

Havoc 150cc Engine

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FIG 1 - MOTOR

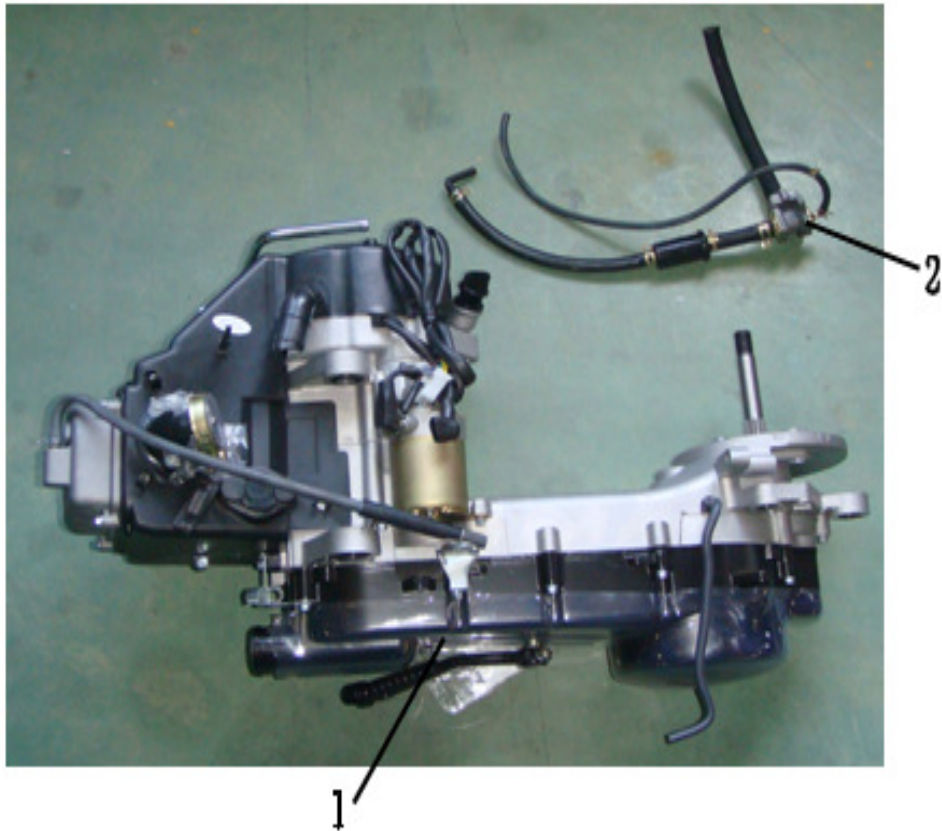


Diagram Number	Part Number	Description	Qty
1	10000-GY7A-9000-CC-2	GY7 150 Long case engine	1
2	1865A-GY6A-9000	Valve Assembly	1

FIG 2 - CYLINDER

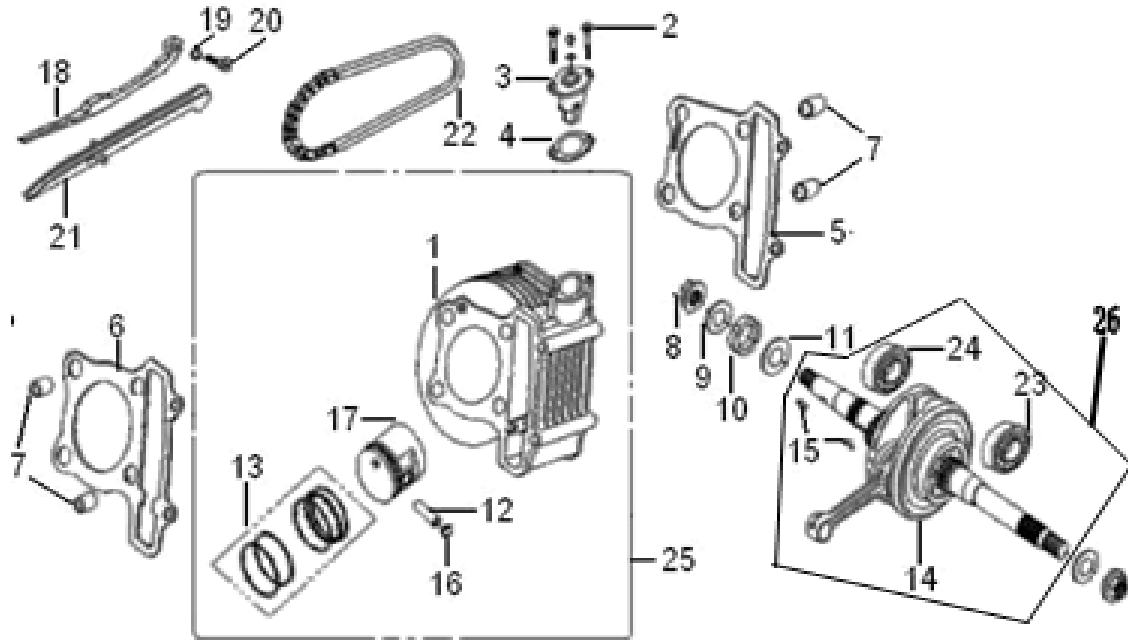


Diagram Number	Part Number	Description	Qty
1	12100-GY7F-9000	Cylinder	1
2	90001-06022-08	Bolt M6×22	2
3	14520-GY6A-9000	Chain adjuster assy	1
4	14523--GY6A-9000	Gasket chain adjuster	1
5	12191-GY7A-9000	Cylinder pad of paper	1
6	12251-GY6F-9000	Gasket cylinder head	1
7	94310-10160	Pin dowel 10×16	4
8	94050-12080	Nut M12x1.25 (11)	2
9	90440-GY6A-9000	Washer (12x24x2)	2
10	90201-02212-08	Lock nut, crankshaft (M22x1x6)	1
11	90403--GY6A-9000	Washer (22x39x2)	1
12	13111-GY6F-9000	Piston pin	1
13	13011-GY6F-9000	Piston ring .comp	1
14	13010-GY6A-9000	Crank and connecting rod assembly	1
15	90701-GY6A-9000	Woodruff key	2
16	94601-15000	Clip piston pin	2
17	13101-GY6F-9000	Piston	1

FIG 2 - CYLINDER - Cont'd

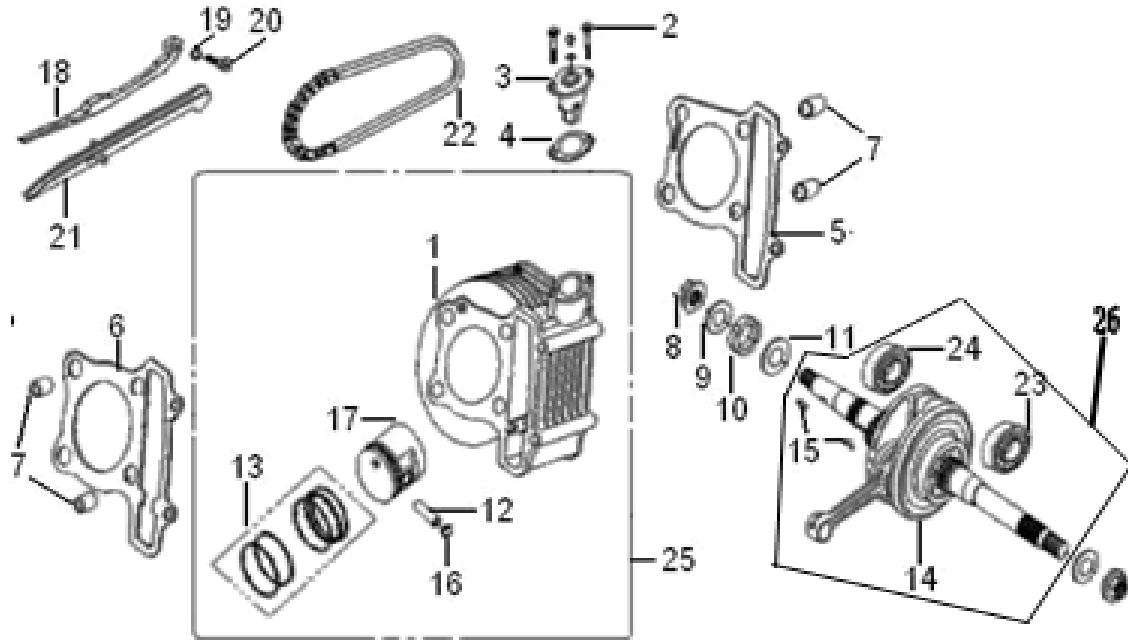


Diagram Number	Part Number	Description	Qty
18	14510-GY6A-9000	Tension rod chain	1
19	91301-GY6A-9000	O-ring 15.2×1.5	1
20	14531-GY6A-9000	Cam chain screw	1
21	14610-GY6A-9000	Guide comp chain	1
22	14401-GY7A-9000	Timing chain	1
23	91002-63220-00	Crankshaft bearing sco 4A86	1
24	91002-63220-00	Crankshaft bearing sco 4A86	1
25	1310A-9030	Cylinder, piston, piston rings, circlip, piston pin group	1
26	13000-GY6A-9000	Crankshaft connecting-rod assy	1

FIG 3 - CYLINDER HEAD

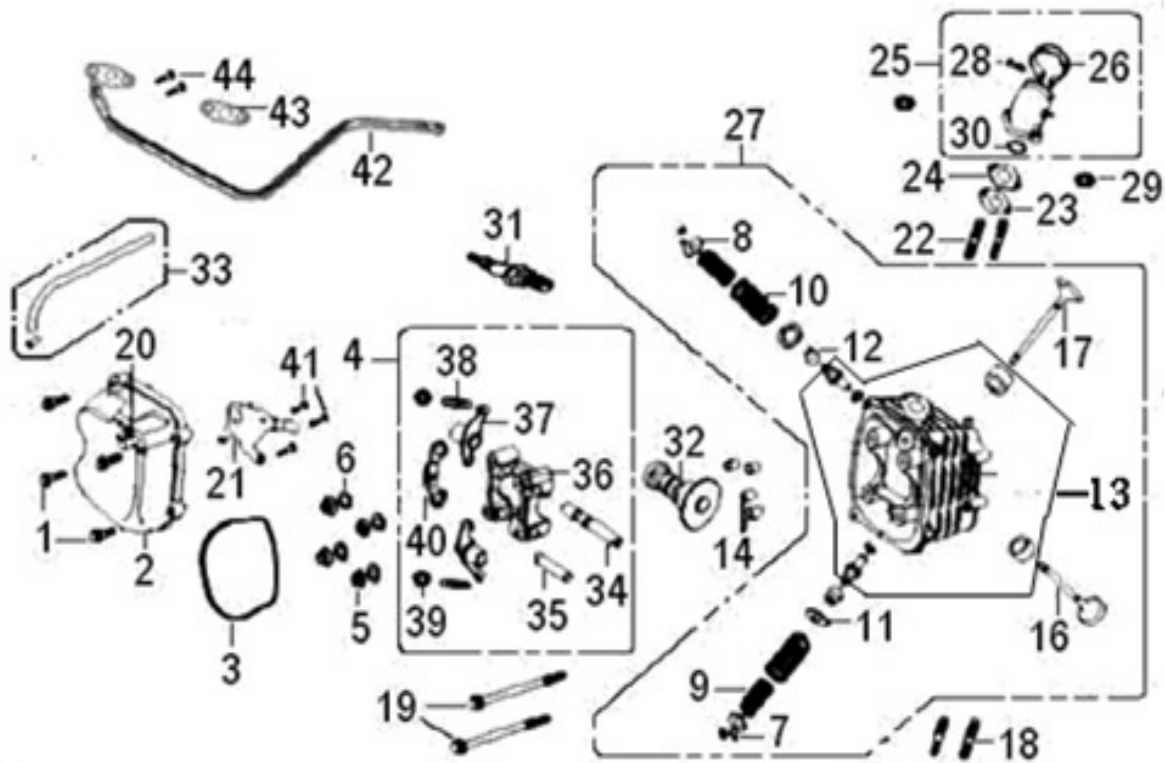


Diagram Number	Part Number	Description	Qty
1	96001-06025-08	Bolt M6x25	4
2	12310-GY6A-9200	Cylinder head cover	1
3	12391-GY6A-9000	Gasket for head cover	1
4	12211-GY7A-9000	Rocker bracket assembly	1
5	94050-08080	Nut M8	4
6	90465-GY6A-9000	Washer ϕ 8x ϕ 19x2	4
7	14781-GY6A-9000	Valve cone half	4
8	14771-GY6A-9000	Retainer valve spring	2
9	14761-GY7A-90000	Spring, valve inner	2
10	14751-GY7A-9000	Spring, valve outer	2
11	14775-GY6A-9000	Valve spring washer	2
12	12209-GY6A-9000	Seal valve	2
13	12200-GY7F-9100	Cyliner head	1
14	94301-10160	Bowel pin 8x14	4
16	14721-GY7A-9000	Valve intake	1
17	14711-GY7A-9000	Exhaust valve	1
18	90033-08035-08	Double end studs M8x35	2
19	96001-06100-08	Bolt M6x100	2
20	12305-GY6A-9000	Tube breather	1
21	12302-GY6A-9000	Pressure plate breather	1

FIG 3 - CYLINDER HEAD Cont'd

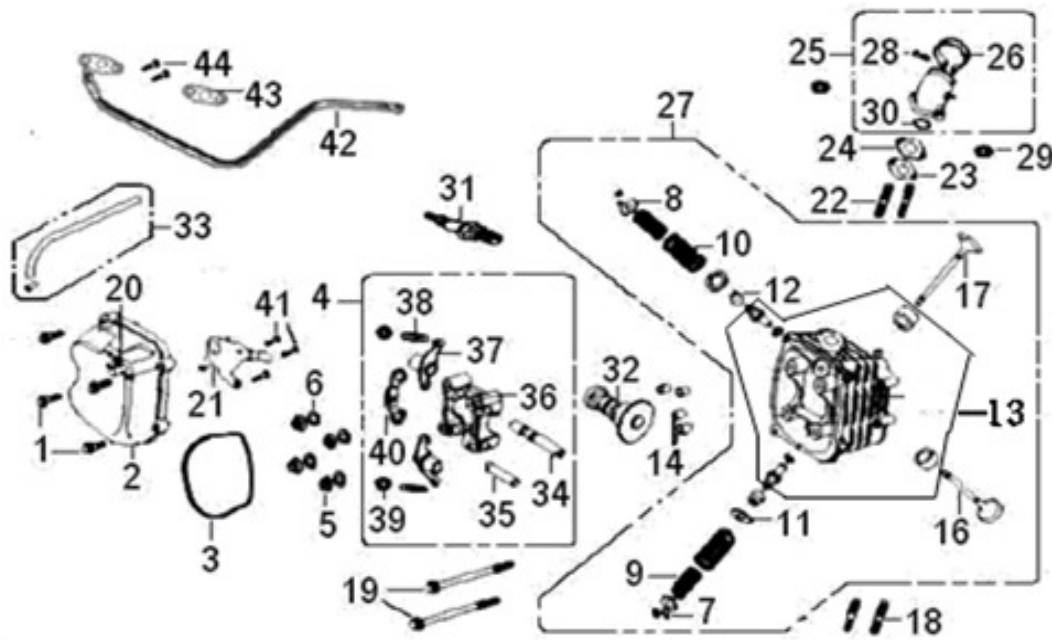


Diagram Number	Part Number	Description	Qty
22	90033-06073-08	Double end studs M6×73	2
23	16201-GY6A-9000	Gasket carburetor insulator	1
24	16211-GY6A-9000	Insulator carburetor	1
25	1711A-GY7A-9000	Inlet pipe	1
26	17256-GY6A-9000	Clip tube assy	1
27	1220A-GY7F-9100	Cylinder head assy	1
28	93500-04025-00	Screw, inlet pipe lock	1
29	94062-04000-00	Nut M6	2
30	91301-GY6A-9000	O ring 27×2.0	1
31	98056-5771R-00	Spark plugs (NGK with R)	1
32	14100-GY7A-9000	Camshaft group	1
33	11211-GY6A-9000	Air tube	1
34	14450-GY7A-9000	Intake valve rocker shaft	1
35	14452-GY7A-9000	Exhaust valve rocker shaft	1
36	12211-GY7A-9000	Holder camshaft	1
37	14431-GY7A-9000	Rocker arm inner	2
38	90012-GY6A-9000	Screw tappet adjusting	2
39	90206-GY6A-9000	Nut tappet adjusting	2
40	14111-GY6A-9000	Stoper plate	1
41	93903-04080	Screw st4×8-c-h	3
42	12321-GY6A-9100	Qi elbow extension	1
43	12322-GY6A-9100	Aerate syphon airproof gasket	1
44	96001-06018-08	Bolt M6×18	2

FIG 4 - RIGHT SIDE CRANK CASE

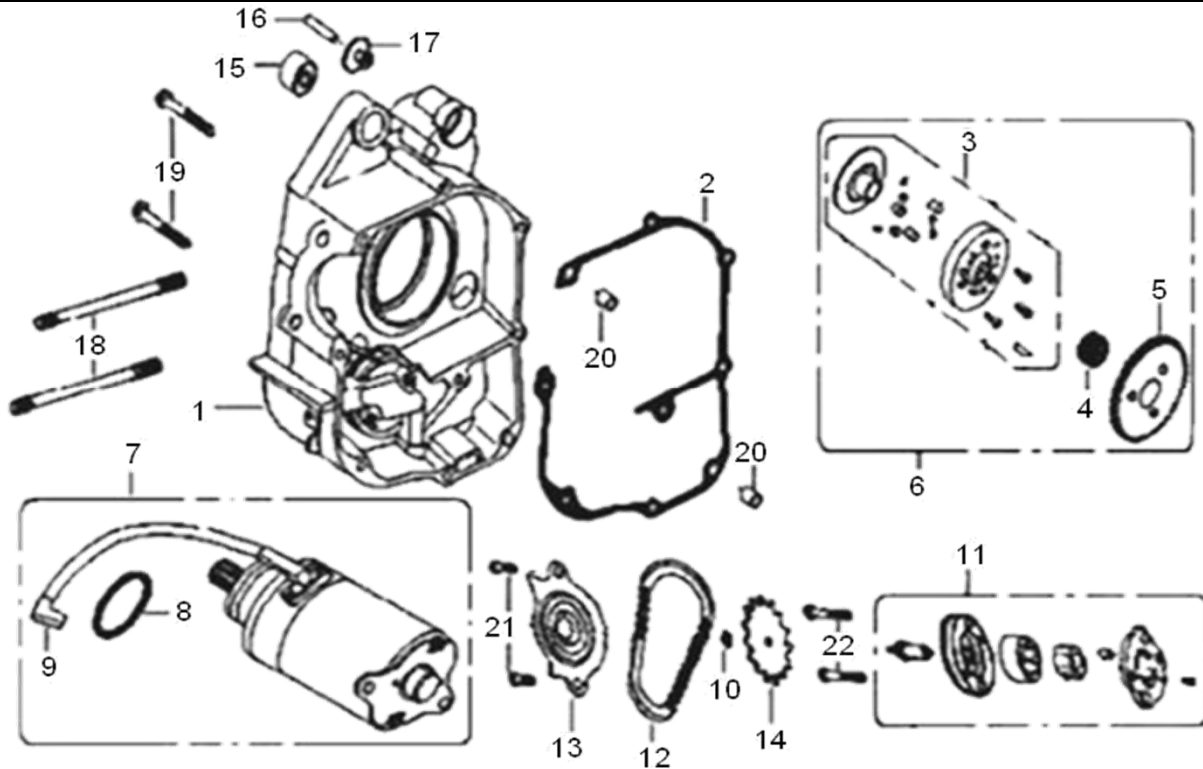


Diagram Number	Part Number	Description	Qty
1	11100-GY6A-9000	Crank case comp right	1
2	11192-GY6A-9000	Gasket	1
3	28120-GY6A-9000	Clutch assy, start	1
4	91104-GY6A-9000	Bearing needle	1
5	28110-GY6A-9000	Gear clutch assy	1
6	2812A-GY6A-9000	Clutch assy	1
7	31200-GY6A-9000	Starting motor assy	1
8	91309-GY6A-9000	O-ring	1
9	32410-GY6A-9000	Cable starting motor	1
10	94050-06080	Nut M6	1
11	15100-GY7-9000	Pump assy oil	1
12	15141-GY6A-9000	Sprocket drive	1
13	15711-GY6A-9000	Separator oil	1
14	15133-GY6A-9000	Sprocket drive	1
15	11102-GY6A-9000	Bush enging hanger	1
16	28102-GY6A-9000	Shaft starter reduction gear	1
17	28101-GY6A-9000	Gear starter reduction	1
18	90031-GY7A-9000	Double end studs M8x200	2
19	96001-06050-08	Bolt M6x50	2
20	94301-08140	Bowel pin 8x14	2
21	96001-06012-08	Bolt M6x12	2
22	96002-06030-08	Cross countersunk head bolt M6 * 30	2

FIG 5 - LEFT CRANK CASE

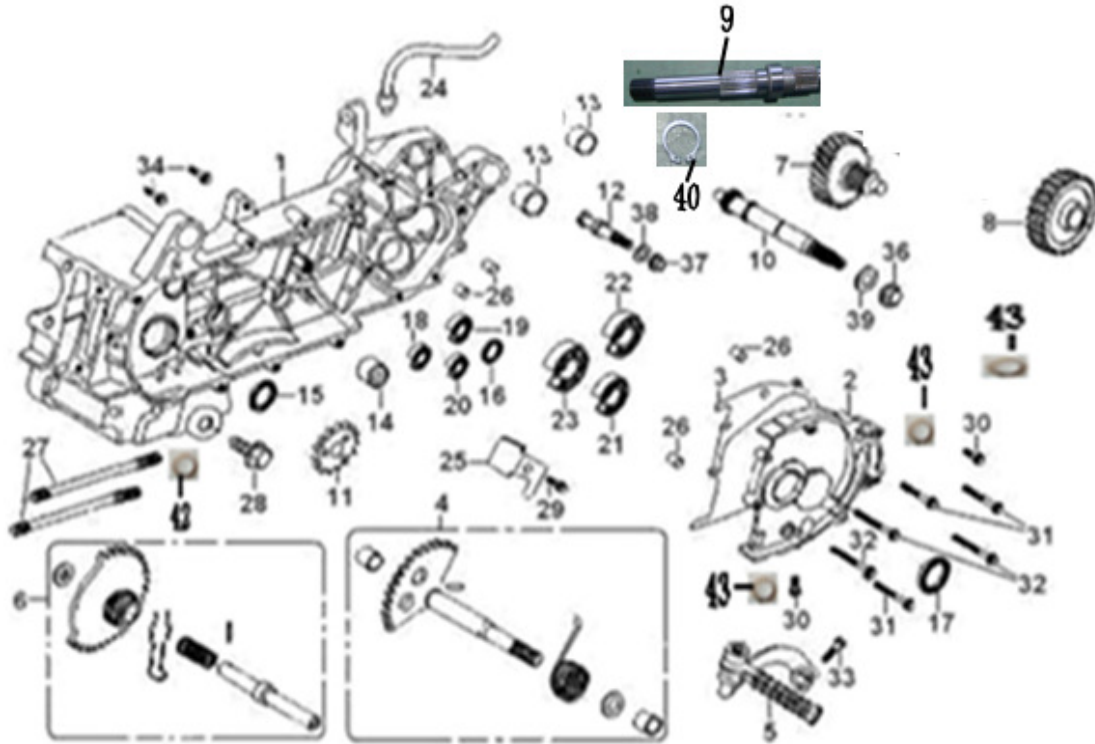


Diagram Number	Part Number	Description	Qty
1	11200-GY6C-9000	Left crank case (extended)	1
2	21301-GY6A-9000	Gear box case	1
3	21395-GY6A-9000	Paper cushion gear	1
4	2825A-GY6A-9000	Kick start spindle assy	1
5	28300-GY6A-9000	Kick start pedal	1
6	2823A-GY6A-9000	Starting idle gear assy	1
7	23420-GY6A-9000	Mid gear	1
8	23432-GY6A-9000	Final gear	1
9	23431-GY6A-9100	Output shaft (axis)	1
10	23411-GY6A-9000	Input shaft	1
11	28221-GY6A-2000	Gear kick driven	1
12	1120B-GY6A-9000	Pin brake shoe anchor	1
13	11203-GY6A-9000	Shock absorber tube	2
14	11102-GY6A-9000	Bush enging hanger	1
15	91202-GY6A-9000	Left oil seal 19.8×30×5	1
16	91255-GY6A-9000	Oil seal 27×42×7	1
17	91204-GY6A-9000	Oil seal20×32×6	1
18	96100-63010-00	Bearing radial ball 6301	1
19	96100-60040-00	Bearing radial ball 6004	1
20	96100-60020-00	Bearing radial ball 6002	1
21	96100-62020-00	Bearing radial ball 6202	1

FIG 5 - LEFT CRANK CASE Cont'd

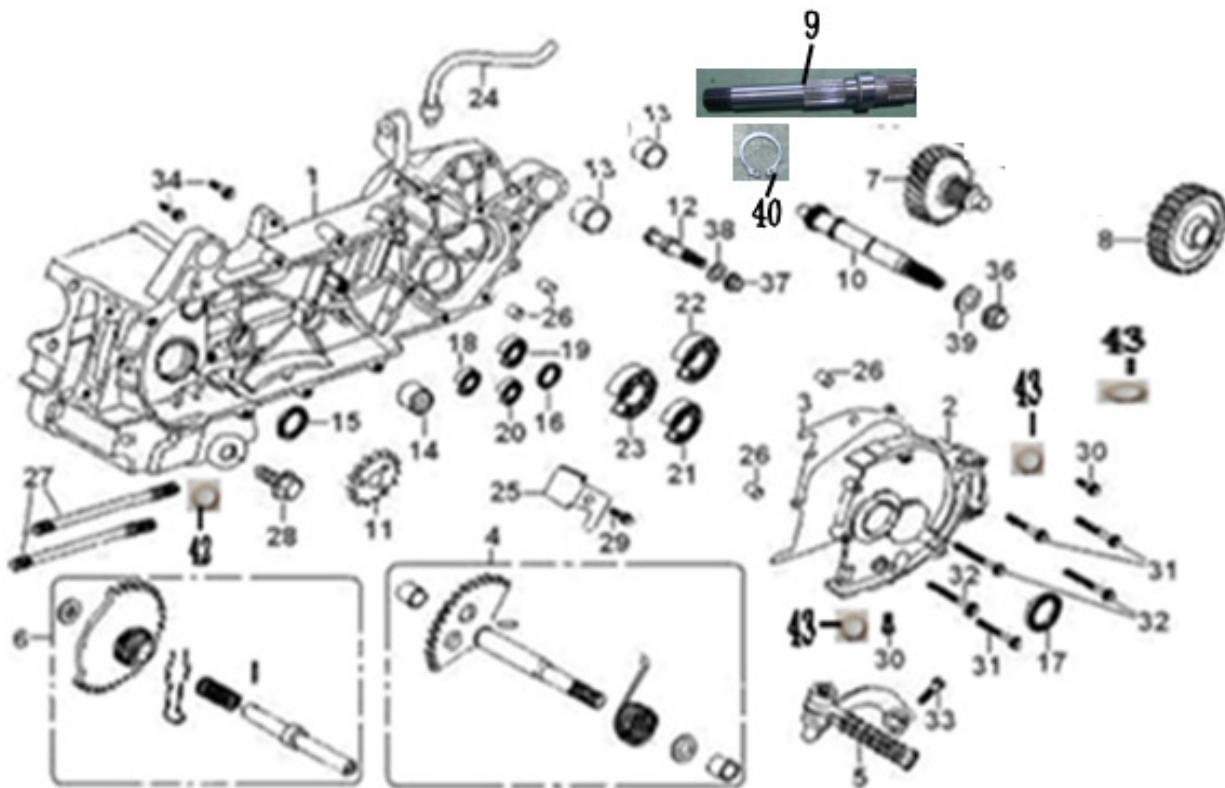


Diagram Number	Part Number	Description	Qty
22	96100-62030-00	Bearing radial ball 6203	1
23	96100-62040-00	Bearing radial ball 6204	1
24	11221-GY6A-9000	Tube breather assy	1
25	11206-GY6A-9000	Plate kick return stopper	1
26	94301-08140	Bowel pin 8x14	2
27	90032-GY7A-08	Double end studs M7x208	2
28	9052A-GY6A-9000	Oil plug	1
29	96001-06012-08	Bolt M6x12	1
30	95701-08012-08	Bolt M7x12	2
31	96001-06028-08	Bolt M6x28	4
32	96001-06035-08	Bolt M6x35	1
33	96001-06025-08	Bolt M6x25	1
34	96001-06012-08	Bolt M6x12	2
36	94050-12081	Nut M12x1.25(9)	1
37	90309-08000-00	Nut M7	1
38	91303-GY6A-9000	O-ring 7.5x1.5	1
39	90441-GY6A-9000	Washer (12x29x2)	2
40	94510-20000	Output shaft snap ring	1
42	90470-GY6A-9000	Oil drain plug gasket (ø12 * 20 * 1.5)	1
43	90473-GY6A-9000	Gasket ø8 * ø16 * 1.5	2

FIG 6 - RIGHT OIL COVER

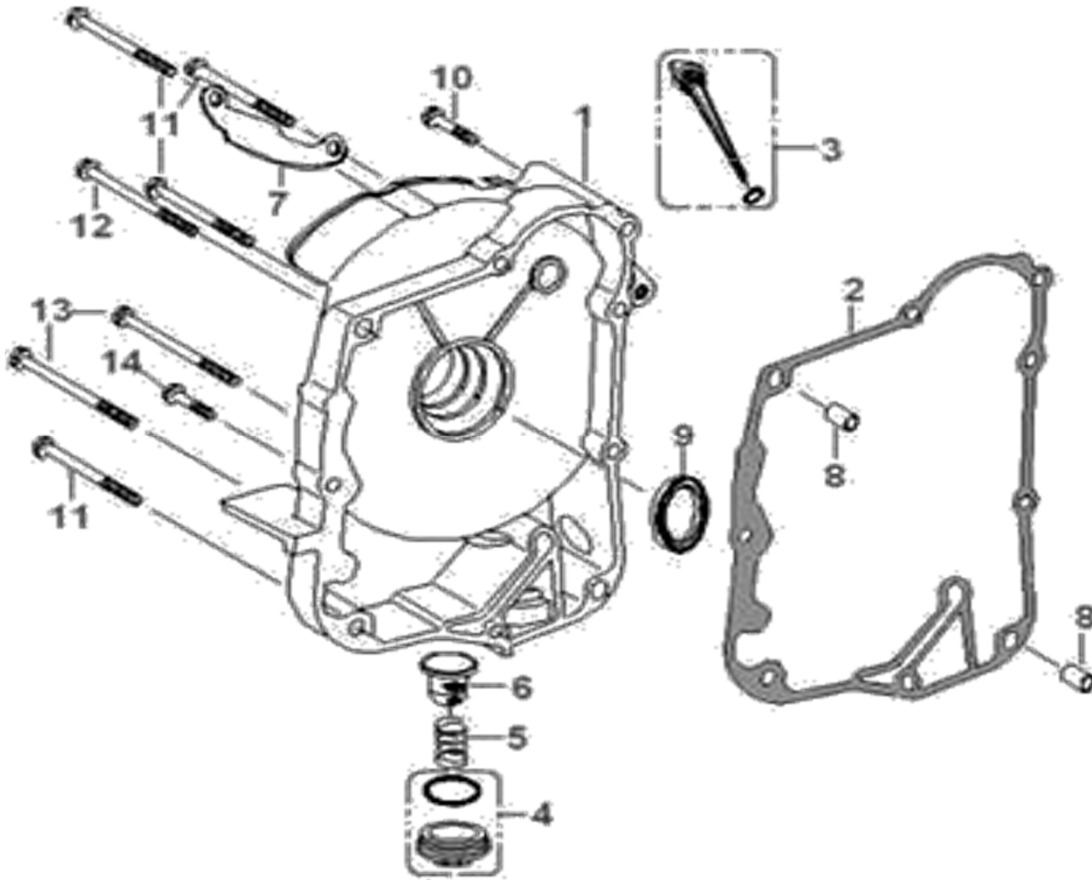


Diagram Number	Part Number	Description	Qty
1	11331-GY6A-9000	Right crankcase cover	1
2	11394-GY6A-9000	Right crankcase cover gasket	1
3	15651-GY6A-9000	Fuel guage assy,	1
4	12361-GY6A-9000	O-ring and oil network cover	1
5	15426-GY6A-9000	Oil filter spring	1
6	15421-GY6A-9000	Oil network	1
7	32961-GY6A-9000	Clamber magneto	1
8	94301-08140	Bowel pin 8x14	2
9	91203-GY6A-9000	Right oil seal19.8x30x5	1
10	90001-06040-08	Bolt M6x40	1
11	96001-06095-08	Bolt M6x95	4
12	96001-06100-08	Bolt M6x100	1
13	96001-06110-08	Bolt M6x110	2
14	96001-06028-08	Bolt M6x28	1

FIG 7 - RIGHT CRANKCASE COVER

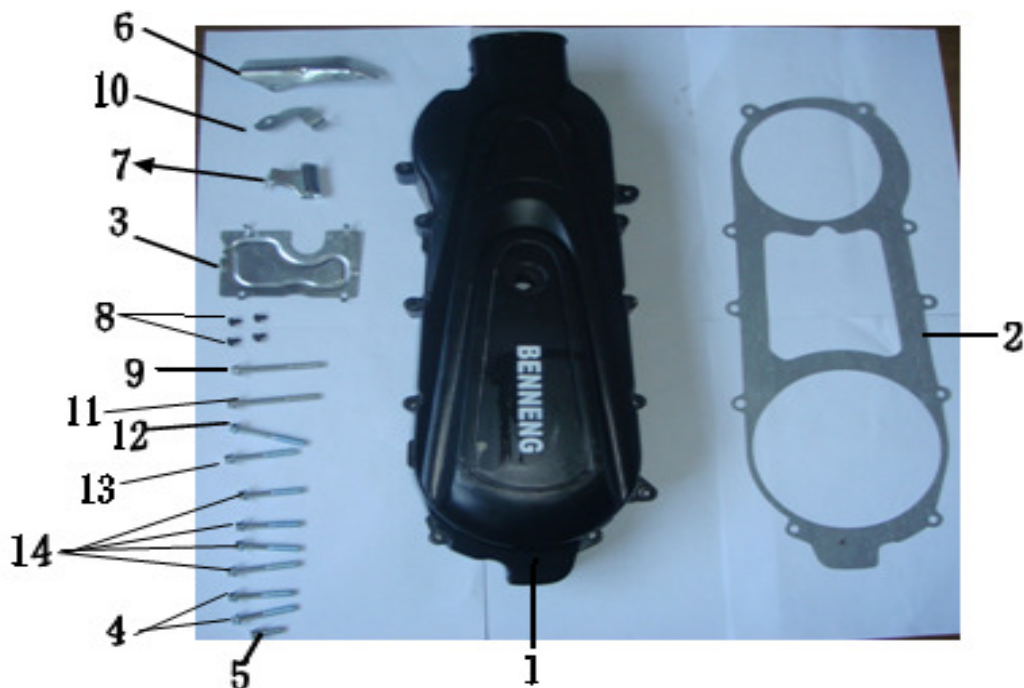


Diagram Number	Part Number	Description	Qty
1	11341-GY6C-9010	Smoky cover the left circle qi (extended)	1
2	11395-GY6F-9000	Gasket for crankcase cover	1
3	11380-GY6A-9000	Platel cover	1
4	90001-06040-08	Bolt M6×40	2
5	96001-06012-08	Bolt M6×12	1
6	50504-GY6A-9000	Plate	1
7	11382-GY6A-9000	Clamper brake cable	1
8	93903-04080	Screw st4×8-c-h	4
9	90001-06065-08	Bolt M6×65	1
10	11381-GY6A-9000	Throttle clamp	1
11	90001-06070-08	BOLT M6×70	1
12	90001-06055-08	BOLT M6×55	1
13	90001-06050-08	BOLT M6×50	1
14	90001-06040-45	BOLT M6×45	4

FIG 8 - FAN & ALTERNATOR

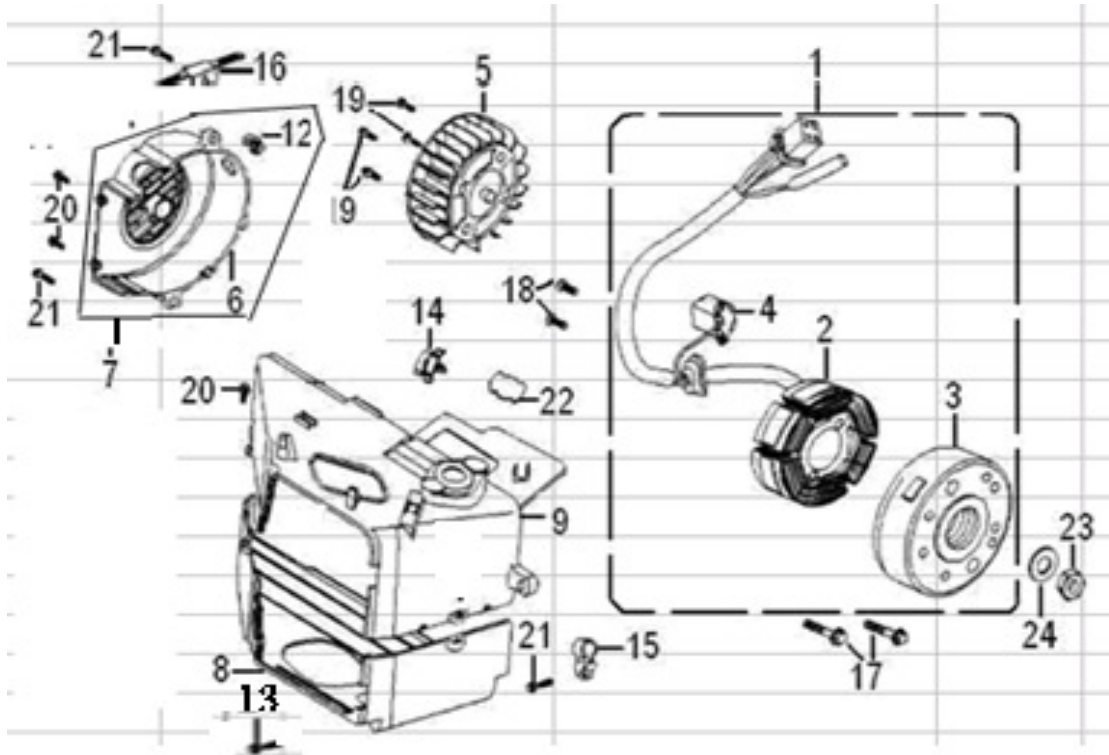


Diagram Number	Part Number	Description	Qty
1	31100-GY6A-9000	Magnetic motor assembly (12 pole)	1
2	31120-GY6A-9000	Magneto Coil	1
3	31110-GY6A-9000	Magneto flywheel	1
4	31130-GY6-9000	Magneto Trigger	1
5	19510-GY6A-9000	Wind wheel	1
6	19611-GY7A-9000	Bust shroud	1
7	19610-GY7A-9000	Cooling fan cover assy,	1
8	19621-GY7A-9000	Shroud comp a	1
9	19630-GY7A-9000	Shroud comp b	1
12	70529-GY6A-9000	Grommet shroud a	1
13	96002-06016-08	Phillips head screw M6 * 16	1
14	11386-GY6A-9000	Clamper breather tube	1
15	11385-GY6A-9000	Clamper overflow tube	1
16	19613-GY6A-9000	Clamper starter cable	1
17	96001-06025-08	Bolt M6x25	2
18	92101-05012-08	Bolt M5x12	2
19	96001-06018-08	Bolt M6x18	4
20	96001-06016-08	Bolt M6x16	3
21	96001-06025-08	Bolt M6x25	3
22	19633-GY6A-9000	Rubber cap, upper protetion fan cover	1
23	94050-12080	Nut M12x1.25 (11)	1
24	90440-GY6A-9000	Washer $\phi 12 \times \phi 24 \times 2$	1

FIG 9 - VARIATOR AND CLUTCH

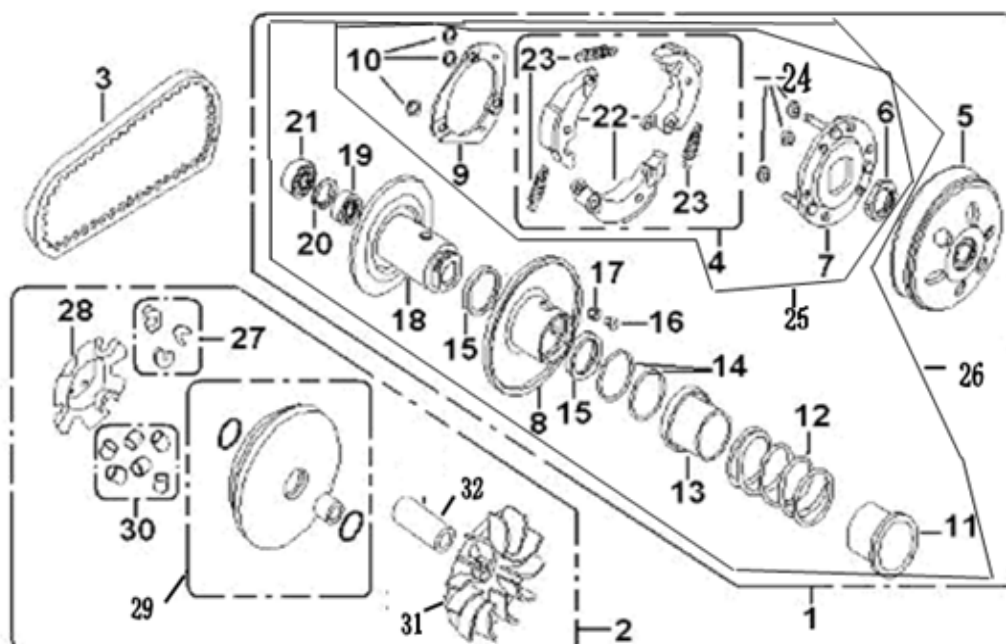


Diagram Number	Part Number	Description	Qty
1	23010-GY6F-9000	Pulley assy driven	1
2	22100-GY6F-9000	Driver wheel groupware	1
3	23100-GY6A-9000	Belt drive (835×30×20)	1
4	2253A-GY6A-9000	Clutch brake shoe set	1
5	2301A-GY6A-9000	Outer clutch	1
6	90202-GY6A-9000	Nut m28x1	1
7	22350-GY6A-9000	Fixing holder assy, brake shoe	1
8	23220-GY6A-9000	Face comp movable driven	1
9	22361-GY6A-9000	Plate clutch	1
10	90605-GY6A-9000	Circlip (7x9x1)	3
11	23238-GY6A-9000	Upper holder, spring	1
12	23233-GY6F-9000	Spring, driven face	1
13	23237-GY6A-9000	Lower holder, spring	1
14	91351-GY6A-9000	O-ring 39x2	2
15	91211-GY6A-9000	Oil seal 34x41x4	2
16	23225-GY6A-9000	Pin, roller guide	3
17	23226-GY6A-9000	Roller guide	3
18	23210-GY6A-9000	Driven pulley	1
19	91002-GY6A-9000	Bearing 6902	1
20	94520-28000	Circlip (9.5x11,5x1)	1
21	91001-GY6A-9000	Needle bearing 20x29x18	1

FIG 9 - VARIATOR AND CLUTCH Cont'd

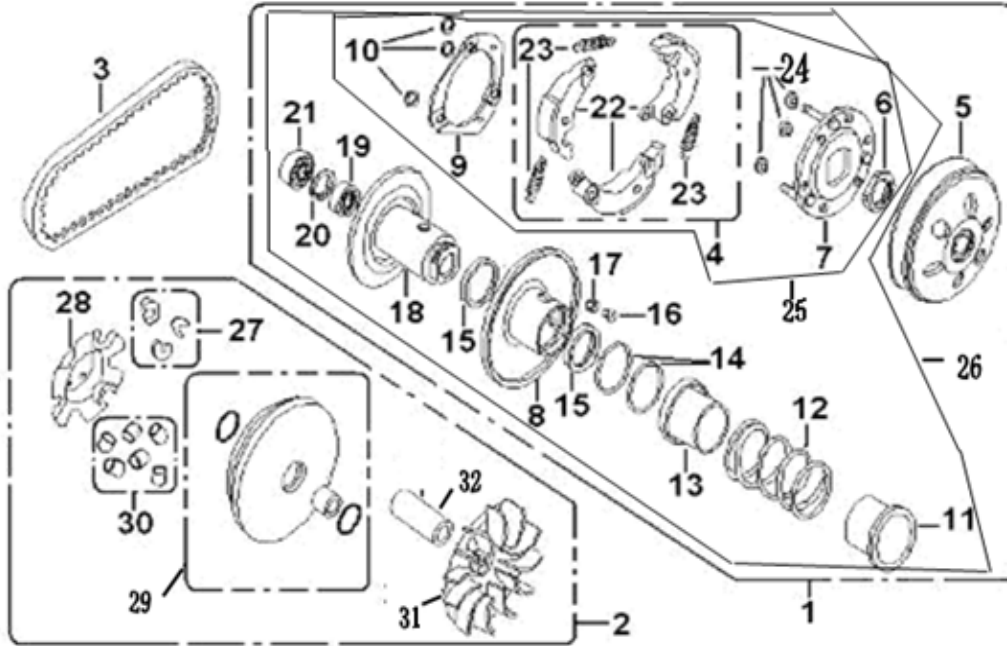


Diagram Number	Part Number	Description	Qty
22	22530-GY6A-9000	Weight set clutch	3
23	22401-GY6A-9000	Spring clutch	3
24	22804-GY6A-90000	Rubber clutch dumper	3
25	22300-GY6A-9000	Plate assy drive	1
26	23011-GY6A-9000	Plate sub assy driven	1
27	22132-GY6A-9000	Ramp Edge Piece Set	1
28	22131-GY6A-9000	Ramp plate	1
29	22110-GY6A-9000	Sliding disk drive peer group	1
30	22121-GY6F-9000	Ball assembly (weight 17g beads)	1
31	22102-GY6A-9000	Drive belt drive fan	1
32	22105-GY6A-9000	Village sets of driving wheel	1