Parts Manual

Mfg. No: 030654-00

3,000 Watt Briggs & Stratton Inverter

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17-Oct-2017

Model Components

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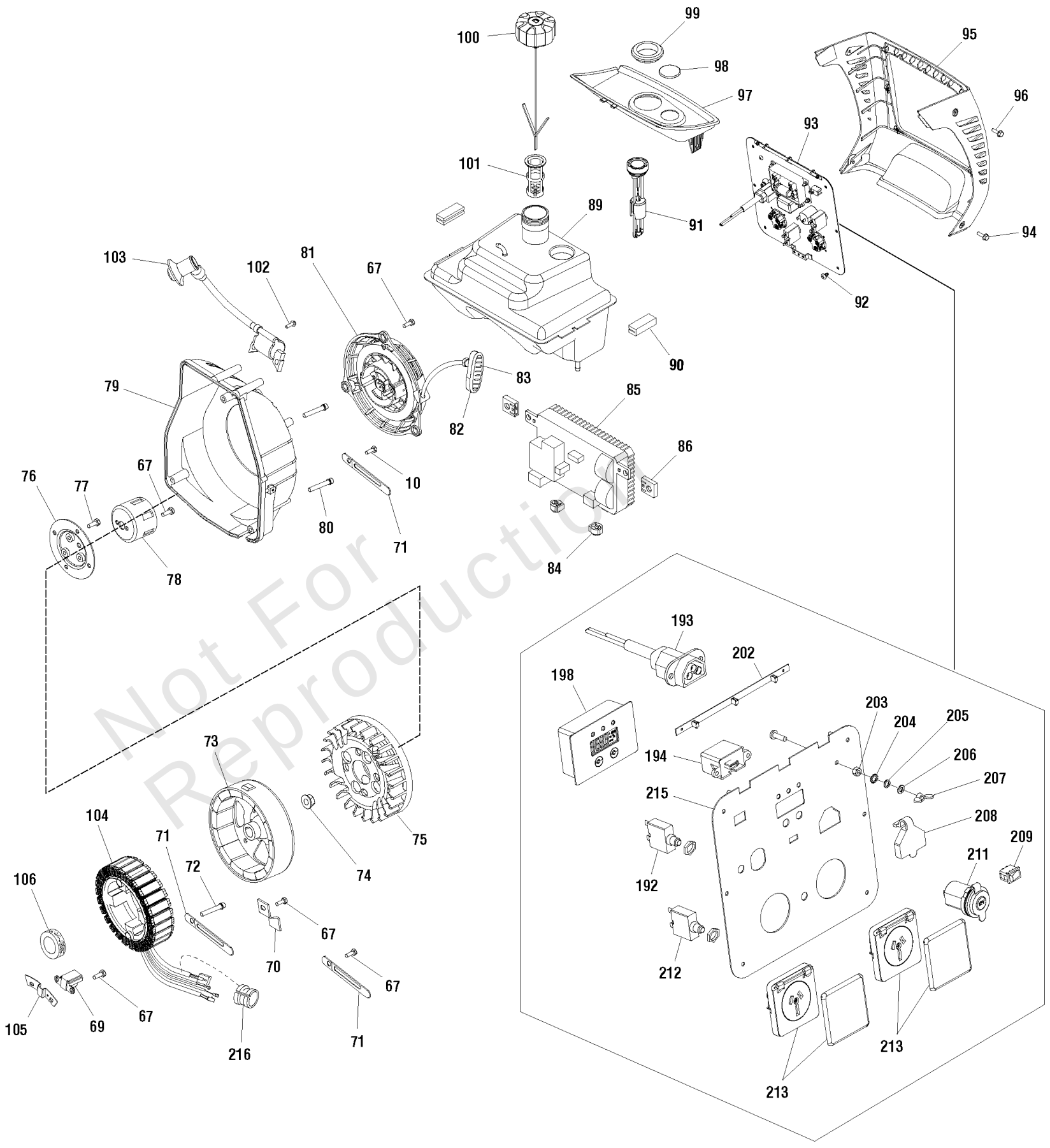
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Alternator & Control Panel (80012940p1)

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Alternator & Control Panel (80012940p1)

REF NO	PART NO	QTY	DESCRIPTION
10			SCREW
67			BOLT-M6 x 12
69	705457		TRIGGER-IGNITION
70			BRACKET
71			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		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
208	705478		COVER-PORT
209	311442GS		SWITCH
211	314531GS		OUTLET-DC

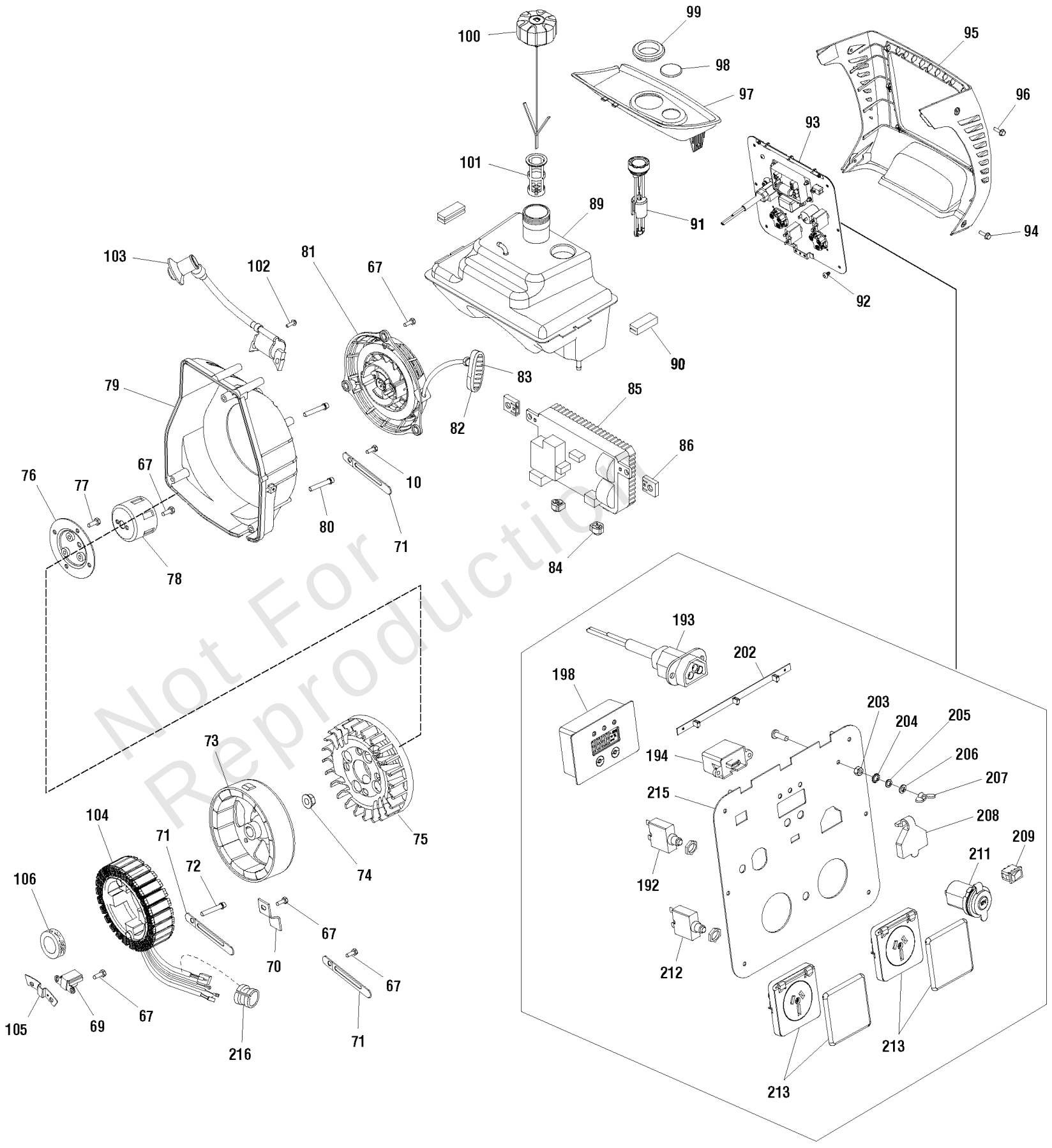
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Alternator & Control Panel (80012940p1)

REF NO	PART NO	QTY	DESCRIPTION
212	707170		BREAKER-CIRCUIT
213	314532GS		OUTLET
215	707179		PANEL-CONTROL
216			COVER-RUBBER
--	187876GS		CABLE-BTTRY CHARGE -(Not Illustrated)
--	706357		FUNNEL -(Not Illustrated)
--	100005GS		OIL -(Not Illustrated)
--	703574		KIT-TOOL -(Not Illustrated)
--	706139		JET-MAIN, High Altitude, 5000 ft -(Optional Accessory - Not Included)

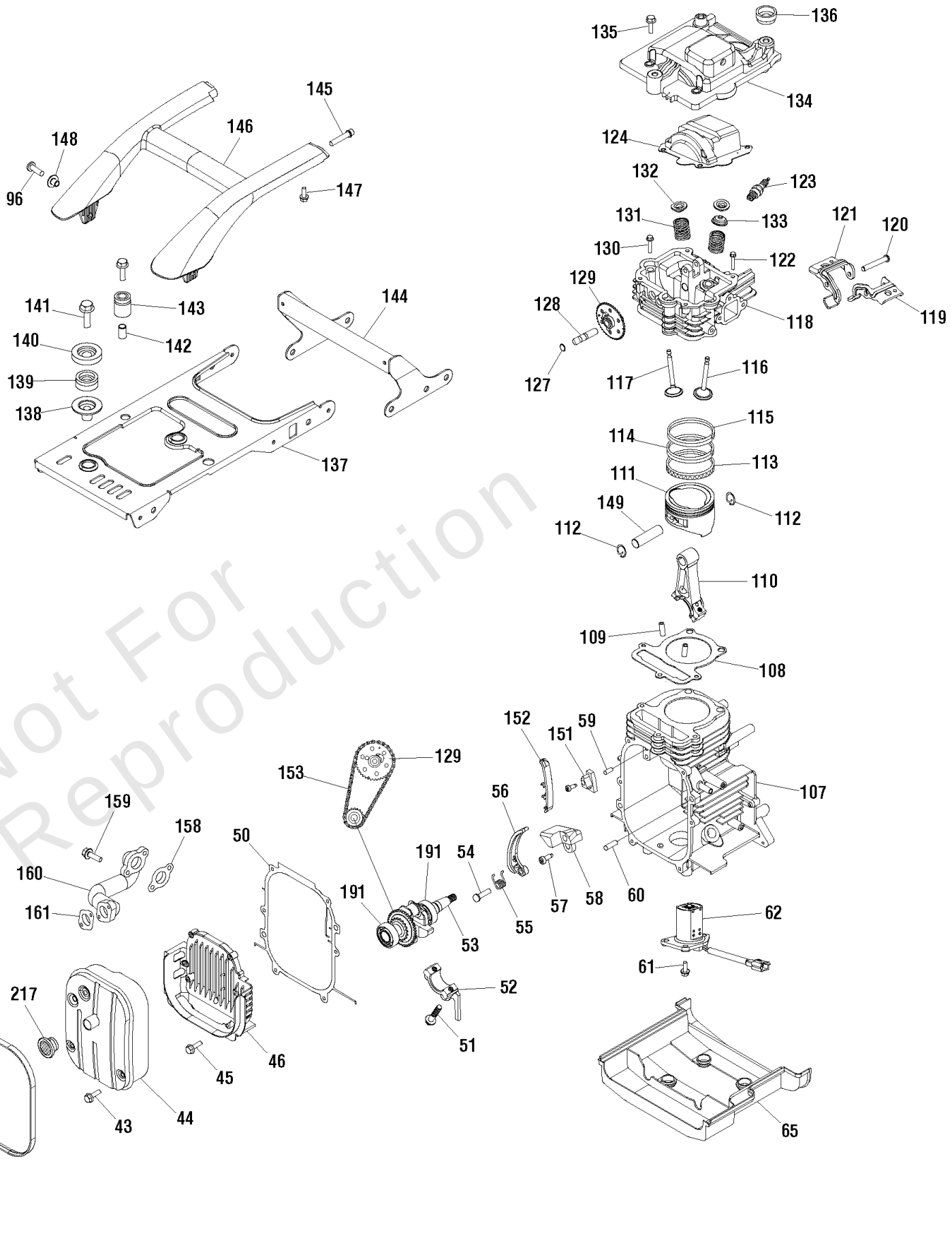
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Engine (80012940p3)

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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		BRACEKT

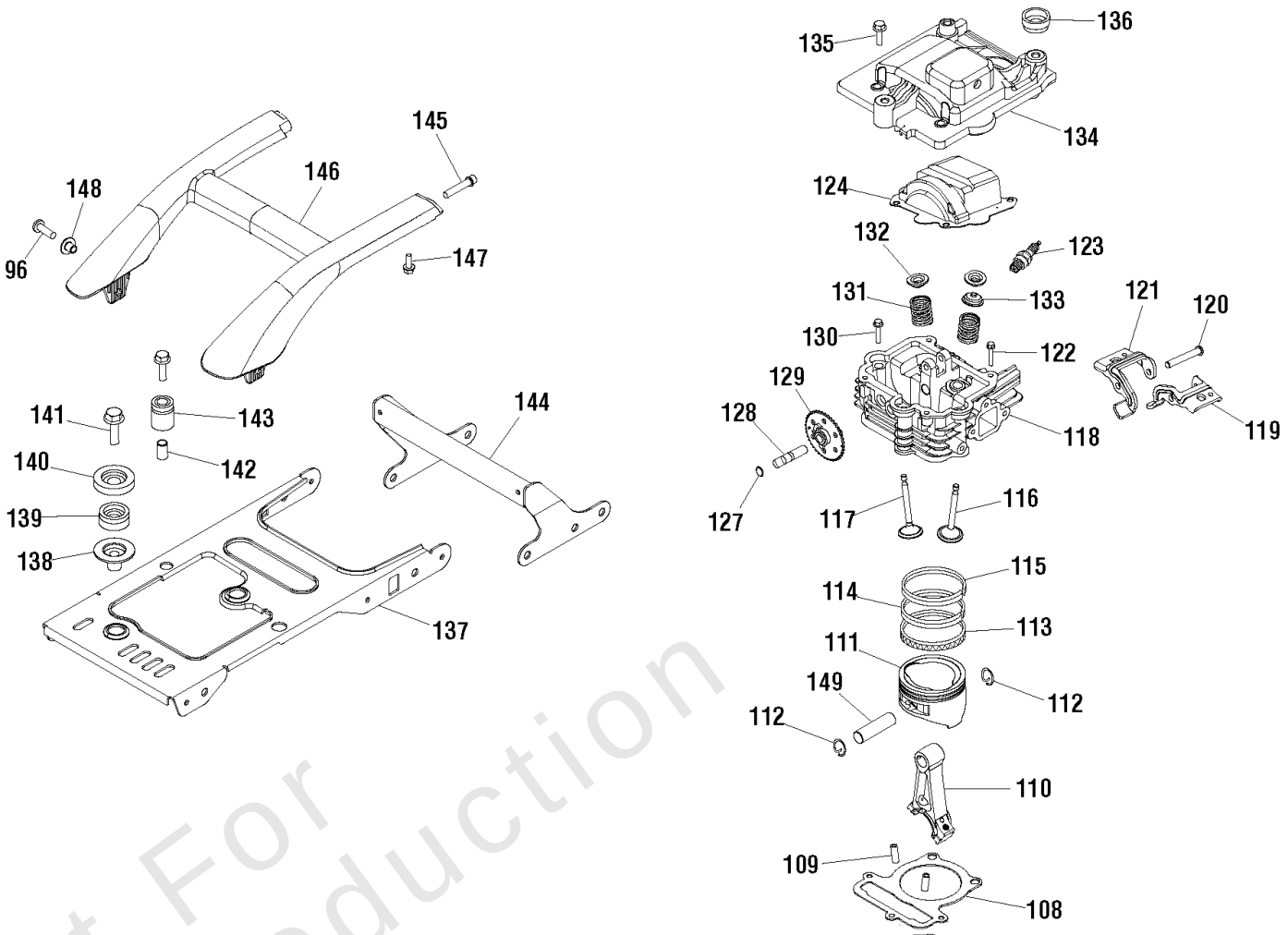
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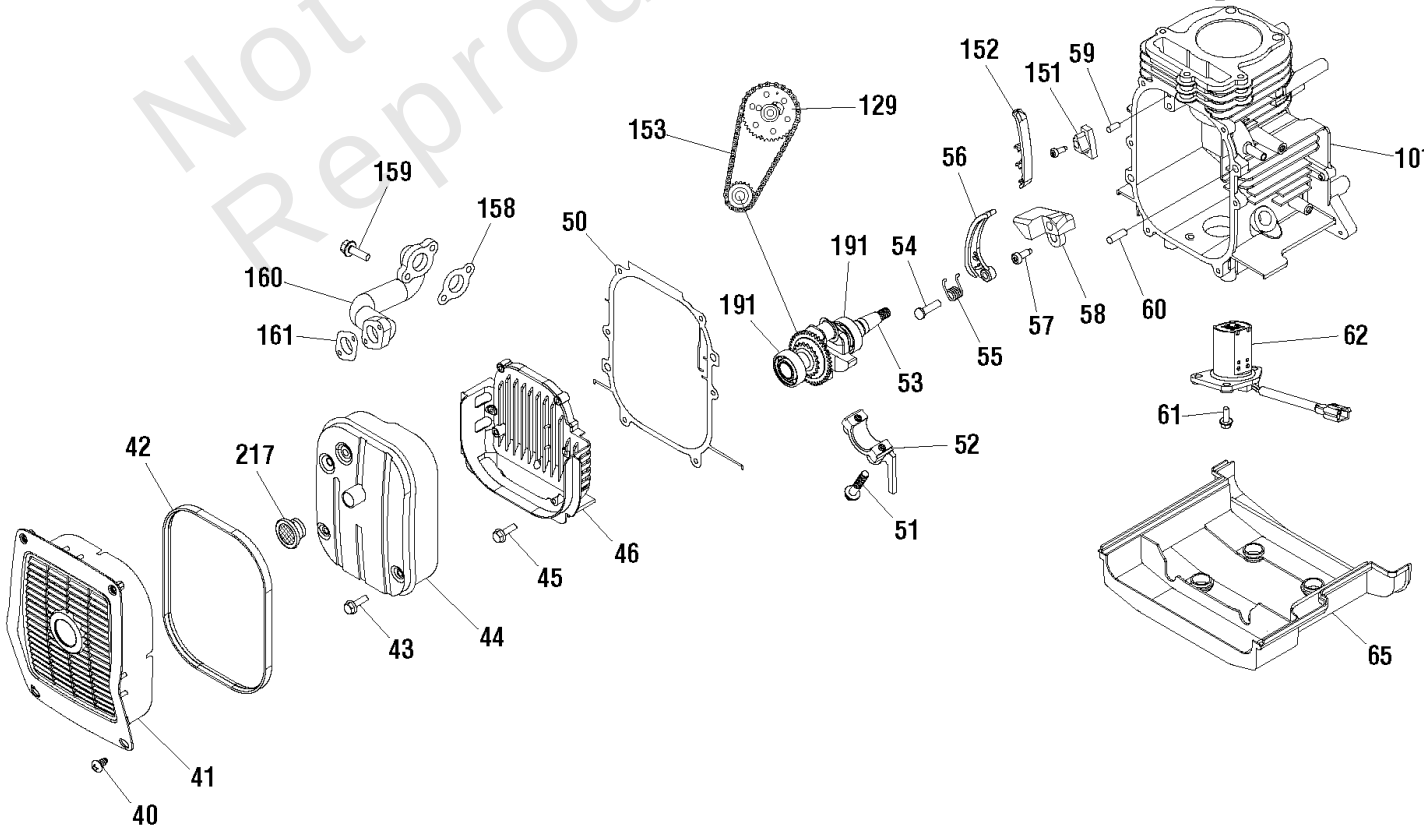
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Engine (80012940p3)

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

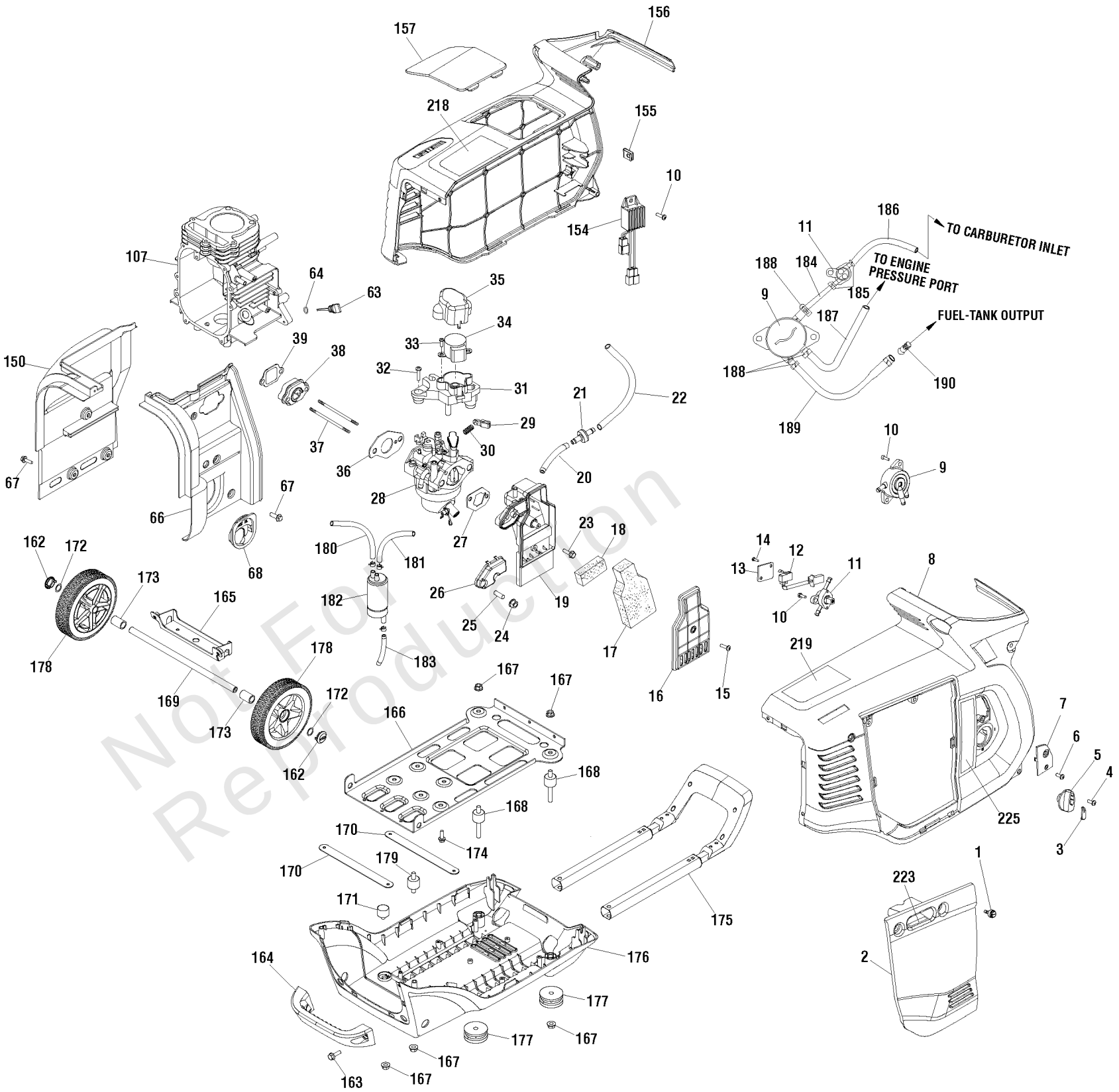
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Main Unit (80012940p2)

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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		BOLT
24			NUT
25			SLEEVE
26	705477		COVER-AIR CLEANER
27	705939		GASKET-AIR CLEANER
28	705940		CARBURATOR
29	705943		ROD-THROTTLE
30			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		O-RING
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

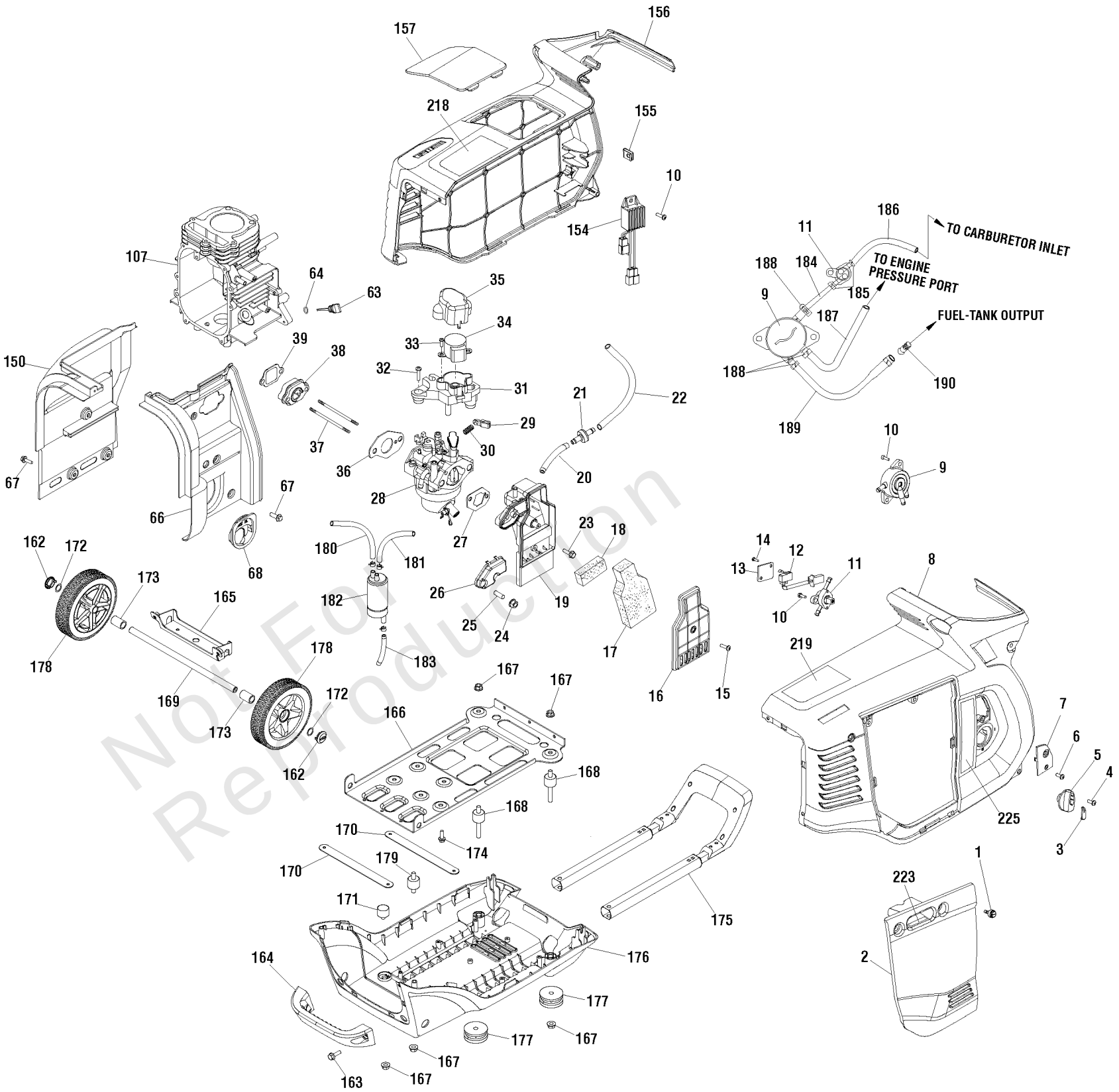
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Main Unit (80012940p2)

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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			CLIP
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
218	707172		DECAL
219	707169		DECAL
223	705967		DECAL
225	705978		DECAL

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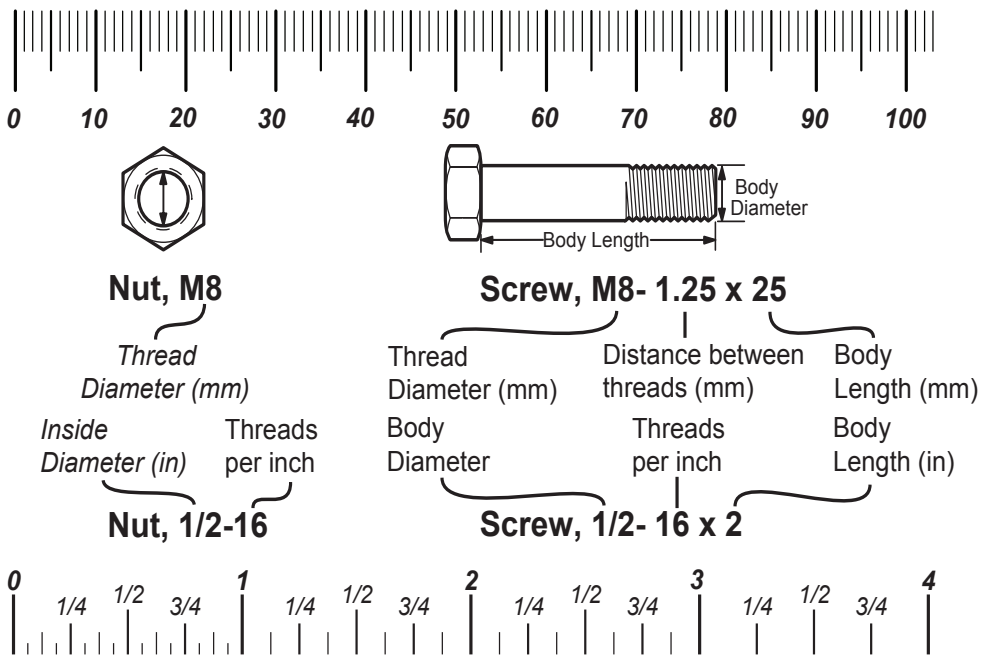
Hardware Identification & Torque Specifications

Torque Specification Chart

FOR STANDARD METRIC MACHINE HARDWARE (Tolerance ± 20%)

Property Class	5.6 Class 5.6		8.8 Class 8.8		10.9 Class 10.9		12.9 Class 12.9	
Size Of Hardware	*in/lbs* **ft/lbs**	Nm.	*in/lbs* **ft/lbs**	Nm.	*in/lbs* **ft/lbs**	Nm.	*in/lbs* **ft/lbs**	Nm.
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

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



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).

Torque Specification Chart

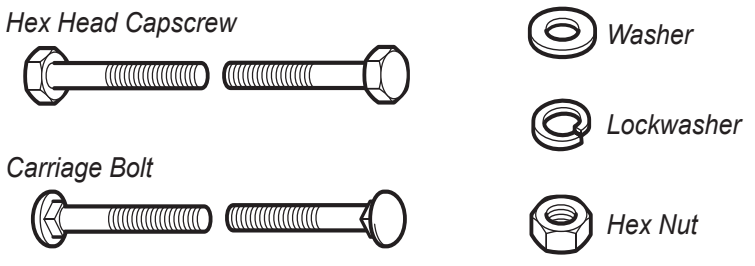
FOR STANDARD MACHINE HARDWARE (Tolerance ± 20%)

Hardware Grade	No Marks SAE Grade 2		SAE Grade 5		SAE Grade 8	
Size Of Hardware	*in/lbs* **ft/lbs**	Nm.	*in/lbs* **ft/lbs**	Nm.	*in/lbs* **ft/lbs**	Nm.
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

NOTES

1. 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.
2. Recommended seating torque values for locknuts:
   a. for prevailing torque locknuts - use 65% of grade 5 torques.
   b. for flange whizlock nuts and screws - use 135% of grade 5 torques.
3. Unless otherwise noted on assembly drawings, all torque values must meet this specification.

Common Hardware Types



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—22 mm

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