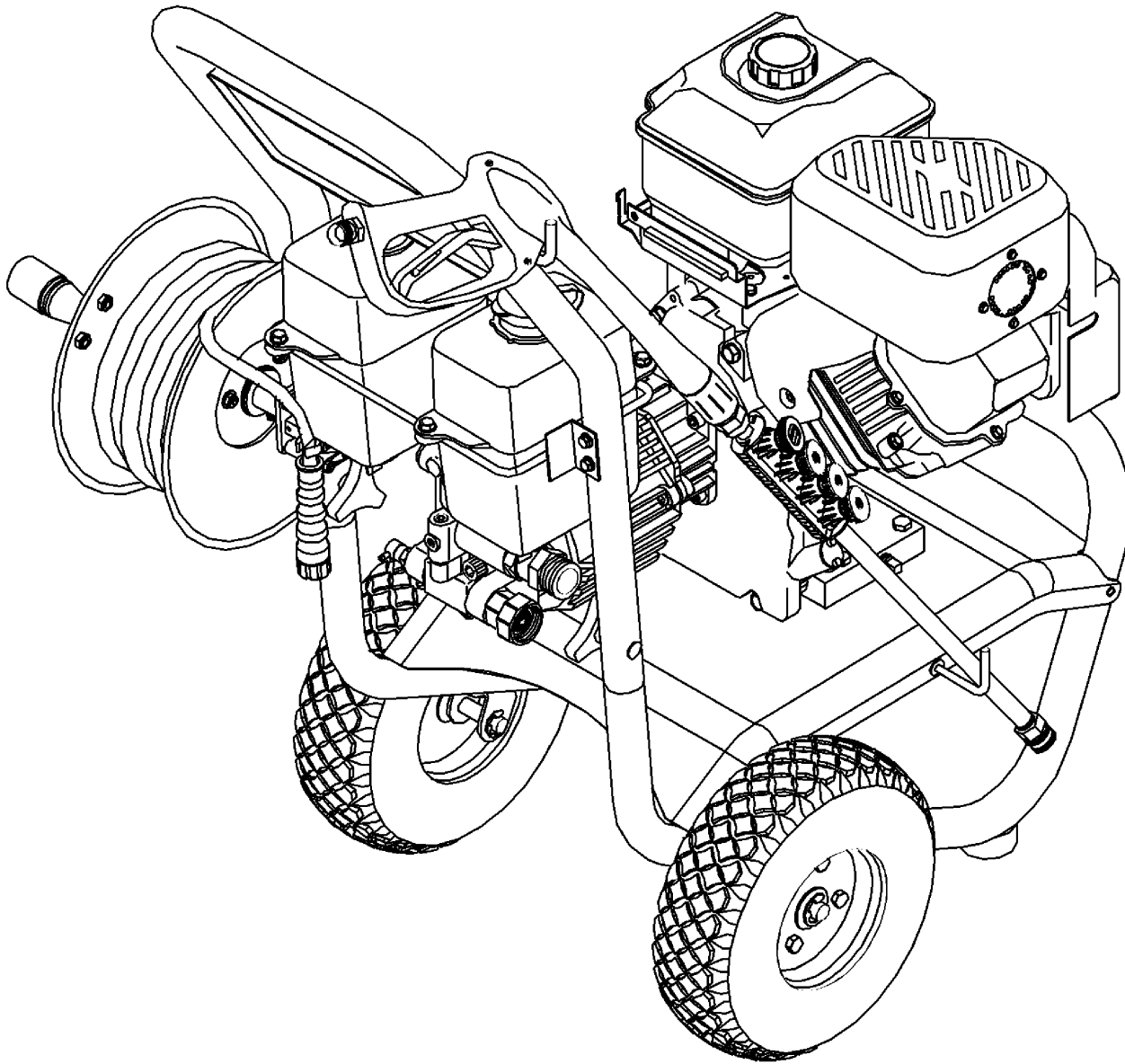




Parts Manual

Mfg. No: 1937-0
2,800 PSI CS



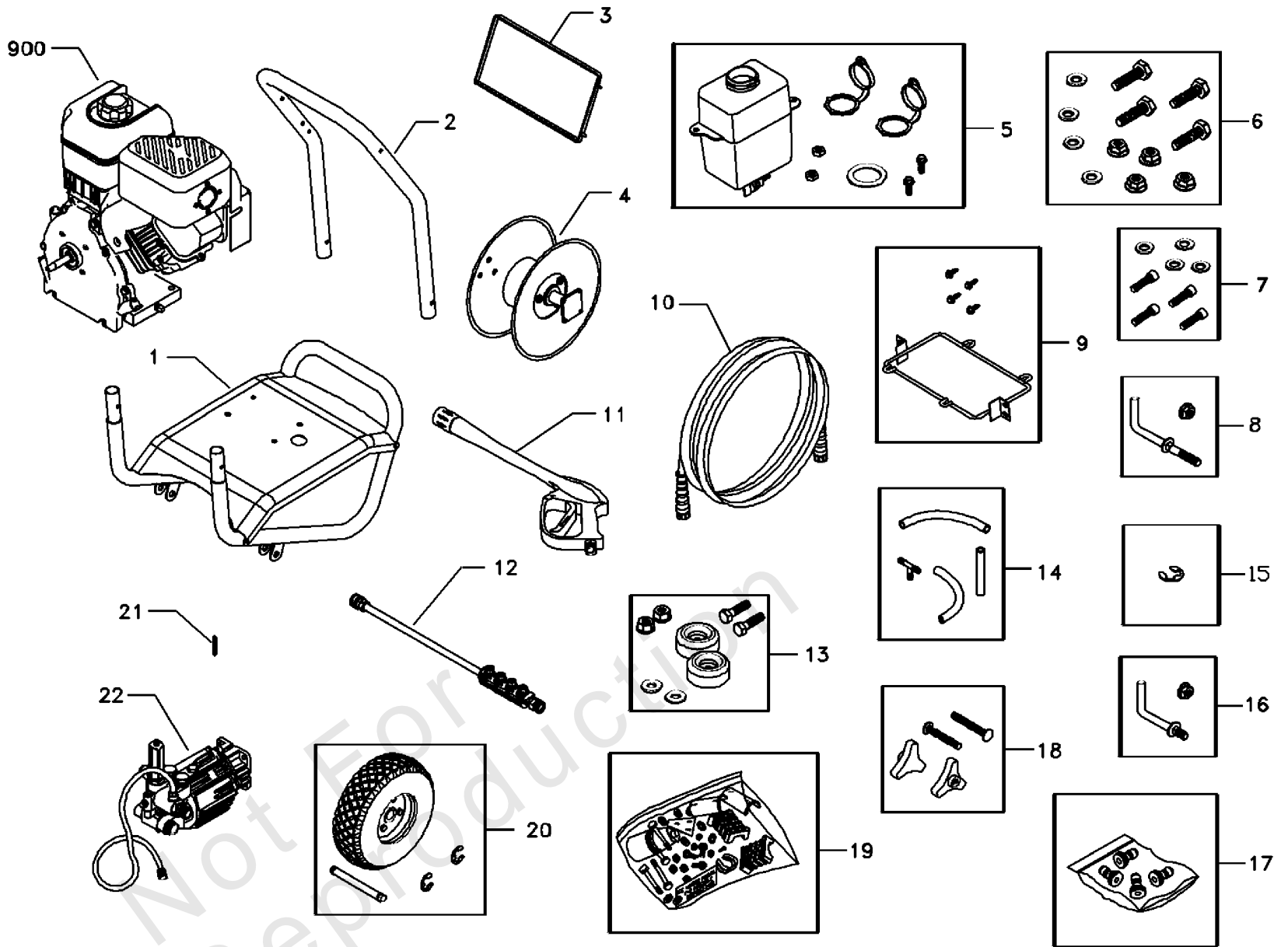
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Not For
Reproduction

Main Unit

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 1937-0



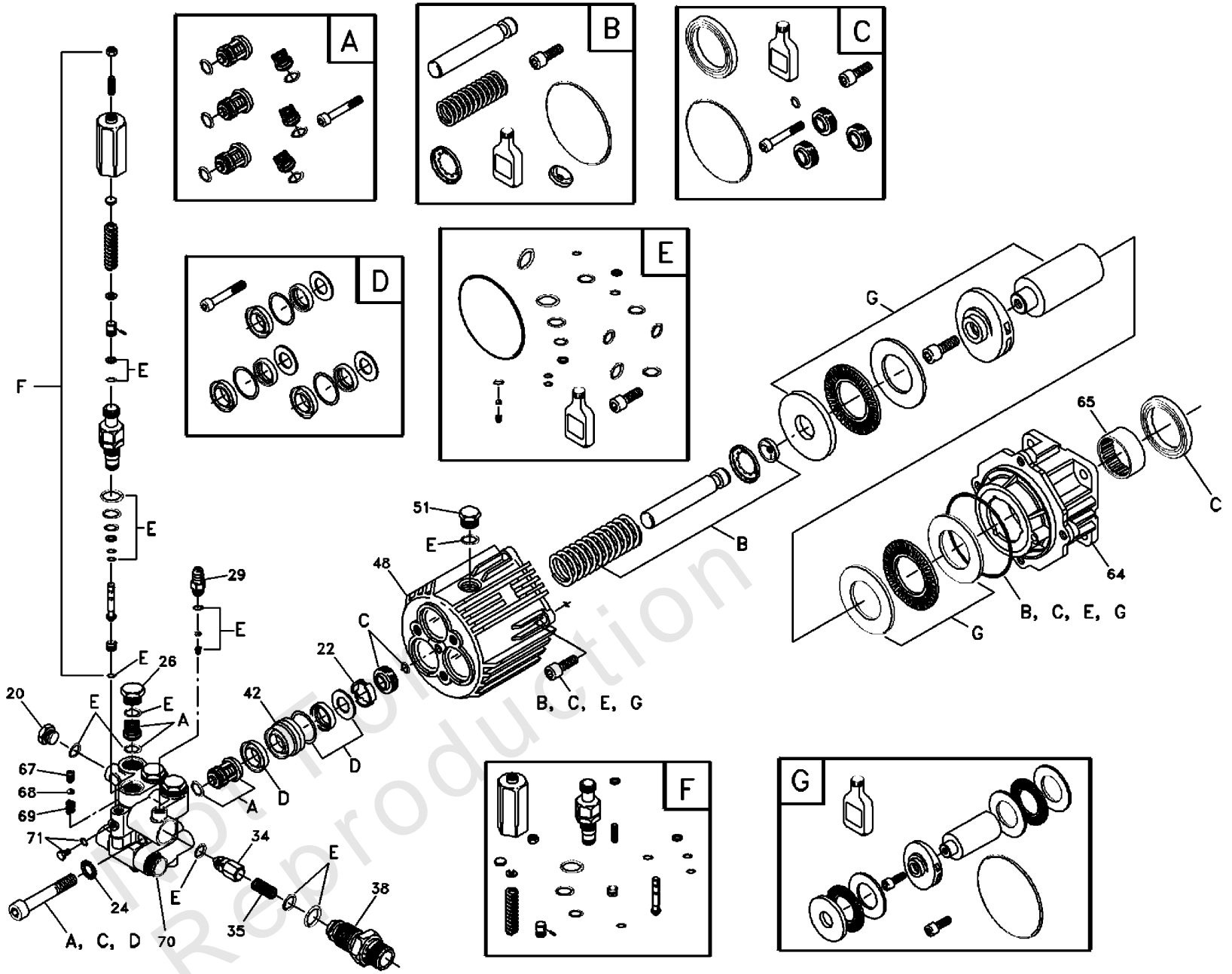
Main Unit

REF NO	PART NO	QTY	DESCRIPTION
1	192772GS		BASE
2	B191874GS		HANDLE
3	191909GS		BILLBOARD
4	B5747GS		HOSEREEL -(Includes Item 19)
5	192773GS		KIT, Chemical Tank
6	192797GS		KIT, Engine Mounting Hardware
7	192131GS		KIT, Pump Mounting Hardware
8	192128GS		KIT, Hook
9	192774GS		KIT, Wireform
10	185877GS		HOSE
11	B3263GS		GUN
12	192199GS		EXTENSION
13	192310GS		KIT, Vibration Mount
14	192775GS		KIT, Chemical Hoses
15	191265GS		KIT, E-Ring
16	192309GS		KIT, Hook
17	B5646GS		KIT, Spray Tip
18	B2203GS		KIT, Handle Connector
19	186113GS		KIT, Hose Reel Mounting Hardware
20	192317GS		KIT, Wheel
21	23139BGS		KEY
22	190183GS		ASSY, Pump -(See "Pump")
900	~NSP		ENGINE
	192666GS		MANUAL, Owner's -Item Not Illustrated
	192776GS		KIT, Decals -Item Not Illustrated
	BB3061BGS		OIL, Engine -Item Not Illustrated

Pump

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 1937-0



Pump

REF NO	PART NO	QTY	DESCRIPTION
20	190638GS		PLUG
22	190639GS		SPACER
24	190640GS		WASHER
26	190641GS		PLUG
29	190642GS		HOSE TAIL
34	190643GS		JET
35	190644GS		SPRING
38	190645GS		INJECTOR, Detergent
42	190646GS		PISTON, Guide
48	190647GS		HOUSING
51	190648GS		PLUG
64	190649GS		FLANGE
65	190650GS		ROLLER BEARING
67	190651GS		GRUB SCREW
68	190652GS		BALL
69	190653GS		SPRING
70	190654GS		PUMP HEAD
71	190655GS		GRUB SCREW & WASHER
72	190656GS		OIL BOTTLE
A	190657GS		KIT, CHECK VALVE -Service kit and includes all parts shown within the box.
B	190658GS		KIT, PISTON SET -Service kit and includes all parts shown within the box.
C	190659GS		KIT, SEAL OIL -Service kit and includes all parts shown within the box.
D	190660GS		KIT, SEAL HIGH PRESSURE -Service kit and includes all parts shown within the box.
E	190677GS		KIT, O-RINGS -Service kit and includes all parts shown within the box.
F	190661GS		KIT, UNLOADER -Service kit and includes all parts shown within the box.
G	190662GS		KIT, CAM & BEARING -Service kit and includes all parts shown within the box.

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

