FORKLIFT TRUCK

SPARE PARTS MANUAL

MAKE: ACE

MODEL: AF 20D & AF 30D

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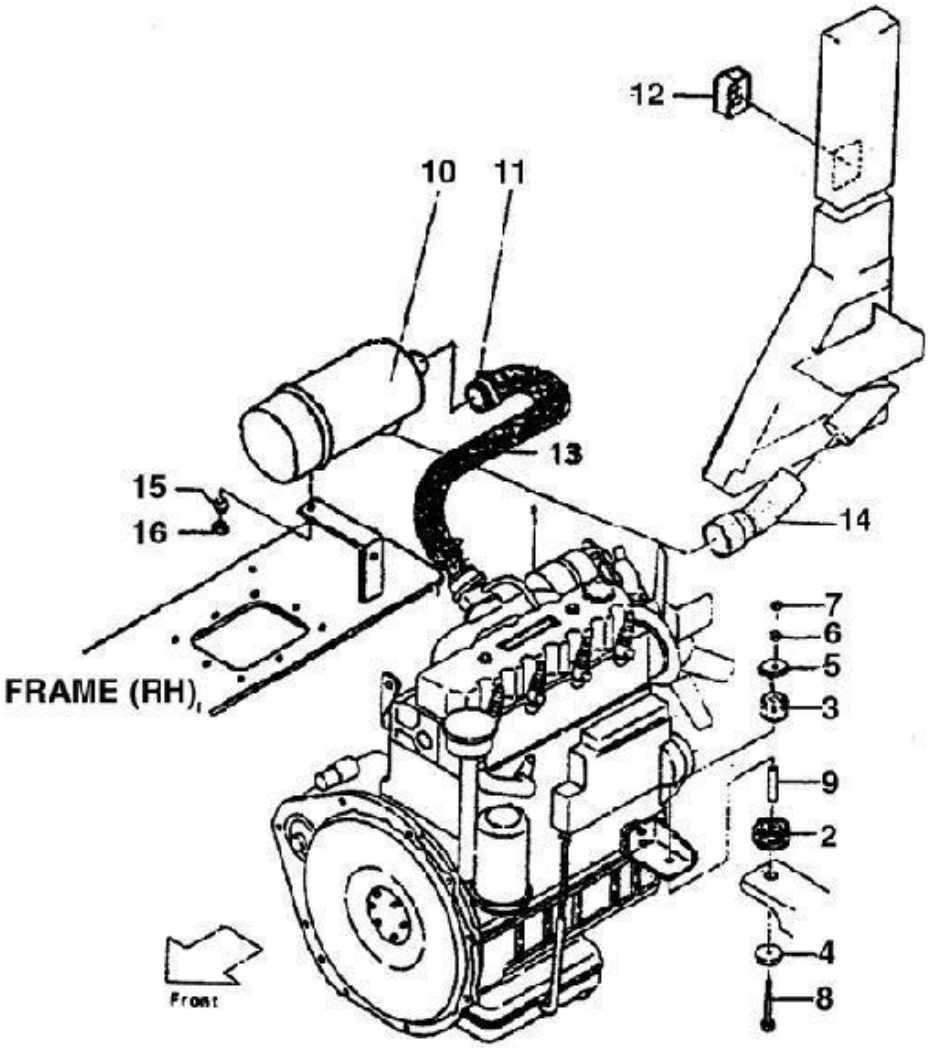
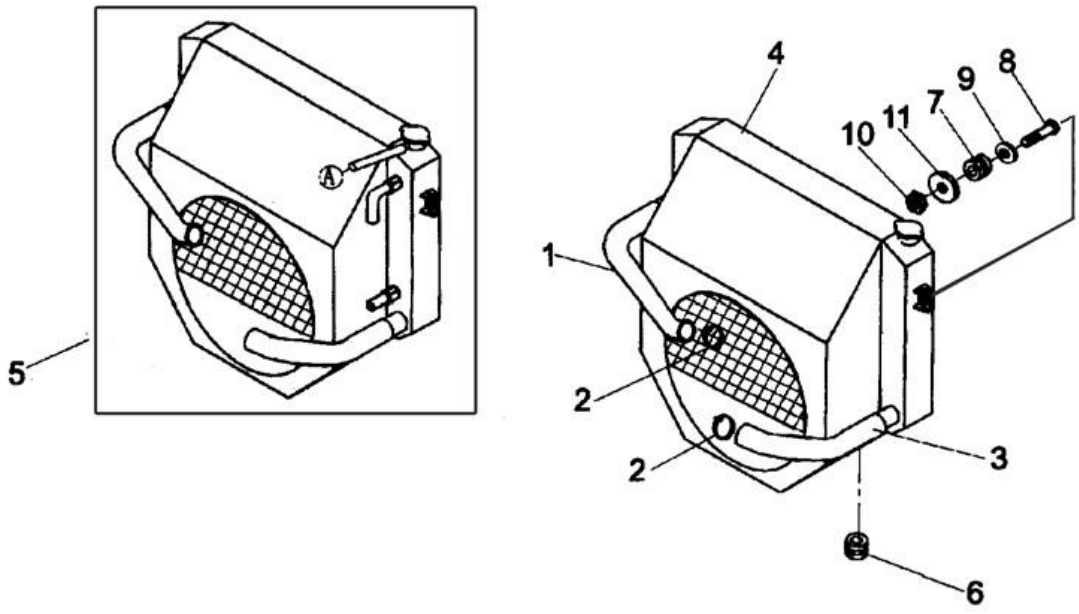
ENGINE A90BPG (50 HP@ 2650 RPM)



ENGINE A90BPG (50 HP@ 2650 RPM)

ITEM NO.	DESCRIPTION	PART NO.	QTY.
1	A490-Engine	180301010000	1
2	RUBBERLOWERE.MTG	180301010500	2
3	RUBBERUPPERE.MTG	180301010600	2
4	PLATE 1	180301011000	2
5	PLATE 2	180301012000	2
6	Washer	901601000000	2
7	HEX NUT-M10	901201000000	2
8	BOLT HEX-M10X120	901101012240	2
9	Collar	180301010700	2
10	Air Cleaner Assy	C0F010910100	1
11	Ø 60 Hose Clamp	955400450600	4
12	AIR INTAKE FILTER	180307041000	1
13	HOSE AIR CLEANER TO ENGINE INTAKE MANIFOLD	180301020200	1
14	HOSE AIR PASSAGE TO AIR CLEANER	180301020300	1
15	SPRING WASHER M8	901610800000	2
16	HEX NUT-M8	901200800000	2
	Air filter element (Dual) (I) Air filter element (Single) (V& J)	180301020500 KW1634X00000	1 1
	Engine Mounting rubber set (V& J)	C0F012030500	2

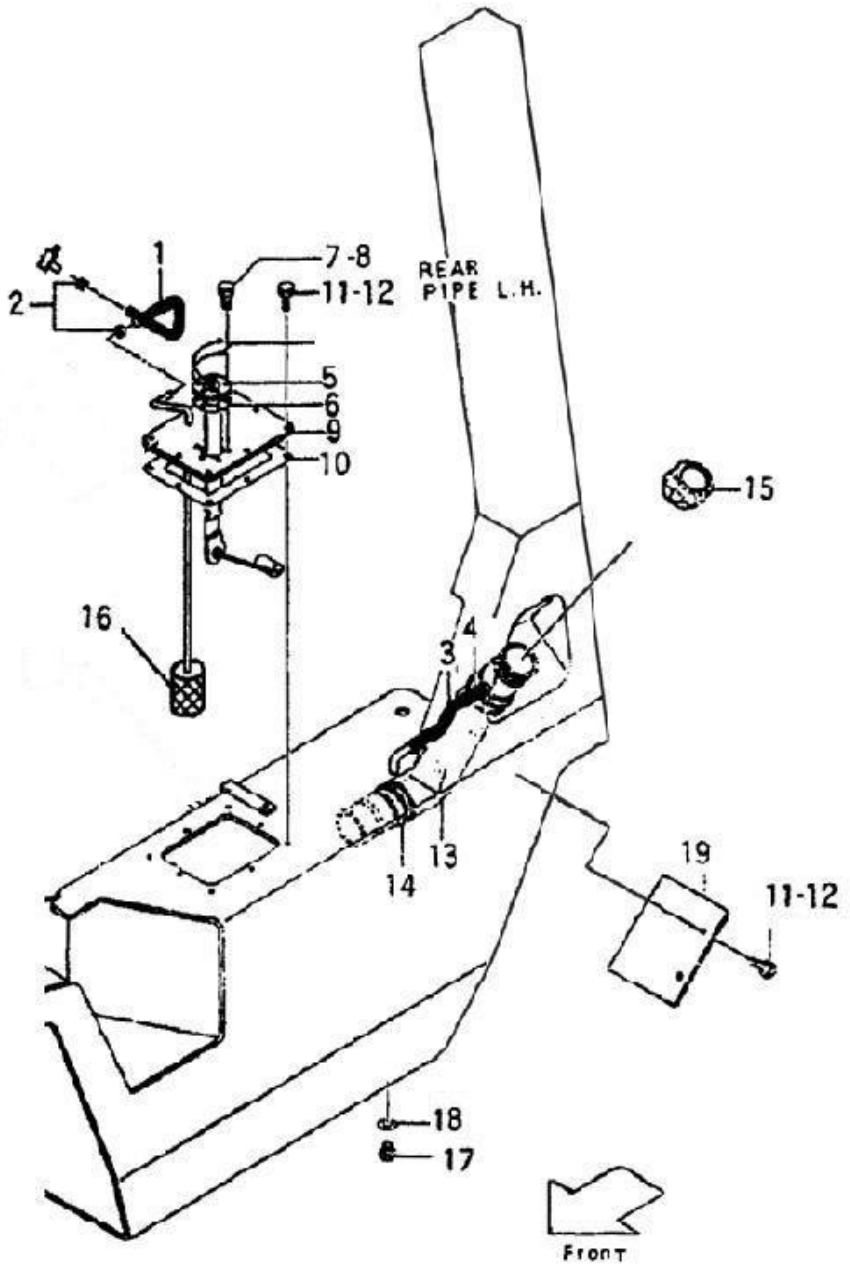
COOLING SYSTEM



COOLING SYSTEM

ITEM NO.	DESCRIPTION	PART NO.	QTY.
1	HOSE ENGINE TO RADIATOR	180301030300	1
2	Ø 45 Hose Clamp	955400450600	4
3	HOSE RADIATOR TO ENGINE	180301030500	1
4	RADIATOR ASSY (MECH) (I) RADIATOR ASSY (MECH) (V&J)	183301030100 COF020510100	1 1
5	RADIATOR ASSY (TC) (I) RADIATOR ASSY (TC) (V&J)	180301030100 C0F021160100	1 1
6	Rubber (Manual Transmission)	C0F012280100	2
7	RUBBER GROMET	180304030250	2
8	BOLT HEX-M10X40	901101012080	4
9	SPRING WASHER M10	901611000000	4
10	NYLOCK NUT-M10	901201000000	4
11	WASHER PLAIN M10	901601000000	4

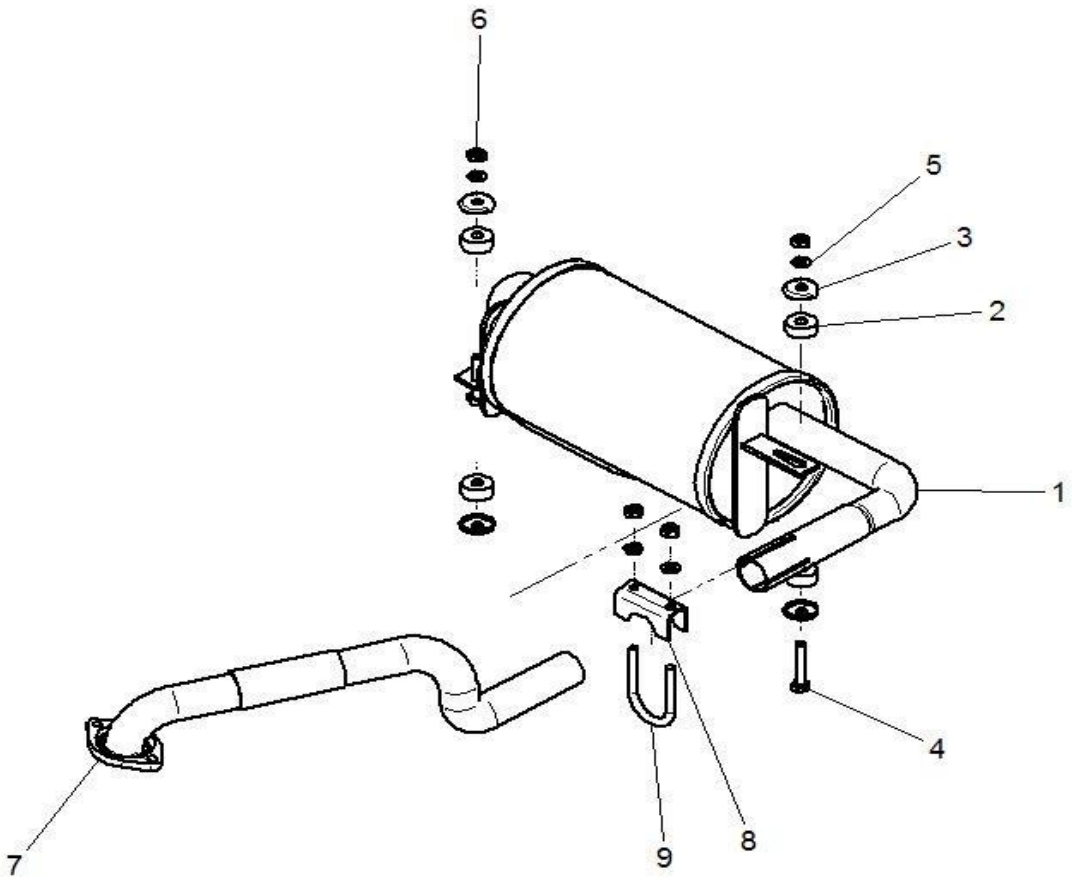
FUEL SYSTEM



FUEL SYSTEM

ITEM NO.	DESCRIPTION	PART NO.	QTY.
1	HOSE FROM FUEL TANK	919972101120	1
2	Ø25 HOSE CLAMP	955400250350	2
3	HOSE FUEL INTAKE PIPE TO FUEL TANK	180305070000	1
4	Ø 25 HOSE CLAMP	955400250350	2
5	FUEL INDICATOR UNIT (I) FUEL INDICATOR UNIT (V& J)	180301050300 C0F010640100	1 1
6	PACKING (SUPPLY WITH FUEL INDICATOR UNIT)		1
7	BOLT HEX-M5X15	901100512030	5
8	WASHER SPRING M5	901610500000	5
9	DIESEL TANK COVER PLATE	180301050100	1
10	TANK COVER GASKET	180308020200	1
11	BOLT HEX-M8X35	901100812070	8
12	SPRING WASHER M8	901610800000	8
13	HOSE FUEL INTAKE TO FUEL TANK	180305060000	4
14	Ø 45 HOSE CLAMP	955400450600	2
15	CAP FUEL INTAKE	180307040370	1
16	FUEL FILTER	COF010620100	1
17	MAGNETIC PLUG M 24X 1.5	100083301900	2
18	DOWTY SEAL M24	925081001200	2
19	PLATE (SIDE SUPPORT 2)	180305011500	1

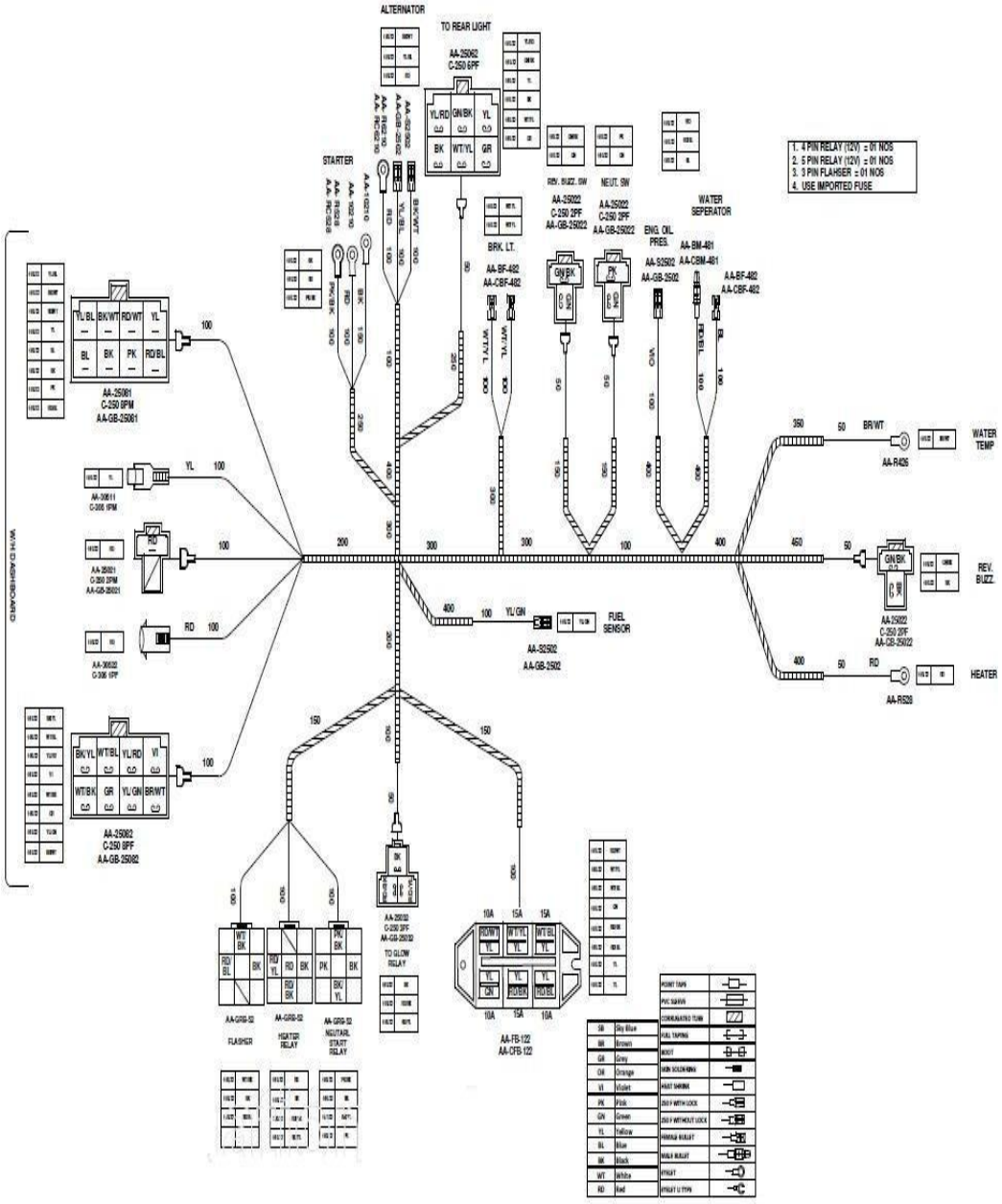
EXHAUST SYSTEM



EXHAUST SYSTEM

ITEM NO.	DESCRIPTION	PART NO.	QTY.
1	SILENCER (I) SILENCER (V&J) 20 D SILENCER (V&J) 30 D	180301040100 C0F010430100 C0F030410100	1 1 1
2	Rubber grommet for silencer mounting	180301040500	4
3	SILENCER GROMMET CUP	180301040700	4
4	BOLT HEX M10x60	901101012120	2
5	Washer Spring M10	901611000000	4
6	Nut Hex M10, Gr.8	901201002000	4
7	SILENCER PIPE	180301040200	1
8	SILENCER U-CLAMP	180301040300	1
9	SILENCER U BOLT	180301040400	1

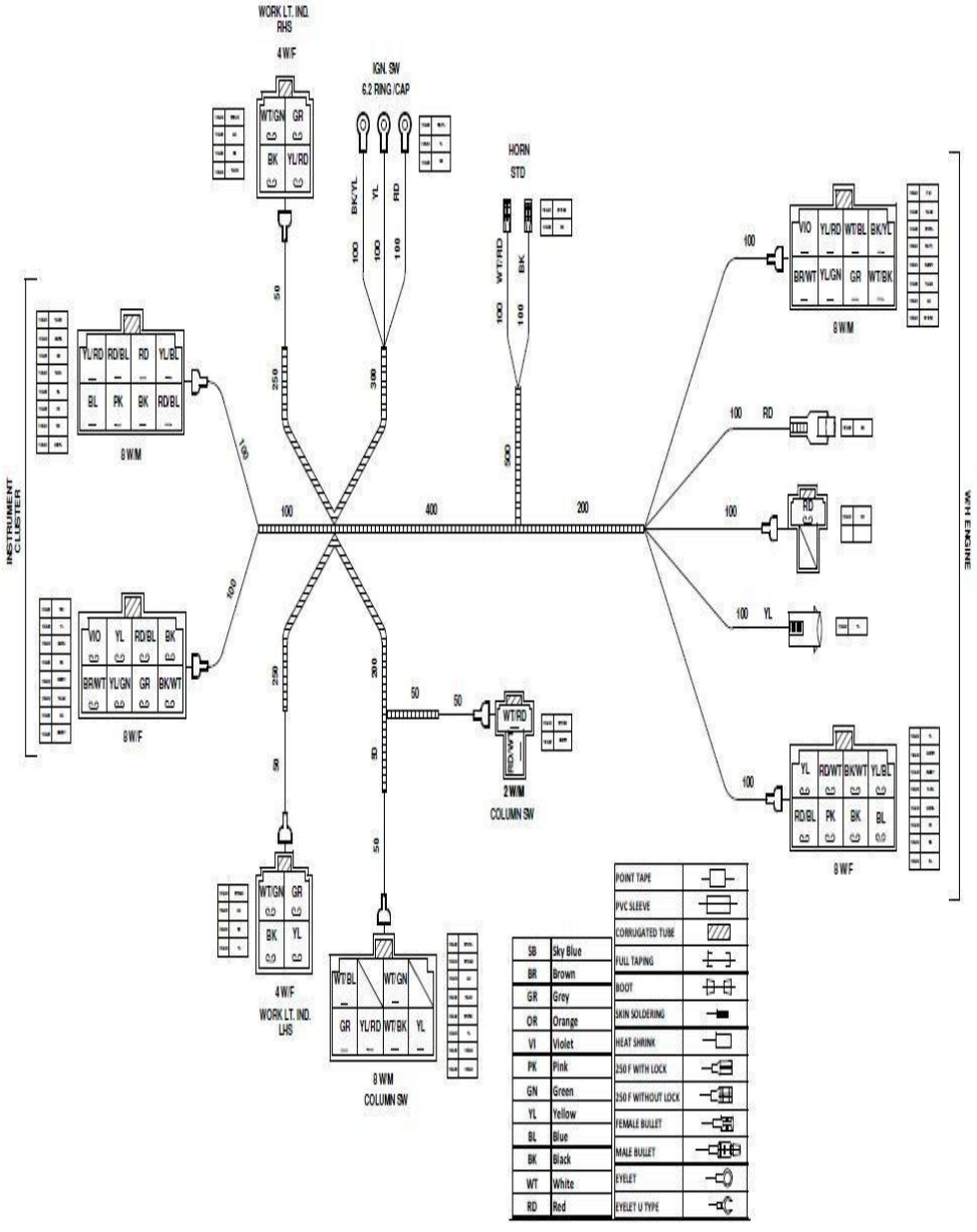
ELETRIC SYSTEM



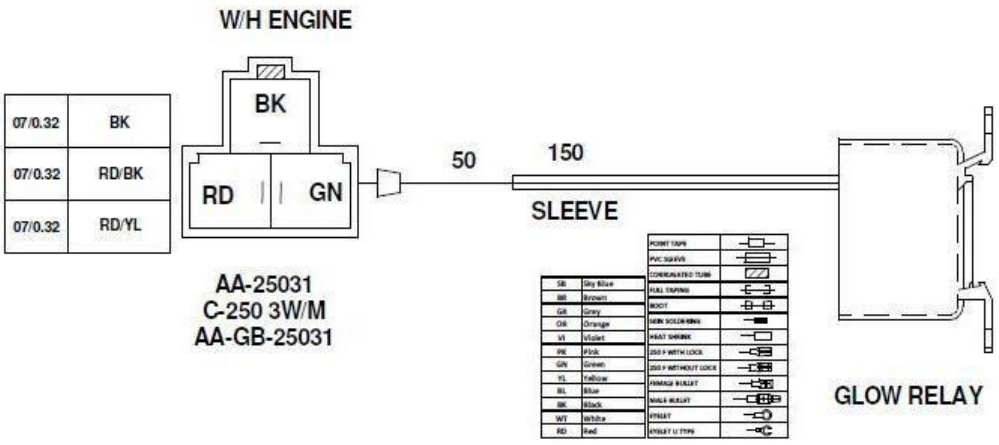
ELETRIC SYSTEM

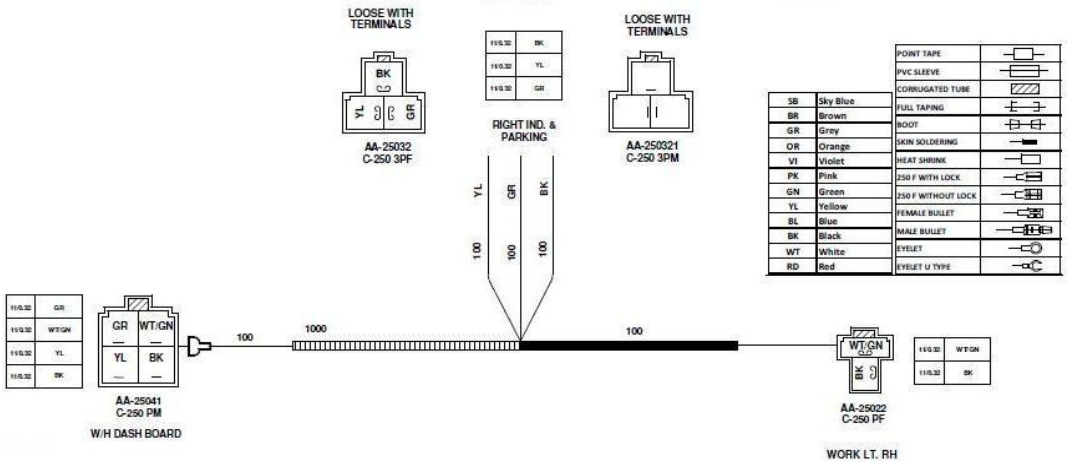
ITEM NO.	DESCRIPTION	PART NO.	QTY.
-	Engine Harness (TC Transmission) AF 20 D	18020210100	1
-	Engine Harness (TC Transmission) AF 30 D (I) Engine Harness (TC Transmission) AF 30 D (V&J)	18030210100 C0D010210100	1 1
-	Engine Harness (Manual Transmission) (I) Engine Harness (M) (V&J)	18033210100 C0D020210100	1 1

ELETRIC SYSTEM

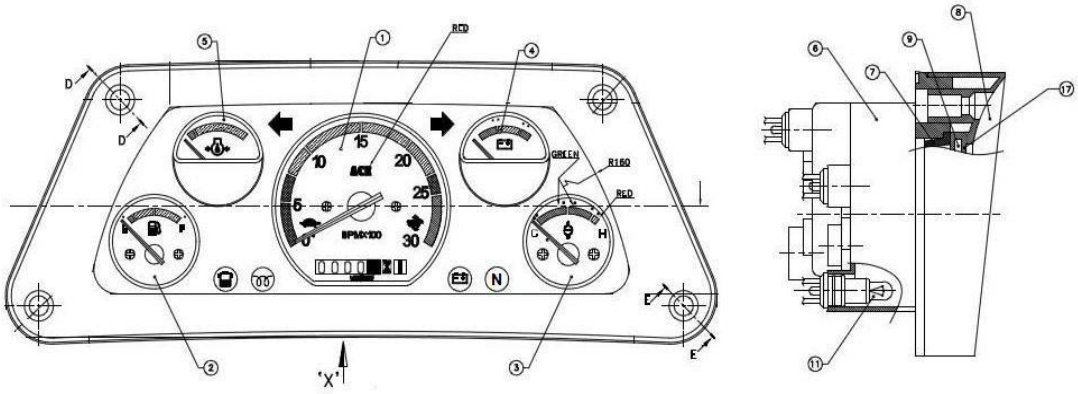


ELETRIC SYSTEM





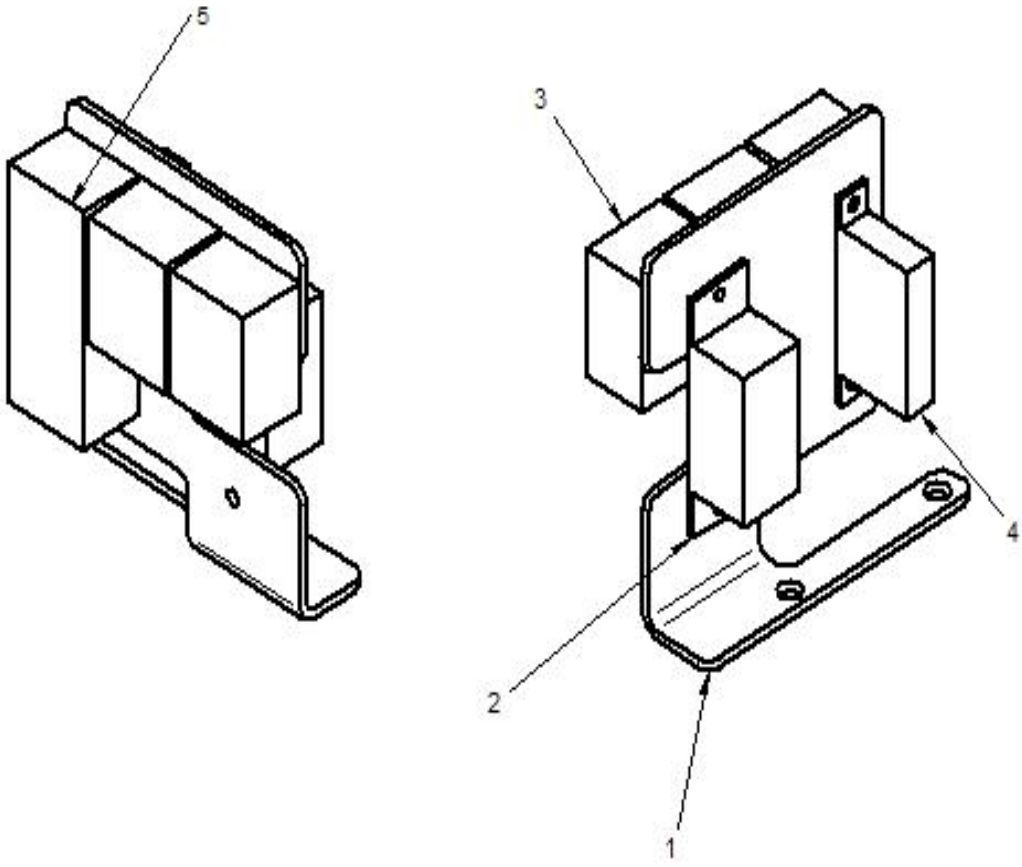
METER BOARD ASSY.



METER BOARD ASSY.

ITEM NO.	DESCRIPTION	PART NO.	QT
1	INSTRUMENT CLUSTER UNIT (I)	180304031200	1
	INSTRUMENT CLUSTER TC (J)	C0D0123301AO	1
	INSTRUMENT CLUSTER (MANUAL) (J)	C0D0123301M0	1
	INSTRUMENT CLUSTUR UNIT TC (V)	C0D0123001V0	1
	COMBINATION SWITCH (I) COMBINATION SWITCH (J) COMBINATION SWITCH (V)	180302010200 C0D010260100 ZK0000000000	1 1 1

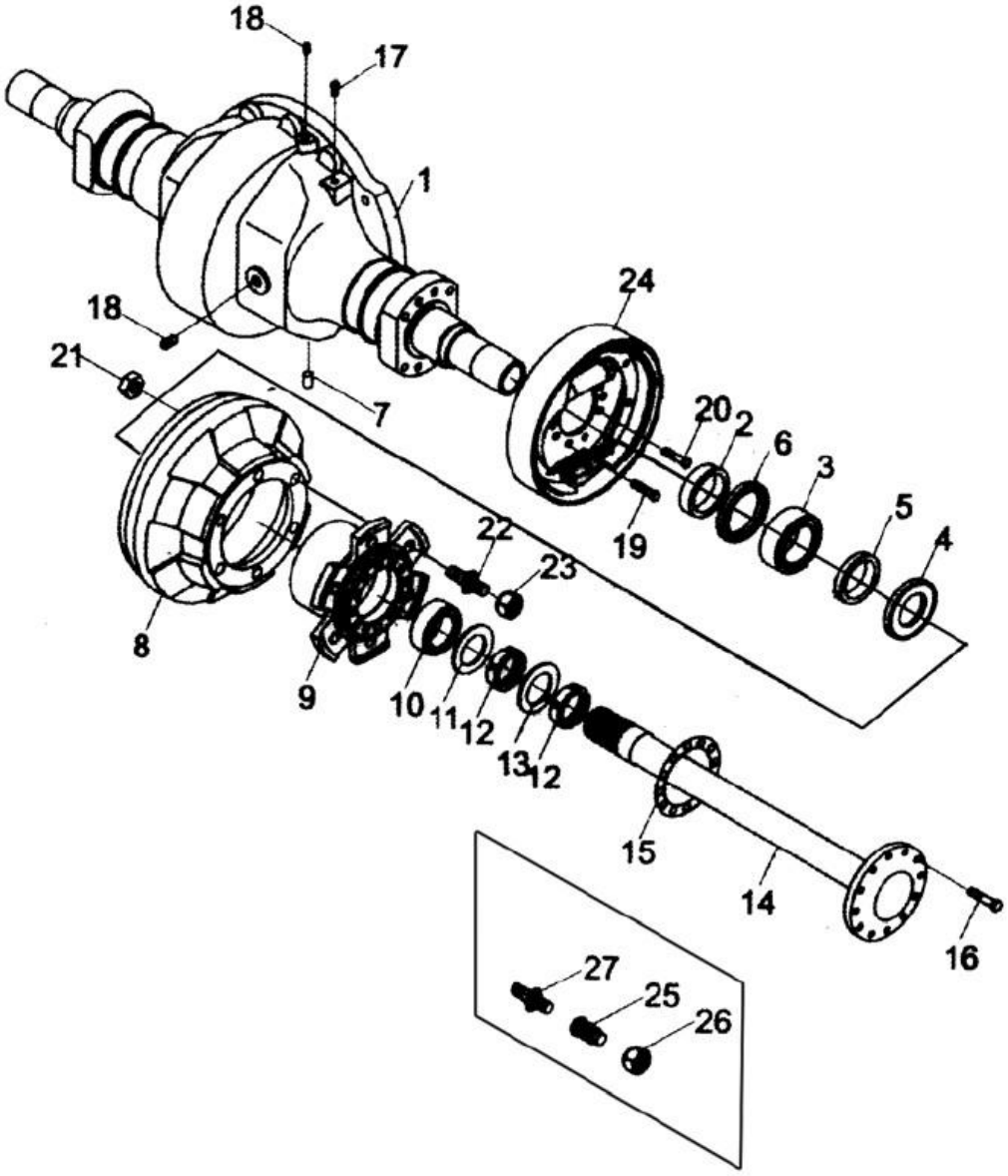
ELECTRIC ELEMENT MOUNT



ELECTRIC ELEMENT MOUNT

ITEM NO.	DESCRIPTION	PART NO.	QTY.
1	FUSE BOX MOUNTING BKT	180302010100	1
2	FUSE BOX (I)	180302011200	1
3	FLASHER (I) FLASHER (V &J)	180302011300 SG1520000000	1 1
4	GLOW RELAY (I)	180302011400	1
5	RELAY (I)	180302011500	1
	PANEL BOARD ELECTRICAL (J) (BOX TYPE) PANEL BOARD ELECTRICAL (V) (BOX TYPE)	BX2052000000 BX2052000V00	1 1

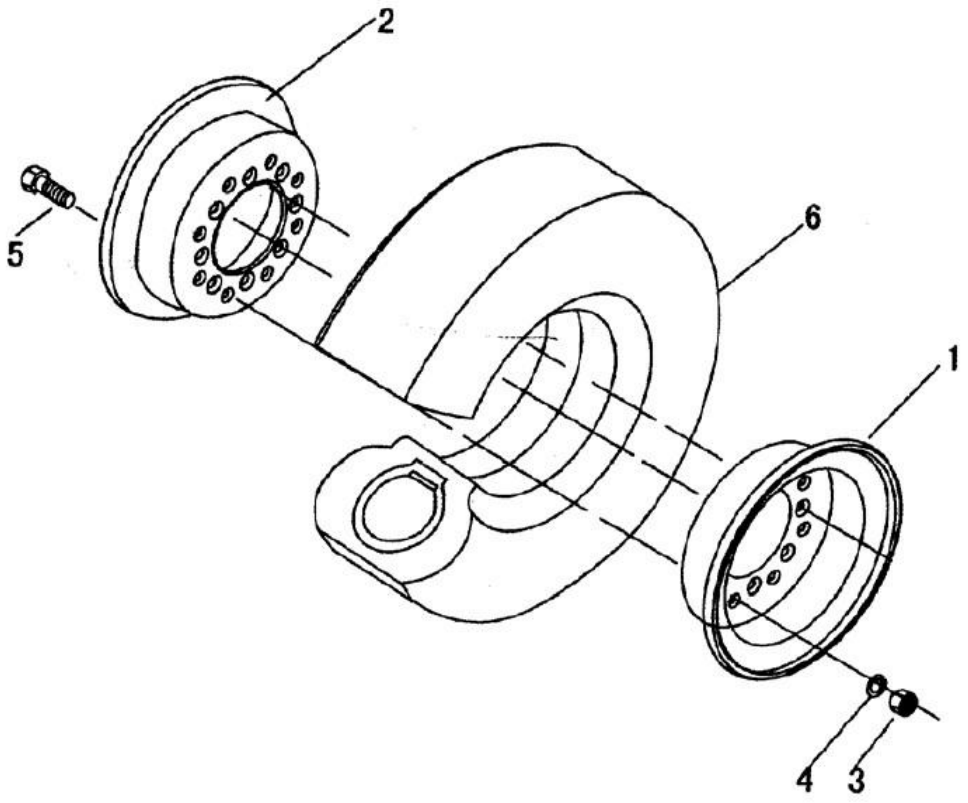
DRIVE AXLE



DRIVE AXLE

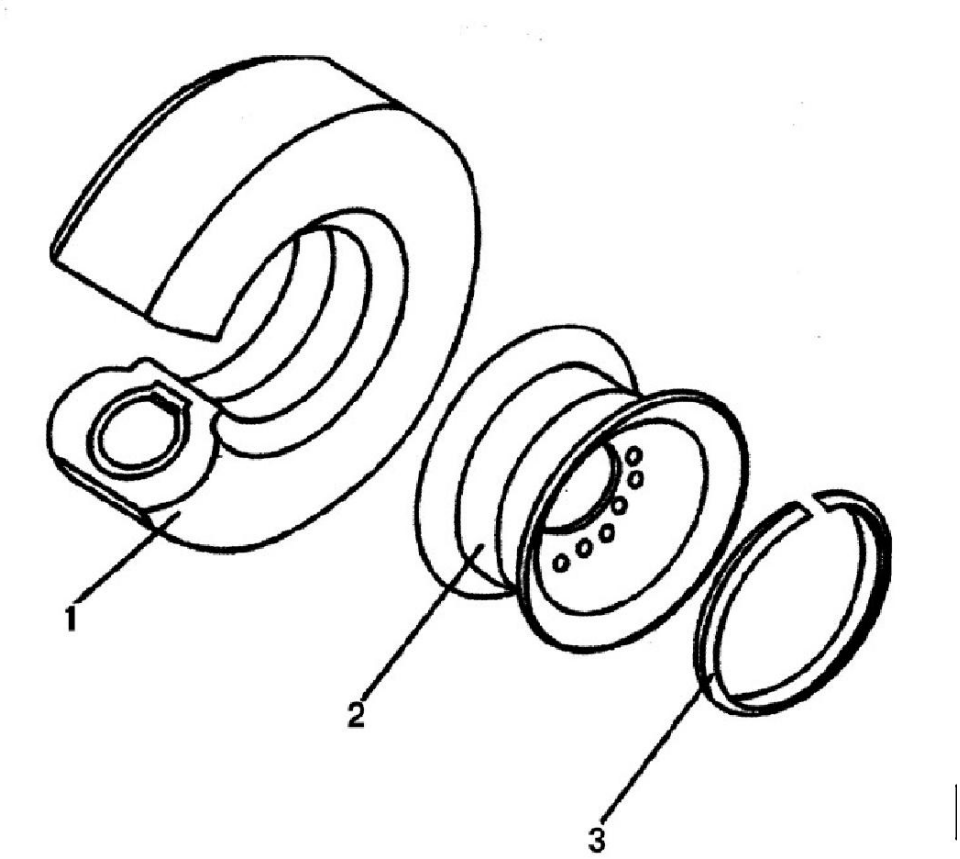
ITEM NO.	DESCRIPTION	PART NO.	QTY.
--	FRONT AXLE ASSY SINGLE DRIVE	180303010000	1
--	FRONT AXLE ASSY DUAL DRIVE	180303020000	1
1	Housing axle (For AF20D)	C0Q012120100	1
--	Housing axle (For AF30D)	C0Q032120100	1
2	Retainer oil seal	C0Q012130100	2
3	SC100x125x12 Seal, Oil	GB9877188000	2
4	Retainer	C0Q012140100	2
5	Washer	C0Q012150100	2
6	30214 Bearing		2
7	B10x30 Pin	GB119860000	1
8	Drum, brake (For AF20D)	C0Q012090100	2
--	Drum, brake(For AF30D)	C0Q032090100	2
9	Hub Front (For AF20D)	C0Q012060100	2
--	Hub Front (For AF30D)	C0Q032060100	2
10	Seal, Oil	C0Q012040100	2
--	33012 Bearing		2
11	Packing	C0Q012020100	2
12	M60x2 Nut	GB8108800000	4
13	φ 60Washer	GB8588800000	2
14	Shaft, drive (For AF20D)	C0Q012100100	2
--	Shaft, drive (For AF30D)	C0Q032100100	2
15	Packing	C0Q012050100	2
16	Bolt	C0Q012010100	24
17	Breather air	Q900B0000000	1
18	Plug	Q61906000000	3
19	M14x1.5x40 Bolt	GB5786860000	12
20	Bolt	C0Q012160100	4
21	M20x1.5 Nut	C0CQ32081000	12
22	Bolt (For AF20D)		12
--	Bolt (For AF30D)		12
23	Nut (For AF20D)		12
--	Nut (For AF30D)		12
24	Wheel brake (For AF20D)	C0Q01SH00100	2
--	Wheel brake (For AF30D)	C0Q03SH00100	2
25	Nut, hut	COCQ52060100	12
26	Nut, hut		12
27	Bolt, hut	C0Q032080100	12

DRIVE WHEEL (2t)



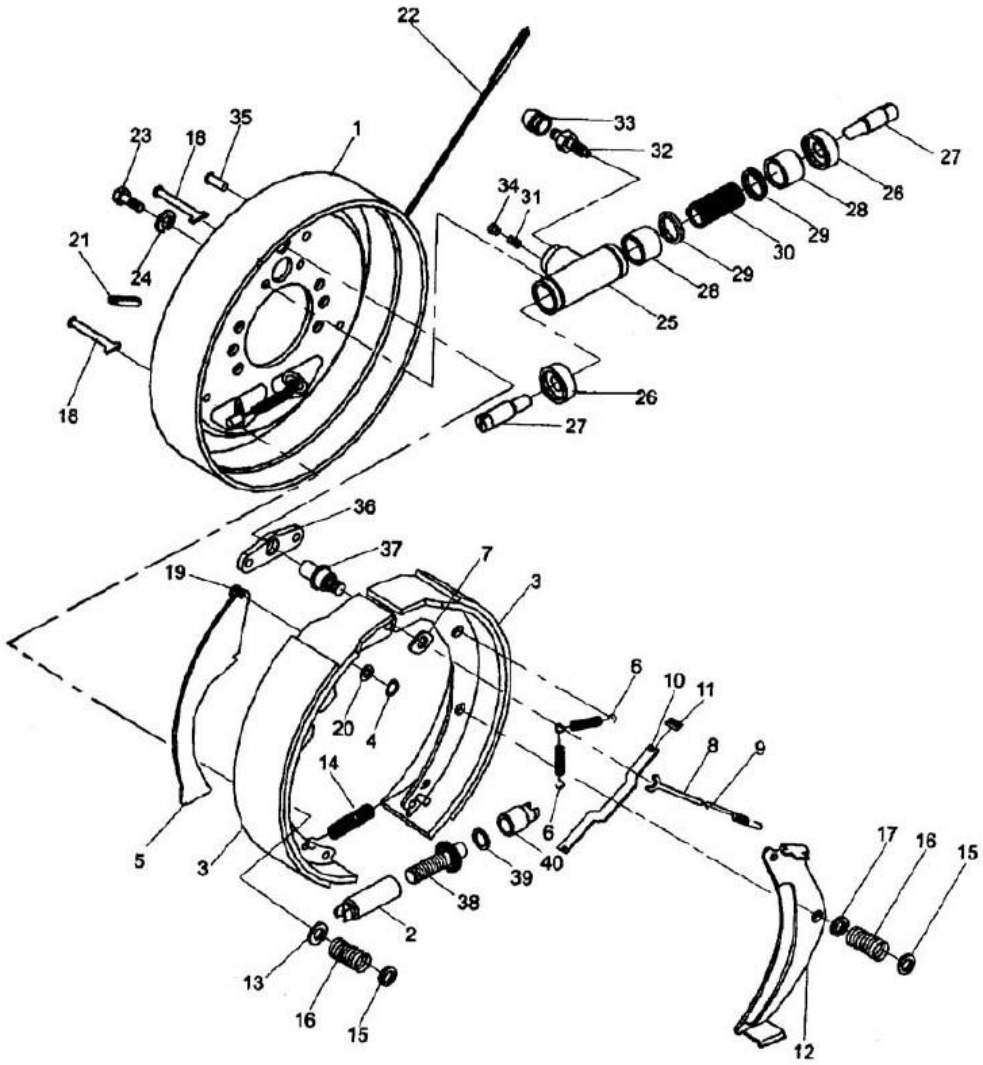
ITEM NO.	DESCRIPTION	PART NO.	QTY.
1	RIM FRONT- OUTER (5.00S-12)	180203050000	2
2	RIM FRONT (5.00S-12)	180203020000	2
3	M16 Nut	901201600000	2
4	φ 16 Washer lock	901611600000	12
5	M16x35 Bolt	901101612070	12
6	PNEUMATIC TYRE (7X12)	182082400200	2

DRIVE WHEEL (3t)



ITEM NO.	DESCRIPTION	PART NO.	QTY.
1	28X9-15-12PR Tyre	183082400600	2
--	Tyre	183082400600	4
2	Rim	960400000500	2
--	Rim	960400001250	2
3	Snap ring (ALONG WITH RIM)	RIM PART	2

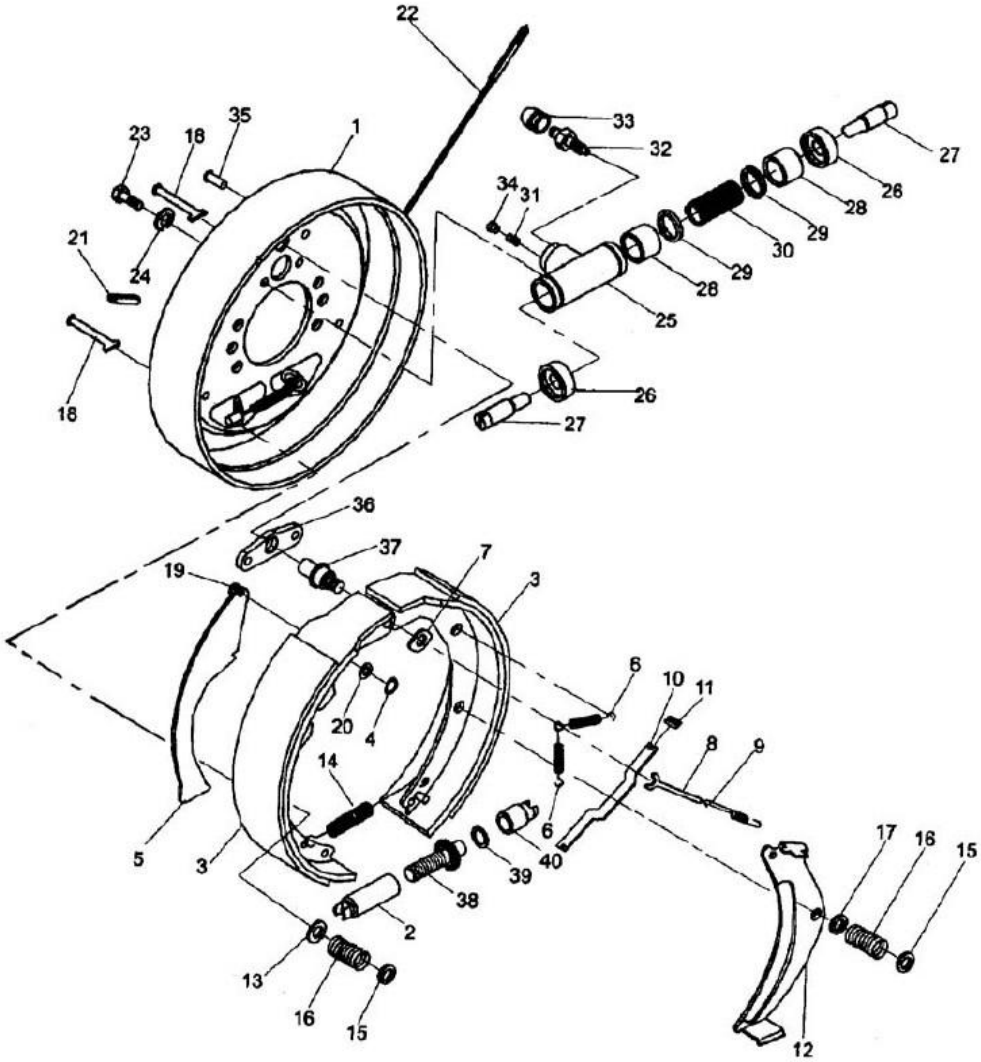
WHEEL BRAKE (2t)



WHEEL BRAKE (2t)

ITEM NO.	DESCRIPTION	PART NO.	QTY.
A	Wheel brake	C0Q010200100	1
B	Wheel brake	C0Q010210100	1
1	Back plate	C0Q010220100	1
2	Adjuster cover	C0Q012310100	1
3	Brake shoe	C0Q012320100	2
4	Washer spring	C0Q012330100	1
5	Lever LH brake	C0Q012340100	1
6	Spring shoe return	C0Q012350100	2
7	Plate shoe guide	C0Q012360100	1
8	Stopper pole lever	C0Q012370100	1
9	Spring actuator	C0Q012380100	1
10	Strut	C0Q012390100	1
11	Spring	C0Q012400100	1
12	LeverLH pole	C0Q012410100	1
13	Washer cup	C0Q012420100	3
14	Spring	C0Q012430100	1
15	Washer, cup	C0Q012440100	4
16	Spring	C0Q012450100	4
17	Washer, cup	C0Q012460100	1
18	Pin, shoe hold	C0Q012470100	1
19	Pin lever	C0Q012480100	2

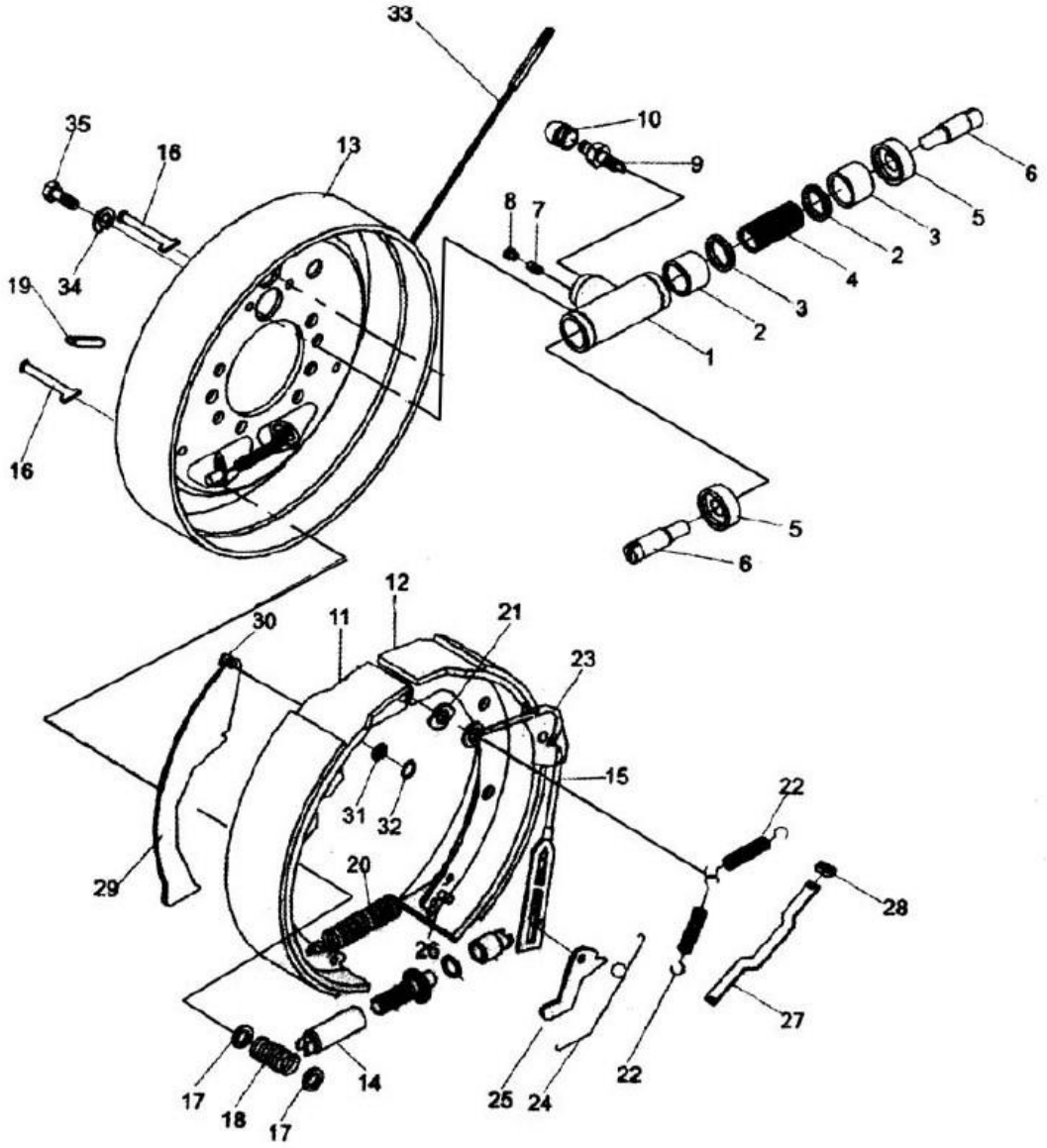
WHEEL BRAKE (2t)



WHEEL BRAKE (2t)

ITEM NO.	DESCRIPTION	PART NO.	QTY.
22	Shim	C0Q012490100	1
--	Plug rubber	C0Q012500100	1
23	Cable L.H	C0Q012510100	1
24	Cable R.H	C0Q012520100	1
B	M8x16 Bolt	901100812030	2
25	**8, Washer lock**	901610800000	2
26	Wheel cylinder Assy	C0Q012550100	1
27	Body	C0Q012560100	1
28	Cover, dust	C0Q012570100	2
29	Rod, Piston	C0Q012580100	2
30	Piston	C0Q012590100	2
31	Cup Piston	C0Q012600100	2
32	Spring	C0Q012610100	1
33	Seat tube	C0Q012620100	1
34	Bleading Screw	C0Q012630100	1
35	Cap, screw	C0Q012640100	1
36	Cap dust	C0Q012650100	1
37	Rivet	C0Q012660100	2
38	Plate	C0Q012670100	1
39	Pin Lever	C0Q012680100	1
40	Adjust bolt	C0Q012690100	1

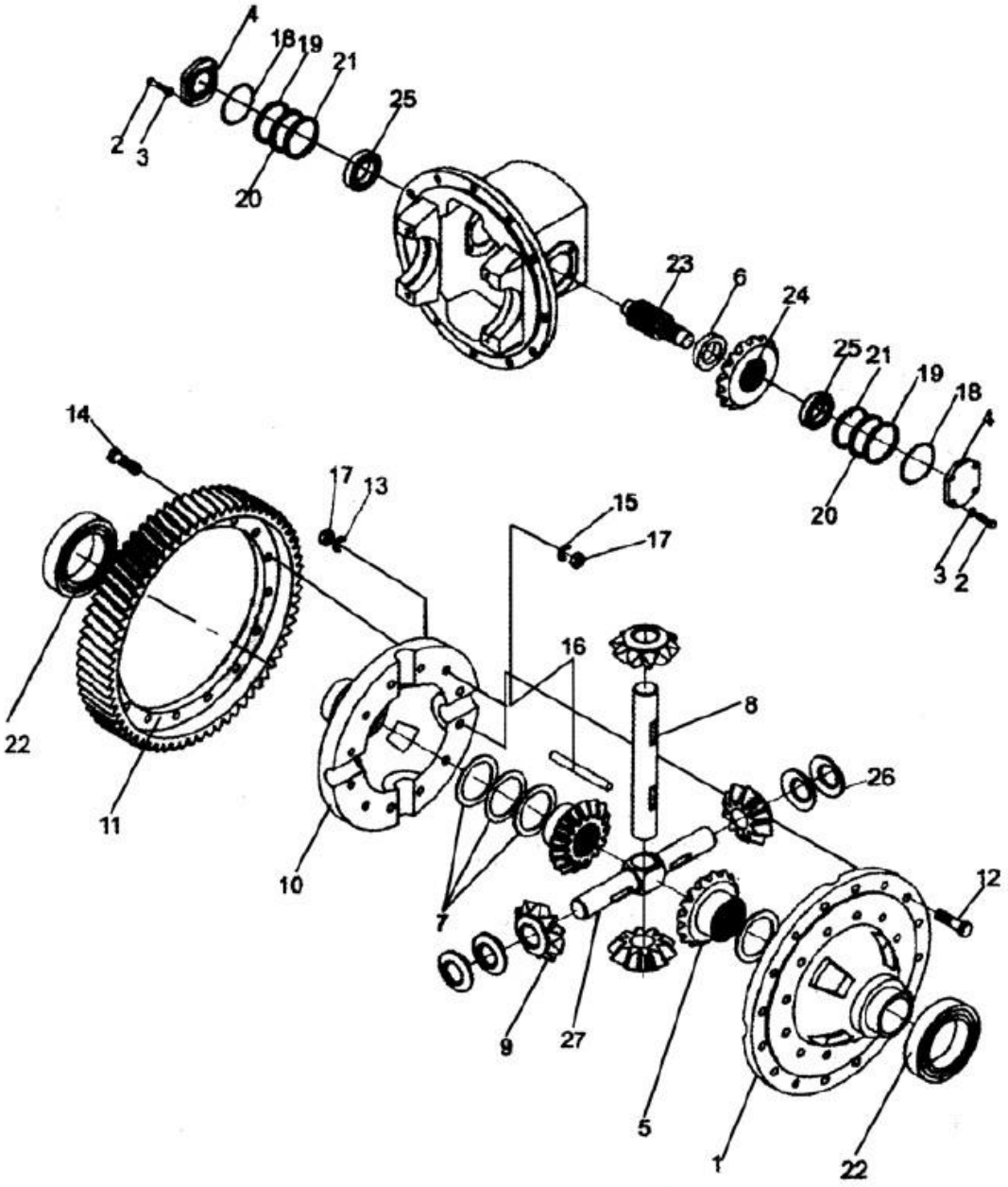
WHEEL BRAKE (3t)



WHEEL BRAKE (3t)

ITEM NO.	DESCRPTION	PART NO.	QTY
A	Wheel Brake	C0Q030200100	1
B	Wheel Brake	C0Q030210100	1
	Wheel cylinder Assy	C0Q030210100	1
1	Cylinder	C0Q032310100	1
2	Piston	C0Q032320100	2
3	Cup, piston	C0Q032330100	2
4	Spring	C0Q032340100	1
5	Cover, dust	C0Q032350100	2
6	Rod, piston	C0Q032360100	2
7	Plug	C0Q032370100	1
8	Screw	C0Q032380100	1
9	Screw, breather	C0Q032390100	1
10	Cap, screw	C0Q032400100	1
11	Pin, shoe & lining Assy.	C0Q032410100	1
12	Pin, shoe & lining Assy.	C0Q032420100	1
13	Back plate	C0Q032430100	1
17	Clearance adjuster	C0Q032440100	1
18	Spring & Fitting Assy.	C0Q032450100	1
19	Pin, shoe hold down	C0Q032460100	2
20	Cup, shoe hold down	C0Q032470100	4
21	Spring, shoe hold down	C0Q032480100	2
22	Cover, adjusting hole	C0Q032490100	1
23	Spring shoe	C0Q032500100	1
24	Guide plate	C0Q032510100	1
25	Return spring, brake shoe	C0Q032520100	2
26	Guide, cable	C0Q032530100	1
27	Spring	C0Q032540100	1
28	Level	C0Q032550100	1
29	Pin	C0Q032560100	1
30	Strut L.H.	C0Q032570100	1
31	Spring	C0Q032580100	1
32	Rod	C0Q032590100	1
33	Pin	C0Q032600100	1
--	Washer, spring	C0Q032610100	1
	Wheel cylinder kit	C0Q032102000W	1

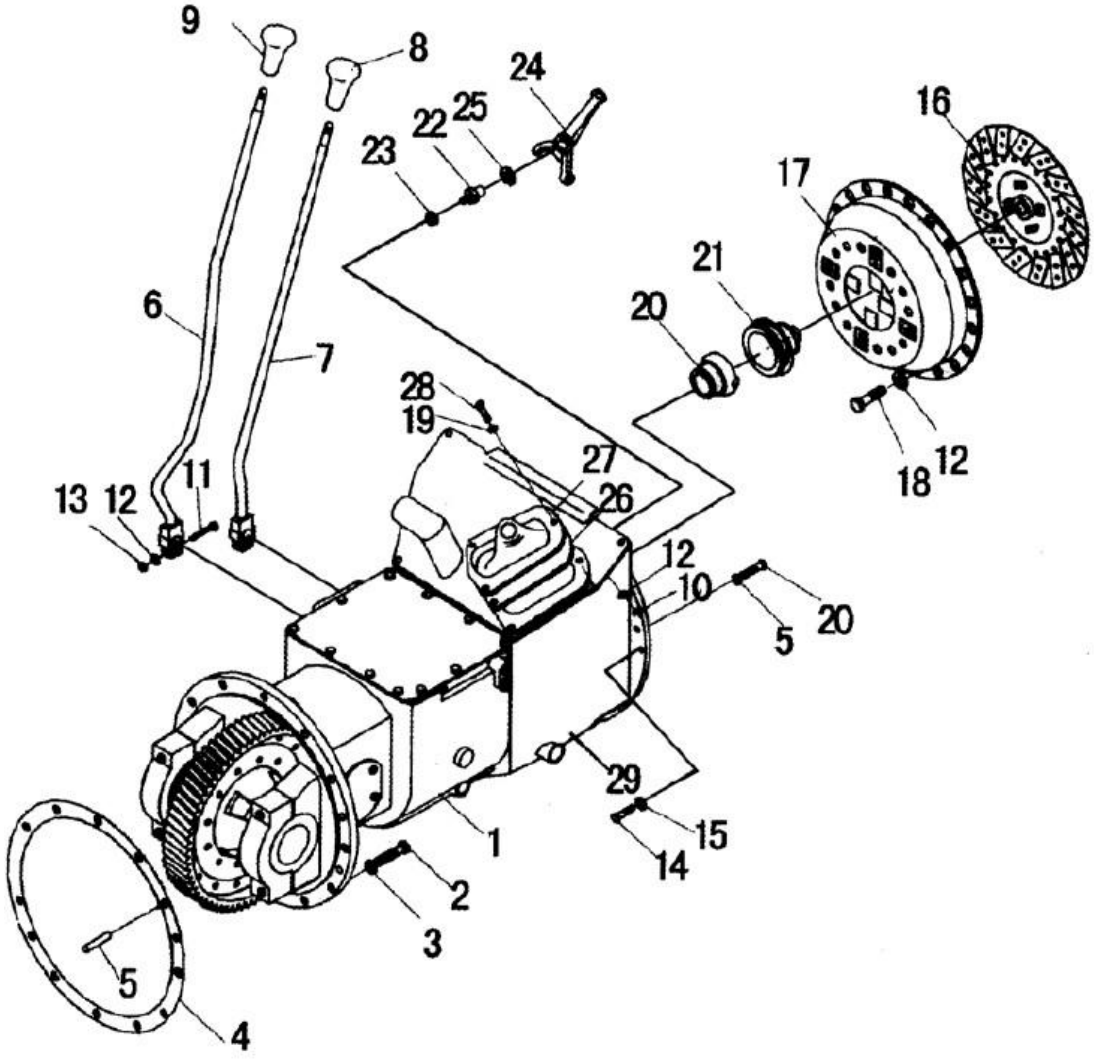
DIFFERENTIAL



DIFFERENTIAL

ITEM NO.	DESCRIPTION	PART NO.	QTY.
1	Case, cross L.H	C0C013110100	1
2	M10x1.25x25 Bolt	GB5786860000	8
3	φ 10 Washer	901611000000	8
4	Cover, Bearing	C0C013120100	2
5	Gear, Side	C0C013130100	2
6	Spacer	C0C013140100	1
7	Washer	C0C013150100	2
--	Washer	C0C013160100	2
--	Washer	C0C013170100	2
8	Shaft, Pinion	C0C013180100	1
--	Shaft, Pinion	C0C013190100	1
9	Gear, Pinion	C0C013200100	4
10	Case, cross R.H	C0C013210100	1
11	Gear, ring	C0C013220100	1
12	Bolt	C0C013230100	12
13	Washer, lock	C0C013240100	8
14	Bolt	C0C013250100	16
15	Plate, lock	C0C013260100	8
16	6dx30 Pin parallel	GB1198600000	1
17	M10x1.25 Nut	GB6171860000	28
18	**75x3.1 O-ring**	GB1235760000	2
19	Shim	C0C013270100	2
20	Shim	C0C013280100	4
21	Shim	C0C013290100	2
22	30213 Bearing	GB2729300000	2
23	Shaft, final pinion gear	C0C013300100	1
24	Gear, spiral bsevel	C0C013310100	1
25	32207 Bearing	GB2979400000	2
26	Washer thrust	C0C013320100	4

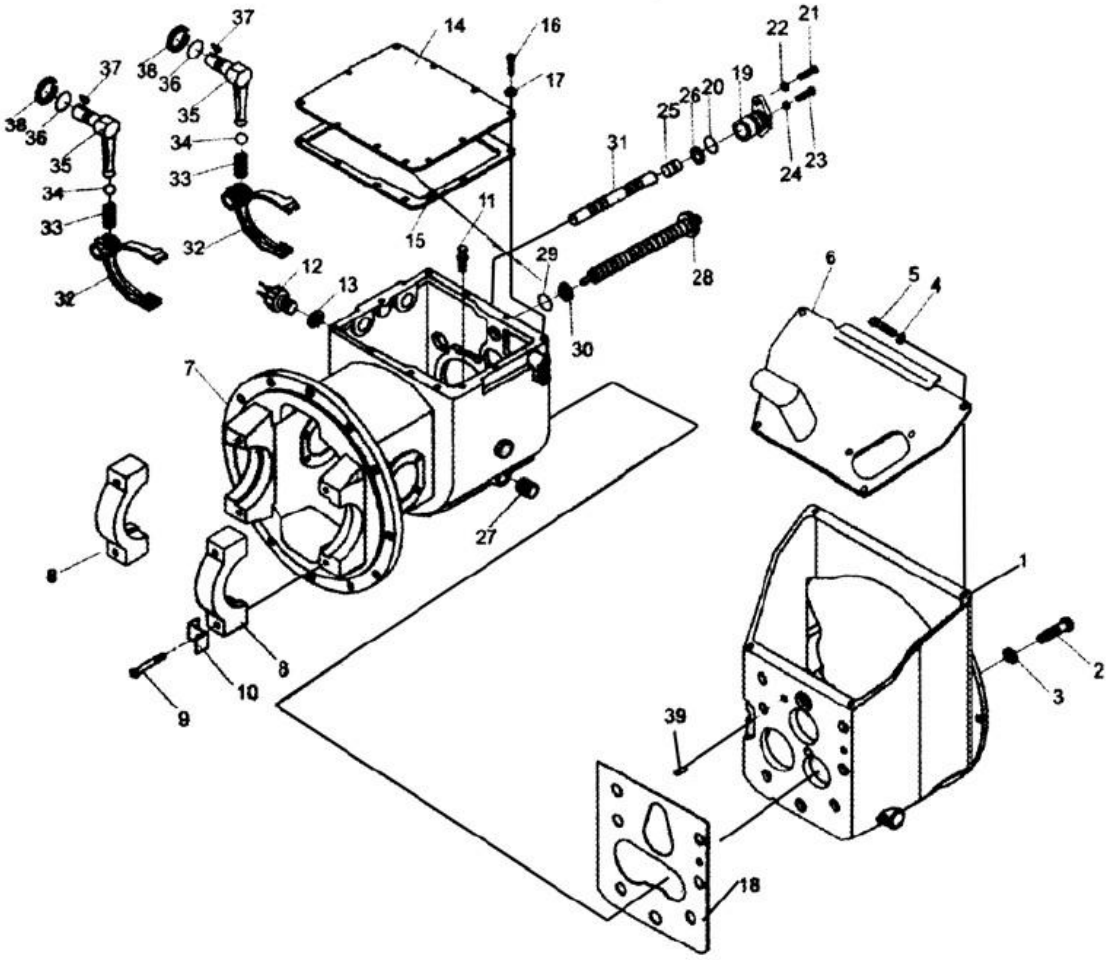
DRIVE UNIT MOUNT (MANUAL TRANSMISSION)



DRIVE UNIT MOUNT (MANUAL TRANSMISSION)

ITEM NO.	DESCRIPTION	PART NO.	QTY.
1	Drive unit	180301110000	1
2	M12x1.25x40-6g Bolt	901101222090	12
3	φ 12 Washer, lock	901611200000	12
4	Packing	180301060300	1
5	Pin, parallel	GB1198600000	1
6	Lever, speed change	180330160000	1
7	Lever, direction change	180330150000	1
8	Knob, direction	180330120000	1
9	Knob, speed	180330110000	1
10	M8 Nut	901200800000	2
11	M8x35-6g Bolt	901100812070	2
12	φ 8 Washer, lock	901610800000	10
13	M8-6H Nut	901200800000	2
14	M10x50 Bolt	901101012100	9
15	φ 10 Washer	901611000000	9
16	Clutch disc Assy.	C0C010240100	1
17	Clutch cover	C0C010250100	1
18	M8x20 Bolt	901100812040	6
19	φ 8 Washer	901610800000	2
20	Retainer, bearing	C0C012070100	1
21	Bearing, thrust	968821100000	1
22	Pivot, clutch yoke	C0C012080100	1
23	M12x1.25 Nut	GB6171860000	1
24	Yoke, Clutch	C0C012090100	1
25	Snap, ring	C0C012100100	1
26	Cover dust	C0C012110100	1
27	Retainer, cover	C0C012120100	1
28	M8x16 Bolt	901100812030	2
29	Clutch housing	C0C012010100	1
30	M10x1.25x35	901101012070	1

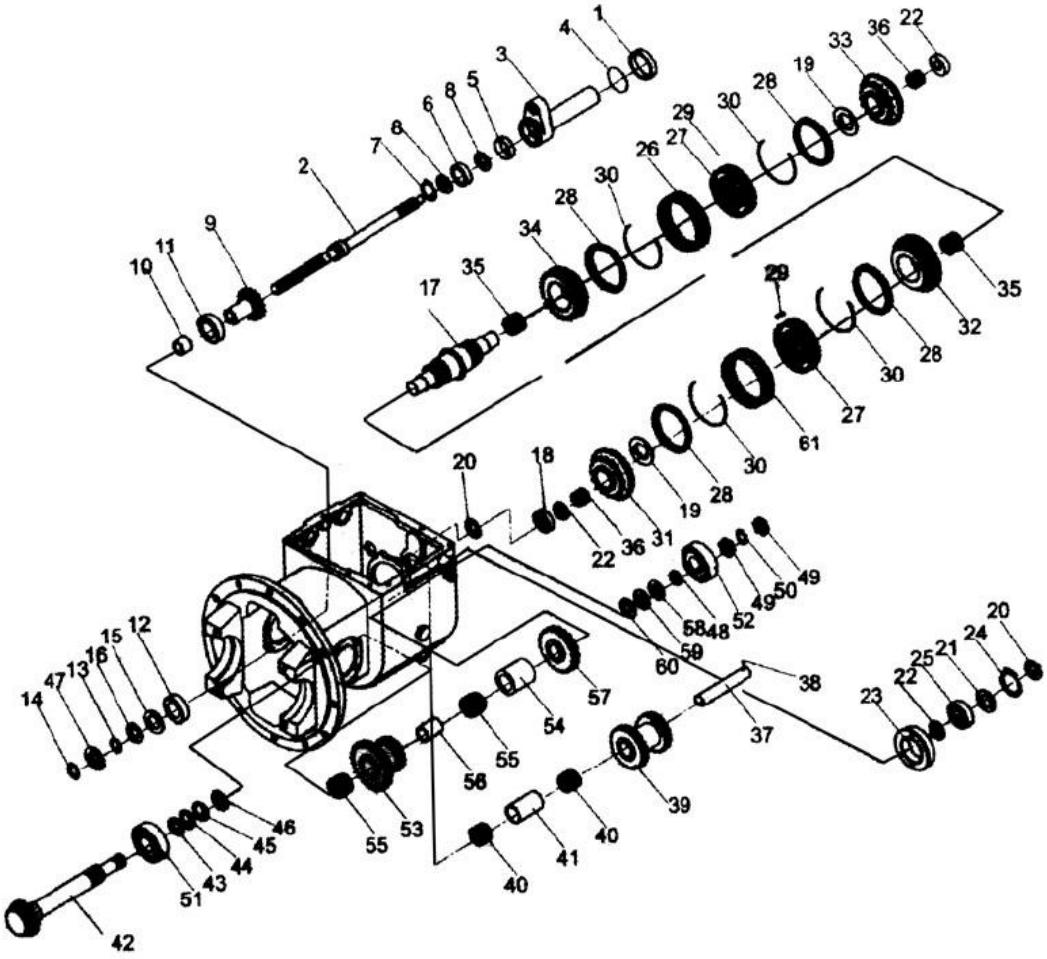
TRANSMISSION (MANUAL TRANSMISSION)



TRANSMISSION (MANUAL TRANSMISSION)

ITEM NO.	DESCRIPTION	PART NO.	QTY.
1	Clutch housing	C0C012010100	1
2	M10x30 Bolt	901101012060	7
3	10 Washer, lock	901611000000	7
4	6 Washer, lock	901610600000	4
5	M6x16 Bolt	901500612030	4
6	Cover, case	C0C012050100	1
7	Case, transmission	C0C012310100	1
8	Cap, bearing	C0C012320100	2
9	Bolt	C0C012330100	4
10	Plate, lock	C0C012340100	4
11	Air Breather	C0C012350100	1
12	Switch, back-lamp	C0C012360100	1
13	Washer	C0C012370100	1
14	Case, cover	C0C012380100	1
15	Gasket, case cover	C0C012390100	1
16	M10x16 Bolt	901101012030	10
17	10 Washer, lock	901611000000	17
18	Gasket, clutch housing	C0C012020100	1
19	Supporter, arm shaft	C0C012400100	1
20	35x3.1 O-ring	GB1235760000	1
21	M8x20 Bolt	901100812040	1
22	8 Washer, lock	901610800000	2
23	M10x45 Bolt	901101012090	1
24	M10 Nut	901201000000	1
25	Plug		1
26	20x2.4 O-ring	GB1235-76	1
27	ZG1/2” Plug	C0C01-24201	1
28	Bolt side	C0C01-24301	1
29	28x3.5 O-ring	GB1235-76	1
30	Washer	C0C01-24401	1
31	Rod, shift	C0C01-24501	1
32	Fork, shift	C0C01-24601	2
33	Spring	C0C01-24701	2
34	10 Ball, steel	GB308-89	2
35	Lever, shift	C0C01-24801	2
36	22x2.4 O-ring	GB1235-76	2
37	5x19 Key	GB1099-79	2

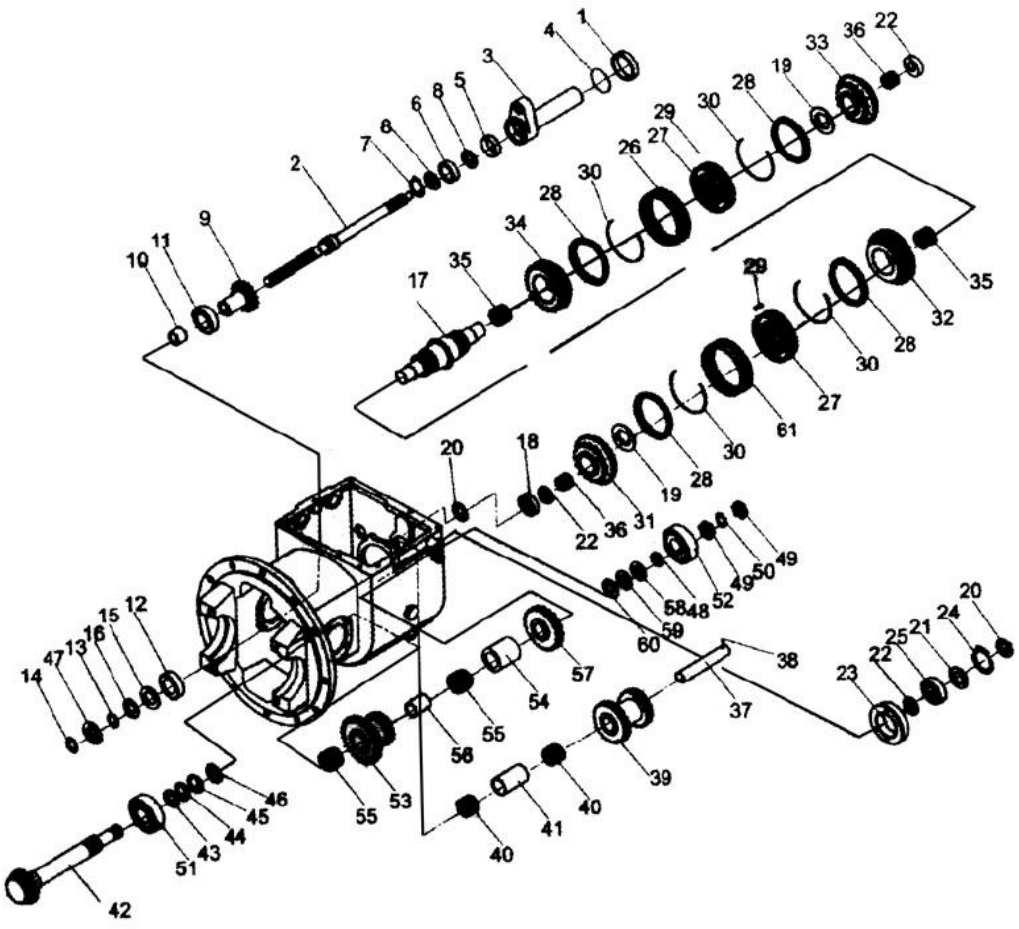
TRANSMISSION (MANUAL TRANSMISSION)



TRANSMISSION (MANUAL TRANSMISSION)

ITEM NO.	DESCRIPTION	PART NO.	QTY.
1	Collar	C0C012510100	1
2	Shaft, main drive	C0C012520100	1
3	Retainer, bearing	C0C012530100	1
4	42x3.5 O-ring	GB1235760000	1
5	Seal, oil	C0C012540100	1
6	6205 Bearing, ball	GB2769400000	1
7	47 snap ring	GB8932860000	1
8	25 snap ring	GB894186000o	2
9	Gear, input	C0C012550100	1
10	Spacer	C0C012560100	1
11	6207 Bearing, ball	GB2769400000	1
12	50207 Bearing, ball	GB2729300000	1
13	Spacer	C0C012570100	1
14	35 Snap ring	GB8941860000	1
15	72/78.6 Ring, thrust	GB3058900000	1
16	Spacer	C0C012580100	1
17	Shaft, main	C0C012590100	1
18	42306 Bearing, ball	GB2838700000	1
19	48 Snap ring	GB8941860000	2
20	30 Snap ring	GB8941860000	2
21	Spacer	C0C012600100	1
22	Plate, thrust	C0C012610100	2
23	Retainer, bearing	C0C012620100	1
24	72 Snap ring	GB8942860000	1
25	306 Bearing, ball	GB2769400000	1
26	Gear sleeve	C0C012630100	2
27	Gear hub	C0C012640100	2
28	Ring	C0C012650100	4
29	insert	C0C012660100	6
30	Spring	C0C012670100	4

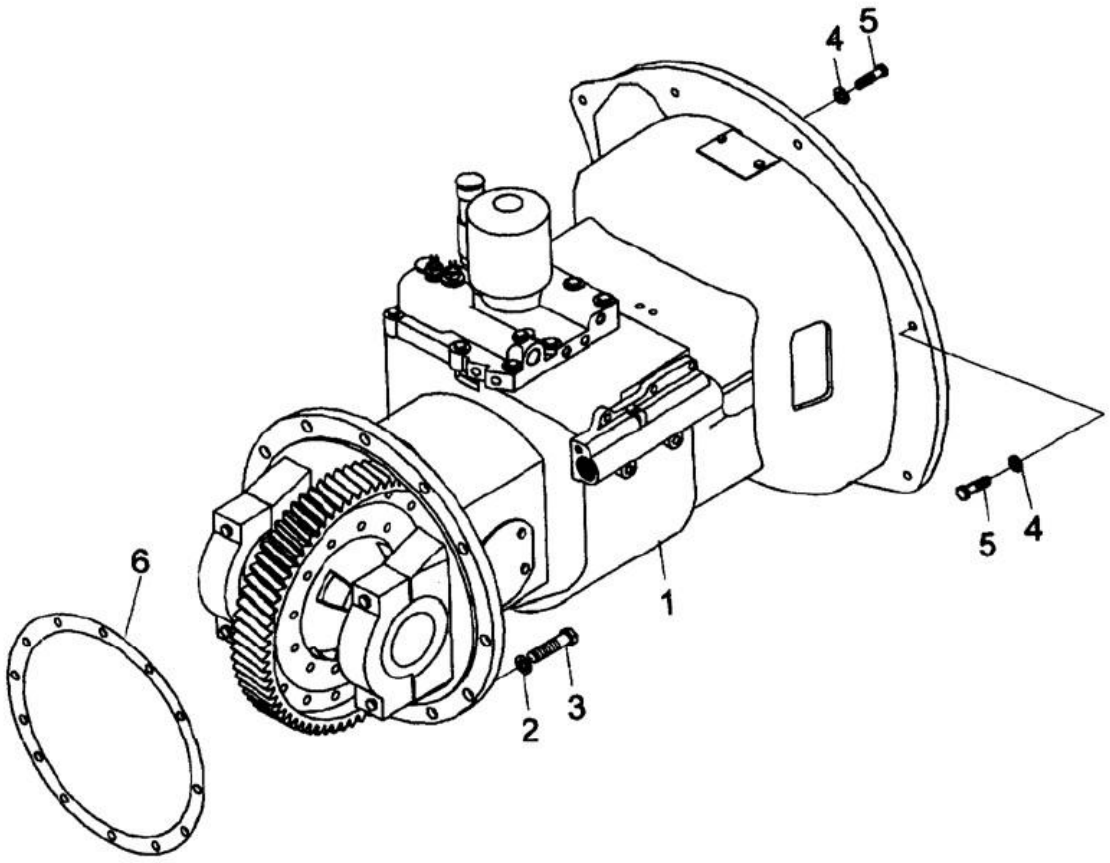
TRANSMISSION (MANUAL TRANSMISSION)



TRANSMISSION (MANUAL TRANSMISSION)

ITEM NO.	DESCRIPTION	PART NO.	QTY.
31	Gear, high speed	C0C012680100	1
32	Gear, low speed	C0C012690100	1
33	Gear, forward	C0C012700100	1
34	Gear, reverse	C0C012710100	1
35	Bearing, needle	C0C012720100	2
36	Bearing, needle	C0C012730100	2
37	Shaft, reverse idler	C0C012740100	1
38	1/4” Ball, steel	GB3088900000	1
39	Gear, reverse idler	C0C012750100	1
40	Bearing, needle	C0C012760100	2
41	Spacer	C0C012770100	1
42	Shaft, output	C0C012780100	1
43	Shim	C0C012790100	1
44	Shim	C0C012800100	2
45	Shim	C0C012810100	2
46	Plate, thrust	C0C012820100	1
47	80 Snap ring	GB8932860000	1
48	Ring	C0C012830100	1
49	M24x1.5 Nut	GB8128800000	2
50	25 Washer thrust	GB8588800000	1
51	30208 Bearing taper roller	GB2979400000	1
52	30205 Bearing taper roller	GB2979400000	1
53	Gear, cluster	C0C012840100	1
54	Spacer	C0C012850100	1
55	Bearing, needle	C0C012860100	2
56	Spacer	C0C012870100	1
57	Gear, output	C0C012880100	1
58	Plate, thrust	C0C012890100	
59	Plate, thrust	C0C012900100	
60	Plate, thrust	C0C012910100	

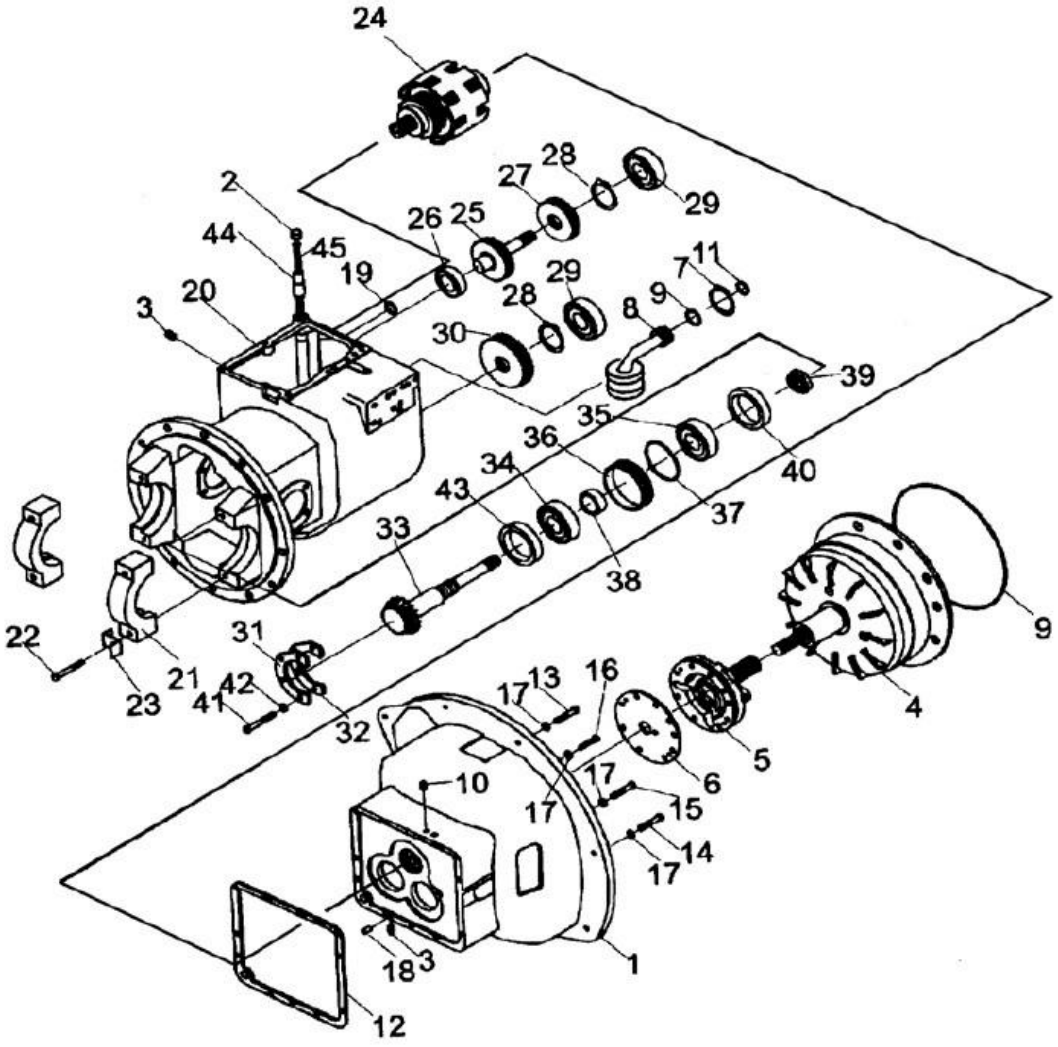
DRIVE UNIT MOUNT (TC TRANSMISSION)



TRANSMISSION (TC TRANSMISSION)

ITEM NO	DESCRIPTION	PART NO.	QTY.
1	Drive unit	180301110000	1
2	φ 12 Washer	901611200000	12
3	M12x1.25x40-6g Bolt	901101222090	12
4	φ 10 Washer	901611000000	9
5	M10 x 35 Bolt	901101012070	9
6	FRONT AXLE GASKET	180301060300	1
7	TRANSMISSION REPAIR KIT	C0C020260200	1

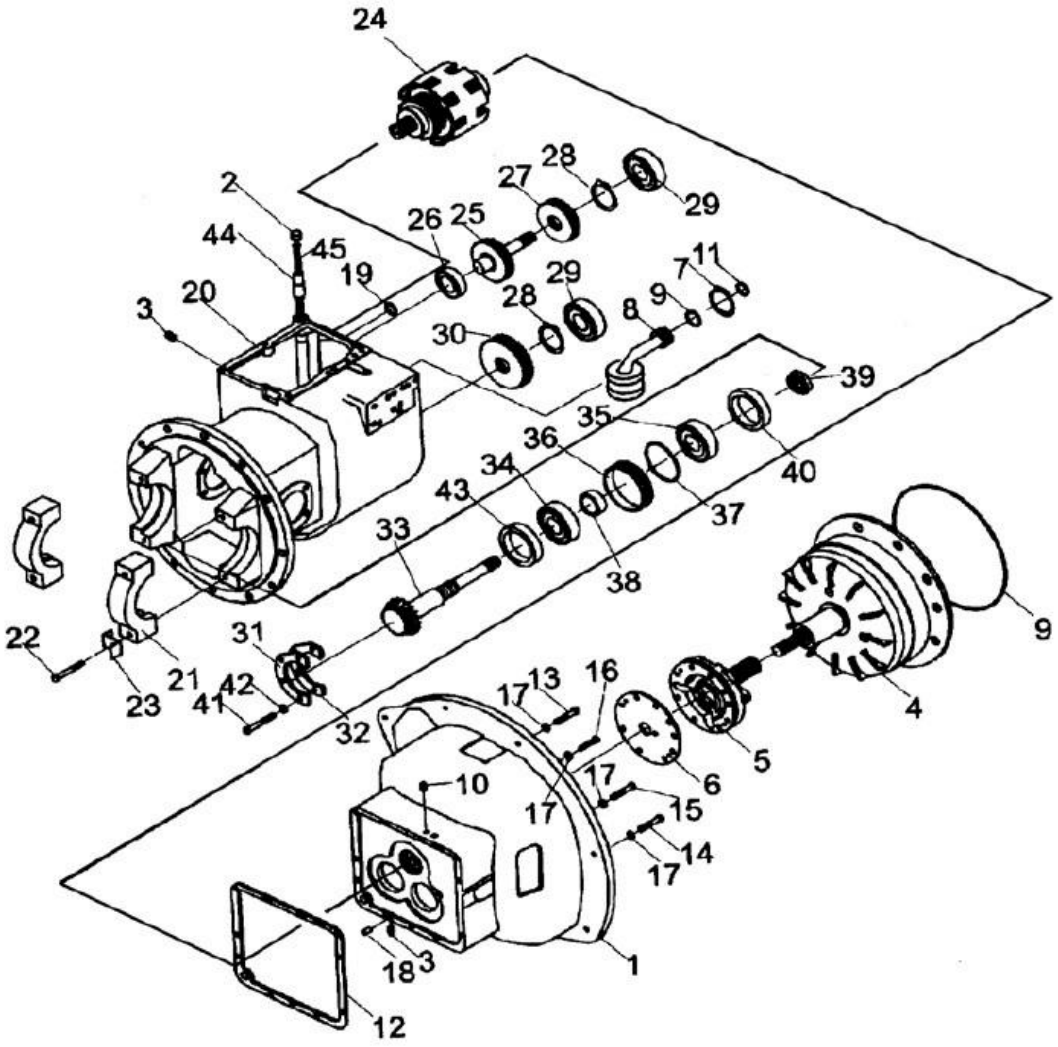
DRIVE UNIT MOUNT (TC TRANSMISSION)



DRIVE UNIT MOUNT (TC TRANSMISSION)

ITEM NO.	DESCRIPTION	PART NO.	QTY.
1	Case tor-con	C0C022200100	1
2	Cup	C0C022210100	1
3	1/2” Plug	QZ2854000000	4
4	Tor-con Assy.	C0C020500100	1
5	Charging pump Assy.	C0C020310100	1
6	Gasket	C0C022220100	1
7	35 Snap ring	GB8948600000	1
8	Strainer	C0C020320100	1
9	35x3.5 O_ring	GB1235760000	1
10	1/4” Plug	QZ2852000000	2
11	28x3.5 O_ring	GB1235760000	1
12	Gasket	C0C022230100	1
13	M10x1.25x75 Bolt	GB5785860000	1
14	M10x1.25x55 Bolt	GB5785860000	3
15	M10x1.25x50 Bolt	GB5785860000	1
16	M10x1.25x30 Bolt	GB5785860000	4
17	10 Washer	GB9387000000	9
18	B12x20 Pin	GB1197600000	2
19	15x2.4O_ring	GB1235760000	1
20	Case mission	C0C020330100	1
21	Cap, bearing	C0C022240100	2
22	Bolt	C0C022250100	4
23	Plate, lock	C0C022260100	4
24	Clutch hydraulic	C0C020330100	1
25	Shaft, idler	C0C020340100	1

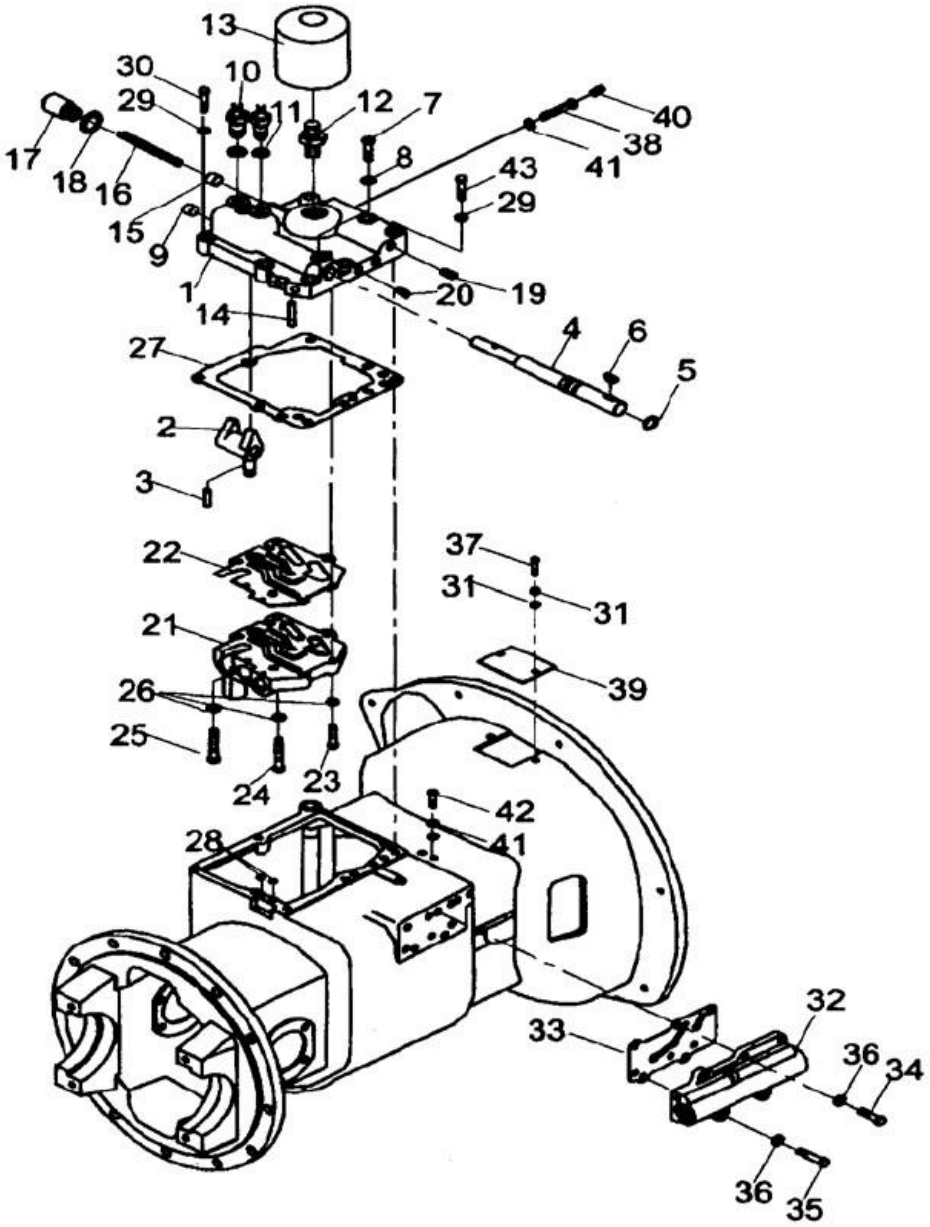
DRIVE UNIT MOUNT (TC TRANSMISSION)



DRIVE UNIT MOUNT (TC TRANSMISSION)

ITEM NO.	DESCRIPTION	PART NO.	QTY.
26	30206 Bearing	Gb2766400000	1
27	Gear, idler	C0C02270100	1
28	24 Snap ring	GB8938600000	2
29	30207 Bearing	Gb2766400000	2
30	Gear output	C0C022280100	1
31	Plate, bearing support	C0C022290100	1
32	Shim	C0C022300100	
--	Shim	C0C022310100	
--	Shim	C0C022320100	
33	Shaft output	C0C022330100	1
34	30208 bearing	Z75080000000	2
35	32208 bearing	Z72080000000	1
36	Retainer, oil seal	C0C022340100	1
37	80x3.1O_ring	GB1235760000	1
38	Seal oil	C0C022350100	1
39	Nut	C0C022360100	1
40	Shim	C0C022370100	1
--	Shim	C0C022380100	1
--	Shim	C0C022390100	1
41	M8x20 bolt	901100812040	4
42	8 Washer	901610800000	15
43	Collar	C0C022400100	1
44	Pipe oil fill	C0C022410100	1

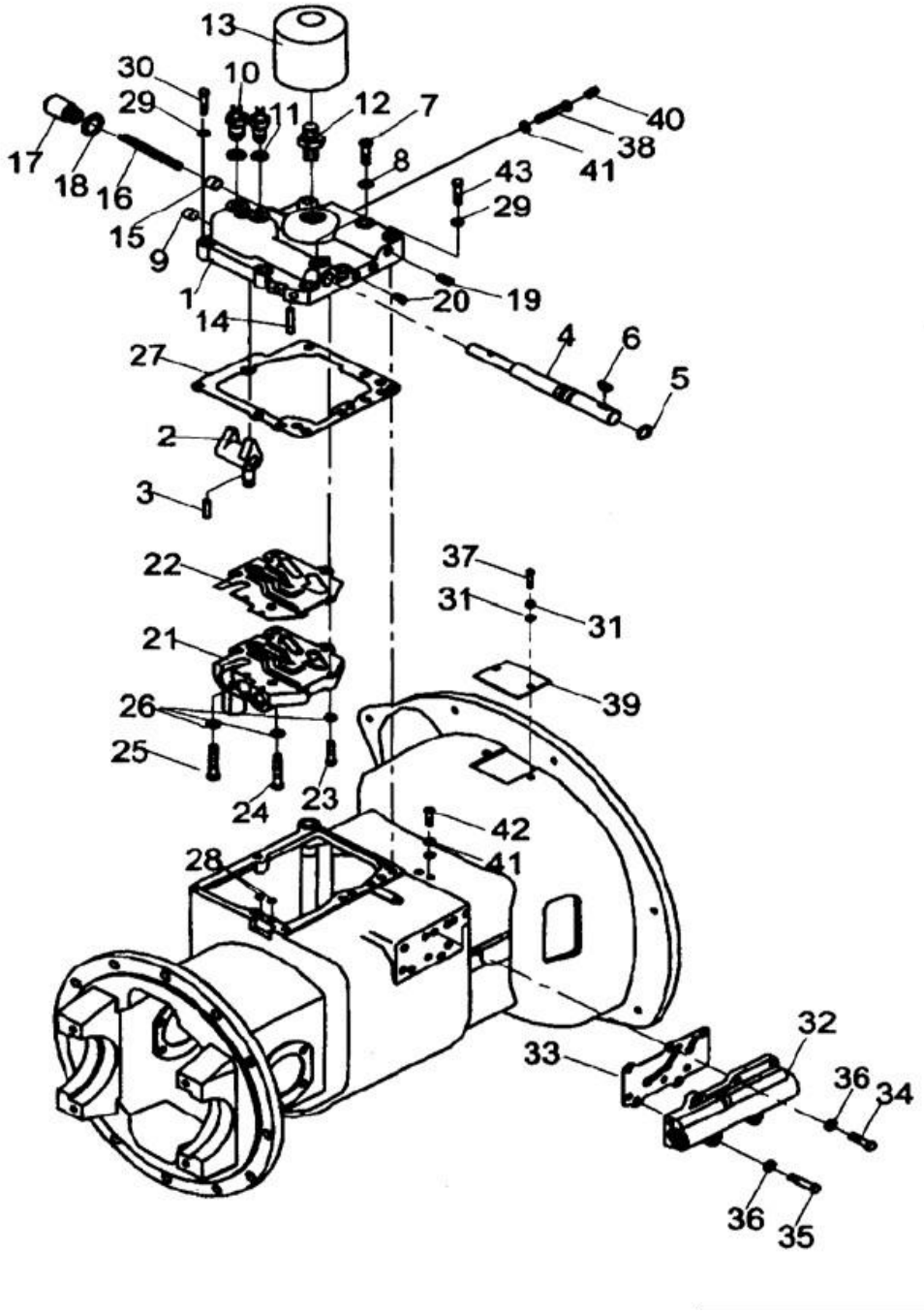
DRIVE UNIT (COVER INCHING VALVE)



DRIVE UNIT (COVER INCHING VALVE)

ITEM NO.	DESCRIPTION	PART NO.	QTY.
1	Cover	C0C020400100	1
2	Arm, shift	C0C020410100	1
3	6x32 pin, lock	GB8797600000	1
4	Shaft, shift arm	C0C022500100	1
5	20x2.4O_ring	GB1236760000	1
6	Key 5x19	GB1099790000	1
7	Bolt	C0C022510100	1
8	Shim	C0C022520100	1
9	Plug	C0C022530100	7
10	Switch	C0C020420100	1
11	Shim	C0C022540100	2
12	Nipple	C0C020430100	2
13	Filter, oil	C0C020440100	1
14	4x25 pin, lock	GB8797600000	1
15	Piston	C0C020450100	1
16	Piston	C0C022550100	1
17	Cup	C0C022560100	1
18	Packing, Copper	C0C022570100	1
19	1/8” Plug	QZB285100000	1
20	1/4” Plug	QZB285200000	6
21	Control Assy.	C0C020460100	4
--	Electric Controller	C0C020470100	1
22	Gasket	C0C022580100	1
23	M8x35 Bolt	901100812070	2
24	M8x55 Bolt	901100812110	2
25	M8x50 Bolt	901100812100	2
26	8 Shim		6
27	Gasket	C0C022590100	1

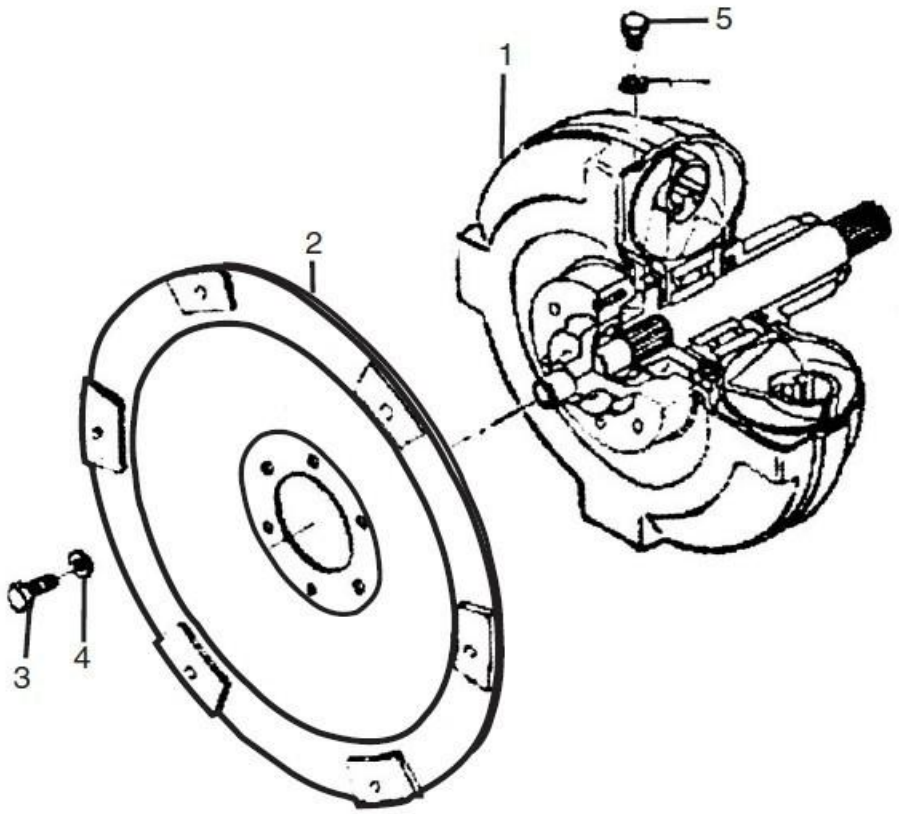
DRIVE UNIT (COVER INCHING VALVE)



DRIVE UNIT (COVER INCHING VALVE)

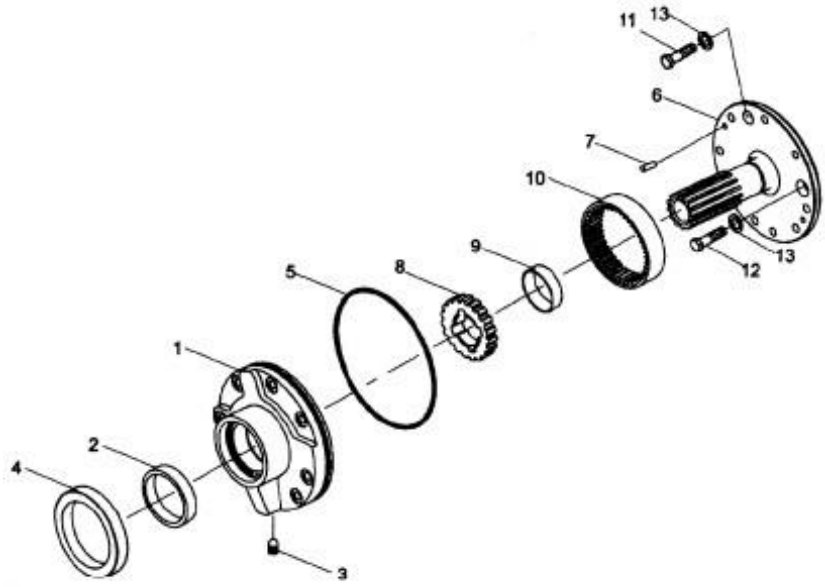
ITEM NO.	DESCRIPTION	PART NO.	QTY.
28	9x1.9 O_ring	GB1235760000	2
29	10 Shim	GB5782860000	8
30	M10x1.25x55 Bolt	GB5782860000	2
31	8 Shim	GB9387000000	3
32	Inching valve Assy.	C0C020800100	1
33	Shim	C0C022600100	1
34	M8x25 Bolt	901100812050	4
35	M8x50 Bolt	901100812100	2
36	8 Shim	GB9387000000	5
37	M8x12 Bolt	GB5783860000	2
38	Bolt	C0C022610100	1
39	Cover, tor-con	C0C020490100	1
40	ZG1/8”Plug	QZB285770000	1
41	Packing copper	C0C022620100	4
42	Bolt	C0C022630100	1
43	M10x1.25x40 Bolt	GB5785860000	6

TORQUE-CONVERTER (TC TRANSMISSION)



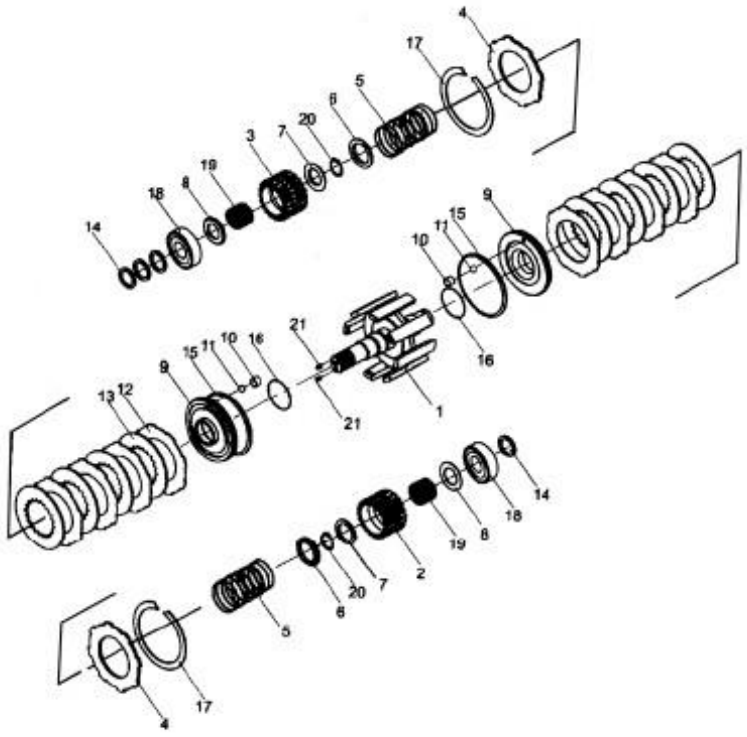
ITEM NO.	DESCRIPTION	PART NO.	QTY.
A	Torque-converter Assy.	COC020300100	1
1	Plate, input	COC020410100	1
2	M10x1.25x15 Bolt	GB5785860000	6
3	φ 10 Washer	901611000000	6
4	M8x1x8 Bolt	GB4576000000	2
5	φ 8 Plug	COC022500100	2

CHARGING PUMP (TC TRANSMISSION)



ITEM NO.	DESCRIPTION	PART NO.	QTY.
A	Charging pump Assy.	COC020500100	1
1	Case, pump	COC020510100	1
2	Bushing	COC022700100	1
3	ZG1/8" Plug	COC022710100	1
4	Seal, oil	COC022720100	1
5	Snap O_ring	COC022730100	1
6	Support starter	COC022740100	1
7	6x16 Pin	GB1198600000	2
8	Gear driven	COC022750100	1
9	Bushing	COC022760100	1
10	Gear drive	COC022770100	1
11	M8x45 Bolt	901100812090	4
12	M8x25 Bolt	901100812050	4
13	Washer	COC022780100	2

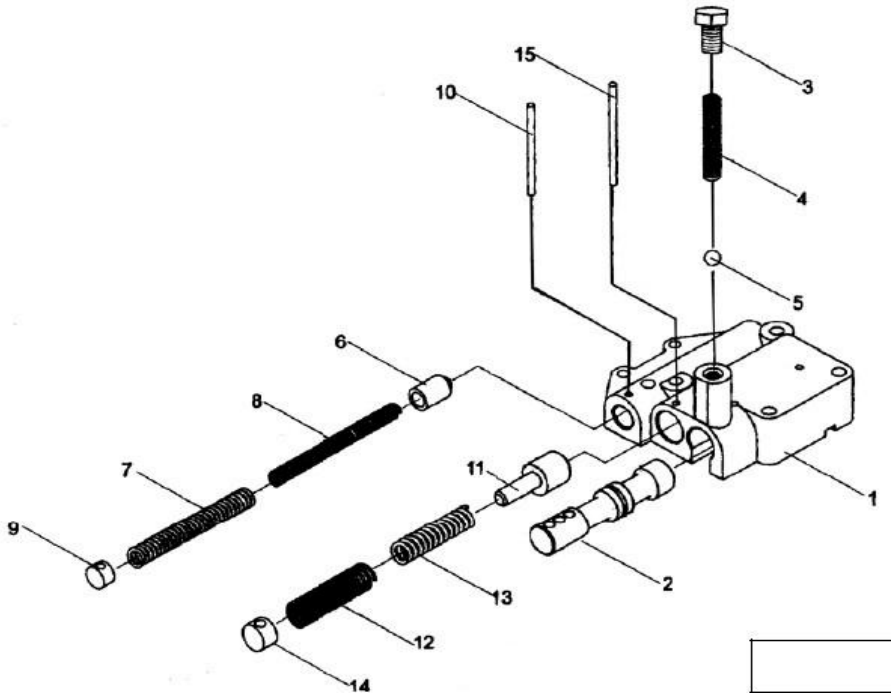
HYDRAULIC CLUTCH (TC TRANSMISSION)



HYDRAULIC CLUTCH (TC TRANSMISSION)

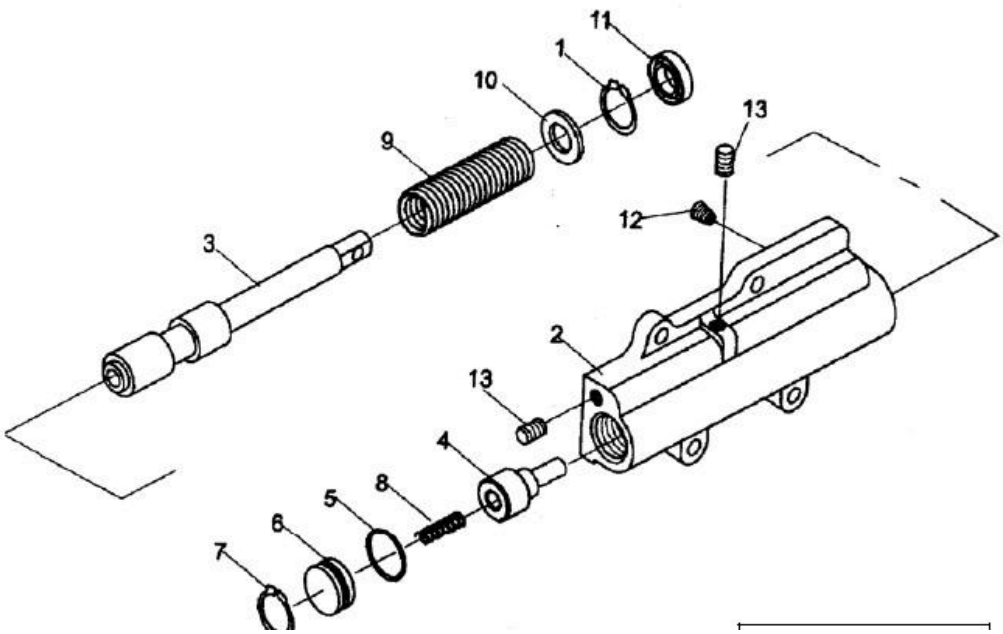
ITEM NO.	DESCRIPTION	PART NO.	QTY.
A	Clutch hydraulic	COC020330100	1
1	Shift, input	COC020610100	1
2	Gear, reverse	COC022800100	1
3	Gear, forward	COC022810100	1
4	Plate, end	COC022820100	2
5	Spring, return	COC022830100	2
6	Seat, Spring	COC022840100	2
7	A Ring, seal	COC022850100	2
8	B Ring, seal	COC022860100	2
9	Piston	COC020620100	1
10	Plug	COC022870100	1
11	1/8” Ball, steel	GB3077700000	1
12	Plate, friction	COC022880100	8
13	Plate, separator	COC022890100	8
14	A Ring seal	COC022900100	4
15	B Ring seal	COC022910100	2
16	O_ring	GB1235760000	2
17	Snap, ring	COC022920100	2
18	62206 bearing	GB2768200000	2
19	Bearing needle	COC022930100	2
20	40 Snap ring	GB8948600000	2
21	M8x8 Plug	GB7885000000	2

CONTROL VALVE (TC TRANSMISSION)



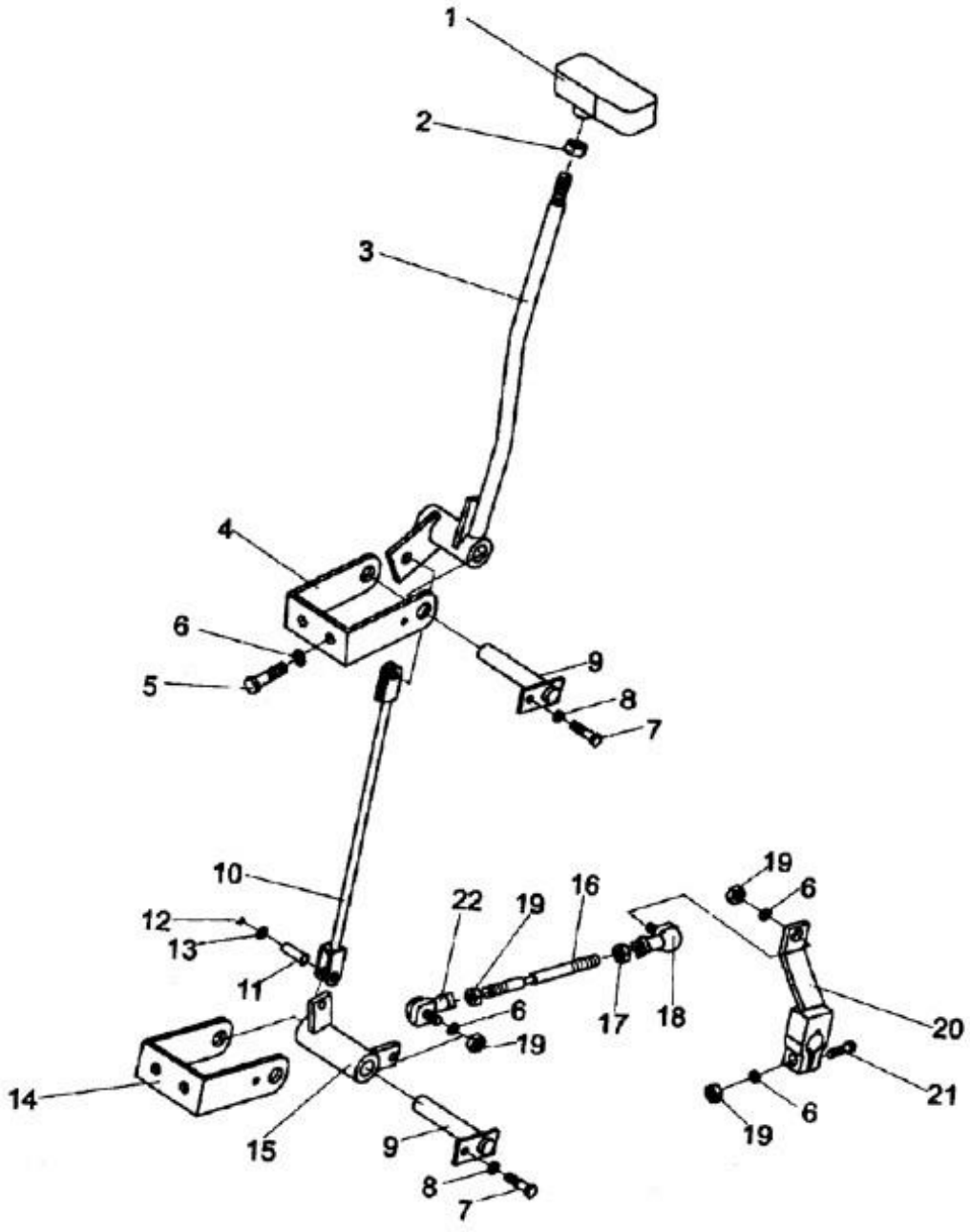
ITEM NO.	DESCRIPTION	PART NO.	QTY.
A	Control valve Assy	COC020460100	1
1	Body valve	COC020710100	1
2	Selector	COC023000100	1
3	Plug	COC023010100	1
4	Spring	COC023020100	1
5	13/32" Ball	GB3087700000	1
6	Piston	COC023030100	1
7	Spring	COC023040100	1
8	Spring	COC023050100	1
9	Plug	COC023060100	1
10	4x35 Pin, lock	GB8797600000	1
11	Spool	COC020720100	1
12	Spring	COC023070100	1
13	Spring	COC023080100	1
14	Plug	COC023090100	1
15	4x40 Pin, lock	GB8797600000	1

INCHING VALVE (TC TRANSMISSION)



ITEM NO.	DESCRIPTION	PART NO.	QTY.
A	Inching valve Assy.	COC020800100	1
1	Snap ring	GB8931861000	1
2	Body valve	COC020810100	1
3	Spool	COC023100100	1
4	Plunger	COC020820100	1
5	23.6x2.65 O_ring	GB3452192000	1
6	Seal oil	COC023110100	1
7	28 Snap ring	GB8931860000	1
8	1.2 x D9.2 x 30	COC023120100	1
9	Spring	COC023130100	1
10	3 x D22.9 x 87.4	COC023140100	1
11	Spring	HG4692690000	1
12	4x35 spacer	COC023150100	1
13	30 x16 x 7 Seal oil Plug choke ZG 1/8” Plug	QZB285770000	2

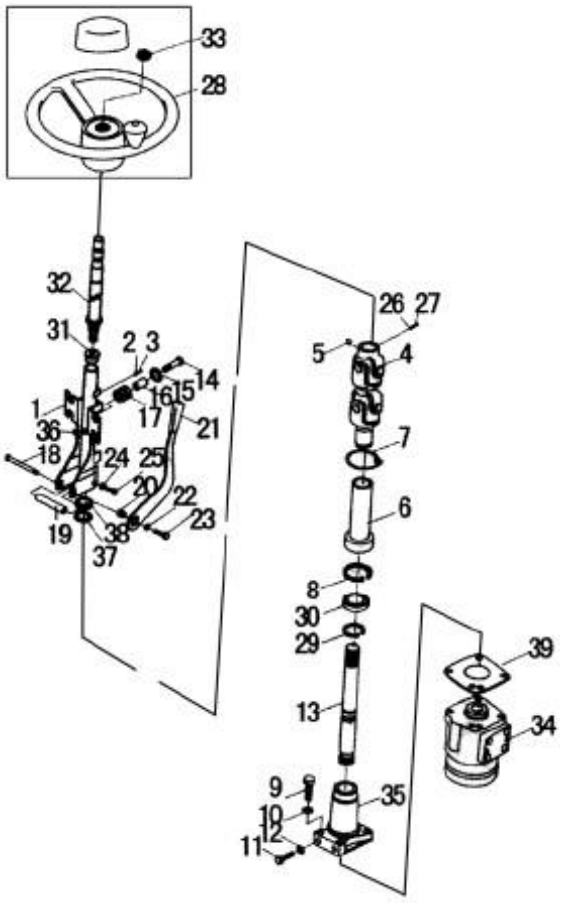
TRANSMISSION CONTROL LINKAGE (TC TRANSMISSION)



TRANSMISSION CONTROL LINKAGE (TC TRANSMISSION)

ITEM NO.	DESCRIPTION	PART NO.	QTY.
1	KNOB ASSY	180301070100	1
2	HEX NUT-M10	901201000000	1
3	ROD ASSY	180301070200	1
4	BRACKET UP	180301070300	1
5	BOLT HEX-M8X25	901100812050	4
6	SPRING WASHER M8	901610800000	7
7	BOLT HEX 6X16	901100612030	2
8	SPRING WASHER M6	901610600000	2
9	SHAFT ASSY	180301070400	2
10	LINK	180301070920	1
11	PIN 8*18	180301070600	2
12	Split Pin 3.2x20	900400300040	2
13	SPRING WASHER M8	901610800000	2
14	BRACKET LOWER	180301070700	1
15	BOSS ASSY	180301070800	1
16	LINK	180301070920	1
17	NUT HEX M8 LH	901200812010	1
18	ELBOW RH	180301070910	1
19	HEX NUT-M8	901200800000	4
20	CONNECTING LINK	180301071000	1
21	BOLT HEX-M8X25	901100812050	1
22	ELBOW LH	180301070930	1
	LINKAGE (SL NO 16,17, 18,19 & 22) (V&J)	COC022150100	1

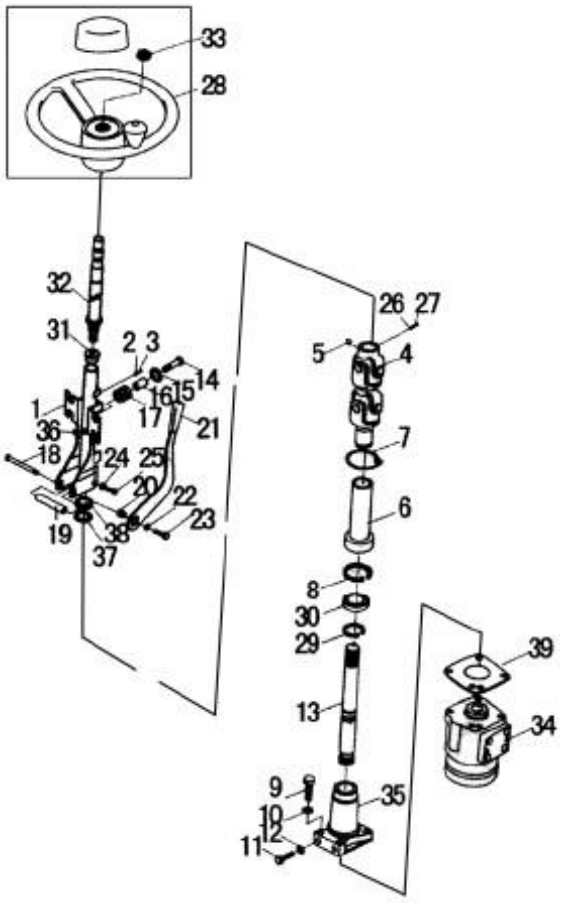
STEERING SYSTEM (TC TRANSMISSION)



STEERING SYSTEM (TC TRANSMISSION)

ITEM NO.	DESCRIPTION	PART NO.	QTY.
1	STEERING COLUMN	180304030300	1
2	SPRING WASHER M6	901610600000	4
3	SCREW M6x15	901570612030	4
4	UNIONJOINT (I) UNIOUN JOINT (V&J)	180304040000 C0E0102101W	1 1
5	M10 x 1 Nipple, grease	GB1152820000	1
6	BOOTFORSTEERING	180304031300	1
7	INTERNAL CIRCLIP Ø37	930371501000	1
8	37 Snap ring	930371501000	1
9	BOLT HEX-M10X50	901101012100	4
10	SPRING WASHER M10	901611000000	4
11	SCREW HEX-M12X25	901501212050	2
12	SPRING WASHER M12	901611200000	2
13	SHAFT (I) SHAFT (LINK) (V&J)	180304020200 C0E012010100	1 1
14	M6 x 35 Bolt	901500612060	4
15	Washer Spring M6	901610600000	4
16	INSERT	180304030260	4
17	RUBBER GROMET FOR STEERING BKT	180304030330	4
18	TILTINGBOLT	180304030700	1
19	SPACER STEERING BKT	180304030500	1
20	LOCKING NUT	180304030800	1

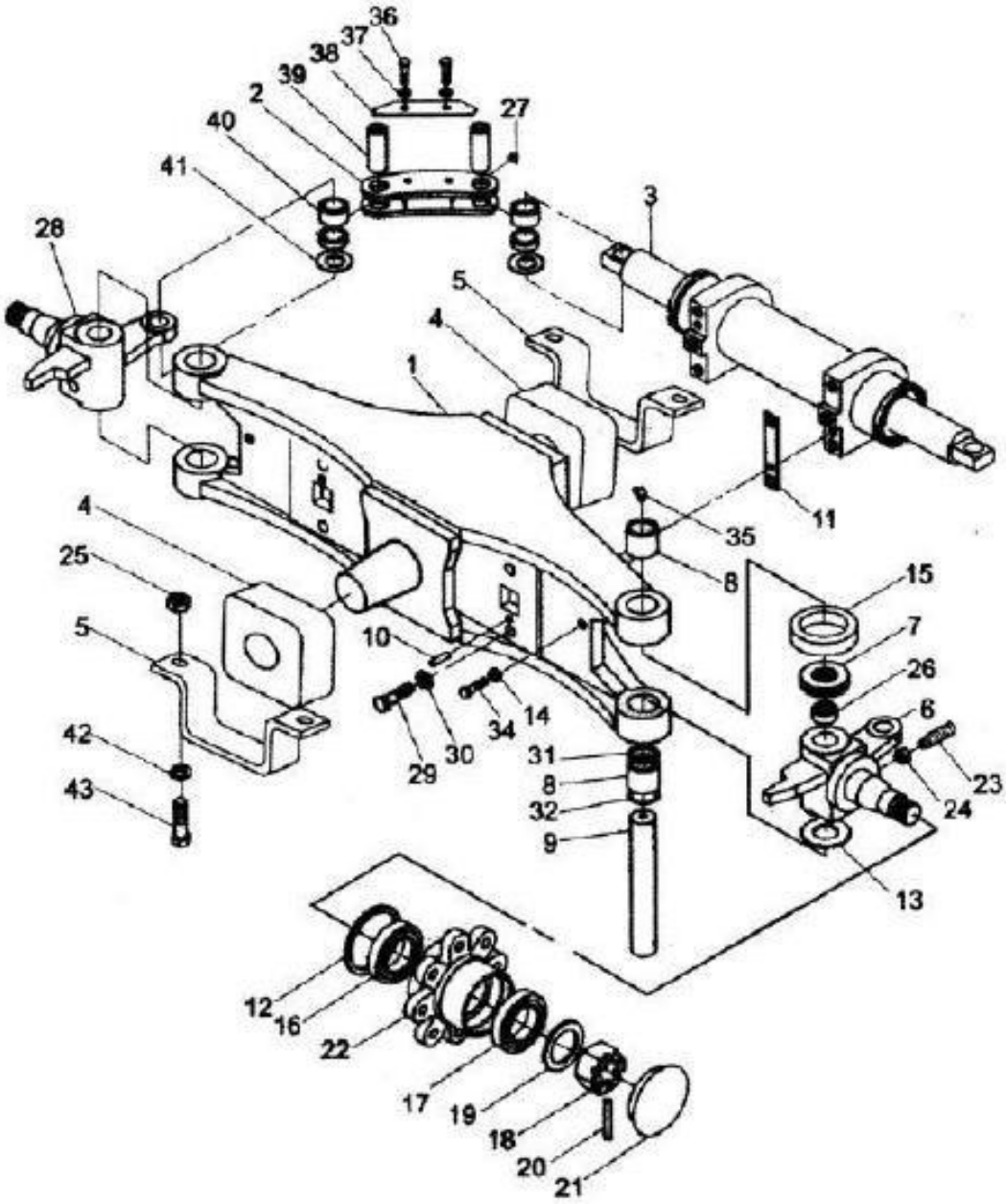
STEERING SYSTEM (TC TRANSMISSION)



STEERING SYSTEM (TC TRANSMISSION)

ITEM NO.	DESCRIPTION	PART NO.	QTY.
21	HANDEL WITH COVER	180304030900	1
22	10 Washer	GB9685000000	1
23	M10 x 16 Bolt (left)	GB5782860000	1
24	Washer	C0E012090100	2
25	LOCK BOLT	180304031000	2
26	8 Washer	901610800000	1
27	M8 x 35 Bolt	901100812070	1
28	STEERING WHEEL (I) STEERING WHEEL (V&J)	180304030400 C0E0010250100	1 1
29	20 Snap ring	930371501000	1
30	61940-2Z bearing	GBT276940000	1
31	61940-2Z bearing	GBT276940000	1
32	ARBOR	180304030350	1
33	NUT M16	901201600000	1
34	ORBITROL UNIT (I) ORBITROL UNIT (V&J)	180304010000 C0E010230100	1 1
35	LOWER COLUMN	180304020100	1
36	Grommet	180304030330	4
37	20 Snap ring	GB8941860000	1
38	61904-Z bearing	GB2769400000	1
39	Shim	C0E012110100	1

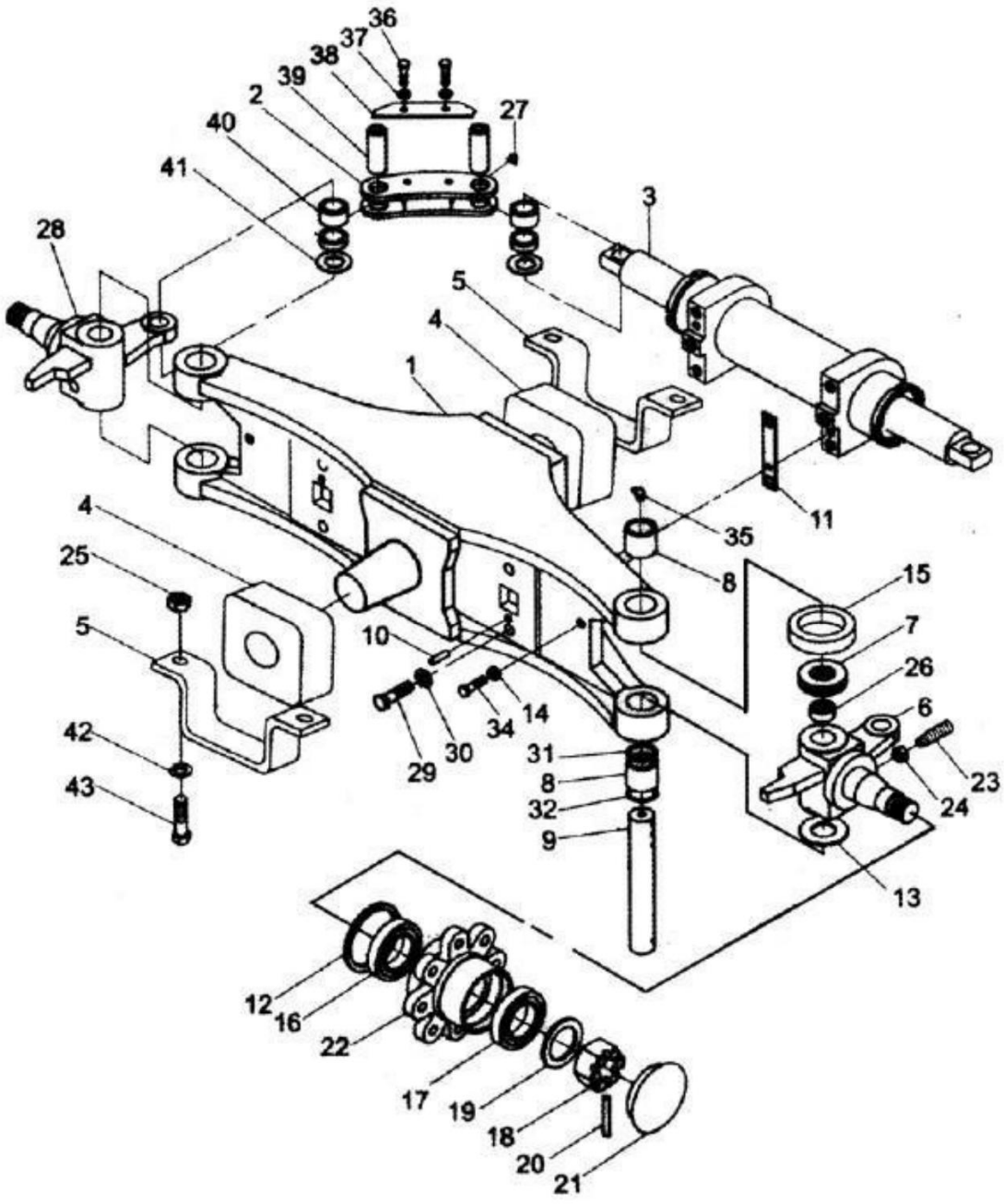
STEERING AXLE



STEERING AXLE

ITEM NO.	DESCRIPTION	PART NO.	QTY.
1	STEERING AXLE FAB ASSY(AF 20 D)	180203030100	1
--	STEERING AXLE FAB ASSY(AF 30 D)	180303030100	1
2	CYLINDER MOUNT END	180303030600	2
3	STEERING CYLINDER	180303050000	1
4	REAR AXLE MOUNTING PAD	180303030200	2
5	TRUNION BRACKET	18035030400	2
6	KNUCKLE RH	180303030230	1
7	THRUST BEARING 51208	933500001200	2
8	NEEDAL BEARING (NK 32/30)	933120000300	4
9	PIN KING	180303030500	2
10	DOWEL Ø10	180303050100	2
11	Shim	C0W01222010	4
12	SEAL 110x85x12	180303030240	2
13	SHIM 0.5 mm	180303030900	2
14	HEX NUT-M14	901201214000	2
15	CAP THRUST BEARING	180303030410	2
16	TAPER ROLLER BEARING(30207 J2/Q)	933300002200	2
17	TAPER ROLLER BEARING(30211 J2)	933300002100	2
18	CASTLE NUT	901263000000	2
19	WASHER PLAIN M30	901603000000	2
20	Split pin 5x65	900400500130	2
21	CAP	180303030220	2
22	HUB ASSY	180303030250	2
23	SCREW GRUB M12x15	901521212030	2
24	HEX NUT-M12	901201212000	2
25	HEX NUT-M16	901201600000	2
26	THRUST BEARING SLEEVE	180303030420	2

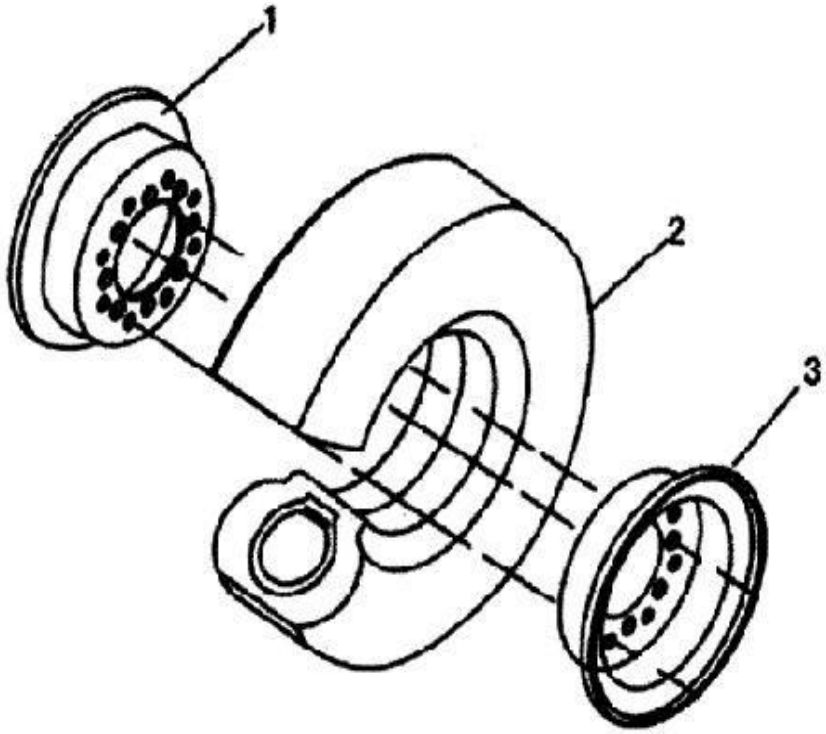
STEERING AXLE



STEERING AXLE

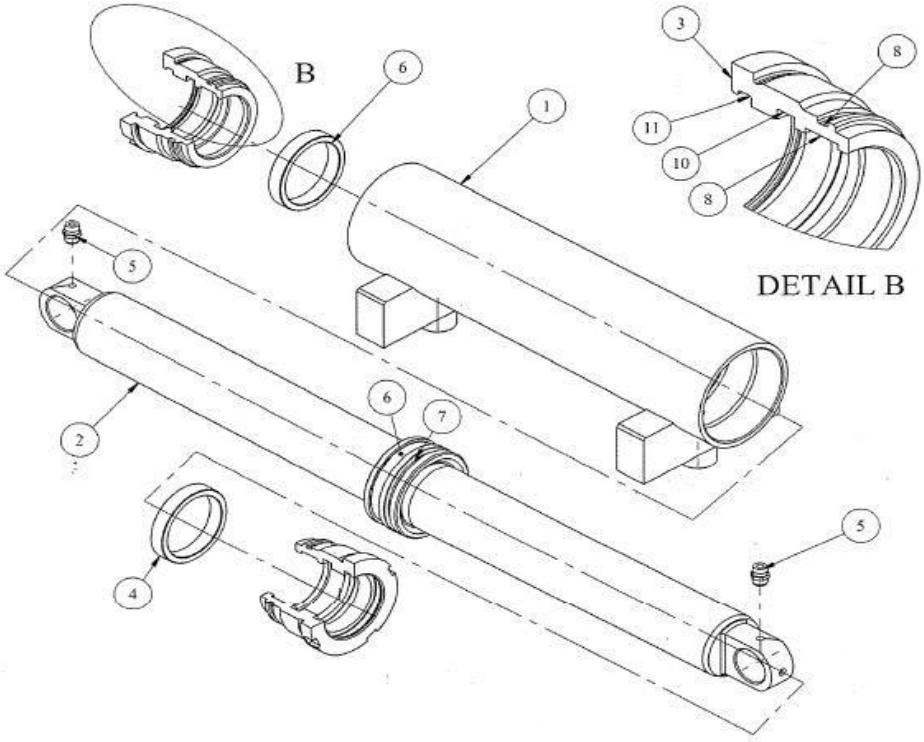
ITEM NO.	DESCRIPTION	PART NO.	QTY.
27	NIPPLE GREASE M6	901300600000	4
28	KNUCKLE LH	180303030310	1
29	SCREW HEX M14X50	901501413100	4
30	WASHER SPRING M14	901611400000	4
31	O-RING 42X32X5	180303031200	2
32	OIL SEAL 42X32X6	180303031100	2
34	SCREW HEX M14X35	901501413070	2
35	NIPPLE GREASE M8	901300800000	2
36	BOLT HEX M8x35, Gr - 8.8	901100812070	4
37	SPRING WASHER M8	901610800000	4
38	LOCK PLATE	180303030700	2
39	CYLINDER MOUNT PIN	180303030800	4
40	ES bearing	C0W01235010	4
41	Shim	C0W01236010	4
42	SPRING WASHER M16	901611600000	4

STEERING WHEEL



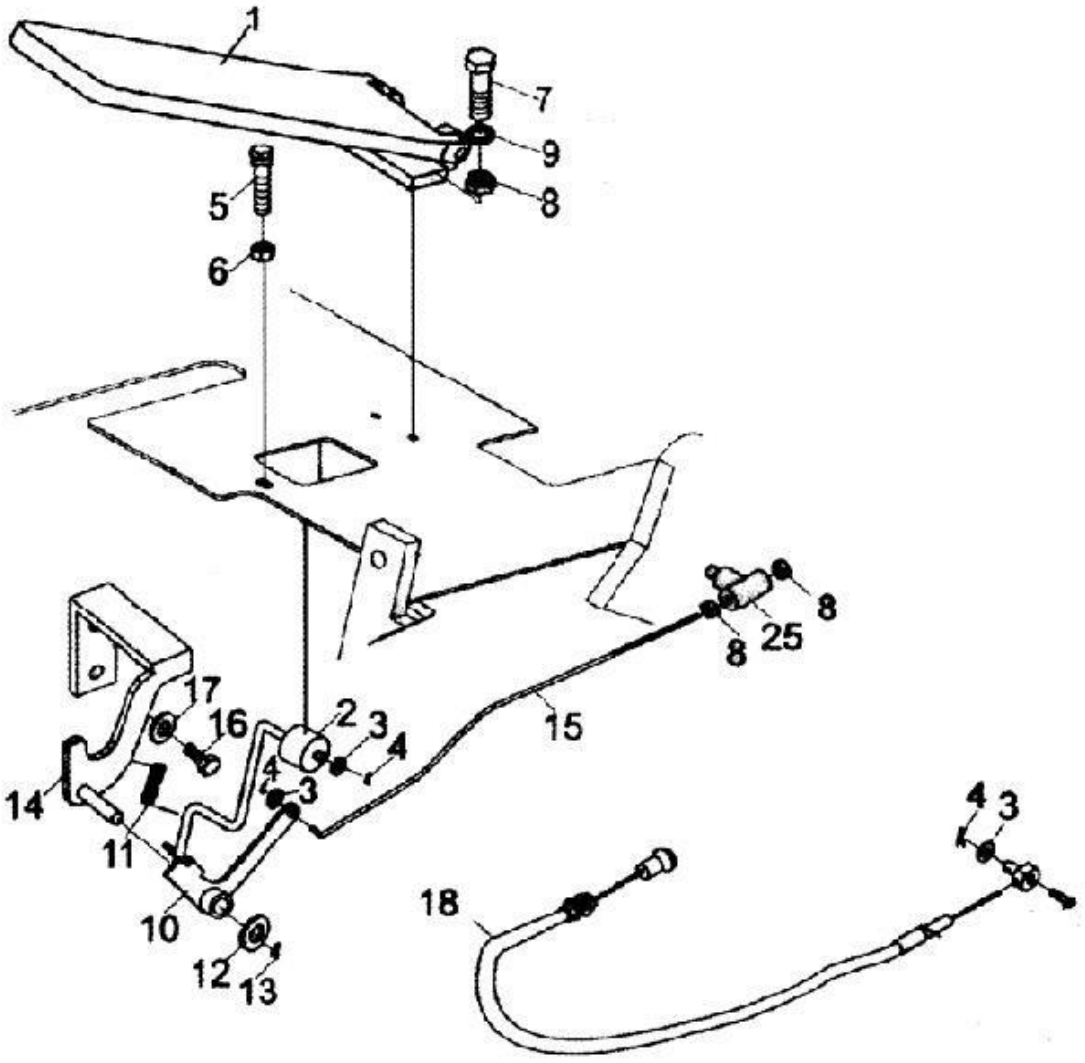
ITEM NO.	DESCRIPTION	PART NO.	QTY.
1	Rim Rear (5.00X10)	960400001250	2
2	TYRE SOLID (6.50X10)	181582400500	2
	TYRE PNUMATIC (6.50X10)	181582400200	2
	TYRE NON MARKING (6.50X10)	181582400700	2

STEERING CYLINDER (I) 1803030600



ITEM NO.	DESCRIPTION	PART NO.	QTY.
1	TUBE WELDMENT MILLING	DC12374-100MA	1
2	PISTON ROD TURNING	DC12374-200LA	1
3	GLAND	DC10223-400ZA	2
4	SPACER	DC12374-650ZA	2
5	GREASING NIPPLE	BG001	2
6	SLYD RING	PART OF SEAL KIT	1
7	P GLYDRING	PART OF SEAL KIT	1
8	O RING NBR	PART OF SEAL KIT	2
9	SLYD RING	PART OF SEAL KIT	2
10	ROD SEAL	PART OF SEAL KIT	2
11	WIPER SEAL	PART OF SEAL KIT	2
12	SEAL KIT OFCONSIST 6 TO 11(I) SEAL KIT (V&J)	180303050000 C0W012300120	1 1

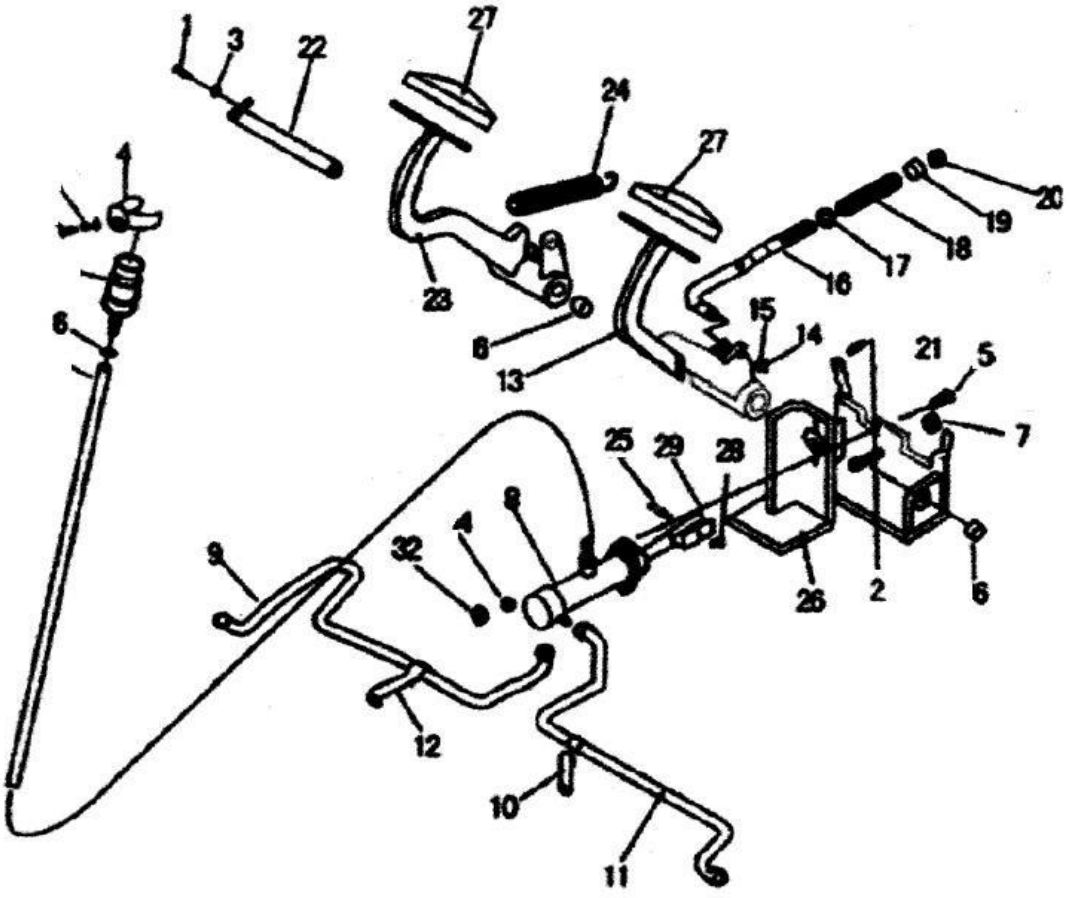
ACCELERATOR PEDAL



ACCELERATOR PEDAL

ITEM NO.	DESCRIPTION	PART NO.	QTY.
1	ACCELERATOR PEDAL (I)	180301080620	1
	ACCELERATOR PEDAL (V&J)	C0S010000100	1
2	PEDAL ROLLER	180301080400	1
3	SPACER	180301080230	3
4	Split Pin 3.2x20	900400300040	3
5	PAN HEAD BOLT M12X60	180301080640	1
6	HEX NUT-M12	901201212000	1
7	BOLT HEX 6X20-GR.8.8	901100612040	2
8	HEX NUT-M6	901200600000	2
9	PLAIN WASHER M6	901600600000	2
10	PEDAL ROD ASSY	180301080200	1
11	TORSIONAL SPRING	180301080300	1
12	WASHER PLAN M10	901601000000	1
13	Split Pin 3.2x20	900400300040	1
14	MOUNTING PLATE ASSY	180301080100	1
15	ACCELERATOR CABLE ASSY.	180301080500	1
16	BOLT HEX-M10X16	901101012030	2
17	WASHER PLAN M10	901601000000	2
18	ENGINE STOP WIRE ASSY (I)	180301010400	1
	ENGINE STOP WIRE ASSY (V&J)	C0S010240100	1

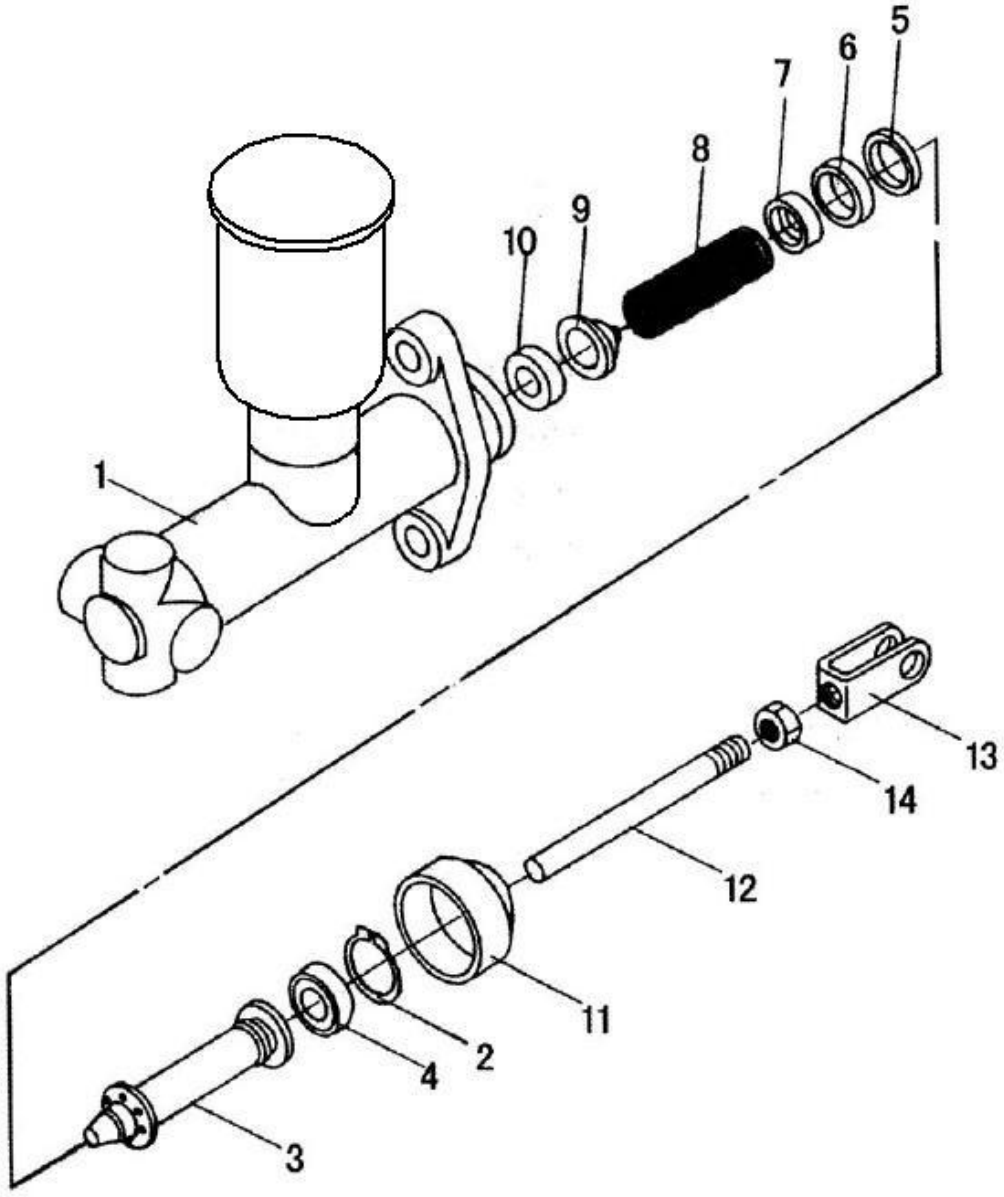
BRAKE & CLUTCH CONTROL



BRAKE & CLUTCH CONTROL

ITEM NO.	DESCRIPTION	PART NO.	QTY.
1	BOLT HEX 6X16	901100612030	1
2	BOLT HEX-M10X35	901101012070	1
3	SPRING WASHER M6	901610600000	1
4	Washer Plain M10	901601000000	2
5	BOLT HEX-M10X35	901101012070	1
6	BRAKE BUSH INNER 25	180301091300	2
7	HEX NUT-M10	901201000000	4
8	MASTER CYLINDER ASSY (I) MASTER CYLINDER ASSY (I) TVS (NOV 2015) MASTER CYLINDER (V & J SERIES)	180301090800 18302090900 COX010300100	1 1 1
9	TUBE 1 FROM MAS CYL TO WHEEL CLY (I) TUBE 1 FROM MAS CYL TO WHEEL CLY (V&J)	180330260000 C0X030220100	1 1
10	TUBE HOLDING **(I SERIES)** TUBE HOLDING (V&J)	180301091430 C0X030220100	1 1
11	TUBE 2 FROM MAS CYL TO WHEEL CLY	180330270000	1
12	TUBE HOLDING PLATE	180301091430	1
13	**CLUTCH PEDAL ASSY (I SERIES)** **CLUTCH PEDAL (V & J SERIES)**	180330090100 C0X010240100	1 1
14	Split Pin-Dia3x20	900400300040	1
15	Washer Plain M10	901601000000	1
16	Clutch Lever Fab.	180330090510	1
17	Spring Rester Washer	180330090540	1
18	Clutch Lever Spring	180330090530	1
19	Lock Nut Hex M12	180330090550	1
20	Nut Hex M12	901201200000	1
21	BRAKE SWITCH STOPPER	180301091100	1
22	PEDAL PIN ASSY	180330090300	1
23	**BRAKE PEDAL ASSY (I SERIES)** **BREAK PADEL (V&J SERIES)**	180330090200 C0X010260100	1 1
24	BRAKE SPRING	180301090900	2
NOTE : CHANGE MASTER CYLINDER (I) TVS MAKE WITH CONNECTING TUBE WEF NOV 15			

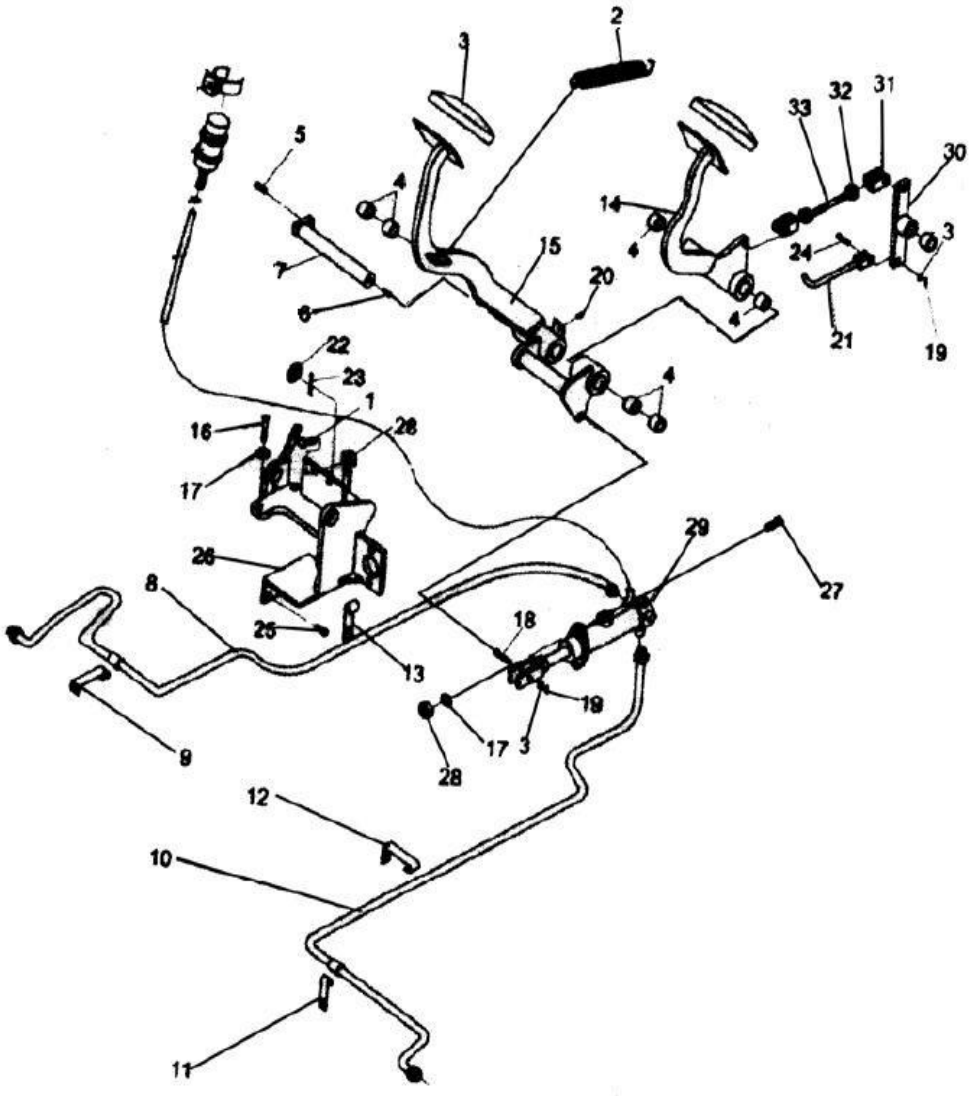
MASTER CYLINDER



MASTER CYLINDER

ITEM NO.	DESCRIPTION	PART NO.	QT Y
A	MASTER CYLINDER ASSY (I)	180301090800	1
	MASTER CYLINDER ASSY (I) TVS (NOV 2015)	180302090900	1
	MASTER CYLINDER (without reservoir) (V&J)	COX010300100	1
	MASTER CYLINDER (with reservoir) (V&J)	COX0133001J0	1
1	Body	C0X012800100	1
2	Ring stopper	C0X012810100	1
3	Piston	PC0910000000	1
4	Cup secondary		1
5	Spacer cup		1
6	Cup secondary		1
7	Shear, spring		1
8	Spring		1
9	Valve check		1
10	Seat valve		1
11	Boots		1
12	Rod, push	C0X012910100	1
13	Clevis	C0X012920100	1
14	M8 Nut	GB6170860000	1
15	Bushing rubber	C0X012930100	1
16	Union	C0X012940100	1
	BUNDY TUBE TVS R	180302090900	1
	BUNDY TUBE TVS L	180302092900	1
	DISTRIBUTOR	101202400600	1
	NOTE : CHNAGED ALL CONNECTING TUBE WITH TVS IN (I) SERISE		

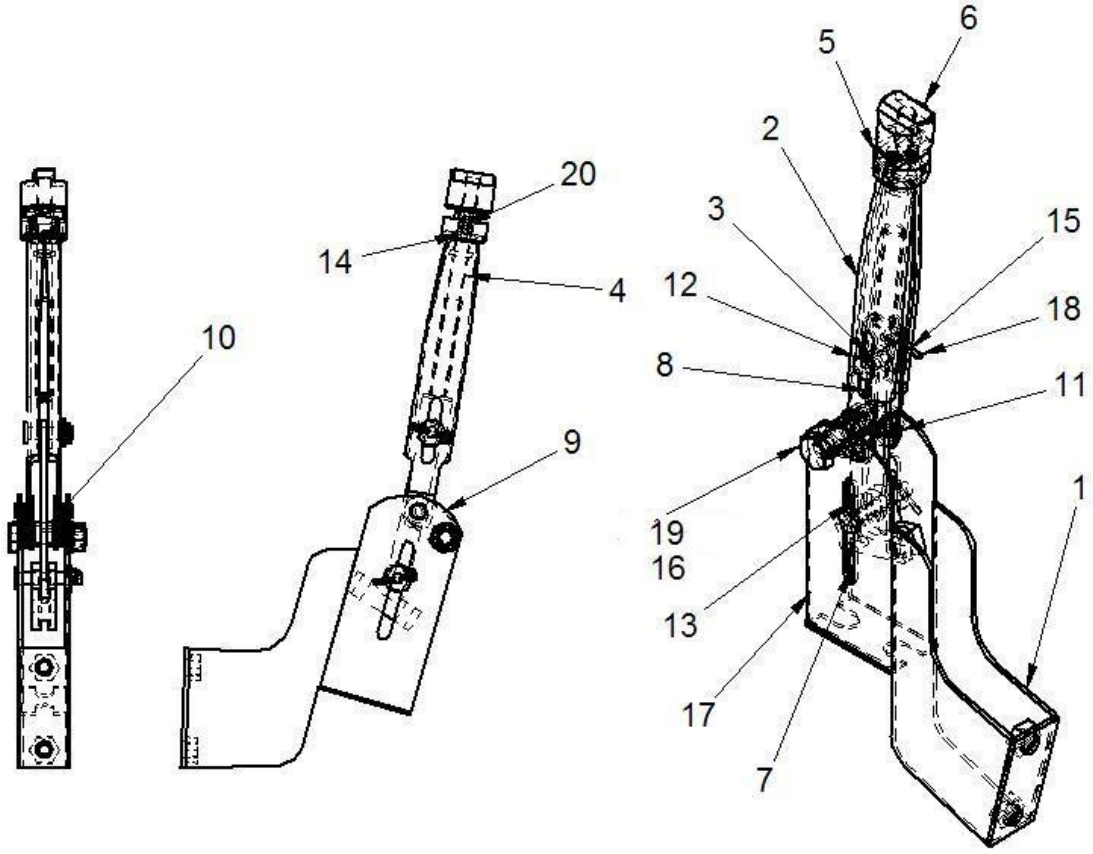
BRAKE & INCHING CONTROL



BRAKE & INCHING CONTROL

ITEM NO.	DESCRIPTION	PART NO.	QTY.
1	BOLT HEX-M10X45	901101012090	1
2	BRAKE SPRING	180301090900	2
3	PEDAL COVER	180301091000	2
4	BRAKE BUSH INNER 25	180301091300	6
5	BOLT HEX 6X16	901100612030	1
6	SPRINGWASHERM6	901610600000	1
7	PEDAL PIN ASSY	180301090600	1
8	TUBE 1 ASSY FROM MASTER CYL TO WHEEL CYL	180301091400	1
9	TUBE HOLDING PLATE	180301091430	1
10	TUBE 2 ASSY FROM MASTER CYL TO WHEEL CYL	180301091500	1
11	TUBE HOLDING PLATE	180301091430	1
12	TUBE HOLDING PLATE	180301091430	1
13	TUBE HOLDING PLATE	180301091430	1
14	INCHINGPEDALASSY	180301090500	1
15	BRAKE ASSY	180301090400	1
16	BOLT HEX-M10X35	901101012070	2
17	SPRINGWASHERM10	901611000000	2
18	CLEVIS PIN	180301090730	3
19	Split Pin-Dia3x20	900400300040	5
20	BRAKE SWITCH STOPPER	180301091100	1
21	INCHING LINK ASSY 2.	180301091200	1
22	WASHERPLAINM8	901600800000	1
23	Split Pin-Dia2x20	900400200040	1
24	CLEVIS PIN	180301090730	1
25	BOLT HEX-M10X45	901101012090	2
26	BRACKET ASSY	180301090100	1
27	BOLT HEX-M10X35	901101012070	2
28	HEX NUT-M10	901201000000	2
29	MASTER CYLINDER ASSY (I) MASTER CYLINDER TVS	180301090800 180302090900	1 1
30	INCHING LINK STOPER ASSY	180301091600	1
31	FORK	180301090720	1
32	Nut Hex M8 LH	901200812010	1
33	STUD M8	180301090710	1

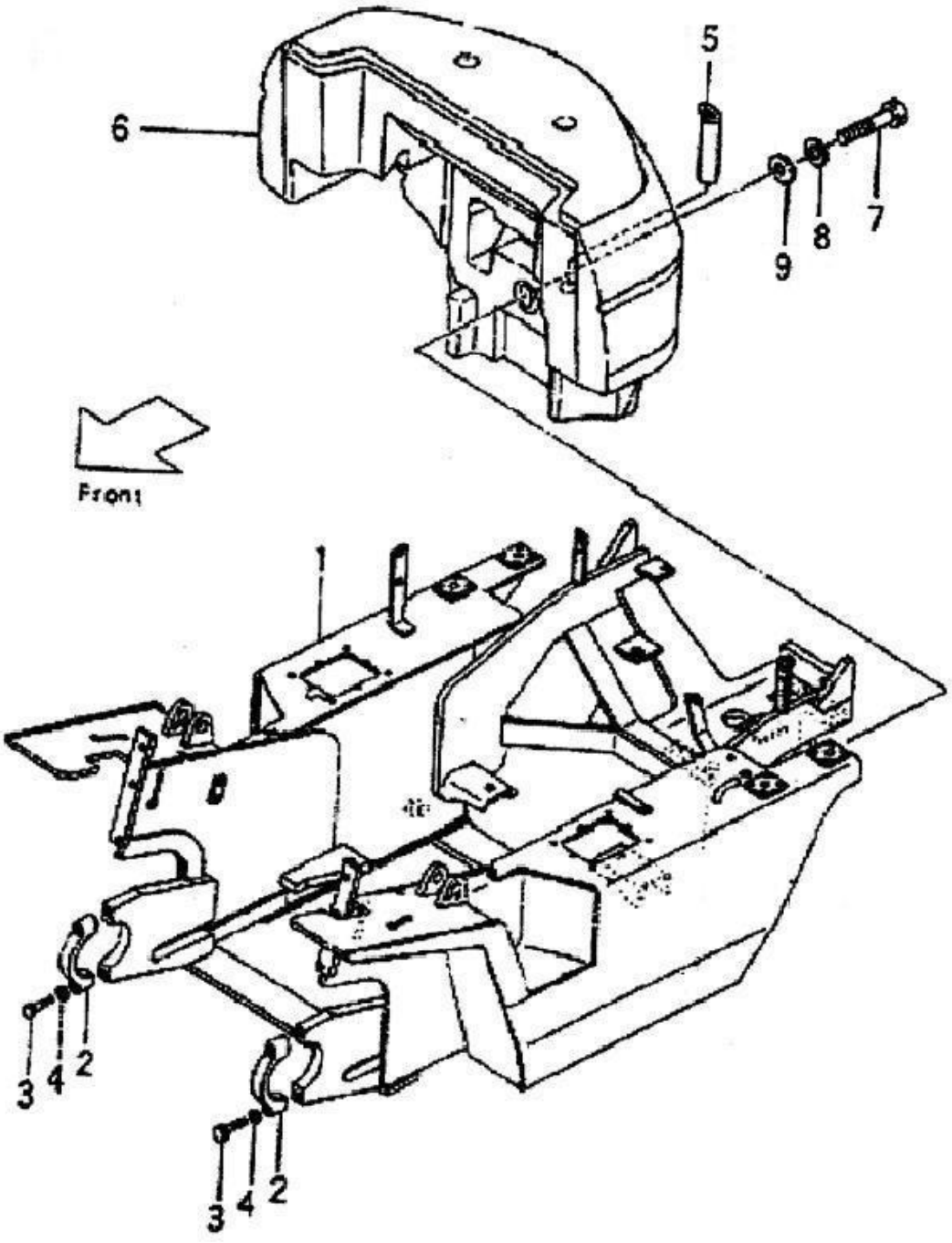
BRAKE LEVER



BRAKE LEVER

ITEM NO.	DESCRIPTION	PART NO.	QTY.
1	BRAKE FAB ASSY (I) BRAKE LEVER (V&J)	180301201000 C0T010000010	1 1
2	HANDLE ASSY	180301202000	1
3	FORK ASSY	180301203000	1
4	ADJUSTINGSCREW	180301204000	1
5	ADJUSTINGKNOB	180301205000	1
6	LOCK NUT	180301206000	1
7	LINK PLATE	180301208000	1
8	LEVER PIVOT PIN ASSY	180301209000	2
9	BUSH SHORT	180301210000	1
10	SPACER	180301211000	6
11	PINFOR HANDLE	180301212000	1
12	WIRE MTG. BRACKET	180301101400	1
13	SP DIA 6	180301100700	2
14	WASHER PLAIN M8	901600800000	2
15	Nut Hex M10, Gr.8	901201012000	1
16	PIN D8X38	180301101500	1
17	Split Pin-Dia3x20	900400300040	2
18	Washer Spring M10	901611000000	1
19	SPRING5.5X1X10.8	180301100800	2
20	M10 SCREW HEX	901501012090	1

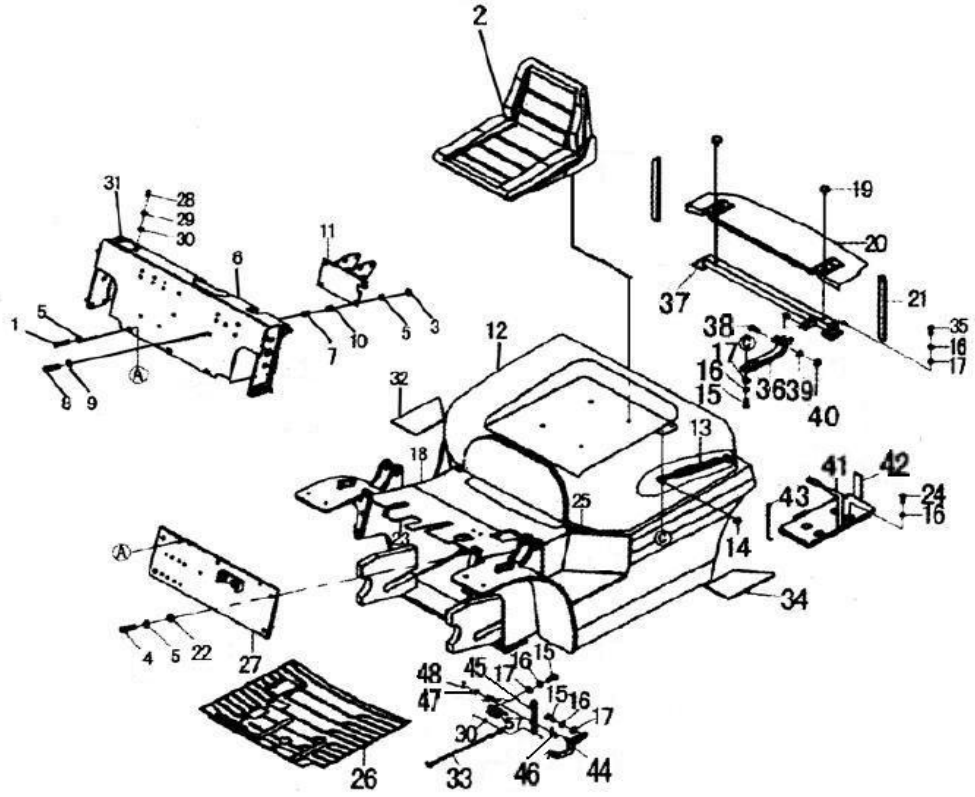
CHASSIS & COUNTER WEIGHT



CHASSIS & COUNTER WEIGHT

ITEM NO.	DESCRIPTION	PART NO.	QTY.
1	CHASSIS ASSEMBLY 20D	180205000000	1
--	CHASSIS ASSEMBLY 30D	180305000000	1
2	AXLE MTG. CLAMP	180305050000	2
3	BOLT HEX M16X100	901101612200	4
4	SPRING WASHER M16	901611600000	4
5	PIN Ø25 WITH RING	180306040000	1
6	COUNTER WEIGHT AF 20 D	180206010000	1
--	COUNTER WEIGHT AF 30 D	180306010000	1
7	HEX BOLT M30X200	901103012400	1
8	SPRING WASHER M30	901613000000	1
9	WASHER PLAIN M30	901603000000	1

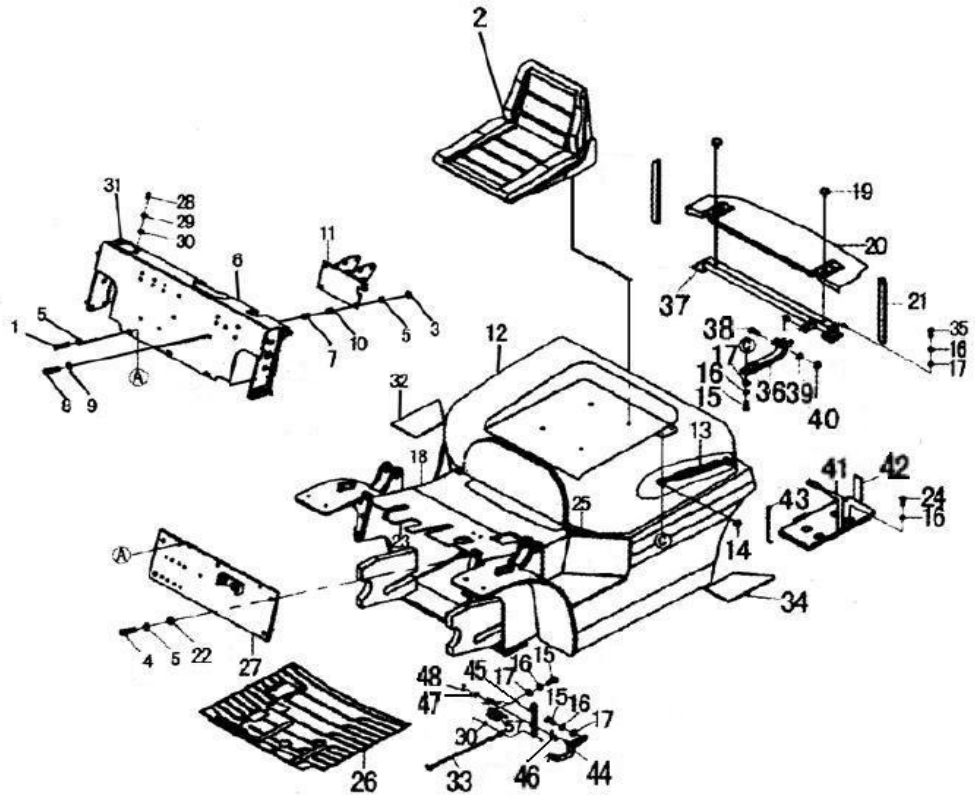
HOOD, FLOOR BOARD & SEAT



HOOD, FLOOR BOARD & SEAT

ITEM NO.	DESCRIPTION	PART NO.	QTY.
1	BOLT HEX-M10X20	901101012040	3
2	DRIVER SEAT	180317000000	1
3	HEX NUT-M10	901201000000	4
4	BOLT HEX-M16X35	901101612070	4
5	SPRING WASHER M16	901611600000	4
6	UPPER HOOD ASSY	180307010100	1
7	RUBBER GROMET	180304030250	4
8	BOLT HEX-M10X50	901101012100	4
9	SPRING WASHER M10	901611000000	4
10	INSERT	180304030260	4
11	MOUNTING BRACKET	180304030020	1
12	BONNET ASSY	180307050000	1
13	BONNET SHOCKER	180307060600	1
14	HEX NUT-M8	901200800000	2
15	BOLT HEX-M10X35	901101012070	4
16	SPRING WASHER M10	901611000000	4
17	WASHER PLAIN M10	901601000000	4
18	FLOOR BOARD BACK	180307030000	1
19	LOCKING BOLT M10	180307070100	2
20	RADIATOR COVER	180307070000	1
21	FOAM PAD	180306020000	2
22	WASHER PLAIN M16	901601600000	4
23	FLOOR BOARD FRONT	180307020000	1
24	Screw M10x16	901101012030	4

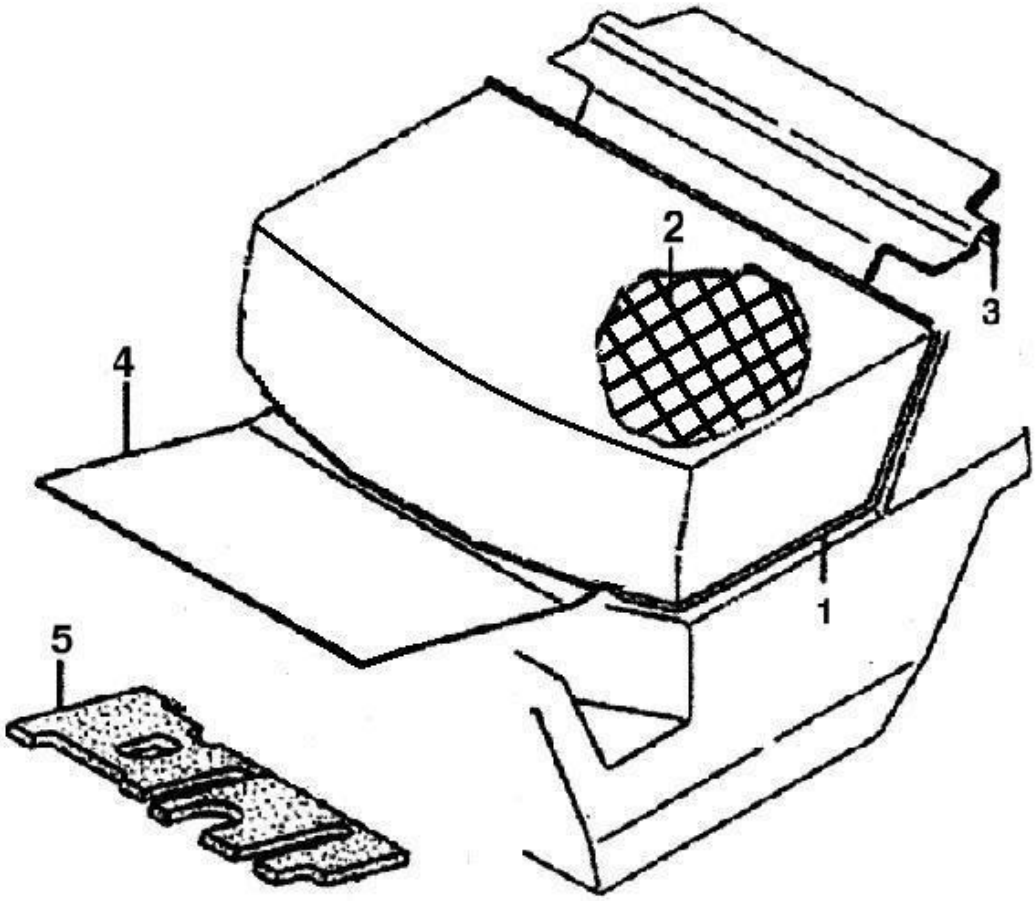
HOOD, FLOOR BOARD & SEAT



HOOD, FLOOR BOARD & SEAT

ITEM NO.	DESCRIPTION	PART NO.	QTY.
25	BONNET HEAT SHIELD	180307050200	1
26	FLOOR MAT	180301110300	1
27	LOWER HOOD ASSEMBLY	180307010200	1
28	SCREW HEX M6X30	901500612060	2
29	PLAIN WASHER M6	901600600000	2
30	SPRING WASHER M6	901610600000	2
31	PLASTIC POCKET	180307010500	1
32	FOOT PAD SHEET RH	180305080000	1
33	HOOD LOCK CABLE	180330240000	1
34	FOOT PAD SHEET LH	180305090000	1
35	BOLT HEX-M10X25	901101012050	4
36	MOUNTING BRACKET ASSY	180307060400	2
37	BONNET MOUNTING BRACKET ASSY	180307060000	1
38	SNAP HEAD PIN DIA 10	180307060500	2
39	WASHER PLAIN M10	901601000000	2
40	Split Pin-Dia3x20	900400300040	2
41	BATTERY MTG PLATE	180309020000	1
42	BATTERY MOUNTING CLAMP	180309030000	1
43	SCREW ROD WITH WING NUT	300173400300	1
44	PLATE 2	180307050620	1
45	PLATE 1	180307050610	1
46	Torsional Spring	180307050660	1
47	SPRING WASHER M10	901611000000	2
48	BOLT HEX-M10X25	901101012050	2

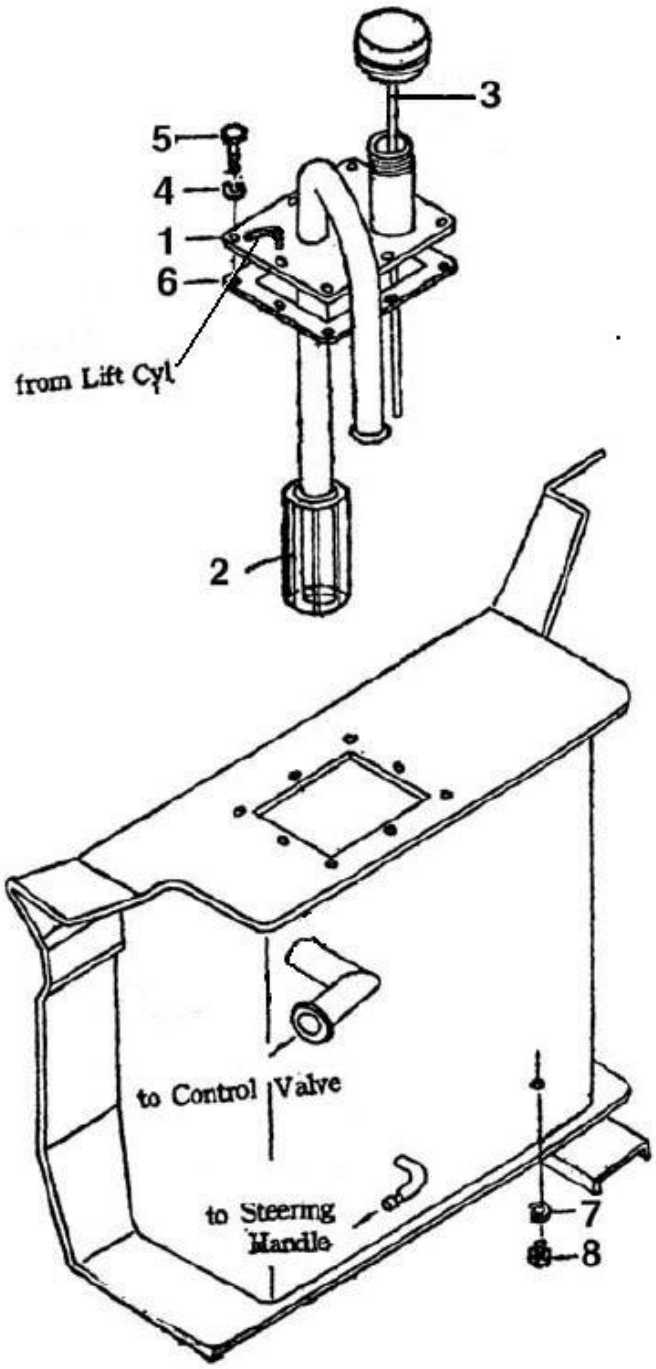
INSULATOR MAT



INSULATOR MAT

ITEM NO.	DESCRIPTION	PART NO.	QTY.
1	BONNET BEAD	180301110100	1
2	BONNETHEATSHIELD	180307050200	1
3	RADIATOR COVER BEAD	180301110210	1
4	FLOOR MAT	180301110300	1
5	FLOOR BOARD INSULATOR	180301110400	1

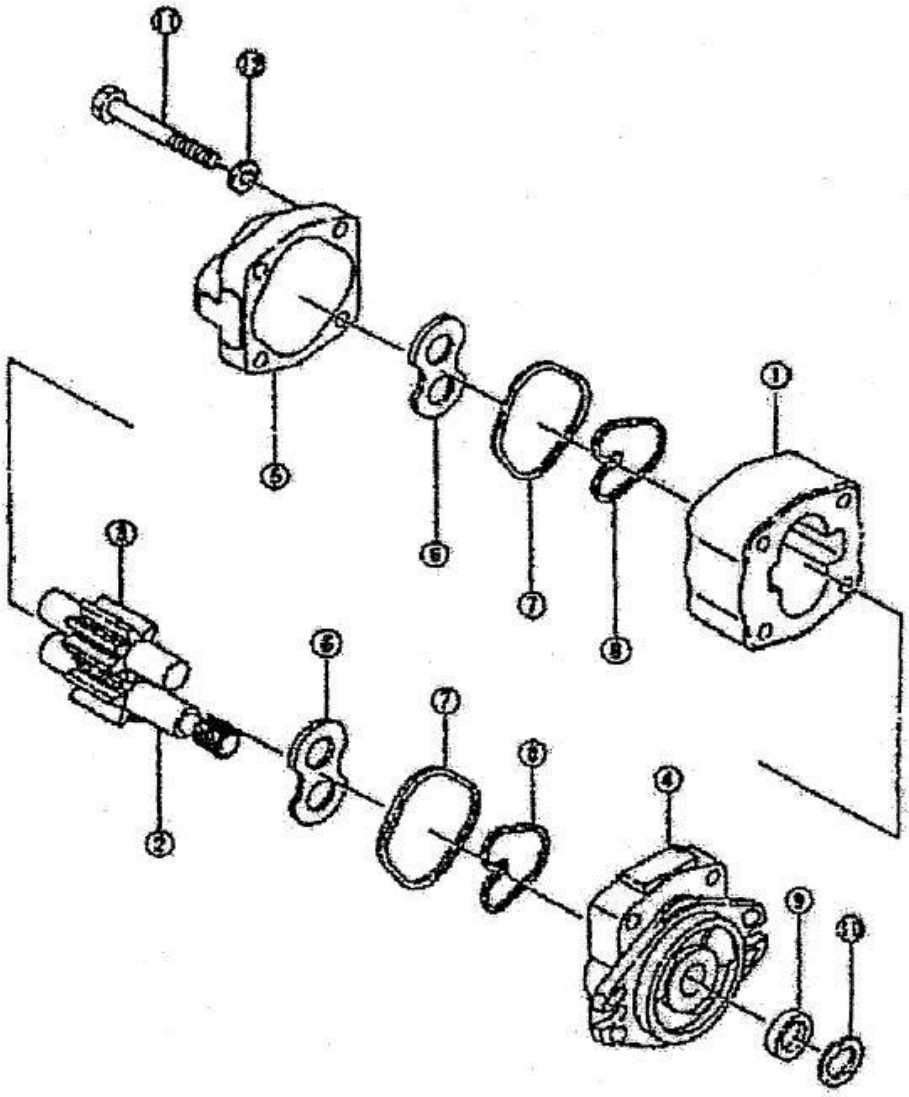
HYDRAULIC OIL TANK



HYDRAULIC OIL TANK

ITEM NO.	DESCRIPTION	PART NO.	QTY.
1	HYD COVER ASSY	180308020100	1
2	STRAINER HY. TANK (I)	180308020400	1
	STRAINER HY. TANK (V&J)	AWU63X180J00	1
3	BREATHER CUM DIPSTICK	180308020300	1
4	SPRING WASHER M8	901610800000	8
5	BOLT HEX-M8X35	901100812070	8
6	TANK COVER GASKET	180308020200	1
7	DOWTY SEAL M24	925081001200	1
8	MAGNETIC PLUG M 24X 1.5	100083301900	1

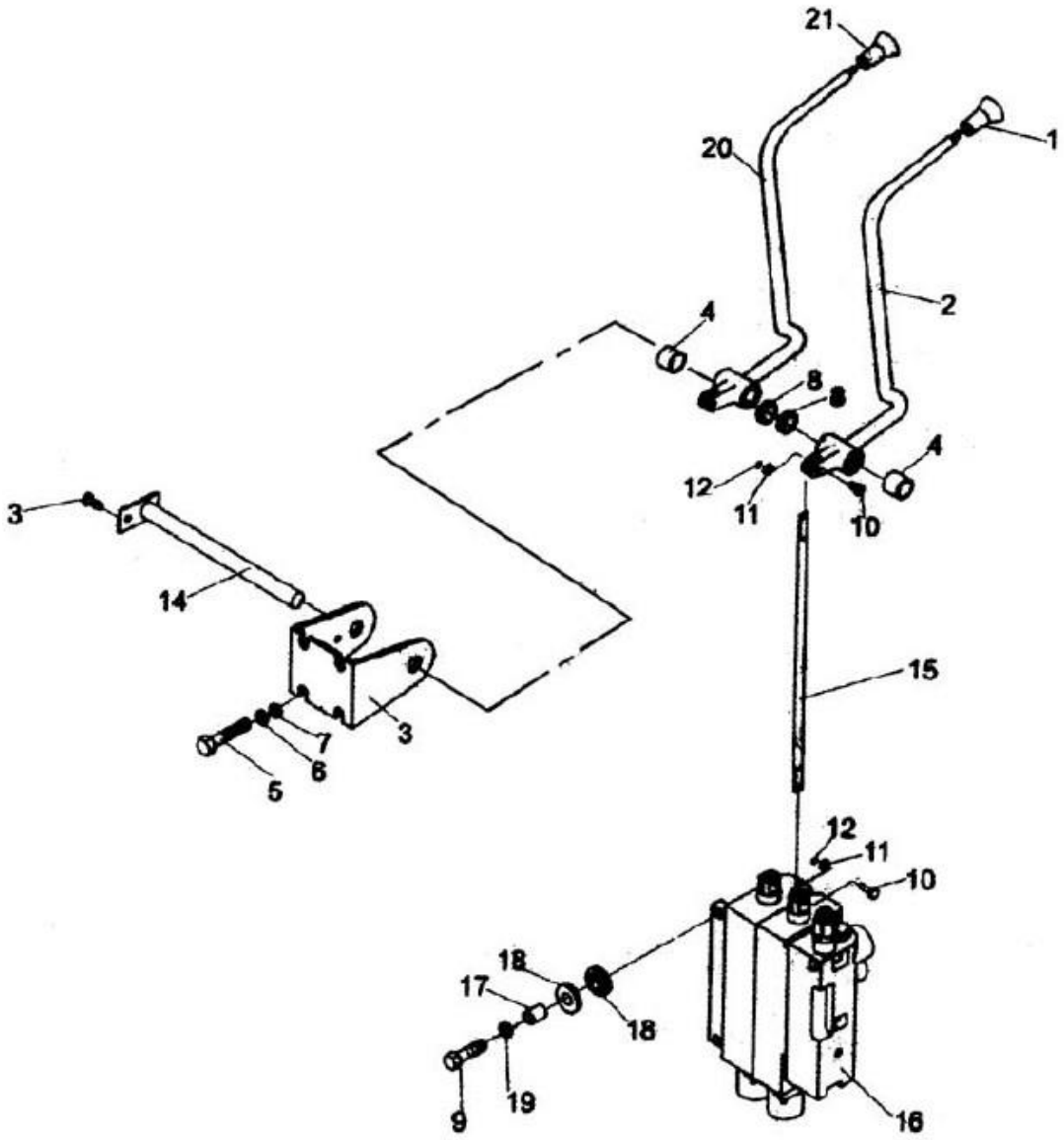
GEAR PUMP



GEAR PUMP

ITEM NO.	DESCRIPTION	PART NO.	QTY.
A	Gear pump (I) Gear Pump (V&J)	180308090000 CBTF430AFHLO	1 1
1	Cover	PART OF PUMP	1
2	Body		1
3	Bushing		2
4	Bushing		2
5	Gear, drive		1
6	Gear, driven		1
7	Cover front		1
8	Ring backing		2
9	Ring backing		2
10	Ditto		2
11	Ditto		2
12	Bolt		1
13	Washer		1
14	Seal oil		1
15	Washer		1
	HY. PUMP SEAL KIT	ASGPA315L000	1

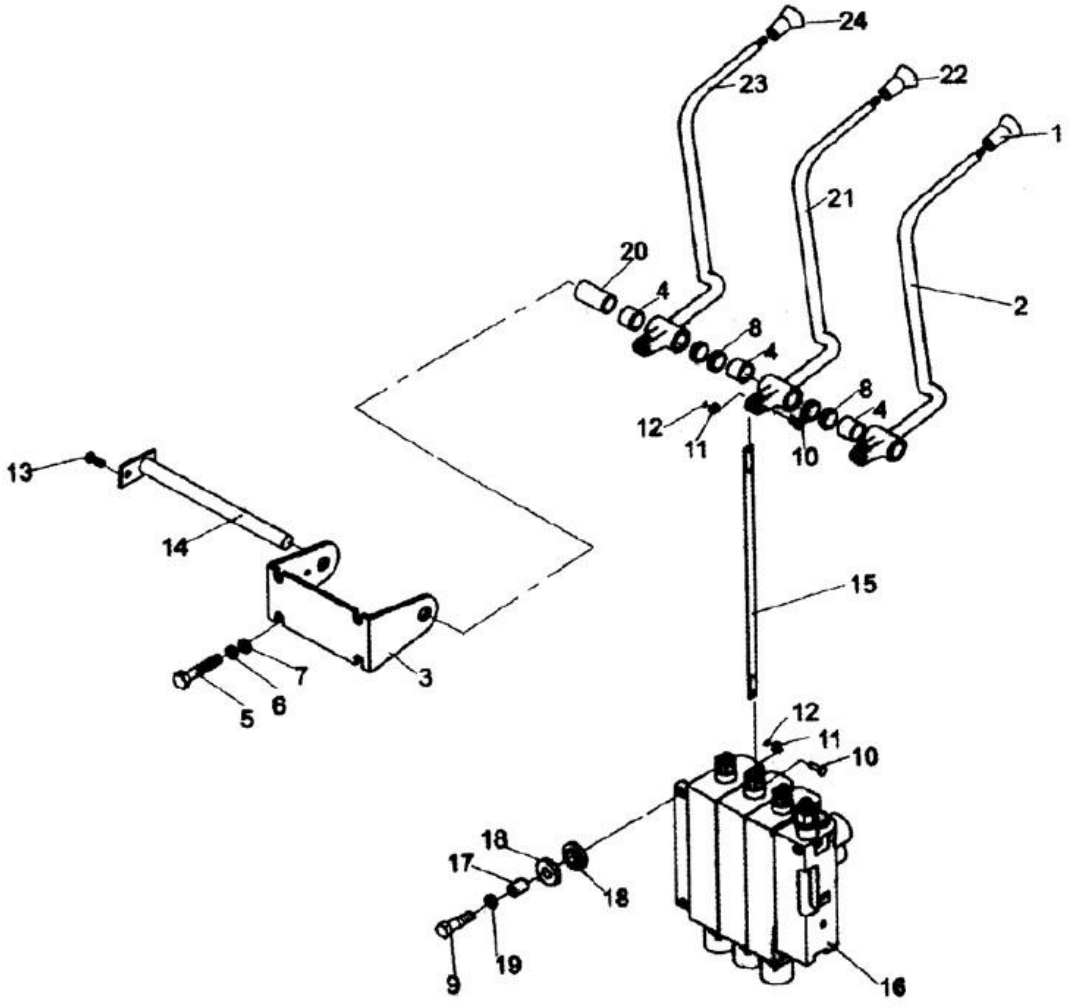
VALVE CONTROL LINKAGE (TWO THROW)



VALVE CONTROL LINKAGE (TWO THROW)

ITEM NO.	DESCRIPTION	PART NO.	QTY.
1	KNOB ASSY LEVER 1	180182401600	1
2	LEVER ASSY 1	180308030200	1
3	MOUNTING BRACKET	180308030100	1
4	BUSH DIA 16	180308030230	2
5	BOLT HEX-M8X20	901100812040	4
6	PLAINWASHER M8	901600800000	4
7	SPRING WASHER M8	901610800000	4
8	Shim	180308030700	2
9	SCREW HEX M10X1.25X45	901101022090	3
10	PIN DIA 5	180308031000	4
11	Washer Plain M8	901600800000	4
12	Split Pin-Dia2x20	900400200040	4
13	ScrewHex M6x16	901500612030	1
14	SHAFT ASSY	180308030800	1
15	CONNECTING LINK ROD	180308030900	2
16	HY. Valve Control (2 Spool) (I) HY. Valve Control 2 Spool (V&J)	180308040000 C0K010200100	1 1
17	BUSH	180307010400	3
18	RUBBER GROMMET	180307010300	6
19	WASHER PLAIN M10	901601000000	3
20	LEVER ASSY 1	180308030300	1
21	KNOB ASSY LEVER 2	180182401700	1

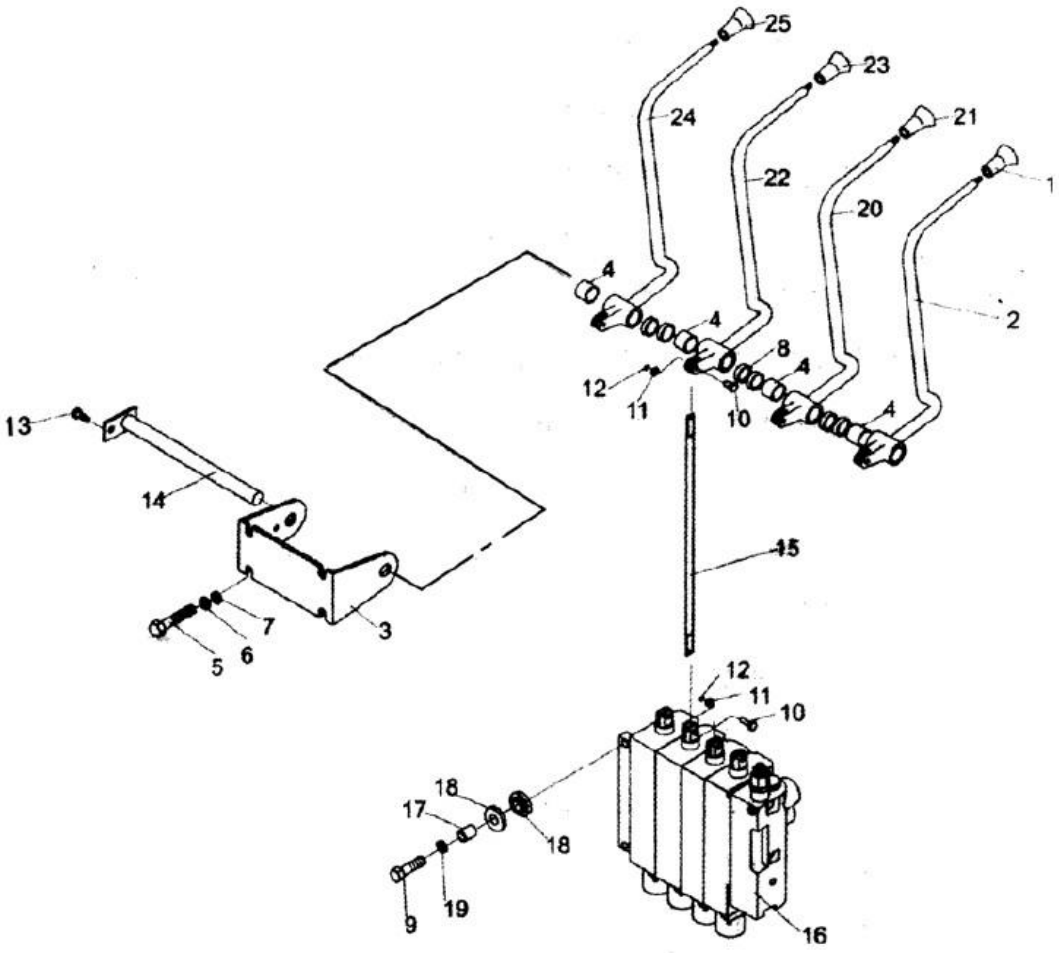
VALVE CONTROL LINKAGE (THREE THROW)



VALVE CONTROL LINKAGE (THREE THROW)

ITEM NO.	DESCRIPTION	PART NO.	QTY.
1	KNOB ASSY LEVER 1	180182401600	1
2	LEVER ASSY 1	180308030200	1
3	MOUNTING BRACKET	180308030100	1
4	BUSH DIA16	180308030230	3
5	BOLT HEX-M8X20	901100812040	4
6	PLAINWASHERM8	901600800000	4
7	SPRINGWASHERM8	901610800000	4
8	Shim	180308030700	4
9	SCREW HEX M10X1.25X45	901101022090	3
10	PIN DIA 5	180308031000	6
11	Washer Plain M8	901600800000	6
12	Split Pin-Dia2x20	900400200040	6
13	Screw Hex M6x16	901500612030	1
14	SHAFT ASSY	180308030800	1
15	CONNECTING LINK ROD	180308030900	3
16	HY. Valve Control (3 Spool) (I) HY. Valve Control 3 Spool (V&J)	180308050000 C0K010210100	1 1
17	BUSH	180307010400	3
18	RUBBER GROMMET	180307010300	6
19	WASHER PLAIN M10	901601000000	3
20	SPACER	180308030600	1
21	LEVER ASSY 2	180308030300	1
22	KNOB ASSY LEVER 2	180182401700	1
23	LEVER ASSY 3	180308030400	1
24	KNOB ASSY LEVER 3	180182401800	1

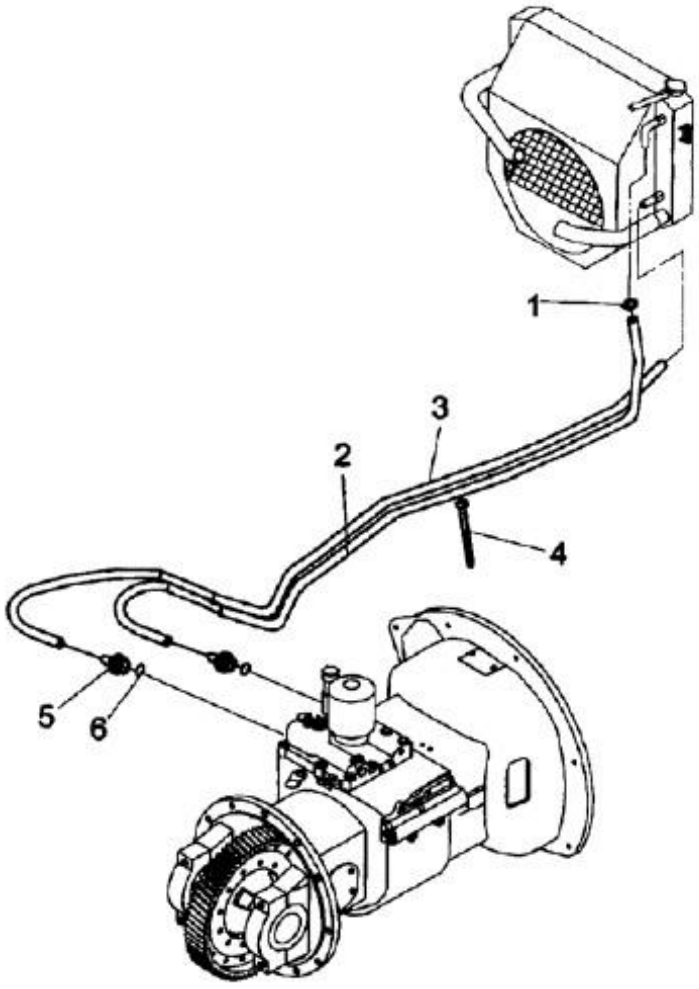
VALVE CONTROL LINKAGE (FOUR THROW)



VALVE CONTROL LINKAGE (FOUR THROW)

ITEM NO.	DESCRIPTION	PART NO.	QTY.
1	KNOB ASSY LEVER 1	180182401600	1
2	LEVER ASSY 1	180308030200	1
3	MOUNTING BRACKET	180308030100	1
4	BUSH DIA 16	180308030230	4
5	BOLT HEX-M8X20	901100812040	4
6	PLAIN WASHER M8	901600800000	4
7	SPRING WASHER M8	901610800000	4
8	Shim	180308030700	8
9	SCREW HEX M10X1.25X45	901101022090	3
10	PIN DIA 5	180308031000	8
11	Washer Plain M8	901600800000	8
12	Split Pin-Dia2x20	900400200040	8
13	Screw Hex M6x16	901500612030	1
14	SHAFT ASSY	180308030800	1
15	CONNECTING LINK ROD	180308030900	4
16	HY. Valve Control (4 Spool) (I) HY. Valve Control 4 spool (V&J)	180308060000 C0K010200400	1 1
17	BUSH	180307010400	3
18	RUBBER GROMMET	180307010300	6
19	WASHER PLAIN M10	901601000000	3
20	LEVER ASSY 2	180308030300	1
21	KNOB ASSY LEVER 2	180182401700	1
22	LEVER ASSY 3	180308030400	1
23	KNOB ASSY LEVER 3	180182401800	1
24	LEVER ASSY 4	180308030500	1
25	KNOB ASSY LEVER 4	180182401900	1

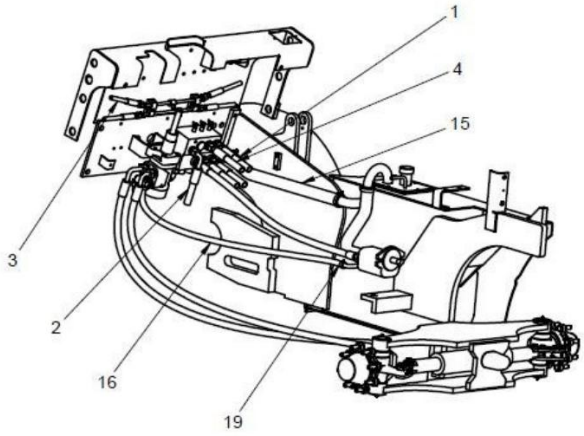
TORQUE-CONVERTER OIL COOLING SYSTEM

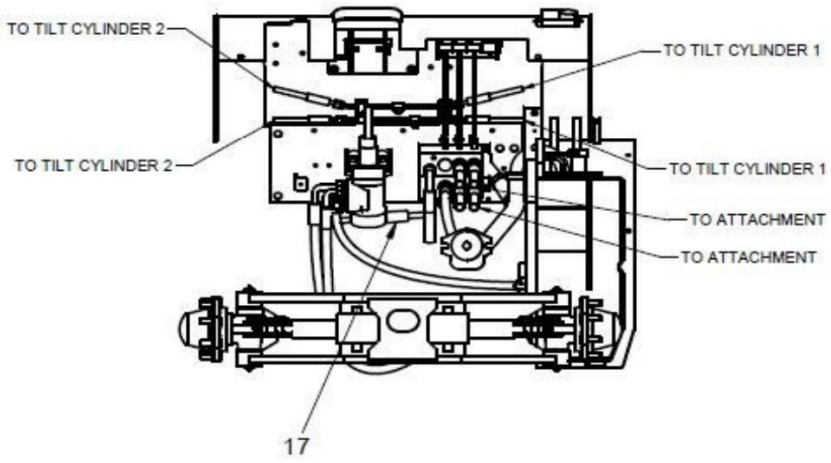


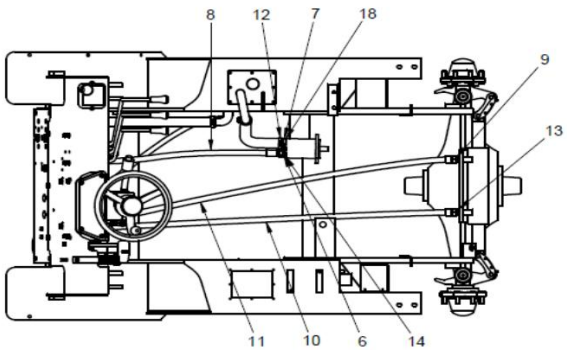
TORQUE-CONVERTER OIL COOLING SYSTEM

ITEM NO.	DESCRIPTION	PART NO.	QTY.
1	HOSE CLAMP DIA 25	955400250350	4
2	HOSE FROM TRANSMISSION TO RADIATOR 1	919972101980	1
3	HOSE FROM TRANSMISSION TO RADIATOR 2	919972102310	1
4	CABLE TIE-6''	955440000100	6
5	CONNECTOR TRANSMISSION INLET & OUTLET	180301060200	2
6	BONDED SEAL M14	925081000700	2

HYDRAULIC SYSTEM



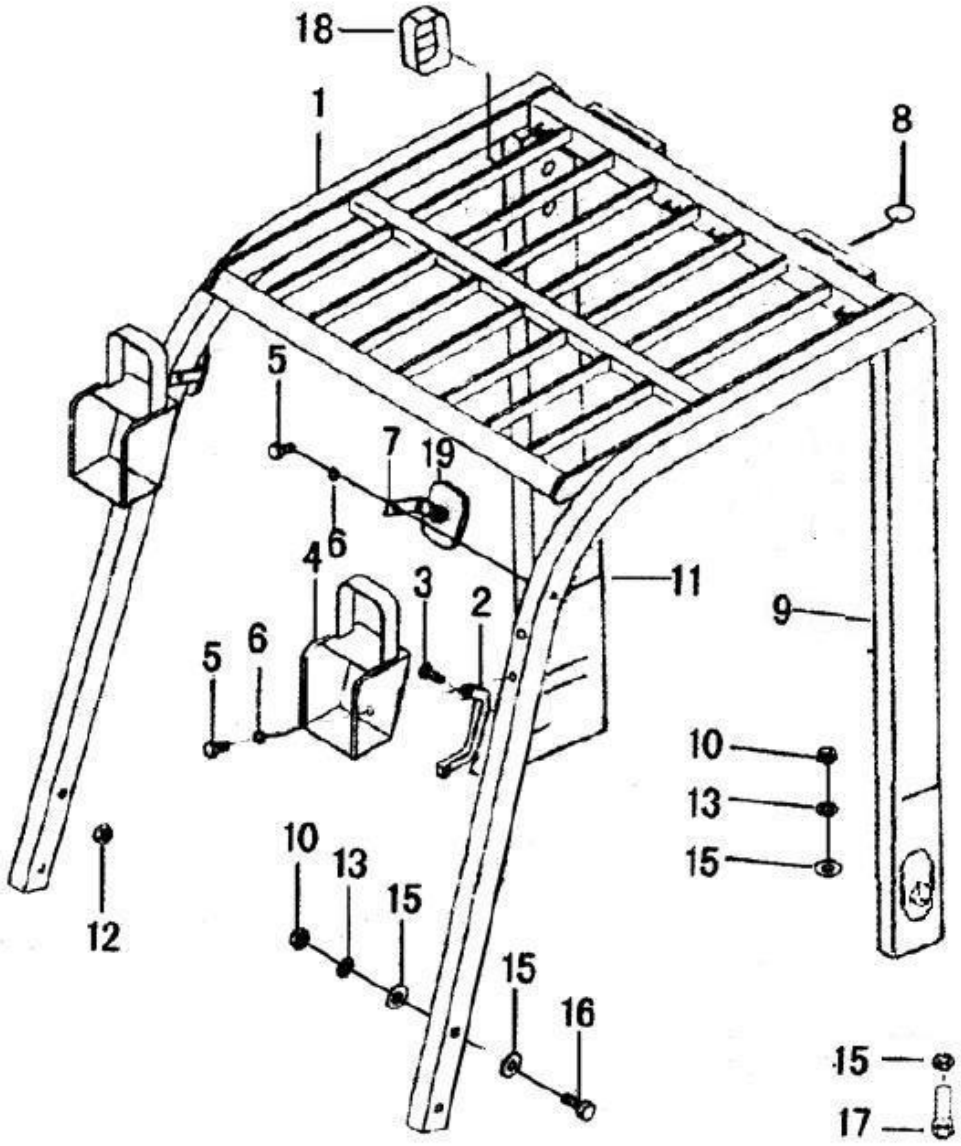




HYDRAULIC SYSTEM

ITEM NO.	DESCRIPTION	PART NO.	QTY.
1	H-CV TO FIXING TUBE	911002090630	2
2	HOSE CONTROL VALVE TO FLOW VALVE	911002090680	1
3	HOSE CV TO TILT CYLINDER 2	911002090290	4
4	HOSE CV TO TILT CYLINDER 1	911002090370	2
5	CONNECTOR BSP 1/2 - BSP 1/2	925092000200	1
6	HY.PUMP INLET	180301010300	1
7	HOSE HY PUMP TO CONTROL VALVE	911002091200	1
8	CONNECTOR BSP 3/8 - M 18X1.5	180304010100	2
9	HOSE STEERING UNIT TO STEERING CYLINDER 1	911002091910	1
10	HOSE STEERING UNIT TO STEERING CYLINDER 2	911002092110	1
11	WORM DRIVE CLAMP	955400450600	4
12	DOWTY SEAL M18	925081000900	2
13	DOWTY SEAL M20	925081001000	1
14	HOSE CONTROL VALVE TO HY TANK	180308020600	1
15	HOSE STEERING UNIT RETURN	919972101570	1
16	CONTROL VALVE TO ST.UNIT	912002090290	1
17	DOWTY SEAL M33	925081001700	1
18	HOSE CLAMP DIA 25	955400250350	2

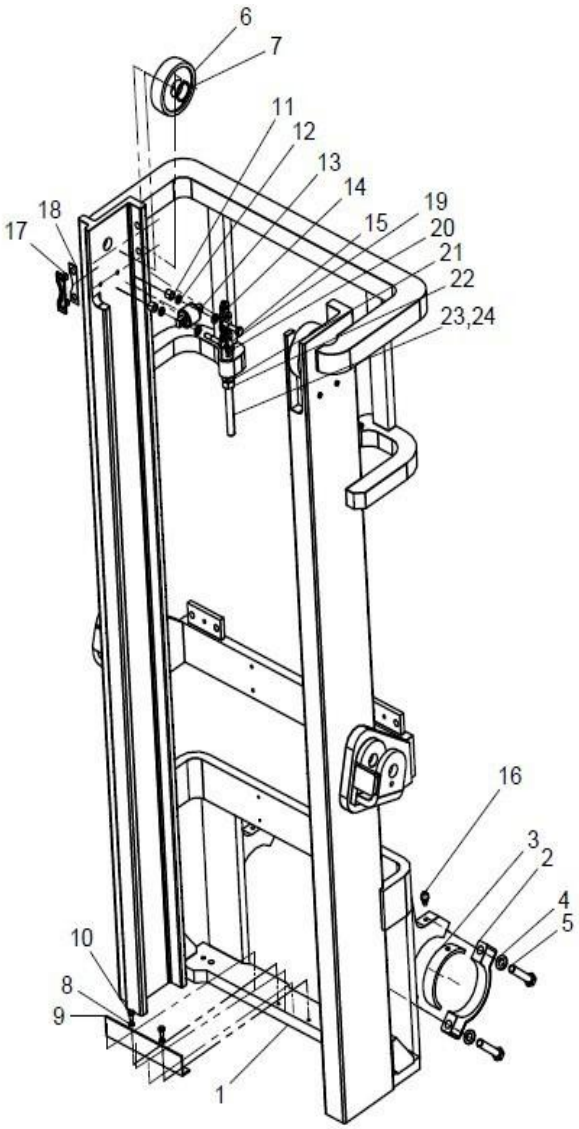
OVERHEAD GUARD



OVERHEAD GUARD

ITEM NO.	DESCRIPTION	PART NO.	QTY.
1	OVER HEAD GUARD ASSY	180307040000	1
2	HANDLE ASSY	180307041200	1
3	BOLT ALLEN-M6X16	901110610030	2
4	HEADLIGHT BRACKET	180307040600	2
5	BOLT ALLEN-M6X16	901110610030	4
6	SPRING WASHER M6	901610600000	4
7	FRONT MIRROR BRACKET	180307040700	2
8	CAP FUEL INTAKE	180307040370	1
9	REAR SUPPORT LH	180307040300	1
10	HEX NUT-M20	901202000000	8
11	REAR SUPPORT RH	180307040200	1
12	WASHER PLAN M20	901602000000	8
13	SPRING WASHER M 20	901612000000	4
14	SPRING WASHER M2	901611200000	4
15	WASHER PLAN M20	901602000000	8
16	BOLT HEX-M20X40	901102012080	4
17	BOLT HEX-M12X40	901101212080	4
18	AIR INTAKE FILTER	180307041000	1
19	MIRROR ASSY	180307041100	2

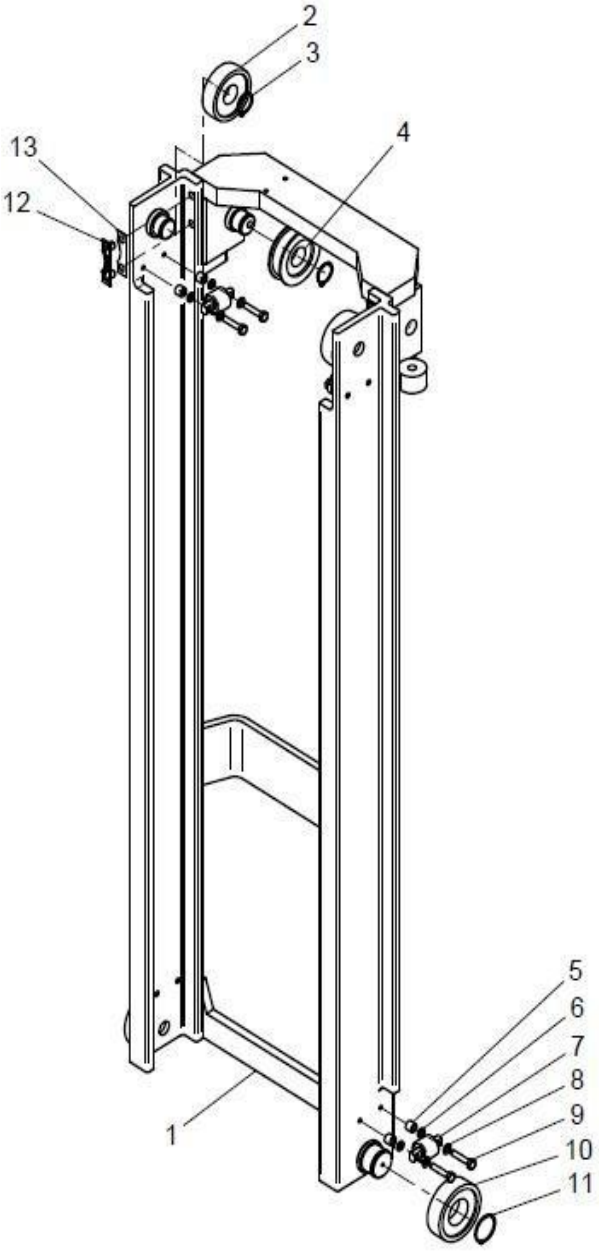
OUTER MAST Assy. 4.5 FFL, 3.6 STD, 3.0 STD



OUTER MAST ASSY. 4.5 FFL, 3.6 STD,3.0 STD

ITEM NO.	DESCRIPTION	PART NO.	QTY.
1	OUTER MAST ASSY FAB.(4.5mffl)	180312030010	1
-	OUTER MAST ASSY FAB.(3.6M std)	180236030010	
-	OUTER MAST ASSY FAB.(3.0M std)	180326030010	
2	AXLE MOUNTING CLAMP	180305050000	2
3	MAST MOUNTING SEAL	180312300000	2
4	Washer Spring M16	901611600000	4
5	SCREW HEX M16X80	901501632160	4
6	ROLLER DIA 110 (180708KT)	180312031200	2
7	EXTERNAL CIRCLIP-Ø40X1.75	930401802000	2
8	SPRING WASHER M8	901610800000	2
9	ANGLE SUPPORT	180312031600	1
10	BOLT HEX M8x15	901500812030	2
11	BUSH	180312031700	4
12	SIDE ROLLER SHIM	180312031800	4
13	SIDE ROLLER (84904 ARS)	180312031900	2
14	Washer Spring M10	901611000000	4
15	SCREW HEX M10X50	901501012100	4
16	GREASE NIPPLE M8X1	901300800000	2
17	CLEARENCE PAD	180312032300	2
18	CLEARENCE PAD SHIM	180312032400	2
19	CHAIN BIG 4.5M FFL	180312170100	2
	CHAIN SMALL 4.5M FFL	180312160100	2
	CHAIN 3.6M STD 3.0T	180323252160	2
	CHAIN 3.6M STD 2.0T	180236160100	2
	CHAIN 3.0M STD 3.0T	180312170100	2
20	CHAIN MOUNTING PIN	180312170200	2
21	CHAIN MOUNTING NUT	180312170110	4
22	CHAIN MOUNTING LOCK NUT	180312170120	4
23	CHAIN MOUNT BOLT BIG	180312080100	2
24	CHAIN MOUNT BOLT SMALL	180312070100	2

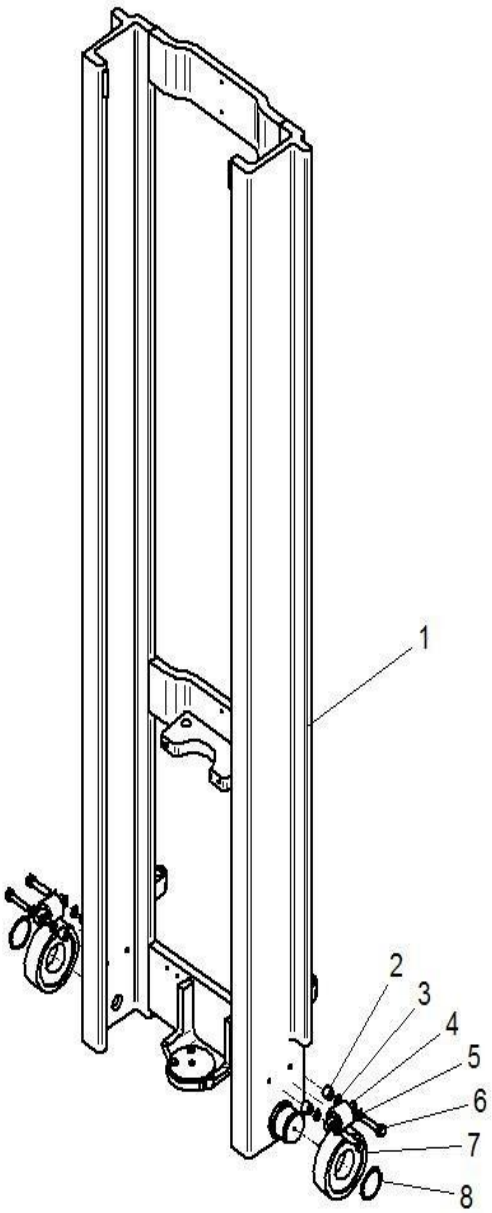
MID MAST Assy. 4.5 M FFL



MID MAST Assy. 4.5 M FFL

ITEM NO.	DESCRIPTION	PART NO.	QTY.
1	MID MAST ASSY FAB.	180312040010	1
2	ROLLER Ø 110 (180708KT) (I) ROLLER Ø 109.7 (V&J)	180312031200 CKMO137701A0	2 2
3	EXTERNAL CIRCLIP-Ø40X1.75	930401802000	4
4	CHAIN ROLLER (I) CHAIM ROLLER (V&J)	180312041300 CKMO13940100	2 2
5	BUSH	180312031700	8
6	SIDE ROLLER SHIM	180312031800	8
7	SIDE ROLLER (84904 ARS)	180312031900	4
8	Washer Spring M10	901611000000	8
9	SCREW HEX M10X50 GR-8.8	901501012100	8
10	ROLLER Ø 119.2 (980811NT)	180312041100	2
11	EXTERNAL CIRCLIP-Ø 55X2.0	930552002000	2
12	CLEARENCE PAD	180312032300	2
13	CLEARENCE PAD SHIM	180312032400	2

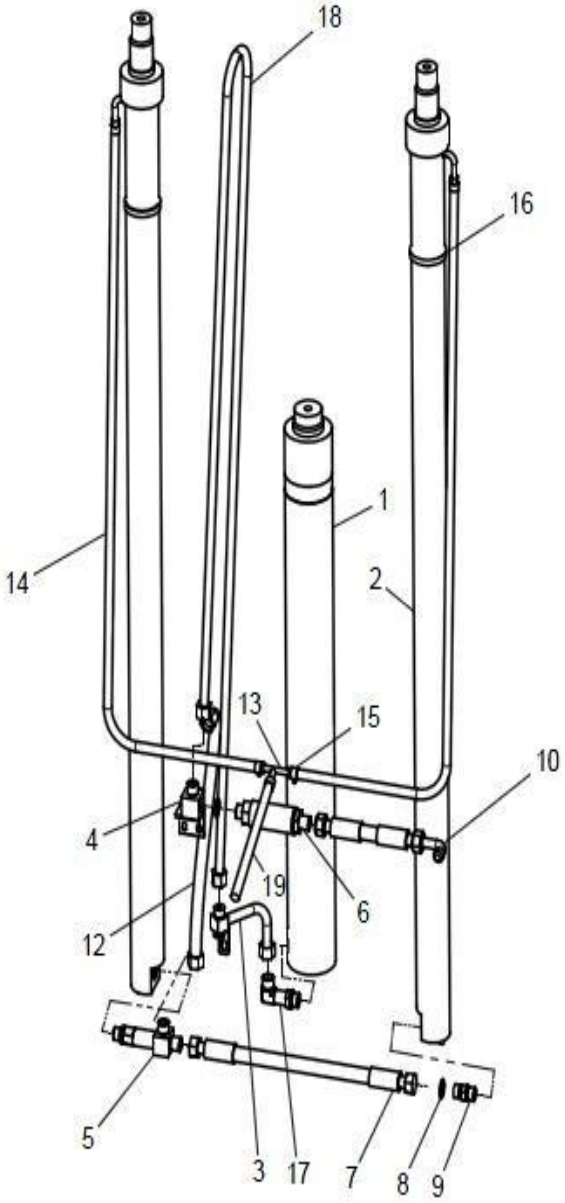
INNER MAST Assy. 4.5 M FF,3.6 STD,3.0 STD



INNER MAST Assy. 4.5 M FF,3.6 STD,3.0 STD

ITEM NO.	DESCRIPTION	PART NO.	QTY.
1	INNER MAST ASSY FAB.(4.5 M FFL) 2T,3T	180312050010	1
-	INNER MAST ASSY FAB.(3.6 M STD) 2T,3T	180236040010	1
-	INNER MAST ASSY FAB.(3.0 M STD) 2T,3T	180326040010	1
2	BUSH	180312031700	4
3	SIDE ROLLER SHIM	180312031800	4
4	SIDE ROLLER (84904 ARS)	180312031900	2
5	Washer Spring M10	901611000000	4
6	SCREW HEX M10X50	901501012100	4
7	ROLLER DIA 119.2 (980811NT)	180312041100	2
8	EXTERNAL CIRCLIP-DIA 55X2.0	930552002000	2

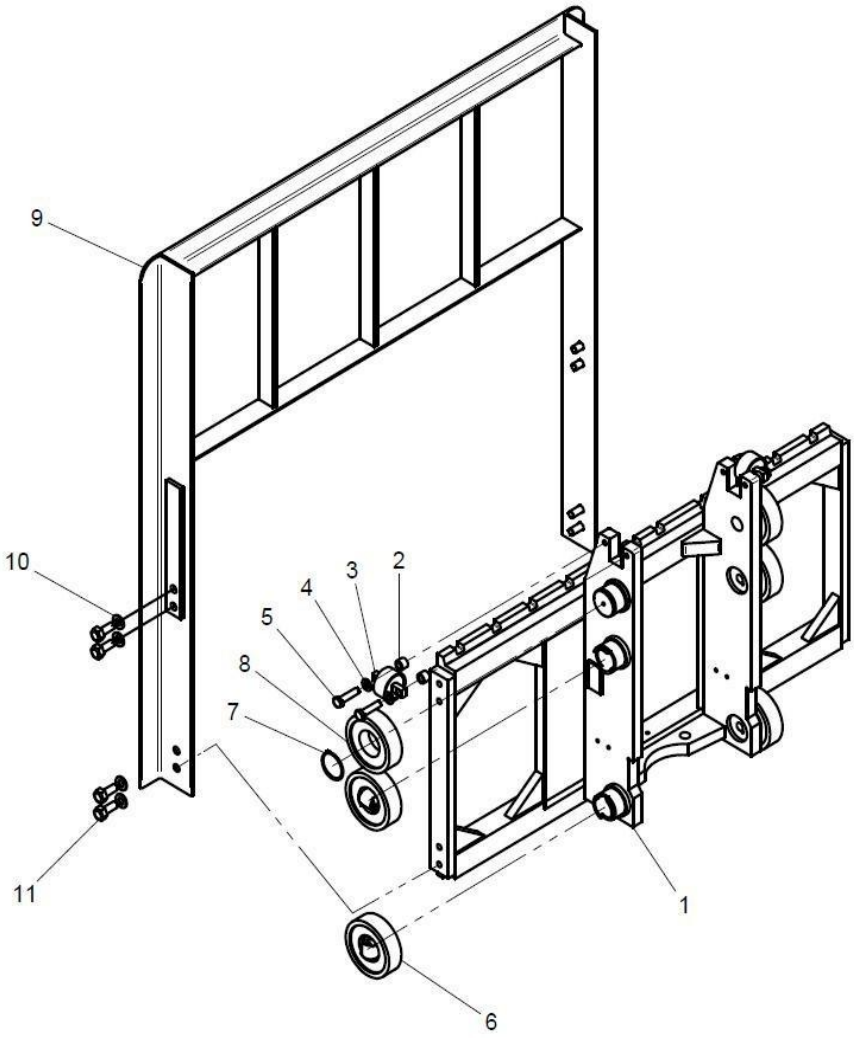
HYDRAULIC SYSTEM OF 4.5 M FFL



HYDRAULIC SYSTEM OF 4.5 M FFL

ITEM NO.	DESCRIPTION	PART NO.	QTY.
1	CENTER CYLINDER 2T,3T	180312200000	1
2	LIFITING CYLINDER 3T	180312190000	2
3	CENTRE CYLINDER TUBE ASSY	180315010000	1
4	T-JOINT	180312230000	1
5	CONNECTOR LIFTING CYLINDER TO T- JOINT LH	180312240000	1
6	FLOW VALVE	180312220000	1
7	HOSE FROM IN B/W LIFTING CYL.	911002090430	1
8	DOWTY SEAL M20	925081001000	2
9	CONNECTOR BSP 1/2 - BSP 1/2	925092000200	1
10	HOSE C.V. TO F.V.	911002090680	1
11	HOSE FROM F.V. TO SIDE CYL. CENTER JOINT	911002090440	1
12	T FOR CYLINDER RETURN	180312190100	1
13	HOSE FR0M LIFT CYLINDER TO T- JOINT	919972101570	2
14	HOSE CLAMP DIA 25	955400250350	5
15	CABLE TIE 10"	996200000194	2
16	ADOPTER FOR CENTRE CYLINDER	180312201000	1
17	FLOW VALVE TO CENTRE CYLINDER	911002093100	1
18	HOSE FR0M LIFT CYLINDER TO T- JOINT	919972101570	1

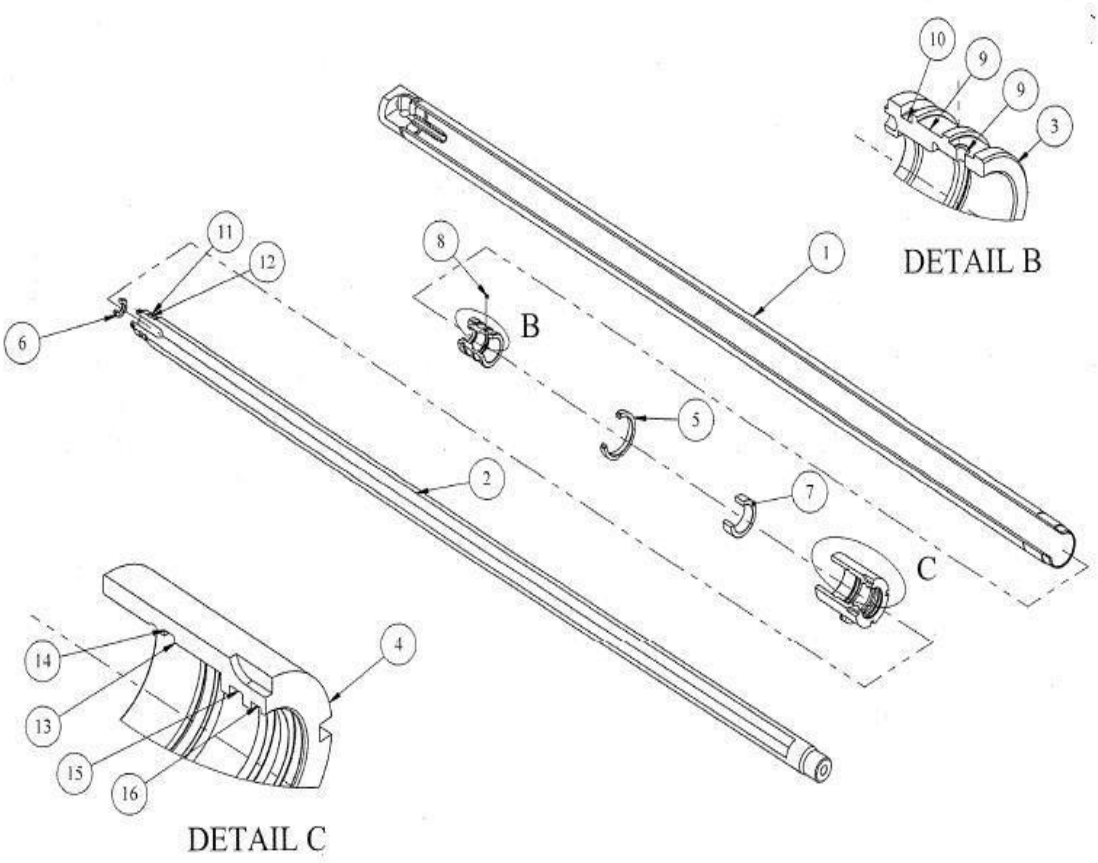
CARRIAGE & BACK REST ASSY OF 4.5 M FFL,3.6 STD,3.0STD



CARRIAGE & BACK REST ASSY OF 4.5 M FFL,3.6 STD,3.0STD

ITEM NO.	DESCRIPTION	PART NO.	QTY.
1	CARRAIGE ASSY SINGLE DRIVE 4.5FFL	180312450010	1
-	CARRAIGE ASSY DUAL DRIVE 4.5FFL	180312020000	1
-	CARRAIGE ASSY SINGLE DRIVE3.0STD	180326020000	1
-	CARRAIGE ASSY DUAL DRIVE 3.6 STD	180236020000	1
2	BUSH LARGE	180312022000	4
3	SIDE ROLLER Ø 58 (6204 RS)	180312021000	2
4	SPRING WASHER M12	901611200000	4
5	SCREW HEX-M12X50 GR8.8	901501212100	4
6	COMPOUND BEARING ASSY	180312021100	4
7	EXTERNAL CIRCLIP-Ø 55X2.0	930552002000	2
8	ROLLER Ø 119.2 (980811NT)	180312041100	2
9	BACK REST ASSY 3.0 M	180325010000	1
10	WASHER SPRING M14	901611400000	8
11	Bolt Hex M14x35	901501412070	8

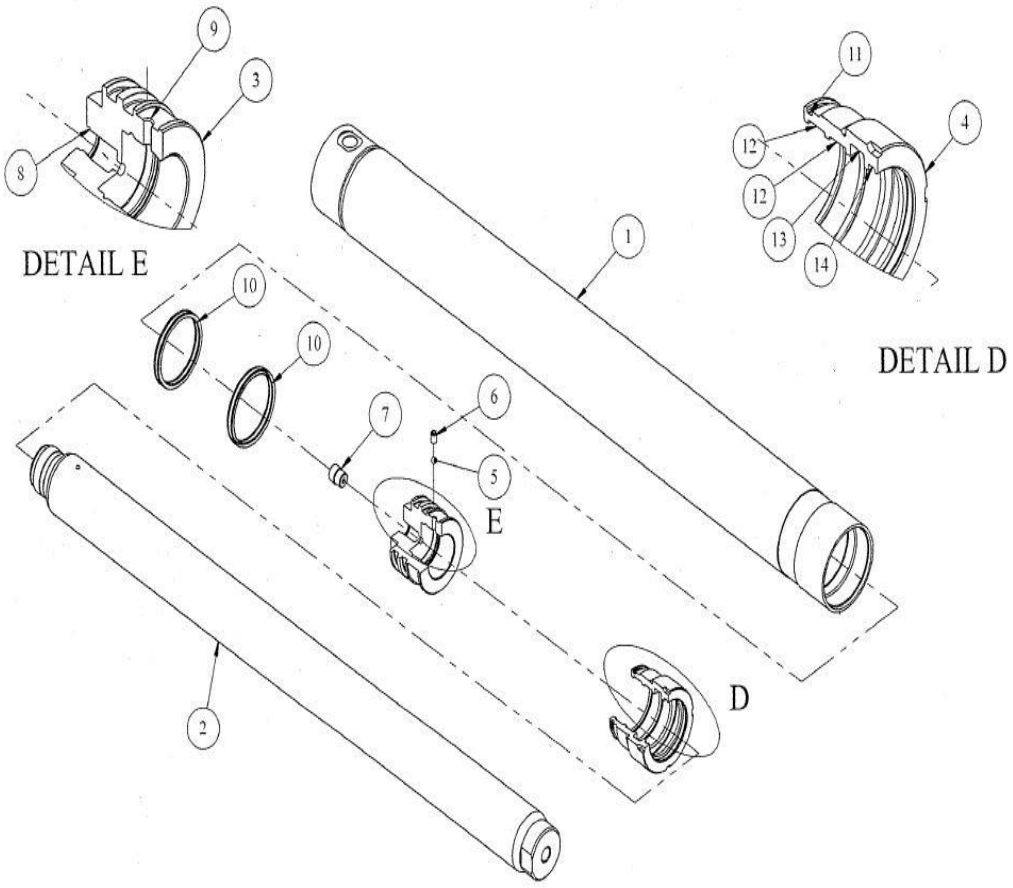
SIDE LIFT CYLINDER OF 4.5



SIDE LIFT CYLINDER OF 4.5

ITEM NO.	DESCRIPTION	PART NO.	QTY.
1	FINAL TUBE WELDMENT	DC12373-100XA-01	1
2	PISTON ROD	DC12373-200ZA-01	1
3	PISTON	DC12373-500ZA-01	1
4	GLAND WELDMENT	DC12373-400WA-01	1
5	LOCK NUT	DC05936-570ZA	1
6	CUSHIONING RING	DC11782-5400A	1
7	BEARING RING	DC12373-730ZA-01	1
8	GRUB SCREW	BB809	1
9	SLYD RING	PART OF SEAL KIT	2
10	PISTON U CUP	PART OF SEAL KIT	1
11	O RING	PART OF SEAL KIT	1
12	BACK UP RING	PART OF SEAL KIT	1
13	O RING	PART OF SEAL KIT	1
14	BACK UP RING	PART OF SEAL KIT	1
15	ROD SEAL	PART OF SEAL KIT	1
16	WIPER SEAL	PART OF SEAL KIT	1
17	SEAL KIT OFCONSIST 6 TO 11 (I)	180312190000	1
	SEAL KIT 45 MM PISTON DIA (V &J) 3T	COWO123001S0	1
	SEAL KIT 40 MM PISTON DIA (V&J) 2T	COKO125RL000	1

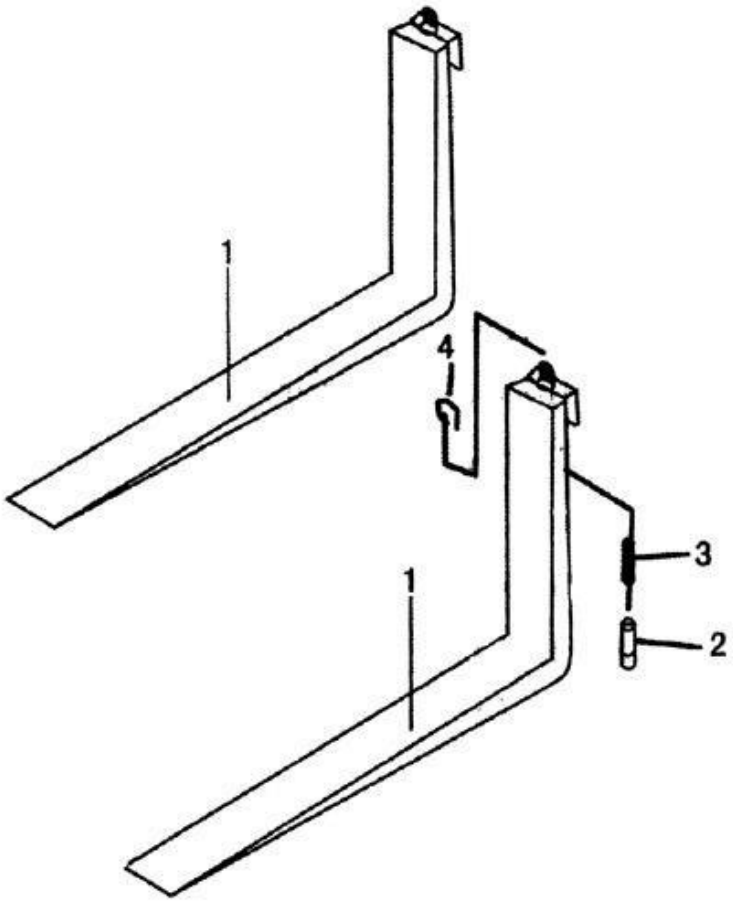
CENTRE CYLINDER OF 4.5 M FFL



CENTRE CYLINDER OF 4.5 M FFL

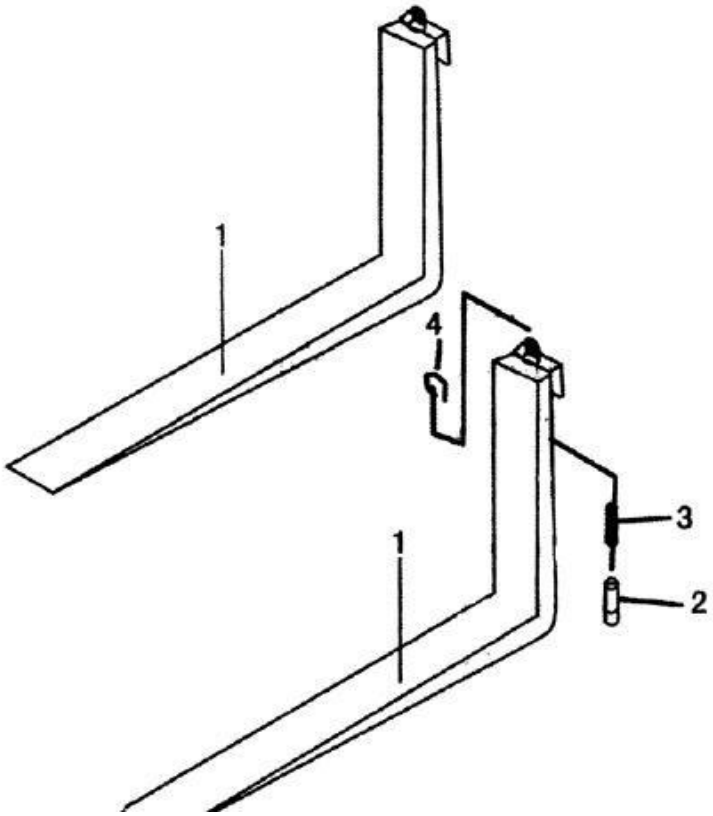
ITEM NO.	DESCRIPTION	PART NO.	QTY.
1	TUBEFINAL WELDMENT	DC12371-100XA-01	1
2	PISTON ROD	DC12371-200ZA-01	1
3	PISTON	DC11797-500ZA	1
4	GLAND	DC10456-400ZA	1
5	STEEL BALL	BD051	1
6	GRUB SCREW	BB818	1
7	INTEGRAL HYD.CHE.VALVE	BV160	1
8	CIRCLIP INTERNAL	BC611	1
9	SLYD RING	PART OF SEAL KIT	2
10	PISTON SEAL U CUP	PART OF SEAL KIT	1
11	O RING	PART OF SEAL KIT	1
12	SLYD RING	PART OF SEAL KIT	1
13	ROD SEAL	PART OF SEAL KIT	1
14	WIPER SEAL	PART OF SEAL KIT	1
	CENTRE CY. SEAL KIT OFCONSIST 9 TO 14 (I) CENTRE CY. SEAL KIT 85MM 3T (V&J) CENTRE CY. SEAL KIT 70 MM 2T (V& J)	180312200000 COWO123002F0 COKO125RC000	1 1 1

FORK



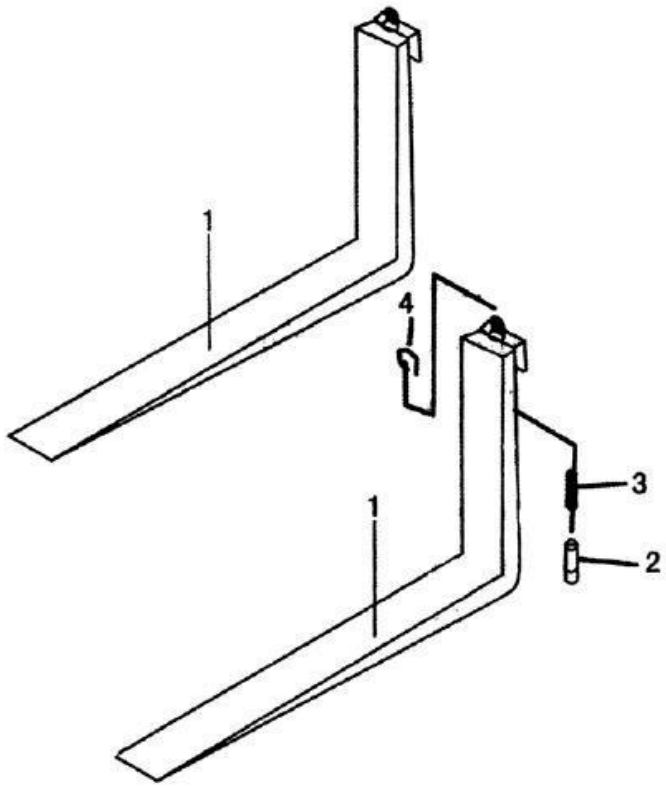
ITEM NO.	DESCRIPTION	PART NO.	QTY.
1	Fork Assy. (For AF 20D)	CKM01SH00900	2
--	Fork Assy. (For AF 30D)	CKM03SH00700	2
2	Positioning pin	CKM013970100	2
3	Spring	CKM013980100	2
4	Handle	CKM013990100	2

FORK (2T)



FORK OPTIONAL PARTS			
PART NO.		LENGTH	
Series I	Series II	Series I	Series II
HC2T-92A	HC2T-90A	920+2	900+2
HC2T-107A	HC2T-90A	1070+3	1000+3
HC2T-122A	HC2T-90A	1220+3	1100+3
HC2T-137A	HC2T-90A	1370+3	1200+3
HC2T-152A	HC2T-90A	1520+4	1300+3
HC2T-167A	HC2T-90A	1670+4	1400+4
HC2T-182A	HC2T-90A	1820+4	1500+4
HC2T-197A	HC2T-90A	1970+4	1600+4
HC2T-212A	HC2T-90A	2120+4	1700+4
	HC2T-180A		1800+4
	HC2T-190A		1900+4
	HC2T-200A		2000+4

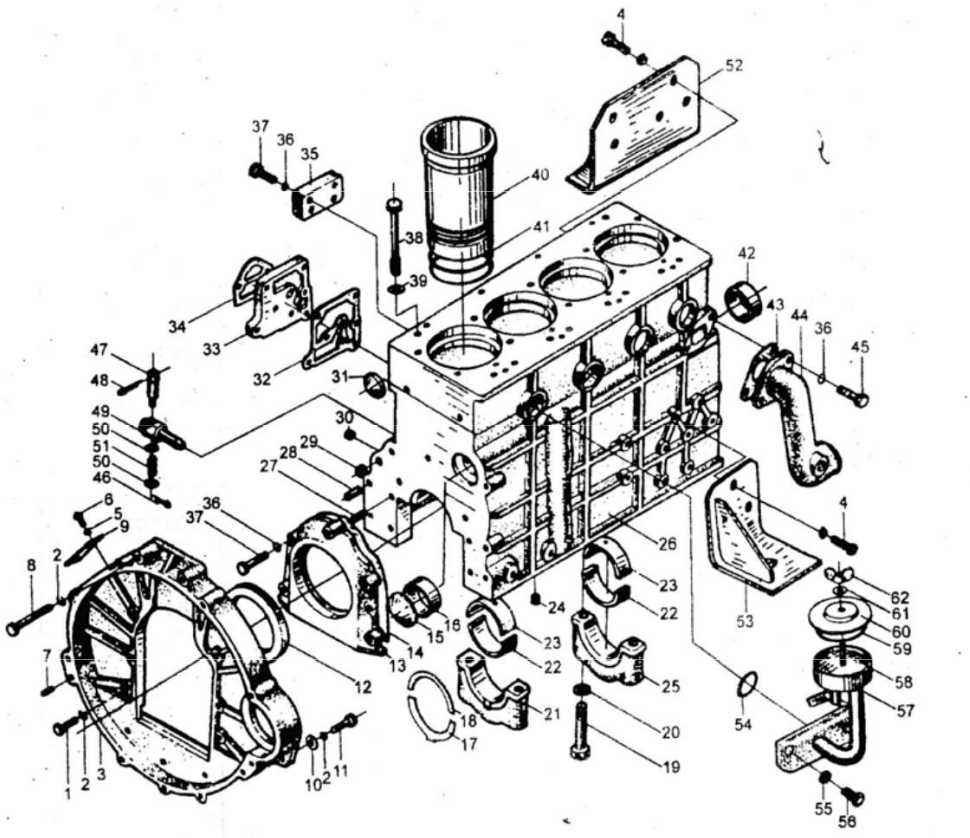
FORK (3T)



FORK (3T)

FORK OPTIONAL PARTS			
PART NO.		LENGTH	
Series I	**Series II**	**Series I**	**Series II**
HC3T-92A	HC3T-90A	**920**+2	**900**+2
HC3T-107A	HC3T-100A	**1070**+3	**1000**+3
HC3T-122A	HC3T-110A	**1220**+3	**1100**+3
HC3T-137A	HC3T-120A	**1370**+3	**1200**+3
HC3T-152A	HC3T-130A	**1520**+4	**1300**+3
HC3T-167A	HC3T-140A	**1670**+4	**1400**+4
HC3T-182A	HC3T-150A	**1820**+4	**1500**+4
HC3T-197A	HC3T-160A	**1970**+4	**1600**+4
HC3T-212A	HC3T-170A	2120+4	**1700**+4
	HC3T-180A		**1800**+4
	HC3T-190A		**1900**+4

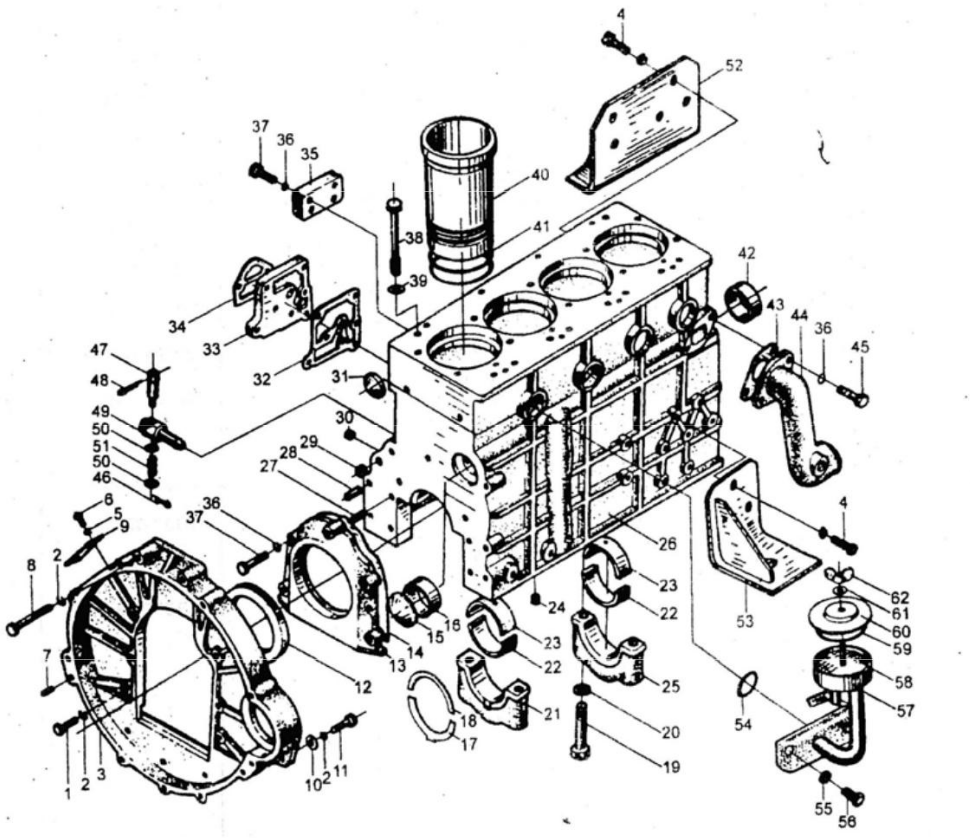
CYLINDER BLOCK FLY WHEEL HOUSING ASSEMBLY



CYLINDER BLOCK FLY WHEEL HOUSING ASSEMBLY

ITEM NO.	DESCRIPTION	PART NO.	QTY.
1	BOLT M12 X 32	GBT578220000	8
2	SPRING WASHER 12	GBT931987000	10
3	FLYWHEEL HOUSING	490B130001A 0	1
4	BOLT M10 X 25	GBT578320000	8
5	SPRING WASHER	GBT931987000	2
6	SCREW M6 X 10	GBT672000000	2
7	PIN A 10 X 25	GBT120200000	2
8	BOLT 12 X 45	GBT578220000	2
9	COVER INSPECTION HOLE	490B13003000	1
10	WASHER 12	GBT848198500	8
11	BOLT M 12 X 30	GBT578220000	2
12	OIL SEAL 100 X 125 X 12	490B01035000	1
13	OIL SEAL SEAT	490B01024A 00	1
14	GASKET	490B01025000	1
15	PLUG	490B01009000	1
16	BUSHING	490B01008000	1
17	LOWER THRUST BUSHING	490B01022000	2
18	UPPPER THRUST BUSHING	490B01026000	2
19	BOLT	490B01019000	10
20	WASHER	490B01018000	10
21	REAR MAIN BEARING COVER	490B01023000	1
22	LOWER & UPPER HALF MAIN BEARING	490B01033000	set 1
23	LOWER & UPPER HALF MAIN BEARING	490B01033000	set 1
24	PLUG	490B01032000	1
25	MAIN BEARING COVER	490B01032000	4
26	CYLINDER BODY	490B01001000	1
27	PIN B8 X 20	GBT119220000	2
28	PIN B10 X 24	GBT119220000	2
29	PLUG 15	490B01080000	2
30	PLUG R1/8	490B01029000	6

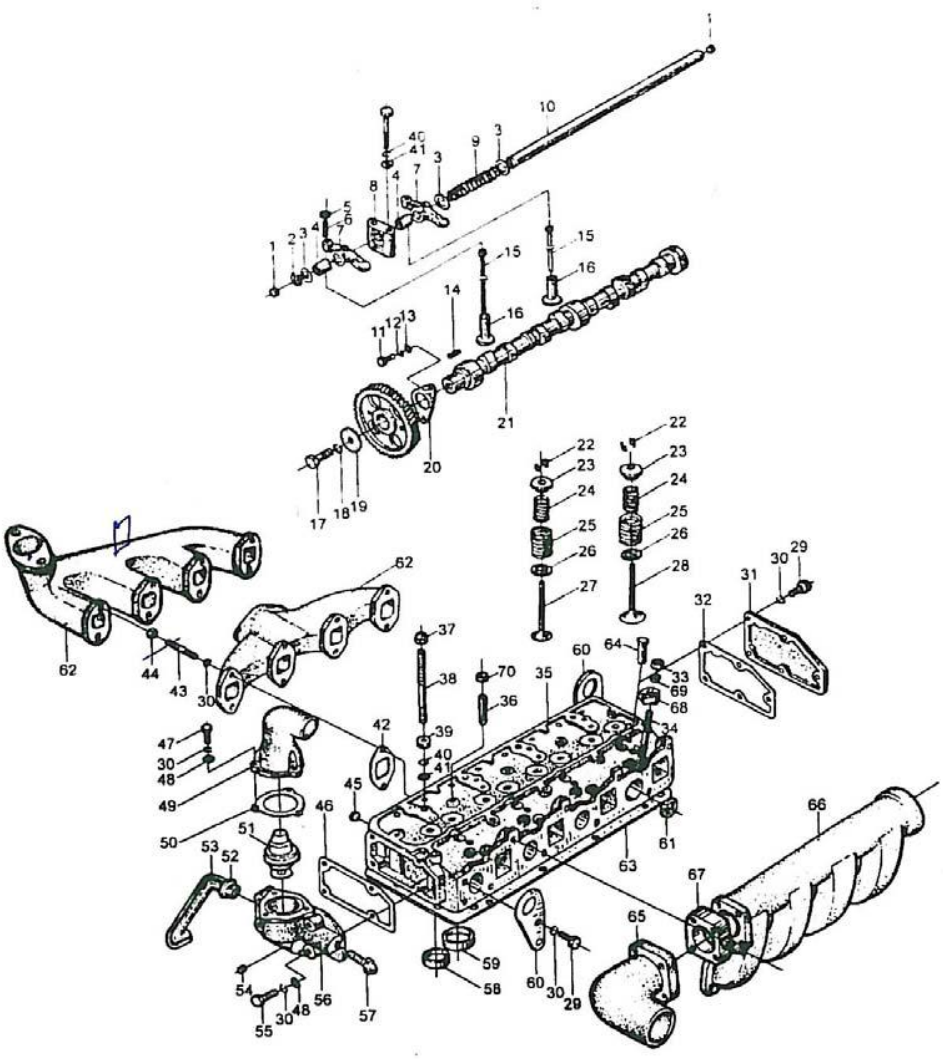
CYLINDER BLOCK FLY WHEEL HOUSING ASSEMBLY



CYLINDER BLOCK FLY WHEEL HOUSING ASSEMBLY

ITEM NO.	DESCRIPTION	PART NO.	QTY.
31	PLUG 40	490B01079000	4
32	GASKET	490B01071000	1
33	OIL FILTER BACK PLATE	490B01072000	1
34	GASKET	490B01073000	1
35	FUEL FILTER BACK PLATE	490B01076B00	1
36	SPRING WASHER 10	GBT931987000	15
37	BOLT M 10 X 22	GBT578320000	2
38	BOLT	490B01002000	14
39	WASHER	490B01044000	18
40	CYLINDER LINER	490B01005000	4
41	WATER SEAL RING	490B01006000	8
42	CAMSHAFT BUSHING	490B01007000	2
43	GASKET	490B01012000	1
44	WATER PIPE	490B01011000	1
45	WATER PIPE	490B01011300	1
46	BOLT M8 X 25	GBT578320000	1
47	DRAIN COCK CORE	485011030000	1
48	DRAIN COCK HANDLE	485011010000	1
49	COCK BODY	485011020000	1
50	WASHER	GBT971985000	2
51	SPRING	485011040000	1
52	FRONT BRACKET (LEFT)(30 D ENGINE)	485BPG152008	1
53	FRONT BRACKET (RIGHT)(30 D ENGINE)	490BPG151008	1
54	O RING	490B34009000	1
55	SPRING WASHER 8	GBT931987000	4
56	BOLT M8 X 16	GBT578320000	2
57	LOWER BODY AIR INTAKE DEVICE	495B34006000	1
58	FILTER NET	JB3616184000	1
59	RUBBER SEAL RING	490B34008000	1
60	UPPER COVER AIR INTAKE DEVICE	490B34005000	1

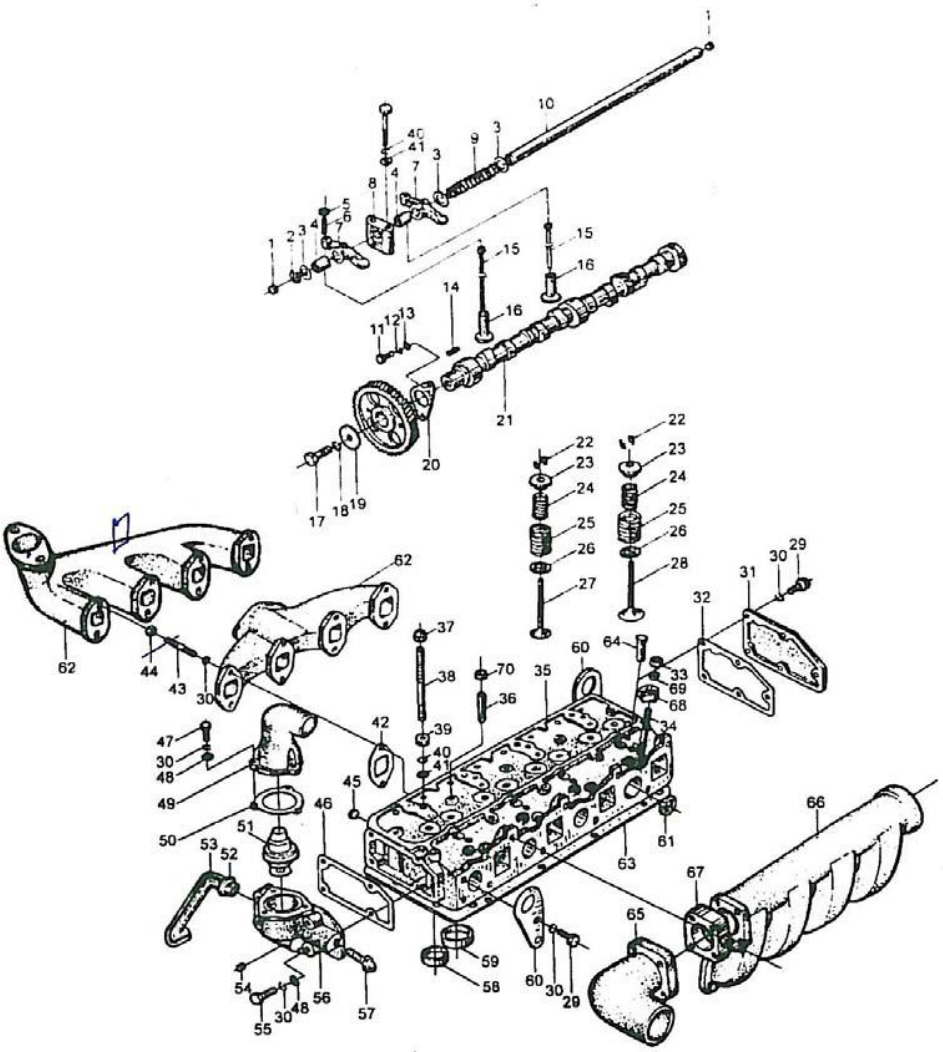
CYLINDER HEAD AND MANIFOLDS ASSEMBLY



CYLINDER HEAD AND MANIFOLDS ASSEMBLY

ITEM NO.	DESCRIPTION	PART NO.	QTY.
1	PLUG 12	490B03018000	2
2	SNAP RING 20	GBT894119860	2
3	WASHER 20	GBT848198500	8
4	VALVE ROCKER ARM BUSHING	490B03212A00	8
5	NUT M 8 X 1	GBT617120000	8
6	ADJUSTING SCREW FOR VALVE CLEARANCE	490B03201000	8
7	VALVE ROCKER ARM with 8 rocker	490B03211A00	set 1
8	SEAT	490B03202000	4
9	SPRING	490B03203000	3
10	SHAFT	490B03204000	1
11	BOLT M8 X 18	GBT578320000	9
12	SPRING WASHER	GBT931987000	17
13	WASHER 8	GBT971198500	2
14	KEY C8 X 32	GBT109619790	1
15	PUSH ROD	490B06003000	8
16	PUSH TAPPET	490B06002000	8
17	BOLT M12 X 45	GBT578220000	1
18	SPRING WASHER 12	GBT931987000	1
19	STOPPING PLATE FOR CAMSHAFT TIMING GEAR	490B02011000	1
20	THRUST PLATE FOR CAMSHAFT	490B02008000	1
21	CAMSHAFT	495B06001000	1
22	SPLIT VALVE RETAINER	490B03006000	16
23	VALVE SPRING SEAT UPPER	490B03007000	8
24	VALVE SPRING INNER	490B03005000	8
25	VALVE SPRING OUTER	490B03004000	8
26	LOWER SEAT VALVE SPRING	490B03011000	8
27	EXHAUST VALVE	490B03015000	4
28	INTAKE VALVE	490B03014000	4
29	BOLT M8 X 20	GBT578320000	4
30	SPRING WASHER 8	GBT931987000	17
31	REAR COVER	490B03012000	1
32	GASKET	490B03013000	1
33	NUT M 10	GBT561988000	4
34	STUD M 10 X 50	GBT889919880	4
35	CYLINDER HEAD	A490B0310100	1

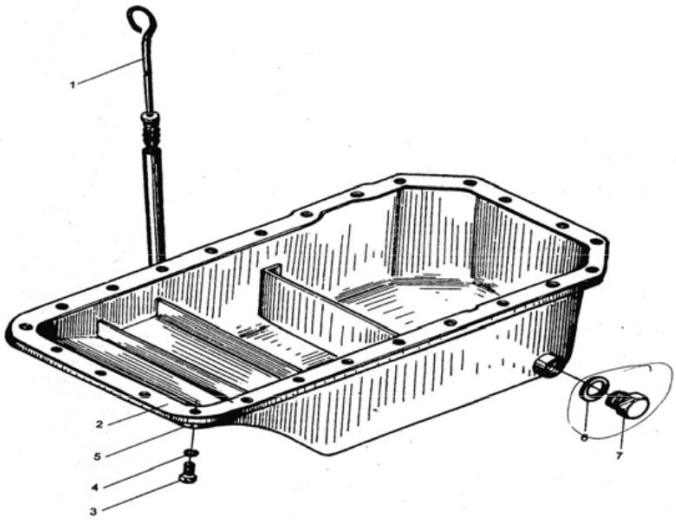
CYLINDER HEAD AND MANIFOLDS ASSEMBLY



CYLINDER HEAD AND MANIFOLDS ASSEMBLY

ITEM NO.	DESCRIPTION	PART NO.	QTY.
36	VALVE GUIDE	490B03102000	8
37	NUT M8	GBT923198800	4
38	BOLT	490B03001000	4
39	NUT M 10	GBT617020000	4
40	SPRING WASHER 10	GBT931987000	4
41	WASHER 10	GBT971198500	4
42	GASKET	490B03003000	4
43	STUD AMB -M8 X 25	GBT899198800	8
44	NUT M8	GBT617020000	8
45	PLUG	490B03103000	1
46	THERMOSTAT GASKET	490B43005000	1
47	BOLT M8 X 25	GBT578320000	3
48	WASHER 8	GBT971198500	7
49	THERMOSTAT COVER	490B43001000	1
50	THERMOSTAT COVER GASKET	490B43003000	1
51	THERMOSTAT	490B43002000	1
52	PIPE	490B01074000	1
53	INTAKE WATER PIPE	490B43007000	1
54	PLUG NPT 3/ 8	490B43008000	1
55	BOLT M 8 X 35	GBT578220000	4
56	THERMOSTAT HOUSING	490B43101100	1
57	WATER TEMPRETURE SENSOR	490B43009000	1
58	EXHAUST VALVE SEAT	490B03108000	4
59	INTAKE VALVE SEAT	490B03107000	4
60	HOISTING BRACKET	490B03009A00	1
61	PLUG 30	490B01078000	4
62	EXHAUST PIPE	490B08001000	1
	EXHAUST PIPE	490B08001300	1
63	HEAD GASKET	490B01004000	1
64	COPPER SLEEVE	A490B0310900	4
65	CONNECTING PIPE	490B09003110	1
66	INTAKE PIPE	490B09002000	1
67	AIR HEATER	490B54000000	1
68	PRESS PLATE	A490B0301600	4
69	WASHER M 10	GBT849198800	4

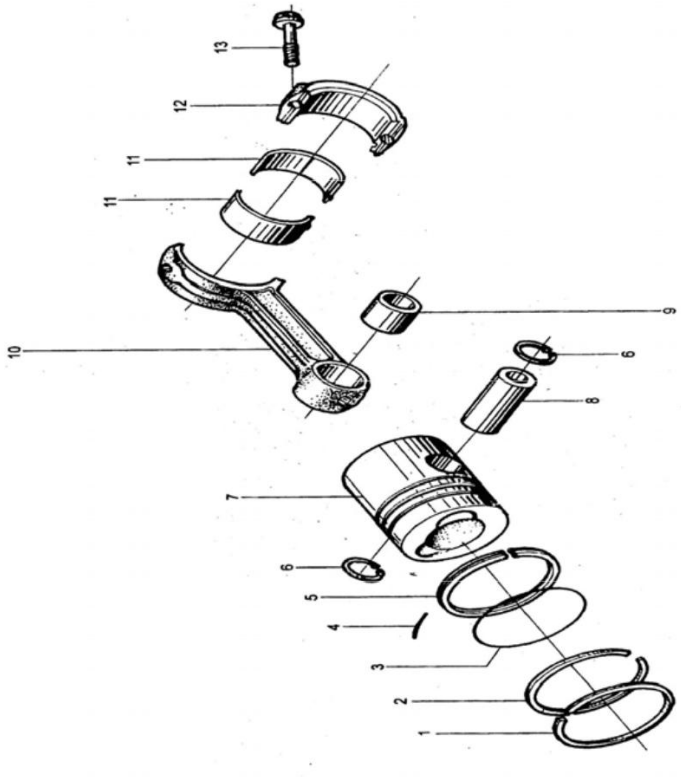
OIL SUMP ASSEMBLY



OIL SUMP ASSEMBLY

ITEM NO.	DESCRIPTION	PART NO.	QTY.
1	OIL DIPSTICK	490B07200000	1
2	OIL SUMP GASKET	490B07002000	1
3	BOLT M8 X 16	GBT578320000	28
4	SPRING WASHER 8	GBT931987000	28
5	OIL SUMP	490B07100000	1
6	SEAT RING 20	JB9827700000	1
7	MAGNETIC PLUG	JB2343790000	1
8	ALL GASKET WHOLE ENGINE	490BPG000000	1

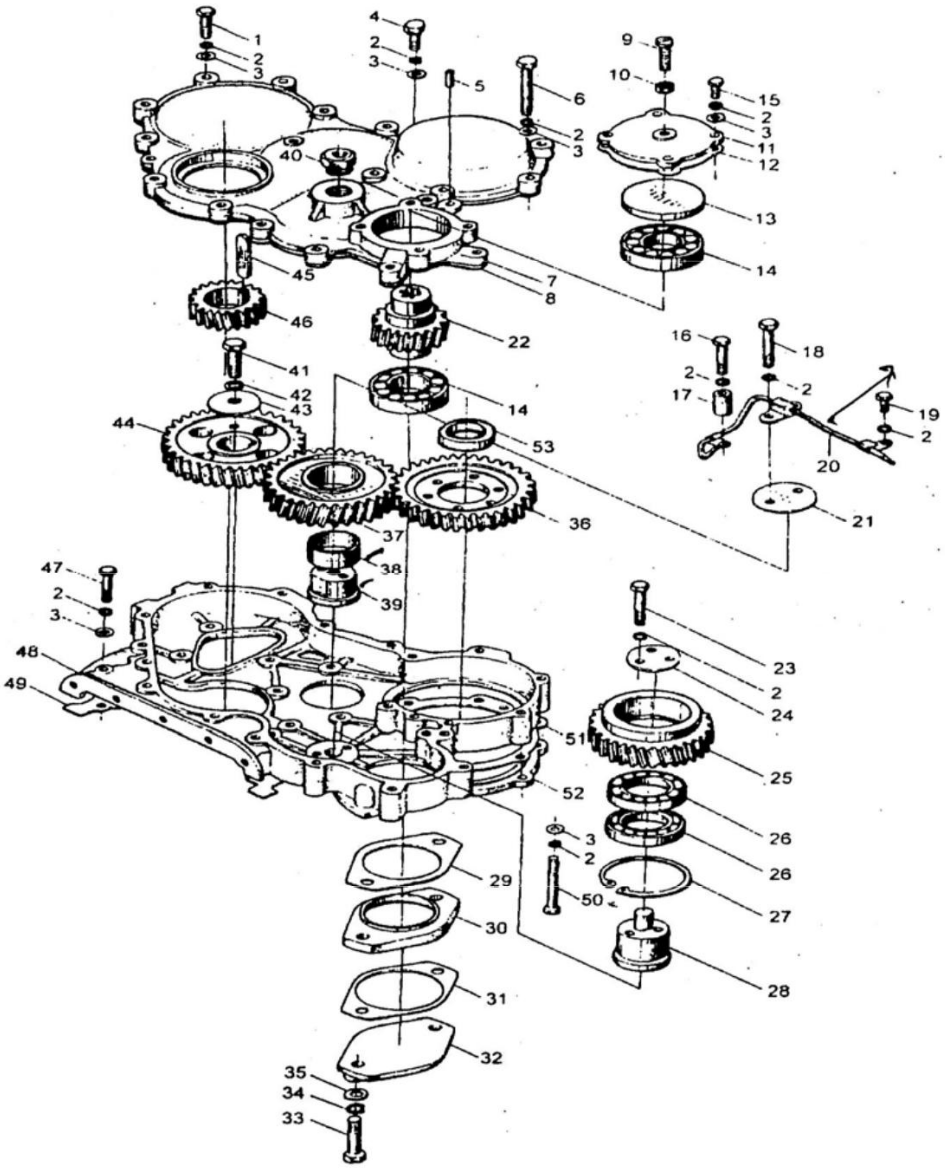
PISTON CONNECTING ROD ASSEMBLY



PISTON CONNECTING ROD ASSEMBLY

ITEM NO.	DESCRIPTION	PART NO.	QTY.
1	COMPRESSION RING (TOP)	490B04002000	4
2	COMPRESSION RING (SECOND)	490B04003000	4
3	SPIRAL EXPANSION RING	490B04102000	4
4	PIN	490B04103000	4
5	OIL RING BODY	490B04101000	4
6	SNAP RING	490B04013000	8
7	PISTON	A490B0400100	4
8	PISTON PIN	490B04004000	4
9	CONNECTING ROD BUSH	490B04005000	4
10	CONNECTING ROD ASSY	490B04201000	4
11	CONNECTING ROD BEARING STD SET OF 8	490B04007000	8
12	CONNECTING ROD CAP	490B04202000	4
13	CONNECTING ROD BOLT	490B04009B00	8
14	PISTON RING SET (FOR 4 PISTON)	490B04120000	1
15	CONNECTING ROD BEARING OVER SIZE .25 SET OF 8	490B04007025	1

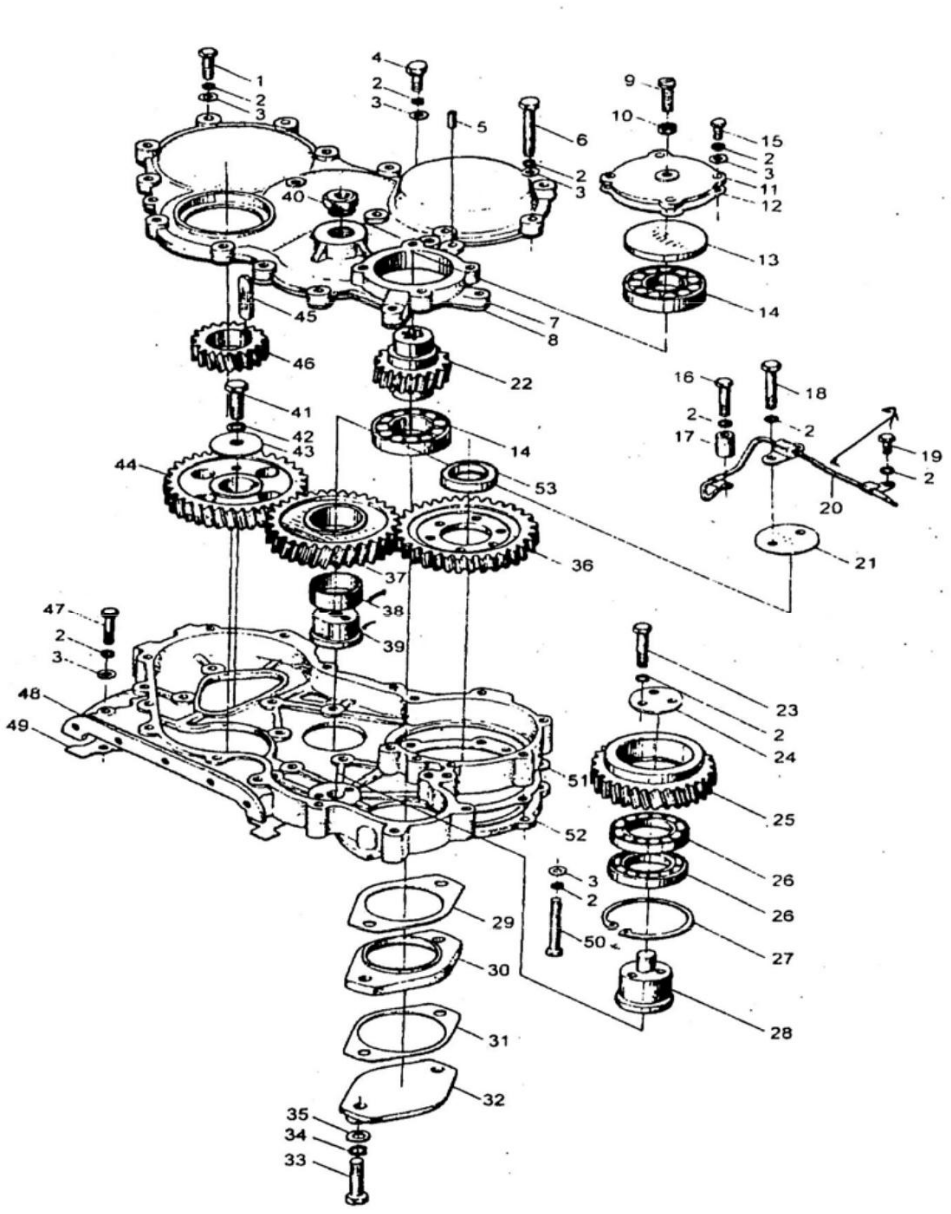
TIMING GEAR TRAIN ASSEMBLY



TIMING GEAR TRAIN ASSEMBLY

ITEM NO.	DESCRIPTION	PART NO.	QTY.
1	BOLT M8 X 30	GBT578220000	2
2	WASHER 8	GBT859198700	33
3	WASHER 8	GBT849198700	36
4	BOLT M8 X 25	GBT578220000	8
5	PIN B8 X 20	GB1192200000	2
6	BOLT M8 X 70	GBT578220000	8
7	COVER	490BPG160001	1
8	GASKET	490BPG160002	1
9	ADJUSTING SCREW	490BPG820140	1
10	NUT M8 X 1	GBT617120000	1
11	BEARING COVER	490BPG820080	1
12	GASKET	490BPG820090	1
13	END PLATE	490BPG820010	1
14	BEARING 30207	GBT297199400	2
15	BOLT M8 X 20	GBT578220000	4
16	BOLT M8 X 40	GBT578220000	2
17	WASHER	490BPG820030	1
18	BOLT M8 X 60	GBT578220000	2
19	BOLT M8 X 15	GBT578220000	1
20	OIL PIPE	490BPG021000	1
21	END PLATE	490B02012100	1
22	HYDRAULIC PUMP GEAR	490BPG820070	1
23	BOLT M8 X 50	GBT578220000	3
24	SNAP PLATE	490BPG820060	1
25	BRIDGE GEAR	490BPG820040	1
26	BEARING 6009	GBT276199400	2
27	SNAP RING 75	GBT893119860	1
28	GEAR SHAFT	490BPG820050	1
29	GASKET	490BPG820100	1
30	CONNECTING PLATE	490BPG820110	1

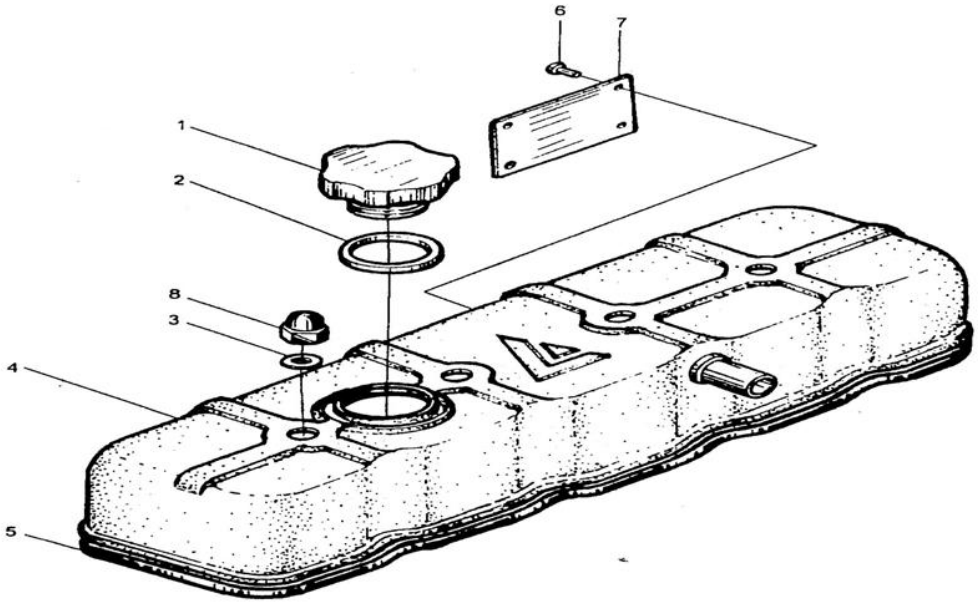
TIMING GEAR TRAIN ASSEMBLY



TIMING GEAR TRAIN ASSEMBLY

ITEM NO.	DESCRIPTION	PART NO.	QTY.
31	GASKET	490BPG820120	1
32	END COVER	490BPG820130	1
33	BOLT M10 X 45	GB2176000000	2
34	WASHER 10	GBT859198700	8
35	WASHER 10	GBT849198700	8
36	PUMP TIMING GEAR	490BPG020030	1
37	TIMING IDLE GEAR	490BPG020060	1
38	BUSHING	490B02005000	1
39	IDEL GEAR SHAFT	490B02004000	1
40	SCREW	490BPG820020	1
41	BOLT M12 X 45	GBT578220000	1
42	SPRING WASHER 12	GBT859198700	1
43	END COVER	490B02011000	1
44	CAMSHAFT TIMING GEAR	490BPG020090	1
45	KEY C12 X 63	GBT109619790	1
46	CRANKSHAFT TIMING GEAR	490BPG020070	1
47	BOLT M8 X 45	GBT578220000	1
48	TIMING GEAR HOUSING	490BPG160030	1
49	GASKET	490BPG160091	1
50	BOLT M8 X 45	GBT578220000	2
51	GASKET	490B16008000	1
52	CONNECTING FLANGE	490B16004100	1
53	AXLE SLEEVE	495021050000	1

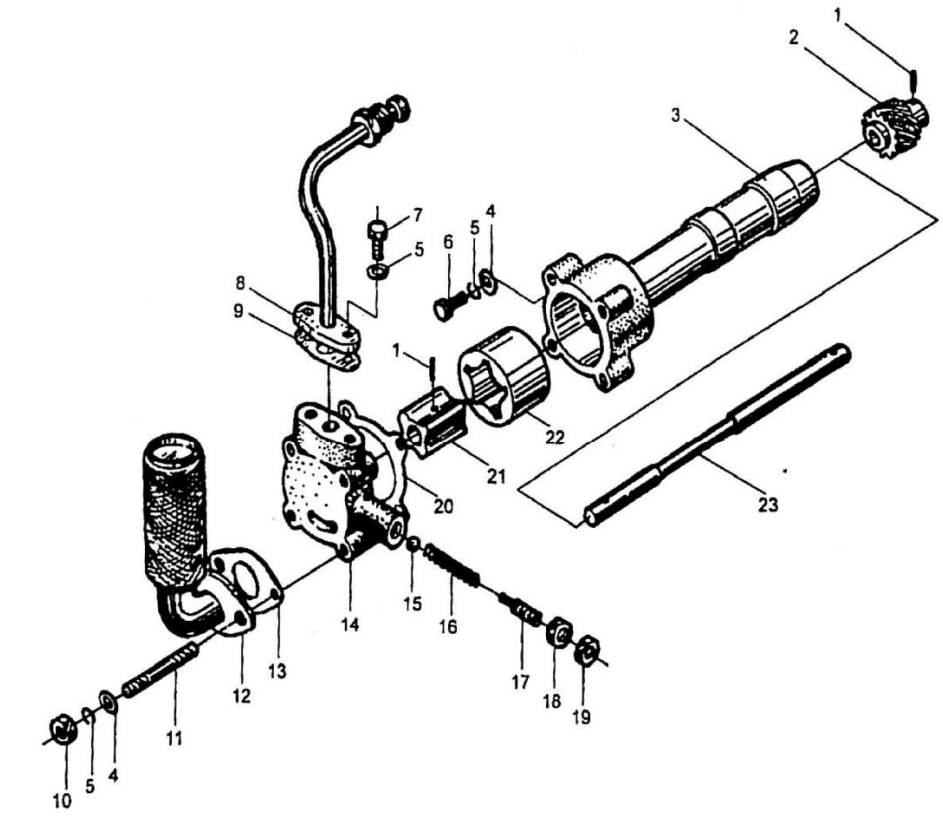
CYLINDER HEAD COVER ASSEMBLY



CYLINDER HEAD COVER ASSEMBLY

ITEM NO.	DESCRIPTION	PART NO.	QTY.
1	CAP	490B11013A00	1
2	CAP GASKET	490B11014000	1
3	SEAL WASHER	JB9821977000	1
4	CYLINDER HEAD COVER	AFL490B11100	1
5	RUBBER PAD	A490B1100400	1
6	RIVET 2 X 5	GBT827198600	4
7	NAME PLATE	A490BPG11009	1
8	NUT M 8	GBT923198800	4

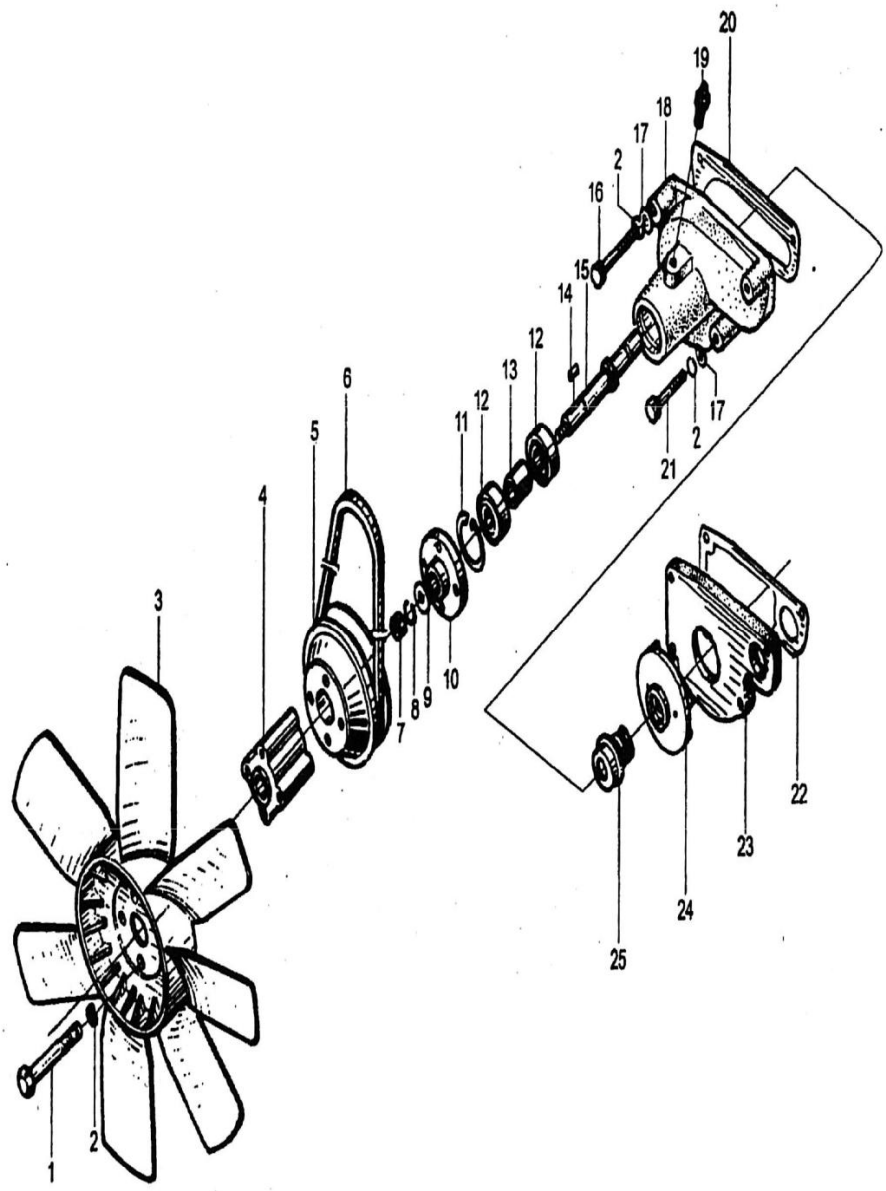
OIL PUMP AND OIL PIPE ASSEMBLY



OIL PUMP AND OIL PIPE ASSEMBLY

ITEM NO.	DESCRIPTION	PART NO.	QTY.
1	OIL PUMP ASSY	490B31000000	1
2	PIN	490B31203000	2
3	OIL PUMP DRIVING GEAR	490B31001000	1
4	OIL PUMP HOUSING	490B31004000	1
5	WASHER 8	GBT971198500	5
6	SPRING WASHER 8	GBT931987000	5
7	BOLT M8 X 30	GBT578320000	1
8	BOLT M8 X 20	GBT578320000	2
9	PIPING ASSEMBLY	490B33000000	1
10	GASKET	490B33005000	1
11	NUT M 8	GBT617020000	2
12	STUD M8	GBT578220000	4
13	SCREEN FILTER	490B31100200	1
14	OIL FILTER GASKET	490B31006000	1
15	COVER OIL PUMP	490B31005000	1
16	STEEL BALL 10	GBT308198900	1
17	SPRING	490B31003000	1
18	SCREW	490B31002000	1
19	NUT M14 X 1.5	GBT617120000	1
20	NUT M14 X 1.5	GBT617120000	1
21	COVER OIL PUMP GASKET	490B31007000	1
22	INNER ROTOR	490B31202000	1
23	OUTER ROTOR	490B31008000	1

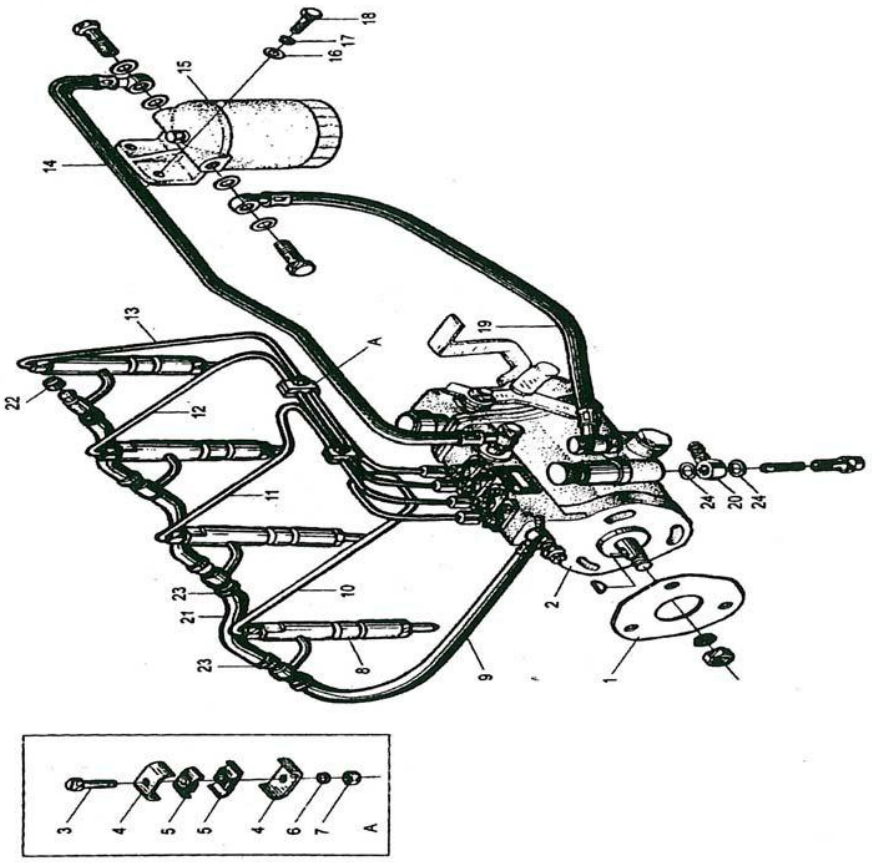
COOLING WATER PUMP AND FAN ASSEMBLY



COOLING WATER PUMP AND FAN ASSEMBLY

ITEM NO.	DESCRIPTION	PART NO.	QTY.
1	WATER PUMP ASSEMBLY	AFL490B42000	1
2	BOLT M8 X 70	GBT578220000	4
3	SPRING WASHER 8	GBT931987000	4
4	FAN	490B41100100	1
5	GASKET	490B41003300	1
6	FAN PULLEY	490B41002000	1
7	FAN BELT	490B41001000	1
8	NUT M10	GBT617820000	1
9	SPRING WASHER 10	GBT931987000	1
10	WASHER 10	GBT971198500	1
11	FAN PULLEY HUB	490B42001000	1
12	SNAP RING 40	490B42011000	1
13	BEARING	GBT278198900	2
14	SLEEVE SPACER	490B42003000	1
15	KEY 5 X 19	GBT109919790	1
16	WATER PUMP SHAFT	490B42002000	1
17	BOLT M8 X 70	GBT578220000	1
18	WASHER 8	GBT971198500	4
19	WATER PUMP HOUSING	490B42004000	1
20	OIL CUP	GB1152198900	1
21	GASKET	490B42005000	1
22	BOLT M8 X 50	GBT578220000	3
23	GASKET	490B42011000	1
24	BACK PLATE	490B42006000	1
	WATER PUMP IMPELLER	490B42008000	1

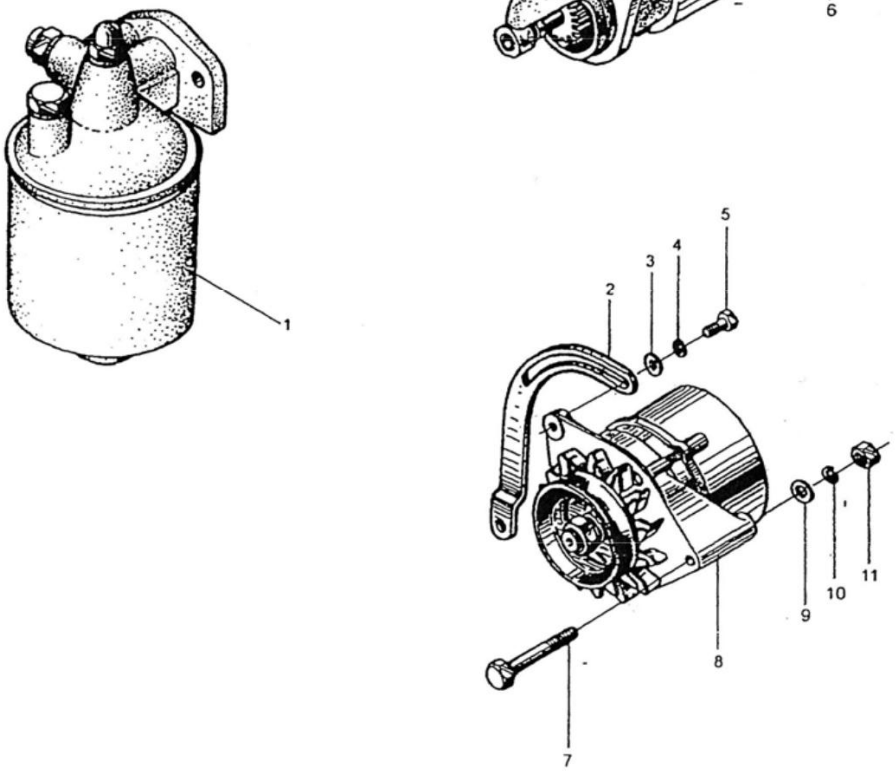
FUEL SUPPLY SYSTEM ASSEMBLY



FUEL SUPPLY SYSTEM ASSEMBLY

ITEM NO.	DESCRIPTION	PART NO.	QTY.
1	GASKET FUEL PUMP (A490BPG ENGINE)	490B21002100	1
2	FUEL INJECTION PUMP ASSY.(A490BPG ENGINE	490B21001000	1
3	BOLT M 6 X 25	GBT291198800	3
4	CLAMP	490B23501000	6
5	RUBBER GASKET	490B23502000	6
6	SPRING WASHER 6	GBT931987000	3
7	NUT M6	GBT617220000	3
8	FUEL INJECTOR (A490BPG ENGINE)	A490B2200000	4
9	INJECTOR LEAK OFF (3 TON)	A490B2510010	1
10	1ST CYLINDER HIGH PRESSURE FUEL TUBE(30DENGINE)	A490B2310100	1
11	2ND CYLINDER HIGH PRESSURE FUEL TUBE(30DENGINE)	A490B2320100	1
12	3RD CYLINDER HIGH PRESSURE FUEL TUBE(30DENGINE)	A490B2330100	1
13	4TH CYLINDER HIGH PRESSURE FUEL TUBE(30DENGINE)	A490B2340100	1
14	FUEL PUMP HOSE - AF 30 D	490B25200000	1
15	FUEL FILTER	CX0708760000	2
16	WASHER 8	GBT971198500	2
17	SPRING WASHER 8	GBT931987000	2
18	BOLT M8 X 30	GBT578320000	2
19	FUEL PUMP HOSE (FEED PUMP) AF 30 D	490B25300000	1
20	FUEL SUPPLY PUMP CONNECTOR(30 D ENGINE)	490B25401400	1
21	SEBIFIC DUCT (A490BPG ENGINE)	490B25002000	3
22	LEAK PROOF CAP (3 TON)	498B25001000	1
23	CLAMP(30 D ENGINE)	490B25004000	10
24	COPPER WASHER	A490B2200100	4
25	FEED PUMP (A490BPG ENGINE)	490BLSO142A0	1
26	PUMP ELEMENT FIP (3 TON)	490B84000000	4
###	FUEL FILLTER MOUNT BKT	CXO700T00000	1
30	HIGH PRESSURE FUEL TUBES (A490BPG ENGINE	A490B2300000	1

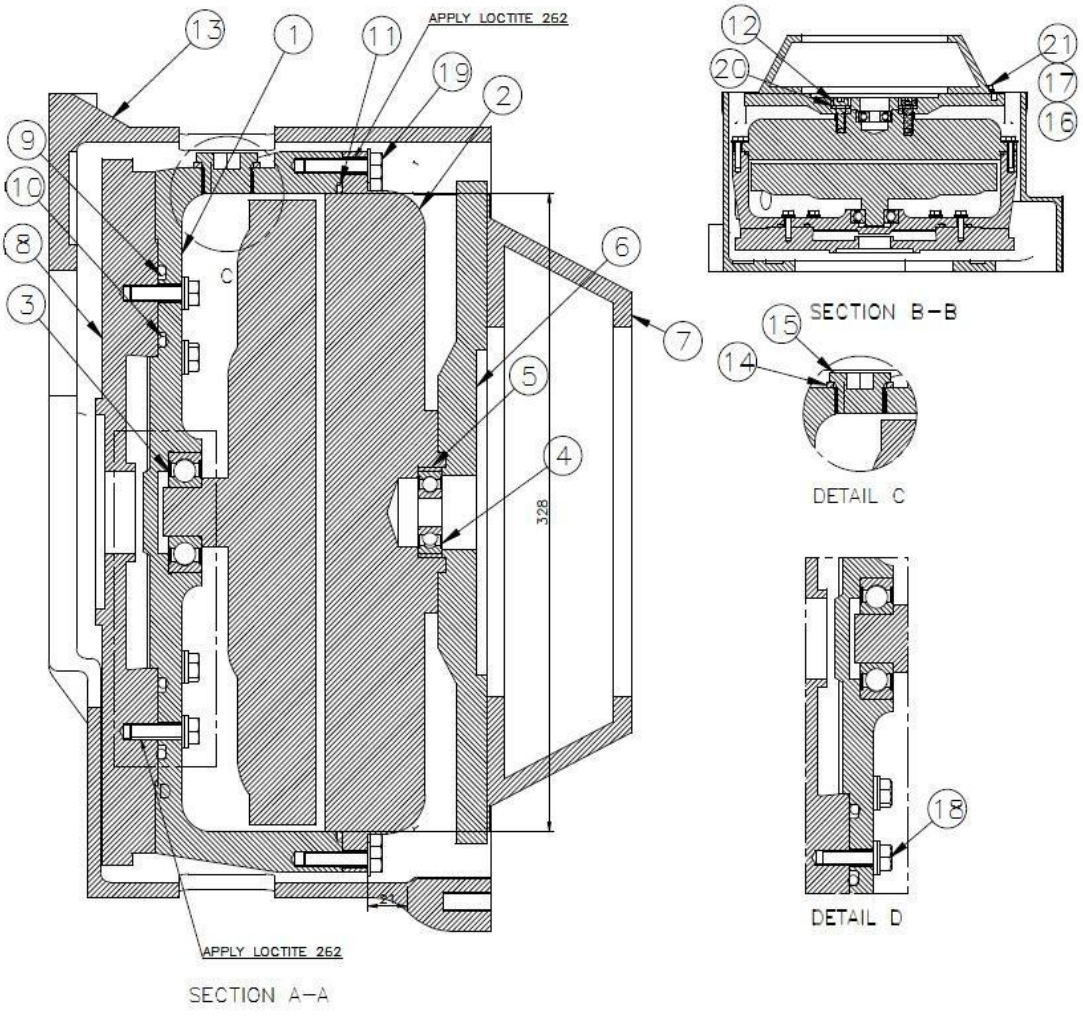
OIL FILTER ,STARTING MOTOR AND ALTERNATOR ASSEMBLY



OIL FILTER, STARTING MOTOR AND ALTERNATOR ASSEMBLY

ITEM NO.	DESCRIPTION	PART NO.	QTY.
1	OIL FILTER	JX85100C0000	1
2	ADJUSTING LEVER FOR GENERATOR (ALTERNATOR BK90TB)	543001400 1	
3	WASHER 8	GBT971198500	1
4	SPRING WASHER	GBT931987000	1
5	BOLT M8-25	GBT578320000	1
6	STARTING MOTOR	AFL490B51000	1
7	BOLT M10 X 80	GBT578220000	1
8	CHARGING GENERATOR (ALTERNATOR)	AF0300005200	1
9	WASHER 10	GBT971198500	1
10	SPRING WASHER	GBT931987000	1
11	NUT 10	GBT617020000	1
12	OIL FILTER BRACKET	JX8500T00000	1
	OIL SENSOR (I) OIL SENSOR (V&J) PHOTO TO BE ADDED		

FLUID COUPLING



FLUID COUPLING

ITEM NO.	DESCRIPTION	PART NO.	QTY.
1	DRUM MACHINED	180293200300	1
2	FLUID COUPLING	180173100200	1
3	BALL BEARING	933100001700	1
4	BALL BEARING	933100001400	1
5	BUSH	180293200400	1
6	BASE PLATE	180293202100	1
7	PRESSURE PLATE	180173201500	1
8	FLYWHEEL	180173200500	1
9	O RING	935530243000	1
10	`O' RING	935530170000	1
11	`O' RING	935400328000	1
12	BOLT ALLEN	901111210070	7
13	FLYWHEEL HOUSING MACHINED	180293200200	1
14	DOWTY SEAL	200145400600	2
15	PLUG	925062000500	2
16	WASHER PLAIN	901600800000	14
17	WASHER SPRING	901610800000	34
18	SCREW HEX	901500811060	8
19	SCREW HEX	901500812070	20
20	WASHER SPRING	901611200000	6
21	BOLT HEX	901100811040	6

MODIFICATIONS

Item No.	DESCRIPTION	Part No.	Fig.No.	Page No.	Remarks