



Parts Manual

Mfg. No: 030654-00
3,000 Watt Briggs & Stratton Inverter
Generator



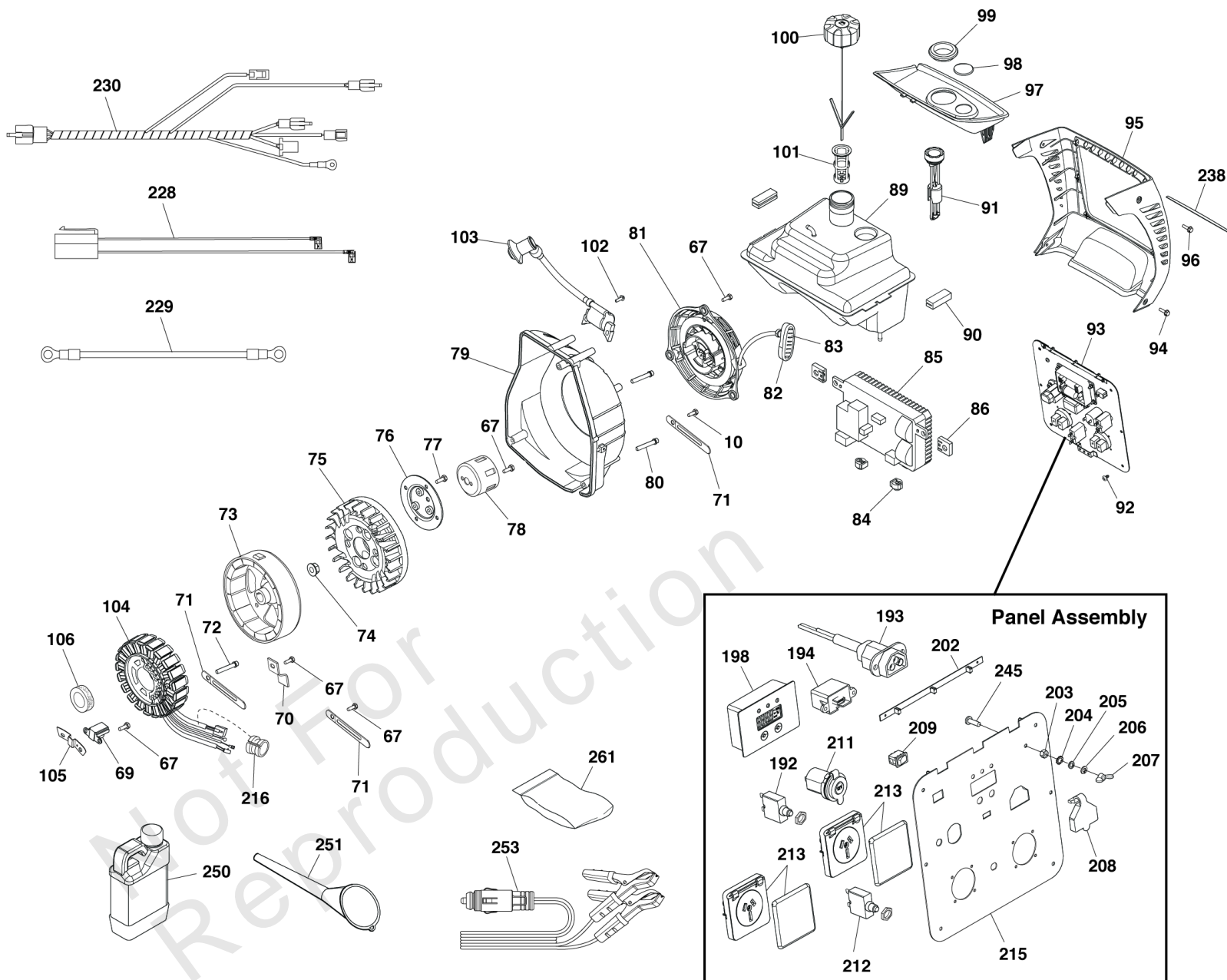
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Not For
Reproduction

Alternator & Control Panel (80012940p1)

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 030654-00



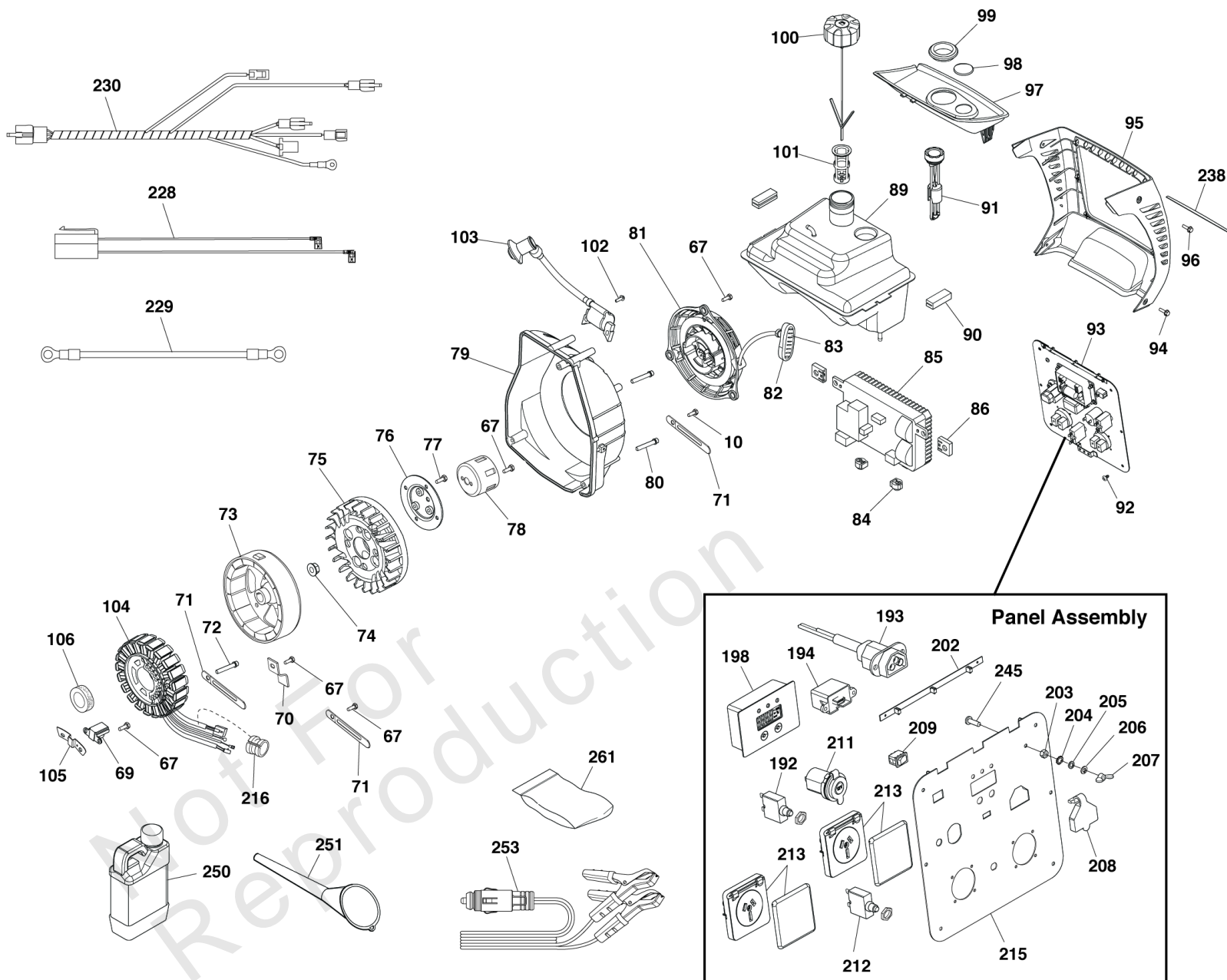
Alternator & Control Panel (80012940p1)

| REF NO | PART NO | QTY | DESCRIPTION |
|--------|----------|-----|---------------------|
| 10 | ----- | | SCREW |
| 67 | ----- | | BOLT-M6 x 12 |
| 69 | 705457 | | TRIGGER-IGNITION |
| 70 | 707320 | | BRACKET |
| 71 | 707319 | | * BRACKET |
| 72 | ----- | | SCREW-M6 x 60 |
| 73 | 705458 | | ROTOR |
| 74 | ----- | | NUT, FLANGE M14 |
| 75 | 705459 | | FAN |
| 76 | ----- | | TERMINAL |
| 77 | ----- | | BOLT-M6 x 16 |
| 78 | 705466 | | CUP-FLYWHEEL |
| 79 | ----- | | COVER-FAN |
| 80 | ----- | | BOLT-M6 x 55 |
| 81 | 705465 | | STARTER-REWIND |
| 82 | 311414GS | | INSERT, Grip |
| 83 | ----- | | INSERT-GRIP |
| 84 | ----- | | MOUNT-VIBRATION |
| 85 | 705462 | | INVERTER |
| 86 | ----- | | MOUNT-VIBRATION |
| 89 | 707176 | | TANK-FUEL |
| 90 | 319941GS | | MOUNT-VIBRATION |
| 91 | 319933GS | | GAUGE |
| 92 | ----- | | SCREW |
| 93 | 319947GS | | PANEL-CONTROL |
| 94 | ----- | | SCREW-M5 x 30 |
| 95 | 319927GS | | COVER-PANEL |
| 96 | ----- | | SCREW-M6 x 56 |
| 97 | 319929GS | | TRAY-FUEL |
| 98 | 706134 | | PLUG-SIGHT |
| 99 | 705490 | | GROMMET-FUEL |
| 100 | 317134GS | | CAP-FUEL |
| 101 | 317441GS | | FILTER, Filler Neck |
| 102 | ----- | | SCREW |
| 103 | 705463 | | COIL-IGNITION |
| 104 | 705464 | | STATOR |
| 105 | ----- | | BRACKET |
| 106 | ----- | | SEAL-OIL |
| 192 | 311444GS | | BREAKER, Circuit |
| 193 | 705488 | | PORT-PARALLEL |
| 194 | 319946GS | | PORT-USB |
| 198 | 705482 | | MODULE |
| 202 | 319945GS | | PCB-LED |
| 203 | 207743GS | | NUT |
| 204 | 91719GS | | WASHER |
| 205 | 207806GS | | WASHER |
| 206 | 207805GS | | WASHER |
| 207 | 187424GS | | NUT, WING, M5 X 0.8 |
| 208 | 705478 | | COVER-PORT |
| 209 | 311442GS | | SWITCH |
| 211 | 314531GS | | OUTLET, 12VDC |

Alternator & Control Panel (80012940p1)

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 030654-00



Alternator & Control Panel (80012940p1)

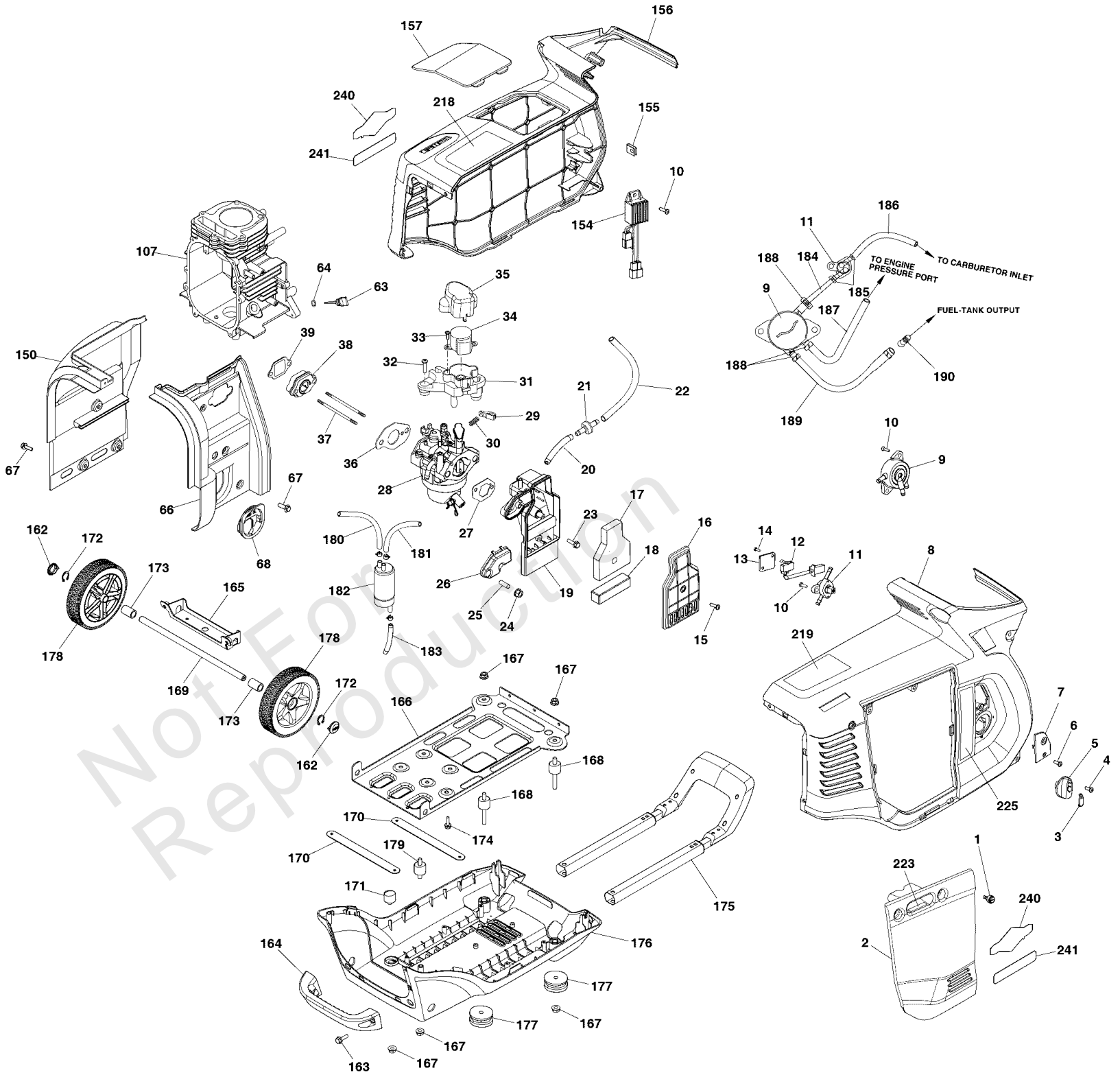
| REF NO | PART NO | QTY | DESCRIPTION |
|--------|----------|-----|--|
| 212 | 707170 | | CIRCUIT BREAKER, 15A |
| 213 | 314532GS | | OUTLET |
| 215 | 707179 | | PANEL-CONTROL |
| 216 | ----- | | COVER-RUBBER |
| 228 | 314479GS | | WIRE |
| 229 | 314483GS | | WIRE, Ground |
| 230 | 771933 | | WIRE-MAIN |
| 238 | 771883 | | DECAL |
| 245 | 76040GS | | SCREW |
| 250 | 100005 | | OIL-4 CYCLE 30W 18OZ. |
| 251 | 706357 | | FUNNEL |
| 253 | 187876GS | | CABLE, BATTERY CHARGE |
| 261 | 703574 | | KIT, Tool |
| -- | 706139 | | JET-MAIN, High Altitude, 5000 ft -(Optional Accessory - Not Included) |

Not For Reproduction

Main Unit (80012940p2)

Note: Unless noted otherwise, use the standard torque specifications

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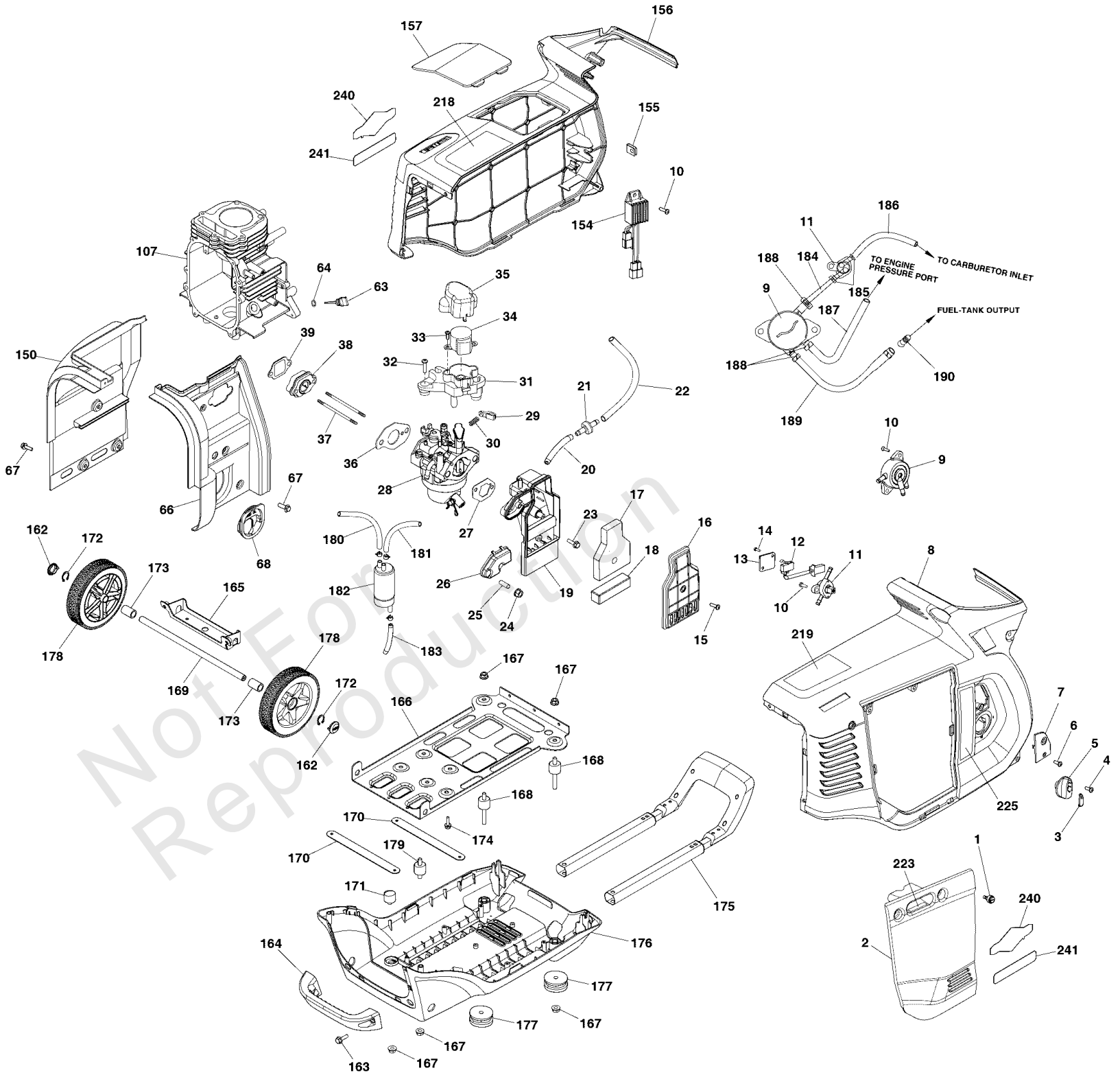
Main Unit (80012940p2)

| REF NO | PART NO | QTY | DESCRIPTION |
|--------|----------|-----|--------------------|
| 1 | 311375GS | | BOLT |
| 2 | 319926GS | | PANEL-ACCESS |
| 3 | 311377GS | | COVER, Knob |
| 4 | ----- | | SCREW |
| 5 | 705472 | | KNOB |
| 6 | ----- | | SCREW |
| 7 | 319936GS | | PLATE-TRIM |
| 8 | 319925GS | | COVER-SIDE |
| 9 | 706057 | | PUMP-FUEL |
| 10 | ----- | | SCREW |
| 11 | 311384GS | | VALVE, Fuel |
| 12 | 311385GS | | SWITCH, ON/OFF |
| 13 | ----- | | COVER-SWITCH |
| 14 | ----- | | SCREW |
| 15 | 707177 | | SCREW |
| 16 | 705474 | | COVER-AIR CLEANER |
| 17 | 705473 | | FILTER-A/C FOAM |
| 18 | 705475 | | FILTER-A/C FOAM |
| 19 | 705476 | | BASE-AIR CLEANER |
| 20 | 317446GS | | HOSE |
| 21 | 317108GS | | CHECK VALVE |
| 22 | 317447GS | | HOSE |
| 23 | 311400GS | | SCREW |
| 24 | ----- | | NUT |
| 25 | ----- | | SLEEVE |
| 26 | 705477 | | COVER-AIR CLEANER |
| 27 | 705939 | | GASKET-AIR CLEANER |
| 28 | 705940 | | CARBURETOR |
| 29 | 84003963 | | ROD-THROTTLE |
| 30 | 84003964 | | SPRING |
| 31 | 705944 | | BRACKET |
| 32 | ----- | | SCREW |
| 33 | ----- | | SCREW |
| 34 | 705938 | | MOTOR-STEPPER |
| 35 | 705941 | | COVER |
| 36 | 705945 | | GASKET |
| 37 | 705942 | | STUD |
| 38 | 705495 | | INSULATOR |
| 39 | 705496 | | GASKET |
| 63 | 705491 | | DIPSTICK |
| 64 | 705492 | | OIL SEAL |
| 66 | ----- | | DEFLECTOR |
| 67 | ----- | | BOLT-M6 x 12 |
| 68 | ----- | | SEAL-RUBBER |
| 107 | ----- | | CRANKCASE |
| 150 | ----- | | DEFLECTOR |
| 154 | 705467 | | REGULATOR-VOLTAGE |
| 155 | ----- | | NUT |
| 156 | 319924GS | | COVER-SIDE |
| 157 | 319928GS | | COVER-SPARK PLUG |
| 162 | 706065 | | HUBCAP |

Main Unit (80012940p2)

Note: Unless noted otherwise, use the standard torque specifications

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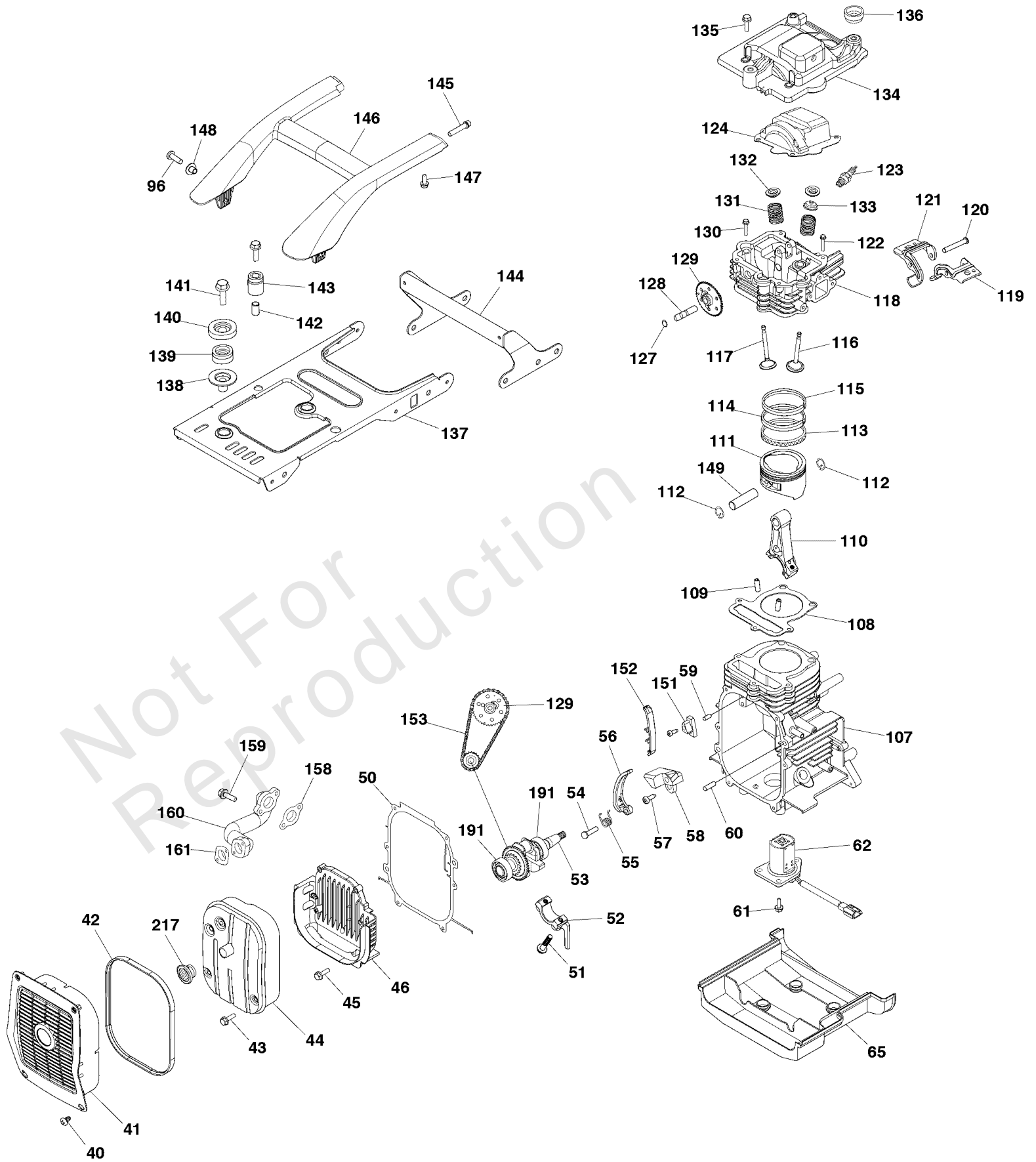
Main Unit (80012940p2)

| REF NO | PART NO | QTY | DESCRIPTION |
|--------|----------|-----|------------------|
| 163 | ----- | | BOLT-M6 x 25 |
| 164 | 319932GS | | BAR |
| 165 | 319934GS | | BRACKET |
| 166 | 319942GS | | FRAME |
| 167 | ----- | | NUT-FLANGE M8 |
| 168 | 705469 | | MOUNT-VIBRATION |
| 169 | 705494 | | AXLE |
| 170 | 705946 | | BRACKET |
| 171 | 705470 | | MOUNT-VIBRATION |
| 172 | 771593 | | E-RING |
| 173 | 705471 | | SLEEVE |
| 174 | ----- | | BOLT-M8 x 16 |
| 175 | 319938GS | | HANDLE |
| 176 | 319923GS | | COVER-BOTTOM |
| 177 | 311427GS | | MOUNT, Vibration |
| 178 | 319940GS | | WHEEL |
| 179 | 311426GS | | MOUNT, Vibration |
| 180 | 705483 | | HOSE |
| 181 | 705484 | | HOSE |
| 182 | 705487 | | SEPARATOR |
| 183 | 705485 | | HOSE |
| 184 | 705486 | | HOSE-FUEL |
| 185 | ----- | | CLAMP |
| 186 | 705480 | | HOSE-FUEL |
| 187 | 705481 | | HOSE-FUEL |
| 188 | ----- | | CLAMP |
| 189 | 707178 | | HOSE-FUEL |
| 190 | 707168 | | FILTER-FUEL TANK |
| 218 | 707172 | | DECAL |
| 219 | 707169 | | DECAL |
| 223 | 705967 | | DECAL |
| 225 | 705978 | | DECAL |
| 240 | 707463 | | DECAL |
| 241 | 771882 | | DECAL |

Main Unit Engine (80012940p3)

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 030654-00



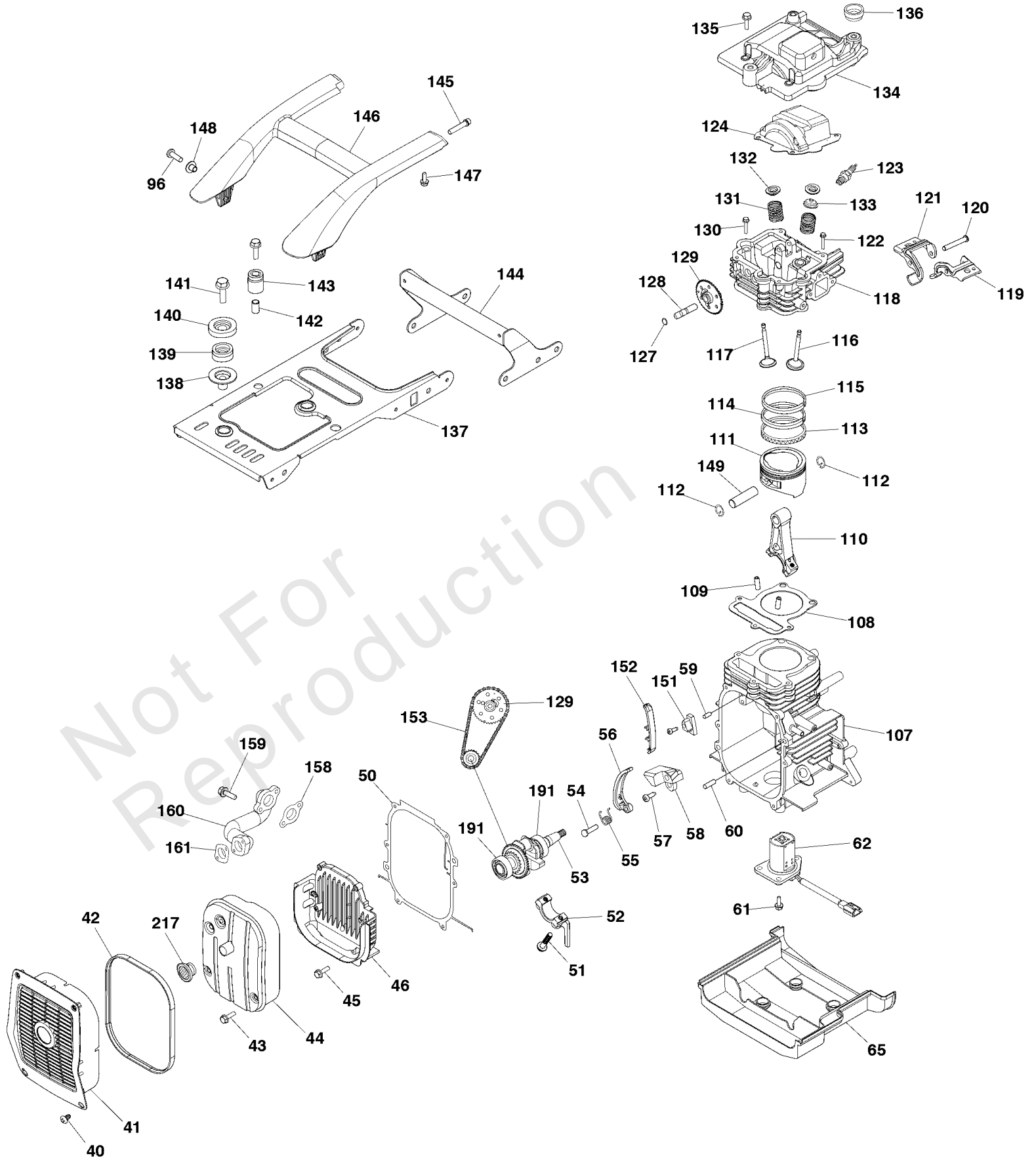
Main Unit Engine (80012940p3)

| REF NO | PART NO | QTY | DESCRIPTION |
|--------|----------|-----|-------------------|
| 40 | ----- | | SCREW |
| 41 | 319930GS | | GUARD-MUFFLER |
| 42 | 705962 | | GASKET |
| 43 | ----- | | BOLT-M6 x 75 |
| 44 | ----- | | MUFFLER |
| 45 | ----- | | BOLT-M6 x 30 |
| 46 | ----- | | COVER-CRANKCASE |
| 50 | 705963 | | GASKET-CRANKCASE |
| 51 | ----- | | ROD |
| 52 | ----- | | COVER |
| 53 | ----- | | CRANKSHAFT |
| 54 | ----- | | PIN |
| 55 | ----- | | SPRING |
| 56 | ----- | | ARM-TENSION |
| 57 | ----- | | SCREW |
| 58 | ----- | | BRACKET |
| 59 | ----- | | PIN |
| 60 | ----- | | PIN |
| 61 | ----- | | BOLT-M5 x 14 |
| 62 | 705964 | | SENSOR-OIL |
| 65 | ----- | | COVER |
| 96 | ----- | | SCREW |
| 107 | ----- | | CRANKCASE |
| 108 | ----- | | GASKET |
| 109 | ----- | | PIN |
| 110 | ----- | | ROD |
| 111 | ----- | | PISTON |
| 112 | ----- | | RETAINER-PIN |
| 113 | ----- | | RING |
| 114 | ----- | | RING |
| 115 | ----- | | RING |
| 116 | ----- | | VALVE-INTAKE |
| 117 | ----- | | VALVE-EXHAUST |
| 118 | ----- | | CYLINDER HEAD |
| 119 | ----- | | ARM-INTAKE VALVE |
| 120 | ----- | | PIN |
| 121 | ----- | | ARM-EXHAUST VALVE |
| 122 | ----- | | BOLT-M8 x 50 |
| 123 | 705455 | | SPARK PLUG |
| 124 | ----- | | BLOCK |
| 127 | ----- | | O-RING |
| 128 | ----- | | PIN-SHAFT |
| 129 | ----- | | CAM-ASSEMBLY |
| 130 | ----- | | BOLT-M8 x 70 |
| 131 | ----- | | SPRING |
| 132 | ----- | | SEAT-VALVE |
| 133 | ----- | | SEAL-VALVE OIL |
| 134 | 705456 | | COVER-CYLINDER |
| 135 | ----- | | BOLT-M6 x 25 |
| 136 | ----- | | MOUNT-VIBRATION |
| 137 | 319943GS | | BRACKET |

Main Unit Engine (80012940p3)

Note: Unless noted otherwise, use the standard torque specifications

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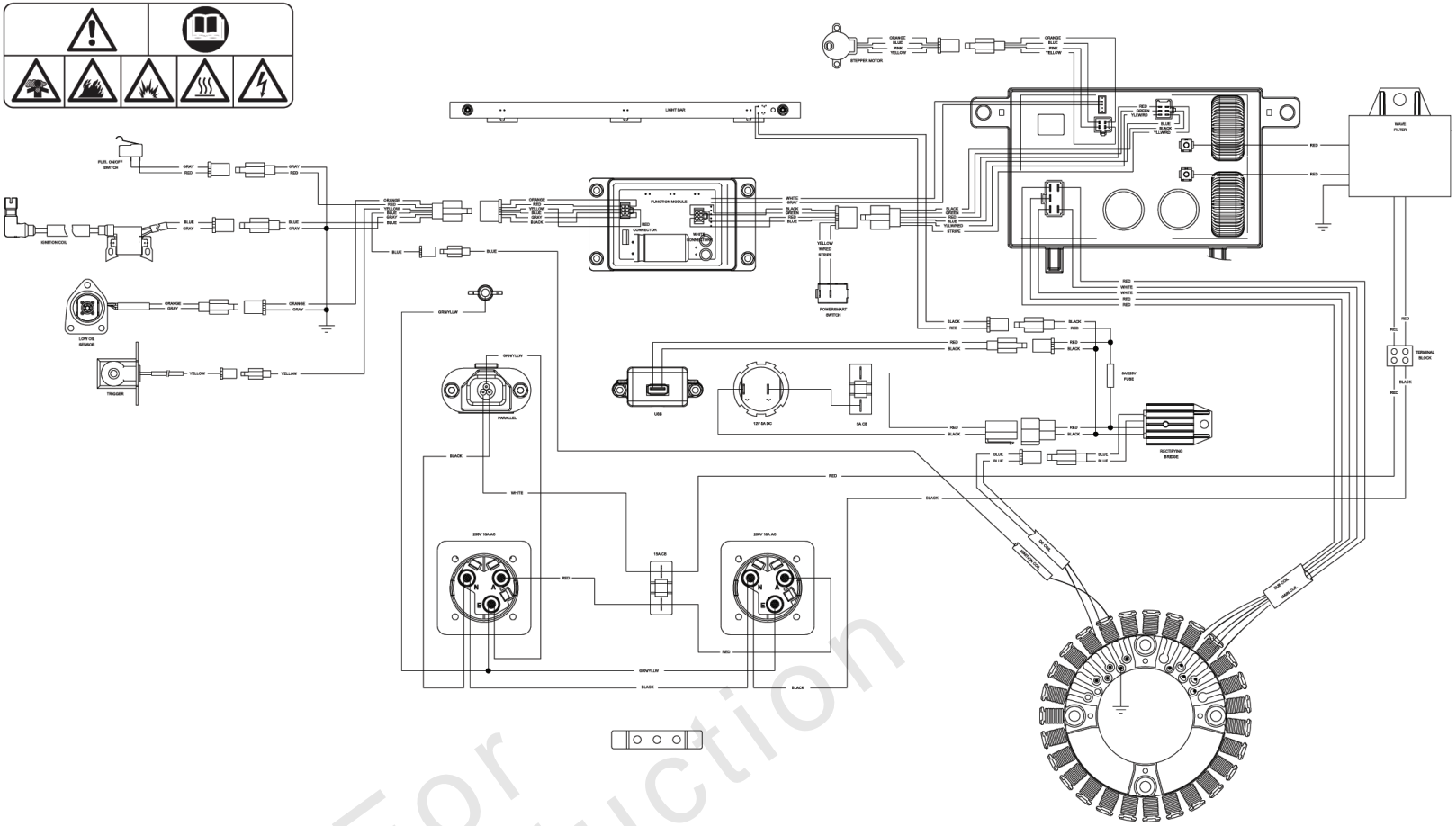
Main Unit Engine (80012940p3)

| REF NO | PART NO | QTY | DESCRIPTION |
|--------|----------|-----|-----------------|
| 138 | ----- | | MOUNT-VIBRATION |
| 139 | ----- | | BUSHING |
| 140 | ----- | | GASKET |
| 141 | ----- | | BOLT-M8 x 30 |
| 142 | ----- | | BUSHING |
| 143 | ----- | | MOUNT-VIBRATION |
| 144 | 319935GS | | BRACKET |
| 145 | ----- | | BOLT |
| 146 | 319937GS | | HANDLE |
| 147 | ----- | | SCREW |
| 148 | 311431GS | | BUSHING |
| 149 | ----- | | PIN-PISTON |
| 151 | ----- | | BRACKET |
| 152 | ----- | | BRACKET |
| 153 | ----- | | CHAIN |
| 158 | 705966 | | GASKET |
| 159 | ----- | | BOLT-M6 x 20 |
| 160 | ----- | | PIPE-MUFFLER |
| 161 | 705468 | | GASKET |
| 191 | ----- | | BEARING |
| 217 | 703189 | | ARRESTOR-SPARK |

Wiring Diagram (319944WD4)

Note: Unless noted otherwise, use the standard torque specifications

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Wiring Diagram (319944WD4)

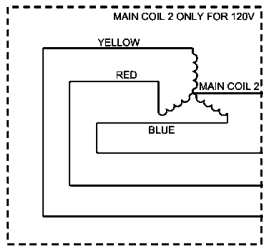
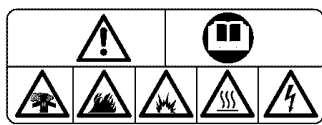
| REF NO | PART NO | QTY | DESCRIPTION |
|--------|---------|-----|---|
| -- | ----- | | Wiring Diagram Only |
| -- | ----- | | WARNING - Generator Voltage Could Cause Electrical Shock or Burn Resulting in Death Or Serious Injury. To Avoid Electrical Shock Or Burn Hazard, Please Refer Service To Qualified Personnel. |

Not For Reproduction

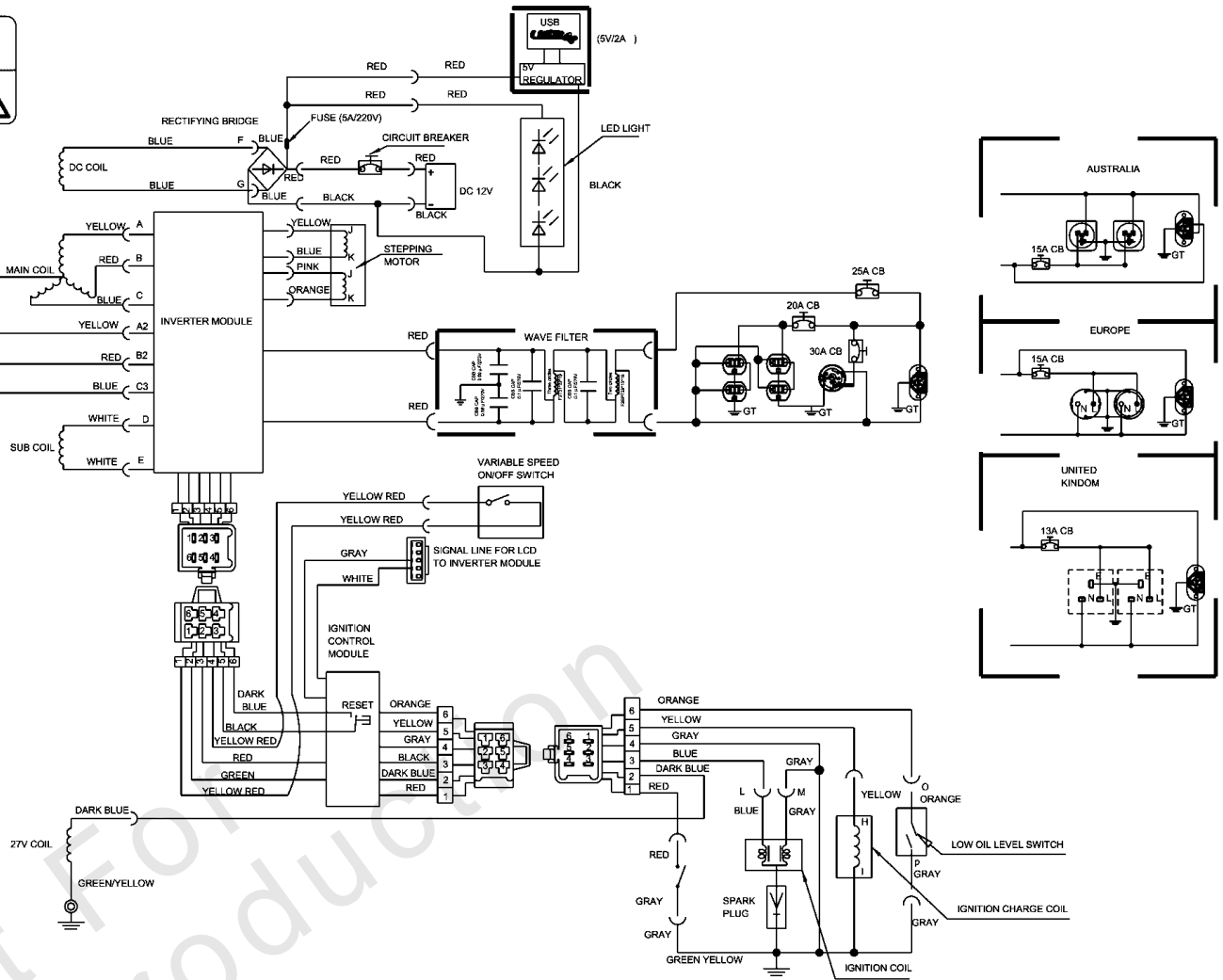
Wiring Schematic (319944WS)

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 030654-00



| STATIC RESISTANCE VALUE (68° F) | | |
|---------------------------------|--------------|--------------|
| | US | AUS/EU/UK |
| A-B | 1.155Ω ± 10% | 2.275Ω ± 10% |
| A-C | 1.155Ω ± 10% | 2.275Ω ± 10% |
| B-C | 1.155Ω ± 10% | 2.275Ω ± 10% |
| A2-B2 | 1.155Ω ± 10% | — |
| A2-C2 | 1.155Ω ± 10% | — |
| B2-C2 | 1.155Ω ± 10% | — |
| D-E | 0.198Ω ± 15% | 0.198Ω ± 15% |
| F-G | 0.098Ω ± 15% | 0.098Ω ± 15% |
| H-I | 130Ω ± 20% | 130Ω ± 20% |
| J-K | 50Ω ± 10% | 50Ω ± 10% |
| L-M | 1.1Ω ± 20% | 1.1Ω ± 20% |
| O-P | ≤ 120mΩ | ≤ 120mΩ |



Wiring Schematic (319944WS)

| REF NO | PART NO | QTY | DESCRIPTION |
|--------|---------|-----|---|
| | ----- | | Wiring Schematic Only |
| | ----- | | WARNING - Generator Voltage Could Cause Electrical Shock or Burn Resulting in Death Or Serious Injury. To Avoid Electrical Shock Or Burn Hazard, Please Refer Service To Qualified Personnel. |

Not For Reproduction

Hardware Identification & Torque Specifications

| Torque Specification Chart | | | | | | | | |
|--|-----------|------|-----------|------|------------|------|------------|------|
| FOR STANDARD METRIC MACHINE HARDWARE (Tolerance ± 20%) | | | | | | | | |
| Property Class | 5.6 | | 8.8 | | 10.9 | | 12.9 | |
| | Class 5.6 | | Class 8.8 | | Class 10.9 | | Class 12.9 | |
| Size Of Hardware | in/lbs | Nm. | in/lbs | Nm. | in/lbs | Nm. | in/lbs | Nm. |
| | ft/lbs | | ft/lbs | | ft/lbs | | ft/lbs | |
| M3 | 5.88 | .56 | 13.44 | 1.28 | 19.2 | 1.80 | 22.92 | 2.15 |
| M4 | 13.44 | 1.28 | 30.72 | 2.90 | 43.44 | 4.10 | 52.56 | 4.95 |
| M5 | 26.4 | 2.50 | 60.96 | 5.75 | 5.97 | 8.10 | 7.15 | 9.7 |
| M6 | 44.64 | 4.3 | 7.3 | 9.9 | 10.3 | 14 | 12.1 | 16.5 |
| M7 | 5.2 | 7.1 | 12.1 | 16.5 | 16.9 | 23 | 19.9 | 27 |
| M8 | 7.7 | 10.5 | 17.7 | 24 | 25 | 34 | 29 | 40 |
| M10 | 15 | 21 | 35 | 48 | 50 | 67 | 59 | 81 |
| M12 | 26 | 36 | 61 | 83 | 86.2 | 117 | 103 | 140 |
| M14 | 42 | 58 | 101 | 132 | 136 | 185 | 162 | 220 |
| M16 | 64 | 88 | 147 | 200 | 210 | 285 | 250 | 340 |
| M18 | 89 | 121 | 202 | 275 | 287 | 390 | 346 | 470 |
| M20 | 126 | 171 | 290 | 390 | 405 | 550 | 486 | 660 |
| M22 | 169 | 230 | 390 | 530 | 559 | 745 | 656 | 890 |
| M24 | 217 | 295 | 497 | 375 | 708 | 960 | 840 | 1140 |
| M27 | 320 | 435 | 733 | 995 | 1032 | 1400 | 1239 | 1680 |
| M30 | 435 | 590 | 995 | 1350 | 1401 | 1900 | 1681 | 2280 |
| M33 | 590 | 800 | 1349 | 1830 | 1902 | 2580 | 2278 | 3090 |
| M36 | 759 | 1030 | 1740 | 2360 | 2441 | 3310 | 2935 | 3980 |
| M39 | 988 | 1340 | 2249 | 3050 | 3163 | 4290 | 3798 | 5150 |

| Torque Specification Chart | | | | | | |
|---|-------------|-------|-------------|-------|-------------|---------|
| FOR STANDARD MACHINE HARDWARE (Tolerance ± 20%) | | | | | | |
| Hardware Grade | No Marks | | SAE Grade 5 | | SAE Grade 8 | |
| | SAE Grade 2 | | SAE Grade 5 | | SAE Grade 8 | |
| Size Of Hardware | in/lbs | Nm. | in/lbs | Nm. | in/lbs | Nm. |
| | ft/lbs | | ft/lbs | | ft/lbs | |
| 8-32 | 19 | 2.1 | 30 | 3.4 | 41 | 4.6 |
| 8-36 | 20 | 2.3 | 31 | 3.5 | 43 | 4.9 |
| 10-24 | 27 | 3.1 | 43 | 4.9 | 60 | 6.8 |
| 10-32 | 31 | 3.5 | 49 | 5.5 | 68 | 7.7 |
| 1/4-20 | 66 | 7.6 | 8 | 10.9 | 12 | 16.3 |
| 1/4-28 | 76 | 8.6 | 10 | 13.6 | 14 | 19.0 |
| 5/16-18 | 11 | 15.0 | 17 | 23.1 | 25 | 34.0 |
| 5/16-24 | 12 | 16.3 | 19 | 25.8 | 29 | 34.0 |
| 3/8-16 | 20 | 27.2 | 30 | 40.8 | 45 | 61.2 |
| 3/8-24 | 23 | 31.3 | 35 | 47.6 | 50 | 68.0 |
| 7/16-14 | 30 | 40.8 | 50 | 68.0 | 70 | 95.2 |
| 7/16-20 | 35 | 47.6 | 55 | 74.8 | 80 | 108.8 |
| 1/2-13 | 50 | 68.0 | 75 | 102.0 | 110 | 149.6 |
| 1/2-20 | 55 | 74.8 | 90 | 122.4 | 120 | 163.2 |
| 9/16-12 | 65 | 88.4 | 110 | 149.6 | 150 | 204.0 |
| 9/16-18 | 75 | 102.0 | 120 | 163.2 | 170 | 231.2 |
| 5/8-11 | 90 | 122.4 | 150 | 204.0 | 220 | 299.2 |
| 5/8-18 | 100 | 136 | 180 | 244.8 | 240 | 326.4 |
| 3/4-10 | 160 | 217.6 | 260 | 353.6 | 386 | 525.0 |
| 3/4-16 | 180 | 244.8 | 300 | 408.0 | 420 | 571.2 |
| 7/8-9 | 140 | 190.4 | 400 | 544.0 | 600 | 816.0 |
| 7/8-14 | 155 | 210.8 | 440 | 598.4 | 660 | 897.6 |
| 1-8 | 220 | 299.2 | 580 | 788.8 | 900 | 1,244.0 |
| 1-12 | 240 | 326.4 | 640 | 870.4 | 1,000 | 1,360.0 |

The guides and ruler furnished below are designed to help you select the appropriate hardware.

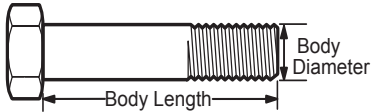


Nut, M8

Thread Diameter (mm)

Inside Diameter (in) Threads per inch

Nut, 1/2-16



Screw, M8- 1.25 x 25

Thread Diameter (mm) Distance between threads (mm) Body Length (mm)

Body Diameter Threads per inch Body Length (in)

Screw, 1/2- 16 x 2



Standard Hardware Sizing

When a washer or nut is identified as 1/2" (M8), this is the *Nominal size*, meaning the *inside diameter* is 1/2 inch (8mm metric thread diameter); if a second number is present it represents the *threads per inch* (distance between threads).

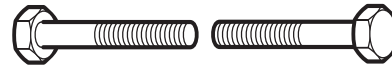
When bolt or capscrew is identified as 1/2 - 16 x 2" (M8 - 1.25 x 50), this means the *Nominal size*, or body diameter is 1/2 inch (8mm metric thread diameter), the second number, 16, represents the *threads per inch*, (*distance between threads*). The final number is the body length of the bolt or screw, 2 inches (50mm).

NOTES

- These torque values are to be used for all hardware excluding: locknuts, self-tapping screws, thread forming screws, sheet metal screws and socket head setscrews.
- Recommended seating torque values for locknuts:
 - for prevailing torque locknuts - use 65% of grade 5 torques.
 - for flange whizlock nuts and screws - use 135% of grade 5 torques.
- Unless otherwise noted on assembly drawings, all torque values must meet this specification.

Common Hardware Types

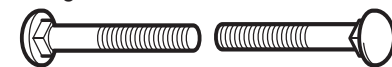
Hex Head Capscrew



Washer



Carriage Bolt



Hex Nut

Wrench & Fastener Size Guide

| | | | | |
|----------------------------------|----------------------------------|----------------------------------|--|---------------------------------|
| | | | | |
| 1/4" Bolt or Nut Wrench—7/16" | 5/16" Bolt or Nut Wrench—1/2" | 3/8" Bolt or Nut Wrench—9/16" | 7/16" Bolt or Nut Wrench (Bolt)—5/8" Wrench (Nut)—11/16" | 1/2" Bolt or Nut Wrench—3/4" |
| M6 Bolt or Nut Wrench—10mm | M8 Bolt or Nut Wrench—13mm | M10 Bolt or Nut Wrench—17mm | M12 Bolt or Nut Wrench—19mm | M14 Bolt or Nut Wrench—22mm |

