0920484	WASHER, plain	2
	8	0920053	WASHER, spring	7
	9	0997018	AIR FILTER	1
	10	0240568	COVER, air filter	1
	11	0180070	CLIP, cover to induction manifold ..	1
	12	34821428	CONNECTION, air filter	1
	13	0180063	CLIP, air filter connection	2
	14	33536445	ADAPTOR, ether starting	1
	15	0650594	PLUG, ether starting adaptor	1

Notes:
(A) Up to Engine No. 108U44413.
(B) From Engine No. 108U44413 onwards.

- TIMING GEAR -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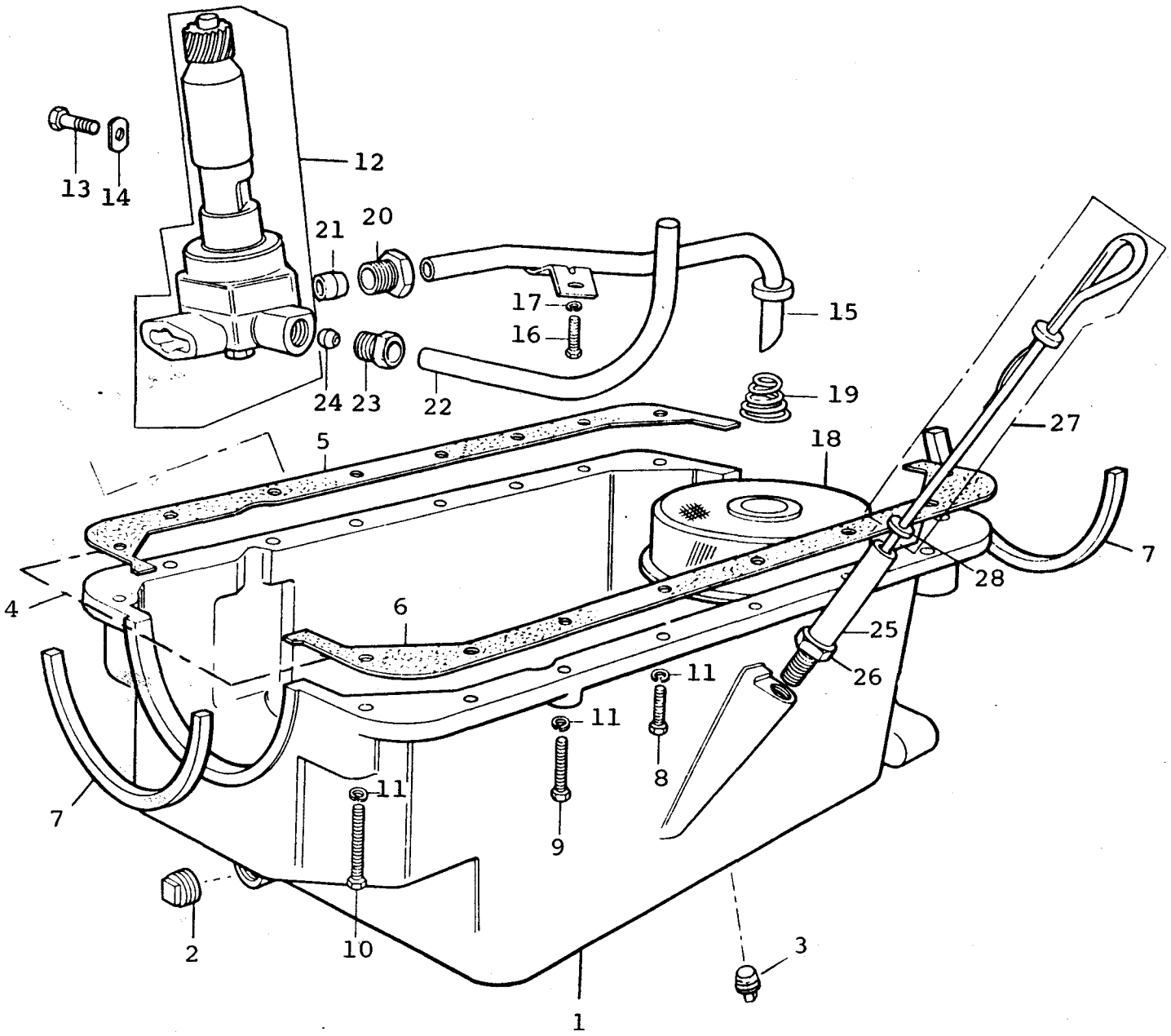
- TIMING GEAR -

NOTE	REF. NO.	PART NO.	DESCRIPTION	QTY.
	1	31415303	CAMSHAFT	1
	2	31171541	GEAR, camshaft	1
	3	0746255	SETSCREW, gear to camshaft	3
	4	0920053	WASHER, spring	3
	5	36178509	PLATE, camshaft thrust	2
	6	0610844	PIN, thrust plate locating	1
	7	41115036	GEAR, idler	1
			Includes:	
	8	31134137	BUSHING, idler gear	1
	9	33426516	HUB, idler gear	1
	10	0941044	PLATE, idler gear retaining	1
	11	0746461	SETSCREW, idler gear hub to block ..	2
	12	0921159	TABWASHER, idler gear retaining	1
	13	37161105	HOUSING, timing gear	1
	14	0730098	SEAL, oil - housing	1
	15	36813145	GASKET, housing to front mtg. plate .	1
	16	0826248	STUD, housing & mtg. plate to front bearing cap	1
	17	32726511	PIN, engine timing	1
	18	36151505	WASHER, elongated - timing pin	1
	19	0920053	WASHER, spring	1
	20	0746255	SETSCREW, housing & mtg. plate to block & front brg. cap ...	8
	21	36151505	WASHER, elongated	6
	-	0920003	WASHER, plain	1
	22	0920053	WASHER, spring	8
	23	0826201	STUD, housing & mtg. plate to block .	1
	24	0576002	NUT, housing retaining	1
	25	36151505	WASHER, elongated	1
	26	0920053	WASHER, spring	1
	27	0746052	BOLT, housing to mounting plate	4
	28	0576001	NUT, housing retaining	4
	29	36151506	WASHER, elongated	3
	30	0920052	WASHER, spring	4

- LUBE OIL SYSTEM -

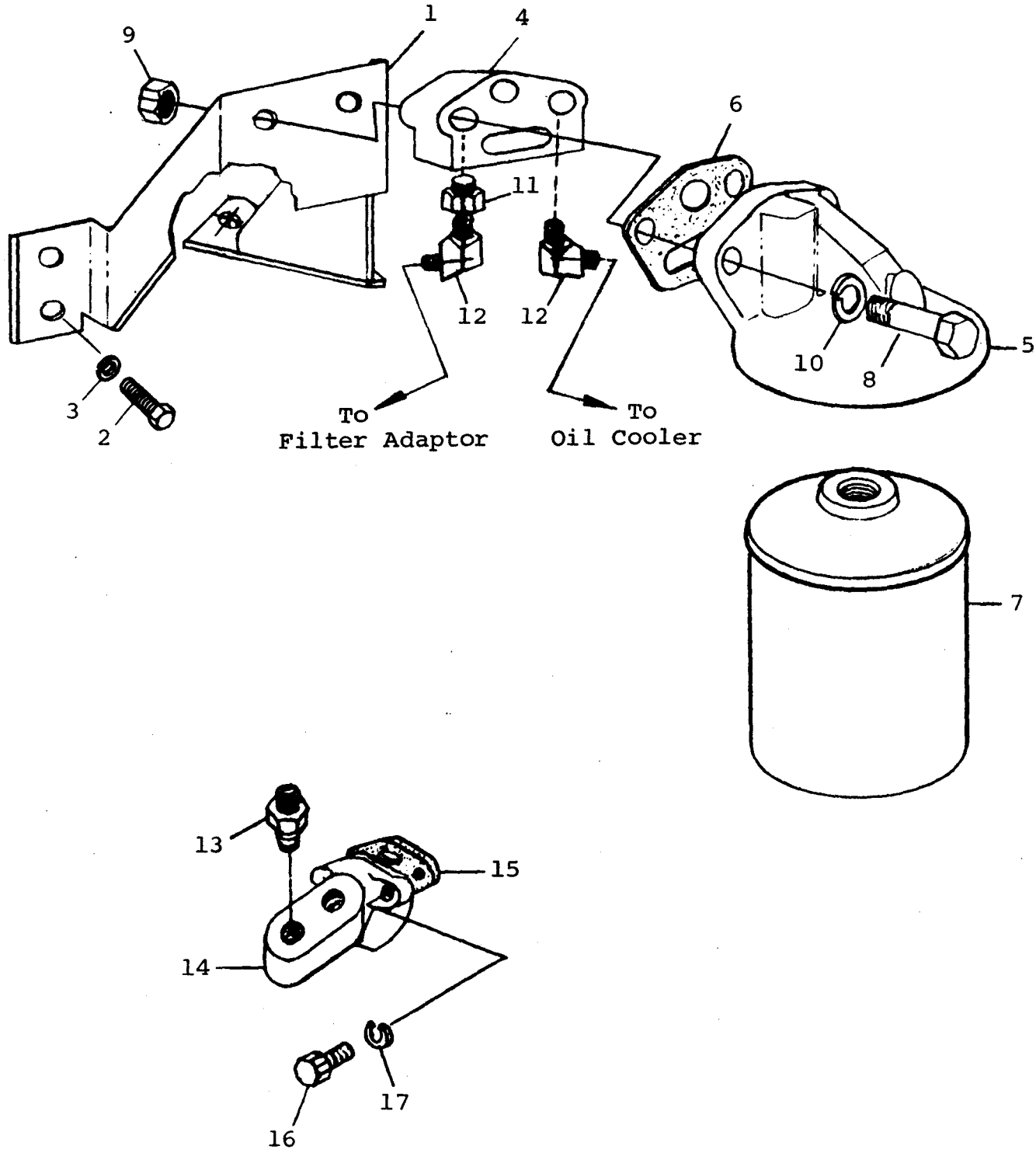


- LUBE OIL SYSTEM -

NOTE	REF. NO.	PART NO.	DESCRIPTION	QTY.
	1	37173591	PAN, lube oil	1
	2	0650593	PLUG, oil pan drain	1
	3	0650722	PLUG, lube oil pan	1
	4	0999659	GASKET, lube oil pan (Assembly)	1
			Includes:	
(A)	5	36815319	GASKET, lube oil pan - R.H. side .	1
(A)	6	36815321	GASKET, lube oil pan - L.H. side .	1
	7	0490775	GASKET, oil pan - front & rear	2
	8	0746255	SETSCREW, oil pan to cylinder block .	11
	9	0096236	SETSCREW, oil pan to cylinder block .	4
	10	0746260	SETSCREW, oil pan to cylinder block .	1
	11	0920053	WASHER, spring	16
	12	41314089	LUBE OIL PUMP (ASSEMBLY)	1
			Includes:	
	-	32712715	PLUNGER, lube oil pump	1
	-	31742128	SPRING, oil pump plunger	1
	-	0150144	CAP, plunger	1
	-	0610011	SPLITPIN, plunger retaining	1
	13	0746201	SETSCREW, pump body locating	1
	14	36151507	TABWASHER, setscrew locating	1
	15	35737198	PIPE, lube oil suction (Assembly) ..	1
	16	0746253	SETSCREW, pipe clip to bearing cap ..	1
	17	0920053	WASHER, spring	1
	18	37725448	STRAINER, lube oil pan	1
	19	0780310	SPRING, strainer positioning	1
	20	33532121	NUT, lube oil suction pipe	1
	21	0560244	FERRULE, suction pipe	1
	22	0623293	PIPE, lube oil pump to cyl. block ...	1
	23	0571352	NUT, lube oil delivery pipe	2
	24	0566007	FERRULE, delivery pipe	2
	25	35772415	TUBE, lube oil dipstick (Assembly) ..	1
			Includes:	
	26	33533103	NUT, dipstick tube	1
	-	0180028	CLIP, dipstick tube	1
	27	31788387	DIPSTICK, lube oil (Assembly)	1
			Includes:	
	28	33812108	WASHER, sealing	1

Note:
(A) Order Assembly.

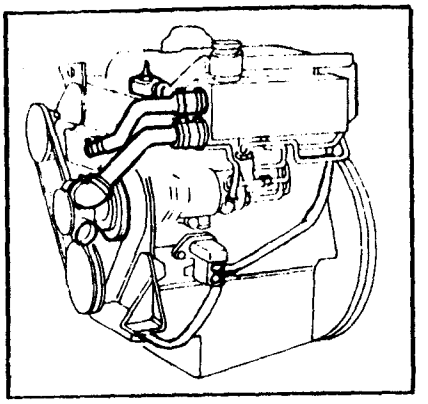
- LUBE OIL FILTER -

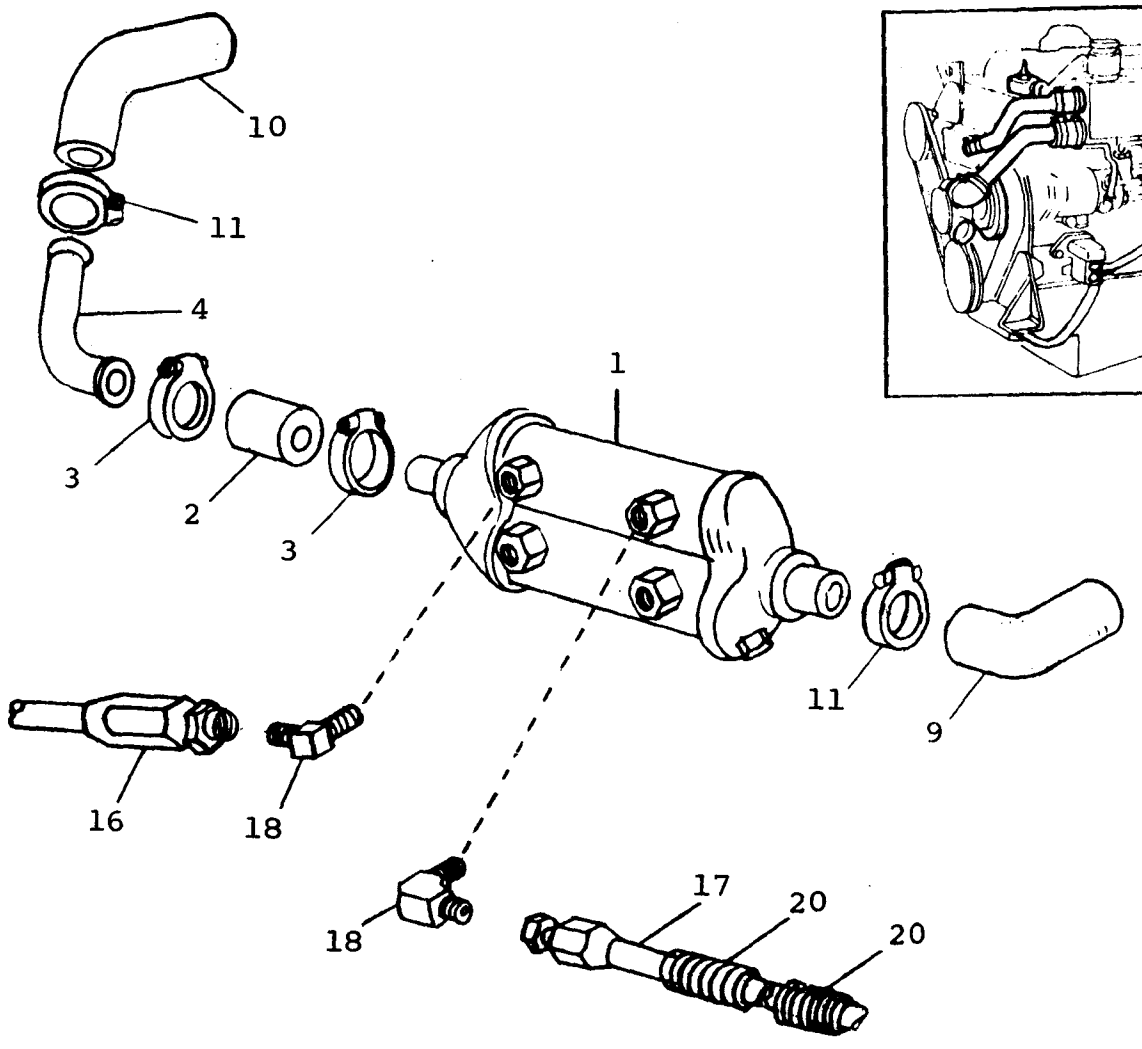


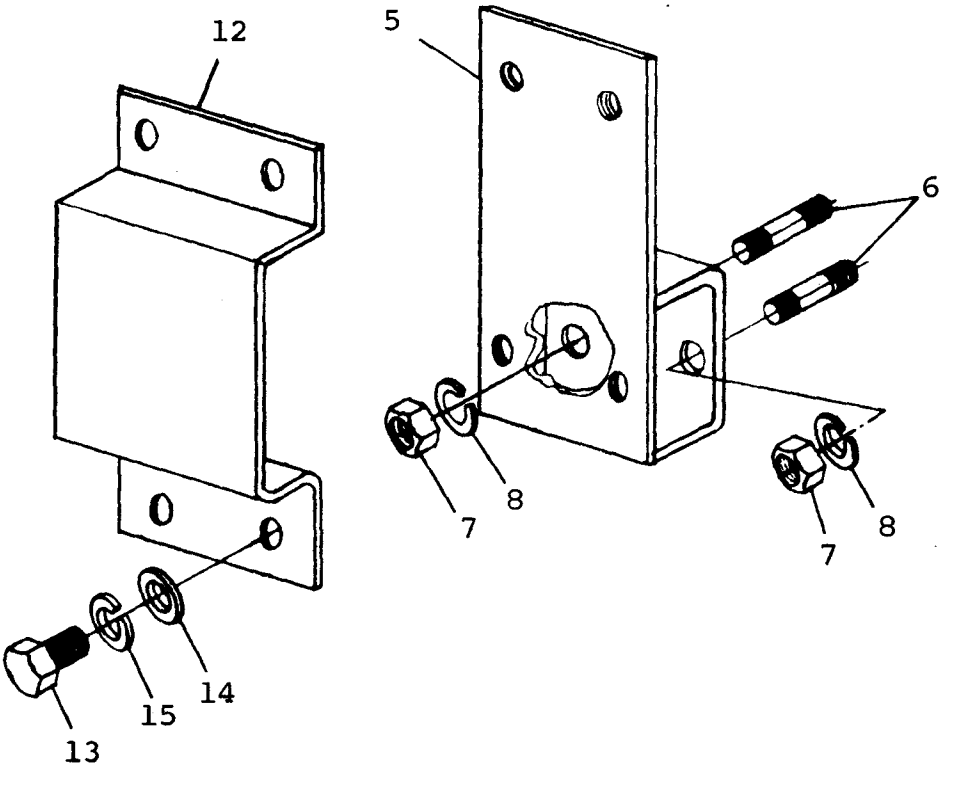
- LUBE OIL FILTER -

NOTE	REF. NO.	PART NO.	DESCRIPTION	QTY.
	1	NA003485	BRACKET, lube oil filter	1
	2	0746452	SETSCREW, bracket to cylinder head ..	4
	3	0920054	WASHER, spring	4
	4	37586241	ADAPTOR, lube oil filter	1
	5	37764181	HEAD, lube oil filter	1
	6	36862517	GASKET, lube oil filter head to adaptor	1
	7	2654403	FILTER, lube oil (element)	1
	8	2184463	SETSCREW, filter & adaptor to bracket	2
	9	0576054	NUT, filter & adaptor retaining	2
	10	0920055	WASHER, spring	2
	-	0920006	WASHER, plain	2
	11	NA001082	REDUCER, lube oil filter - inlet ...	1
	12	NA001083	CONNECTION, 45° lube oil adaptor - in and out	2
	13	NA000040	CONNECTION, straight - cyl. block lube oil adaptor	2
	14	36271408	ADAPTOR, cyl. block lube oil	1
	-	0650594	PLUG, lube oil adaptor	1
	-	32114461	PLUG, lube oil adaptor	2
	15	36862517	GASKET, lube oil adaptor to block ..	1
	16	0096634	SETSCREW, adaptor to cylinder block .	2
	17	0920055	WASHER, spring	2

- OIL COOLER -



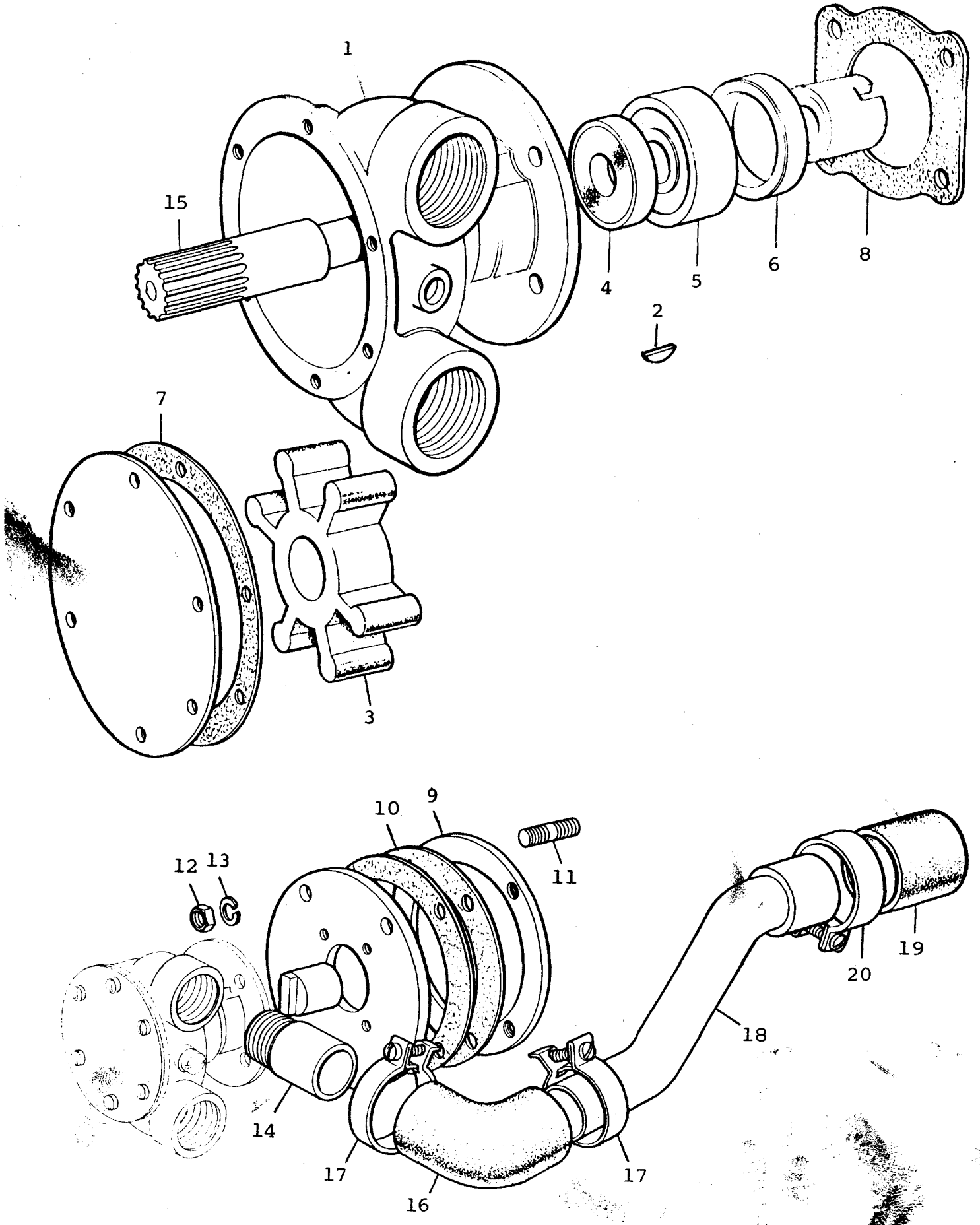




- OIL COOLER -

NOTE	REF. NO.	PART NO.	DESCRIPTION	QTY.
	1	NA000282	OIL COOLER (ASSEMBLY)	1
	2	0200008	HOSE, oil cooler to h/exchanger pipe.	1
	3	0180066	CLIP, hose clamping	2
	4	NA001088	PIPE, oil cooler to heat exchanger ..	1
	5	NA001090	BRACKET, oil cooler mounting	1
	6	0826614	STUD, cyl. block to oil cooler brkt..	2
	7	0576054	NUT, oil cooler bracket retaining ..	2
	8	0920055	WASHER, spring	2
	9	NA001087	ELBOW, cyl. block water inlet to oil cooler	1
	10	34821112	ELBOW, heat exchanger to oil cooler .	1
	11	0180066	CLIP, hose clamping	4
	12	NA001091	STRAP, oil cooler retaining	1
	13	0748411	SETSCREW, strap to mtg. bracket	4
	14	0920003	WASHER, plain	4
	15	0920053	WASHER, spring	4
	16	NA001085	HOSE, adaptor to oil cooler - flex ..	1
	17	NA001086	HOSE, flex - filter adaptor to oil cooler	1
	18	NA000043	CONNECTION, 90° oil cooler in & out .	2
	16	NA001085	HOSE, lube oil filter adaptor to cyl. block adaptor	1
	20	NA001489	GUARD, flex hose	5

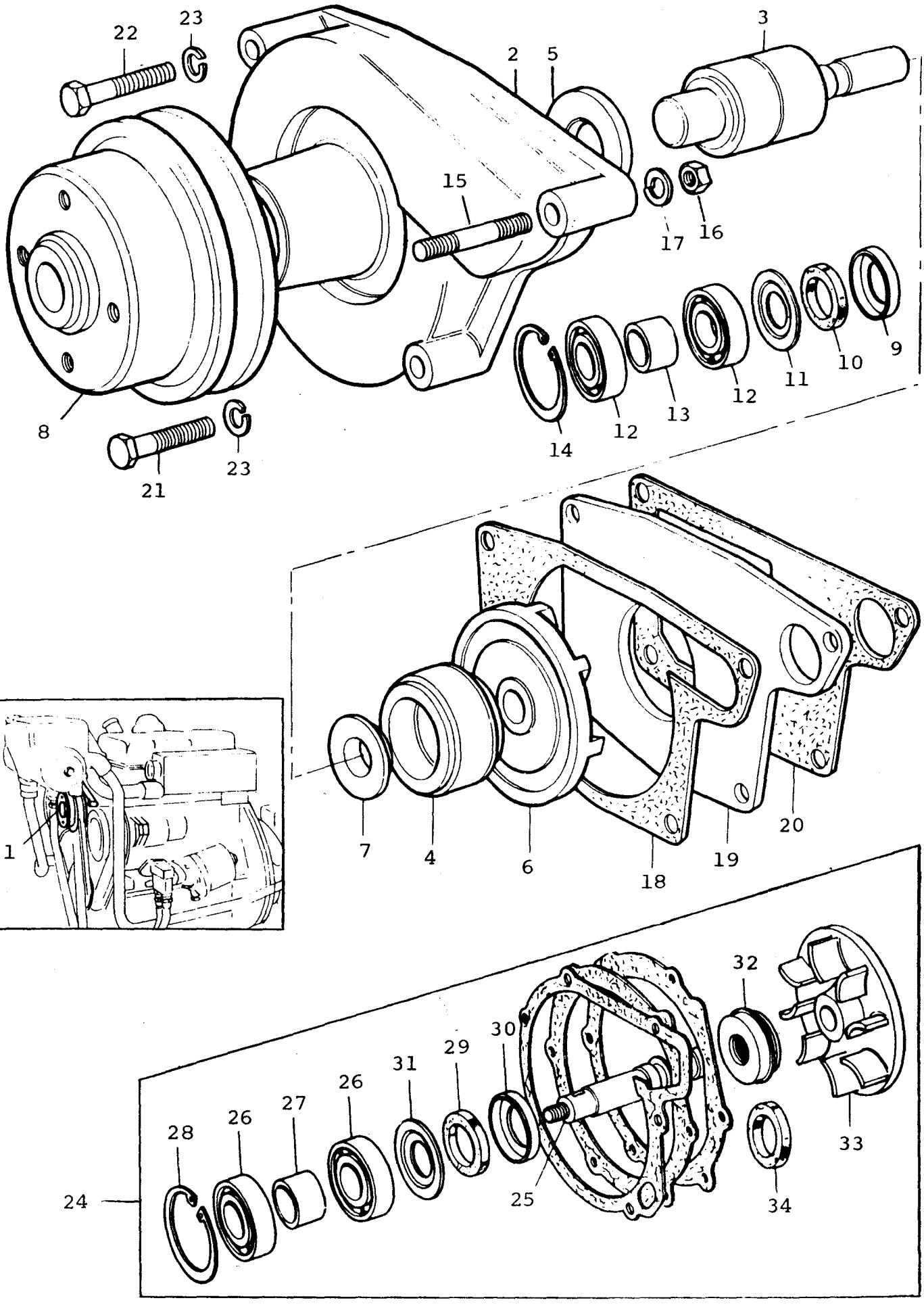
- SEA WATER PUMP -



- SEA WATER PUMP -

NOTE	REF. NO.	PART NO.	DESCRIPTION	QTY.
	1	NA003335	SEA WATER PUMP (ASSEMBLY)	1
			Includes:	
	2	NA900009	KEY, sea water pump	1
	3	NA900010	IMPELLER, sea water pump	1
	4	NA900011	OIL SEAL, sea water pump	1
	5	NA900015	BALL BEARING, sea water pump	1
	6	NA900016	LIP SEAL, sea water pump	1
	7	NA900017	GASKET, sea water pump	1
	8	33825411	GASKET, sea water pump to timing gear housing	1
	9	33154118	RING, mounting plate retaining	1
	10	33825411	GASKET, water pump adaptor and retaining ring	2
	11	0826268	STUD, retaining plate to pump adaptor	4
	12	0576002	NUT, water pump adaptor retaining ..	4
	13	0920053	WASHER, spring	4
	14	33286109	CONNECTION, sea water pump inlet and outlet	2
	15	32461313	SHAFT, sea water pump drive - fuel pump drive gear	1
	16	NA001370	HOSE, elbow - sea water pump to heat exchanger pipe	1
	17	0180065	CLAMP, hose	2
	18	NA001073	PIPE, sea water pump to h/exchanger .	1
	19	0200092	HOSE, heat exchanger to sea water pump pipe	1
	20	0180065	CLAMP, hose	2

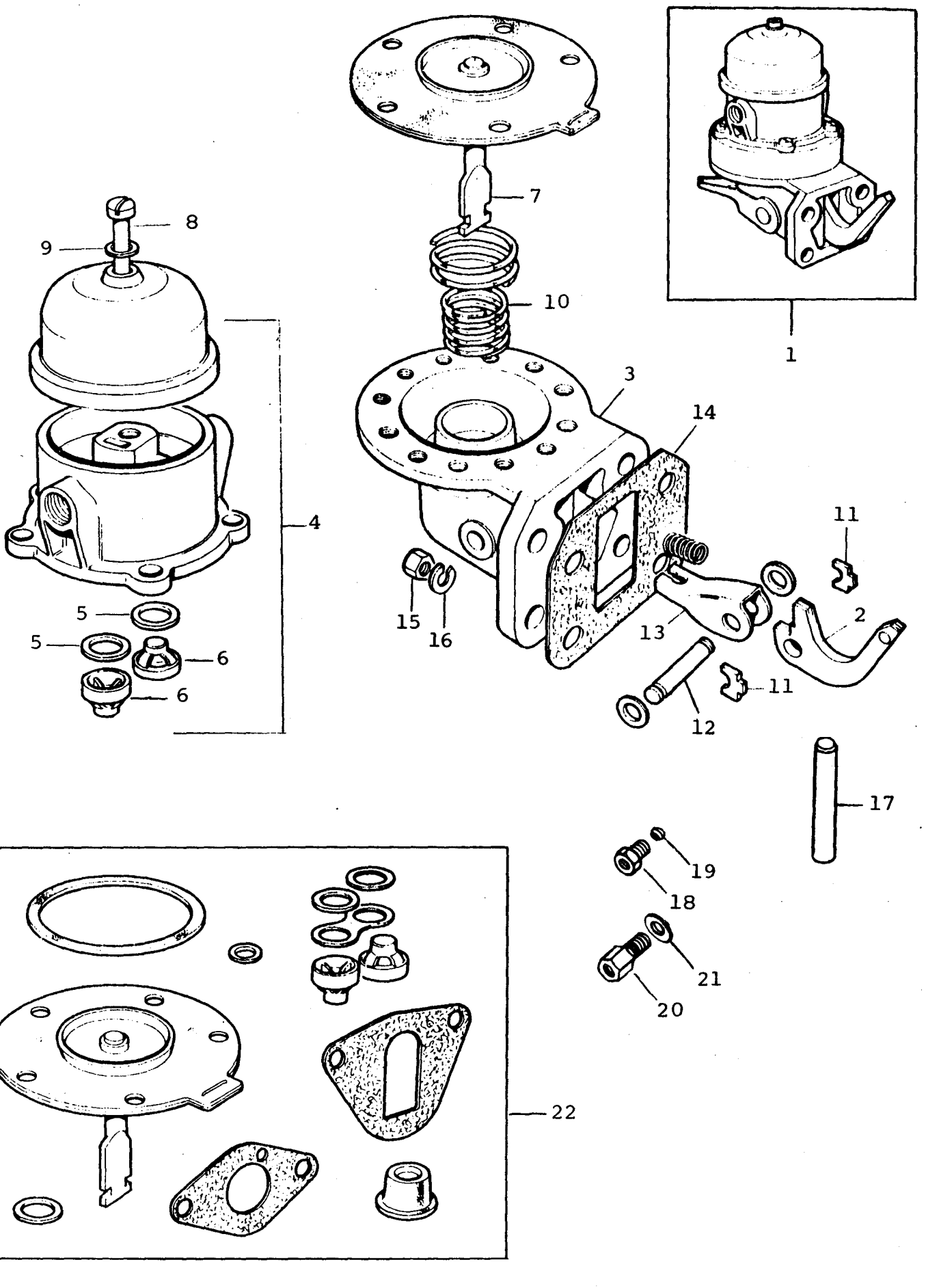
- FRESH WATER PUMP -



- FRESH WATER PUMP -

NOTE	REF. NO.	PART NO.	DESCRIPTION	QTY.
	1	41312449	WATER PUMP (ASSEMBLY)	1
			Includes:	
	2	37711751	BODY, water pump	1
	3	32717316	SHAFT, water pump	1
	4	2415217	SEAL, water pump	1
	5	2417204	SEAL, ceramic counterface	1
	6	37447271	IMPELLER, water pump	1
	7	33415127	THROWER, water pump	1
	8	31145821	PULLEY, water pump	1
	9	33157108	RETAINER, front seal	1
	10	33813313	SEAL, front	1
	11	33415117	FLANGE, seal retainer	1
	12	0040058	BEARING, front and rear	2
	13	33142115	DISTANCE-PIECE, bearing	1
	14	0170046	SNAP RING, bearing retaining	1
	14	0170051	SNAP RING, pulley retaining	1
	15	0826209	STUD, cyl. block to water pump body .	1
	16	0576002	NUT, water pump body retaining	1
	17	0920053	WASHER, spring	1
	18	36866713	GASKET, water pump backplate to cylinder block	1
	19	36243515	BACKPLATE, water pump	1
	20	36866421	GASKET, water pump to backplate	1
	21	0096236	SETSCREW, water pump and backplate to cylinder block	2
	22	0096234	SETSCREW, water pump and backplate to cylinder block	1
	23	0920053	WASHER, spring	3
	24	89029	REPAIR KIT, WATER PUMP (ASSEMBLY) ..	X
			Includes:	
	25	32717316	SHAFT, water pump	1
	26	0040058	BEARING, front and rear	2
	27	33142115	DISTANCE-PIECE, bearing	1
	28	0170046	SNAP RING, bearing retaining	1
	29	33813313	SEAL, front	1
	30	33157108	RETAINER, front seal	1
	31	33415117	FLANGE, seal retaining	1
	31	33415127	FLANGE, water pump	1
	32	2415217	SEAL, water pump	1
	33	37447271	IMPELLER, water pump	1
	34	2417204	SEAL, ceramic counterface	1

- FUEL OIL LIFT PUMP -

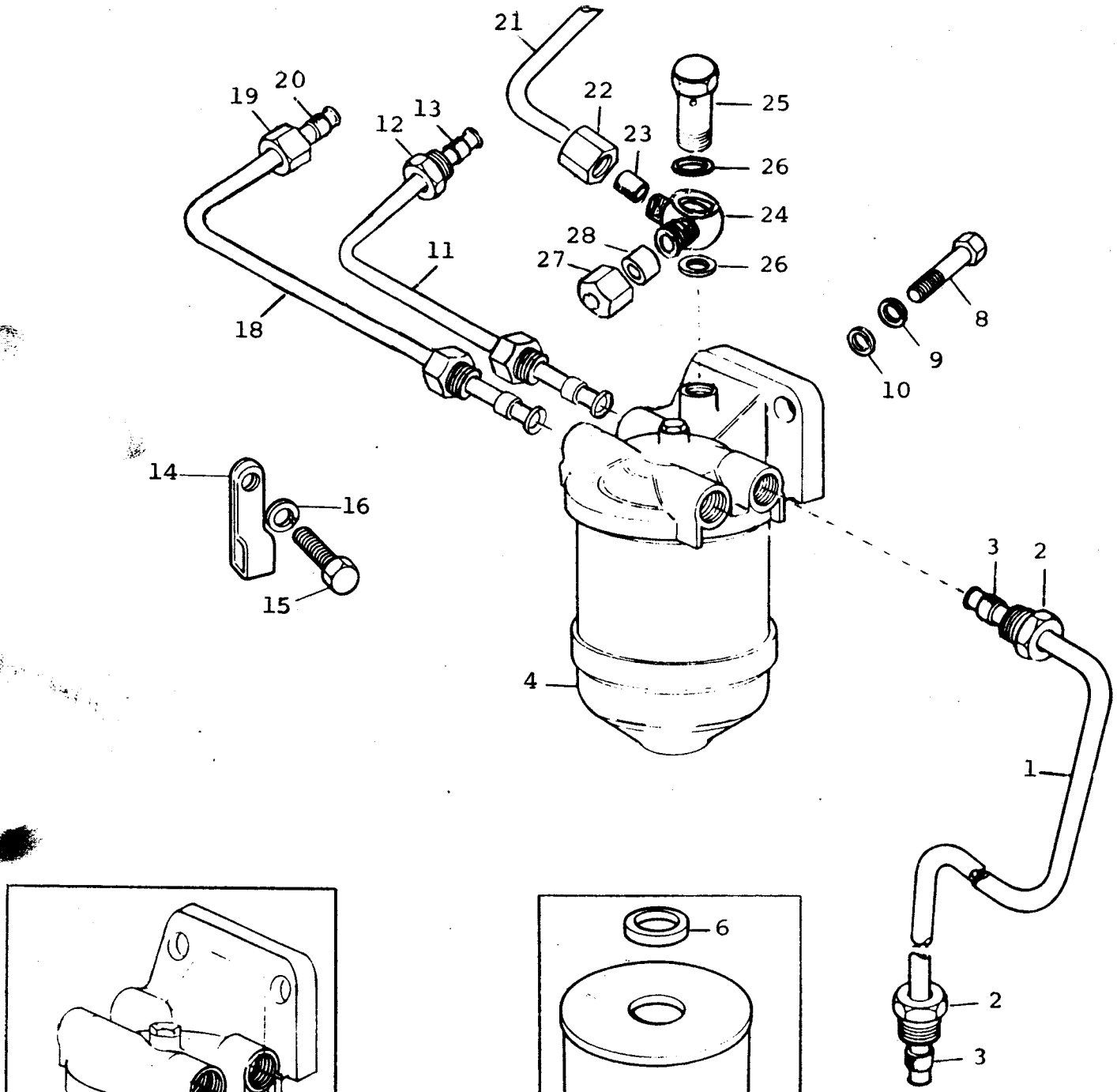


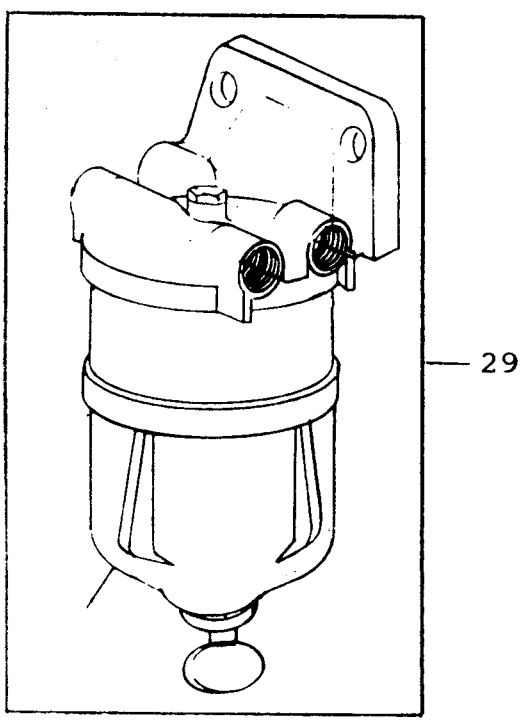
- FUEL OIL LIFT PUMP -

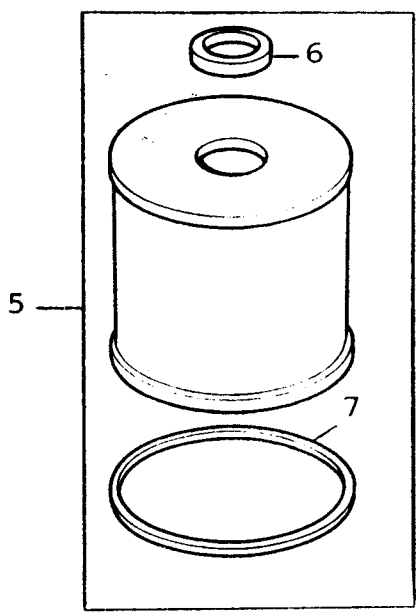
NOTE	REF. NO.	PART NO.	DESCRIPTION	QTY.
	1	2641702	FUEL OIL LIFT PUMP (ASSEMBLY)	1
			Includes:	
	2	26410095	ROCKER ARM (Assembly)	1
	3	26410121	BODY, lift pump	1
	4	26410058	COVER & VALVE (Assembly)	1
			Includes:	
	5	0490627	GASKET, valve seating	2
	6	32517	VALVE, inlet & outlet	2
	7	26410097	DIAPHRAGM & PULL ROD	1
	8	0720709	SCREW, cover	5
	9	0921018	WASHER, cover screw	5
	10	0780240	SPRING, diaphragm return	1
	11	0997128	RETAINER, rocker arm pin	2
	12	0610847	PIN, rocker arm	1
	13	0520420	LINK	1
(A)	14	36851113	GASKET, lift pump to tappet inspection cover	1
	15	33221115	NUT, lift pump retaining	4
	16	33114412	WASHER, retaining nut	4
	17	0700279	PUSH ROD, lift pump	1
	18	33533112	NUT, lift pump - inlet	1
	19	0566003	FERRULE, lift pump	1
	20	2658201	VALVE, non-return - lift pump	1
	21	2411141	WASHER, non-return valve	1
	22	26410096	REPAIR KIT, LIFT PUMP (ASSEMBLY) ...	X
			Includes:	
		0490627	GASKET	2
		26410097	DIAPHRAGM	1
		0490695	GASKET	1
		0921235	WASHER	1
		32517	VALVE	2
		0490559	GASKET	1
		26410021	SEAL	1
		26410016	RETAINER	1
		26410008	SCREEN	1
		0520420	LINK	1
		0610809	PIN	1
		0180902	RETAINER	2
		0921058	WASHER	2
		0780241	SPRING	1
		0610847	PIN	1
		26410006	RETAINER	2

Note:
(A) Gasket #36851113 must be ordered separately.

- FUEL OIL FILTER -

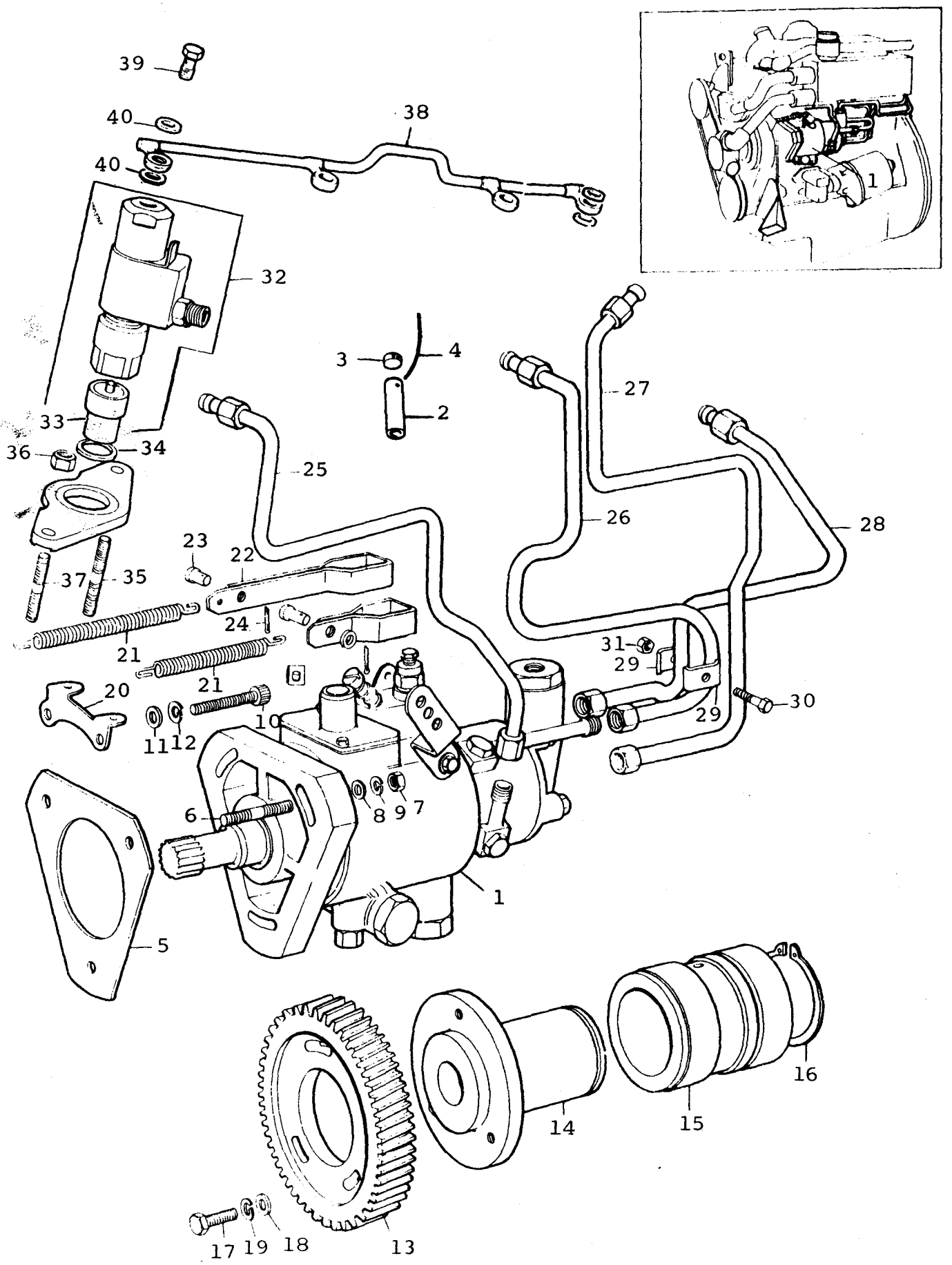






- FUEL OIL FILTER -

NOTE	REF. NO.	PART NO.	DESCRIPTION	QTY.
	1	35844057	PIPE, LIFT PUMP TO FUEL OIL FILTER ..	1
			Includes:	
	2	33532128	NUT, fuel oil pipe	2
	3	33811113	FERRULE, fuel oil pipe	2
	4	2656613	FUEL OIL FILTER (ASSEMBLY)	1
			Includes:	
	5	26560017	ELEMENT KIT, fuel oil filter	1
			Includes:	
	6	26560014	SEAL, element seating	1
	7	0490786	SEAL, element sealing	1
	8	0746454	SETSCREW, fuel oil filter to induction manifold	2
	9	0920054	WASHER, spring	2
	10	0920004	WASHER, plain	2
	-	0650204	PLUG, fuel oil filter	1
	-	0920112	WASHER, filter plug	1
	11	35847108	PIPE, FUEL FILTER TO FUEL INJ. PUMP .	1
			Includes:	
	12	33532128	NUT, fuel oil pipe	2
	13	33811113	FERRULE, fuel oil pipe	2
	14	36651119	CLIP, fuel injection pump pipe - also clips return pipe	1
	15	0746451	SETSCREW, clip to cylinder block ...	1
	16	0920054	WASHER, spring	1
	18	35847308	PIPE, FUEL INJECTION PUMP TO FILTER .	1
			Includes:	
	19	33532128	NUT, fuel oil pipe	2
	20	33811113	FERRULE, fuel oil pipe	2
	21	34417414	PIPE, FUEL OIL LEAK-OFF TO PRESSURE RELIEF VALVE	1
			Includes:	
	22	33225412	NUT, fuel oil pipe	2
	23	33811112	FERRULE, fuel oil pipe	2
	24	0201397	CONNECTION, filter overflow banjo ..	1
	25	0095344	BOLT, banjo connection	1
	26	0920146	WASHER, banjo bolt	2
	27	0576112	NUT, overflow banjo connection	1
	28	0566003	FERRULE, overflow banjo connection ..	1
	29	2656084	PRE-FILTER, fuel oil	1
	-	33533112	NUT, pre-filter - inlet port	1
	-	0200758	CONNECTION, pre-filter	1
	-	0571138	NUT, pre-filter	2
	-	0566003	FERRULE, pre-filter	1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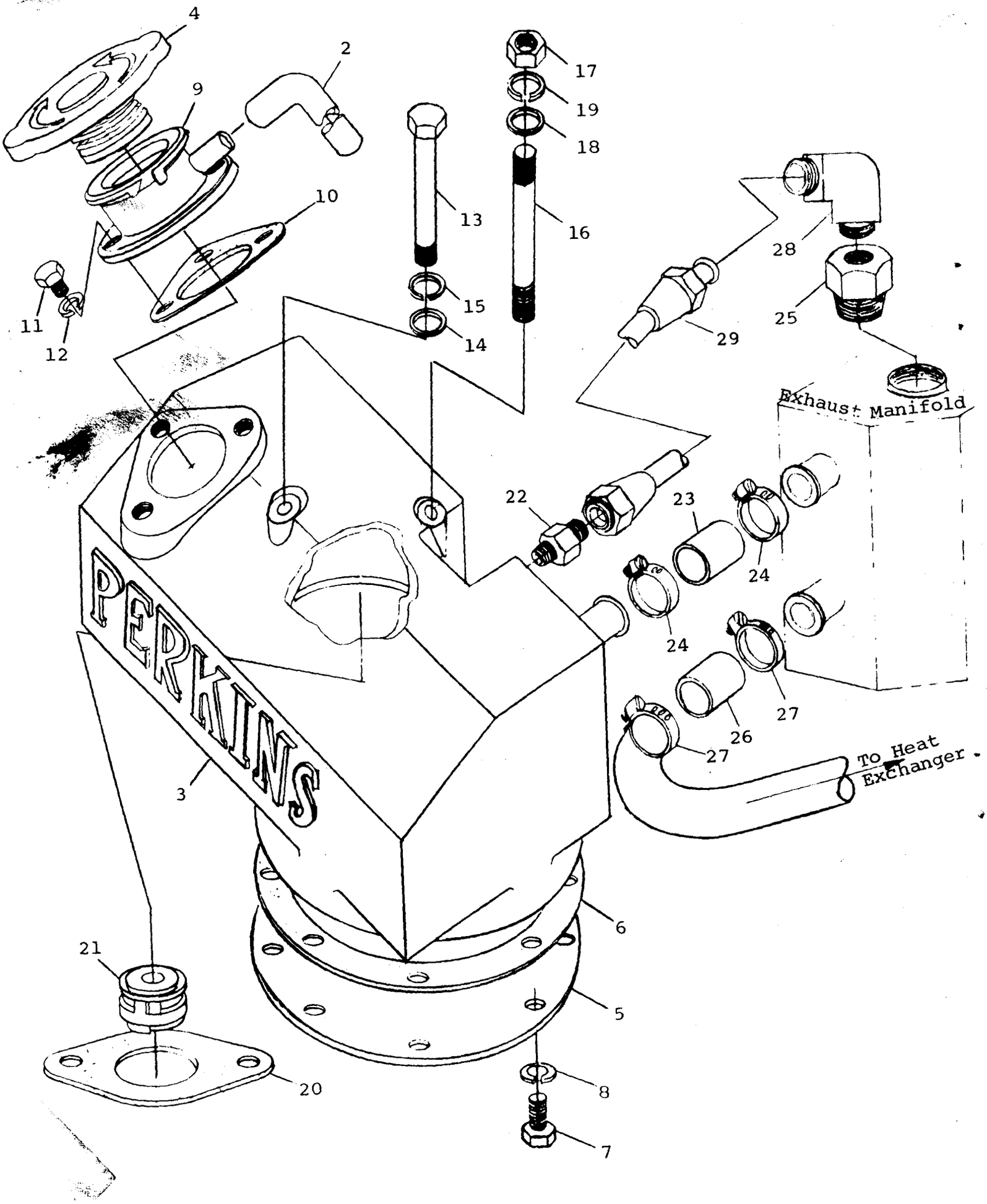
- FUEL INJECTION SYSTEM -

NOTE	REF. NO.	PART NO.	DESCRIPTION	QTY.
	1	37306	FUEL INJECTION PUMP (ASSEMBLY) - c/w throttle & stop control levers ..	1
	2	2644951	SLEEVE, throttle lever adj. screw ..	1
	3	31718104	SEAL, adjusting screw sleeve	1
	4	31718105	WIRE, adjusting screw sleeve seal ..	1
	5	0490685	GASKET, injection pump to cyl. block.	1
	6	0826244	STUD, injection pump to cyl. block ..	2
	7	0576002	NUT, injection pump retaining	2
	8	0920003	WASHER, plain	2
	9	0920053	WASHER, spring	2
	10	2172692	CAPSCREW, injection pump to block ..	1
	11	0920003	WASHER, plain	1
	12	0920053	WASHER, spring	1
	13	31171542	GEAR, pump drive	1
	14	33472496	HUB, drive gear	1
	15	0050323	BEARING, drive gear hub	1
	16	2724436	SNAP RING, hub retaining	1
	17	0746355	SETSCREW, drive gear to hub	3
	18	0920003	WASHER, plain	3
	19	0920053	WASHER, spring	3
	20	38152107	BRACKET, control return spring anchor	1
	21	31753114	SPRING, stop & throttle control return	2
	22	0996525	FORK END, stop control lever	1
	23	0610837	CLEVIS PIN, fork end	1
	24	0610042	SPLIT PIN, clevis pin retaining	1
	25	35355268	PIPE, FUEL INJECTION - NO. 1 CYLINDER	1
	26	35354265	PIPE, FUEL INJECTION - NO. 2 CYLINDER	1
	27	35354263	PIPE, FUEL INJECTION - NO. 3 CYLINDER	1
	28	35354264	PIPE, FUEL INJECTION - NO. 4 CYLINDER	1
	29	0180637	CLIP, fuel injection pipes	4
	30	0726264	BOLT, inj. pipe clip clamping	2
	31	0571350	NUT, clip clamping	2
	32	2645559	INJECTOR, FUEL OIL (ASSEMBLY) ..... Includes:	4
	33	33435	NOZZLE, injector	1
	34	0920113	WASHER, injector seating	4
	35	0826274	STUD, cyl. head to injector - long ..	4
	36	0576002	NUT, injector retaining	4
	37	0826232	STUD, cyl. head to injector	4
	36	0576002	NUT, injector retaining	4
	38	35587355	PIPE, injector main leak-off	1
	39	0095315	BOLT, banjo - leak-off pipe	4
	40	0921176	WASHER, banjo bolt	8

- HEADER TANK -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Exhaust Manifold
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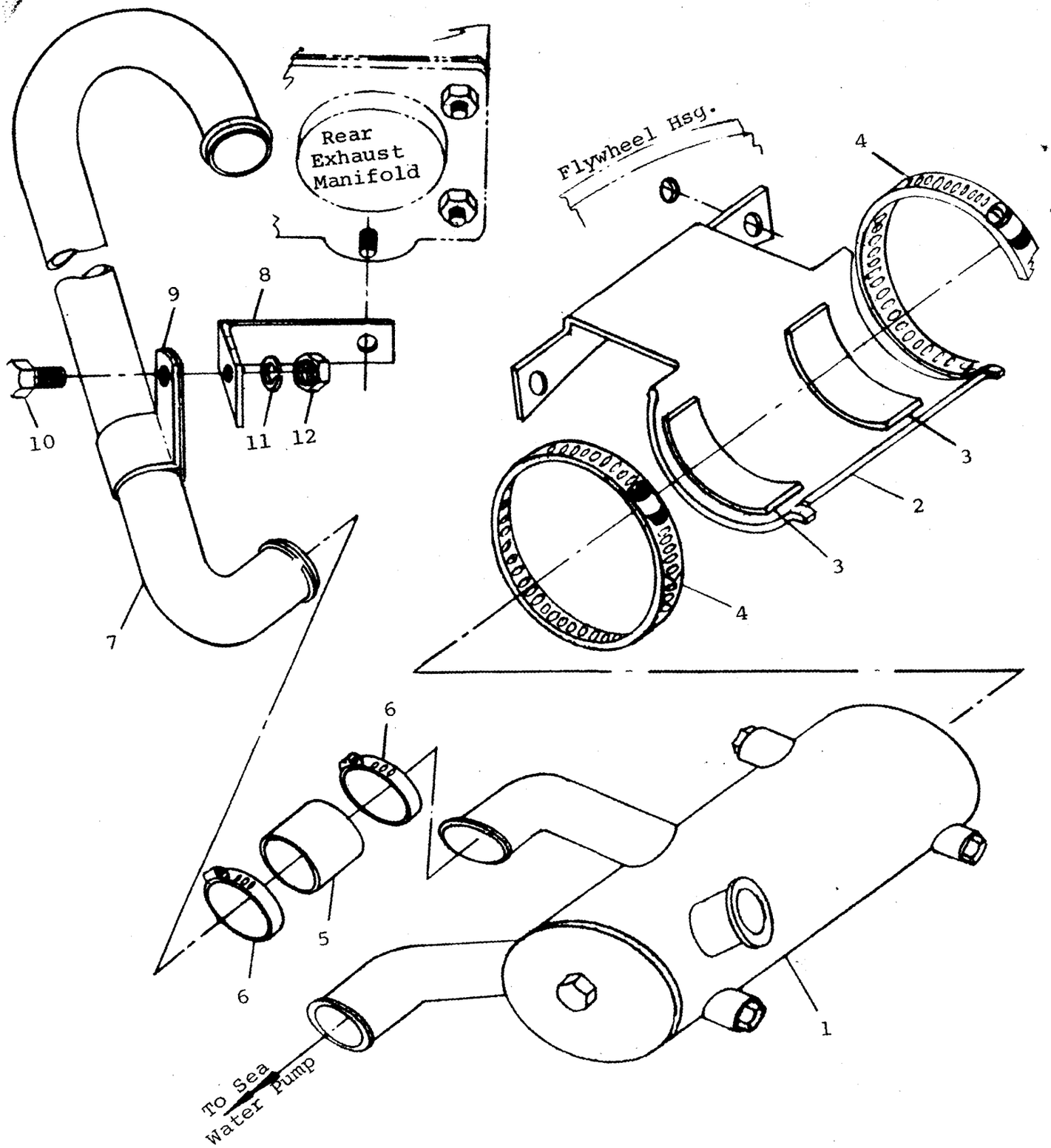
- HEADER TANK -

NOTE	REF. NO.	PART NO.	DESCRIPTION	QTY.
	1	NA001074	HEADER TANK (ASSEMBLY)	1
			Includes:	
	2	NA001548	TUBE, flexible	1
	3	NA000541	TANK, expansion	1
	4	2487895	CAP, header tank fill	1
	5	NA001330	PLATE, cover - bottom	1
	6	NA000542	GASKET, bottom cover plate	1
	7	0748353	SETSCREW, plate to header tank ..	8
	8	0920052	WASHER, spring	8
	9	2487947	FLANGE, header tank filler	1
	10	36861446	GASKET, flange to header tank ...	1
	11	0748411	SETSCREW, flange to header tank .	3
	12	0920053	WASHER, spring	3
	13	0096445	BOLT, header tank to cylinder head .	1
	14	0920004	WASHER, plain	1
	15	0920054	WASHER, spring	1
	16	0826512	STUD, cyl. head to header tank	1
	17	0576051	NUT, header tank retaining	1
	18	0920004	WASHER, plain	1
	19	0920054	WASHER, spring	1
	20	36834118	GASKET, cylinder head to header tank.	1
	21	2485688	THERMOSTAT	1
	22	NA000257	REDUCER, exhaust manifold to header tank air bleed	1
	23	0200044	HOSE, header tank to exh. manifold ..	1
	24	0180066	CLIP, hose clamping	2
	25	NA000036	CONNECTION, male - header tank pipe .	1
	26	0200044	HOSE, exhaust manifold to heat exchanger pipe	1
	27	0180066	CLIP, hose clamping	2
	28	NA000041	ELBOW CONNECTION, header tank bleed pipe	1
	29	NA000258	PIPE, header tank to exhaust manifold	1

- HEAT EXCHANGER -



THAT IS
ALL
I HAVE