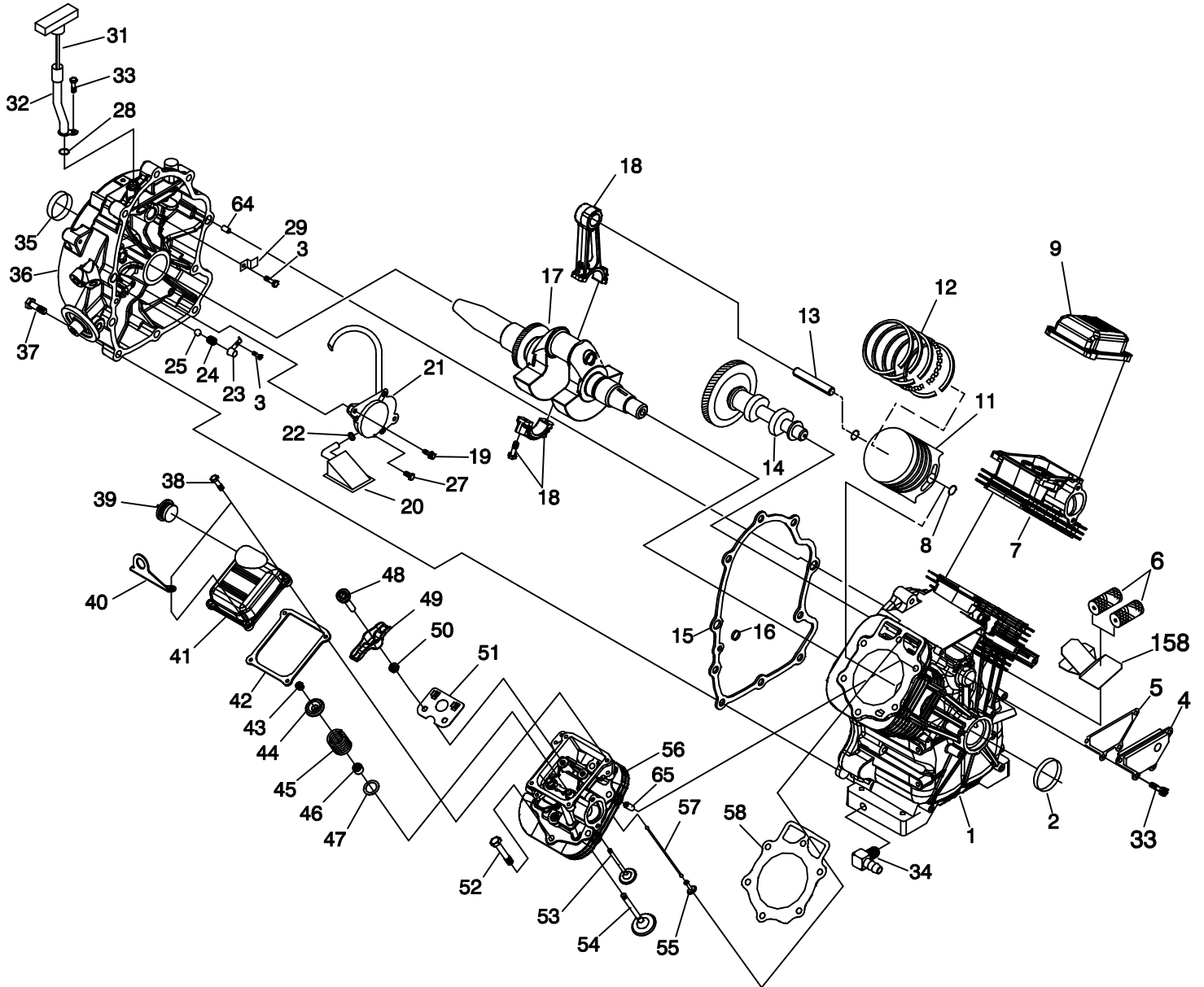


GROUP

59	2, 5, 15, 16, 28, 35, 42, 58, 86
60	4, 5, 6
61	7, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 57, 58
62	42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 56, 57, 58
63	23, 24, 25



EXPLODED VIEW: GH-990 HSB ENGINE

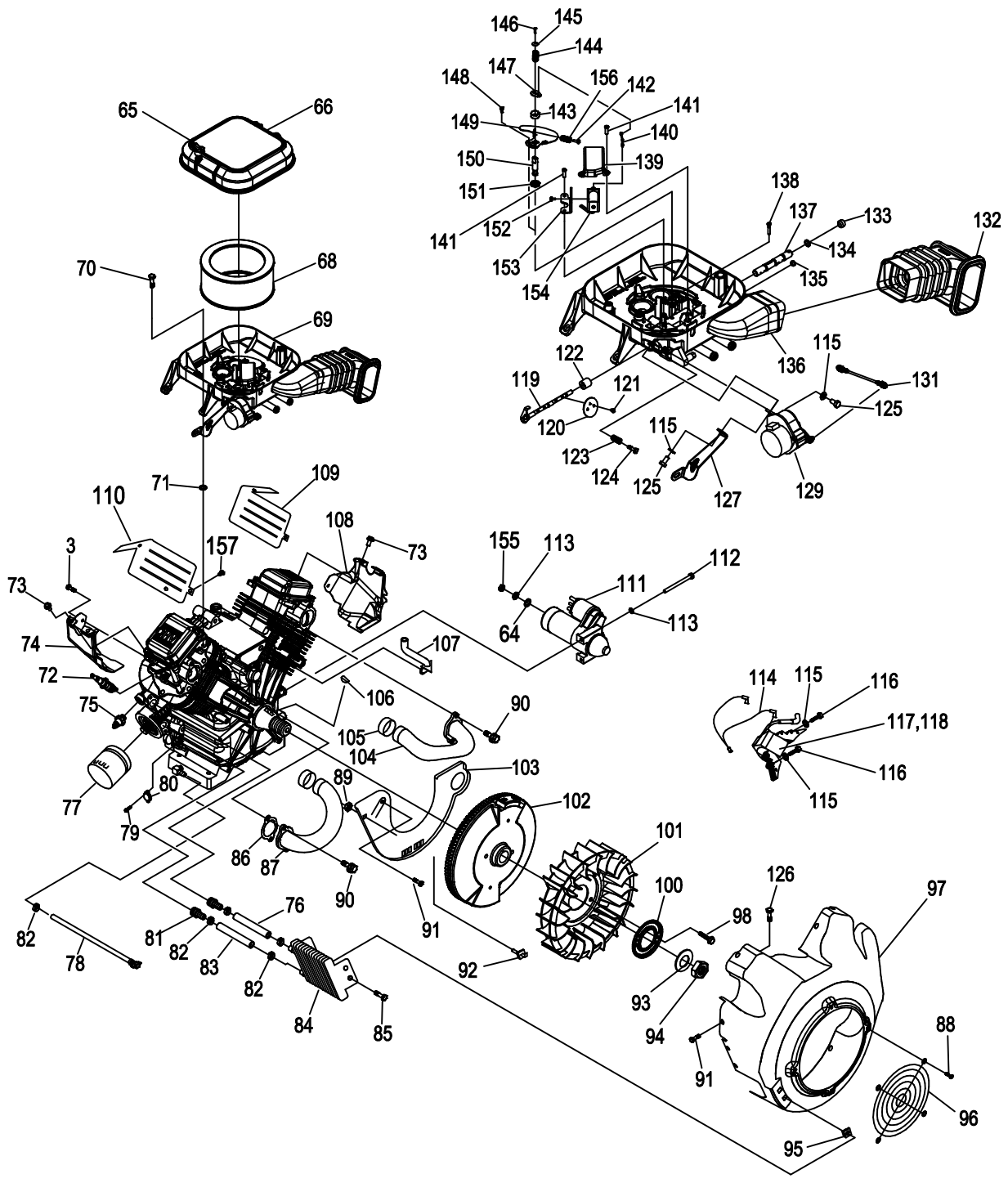
DRAWING #: 0G3071

GROUP

APPLICABLE TO: 2007 HSB

ITEM	PART #	QTY.	DESCRIPTION	ITEM	PART #	QTY.	DESCRIPTION
1	0G7908A	1	ASSY, CRANKCASE WITH SLEEVE	36	0F8054	1	GEARCOVER / ADAPTOR GTH-990
2	0E9843A	1	SEAL, 38 I.D. CRANKSHAFT GREEN	37	0C3006	10	SCREW, HHFC M10-1.5 X 55
3	0G0919	5	SCREW, HHFCS M6-1.0 X 12 G8.8	38	080318	8	SCREW HHFC M6-1.0 X 25
4	0G9100	1	ASSEMBLY, BREATHER DUAL BREATHER	39	093064	1	ASSEMBLY, OIL FILL CAP
5	0C3005	1	GASKET, BREATHER COVER	40	0G1839	2	LIFT HOOK GT990/760
6	0E3372C	2	SEPARATOR, OIL BREATHER	41	0D2723B	1	ROCKER, COVER WITH OIL FILL
7	0H1760A	1	ASSY, HEAD #1	42	0C2979	2	GASKET, VALVE COVER
8	071983	4	RETAINER, PISTON PIN 20	43	086515	8	KEEPER, VALVE SPRING
9	0C2981C	1	ROCKER, COVER NO OIL FILL	44	0D2274	4	RETAINER, VALVE SPRING
11	0K0988	2	PISTON, FLAT TOP DIA 90	45	0D3867	4	SPRING, VALVE
12	0G2565	2	RING SET, PISTON DIA 90	46	078672	2	SEAL, VALVE STEM D7
13	0G7940	2	PIN, PISTON (20Kw)	47	0C5371	4	WASHER, VALVE SPRING
14	0D4041	1	ASSY, CAMSHAFT & GEAR (13,14,16,17Kw)	48	072694	4	STUD, ROCKER ARM PIVOT
	0G7974	1	ASSY, CAMSHAFT & GEAR (20Kw)	49	0D5313	4	ROCKER ARM
15	0C2977	1	GASKET, CRANK CASE	50	0D3998	4	NUT HEX M8-1.0 G8 YEL CHR
16	0C5943	1	SEAL, OIL PASSAGE	51	0G8552	2	PLATE, PUSH ROD GUIDE (20KW)
17	0E4357E	1	ASSY, CRANK & GEAR (13,14,16,17Kw)	52	0C2976	12	SCREW HHFC M8-1.25 X 65
	0G5001E	1	ASSY, C' SHAFT 0.D. 41 (20Kw)	53	086516	2	VALVE, EXHAUST
18	0J8969	2	ASSY, CONNECTING ROD (13,14,16,17Kw)	54	0C2229	2	VALVE, INTAKE
	0J8968	2	ASSY, CONNECTING ROD (20Kw)	55	083897	4	TAPPET, SOLID
19	0G6431	2	SCREW SHC SEMS M6-1.0 X 50 G8.8	56	0H1760B	1	ASSY, HEAD #2 (20Kw)
20	0E6098	1	SCREEN, OIL PICKUP	57	0D9853D	4	PUSHROD, 147
21	0D4123B	1	ASSEMBLY, OIL PUMP W/O O-RING	58	0C2978	2	GASKET, HEAD
22	0E8152	1	O-RING .49 ID X .07 THICK	59	0D4010	1	KIT GASKET
23	0C3011	2	COVER, OIL RELIEF	60	0D4012	1	KIT BREATHER ASSEMBLY
24	0C3009	2	SPRING, OIL RELIEF	61	0D8675A	1	KIT HEAD ASSEMBLY CYLINDER 1
25	0C3010	2	BALL, 1/2D OIL RELIEF	62	0D8675B	1	KIT HEAD ASSEMBLY CYLINDER 2
27	0F5458	1	SCREW, PLASTITE HI-LOW #10	63	0D4015	1	KIT OIL RELIEF
28	0C3027	1	O-RING, 3/8" X 1/2"	64	078699C	2	SLEEVE DOWEL PIN 14 DIA.
29	0C5998	1	CLAMP, OIL TUBE	65	078699B	4	SLEEVE DOWEL PIN 12 DIA.
31	0F2664L	1	ASSEMBLY, DIPSTICK WITH HANDLE	158	0G8558	1	DWERTER, BREATHER GTH
32	0C5305	1	TUBE, DIPSTICK				
33	0D6147	5	SCREW HHFC M6-1.0 X 10mm				
34	043790A	1	BARBED ELBOW 90 3/8NPT X 3/8 VS				
35	0E9842A	1	SEAL, 42 I.D. CRANKSHAFT GREEN				

GROUP



**EXPLODED VIEW: GH-990 HSB ENGINE
DRAWING #: 0G3071**

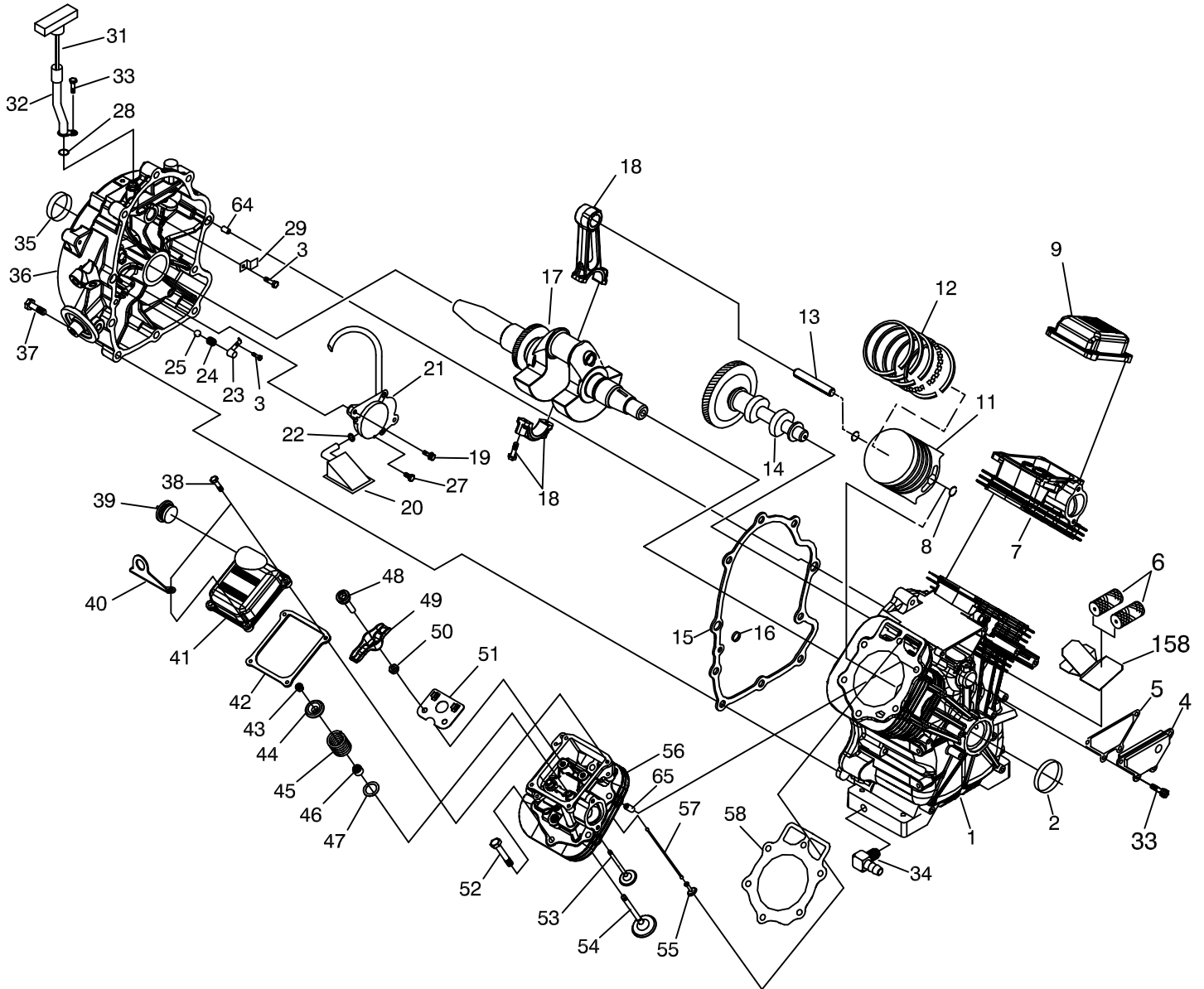
GROUP

APPLICABLE TO: 2007 HSB

ITEM	PART #	QTY.	DESCRIPTION	ITEM	PART #	QTY.	DESCRIPTION
64	022145	1	WASHER FLAT M8 - 5/16	119	0E9568	1	ASSY, THROTTLE SHAFT
65	0C5136A	2	KNOB, AIR CLEANER (13,14,16,17Kw)	120	0E9565	2	THROTTLE VALVE
	0C5136D	2	KNOB,AIR CLEANER (20Kw)	121	074027	4	SCREW PPHM M3 - 0.5 X 5
66	0C3024	1	COVER, AIRBOX NG/LP (13,14,16,17Kw)	122	0C3044	1	COVER, DUST, MIX/AIRBOX
	0G5895	1	COVER, AIRBOX NG/LP (20Kw)	123	0C4756	1	SPRING, IDLE ADJUST
68	0C8127	1	ELEMENT, AIR CLEANER (13,14,16,17Kw)	124	075477	1	SCREW PPHM M5 - 0.58 X 20
	0G5894	1	ELEMENT, AIR CLEANER (20Kw)	125	043116	2	SCREW HHC M6 - 1.0 X 12
69	0F9255	1	ASSY, MIXER / AIRBOX 990 (13, 16Kw)	126	0E1644	1	SCREW BHSC M6-1.0 X 12 SS
	0G8297	1	ASSY, MIXER / AIRBOX 990 (14, 17 Kw)	127	0E9572	1	BRACKET, STEPPER MOTOR
	0G8448	1	ASSY, MIXER / AIRBOX 999 (20Kw)	129	0G6453	1	ASSY,CONTROLLER GTH990 HSB
70	0E9582	4	SCREW SHLDR(8MM) M6-1.0 X 21	131	0E9570	1	ASSY, THROTTLE ROD
71	0D4417	4	WASHER,RUBBER 1/4" X 1/8" THICK	132	0E9577	1	BELLOWS, INTAKE
72	0E7585A	2	SPARKPLUG, RCY14 .040"GAP (13,14,16,17Kw)	133	0E5846	1	EXPANSION PLUG
	0G0767A	2	SPARKPLUG, RC12 .040" GAP (20Kw)	134	0E9419	3	#10 O-RING
73	0E6043	2	SCREW TAPTITE M5 - 0.8 X 8	135	0C4760	1	PLUG, MANIFOLD
74	0G7606	1	WRAPPER, LOWER CYLINDER 2 ZINC	136	0F9253	1	ASSY, AIR BOX BASE
75	0C3025	1	SWITCH, OIL PRESS	137	0G5970	1	PIN, FUEL SELECTOR (13, 16kW) NO STRIPES
76	0F0452D	1	HOSE 3/8" 300PSI 6.5" LG OIL		0G8824	1	PIN,FUEL SELECTOR (14, 17 kW) 1 STRIPE
77	070185E	1	OIL FILTER, 90mm		0G9133	1	PIN, FUEL SELECTOR (20kW) 3 STRIPES
78	0D3083	1	ASSY, OIL DRAIN HOSE	138	0E9554	1	PIN, FUEL SEL STOP
79	0F2094	2	SCREW M3 - 0.5 X 6 SEMS	139	0E9348	1	SOLENOID COVER
80	094090	1	SWITCH, THERMAL 293F	140	0E9599	1	LINKAGE, CHOKE
81	035461	2	BARBED STRAIGHT 1/4NPT X 3/8	141	0E9595	4	SCREW PPPH HI-LO #6 X 1/2
82	0G3662B	5	CLAMP, HOSE OETIKER STEPLESS 18.5mm	142	090987	1	SCREW PHTT M3 - 0.5 X 8
83	0F0452C	1	HOSE 3/8" 300PSI 6" LG OIL	143	0E9403	1	RETAINER, CHOKE RETURN SPRING
84	0E9506	1	COOLER, OIL	144	0E9571	1	SPRING, CHOKE RETURN
85	0C9764	4	SCREW PLASTITE 1/4-15 X 3/4	145	0E9380	1	WASHER, BELLEVILLE SPRING
86	0C3043	2	GASKET, MANIFOLD / PORT	146	0A6345	1	SCREW PPHM M2 - 0.4 X 8
87	0C7694A	1	MANIFOLD CYLINDER 2	147	0E9598	1	CHOKE ARM
88	045756	4	SCREW, HHTT M6-1 x 10 LONG	148	0E9593	1	SCREW SHOULDER M3 - 0.5 X 6
89	082025	1	NUT, HEX LOCK M5-0.8 ZINC	149	0E9564	1	VALVE, CHOKE
90	0G3730	4	SCREW SHC M8 - 1.25 X 20 SEMS	150	0E9575	1	SHAFT, CHOKE
91	090388	13	SCREW TAPTITE M6-1X12 CLEAR ZINC	151	0E9357	1	SEAL, GOVERNOR ARM
92	0E4997	1	ASSY, GROUND WIRE CONNECTOR	152	0A7094	2	SCREW PHM #4 - 40 X 1/4
93	0C3033	1	WASHER, 25MM I.D.	153	0E9574	1	BRACKET, SOLENOID
94	0C3034	1	NUT, HEX M24	154	0F9273	1	SOLENOID, 6VDC
95	0C9763	4	NUT, GROMMET 1/4 PLUG	155	0F5467	1	NUT HEX M8 - 1.25 YELLOW ZINC
96	0D1131	1	GUARD, FAN	156	0E9557	1	SPRING, CHOKE VALVE ADJUST
97	0F1169K	1	HOUSING, BLOWER NG COOLER	157	0E1644	1	SCREW, BHSC M6-1.0 x 12
98	0H4957	2	SCREW HHFCS M8 - 1.25 X 10 G8.8				
100	0C3032	1	PLATE, FAN				
101	0C3031	1	FAN, NYLON				
102	0C3725B	1	ASSY, FLYWHEEL (13,14,16,17Kw)				
	0C3725D	1	ASSY, FLYWHEEL (20Kw)				
103	0G4928C	1	PLATE, BACKING WITH CUT OUT				
104	0C7693A	1	MANIFOLD CYLINDER 1				
105	0C3041A	2	SLEEVE, RUBBER				
106	082774	1	KEY, WOODRUFF 4 X 19D				
107	0C3036A	1	HOSE BREATHER				
108	0G7604	1	WRAPPER, LOWER CYLINDER 1 ZINC				
109	0G7603	1	WRAPPER, UPPER CYLINDER 1 ZINC				
110	0G7605	1	WRAPPER, UPPER CYLINDER 2 ZINC				
111	0E9323	1	STARTER MOTOR HEAR REDUCED 1KW				
112	061906	2	SCREW HHC M8 - 1.25 X 85 G8.8				
113	022129	3	WASHER LOCK M8 - 5/16				
114	0F1177	1	ASSEMBLY, GROUND WIRE				
115	022097	2	WASHER LOCK M6 - 1/4				
116	0G3110	4	SCREW TAPTITE M6 - 1.0 X 20 ZINC				
117	0G3224A	1	ASSY, IGN COIL W/DIODE, CYLINDER 1				
118	0G3224B	1	ASSY. IGN COIL W/DIODE. CYLINDER 2				

GROUP D

59	2, 5, 15, 16, 28, 35, 42, 58, 86
60	4, 5, 6
61	7, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 57, 58
62	42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 56, 57, 58
63	23, 24, 25



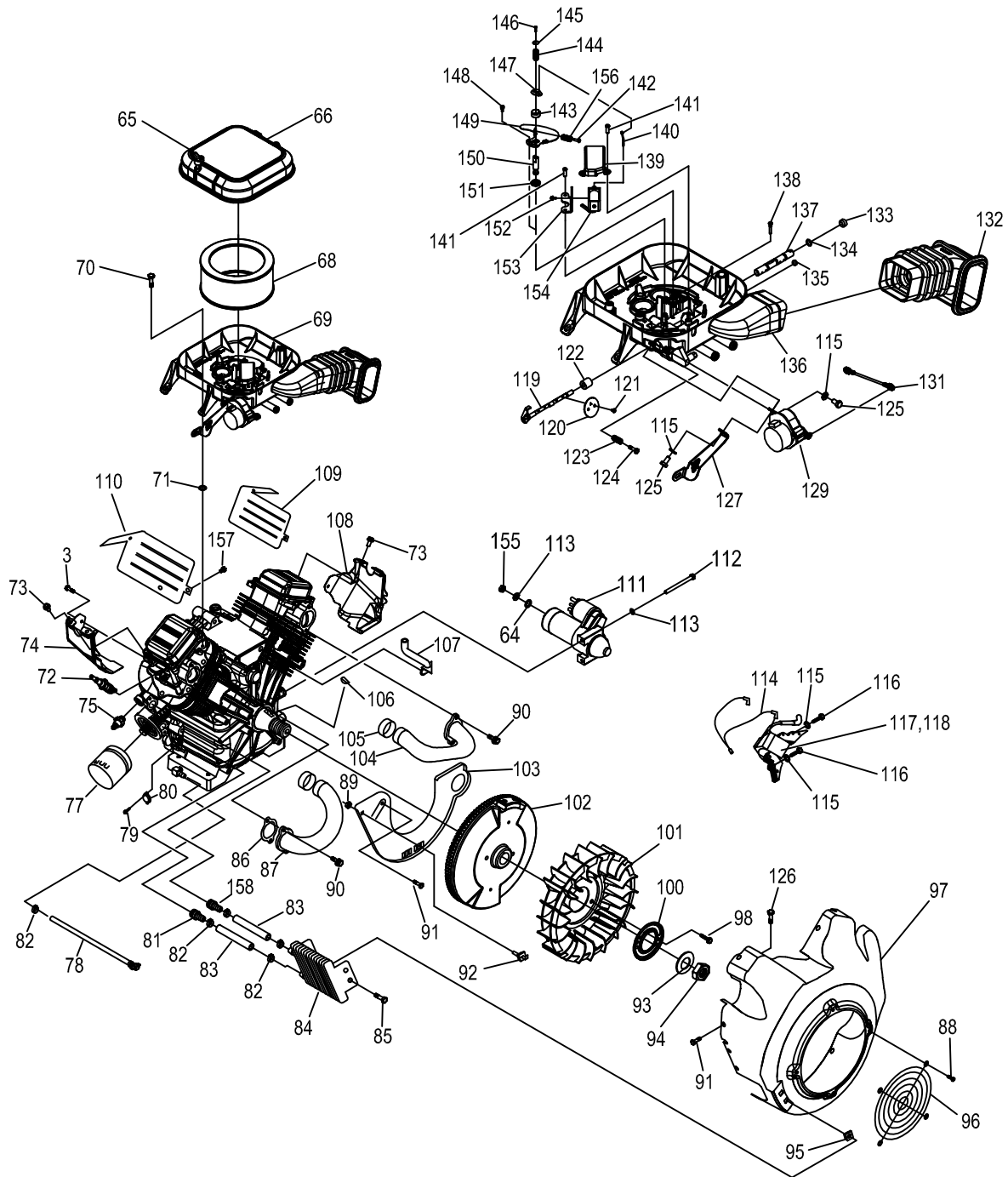
EXPLODED VIEW: GH-990 HSB ENGINE
DRAWING #: 0G3071

APPLICABLE TO: 2007 HSB

GROUP D

ITEM	PART #	QTY.	DESCRIPTION	ITEM	PART #	QTY.	DESCRIPTION
1	0G7908A	1	ASSY, CRANKCASE WITH SLEEVE	36	0F8054	1	GEARCOVER / ADAPTOR GTH-990
2	0E9843A	1	SEAL, 38 I.D. CRANKSHAFT GREEN	37	0C3006	10	SCREW, HHFC M10-1.5 X 55
3	0G0919	5	SCREW, HHFCS M6-1.0 X 12 G8.8	38	080318	8	SCREW HHFC M6-1.0 X 25
4	0G9100	1	ASSEMBLY, BREATHER DUAL BREATHER	39	093064	1	ASSEMBLY, OIL FILL CAP
5	0C3005	1	GASKET, BREATHER COVER	40	0K4867	2	LIFT HOOK
6	0E3372C	2	SEPARATOR, OIL BREATHER	41	0D2723B	1	ROCKER, COVER WITH OIL FILL
7	0H1760A	1	ASSY, HEAD #1	42	0C2979	2	GASKET, VALVE COVER
8	071983	4	RETAINER, PISTON PIN 20	43	086515	8	KEEPER, VALVE SPRING
9	0C2981C	1	ROCKER, COVER NO OIL FILL	44	0D2274	4	RETAINER, VALVE SPRING
11	0K0988	2	PISTON, FLAT TOP DIA 90	45	0D3867	4	SPRING, VALVE
12	0G2565	2	RING SET, PISTON DIA 90	46	078672	2	SEAL, VALVE STEM D7
13	0G7940	2	PIN, PISTON (20Kw)	47	0C5371	4	WASHER, VALVE SPRING
14	0D4041	1	ASSY, CAMSHAFT & GEAR (13,14,16,17Kw)	48	072694	4	STUD, ROCKER ARM PIVOT
	0G7974	1	ASSY, CAMSHAFT & GEAR (20Kw)	49	0D5313	4	ROCKER ARM
15	0C2977	1	GASKET, CRANK CASE	50	0D3998	4	NUT HEX M8-1.0 G8 YEL CHR
16	0C5943	1	SEAL, OIL PASSAGE	51	0G8552	2	PLATE, PUSH ROD GUIDE (20KW)
17	0E4357E	1	ASSY, CRANK & GEAR (13,14,16,17Kw)	52	0C2976	12	SCREW HHFC M8-1.25 X 65
	0G5001E	1	ASSY, C'SHAFT 0.D. 41 (20Kw)	53	086516	2	VALVE, EXHAUST
18	0J8969	2	ASSY, CONNECTING ROD (13,14,16,17Kw)	54	0C2229	2	VALVE, INTAKE
	0J8968	2	ASSY, CONNECTING ROD (20Kw)	55	083897	4	TAPPET, SOLID
19	0G6431	2	SCREW SHC SEMS M6-1.0 X 50 G8.8	56	0H1760B	1	ASSY, HEAD #2 (20Kw)
20	0E6098	1	SCREEN, OIL PICKUP	57	0D9853D	4	PUSHROD, 147
21	0D4123B	1	ASSEMBLY, OIL PUMP W/O O-RING	58	0C2978	2	GASKET, HEAD
22	0E8152	1	O-RING .49 ID X .07 THICK	59	0D4010	1	KIT GASKET
23	0C3011	2	COVER, OIL RELIEF	60	0D4012	1	KIT BREATHER ASSEMBLY
24	0C3009	2	SPRING, OIL RELIEF	61	0D8675A	1	KIT HEAD ASSEMBLY CYLINDER 1
25	0C3010	2	BALL, 1/2D OIL RELIEF	62	0D8675B	1	KIT HEAD ASSEMBLY CYLINDER 2
27	0F5458	1	SCREW, PLASTITE HI-LOW #10	63	0D4015	1	KIT OIL RELIEF
28	0C3027	1	O-RING, 3/8" X 1/2"	64	078699C	2	SLEEVE DOWEL PIN 14 DIA.
29	0C5998	1	CLAMP, OIL TUBE	65	078699B	4	SLEEVE DOWEL PIN 12 DIA.
31	0F2664L	1	ASSEMBLY, DIPSTICK WITH HANDLE	158	0G8558	1	DIVERTER, BREATHER GTH
32	0C5305	1	TUBE, DIPSTICK				
33	0D6147	5	SCREW HHFC M6-1.0 X 10mm				
34	043790A	1	BARBED ELBOW 90 3/8NPT X 3/8 VS				
35	0E9842A	1	SEAL, 42 I.D. CRANKSHAFT GREEN				

GROUP D



EXPLODED VIEW: GH-990 HSB ENGINE

DRAWING #: 0G3071

GROUP D

APPLICABLE TO: 2007 HSB

ITEM	PART #	QTY.	DESCRIPTION	ITEM	PART #	QTY.	DESCRIPTION
64	022145	1	WASHER FLAT M8 - 5/16	119	0E9568	1	ASSY, THROTTLE SHAFT
65	0C5136A	2	KNOB, AIR CLEANER (13,14,16,17Kw)	120	0E9565	2	THROTTLE VALVE
	0C5136D	2	KNOB, AIR CLEANER (20Kw)	121	074027	4	SCREW PPHM M3 - 0.5 X 5
66	0C3024	1	COVER, AIRBOX NG/LP (13,14,16,17Kw)	122	0C3044	1	COVER, DUST, MIX/AIRBOX
	0G5895	1	COVER, AIRBOX NG/LP (20Kw)	123	0C4756	1	SPRING, IDLE ADJUST
68	0C8127	1	ELEMENT, AIR CLEANER (13,14,16,17Kw)	124	075477	1	SCREW PPHM M5 - 0.58 X 20
	0G5894	1	ELEMENT, AIR CLEANER (20Kw)	125	043116	2	SCREW HHC M6 - 1.0 X 12
69	0F9255	1	ASSY, MIXER / AIRBOX 990 (13, 16Kw)	126	0E1644	1	SCREW BHSC M6-1.0 X 12 SS
	0G8297	1	ASSY, MIXER / AIRBOX 990 (14, 17 Kw)	127	0E9572	1	BRACKET, STEPPER MOTOR
	0G8448	1	ASSY, MIXER / AIRBOX 999 (20Kw)	129	0G6453	1	ASSY, CONTROLLER GTH990 HSB
70	0E9582	4	SCREW SHLDR(8MM) M6-1.0 X 21	131	0E9570	1	ASSY, THROTTLE ROD
71	0D4417	4	WASHER, RUBBER 1/4" X 1/8" THICK	132	0E9577	1	BELLOWS, INTAKE
72	0E7585A	2	SPARKPLUG, RCY14 .040" GAP (13,14,16,17Kw)	133	0E5846	1	EXPANSION PLUG
	0G0767A	2	SPARKPLUG, RC12 .040" GAP (20Kw)	134	0E9419	3	#10 O-RING
73	0E6043	2	SCREW TAPTITE M5 - 0.8 X 8	135	0C4760	1	PLUG, MANIFOLD
74	0G7606	1	WRAPPER, LOWER CYLINDER 2 ZINC	136	0F9253	1	ASSY, AIR BOX BASE
75	0C3025	1	SWITCH, OIL PRESS	137	0G5970	1	PIN, FUEL SELECTOR (13, 16kw) NO STRIPES
76					0G8824	1	PIN, FUEL SELECTOR (14, 17kw) 1 STRIPES
77	070185E	1	OIL FILTER, 90mm		0G9133	1	PIN, FUEL SELECTOR (20kw) 3 STRIPES
78	0D3083	1	ASSY, OIL DRAIN HOSE	138	0E9554	1	PIN, FUEL SEL STOP
79	0A7095	2	SCREW #4-40 SEMS	139	0E9348	1	SOLENOID COVER
80	094090	1	SWITCH, THERMAL 293F	140	0E9599	1	LINKAGE, CHOKE
81	035461	1	BARBED STRAIGHT 1/4NPT X 3/8	141	0E9595	4	SCREW PPH HI-LO #6 X 1/2
82	0G3662B	5	CLAMP, HOSE OETIKER STEPLESS 18.5mm	142	090987	1	SCREW PHTT M3 - 0.5 X 8
83	0F0452C	2	HOSE 3/8" 300PSI 6" LG OIL	143	0E9403	1	RETAINER, CHOKE RETURN SPRING
84	0E9506	1	COOLER, OIL	144	0E9571	1	SPRING, CHOKE RETURN
85	0C9764	4	SCREW PLASTITE 1/4-15 X 3/4	145	0E9380	1	WASHER, BELLEVILLE SPRING
86	0C3043	2	GASKET, MANIFOLD / PORT	146	0A6345	1	SCREW PPHM M2 - 0.4 X 8
87	0C7694A	1	MANIFOLD CYLINDER 2	147	0E9598	1	CHOKE ARM
88	045756	4	SCREW, HHTT M6-1 x 10 LONG	148	0E9593	1	SCREW SHOULDER M3 - 0.5 X 6
89	082025	1	NUT, HEX LOCK M5-0.8 ZINC	149	0E9564	1	VALVE, CHOKE
90	0G3730	4	SCREW SHC M8 - 1.25 X 20 SEMS	150	0E9575	1	SHAFT, CHOKE
91	090388	13	SCREW TAPTITE M6-1X12 CLEAR ZINC	151	0E9357	1	SEAL, GOVERNOR ARM
92	0E4997	1	ASSY, GROUND WIRE CONNECTOR	152	0A7094	2	SCREW PHM #4 - 40 X 1/4
93	0C3033	1	WASHER, 25MM I.D.	153	0E9574	1	BRACKET, SOLENOID
94	0C3034	1	NUT, HEX M24	154	0F9273	1	SOLENOID, 6VDC
95	0C9763	4	NUT, GROMMET 1/4 PLUG	155	0F5467	1	NUT HEX M8 - 1.25 YELLOW ZINC
96	0D1131	1	GUARD, FAN	156	0E9557	1	SPRING, CHOKE VALVE ADJUST
97	0F1169K	1	HOUSING, BLOWER NG COOLER	157	0E1644	1	SCREW, BHSC M6-1.0 x 12
98	0H4957	2	SCREW HHFCS M8 - 1.25 X 10 G8.8	158	0H6244	1	EXTENDED BARB STR 1/4 NPT X 3/8
100	0C3032	1	PLATE, FAN				
101	0C3031	1	FAN, NYLON				
102	0C3725B	1	ASSY, FLYWHEEL (13,14,16,17Kw)				
	0C3725D	1	ASSY, FLYWHEEL (20Kw)				
103	0G4928C	1	PLATE, BACKING WITH CUT OUT				
104	0C7693A	1	MANIFOLD CYLINDER 1				
105	0C3041A	2	SLEEVE, RUBBER				
106	082774	1	KEY, WOODRUFF 4 X 19D				
107	0C3036A	1	HOSE BREATHER				
108	0G7604	1	WRAPPER, LOWER CYLINDER 1 ZINC				
109	0G7603	1	WRAPPER, UPPER CYLINDER 1 ZINC				
110	0G7605	1	WRAPPER, UPPER CYLINDER 2 ZINC				
111	0E9323	1	STARTER MOTOR HEAR REDUCED 1KW				
112	061906	2	SCREW HHC M8 - 1.25 X 85 G8.8				
113	022129	3	WASHER LOCK M8 - 5/16				
114	0F1177	1	ASSEMBLY, GROUND WIRE				
115	022097	2	WASHER LOCK M6 - 1/4				
116	0G3110	4	SCREW TAPTITE M6 - 1.0 X 20 ZINC				
117	0G3224A	1	ASSY, IGN COIL W/DIODE, CYLINDER 1				
118	0G3224B	1	ASSY, IGN COIL W/DIODE, CYLINDER 2				