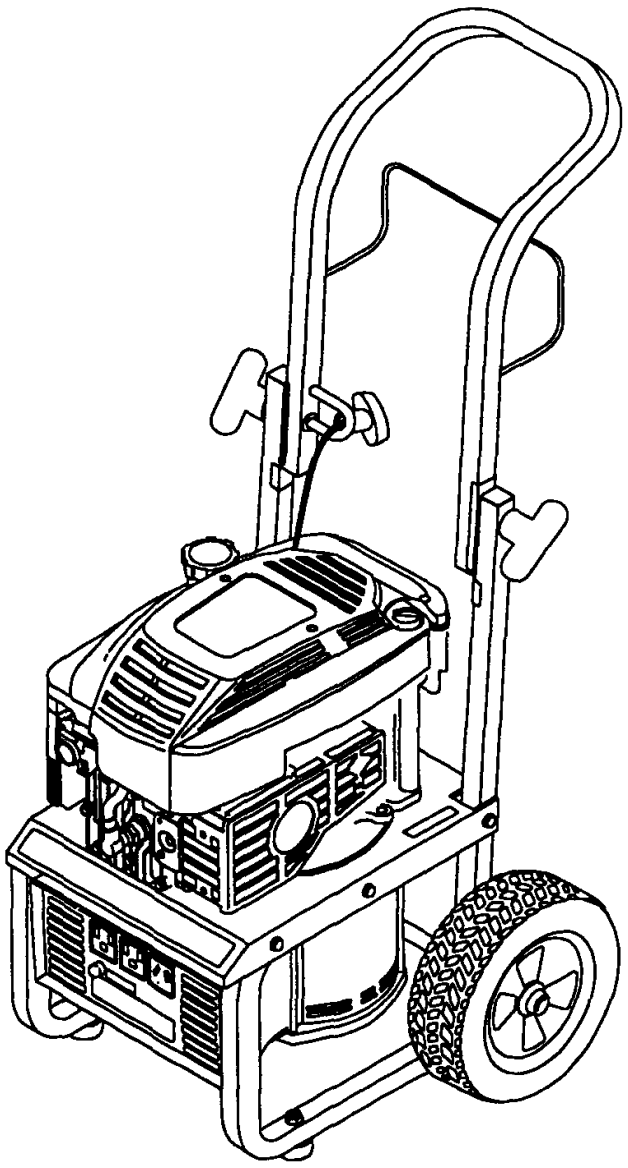
Parts Manual

Mfg. No: 1016-0
MEGA 2,500



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Model Components

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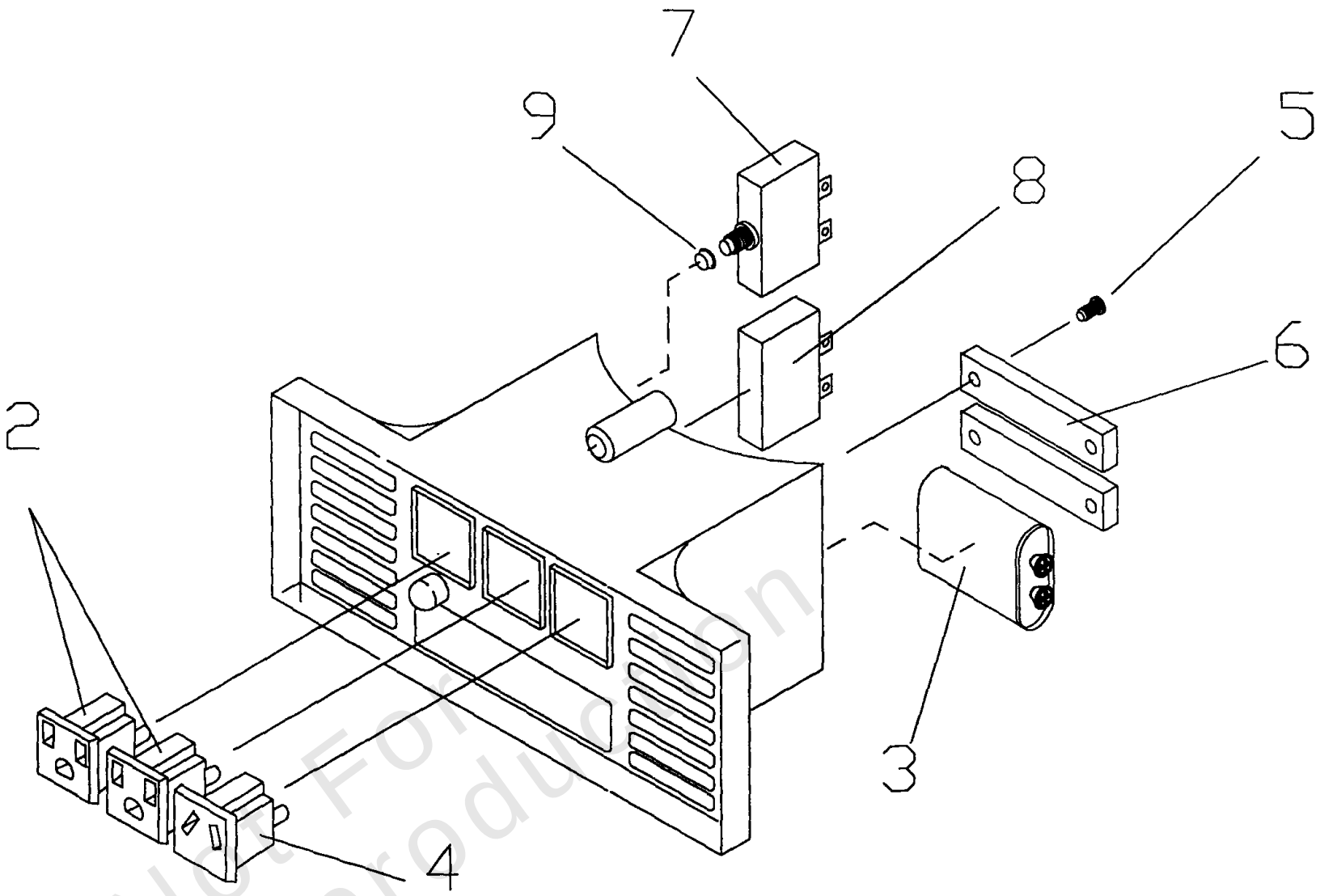
Control Panel

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 1016-0



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Control Panel

REF NO	PART NO	QTY	DESCRIPTION
1	99837	1	PANEL, Control
2	66818	2	OUTLET, 120V 15A
3	99887	1	CAPACITOR, 12.5 MFD
4	90418	1	OUTLET, 12V DC
5	84543C	4	SCREW, 3.5 x 18mm Lg. Phillips Head
6	99860	2	BAR, Retaining
7	75207D	1	CIRCUIT BREAKER, 15A AC Man. Reset
8	83514	1	CIRCUIT BREAKER, 10A DC Auto Reset
9	84198	1	CAP, Circuit Breaker

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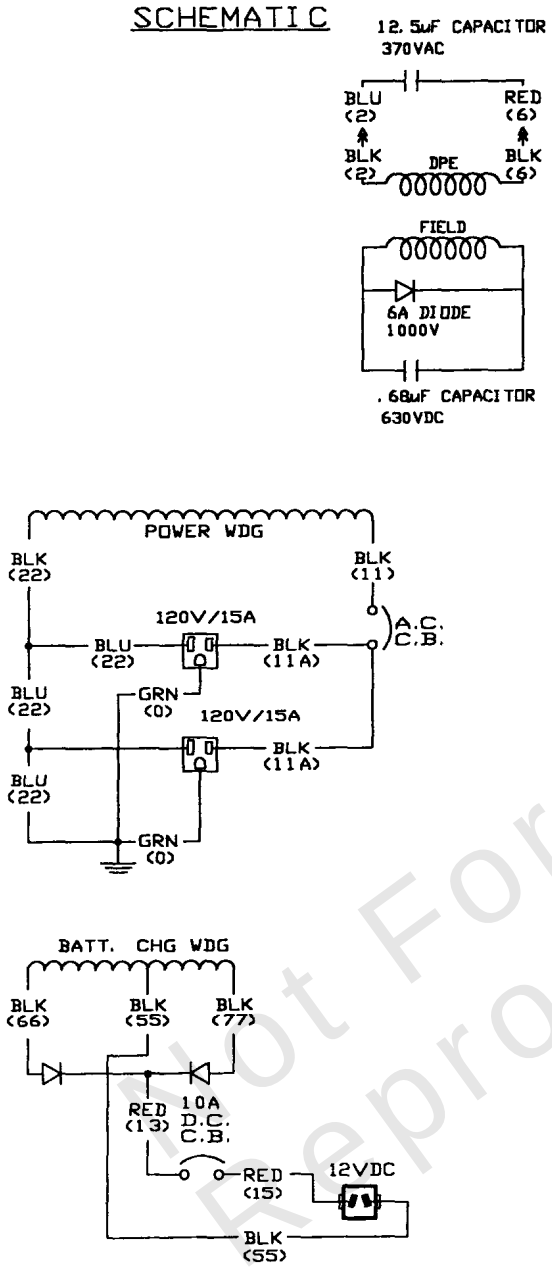
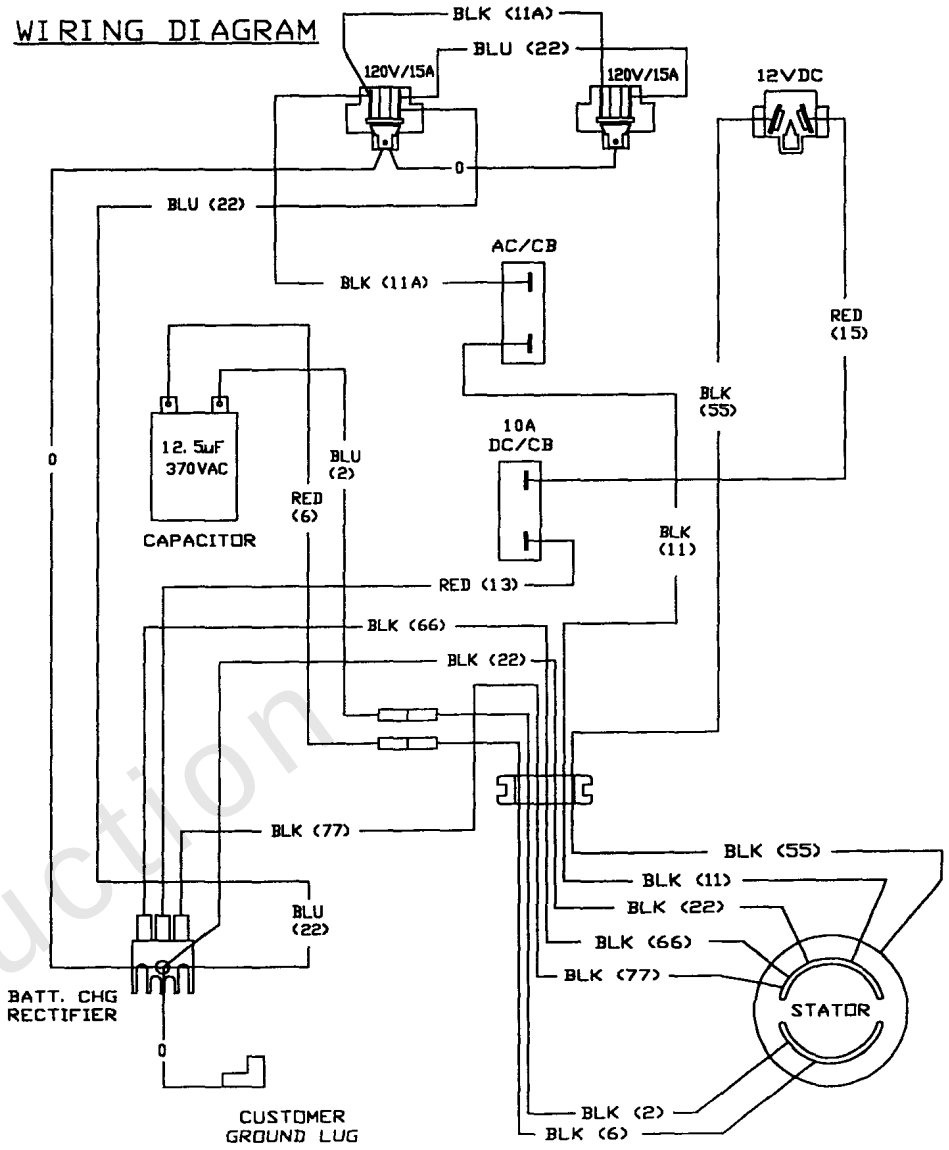
SCHEMATIC



WIRING DIAGRAM



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Electrical Data

REF NO	PART NO	QTY	DESCRIPTION
--	-----		Wiring Diagram/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.

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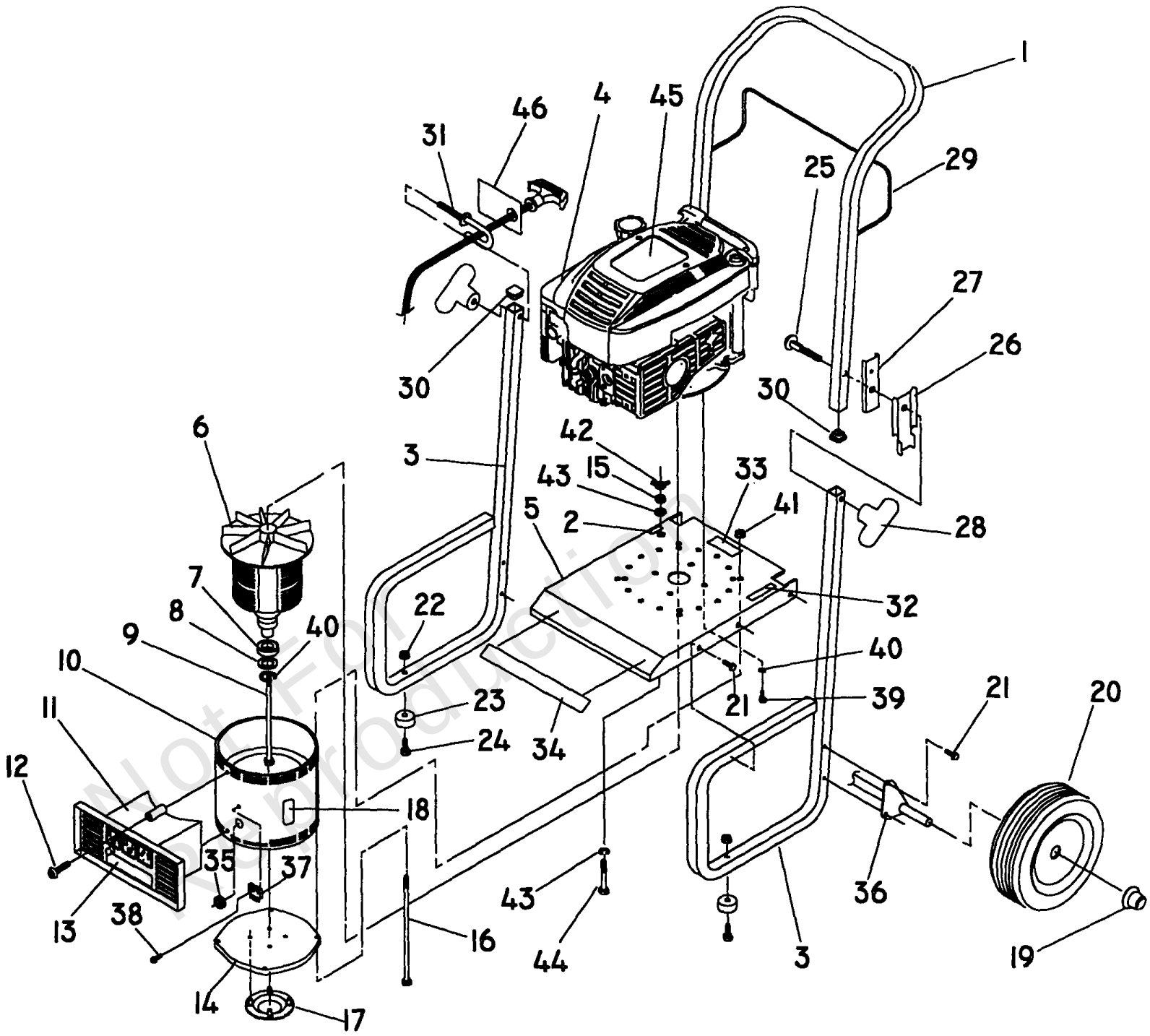
Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 1016-0



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Generator

REF NO	PART NO	QTY	DESCRIPTION
1	99685	1	HANDLE
2	67210A	1	DECAL, Ground
3	99681	2	FRAME
4	B1936	1	ENGINE, 5.5 h.p. - VS BRIGGS
5	99684	1	PLATE, Base
6	99687J	1	ASSEMBLY, Rotor
7	65791	1	BEARING
8	67451	1	WASHER, Flat Special
9	99849	1	HHCS, 5/16-24 x 5"
10	99688J	1	ASSEMBLY, Stator
11	99884	1	ASSEMBLY, Control Panel
12	99896	2	PPHMS, #10 x 1-1/4 Self Drill
13	B1308	1	DECAL, Control Panel
14	99686	1	PLATE, RBC End Stator
15	49813	1	NUT, M6-1.0 Hex
16	66449L	4	BOLT, Stator
17	99850	1	COVER, Bearing
18	78817	1	DECAL, Data Sheet (back side)
19	75402	2	PUSHNUT, 1/2" Dia
20	B1760	2	ASSEMBLY, 10" Wheel & Tire
21	86292	10	HHCS, #10-16 x 3/4" Self Drill
22	52858	2	NUT, M8- 1.25 Locking
23	87841	2	MOUNT, Vibration
24	39414	2	HHCS, M8 - 1.0 x 35
25	B1343	1	BOLT, 1/4 - 20 x 2" Lg. Carriage
26	97082	2	CLIP, Handle
27	99368	2	PLATE, SS Anti-Scratch
28	B1337	2	KNOB, Handle
29	21724	1	HOLDER, Ext. Cord
30	81895	4	CAP, Plug 3/4" Square
31	97998	1	EYE BOLT, Square Neck
32	20566	1	DECAL, 1-800 Number
33	93639	1	DECAL, Danger Instructions
34	20024	1	DECAL, Start Instructions
35	89685	1	GROMMET, Control Box
36	B1769	1	ASSEMBLY, Axle
37	65795	1	RECTIFIER, Battery Charge
38	66849A	1	SCREW, M5 - 0.8 x 20 Taptite
39	86307	4	HHCS, 5/16-24 x 3/4"
40	22129	5	WASHER, 5/16 Lock
41	77395	4	NUT, M6 Flange Lock
42	87680	1	NUT, M6 - 10 Wing
43	-----	2	WASHER, M6 - 1/4 Shakeproof
44	40945	1	SHCS, M6 - 1.0 x 20
45	81905	1	DECAL, Mega 2500
46	70453	1	TAG, Oil Fill

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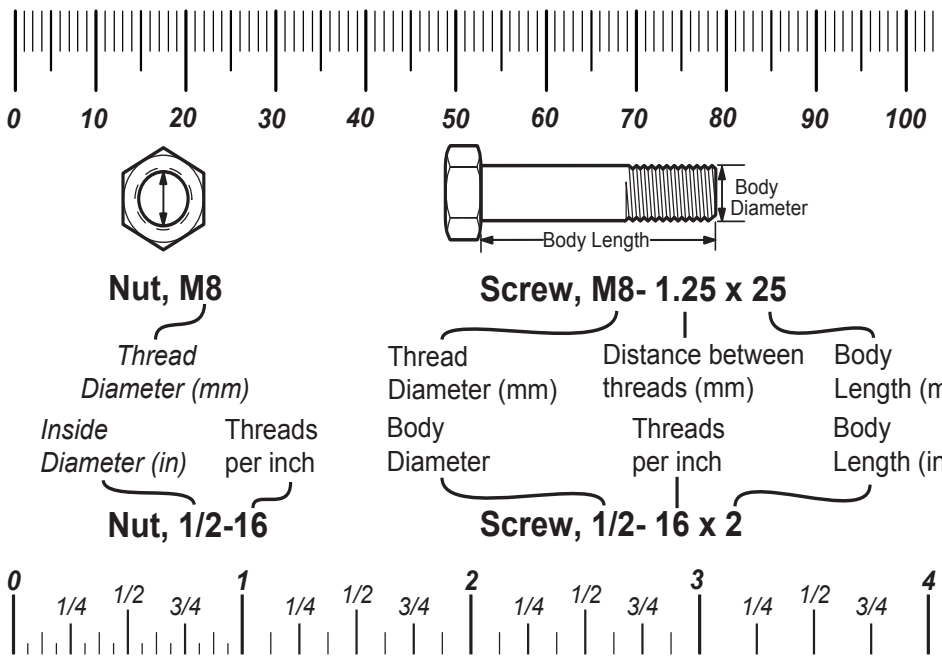
Hardware Identification & Torque Specifications

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

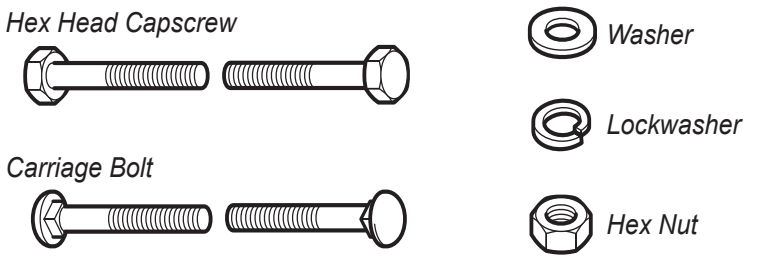
FOR STANDARD MACHINE HARDWARE (Tolerance ± 20%)

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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