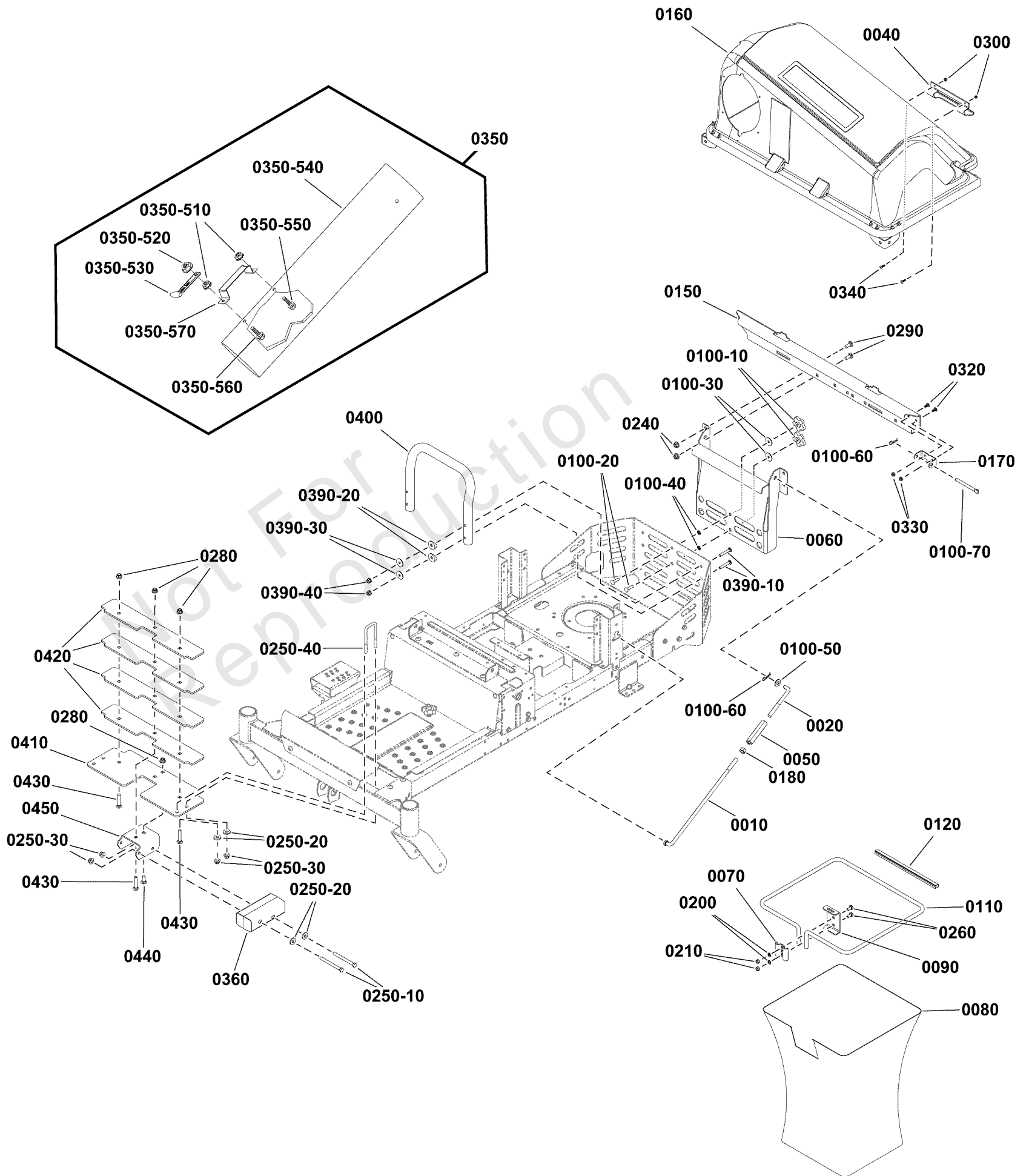


Parts Manual

Mfg. No: 1697408A-00
Kit, ZT Catcher, Twin, CS

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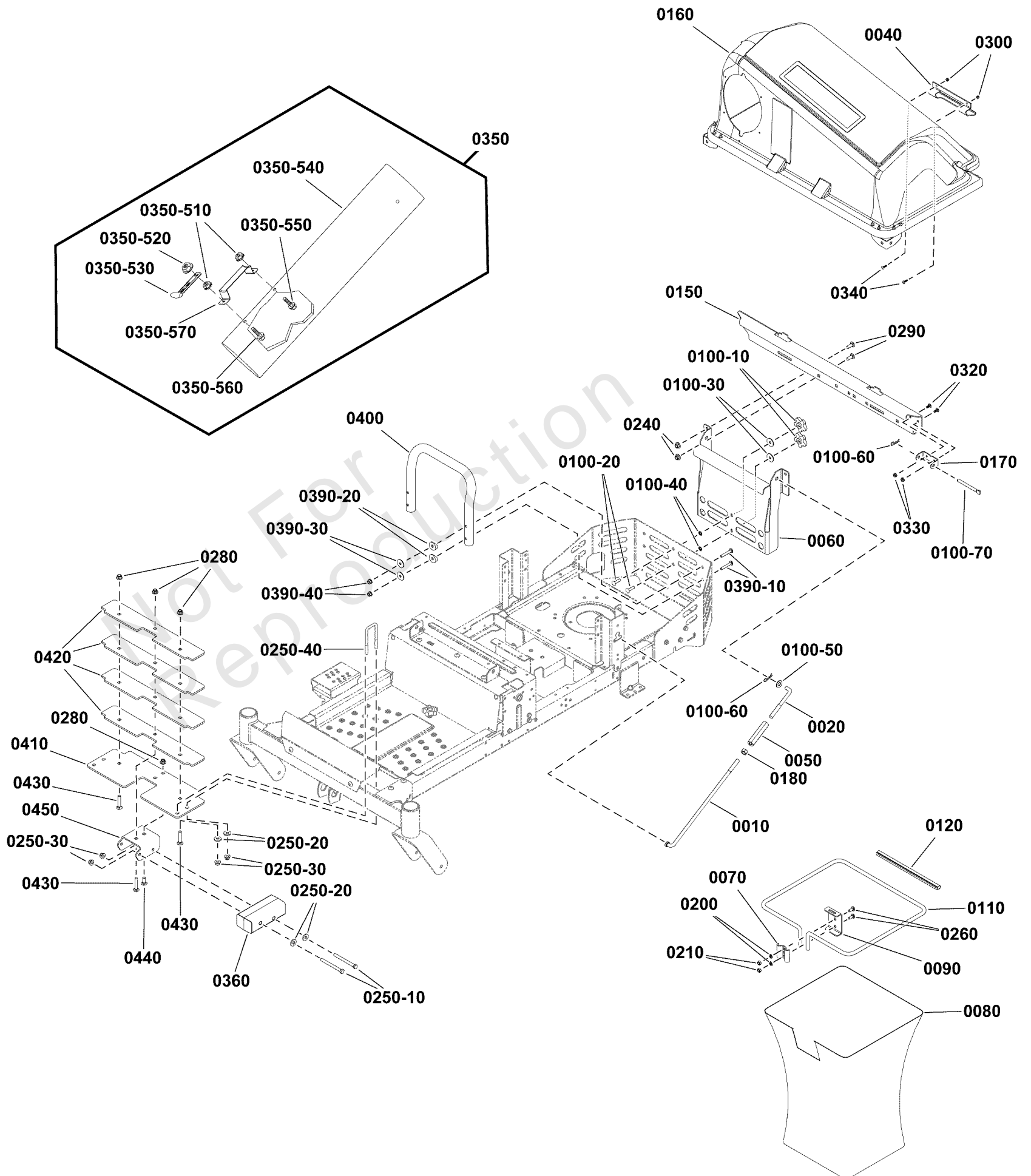
Catcher Group

REF NO	PART NO	QTY	DESCRIPTION
0010	1759374YP	2	ROD, Bag Support
0020	1759375YP	2	ROD, Bag Support Upper
0040	054537MA	1	HANDLE, Plastic
0050	708163	2	NUT, Coupling
0060	84002548	1	MOUNT, Grass Catcher
0070	1672023ASM	2	CLAMP, GRASS BAG - BL
0080	1703764SM	2	BAG-GRASS 15.9 X 16.5
0090	1703807ASM	2	HANGER, Grass Bag Hoop, 10 Gauge Twin
0100-10	1733098SM	2	KNOB, Threaded, 5 Lobe, 5/16-18 x 3/4 Lg
0100-20	703446	2	BOLT, 5/16-18X1.25 G5
0100-30	1960044SM	2	WASHER-0.312(0.33IDX1
0100-40	703297	2	RETAINER, GR5, 5/16
0100-50	5025158SM	2	WASHER, 1/2" SAE
0100-60	703300	4	PIN, 3/32 X 1.6
0100-70	054407ZMA	2	PIN, Cover Hinge, 3/8 Dia.x 3-3/4
0110	1733491SM	2	HOOP, Twin, 1/2 Dia.
0120	1733709SM	2	EDGING, Tube Grass Bag
0150	1759713YP	1	CROSS SUPPORT, Twin
0160	84002550	1	COVER ASSEMBLY
0170	1736886BMYP	2	PIVOT, HINGE
0180	703340	2	NUT,1/2-13,GR5,HEX,ZC
0200	5025170SM	4	WASHER, 5/16" LOCK
0210	5025032SM	4	NUT, 5/16-18 HEX
0240	5025128SM	4	NUT, 3/8-16 HEX SERRA
0250-10	5025013X32SM	4	BOLT, 3/8-16 X 4" GD5
0250-20	704128	8	WASHER
0250-30	5025394SM	8	NUT, 3/8-16 HEX NYLOCK
0250-40	1759656YP	2	BOLT, U, 3/8-16 X 4 1/4
0260	703185	4	BOLT, Round Head, Short Square Neck
0280	5025394SM	4	NUT, 3/8-16 HEX NYLOCK
0290	703815	4	BOLT, RD SQ 3/8-16X1
0300	703412	2	NUT, NYLOCK, 10-24
0320	1960252SM	4	BOLT-RD HD SH SQ NK 1
0330	703233	4	NUT, 1/4-20, GR5
0340	1960404SM	2	SCREW, Truss Head, Phillips, #10-24 x 3/4,
0350	-----	1	ASSEMBLY, Tube
0350-510	703914	2	NUT, HEX, KEPS,1/4-20
0350-520	703916	1	NUT, HEX FLNG, 1/4-20
0350-530	2171600SM	1	STRAP, Hood Rubber
0350-540	7104383YP	1	TUBE, Clear, 34"
0350-550	004X24MA	1	SCREW, Slotted, 1/4-20 x 1/2
0350-560	004X71MA	1	SCREW, Machine, 1/4-20 X 1
0350-570	054416ZMA	1	HANDLE, Connect Tube
0360	1759653YP	2	WEIGHT, Front
0390-10	704035	4	BOLT, CRRG, 5/16-18X2
0390-20	1759361YP	4	SADDLE, Tube, 1.25 O.D.
0390-30	1960044SM	4	WASHER-0.312(0.33IDX1
0390-40	5025392SM	4	NUT, Ny Lock Flange, 5/16-18
0400	1759315AYP	1	TUBE, Support
0410	84002401	1	WEIGHT, Lower
0420	84002402	4	WEIGHT, Upper

Catcher Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 1697408A-00



Catcher Group

REF NO	PART NO	QTY	DESCRIPTION
0430	5025146X16SM	3	BOLT, 3/8-16 X 2", CA
0440	703814	1	BOLT, RD HD, 3/8-16X1
0450	84002552	1	BRACKET, Weight Mount

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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		in/lbs		in/lbs		in/lbs	
	ft/lbs	Nm.	ft/lbs	Nm.	ft/lbs	Nm.	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

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		in/lbs		in/lbs	
	ft/lbs	Nm.	ft/lbs	Nm.	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

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

