



Parts Manual

Mfg. No: 624518x31A
Dual Stage Snow Thrower (2004)

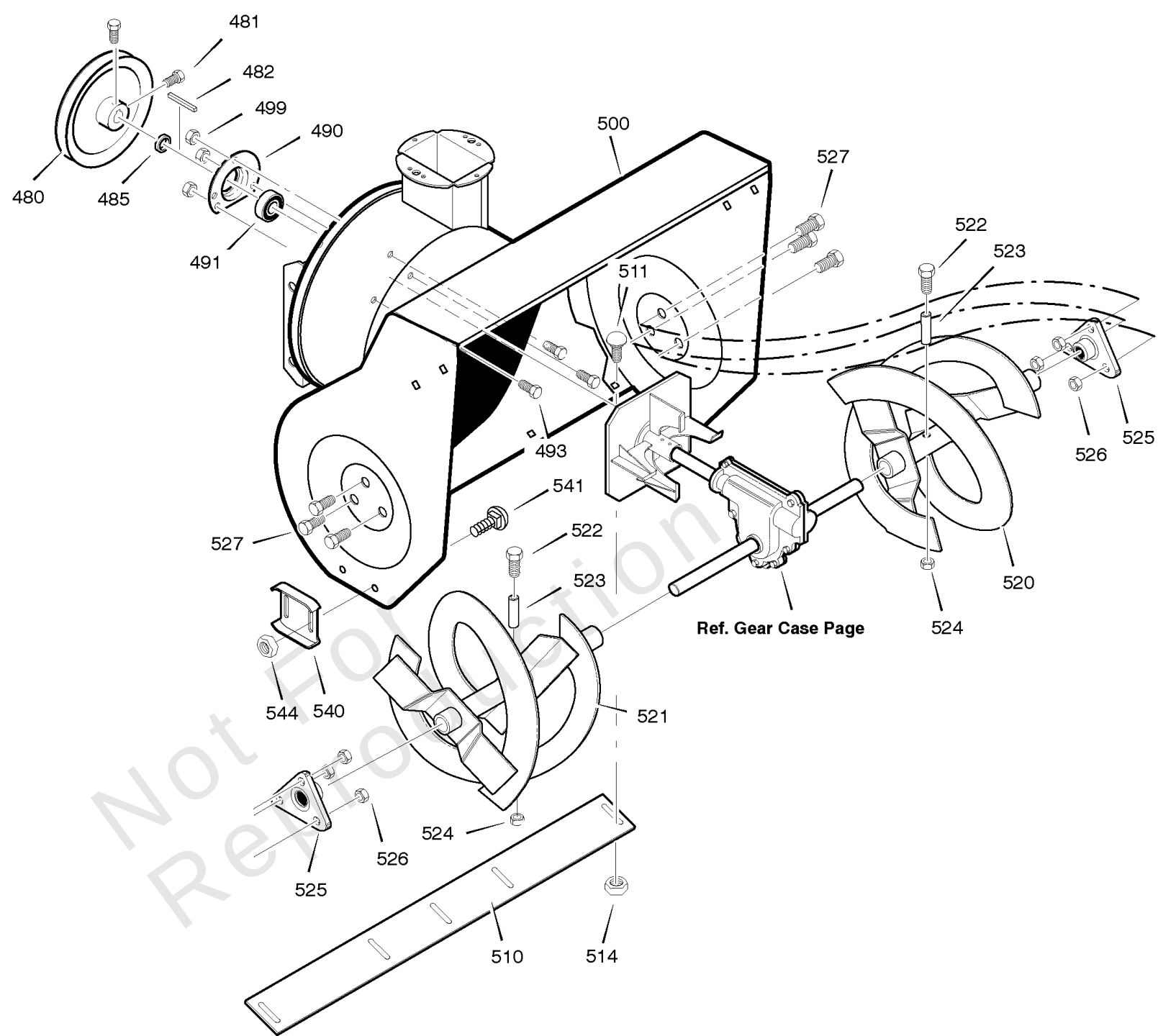
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Not For
Reproduction

Auger Housing

Note: Unless noted otherwise, use the standard torque specifications

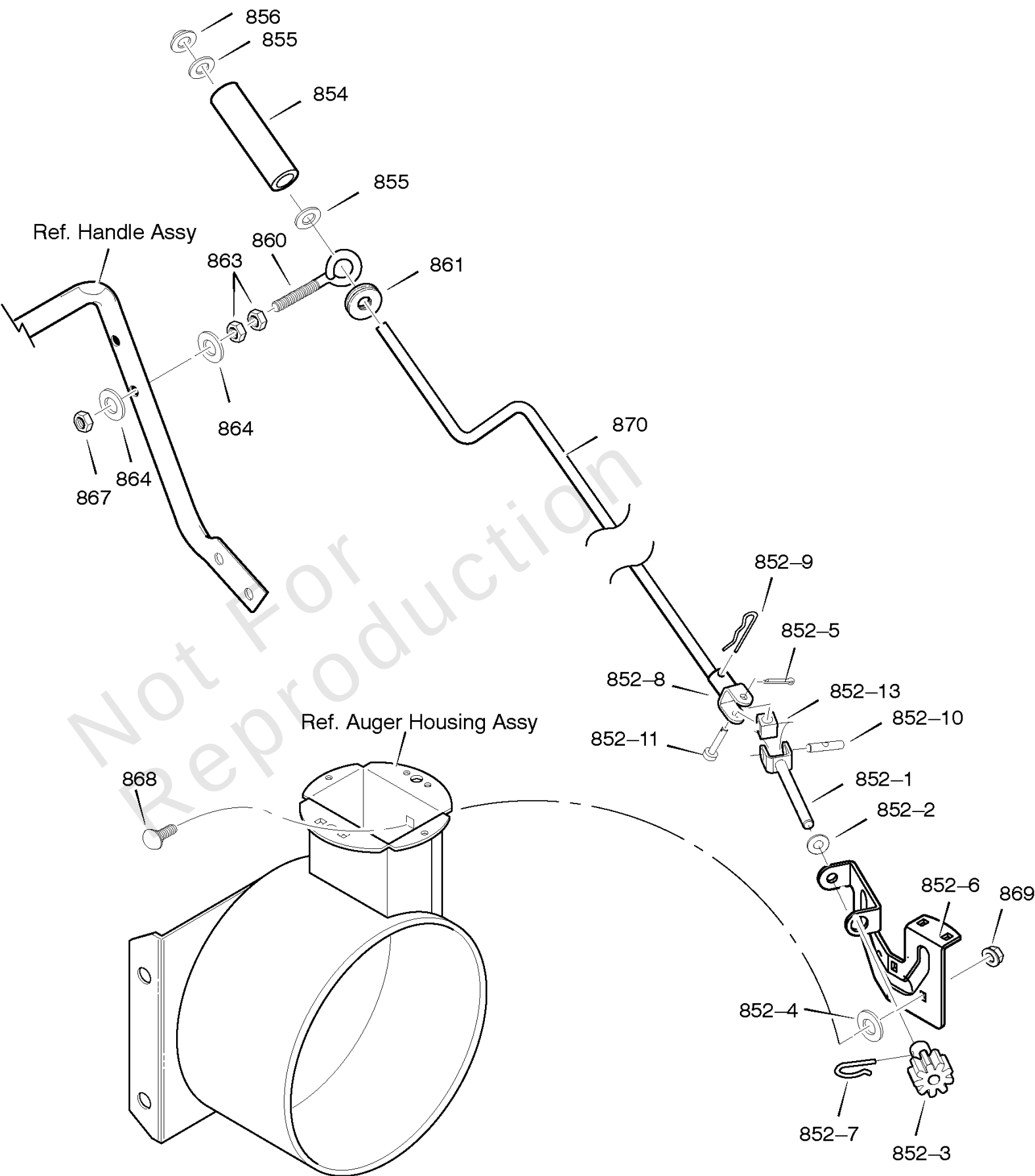
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Auger Housing

REF NO	PART NO	QTY	DESCRIPTION
480	762146MA		PULLEY,V4L 6.12X.67
481	577400MA		SCREW, 5/16-18X.63 HH
482	2001022MA		KEY,SQUARE 3/16 X 3/4
485	1501158MA		SPACER,FRICTION PULLE
490	582957 YZ		RETAINER, BALL BRNG
491	1501389MA		BEARING, BALL
493	001X92MA		BOLT, HEX 5/16-18X .50
499	710026		NUT, 5/16-18 HEXWDFLLK
500	1501161E700		HOUSING, ASSY
510	581397E717MA		BLADE, SCRAPER
511	340714MA		BOLT, 1/4-20X.75
514	780285MA		NUT, 1/4-20
520	340518E717		AUGER, ASSY, LH
521	340523E717		AUGER, ASSY, RH
522	9524MA		SCREW, 1/4-20X1.75
523	3943MA		SPACER, SLEEVE
524	73826		NUT, 1/4-20
525	9517MA		BEARING AUGER BLACK
526	711862MA		NUT, 5/16-18
527	9357MA		SCREW, 5/16-18X .75WD
540	301380E717		SKID, HEIGHT ADJUST
541	340720MA		BOLT, 5/16-18 X .75
544	710026		NUT, 5/16-18
--	1501216MA		KIT,SHEAR BOLT.25-20X

Chute Rod



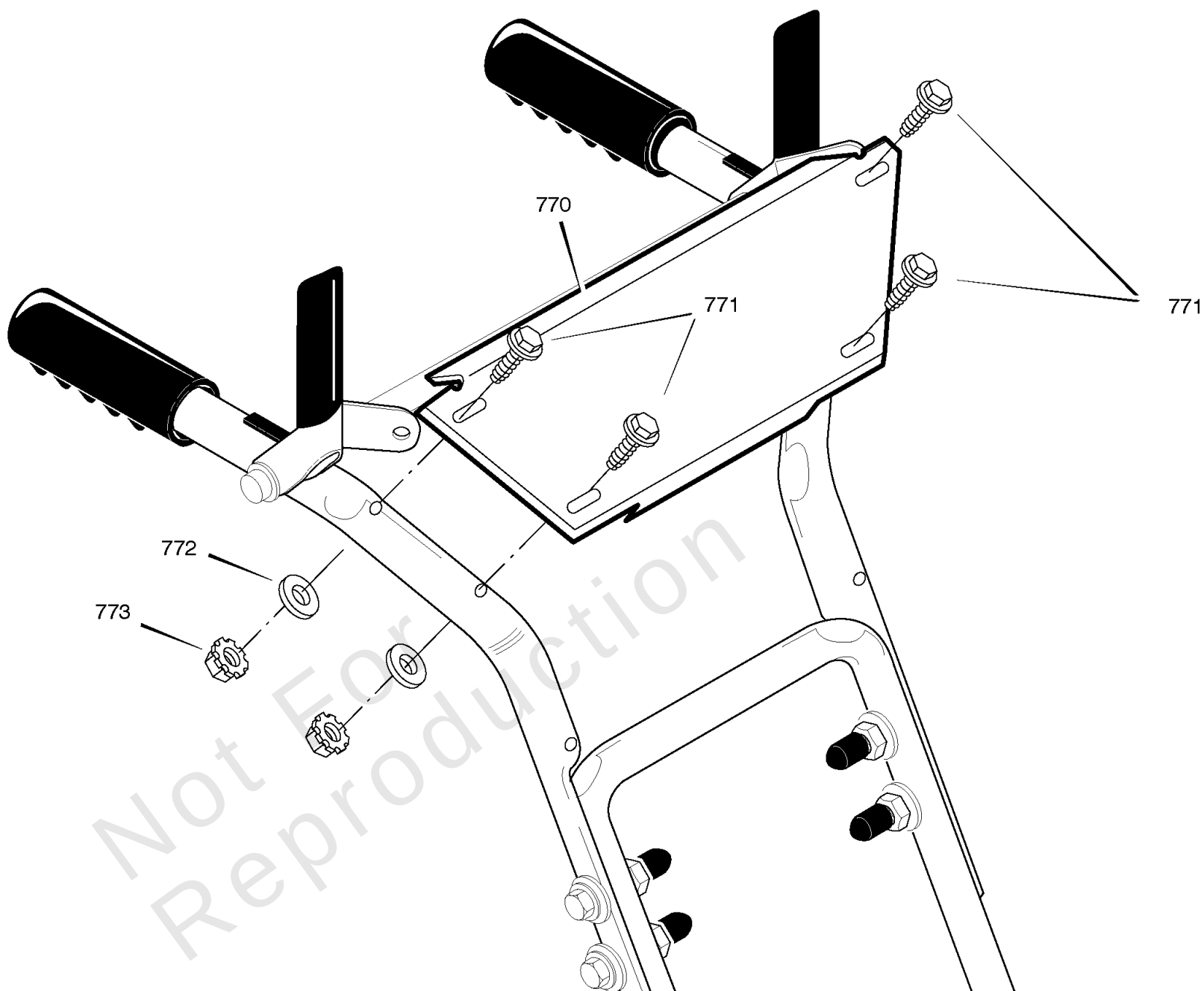
Chute Rod

REF NO	PART NO	QTY	DESCRIPTION
852-1	1501309 YZ		ASSEMBLY, YOKE & ROD
852-2	313431MA		WASHER, CURVED SPRING
852-3	1501067MA		GEAR,9 TOOTH 8DP
852-4	17X170MA		WASHER.46.97.25 FLAT
852-5	579493MA		PIN, COTTER .06X .50
852-6	1501306E717MA		BRACKET, GEAR MOUNT
852-7	1501293MA		PIN-HAIR, CHUTE GEAR
852-8	1501075 YZ		ASSEMBLY, YOKE ADAPTER YZ
852-9	711682MA		PIN, HAIR
852-10	578060MA		PIN,UNIV JOINT 3/8X1.
852-11	578309MA		LF PIN, CLEVIS .25DX
852-13	578063MA		BLOCK,UNIVERSAL PIVOT
854	51443MA		KNOB, SLEEVE STD BLK
855	309312MA		WASHER, FLAT .39 X .7
856	73664MA		NUT, PUSH ON 3/8"
860	581618MA		EYEBOLT.38-16X6.00 .6
861	148MA		GROMMET, Eyelet
863	71045		NUT, 3/8-16 HEXJAM
864	71072		FLATWASHER .406X.81X.066
867	71046		NUT, 3/8-16 HEXNYL
868	002X98MA		BOLT, CARRIAGE 1/4-20 X 1.00
869	15X145MA		NUT
870	1501074 YZ		CRANK, ASSY CHUTE

Control Panel

Note: Unless noted otherwise, use the standard torque specifications

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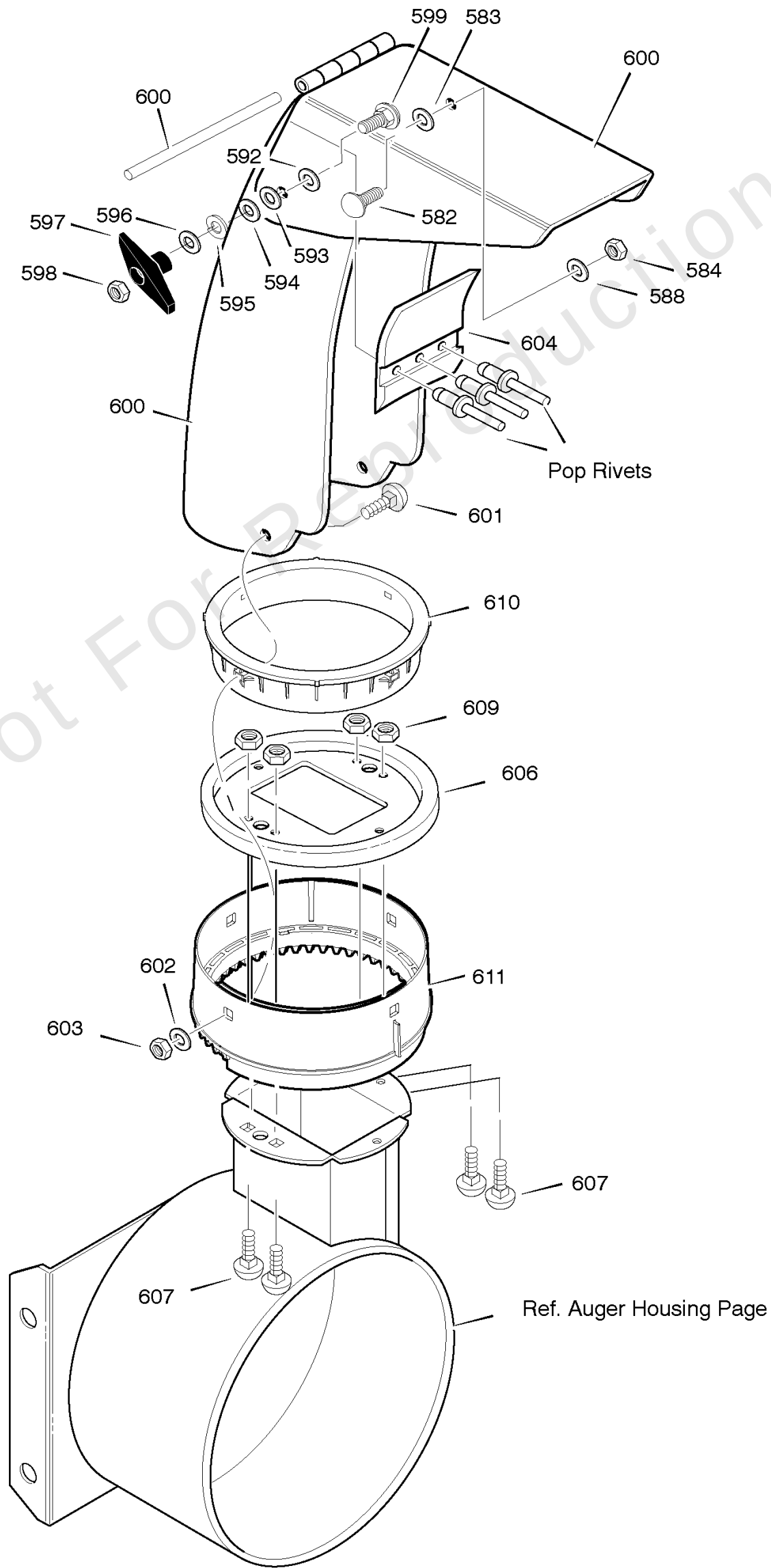
Control Panel

REF NO	PART NO	QTY	DESCRIPTION
770	762329E700		PANEL
771	001798		SCREW
772	71067		WASHER
773	15X145MA		NUT

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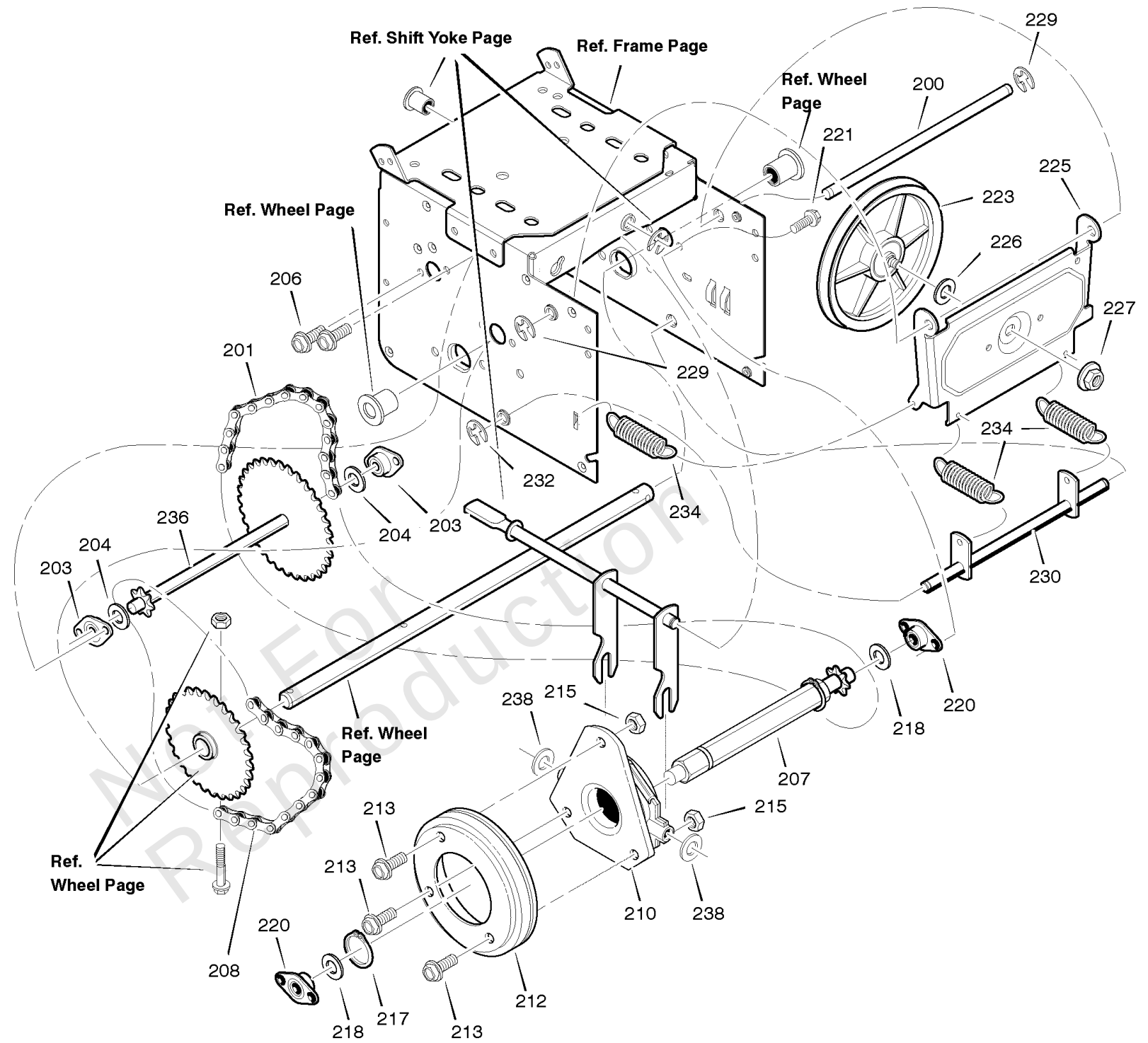
Discharge Chute

Note: Unless noted otherwise, use the standard torque specifications Mfg. No: 624518x31A



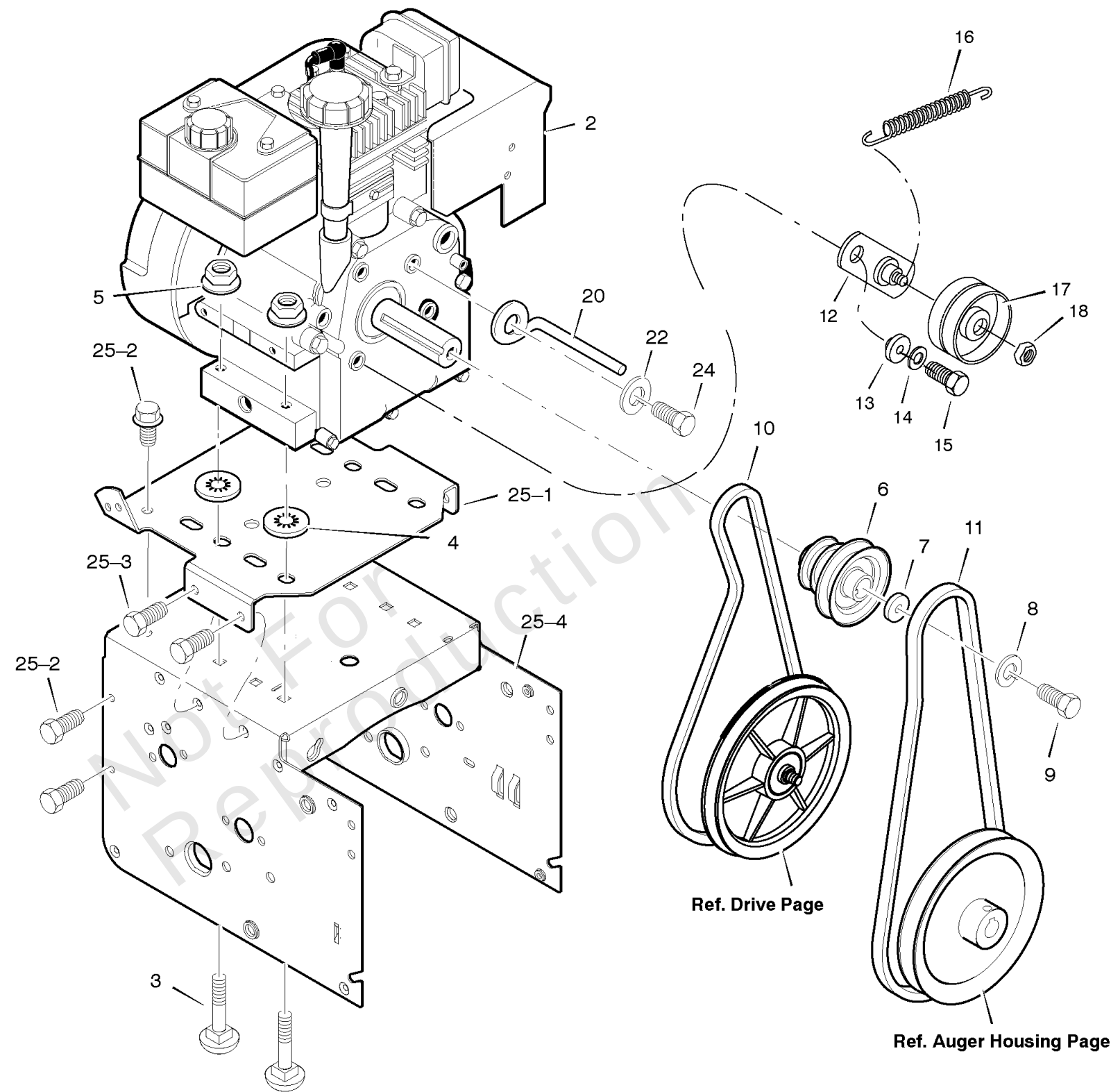
Discharge Chute

REF NO	PART NO	QTY	DESCRIPTION
582	340720MA		BOLT, CARRIAGE 5/16-18 X.75
583	12021		WASHER, PLASTIC
584	71038		NUT, 5/16-18 REGHEX NYLOCK
588	6711MA		WASHER, PLASTIC .315X
592	12021		WASHER, PLASTIC
593	6711MA		WASHER, PLASTIC .315X
594	71071		WASHER, FLAT
595	71060		WASHER, SPLIT
596	71071		WASHER, FLAT
597	57171		KNOB, T 3.00
598	15X144		NUT, 5/16-18 REGHEX
599	002X97MA		BOLT, CRG. 5/16-18X1.50
600	760990E717		CHUTE ASSEMBLY
601	02X100		BOLT, 5/16-18 X1.00
602	71071		WASHER, FLAT
603	71038		NUT, 5/16-18 HEXNYL
604	760268MA		FLAP,CHUTE INSERT C2
606	1501932 YZ		CHUTE COLLAR
607	02X101MA		SCREW, 1/4-20 X 0.75
609	15X145MA		NUT, 1/4-20 HEX NYLOCK
610	337227MA		RETAINER RING INNER
611	1501282MA		RING,OUTER CHUTE



Drive

REF NO	PART NO	QTY	DESCRIPTION
200	1501092 YZ		LF AXLE, SWING PLATE YZ
201	579851MA		CHAIN, ROLLER 420X19.
203	334163MA		BEARING AND RETAINER, ASSY
204	579858MA		WASHER.502-0.75-.06 F
206	25X020MA		SCREW.31-18X0.50 WAHH
207	1501100MA		HEX SHAFT
208	579868MA		CHAIN,ROLLER 420X18.0
210	337029MA		BEARING, TRUNION CLUTCH R
212	1501435MA		WHEEL,FRICTION 4.3 RU
213	001X38MA		BOLT
215	303008MA		NUT, KEPS HEX 1/4-20
217	579859MA		RING,RETEXT .54X.03TR
218	579858MA		WASHER.502-0.75-.06 F
220	334163MA		BEARING AND RETAINER, ASSY
221	25X020MA		SCREW.31-18X0.50 WAHH
223	1501115MA		FRICTION PULLEY
225	1501057 YZ		LF PLATE, SWINGING YZ
226	1501158MA		SPACER,FRICTION PULLE
227	15X114		NUT, FLANGE LOCK 3/8-24
229	11X30MA		RETAINER, RING 7/16 Y
230	1501107 YZ		LF ASSY, SPRING LINK YZ
232	11X30MA		RETAINER, RING 7/16 Y
234	165X112MA		SPRING, EXTENSION
236	1501090MA		WLD, INTERMED SPROCKET 33T/7
238	71074		WASHER, FLAT



Engine

REF NO	PART NO	QTY	DESCRIPTION
2	-----		Engine *
3	002X97MA		BOLT, CARRIAGE 5/16-18
4	028X76MA		NUT,SPEED
5	710026		NUT 5/16-18
6	1501109MA		PULLEY, ENGINE
7	710247		WASHER
8	71063		WASHER .38ID
9	71015		SCREW, 3/8-24 x 1.00
10	579932MA		BELT, DRIVE
11	37X120MA		BELT, AUGER
12	1501112 YZ		BRACKET ASSEMBLY, IDLER
13	1501065MA		BUSHING,IDLER BRKT
14	71060		WASHER, SPLIT
15	25X021MA		SCREW 5/16-24 X 0.75
16	53704MA		SPRING, IDLER TRACTIO
17	50793MA		PULLEY, IDLER
18	590		NUT, JAM 3/8-16
20	1501201MA		GUIDE, BELT
22	71060		WASHER .31X.58X.08
24	710097		SCREW, 5/16-24 x 0.75
25	-----		FRAME, MOTORBOX (5-11HP)
25-1	1501062E700		PLATE, ENGINE MOUNT
25-2	310169MA		SCREW, 1/4-20X .63 WA
25-3	25X020MA		SCREW.31-18X0.50 WAHH
25-4	1501049E700		FRAME, MOTOR BOX
--	F-041085L		OWNER'S MANUAL

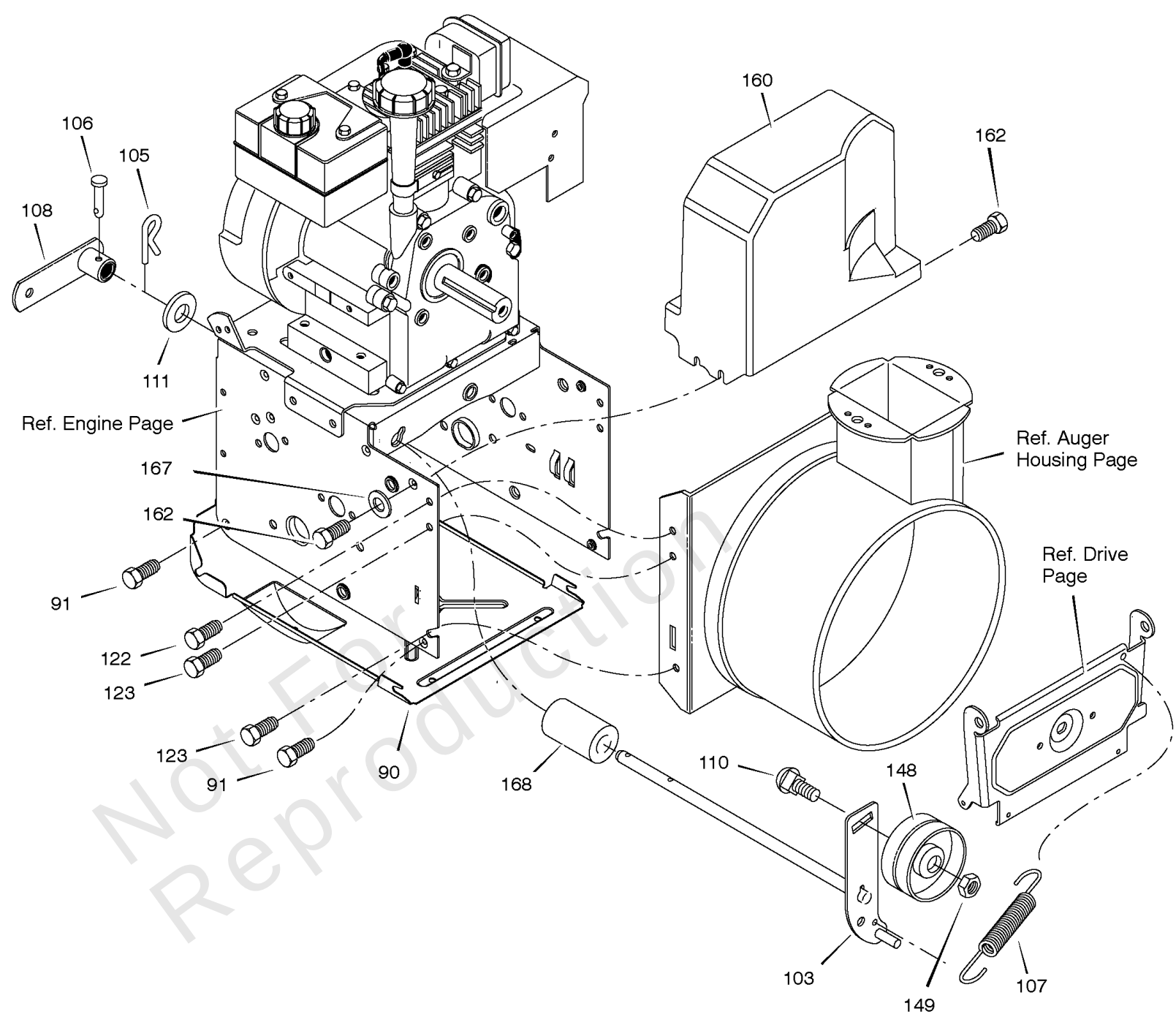
Footnotes:

Note* For information on Replacement Parts contact the Engine manufacturer.

Frame

Note: Unless noted otherwise, use the standard torque specifications

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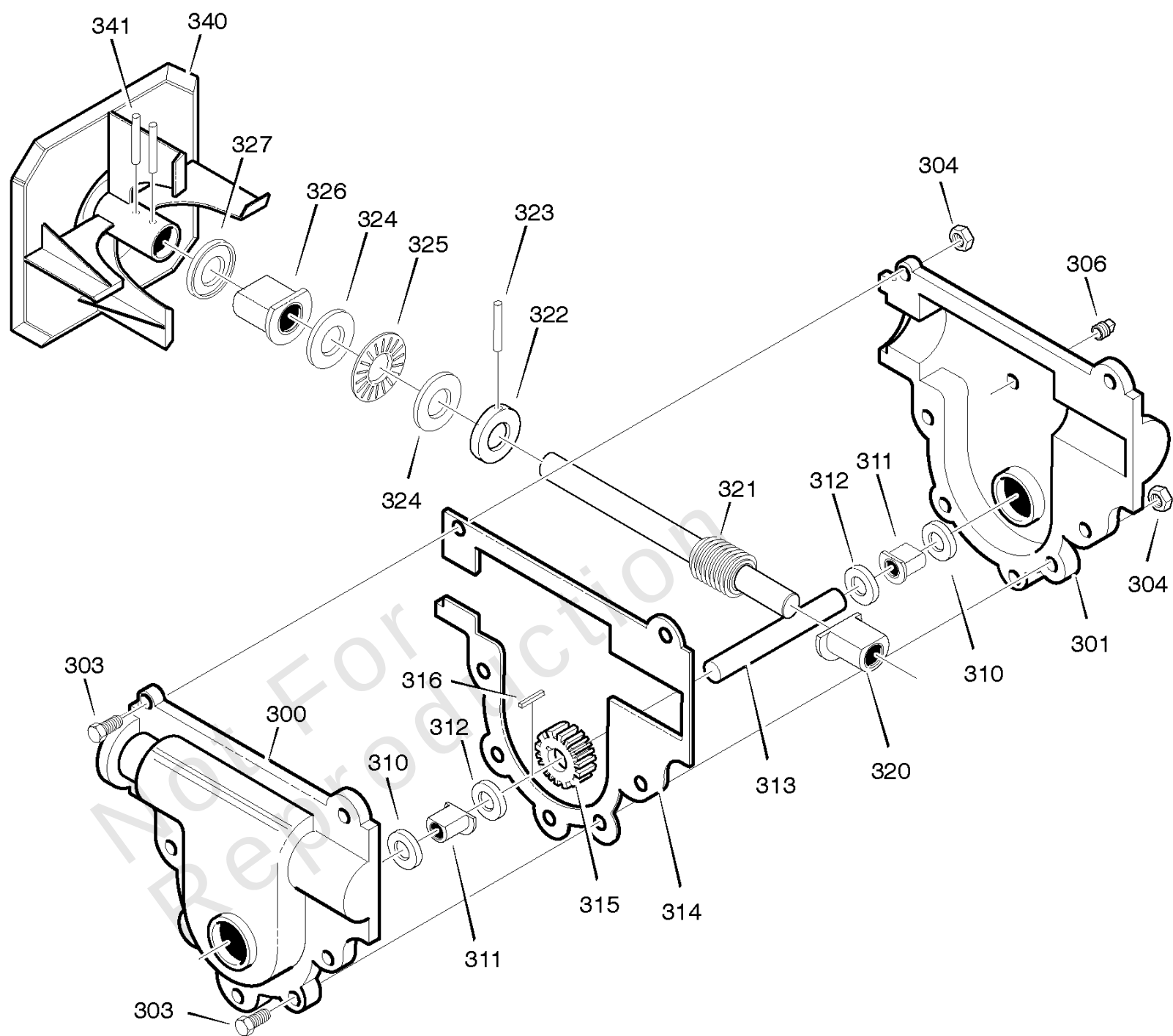
Frame

REF NO	PART NO	QTY	DESCRIPTION
90	1501055E717		COVER, BOTTOM
91	310169MA		SCREW, 1/4-20X .63 WA
103	1501111 YZ		IDLER ASSEMBLY, AUGER
105	711682MA		PIN, HAIR .38DIA X 1.64LG
106	761761MA		PIN, CLEVIS 3/16" DIA
107	165X160MA		SPRING, TENSION
108	761675 YZ		ASSY., SPRING ATTACH
110	585781MA		BOLT, 3/8-16X1.25 CARR.
111	711617		WASHER, FLAT
122	25X021MA		SCREW, TAP 5/16-18 X .75
123	25X020MA		SCREW.31-18X0.50 WAHH
148	50793MA		PULLEY, IDLER
149	590		NUT, JAM 3/8-16
160	1501172		COVER, BELT
162	26X306MA		SCREW, TAP
166	71067		WASHER, FLAT
168	1501200MA		SPACER/AUGER BRKT

Gear Case

Note: Unless noted otherwise, use the standard torque specifications

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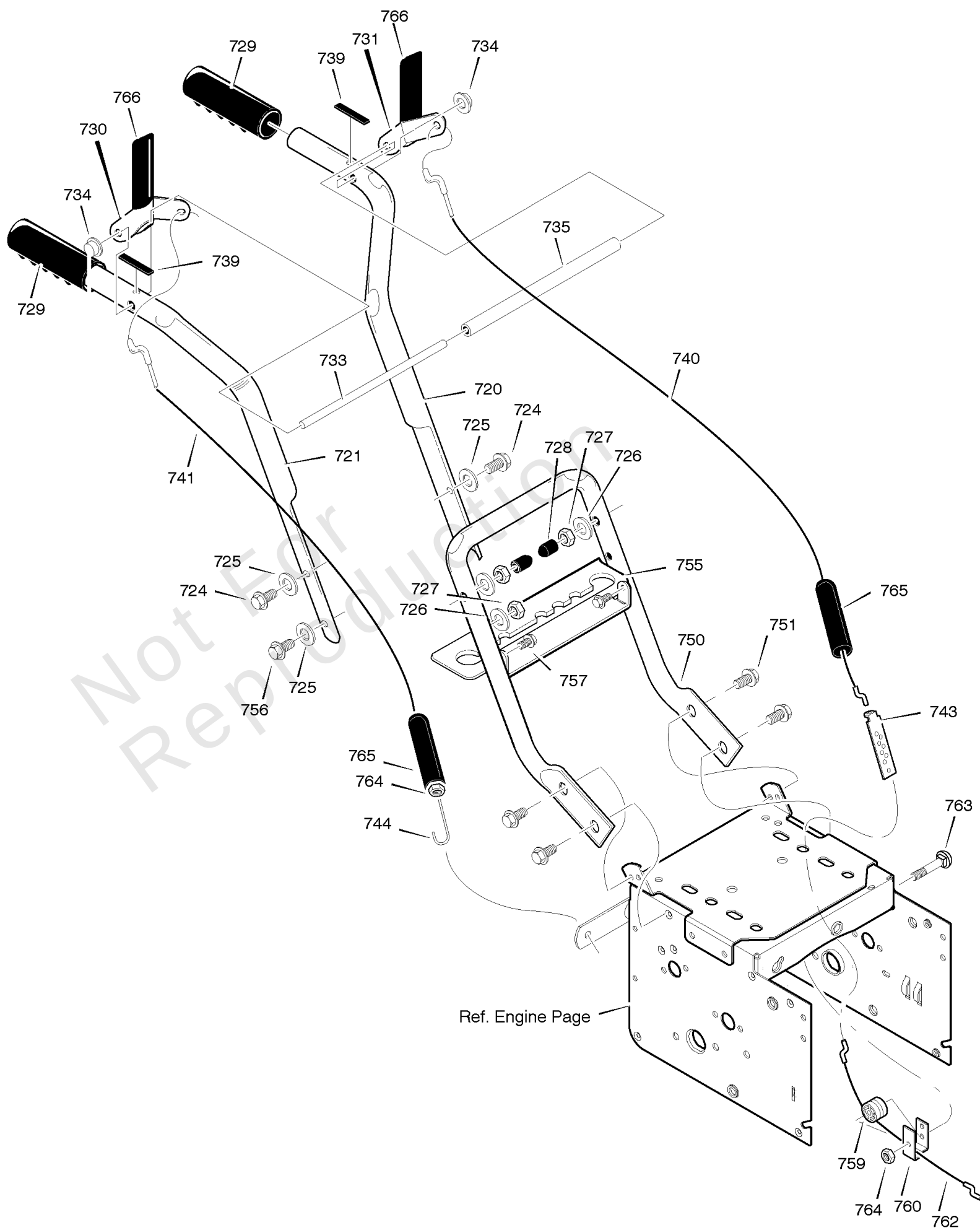
Gear Case

REF NO	PART NO	QTY	DESCRIPTION
300	10577MA		CASE, GEAR, RH
301	10576MA		CASE, GEAR, LH
303	710025		SCREW,1/4-20X.75
304	15X143MA		NUT,25-20 HEX FLG CTR
306	9344MA		SCREW, 3/8-16 x 0.50
310	9566MA		SEAL, OIL, .75 X 1.19
311	50304MA		BRNG, FL .752IDX1.002
312	48275MA		WASHER, FLAT .752X1.
313	340284MA		SHAFT,AUGER,OUTPUT 22
314	51279MA		GASKET, GEAR BOX
315	51405MA		GEAR,WORM
316	431787MA		KEY, WOODRUFF #61
320	50221MA		BRNG,FLNG.502IDX0.752
321	1501128MA		SHAFT, AUGER INPUT (IMPELLER)
322	580295MA		COLLAR,THRUST.753X1.2
323	454565MA		PIN, SPRING.250DIAX1.
324	48275MA		WASHER, FLAT .752X1.
325	50684MA		BRNG, ROLL
326	50304MA		BRNG, FL .752IDX1.002
327	9566MA		SEAL, OIL, .75 X 1.19
340	760194E717MA		IMPELLER
341	454565MA		PIN, SPRING.250DIAX1.
--	333431MA		LUBRIPLATE, GR132, 14oz -(Not Illustrated)

Handle Assembly

Note: Unless noted otherwise, use the standard torque specifications

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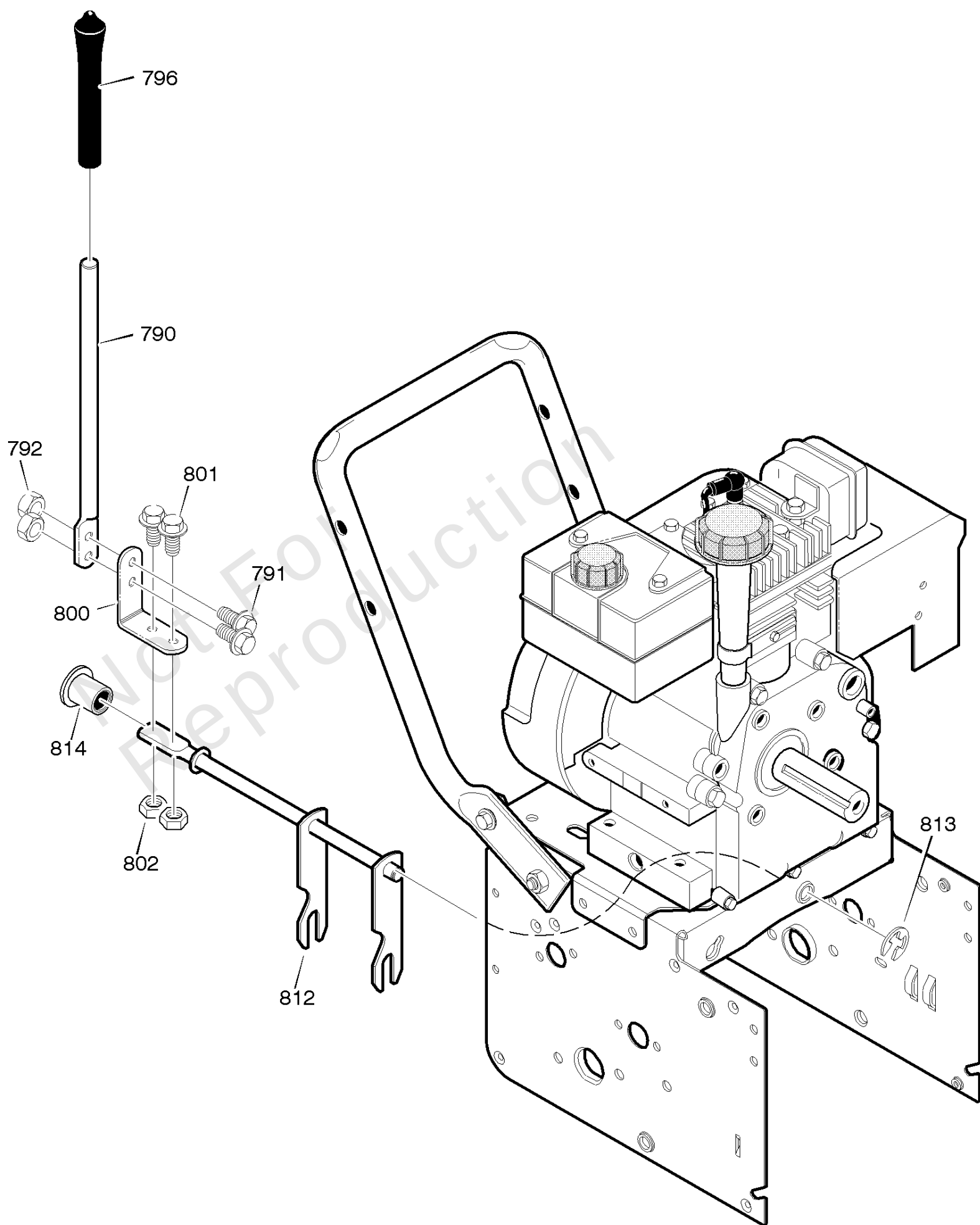
Handle Assembly

REF NO	PART NO	QTY	DESCRIPTION
720	1501205E717		HANDLE, UPPER LH
721	1501206E717		HANDLE, UPPER RH
724	11234MA		SCREW, 5/16-18 x 2.75
725	71071		WASHER, FLAT
726	71060		WASHER, SPTLK .31X.58X.08
727	15X144		NUT, 5/16-18 REGHEX
728	11261MA		STOP, RED PLASTIC
729	337399MA		GRIP-HANDLE FINGER
730	337816E717		LEVER, ASSY CLUTCH DRIVE RH
731	337815E717		LEVER, ASSY CLUTCH DRIVE LH
733	337381MA		ROD,PIVOT CTRL
734	761105MA		NUT, PUSH ON CAP
735	337373MA		SPACER,HANDLE
739	4049MA		BUMPER, RECT W/FLAT T
740	1501123MA		CABLE,FR-DR P1,P2,P3,
741	761872MA		CABLE, AUGER CLUTCH
743	313441MA		BRACKET, CABLE ADJ BL
744	1673MA		SPRING, AUGER CLUTCH,
745	15X145MA		NUT, 1/4-20
750	339541E717MA		HANDLE, LOWER
751	25X021MA		SCREW
755	337407E717		BRKT, GEAR SELECTOR
756	6751		SCREW, 5/16-18 x 2.00
757	310169MA		SCREW, 1/4-20X .63 WA
759	579860MA		SPOOL-CABLE, AUGER CLUTCH
760	1501059 YZ		BRACKET, CABLE SPOOL YZ
762	1501122MA		CABLE, LOWER DRIVE 12"
763	001798		BOLT, HEX 1/4-20 X 1.50 YZ
764	15X145MA		NUT
765	308146MA		BOOT, CLUTCH SPRING
766	337380MA		GRIP

Shift Yoke

Note: Unless noted otherwise, use the standard torque specifications

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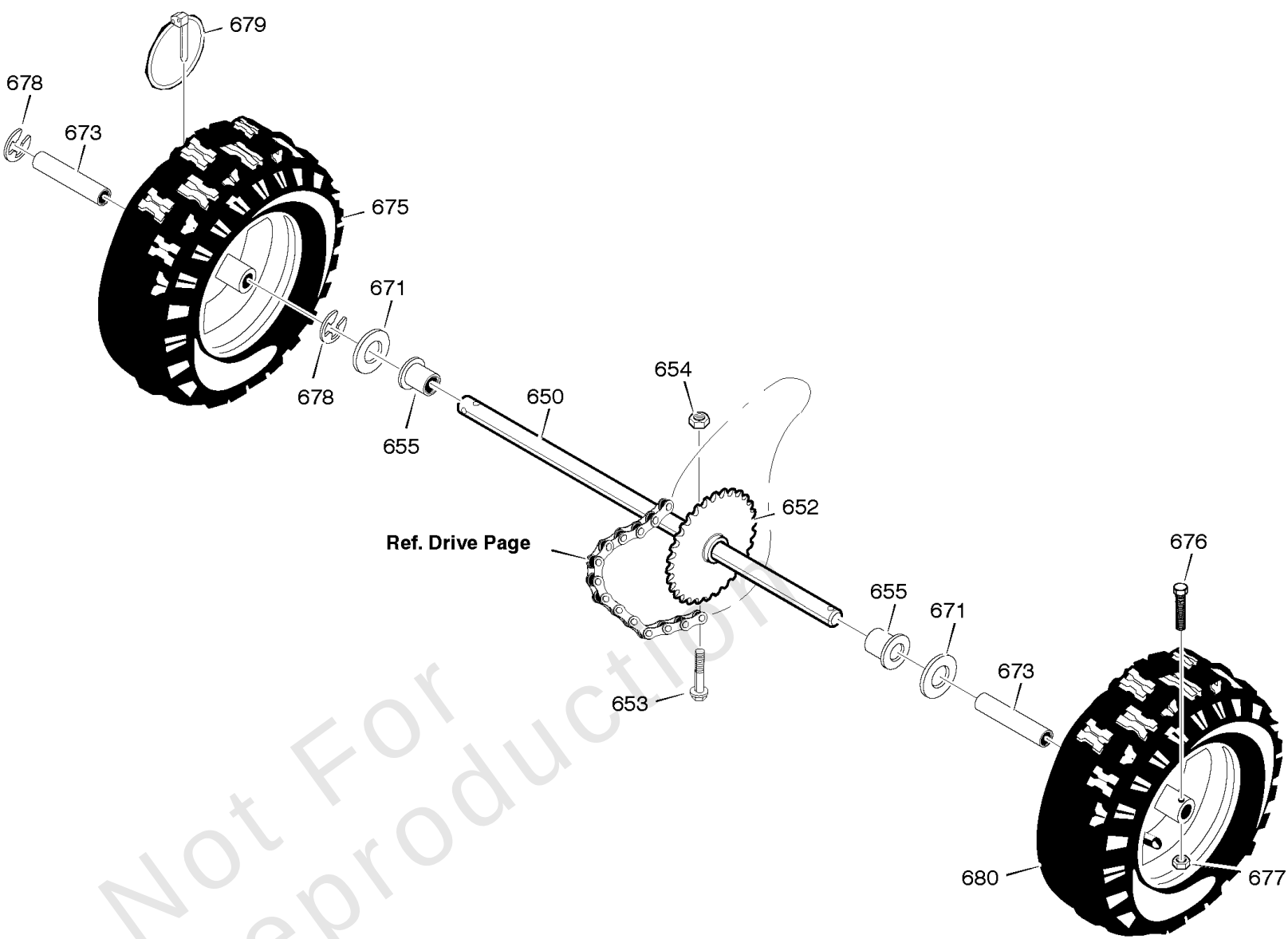
Shift Yoke

REF NO	PART NO	QTY	DESCRIPTION
790	762299E717		ROD, SHIFT
791	302628MA		SCREW, 1/4-20X .75 HH
792	73826		NUT, 1/4-20
796	331624MA		KNOB, SLIP PLASTISOL
800	760564MA		LEVER,SPRING SHIFT
801	302628MA		SCREW, 1/4-20X .75 HH
802	73826		NUT, 1/4-20
812	1501085 YZ		ROD ASSY., SPEED SELECT
813	11X30MA		RETAINER, RING 7/16 Y
814	579944MA		BRNG FL .500ID X .88

Wheels

Note: Unless noted otherwise, use the standard torque specifications

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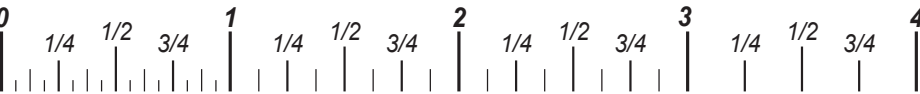
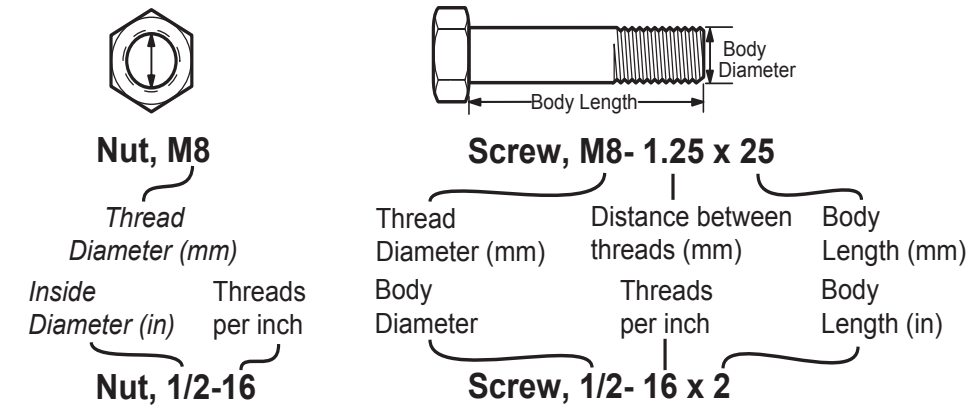
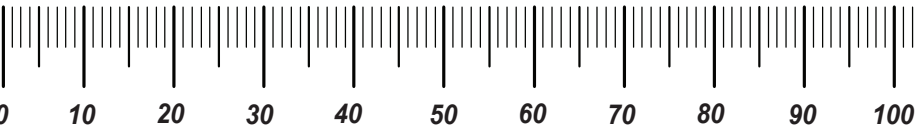
Wheels

REF NO	PART NO	QTY	DESCRIPTION
650	1501562		SHAFT, AXLE
652	1501089		SPRKT & HUB
653	01X193MA		SCREW, 1/4-20 x 1.75
654	15X145MA		NUT, 1/4-20 HEX NYLOCK
655	1501114MA		BEARING,AXLE
671	712120MA		FLATWASHER
673	1501139MA		BUSHING,WHL 4.62 13TI
675	1501834		TIRE & RIM, RIGHT
676	577015MA		SCREW, SHR 1/4-20X1.7
677	15X145MA		NUT, 1/4-20 HEX NYLOCK
678	239MA		RING, RET
679	73842MA		PIN, KLIK .25 X 1.38 DIA
680	1501835		TIRE & RIM, LEFT

Hardware Identification & Torque Specifications

Torque Specification Chart								
FOR STANDARD METRIC MACHINE HARDWARE (Tolerance ± 20%)								
Property Class	 Class 5.6		 Class 8.8		 Class 10.9		 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).

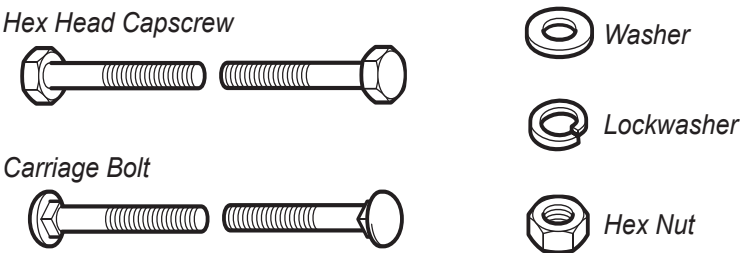
When bolt or capscrew is identified as 1/2 - 16 x 2" (M8 - 1.25 x 50), this means the *Nominal size*, or body diameter is 1/2 inch (8mm metric thread diameter), the second number, 16, represents the *threads per inch*, (*distance between threads*). The final number is the body length of the bolt or screw,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

Torque Specification Chart						
FOR STANDARD MACHINE HARDWARE (Tolerance ± 20%)						
Hardware Grade	 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

- 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



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

