



Parts List
M-12
M2-12

Part number 200137
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: M-12 Number of cylinders: 2 Mfg. Years: 1983-1988

Cubic Inches: 24.4 Horsepower: 10 Weight: 175

Air Filter	-	301926	Oil Pressure Switch	-	299964
Air Filter Element	-	301049	Panel, Standard	-	300680
Alternator	-	302280	Panel, Deluxe	-	300685
Ammeter	-	300668	Panel, Custom	-	300690
Belt	-	301073	Pump, Fresh Water	-	301336
Dipstick	-	301212	Pump, Mounting Gasket	-	301340
Exhaust Manifold	-	300802	Pump, Rebuild Kit	-	N/A
(A) Exhaust Manifold Gasket	-	301245	Pump, Sea Water	-	302648 (E)
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	-	301120	Pump, Seal	-	302885
Gasket, Oil Pan	-	301209	Pump Conversion Kit (includes pump)	-	302835
Gasket Set, Upper	-	256840	Pump Conversion Kit (excludes pump)	-	302838
Gasket Set, Complete	-	256841	PTO Pulley Kit	-	303068
Glow Plug	-	301754	Pump, Fuel Lift	-	301385
Harness, 5 FT. EXT.	-	300708	Shim, Cylinder Head	-	N/A
Harness, 10 FT. EXT.	-	300675	Spare Parts Kit A	-	256910
Harness, Engine	-	298586	Spare Parts Kit B	-	256829
(B) Heat Exchanger	-	298633	Starter	-	301295
Heat Exchanger End Cap	-	299838	Starter Solenoid	-	301933
(C) Heat Exchanger Gasket	-	299838	Tachometer	-	300684
Injector	-	301109	Tachometer with Hour Meter	-	300687
Injection Pump	-	301121	Tank, Coolant Recovery	-	300238
Injection Hardware Kit	-	N/A	Thermostat Element	-	301358
Injector Nozzle	-	N/A	Thermostat Element Gasket	-	N/A
(D) Injector Return Line	-	SEE BELOW	Thermostat MTG Gasket	-	300237
Isolators	-	300974	Valve Cover Gasket	-	301239
Ignition Switch	-	300671	Water Temp Meter	-	300670
Manuals, Operators	-	200157	Water Temp Sender	-	299066
Manuals, Parts	-	200137	Water Injected Elbow	-	N/A
Manuals, Technical	-	200155	Zinc	-	301069 (F)
Oil Drain Washer Kit	-	301431			
Oil Pump	-	301203			

Notes:

- (A) QTY.- 2 EXHAUST MANIFOLD GASKETS REQUIRED PER ENGINE.
- (B) THE HEAT EXCHANGER IS 2 INCHES IN DIAMETER.
- (C) HEAT EXCHANGER END CAP, GASKET, AND BOLT ARE P/N 299838.
- (D) INJECTOR RETURN LINE CONSISTS OF 1-299831, 1-301298, & 1-301299.
- (E) NEW STYLE SHERWOOD PUMP - DOES NOT HAVE AN END COVER PLATE.
(INFORMATION ON OLD STYLE SHERWOOD OR OBERDORFER IN PARTS LIST)
- (F) ZINC SIZE IS 1/8 NPT X 1-7/8" LONG X 3/16 DIAMETER.



UNIVERSAL DIESEL FAST MOVING PARTS

Model: M2-12 Number of cylinders: 2 Mfg. Years: 1987-CURRENT

Cubic Inches: 26 Horsepower: 11 Weight: 175

Air Filter	-	301926	Oil Pressure Switch	-	299964
Air Filter Element	-	301049	Panel, Standard	-	300680
Alternator	-	302280	Panel, Deluxe	-	300685
Ammeter	-	300668	Panel, Custom	-	300690
Belt	-	302084	Pump, Fresh Water	-	301336
Dipstick	-	301212	Pump, Mounting Gasket	-	301340
Exhaust Manifold	-	300802	Pump, Rebuild Kit	-	N/A
(A) Exhaust Manifold Gasket	-	301245	Pump, Sea Water	-	302648 (E)
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	-	302791	Pump, Seal	-	302885
Gasket, Oil Pan	-	301209	Pump Conversion Kit		
Gasket Set, Upper	-	256940	(includes pump)	-	302835
Gasket Set, Complete	-	256941	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
(B) Heat Exchanger	-	298633	Spare Parts Kit A	-	256910
Heat Exchanger End Cap	-	299838	Spare Parts Kit B	-	256939
(C) Heat Exchanger Gasket	-	299838	Starter	-	301295
Injector	-	302735	Starter Solenoid	-	301933
Injection Pump	-	302795	Tachometer	-	300684
Injection Hardware Kit	-	N/A	Tachometer with Hour Meter	-	300687
Injector Nozzle	-	N/A	Tank, Coolant Recovery	-	300238
(D) 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	-	301239
Manuals, Parts	-	200137	Water Temp Meter	-	300670
Manuals, Technical	-	200155	Water Temp Sender	-	299066
Oil Drain Washer Kit	-	301431	Water Injected Elbow	-	N/A
Oil Pump	-	301203	Zinc	-	301069 (F)

Notes:

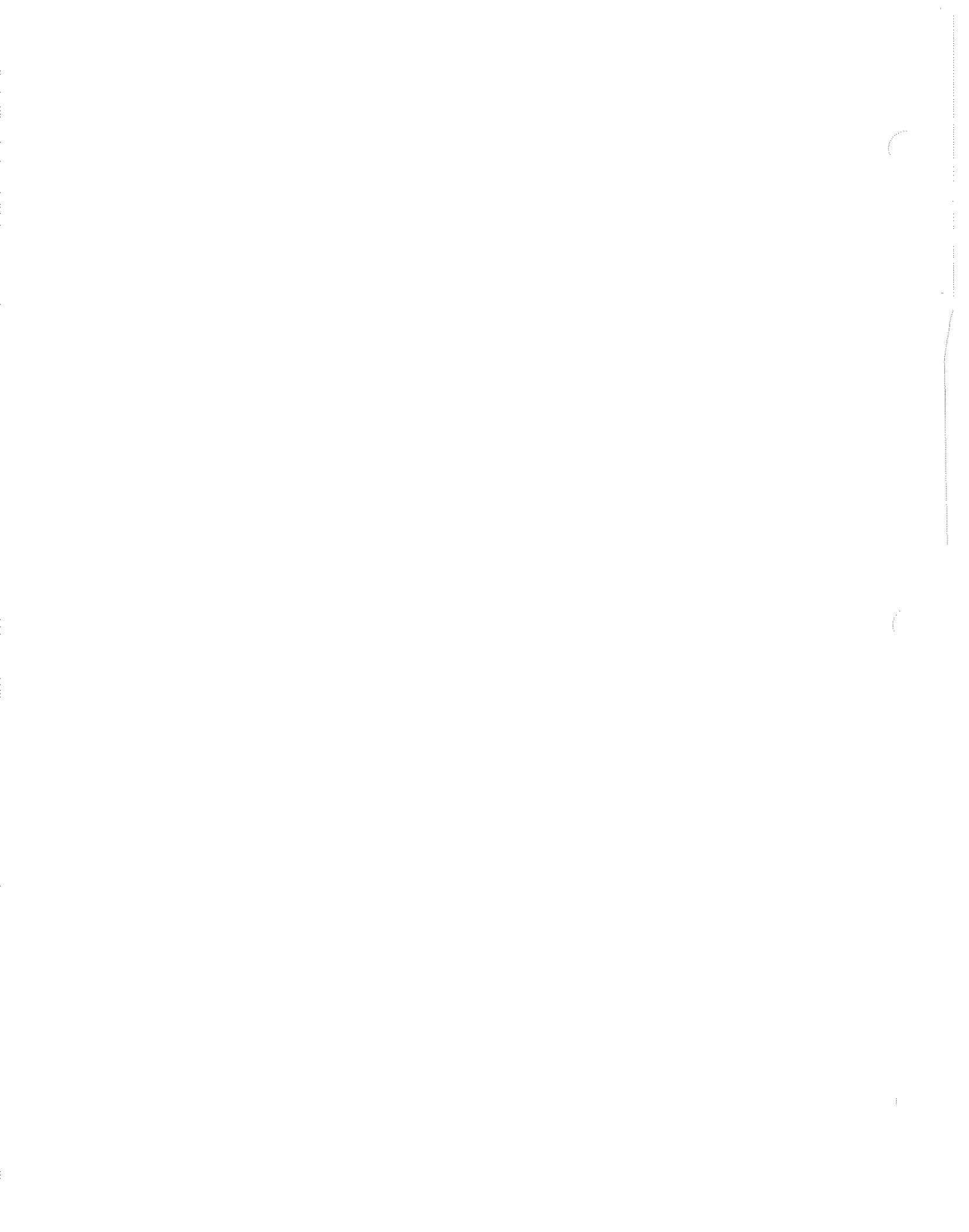
- (A) QTY.-2 EXHAUST MANIFOLD GASKETS REQUIRED PER ENGINE.
- (B) THE HEAT EXCHANGER IS 2 INCHES IN DIAMETER.
- (C) P/N 299838 CONSISTS OF END CAP, END CAP GASKET, & BOLT.
- (D) INJECTOR RETURN LINE CONSISTS OF 1-299831, 1-301298, & 1-301299.
- (E) NEW STYLE SHERWOOD PUMP - DOES NOT HAVE END COVER PLATE.
(INFORMATION ON OLD STYLE SHERWOOD OR OBERDORFER IN PARTS LIST)
- (F) ZINC SIZE IS 1/8 NPT X 1-7/8" LONG X 3/16 DIAMETER.





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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

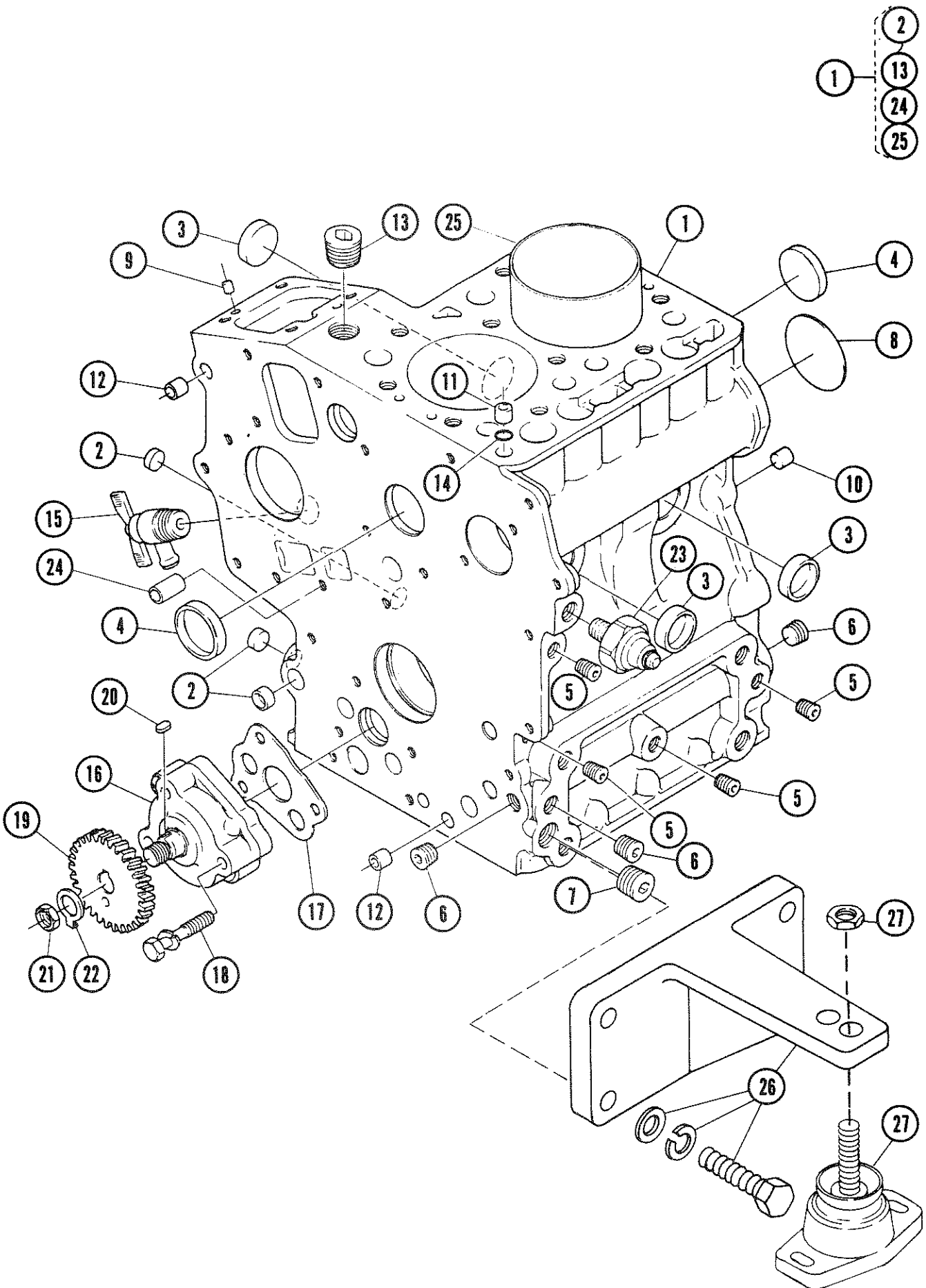
Our responsibility ceases upon delivery of shipments to the common carrier. Any claims for loss or damage in transit must be filed with the transportation company.

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



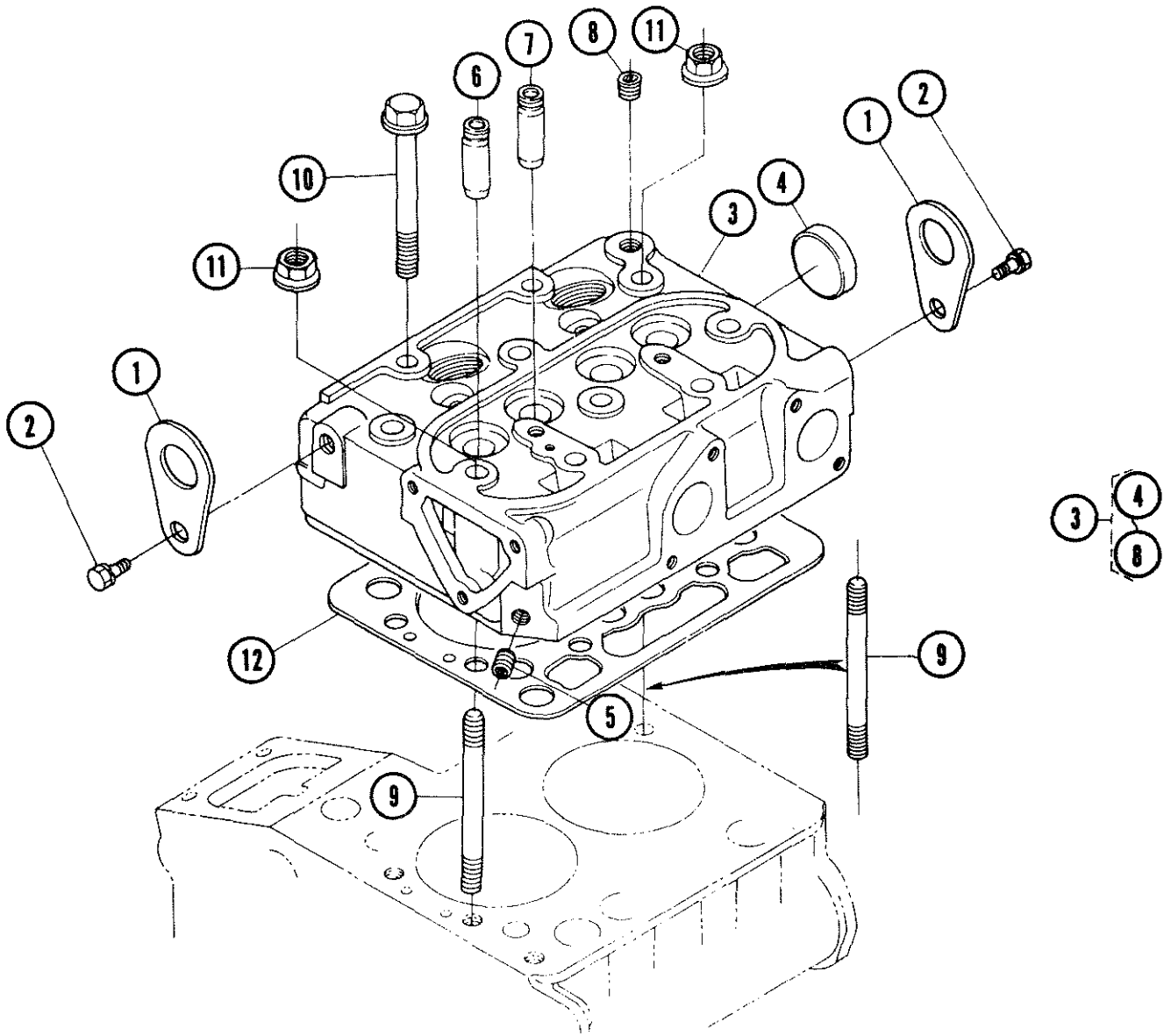
CRANKCASE GROUP

Item	Part No.	Unit	Description
1	301198	1	Assembly Crank Case
1A	302789		Crankcase Assembly - M2-12
2	301199	3	Plug 5, Freeze
3	301200	3	Plug 1, Freeze
4	301201	2	Plug 2, Freeze
5	299356	4	Plug
6	299357	3	Plug
7	299358	1	Plug
8	299353	1	Plug, Freeze
9	301543	2	Pin, Straight
10	299360	2	Pin, Straight
11	301485	1	Pin, Pipe
12	301484	2	Pin, Pipe
13	301544	1	Plug
14	299362	2	O-Ring
15	301202	1	Assembly Cock-Drain
16	301203	1	Assembly Pump Oil
17	301204	1	Packing, Oil Pump
18	301545	3	Bolt
19	301205	1	Gear, Oil Pump Drive
20	301546	1	Key, Feather
21	299409	1	Nut
22	299413	1	Washer, Claw
23	301206	1	Switch, Oil
24	301547	2	Pin, Pipe
25	301207	2	Liner, Cylinder
26	300823	2	Mount
27	300974	4	Flex Mount

OIL PAN GROUP

Item	Part No.	Unit	Description
1	301208	1	Assembly Oil Pan
2	301209	1	Gasket, Oil Pan
3	299462	14	Bolt
4	301548	1	Bolt
5	299373	1	O-Ring
6	302688	1	Filter, Oil
7	301212	1	Gauge, Oil
8	300724	1	Oil Drain Kit
9	301431	2	Washer Oil Drain Kit

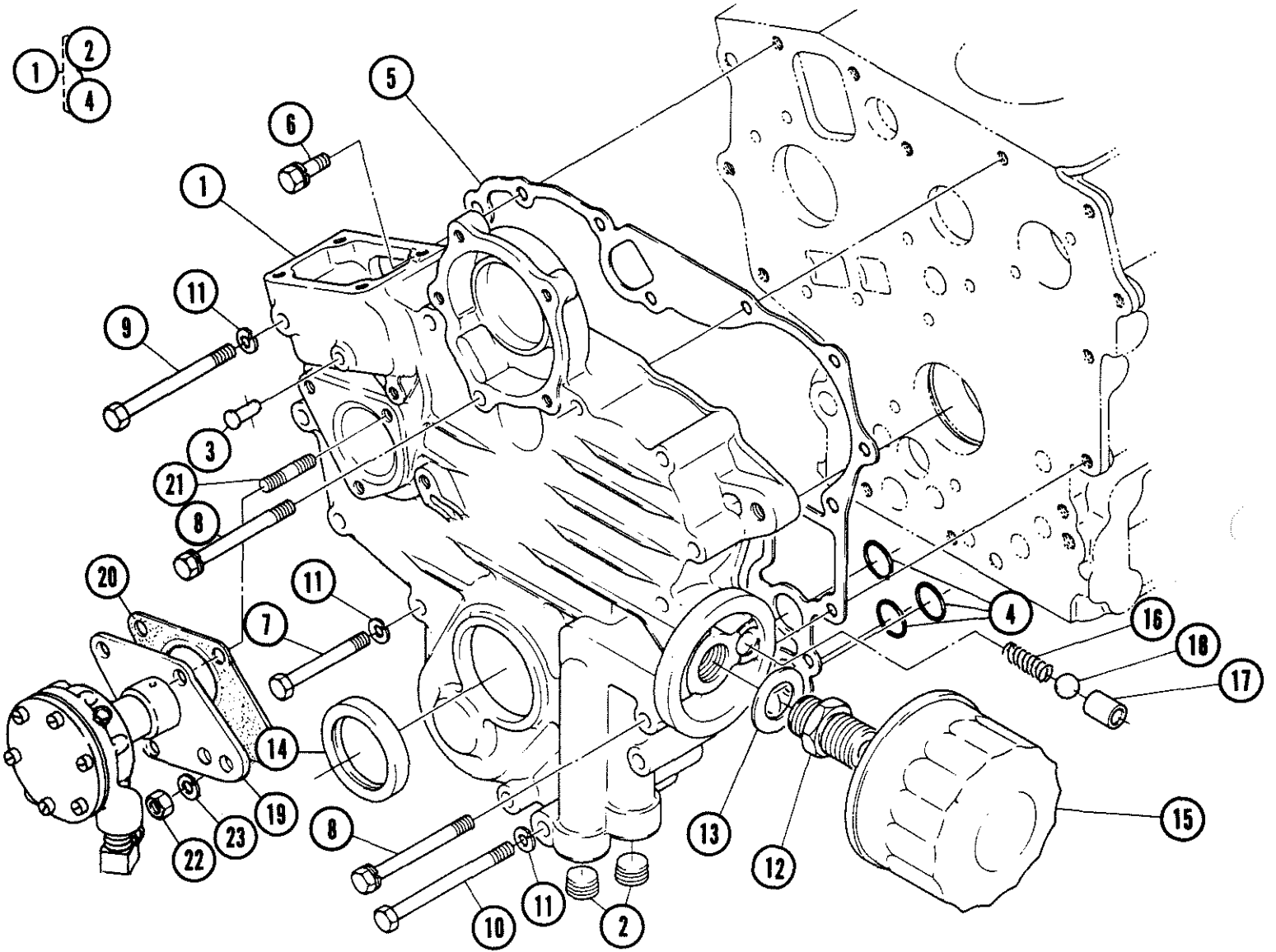
CYLINDER HEAD GROUP



CYLINDER HEAD GROUP

Item	Part No.	Unit	Description
1	301549	2	Hook, Engine
2	301548	2	Bolt
3	301213	1	Assembly Cylinder Head
3A	302790		M2-12 Cylinder Head
4	299384	1	Plug
5	299356	1	Plug
6	301214	2	Guide, Inlet Valve
7	301215	2	Guide, Exhaust Valve
8	301550	1	Plug
9	301216	2	Stud, Cylinder Head
10	301217	8	Bolt, Cylinder Head
11	301218	2	Nut, Cylinder Head
12	301120	1	Gasket, Cylinder Head
12A	302791		M2-12 Head Gasket
13	302764	2	Combustion Chamber

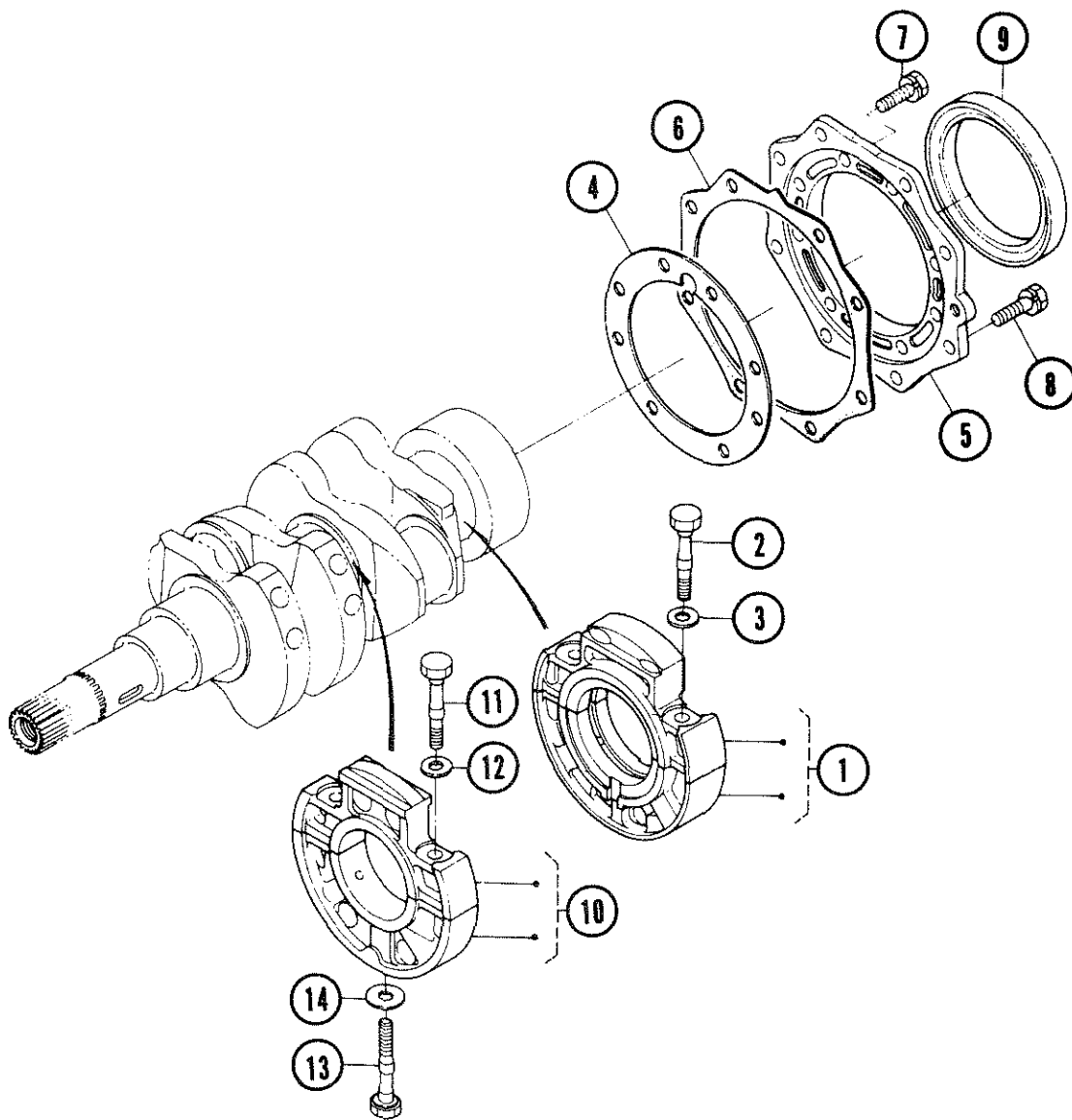
GEAR CASE GROUP



GEAR CASE GROUP

Item	Part No.	Unit	Description
1	301219	1	Assembly Case, Gear
2	299537	2	Plug
3	301551	1	Pin, Start Spring
4	300160	3	O-Ring
5	301220	1	Gasket, Gear Case
6	299365	1	Bolt
7	299433	10	Bolt
8	301552	3	Bolt
9	299401	1	Bolt
10	301553	1	Bolt
11	301490	12	Washer, Spring
12	301490	1	Joint, Pipe
13	301222	1	Washer, Plain
14	301223	1	Seal, Oil
15	300209	1	Cartridge, Oil Filter
16	301554	1	Spring
17	301555	1	Seat
18	301556	1	Ball
19	300986	1	Water Pump Sherwood
19A	301357		Water Pump Oberdorfer
20	300994	1	Gasket, Water Pump
21	300096	4	Stud
22	299041	4	Nut
23	299380	4	Washer, Spring

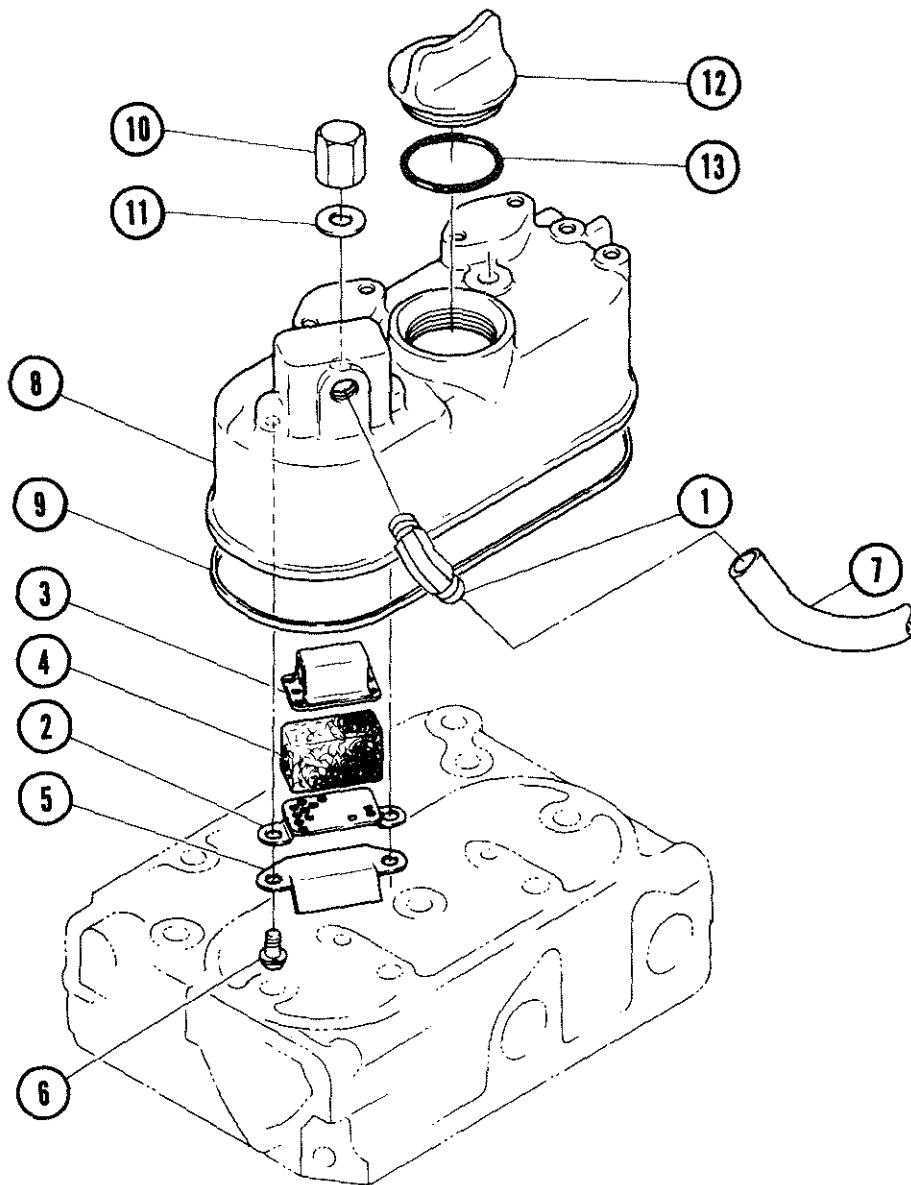
MAIN CASE BEARING GROUP



MAIN BEARING CASE GROUP

Item	Part No.	Unit	Description
1	301224	1	Assembly Case, Main Bearing
2	301225	2	Bolt, Bearing Case 1
3	301226	2	Washer, Bearing Case 1
4	301227	1	Packing, Bearing Case
5	301228	1	Cover, Bearing Case
6	301229	1	Packing, Bearing Case Cover
7	299432	8	Bolt
8	301230	8	Bolt
9	301231	1	Seal, Oil
10	301232	1	Assembly Case, Main Bearing 1
11	301225	2	Bolt, Bearing Case 1
12	301226	2	Washer, Bearing Case 1
13	301235	1	Bolt, Bearing Case 2
14	301236	1	Washer, Bearing Case 2

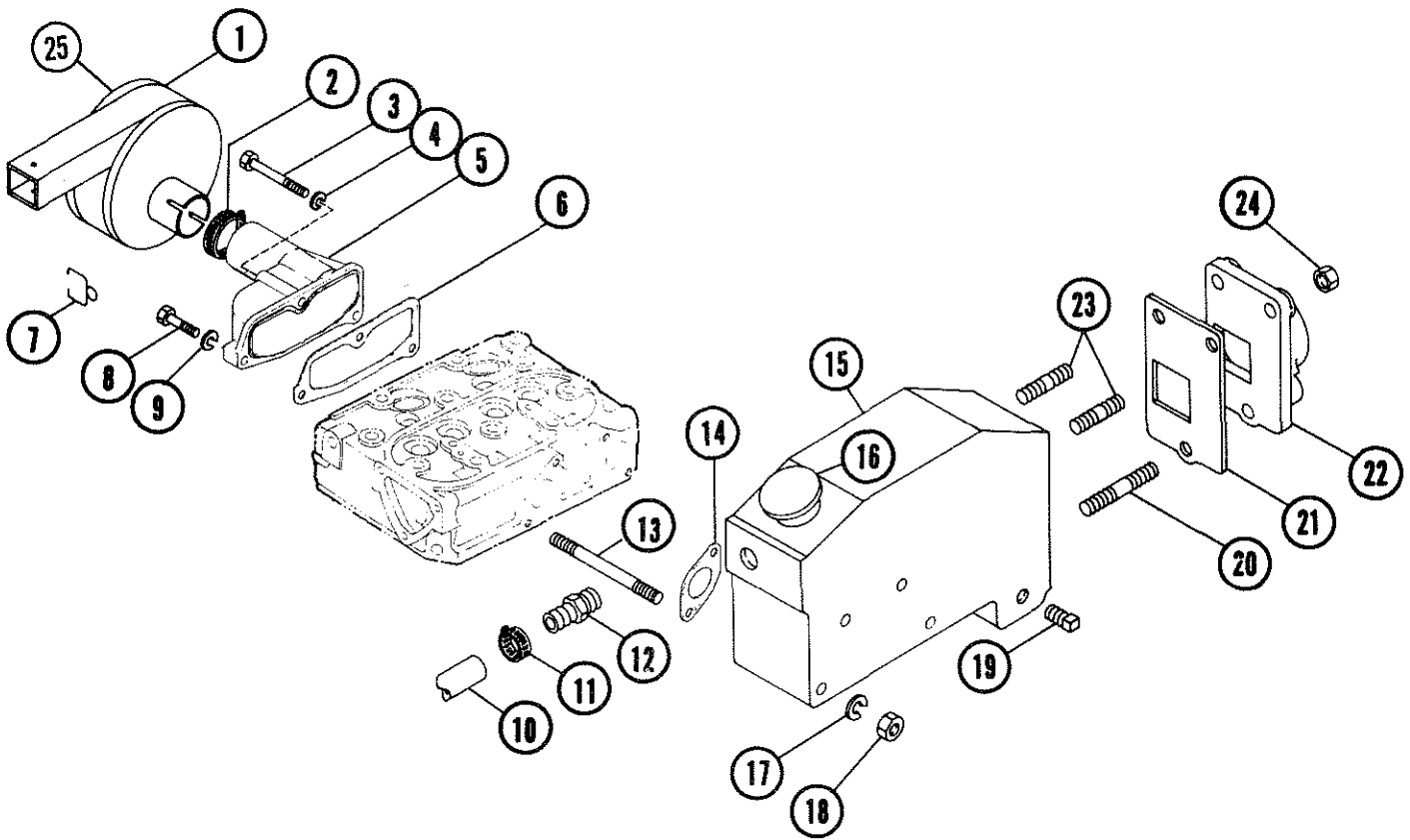
HEAD COVER GROUP



HEAD COVER GROUP

Item	Part No.	Unit	Description
1	299854	1	Joint, Breather Pipe
2	301557	1	Plate, Breather Element 1
3	301558	1	Plate, Breather Element 2
4	301237	1	Element, Breather
5	301559	1	Oil Shield, Breather
6	301399	2	Screw
7	301560	1	Pipe, Breather
8	301238	1	Cover, Valve
9	301239	1	Packing, Valve Cover
10	301240	2	Nut, Cap
11	301241	2	Packing
12	299464	1	Plug, Oil Filler
13	299465	1	O-Ring

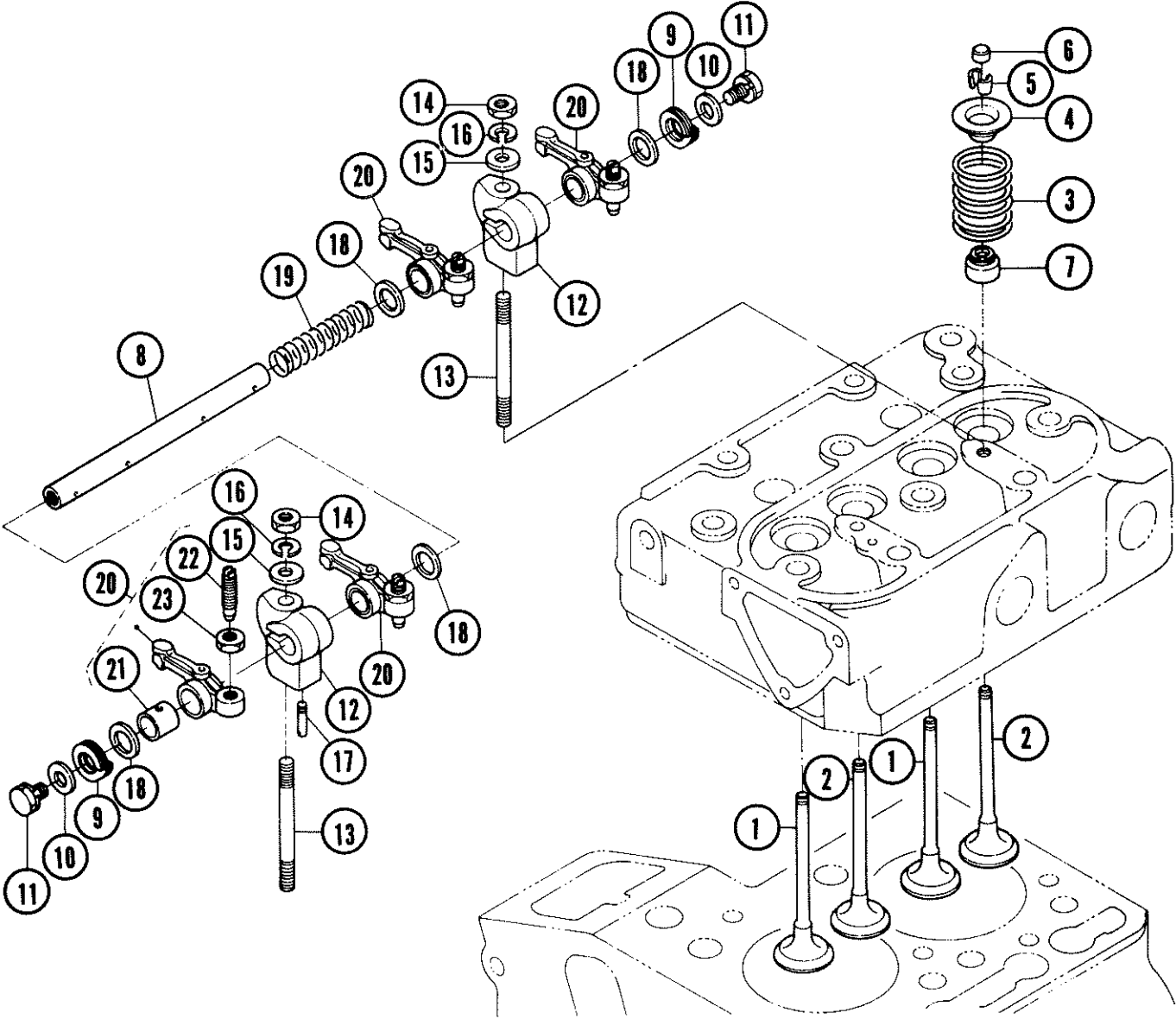
INLET MANIFOLD GROUP



INLET MANIFOLD GROUP

Item	Part No.	Unit	Description
1	301926	1	Air Cleaner
2	298604	1	Hose Clamp
3	301244	1	Bolt
4	299434	1	Washer, Spring
5	301242	1	Manifold, Inlet
6	301243	1	Packing, Inlet Manifold
7	300983	1	Clip
8	299365	2	Bolt
9	299434	1	Washer, Spring
10	301065	1	Hose
11	298648	1	Hose Clamp
12	286075	1	Adapter
13	300095	4	Stud
14	301245	2	Packing, Exhaust Manifold
15	300802	1	Exhaust Manifold
16	299956	1	Cap
17	299434	4	Washer, Spring
18	299543	4	Nut
19	239136	1	Plug
20	298974	1	Stud
21	298600	1	Gasket
22	298599	1	Exhaust Flange
23	276440	2	Stud
24	230147	3	Nut
25	300429	1	Filter Element

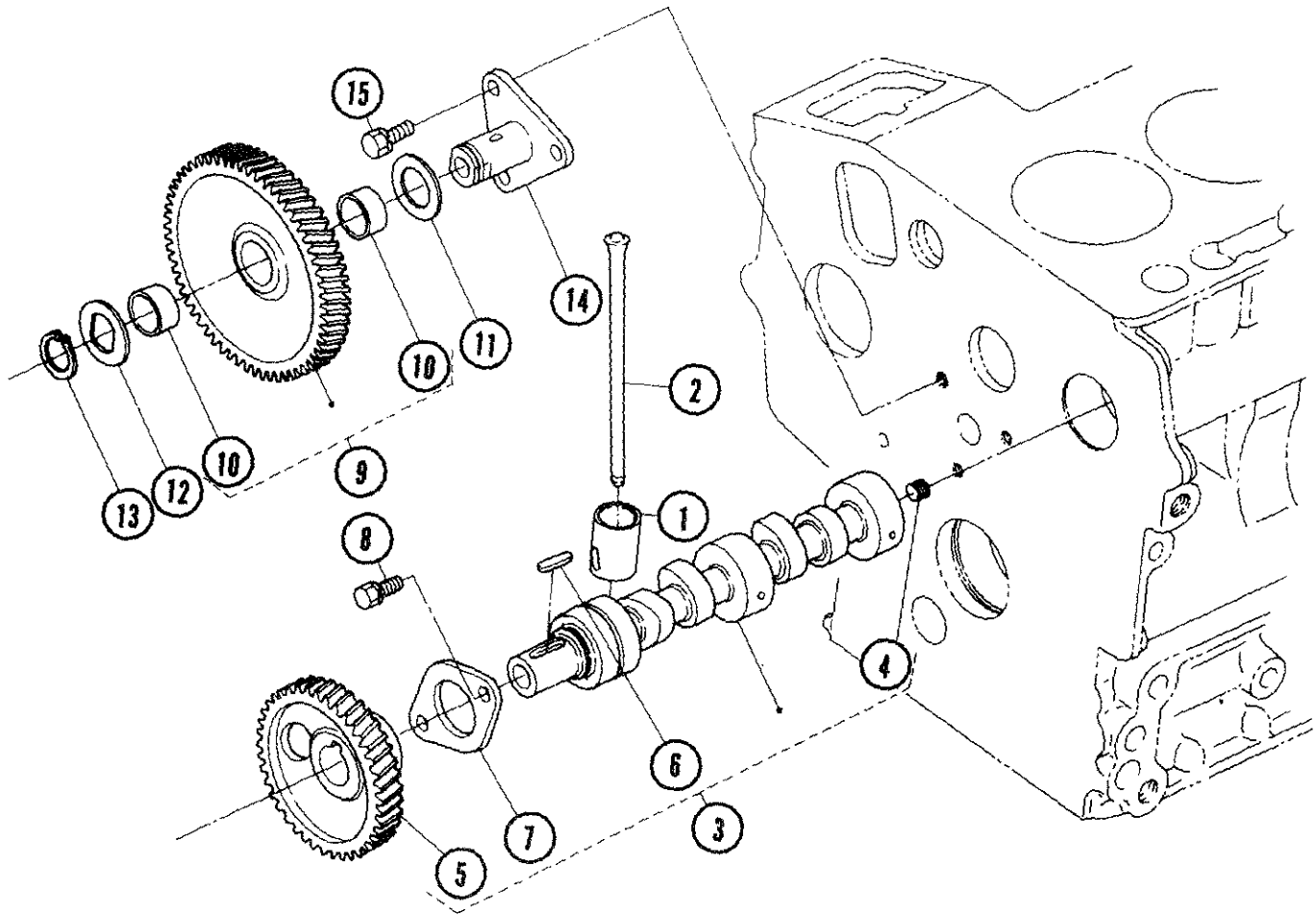
VALVE, ROCKER ARM GROUP



VALVE, ROCKER ARM GROUP

Item	Part No.	Unit	Description
1	301246	2	Valve, Inlet
2	301247	2	Valve, Exhaust
3	301248	4	Spring, Valve
4	301249	4	Retainer, Valve Spring
5	301250	8	Collet, Valve Spring
6	301251	4	Cap Valve
7	301252	4	Seal, Valve Stem
8	301253	1	Shaft, Rocker Arm
9	301254	2	Spring
10	301255	2	Washer, Plain
11	301256	2	Bolt
12	301257	2	Bracket, Rocker Arm
13	301258	2	Stud
14	298684	2	Nut
15	301561	2	Washer, Plain
16	299369	2	Washer, Spring
17	301562	1	Screw, Set
18	301563	4	Washer, Rocker Arm
19	301259	1	Spring, Rocker Arm
20	301260	4	Assembly Rocker Arm
21	301564	4	Bush
22	301565	4	Screw, Adjusting
23	301566	4	Nut

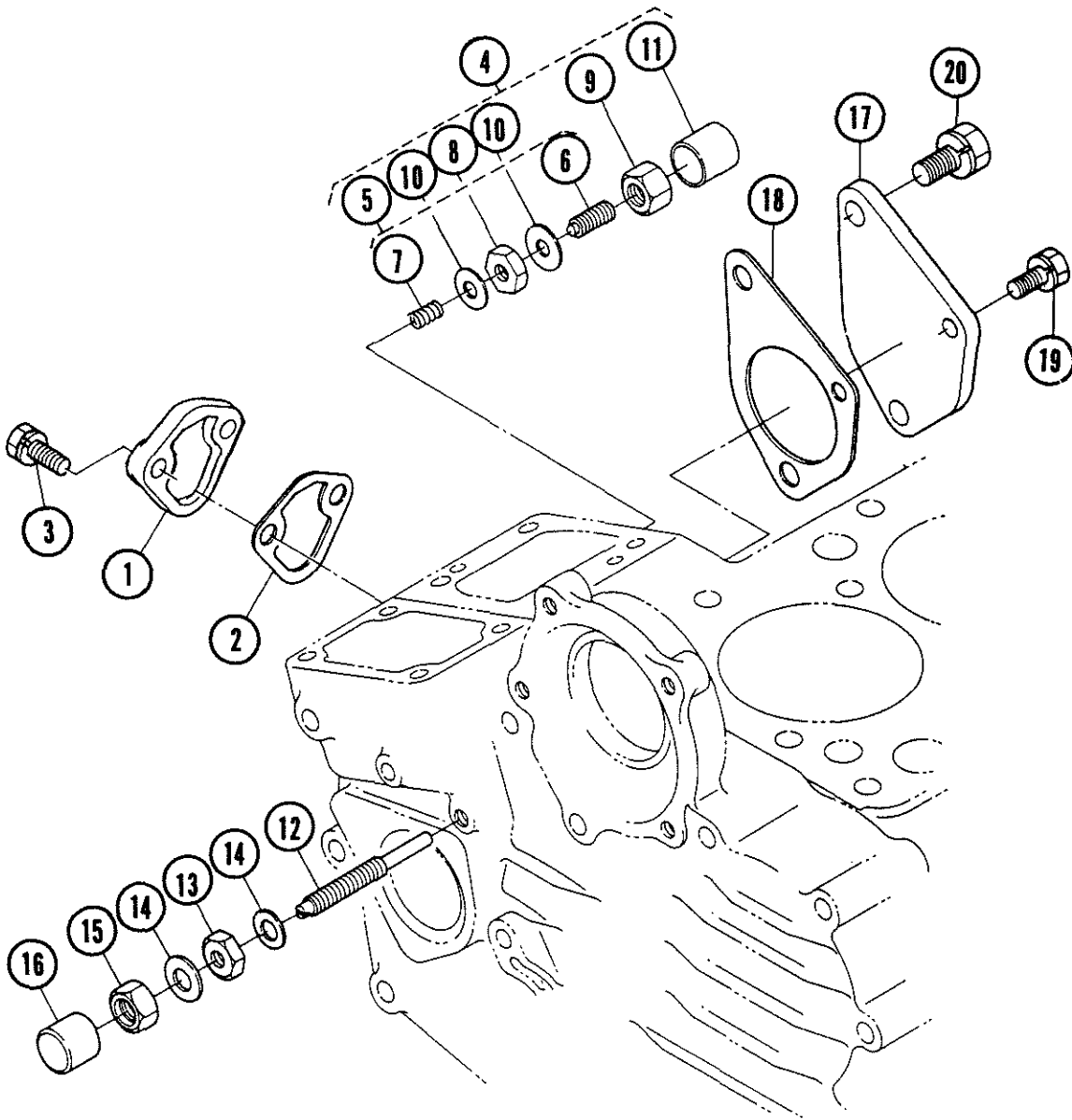
CAMSHAFT GROUP



CAMSHAFT GROUP

Item	Part No.	Unit	Description
1	301261	4	Tappet
2	301262	4	Rod, Push
3	301263	1	Assembly Camshaft
4	301567	1	Screw
5	301264	1	Gear, Camshaft
6	301568	1	Key, Feather
7	302687	1	Stopper, Camshaft
8	299462	2	Bolt
9	302714	1	Comp. Gear, Idle
10	302715	2	Bush, Idle Gear
11	302716	1	Collar, Idle Gear 1
12	302717	1	Collar, Idle Gear 2
13	302718	1	Cir-Clip, Idle Gear
14	302719	1	Shaft, Idle Gear
15	302604	3	Bolt

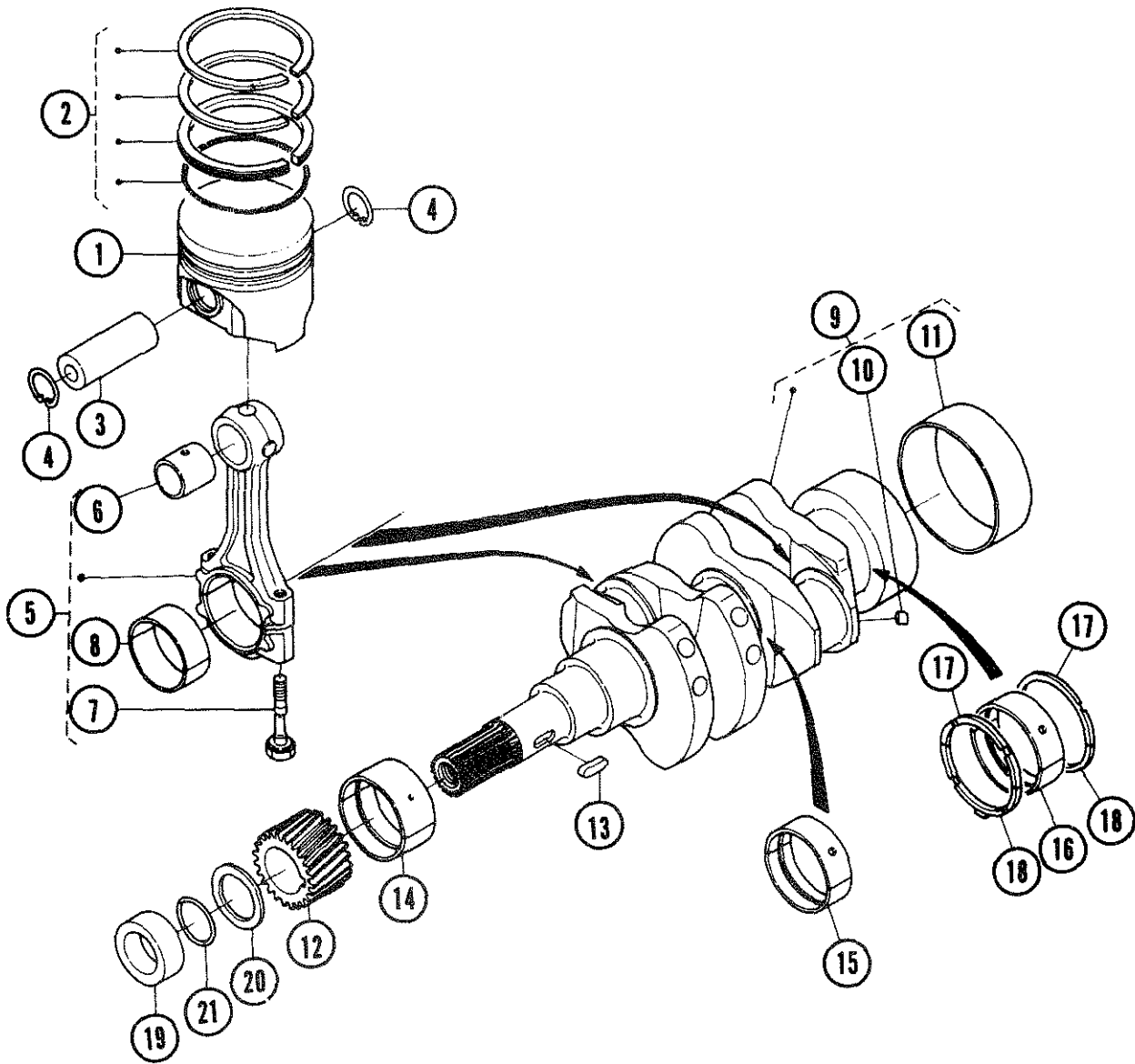
IDLING APPARATUS



IDLING APPARATUS

Item	Part No.	Unit	Description
1	302744	1	Cover
2	302745	1	Packing, Fuel Pump
3	299462	2	Bolt
4	301575	1	Assembly Apparatus, Idling
5	301576	1	Assembly Bolt, Adjusting
6			Order by Item No. 5
7	301577	1	Spring
8	301493	1	Nut
9	301578	1	Nut, Cap
10	301495	2	Packing
11	301416	1	Cap
12	301580	1	Bolt, Adjusting
13	301581	1	Nut
14	301241	2	Packing
15	302746	1	Nut, Cap
16	302485	1	Cap
17	301584	1	Cover
18	301585	1	Packing, Oil Pump
19	299462	1	Bolt
20	299527	2	Bolt

PISTON, CRANKSHAFT GROUP



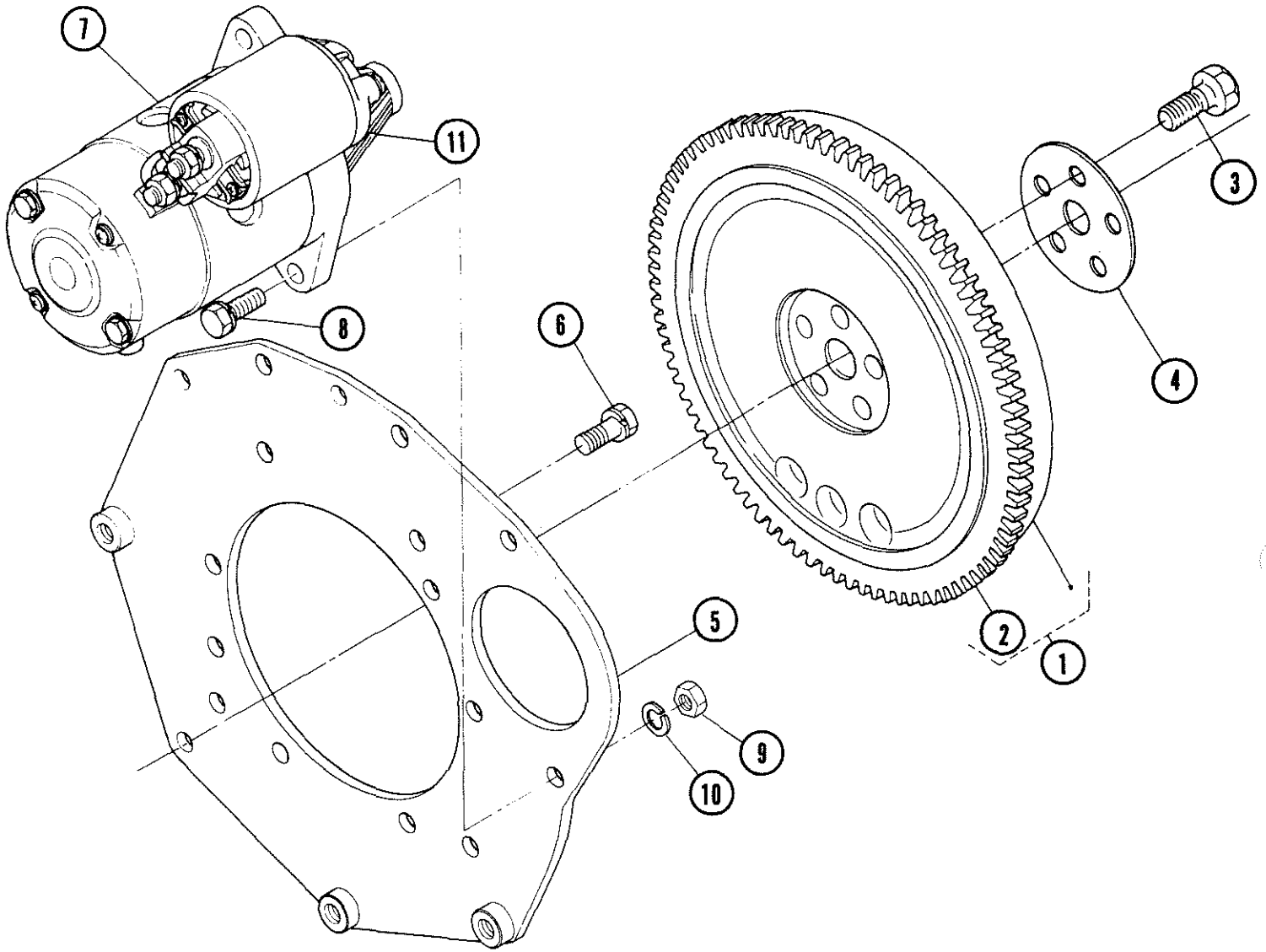
PISTON, CRANKSHAFT GROUP

Item	Part No.	Unit	Description
1	301271	2	Piston
1A	302720	2	M2-12 Piston
2	301272	2	Assembly Piston Ring
2A	302722	2	M2-12 Piston Ring Assembly
3	301273	2	Pin, Piston
4	301274	4	Cir-Clip, Piston Pin
5	301275	2	Assembly Rod, Connecting
5A	302724	2	M2-12 Connecting Rod, Assembly
6	301276	2	Bush, Piston Pin
6A	302725	2	M2-12 Bush, Piston Pin
7	301277	4	Bolt, Connecting Rod
7A	302726	4	M2-12 Bolt, Connecting Rod
8	301278	4	Metal, Crankpin
8A	302727	4	M2-12 Metal, Crankpin
9	301279	1	Comp. Crankshaft
10	299385	2	Plug, Pin
11	300813	1	Sieve, Crankshaft
12	301281	1	Gear, Crank
13	299549	1	Key, Feather
14	301282	1	Metal, Crankshaft 1
15	301283	2	Metal, Crankshaft 3
16	299501	2	Metal, Crankshaft 2
17	299502	2	Metal, Side 1
18	299503	2	Metal, Side 2
19	301287	1	Collar, Crankshaft
20	302731	1	Oil Slinger, Crankshaft
21	301289	1	O-Ring

OVERSIZE BEARINGS

Part No.	Oversize Measurements In Millimeters	Description
301637	.05	Piston
302721	.05	M2-12 Piston
301638	.05	Piston Ring
302723	.05	M-2-12 Piston Ring
301639	.02	Crankpin Bearing (Conn. Rod)
301640	.04	Crankpin Bearing
301641	.02	Crankshaft Bearing No. 1
301642	.04	Crankshaft Bearing No. 1
301643	.02	Crankshaft Bearing No. 2
301644	.04	Crankshaft Bearing No. 2
301645	.02	Crankshaft Bearing No. 3
301646	.04	Crankshaft Bearing No. 3
301647	.02	Thrust Bearing No. 1
301648	.04	Thrust Bearing No. 1
301649	.02	Thrust Bearing No. 2
301650	.04	Thrust Bearing No. 2

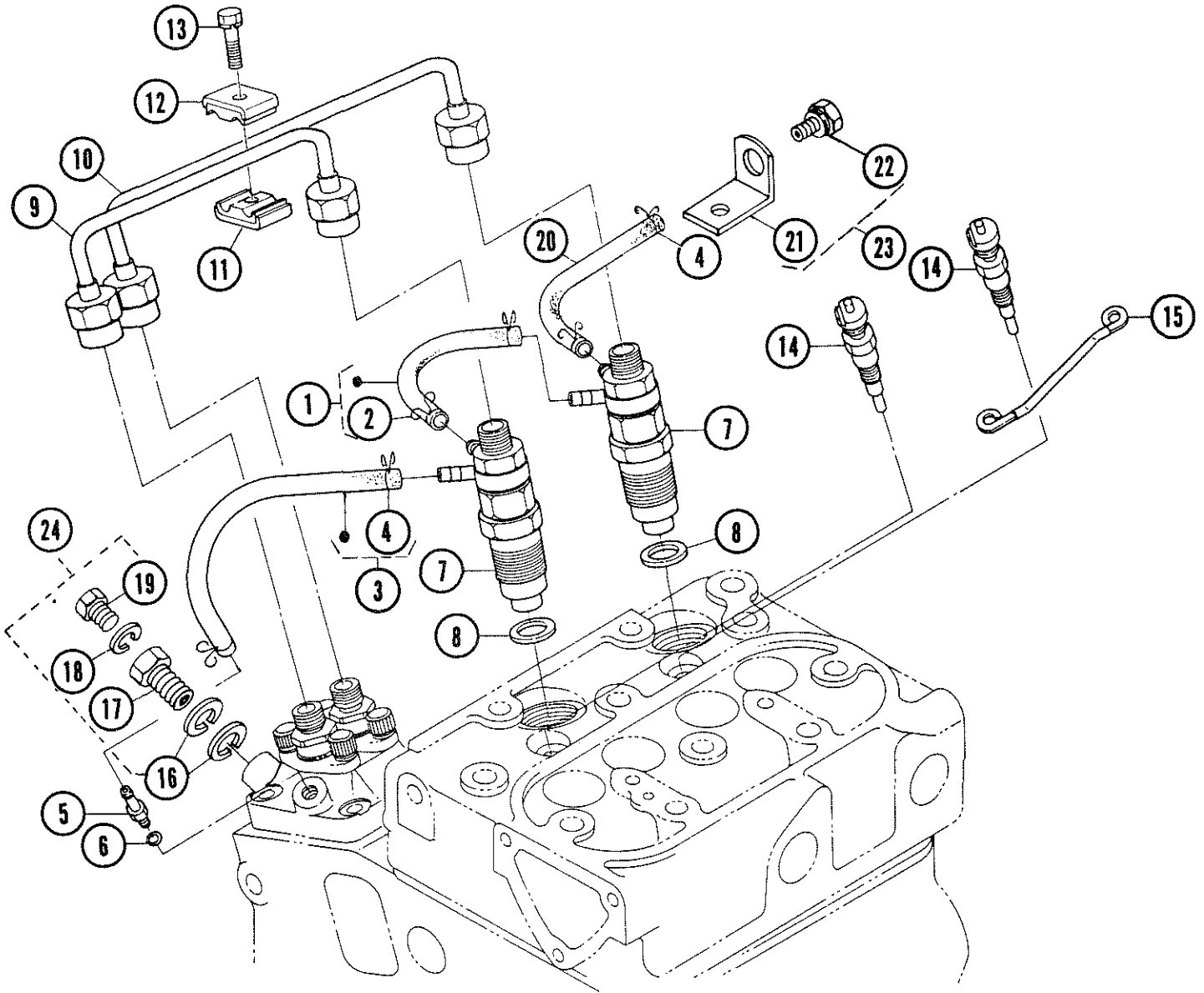
FLYWHEEL GROUP



FLYWHEEL GROUP

Item	Part No.	Unit	Description
1	301290	1	Comp. Flywheel
2	301291	1	Gear, Ring
3	301292	5	Bolt, Flywheel
4	301570	1	Washer, Flywheel
5	301293	1	Rear End Plate
6	301294	10	Bolt
7	301295	1	Assembly Starter
8	299514	2	Bolt
9	301297	2	Nut
10	299583	2	Washer, Spring
11	301933	1	Solenoid

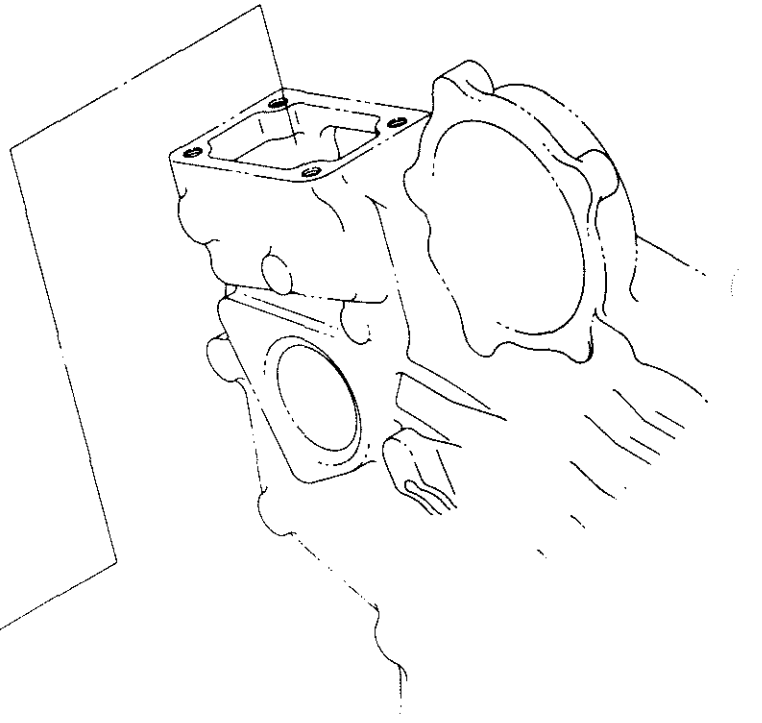
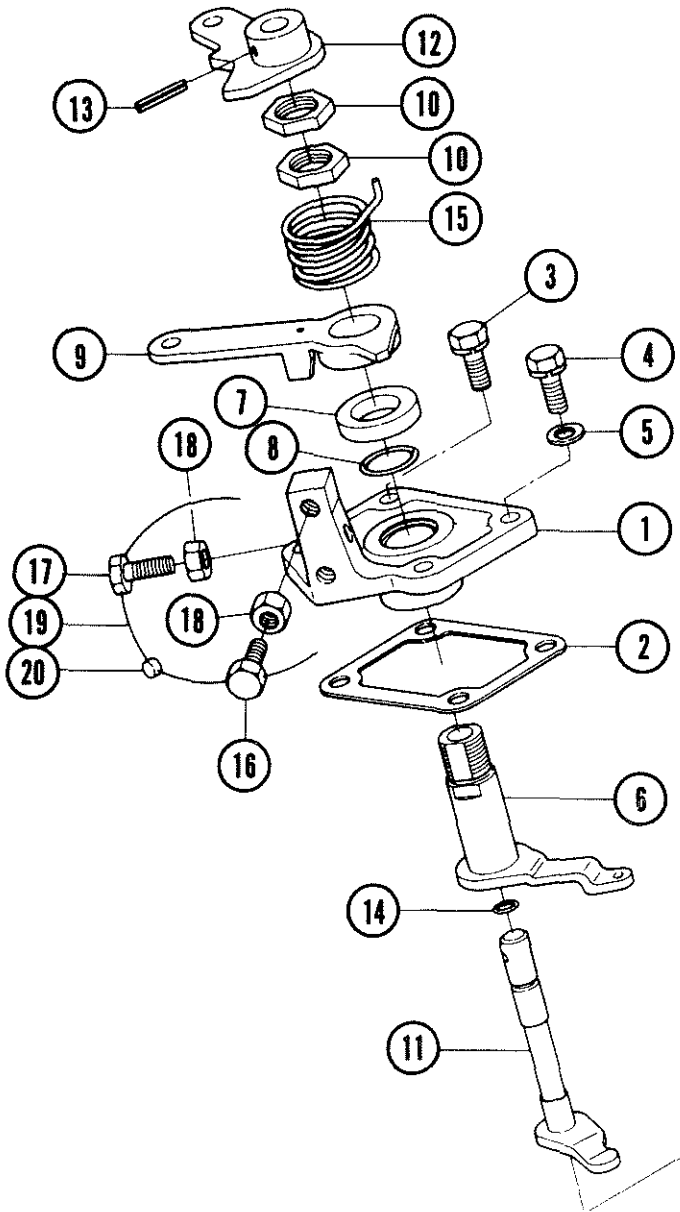
NOZZLE HOLDER GROUP



NOZZLE HOLDER GROUP

Item	Part No.	Unit	Description
1	301298	1	Assembly Pipe, Overflow 1
2	299524	2	Clip, Pipe
3	301299	1	Assembly Pipe, Overflow 2
4	299524	4	Clip, Pipe
5	301300	1	Screw
6	301241	1	Packing
7	301109	2	Injector
7A	302735	2	M2-12 Injector
8	301303	2	Packing
9	301304	1	Pipe, Injection 1
10	301305	1	Pipe, Injection 2
11	301306	1	Clamp, Pipe 1
12	301307	1	Clamp, Pipe 2
13	298794	1	Screw, with Washer
14	301754	2	Plug, Glow
15	301309	1	Code, Glow Plug
16	301752	2	Washer, Lock
17	301751	1	Bleed Screw
18	301750	1	Washer, Lock
19	301749	1	Bleed Screw
20	299831	1	Fuel Line, Return
21	300528	1	Bracket
22	299829	1	Hose Connector
23	300941	1	Fuel Bracket Assembly
24	301753	1	Bleed Screw Assembly (Items 16,17,18,19)

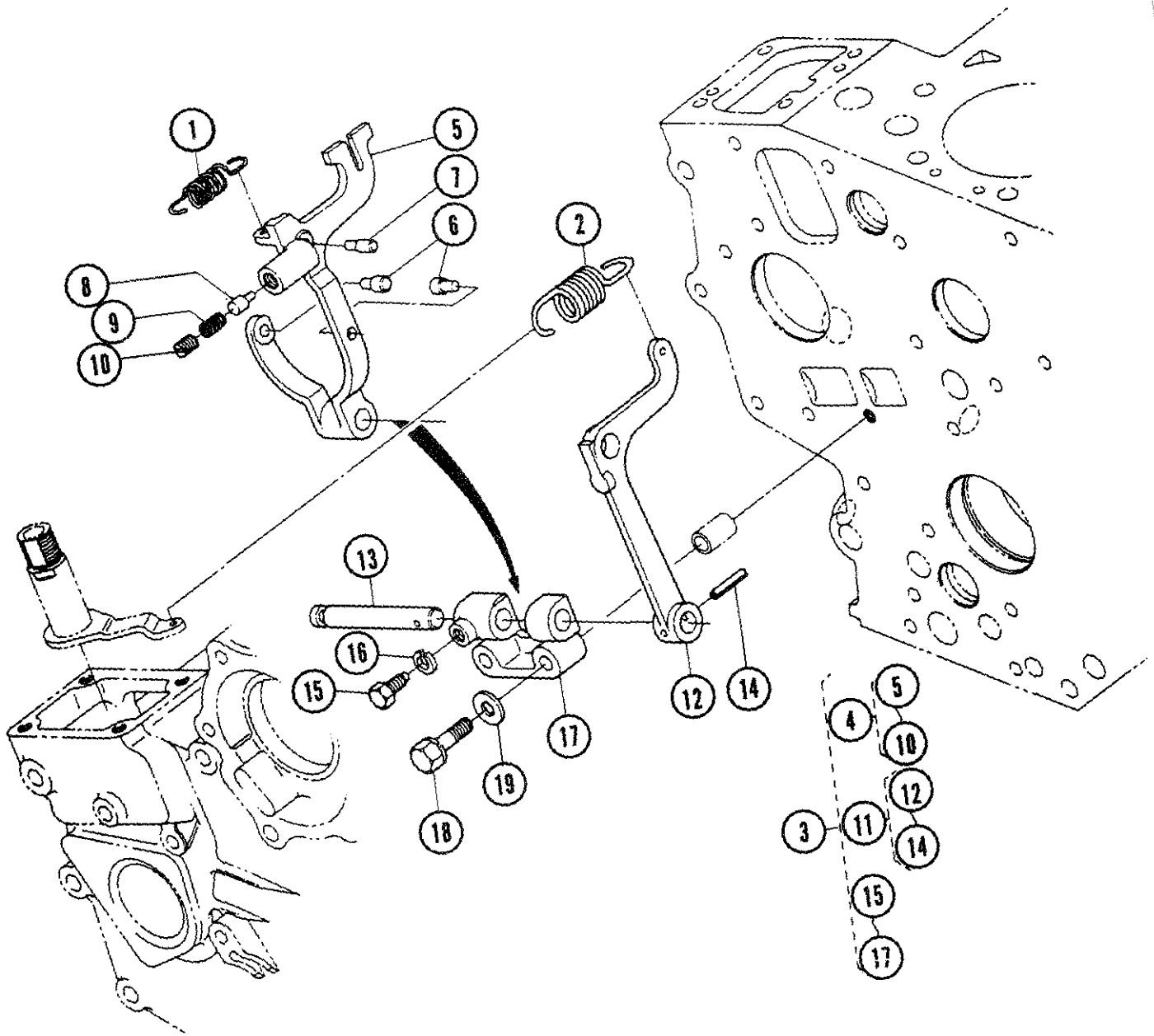
SPEED CONTROL PLATE GROUP



SPEED CONTROL PLATE GROUP

Item	Part No.	Unit	Description
1	301591	1	Plate, Speed Control
2	301325	1	Packing, Speed Control Plate
3	299365	2	Bolt
4	299379	2	Bolt
5	301241	2	Packing
6	301592	1	Lever, Governor
7	301593	1	Collar
8	302750	1	O-Ring
9	301326	1	Lever, Speed Control
10	301594	2	Nut
11	301595	1	Shaft, Lever
12	302751	1	Lever, Engine Stop
13	301588	1	Pin, Spring
14	301496	1	O-Ring
15	301328	1	Spring
16	298826	2	Stopper
17	301596	1	Bolt
18	298684	3	Nut
19			Non Sale
20			Non Sale

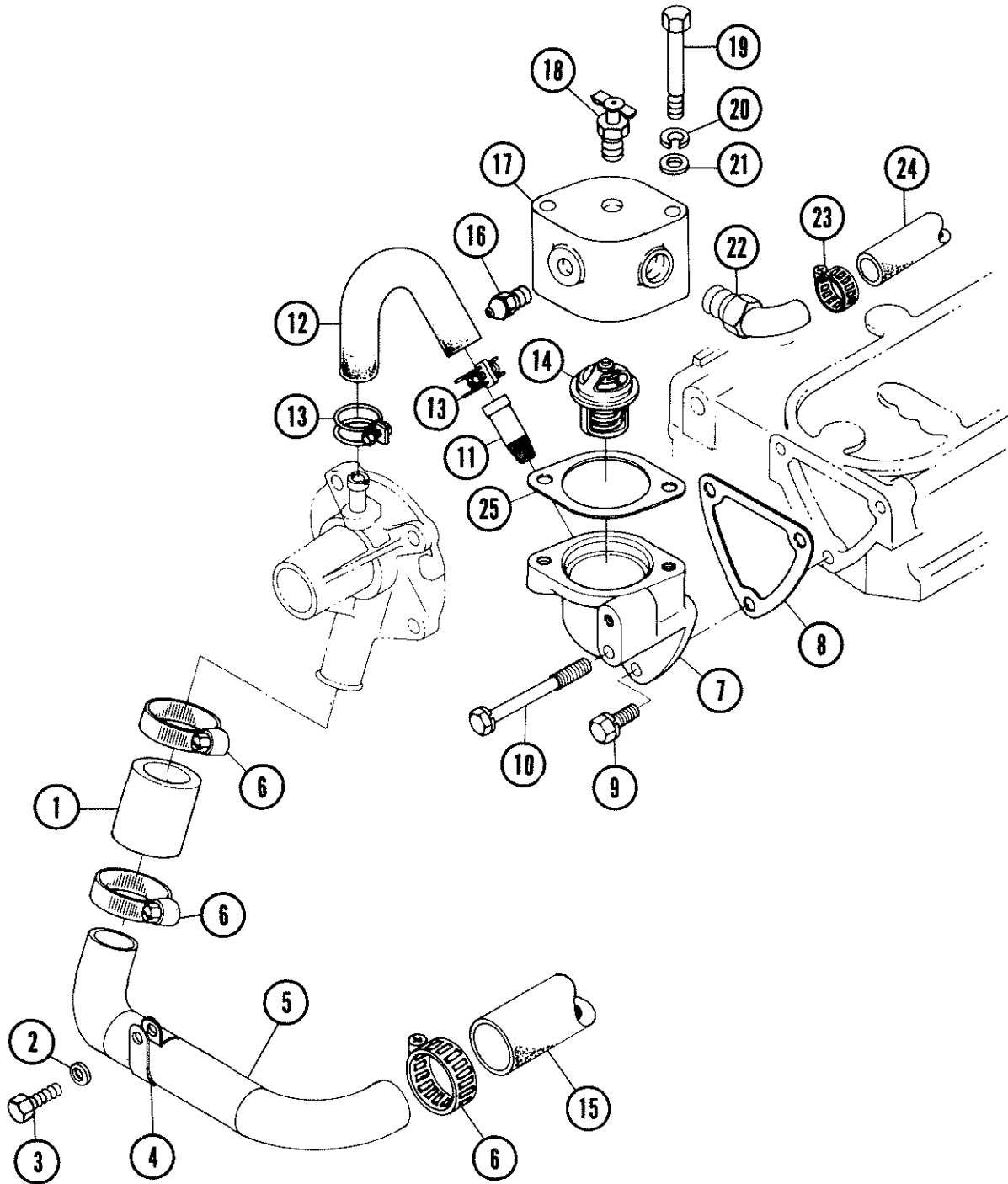
GOVERNOR GROUP



GOVERNOR GROUP

Item	Part No.	Unit	Description
1	301301	1	Spring, Start
2	302747	1	Spring, Governor
3	301322	1	Assembly Lever, Fork
4	301323	1	Comp. Lever, Fork 1
5			Order by Item No. 4
6			Order by Item No. 4
7			Order by Item No. 4
8			Order by Item No. 4
9			Order by Item No. 4
10			Order by Item No. 4
11	301324	1	Assembly Lever, Fork 2
12	301586	1	Lever, Fork 2
13	301587	1	Shaft, Fork Lever
14	301588	1	Pin, Spring
15	300189	1	Bolt
16	300187	1	Washer, Spring
17	301589	1	Holder, Fork Lever
18	301590	2	Bolt
19	301561	2	Washer, Plain

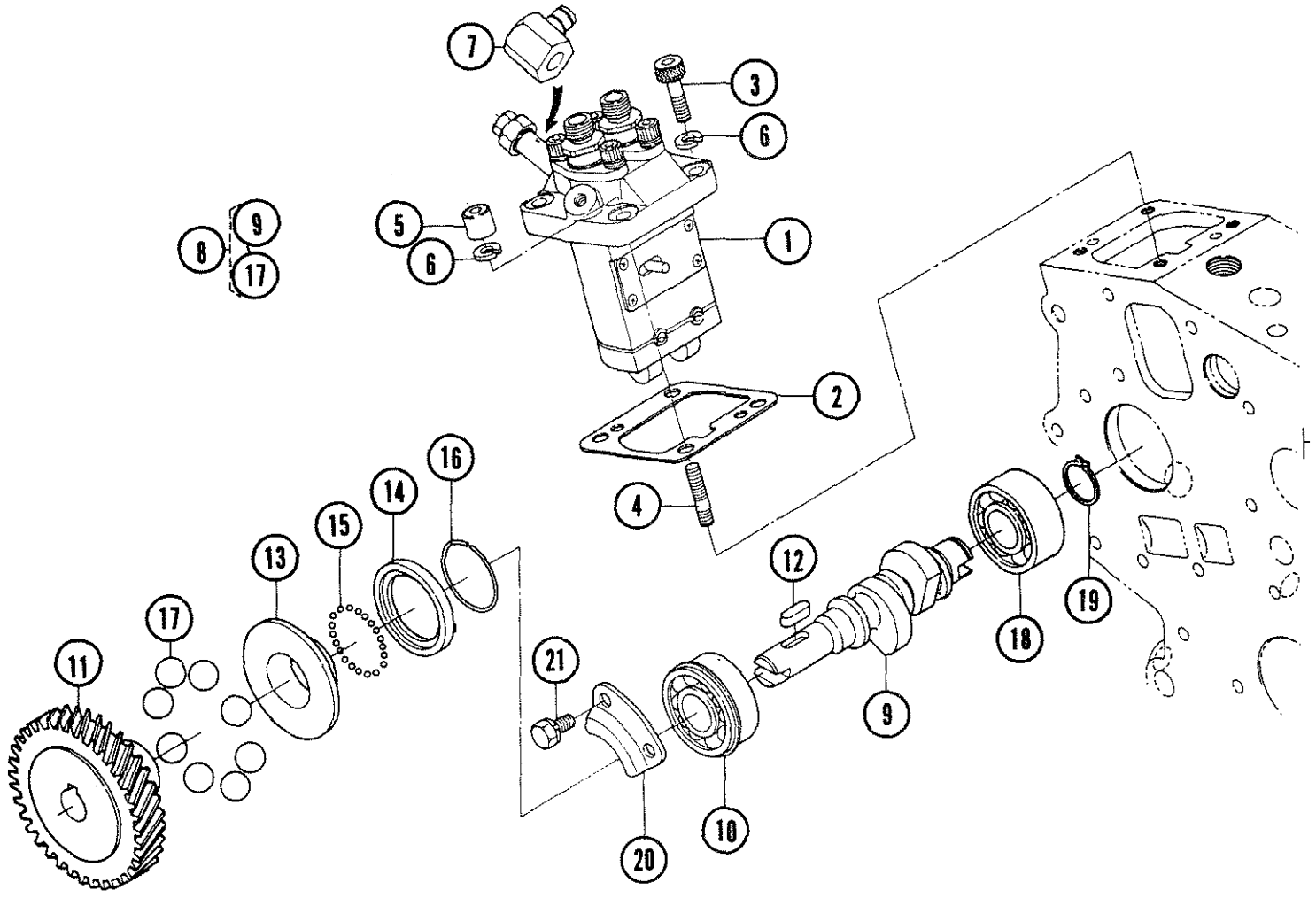
WATER FLANGE GROUP



WATER FLANGE GROUP

Item	Part No.	Unit	Description
1	301076	1	Hose
2	299033	1	Washer
3	299032	1	Bolt
4	301089	1	Clamp
5	301078	1	Hose
6	298648	2	Clamp
7	301332	1	Flange, Water
8	301333	1	Packing, Water Flange
9	301334	2	Bolt
10	301600	1	Bolt
11	300235	1	Pipe, Water Return, 1
12	301335	1	Pipe, Water Return, 2
13	301397	2	Band, Pipe
14	301358	1	Assembly, Thermostat
15	301077	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	301064	1	Elbow
23	374747	1	Clamp
24	301065	1	Hose
25	300237	1	Packing, Thermostat Cover

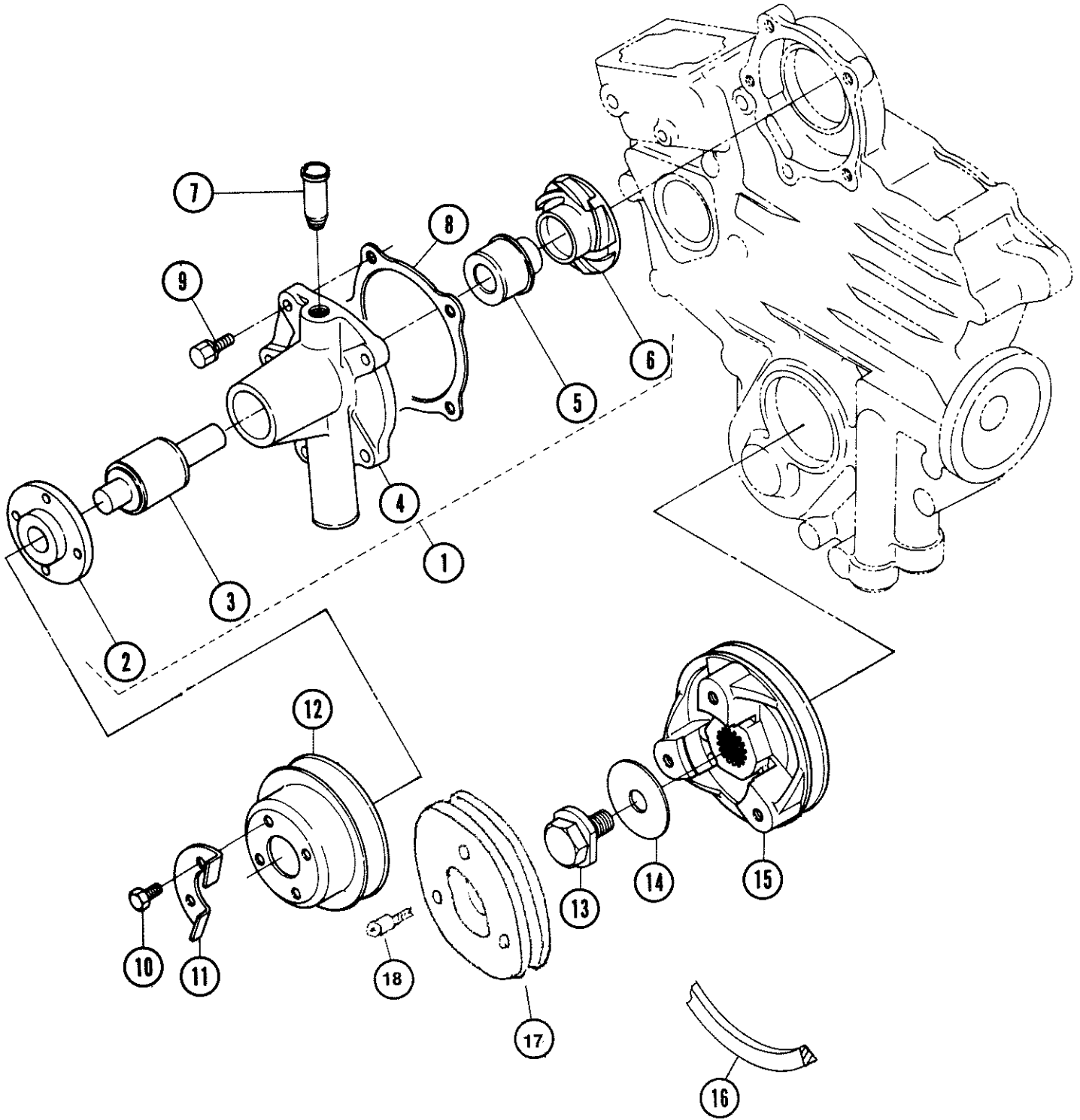
FUEL CAMSHAFT GROUP



FUEL CAMSHAFT GROUP

Item	Part No.	Unit	Description
1	301121	1	Assembly Pump, Injection
1A	302795		M2-12 Assembly Pump, Injection
2	301310	5	Shim, Injection Pump
3	301311	3	Bolt
4	301312	1	Stud
5	301313	1	Nut, Cap
6	299369	4	Washer, Spring
7	301314	1	Joint
8	301315	1	Assembly Camshaft, Fuel
9	301316	1	Camshaft, Fuel
10	301317	1	Bearing, Ball
11	301318	1	Gear, Injection Pump
12	299549	1	Key, Feather
13	301571	1	Sleeve, Governor
14	301572	1	Case, Governor Ball
15	301573	32	Ball
16	300198	1	Cir-Clip, Governor Sleeve
17	299534	8	Ball
18	301319	1	Bearing, Ball
19	301320	1	Cir-Clip, External
20	301574	1	Stopper, Fuel Camshaft
21	299462	2	Bolt

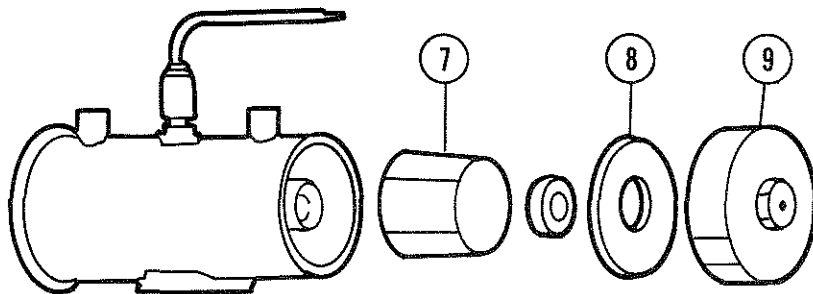
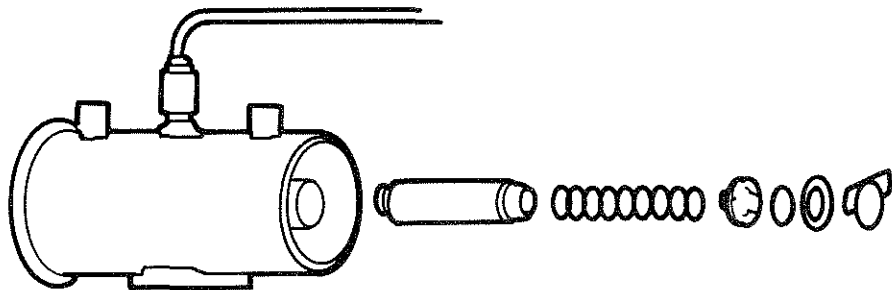
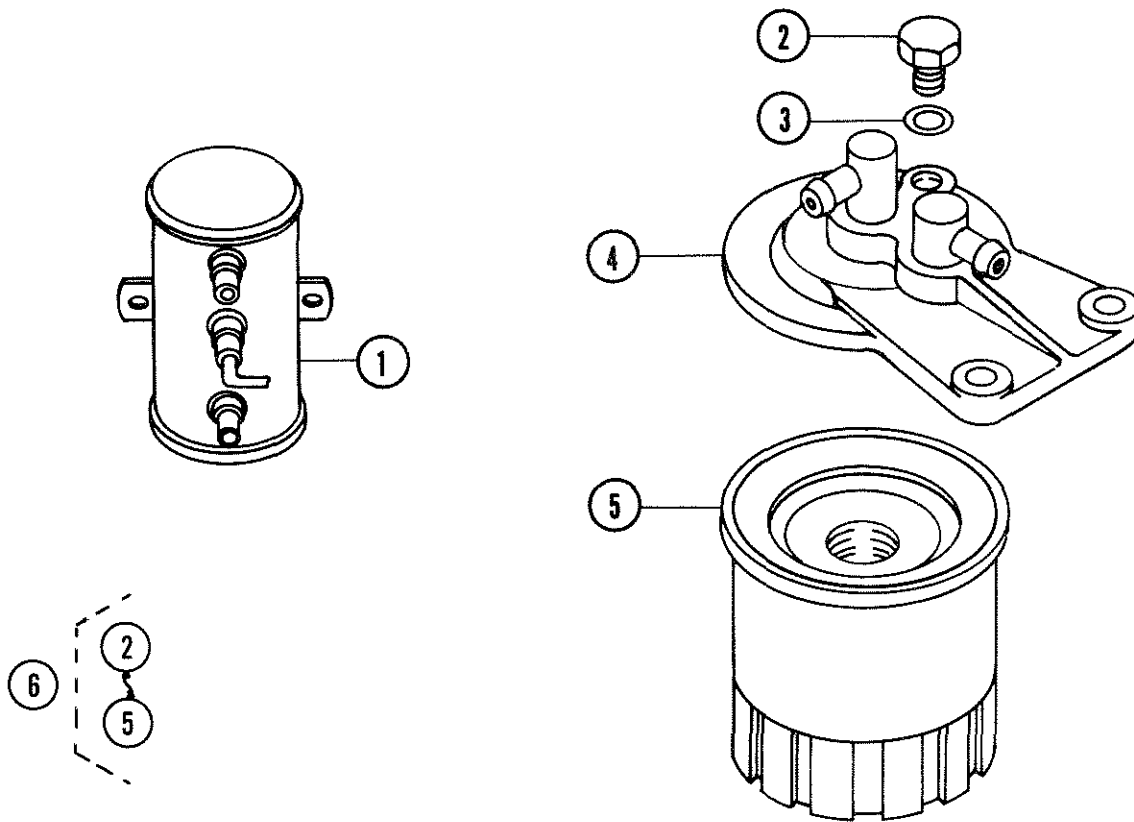
WATER PUMP GROUP



WATER PUMP GROUP

Item	Part No.	Unit	Description
1	301336	1	Assembly Pump, Water
2	301518	1	Flange, Water Pump
3	301337	1	Bearing
4			Order by Item No. 1
5	302757	1	Assembly Seal, Mechanical
6	301339	1	Impeller, Water Pump
7	302493	1	Pipe, Water Return 1
8	301340	1	Packing, Water Pump
9	301601	4	Bolt
10	301330	4	Bolt
11	301331	2	Washer, Fan
12	301329	1	Pulley, Fan
13	301598	1	Bolt
14	301599	1	Washer, Plain
15	301597	1	Pulley, Fan Drive
16	301073	1	V-Belt
16A	302084	1	V-Belt M2-12
18 & 17	303068	1	PTO Pulley Kit 5" x 3/8 Grove Pulley & 3 Al. Hd. Cap.
17	301847	1	P.T. Pulley 5"
18	302046	3	Cap. Sc. Hd. 8mm x 1.25 x 30mm

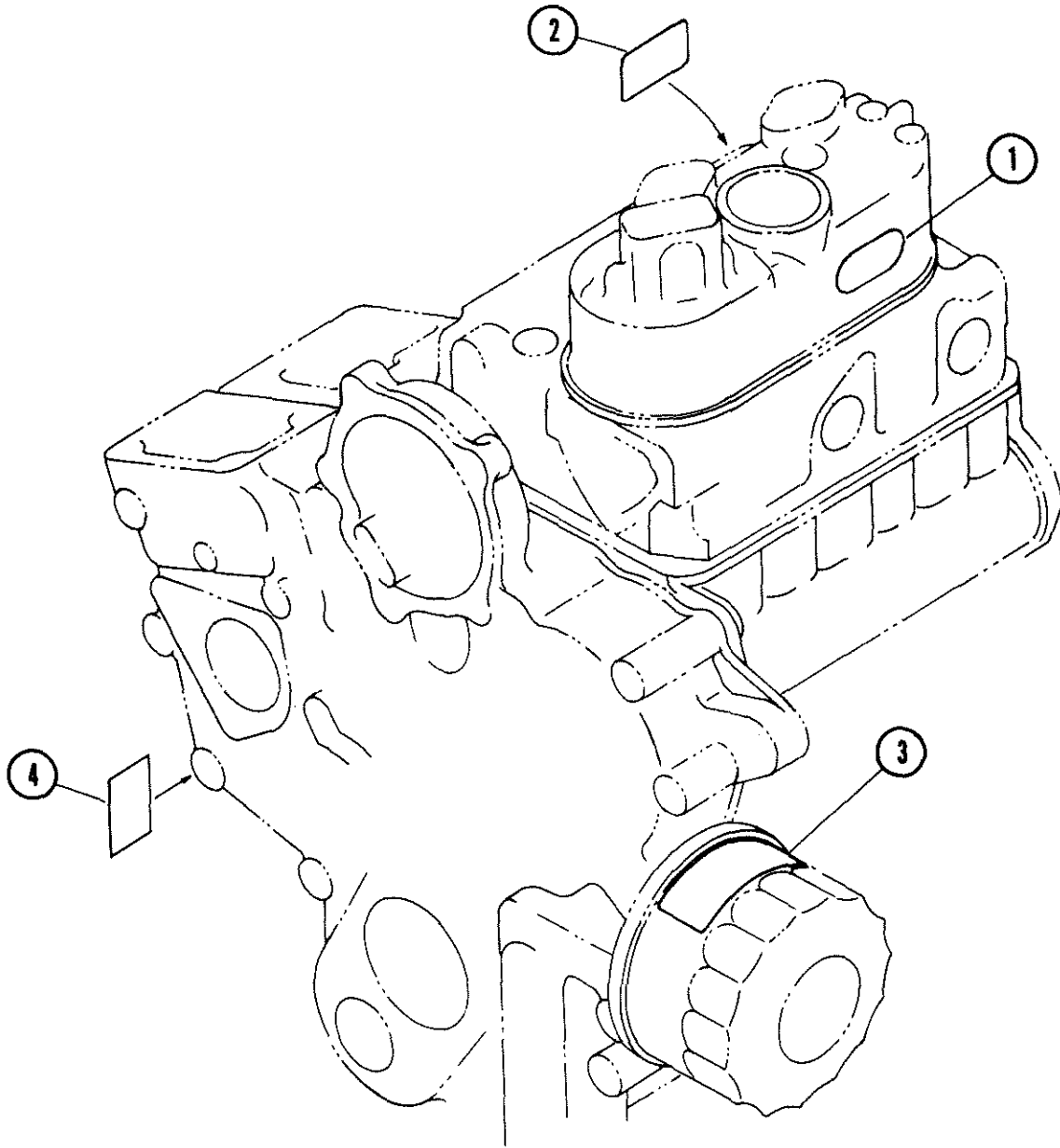
FUEL FILTER GROUP



FUEL FILTER GROUP

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

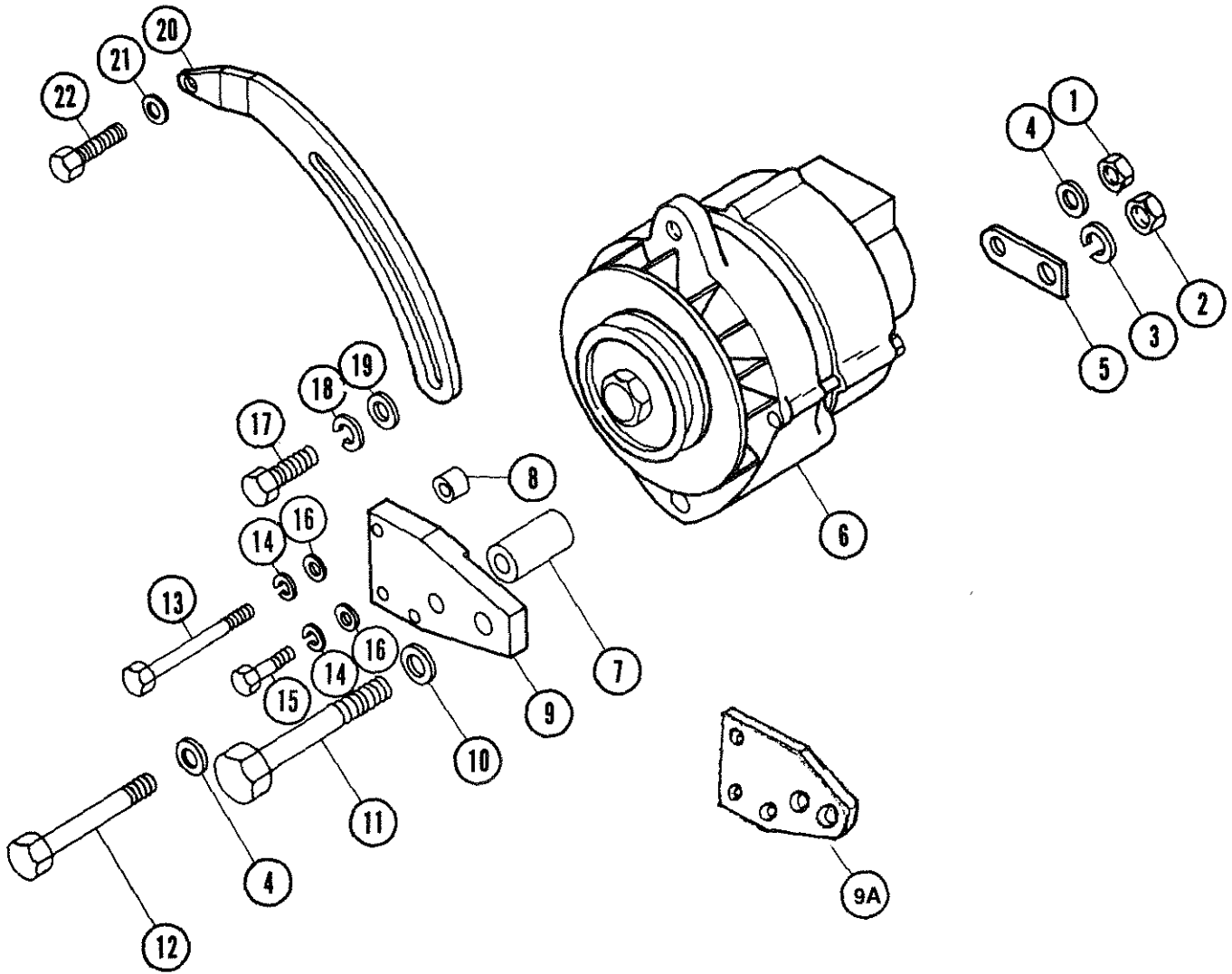
NAME PLATE GROUP



NAME PLATE GROUP

Item	Part No.	Unit	Description
1	299609	1	Label, Oil
2	298851	1	Label
3	298849	1	Label
4	298847	1	Label

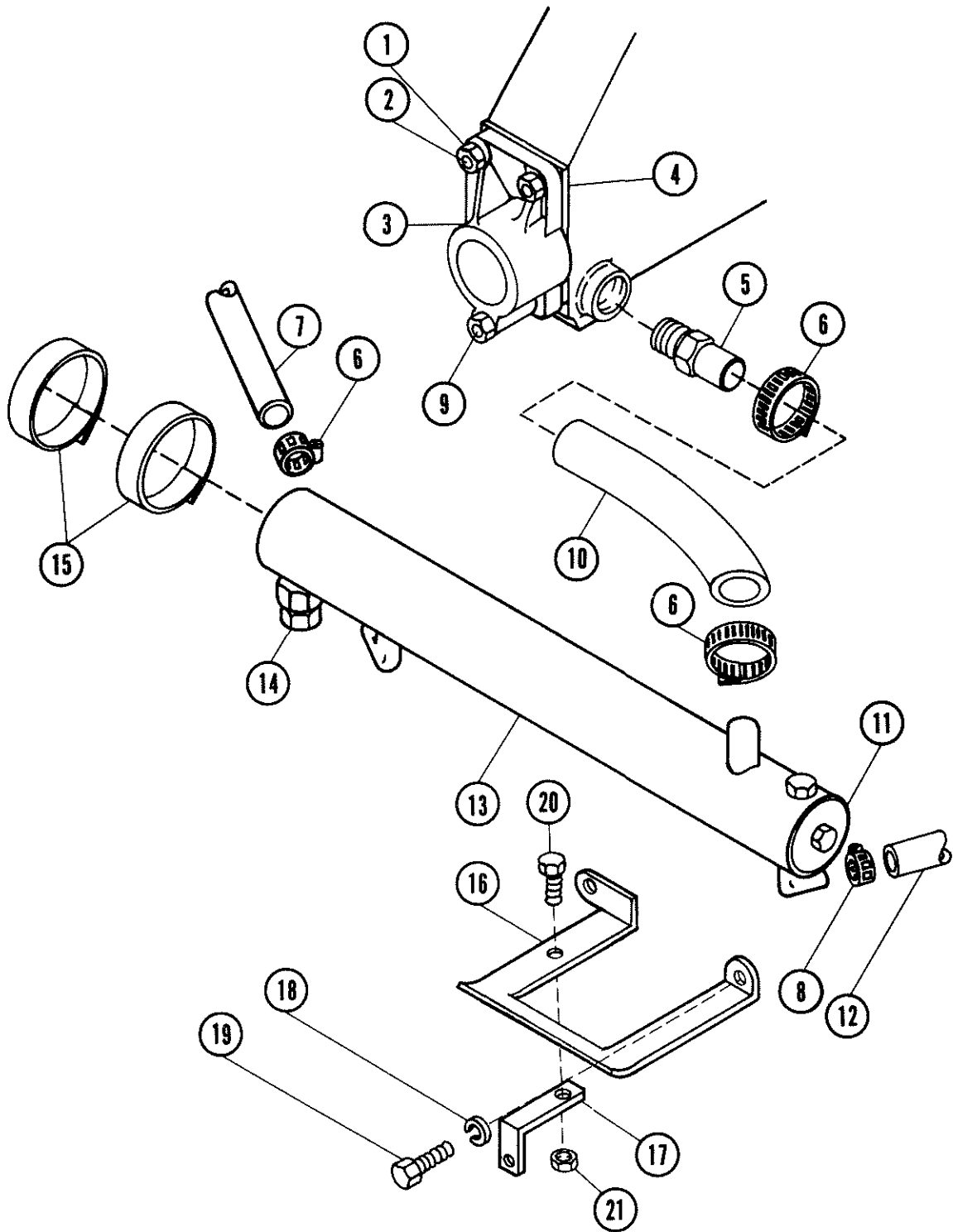
ALTERNATOR GROUP



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	302280	1	Alternator
7	300995	1	Alternator Spacer
8	301011	1	Alternator Spacer
9	301075	1	Alternator Bracket
9A	303125	1	Alt. Brkt. 1/4" Stl.
10	231876	1	Washer
11	231091	1	Hex Head Cap Screw 3/8-16 x 3-1/4
12	300976	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

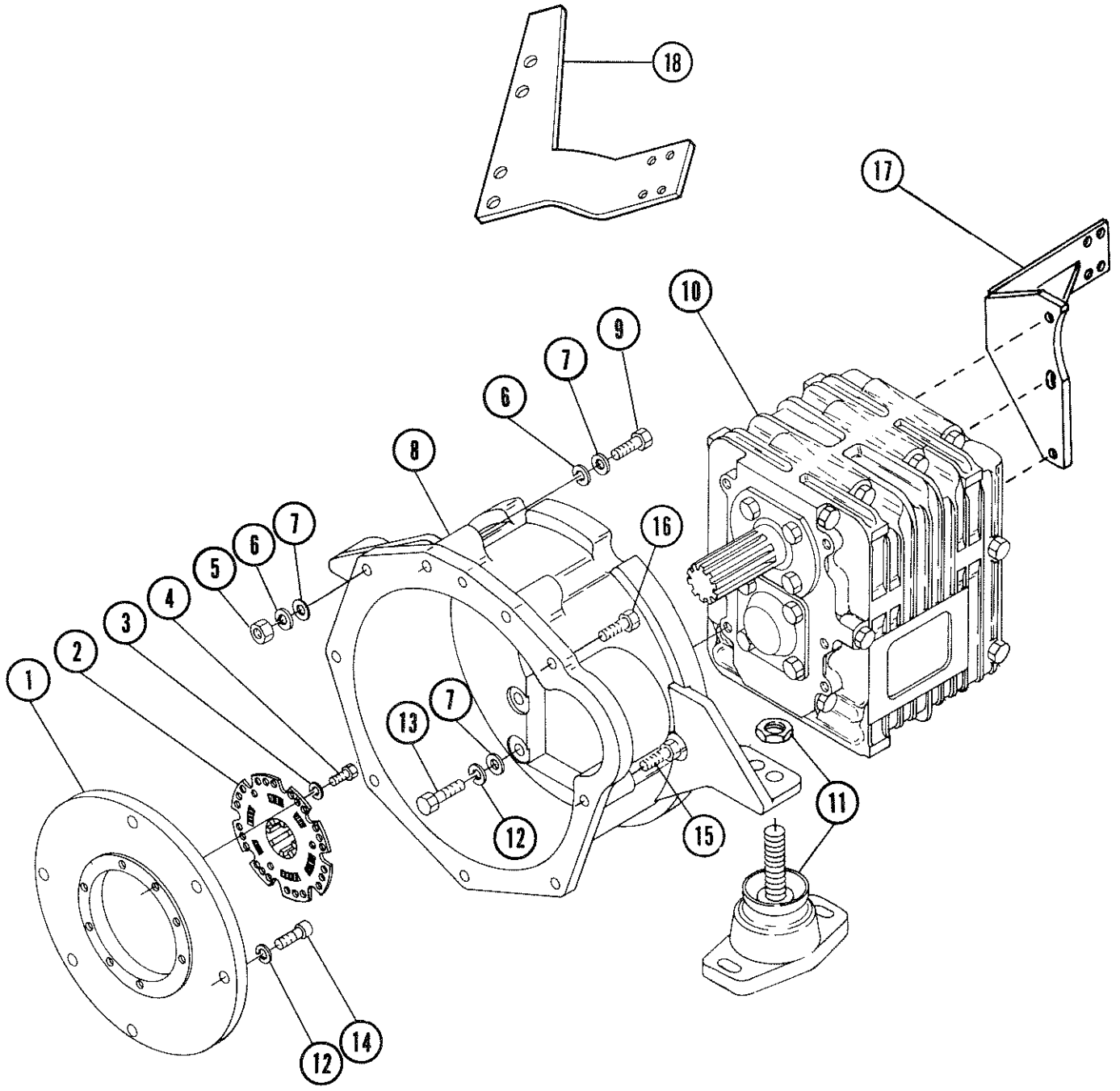
HEAT EXCHANGER GROUP



HEAT EXCHANGER GROUP

Item	Part No.	Unit	Description
1	230147	3	Hex Nut 3/8-24
2	276440	2	Stud 3/8-16 & 24 x 1-7/16
3	298599	1	Exhaust Flange
4	298600	1	Gasket, Exhaust Flange
5	286075	1	Hose Connector
6	298648	3	Hose Clamp
7	301077	1	Hose
8	374747	1	Hose Clamp
9	298974	1	Stud 3/8-16 & 24 x 2-5/8
10	300816	1	Wire Flex Hose 7/8 I.D.
11	299838	1	Cover Plate and Gasket
12	301066	1	Hose
13	298633	1	Heat Exchanger 2" x 12"
14	301069	1	Zinc 1/8 NPT x 1 7/8 x 3/16 DIA.
15	294386	2	Hose Clamp No. 28
16	301067	1	Heat Exchanger Bracket M-12
16A	301082	1	M2-12 Heat Exchanger Bracket
17	301082	1	Heat Exchanger Bracket Support
18	285305	2	Lock Washer
19	294485	2	Bolt
20	231035	1	Bolt
21	230257	1	Nut

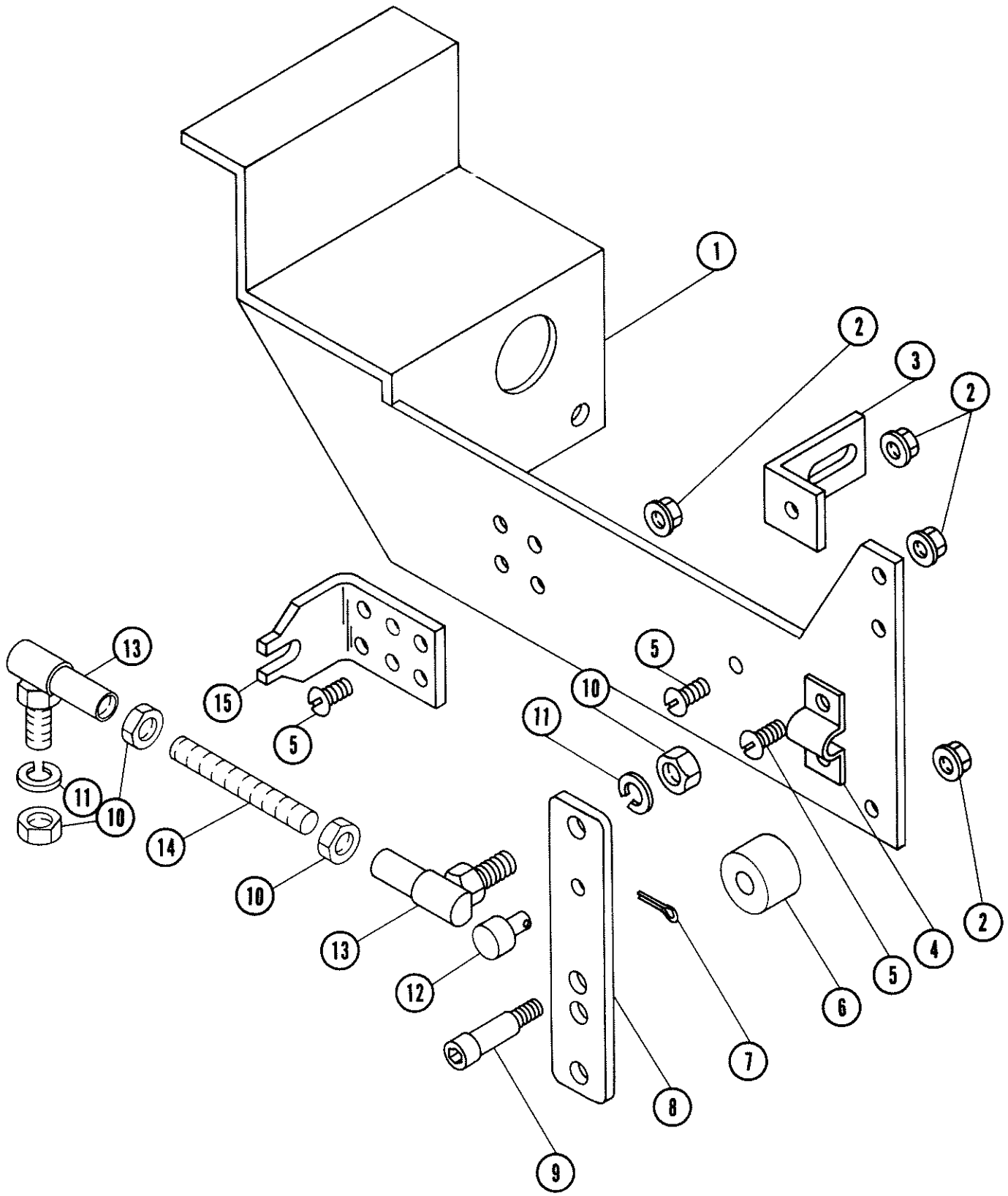
BELL HOUSING GROUP



BELL HOUSING GROUP

Item	Part No.	Unit	Description
1	300798	1	Plate, Damper Mounting
2	299156	1	Damper, Reverse Gear
3	298459	8	Washer, Split Lock
4	298458	8	Hex Head Cap Screw 5mm x 12mm
5	230141	3	Hex Nut 8mm
6	231891	9	Washer, 5/16 Lock
7	231875	9	Washer, 5/16 Plain
8	300799	1	Bell Housing
8A	302409	1	Bell Hsg. New Style w/ Radius for H.E.
9	298622	7	Hex Head Cap Screw 8mm x 1.25 x 65mm
10	300115	1	Standard Transmission
	299942	1	"V" Drive Transmission
11	300974	4	Flex Mount
12	298461	6	Washer, Lock 8mm
13	298468	6	Hex Head Cap Screw M8 x 25mm
14	298460	6	Socket Head Cap Screw 8mm x 25mm
15	300976	1	Hex Head Cap Screw 8mm x 1.25 x 80mm
16	298540	1	Hex Head Cap Screw 8mm x 1.25 x 40mm
17	300427	1	Shift Bracket
18	300244	1	Vertical Shift Bracket
19	303146	1	Pad Rubber N. Excn. Backing

THROTTLE BRACKET GROUP

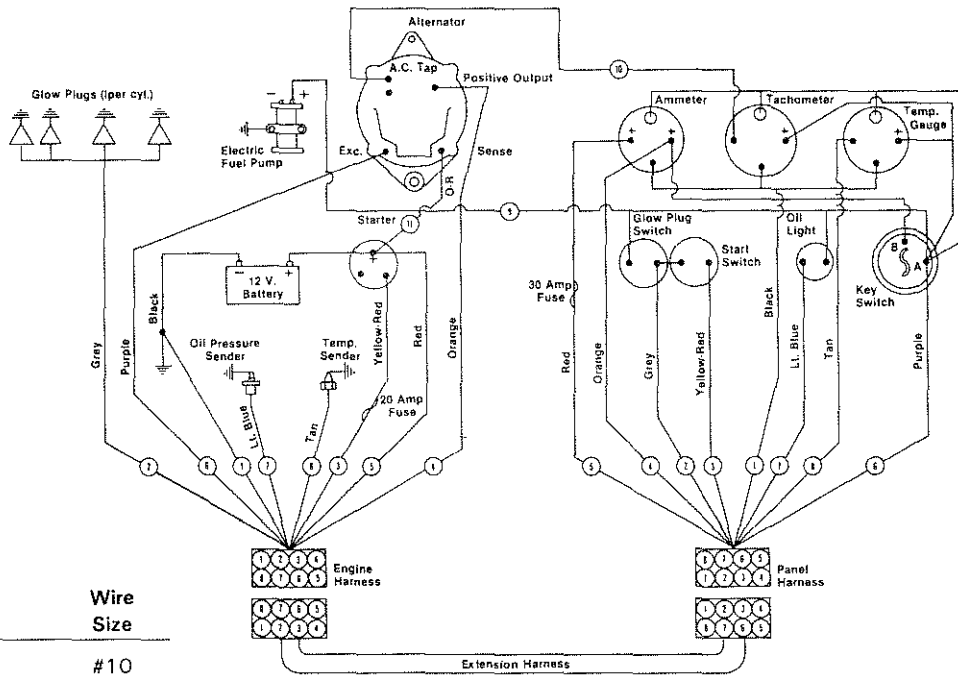
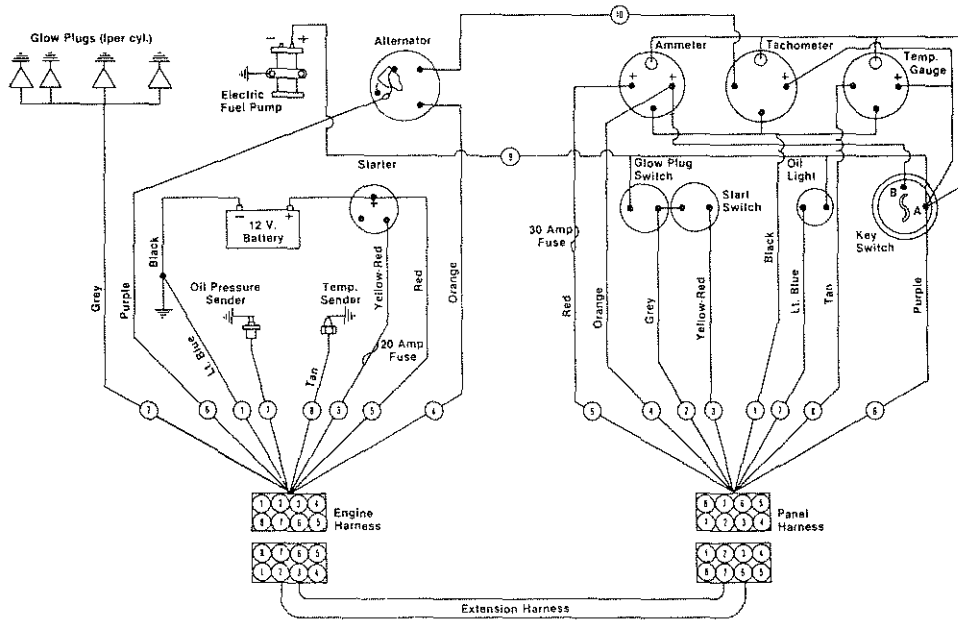


THROTTLE BRACKET GROUP

THROTTLE ASSEMBLY 256823

Item	Part No.	Unit	Description
1	300981	1	Bracket, Throttle
2	015434	6	Key Nut No. 10-24
3	300979	1	Support, Throttle Bracket
4	299653	1	Clamp, Choke Cable
5	015360	5	Round Head Machine Screw No. 10-24 x 1/2
6	300090	1	Spacer, Lever
7	230281	1	Cotter Pin
8	300826	1	Lever, Throttle
9	231452	1	Shoulder Screw No. 10-24 x 1/4 x 5/8 Sld.
10	230184	4	Hex Jam Nut 1/4-28
11	231907	2	Lock Washer, 1/4
12	299019	1	Pivot, Throttle Cable
13	299767	2	Ball Joint
14	300978	1	Rod, Adjustment
15	298630	1	Cable Cup

WIRING DIAGRAM



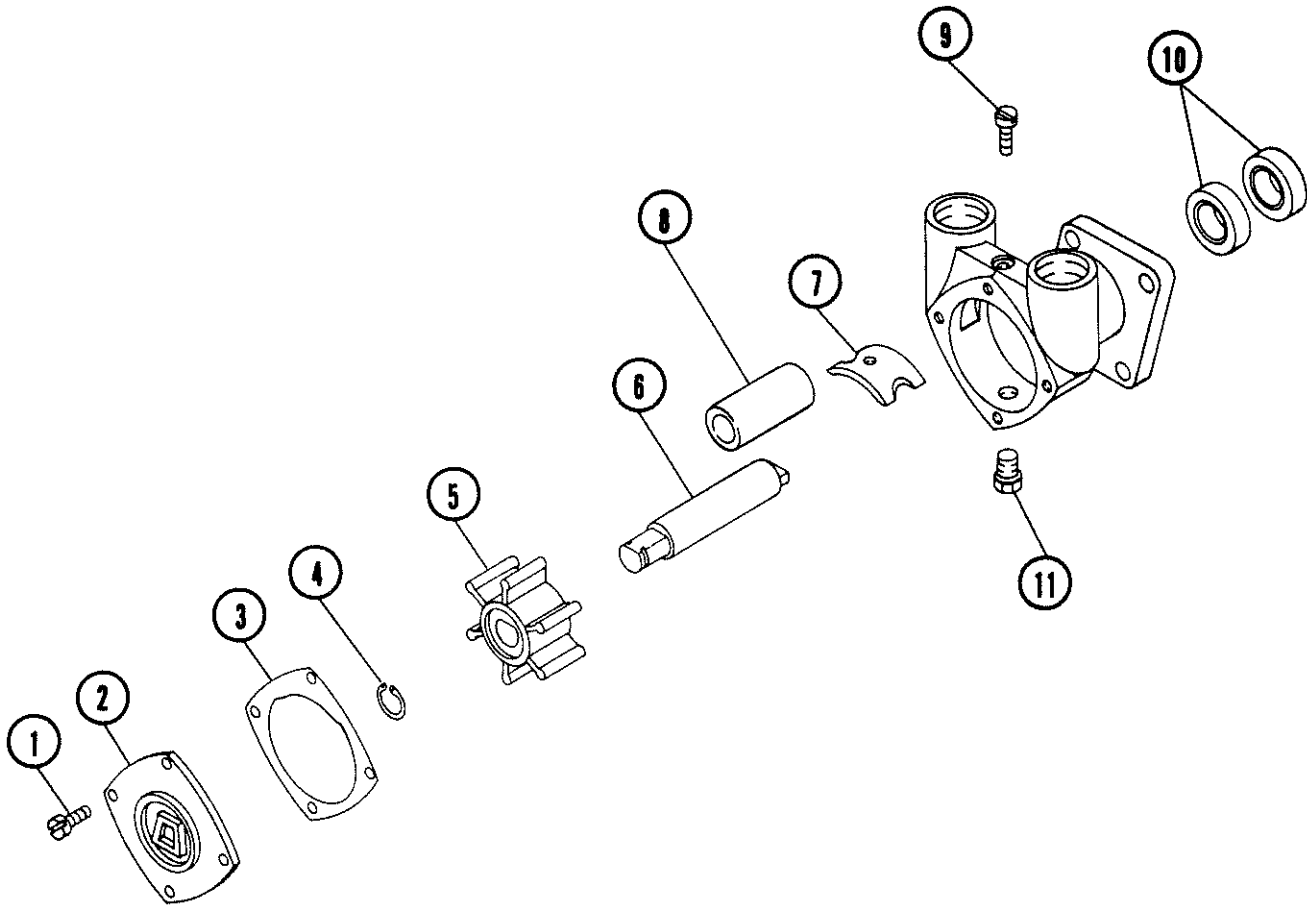
Wire No.	Color	Wire Size
1	Black	# 10
2	Grey	10
3	Yellow-Red	16
4	Orange	10
5	Red	10
6	Purple	16
7	Lt. Blue	16
8	Tan	16
9	Open	14
10	Grey	16
11	Orange-Red	14

256829
"B" SPARE PARTS KIT M-12

256910 LESS INJECTOR
"A" SPARE PARTS KIT M-12-M2-12

256939
"B" SPARE PARTS KIT M2-12

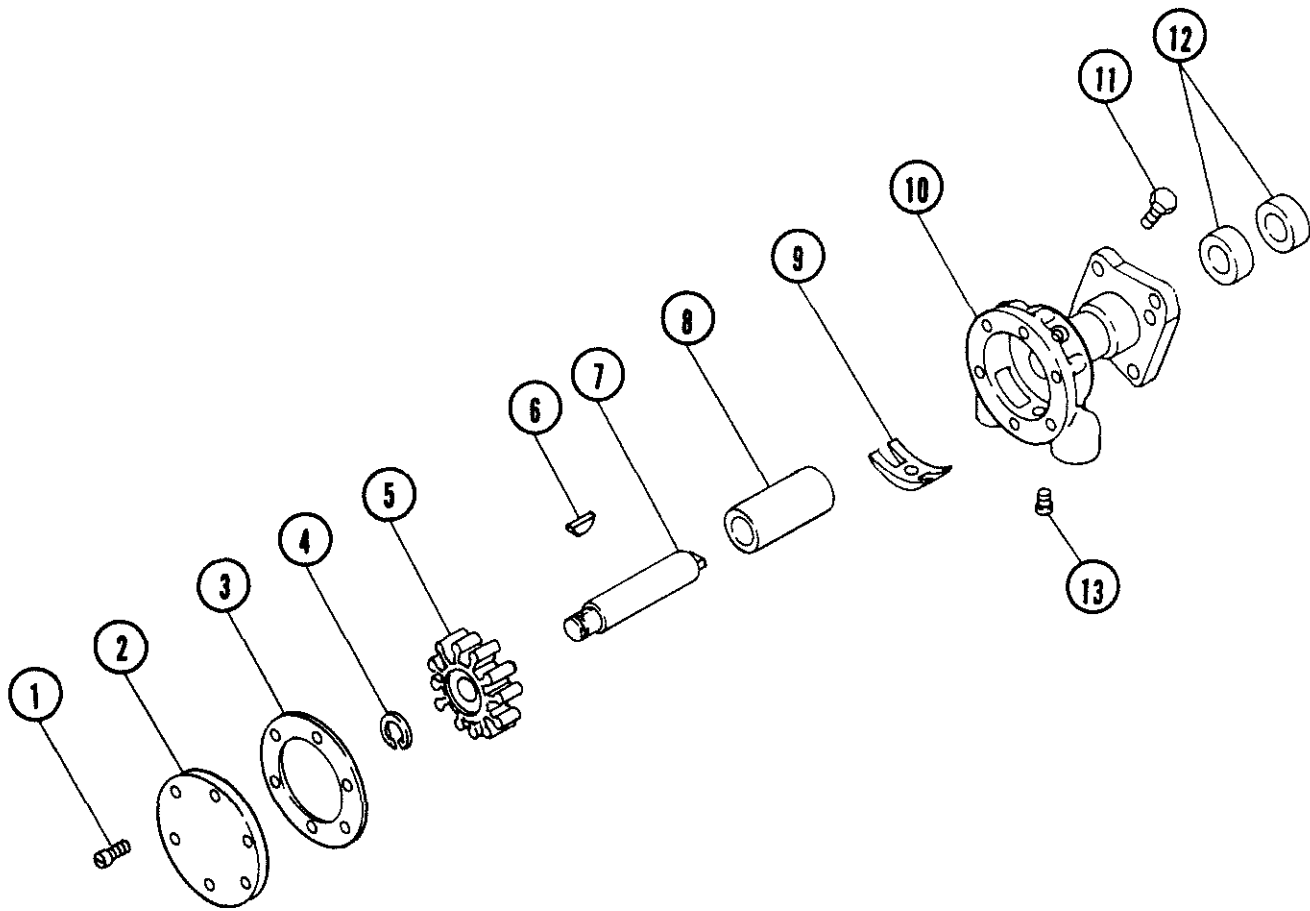
OBERDORFER WATER PUMP



PUMP ASSEMBLY 301357

Item	Part No.	Unit	Description
1	296580	4	Cover Screws
2	296578	1	Pump Cover
3	295626	1	Cover Gasket
4	295629	1	Impeller Snap Ring
5	295628	1	Impeller
6	296575	1	Pump Shaft Old Style
6A	301788	1	1 pc. Shaft New Style
7	298889	1	Cam
8	302322	1	Carbon Bushing
9	296580	1	Cam Locking Screw
10	295627	2	Oil Seal
11	296576	1	Drain Plug

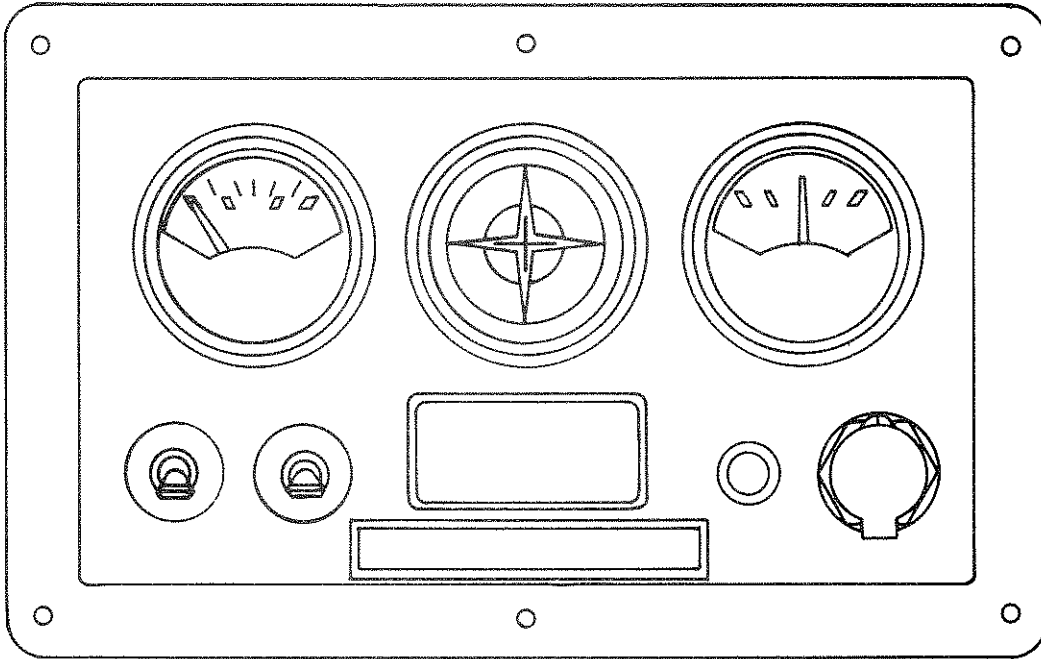
SHERWOOD WATER PUMP



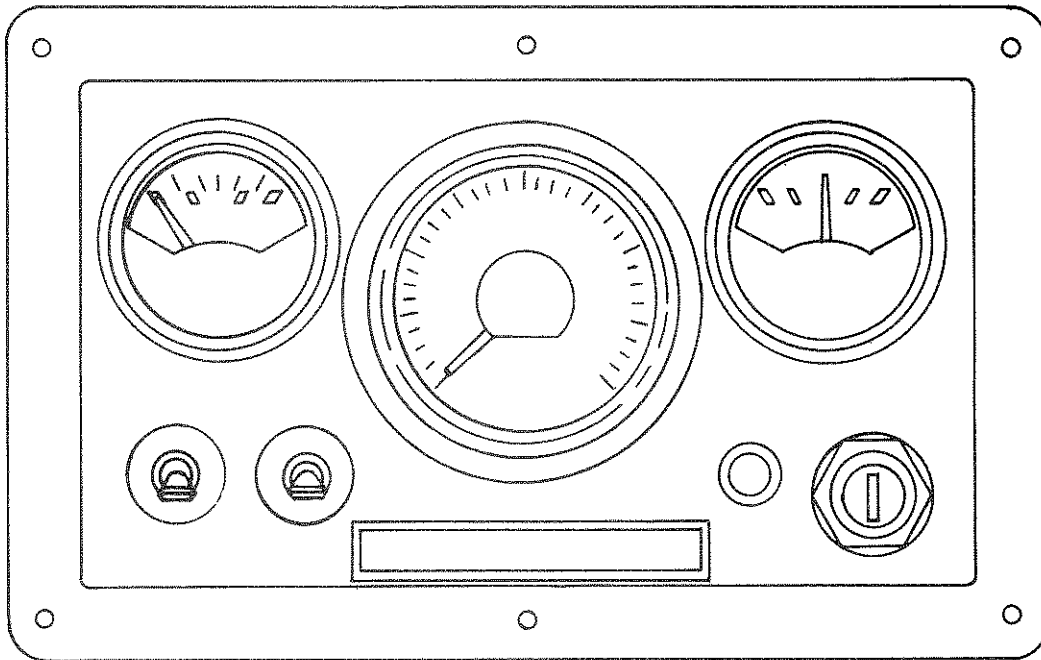
PUMP ASSEMBLY 300986

Item	Part No.	Unit	Description
1	299895	6	Cover Screws
2	299891	1	Pump Cover
3	295745	1	Cover Gasket
4	299893	1	Impeller Snap Ring
5	287439	1	Impeller
6	299896	1	Key
7	299888	1	Pump Shaft Old Style
7A	301787	1	1 pc. Shaft New Style
8	299889	1	Water Seal
9	299894	1	Cam
10	299890	1	Pump Body
11	299895	1	Cam Locking Screw
12	262286	2	Oil Seal
13	239136	1	Drain Plug

**MEDALLION PANELS
(No Longer Available)**

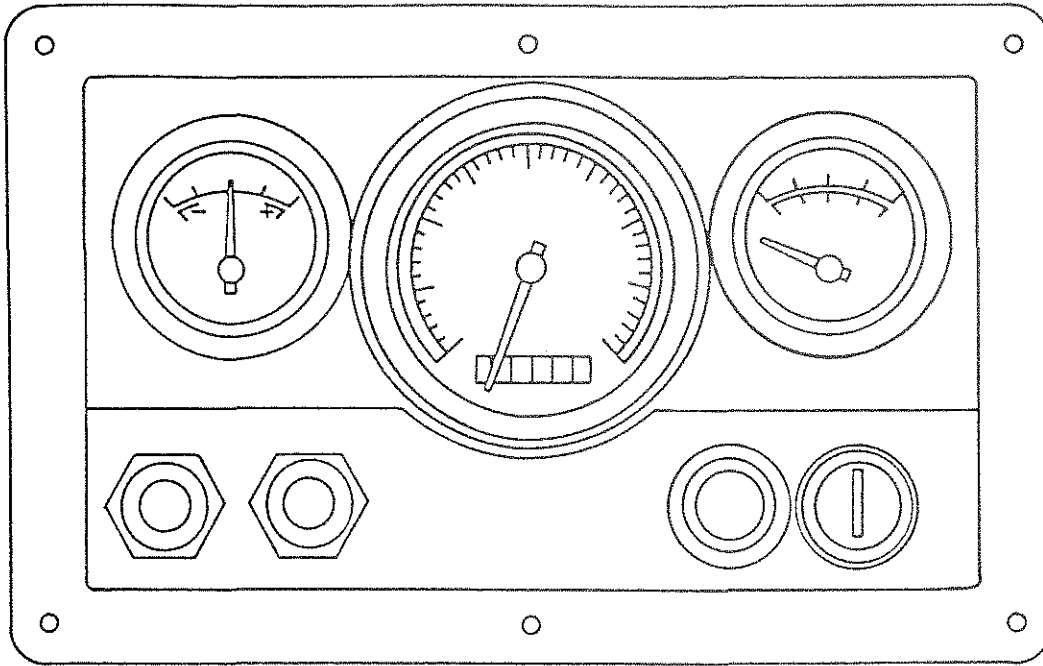


299626 STANDARD PANEL

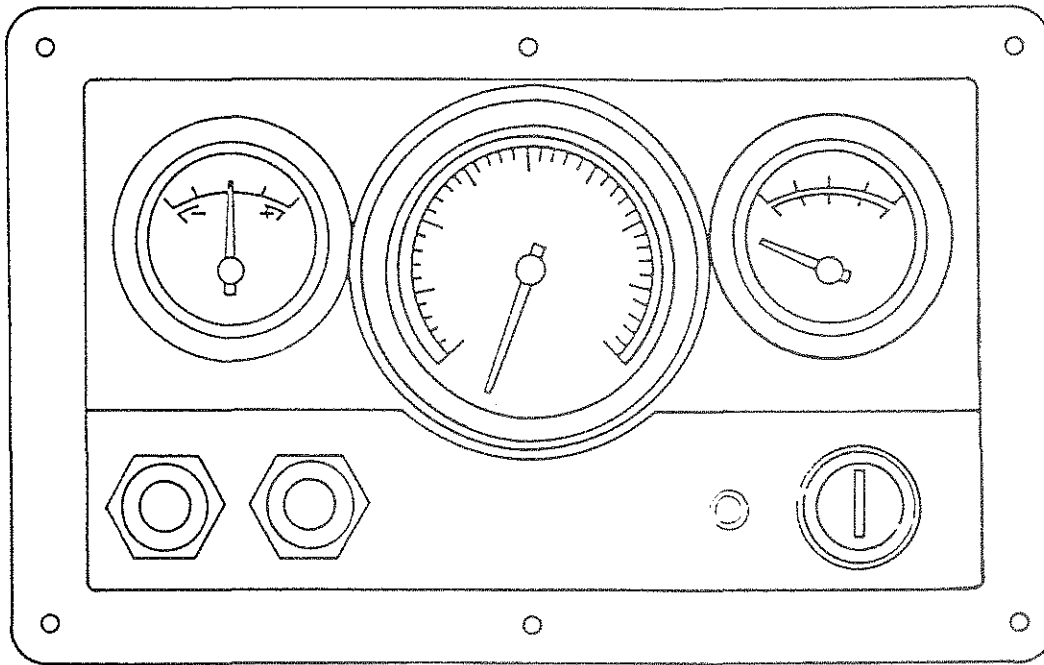


299683 DELUXE PANEL

NOVATRON PANELS

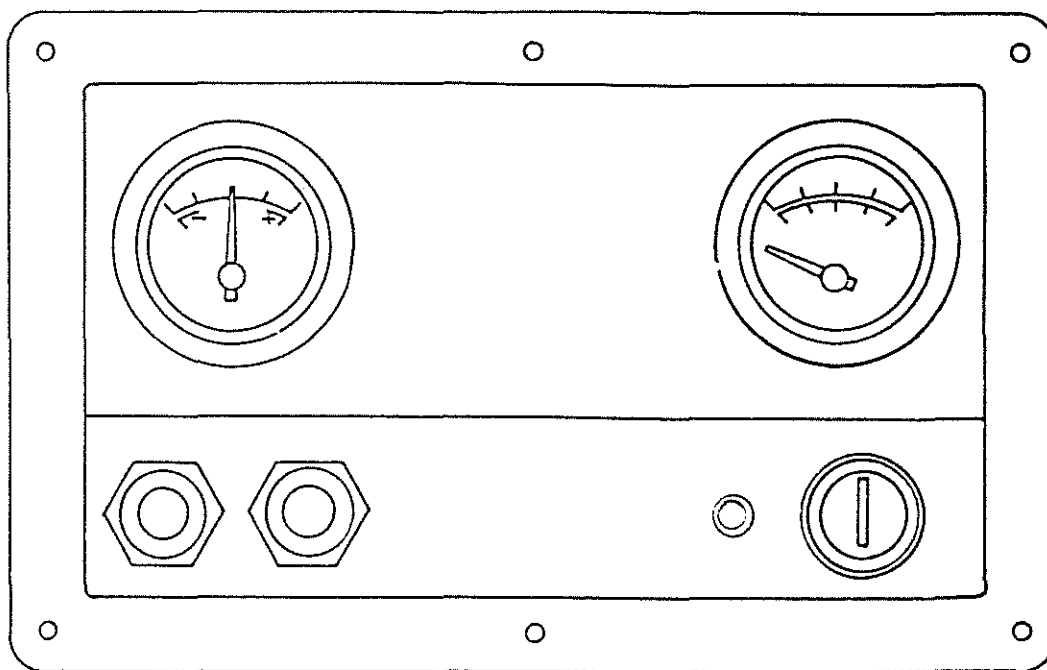


300690 CUSTOM PANEL
(With Tachometer - Hour Meter and Alarms)



300685 DELUXE PANEL
(With Tachometer)

NOVATRON PANELS



300680 STANDARD PANEL
(No Tachometer)

NOVATRON INSTRUMENT PANEL

Item	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

Top Gasket Set
M-12 256840
Complete Gasket Set
M-12 256841
Top Gasket Set
M2-12 256940
Complete Gasket Set
M2-12 256941

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



