



# Parts Manual

Mfg. No: 627852x85A  
Dual Stage Snow Thrower (2005)



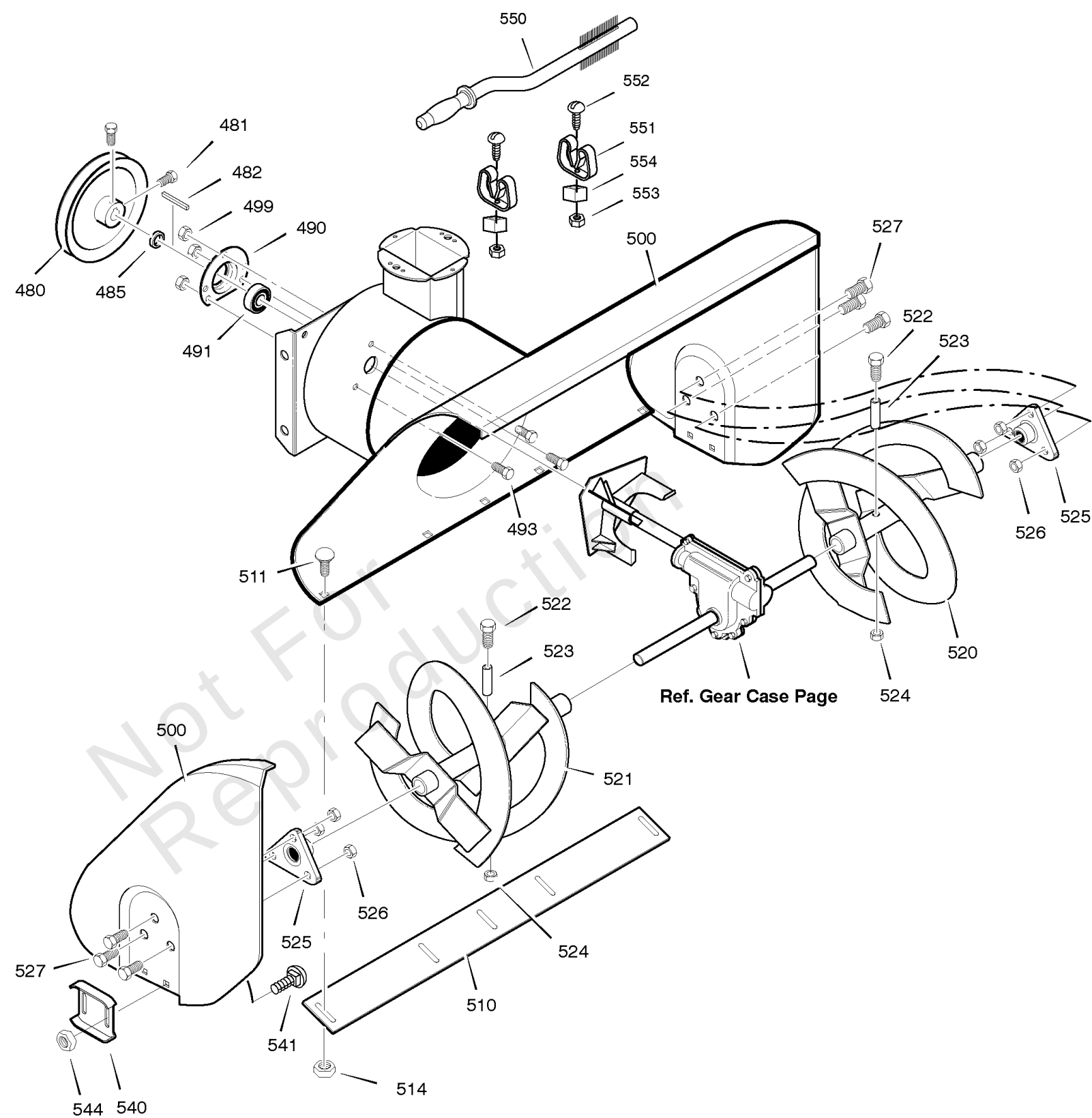
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Auger Housing

Note: Unless noted otherwise, use the standard torque specifications

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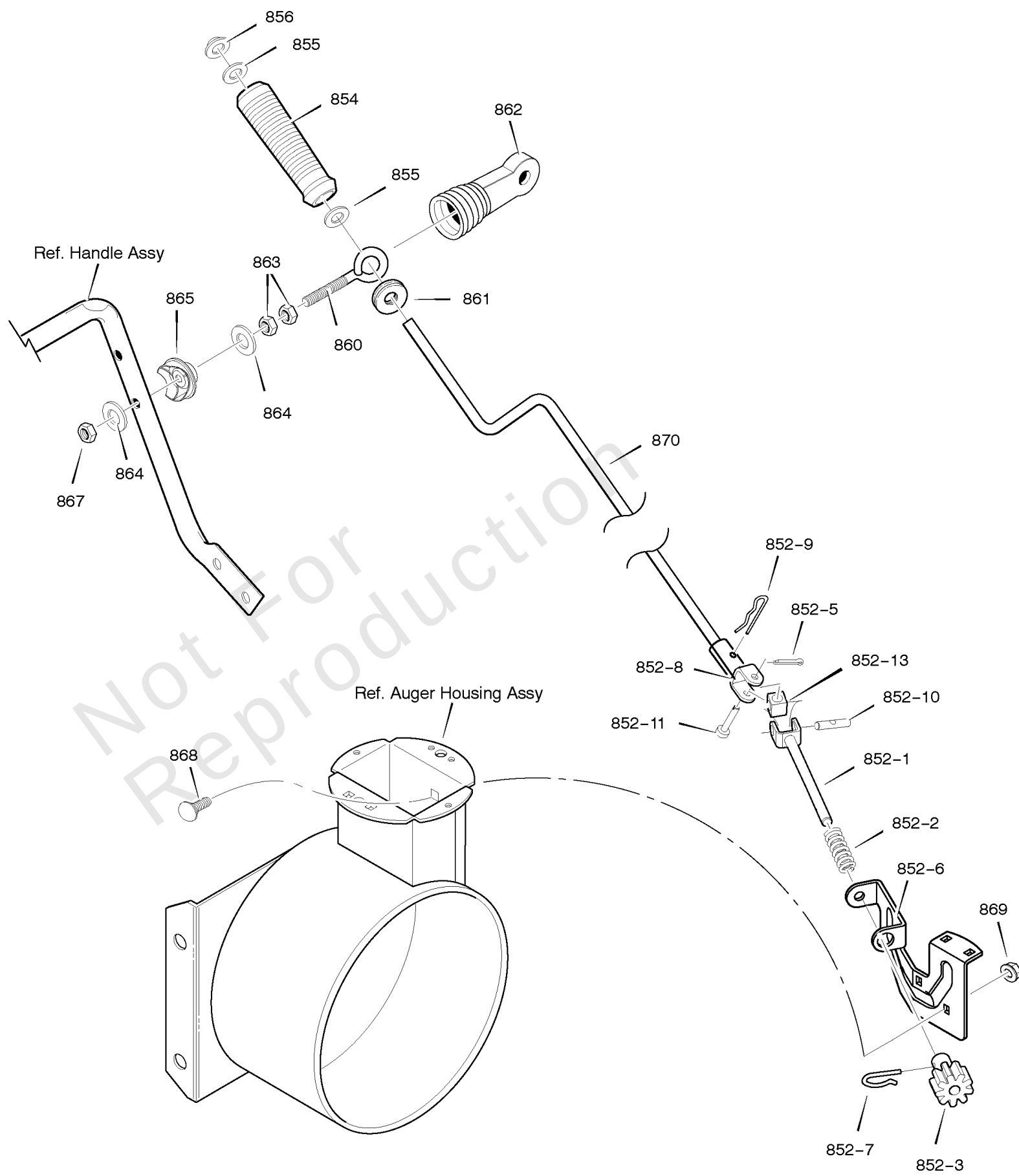
## Auger Housing

| REF NO | PART NO       | QTY | DESCRIPTION            |
|--------|---------------|-----|------------------------|
| 480    | 1501211MA     |     | PULLEY, 8.40 V4L .67id |
| 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    | 001X45MA      |     | BOLT, HEX 5/16-18x0.62 |
| 499    | 710026        |     | NUT, 5/16-18 HEXWDFLLK |
| 500    | 1502013E012   |     | HOUSING, ASSY          |
| 510    | 760661E701MA  |     | BLADE, SCRAPER         |
| 511    | 001X45MA      |     | BOLT, 1/4-20X0.62      |
| 514    | 710026        |     | NUT, 5/16-18x0.62      |
| 520    | 1502017E701MA |     | AUGER, ASSY, LH        |
| 521    | 1502016E701MA |     | 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    | 309016E701MA  |     | SKID,HGT ADJ S2 HT     |
| 541    | 908156MA      |     | BOLT, 5/16-18x0.5      |
| 544    | 710026        |     | NUT, 5/16-18           |
| 550    | 1501576MA     |     | BRUSH, CLEANOUT        |
| 551    | 1501672MA     |     | CLIP,RETAINER YZ       |
| 552    | 06X115MA      |     | SCREW                  |
| 553    | 15X146MA      |     | NUT                    |
| 554    | 578063MA      |     | BLOCK,UNIVERSAL PIVOT  |

Chute Rod

Note: Unless noted otherwise, use the standard torque specifications

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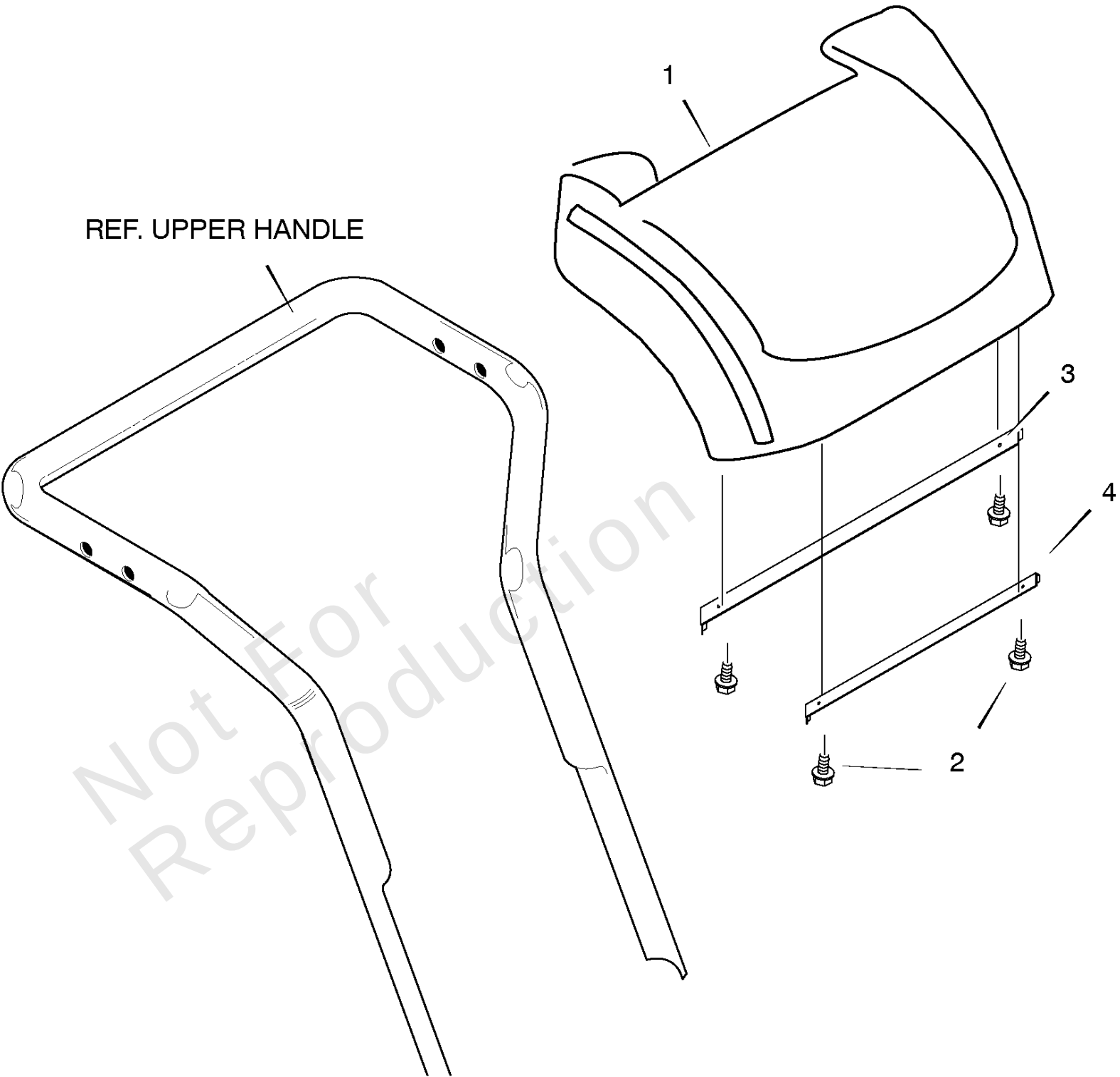
## Chute Rod

| REF NO | PART NO       | QTY | DESCRIPTION                 |
|--------|---------------|-----|-----------------------------|
| 852-1  | 1501533 YZ    |     | ASSEMBLY, YOKE & ROD        |
| 852-2  | 164X37MA      |     | SPRING, COMPRESSION         |
| 852-3  | 1501067MA     |     | GEAR,9 TOOTH 8DP            |
| 852-5  | 579493MA      |     | PIN, COTTER .06X .50        |
| 852-6  | 1501306E701MA |     | BRKT,CHUTE GEAR             |
| 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    | 307399MA      |     | KNOB, SLEEVE                |
| 855    | 309312MA      |     | WASHER, FLAT .39 X .7       |
| 856    | 73664MA       |     | NUT, PUSH ON 3/8"           |
| 860    | 1501618       |     | EYE BOLT, 3/8-16x6.00       |
| 861    | 148MA         |     | GROMMET, Eyelet             |
| 862    | 308145MA      |     | BOOT, EYE BOLT              |
| 863    | 71045         |     | NUT, 3/8-16 HEXJAM          |
| 864    | 71072         |     | FLATWASHER .406X.81X.066    |
| 865    | 309344MA      |     | ADAPTER, BOOT               |
| 867    | 71046         |     | NUT, 3/8-16 HEXNYL          |
| 868    | 02X101MA      |     | BOLT, CARRIAGE 0.25-20x0.75 |
| 869    | 15X145MA      |     | NUT, 0.25-20                |
| 870    | 1501074 YZ    |     | CRANK, ASSY CHUTE           |

**Control Panel**

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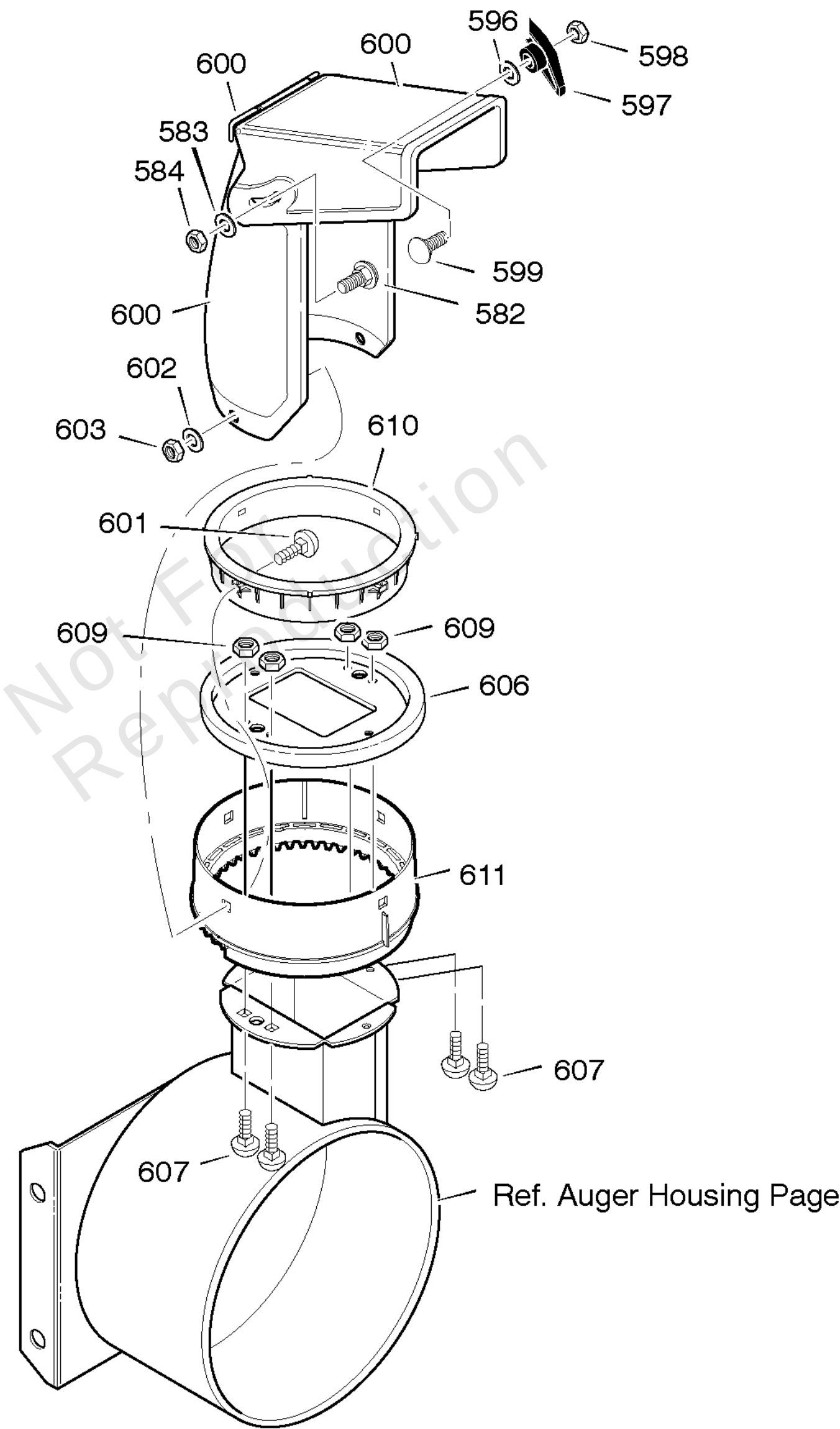
**Control Panel**

| REF NO | PART NO     | QTY | DESCRIPTION                   |
|--------|-------------|-----|-------------------------------|
| 1      | 1501650MA   |     | PANEL, CONSOLE                |
| 2      | 316042MA    |     | SCREW, 10X.62 UNSL-HW         |
| 3      | 1501649E701 |     | BRACKET, HANDLE COVER -TOP    |
| 4      | 1501648E701 |     | BRACKET, HANDLE COVER -BOTTOM |

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**Discharge Chute**

Note: Unless noted otherwise, use the standard torque specifications Mfg. No: 627852x85A



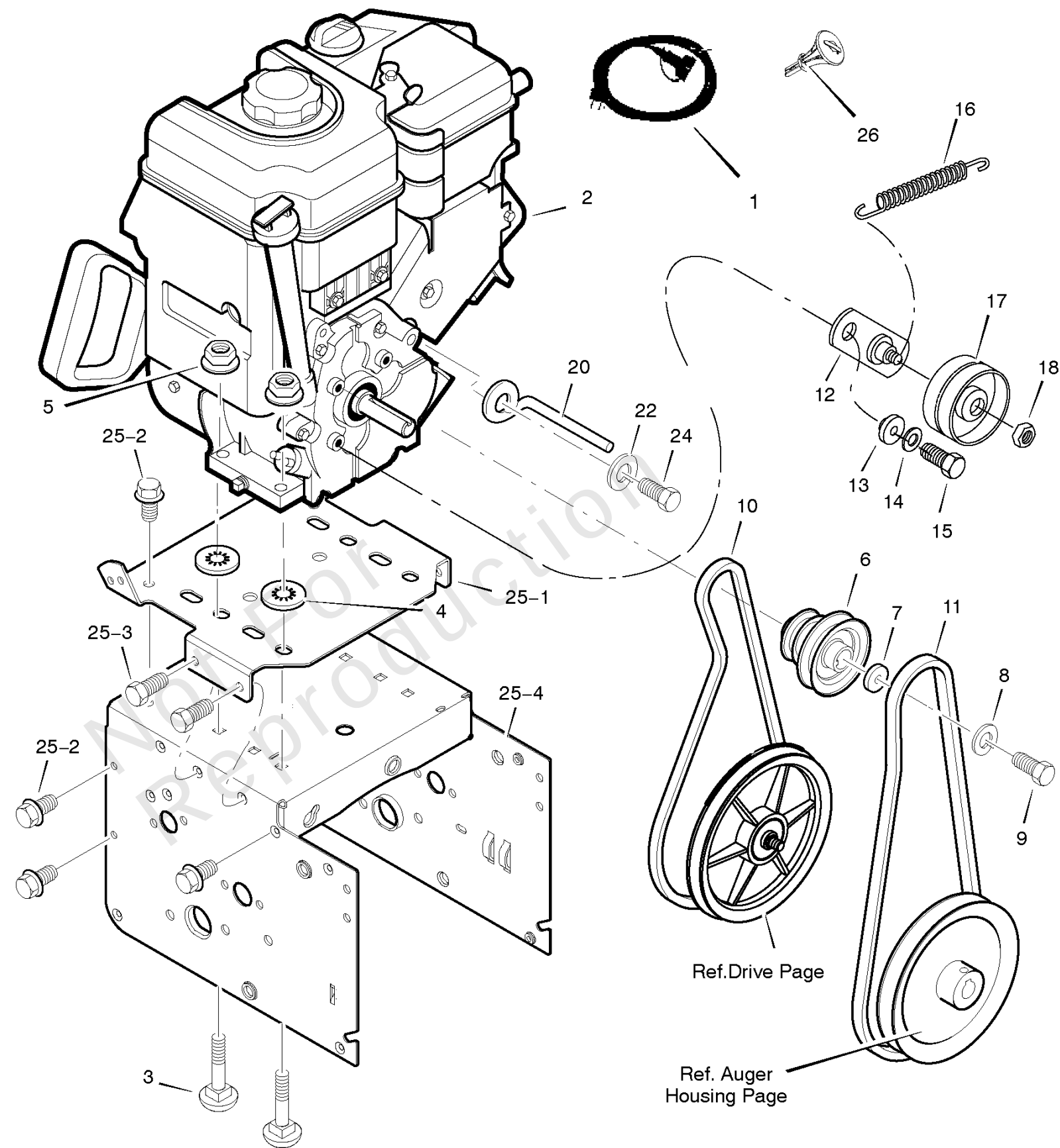
## Discharge Chute

| REF NO | PART NO     | QTY | DESCRIPTION            |
|--------|-------------|-----|------------------------|
| 582    | 002X97MA    |     | SCREW, 5/16-18 x 1.50  |
| 583    | 71071       |     | WASHER, FLAT           |
| 584    | 71038       |     | NUT, 5/16-18           |
| 596    | 71071       |     | WASHER                 |
| 597    | 57171       |     | KNOB, T 3.00           |
| 598    | 15X144      |     | NUT, 5/16-18           |
| 599    | 02X100      |     | BOLT, 5/16-18x1.00     |
| 600    | 1501884-701 |     | CHUTE ASSEMBLY         |
| 601    | 02X100      |     | BOLT, 5/16-18x1.00     |
| 602    | 71071       |     | WASHER, FLAT           |
| 603    | 71038       |     | NUT, 5/16-18           |
| 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    |     | LF AXLE, SWING PLATE YZ      |
| 201    | 579851MA   |     | CHAIN, ROLLER 420X19.        |
| 203    | 579863MA   |     | BALL BEARING                 |
| 203b   | 579850MA   |     | RETAINER, BEARING            |
| 204    | 579858MA   |     | WASHER.502-0.75-.06 F        |
| 206    | 25X020MA   |     | SCREW.31-18X0.50 WAHH        |
| 207    | 1501101    |     | ASSY, 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        |
| 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    | 1502105 YZ |     | SPRING LINK ASSEMBLY         |
| 232    | 11X30MA    |     | RETAINER, RING 7/16 Y        |
| 234    | 165X112MA  |     | SPRING, EXTENSION            |
| 236    | 1501102    |     | WLD, INTERMED SPROCKET 33T/7 |
| 238    | 71074      |     | WASHER, FLAT                 |



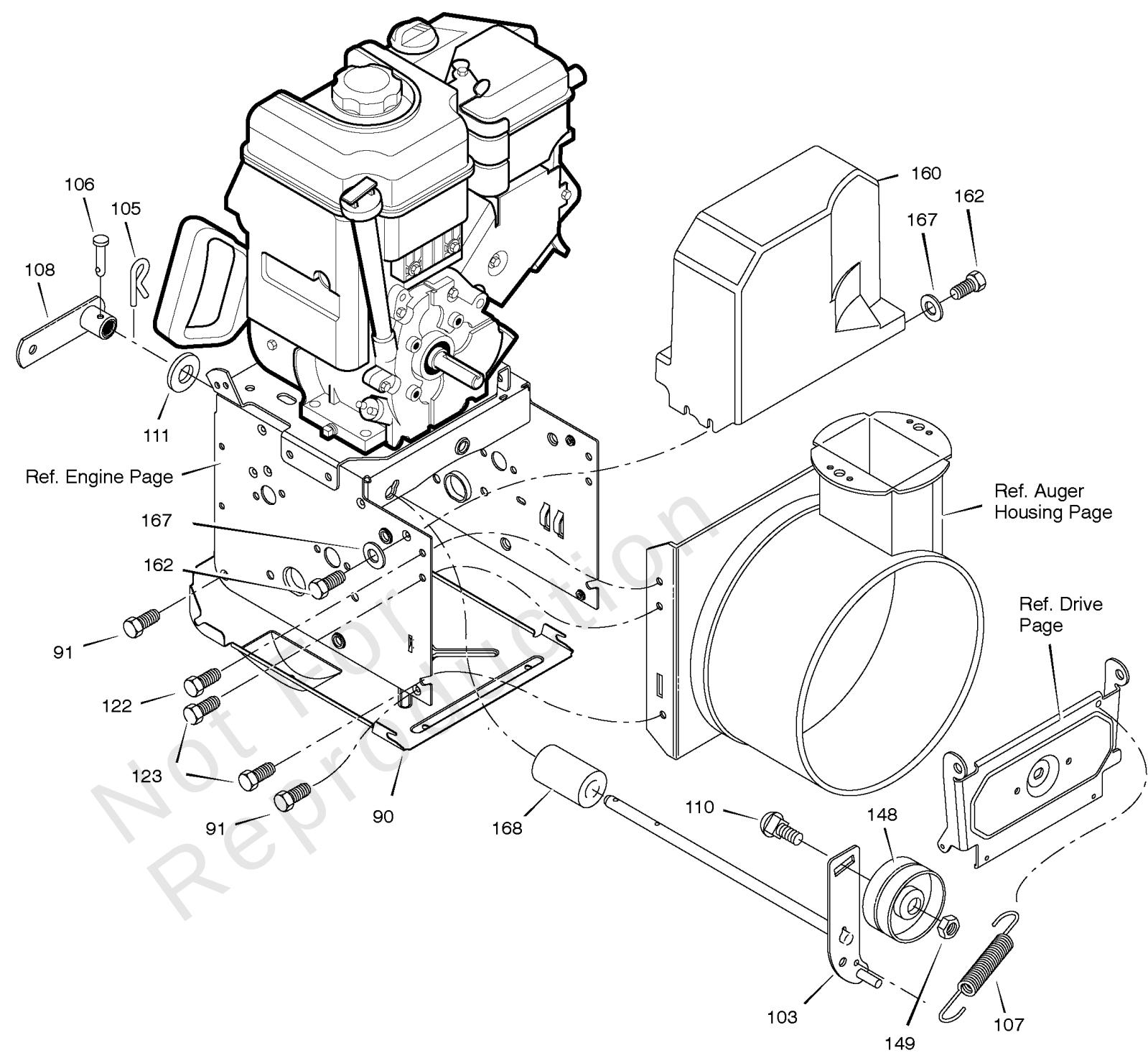
## Engine

| REF NO | PART NO     | QTY | DESCRIPTION                   |
|--------|-------------|-----|-------------------------------|
| 1      | 761332      |     | CORD, STARTER                 |
| 2      | -----       |     | ENGINE                        |
| 3      | 002X97MA    |     | BOLT, CARRIAGE                |
| 4      | 028X76MA    |     | NUT,SPEED                     |
| 5      | 710026      |     | NUT                           |
| 6      | 1501109MA   |     | PULLEY, ENGINE                |
| 7      | 710247      |     | WASHER                        |
| 8      | 71063       |     | WASHER                        |
| 9      | 71015       |     | SCREW                         |
| 10     | 579932MA    |     | BELT, DRIVE V 4L              |
| 11     | 585416MA    |     | BELT                          |
| 12     | 1501112 YZ  |     | BRACKET ASSEMBLY, IDLER       |
| 13     | 1501065MA   |     | BUSHING,IDLER BRKT            |
| 14     | 71060       |     | WASHER, SPLIT                 |
| 15     | 710097      |     | SCREW 5/16-24 X .75           |
| 16     | 53704MA     |     | SPRING, IDLER TRACTIO         |
| 17     | 1502120     |     | PULLEY, IDLER                 |
| 18     | 590         |     | NUT, JAM 3/8-16               |
| 20     | 1501201MA   |     | GUIDE, ROD BELT               |
| 22     | 71060       |     | WASHER                        |
| 24     | 710097      |     | SCREW                         |
| 25     | -----       |     | FRAME ASSEMBLY                |
| 25-1   | 1501062E012 |     | PLATE, ENGINE                 |
| 25-2   | 310169MA    |     | SCREW, 1/4-20X .63 WA         |
| 25-3   | 25X020MA    |     | SCREW.31-18X0.50 WAHH         |
| 25-4   | 1501159E012 |     | MOTOR BOX                     |
| 26     | 695756      |     | KEY, BRIGGS ENGINE            |
| --     | F-051030L   |     | OWNER'S MANUAL (8218-2201-13) |

Frame

Note: Unless noted otherwise, use the standard torque specifications

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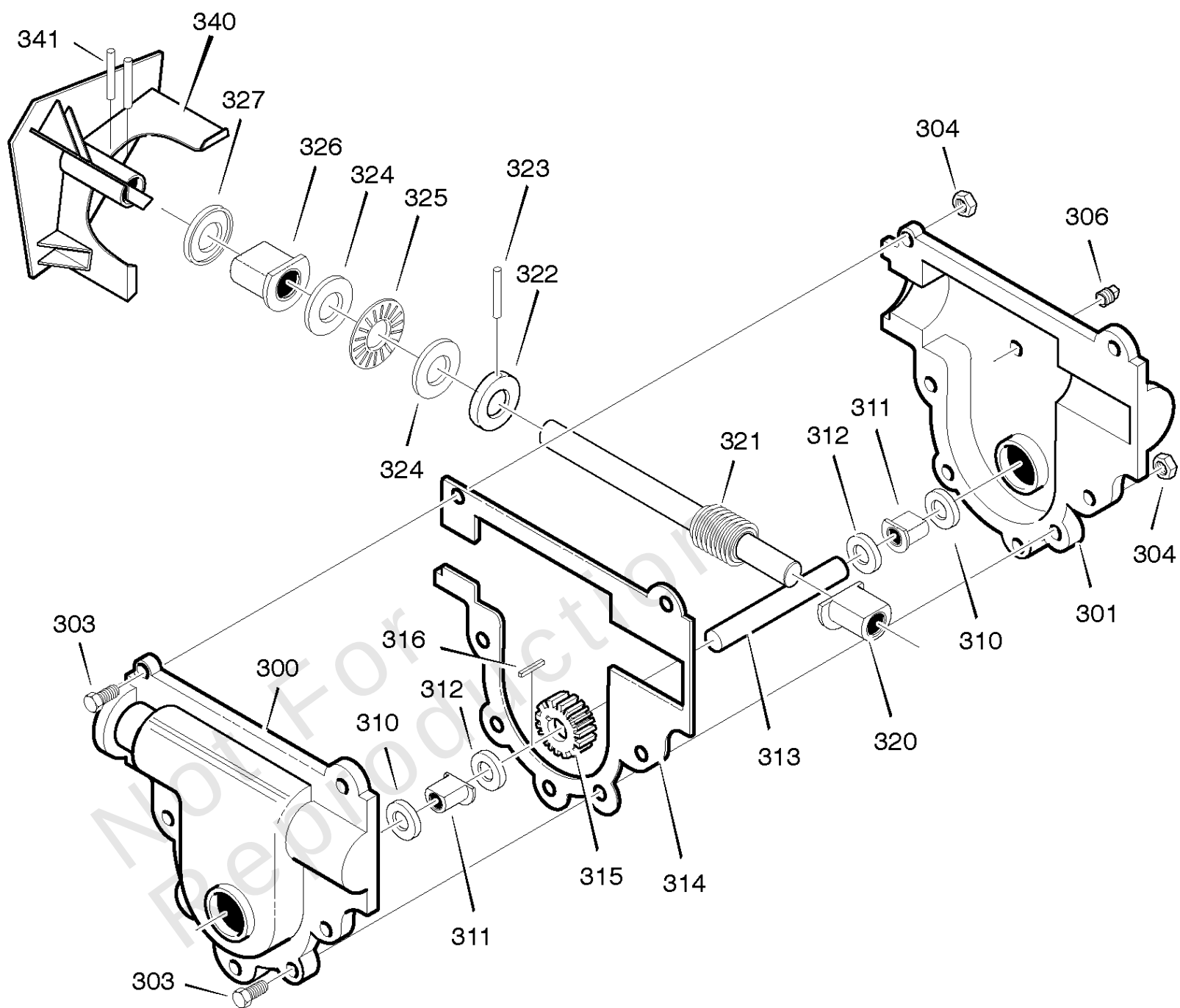
## Frame

| REF NO | PART NO       | QTY | DESCRIPTION               |
|--------|---------------|-----|---------------------------|
| 90     | 1501055E701MA |     | PANEL,BOTTOM              |
| 91     | 310169MA      |     | SCREW, 1/4-20X .63 WA     |
| 103    | 1501226 YZ    |     | IDLER ASSEMBLY, AUGER     |
| 105    | 711682MA      |     | PIN, HAIR .38DIA X 1.64LG |
| 106    | 761761MA      |     | PIN, CLEVIS 3/16" DIA     |
| 107    | 165X159MA     |     | SPRING, TENSION           |
| 108    | 761675 YZ     |     | ASSY., SPRING ATTACH      |
| 110    | 585781MA      |     | BOLT, 3/8-16X1.25 CARR.   |
| 111    | 711617        |     | WASHER, FLAT              |
| 122    | 25X020MA      |     | SCREW.31-18X0.50 WAHH     |
| 123    | 25X021MA      |     | SCREW, TAP 5/16-18 X .75  |
| 148    | 1502120       |     | PULLEY, IDLER             |
| 149    | 590           |     | NUT, JAM 3/8-16           |
| 160    | 1502169       |     | COVER, BELT               |
| 162    | 26X306MA      |     | SCREW, TAP                |
| 167    | 71067         |     | WASHER, FLAT              |
| 168    | 1502041       |     | SPACER, AUGER BRACKET     |

# Gear Case

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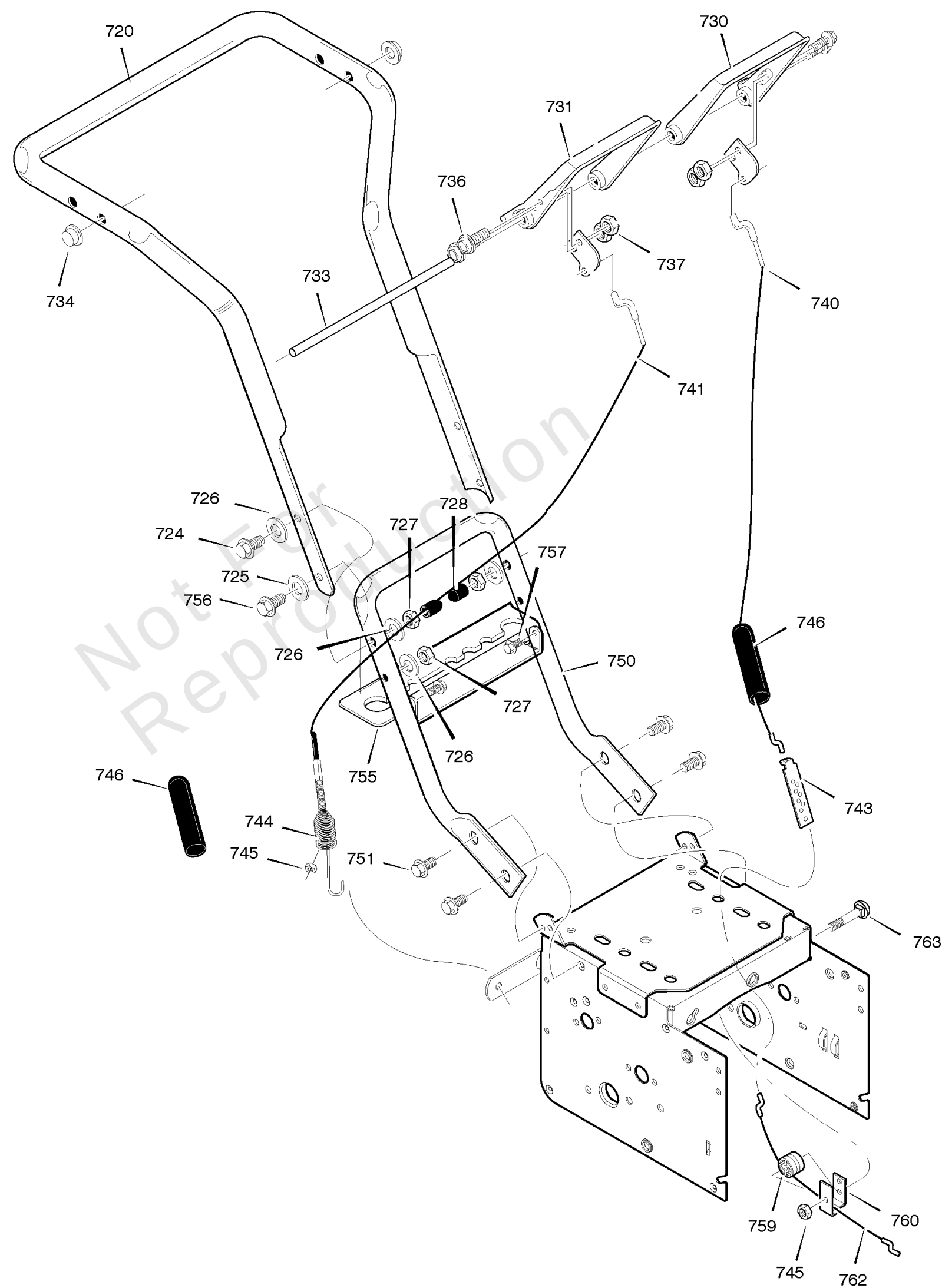
## Gear Case

| REF NO | PART NO       | QTY | DESCRIPTION                                   |
|--------|---------------|-----|-----------------------------------------------|
| 300    | 10577MA       |     | CASE, GEAR, RH                                |
| 301    | 10576MA       |     | CASE, GEAR, LH                                |
| 303    | 710025        |     | SCREW                                         |
| 304    | 15X143MA      |     | NUT,25-20 HEX FLG CTR                         |
| 306    | 9344MA        |     | SCREW                                         |
| 310    | 9566MA        |     | SEAL, OIL, .75 X 1.19                         |
| 311    | 50304MA       |     | BRNG, FL .752IDX1.002                         |
| 312    | 48275MA       |     | WASHER, FLAT .752X1.                          |
| 313    | 1501189       |     | SHAFT, OUTPUT                                 |
| 314    | 51279MA       |     | GASKET                                        |
| 315    | 51405MA       |     | GEAR,WORM                                     |
| 316    | 431787MA      |     | KEY, WOODRUFF                                 |
| 320    | 50221MA       |     | BRNG,FLNG.502IDX0.752                         |
| 321    | 1501191MA     |     | SHAFT, INPUT                                  |
| 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    | 1501188E701MA |     | IMPELLER ASSEMBLY                             |
| 341    | 454565MA      |     | PIN, SPRING.250DIAX1.                         |
| --     | 333431MA      |     | LUBRIPLATE, GR132, 14oz<br>-(Not Illustrated) |

Handle Assembly

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 627852x85A



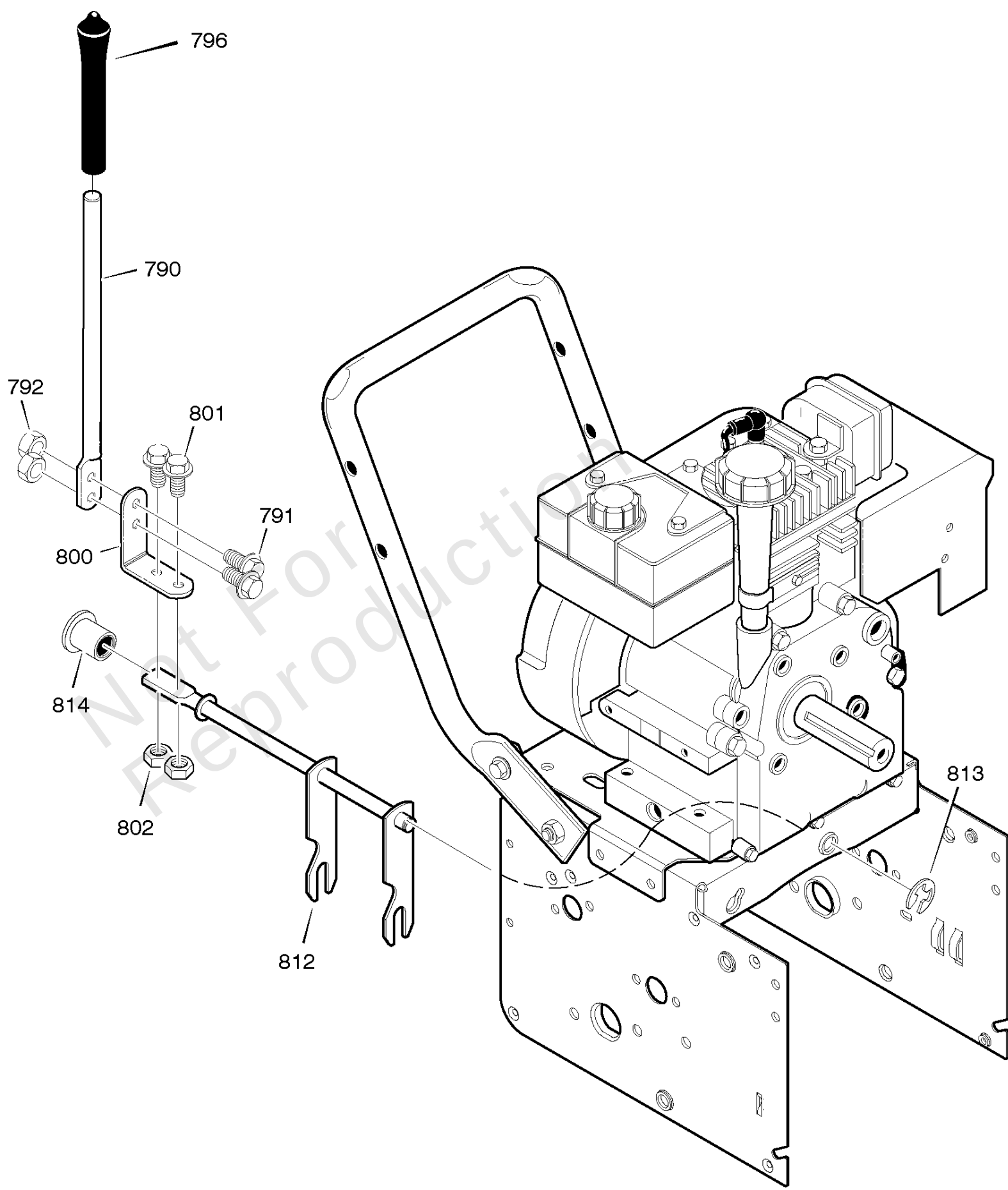
## Handle Assembly

| REF NO | PART NO      | QTY | DESCRIPTION                |
|--------|--------------|-----|----------------------------|
| 720    | 321835E701   |     | HANDLE                     |
| 724    | 11234MA      |     | SCREW                      |
| 725    | 71071        |     | WASHER, FLAT               |
| 726    | 71060        |     | WASHER                     |
| 727    | 15X144       |     | NUT                        |
| 728    | 11261MA      |     | PLASTIC-STOP               |
| 730    | 302557MA     |     | LEVER,CTRL P1 LH BLK       |
| 731    | 302558MA     |     | LEVER,CTRL P1 RH BLK       |
| 733    | 12621        |     | ROD, PIVOT HANDLE          |
| 734    | 3535MA       |     | NUT, PUSH ON CAP .312      |
| 735    | 1502080E701  |     | PLATE, CABLE PIVOT         |
| 736    | 303108       |     | SCREW                      |
| 737    | 73826        |     | NUT                        |
| 740    | 1501123MA    |     | CABLE,FR-DR P1,P2,P3,      |
| 741    | 761589MA     |     | CABLE, AUGER CLUTCH        |
| 743    | 313441MA     |     | BRACKET, CABLE ADJ BL      |
| 744    | 1673MA       |     | SPRING, AUGER CLUTCH,      |
| 745    | 15X145MA     |     | LOCKNUT                    |
| 746    | 308146MA     |     | BOOT, CLUTCH SPRING        |
| 750    | 339541E701MA |     | HANDLE, LOWER              |
| 751    | 25X021MA     |     | SCREW 0.31-18x0.75         |
| 752    | 71060        |     | WASHER                     |
| 755    | 337407E701MA |     | BRKT,GEAR SELECT P123      |
| 756    | 6751         |     | SCREW, .31-18 x 2.00       |
| 757    | 310169MA     |     | SCREW, 1/4-20X .63 WA      |
| 759    | 579860MA     |     | SPOOL-CABLE, AUGRT 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 |

Shift Yoke

Note: Unless noted otherwise, use the standard torque specifications

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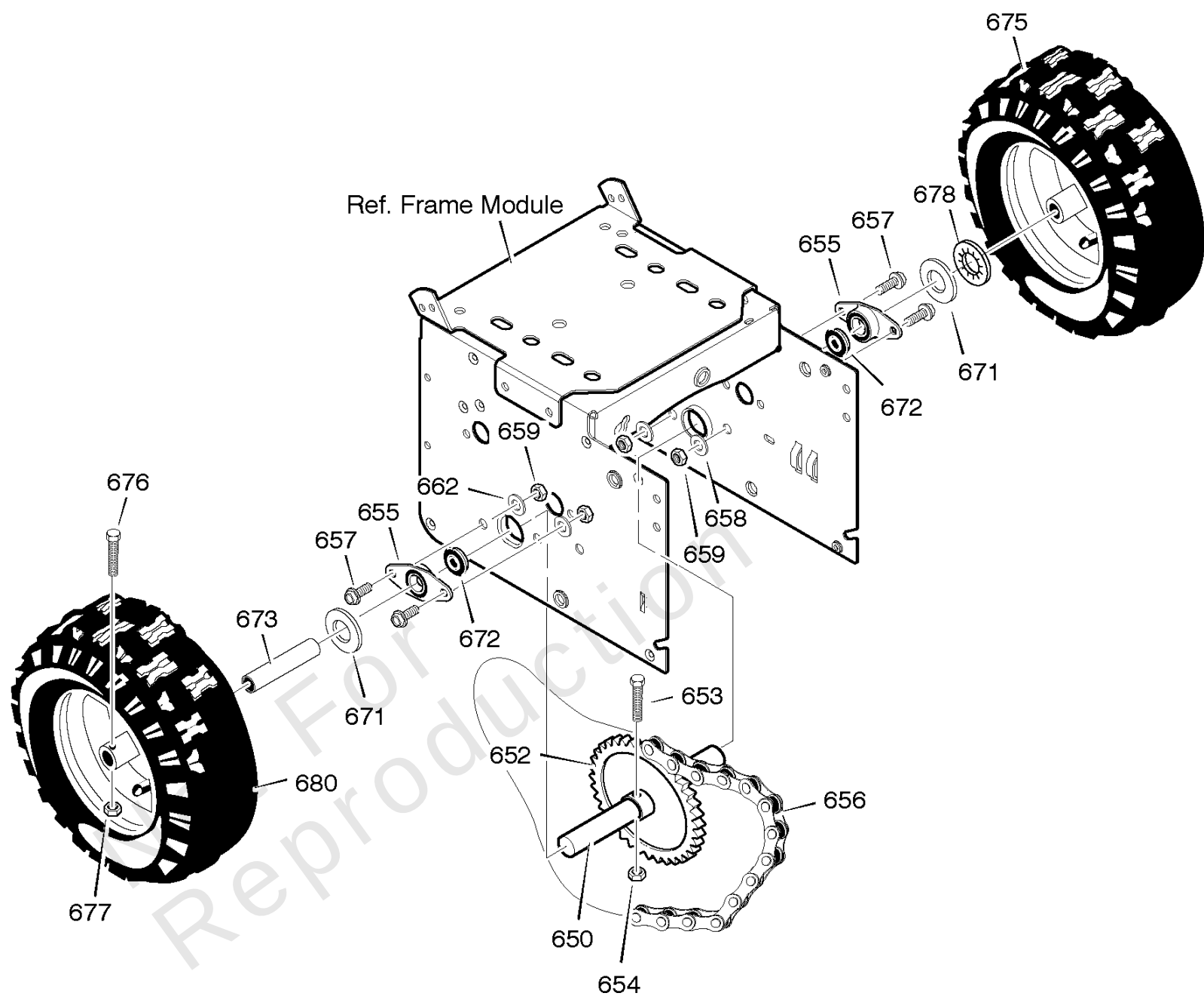
## Shift Yoke

| REF NO | PART NO      | QTY | DESCRIPTION             |
|--------|--------------|-----|-------------------------|
| 790    | 336702E701MA |     | ROD,SHIFT P1P2P3H .44   |
| 791    | 302628MA     |     | SCREW, 1/4-20X .75 HH   |
| 792    | 73826        |     | NUT, 1/4-20             |
| 796    | 304438MA     |     | SHIFT KNOB 1/2-13 BLA   |
| 800    | 760564MA     |     | LEVER,SPRING SHIFT      |
| 801    | 302628MA     |     | SCREW, 1/4-20X .75 HH   |
| 802    | 73826        |     | NUT, 1/4-20             |
| 811    | 579944MA     |     | BRNG FL .500ID X .88    |
| 812    | 1501085 YZ   |     | ROD ASSY., SPEED SELECT |
| 813    | 11X30MA      |     | RETAINER, RING 7/16 Y   |

Wheels

Note: Unless noted otherwise, use the standard torque specifications

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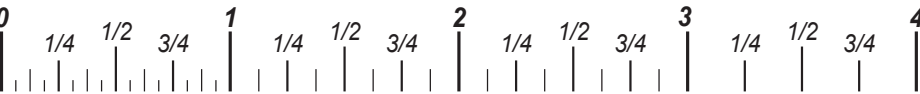
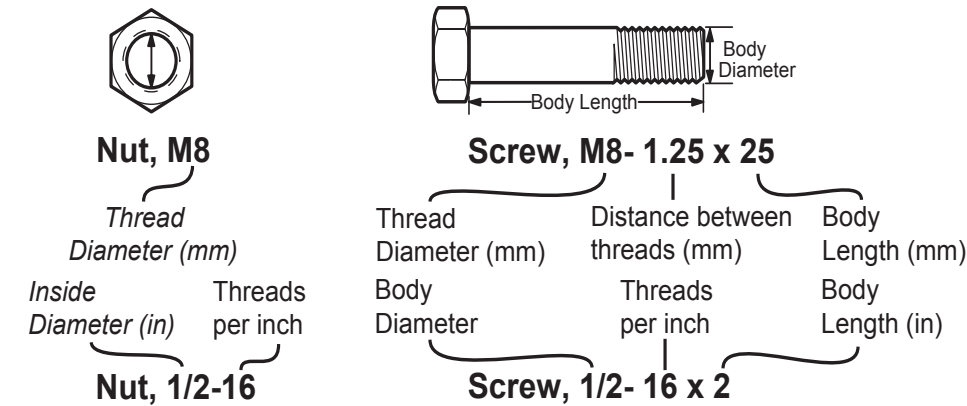
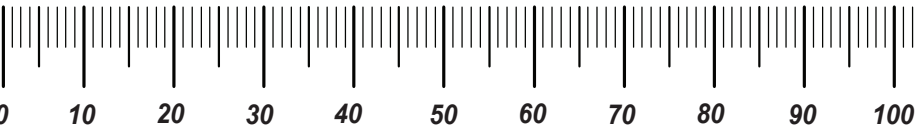
## Wheels

| REF NO | PART NO    | QTY | DESCRIPTION            |
|--------|------------|-----|------------------------|
| 650    | 1501564 YZ |     | SHAFT, AXLE            |
| 652    | 1501089    |     | SPROCKET, AXLE         |
| 653    | 01X193MA   |     | SCREW, 1/4-20X1.75     |
| 654    | 15X145MA   |     | NUT, 1/4-20 HEX NYLOCK |
| 655    | 50648MA    |     | RETAINER, BEARING      |
| 657    | 001X85MA   |     | SCREW, .38-16x0.75     |
| 658    | 71062      |     | WASHER, LOCK           |
| 659    | 71044      |     | NUT, 3/8"-16           |
| 671    | 017X83MA   |     | WASHER, FLAT           |
| 672    | 53263MA    |     | BEARING, BALL          |
| 673    | 1501138MA  |     | BUSHING, WHEEL         |
| 675    | 583384MA   |     | TIRE & RIM, LEFT       |
| 676    | 577015MA   |     | SCREW, SHR 1/4-20X1.7  |
| 677    | 15X116MA   |     | NUT, 1/4-20 HEX NYLOCK |
| 678    | 239MA      |     | RING, RET              |
| 680    | 583384MA   |     | TIRE & RIM, RIGHT      |

# Hardware Identification & Torque Specifications

| Torque Specification Chart                             |                                                                                                |      |                                                                                                |      |                                                                                                 |      |                                                                                                 |      |
|--------------------------------------------------------|------------------------------------------------------------------------------------------------|------|------------------------------------------------------------------------------------------------|------|-------------------------------------------------------------------------------------------------|------|-------------------------------------------------------------------------------------------------|------|
| FOR STANDARD METRIC MACHINE HARDWARE (Tolerance ± 20%) |                                                                                                |      |                                                                                                |      |                                                                                                 |      |                                                                                                 |      |
| Property Class                                         | <br>Class 5.6 |      | <br>Class 8.8 |      | <br>Class 10.9 |      | <br>Class 12.9 |      |
| Size Of Hardware                                       | in/lbs<br>ft/lbs                                                                               | Nm.  | in/lbs<br>ft/lbs                                                                               | Nm.  | in/lbs<br>ft/lbs                                                                                | Nm.  | in/lbs<br>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).

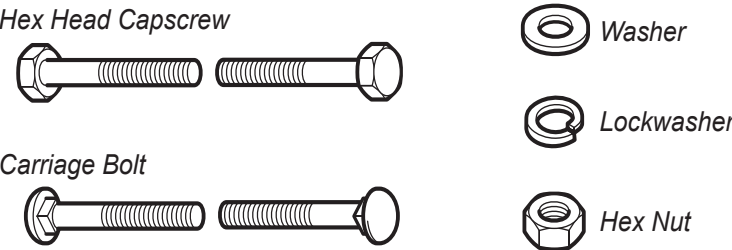
When bolt or capscrew is identified as 1/2 - 16 x 2" (M8 - 1.25 x 50), this means the *Nominal size*, or body diameter is 1/2 inch (8mm metric thread diameter), the second number, 16, represents the *threads per inch*, (*distance between threads*). The final number is the body length of the bolt or screw,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

| Torque Specification Chart                      |                                                                                                    |       |                                                                                                    |       |                                                                                                    |         |
|-------------------------------------------------|----------------------------------------------------------------------------------------------------|-------|----------------------------------------------------------------------------------------------------|-------|----------------------------------------------------------------------------------------------------|---------|
| FOR STANDARD MACHINE HARDWARE (Tolerance ± 20%) |                                                                                                    |       |                                                                                                    |       |                                                                                                    |         |
| Hardware Grade                                  | <br>SAE Grade 2 |       | <br>SAE Grade 5 |       | <br>SAE Grade 8 |         |
| Size Of Hardware                                | in/lbs<br>ft/lbs                                                                                   | Nm.   | in/lbs<br>ft/lbs                                                                                   | Nm.   | in/lbs<br>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

|                                                                                                                           |                                                                                                                           |                                                                                                                           |                                                                                                                                                         |                                                                                                                          |
|---------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| <br>1/4" Bolt or Nut<br>Wrench—7/16" | <br>5/16" Bolt or Nut<br>Wrench—1/2" | <br>3/8" Bolt or Nut<br>Wrench—9/16" | <br>7/16" Bolt or Nut<br>Wrench (Bolt)—5/8"<br>Wrench (Nut)—11/16" | <br>1/2" Bolt or Nut<br>Wrench—3/4" |
| M6 Bolt or Nut<br>Wrench—10mm                                                                                             | M8 Bolt or Nut<br>Wrench—13mm                                                                                             | M10 Bolt or Nut<br>Wrench—17mm                                                                                            | M12 Bolt or Nut<br>Wrench—19mm                                                                                                                          | M14 Bolt or Nut<br>Wrench—22mm                                                                                           |

**STIGA**