

UNIVERSAL ATOMIC DIESEL

MODEL 5411 (11 H.P.)

PARTS MANUAL



Universal Motors

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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.

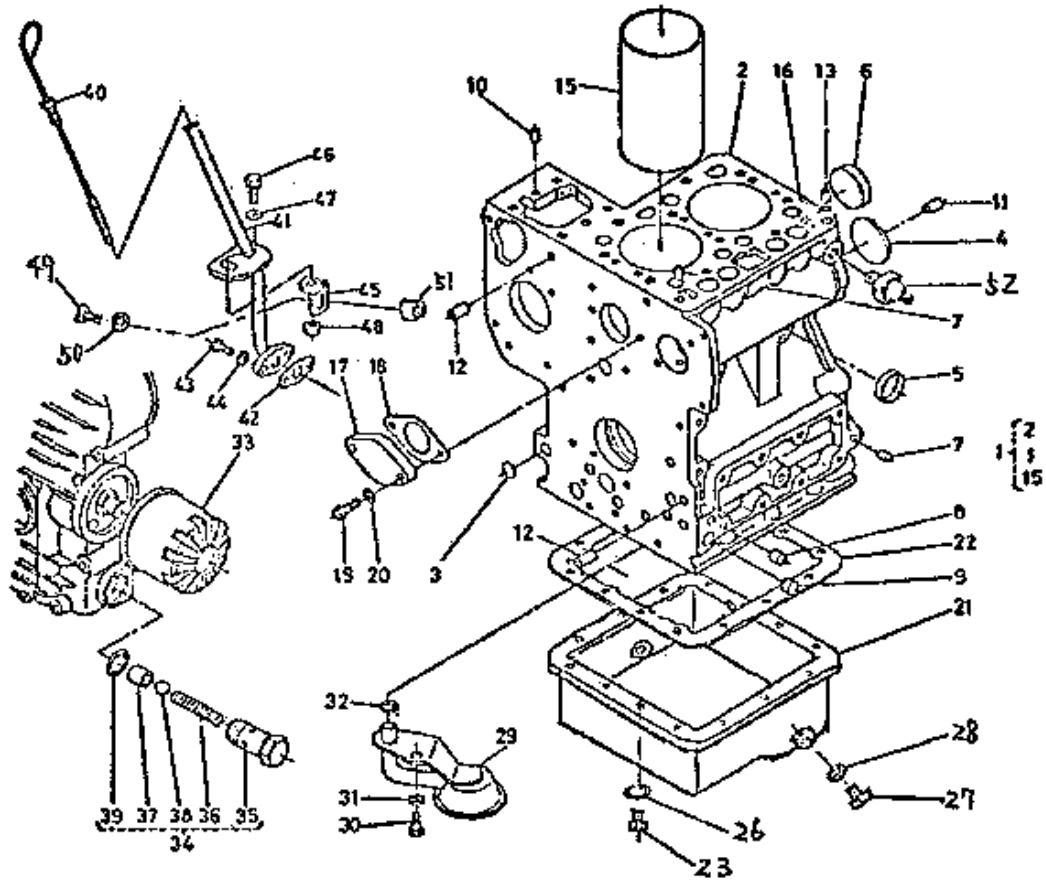
**ALL ORDERS FOR REPAIR PARTS MUST BE PLACED THROUGH OUR DISTRIBUTOR/DEALER
IN YOUR AREA.**

**MEDALIST - UNIVERSAL MOTORS
P.O. BOX 2508
OSHKOSH, WI 54903**

(414)231-4100 Cable UNIMOT

ATTENTION - SERVICE DEPT.

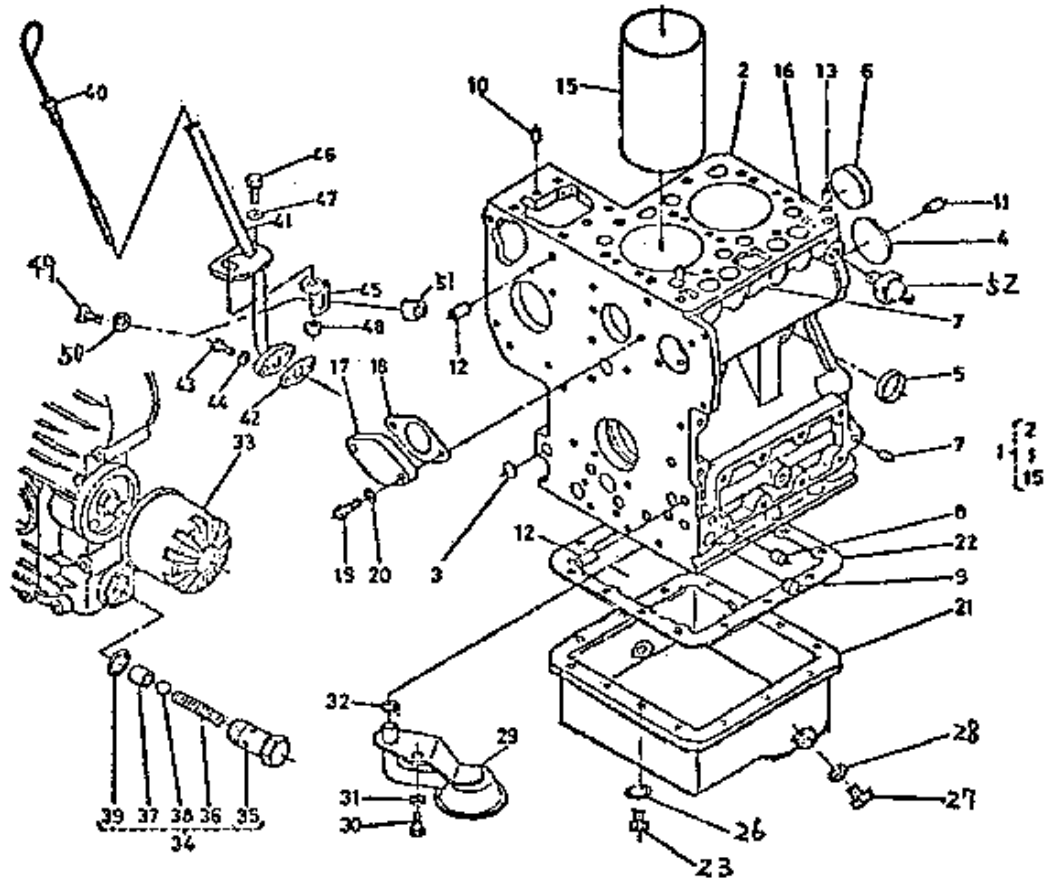
CRANKCASE GROUP



FROM SERIAL NO: 230248 TO 230416
 300000 TO 300071

ITEM	PART NO.	DESCRIPTION	UNIT
1	299351	Assembly, Crankcase	1
3	299352	Plug, Expansion	3
4	299353	Plug, Expansion	1
5	299354	Cap, Sealing	3
6	299355	Cap, Sealing	1
7	299356	Plug, Pin	5
8	299357	Plug, Pin	3
9	299358	Plug, Blind	1
10	299359	Pin, Straight	2
11	299360	Pin, Straight	2
12		Pin, Pipe	1
13		Pin, Pipe	2
15	299361	Liner, Cylinder	2
16	299362	O Ring	1
17	299363	Cover, Water	1
18	299364	Gasket, Water Cover	1
19	299365	Bolt	2
20		Washer, Spring	2
21	299366	Oil Pan	1
22	299367	Gasket, Oil Pan	1
23	299368	Bolt	14

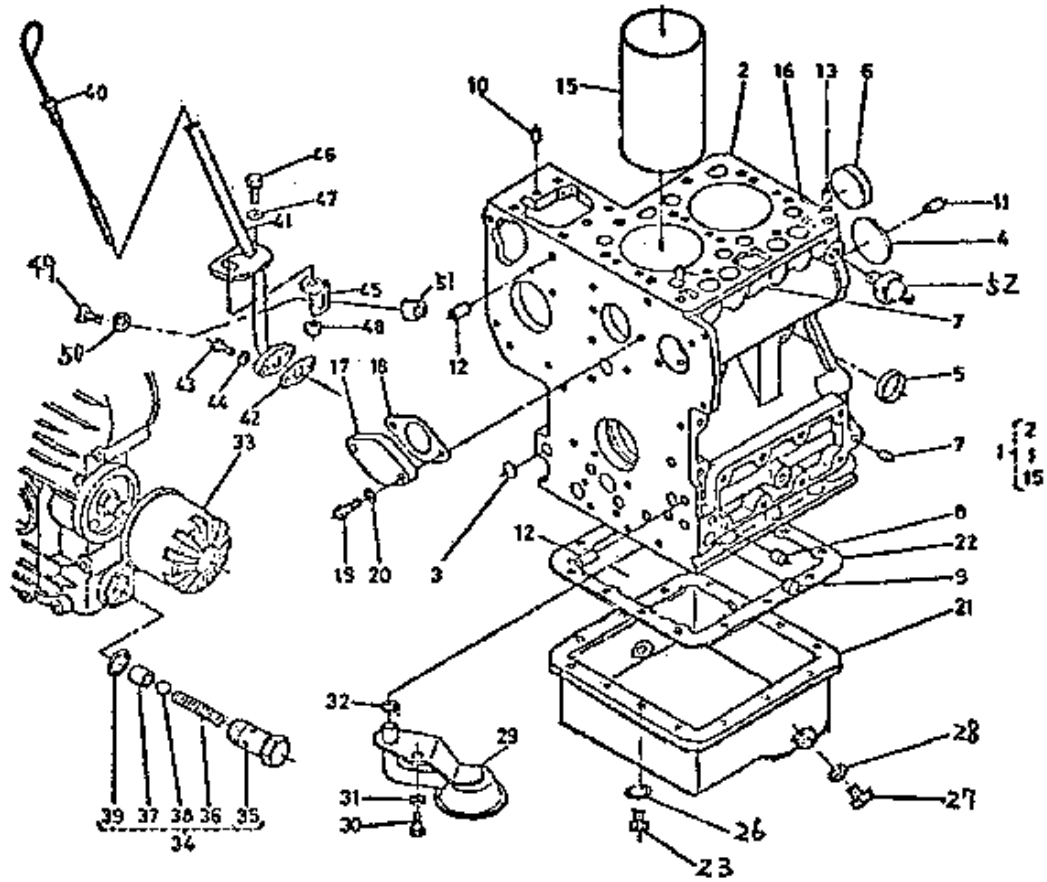
CRANKCASE GROUP



FROM SERIAL NO: 300072 TO

ITEM	PART NO.	DESCRIPTION	UNIT
1	299351	Assembly, Crankcase	1
3	299352	Plug, Expansion	3
4	299353	Plug, Expansion	1
5	299354	Cap, Sealing	3
6	299355	Cap, Sealing	1
7	299356	Plug, Pin	5
8	299357	Plug, Pin	3
9	299358	Plug, Blind	1
10	299359	Pin, Straight	2
11	299360	Pin, Straight	2
12		Pin, Pipe	1
13		Pin, Pipe	2
15	299361	Liner, Cylinder	2
16	299362	O Ring	1
17	299751	Cover, Water (Not interchangeable with 299363)	1
18	299364	Gasket, Water Cover	1
19	299753	Bolt (Must use with 299751)	2
20		Washer, Spring	2
21	299366	Oil Pan	1
22	299367	Gasket, Oil Pan	1
23	299368	Bolt	14

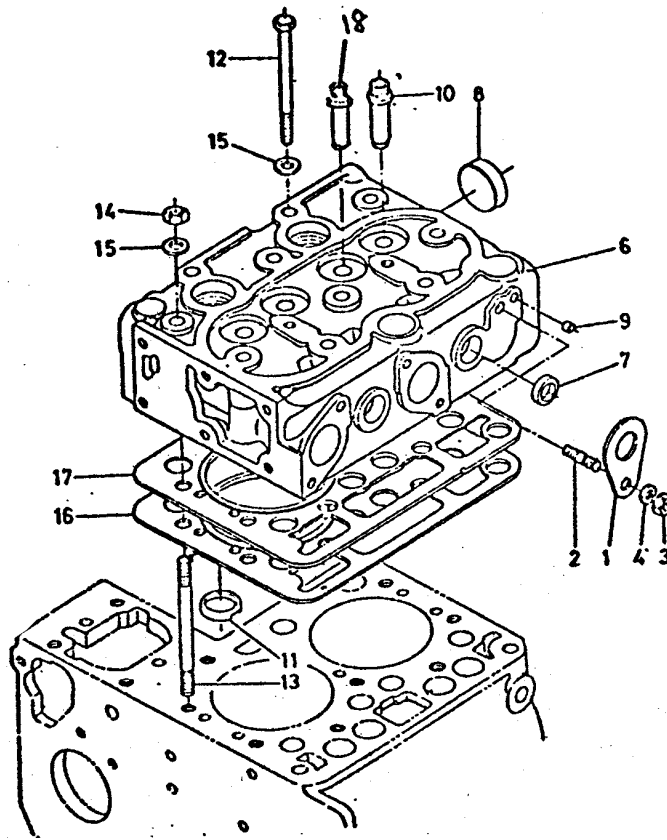
CRANKCASE GROUP



FROM SERIAL NO: 230248 TO 230416
 300000 TO 300071

ITEM	PART NO.	DESCRIPTION	UNIT
26	299369	Washer, Spring	14
27	299370	Plug	1
28	299371	Gasket	1
29	299372	Filter, Oil	1
30	N/A	Bolt	1
31	N/A	Washer, Spring	1
32	299373	O Ring	1
33	299381	Cartridge, Oil	1
34	299374	Relief Valve Assembly	1
35	299375	Body, Relief Valve	1
36	N/A	Spring	1
37	N/A	Seat, Valve	1
38	N/A	Ball	1
39	299376	O Ring	1
40	299377	Gauge, Oil (Dipstick)	1
41	299225	Dipstick Tube	1
42	299226	Dipstick Tube Gasket	1
43	299379	Bolt	2
44	299380	Washer, Spring	2

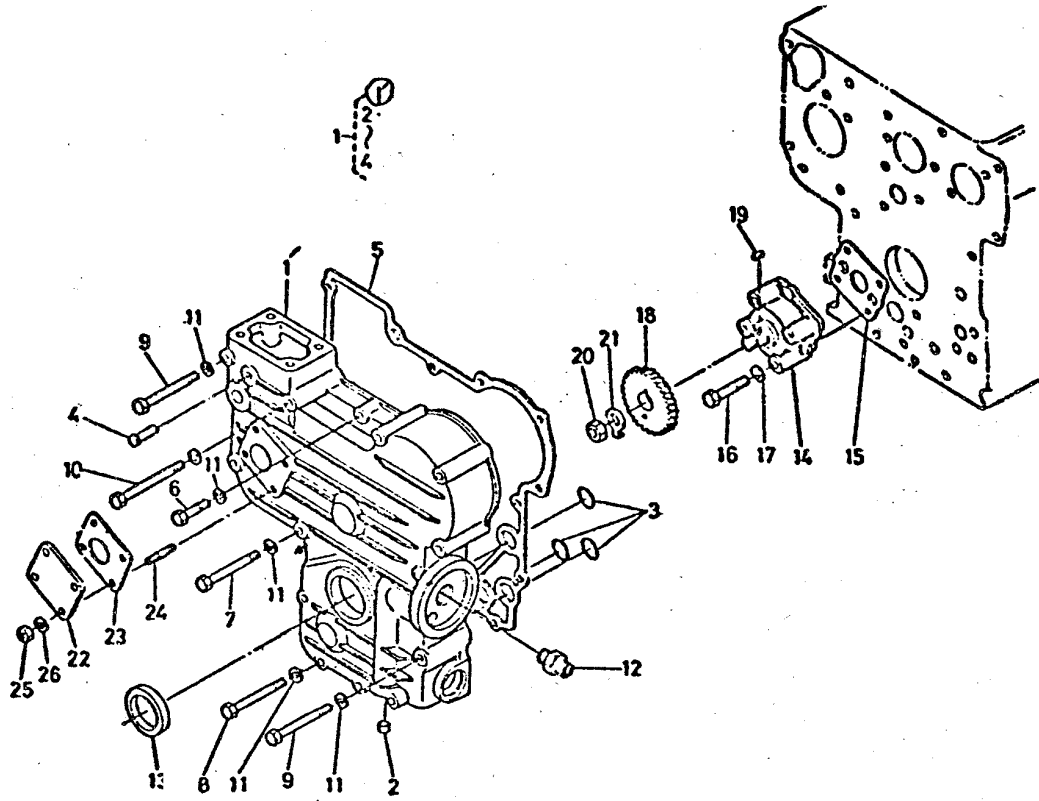
CYLINDER HEAD GROUP



FROM SERIAL NO: 230248 TO 230416
300000 TO 300071

ITEM	PART NO.	DESCRIPTION	UNIT
1	N/A	Hook, Engine	2
2	N/A	Stud	2
3	N/A	Nut	2
4	N/A	Washer, Spring	2
5	299382	Assembly, Cylinde Head	1
6	N/A	Cylinder Head	1
7	299383	Cap, Sealing	3
8	299384	Cap, Sealing	1
9	299385	Plug, Blind	2
10	299386	Guide, Valve	2
11	299387	Combustion Chamber	2
12	299388	Bolt, Cylinder Head	8
13	299389	Stud, Cylinder Head	2
14	299390	Nut, Cylinder Head	2
15	299391	Washer, Plain	10
16	299392	Gasket, Cylinder Head	1
17	299393	Shim, Cylinder Head Gasket	1
18	299394	Guide, Exhaust Valve	2

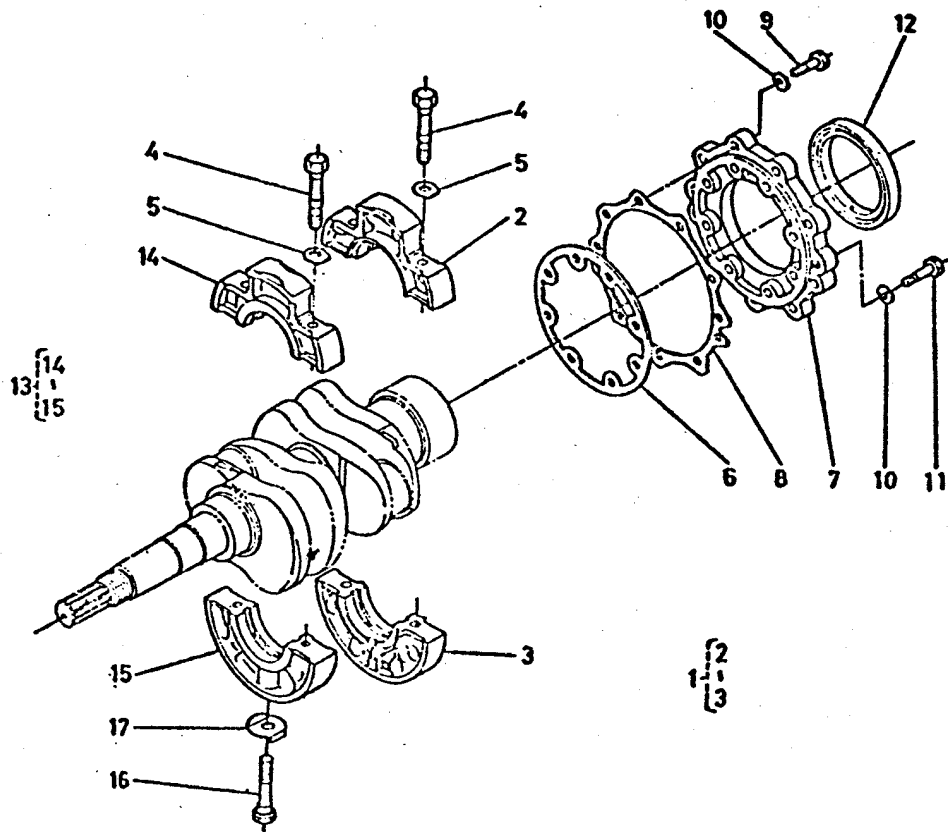
GEAR CASE GROUP



FROM SERIAL NO: 230248 TO 230416
 300000 TO 300071

ITEM	PART NO.	DESCRIPTION	UNIT
1	299411	Assembly, Gear Case	1
2	299395	Plug, Pin	2
3	299396	O Ring	3
4	N/A	Pin, Start Spring	1
5	299397	Gasket, Gear Case	1
6	299398	Bolt	1
7	299399	Bolt	4
8	299400	Bolt	7
9	299401	Bolt	1
10	299402	Bolt	1
11	299403	Washer, Spring	14
12	299412	Pipe, Joint	1
13	299404	Seal, Oil	1
14	299405	Assembly, Oil Pump	1
15	299406	Gasket, Oil Pump	1
16	N/A	Bolt	4
17	N/A	Washer, Spring	4
18	299407	Gear, Oil Pump Drive	1
19	299408	Key, Feather	1
20	299409	Nut	1
21	299413	Washer, Claw	1

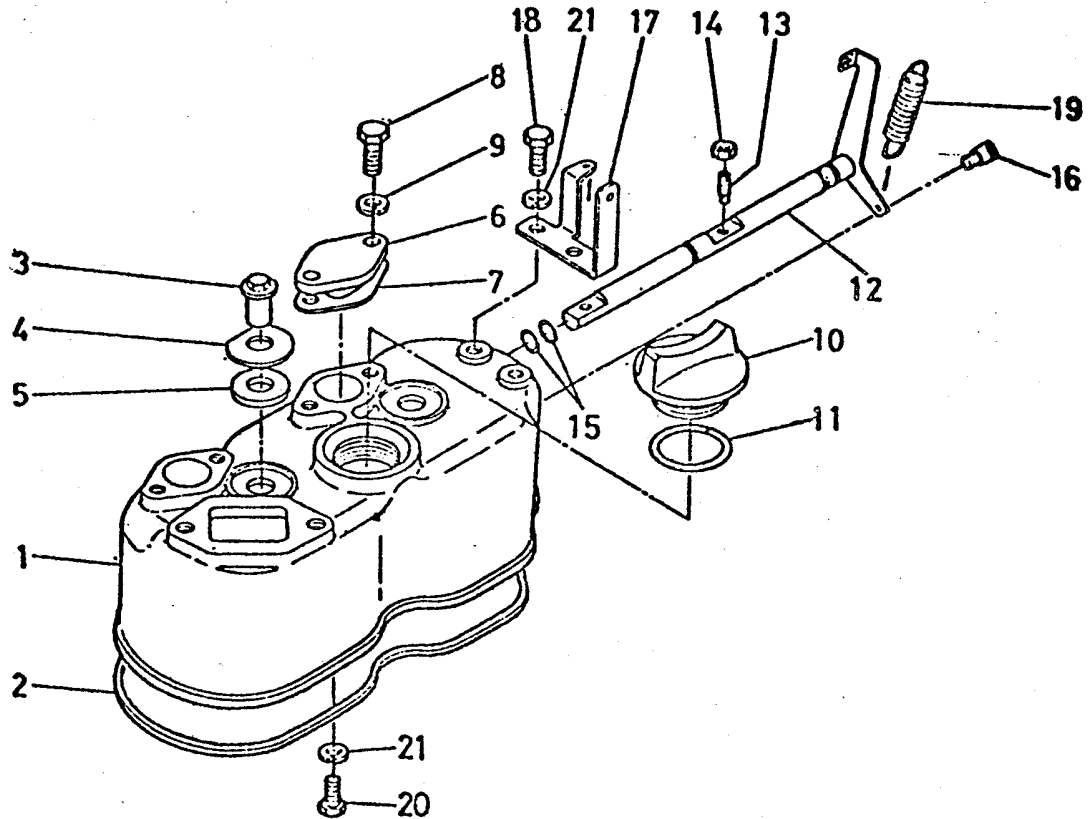
BEARING CASE GROUP



FROM SERIAL NO: 230248 TO 230416
 300000 TO 300071

ITEM	PART NO.	DESCRIPTION	UNIT
1	299414	Assembly Case, Main Bearing	1
2	N/A	Case, Main Bearing / order by Item #1	1
3	N/A	Case, Main Bearing / order by Item #1	1
4	299415	Bolt, Bearing Case	4
5	299416	Washer, Bearing Case	4
6	299417	Gasket, Bearing Case	1
7	N/A	Cover, Bearing Case	1
8	299418	Gasket, Bearing Case Cover	1
9	N/A	Bolt	9
10	N/A	Washer, Spring	17
11	N/A	Bolt	8
12	299419	Seal, Oil	1
13	299420	Assembly Case, Main Bearing	1
14	N/A	Case, Main Bearing / order by Item #13	1
15	N/A	Case, Main Bearing / order by Item #13	1
16	N/A	Bolt, Bearing Case	1
17	299421	Washer, Bearing Case	1

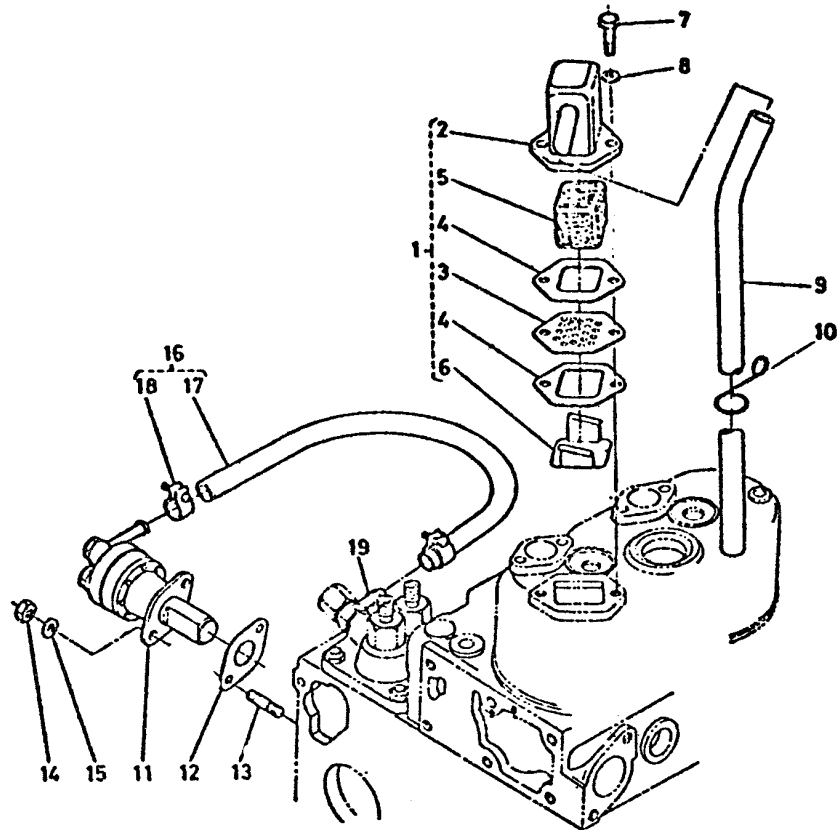
HEAD COVER GROUP



FROM SERIAL NO: 230248 TO 230416
300000 TO 300071

ITEM	PART NO.	DESCRIPTION	UNIT
1	299455	Cover, Cylinder Head	1
2	299456	Gasket, Head Cover	1
3	299457	Nut, head Cover	2
4	299458	Washer, Head Cover	2
5	299459	Gasket, Nut	2
6	299460	Cover, Decompression Hole	2
7	299461	Gasket	2
8	299462	Bolt	4
9	299463	Washer, Spring	4
10	299464	Plug, Oil Filler	1
11	299465	O Ring	1
12	299466	Assembly Shaft, Decompression	1
13	299467	Bolt, Decompression	2
14	299468	Nut	2
15	299469	O Ring	2
16	N/A	Stopper, Decompression Shaft	1
17	299470	Holder, Decompression Wire	1
18	N/A	Bolt	2
19	299471	Spring, Decompression	1
20	N/A	Bolt	1
21	N/A	Washer, Spring	3

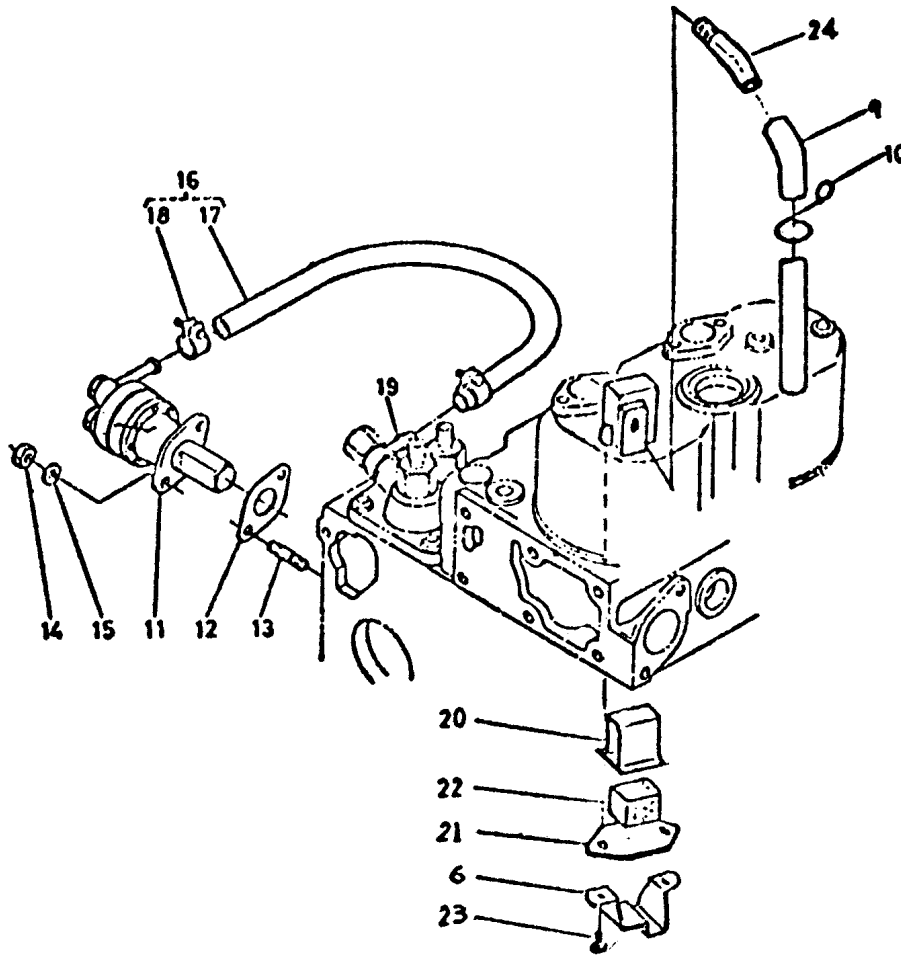
BREATHER GROUP



FROM SERIAL NO: 230248 230416
300000 TO 300071

ITEM	PART NO.	DESCRIPTION	UNIT
1	299422	Assembly, Breather	1
2	N/A	Breather	1
3	N/A	Plate, Element	1
4	299423	Gasket, Cover	2
5	N/A	Element, Breather	1
6	N/A	Oil Shield, Breather	1
7	N/A	Bolt	2
8	N/A	Washer, Spring	2
9	299424	Pipe, Breather	1
10	N/A	Clamp, Pipe	1
11	299425	Assembly Pump, Fuel	1
12	299426	Gasket, Fuel Pump	1
13	N/A	Stud	1
14	N/A	Nut	1
15	N/A	Washer, Spring	1
16	299427	Assembly Pipe, Fuel	1
17	N/A	Pipe, Fuel	1
18	N/A	Clip, Pipe	2
19	299428	Joint, Eye	1

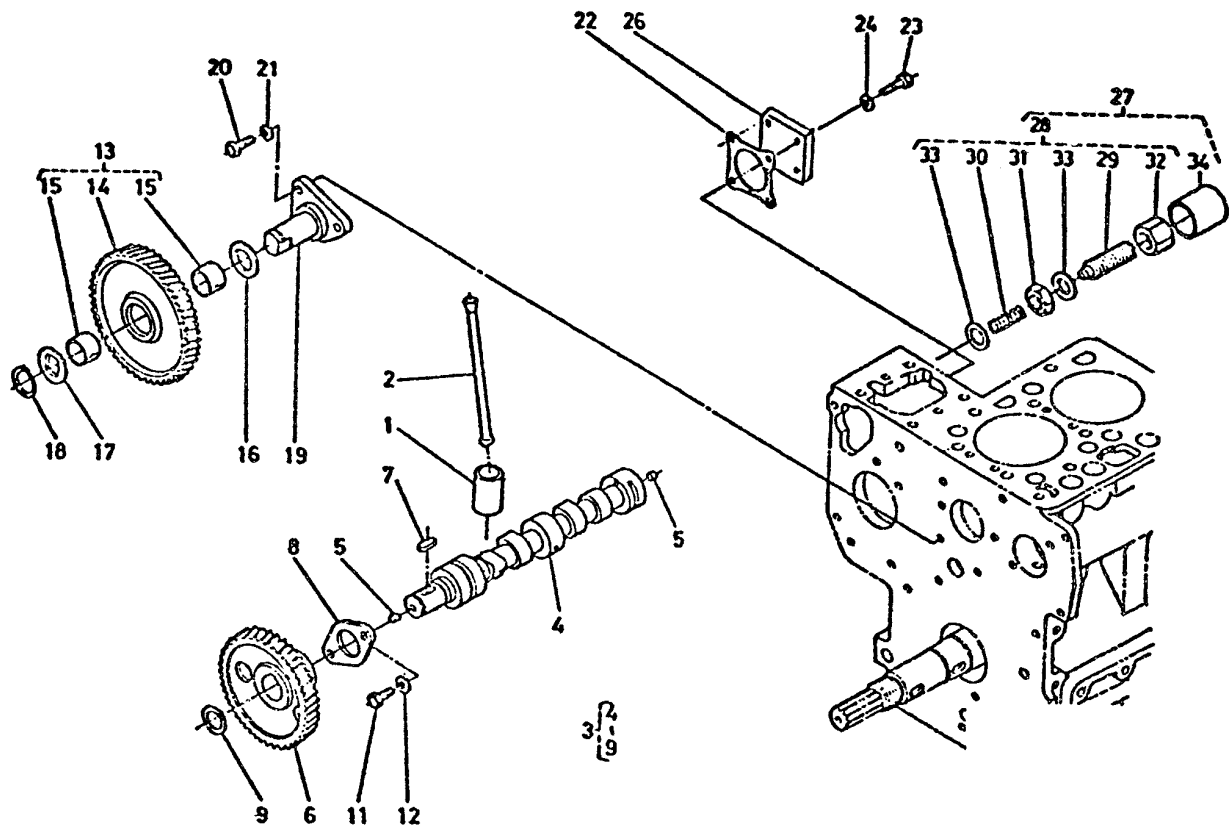
BREATHER GROUP



FROM SERIAL NO: 300072 TO

ITEM	PART NO.	DESCRIPTION	UNIT
6	N/A	Oil Shield, Breather	1
9	299424	Pipe, Breather	1
10	N/A	Clamp, Pipe	1
11	299425	Assembly Pump, Fuel	1
12	299426	Gasket, Fuel Pump	1
13	N/A	Stud	1
14	N/A	Nut	1
15	N/A	Washer, Spring	1
16	299427	Assembly Pipe, Fuel	1
17	N/A	Pipe, Fuel / order by #16	1
18	N/A	Clip, Pipe	2
19	299428	Joint, Eye	1
20	N/A	Plate 1, Element	1
21	N/A	Plate 2, Element	1
22	N/A	Element, Breather	1
23	N/A	Screw, With Washer	2
24	N/A	Joint, Breather Pipe	1

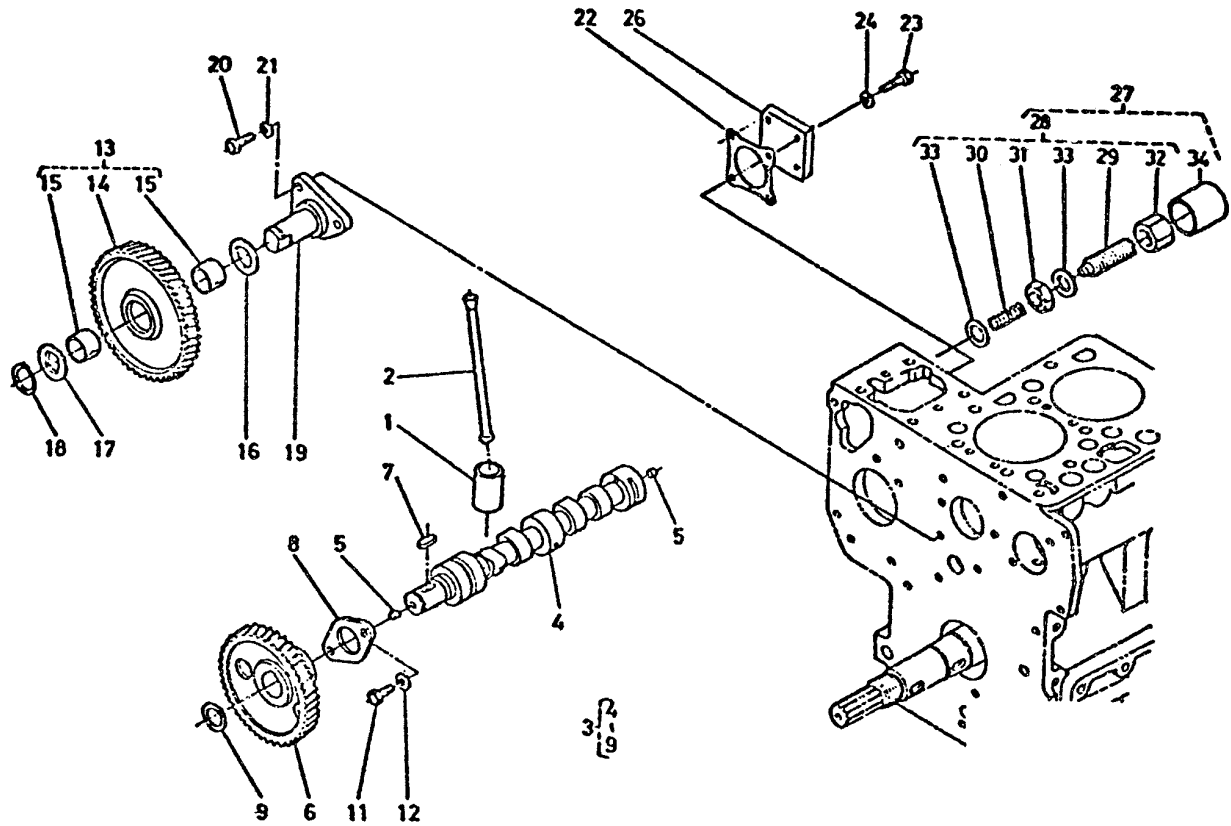
CAMSHAFT GROUP



FROM SERIAL NO: 230248 TO 230416
300000 TO 300071

ITEM	PART NO.	DESCRIPTION	UNIT
1	299472	Tappet	4
2	299473	Rod, Push	4
3	299474	Camshaft Assembly	1
4	N/A	Camshaft	1
5	N/A	Plug, Blind	2
6	299475	Gear, Camshaft	1
7	299476	Key, Feather	1
8	299477	Stopper, Camshaft	1
9	N/A	Circlip, External	1
10	N/A		
11	N/A	Bolt	2
12	N/A	Washer, Spring	2
13	299478	Idle Gear Assembly	1
14	N/A	Idle Gear	1
15	299479	Bushing, Idle Gear	2
16	299480	Collar 1, Idle Gear	1
17	299481	Collar 2, Idle Gear	1
18	299482	Circlip, Idle Gear	1
19	299483	Shaft, Idle Gear	1
20	N/A	Bolt	3
21	N/A	Washer, Spring	3

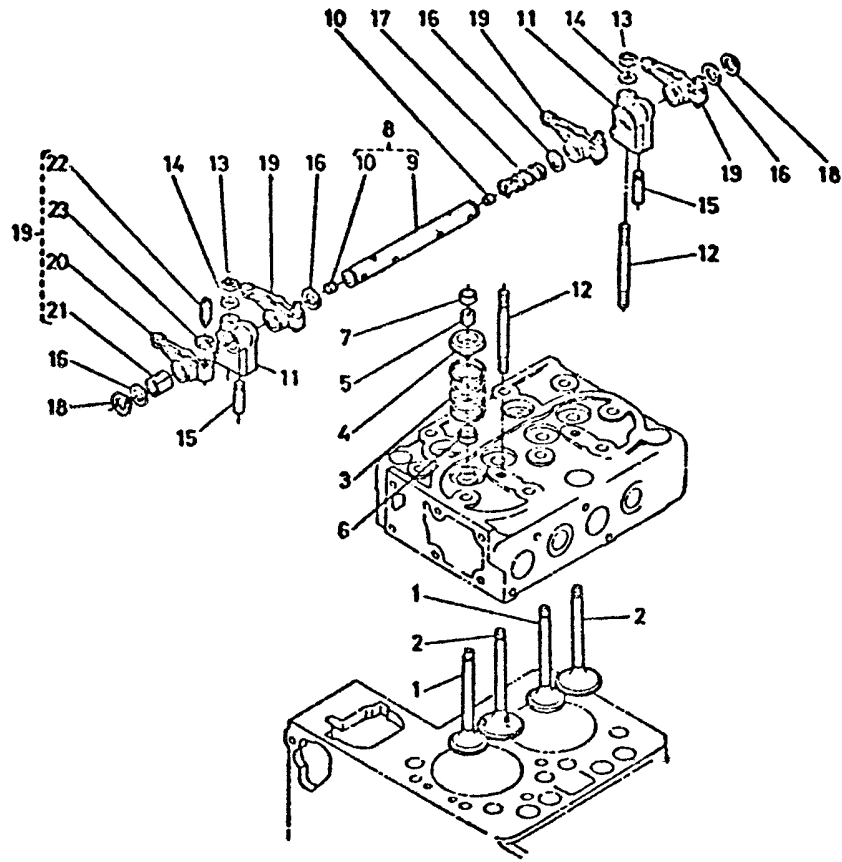
CAMSHAFT GROUP



FROM SERIAL NO: 230248 TO 230416
300000 TO 300071

ITEM	PART NO.	DESCRIPTION	UNIT
22	299484	Gasket, O/P Pump	1
23	299485	Bolt	4
24	N/A	Washer, Spring	4
25	N/A		
26	299486	Cover	1
27	N/A	Assembly Idling	1
28	N/A	Adjusting Bolt Assenbly	1
29	N/A	Adjusting Bolt	1
30	N/A	Spring	1
31	N/A	Nut	1
32	N/A	Nut	1
33	N/A	Gasket	2
34	N/A	Cap	1

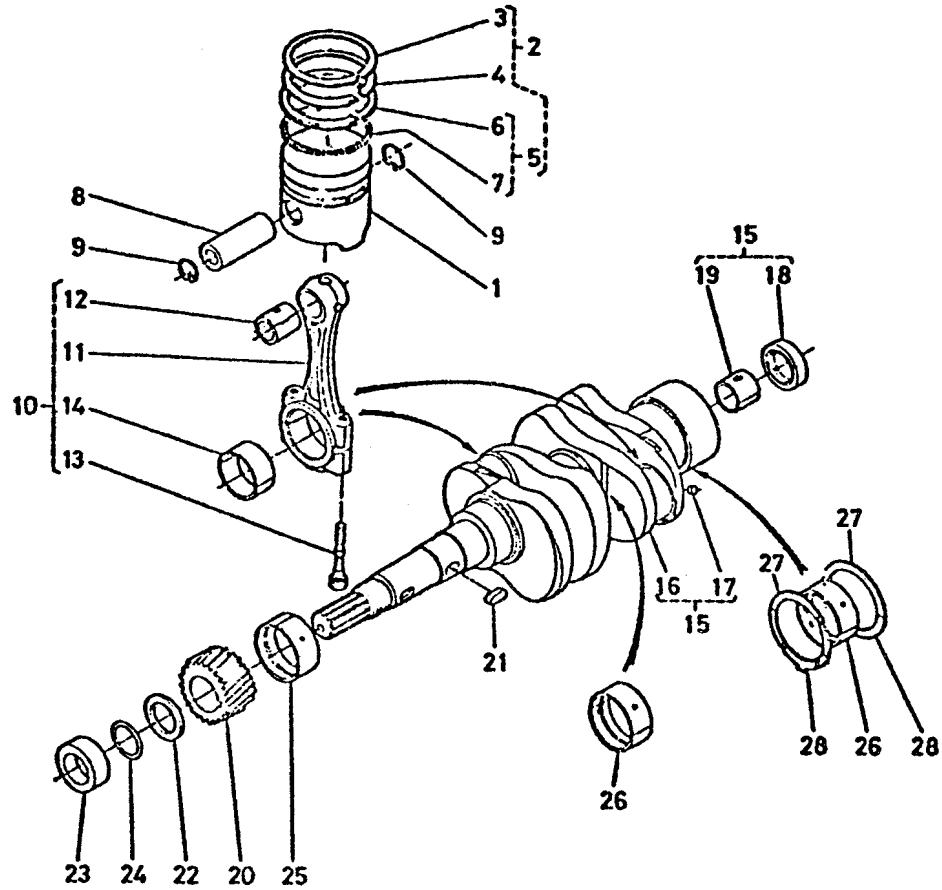
VALVE, ROCKER ARM GROUP



FROM SERIAL NO: 230248 TO 230416
 300000 TO 300071

ITEM	PART NO.	DESCRIPTION	UNIT
1	299436	Valve, Inlet	2
2	299437	Valve, Exhaust	2
3	299438	Spring, Valve	4
4	299439	Retainer, Valve Spring	4
5	299440	Collet, Valve Spring	8
6	299441	Seal, Valve Stem	4
7	299442	Cap, Valve	4
8	299443	Assembly Shaft, Rocker	1
9	N/A	Rocker Arm Shaft	1
10	N/A	Set Screw	2
11	299444	Bracket, Rocker Arm	2
12	299445	Stud	2
13	299446	Nut	2
14	N/A	Washer, Plain	2
15	299447	Set Screw	1
16	299448	Washer	4
17	299449	Spring, Rocker Arm	1
18	299450	Circlip, External	2
19	299451	Rocker Arm Assembly	4
20	N/A	Rocker Arm	4
21	299452	Bushing, Rocker Arm	4
22	299453	Screw, Adjusting	4
23	299454	Nut	4

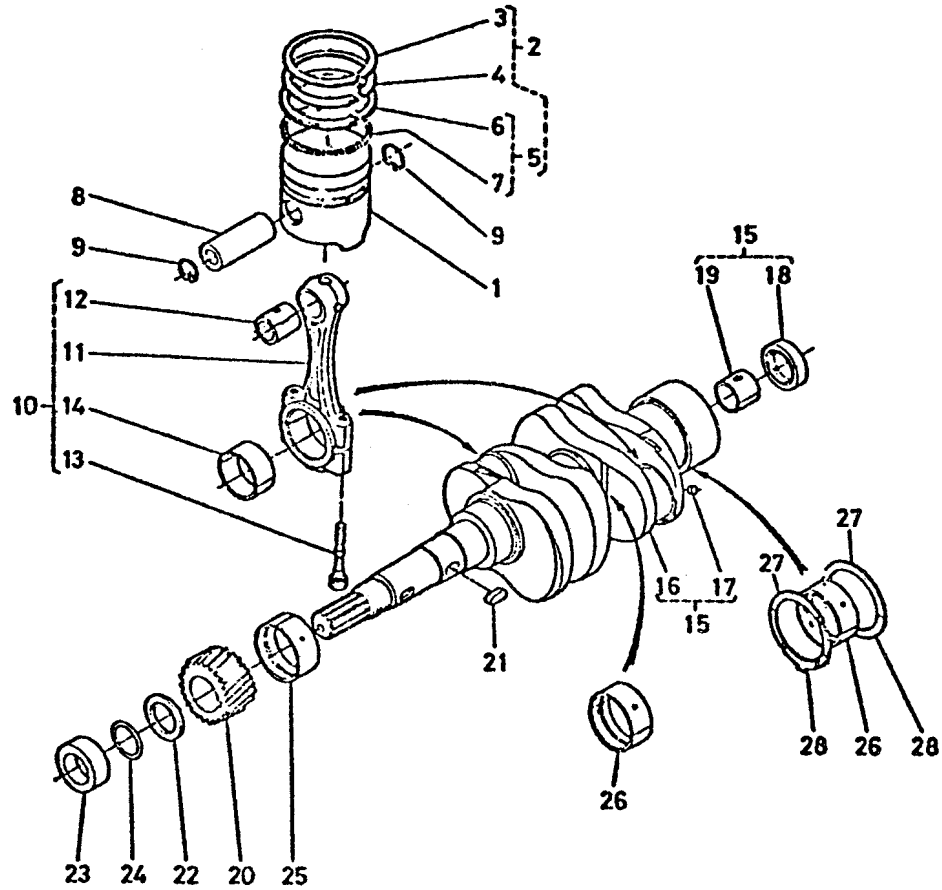
PISTON, CRANKSHAFT GROUP



FROM SERIAL NO: 230248 TO 230416
300000 TO 300071

ITEM	PART NO.	DESCRIPTION	UNIT
1	299487	Piston	2
2	299488	Assembly, Piston Ring	2
3	N/A	Compression Ring	2
4	N/A	Compression Ring	2
5	N/A	Oil Plug Assembly	2
6	N/A	Oil Ring	2
7	N/A	Expander, Oil Ring	2
8	299489	Piston Pin	2
9	299490	Circlip, Piston Pin	4
10	299491	Connecting Rod Assembly	2
11	N/A	Connecting Rod	2
12	299492	Bushing, Piston Pin	2
13	299493	Bolt, Connecting Rod	4
14	299494	Connecting Rod Bearing	4
15	299495	Crankshaft Assembly	1
16	N/A	Crankshaft	1
17	N/A	Plug, Pin	2
18	N/A	Seal, Oil	1
19	N/A	Bearing	1
20	N/A	Gear, Crankshaft	1
21	299496	Key, Feather	1

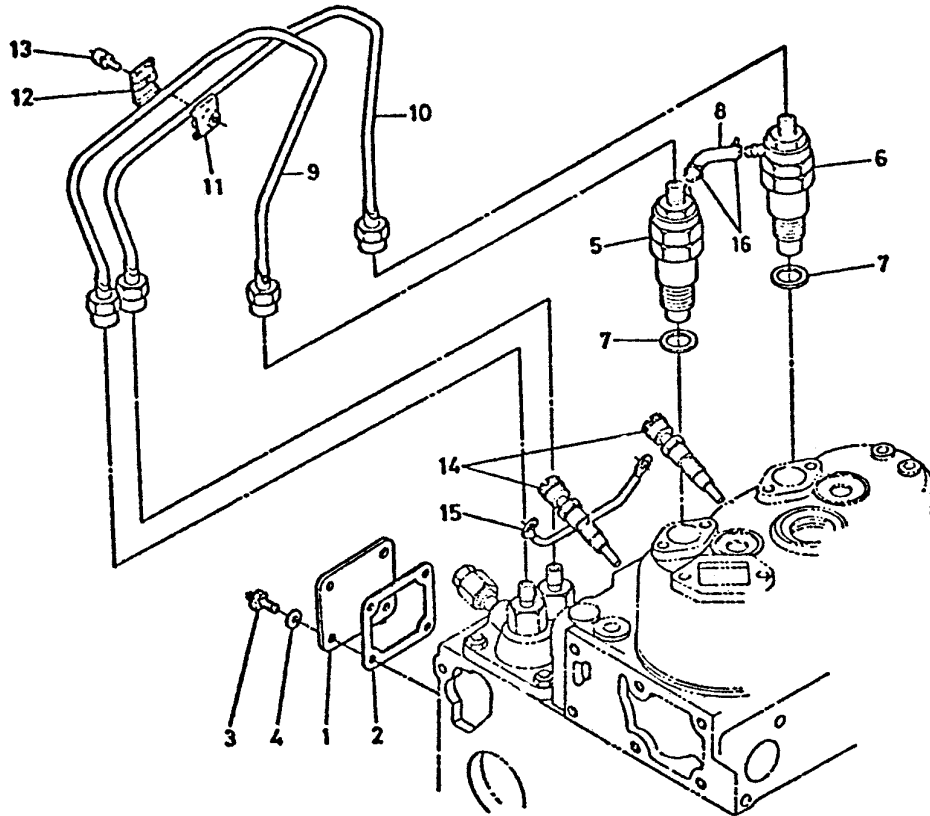
PISTON, CRANKSHAFT GROUP



FROM SERIAL NO: 300072 TO

ITEM	PART NO.	DESCRIPTION	UNIT
1	299487	Piston	2
2	299488	Assembly, Piston Ring	2
3	N/A	Compression Ring	2
4	N/A	Compression Ring	2
5	N/A	Oil Plug Assembly	2
6	N/A	Oil Ring	2
7	N/A	Expander, Oil Ring	2
8	299489	Piston Pin	2
9	299490	Circlip, Piston Pin	4
10	299491	Connecting Rod Assembly	2
11	N/A	Connecting Rod / Order by #10	2
12	299492	Bushing, Piston Pin	2
13	299493	Bolt, Connecting Rod	4
14	299494	Connecting Rod Bearing	4
15	299495	Crankshaft Assembly	1
16	N/A	Crankshaft / order by #15	1
17	N/A	Plug, Pin	2
18	N/A	Seal, Oil	1
19	N/A	Bearing	1
20	N/A	Gear, Crankshaft	1
21	299496	Key, Feather	1

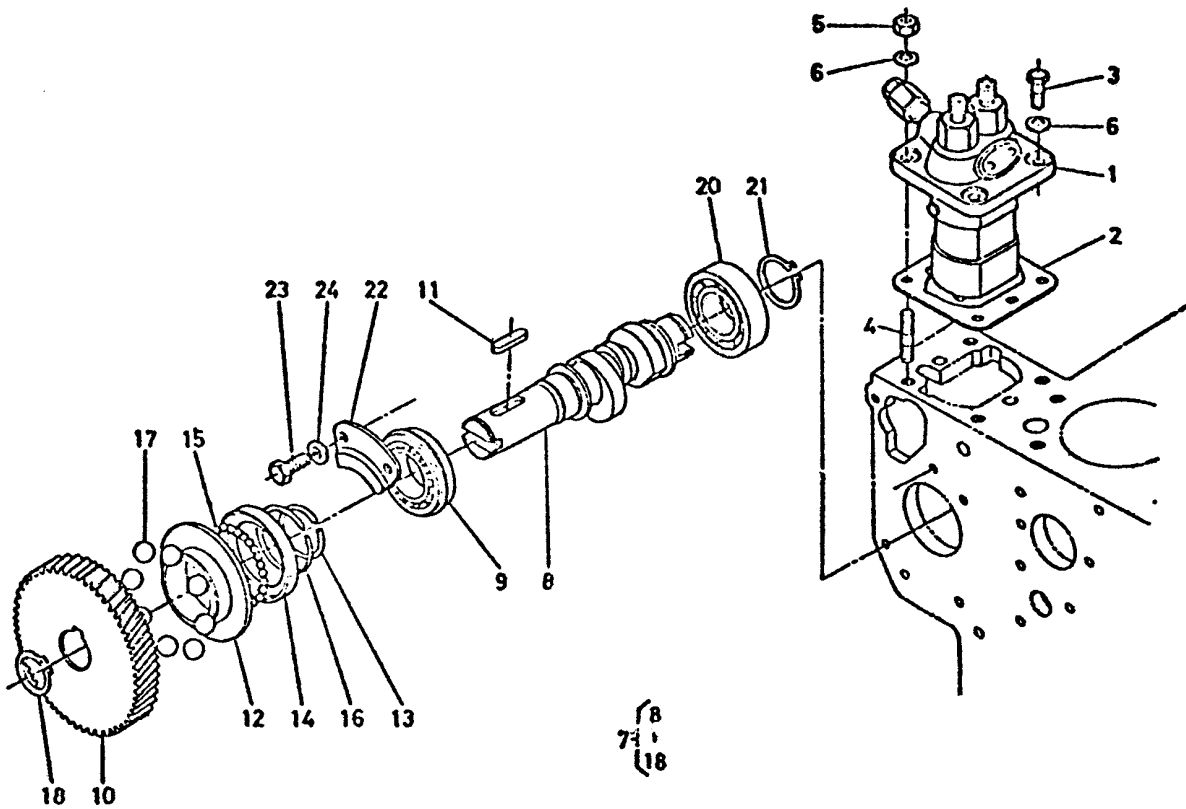
NOZZLE HOLDER GROUP



FROM SERIAL NO: 230248 TO 230416
 300000 TO 300071

ITEM	PART NO.	DESCRIPTION	UNIT
1	N/A	Cover, Injection Pump	1
2	299516	Gasket, Breather	1
3	N/A	Bolt	4
4	N/A	Washer, Spring	4
5	299517	Nozzle Holder Assembly	1
6	299518	Nozzle Holder Assembly	1
7	299519	Gasket	2
8	299520	Pipe, Fuel Over Flow	1
9	299521	Pipe, Injection	1
10	299522	Pipe, Injection	1
11	N/A	Clamp, Pipe	1
12	N/A	Clamp, Pipe	1
13	N/A	Screw With Washer	1
14	299685	Glow Plug	2
15	299523	Cord, Glow Plug	1
16	299524	Clip, Pipe	2

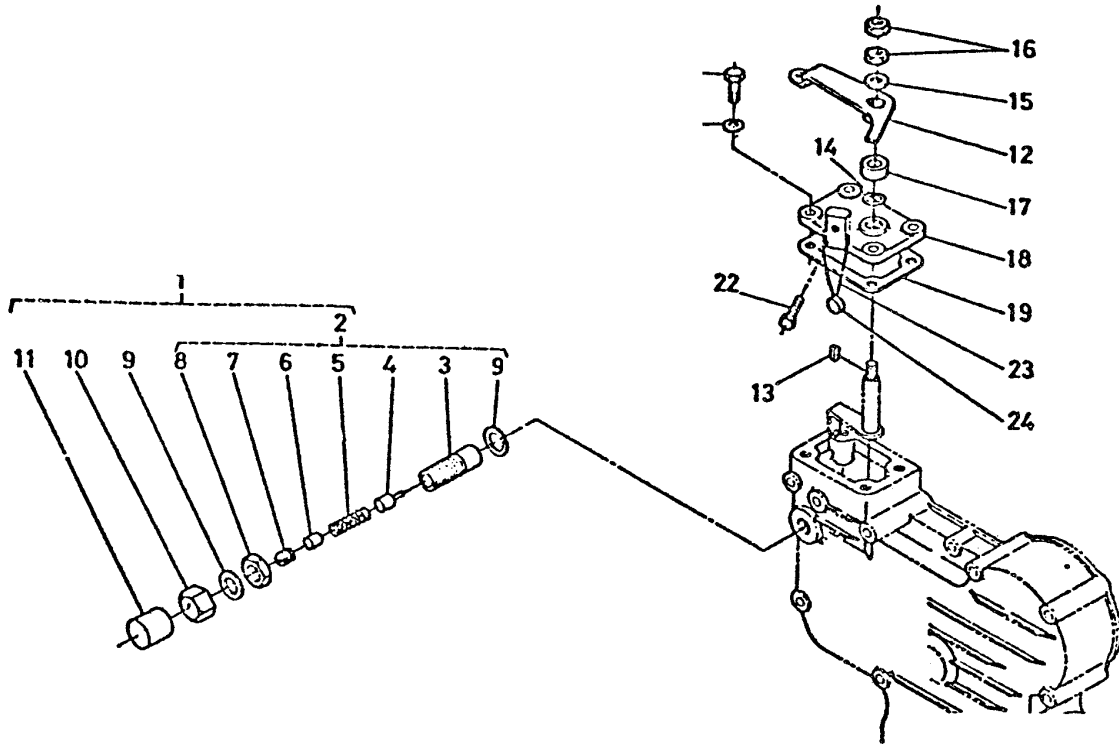
FUEL CAMSHAFT GROUP



FROM SERIAL NO: 230248 230416
300000 TO 300071

ITEM	PART NO.	DESCRIPTION	UNIT
1	299525	Assembly Pump, Injection	1
2	299526	Shim, Injection	5
3	299527	Bolt	2
4	299528	Stud	2
5	299529	Nut	2
6	N/A	Washer, Spring	2
7	299530	Fuel Camshaft Assembly	1
8	N/A	Fuel Camshaft	1
9	N/A	Bearing, Ball	1
10	N/A	Gear, Injection Pump	1
11	299531	Key, Feather	1
12	N/A	Sleeve, Governor	1
13	N/A	Cir-Clip, Sleeve	1
14	299532	Case, Governor Ball	1
15	299533	Ball	30
16	N/A	Cir-Clip, Case	1
17	299534	Ball	8
18	299535	Cir-Clip, External	1
20	299536	Bearing, Ball	1
21	299537	Cir-Clip, External	1
22	N/A	Stopper, Camshaft	1
23	N/A	Bolt	2
24	N/A	Washer, Spring	2

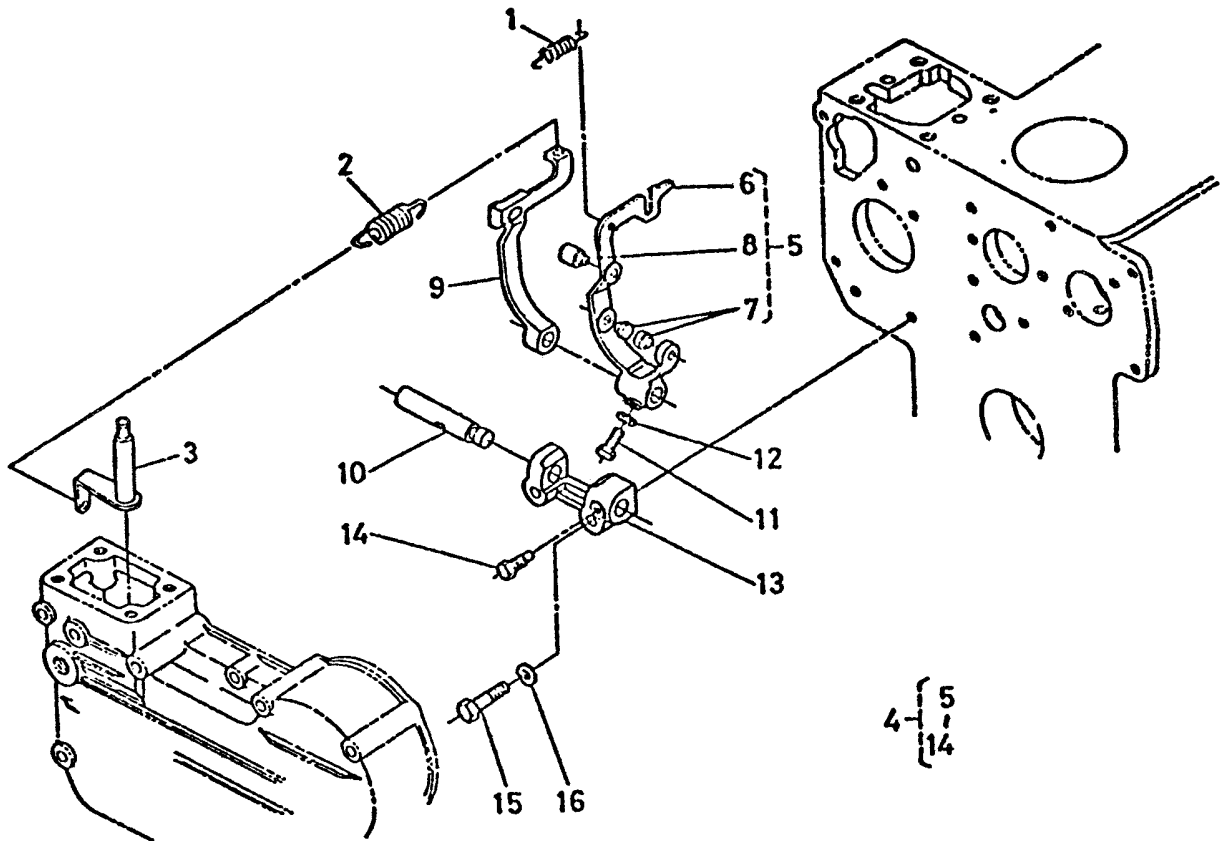
SPEED CONTROL PLATE GROUP



FROM SERIAL NO: 230248 TO 230416
300000 TO 300071

ITEM	PART NO.	DESCRIPTION	UNIT
1	299538	Assembly Apparatus, Fuel	1
2	299516	Fuel Assembly Apparatus	1
3	N/A	Body, Fuel Apparatus	1
4	N/A	Pin, Fuel Apparatus	1
5	N/A	Spring	1
6	N/A	Spacer	1
7	N/A	Set Screw	1
8	N/A	Nut, Lock	1
9	N/A	Gasket	2
10	N/A	Nut, Cap	1
11	N/A	Cap	1
12	299539	Lever, Speed Control	1
13	299540	Key, Feather	1
14	299514	O Ring	1
15	299542	Washer, Plain	1
16	299543	Nut	2
17	299514	Plate, Friction	1
18	N/A	Plate, Speed Control	1
19	299545	Gasket, Control Plate	1
20	N/A	Bolt	4
21	N/A	Washer, Spring	4
22	N/A	Stopper	1
23	299546	Wire	1
24	299547	Lead, Sealing	1

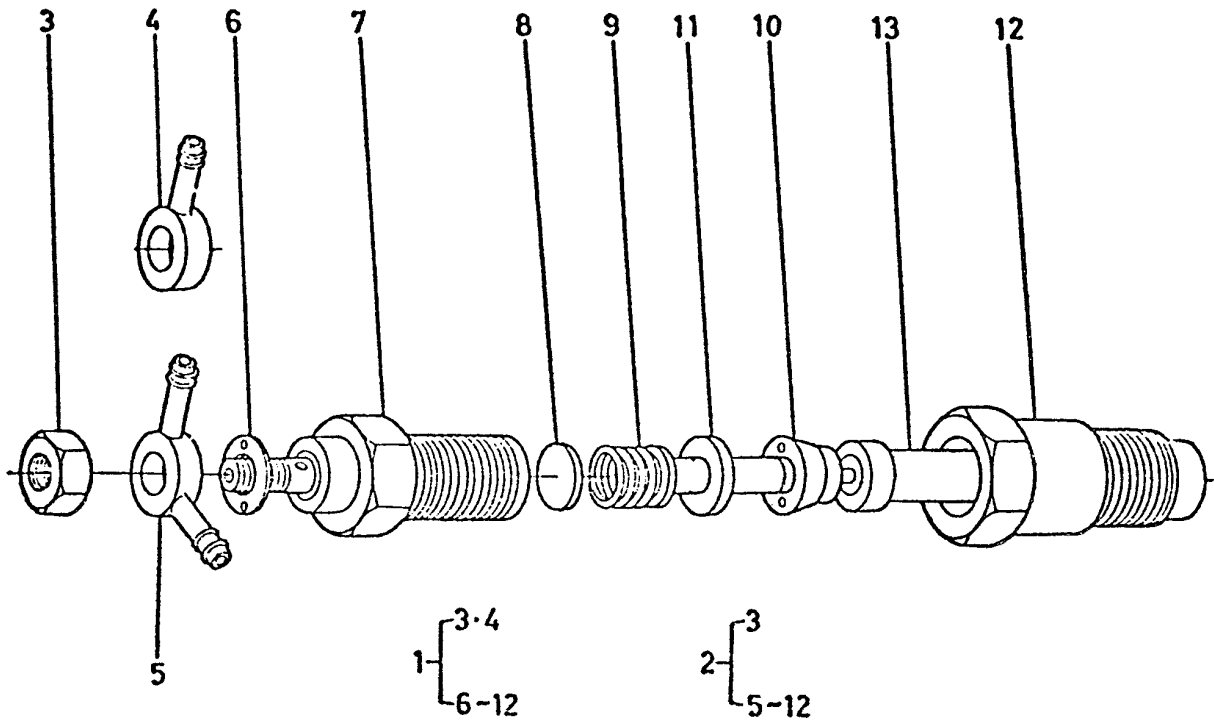
GOVERNOR GROUP



FROM SERIAL NO: 230248 TO 230416
300000 TO 300071

ITEM	PART NO.	DESCRIPTION	UNIT
1	N/A	Spring, Start	1
2	N/A	Spring	1
3	N/A	Governor Lever Assembly	1
4	N/A	Fork Lever Assembly	1
5	N/A	Fork Lever Assembly	1
6	N/A	Fork Lever	1
7	N/A	Pin, Fork Lever	2
8	N/A	Pin, Fork Lever	1
9	N/A	Fork Lever	1
10	N/A	Shaft, Fork Lever	1
11	N/A	Bolt	1
12	N/A	Washer, Spring	2
13	N/A	Fork Lever Holder	1
14	N/A	Bolt	1
15	N/A	Bolt	2
16	N/A	Washer, Spring	2

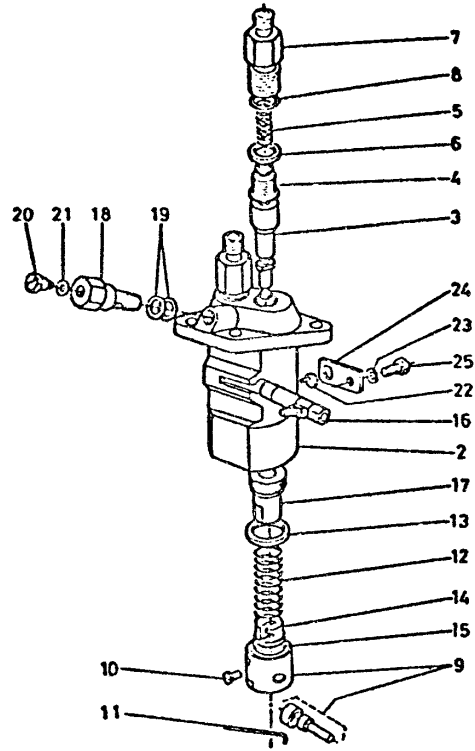
NOZZLE GROUP



FROM SERIAL NO: 230248 TO 230416
 300000 TO 300071

ITEM	PART NO.	DESCRIPTION	UNIT
1	N/A	Nozzle Holder Assembly	1
2	N/A	Nozzle Holder Assembly	1
3	N/A	Nut	1
4	N/A	Joint, Eye	1
5	N/A	Joint, Eye	1
6	N/A	Washer, Plain	1
7	N/A	Nozzle Holder Body	1
8	N/A	Washer, Adjusting	1
9	N/A	Spring, Nozzle	1
10	N/A	Piece, Distance	1
11	N/A	Rod, Push	1
12	N/A	Nut, Nozzle	1
13	N/A	Piece, Nozzle	1

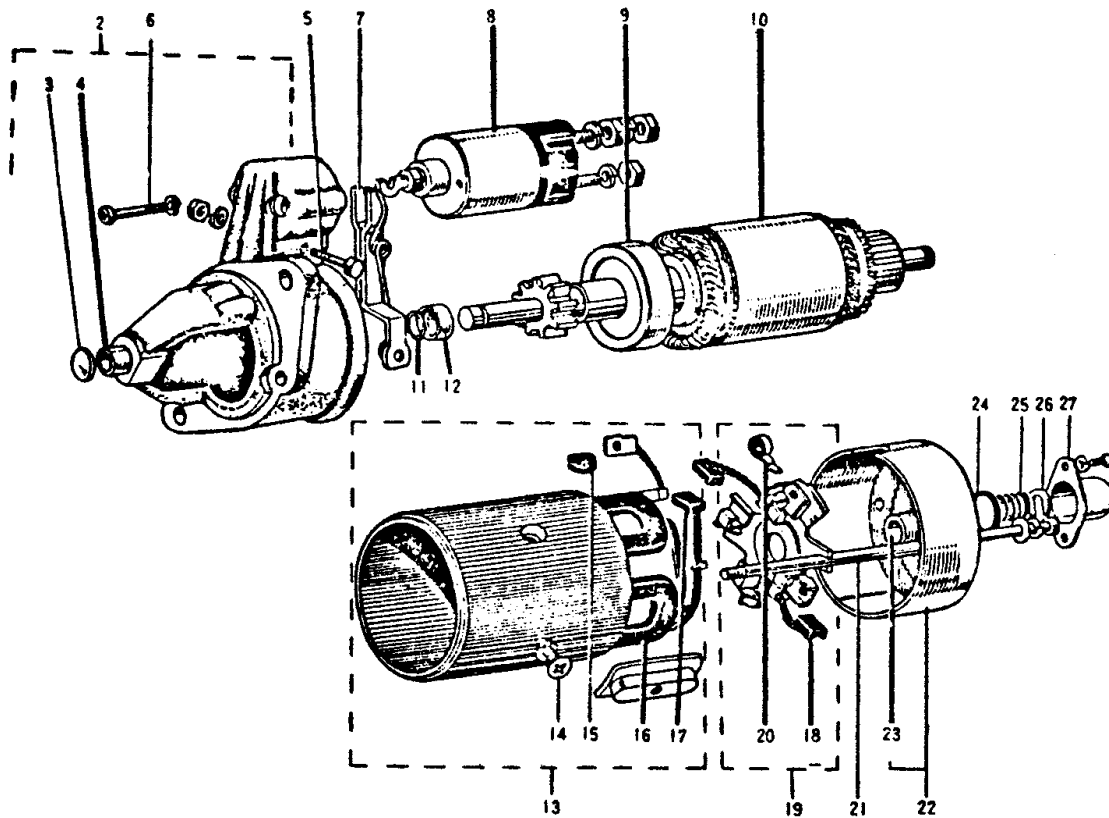
INJECTION PUMP GROUP



FROM SERIAL NO: 230248 TO 230416
 300000 TO 300071

ITEM	PART NO.	DESCRIPTION	UNIT
1	N/A	Injection Pump Assembly	1
2	N/A	Housing, Pump	1
3	N/A	Element, Pump	2
4	N/A	Valve, Delivery	2
5	N/A	Spring, Delivery Valve	2
6	N/A	Gasket, Delivery Valve	2
7	N/A	Holder, Delivery Valve	2
8	N/A	O Ring	2
9	N/A	Tappet Assembly	2
10	N/A	Pin, Tappet Guide	2
11	N/A	Pin, Clamp	2
12	N/A	Spring, Plunger	2
13	N/A	Seat, Spring Upper	2
14	N/A	Seat, Spring Under	2
15	N/A	Shim	1
16	N/A	Rack, Control	1
17	N/A	Sleeve, Control	2
18	N/A	Screw	1
19	N/A	Gasket	2
20	299748	Screw, Air Bleeder	1
21	299749	Gasket	1
22	N/A	Collar	1
23	N/A	Washer, Spring	1
24	N/A	Plate, Adjust	1
25	N/A	Bolt, Plate Adjust	1

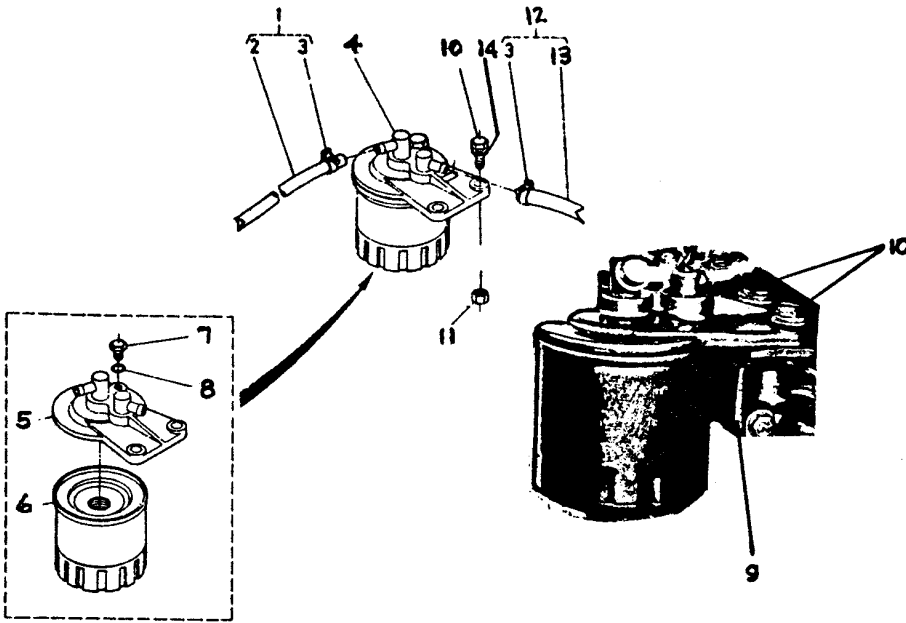
STARTER GROUP



FROM SERIAL NO: 230248 TO 230416
300000 TO 300071

ITEM	PART NO.	DESCRIPTION	UNIT
1	299512	Starter Assembly	1
2	N/A	Frame, Drive End	1
3	N/A	Plug, Expansion	1
4	N/A	Bushing	1
5	N/A	Bolt, Set	1
6	N/A	Bolt	2
7	N/A	Lever, Drive	1
8	N/A	Solenoid	1
9	N/A	Clutch, Over Running	1
10	N/A	Armature	1
11	N/A	Pin, Snap	1
12	N/A	Collar	1
13	N/A	Yoke	1
14	N/A	Bolt, Set	4
15	N/A	Gasket	1
16	N/A	Coil, Field	1
17	N/A	Brush	2
18	N/A	Brush	2
19	N/A	Holder, Brush	1
20	N/A	Bolt, Through	1
21	N/A	Frame, End	2

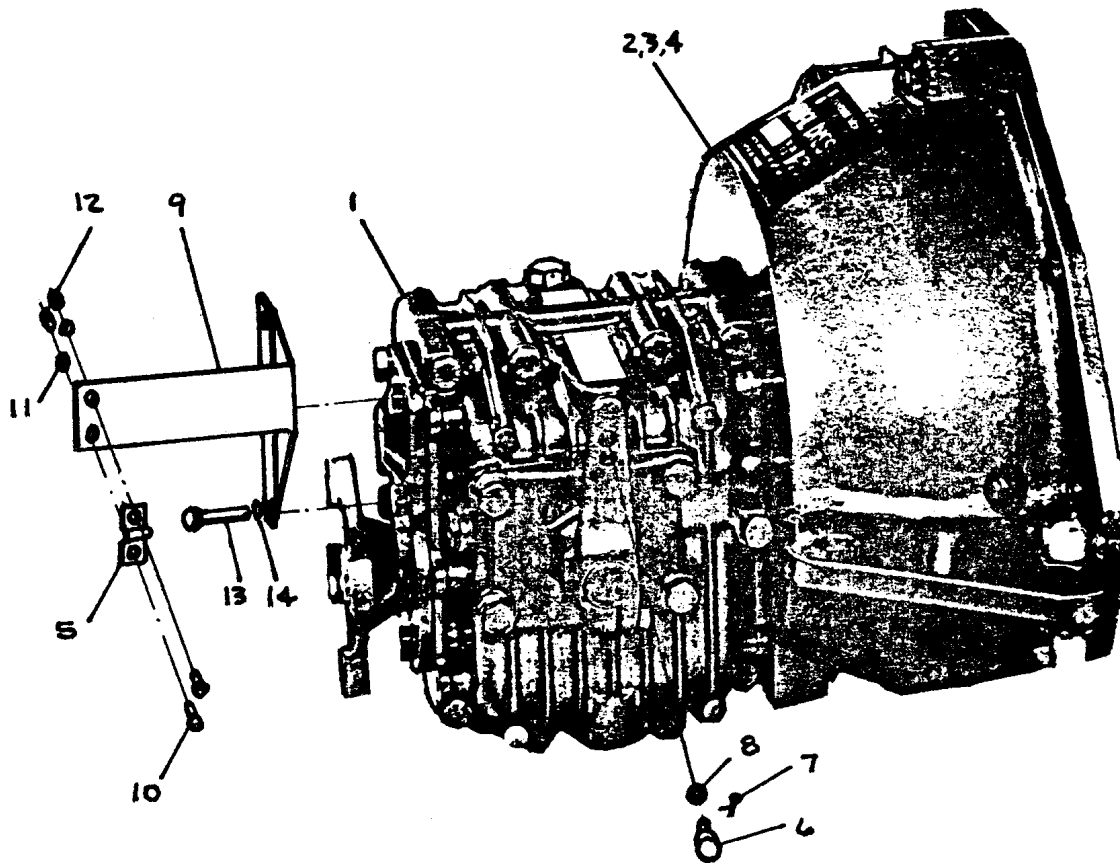
FUEL FILTER GROUP



FROM SERIAL NO: 230248 230416
300000 TO 300071

ITEM	PART NO.	DESCRIPTION	UNIT
1	N/A	Fuel Pipe Assembly	1
2	N/A	Fuel Pipe	1
3	298605	Clip, Pipe	4
4	298853	Fuel Filter Assembly	4
5	N/A	Cover, Filter	1
6	298854	Fuel Filter Element	1
7	N/A	Plug, Filter Breather	2
8	N/A	O Ring	1
9	299029	Bracket, Filter	1
10	231059	Bolt	1
11	230142	Nut	1
12	N/A	Fuel Pipe Assembly	1
13	298567	Pipe, Fuel Filter to Engine	1
14	298461	Lock Washer	2

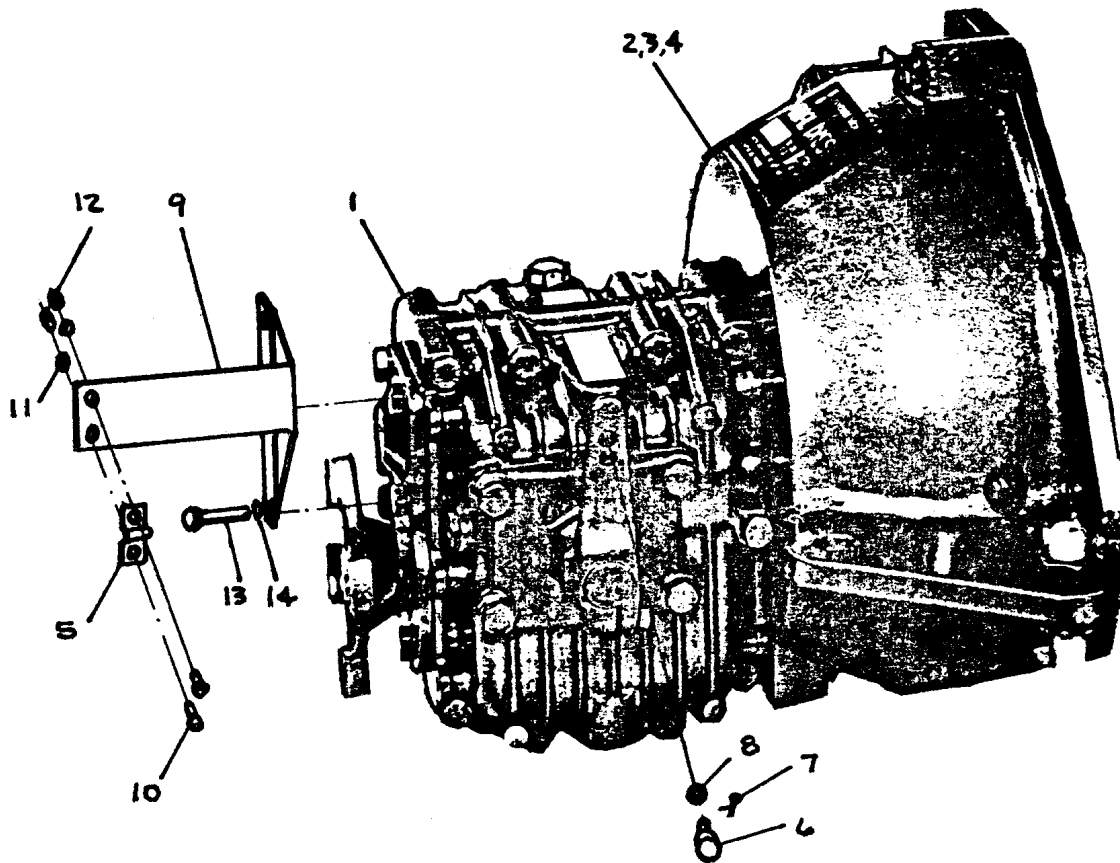
TRANSMISSION GROUP



FROM SERIAL NO: 230248 230416
300000 TO 300071

ITEM	PART NO.	DESCRIPTION	UNIT
1	299155	Reverse Gearbox Complete	1
2	299100	Bell Housing	1
3	299156	Damper – Reverse Gear (Not Shown)	1
4	299157	Plate – Damper Mounting (Not Shown)	1
5	298897	Clamp – Shift Cable to Control Bracket	1
6	298898	Pivot – Shift Cable to Reverse Gear Lever	1
7	230281	Cotter Pin – 3/32 x 1/2"	1
8	231874	Flat Washer 1/4	1
9	299160	Shift Control Mounting Bracket	1
10	231224	Rd. Hd. Mach. Screw (#10-32 x 1/2")	2
11	231890	Lock Washer, Split (#10-32 Screw)	2
12	230138	Hex nut (#10-32)	2
13	287895	Hex Hd Cap Screw (8MM x 1.25 x 16MM)	2
14	298461	Lock Washer (8MM Screw)	2
15	298468	Hex Hd Cap Screw (Trans. to Bell Housing) N/S	6
16	231875	Flat Washer 5/16 (Trans. To Bell Housing) N/S	6
17	298461	Washer, Lock 8MM (Trans. to Bell Housing) N/S	6

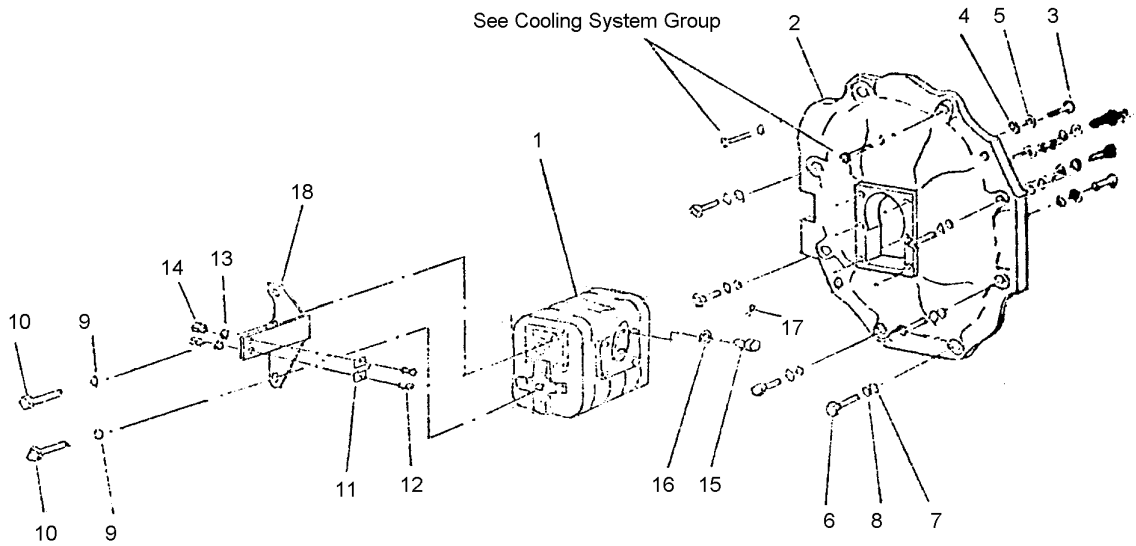
TRANSMISSION GROUP



FROM SERIAL NO: 300072 TO

ITEM	PART NO.	DESCRIPTION	UNIT
1	299155	Reverse Gearbox Complete	1
2	299100	Bell Housing	1
3	299156	Damper – Reverse Gear (Not Shown)	1
4	299157	Plate – Damper Mounting (Not Shown)	1
5	298897	Clamp – Shift Cable to Control Bracket	1
6	299690	Pivot – Shift Cable to Reverse Gear Lever	1
7	230281	Cotter Pin – 3/32 x 1/2"	1
8	231874	Flat Washer 1/4	1
9	299160	Shift Control Mounting Bracket	1
10	231224	Rd. Hd. Mach. Screw (#10-32 x 1/2")	2
11	231890	Lock Washer, Split (#10-32 Screw)	2
12	299290	Hex nut (#10-32)	2
13	231906	Hex Hd Cap Screw (8MM x 1.25 x 16MM)	2
14	298461	Lock Washer (8MM Screw)	2
15	298468	Hex Hd Cap Screw (Trans. to Bell Housing) N/S	6
16	231875	Flat Washer 5/16 (Trans. To Bell Housing) N/S	6
17	298461	Washer, Lock 8MM (Trans. to Bell Housing) N/S	6

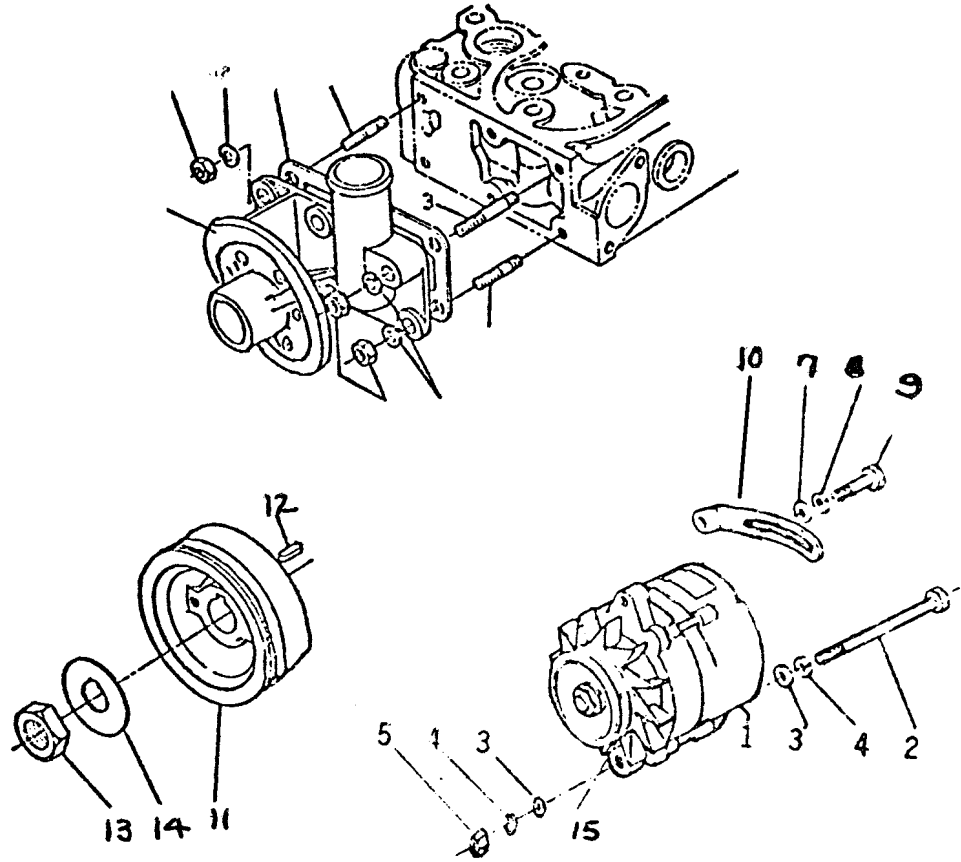
TRANSMISSION GROUP



FROM SERIAL NO: TO

ITEM	PART NO.	DESCRIPTION	UNIT
	299640	Rigid Coupling 3/4"	
	299641	Rigid Coupling 7/8"	
	299642	Rigid Coupling 1"	
	299643	Rigid Coupling 1-1/8"	
	299644	Rigid Coupling 1-1/4"	
	238162	Screw - Sq.Hd. 3/8 - 16 x 1"	2
	239548	Screw - Hex Hd. 3/8 - 24 x 1-1/4"	4
	231910	Washer - Shake Proof	4
	230189	Nut - Jam 3/8-24	4
	298568	Flexible Coupling 3/4" - 1/4" Key	
	298569	Flexible Coupling 7/8" - 1/4" Key	
	298484	Flexible Coupling 1" - 1/4" Key	
	298570	Flexible Coupling 1-1/8" - 1/4" Key	
	299300	Flexible Coupling 1-1/4" - 5/16" Key	

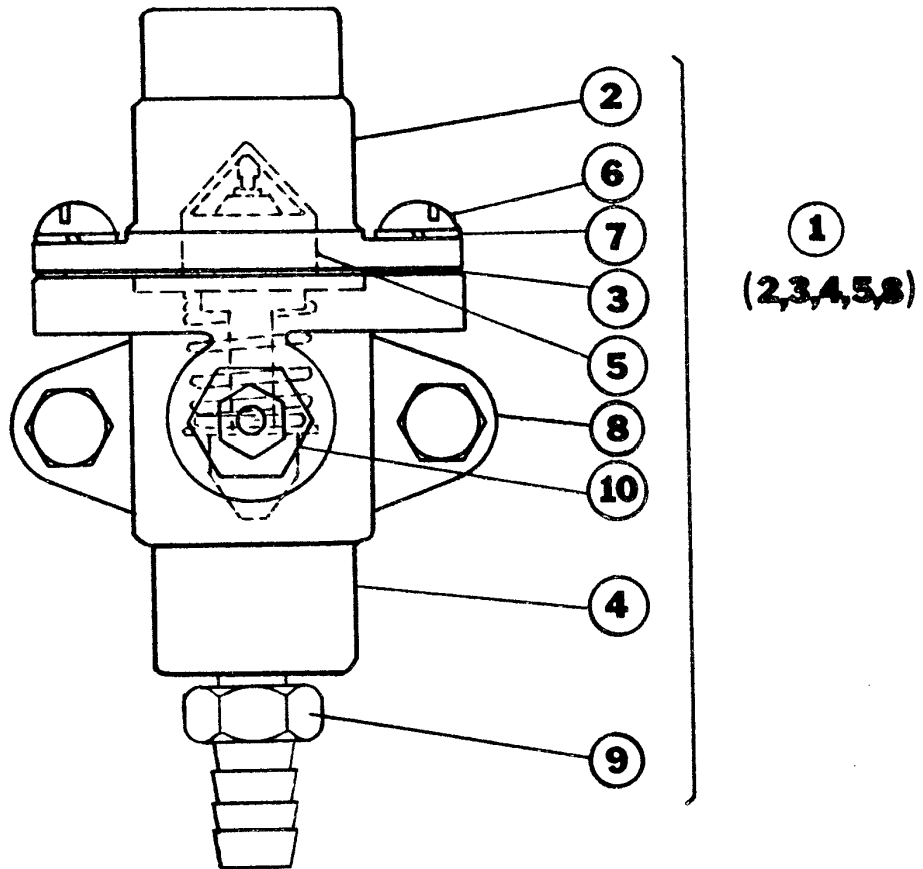
DYNAMO GROUP



FROM SERIAL NO: 230248 TO 230416
300000 TO 300071

ITEM	PART NO.	DESCRIPTION	UNIT
1			
2	231093	Hex Hd Capscrew 3/8-16 x 3-3/4"	1
3	231878	Washer 3/8"	2
4	285305	Washer – Split Lock 3/8"	2
5	230144	Hex Nut 3/8-16	1
*	299095	Alternator Pivot Bracket	1
7	231856	Washer – Flat 5/16"	1
8	298461	Washer – Lock (8mm Screw)	3
9	231057	Hex Hd Capscrew (5/16'18 x 3/4)	1
10	299698	Alternator Adjusting Arm	1
11	299548	Pulley, Fan Drive	1
12	299549	Key, Feather	1
13	299550	Nut, Crankshaft	1
14	299551	Washer, Crankshaft	1
15	298972	Alternator – 55 Amp.	1
		* Not Shown	

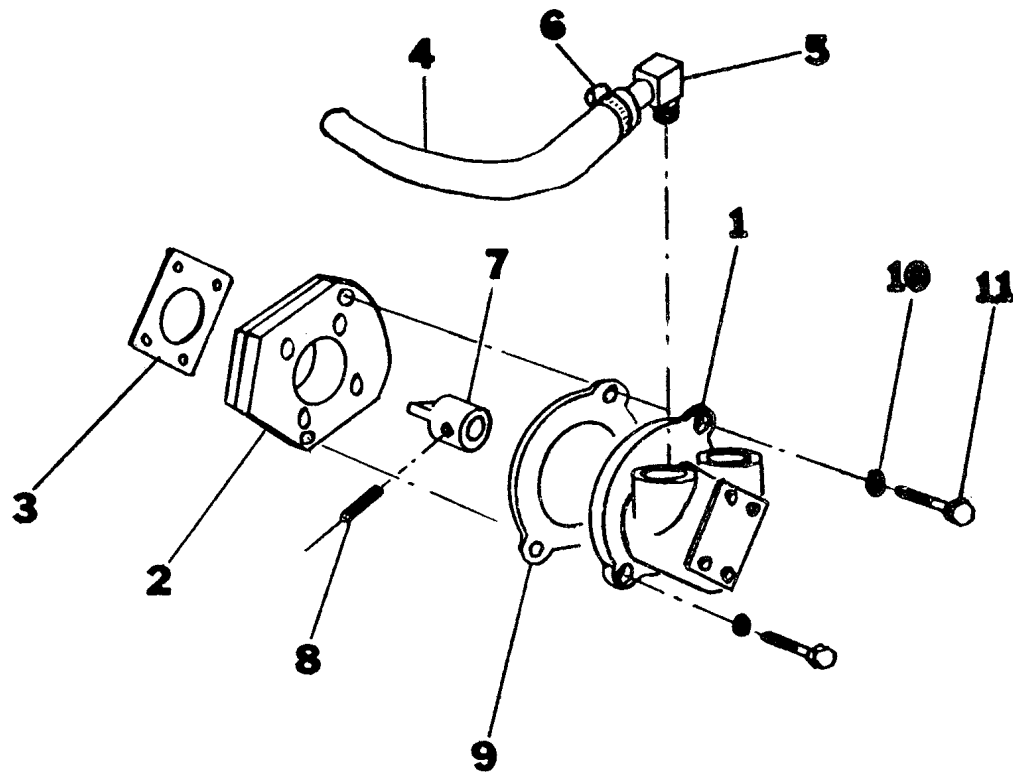
THERMOSTAT GROUP



FROM SERIAL NO: 230248 TO 230416
 300000 TO 300071

ITEM	PART NO.	DESCRIPTION	UNIT
1	299624	Thermostat Assembly	1
2	299043	Housing, Thermostat	1
3	261144	Gasket	1
4	299177	Outlet Housing, Thermostat	1
5	275965	Element, Thermostat	1
6	294376	Machine Screw 1/4-20 Brass	2
7	231828	Lock Washer 1/4 Brass	2
8	299048	Gasket	3
9	241021	Hose Fitting, Straight	1
10	299066	Temperature Sender	1
	241022	Tee-Hose Fitting	1
	241019	90° El Fitting - 3/8 MPT ro 1/2" Hose	1
	295292	Washer - Lock 5/8"	4
	231880	Washer - Flat 5/8"	8

WATER PUMP GROUP

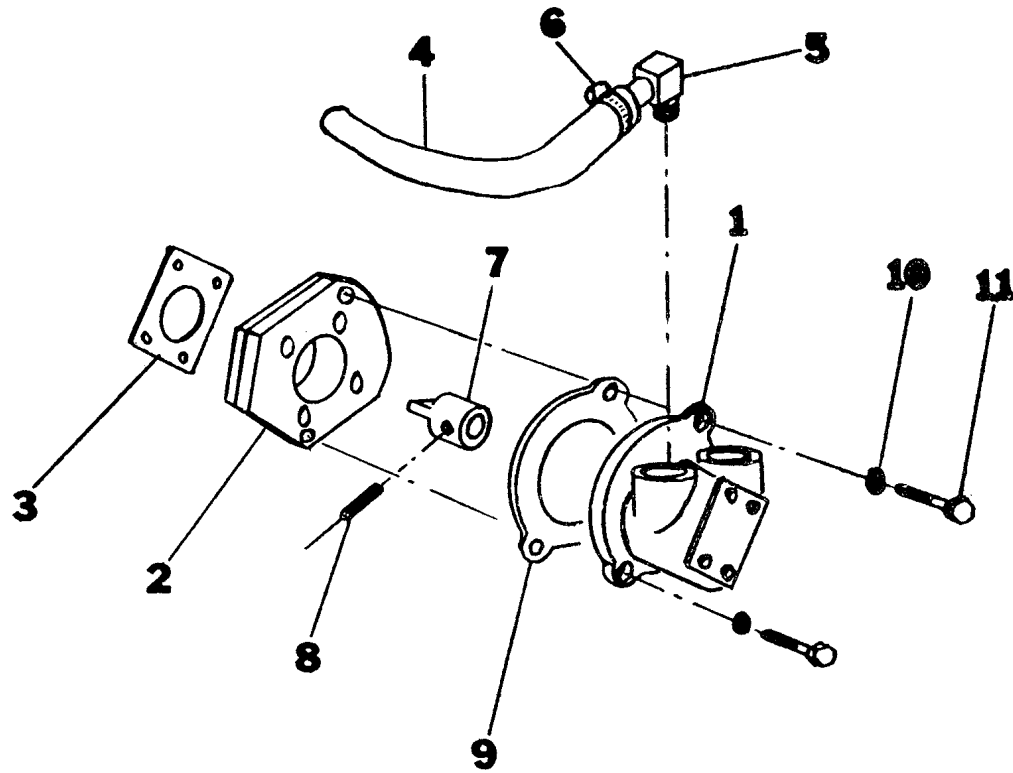


FROM SERIAL NO: TO 301031

ITEM	PART NO.	DESCRIPTION	UNIT
1		Pump	1
2	298477	Adapter Plate	1
3	298485	Gasket, Adapter Plate	1
4	299162	Hose 1/2" Pump to Engine	1
5	241019	Fitting 90° 1/2" Hose	1
6	374747	Clamp 1/2" Hose	1
7	298478	Coupling Adaptor	1
8	230371	Roll Pin 3/16 Dia. x 7/8 Lg.	1
9	261044	Gasket	1
10	285305	Washer	2
11	231080	Cap Screw	2

When replacing pump impeller order "water pump repair kit" Part No. 298416-A.
Kit consists of: impeller, lip seal, gasket and retaining ring.

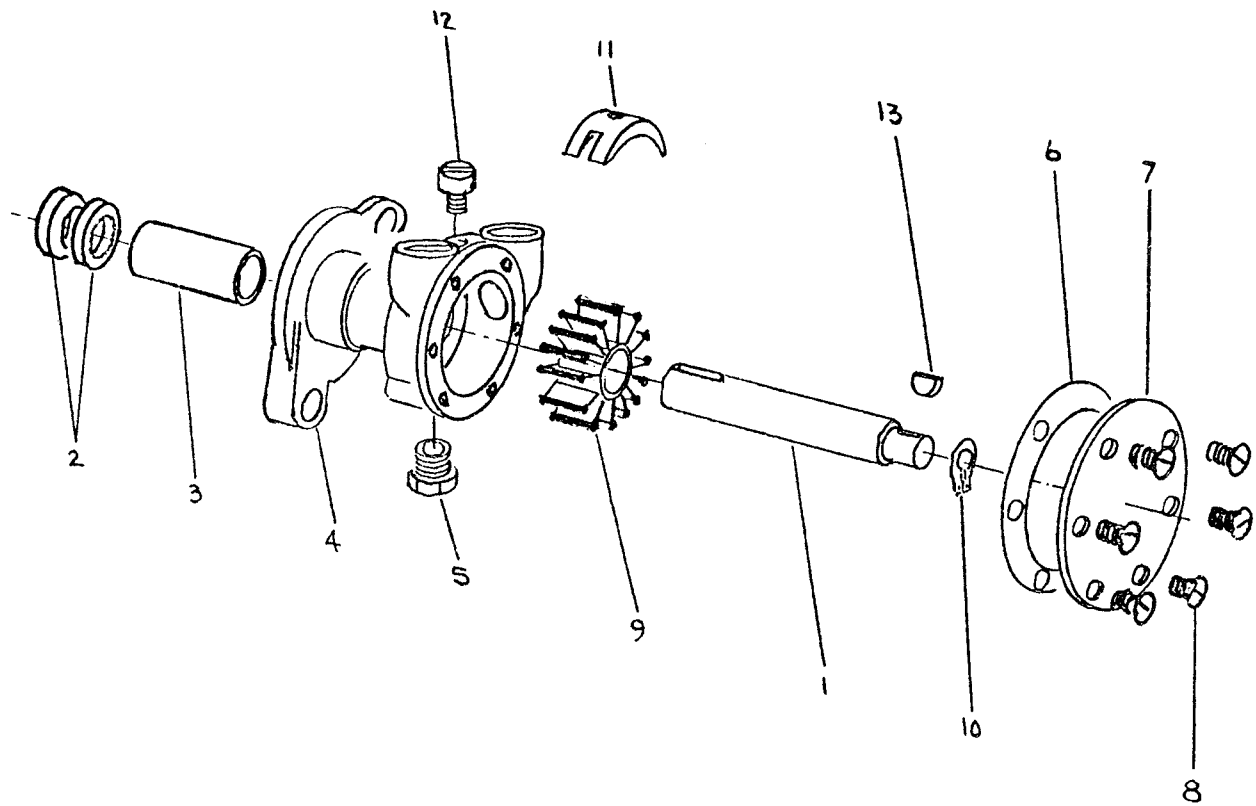
WATER PUMP GROUP



FROM SERIAL NO: 301032 TO 305358

ITEM	PART NO.	DESCRIPTION	UNIT
1	298890	Pump - Oberdorfer	1
2	298477	Adapter Plate	1
3	298485	Gasket, Adapter Plate	1
4	299162	Hose 1/2" Pump to Engine	1
5	241019	Fitting 90° 1/2" Hose	1
6	374747	Clamp 1/2" Hose	1
7	298478	Coupling Adaptor	1
8	230371	Roll Pin 3/16 Dia. x 7/8 Lg.	1
9	261044	Gasket	1
10	285305	Washer	2
11	231080	Cap Screw	2
12	298889	Cam - Not Shown	1
When replacing pump impeller order "water pump repair kit" Part No. 298416-A. Kit consists of: impeller, lip seal, gasket and retaining ring.			

WATER PUMP GROUP (SHERWOOD)



FROM SERIAL NO: 305359 TO

ITEM	PART NO.	DESCRIPTION	UNIT
	299805	Pump Assembly, Complete (Sherwood)	1
1	299888	Shaft	1
2	262286	Seal, Lip	2
3	299889	Bushing, Carbon	1
4	299890	Body	1
5	239136	Plug, Drain	1
6	297745	Gasket	1
7	299891	Cover	1
8	299895	Screw – 10-24 x 3/8 Long	6
9	287439	Impeller	1
10	299893	Retaining Ring – External	1
11	299894	Cam (.187)	1
12	299895	Screw – 1/4-20 x 5/16 Long	1
13	299896	Key No. 2	1
14	298477	Adaptor Plate (not shown)	1

INSTRUMENT PANEL

PART NO.	DESCRIPTION	UNIT
298559	Instrument Panel Complete	Optional
298572	Panel	1
298385	Ammeter	1
299240	Oil Indicator Light	1
298383	Temperature Gauge	1
299190	Ignition Switch	1
299650	Blower Switch	1
299754	Blower Switch Plate	1
299839	Glo Plug Switch	1
299755	Glo Plug Switch Plate	1
299756	Caution Plate	1
299651	Fuse – 10A	1
299066	Temperature Sender – 1/4”	1
298584	Panel Harness	1
298585	10 Ft. Extension Harness	1
298586	Engine Wire Harness	1
	OR	
299732	Instrument Panel Complete with 299263 Tachometer and All Other Components Listed Above.	
256748	Spare parts Kit	Optional
256735	Gasket Set	Optional

(Used on instrument panel Spec. dwg. #298559-A)

Universal Diesel

PANEL CONNECTIONS

ENGINE CONNECTIONS

