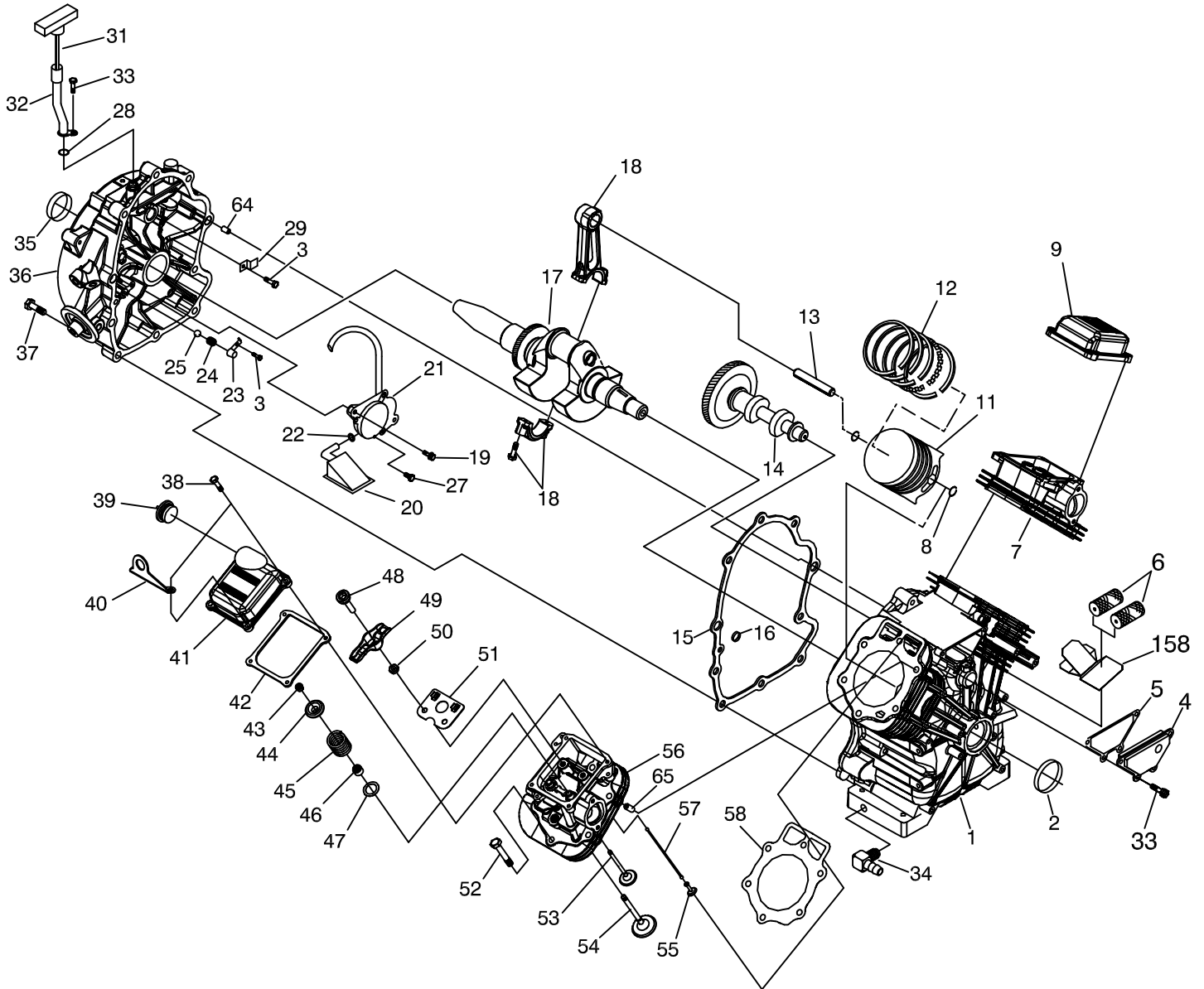


GROUP D

| | |
|----|--|
| 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 |



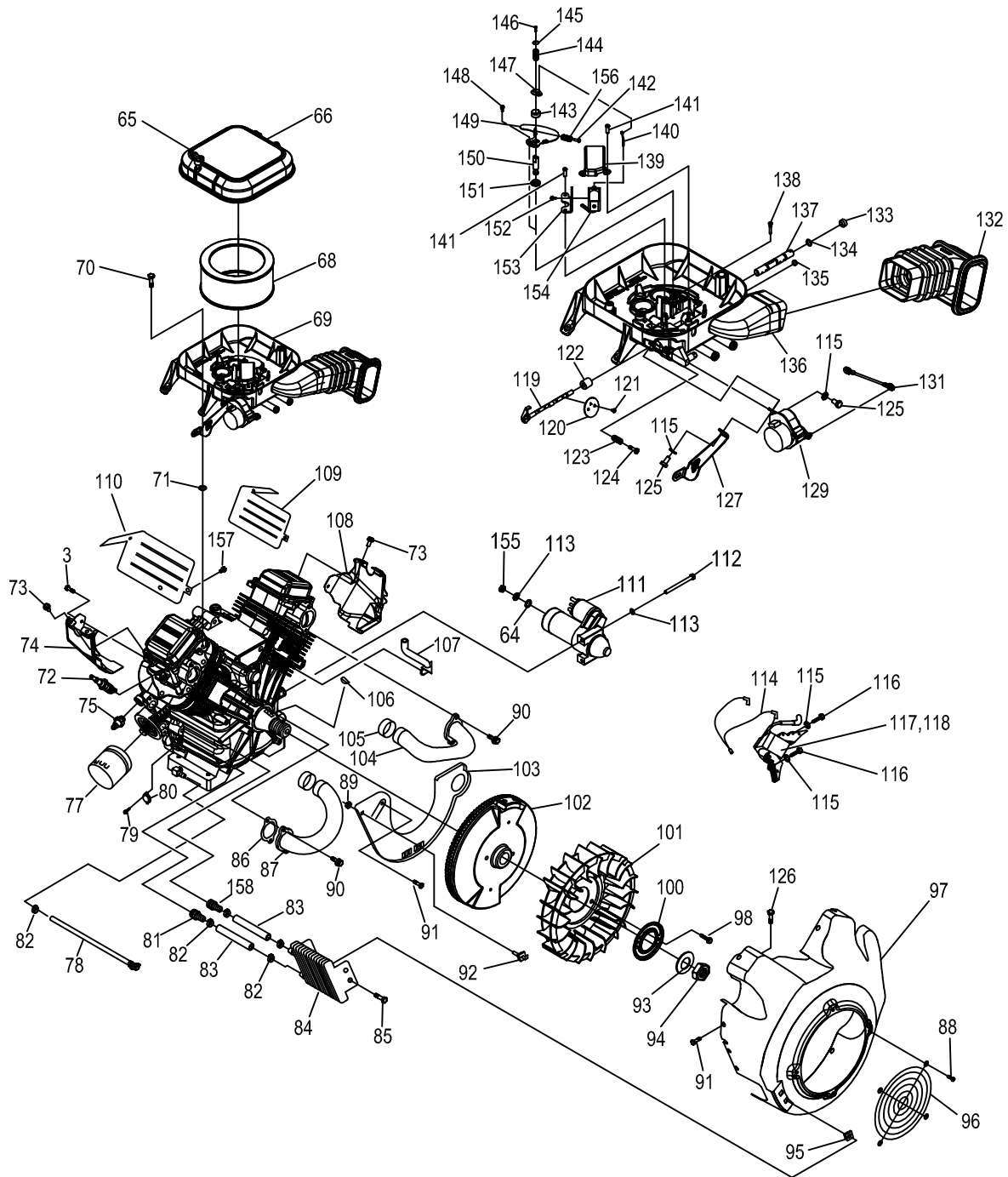
EXPLODED VIEW: GH-990 HSB ENGINE
DRAWING #: 0G3071

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 | | | | |