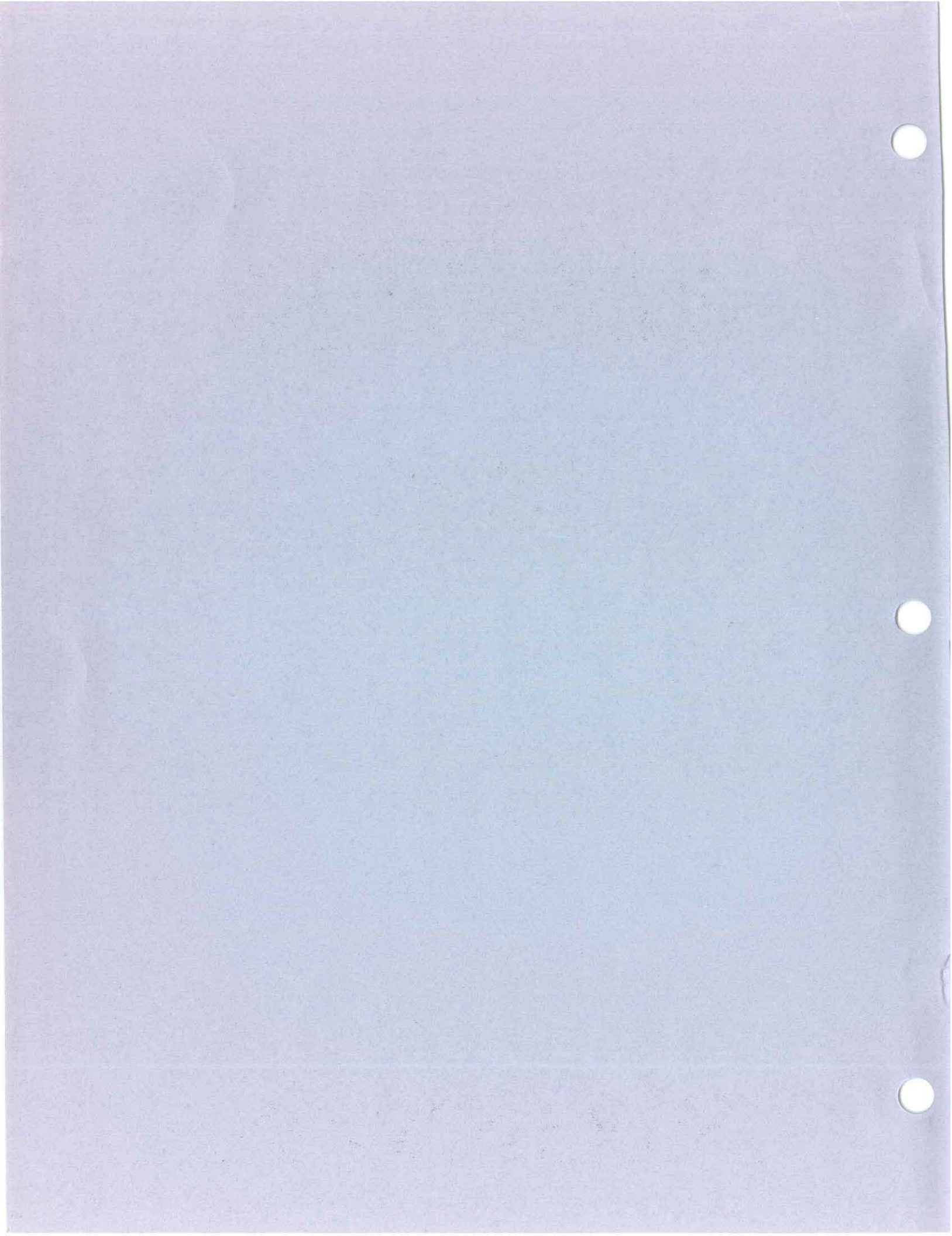




**Parts List
M4-30**

Part number 200144
Edition 1
October, 1990





UNIVERSAL ENGINE DATA

Model	Cubic Inches	Horsepower	# Cylinders	Weight	Block Model	Years	Approx. Qty. Sold
M-12.....	24.4.....	10.....	2.....	175.....	Z-400.....	83-88.....	1200
** M2-12.....	26.....	11.....	2.....	175.....	Z-430.....	87-Current.....	320
M-15.....	31.....	11.....	2.....	245.....	Z-500.....	82-83.....	370
M-18.....	34.8.....	14.....	2.....	255.....	Z-600.....	83-88.....	2400
M-20.....	45.....	16.....	2.....	365.....	Z-751.....	82-83.....	230
** M3-20.....	38.9.....	18.....	3.....	235.....	D-640.....	88-Current.....	525
M-25.....	52.....	21.....	3.....	285.....	D-850.....	81-86.....	3650
M-25XP.....	57.....	23.....	3.....	285.....	D-950.....	86-Current.....	3100
M-30.....	68.....	24.....	3.....	425.....	D-1101&1102.....	83-87.....	400
** M4-30.....	52.....	25.....	4.....	270.....	Y-850.....	88-Current.....	470
M-35.....	75.5.....	30.....	4.....	335.....	V-1200.....	87-Current.....	280
M-40.....	91.....	32.....	4.....	545.....	V-1502.....	82-Current.....	360
M-50.....	115.....	44.....	4.....	545.....	V-1902.....	82-Current.....	520
<hr/>							
* 5411(M15).....	31.....	11.....	2.....	245.....	Z-500.....	77-82.....	2900
* 5416(M20).....	45.....	16.....	2.....	365.....	Z-751.....	76-82.....	1000
* 5421(M25).....	52.....	21.....	3.....	285.....	D-850.....	78-81.....	1000
* 5424(M30).....	68.....	24.....	3.....	425.....	D-1101.....	77-83.....	1050
* 5432(M40).....	91.....	32.....	4.....	490.....	V-1501.....	78-82.....	650
* 5444(M50).....	115.....	44.....	4.....	545.....	V-1902.....	80-82.....	280

* These models have been discontinued. The models that replace them are in parenthesis.

** Mini series.



UNIVERSAL DIESEL FAST MOVING PARTS

Model: M4-30 Number of cylinders: 4 Mfg. Years: 1988-CURRENT

Cubic Inches: 52 Horsepower: 25 Weight: 270

Air Filter	-	301926	Oil Pressure Switch	-	299964
Air Filter Element	-	300429	Panel, Standard	-	300680
Alternator	-	302280	Panel, Deluxe	-	300685
Ammeter	-	300668	Panel, Custom	-	300690
Belt	-	302084	Pump, Fresh Water	-	302756
Dipstick	-	301212	Pump, Mounting Gasket	-	301340
Exhaust Manifold	-	302398	Pump, Rebuild Kit	-	N/A
Exhaust Manifold Gasket	-	302759 (4)	Pump, Sea Water	-	302648
Filter, Lube Oil	-	300209	Pump Mounting Gasket	-	302678
Filter, Fuel Oil	-	298854	Pump, Impeller	-	302875
Filter, Electric Lift	-	300128	Pump, Repair Kit	-	N/A
Gasket, Head	-	302691	Pump, Seal	-	302885
Gasket, Oil Pan	-	302686	Pump Conversion Kit		
Gasket Set, Upper	-	256948	(includes pump)	-	302835
Gasket Set, Complete	-	256949	Pump Conversion Kit		
Glow Plug	-	301754	(excludes pump)	-	302838
Harness, 5 FT. EXT.	-	300708	PTO Pulley Kit	-	303068
Harness, 10 FT. EXT.	-	300675	Pump, Fuel Lift	-	301385
Harness, Engine	-	298586	Shim, Cylinder Head	-	N/A
(A) Heat Exchanger	-	302631	Spare Parts Kit A	-	256947
Heat Exchanger End Cap	-	301457	Spare Parts Kit B	-	256945
Heat Exchanger Gasket	-	301457	Starter	-	302474
Injector	-	302735	Starter Solenoid	-	N/A
Injection Pump	-	302740	Tachometer	-	300684
Injection Hardware Kit	-	N/A	Tachometer with Hour Meter	-	300687
Injector Nozzle	-	N/A	Tank, Coolant Recovery	-	300238
(B) Injector Return Line	-	SEE BELOW	Thermostat Element	-	301358
Isolators	-	300974	Thermostat Element Gasket	-	N/A
Ignition Switch	-	300671	Thermostat MTG Gasket	-	300237
Manuals, Operators	-	200157	Valve Cover Gasket	-	302706
Manuals, Parts	-	200144	Water Temp Meter	-	300670
Manuals, Technical	-	200155	Water Temp Sender	-	299066
Oil Drain Washer Kit	-	301431	Water Injected Elbow	-	N/A
Oil Pump	-	302682	Zinc	-	301068

Notes:

A.) HEAT EXCHANGER WITH MOUNTING BRACKETS (3 X 13).

B.) INJECTOR RETURN LINE CONSISTS OF 1 - 302739, 1- 302734, & 1 - 301299.



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HOW TO ORDER PARTS

WHEN ORDERING PARTS, SPECIFY MODEL AND SERIAL NUMBER OF ENGINE.

This information is absolutely essential for the correct execution of your order. We do not hold ourselves responsible for errors or delays where this is lacking.

SERIAL NUMBER LOCATIONS

Stamped on upper left hand corner of block - ignition side - facing flywheel end (front of engine).

Stamped in block directly above flywheel housing, under front oil filler.

On engine nameplate located on reverse gear housing cover.

On engine nameplate located on engine manifold.

RETURNED PARTS

Parts may be returned for credit subject to authorization by the factory, factory inspection and acceptance upon receipt, and a 15% Re-Stocking charge.

A return goods authorization number must be requested from the factory prior to returning the parts.

All return shipments must be fully PREPAID and clearly marked with shipper's name and address.

LOSS OR DAMAGE IN TRANSIT

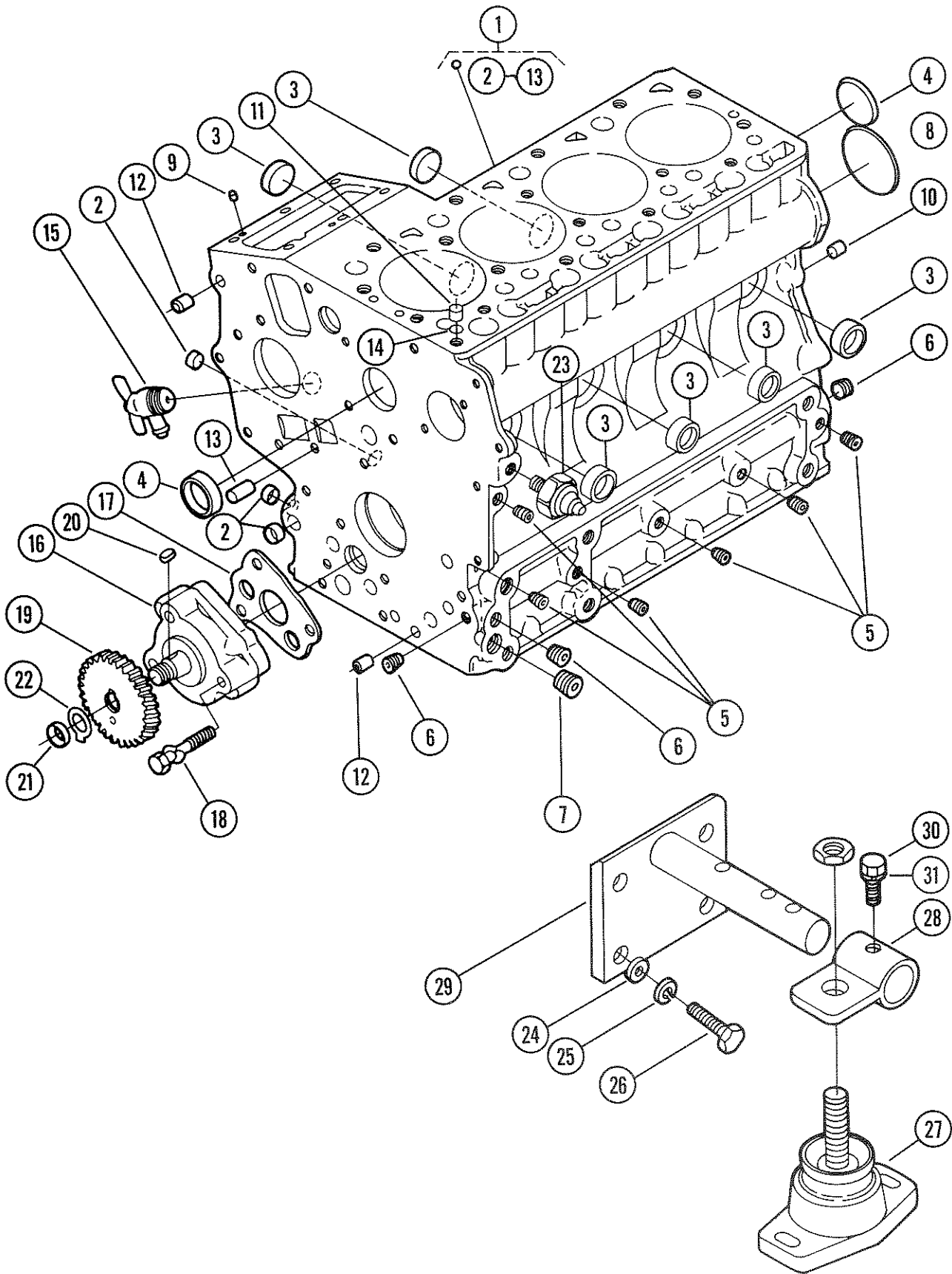
Our responsibility ceases upon delivery of shipments to the common carrier. Any claims for loss or damage in transit must be filed with the transportation company.

SHORTAGE CLAIMS

All claims for shortage must be filed within ten (10) days after receipt of shipment and must be accompanied by packing list.

ALL ORDERS FOR REPAIR PARTS MUST BE PLACED THROUGH OUR DISTRIBUTOR/DEALER IN YOUR AREA.

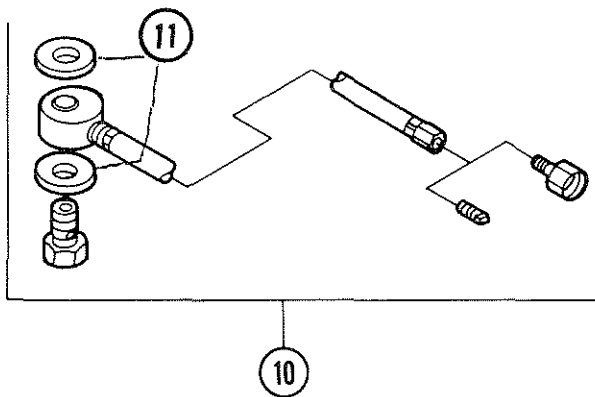
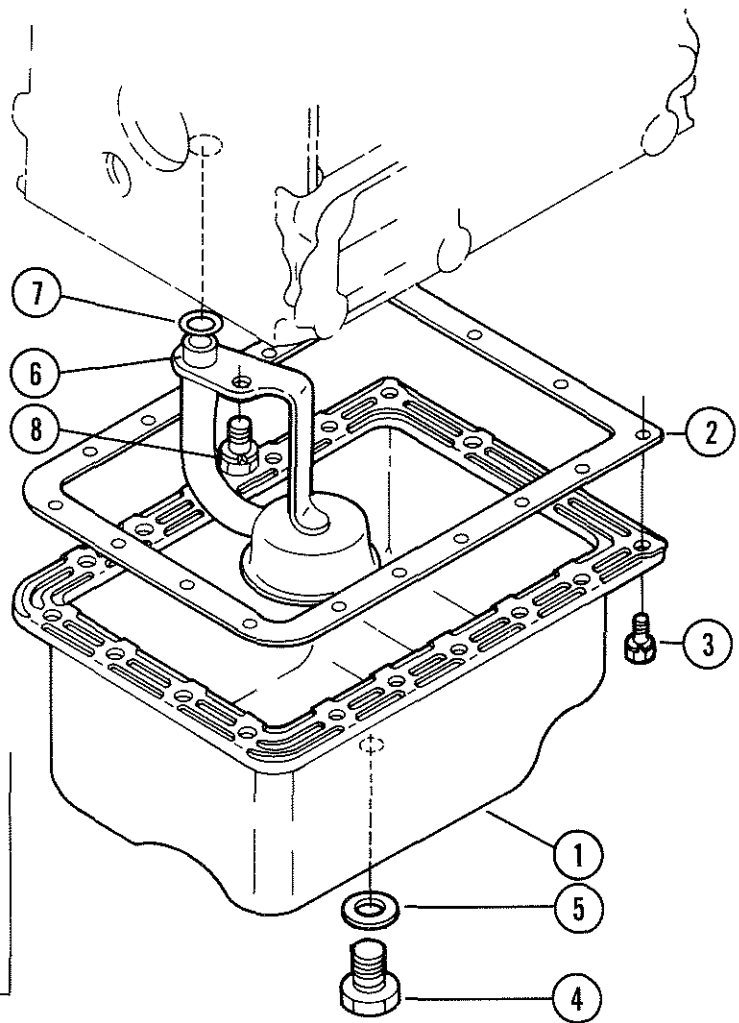
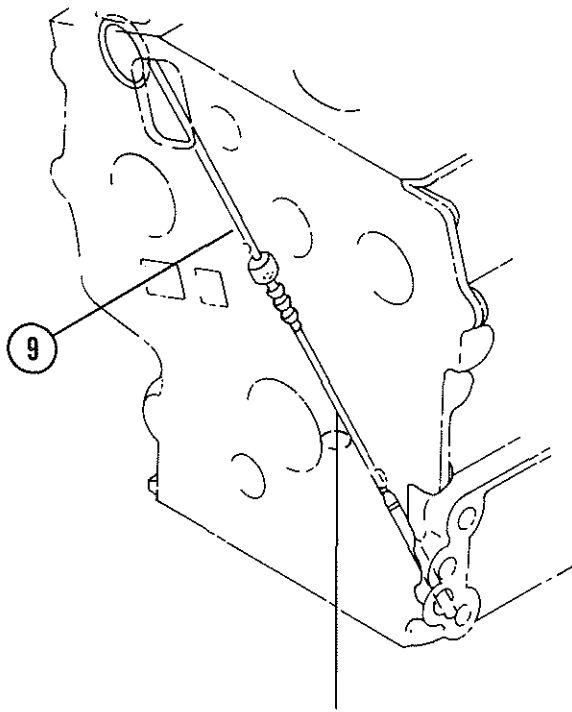
CRANKCASE GROUP



CRANKCASE CASE GROUP

Item	Part No.	Unit	Description
1	302681	1	Crankcase Complete
2	301199	3	Plug
3	301200	6	Plug
4	301201	2	Plug
5	302589	6	Plug
6	302587	3	Plug
7	302588	1	Plug
8	302429	1	Plug
9	301543	2	Pin
10	299360	2	Pin
11	301485	1	Pipe Pin
12	300716	2	Pipe Pin
13	301547	2	Pipe Pin
14	299362	1	O-Ring
15	301202	1	Drain Cock Assembly
16	302682	1	Oil Pump Assembly
17	301204	1	Pump Gasket
18	302683	3	Bolt
19	301205	1	Oil Pump Drive Gear
20	298820	1	Key
21	302684	1	Nut
22	299413	1	Washer
23	301206	1	Oil Sender
24	298456	4	Washer
25	298463	4	Lock Washer
26	298506	4	Bolt
27	300974	4	Flex Mount
28	302638	2	Mount Clamp
29	302637	2	Front Mount Adj-Bar
30	015253	2	Bolt
31	015355	2	Washer
32	303030	1	Frt Mt 11.5, 14.5 & 16 Weld.
33	303031	1	Frt Mt 11.5, 14.5 & 16 Weld.

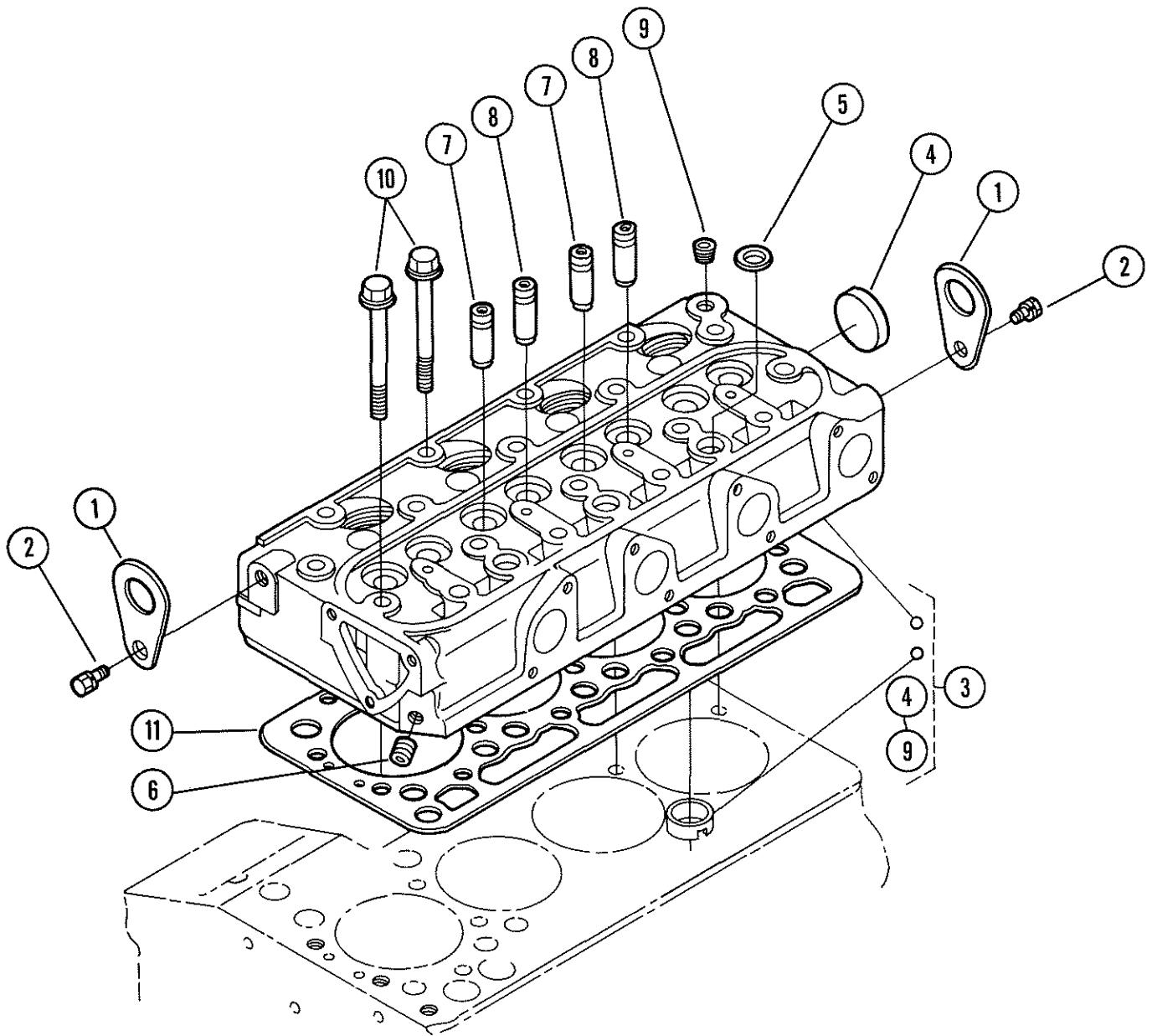
OIL PAN GROUP



OIL PAN GROUP

Item	Part No.	Unit	Description
1	302685	1	Oil Pan
2	302686	1	Pan Gasket
3	302687	22	Bolt
4	298739	1	Plug
5	301211	1	Gasket
6	302688	1	Oil Filter
7	298657	1	O-Ring
8	301548	1	Bolt
9	301212	1	Oil Dipstick
10	300724	1	Oil Drain Kit
11	301431	2	Washer Oil Drain Kit

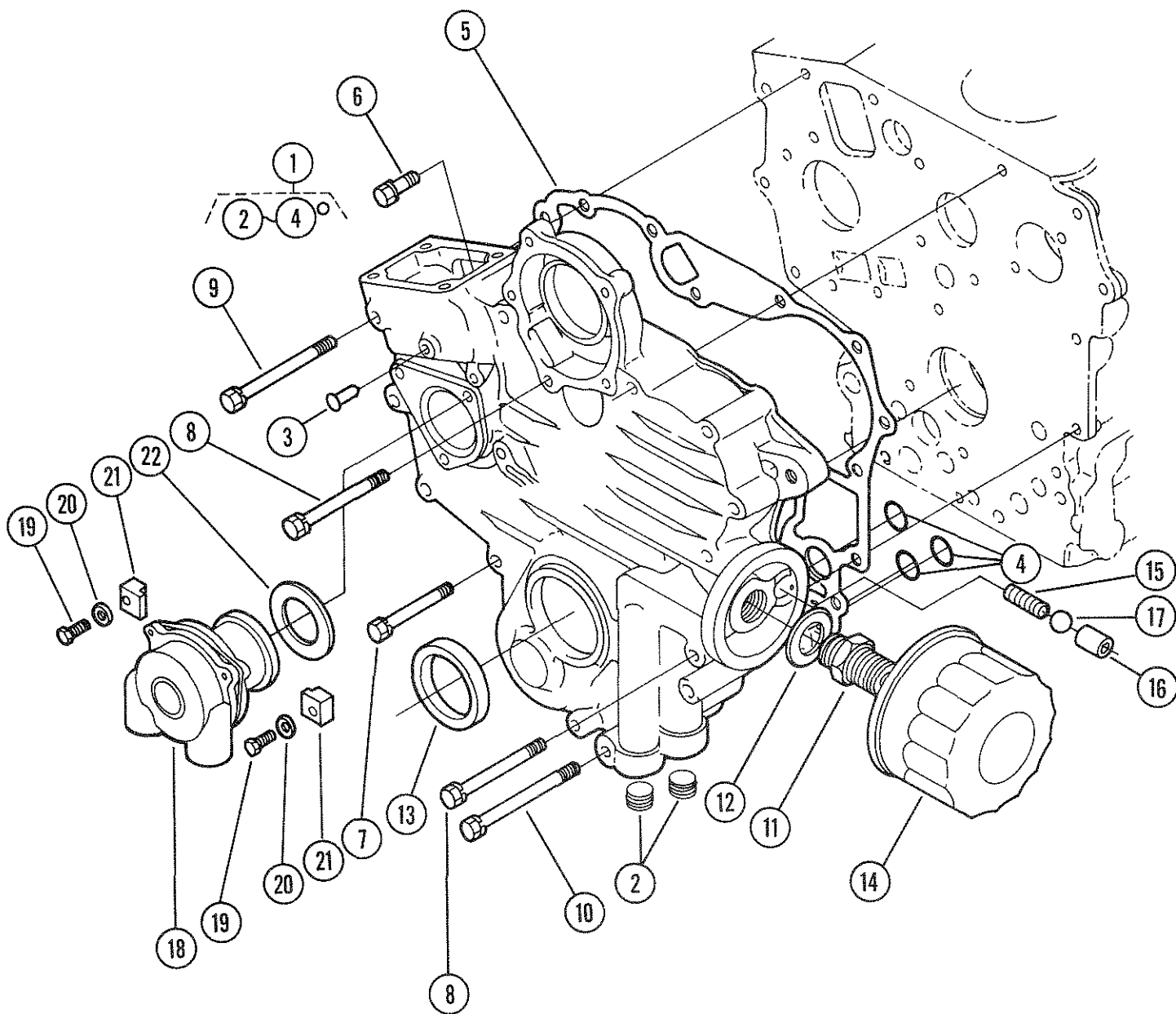
CYLINDER HEAD GROUP



CYLINDER HEAD GROUP

Item	Part No.	Unit	Description
1	301549	2	Engine Hook
2	301548	2	Bolt
3	302689	1	Cylinder Head Complete
4	299354	1	Plug
5	302690	3	Plug
6	302589	1	Plug
7	301214	4	Intake Valve Guide
8	301215	4	Exhaust Valve Guide
9	301550	1	Plug
10	301217	18	Bolt
11	302691	1	Cylinder Head Gasket

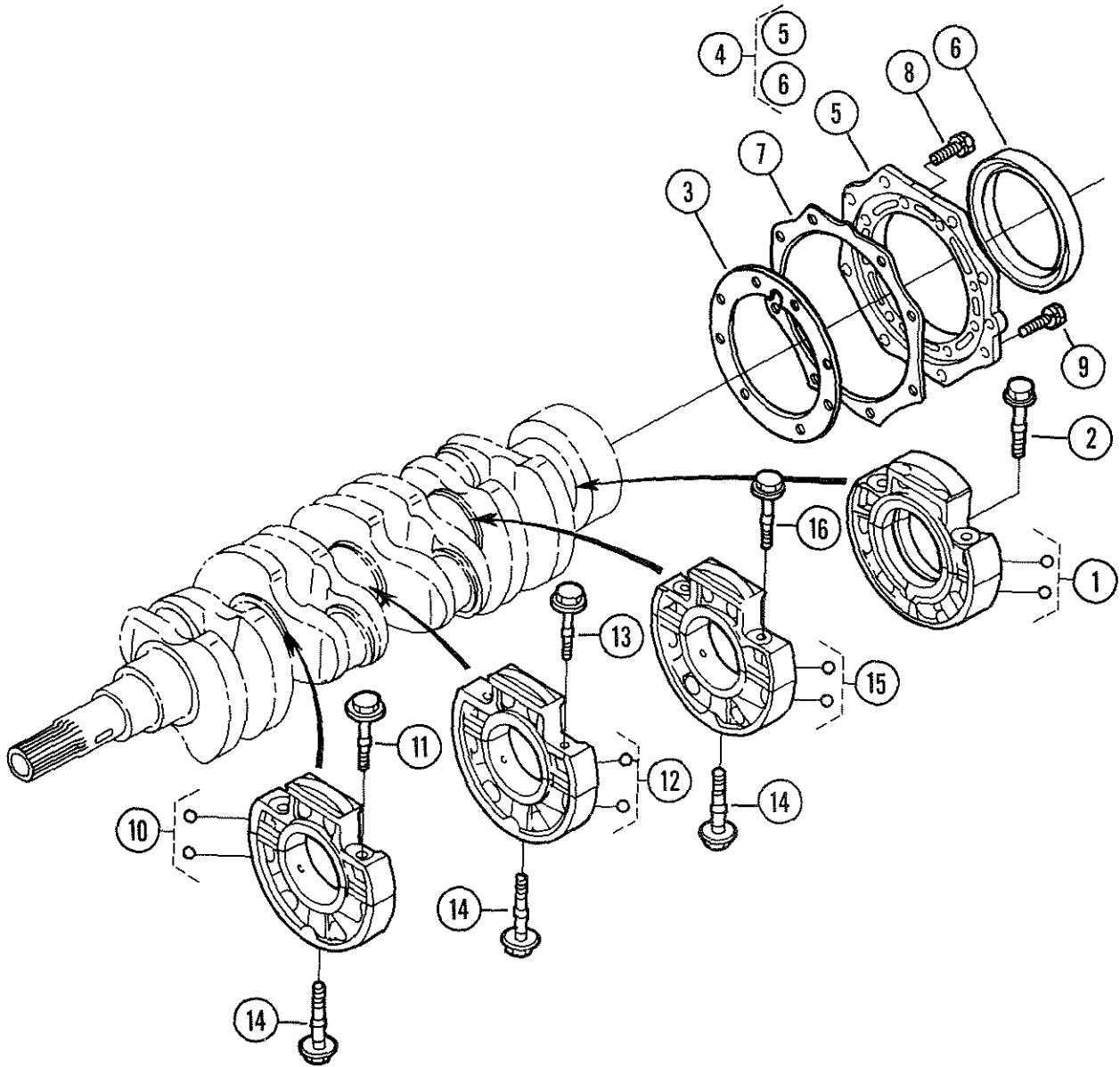
GEAR CASE GROUP



GEAR CASE GROUP

Item	Part No.	Unit	Description
1	302692	1	Gear Case Complete
2	302593	2	Plug
3	301551	1	Start Spring Pin
4	300160	3	O-Ring
5	302693	1	Gasket
6	302618	1	Bolt
7	302694	10	Bolt
8	301552	3	Bolt
9	302695	1	Bolt
10	302696	1	Bolt
11	301490	1	Pipe Joint
12	301222	1	Washer
13	302697	1	Oil Seal
14	300209	1	Oil Filter
15	301554	1	Spring
16	301555	1	Valve Seat
17	301556	1	Ball
18	302648	1	Water Pump
19	299032	2	Bolt
20	299033	2	Lock Washer
21	302679	2	Clamp
22	302678	1	Gasket

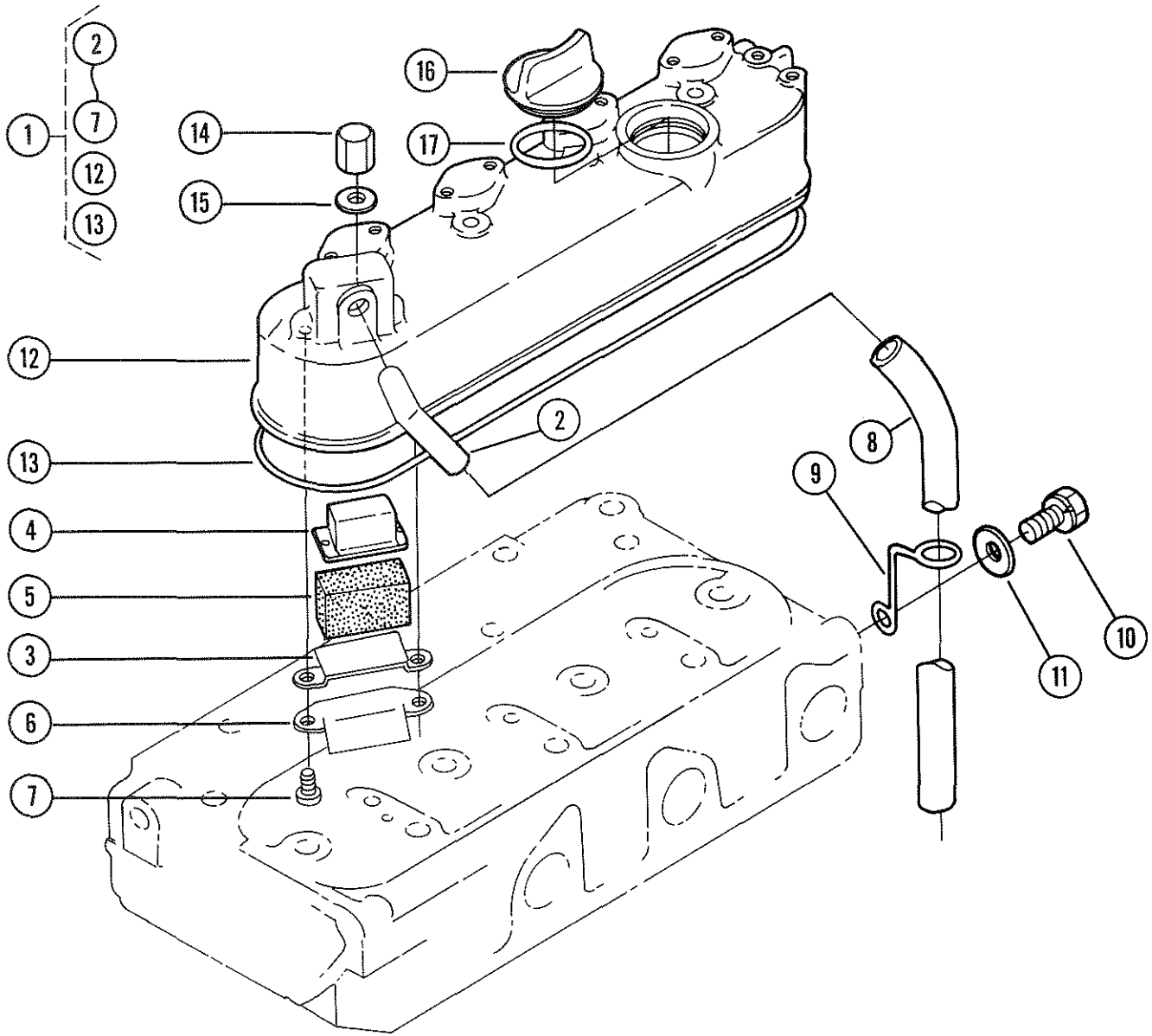
MAIN BEARING CASE GROUP



MAIN BEARING CASE GROUP

Item	Part No.	Unit	Description
1	301224	1	Main Bearing Case Assembly
2	302698	2	Bolt
3	301227	1	Gasket
4	302699	1	Bearing Case Cover Assembly
5	301228	5	Bearing Case Cover
6	301231	1	Oil Seal
7	301229	1	Gasket
8	302617	8	Bolt
9	301230	8	Bolt
10	301232	1	Main Bearing Case Assembly
11	302698	2	Bolt
12	302700	1	Main Bearing Case Assembly
13	302698	2	Bolt
14	301235	3	Bolt
15	302701	1	Main Bearing Case Assembly
16	302698	2	Bolt

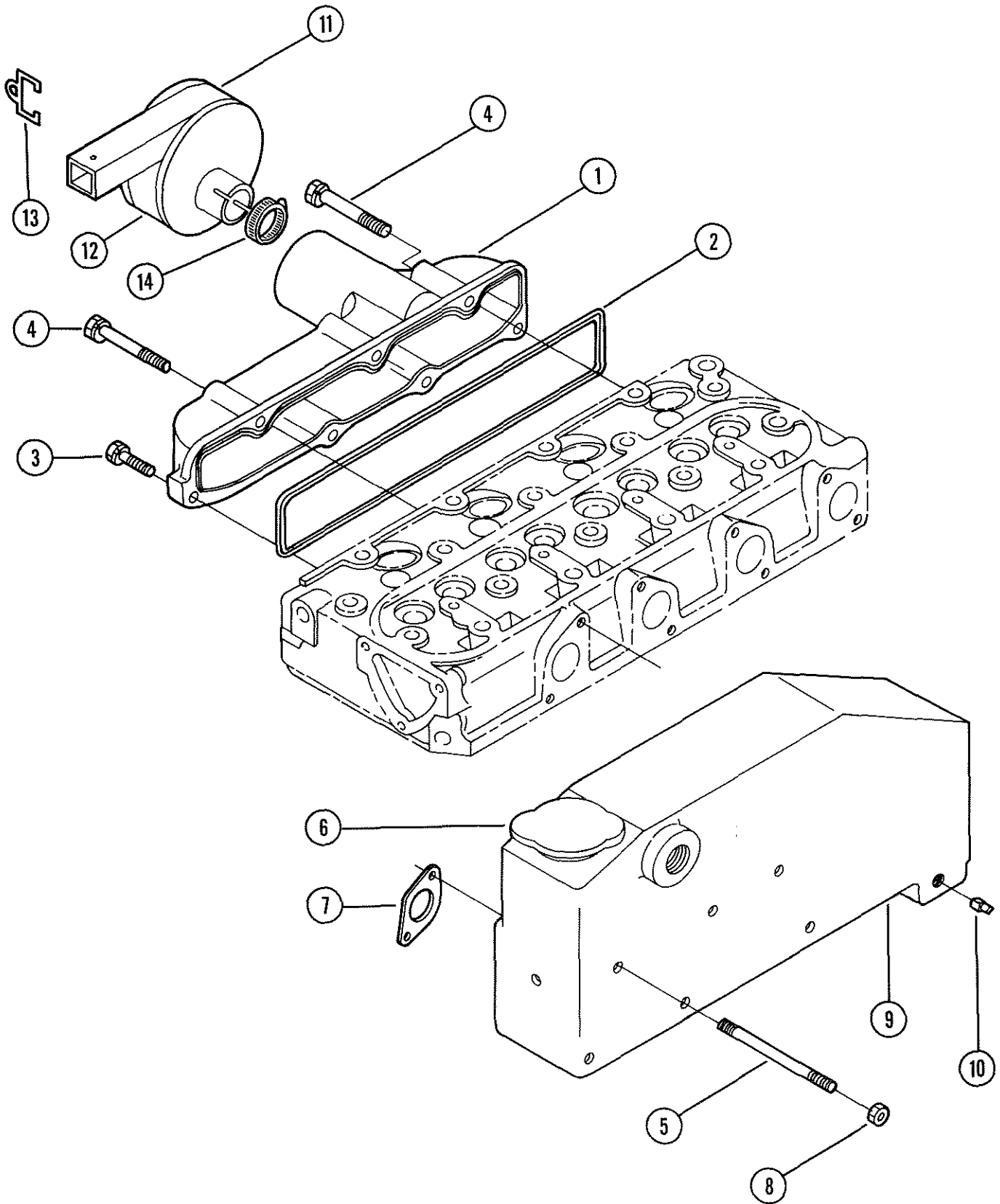
HEAD COVER GROUP



HEAD COVER GROUP

Item	Part No.	Unit	Description
1	302702	1	Head Cover Assembly
2	299854	1	Breath Pipe
3	301557	1	Plate Element
4	302703	1	Plate Element
5	301237	1	Breather Element
6	301237	1	Breather Element
7	301399	2	Screw and Washer
8	301560	1	Breather Pipe
9	302704	1	Clamp
10	302599	1	Bolt
11	300031	1	Washer
12	302705	1	Cylinder Head Cover
13	302706	1	Gasket
14	301240	4	Cap Nut
15	301241	4	Gasket
16	302707	1	Filler Cap
17	298740	1	O-Ring

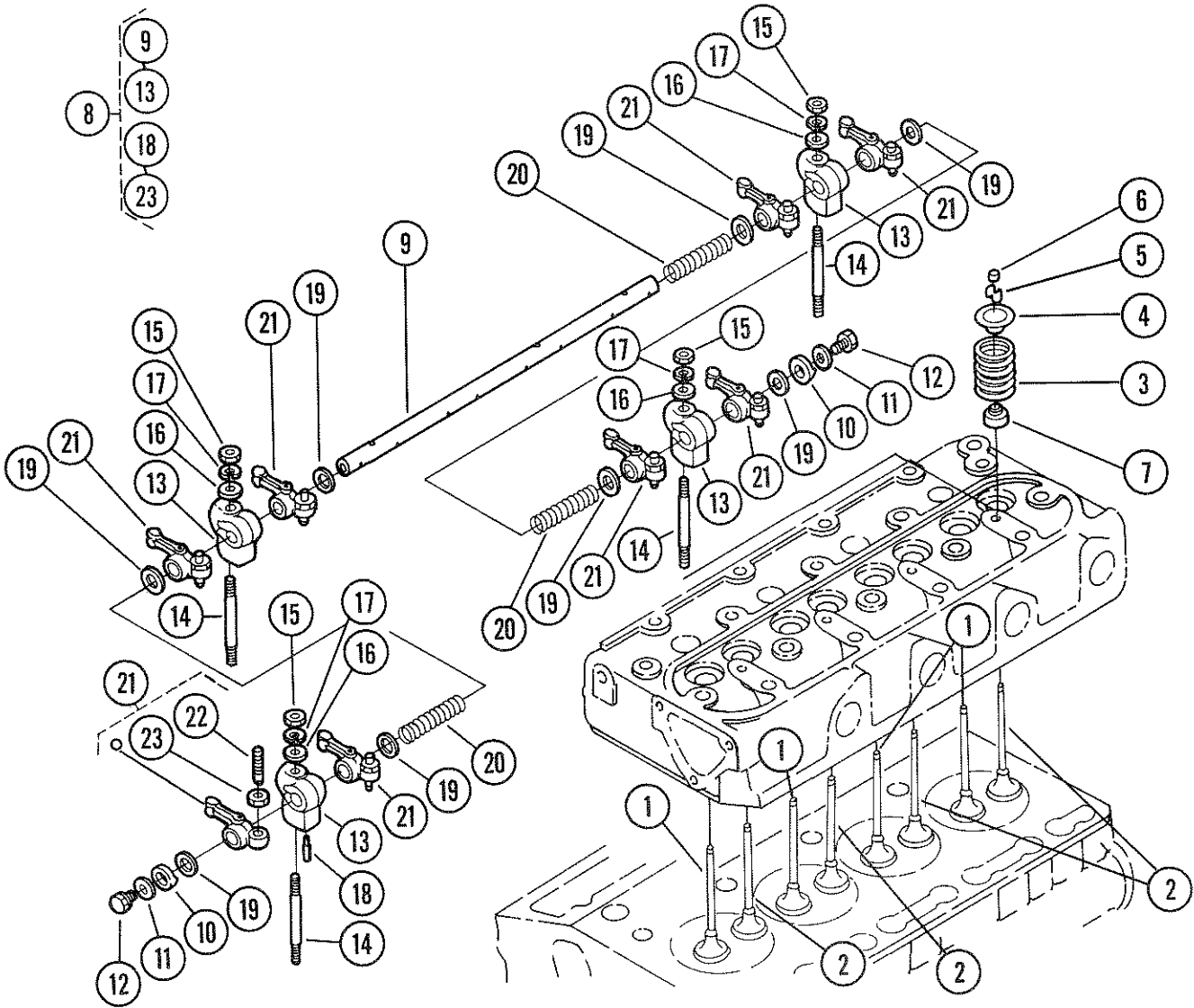
INLET MANIFOLD GROUP



INLET MANIFOLD GROUP

Item	Part No.	Unit	Description
1	302708	1	Intake Manifold
2	302709	1	Gasket
3	299365	3	Bolt
4	301244	4	Bolt
5	300095	8	Stud
6	299956	1	Filler Cap
7	302759	1	Gasket
8	298684	8	Nut
9	302398	1	Exhaust Manifold
10	239136	1	Plug
11	301926	1	Air Filter
12	300429	1	Filter Element
13	300983	1	Clip
14	298604	1	Clamp

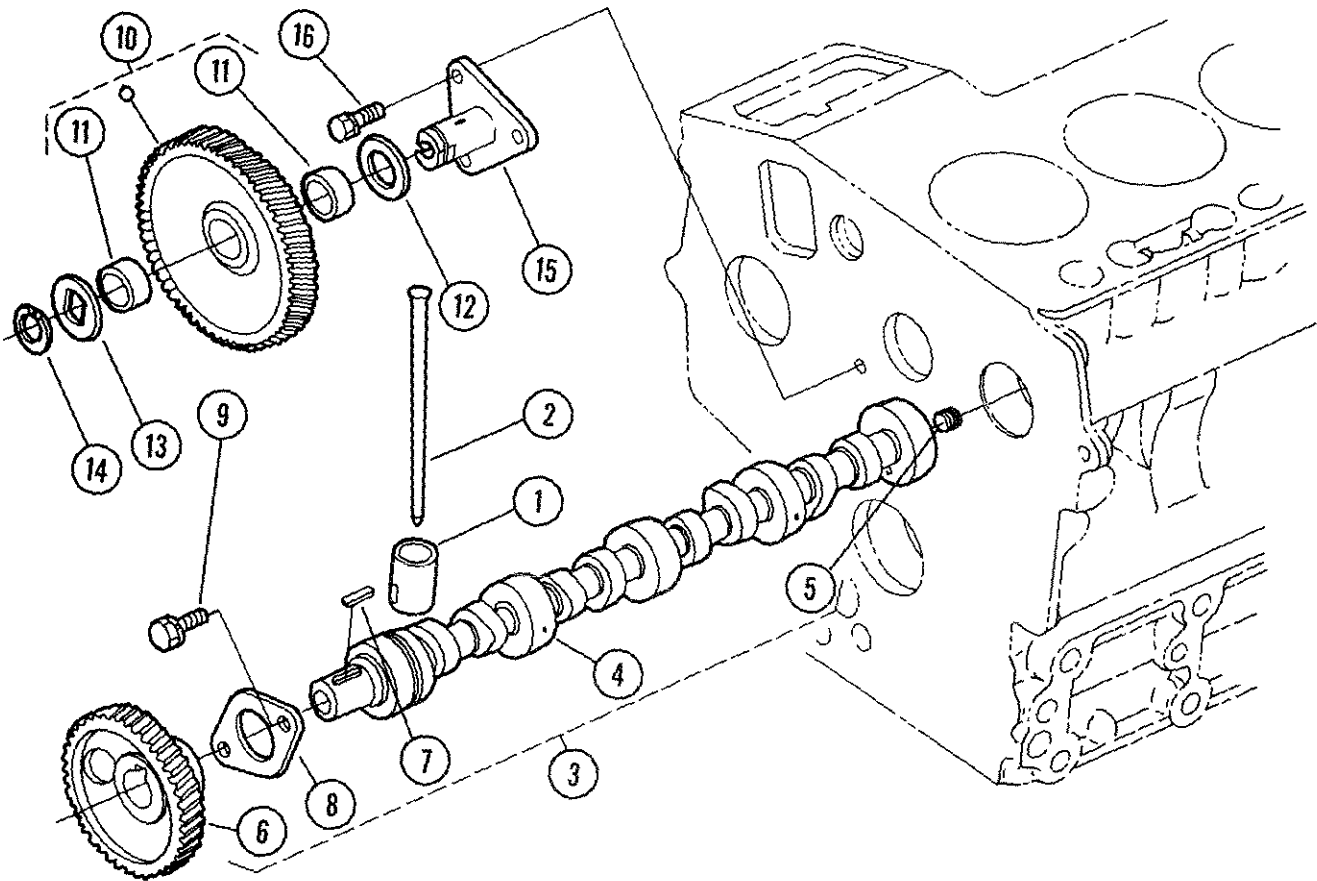
VALVE ROCKER ARM GROUP



VALVE ROCKER ARM GROUP

Item	Part No.	Unit	Description
1	301246	4	Intake Valve
2	301247	4	Exhaust Valve
3	301248	8	Valve Spring
4	301249	8	Valve Spring Retainer
5	301250	16	Valve Spring Collet
6	301251	8	Valve Cap
7	301252	8	Seal
8	302710	1	Rocker Arm Assembly
9	302711	1	Rocker Arm Shaft
10	301254	2	Spring
11	301255	2	Washer
12	301256	2	Bolt
13	301257	4	Rocker Arm Bracket
14	301258	4	Stud
15	298684	4	Nut
16	301561	4	Washer
17	299369	4	Lock Washer
18	301562	1	Set Screw
19	301563	8	Washer
20	301259	3	Spring
21	301260	8	Rocker Arm Assembly
22	301565	8	Adjusting Screw
23	301566	8	Nut

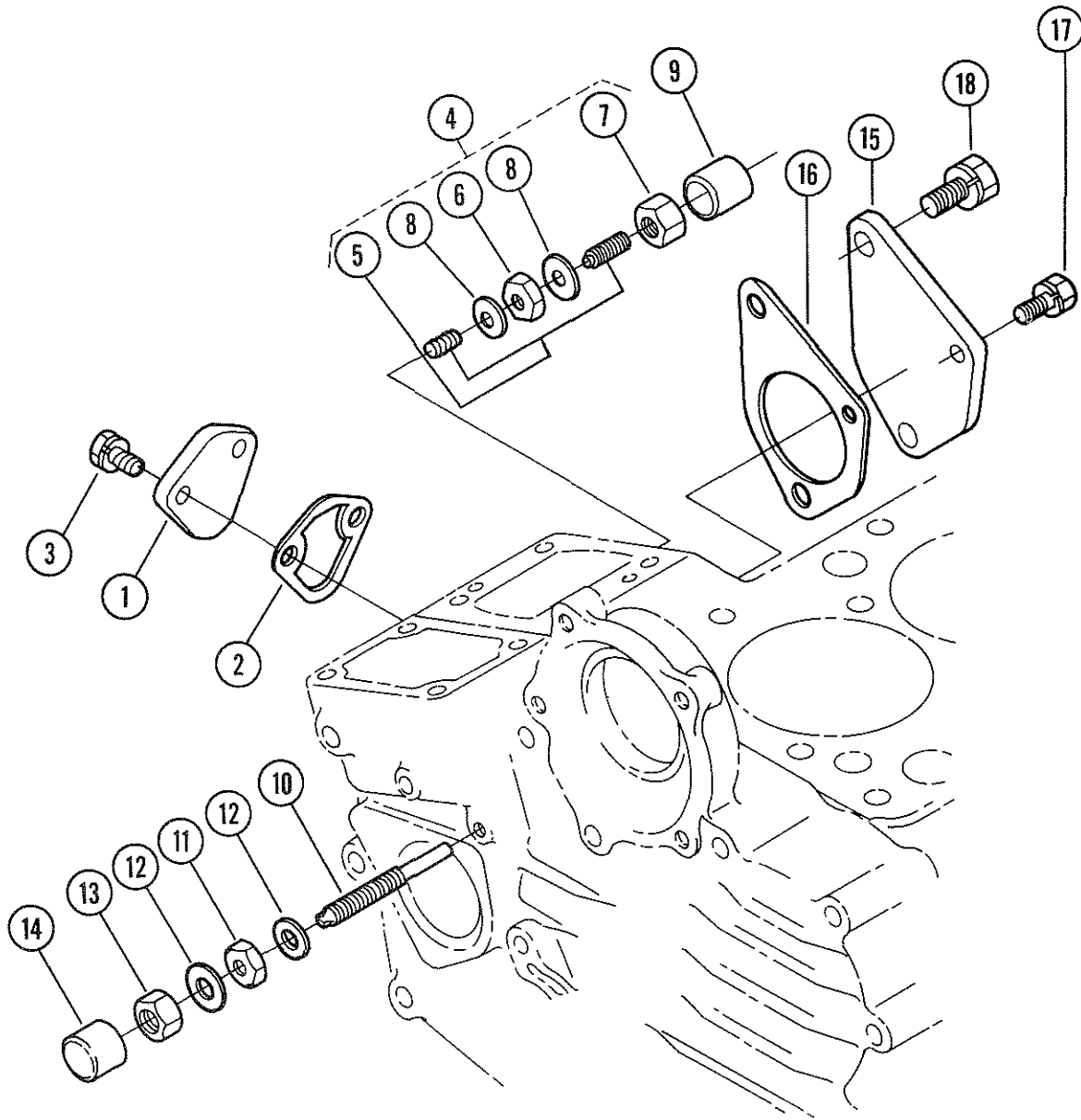
CAMSHAFT GROUP



CAMSHAFT GROUP

Item	Part No.	Unit	Description
1	301261	8	Tappet
2	301262	8	Push Rod
3	302712	1	Camshaft Assembly
4	302713	1	Camshaft
5	301713	1	Screw
6	301264	1	Camshaft Gear
7	301568	1	Key
8	301569	1	Camshaft Retainer
9	302687	2	Bolt
10	302714	1	Idler Gear Complete
11	302715	2	Gear Bushing
12	302716	1	Collar
13	302717	1	Collar
14	302718	1	Cir-Clip
15	302719	1	Idler Gear Shaft
16	302604	3	Bolt

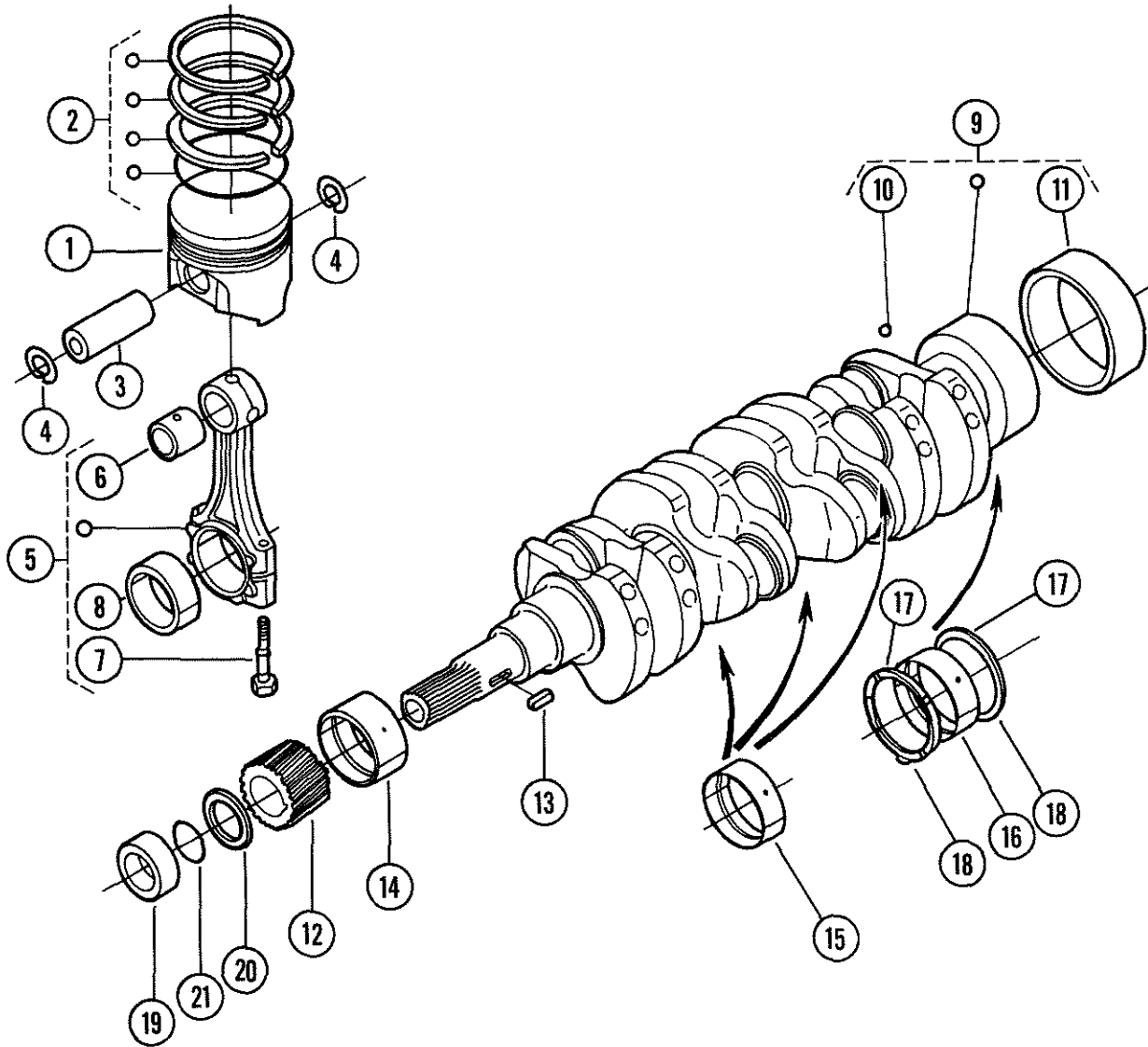
IDLING APPARATUS GROUP



IDLING APPARATUS GROUP

Item	Part No.	Unit	Description
1	302744	1	Cover
2	302745	1	Gasket
3	302661	2	Bolt
4	301575	1	Fuel Adjusting Assembly
5	301576	1	Adjusting Bolt Assembly
6	301493	1	Nut
7	301578	1	Cap Nut
8	301495	2	Gasket
9	301416	1	Cap
10	301580	1	Adjusting Bolt
11	301581	1	Nut
12	301241	2	Gasket
13	302746	1	Cap Nut
14	302485	1	Cap
15	301584	1	Cover
16	301585	1	Gasket
17	302661	1	Bolt
18	300206	2	Bolt

PISTON, CRANKSHAFT GROUP

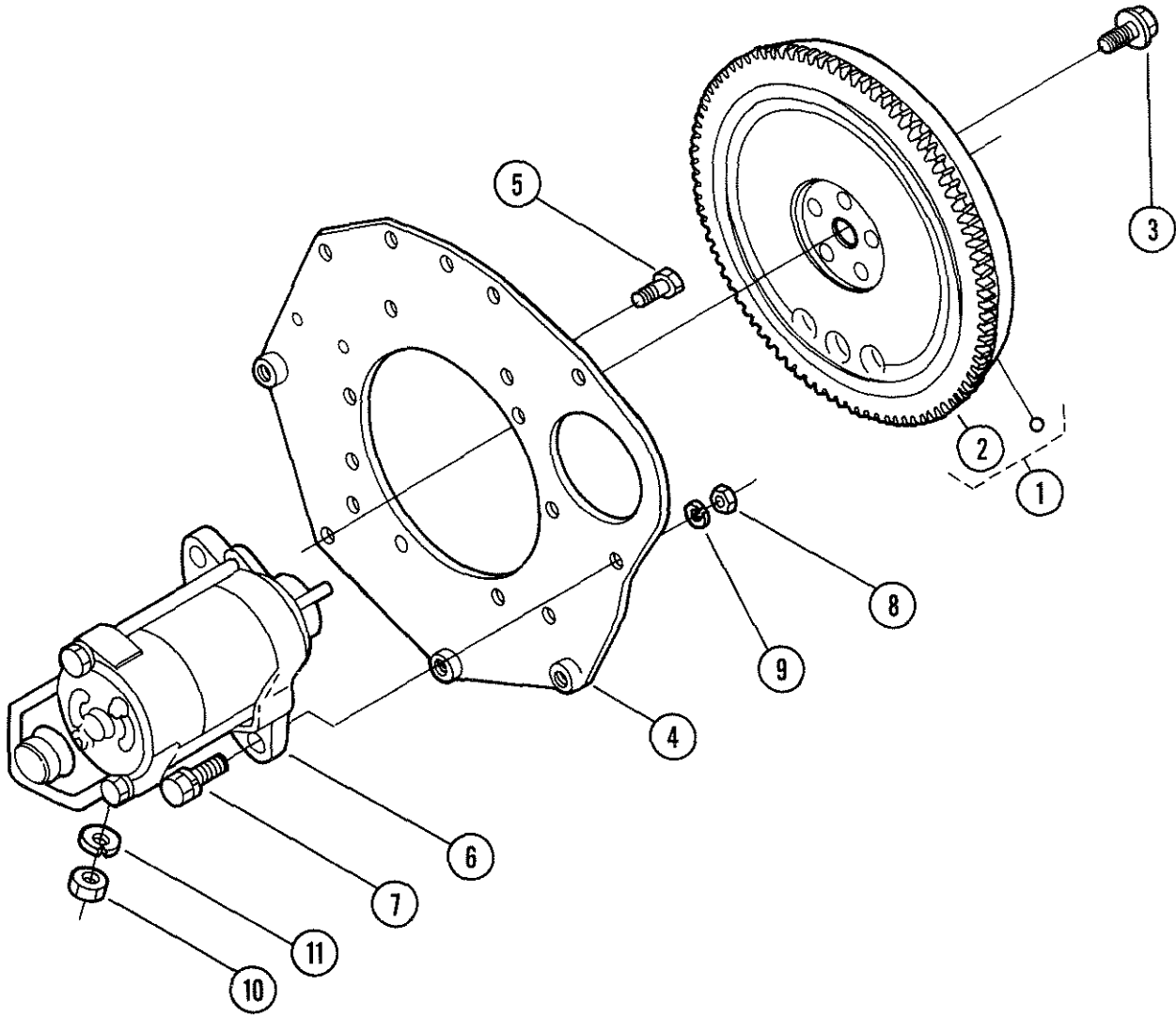


PISTON, CRANKSHAFT GROUP

Item	Part No.	Unit	Description
1	302720	4	Piston
2	302722	4	Piston Ring Set
3	301273	4	Piston Pin
4	301274	8	Cir-Clip
5	302724	4	Connecting Rod Assembly
6	302725	4	Pin Bushing
7	302726	8	Bolt
8	302727	4	Rod Bearing
9	302730	1	Crankshaft Complete
10	302470	4	Ball
11	300813	1	Sleeve
12	301281	1	Gear
13	299549	1	Key
14	301282	1	Bearing Main
15	301283	3	Bearing Main
16	299501	1	Bearing Main
17	299502	2	Bearing Spacer
18	299503	2	Bearing Spacer
19	301287	1	Collar
20	302731	1	Oil Slinger
21	301289	1	O-Ring

Item	Part No.	Unit	Description
1A	302721	4	Piston .05MM Oversize
2A	302723	4	Piston Ring Set .05MM Oversize
8A	302728	4	Rod Bearing .02MM Oversize
8B	302729	4	Rod Bearing .04MM Oversize
14A	301641	1	Bearing Main .02MM Oversize
14B	301642	1	Bearing Main .04MM Oversize
15A	301645	3	Bearing Main .02MM Oversize
15B	301646	3	Bearing Main .04MM Oversize
16A	300754	1	Bearing Main .02MM Oversize
16B	300755	1	Bearing Main .04MM Oversize
17A	301647	2	Bearing Spacer .02MM Oversize
17B	301648	2	Bearing Spacer .04MM Oversize
18A	301649	2	Bearing Spacer .02MM Oversize
18B	301650	2	Bearing Spacer .04MM Oversize

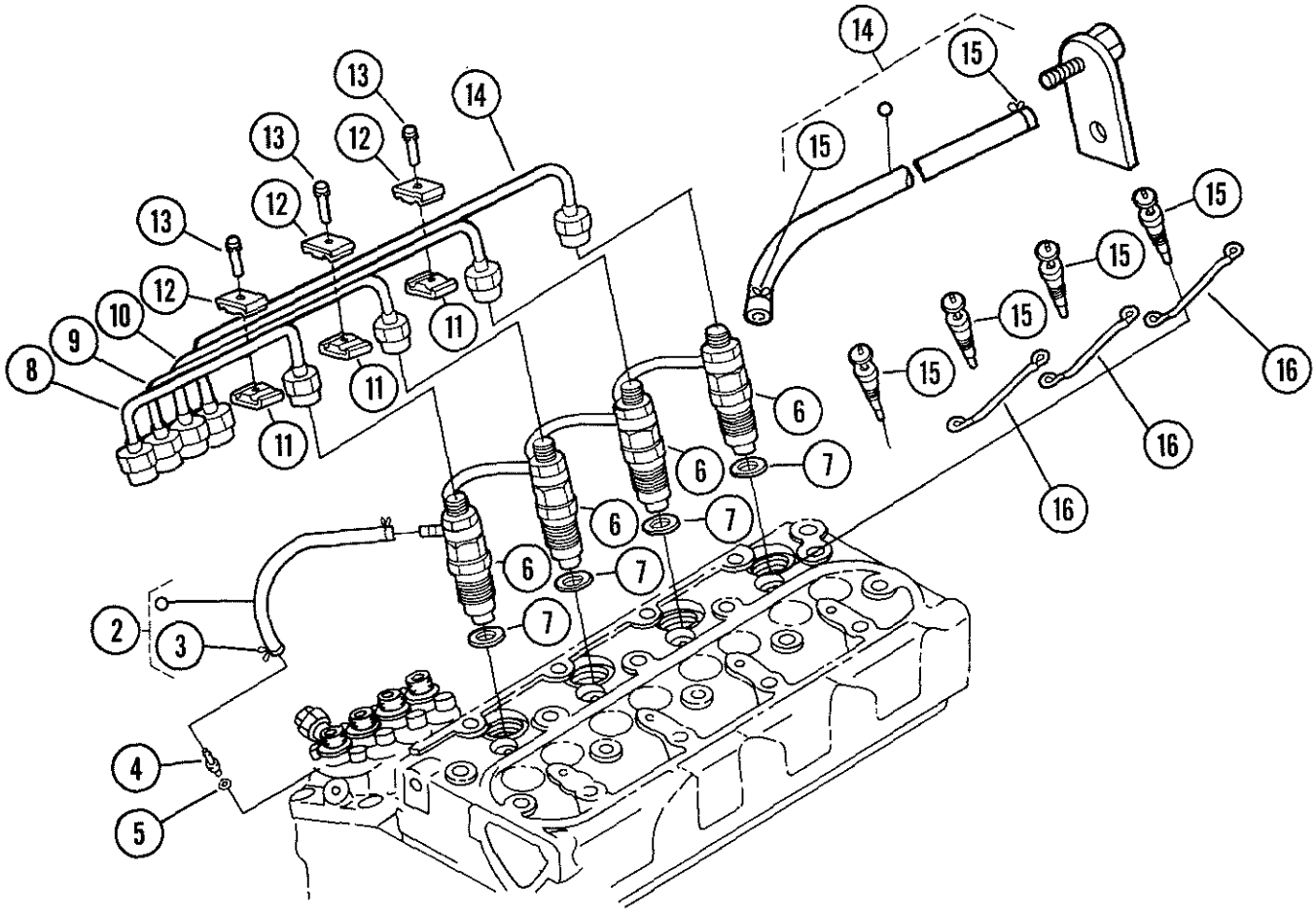
FLYWHEEL GROUP



FLYWHEEL GROUP

Item	Part No.	Unit	Description
1	302732	1	Flywheel Complete
2	301291	1	Ring Gear
3	302733	5	Bolt
4	301293	1	Plate
5	301294	10	Bolt
6	302474	1	Starter
7	299514	2	Bolt
8	301297	2	Nut
9	299583	2	Lock Washer
10	300208	1	Nut
11	299583	1	Lock Washer

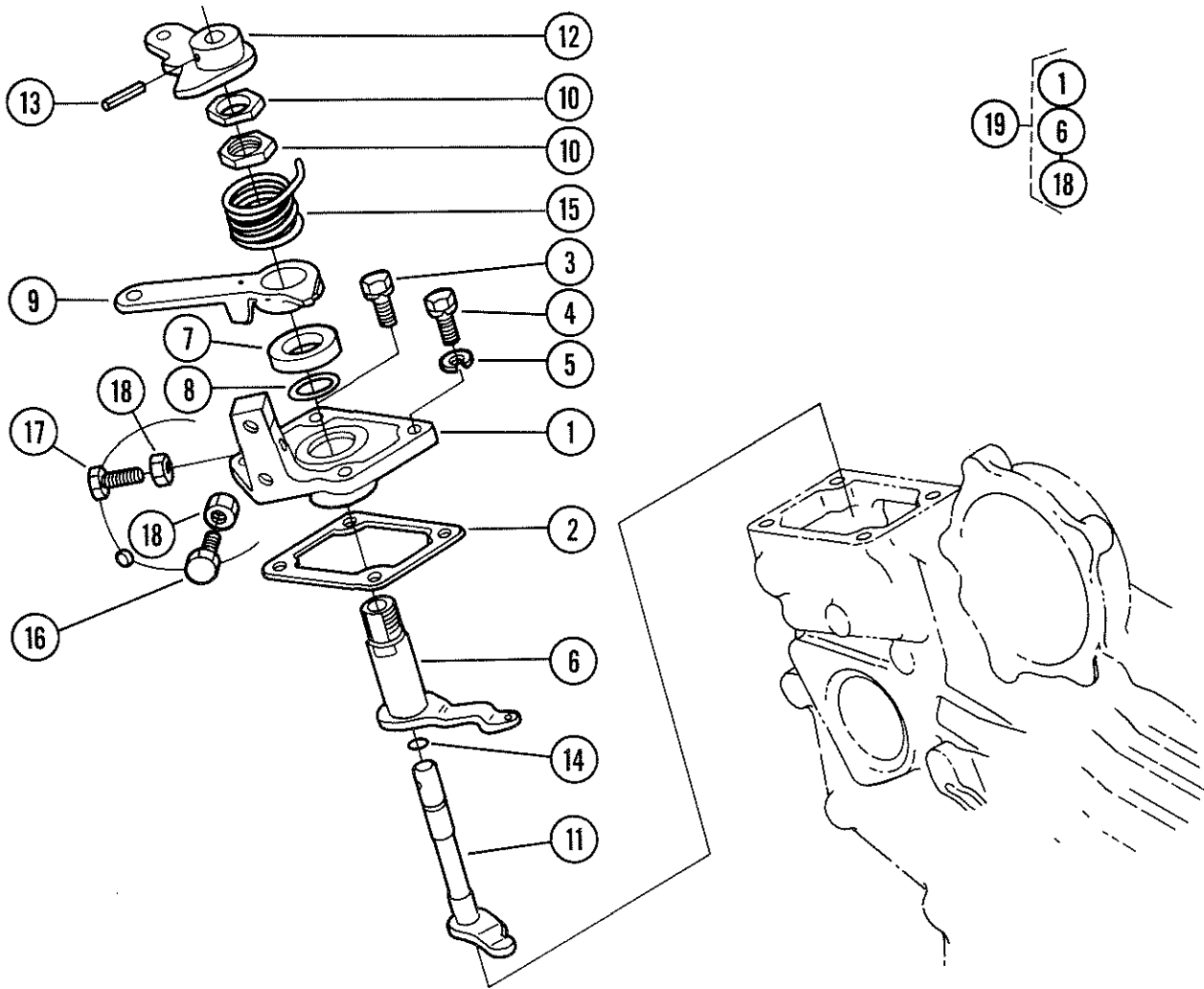
NOZZLE HOLDER GROUP



NOZZLE HOLDER GROUP

Item	Part No.	Unit	Description
1	302734	1	Over Flow Pipe Assembly
2	301299	1	Over Flow Pipe Assembly
3	302269	2	Clamp
4	301300	1	Screw
5	301241	1	Gasket
6	302735	4	Injector
7	301303	4	Gasket
8	302736	1	Injector Pipe
9	302737	1	Injector Pipe
10	302738	1	Injector Pipe
11	301306	3	Clamp
12	301307	3	Clamp
13	298794	3	Screw and Washer
14	302739	1	Injector Pipe
15	301754	4	Glow Plug
16	301309	3	Glow Plug Wire

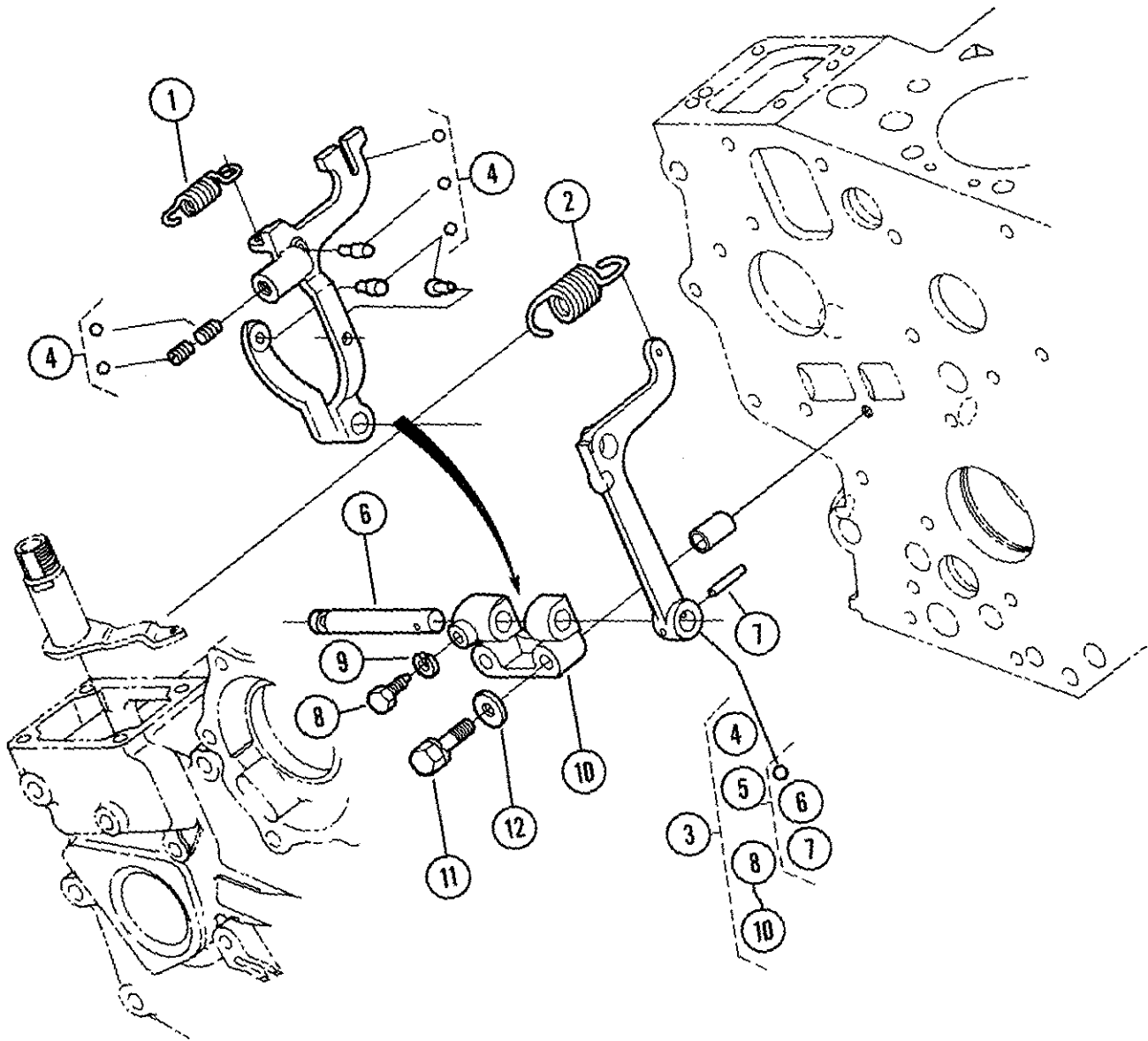
SPEED CONTROL PLATE GROUP



SPEED CONTROL PLATE GROUP

Item	Part No.	Unit	Description
1	301591	1	Speed Control Plate
2	301325	1	Gasket
3	302618	2	Bolt
4	299365	2	Bolt
5	301241	2	Gasket
6	301592	1	Governor Lever
7	301593	1	Collar
8	302750	1	O-Ring
9	301326	1	Speed Control Lever
10	301594	2	Nut
11	301595	1	Lever Shaft
12	302751	1	Engine Stop Lever
13	301588	1	Spring Pin
14	301496	1	O-Ring
15	301328	1	Spring Retainer
16	298826	2	Stopper
17	301596	1	Bolt
18	298684	3	Nut
19	302752	1	Control Plate Assembly

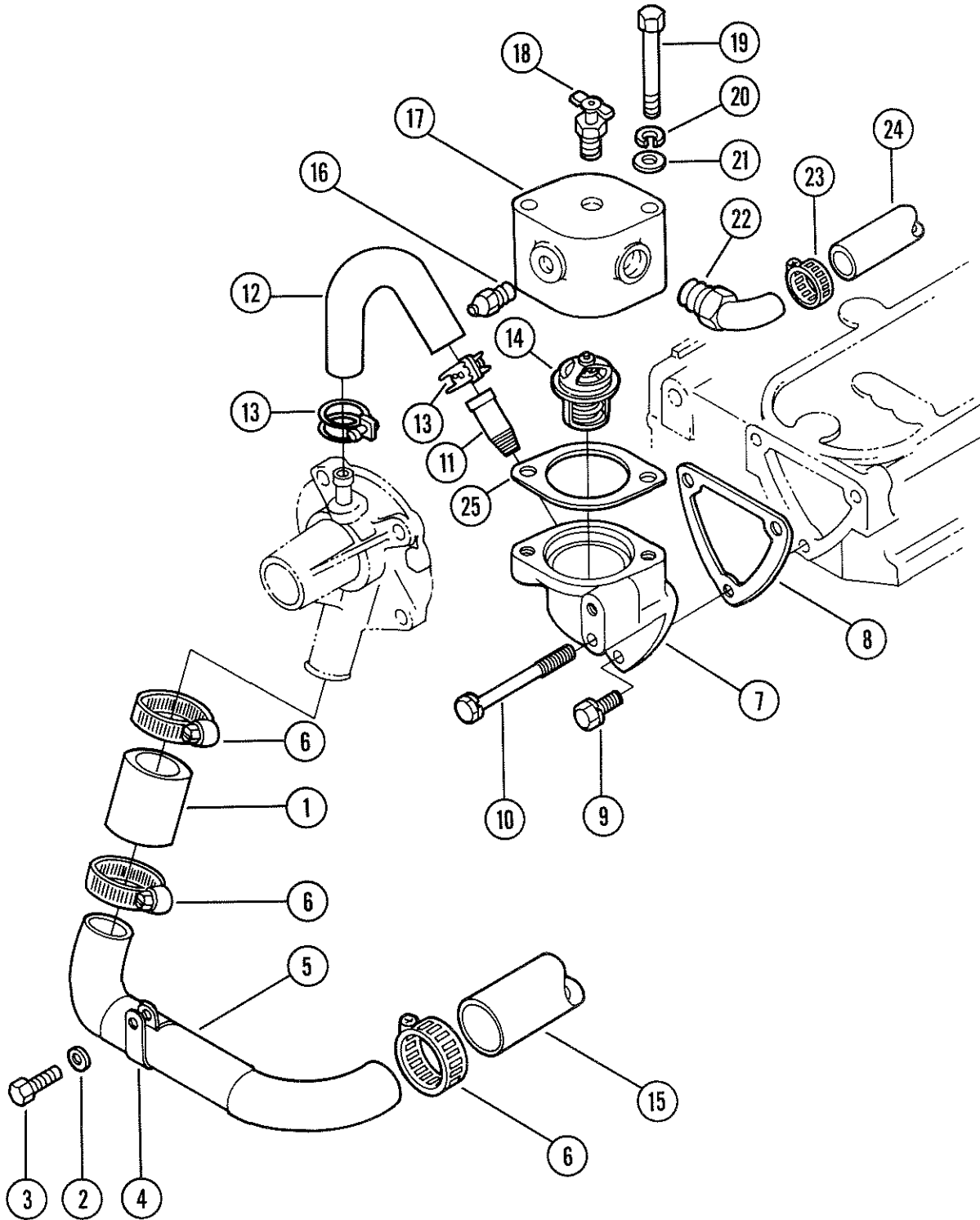
GOVERNOR GROUP



GOVERNOR GROUP

Item	Part No.	Unit	Description
1	301301	1	Start Spring
2	302747	1	Governor Spring
3	302748	1	Fork Lever Assembly
4	302749	1	Fork Lever Complete
5	301324	1	Fork Lever Assembly
6	301587	1	Lever Shaft
7	301588	1	Spring Pin
8	300189	1	Bolt
9	300187	1	Lock Washer
10	301589	1	Fork Lever Holder
11	301590	2	Bolt
12	301561	2	Washer

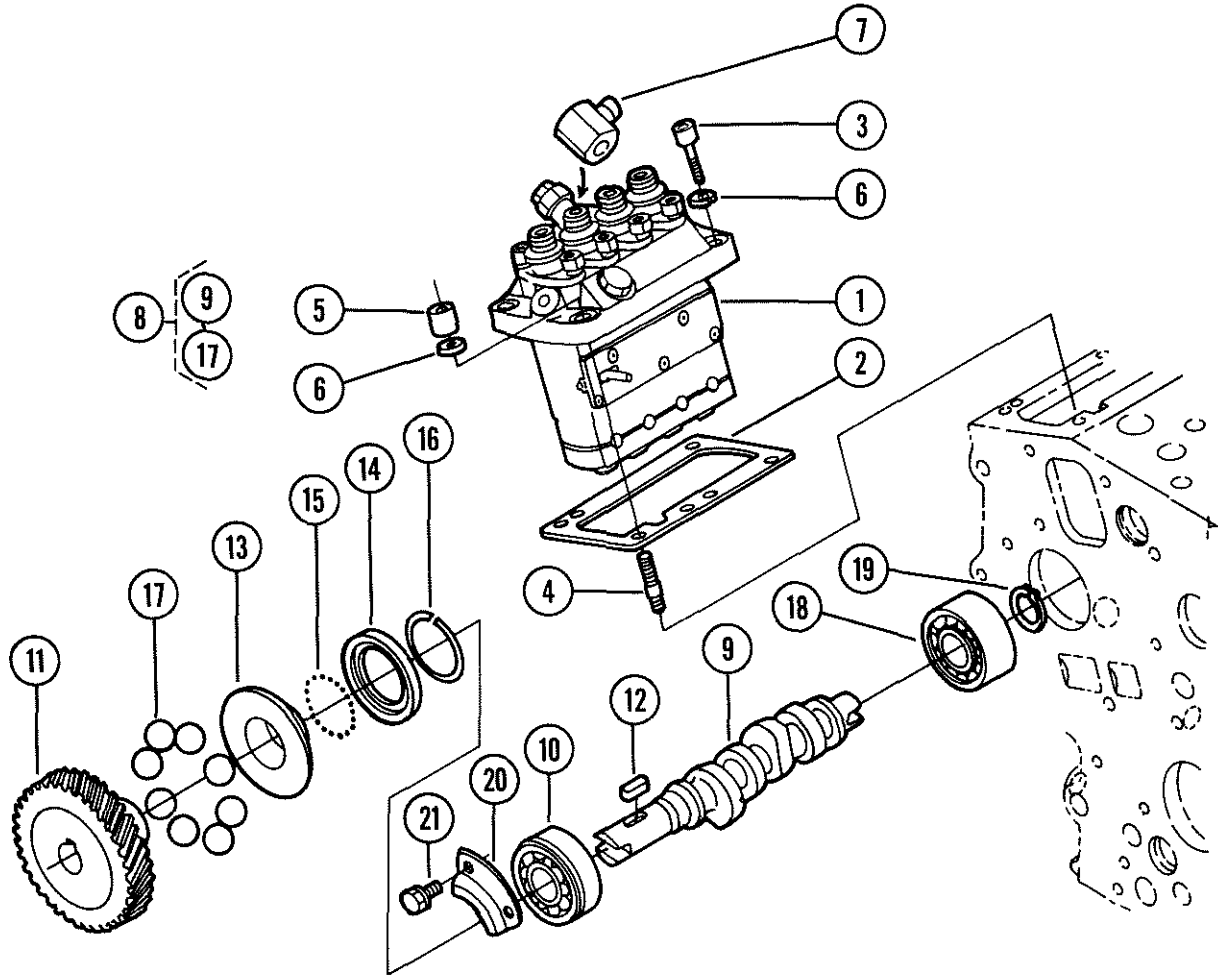
WATER FLANGE GROUP



WATER FLANGE GROUP

Item	Part No.	Unit	Description
1	302090		Hose
2	299033	1	Washer
3	299032	1	Bolt
4	301089	1	Clamp
5	301078	1	Hose
6	298648	2	Clamp
7	302755	1	Water Flange
8	301333	1	Gasket
9	302661	2	Bolt
10	301600	1	Bolt
11	300235	1	Water Pipe
12	301335	1	Water Pipe
13	301397	2	Clamp
14	301358	1	Thermostat
15	302646	1	Hose
16	299066	1	Temperature Sender
17	301059	1	Thermostat Housing
18	239138	1	Drain Cock
19	300330	2	Bolt
20	299033	2	Lock Washer
21	231874	2	Washer
22	302217	1	Elbow
23	374747	1	Clamp
24	301065	1	Hose
25	300237	1	Gasket

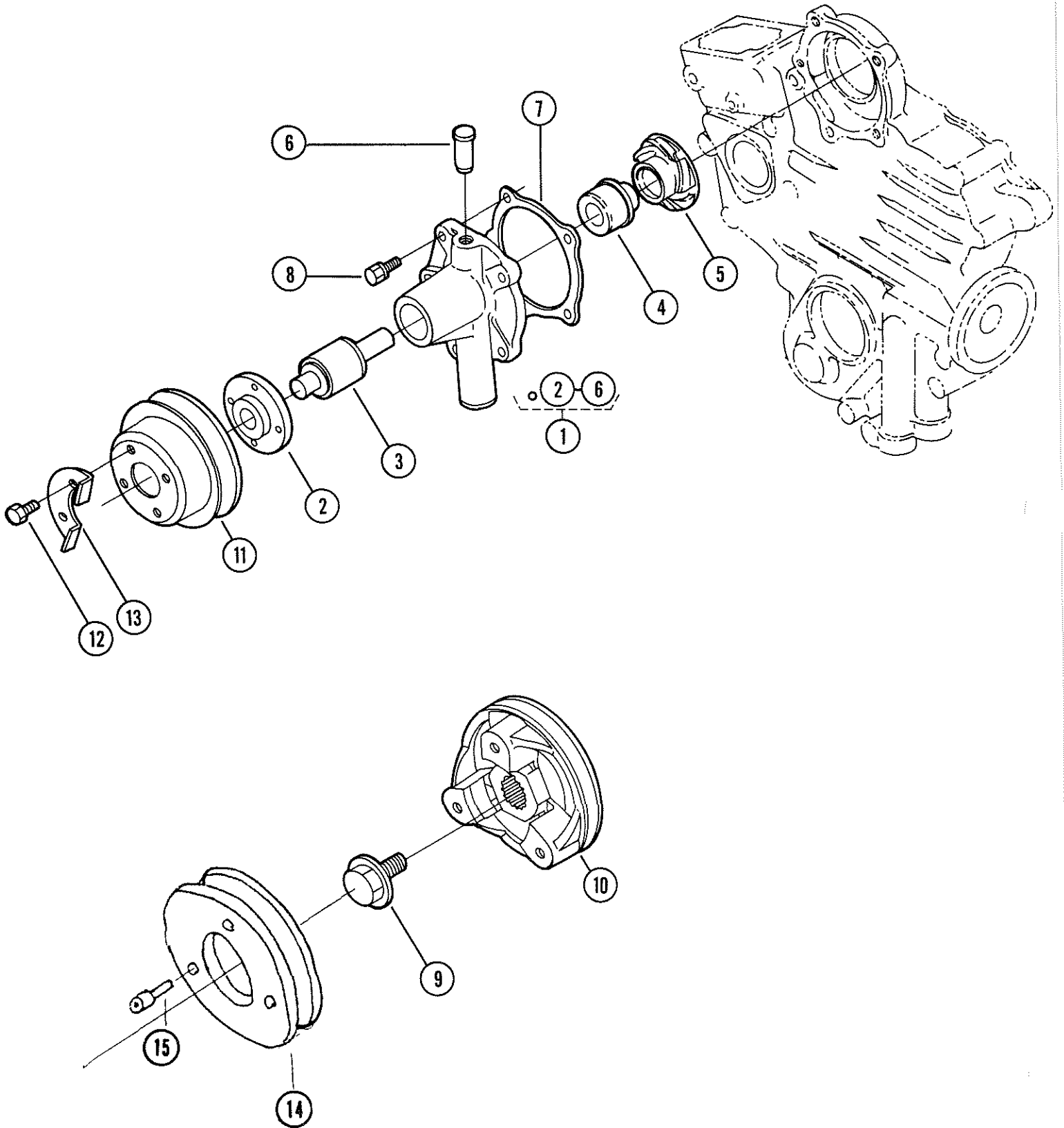
FUEL CAMSHAFT GROUP



FUEL CAMSHAFT GROUP

Item	Part No.	Unit	Description
1	302740	1	Injection Pump Assembly
2	302741	2	Pump Shim
3	301311	4	Bolt
4	301312	2	Stud
5	301313	2	Cap Nut
6	299369	6	Lock Washer
7	301314	1	Bleed Joint
8	302742	1	Fuel Camshaft Assembly
9	302743	1	Camshaft Fuel
10	301317	1	Ball Bearing
11	301318	1	Pump Gear
12	299476	1	Key
13	301571	1	Sleeve
14	301572	1	Governor Ball Case
15	301573	32	Ball
16	300198	1	Cir-Clip
17	299534	8	Ball
18	301319	1	Ball Bearing
19	301320	1	Cir-Clip
20	301574	1	Camshaft Retainer
21	302687	2	Bolt

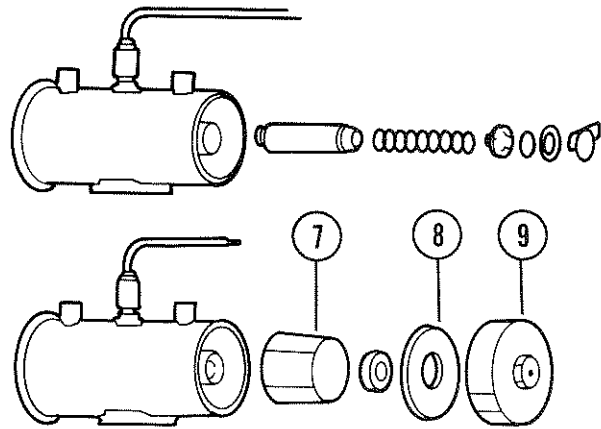
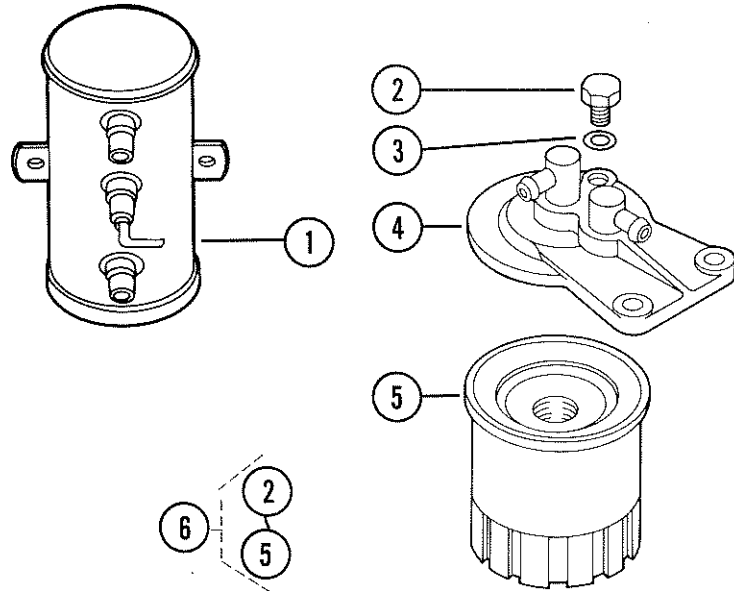
WATER PUMP GROUP



WATER PUMP GROUP

Item	Part No.	Unit	Description
1	302756	1	Water Pump Assembly
2	301518	1	Pump Flange
3	301337	1	Bearing
4	302757	1	Seal
5	302758	1	Impeller
6	302493	1	Return Pipe
7	301340	1	Gasket
8	301601	4	Bolt
9	302754	1	Bolt
10	302753	1	Drive Pulley
11	301329	1	Pump Pulley
12	301330	4	Bolt
13	301331	2	Pulley Washer
15 & 14	303068	1	P.T.O. Pulley Kit 5" x 3/8 Grove
15	302046	3	Pulley & 3 Al. Hd. Cap. Grade 5 (5mm x 1.25 x 30mm)
14	301847	1	P.T.O. Pulley 5"

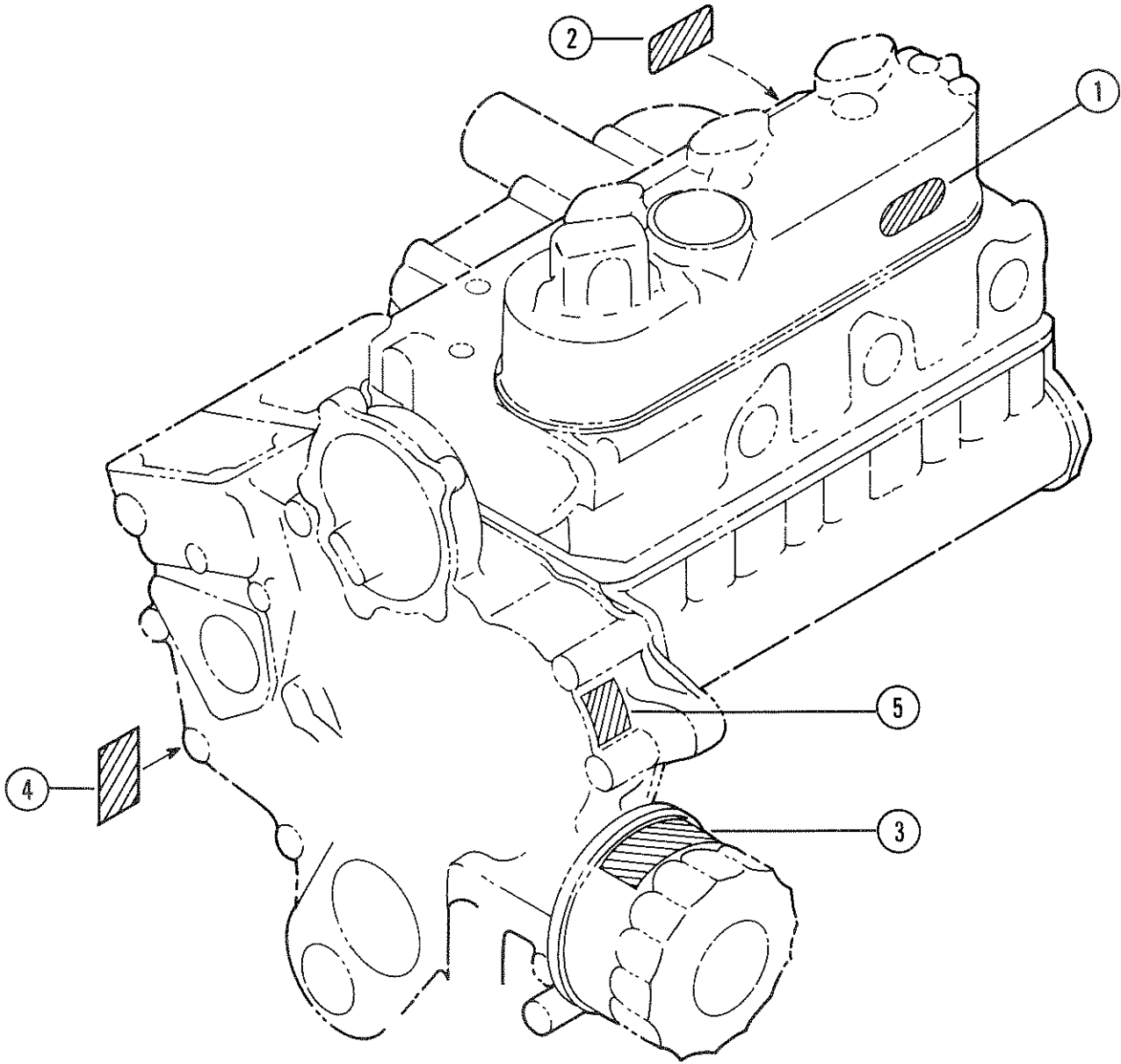
FUEL FILTER GROUP



FUEL FILTER GROUP

Item	Part No.	Unit	Description
1	301385	1	Electric Fuel Pump
2	299855	1	Bleeder Bolt
3	299856	1	O-Ring
4	301602	1	Filter Cover
5	298854	1	Fuel Filter
6	298853	1	Fuel Filter Assembly
7	300128	1	Fuel Pump Filter & Geilt
8	299639	1	Cover Gasket
9	299803	1	Cover

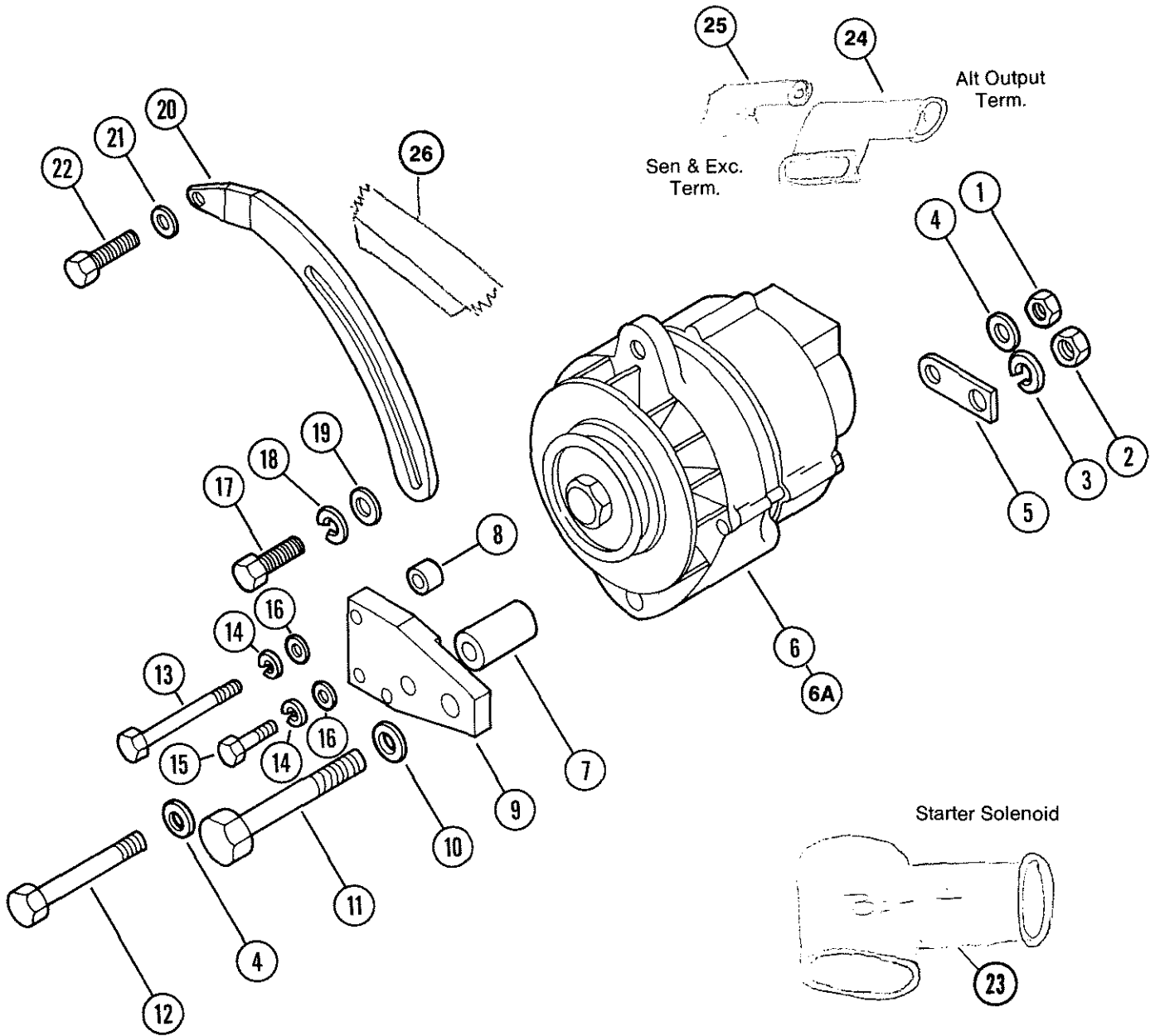
NAME PLATE GROUP



NAME PLATE GROUP

Item	Part No.	Unit	Description
1	298851	1	Label, Glow Plug
2	299609	1	Label, Oil
3	298850	1	Label, Instruction
4	298849	1	Label, Instruction
5	298847	1	Label, Drainage

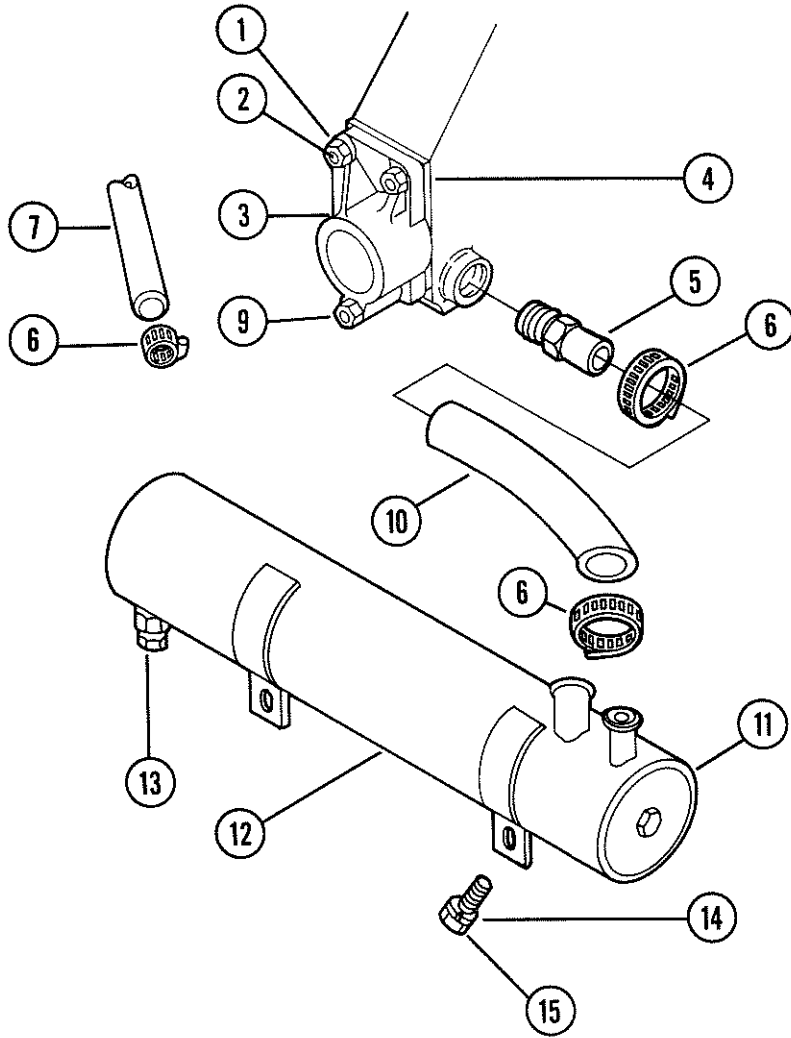
ALTERNATOR GROUP



ALTERNATOR GROUP

Item	Part No.	Unit	Description
1	298466	1	Nut
2	230144	1	Nut
3	231895	1	Split Washer
4	298461	2	Washer
5	301004	1	Alternator Support
6	300800	1	Alternator
6A	300746	1	12V 72 amp Alt.
7	300995	1	Alternator Spacer
8	301011	1	Alternator Spacer
9	301075	1	Alternator Bracket
10	231876	1	Washer
11	231091	1	Hex Head Cap Screw 3/8-16 x 3-1/4
12	300977	1	Hex Head Cap Screw 8m x 80
13	301012	1	Hex Head Cap Screw 6m x 75
14	299033	2	Split Washer
15	299032	1	Hex Head Cap Screw 6 x 1.00 x 25
16	231874	2	Washer
17	230157	1	Hex Head Cap Screw 5/16-18 x 3/4
18	231891	1	Split Washer
19	231875	1	Washer
20	301074	1	Alt. Adjustment Arm
21	299369	1	Washer
22	301600	1	Hex Head Cap Screw
23	303107	1	Rubber Boat
24	303108	1	Rubber Boat
25	303109	2	Rubber Boat

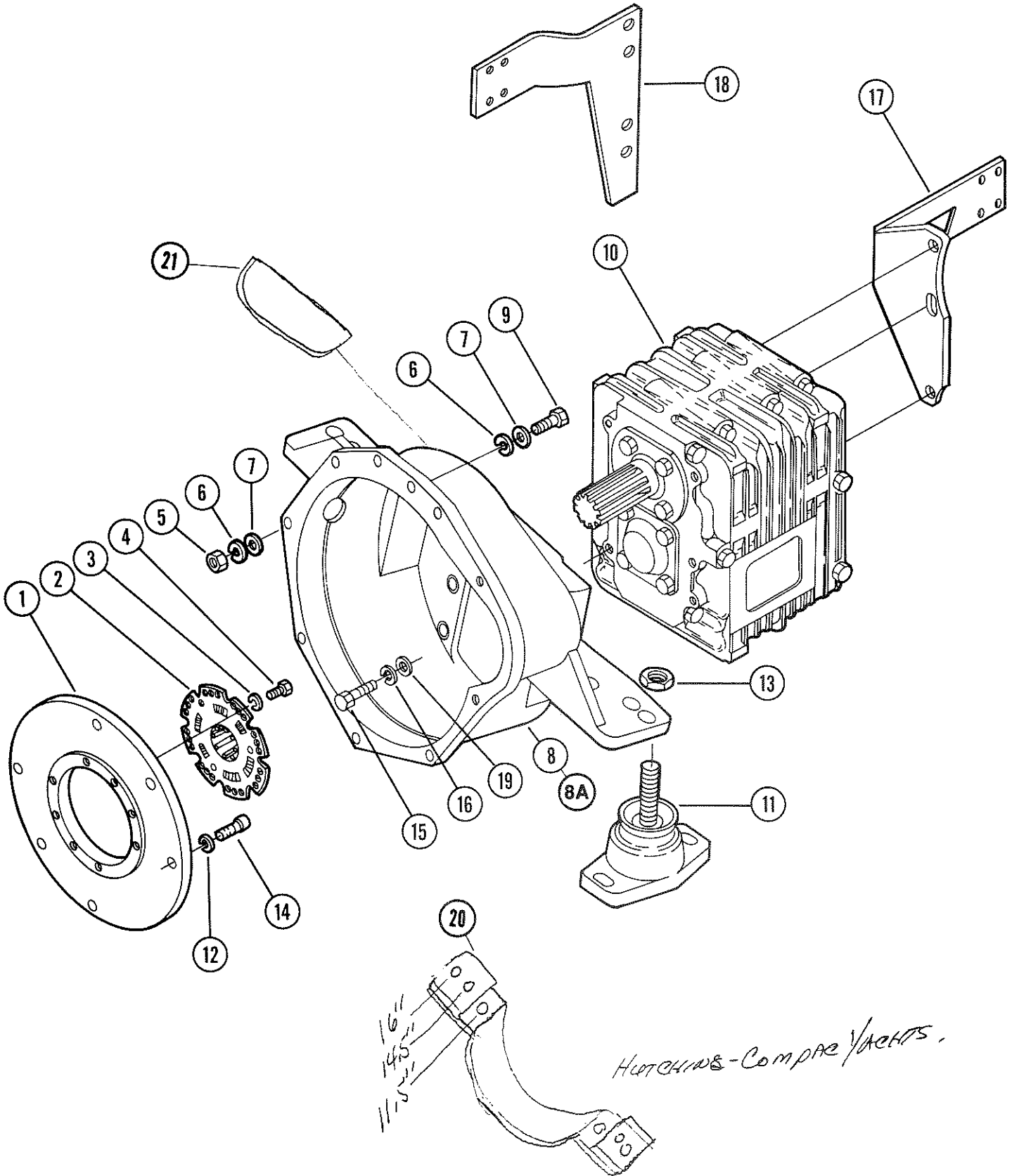
HEAT EXCHANGER GROUP



HEAT EXCHANGER GROUP

Item	Part No.	Unit	Description
1	230147	3	Nut
2	276440	2	Stud
3	298599	1	Exhaust Flange
4	298600	1	Gasket
5	286075	1	Fitting
6	298648	4	Clamp
7	302646	1	Hose
8	301083	2	Clamp
9	230147	3	Nut
10	302645	1	Hose
11	301457	1	End Cap & Gasket
12	302631	1	Heat Exchanger 3" x 13" w/Mtg Brkts.
13	301068	1	Zinc Pencil 3/8 NPT x 1 1/2 x 1/2 D
14	015395	2	Washer
15	231056	2	Bolt

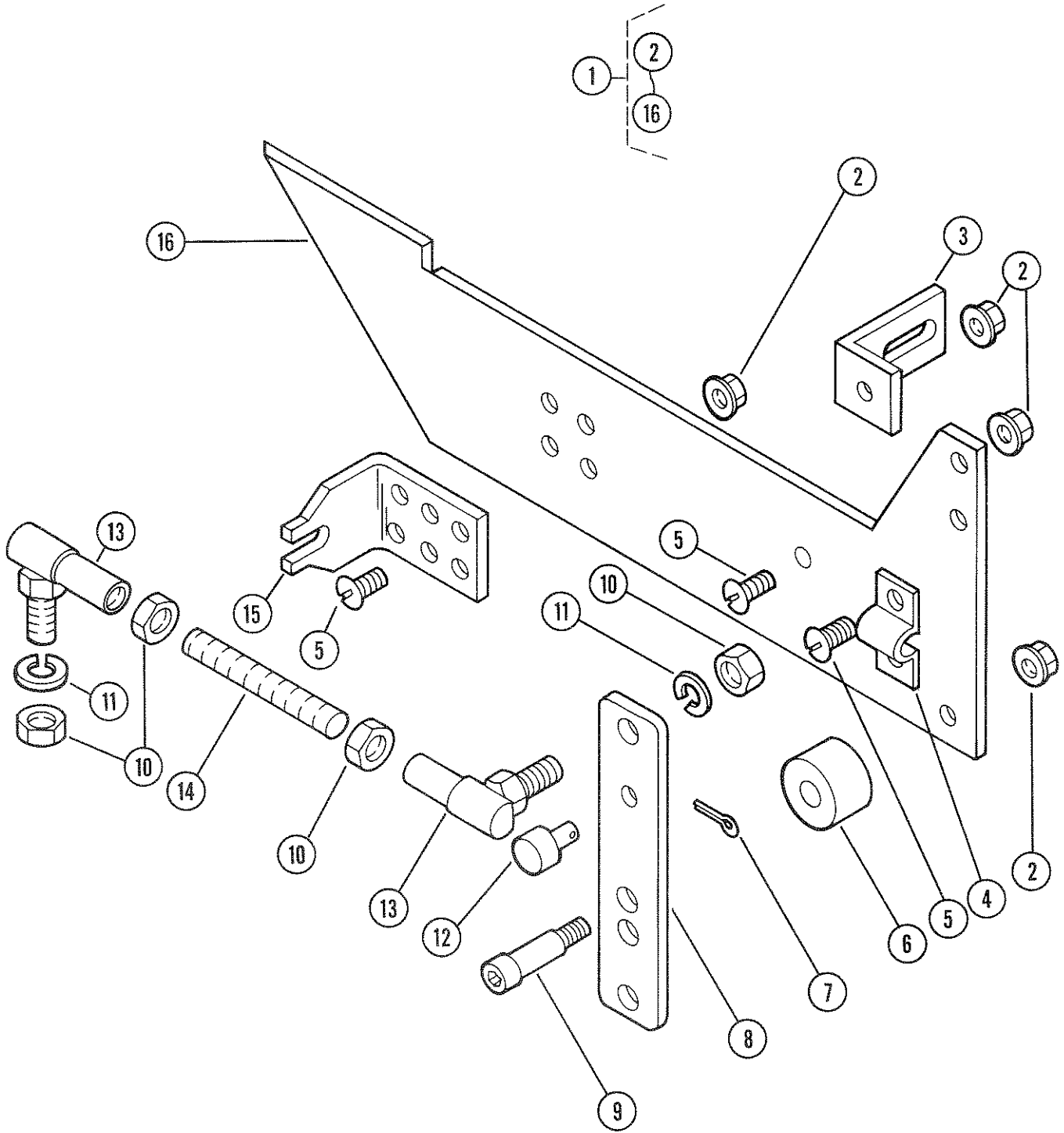
BELL HOUSING GROUP



BELL HOUSING GROUP

Item	Part No.	Unit	Description
1	301914	1	Dampener Mounting Plate
2	299156	1	Dampener
3	298459	8	Lock Washer
4	298458	8	Bolt
5	230141	3	Nut
6	231891	9	Lock Washer
7	231875	9	Plain Washer
8	302396	1	Bell Housing 11.5" Mt. Only (Not Shown)
8A	302671	1	Bele Hsg. 11.5, 14, 5, & 16 Mtg. (As Shown)
9	298622	7	Bolt
10	300115	1	Transmission
10A	299942	1	V-Drive Transmission Not Shown
11	300974	4	Flex Mount
12	298461	6	Lock Washer
13	231190	8	Nut Jam
14	298460	6	Bolt
15	298468	6	Bolt
16	298461	6	Lock Washer
17	300427	1	Shift Bracket
18	300244	1	Vertical Shift Bracket
19	231875	1	Plain Washer
20	303116	1	14.5"-16" Saddle Mt.
21	303147	1	Pad Rubber (H.E. Backing)

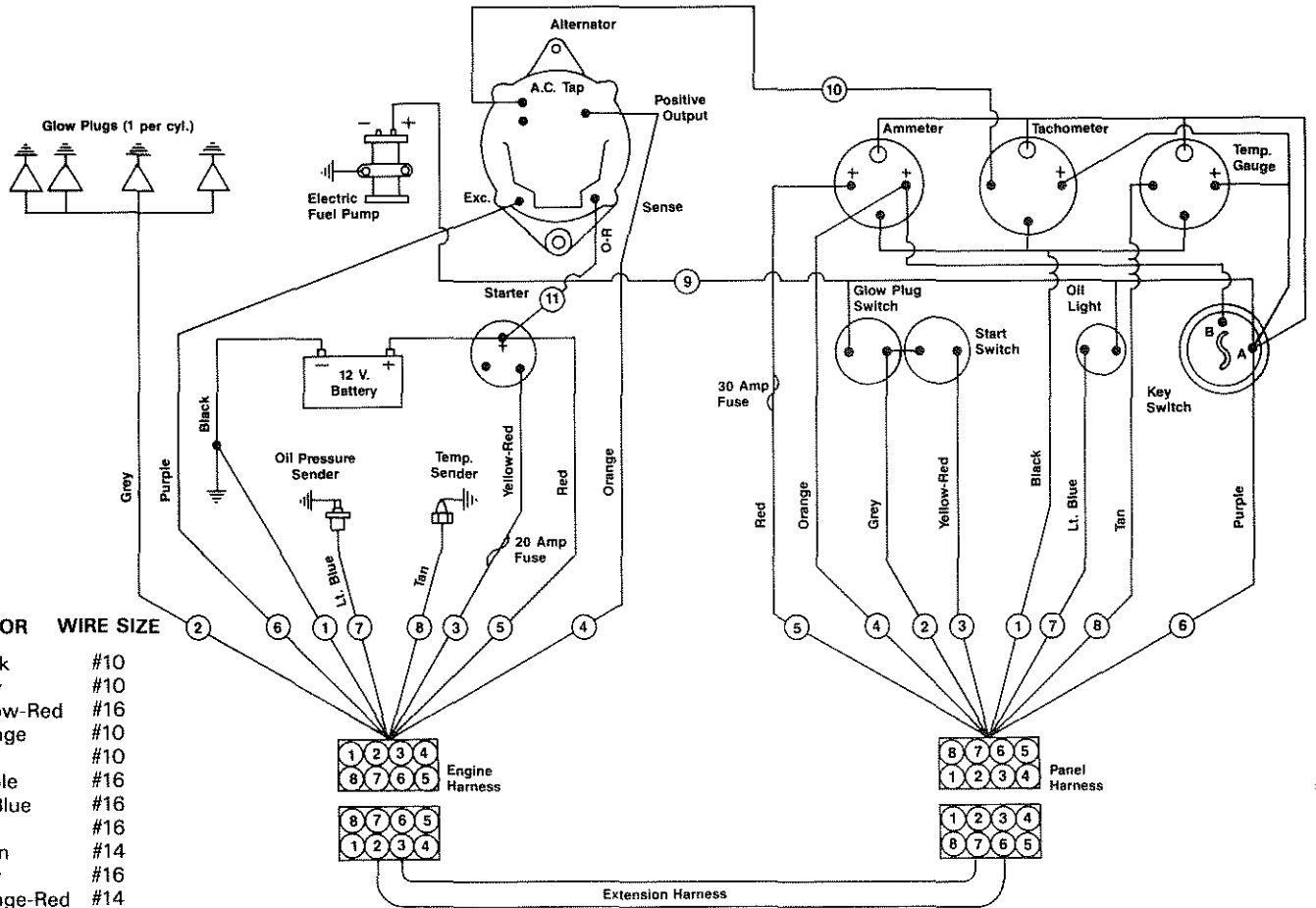
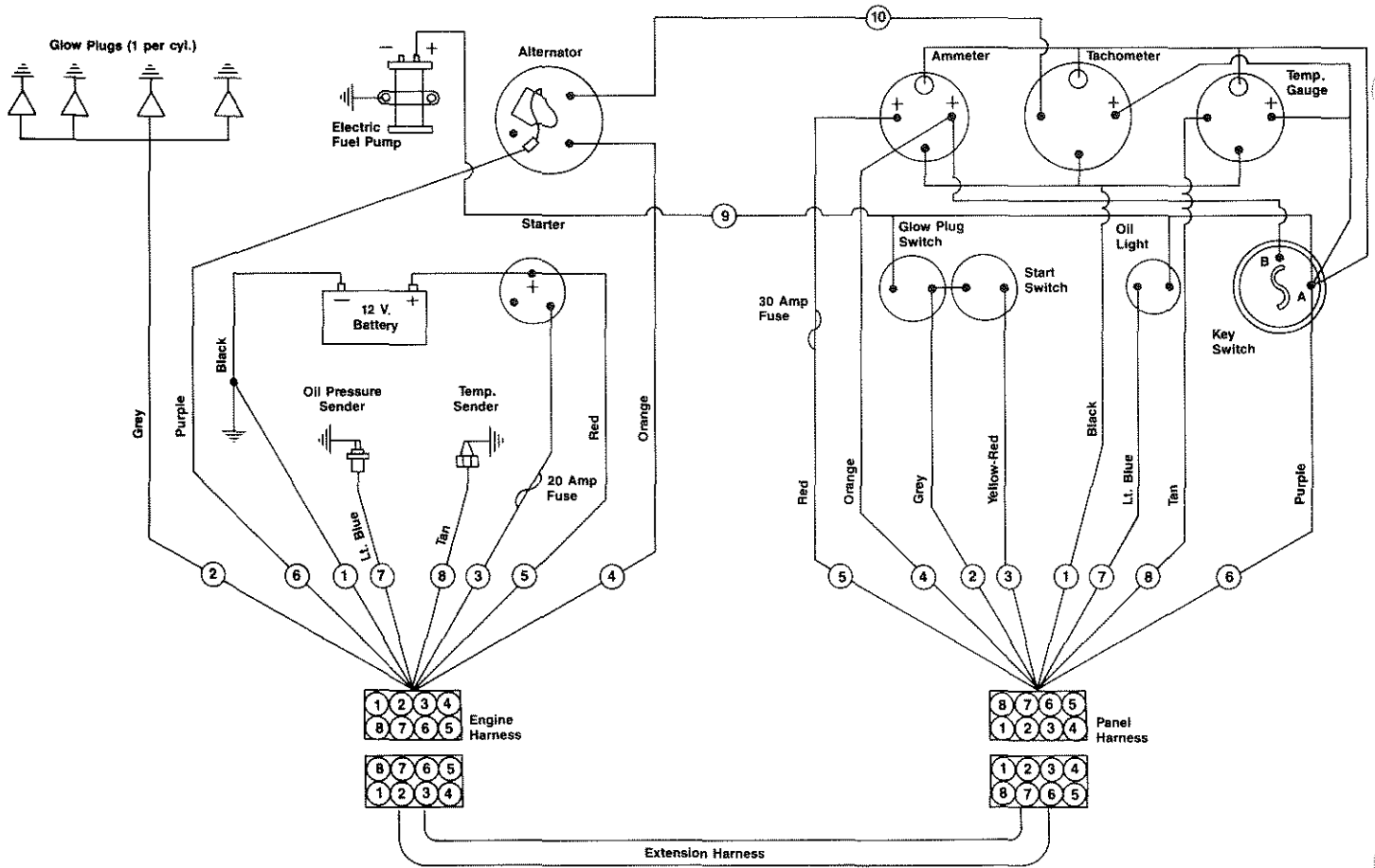
THROTTLE BRACKET GROUP



THROTTLE BRACKET GROUP

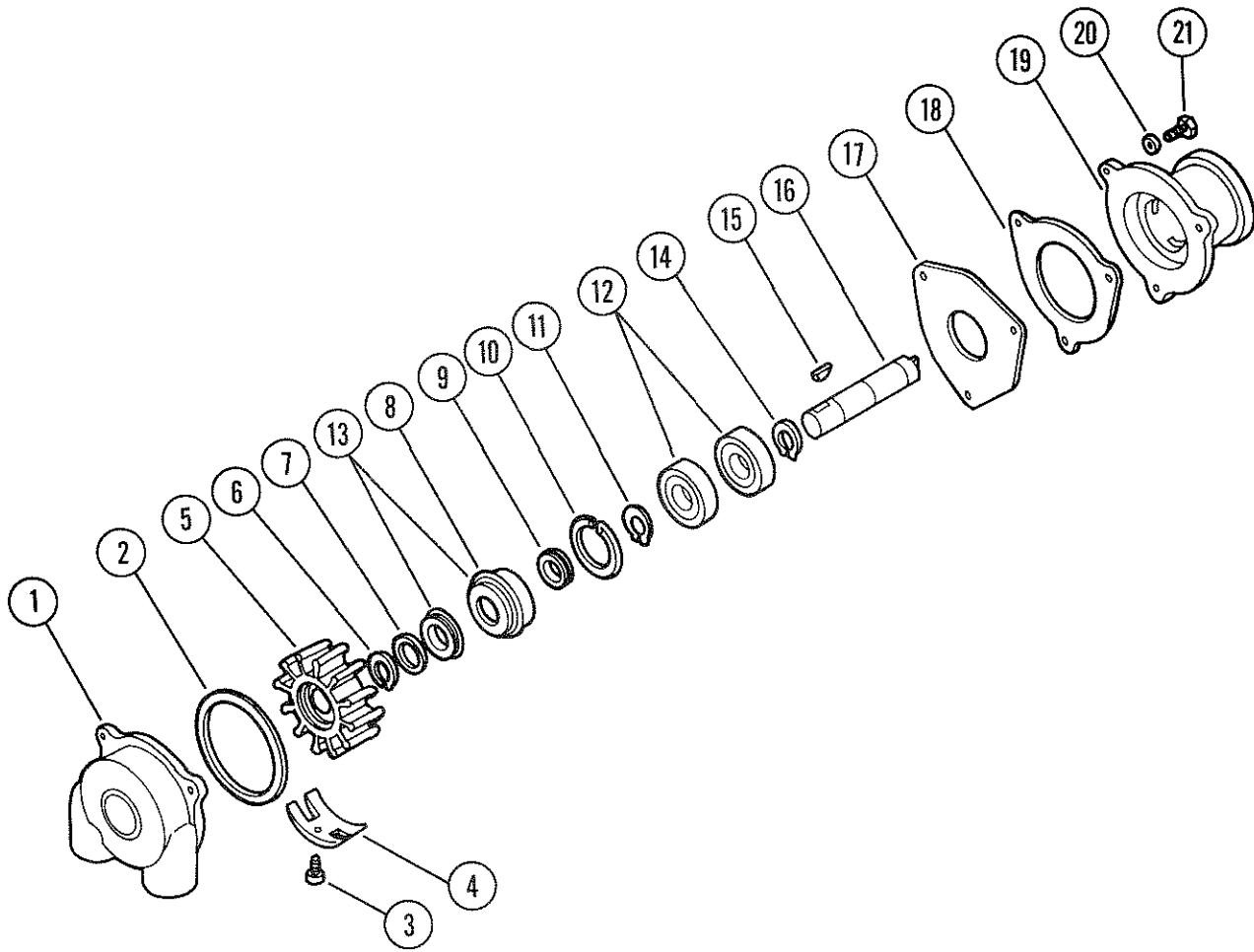
Item	Part No.	Unit	Description
1	256934	1	Throttle Bracket Assembly
2	015434	6	Nut
3	300979	1	Bracket Support
4	299653	1	Cable Clamp
5	015360	5	Screw
6	300090	1	Lever Spacer
7	230281	1	Cotter Pin
8	300826	1	Lever
9	231452	1	Shoulder Screw
10	230184	4	Jam Nut
11	231907	2	Lock Washer
12	299019	1	Cable Pivot
13	299767	2	Ball Joint
14	300978	1	Adjustment Rod
15	298630	1	Cable Cup
16	302635	1	Throttle Bracket

WIRING DIAGRAM



WIRE NO.	COLOR	WIRE SIZE
1	Black	#10
2	Grey	#10
3	Yellow-Red	#16
4	Orange	#10
5	Red	#10
6	Purple	#16
7	Lt. Blue	#16
8	Tan	#16
9	Open	#14
10	Grey	#16
11	Orange-Red	#14

SHERWOOD WATER PUMP NO. 302648

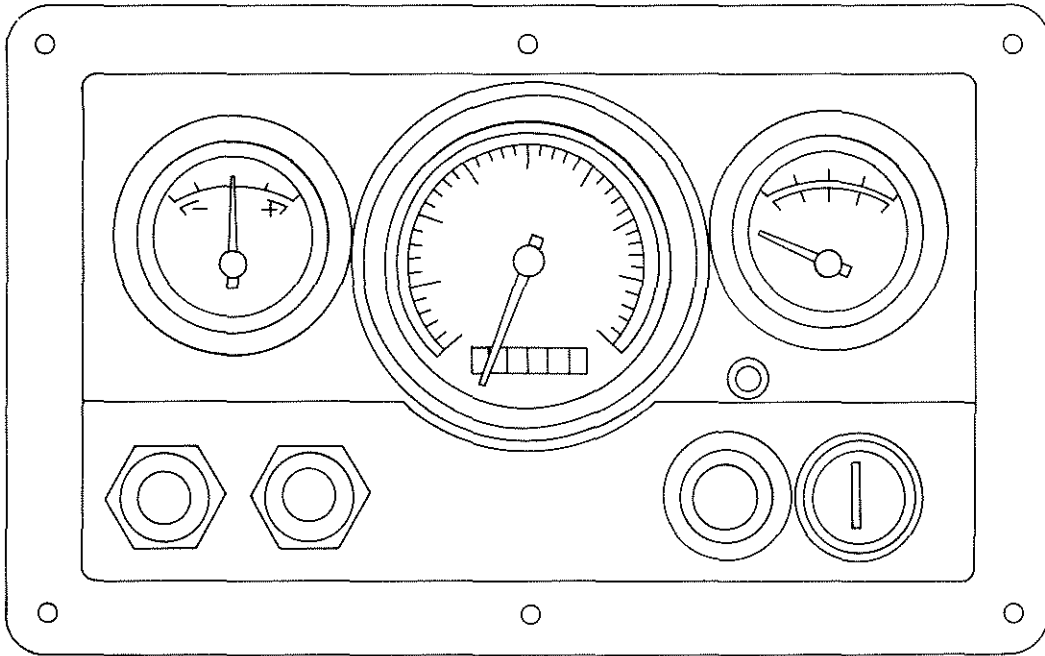


Item	Part No.	Unit	Description
1	302873	1	Impeller Housing
2	302877	1	O-Ring
3	302871	1	Cam Screw
4	302872	1	Cam
5	302875	1	Impeller
6	302867	1	Cir-Clip
7	302876	1	Flat Washer
8	302880	1	Seal Seat
9			Not Available Order #13
10	302868	1	Cir-Clip Internal
11	302867	1	Cir-Clip External
12	302884	2	Ball Bearing
13	302885	1	Seal & Seat Assembly
14	302867	1	Cir-Clip External
15	302874	1	Key
16	302865	1	Shaft
17	302878	1	End Plate
18	302879	1	Gasket
19	302882	1	Pump Body
20	302870	3	Lock Washer
21	302869	3	Bolt

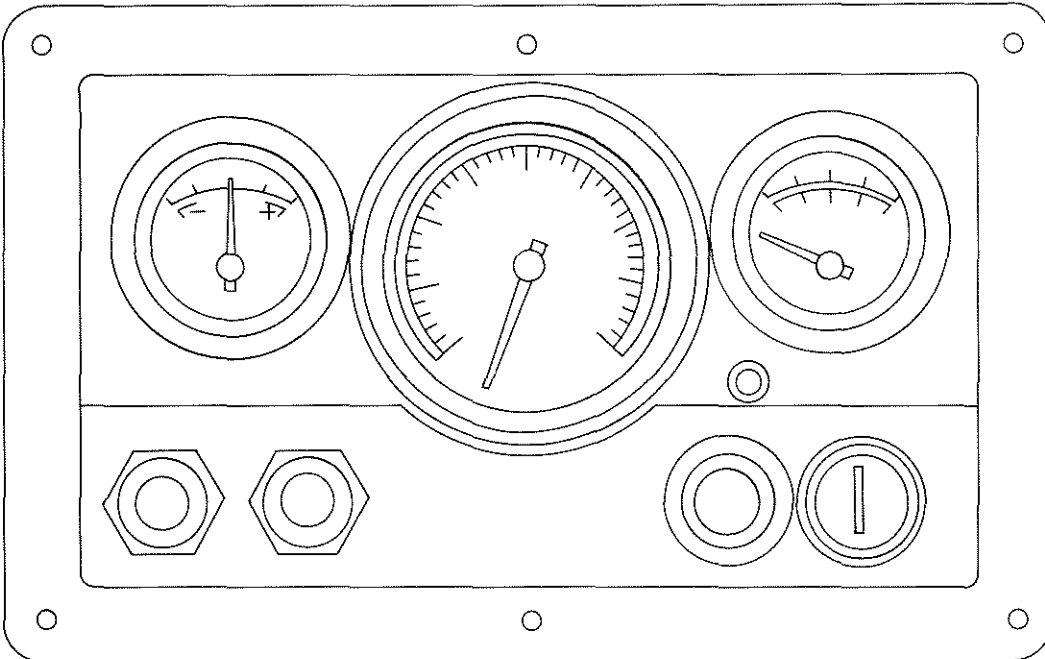
256945
"B" SPARE PARTS KIT M3-20

256947
"A" SPARE PARTS KIT M3-20

NOVATRON PANELS

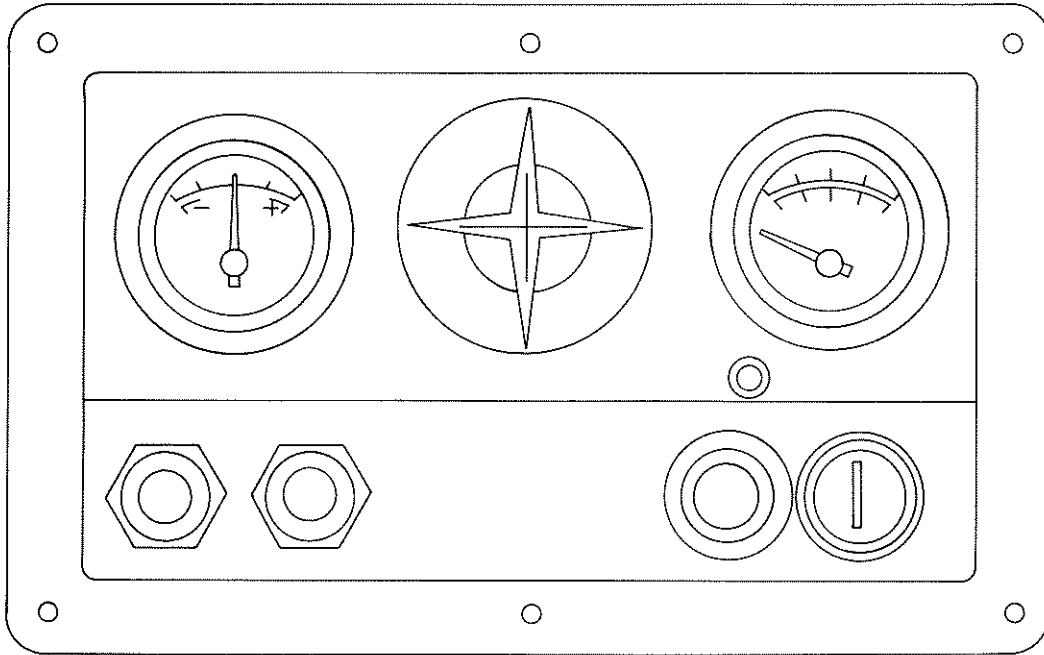


300690 CUSTOM PANEL



300685 DELUXE PANEL

NOVATRON PANELS



300680 STANDARD PANEL

NOVATRON INSTRUMENT PANEL		
Part No.	Unit	Description
300690	Optional	Special Deluxe Panel-Tachometer w/Hourmeter w/Warning Light and Buzzer
301101	Optional	Blank Panel w/Holes
300685	Optional	Deluxe Panel- w/Tachometer
301100	1	Blank Panel w/Holes
300680	1	Standard Panel
301099	1	Blank Panel w/Holes
300668	1	Ammeter
300669	1	Oil Light
300670	1	Temperature Gauge
300671	1	Ignition Switch
300672	2	Glow and Start Button
300673	1	35 Amp Circuit Breaker
300674	1	10 Amp Circuit Breaker
300675	1	10 Foot Extension Harness
300676	1	Panel Harness Assembly
300684	Optional	Tachometer for 300685 Panel
300687	Optional	Tachometer w/Hourmeter for 300690 Panel
300688	Optional	Buzz Light for 300690 Panel
300689	Optional	Tachometer Wire for 300690 Panel
300708	Optional	5 Foot Extension Harness
298586	Optional	Engine Harness

STANDARD COUPLING KITS		
	Rigid	Flex
3/4"	256741	298568
7/8"	256742	298569
1"	256743	298484
1-1/8"	256744	298570
1-1/4"	256745	299300

V-DRIVE COUPLING KITS		
	Rigid	Flex
3/4"	256775	256780
7/8"	256776	256781
1"	256777	256782
1-1/8"	256778	256783
1-1/4"	256779	N/A

Top Gasket Set M4-30 256948
Complete Gasket Set M4-30 256949



