

Owner's Manual

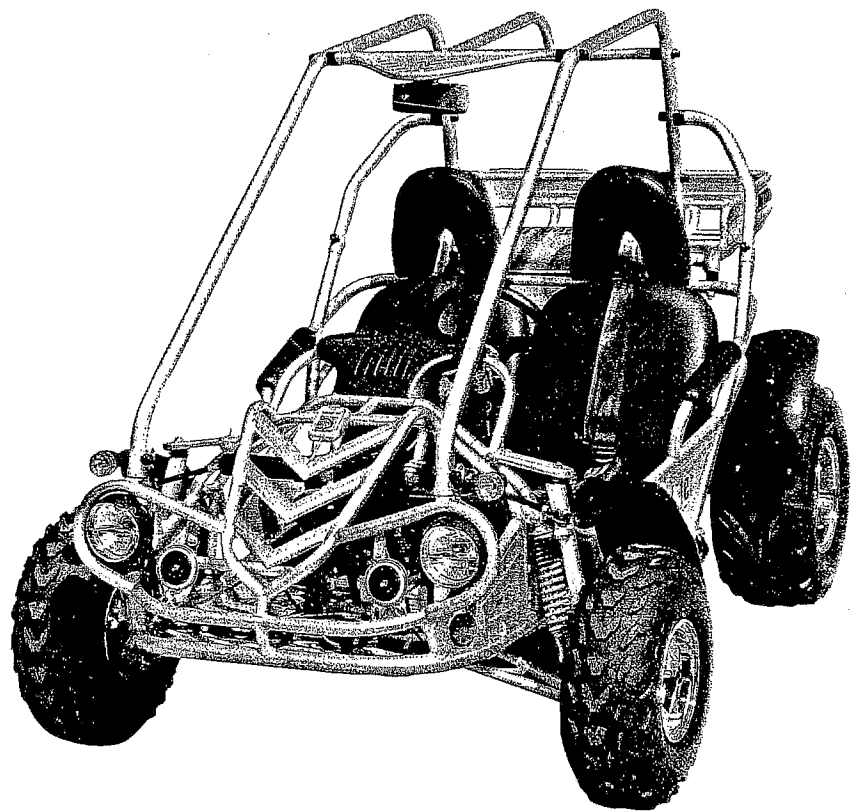
Parts Manual

Twister
Hammerhead

**READ THIS MANUAL CAREFULLY,
IT CONTAINS IMPORTANT SAFETY INFORMATION.**

UM150TR

**MINIMUM
RECOMMENDED
OPERATOR AGE: 16**



FOR OFF-ROAD USE ONLY

This vehicle is designed and manufactured for off-road use only. It does not conform to Federal Motor Vehicle Safety Standards, and in regard to operation on public streets, roads, or highways it is illegal.

UM150IIR Limited Warranty

The warranty policy applies to those cases where the new seller vehicle unloaded from its shipping container, set up and delivered by an authorized dealer, and under normal use and service is found to have defects in parts or workmanship under the following terms and conditions. This warranty covers the kart and engine related components for a period of 90 days.

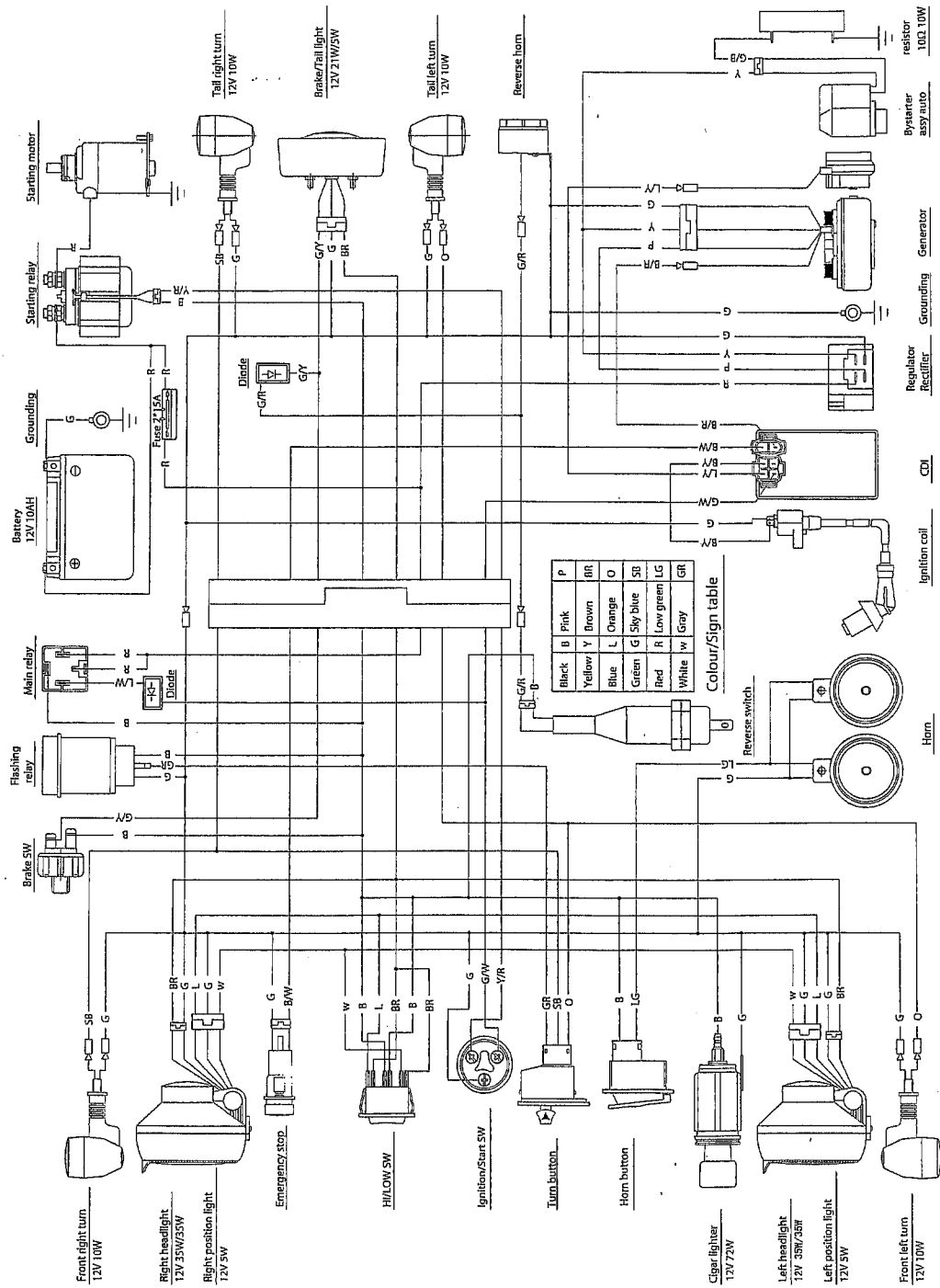
This warranty does not apply to any part, which in opinion of seller was defective because of improper maintenance, improper assembly, alterations, abuse, negligence or accident.

Should warranty service be required on your UM150IIR during the 90 days warranty period, please contact your nearest authorized dealer for repairs.

What is not covered under this warranty

Misuse, Negligence, Alterations, Accidents or any abnormal use including non Genuine parts, renting or leasing, competition or racing. This warranty does not cover loss of use of the unit or loss of time, or inconvenience or normal wear and deterioration caused by the use or storage of consumable items such as spark plugs, chain, brake shoes, fuses, clutch plates, sprockets, light bulbs, battery and tires.

WIRING DIAGRAM



COMPONENT LOCATIONS

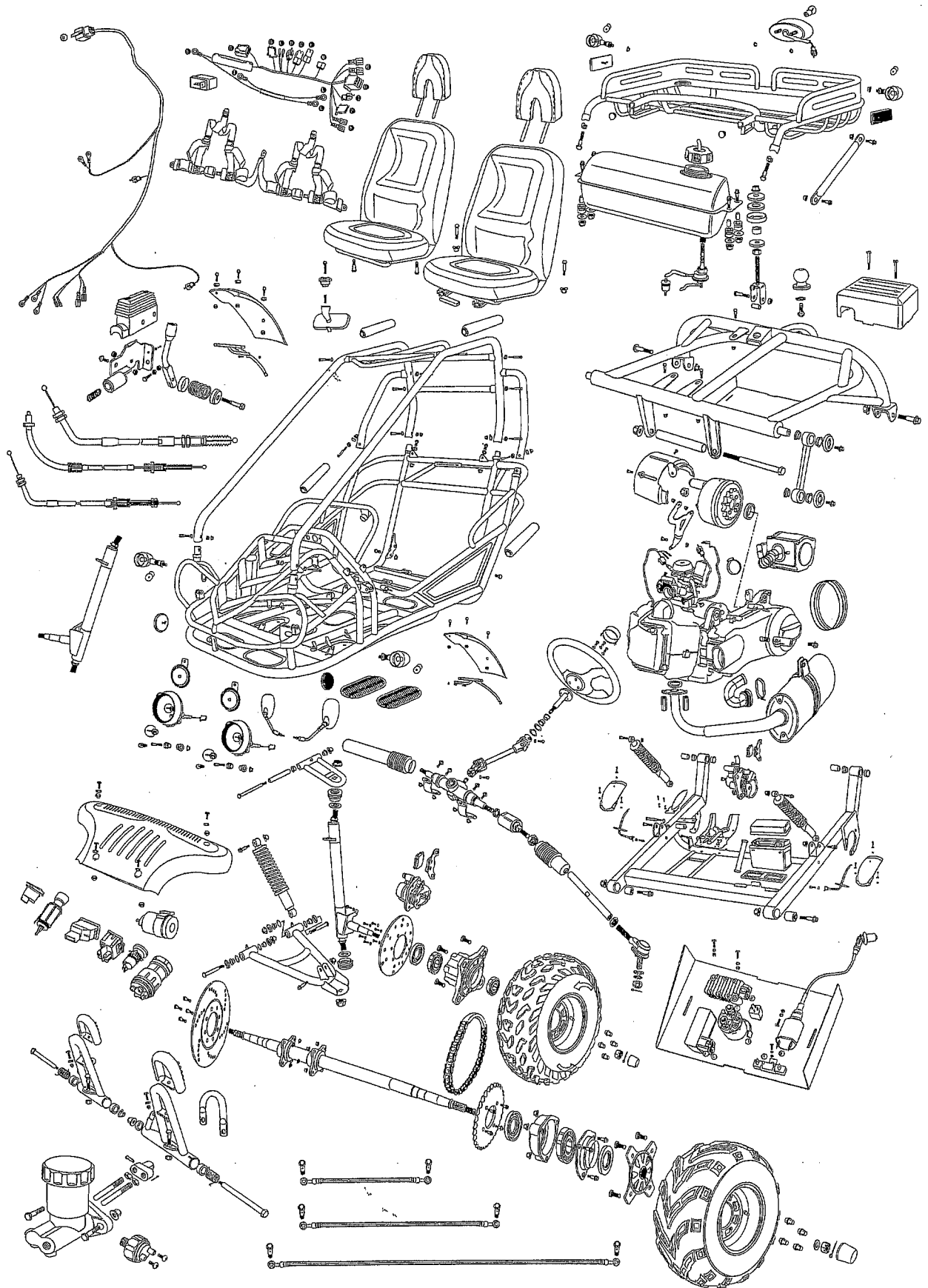
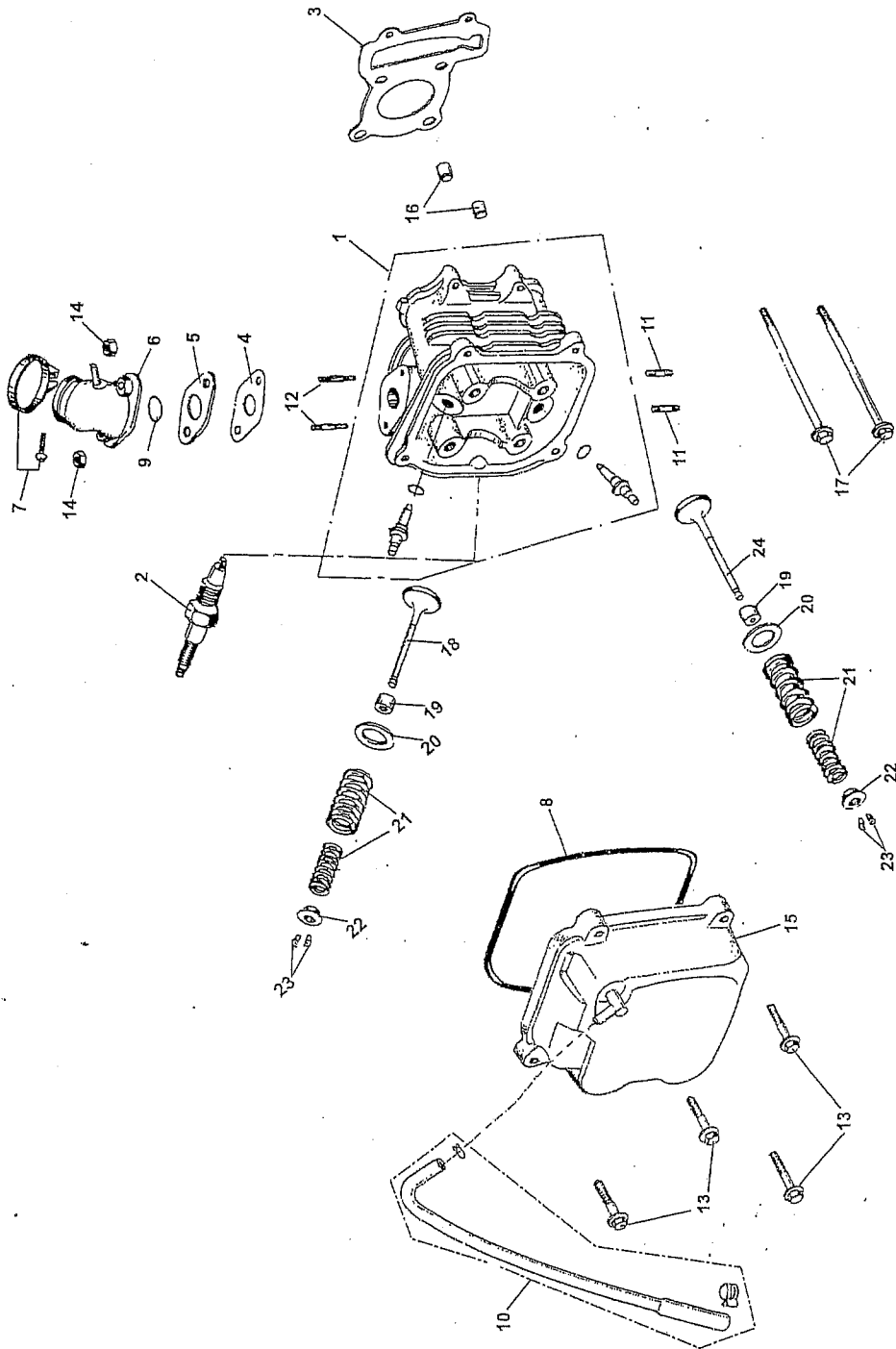
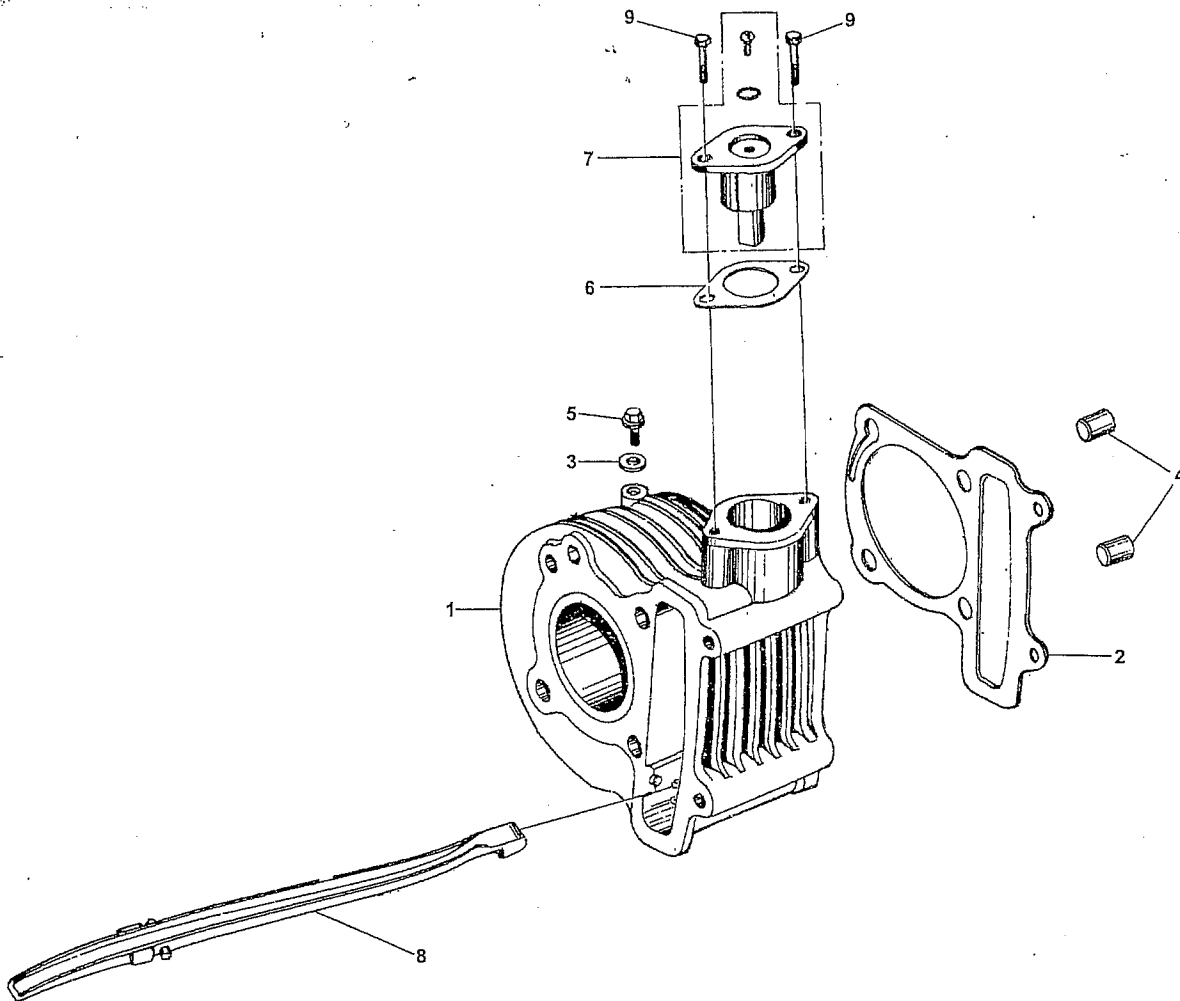


FIG. 1

CYLINDER HEAD ASSY.



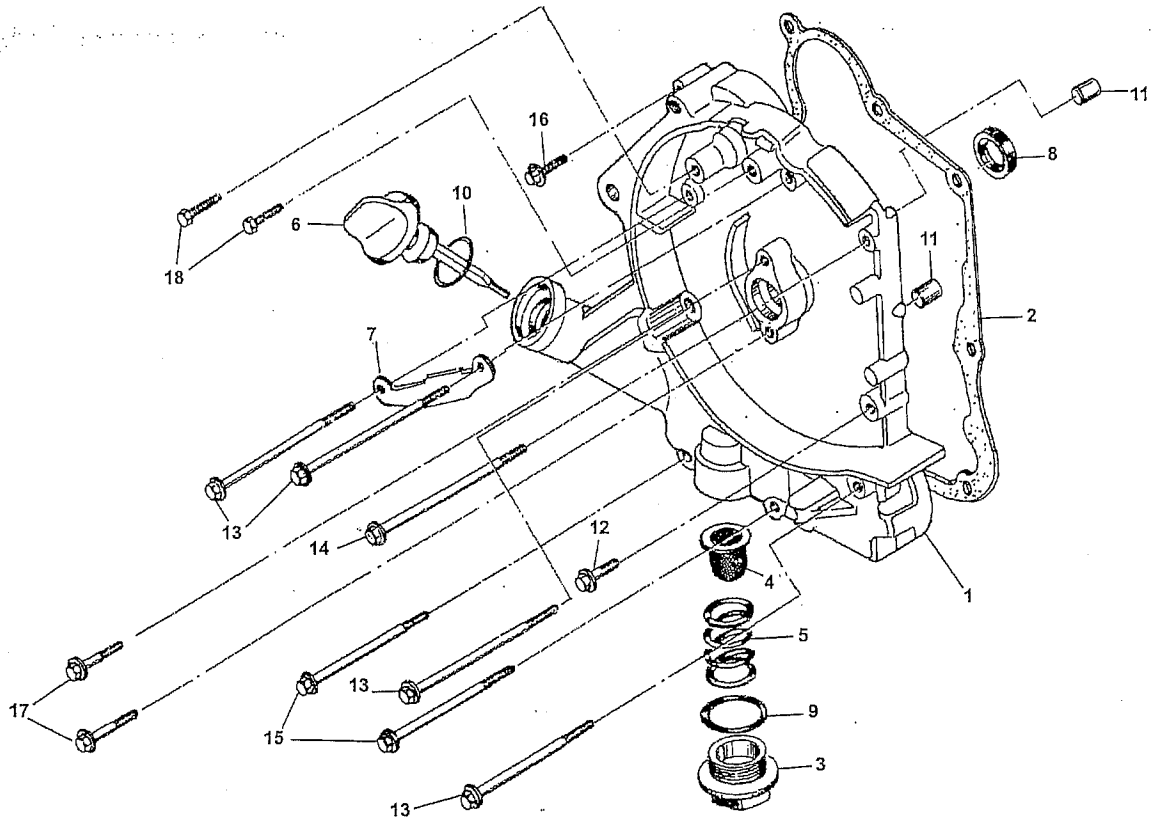
CYLINDER ASSY.



CYLINDER ASSY.

REF NO.	PART NO.	DESCRIPTION	REGD NO.
1	M150-1002200	CYLINDER COMP.	1
2	M150-1002001	GASKET CYLINDER	1
3	90442-06000-KAT	WASHER SEALING 6	1
4	M150-1001007	PIN DOWEL 10X16	2
5	96001-06012-KAT	BOLT FLANGE M6X12-ZN. D	1
6	M150-1002002	GASKET TENSIONER LIFTER	1
7	M150-1002100	LIFTER ASSY. TENSIONER	1
8	M150-1002300	GUIDE COMP. CAM CHAIN	1
9	96001-06020-KAT	BOLT FLANGE, 6X20	2

CRANKCASE ASSY. (1)

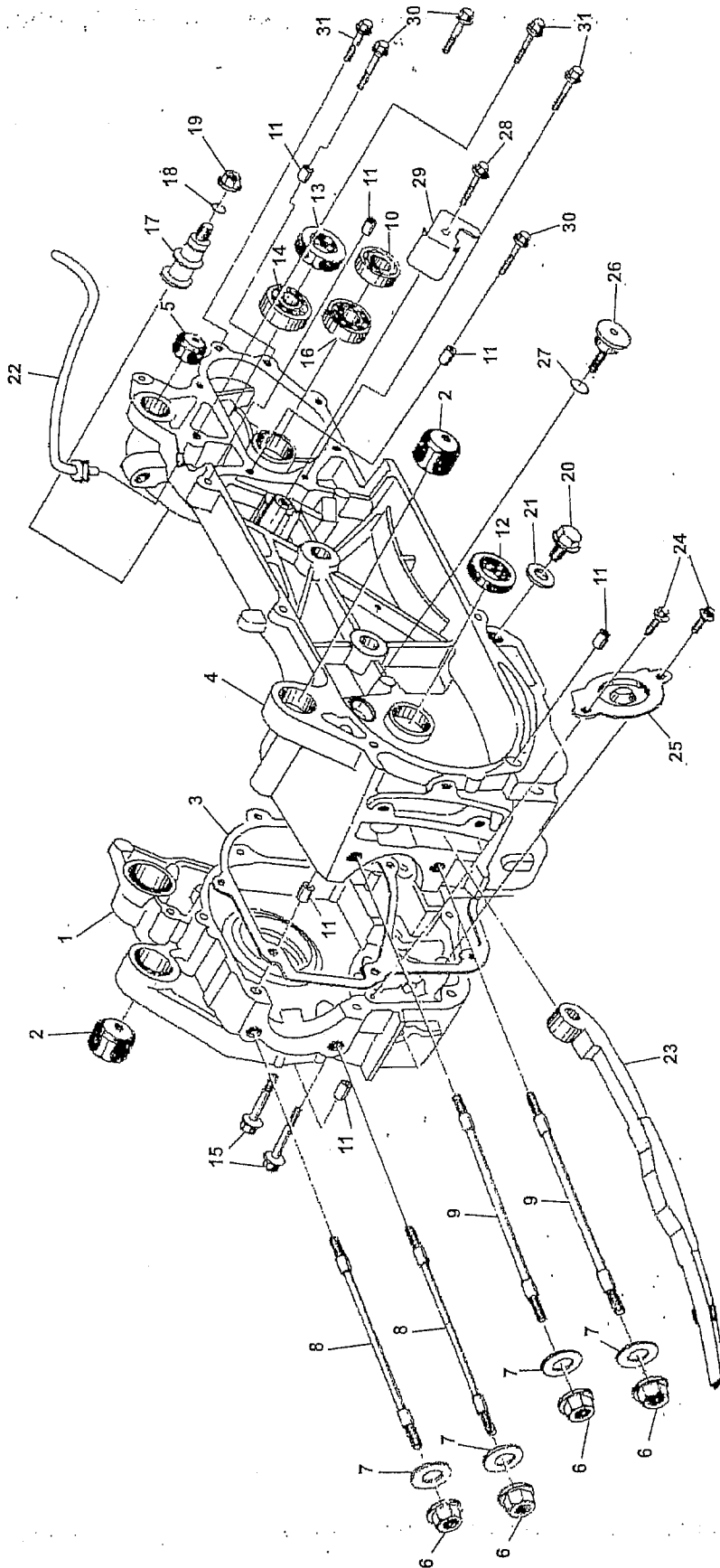


CRANKCASE ASSY.(1)

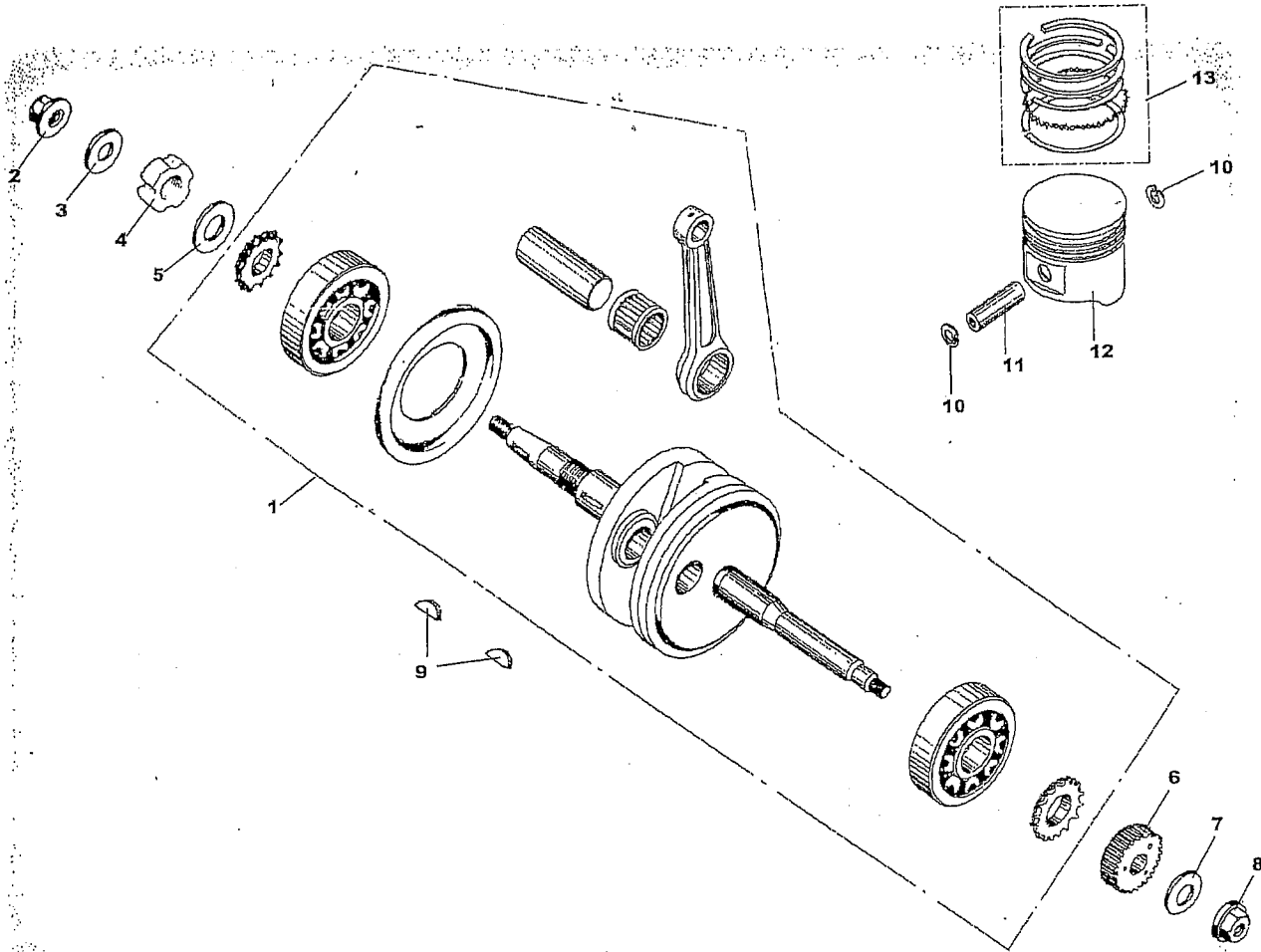
REF NO.	PART NO.	DESCRIPTION	REGD NO.
1	M150-1003101	COVER R CRANKCASE COMP.	1
2	M150-1003013	CRANKCASE COVER,GASKET	1
3	M150-1003104	CAP TAPPET ADJUSTING HOLE	1
4	M150-1003120	SCREEN OIL FILTING	1
5	M150-1003102	SRING OIL FILTING SCREEN	1
6	M150-1003105	GAUGE OIL LEVEL	1
7	M150-1003006	CLAMPER AC GENERATOR CORD	1
8	M150-1003110	OIL SEAL 19.8X30X5	1
9	M150-1003103	O-RING 30.8X3	1
10	M150-1003307	O-RING 18X3	1
11	M150-1003005	PIN DOWEL 8X14	2
12	96001-06032-KAT	BOLT FLANGE M6X28	1
13	M150-1003012	BOLT FLANGE M6X95	4
14	M150-1003007	BOLT FLANGE M6X100	1
15	M150-1003008	BOLT FLANGE M6X110	2
16	M150-1003034	BOLT FLANGE M6X35	1
17	M150-1003106	BOLT FLANGE M6X20	2
18	92101-05012-OH	BOLT HEX M5X12-ZN.D	2

FIG. 4

CRANKCASE ASSY. (2)



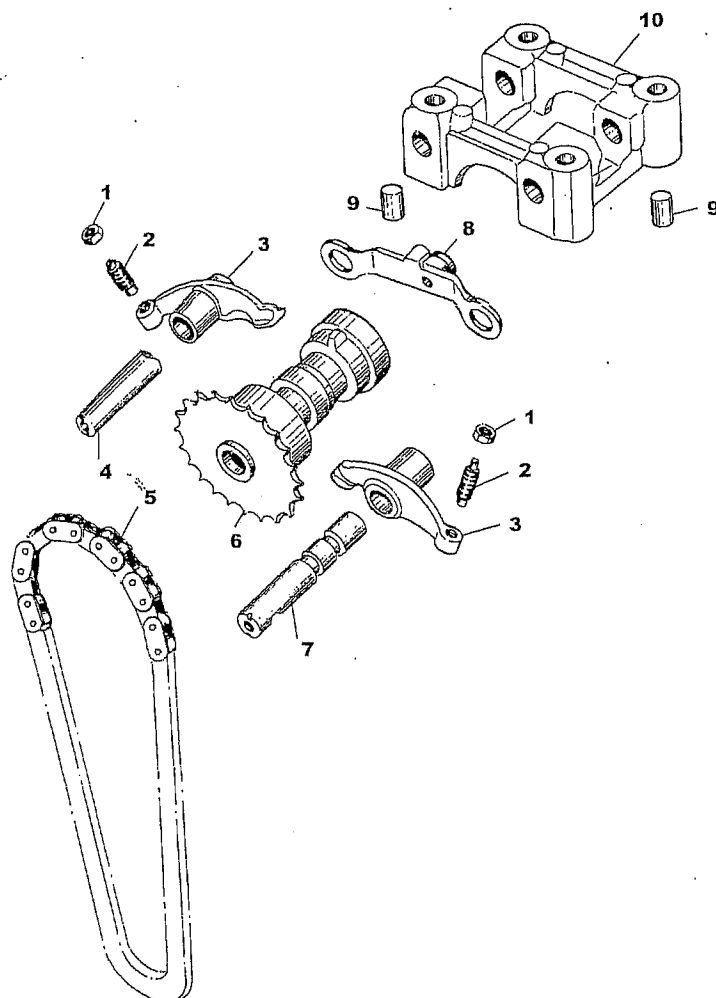
CRANKSHAFT CONROD & PISTON ASSY.



CRANKSHAFT CONROD & PISTON ASSY.

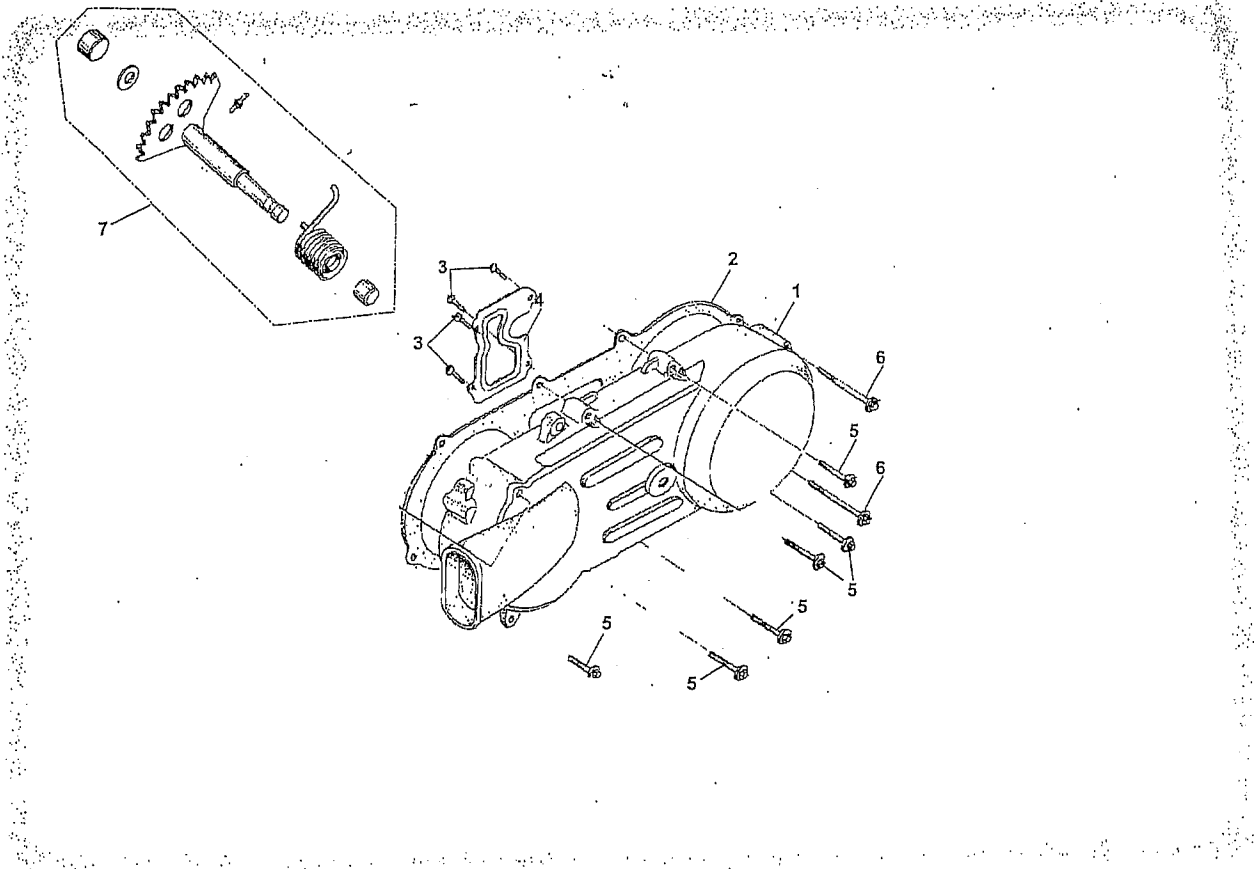
REF NO.	PART NO.	DESCRIPTION	REGD NO.
1	M150-1004100	CRANKSHAFT & CONROD ASSY.	1
2	M150-1004007	NUT M12X1.25	1
3	M150-1004011	WASHER 12-149HV 12-140HV	1
4	M150-1004009	NUT LOCK	1
5	M150-1004013	WASHER	1
6	M150-1004012	GEAR KICK DRIVE	1
7	M150-1040005	WASHER Ø12	1
8	M150-1004008	NUT M12	1
9	M150-1004002	KEY WOODRUFF	2
10	M150-1004003	CLIP PISTON PIN	2
11	M150-1004006	PIN PISTON	1
12	M150-1004001	PISTON	1
13	M150-1004200	PISTON RING SET	1

CAMSHAFT ASSY.



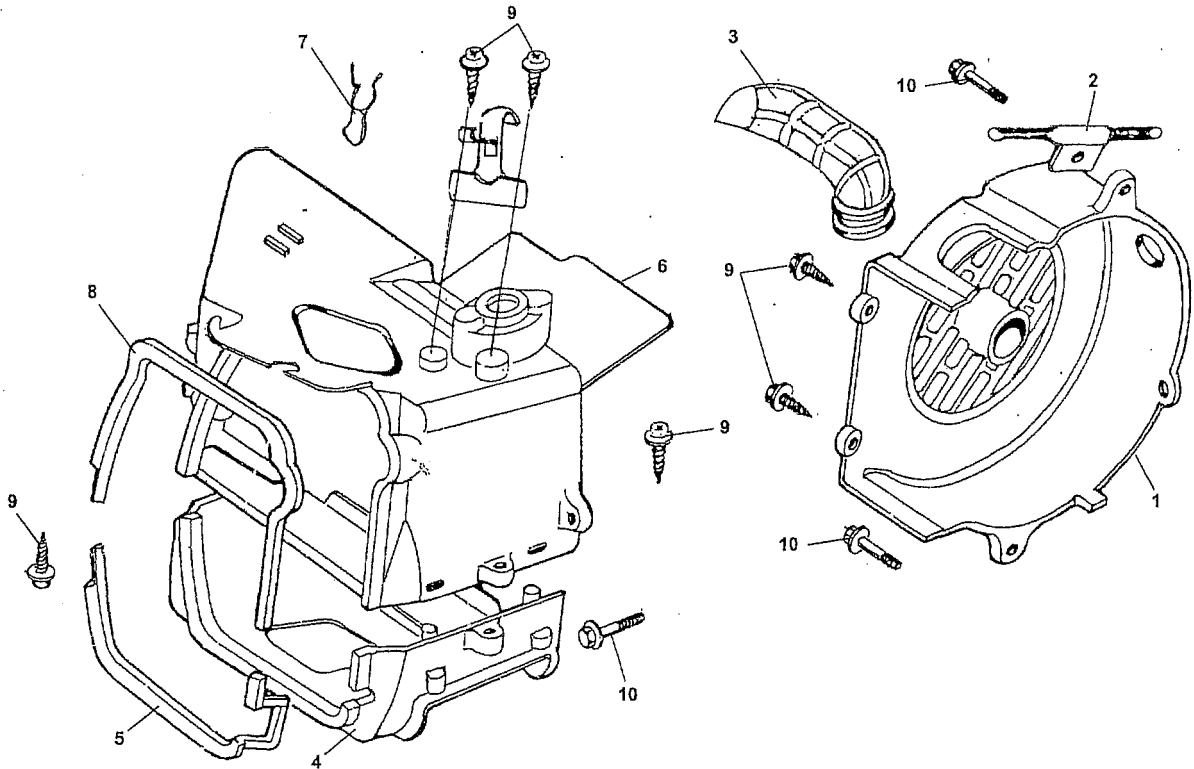
CAMSHAFT ASSY.			
REF NO.	PART NO.	DESCRIPTION	REGD NO.
1	M150-1005004	NUT TAPPET ADJUSTING	2
2	M150-1005003	SCREW TAPPET ADJUSTING	2
3	M150-1005002	ARM VALVE ROCKER	2
4	M150-1005005	SHAFT EX ROCKER ARM	1
5	M150-1005400	CHAIN CAMSHAFT,	1
6	M150-1005300	CAMSHAFT COMP. 16T	1
7	M150-1005200	SHAFT COMP. IN ROCK ARM	1
8	M150-1005100	PLATE COMP. STOPPER	1
9	M150-1001007	PIN DOWEL 10X16	2
10	M150-1005001	HOLDER CAMSHAFT	1

LEFT COVER ASSY.



LEFT COVER ASSY.				
REF NO.	PART NO.	DESCRIPTION	REGD NO.	
1	M150-1008101	COVER L	1	
2	M150-1008005	GASKET L COVER	1	
3	93903-00428-KAT	SCREW TAPPING ST4.2X8-F-H	4	
4	M150-1008102	PLATE L COVER	1	
5	M150-1003034	BOLT FLANGE M6X40	6	
6	M150-1008006	BOLT FLANGE M6X65	2	
7	M150-1008200	SPINDLE COMP. KICK STARTER ASSY.	1	

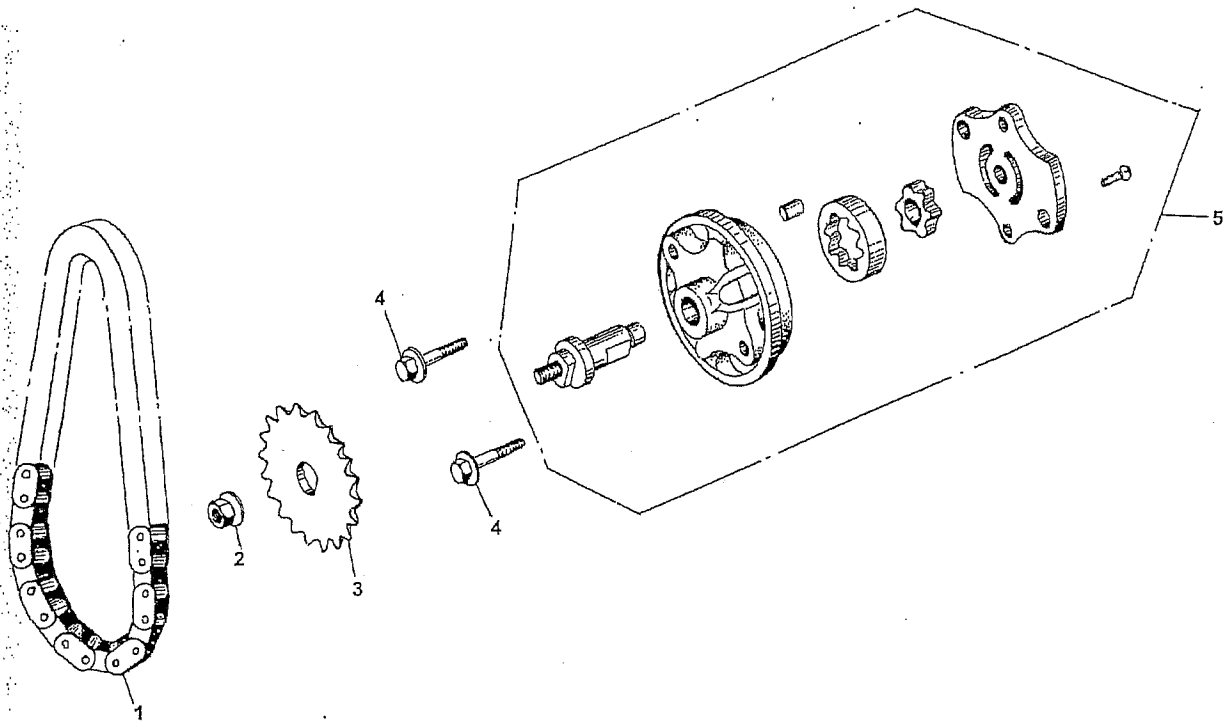
FAN COVER AND SHROUD ASSY.



FAN COVER AND SHROUD ASSY.

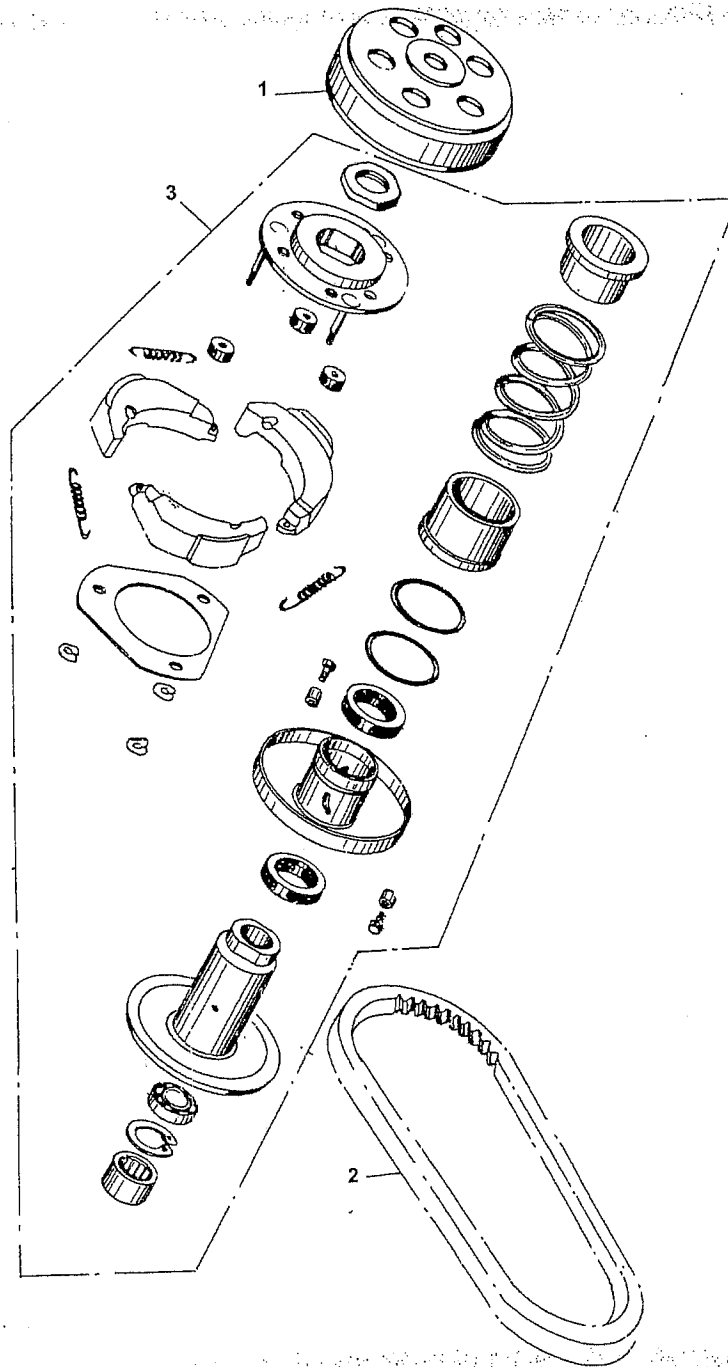
REF NO.	PART NO.	DESCRIPTION	REGD NO.
1	M150-1009410	COVER COMP. FAN	1
2	M150-1009002	CLAMPER STARTER CABLE	1
3	M150-1009401	DUCT, FAN SHROUD COOLING	1
4	M150-1009301	SHROUD LOWER	1
5	M150-1009302	SEAL SHROUD LOWER	1
6	M150-1009110	SHROUD COMP. UPPER	1
7	M150-1009103	CLIP HIGH TENSION CORD	1
8	M150-1009102	SEAL SHROUD UPPER	1
9	M150-1009402	SCREW ST4.8X16-F	6
10	M150-1003075	BOLT M6X25	3

OIL PUMP ASSY.



OIL PUMP ASSY.			
REF NO.	PART NO.	DESCRIPTION	REGD NO.
1	M150-1021000	CHAIN OIL PUMP	1
2	M150-1020002	NUT FLANGE M6	1
3	M150-1020001	SPROCKET OIL PUMP DRIVEN	1
4	M150-B-1003075	BOLT M6X25	2
5	M150-1022000	OIL PUMP SUB ASSY.	1

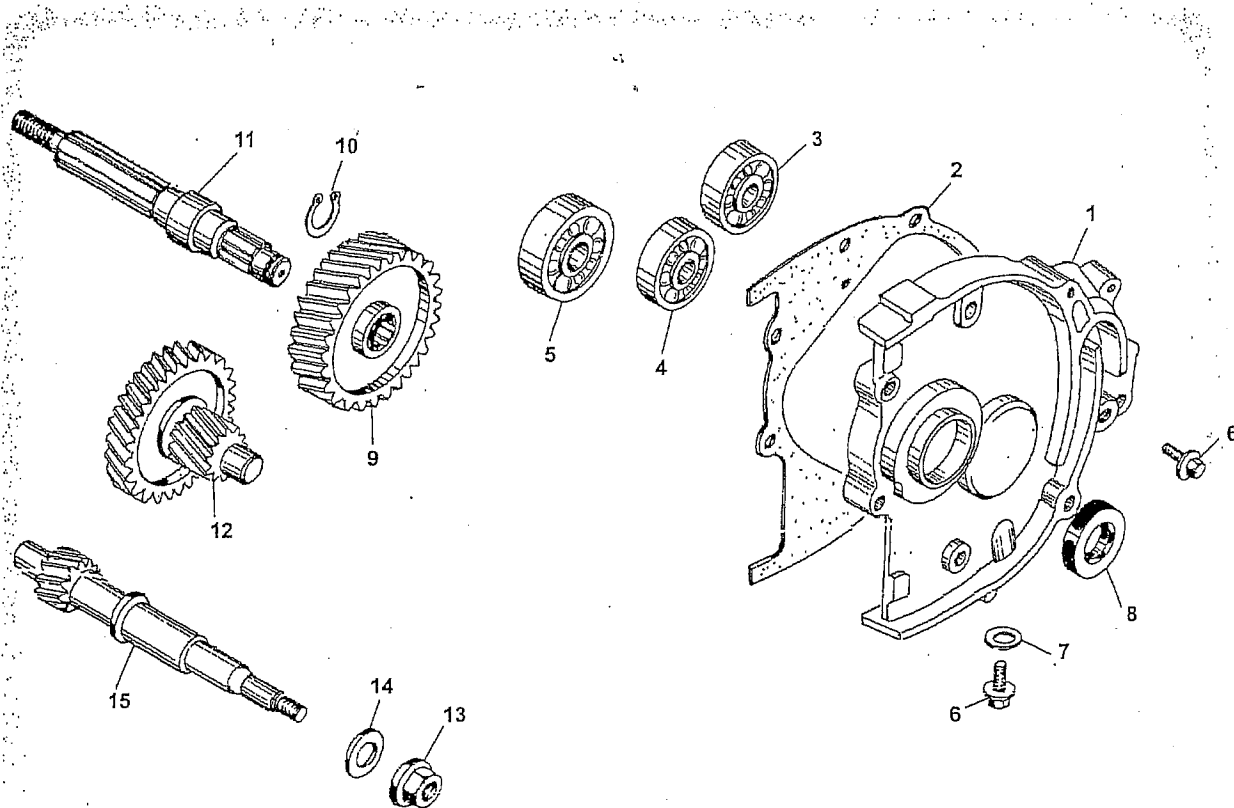
DRIVEN PULLEY AND CLUTCH SUBASSY.



DRIVEN PULLEY AND CLUTCH SUBASSY.

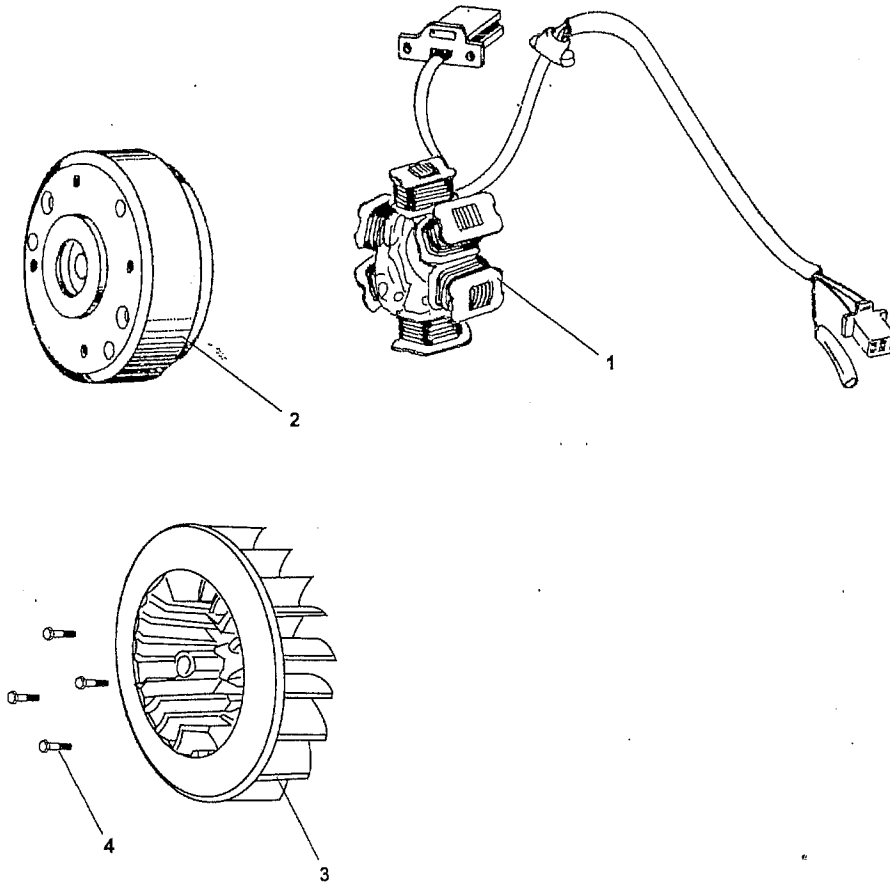
REF NO.	PART NO.	DESCRIPTION	REGD NO.
1	M150-1032000	OUTER CLUTCH ASSY.	1
2	M150-1033000	BELT DRIVE	1
3	M150-1031000	PULLEY ASSY. DRIVEN	1

TRANSMISSION ASSY.



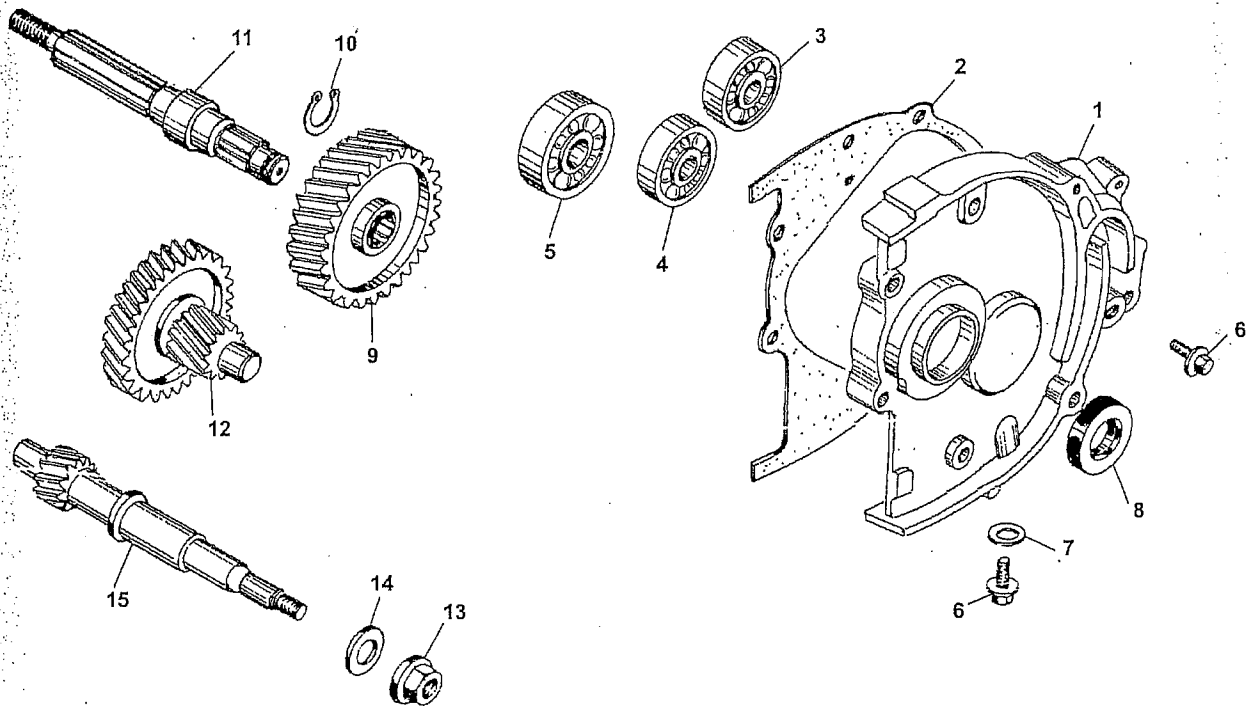
TRANSMISSION ASSY.				
REF NO.	PART NO.	DESCRIPTION	REGD NO.	
1	M150-1040001	COVER TRANSMISSION	1	
2	M150-1041000	GASKET TRANSMISSION COVER	1	
3	91004-E6203-KAT	BEARING RADIAL BALL E6203	1	
4	91004-E6202-KAT	BEARING RADIAL BALL E6202	1	
5	91004-E6204-KAT	BEARING RADIAL BALL E6204	1	
6	M150-1040008	BOLT SPECIAL M8X12	2	
7	M150-1040002	WASHER Ø8	1	
8	M150-1042000	OIL SEAL 20X32X6	1	
9	M150-1040004	GEAR FINAL	1	
10	94510-20000	CIRCLIP EXTERNAL 20	1	
11	M150-1040003	SHAFT FINAL	1	
12	M150-1043000	SHAFT COMP. COUNTER	1	
13	M150-1040007	NUT COMPRESSOR FLANGE M12	1	
14	M150-1040005	WASHER Ø12	1	
15	M150-1040006	SHAFT DRIVE	1	

ELECTRIC SYSTEM



ELECTRIC SYSTEM			
REF NO.	PART NO.	DESCRIPTION	REGD NO.
1	M150-1051200	STATOR COMP.	1
2	M150-1051100	FLYWHEEL COMP.	1
3	M150-1051100-3	FAN COMP COOLING	1
4	M150-1051100-4	BOLT FLANGE M6x18	4

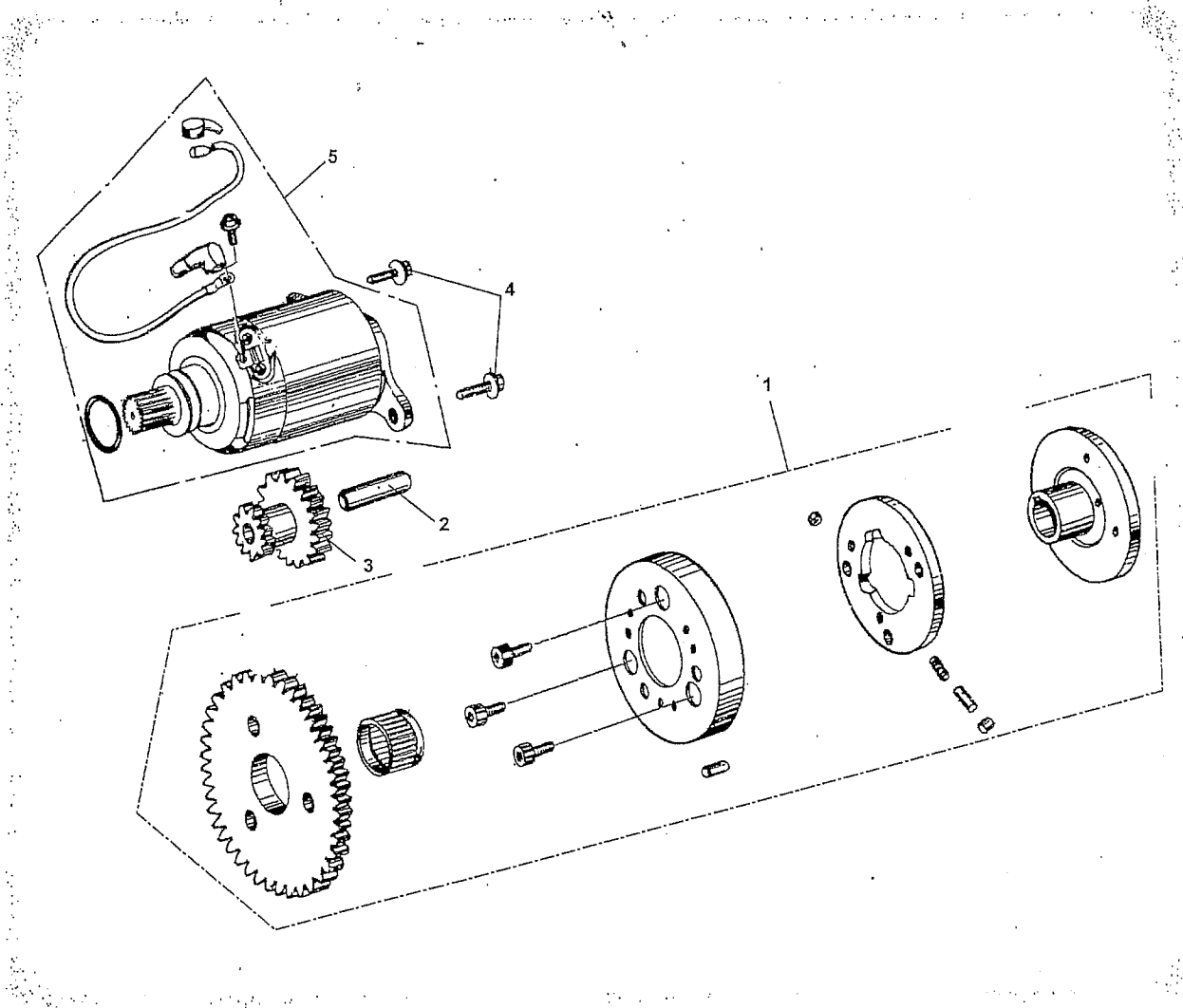
TRANSMISSION ASSY.



TRANSMISSION ASSY.

REF NO.	PART NO.	DESCRIPTION	REGD NO.
1	M150-1040001	COVER TRANSMISSION	1
2	M150-1041000	GASKET TRANSMISSION COVER	1
3	91004-E6203-KAT	BEARING RADIAL BALL E6203	1
4	91004-E6202-KAT	BEARING RADIAL BALL E6202	1
5	91004-E6204-KAT	BEARING RADIAL BALL E6204	1
6	M150-1040008	BOLT SPECIAL M8X12	2
7	M150-1040002	WASHER Ø8	1
8	M150-1042000	OIL SEAL 20X32X6	1
9	M150-1040004	GEAR FINAL	1
10	94510-20000	CIRCLIP EXTERNAL 20	1
11	M150-1040003	SHAFT FINAL	1
12	M150-1043000	SHAFT COMP. COUNTER	1
13	M150-1040007	NUT COMPRESSOR FLANGE M12	1
14	M150-1040005	WASHER Ø12	1
15	M150-1040006	SHAFT DRIVE	1

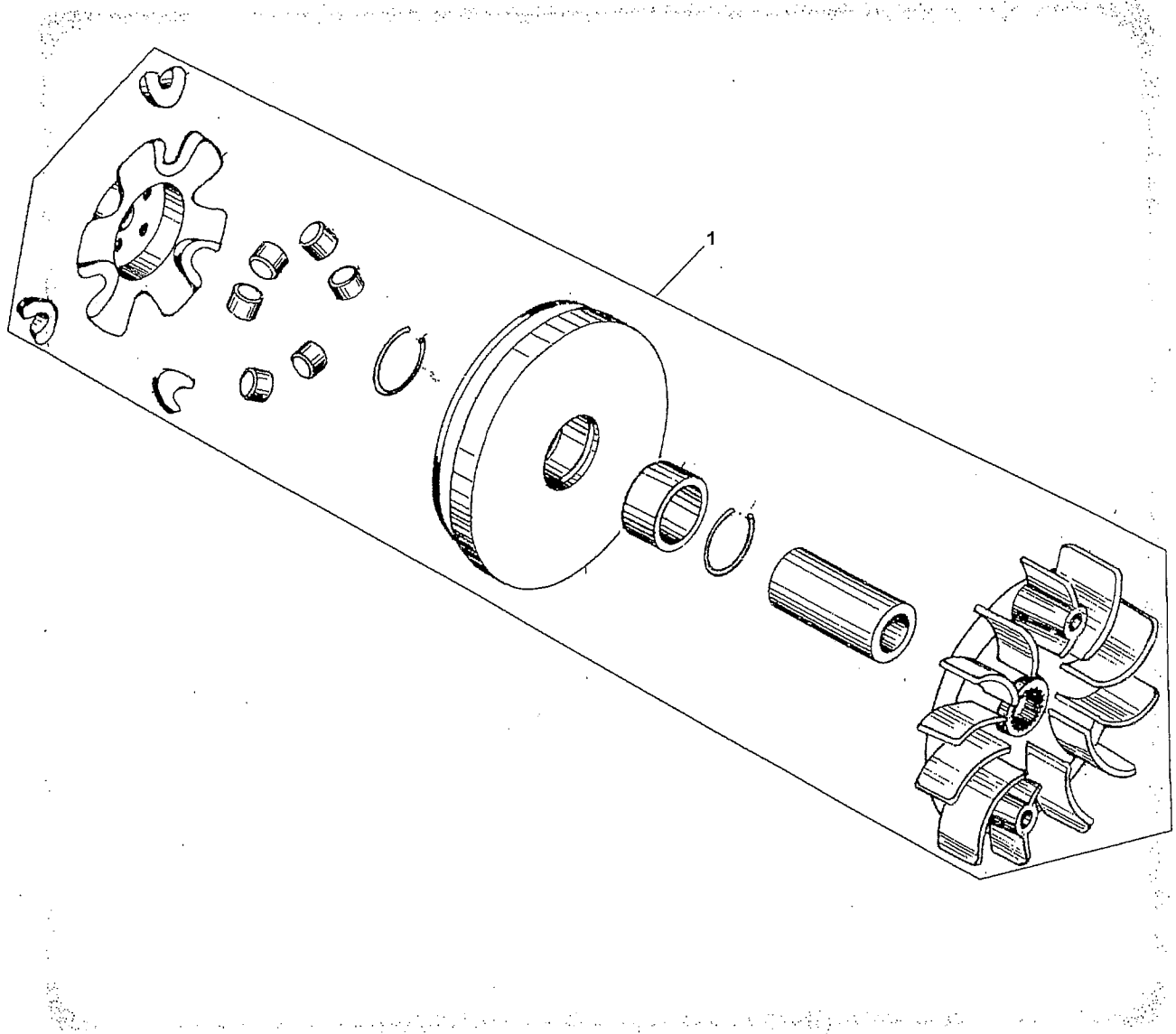
ELECTRIC STARTER ASSY.



ELECTRIC STARTER ASSY.

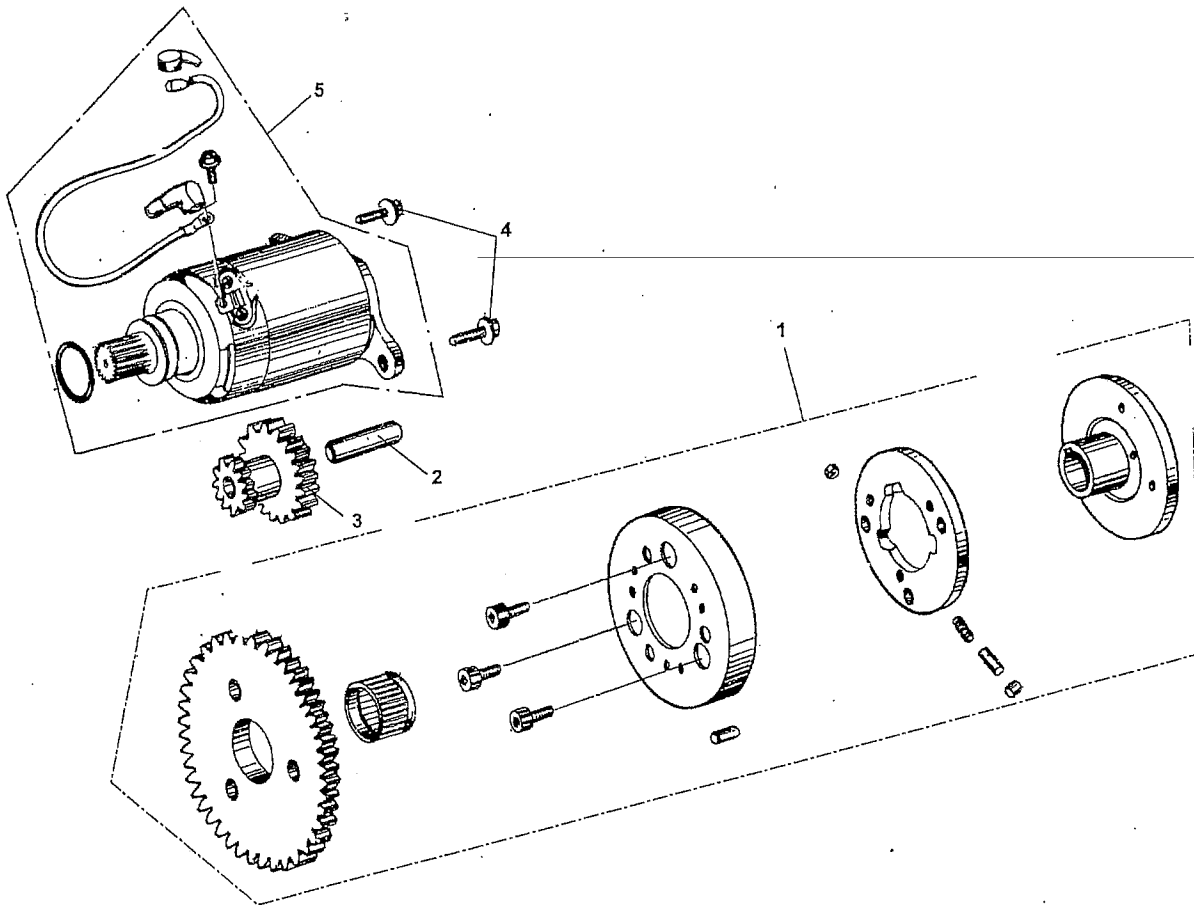
REF NO.	PART NO.	DESCRIPTION	REGD NO.
1	M150-1060001	FLANGE STARTING CLUTCH	1
2	M150-1060002	SHAFT STARTER REDUCTION GEAR	1
3	M150-1060003	GEAR STARTER REDUCTION	1
4	M150-1060005	BOLT FLANGE M6X16	2
5	M150-1064000	MOTOR ASSY. STARTER	1

DRIVE PULLEY SUBASSY.



DRIVE PULLEY SUBASSY.			
REF NO.	PART NO.	DESCRIPTION	REGD NO.
1	M150-1071000	PULLEY ASSY. MOVABLE DRIVE	1

ELECTRIC STARTER ASSY.



ELECTRIC STARTER ASSY.

REF NO.	PART NO.	DESCRIPTION	REGD NO.
1	M150-1060001	FLANGE STARTING CLUTCH	1
2	M150-1060002	SHAFT STARTER REDUCTION GEAR	1
3	M150-1060003	GEAR STARTER REDUCTION	1
4	M150-1060005	BOLT FLANGE M6X16	2
5	M150-1064000	MOTOR ASSY. STARTER	1

FIG. 15

CARBURETOR

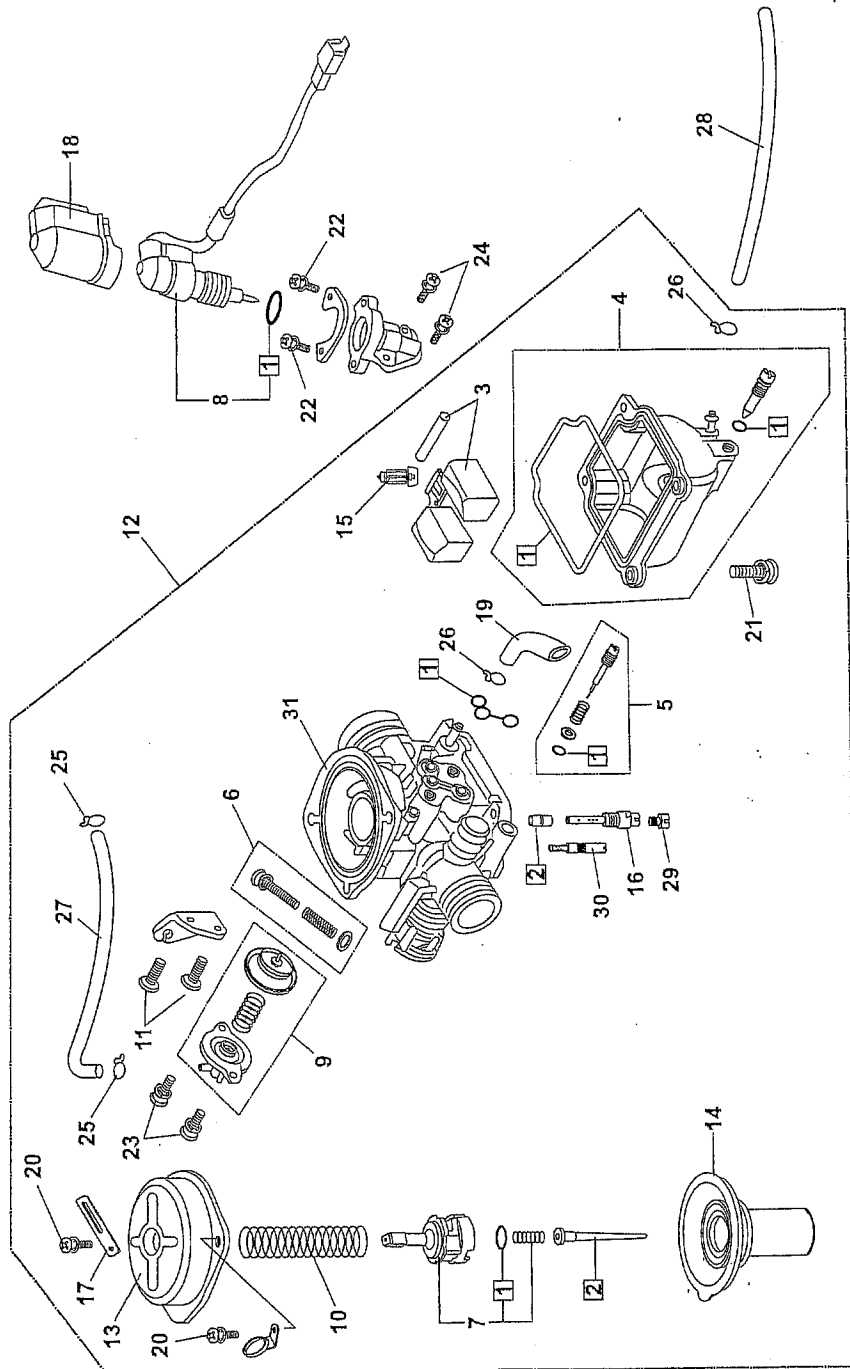
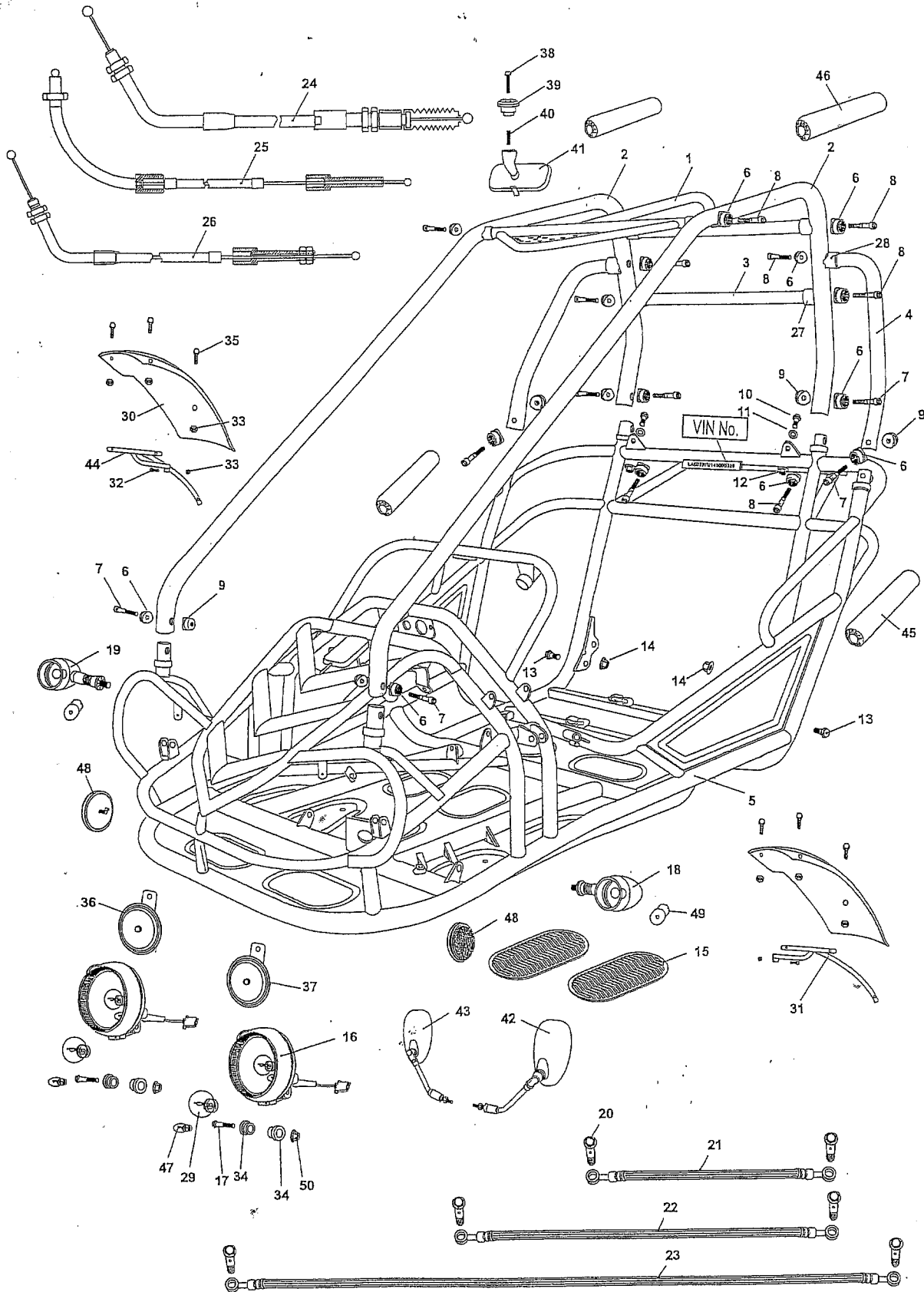


FIG. 16

FRAME GROUP

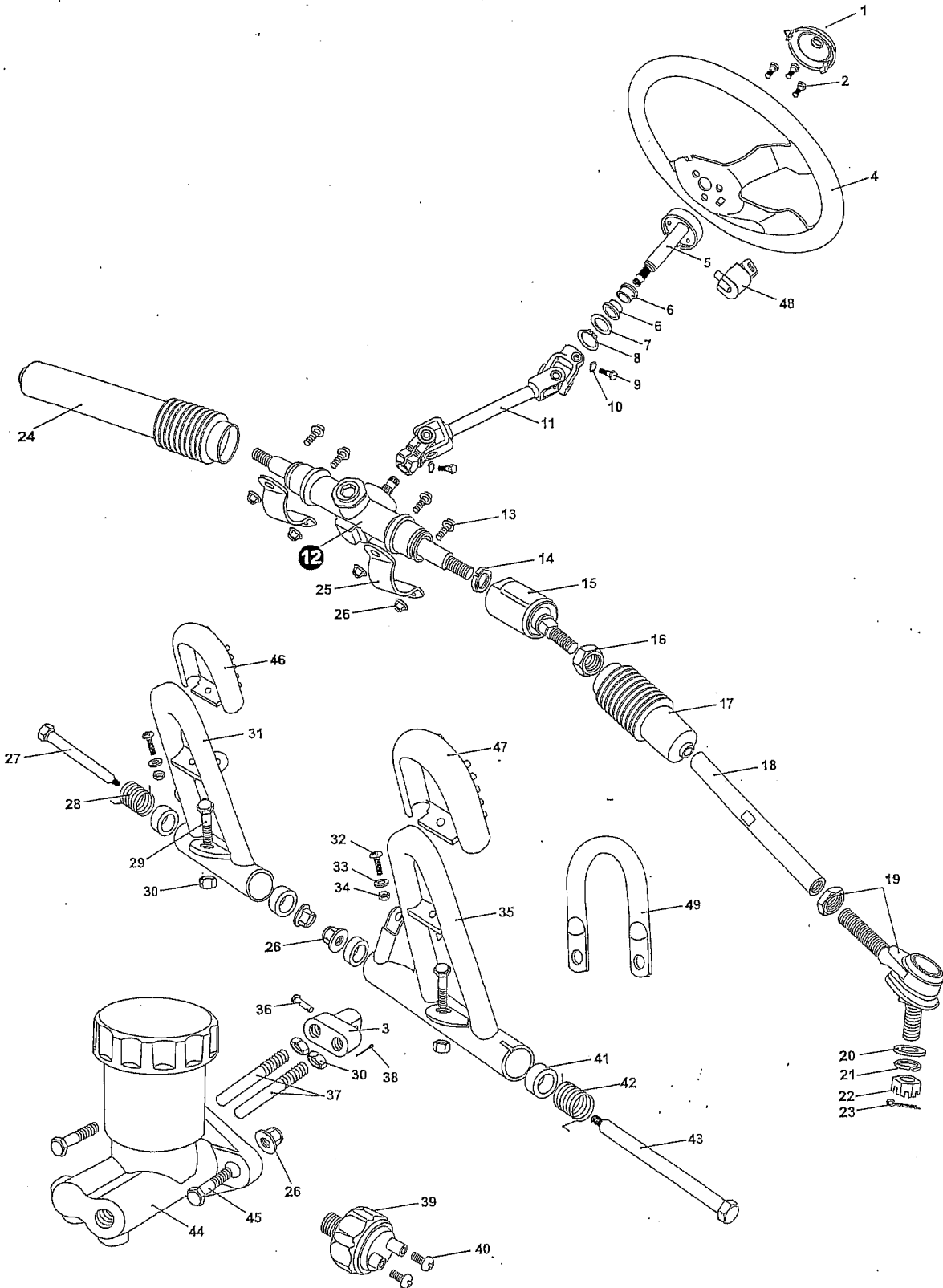


FRAME GROUP

REF NO.	PART NO.	DESCRIPTION	REGD NO.
1	6.000.061	BRUSH GUARD CROSS BAR. FR (B. G. R.)	1
2	8.070.034	BRUSH GUARD BAR. (B. G. R.)	2
3	8.080.033	BRUSH GUARD CROSS BAR. RR (B. G. R.)	1
4	8.070.035	BRUSH GUARD BAR. L. R. SIDE (B. G. R.)	2
5	2.000.026	FRAME COMP (B. G. R.)	1
6	7.010.049	WASHER CAP	16
7	9.108.050N	SOCKET BOLT M8x1.25x50	6
8	9.908.055N	SOCKET BOLT M8x1.25x55	10
9	7.010.050	NUT. CAP M8	6
10	9.700.001	BOLT. SPECIAL M7/16"x28	2
11	9.700.002	WASHER. BELT \varnothing 12	2
12	9.700.003	NUT. BELT M7/16"	2
13	9.112.025	BOLT-WASHER M12x1.25x25	2
14	9.220.012	LOCK FLANGE NUT. M12	2
15	7.020.012	FOOT PLATE. RUBBER	4
16	6.000.104	HEADLIGHT UNIT	2
17	9.108.050	BOLT-WASHER M8x1.25x50	2
18	6.000.155	LIGHT ASSY. L. FR. WINKER	1
19	6.000.156	LIGHT ASSY. R. FR. WINKER	1
20	9.700.004	BOLT. BANJO M10x24	6
21	6.000.089	HOSE ASSY. L. BRAKE 34"	1
22	6.000.090	HOSE ASSY. R. BRAKE 43"	1
23	6.000.091	HOSE ASSY. RR. BRAKE 75"	1
24	6.000.034	CABLE COMP. THROTTLE	1
25	6.000.040	CABLE COMP. REVERSE	1
26	6.000.050	CABLE COMP. PARKING BRAKE	1
27	7.010.017	TUBE SEAT \varnothing 25	6
28	7.010.016	TUBE SEAT \varnothing 32	2
29	9.090.003	BULB. HEADLIGHT 35W/35W 12V	2
30	7.010.034	FENDER. FR	2
31	6.000.067	BRACKET. FRONT FENDER. L	1
32	9.100.640	BOLT M6x40	2
33	9.210.006	LOCK FLANGE NUT. M6	8
34	7.020.049	RUBBER MOUNT. HEADLIGHT	4
35	9.106.014	BOLT-WASHER M6x14	6
36	6.000.135	HORN. H	1
37	6.000.136	HORN. L	1
38	9.100.525	BOLT M5x25	1
39	8.010.086	MOUNT. REAR MIRROR	1
40	8.040.005	REAR VIEW MIRROR SPRING.	1
41	6.000.084	REAR MIRROR ASSY.	1
42	6.000.137	MIRROR ASSY. L. BACK	1
43	7.020.138	MIRROR ASSY. R. BACK	1
44	6.000.102	BRACKET. FRONT FENDER. R	1
45	6.000.083	FOAM PADDING-1	2
46	6.000.116	FOAM PADDING-2	2
47	9.000.004	BULB. POSITION LIGHT 3W 12V	2
48	6.000.114	FRONT REFLECTOR	2
49	9.090.006	BULB.WINKER 10W 12V	2
50	9.220.008	LOCK FLANGE NUT. M8	2

FIG. 17

STEERING SHAFT ASSY.



STEERING SHAFT ASSY.			
REF NO.	PART NO.	DESCRIPTION	REGD NO.
1	7.010.041	COVER. STEERING BOLT	1
2	9.100.612	BOLT STRAP M6x12	3
3	8.030.024	BRACKET. SPINDLE	1
4	7.020.038	STEERING WHEEL	1
5	6.000.122	STEERING SHAFT	1
6	7.010.026	BUSH. STEERING SHAFT	2
7	9.700.020	WASHER. SPECIAL Ø20	1
8	9.700.120	CIRCLIP Ø20	1
9	9.100.825	BOLT M8x25	2
10	9.400.008	WASHER. LOCK Ø8	2
11	6.000.093	STEERING KNUCKLE	1
12	4.000.014	STEERING GEAR	1
13	9.108.025	BOLT-WASHER M8x1.25x25	4
14	9.900.016	ROUND NUT M16x1.5	2
15	4.000.008	STEERING BALL JOINT	2
16	9.200.010	NUT M10	2
17	7.020.002	DUST COVER. L. BALL JOINT	1
18	8.010.071	TIE ROD	2
19	6.000.062	ROD END	2
20	9.300.010	WASHER. FLAT Ø10	2
21	9.400.010	WASHER. LOCK Ø10	2
22	9.800.010	CASTLE NUT. M10	2
23	9.500.215	COTTER PIN. Ø2x15	2
24	7.020.202	DUST COVER. R. BALL JOINT	1
25	8.020.014	BRACKET. STEERING GEAR	2
26	9.220.008	LOCK FLANGE NUT. M8	8
27	9.708.145	BOLT. THROTTLE PEDAL M8x1.25x145	1
28	8.040.001	SPRING. THROTTLE PEDAL RETURN. L	1
29	9.108.040	BOLT-WASHER M8x1.25x40	2
30	9.200.008	NUT M8	2
31	4.000.016	THROTTLE PEDAL COMP.	1
32	9.600.515	SCREW. PAN M5x15	2
33	9.300.005	WASHER. FLAT Ø5	2
34	9.210.005	NYLON LOCK NUT M5	2
35	4.000.015	BRAKE PEDAL COMP	1
36	9.700.624	PIN. 6x24	1
37	8.010.081	PIN. SPINDLE	2
38	9.500.212	COTTER PIN. 2X12	1
39	6.000.063	SWITCH ASS'Y. BRAKE LAMP	1
40	9.600.306	SCREW. PAN M3x6	2
41	7.010.004	BUSH. PEDAL	4
42	8.040.007	SPRING. BRAKE PEDAL RETURN. R	1
43	9.708.222	BOLT. BRAKE PEDAL M8x1.25x222	1
44	6.000.076	MASTER CYLINDER	1
45	9.108.035	BOLT-WASHER M8x1.25x35	2
46	7.020.036	PEDAL PAD. THROTTLE	1
47	7.020.037	PEDAL PAD. BRAKER	1
48	6.000.134	STEERING WHEEL LOCK	1
49	8.070.044	MASTER CYLINDER BRACKET.	1

FIG. 18

SUSPENSION ARM ASSY.

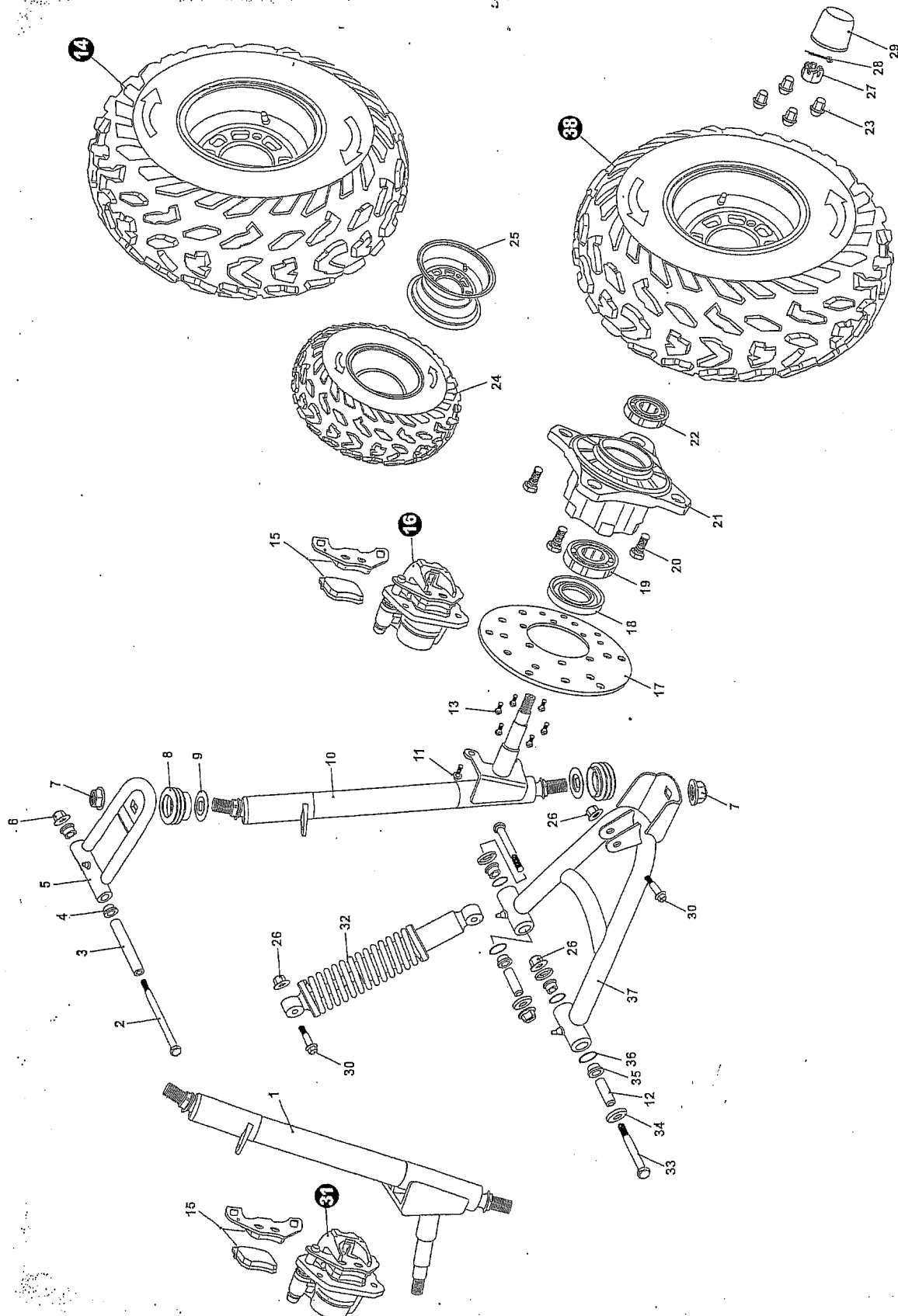


FIG. 19

REAR CARGO RACK/SEAT/BELT

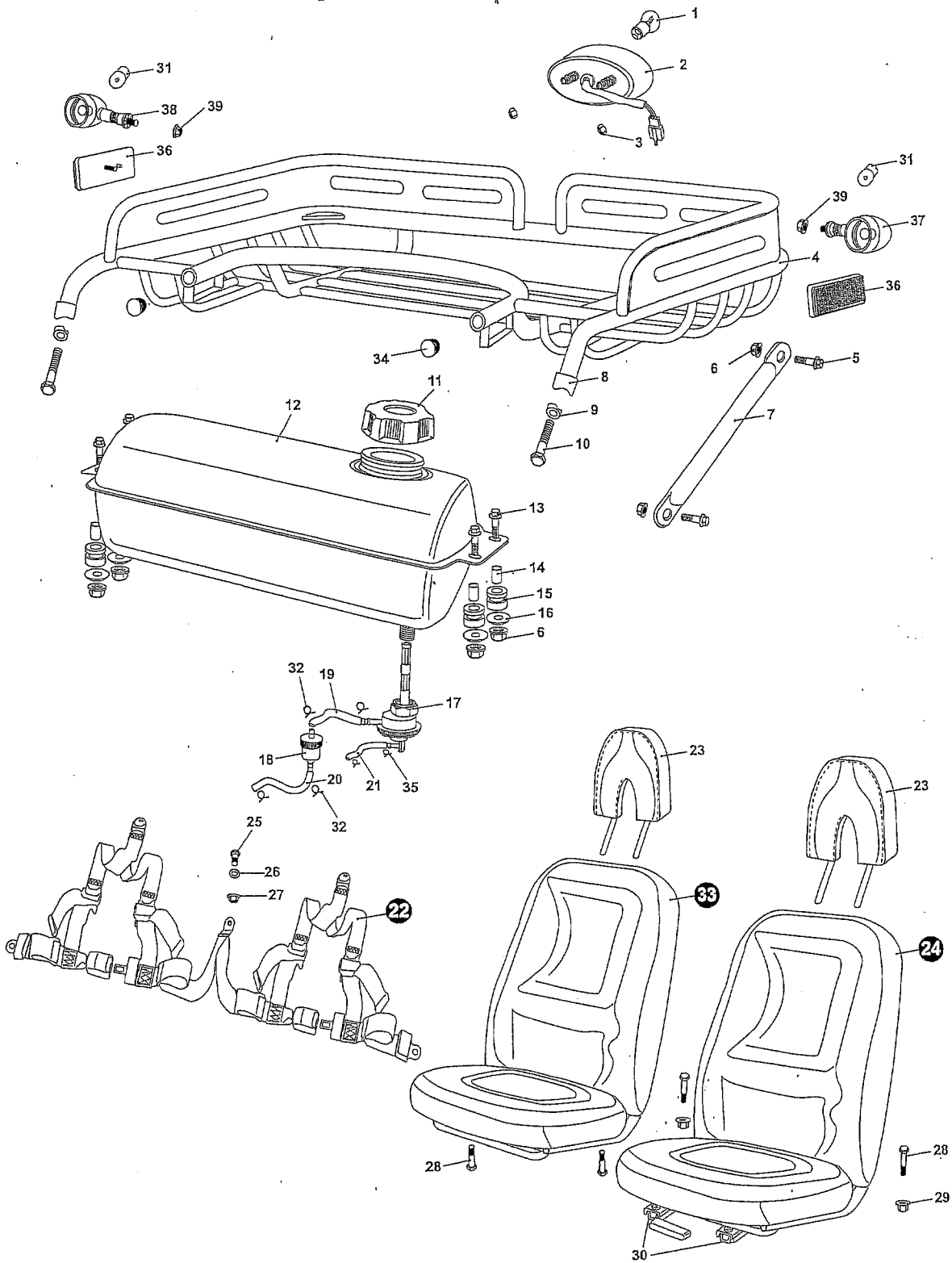


FIG.21

ENGINE/MUFFLER/AIR CLEANER

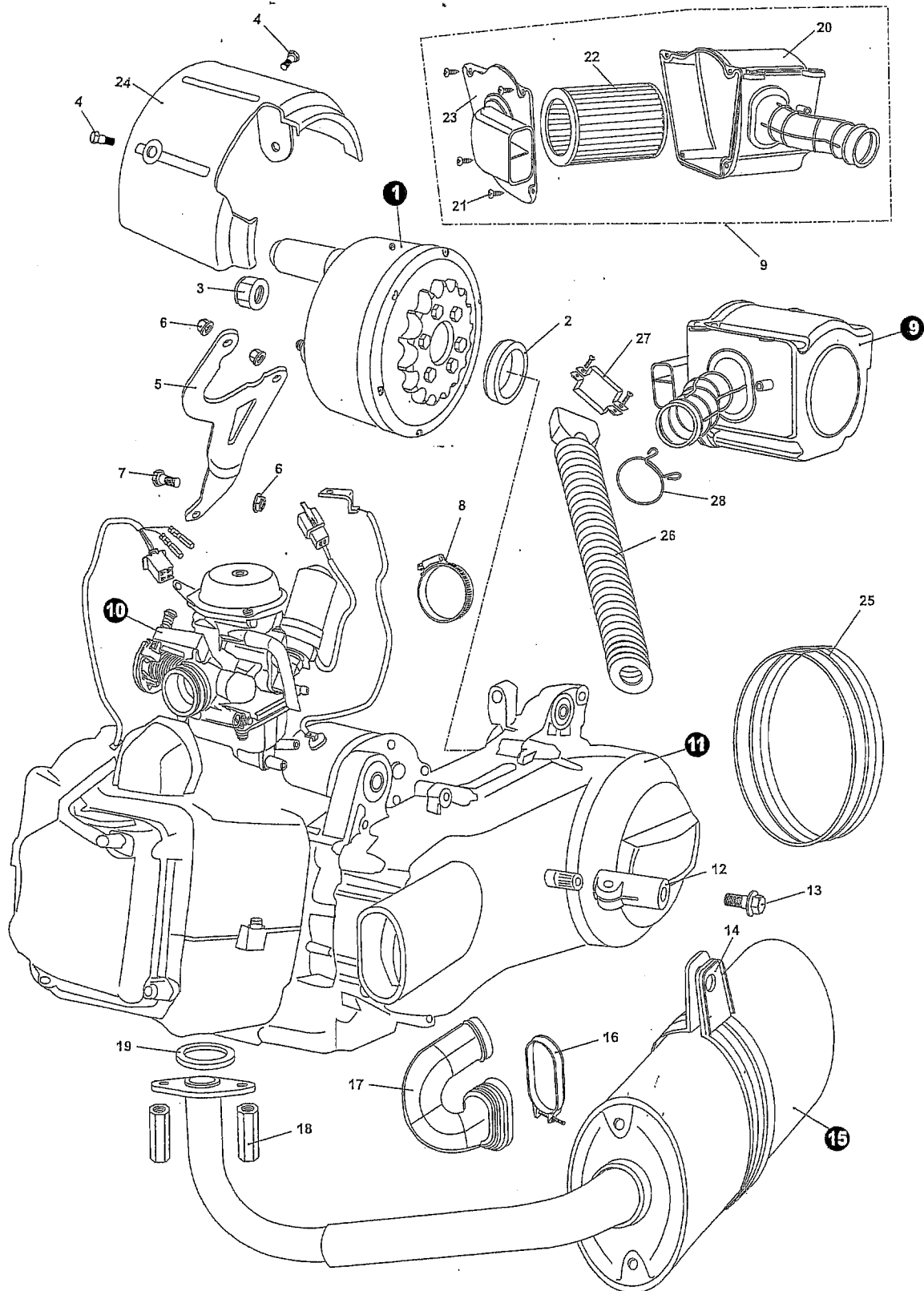


FIG. 22

REAR SWING ARM

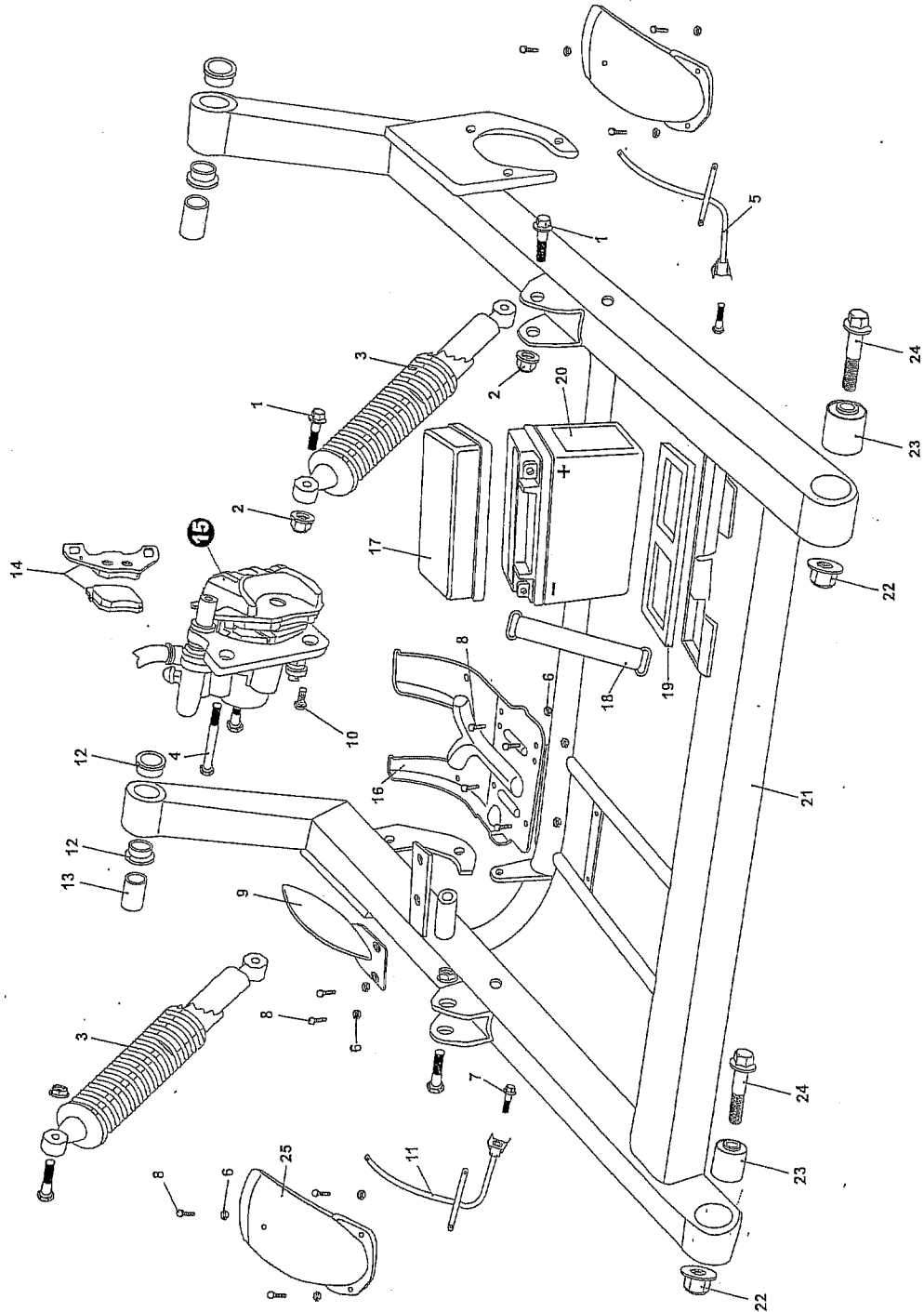


FIG. 23

REAR HOUSING

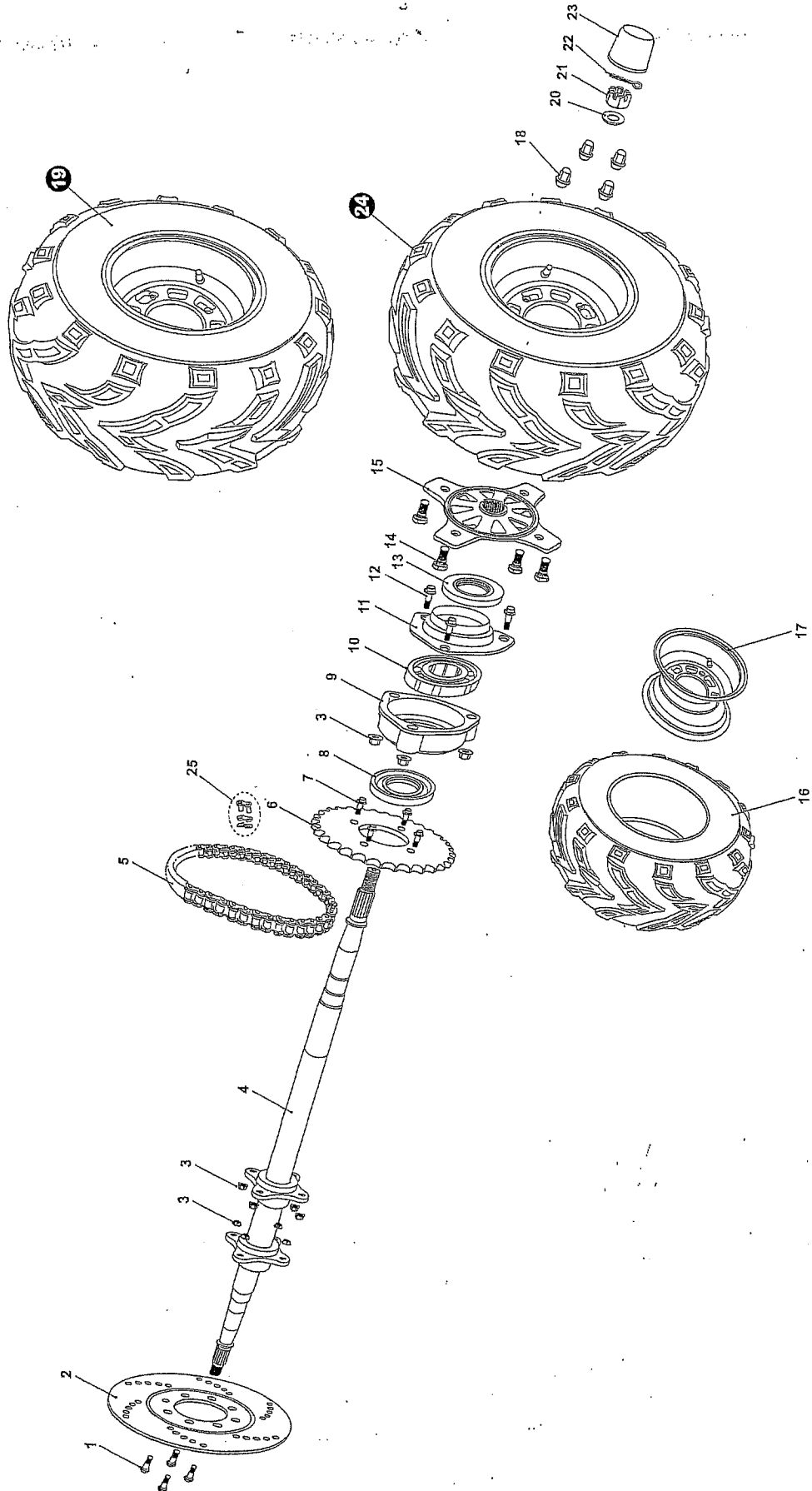


FIG. 24

WIRE HARNESS/ELECTRICAL

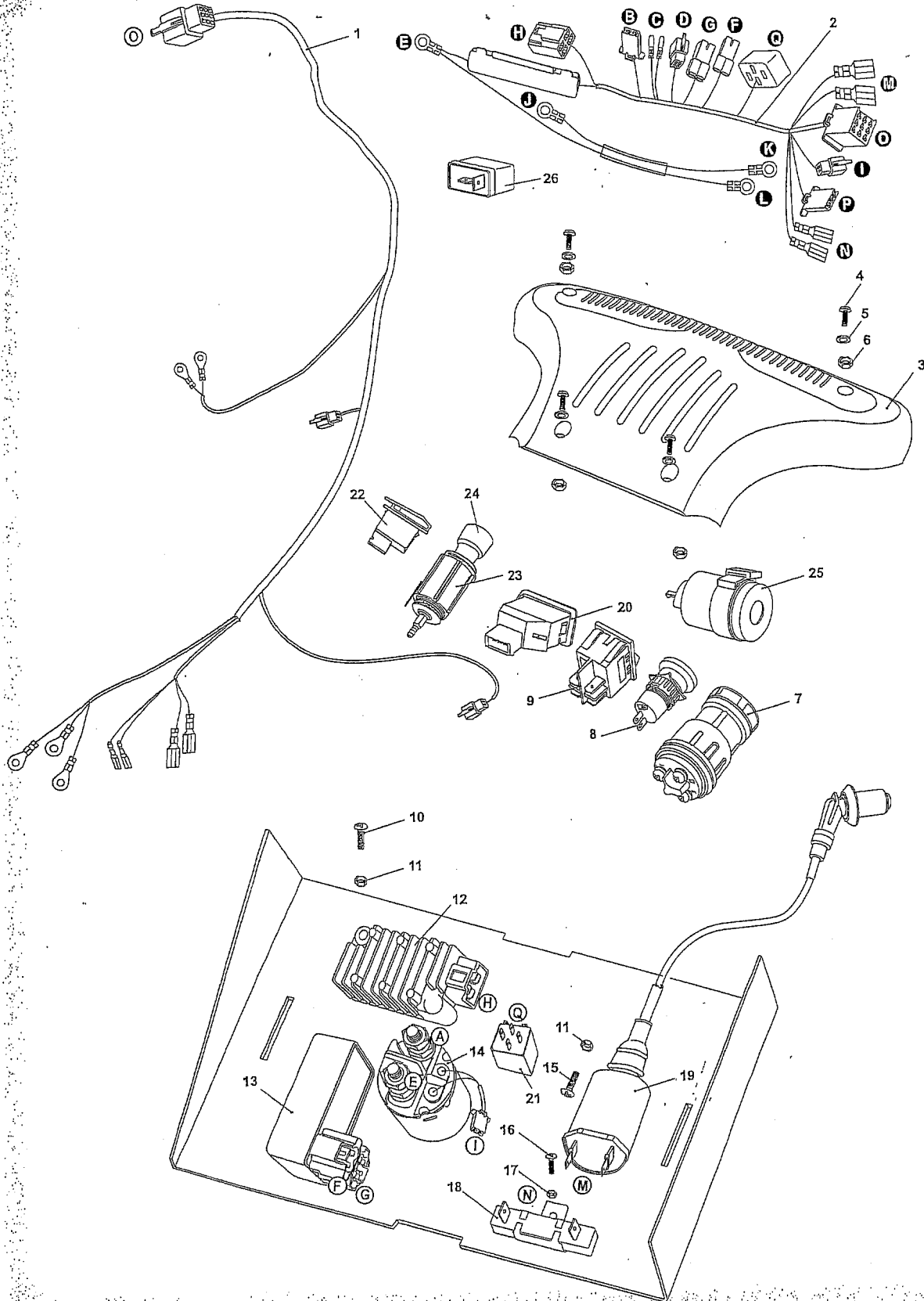
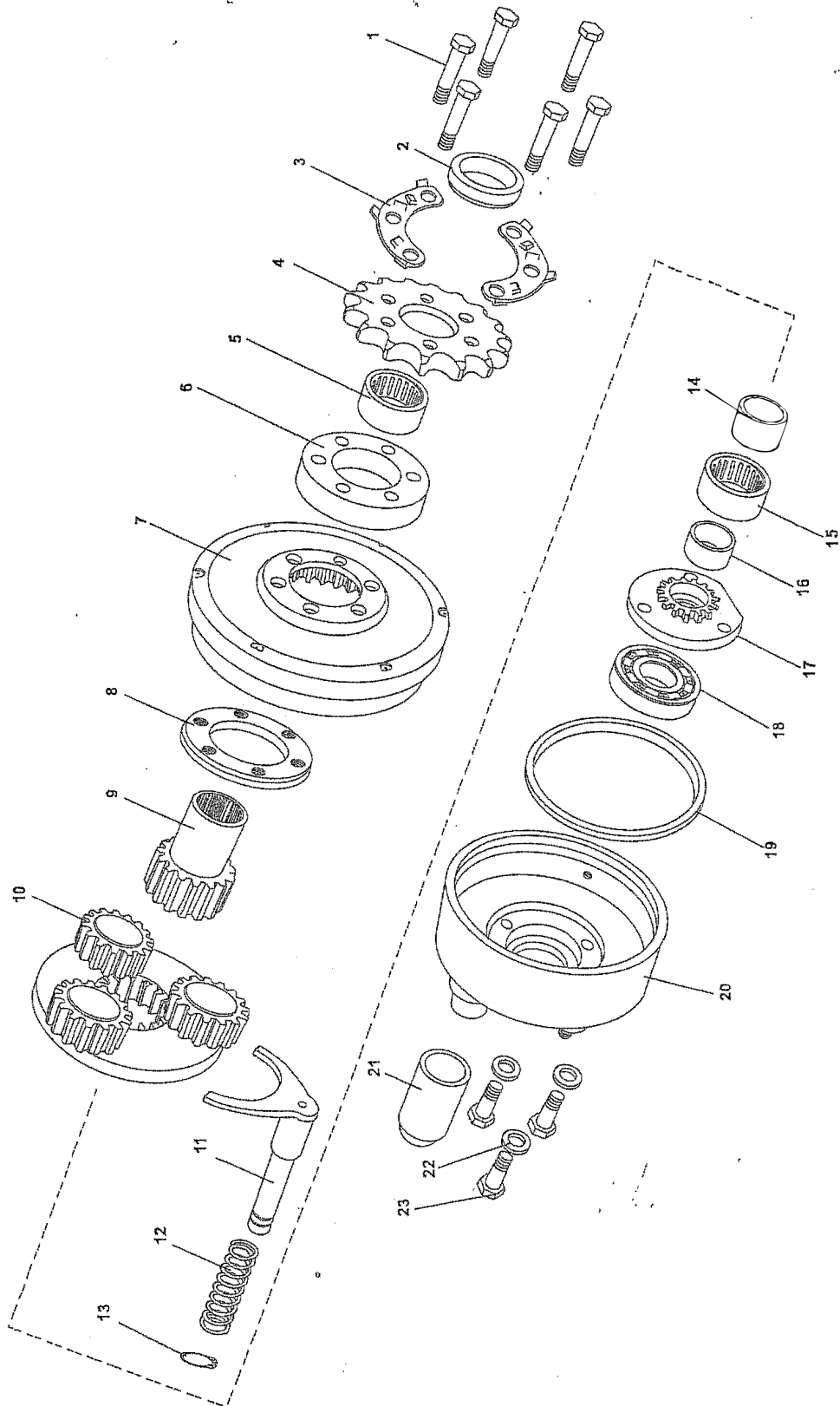


FIG. 25

REVERSE ASSY.



WARNING STICKERS



WARNING STICKERS			
REF NO.	PART NO.	DESCRIPTION	REGD NO.
1	9.090.007	LABEL. PARKING BRAKE	1
2	9.090.008	LABEL. REVERSE LEVER	1
3	9.090.009	LABEL. CHAIN GUARD	1
4	9.090.010	LABEL. NO LONG HAIR	1
5	9.090.011	LABEL. WARNING	1
6	9.090.012	LABEL. NO CLIMBING	1
7	9.090.013	LABEL. WARNING	1
8	9.090.014	LABEL. SEAT BELT	1
9	9.090.015	LABEL. HAMMERHEAD FR	1
10	9.090.016	LABEL. TWISTER	3
11	9.090.017	LABEL. WARNING	1