

522E / 522EX

22" Single Stage Snowthrowers

Attachment

Mfg. No.	Description
1695468	522E, 22" Single Stage Snow Thrower
1695514	522EX, 22" Single Stage Snow Thrower

Not for
Reproduction

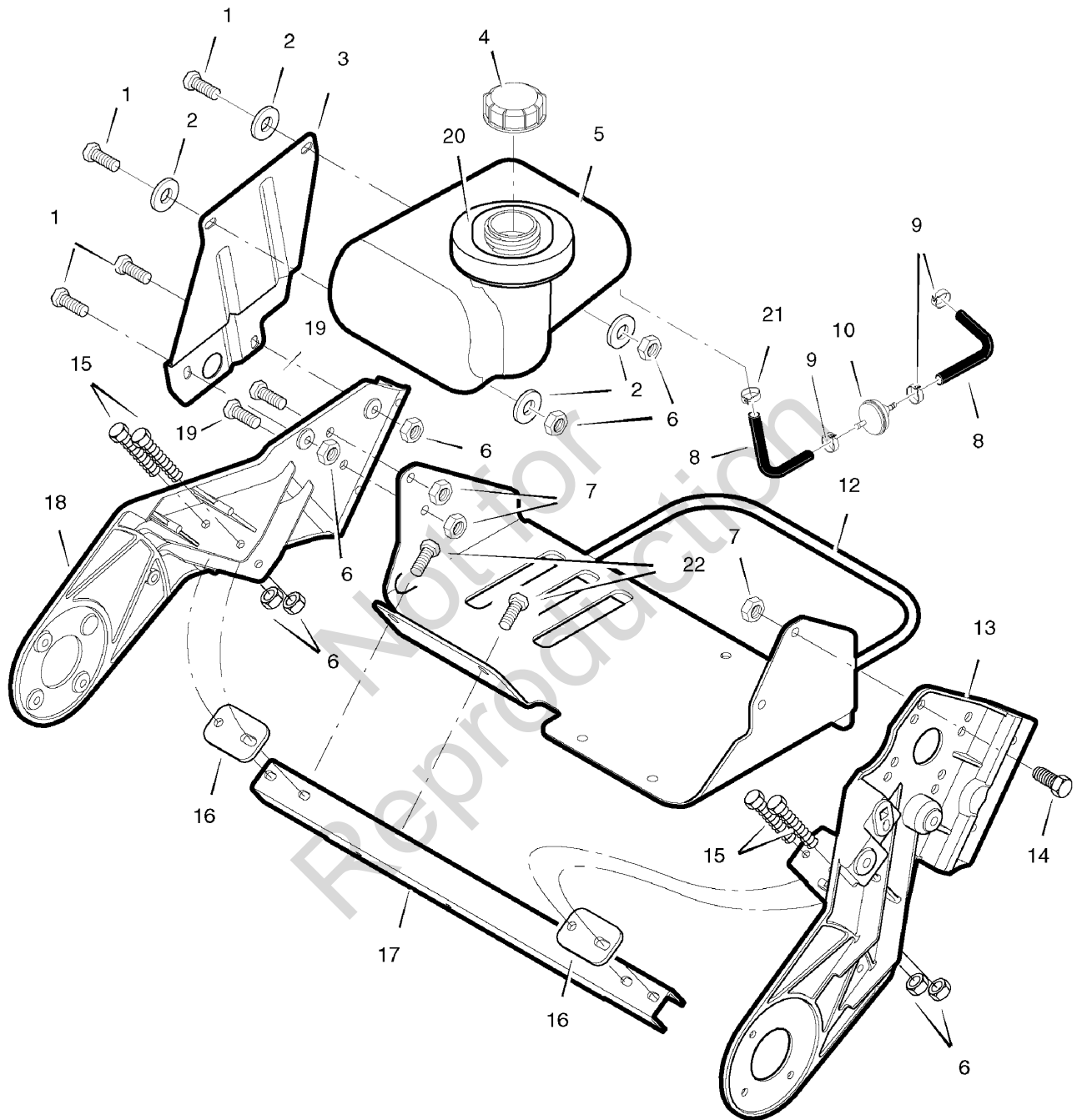
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Frame and Fuel Tank

0005

NOTE: Unless noted otherwise,
use the standard hardware torque
specification chart.



The above parts group applies to the following Mfg. Nos.:

1695468 - 522E

1695514 - 522EX

Frame and Fuel Tank

REF NO	PART NO.	QTY.	DESCRIPTION
1	302628MA	9	SCREW, 1/4 - 20 x 3/4
2	71067MA	18	WASHER
3	1741771HYP	1	BRACKET, Fuel Tank
4	1715917SM	1	CAP, Fuel Tank
5	1716634SM	1	TANK, Fuel
6	73826MA	20	NUT, Hex 1/4 - 20
7	71391MA	6	NUT, Hex 5/16 - 18
8	7200111YP	1	HOSE, Fuel Line, Low Perm, 9" (Cut to length)
9	323387MA	1	CLAMP, Fuel Line
10	298090S	1	FILTER, Fuel Line
12	1741989HYP	1	CRADLE ASSEMBLY, Engine
13	1501872E701MA	1	FRAME, L.H.
14	48901MA	1	SCREW, 5/16-18 x 5/8
15	180044MA	5	SCREW, 1/4 - 20 x 2
16	335351MA	1	PLATE, Mounting Support
17	1501851MA	1	SUPPORT, Frame
18	1741988AYP	1	FRAME, R.H.
19	180077MA	2	SCREW, 5/16-18 x 3/4
20	1740032MA	1	RING, Foam
21	47345MA	1	CLAMP, Fuel Line
22	310169MA	2	SCREW, 1/4 - 20 x 5/8

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Footnotes

The above parts group applies to the following Mfg. Nos.:

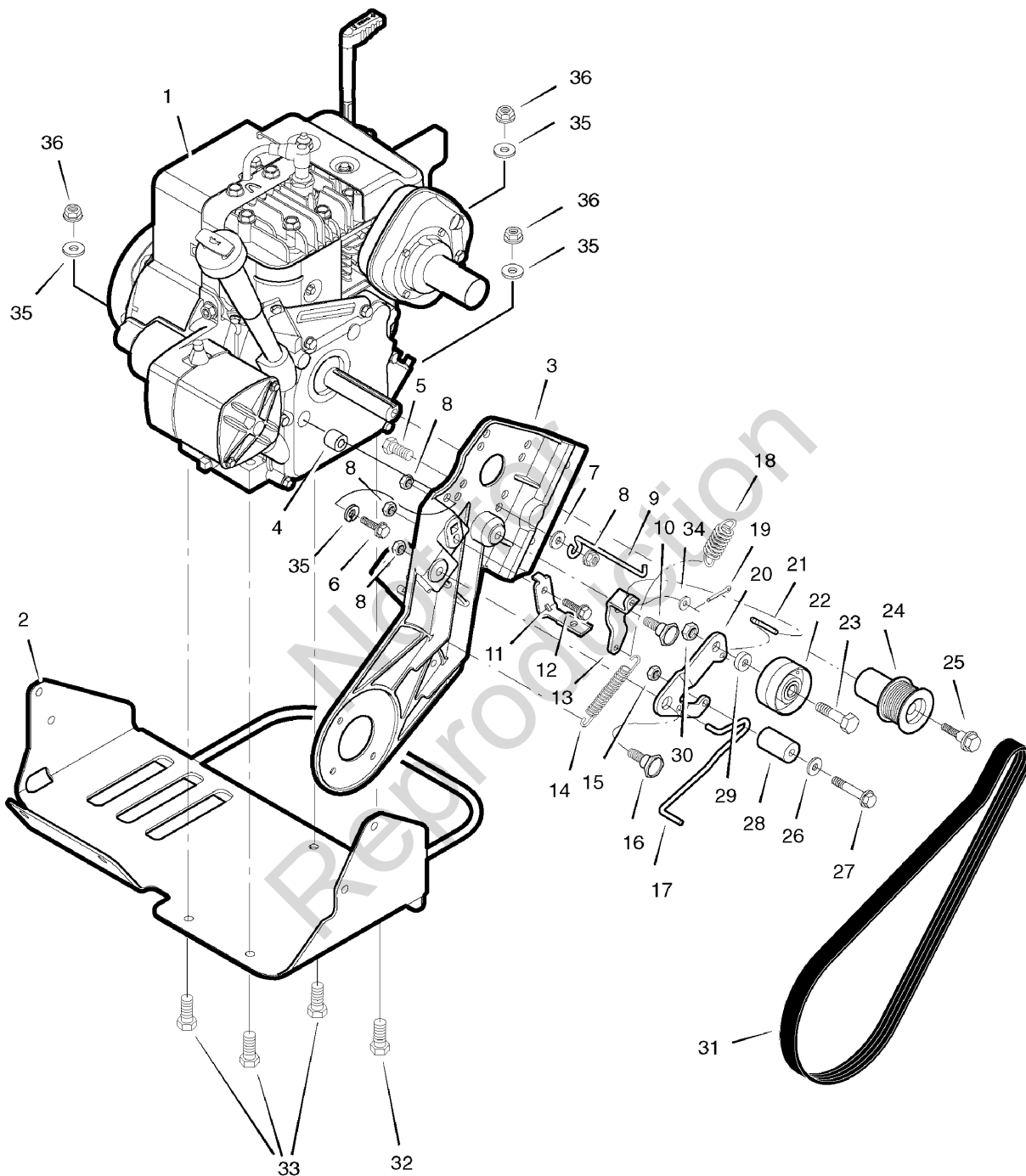
1695468 - 522E

1695514 - 522EX

Engine Drive System

0003

NOTE: Unless noted otherwise,
use the standard hardware torque
specification chart.



The above parts group applies to the following Mfg. Nos.:

1695468 - 522E

1695514 - 522EX

Engine Drive System

REF NO	PART NO.	QTY.	DESCRIPTION
1	----	1	ENGINE, 5.25GT 4CY B&S Electric Start * (Model # 09A4130202E1, Domestic Only)
1	----	1	ENGINE, 5.25GT 4CY B&S Electric Start * (Model # 09A4130203E1, CE/Export Only)
2	1741989HYP	1	CRADLE ASSEMBLY, Engine
3	1501872E701MA	1	FRAME, L.H.
4	1502027MA	1	ANTI-VIBRATION MOUNT, Engine
5	1X216MA	1	BOLT, Hex, 5/16 - 18
6	6X118MA	1	BOLT, Hex, 5/16 - 24
7	71071MA	3	WASHER, Flat
8	71391MA	6	NUT, Hex Center Lock, 5/16 - 18
9	334079MA	1	GUIDE, Belt
10	333594MA	2	BOLT
11	333970MA	1	PAD, Brake
12	579052MA	3	SCREW, 1/4 - 20 x 5/8
13	313444MA	1	IDLER, Arm Pivot
14	313473MA	1	SPRING
15	73826MA	20	NUT, Hex 1/4 - 20
16	333594MA	2	BOLT
17	1501009MA	1	WIRE, Brake
18	313471MA	1	SPRING
19	121223MA	1	PIN, Cotter
20	1741727YP	1	ARM, Idler
21	313436MA	1	ROD, Clutch Linkage
22	48924MA	1	PULLEY, Idler
23	1741500MA	1	SCREW, 3/8 - 16 x 1-5/8
24	1501908MA	1	PULLEY, Engine
25	1501907MA	1	BOLT, Engine Pulley
26	71067MA	18	WASHER, Flat
27	180044MA	5	SCREW, 1/4 - 20 x 2
28	1501010MA	1	PINCH ROLLER
29	1741499MA	1	SPACER, Idler
30	590MA	1	NUT, Hex
31	33721MA	1	BELT, Drive
32	001X81MA	1	BOLT, Hex, 5/16 - 18
33	47792MA	3	SCREW, 3/8 - 16 x 1
34	414106MA	3	WASHER, Flat
35	71060MA	3	LOCKWASHER, Split
36	71037MA	6	NUT, 5/16 - 18

Footnotes

Note* For information on Replacement Parts contact the engine

The above parts group applies to the following Mfg. Nos.:

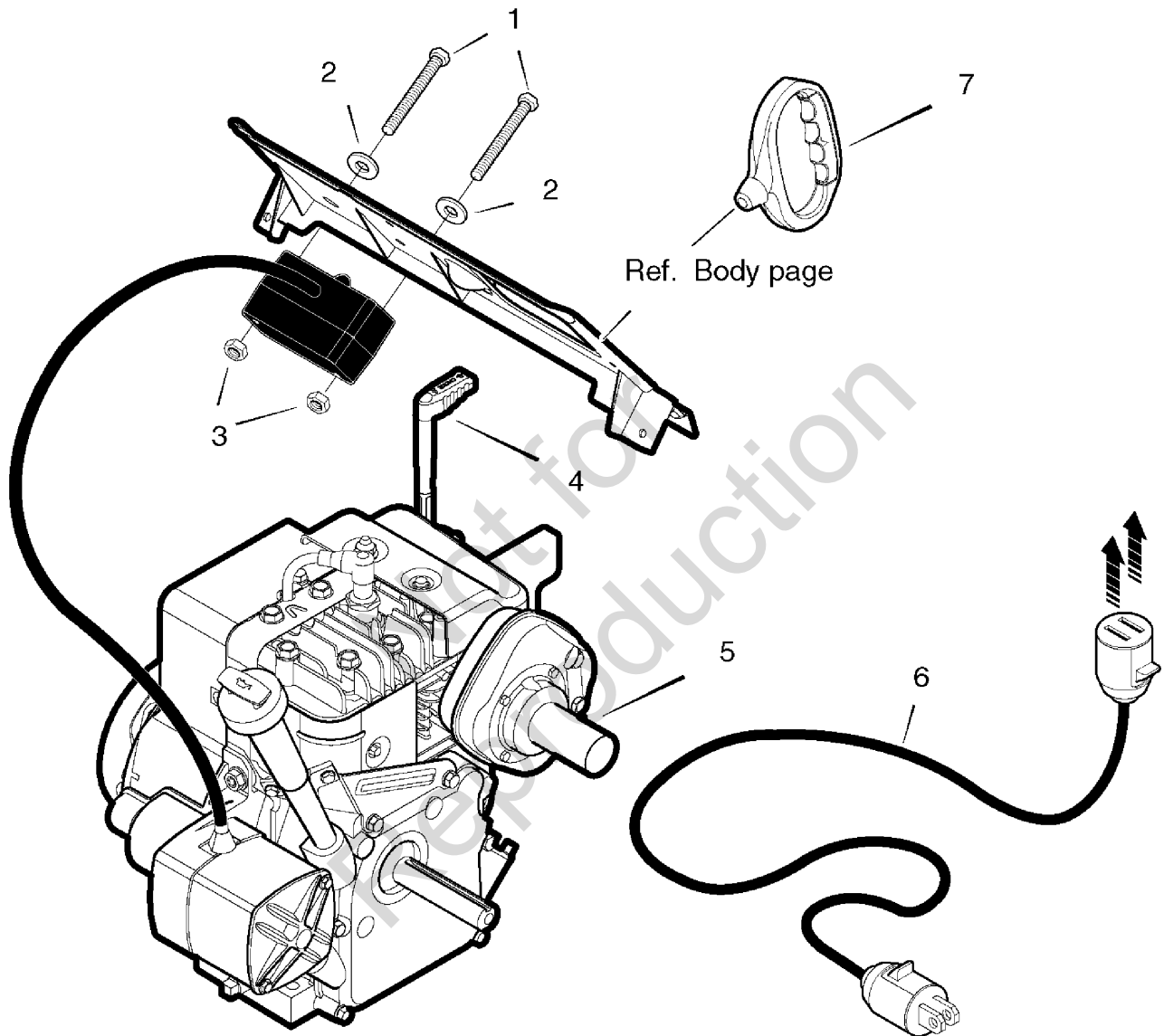
1695468 - 522E

1695514 - 522EX

Electric Starter

NOTE: Unless noted otherwise,
use the standard hardware torque
specification chart.

0009



The above parts group applies to the following Mfg. Nos.:

1695468 - 522E

1695514 - 522EX

Electric Starter

REF NO	PART NO.	QTY.	DESCRIPTION
1	311633MA	2	SCREW, # 8 - 32 x 3
2	414106MA	2	WASHER
3	271163MA	2	NUT, Keps
4	791534	1	LEVER, Choke *
5-1	699565	1	Muffler *
5-2	691880	1	GASKET, Muffler *
5-3	699554	1	SCREW, Torx, Socket-Head, Muffler *
5-4	71060MA	1	WASHER, Split Lock
5-5	71037MA	1	NUT, Hex, 5/16 - 18
5-6	001X81MA	1	BOLT, Hex, 5/16 - 18
6	6219MA	1	CORD, Extension (Domestic Only)
6	761332MA	1	CORD, Extension (CE/Export Only)
7	699334	1	GRIP, Mitten

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Footnotes

Note* For information on Replacement Parts contact the engi

The above parts group applies to the following Mfg. Nos.:

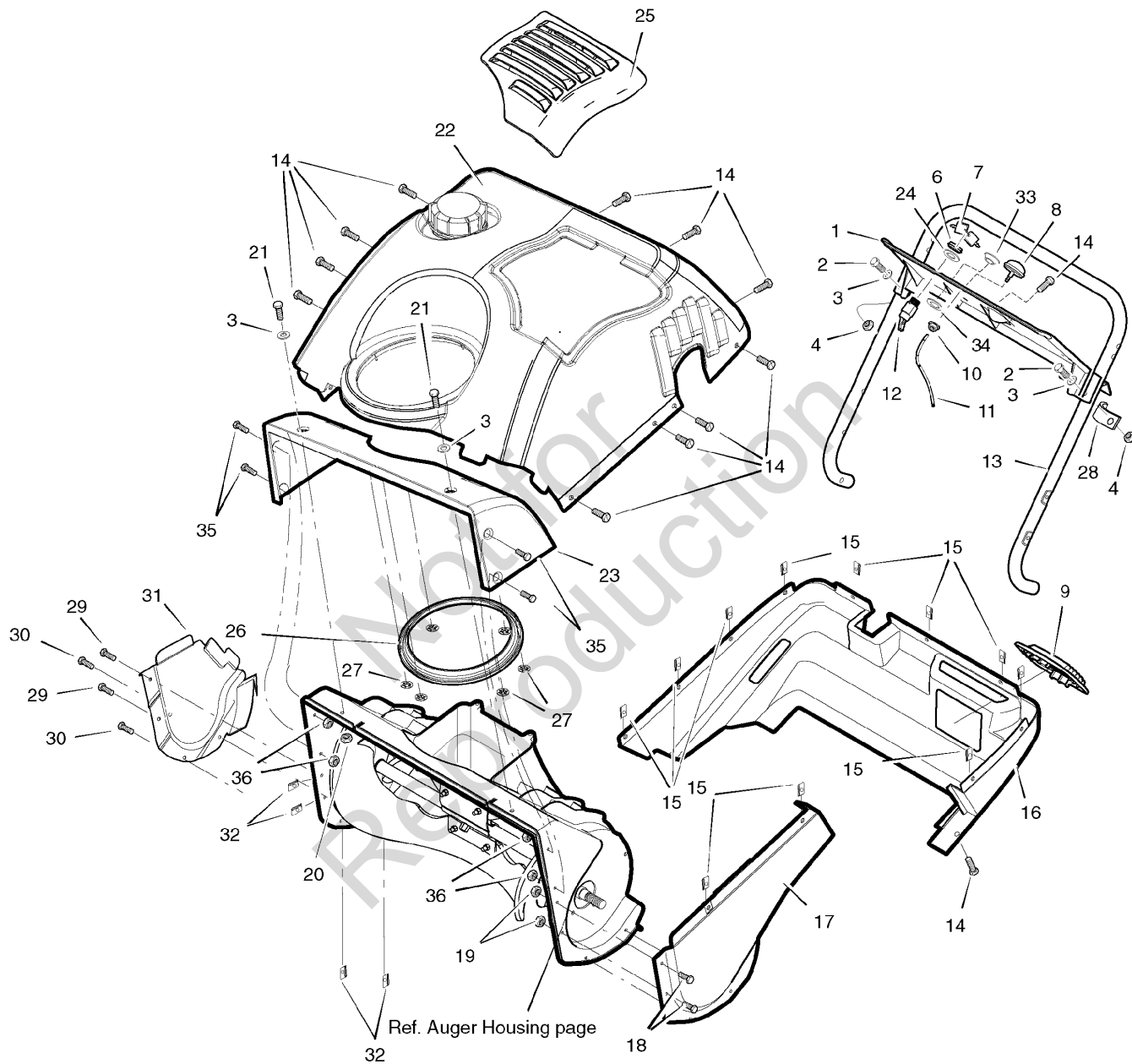
1695468 - 522E

1695514 - 522EX

Body Covering

0015

NOTE: Unless noted otherwise,
use the standard hardware torque
specification chart.



The above parts group applies to the following Mfg. Nos.:

- 1695468 - 522E
- 1695514 - 522EX

Body Covering

REF NO	PART NO.	QTY.	DESCRIPTION
1	1740006MA	1	PANEL, Control
2	313674MA	4	SCREW, 1/4 - 20 x 1-1/4
3	71067MA	4	WASHER
4	15X143MA	1	NUT, 1/4 - 20
6	300193MA	1	NUT, 5/8 - 32
7	691959	1	KEYS & RING, Starter
8	394281S	1	BULB, Fuel Primer
9	1501878MA	1	COVER, Access
10	271172MA	1	NUT, Keps 1/4 - 20
11	335507MA	1	HOSE, Primer, 9.5"
12	56992MA	1	SWITCH, Ignition
13	1741982HYP	1	HANDLE, Lower
14	1740053MA	4	SCREW, 1/4 - 14 x 3/4
15	578109MA	14	NUT, 1/4 - 10
16	1740004MA	1	COVER, Bottom
17	1740005MA	1	COVER, Belt
18	1740051MA	4	SCREW, 10 - 24 x 1/2
19	1740052MA	4	NUT, Hex Center Lock, 10 - 24
20	1740056MA	2	LOCKNUT, Hex 1/4 - 20
21	1740425MA	2	SCREW, 1/4 - 20 x 9/10
22	1740058SM	1	COVER, Top
23	1740007MA	1	COVER, Auger Top
24	313683MA	1	WASHER
25	1740002MA	1	COVER, Oil Access
26	1501995MA	1	Gasket, Chute Ring
27	028X85MA	6	NUT, Push Pal
28	583435MA	1	CLIP, Cable
29	1740426MA	2	SCREW, 10-24 x .72
30	1740427MA	2	SCREW, 10-24 x .95
31	1740071SM	1	COVER, R.H. Auger Housing
32	1740407MA	4	J-NUT, 1/4-10
33	1502074MA	1	GROMMET, Rope
34	1502075MA	1	WASHER, Rope Grommet
35	12342MA	4	SCREW, 10-24 X 1/2"
36	312300MA	4	NUT, Hex, Center-lock, 10-24

Footnotes

The above parts group applies to the following Mfg. Nos.:

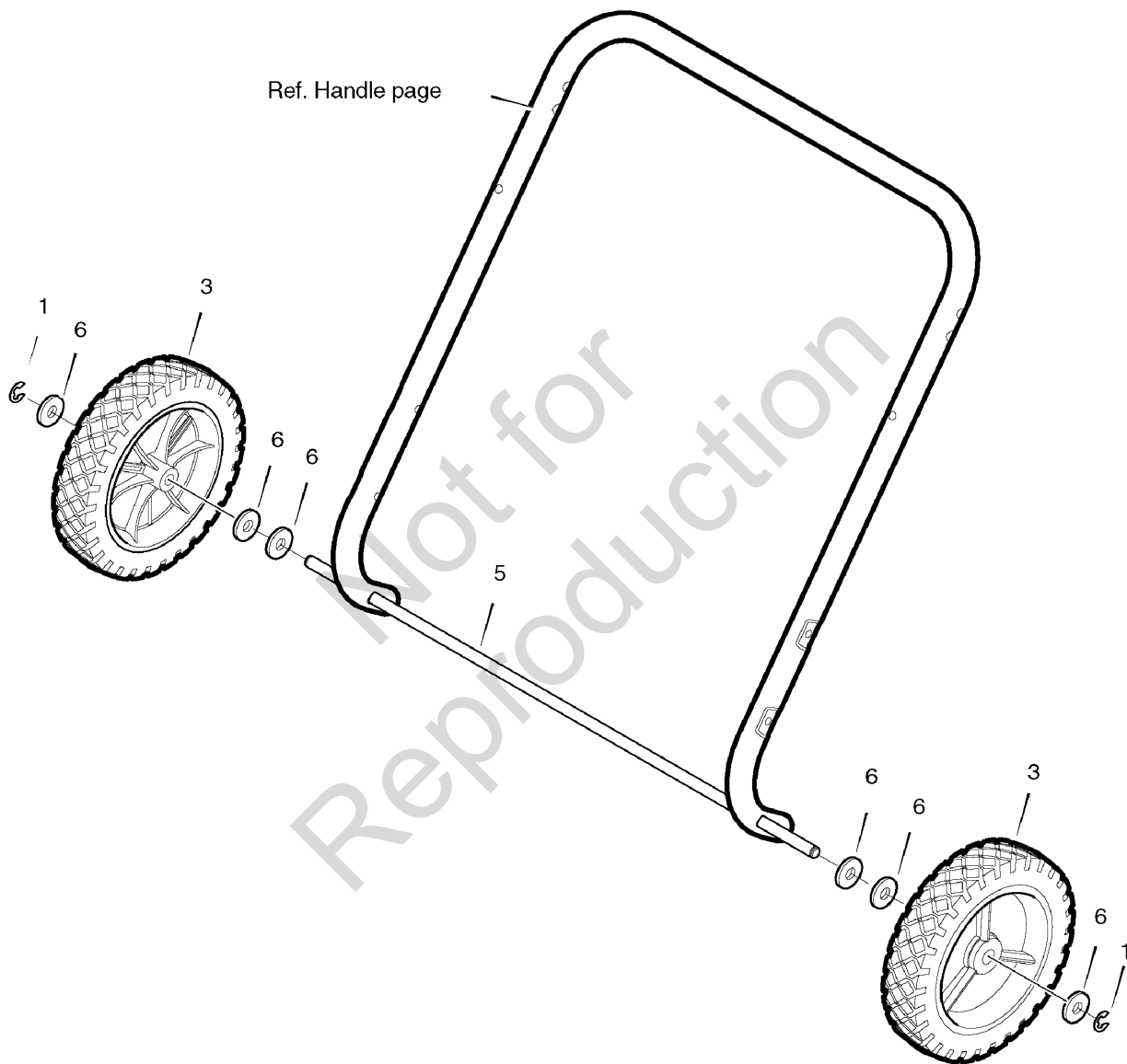
1695468 - 522E

1695514 - 522EX

Wheel Assembly

0017

NOTE: Unless noted otherwise,
use the standard hardware torque
specification chart.



The above parts group applies to the following Mfg. Nos.:

1695468 - 522E

1695514 - 522EX

Wheel Assembly

REF NO	PART NO.	QTY.	DESCRIPTION
1	577598MA	2	RETAINER, E-Ring
3	760713MA	2	WHEEL & TIRE, 7" x 1-1/2"
5	1501879MA	1	ROD, Axle
6	583409MA	6	WASHER

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Footnotes

The above parts group applies to the following Mfg. Nos.:

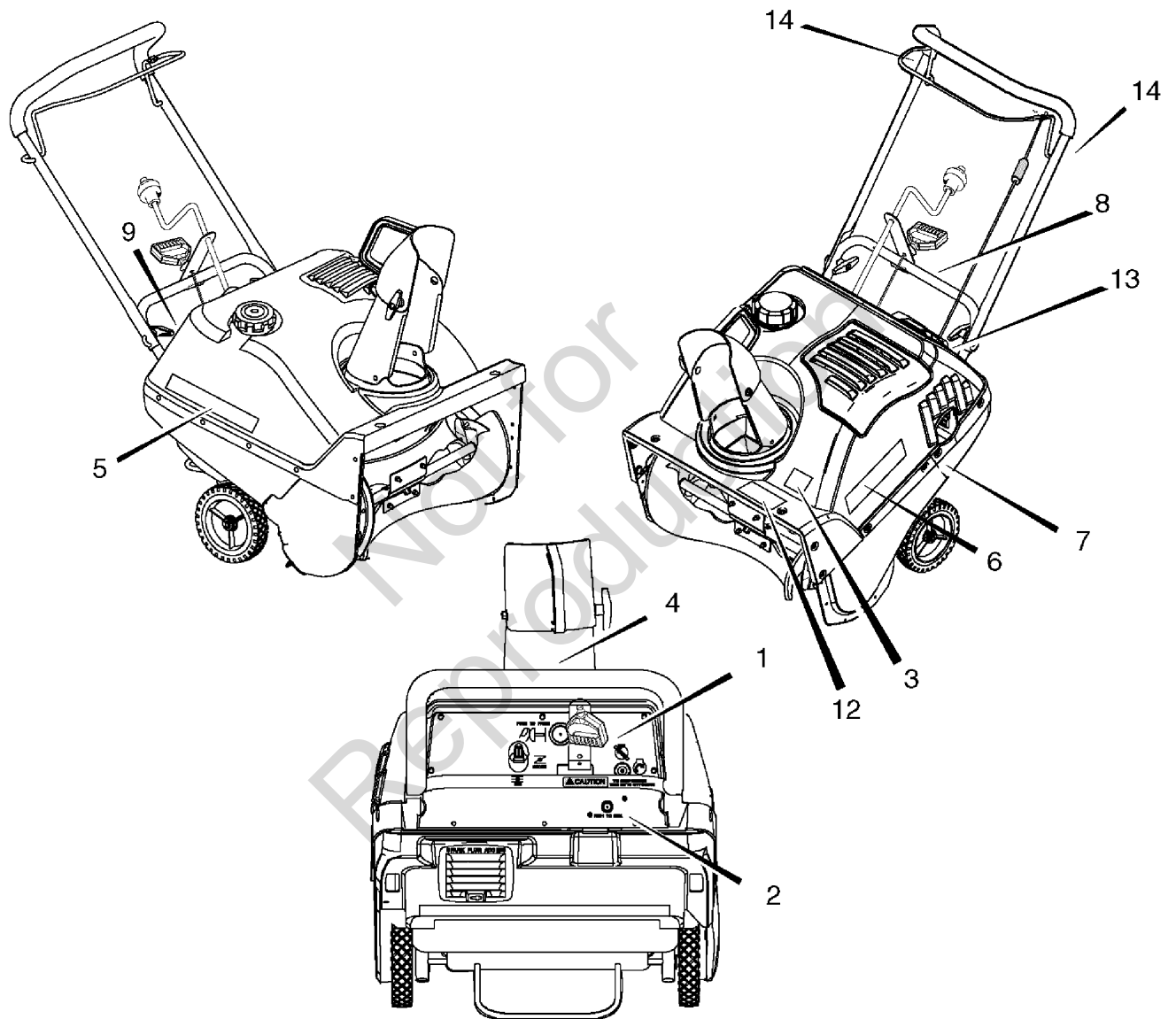
1695468 - 522E

1695514 - 522EX

Decals

NOTE: Unless noted otherwise, use the standard hardware torque specification chart.

0021



The above parts group applies to the following Mfg. Nos.:

1695468 - 522E

1695514 - 522EX

Decals

REF NO	PART NO.	QTY.	DESCRIPTION
1	1736343YP	1	DECAL, Control Panel Electric Start (Domestic Only)
1	1740400MA	1	DECAL, Control Panel Electric Start (CE/Export Only)
2	48X5668MA	1	DECAL, Electric Start
3	70141MA	1	DECAL, Danger Auger
4	48X5642MA	1	DECAL, Danger Chute
5	1740061SM	1	DECAL, 522 Simplicity R.H.
6	1740062SM	1	DECAL, 522 Simplicity L.H.
7	69880MA	1	DECAL, Hot Muffler
8	761150MA	1	DECAL, Auger Control
9	1740422MA	1	DECAL, Choke
12	1740365SM	1	DECAL, 522E
13	1742320MA	1	DECAL, Warning, Access Cover
14	1741994YP	2	DECAL, Handle protector
15	1742166	1	MANUAL, Operator's

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Footnotes

The above parts group applies to the following Mfg. Nos.:

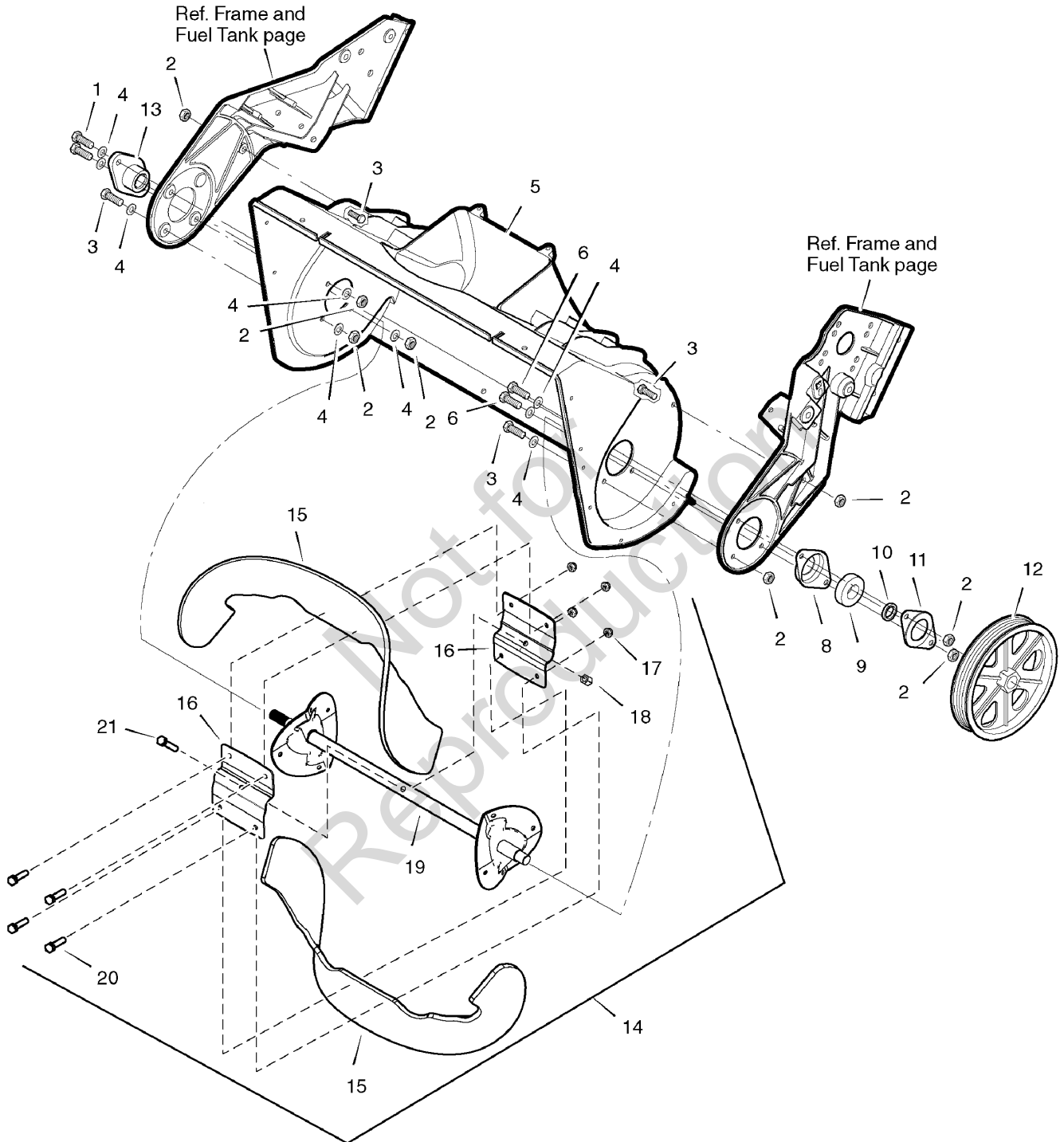
1695468 - 522E

1695514 - 522EX

Auger and Housing

0007

NOTE: Unless noted otherwise, use the standard hardware torque specification chart.



The above parts group applies to the following Mfg. Nos.:

1695468 - 522E

1695514 - 522EX

Auger and Housing

REF NO	PART NO.	QTY.	DESCRIPTION
1	710263MA	2	SCREW, 1/4 - 20 x 1
2	73826MA	2	NUT, Hex, 1/4 - 20
3	302628MA	2	SCREW, 1/4 - 20 x 3/4
4	71067MA	4	WASHER, Flat
5	1736375YP	1	HOUSING ASSEMBLY, Auger
6	579052MA	2	SCREW, 1/4 - 20 x 5/8
8	580251MA	1	BEARING, Retainer
9	43846MA	1	Bearing
10	578101MA	1	SLEEVE, Spacer
11	334287MA	1	PLATE, Bearing Retainer
12	333446MA	1	PULLEY, Auger Drive V6
13	577023MA	1	BEARING, Flange
14	1735771YP	1	AUGER HOUSING Incl. Ref. Nos. 15, 16, 17, 18, 19, 20, & 21
15	1735606YP	1	BLADE, Auger, Black
16	1735609YP	1	BRACKET, Auger, Center
17	1920397SM	12	NUT, Nylock
18	1919438SM	1	NUT, Hex-Lock, ESNA Light, 5/16-18, NC3B, Black
19	1735610YP	1	SHAFT, Sub
20	5025299X8YP	4	BOLT, 1/4-20 X 1"
21	1921221SM	1	CAPSCREW, Hex-Head, 5/16-18 x 1-1/2, G5 Black

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Footnotes

The above parts group applies to the following Mfg. Nos.:

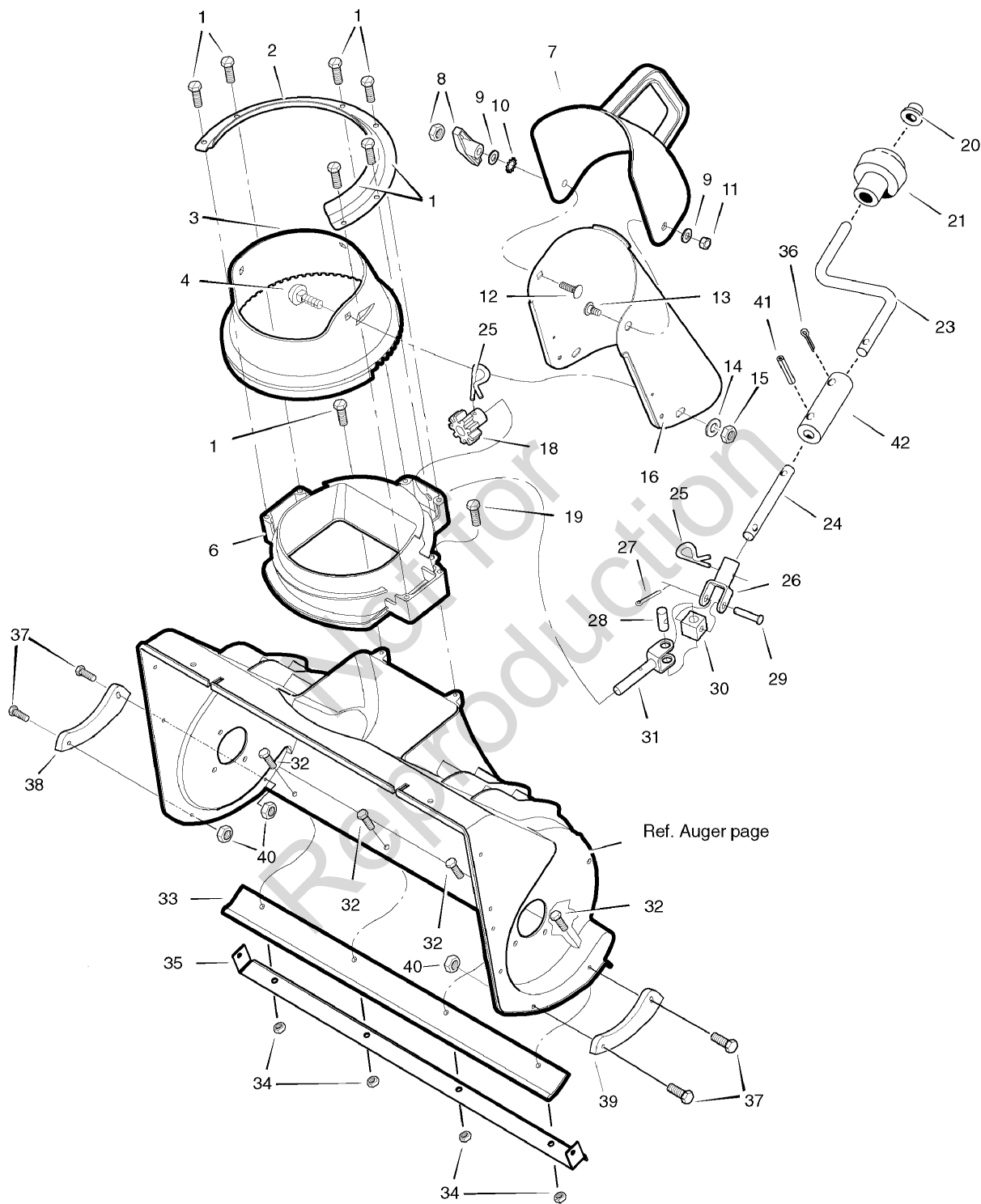
1695468 - 522E

1695514 - 522EX

Chute System

0013

NOTE: Unless noted otherwise,
use the standard hardware torque
specification chart.



The above parts group applies to the following Mfg. Nos.:

- 1695468 - 522E
- 1695514 - 522EX

Chute System

REF NO	PART NO.	QTY.	DESCRIPTION
1	313685MA	2	SCREW, 1/4 - 14
2	1502131MA	1	RETAINER, Chute Ring
3	1502132MA	1	RING, Chute
4	1740430YP	3	BOLT, Carriage, 5/16 - 18 x 3/4
6	1736069YP	1	NECK, Chute
7	1501918MA	1	CHUTE, 22" Upper
8	1501260MA	1	KNOB, Wing
9	71071MA	5	WASHER
10	1742155YP	1	LOCKWASHER, Shakeproof
11	71391MA	6	LOCKNUT, Hex, 5/16 - 18
12	1742154YP	1	BOLT, Carriage, 5/16 - 18
13	1742157YP	1	BOLT, Upper Chute
14	1740431YP	5	WASHER, Flat, 11/16
15	1740432YP	4	NUT, Nylock, 5/16-18
16	1736382YP	1	CHUTE, Lower
18	1501067MA	1	GEAR, 9-Tooth
19	313685MA	8	SCREW, 1/4 - 14 x 3/4
20	1740420MA	1	NUT, Push
21	1714084SM	1	KNOB, Sleeve
23	1733369SM	1	CRANK, Chute Rotation
24	1720576SM	1	HANDLE, Chute Rotator, Lower
25	1501293MA	2	PIN, Hair
26	1741997YP	1	YOKE ASSEMBLY, Adapter
27	579493MA	1	PIN, Cotter, .5
28	578060MA	1	PIN, Universal Joint
29	578309MA	1	PIN, Clevis
30	578063MA	1	HOUSING, Universal
31	1501873MA	1	ROD, Lower Crank
32	302628MA	9	SCREW, 1/4 - 20 x 3/4
33	1501863MA	1	BLADE, Scraper
34	15X143MA	3	LOCKNUT, Hex, 1/4 - 20
35	1734321SM	1	PLATE, Reinforcement
36	1740346MA	1	CLIP, Hairpin, 3/32 x 1-5/8"
37	1741504YP	4	SCREW, 10-32 x 3/4
38	1740398MA	1	SKID SHOE, RH
39	1740397MA	1	SKID SHOE, LH
40	1740382SM	4	NUT, Nylock, 10-32
41	1740347MA	1	PIN, Spring, 5/32 x 1"
42	1720577SM	1	SPLICE, Chute Handle

Footnotes

The above parts group applies to the following Mfg. Nos.:

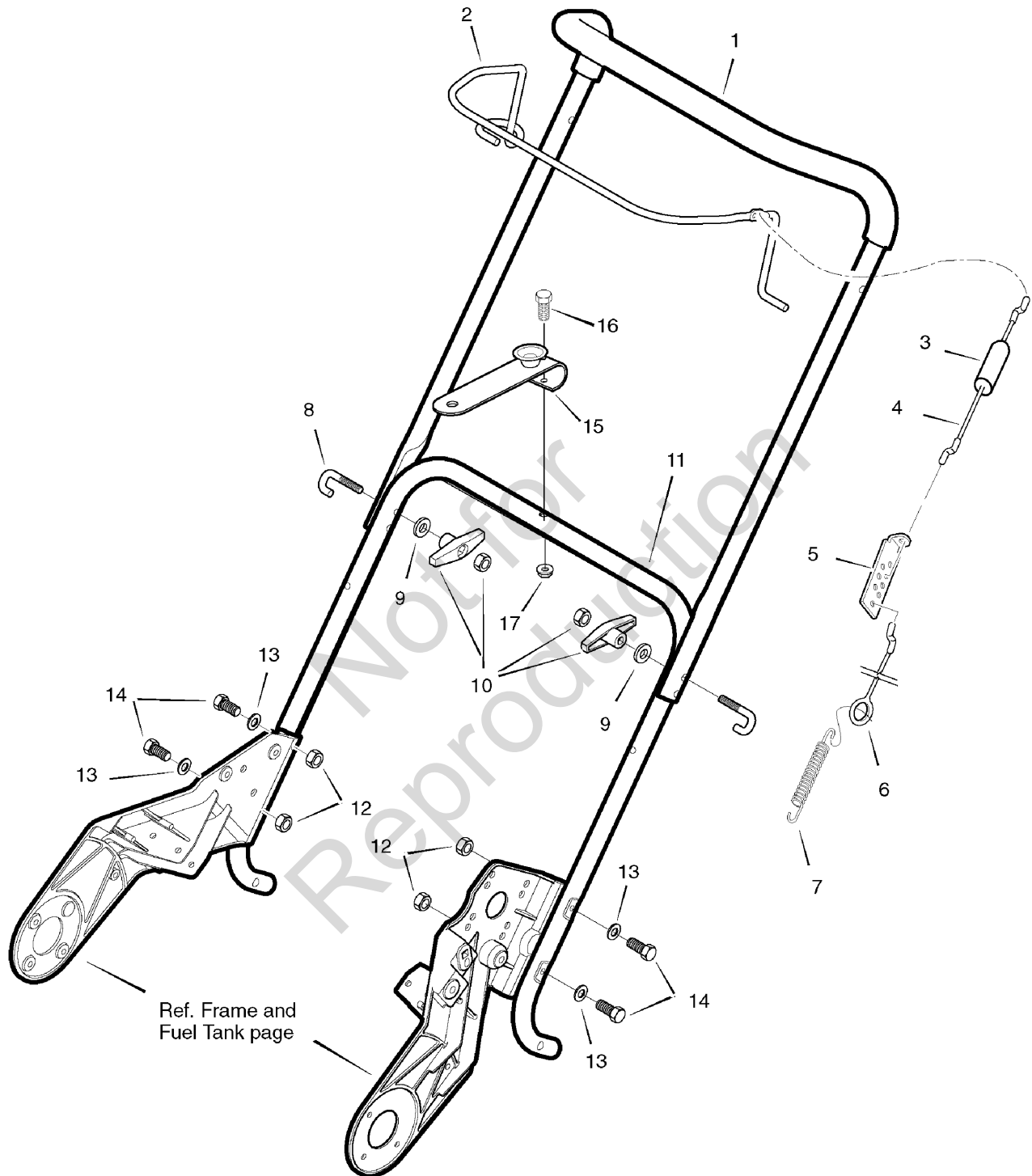
1695468 - 522E

1695514 - 522EX

Handle Assembly

0011

NOTE: Unless noted otherwise,
use the standard hardware torque
specification chart.



The above parts group applies to the following Mfg. Nos.:

1695468 - 522E

1695514 - 522EX

Handle Assembly

REF NO	PART NO.	QTY.	DESCRIPTION
1	1502001MA	1	HANDLE & GRIP ASSEMBLY
2	1742021HYP	1	CONTROL, Bail
3	308146MA	1	BOOT, Clutch Spring
4	1502042MA	1	CABLE, Upper Control
5	313441MA	1	BRACKET, Control Adjust
6	313448MA	1	CABLE, Lower Control
7	313471MA	1	SPRING
8	1501877MA	2	Bolt, "U"
9	311936MA	2	WASHER
10	1740436MA	2	KNOB, "T"
11	1741982HYP	1	HANDLE, Lower
12	73826MA	20	NUT
13	71067MA	18	WASHER
14	313674MA	6	SCREW, 1/4 - 20 x 1-1/4
15	1733377ASM	1	BRACKET & CUP ASMY-CHUTE -BLACK
16	1740344SM	1	BOLT, Hex-Head, 1/4-20 X 1.50
17	1740345YP	1	NUT, Hex-Head, Nylock, 1/4-20

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Footnotes

The above parts group applies to the following Mfg. Nos.:

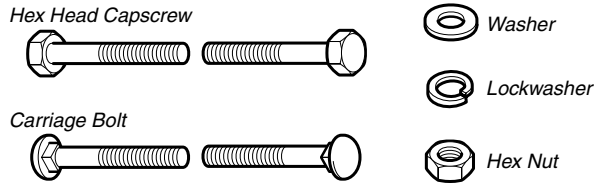
1695468 - 522E

1695514 - 522EX

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Hardware Identification & Torque Specifications

Common Hardware Types

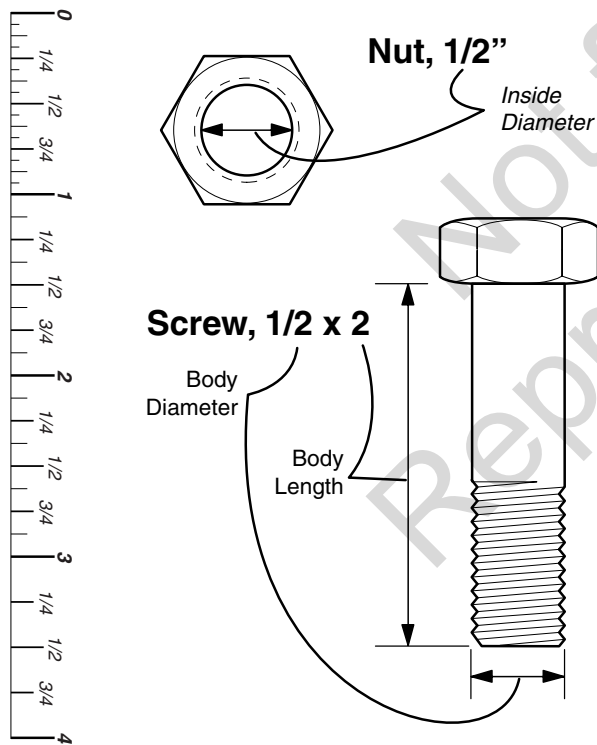


Standard Hardware Sizing

When a washer or nut is identified as 1/2", this is the *Nominal size*, meaning the *inside diameter* is 1/2 inch; if a second number is present it represents the *threads per inch*

When bolt or capscrew is identified as 1/2 - 16 x 2", this means the *Nominal size*, or *body diameter* is 1/2 inch; the second number represents the *threads per inch* (16 in this example, and the final number is the *body length* of the bolt or screw (in this example 2 inches long).

The guides and ruler furnished below are designed to help you select the appropriate hardware and tools.



Torque Specification Chart						
FOR STANDARD MACHINE HARDWARE (Tolerance ± 20%)						
Hardware Grade	No Marks SAE Grade 2		SAE Grade 5		SAE Grade 8	
	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	27	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

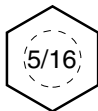
NOTES

- 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.

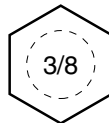
Wrench & Fastener Size Guide



1/4" Bolt or Nut
Wrench—7/16"



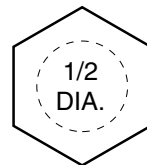
5/16" Bolt or Nut
Wrench—1/2"



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"

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Simplicity

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www.simplicitymfg.com

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