



Parts Manual

Mfg. No: 622515x31B
Dual Stage Snow Thrower (2000)

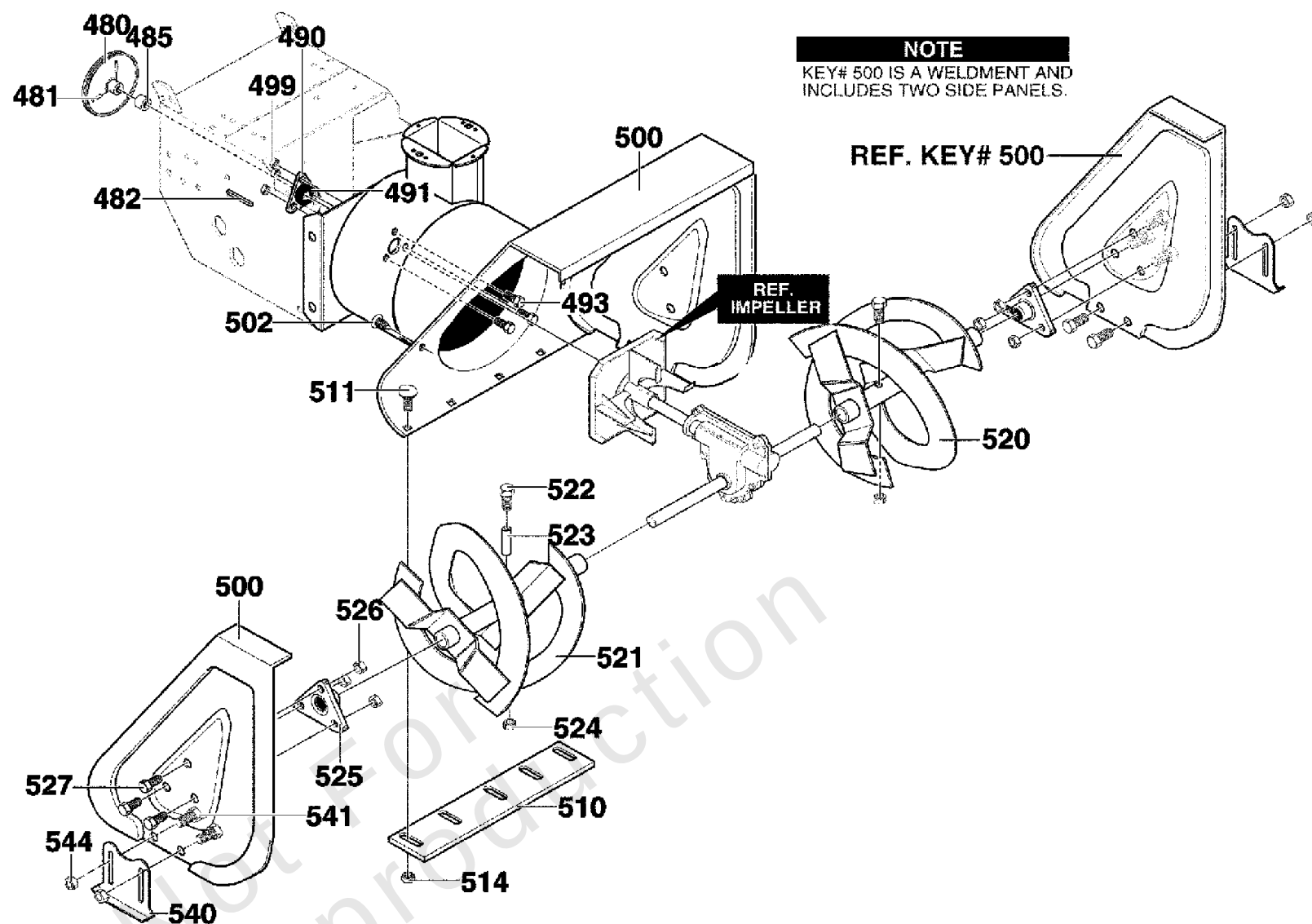
Model Components	Page
Auger Housing.	4
Chute Rod Assembly.	6
Control Panel.	8
Discharge Chute.	10
Drive Components Assembly.	12
Engine Assembly.	14
Frame Components Assembly.	16
Gear Case.	18
Handle Assembly.	20
Shift Yoke Assembly.	22
Wheels Assembly.	24
Torque Specification Chart.	26

Not For
Reproduction

Auger Housing

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 622515x31B



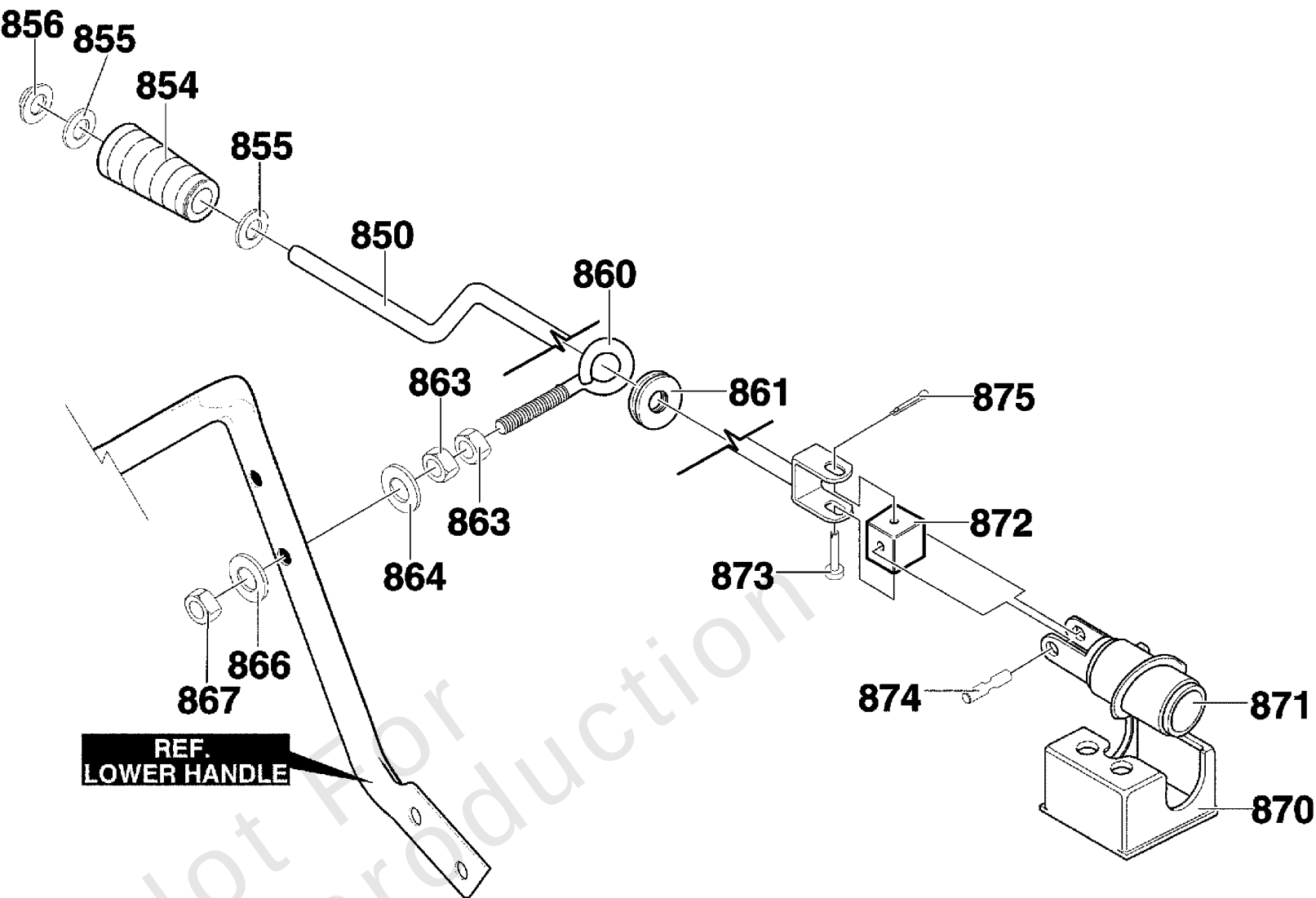
Auger Housing

REF NO	PART NO	QTY	DESCRIPTION
480	762146MA		PULLEY,V4L 6.12X.67
481	577400MA		SCREW, 5/16-18X.63 HH
482	71371MA		KEY, SQUARE
485	334514MA		SPACER, SLEEVE .676X1.00X.53
490	582960		RETAINER, BALL BRNG
491	043846		BEARING, BALL
493	313676		SCREW, 5/16-18 x 0.75
499	710026		NUT, 5/16-18 HEXWDFLLK
500	761745-898		HOUSING, ASSY
502	309235MA		FASTENER, RATCHET
510	581395-821		BLADE, SCRAPER 24"
511	340714MA		BOLT, 1/4-20X.75
514	780285MA		NUT, 1/4-20
520	340520-821		AUGER, ASSY, LH
521	340525-821		AUGER, ASSY, RH
522	9524MA		SCREW, 1/4-20X1.75
523	3943MA		SPACER, SLEEVE
524	782585		NUT, 1/4-20 REGHEXCTRLK
525	9517MA		BEARING AUGER BLACK
526	711862MA		NUT, 5/16-18
527	9357MA		SCREW, 5/16-18X .75WD
540	780061MA		SKID, HEIGHT ADJUST
541	340720MA		BOLT, 5/16-18 X .75
544	710026		NUT, 5/16-18 REGHEX

Chute Rod Assembly

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 622515x31B



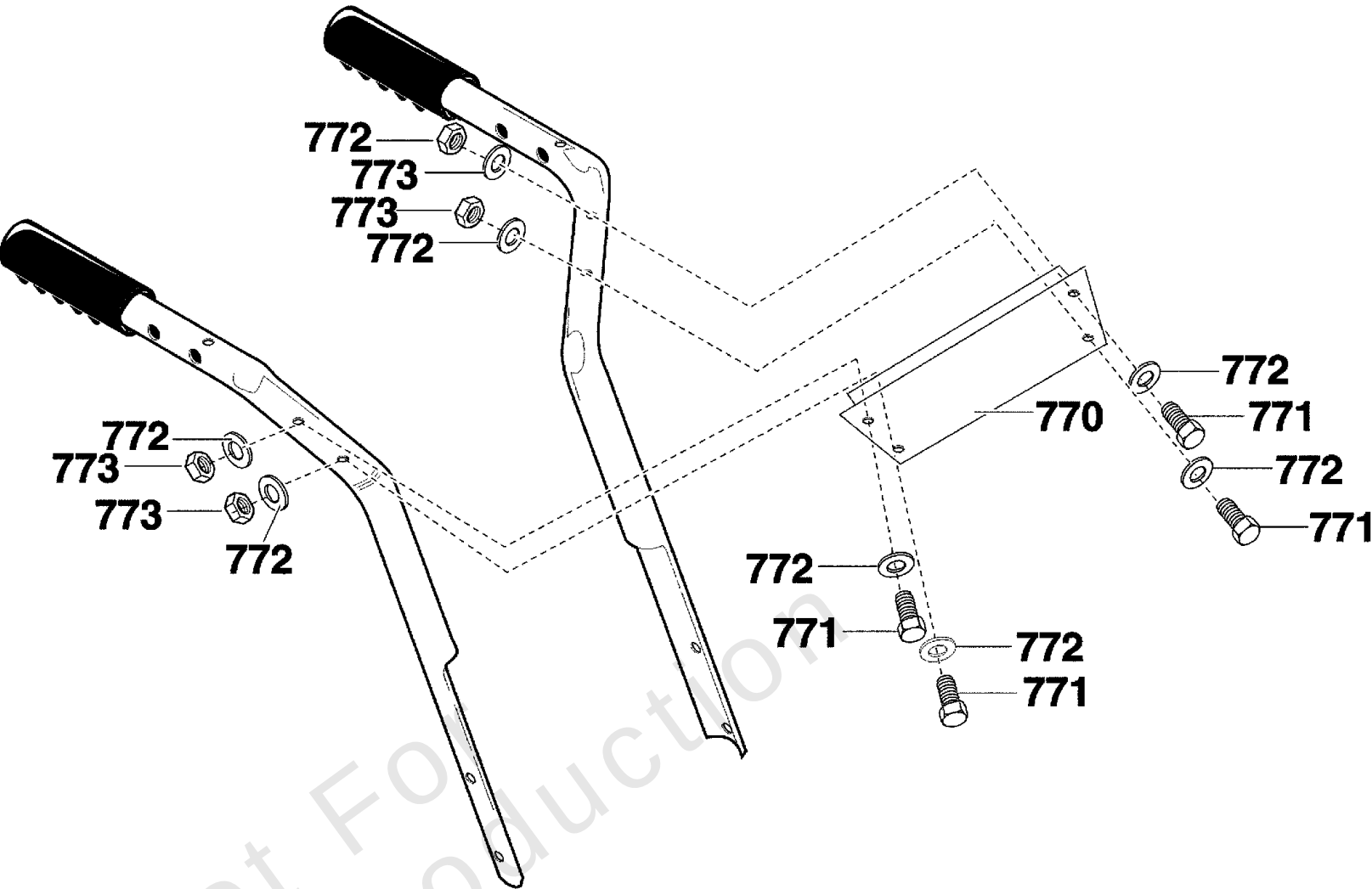
Chute Rod Assembly

REF NO	PART NO	QTY	DESCRIPTION
850	585426MA		CRANK, ASSY CHUTE
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	124829		NUT, 3/8-16 HEXJAM
864	71072		FLATWASHER .406X.81X.066
866	71072		FLATWASHER .406X.81X.066
867	71046		NUT, 3/8-16 HEXNYL
870	585195MA		BRACKET, WORM MTG
871	585196MA		WORM, GEAR CHUTE ROTATION
872	578063MA		BLOCK,UNIVERSAL PIVOT
873	578309MA		LF PIN, CLEVIS .25DX
874	578060MA		PIN,UNIV JOINT 3/8X1.
875	579493MA		PIN, COTTER .06X .50

Control Panel

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 622515x31B



Control Panel

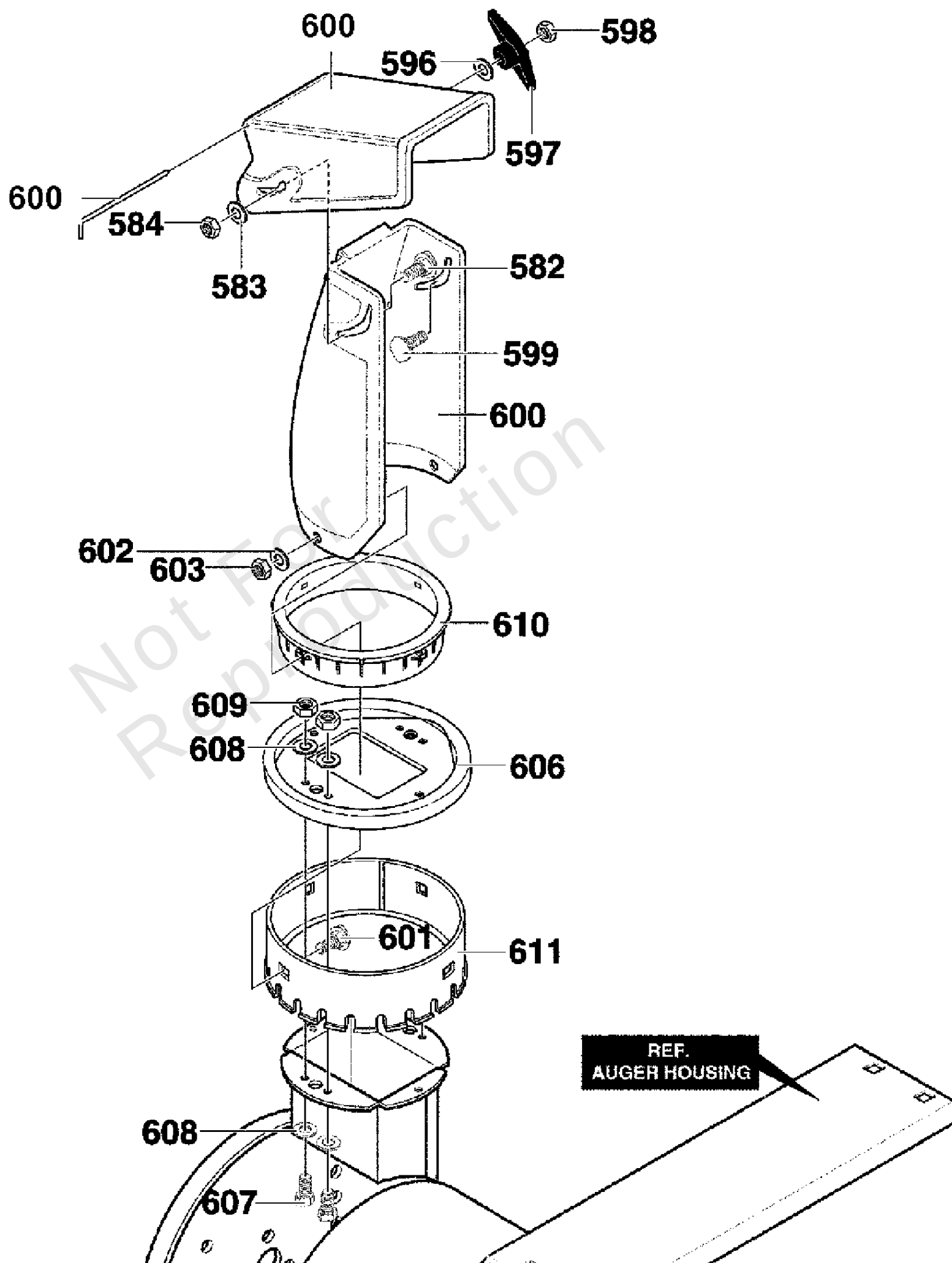
REF NO	PART NO	QTY	DESCRIPTION
770	762329-898		PANEL, DECO
771	180034MA		SCREW
772	71067MA		FLATWASHER
773	711632		NUT

Not For Reproduction

Discharge Chute

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 622515x31B



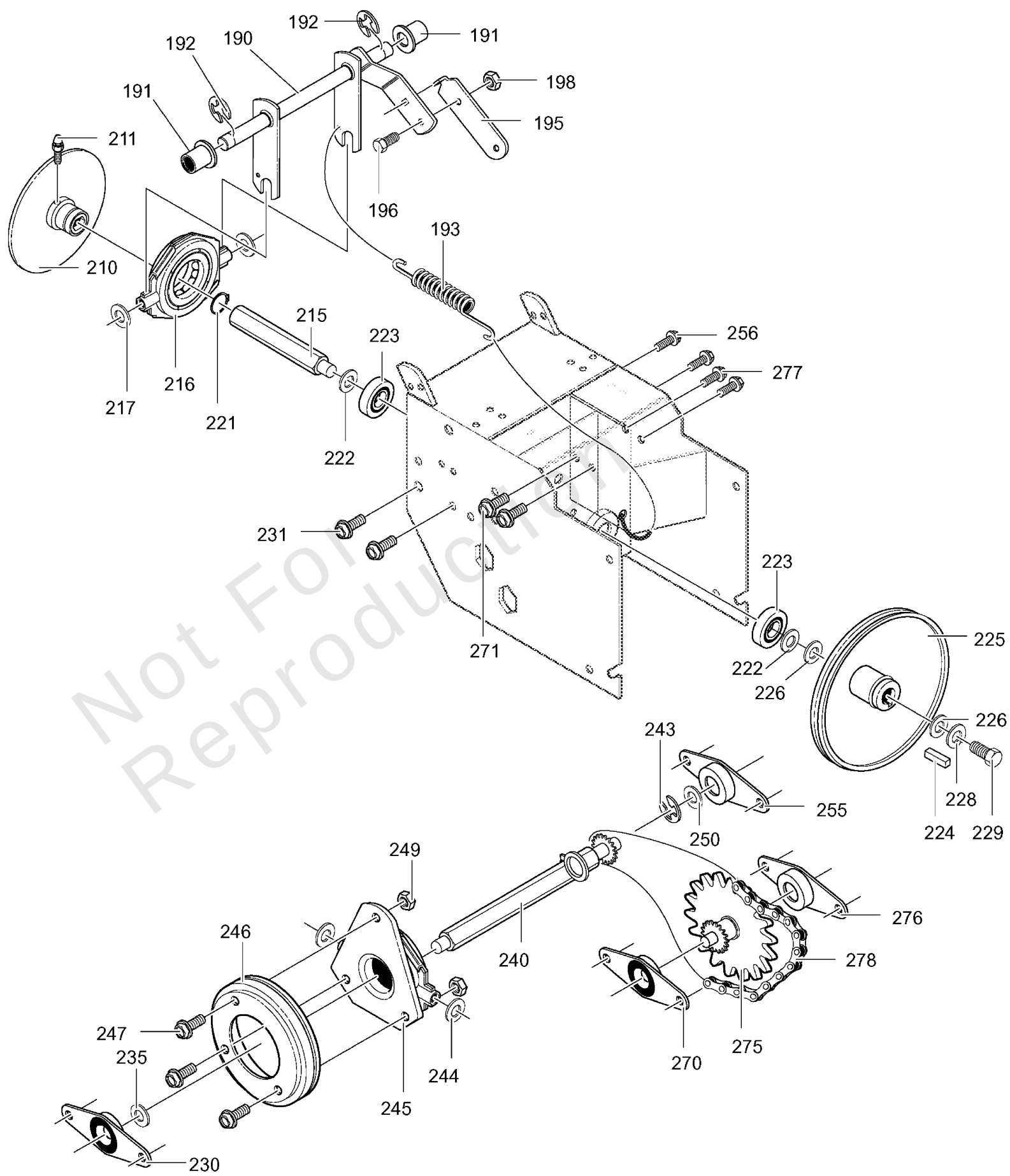
Discharge Chute

REF NO	PART NO	QTY	DESCRIPTION
582	578088MA		SCREW, 5/16-18X .75SL
583	120393		WASHER, FLAT .349X.69X.066
584	1498		NUT, 5/16-18 REGHEXCTRLK
596	120393		WASHER, FLAT .349X.69X.066
597	13527		KNOB, T 3.00
598	71037		NUT, 5/16-18 REGHEX
599	302843MA		BOLT, 5/16-18X1.25 CA
600	762221		CHUTE ASSEMBLY
601	586280		BOLT, 5/16-18 X1.00
602	120393		WASHER, FLAT .349 X .69 X .066
603	71038		NUT, 5/16-18 HEXNYL
606	585214-821		CHUTE COLLAR
607	302628MA		SCREW, 1/4-20X .75 HH
608	71067MA		WASHER, FLAT .281X.63X.065
609	780029		NUT, 1/4-20 HEX NYLOCK
610	337227MA		RETAINER RING INNER
611	585193MA		RETAINER RING OUTER

Drive Components Assembly

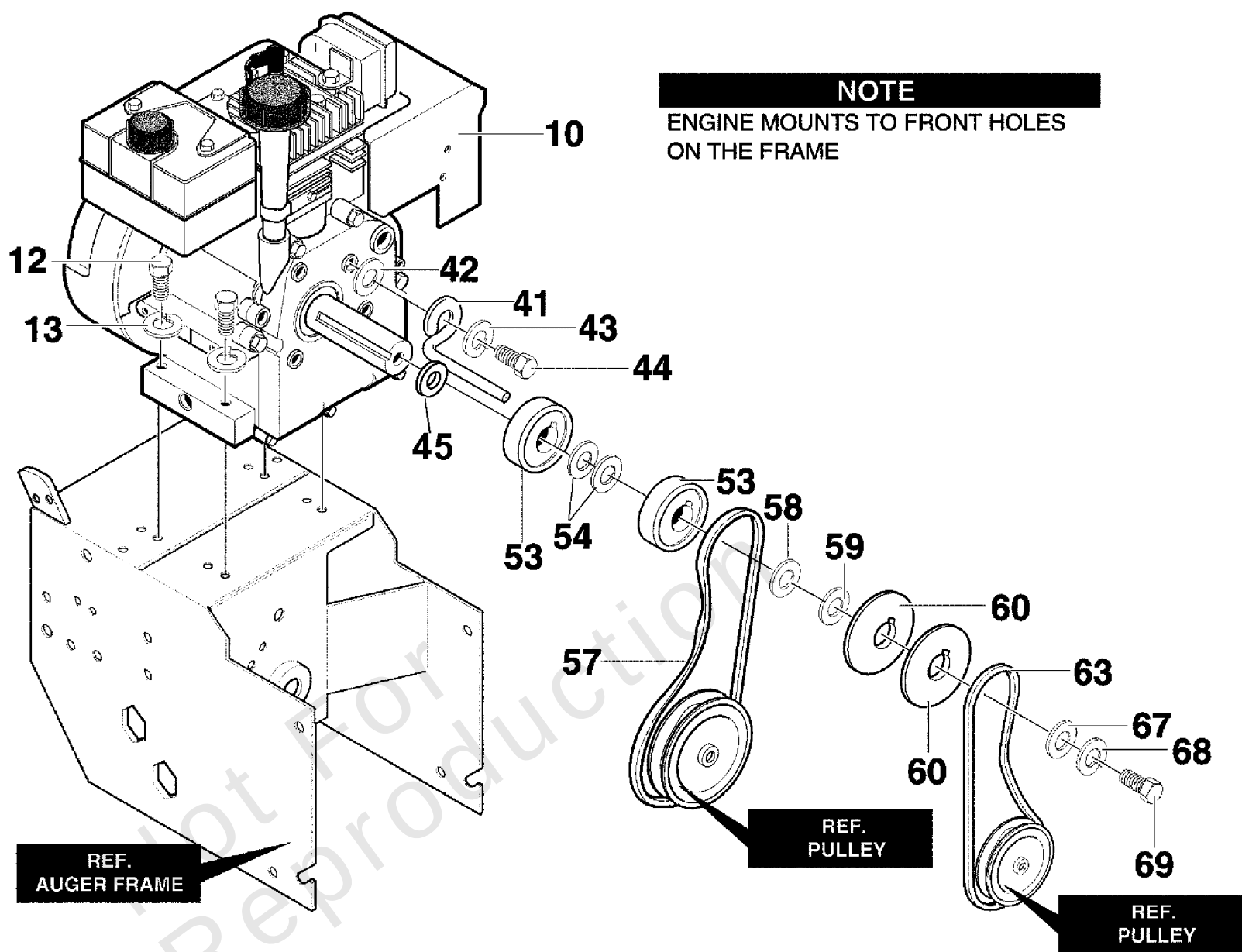
Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 622515x31B



Drive Components Assembly

REF NO	PART NO	QTY	DESCRIPTION
190	761820MA		LEVER, ASSY TRACTION CLUTCH
191	53703MA		BEARING, FLANGE
192	011X16MA		RING, RET E
193	53818MA		SPRING, RETURN
195	579937MA		LEVER, SPRING
196	11871MA		SCREW, 1/4-20X .63
198	782585		NUT, 1/4-20 REGHEXCTRLK
210	583163-821		DISC, ASSY
211	583206MA		ZERK, GREASE
215	583155MA		SHAFT, HEX TRACTION
216	85501MA		BEARING, TRUNION
217	71074		FLATWASHER, .53 X1.00X.063
221	73811MA		RING, RETEX
222	580969MA		FLATWASHER, .680X1.12X.060
223	043846		BEARING, BALL
224	2001022MA		KEY,SQUARE 3/16 X 3/4
225	580961MA		PULLEY, V3L 6.50X .56
226	580965MA		WASHER, WAVE
227	712123		FLATWASHER, .281X1.00X.063
228	071059MA		WASHER, SPLIT .26X.50X.06
229	302628MA		SCREW, 1/4-20X .75 HH
230	334163MA		BEARING & RETAINER
231	780055MA		SCREW, 5/16-18 x 0.50
235	579858MA		WASHER.502-0.75-.06 F
240	579897MA		HEX, ASSY #40-8T W/PBRG
243	783002MA		RING, RETEX
244	71074		FLATWASHER, .53 X1.00X.063
245	337029MA		BEARING, TRUNION
246	313883		WHEEL, ASSY FRICTION
247	11871MA		SCREW, 1/4-20X .63
249	303008MA		NUT, 1/4-20 HEXKEPS
250	579858MA		WASHER.502-0.75-.06 F
255	334163MA		BEARING & RETAINER
256	780055MA		SCREW, 5/16-18 x 0.50
270	334163MA		BEARING & RETAINER
271	780055MA		SCREW, 5/16-18 x 0.50
275	761961		JACK, ASSY #41-36/7
276	334163MA		BEARING & RETAINER
277	780055MA		SCREW
278	579867MA		CHAIN ROLLER



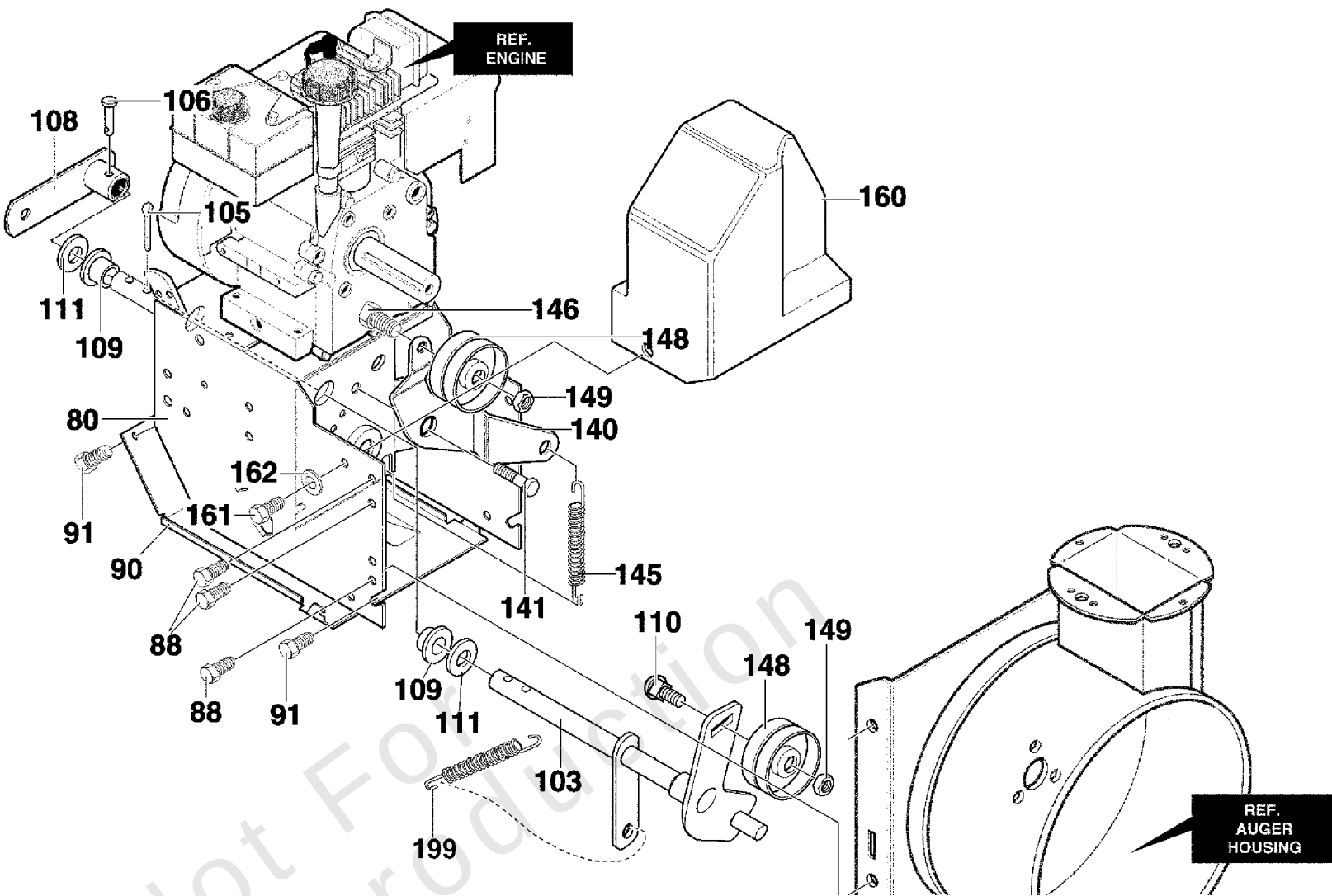
Engine Assembly

REF NO	PART NO	QTY	DESCRIPTION
10	-----		ENGINE -(See Engine Manual)
12	710024		SCREW, 5/16-18
13	120638		WASHER, SPTLK .31X.58X.08
41	3949MA		GUIDE, ROD BELT
42	6711MA		WASHER, PLASTIC .315X
43	120638		WASHER, SPTLK .31X.58X.08
44	910828MA		SCREW, 5/16-24 x 1.00
45	762291MA		SPACER
53	579854MA		PULLEY, HALF
54	579861MA		WASHER, FLAT .752X.91X.02
57	579932MA		BELT, V 3L 33.13LG
58	712120MA		FLATWASHER .765X1.12X.06
59	586251MA		SPACER, SLEEVE
60	586253		PULLEY, ENGINE
63	581264MA		BELT, V 4L35.6 LG
67	50677MA		WASHER, FLAT .375X1.25X.104
68	018X31MA		WASHER,HVSPTLK .38ID
69	39573MA		SCREW, 3/8-24 x 1.00
--	F-001090J		OWNER'S MANUAL

Frame Components Assembly

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 622515x31B



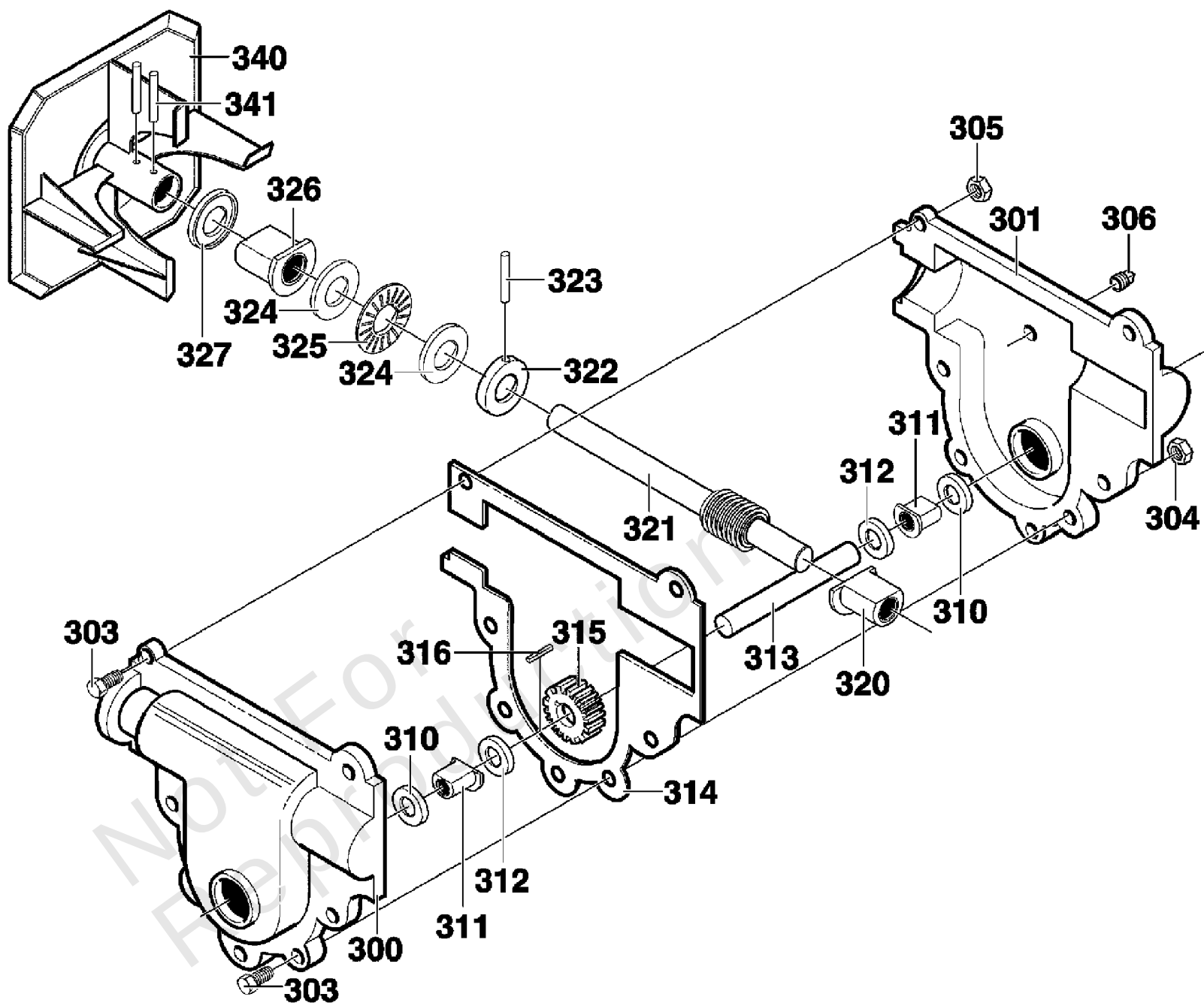
Frame Components Assembly

REF NO	PART NO	QTY	DESCRIPTION
80	761702-898		FRAME ASSY
88	780055MA		SCREW, 5/16-18 x 0.50
90	583031-821		COVER, BOTTOM
91	310169MA		SCREW, 1/4-20X .63 WA
103	762295MA		IDLER ASSEMBLY
105	711682MA		PIN, HAIR .38DIAx1.64LG
106	761761MA		PIN, CLEVIS 3/16" DIA
108	761766MA		ASSY., SPRING ATTACH
109	53703MA		BEARING, FL.
110	585781MA		BOLT, 3/8-16X1.25 CARR.
111	711617		WASHER, FLAT
140	761701MA		LEVER, IDLER ARM TRACTION
141	329989MA		BOLT, .625X.135 HHSH 5/16-18
145	53704MA		SPRING, IDLER TRACTIO
146	761760		SCREW, 3/8-16 x 1.25
148	50793MA		PULLEY, IDLER
149	41529MA		NUT, 3/8-16 HXCTRLKJA
160	760481		COVER, BELT
161	310169MA		SCREW, 1/4-20X .63 WA
162	71067MA		WASHER, FLAT
199	760988MA		SPRING, IDLER AUGER DRIVE

Gear Case

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 622515x31B



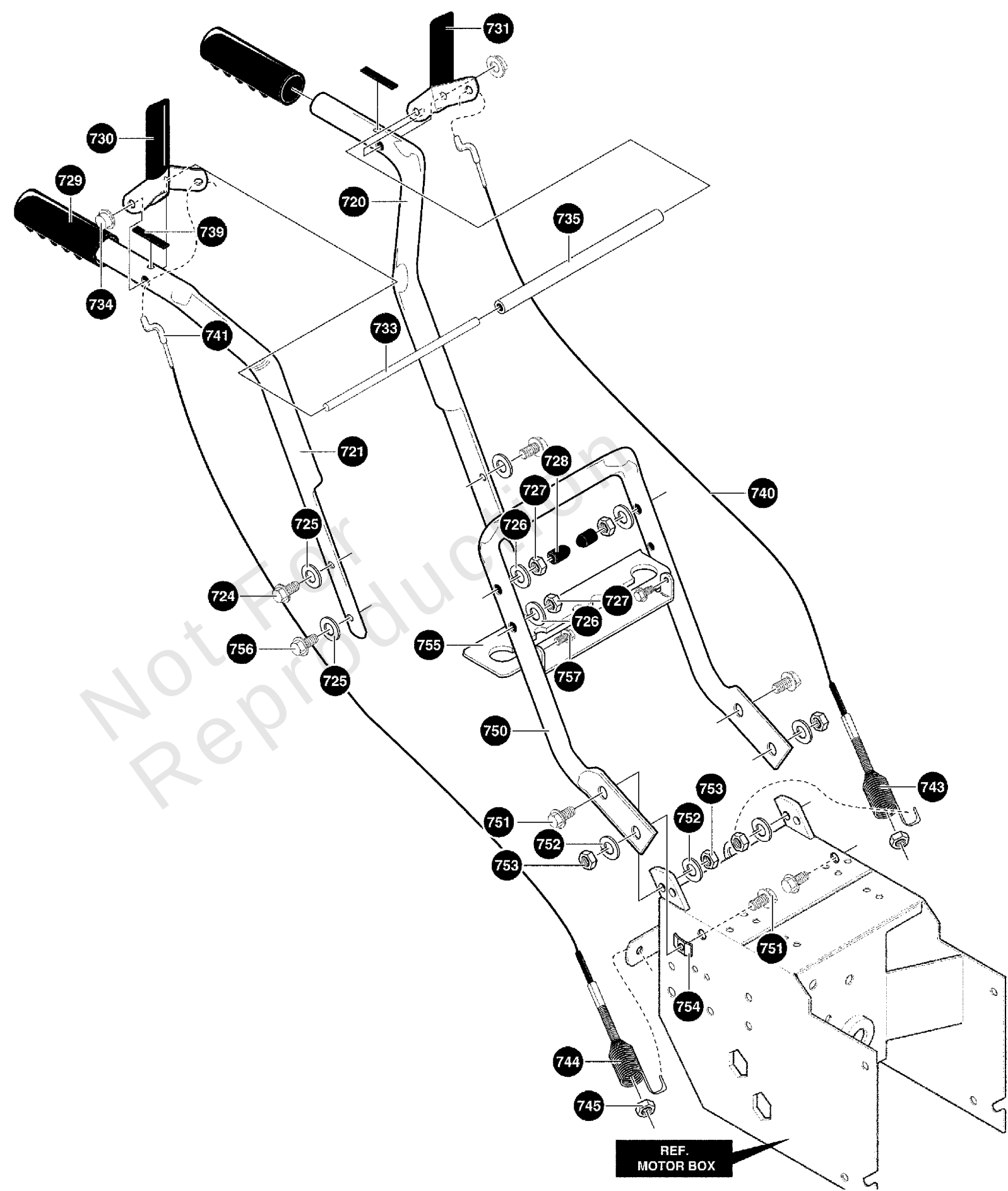
Gear Case

REF NO	PART NO	QTY	DESCRIPTION
300	10577MA		CASE, GEAR, RH
301	10576MA		CASE, GEAR, LH
303	710025		SCREW,1/4-20X.75
304	302635		NUT,1/4-20
305	303008MA		NUT, 1/4-20 HEXKEPS
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	583125MA		SHAFT, AUGER INPUT
322	580295MA		COLLAR,THRUST.753X1.2
323	454565MA		PIN, SPRING.250DIAX1.
324	48275MA		WASHER, FLAT .752X1.
325	313828		BRNG, ROLL
326	50304MA		BRNG, FL .752IDX1.002
327	9566MA		SEAL, OIL, .75 X 1.19
340	760194-821		IMPELLER
341	454565MA		PIN, SPRING.250DIAX1.
--	333431MA		LUBRIPLATE, GR132, 14oz -(Not Illustrated)

Handle Assembly

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 622515x31B



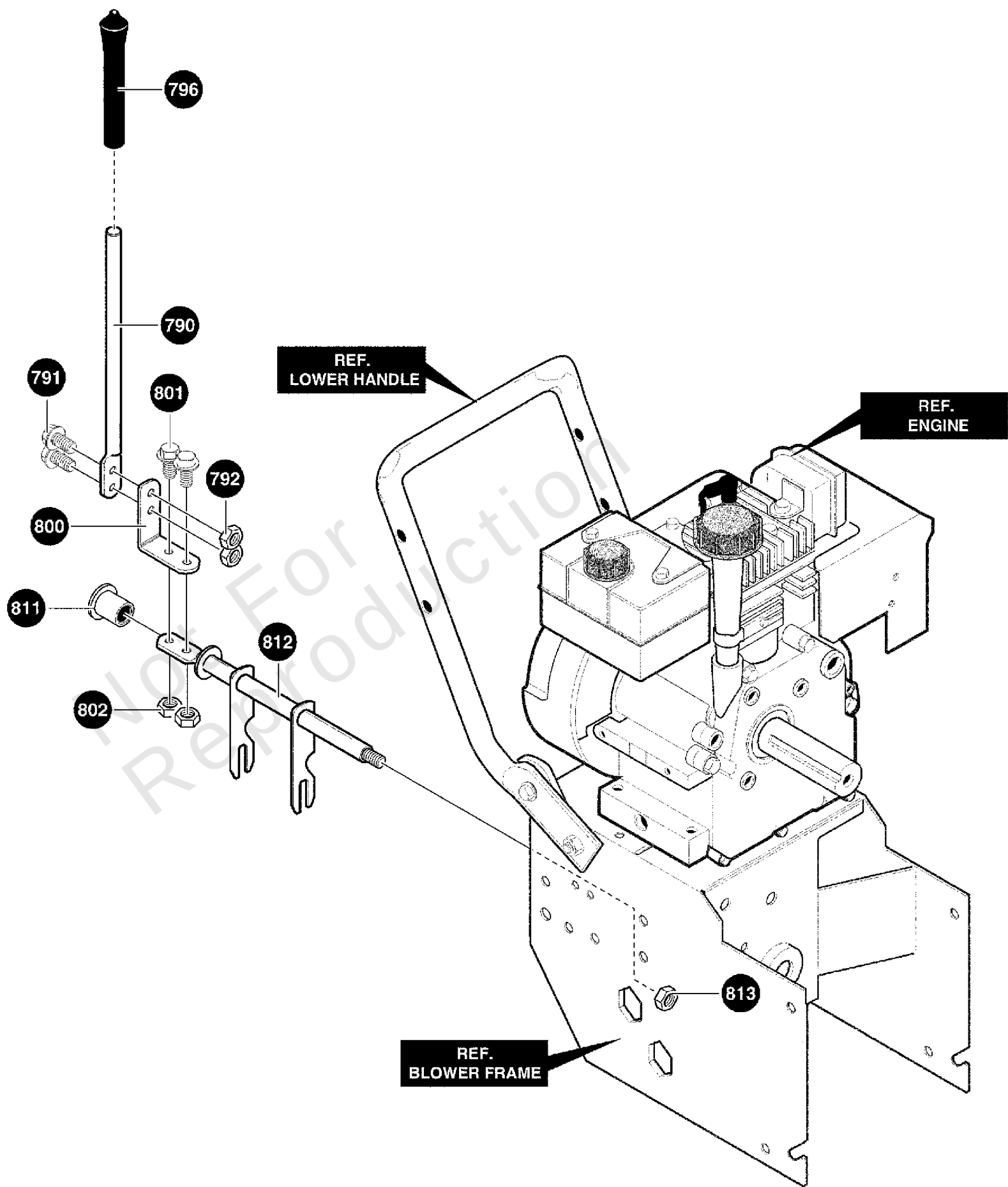
Handle Assembly

REF NO	PART NO	QTY	DESCRIPTION
720	762335-821		HANDLE, UPPER LH
721	762336-821		HANDLE, UPPER RH
724	11234MA		SCREW, 5/16-18 x 2.75
725	120393		WASHER, FLAT .349X.69X.066
726	120638		WASHER, SPTLK .31X.58X.08
727	71037		NUT, 5/16-18 REGHEX
728	11261MA		STOP, RED PLASTIC
729	337399MA		GRIP-HANDLE FINGER
730	337816-853		LEVER, ASSY CLUTCH DRIVE RH
731	337815-853		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	1579MA		CABLE, CLUTCH 28.44L
741	761589MA		CABLE, AUGER CLUTCH
743	579869MA		TENSION SPRING
744	1673MA		SPRING, AUGER CLUTCH,
745	780029		NUT, 1/4-20
750	339541-821		HANDLE, LOWER
751	001X84MA		CAPSCREW, Hex Head, 5/16-18 x 1
752	120638		WASHER, SPTLT
753	71037		NUT, 5/16-18 REGHEX
754	309436MA		PUSHNUT, 5/16 BOLT RETAINER
755	337407-821		BRKT, GEAR SELECTOR
756	180087		SCREW, 5/16-18 x 2.00
757	300303MA		SCREW, .25X.75X.51

Shift Yoke Assembly

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 622515x31B



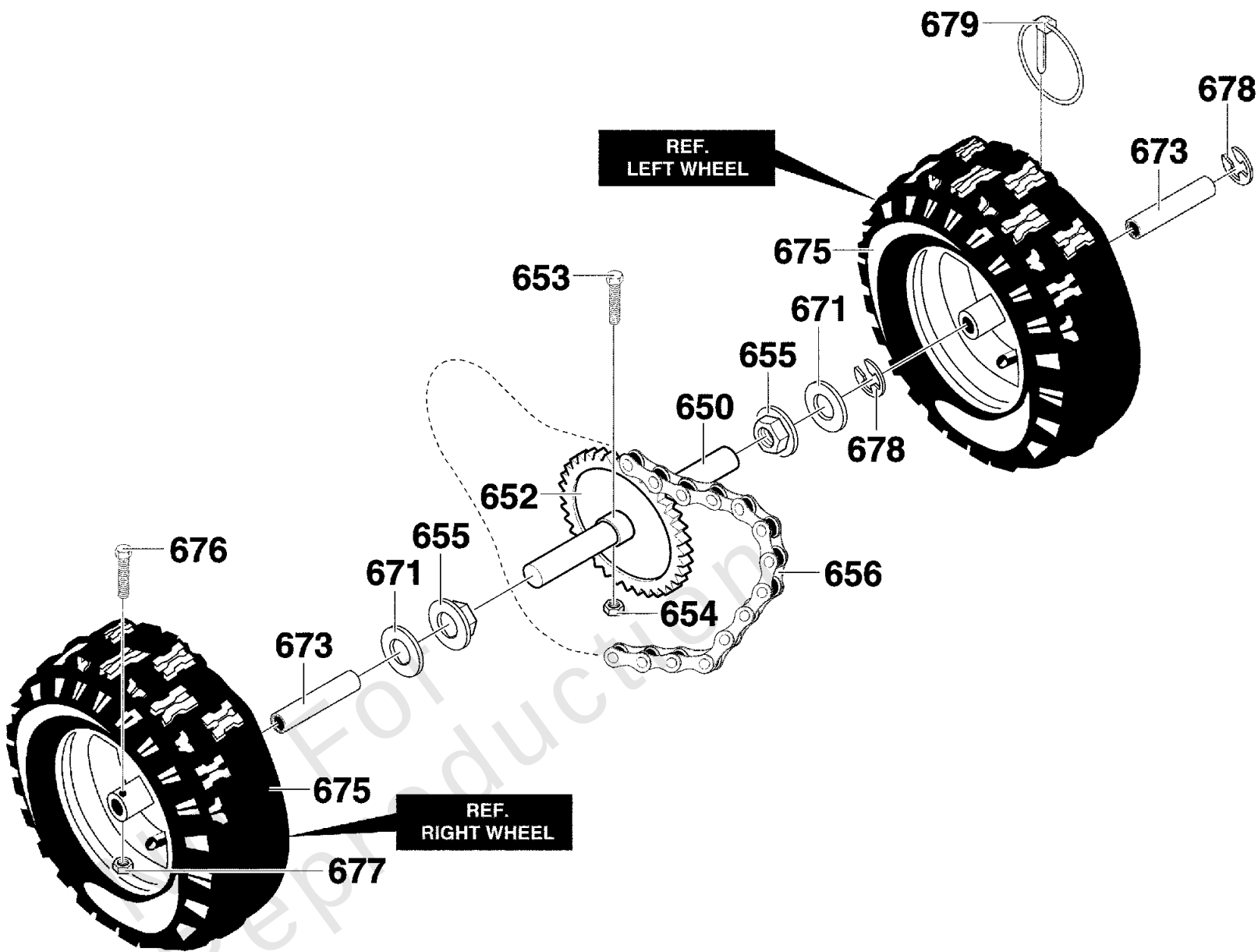
Shift Yoke Assembly

REF NO	PART NO	QTY	DESCRIPTION
790	762299-821		ROD, SHIFT
791	302628MA		SCREW, 1/4-20X .75 HH
792	782585		NUT, 1/4-20 REGHEXCTRLK
796	331624MA		KNOB, SLIP PLASTISOL
800	762333		LEVER, SPRING
801	302628MA		SCREW, 1/4-20X .75 HH
802	782585		NUT, 1/4-20 REGHEXCTRLK
811	579944MA		BRNG FL .500ID X .88
812	581795		ROD, ASSY. YOKE
813	071111		NUT, 3/8-16 HEXCTRLK

Wheels Assembly

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 622515x31B



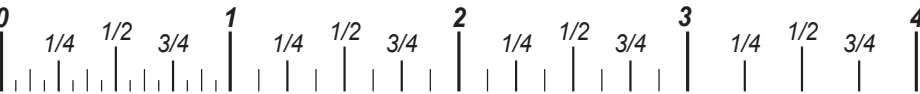
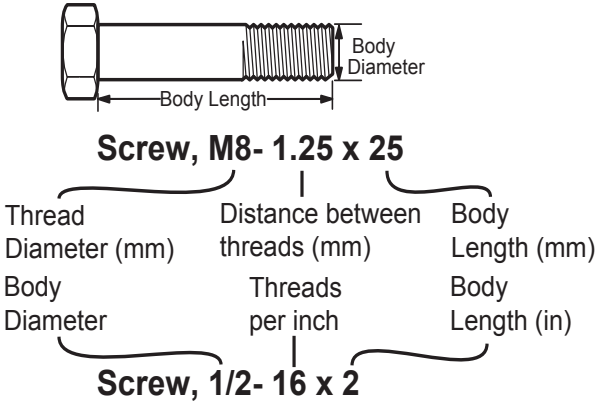
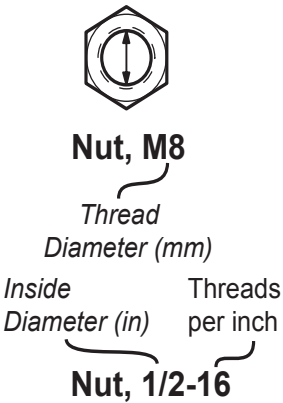
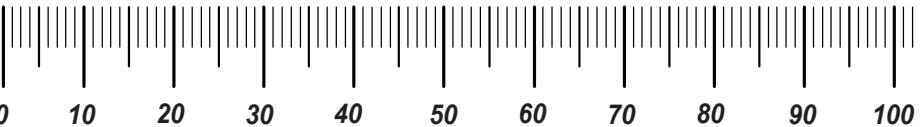
Wheels Assembly

REF NO	PART NO	QTY	DESCRIPTION
650	580883MA		SHAFT, AXLE
652	583012MA		SPRKT & HUB
653	73839MA		SCREW, 1/4-20X2.25
654	780029		NUT, 1/4-20 HEX NYLOCK
655	581730MA		BRNG, FL
656	579867MA		CHAIN, ROLLER
671	712120MA		FLATWASHER .765X1.12X.06
673	585591MA		BUSHING, WHEEL
675	318504MA		TIRE & RIM
676	577015MA		SCREW, SHR 1/4-20X1.7
677	780029		NUT, 1/4-20 HEX NYLOCK
678	239MA		RING, RET
679	73842MA		PIN, KLIK .25 X 1.38 DIA

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).

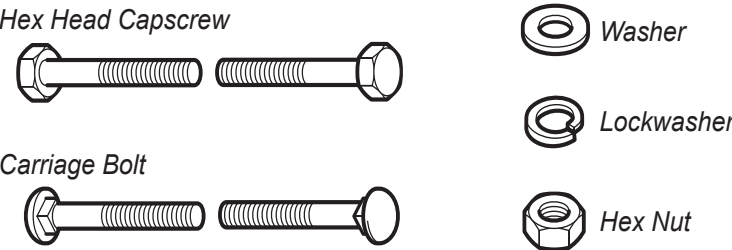
When bolt or capscrew is identified as 1/2 - 16 x 2" (M8 - 1.25 x 50), this means the *Nominal size*, or body diameter is 1/2 inch (8mm metric thread diameter), the second number, 16, represents the *threads per inch*, (*distance between threads*). The final number is the body length of the bolt or screw,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

