



# Parts Manual

Mfg. No: 2690431  
ZT1644E, 16HP Hydro and 44" Mower  
Deck (2005)

1694862 - ZT1644E, 16HP Hydro. ....

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Reproduction

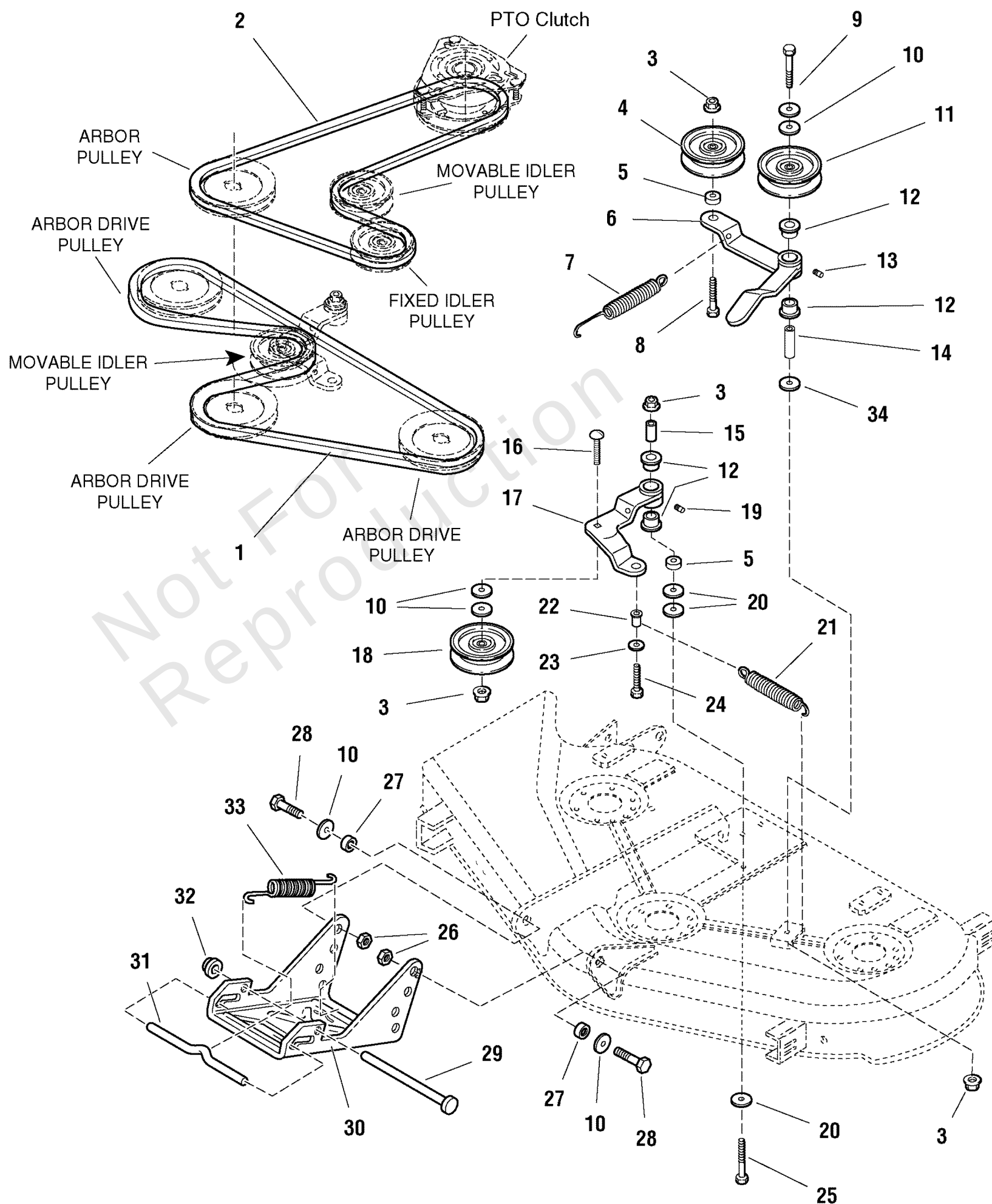
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# 44" Mower Deck - Clutch & Support Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 2690431



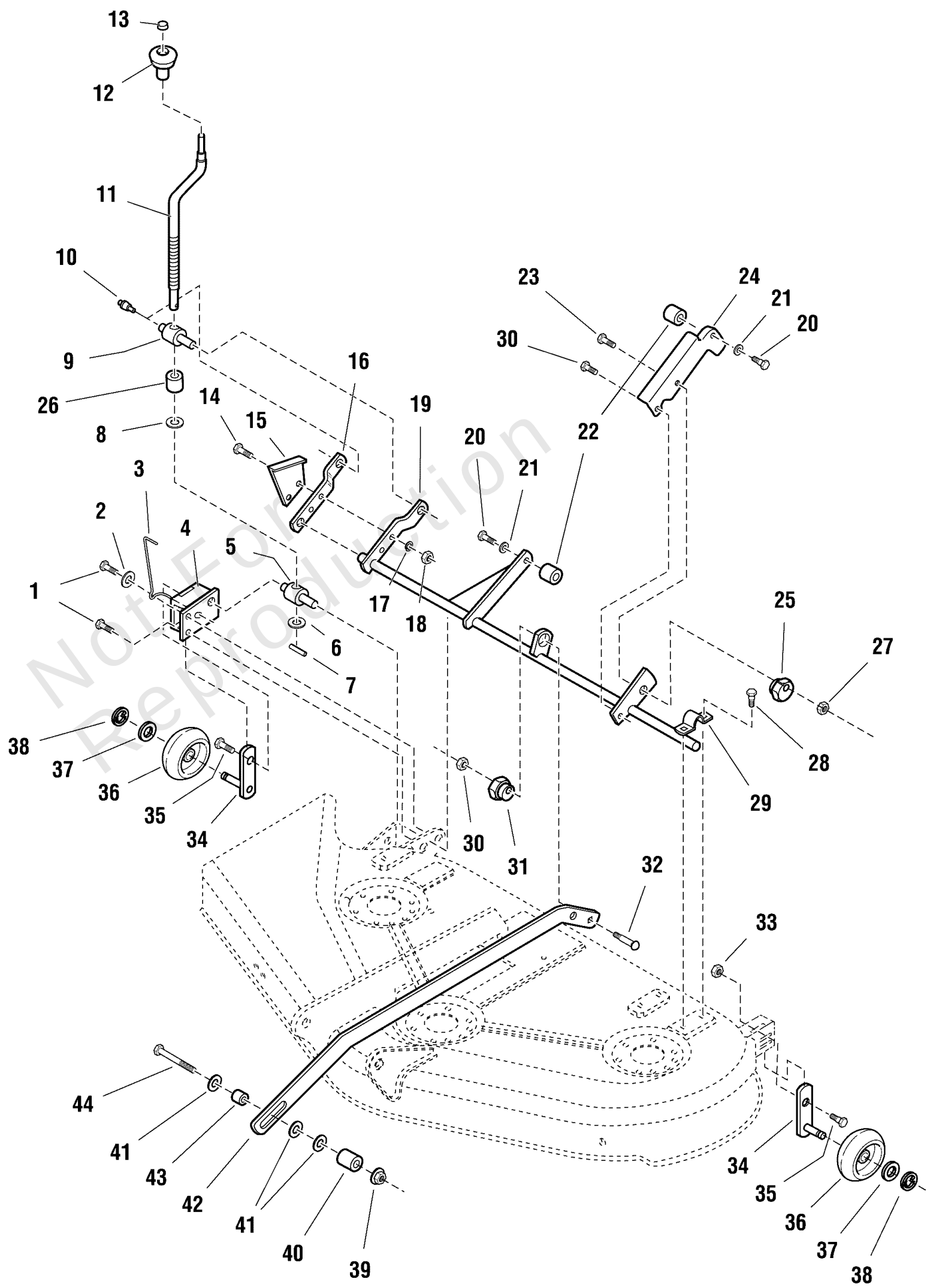
### 44" Mower Deck - Clutch & Support Group

| REF NO | PART NO   | QTY | DESCRIPTION                                           |
|--------|-----------|-----|-------------------------------------------------------|
| 1      | 1721532SM | 1   | BELT, 83.1                                            |
| 2      | 1713549SM | 1   | V-BELT, P.T.O., 44" Mower Deck                        |
| 3      | 1960339SM | 4   | NUT, Hex Flange, 3/8-16                               |
| 4      | 2171247SM | 1   | PULLEY, Idler                                         |
| 5      | 1667811SM | 2   | SPACER                                                |
| 6      | 1726814SM | 1   | LEVER & HANDLE ASSEMBLY, (Includes Ref. Nos. 12 & 13) |
| 7      | 1714062SM | 1   | SPRING, Extension                                     |
| 8      | 1931353SM | 1   | CARRIAGE BOLT, 3/8-16 x 1-3/4 G5, Black               |
| 9      | 1922918SM | 1   | CAPSCREW, 3/8-16 x 3-1/4                              |
| 10     | 1924940SM | 6   | WASHER, 3/8                                           |
| 11     | 1706510SM | 1   | PULLEY, Idler (Includes Ref. Nos. 12 & 13)            |
| 12     | 1676148SM | 4   | BUSHING-0.628IDX                                      |
| 13     | 2812808SM | 1   | FITTING, Lube, 1/4-20 Tappered                        |
| 14     | 1657242SM | 1   | SPACER, Hardened                                      |
| 15     | 1674669SM | 1   | SPACER-0.39 IDX0.625O                                 |
| 16     | 1960268SM | 1   | CARRIAGE BOLT, 3/8-16 x 1-1/4, G5                     |
| 17     | 1718561SM | 1   | LEVER ASSEMBLY, Idler (Includes Ref. Nos. 12 & 19)    |
| 18     | 1724387SM | 1   | PULLEY, Idler                                         |
| 19     | 2821133SM | 1   | FITTING, Lube, 1/4 Drive                              |
| 20     | 1924356SM | 3   | WASHER, 3/8                                           |
| 21     | 1656936SM | 1   | SPRING, Extension                                     |
| 22     | 1701159SM | 1   | SPACER                                                |
| 23     | 1921319SM | 1   | WASHER, 1/4                                           |
| 24     | 1933958SM | 1   | CAPSCREW, Hex Head, 1/4-20 x 1-1/6                    |
| 25     | 1921972SM | 1   | CAPSCREW, Hex Head, 3/8-16 x 2-1/2, G5                |
| 26     | 1919439SM | 2   | NUT, Hex Lock ESNA Light, 3/8-16                      |
| 27     | 1708973SM | 2   | SPACER, Powdered Metal                                |
| 28     | 1922605SM | 2   | CAPSCREW, 3/8-16 x 1-1/4, G8                          |
| 29     | 1713578SM | 1   | ROD, Hitch, 1/2 x 7-5/8                               |
| 30     | 1727593A  | 1   | HITCH                                                 |
| 31     | 1715759SM | 1   | ROD, 3/8 x 8                                          |
| 32     | 1960519SM | 1   | NUT, Push 1/2                                         |
| 33     | 2156302   | 1   | SPRING                                                |
| 34     | 1922755SM | 1   | WASHER                                                |

# 44" Mower Deck - Height Adjustment Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 2690431



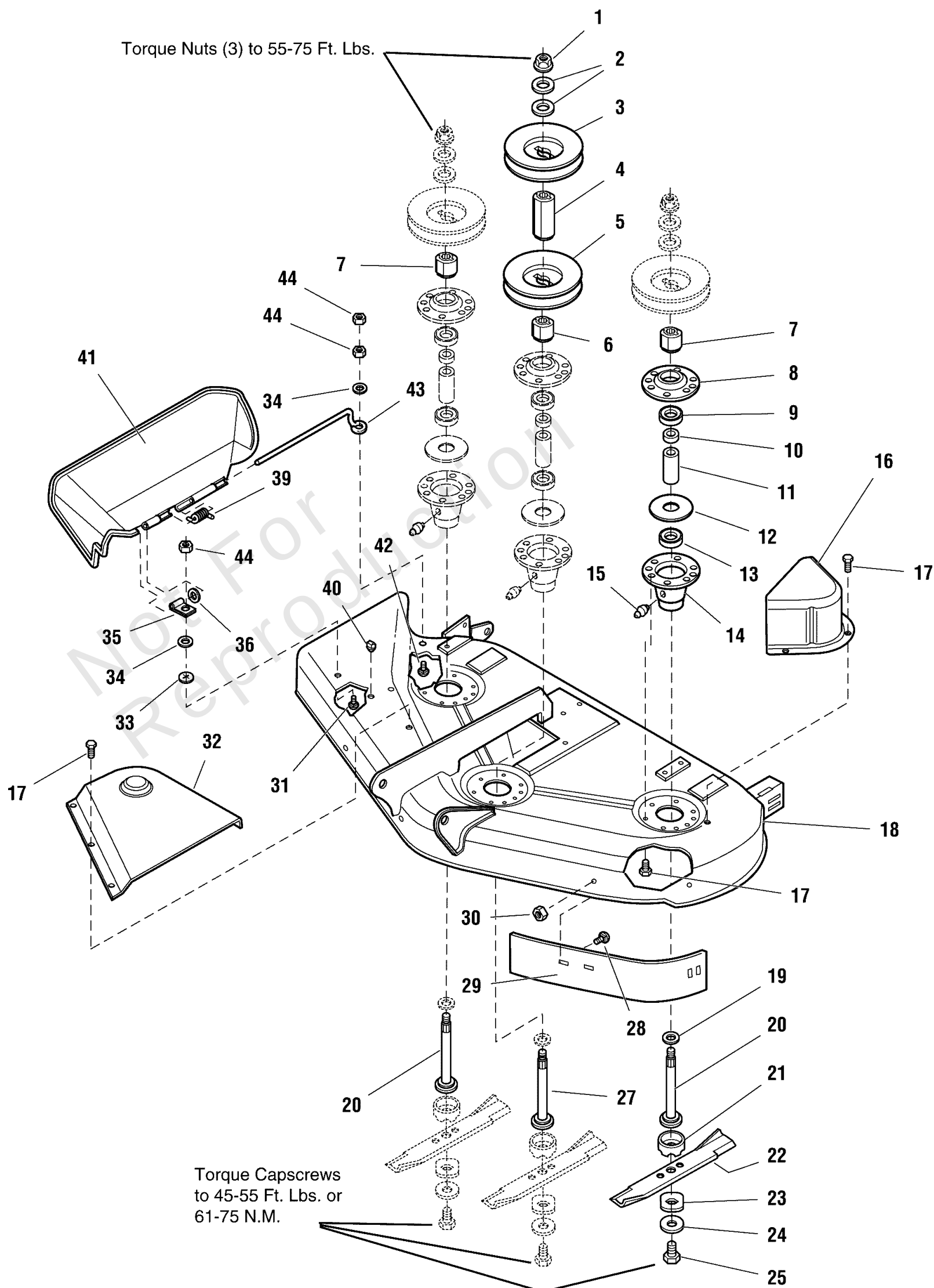
## 44" Mower Deck - Height Adjustment Group

| REF NO | PART NO    | QTY | DESCRIPTION                                        |
|--------|------------|-----|----------------------------------------------------|
| 1      | 1931202SM  | 2   | CAPSCREW, Hex Washer Head Taptite, 5/16-18 x 1-1/4 |
| 2      | 1919381SM  | 1   | WASHER, 5/16                                       |
| 3      | 1704114SM  | 1   | ROD, Indicator Height of Cut                       |
| 4      | 1726424ASM | 1   | PLATE & BRACKET ASSEMBLY, Gauge Wheel              |
| 5      | 1724009SM  | 1   | TRUNNION, 1-1/4                                    |
| 6      | 1704097SM  | 1   | WASHER, Detent                                     |
| 7      | 2816001SM  | 1   | PIN-SPRING .188 X 1.0                              |
| 8      | 1960170SM  | 2   | WASHER, 9/16                                       |
| 9      | 1715892SM  | 1   | TRUNNION, 1-1/4                                    |
| 10     | 1704314SM  | 1   | LUBE FITTING, .250 DR                              |
| 11     | 1727681SM  | 1   | CRANK, Height Adjustment                           |
| 12     | 1714084SM  | 1   | KNOB, Spinner, Soft                                |
| 13     | 1960093SM  | 1   | NUT, Push                                          |
| 14     | 1921977SM  | 2   | CAPSCREW, Hex Head, 5/16-18 x 1 1/4                |
| 15     | 1704116ASM | 1   | BRACKET-HEIGHT OF CUT                              |
| 16     | 1726409ASM | 1   | ARM, Rear                                          |
| 17     | 1917356SM  | 2   | LOCKWASHER, Spring, 5/16                           |
| 18     | 1917372SM  | 2   | NUT, Hex, 5/16-18                                  |
| 19     | 1727768ASM | 1   | ARM ASSEMBLY, Roller Bar 44"                       |
| 20     | 1921210SM  | 2   | CAPSCREW, Hex Head, 3/8-16 x 1, G5                 |
| 21     | 1916965SM  | 2   | LOCKWASHER, Spring, 3/8                            |
| 22     | 1716010SM  | 2   | SPACER, Support                                    |
| 23     | 1960655SM  | 1   | CARRIAGE BOLT, 5/16-18 x 1-1/4, G5                 |
| 24     | 1718136ASM | 1   | ARM, Rear Adjustable                               |
| 25     | 1714879SM  | 1   | CAM, Eccentric, Hex                                |
| 26     | 1709195SM  | 1   | SPACER, .66 X 7/8 X 1 1/4                          |
| 27     | 2860643SM  | 1   | NUT, Hex Flange Collar Lock, 5/16-18               |
| 28     | 1664847SM  | 6   | CAPSCREW, Hex Washer Head Taptite, 5/16-18 x 3/4   |
| 29     | 1665374SM  | 3   | STRAP-1.00WD 3.06LG .                              |
| 30     | 2860681SM  | 1   | NUT, Hex Flange, 3/8-16                            |
| 31     | 1704082SM  | 1   | NUT, Hex Adjusting, 11/16                          |
| 32     | 1931352SM  | 1   | BOLT, Carriage, Short Neck, 3/8-16 x 1-1/2         |
| 33     | 1930642SM  | 2   | NUT, Hex Flange Toplock 1/4-20                     |
| 34     | 1716020ASM | 2   | SHAFT & BAR ASSEMBLY, Roller Fixed Arm             |
| 35     | 1923341SM  | 2   | CAPSCREW, Hex Head, 1/4-20 x 3/4, G5               |
| 36     | 1714760SM  | 2   | GAUGE WHEEL                                        |
| 37     | 1960027SM  | 2   | WASHER, 1/2                                        |
| 38     | 2158399SM  | 2   | E-RING, Retaining Extension                        |
| 39     | 1930645SM  | 1   | NUT, Hex Flange, 3/8-16, Two Way Lock              |
| 40     | 1674440SM  | 1   | SPACER                                             |
| 41     | 1922755SM  | 1   | WASHER, 3/8                                        |
| 42     | 1729653SM  | 1   | ARM, Pitch 44"                                     |
| 43     | 1611705SM  | 1   | SPACER-0.385IDX0                                   |
| 44     | 1923701SM  | 1   | CAPSCREW, 3/8-16 x 2                               |

# 44" Mower Deck - Housing & Arbor Group

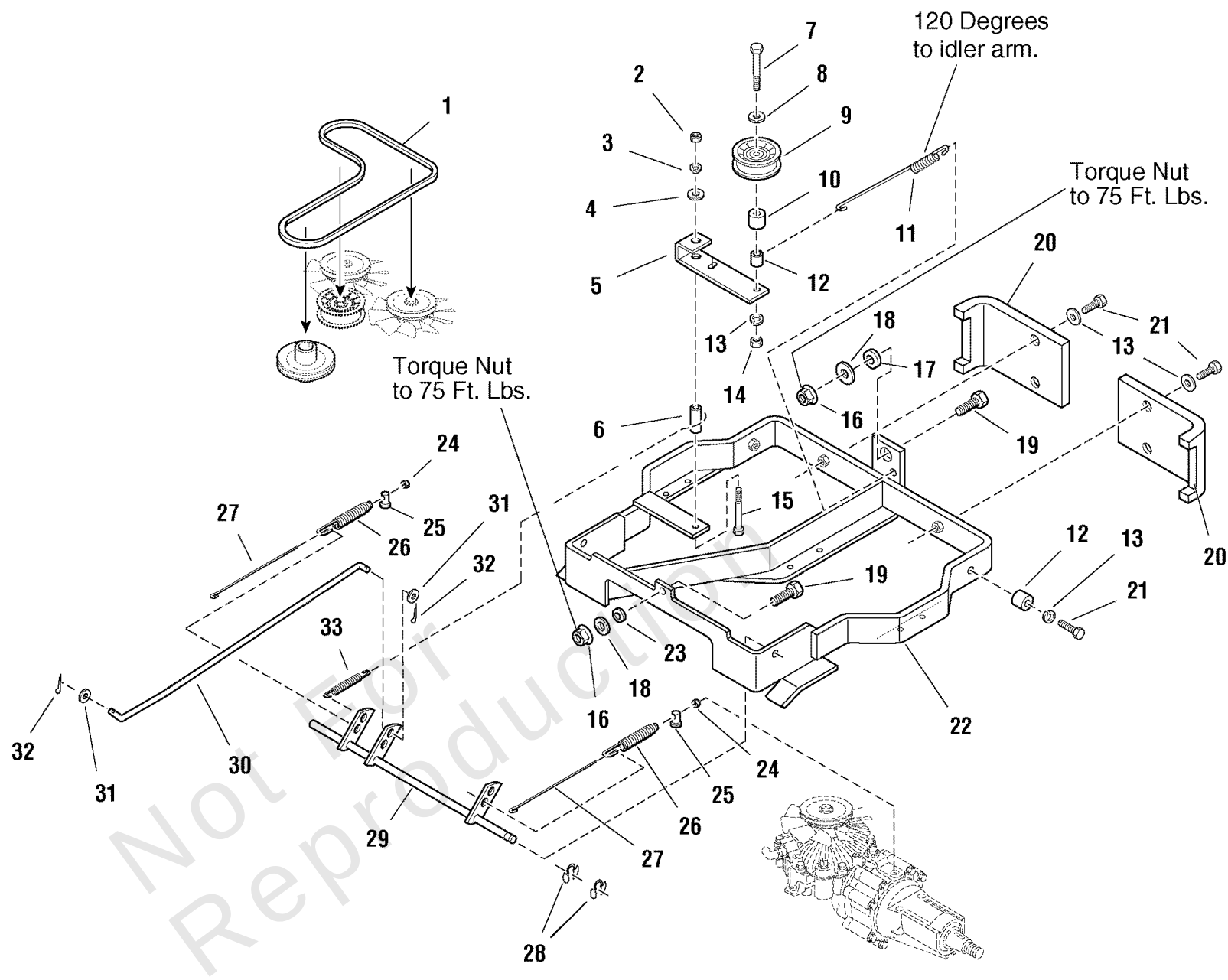
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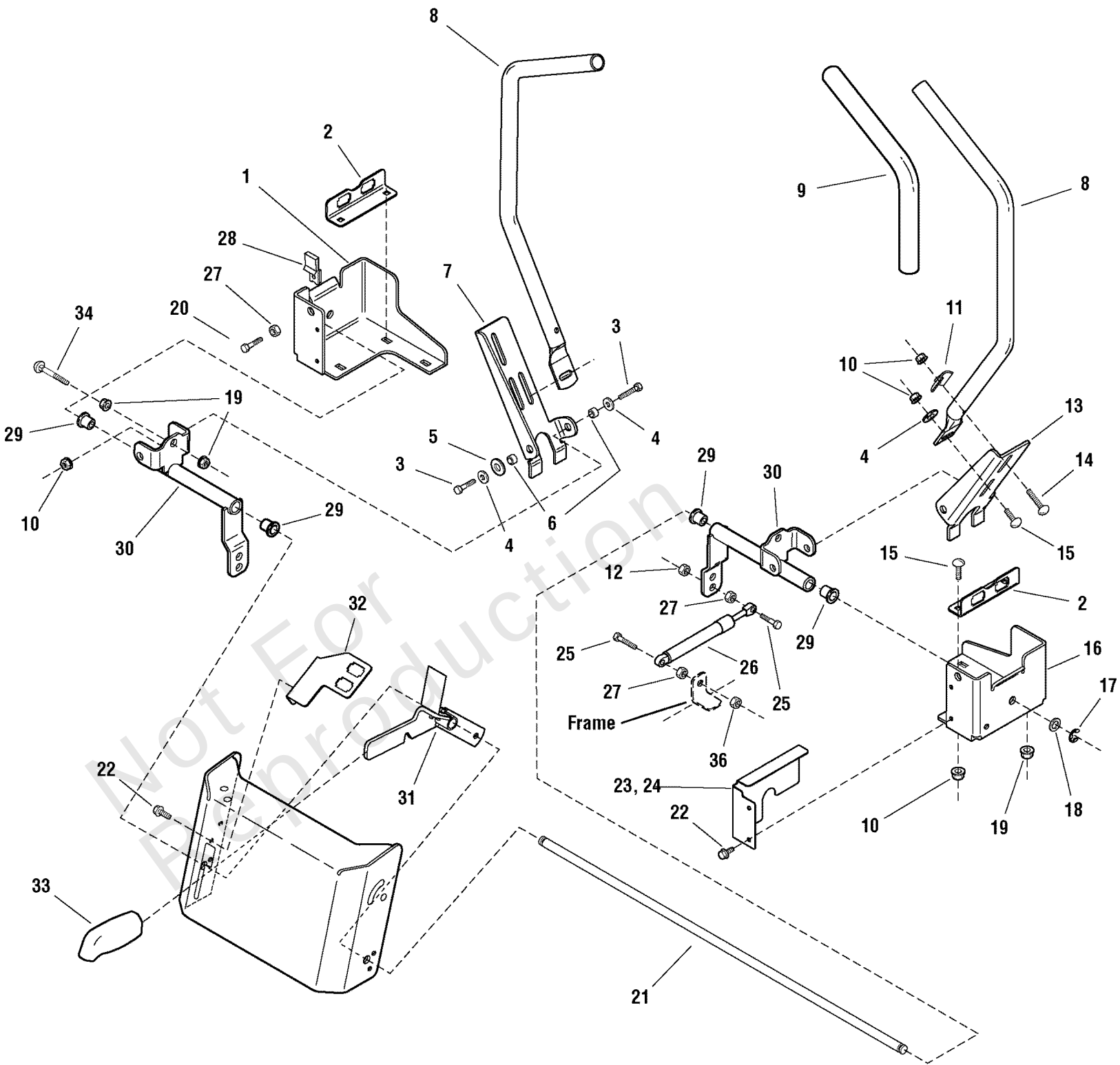
## 44" Mower Deck - Housing & Arbor Group

| REF NO | PART NO    | QTY | DESCRIPTION                                                               |
|--------|------------|-----|---------------------------------------------------------------------------|
| 1      | 1714419SM  | 3   | NUT, Hex Plange Non-Locking, 9/16-18                                      |
| 2      | 1713675SM  | 6   | WASHER, Bellville .56ID x 1.34 OD x .05T                                  |
| 3      | 1720387SM  | 1   | PULLEY, LH, .49" Shallow-Groove OD 4"                                     |
| 4      | 1713158SM  | 1   | HUB, Spacer, 2-13/32                                                      |
| 5      | 1713098SM  | 3   | PULLEY, .49" Shallow-Groove OD 4.25"                                      |
| 6      | 1713533SM  | 1   | HUB, 35/64                                                                |
| 7      | 1713197SM  | 2   | HUB, Serated, 35/64                                                       |
| 8      | 1655729ASM | 3   | HOUSING-ARBOR TOP - B                                                     |
| 9      | 2108202SM  | 3   | BEARING, BALL                                                             |
| 10     | 1715724SM  | 3   | SPACER, Bearing Sleeve                                                    |
| 11     | 1732544SM  | 3   | SPACER, Tube                                                              |
| 12     | 1707335SM  | 3   | GASKET, Foam                                                              |
| 13     | 1705897SM  | 3   | BEARING, BALL 11/16X1                                                     |
| 14     | 1713338ASM | 3   | HOUSING ASSEMBLY, Arbor Bottom, w/Lube Fitting<br>-(Includes Ref. No. 15) |
| 15     | 1704314SM  | 3   | LUBE FITTING, .250 DR                                                     |
| 16     | 1720560ASM | 1   | COVER, Arbor                                                              |
| 17     | 1664847SM  | 27  | CAPSCREW, Hex, Washer Head, Taptite, 5/16-18 x 3/4, G5                    |
| 18     | 1729763C   | 1   | HOUSING ASSEMBLY, 44" Mower Deck                                          |
| 19     | 1713619SM  | 3   | WASHER, Cup                                                               |
| 20     | 1713195SM  | 2   | SHAFT, Arbor with Extruded Washers (short)                                |
| 21     | 1713196SM  | 3   | SHIELD, Grass, Lower Arbor                                                |
| 22     | 1727774ASM | 3   | BLADE, Mower 44"                                                          |
| 23     | 1713089SM  | 3   | WASHER, Hex                                                               |
| 24     | 1656916SM  | 3   | WASHER, SPRING 0.475I                                                     |
| 25     | 2823471SM  | 3   | CAPSCREW, Hex Head, 7/16-14 x 1-1/4, G8                                   |
| 27     | 1713612SM  | 1   | SHAFT, Arbor with Extruded Washers (Long)                                 |
| 28     | 1931333SM  | 2   | CARRIAGE BOLT, 5/16-18 x 3/4, G5                                          |
| 29     | 1724538ASM | 1   | BAFFLE, Blowout, Short                                                    |
| 30     | 1927557SM  | 2   | NUT, Hex Flange Whiz Lock, 5/16-18                                        |
| 31     | 1931318SM  | 1   | CARRIAGE BOLT, 1/4-20 x 7/8, G5                                           |
| 32     | 1703601SM  | 1   | COVER, Arbor                                                              |
| 33     | 1960518SM  | 2   | NUT, Push                                                                 |
| 34     | 1960353SM  | 2   | WASHER, 1/4                                                               |
| 35     | 1704873SM  | 1   | CLAMP, WIRE, .312DIA                                                      |
| 36     | 1919326SM  | 1   | WASHER, 5/16                                                              |
| 39     | 1723938SM  | 1   | Sring, Torsion                                                            |
| 40     | 1705115SM  | 1   | PLUG, Button                                                              |
| 41     | 1705449SM  | 1   | DEFLECTOR, Discharge                                                      |
| 42     | 1960633SM  | 1   | CARRIAGE BOLT, 1/4-20 x 1-1/2                                             |
| 43     | 1706709SM  | 1   | ROD-.283DIA 11.65LG D                                                     |
| 44     | 1709195SM  | 1   | SPACER, .66 X 7/8 X 1 1/4                                                 |



## Carrier Group

| REF NO | PART NO    | QTY | DESCRIPTION                                     |
|--------|------------|-----|-------------------------------------------------|
| 1      | 1726470SM  | 1   | V-BELT                                          |
| 2      | 1917372SM  | 1   | NUT, Hex, 5/16-18                               |
| 3      | 1917356SM  | 1   | LOCKWASHER, Spring, 5/16                        |
| 4      | 1924874SM  | 1   | WASHER, 5/16                                    |
| 5      | 1715971ASM | 1   | ARM, Idler                                      |
| 6      | 1713588SM  | 1   | SPACER-0.323IDX0.555O                           |
| 7      | 1928957SM  | 1   | CAPSCREW, Hex Head, 3/8-16 x 2-3/4, G8          |
| 8      | 1924940SM  | 1   | WASHER, 3/8                                     |
| 9      | 2154534SM  | 1   | PULLEY, Idler                                   |
| 10     | 1667812SM  | 1   | SPACER                                          |
| 11     | 1726527SM  | 1   | SPRING, Extension                               |
| 12     | 1665699SM  | 3   | SPACER                                          |
| 13     | 1916965SM  | 5   | LOCKWASHER, Spring, 3/8                         |
| 14     | 1916950SM  | 1   | NUT, Hex, 3/8-16                                |
| 15     | 1921719SM  | 1   | CAPSCREW, Hex Head, 5/16-18 x 2-1/2, G5         |
| 16     | 1930644SM  | 2   | NUT-HEX FLANGE 1/2-1                            |
| 17     | 1719725SM  | 1   | BUSHING                                         |
| 18     | 1924361SM  | 2   | WASHER, 1/2                                     |
| 19     | 1921176SM  | 2   | CAPSCREW, Hex Head, 1/2-13 x 1-1/4, G5          |
| 20     | 1718300SM  | 2   | BUMPER, Weight, Cast Iron                       |
| 21     | 1923701SM  | 4   | CAPSCREW, Hex Head, 3/8-16 x 2, G5              |
| 22     | 1726551SM  | 1   | FRAME ASSEMBLY, Transmissions                   |
| 23     | 1719683SM  | 1   | BUSHING                                         |
| 24     | 1933896SM  | 2   | NUT, Hex Lock                                   |
| 25     | 1716077SM  | 2   | PIN, Yoke                                       |
| 26     | 1701996SM  | 2   | SPRING, Extension                               |
| 27     | 1716078SM  | 2   | ROD, Brake, 10-24 x 1-1/8                       |
| 28     | 1703805SM  | 2   | RING, Klipring Extension for 1/2 Diameter Shaft |
| 29     | 1715973SM  | 1   | SHAFT & ARMS ASSEMBLY, Pivot                    |
| 30     | 1725970SM  | 1   | ROD, Clutch                                     |
| 31     | 1919326SM  | 2   | WASHER, 5/16                                    |
| 32     | 1918447SM  | 2   | PIN, Cotter                                     |
| 33     | 2159106SM  | 1   | SPRING, Extension                               |



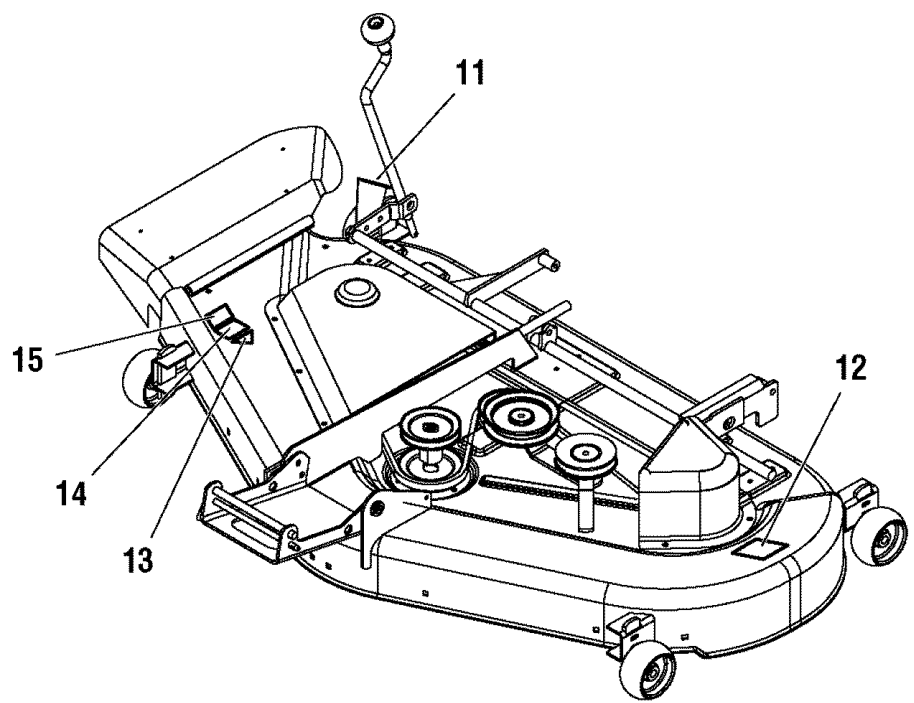
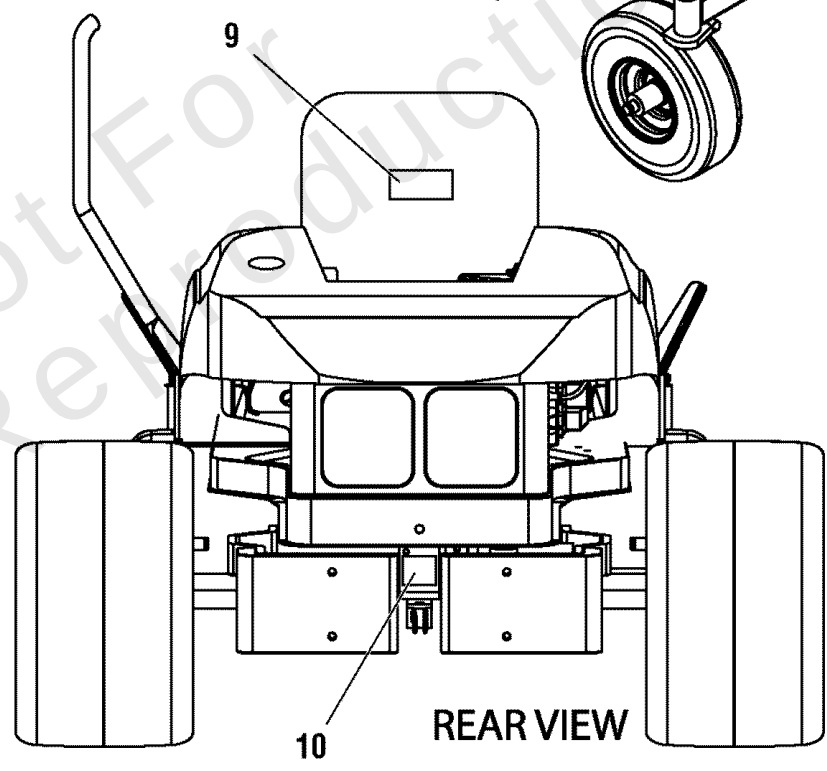
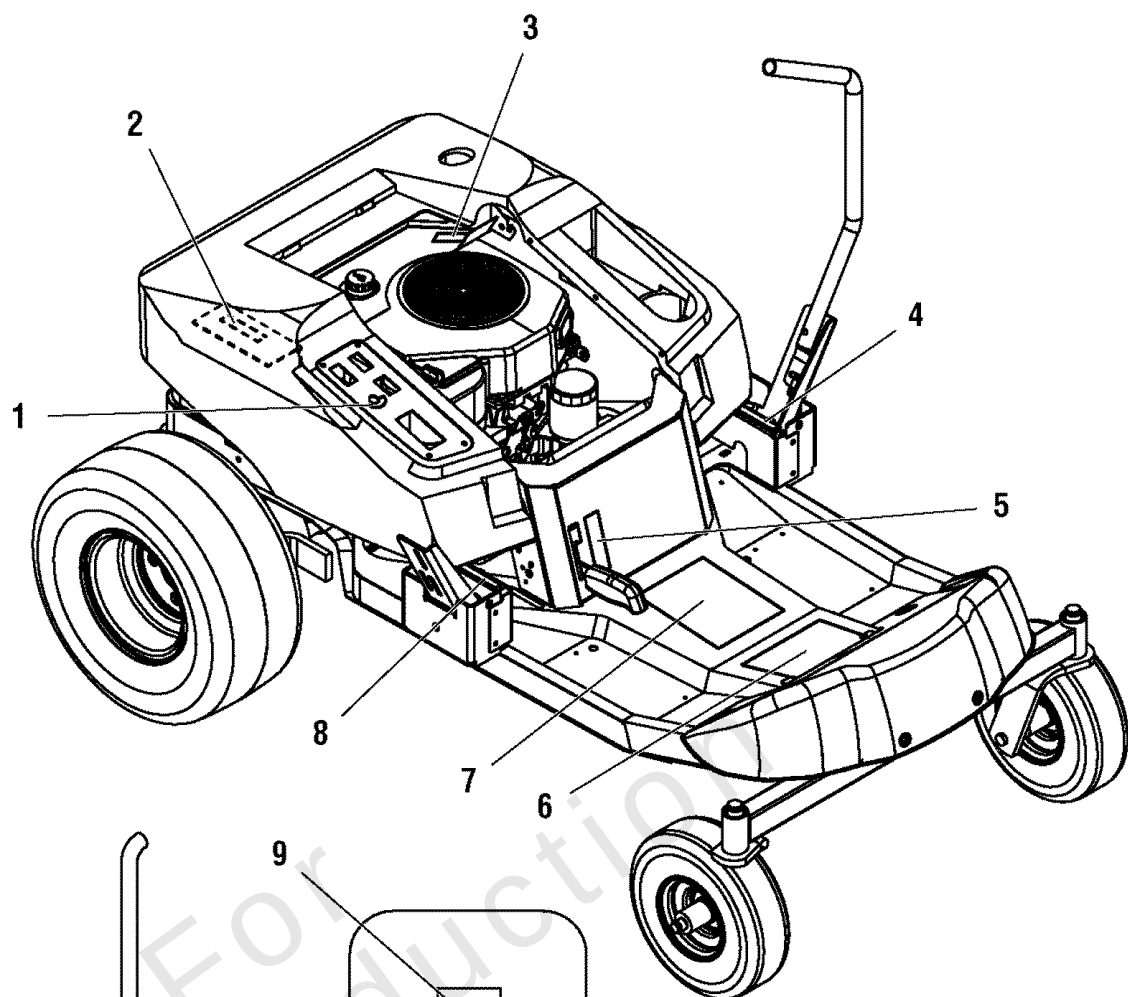
## Controls Group

| REF NO | PART NO    | QTY | DESCRIPTION                                  |
|--------|------------|-----|----------------------------------------------|
| 1      | 1725932ASM | 1   | BRACKET, Mounting, R.H.                      |
| 2      | 1725978SM  | 2   | BRACKET, Switch                              |
| 3      | 1921977SM  | 4   | CAPSCREW, Hex Head, 5/16-18 x 1 1/4          |
| 4      | 1919381SM  | 4   | WASHER, 5/16                                 |
| 5      | 1726445SM  | 2   | WASHER, Flat Nylon, 1/2                      |
| 6      | 1710437SM  | 4   | SPACER                                       |
| 7      | 1725933SM  | 1   | BRACKET, Tube Mount, R.H.                    |
| 8      | 1725934ASM | 2   | TUBE, Control Wand                           |
| 9      | 1726410SM  | 2   | GRIP, Foam Handle Bar                        |
| 10     | 1960686SM  | 14  | NUT, Hex Flange ESNA, 5/16-18                |
| 11     | 1720452SM  | 2   | CLAMP, Saddle                                |
| 12     | 1919438SM  | 4   | NUT, Hex Lock ESNA Light, 5/16-18            |
| 13     | 1726041SM  | 1   | BRACKET, Tube Mount, L.H.                    |
| 14     | 1931338SM  | 2   | CARRIAGE BOLT, 5/16-18 x 1-3/4, G5           |
| 15     | 1931335SM  | 8   | BOLT, Carriage, Short Neck, 5/16-18 x 1      |
| 16     | 1725931SM  | 1   | BRACKET, Mounting, L.H.                      |
| 17     | 1703805SM  | 2   | RING, Klipring                               |
| 18     | 1960027SM  | 2   | WASHER, 1/2                                  |
| 19     | 1931277SM  | 8   | NUT, Hex Flange Whiz Lock, 5/16-18           |
| 20     | 1726520SM  | 1   | KNOB, Extension, Threaded, 5/16-18 x 1       |
| 21     | 1725927SM  | 1   | SHAFT, Cross                                 |
| 22     | 1925003SM  | 6   | SCREW, Hex Washer Head Taptite, 1/4-20 x 5/8 |
| 23     | 1726497SM  | 1   | COVER, Lower Handle, L.H.                    |
| 24     | 1726496SM  | 1   | COVER, Lower Handle, R.H.                    |
| 25     | 1921221SM  | 4   | CAPSCREW, Hex Head, 5/16-18 x 1-1/2, G5      |
| 26     | 1726308SM  | 2   | SHOCK ABSORBER                               |
| 27     | 1920161SM  | 6   | NUT-HEX JAM 5/16-18                          |
| 28     | 1960717SM  | 1   | NUT, Speed, 5/16-1                           |
| 29     | 1715025SM  | 4   | BUSHING                                      |
| 30     | 1725938SM  | 2   | PIVOT ASSEMBLY, Control                      |
| 31     | 1725966SM  | 1   | HANDLE ASSEMBLY, Brake                       |
| 32     | 1726441SM  | 1   | SUPPORT, Switch                              |
| 33     | 1722302SM  | 1   | GRIP                                         |
| 34     | 1960273SM  | 2   | CARRIAGE BOLT, 5/16-18 x 2-1/4, G5           |

*Dash Group (7010 & 7016) DELETE16*

| REF NO | PART NO | QTY | DESCRIPTION |
|--------|---------|-----|-------------|
|--------|---------|-----|-------------|

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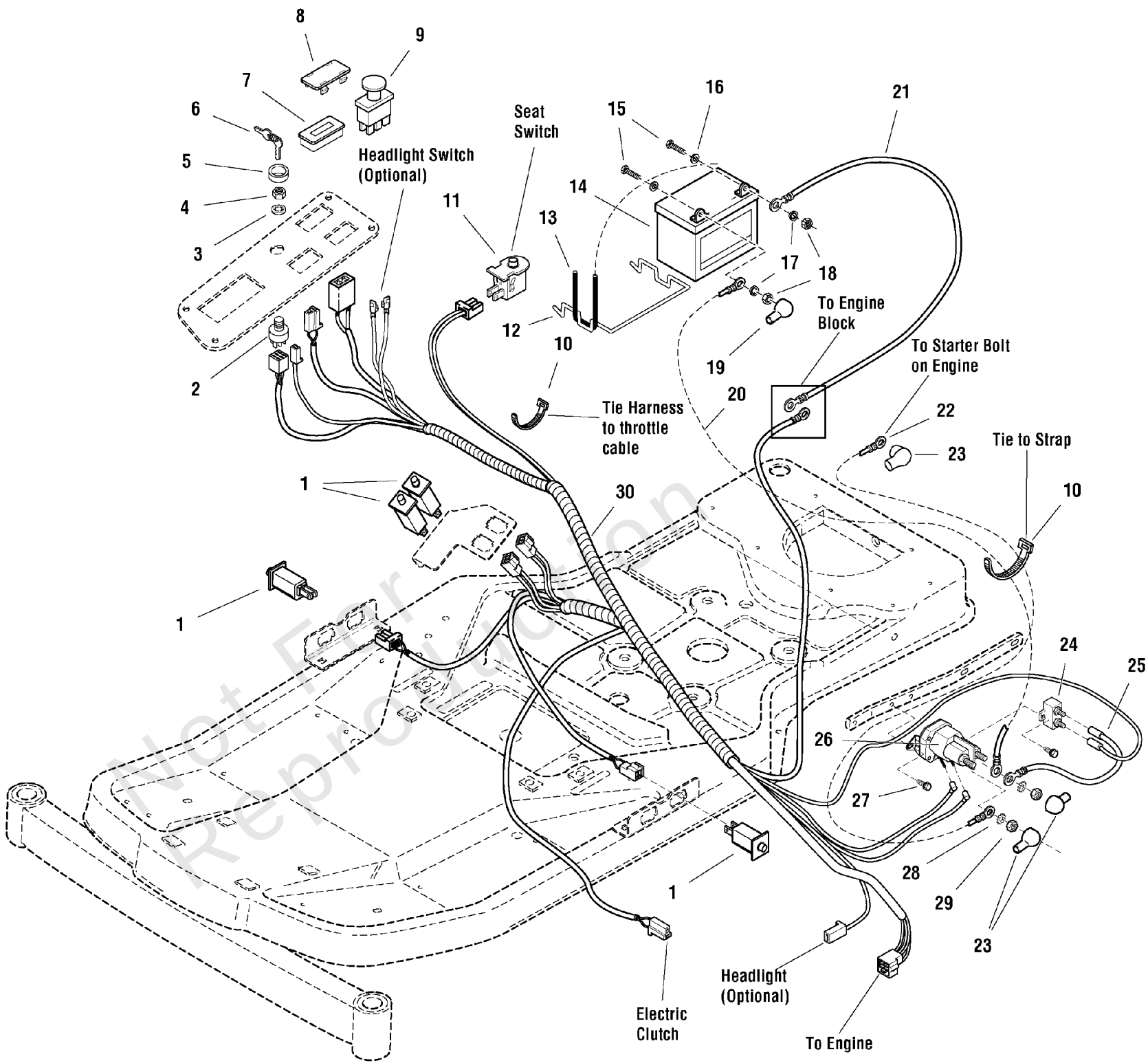


## Decals Group

| REF NO | PART NO   | QTY | DESCRIPTION                                         |
|--------|-----------|-----|-----------------------------------------------------|
| 1      | 1726526SM | 1   | DECAL, Ignition Switch                              |
| 2      | 1726525SM | 1   | DECAL, Sealed Hydro System                          |
| 3      | 1726631SM | 1   | DECAL, Do Not Remove Foam Seal                      |
| 4      | 1725671SM | 1   | DECAL, Motion Control, L.H.                         |
| 5      | 1726529SM | 1   | DECAL, Parking Brake                                |
| 6      | 1726429SM | 1   | DECAL, Panel Upper, Operation                       |
| 7      | 1726430SM | 1   | DECAL, Panel Lower, Warning/Danger & Icon Indicator |
| 8      | 1725670SM | 1   | DECAL, Motion Control, R.H.                         |
| 9      | -----     | 1   | DECAL, ID Plate                                     |
| 10     | 1726834SM | 1   | DECAL, Transmission Release Valve                   |
| 11     | 1726642SM | 1   | DECAL, Height of Cut                                |
| 12     | 1704276SM | 1   | DECAL-DANGER DO NOT P                               |
| 13     | -----     | 1   | DECAL, OPEI Certified (Not Serviced)                |
| 14     | 1722789SM | 1   | DECAL, 44"                                          |
| 15     | 1704277SM | 1   | DECAL, Danger (Do Not Operate With Out Deflector)   |

### Footnotes:

Note:\* Not a Service Part.



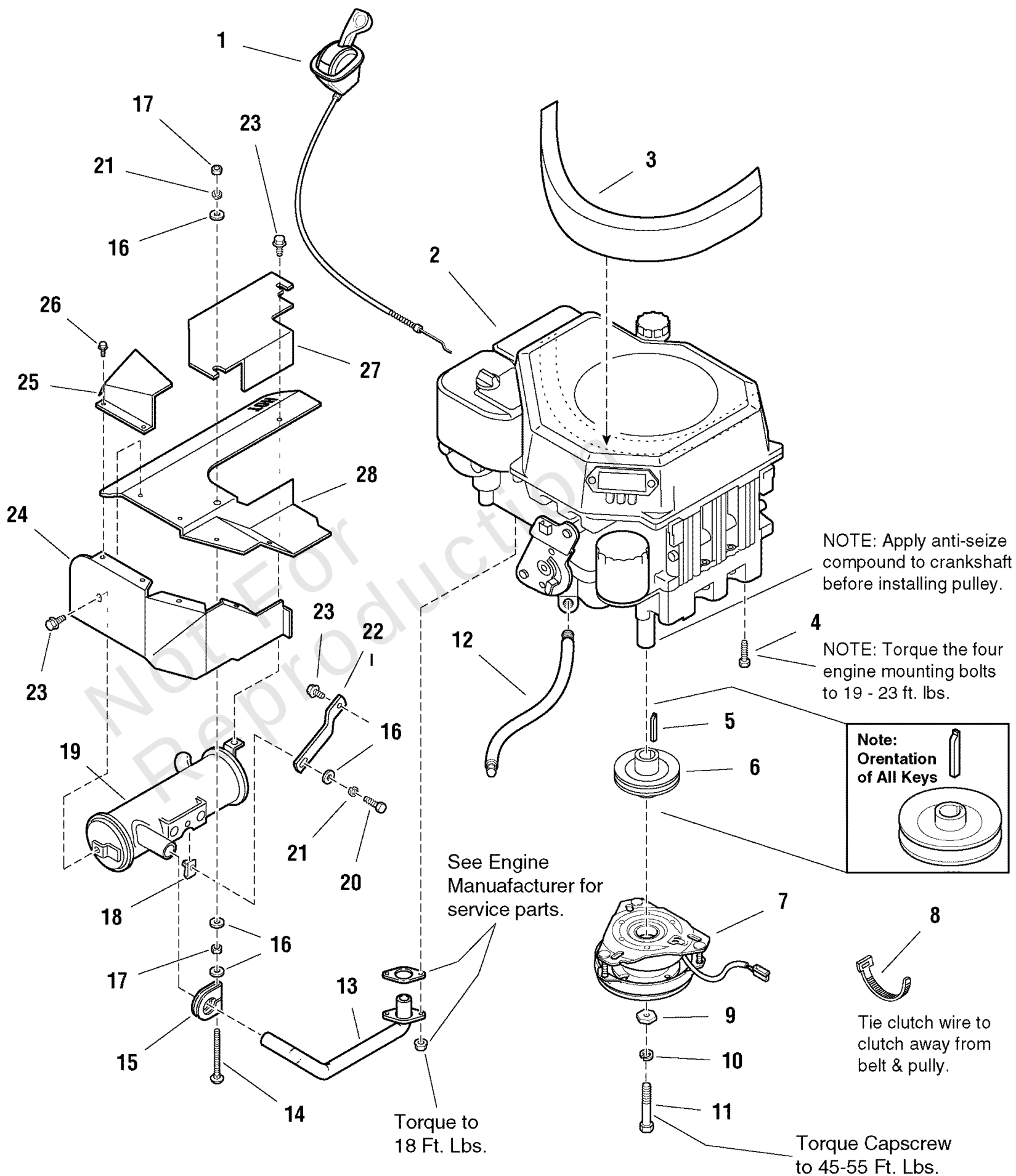
## Electrical Group

| REF NO | PART NO   | QTY | DESCRIPTION                                         |
|--------|-----------|-----|-----------------------------------------------------|
| 1      | 1732006SM | 4   | SWITCH, Push Button                                 |
| 2      | 1686734SM | 1   | IGNITION SWITCH                                     |
| 3      | 1960547SM | 1   | LOCKWASHER-INTERNAL                                 |
| 4      | 1717549SM | 1   | NUT, Hex Flange, 5/8-32, Ignition Switch            |
| 5      | 1717550SM | 1   | COVER, Ignition Switch                              |
| 6      | 1717163SM | 1   | KEY-IGNITION INDAK                                  |
| 7      | 1731184SM | 1   | METER, Hour Digital, with Oil & Lube Alarms         |
| 8      | 1722611SM | 1   | PLUG-HOLE BLACK                                     |
| 9      | 1722887SM | 1   | SWITCH-PTO PUSH                                     |
| 10     | 1701011SM | 3   | TIE, Self Locking                                   |
| 11     | 1732005SM | 1   | SWITCH, Push Button, Seat Switch                    |
| 12     | 1667805SM | 1   | BRACE, Battery                                      |
| 13     | 1665872SM | 1   | STRAP, Black                                        |
| 14     | 1685215SM | 1   | BATTERY,12V                                         |
| 15     | 2823341SM | 2   | CAPSCREW, Hex Head, 1/4-20 x 3/4 G5                 |
| 16     | 2821319SM | 2   | WASHER, 1/4                                         |
| 17     | 2816964SM | 2   | LOCKWASHER, Spring, 1/4                             |
| 18     | 2816622SM | 2   | NUT, Hex, 1/4-20                                    |
| 19     | 1709086SM | 1   | BOOT, Insulator                                     |
| 20     | 1721830SM | 1   | CABLE, #6 x 25, 2 Ring Terminals                    |
| 21     | 1703589SM | 1   | CABLE, #6 x 31, 2 Ring Terminals                    |
| 22     | 1666328SM | 1   | CABLE, #6 x 37-3/4, 2 Ring Terminals                |
| 23     | 1724588SM | 3   | COVER, Terminal                                     |
| 24     | 1665238SM | 1   | BREAKER-CIRCUIT                                     |
| 25     | 1665237SM | 1   | WIRE, 12 GA                                         |
| 26     | 1686981SM | 1   | SOLENOID, 4 Pole, 12 Volt DC                        |
| 27     | 1925003SM | 2   | CAPSCREW, Hex Washer Head Taptite, 1/4-20 x 1/2, G5 |
| 28     | 2820426SM | 2   | LOCKWASHER, External Tooth                          |
| 29     | 2820263SM | 2   | NUT, Hex, 5/16-24                                   |
| 30     | 1726016SM | 1   | HARNESS, Wiring                                     |

# Engine Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 2690431



## Engine Group

| REF NO | PART NO    | QTY | DESCRIPTION                                                                 |
|--------|------------|-----|-----------------------------------------------------------------------------|
| 1      | 1722955SM  | 1   | CONTROL, Throttle, Single, W/Knob                                           |
| 2      | -----      | 1   | ENGINE, 16HP KOHLER, Model # CV460S, Type # PA-26522<br>-(Refer to Note: *) |
| 3      | 1726420SM  | 1   | SEAL, Foam                                                                  |
| 4      | 2827187SM  | 4   | CAPSCREW, Hex Washer Head, Taptite, 3/8-16 x 1                              |
| 5      | 1720463SM  | 1   | KEY, Hi-Pro, 1/4 x 2-1/2                                                    |
| 6      | 1719385SM  | 1   | PULLEY ASSY, PTO                                                            |
| 7      | 1686880SM  | 1   | CLUTCH, Electric Ogura                                                      |
| 8      | 2832747SM  | 1   | TIE, Self Locking, 3-5/8 LG                                                 |
| 9      | 1708264SM  | 1   | WASHER, HEX, 0.453ID                                                        |
| 10     | 1918199SM  | 1   | LOCKWASHER, Spring, 7/16                                                    |
| 11     | 2860631SM  | 1   | CAPSCREW, Hex Head, 7/16-20 x 3, G5                                         |
| 12     | 1726498SM  | 1   | HOSE-OIL DRAIN .375ID                                                       |
| 13     | 1713502SM  | 1   | PIPE, Exhaust                                                               |
| 14     | 1960748SM  | 1   | CARRIAGE BOLT, 5/16-18 x 3-1/4 G5                                           |
| 15     | 1676183SM  | 1   | CLAMP, Muffler, 1.312 Dia.                                                  |
| 16     | 1919326SM  | 4   | WASHER, 5/16                                                                |
| 17     | 1917372SM  | 2   | NUT, Hex, 5/16-18 NC-2B                                                     |
| 18     | 1935255SM  | 1   | NUT, SPEED, 5/16-18 L                                                       |
| 19     | 1708416SM  | 1   | MUFFLER ASSEMBLY                                                            |
| 20     | 703570     | 1   | CAPSCREW, Hex Head, 5/16-18 x 1 1/4                                         |
| 21     | 1917356SM  | 2   | WASHER, Lock Helical Spring                                                 |
| 22     | 1713557ASM | 1   | SUPPORT, Muffler                                                            |
| 23     | 1924856SM  | 3   | SCREW, Hex Washer Head, Taptite, 5/16-18 x 1/2                              |
| 24     | 1722621ASM | 1   | DUCT, Air, Bottom                                                           |
| 25     | 1726539SM  | 1   | SHIELD, Heat                                                                |
| 26     | 1960720SM  | 4   | CAPSCREW, Thread Cutting, # 10 x 1/2                                        |
| 27     | 1726634SM  | 1   | SHIELD, Muffler, Oil Filter Access Panel                                    |
| 28     | 1726633SM  | 1   | SHIELD, Muffler                                                             |

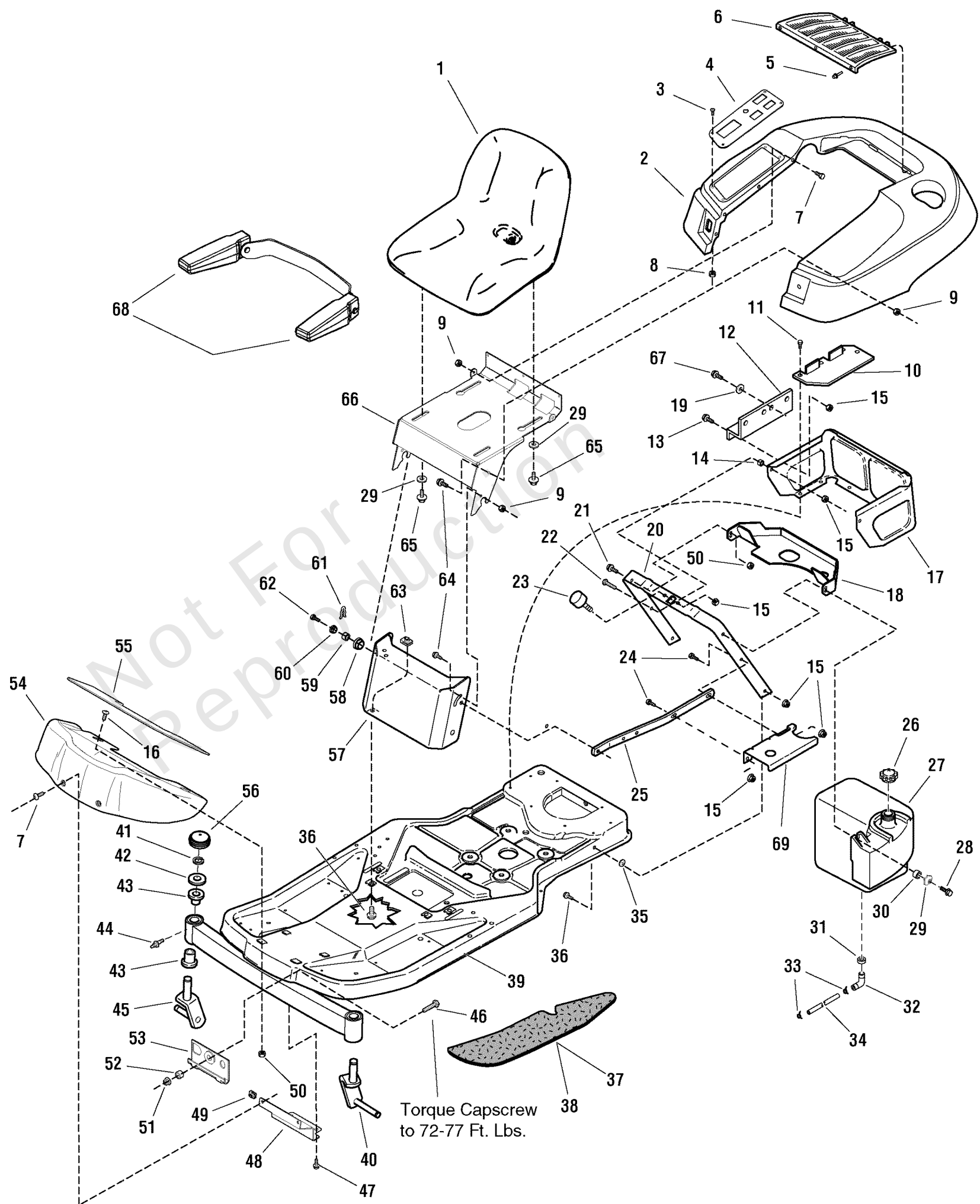
### Footnotes:

Note:\* Refer to group Engine Repair Parts.

Frame, Body & Seat Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 2690431



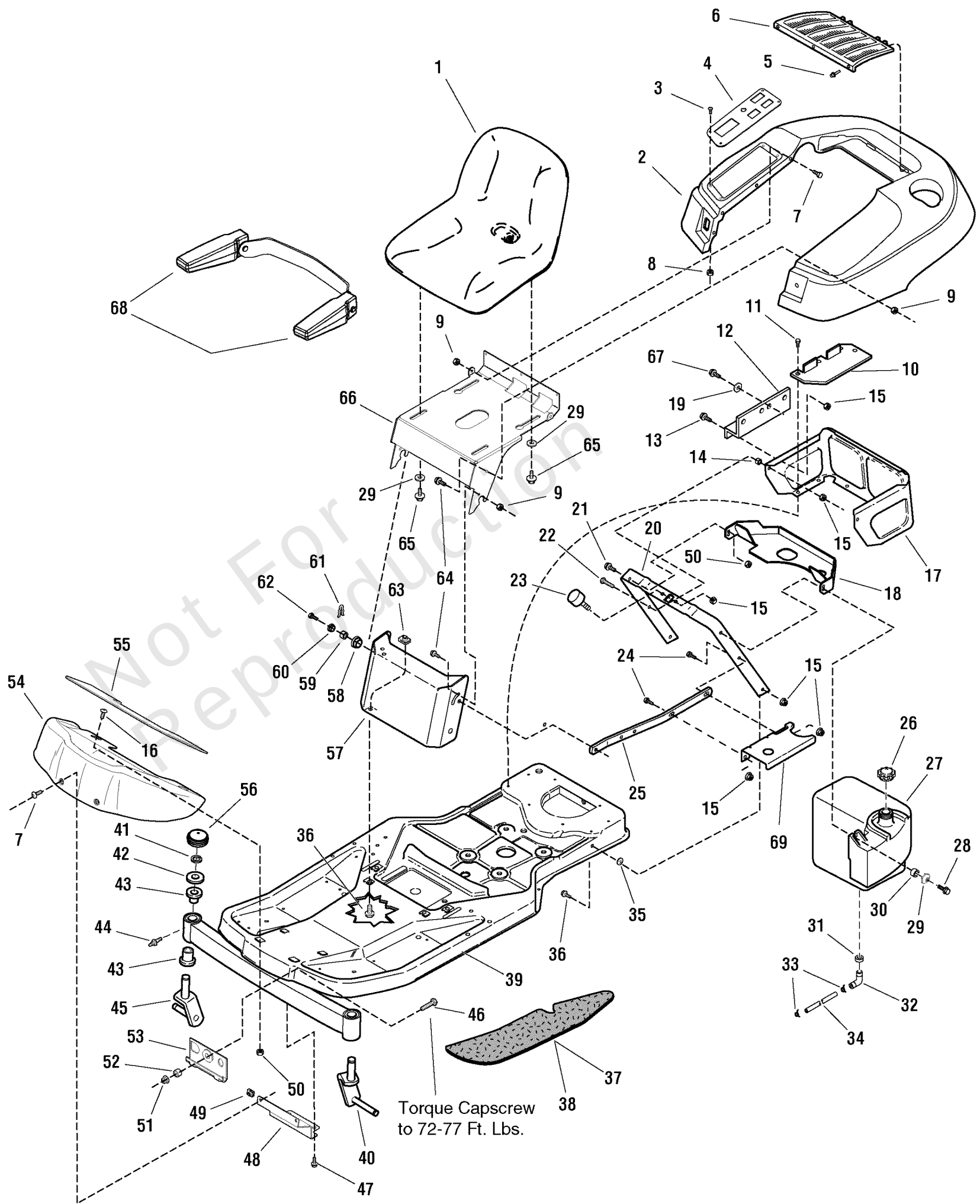
## Frame, Body & Seat Group

| REF NO | PART NO    | QTY | DESCRIPTION                                                             |
|--------|------------|-----|-------------------------------------------------------------------------|
| 1      | 1729762SM  | 1   | SEAT ASSEMBLY, without Arm Rests                                        |
| 2      | 1726305SM  | 1   | DECK, Seat                                                              |
| 3      | 1722293SM  | 4   | CAPSCREW, Hex, Socket Head, 1/4-20 x 7/8, G5                            |
| 4      | 1729771SM  | 1   | PLATE, Pod Control                                                      |
| 5      | 1673320SM  | 3   | RIVET, Pop                                                              |
| 6      | 1708504SM  | 1   | SCREEN, Seat Deck                                                       |
| 7      | 1960715SM  | 4   | SCREW, Truss Head Torx Drive, 1/4-20 x 3/4,                             |
| 8      | 1920397SM  | 4   | NUT, Hex Lock ESNA Light, 1/4-20                                        |
| 9      | 1960694SM  | 6   | NUT, Hex Flange ESNA, 1/4-20                                            |
| 10     | 1716027SM  | 1   | PLATE, Battery                                                          |
| 11     | 1925003SM  | 6   | CAPSCREW, Hex Washer Head Taptite, 1/4-20 x 1/2, G5                     |
| 12     | 1715961SM  | 1   | SUPPORT, Reservoirs                                                     |
| 13     | 1925205SM  | 2   | CAPSCREW, Hex Head, 5/16-18 x 5/8, G5                                   |
| 14     | 1673796SM  | 1   | SPACER, Powdered Metal                                                  |
| 15     | 1931277SM  | 8   | NUT, Hex Flange Whiz Lock, 5/16-18                                      |
| 16     | 1931317SM  | 2   | CARRIAGE BOLT, 1/4-20 x 3/4                                             |
| 17     | 1715962ASM | 1   | SHROUD, Rear                                                            |
| 18     | 1726417SM  | 1   | DUCT, Air Inlet                                                         |
| 19     | 1924874SM  | 1   | WASHER, Plain                                                           |
| 20     | 1725982SM  | 1   | SUPPORT, Seat Deck                                                      |
| 21     | 1923341SM  | 1   | CAPSCREW, Hex Head, 1/4-20 x 3/4, G5                                    |
| 22     | 1922127SM  | 1   | SCREW, Hex Head Cap, 5/16-18 x 1 3/4                                    |
| 23     | 1726390SM  | 2   | BUMPER, Rubber                                                          |
| 24     | 1921977SM  | 2   | CAPSCREW, Hex Head, 5/16-18 x 1 1/4                                     |
| 25     | 1708362ASM | 1   | BRACE, Tank                                                             |
| 26     | 1714020SM  | 1   | CAP, Fuel Tank                                                          |
| 27     | 1726397SM  | 1   | TANK, Fuel                                                              |
| 28     | 1930600SM  | 1   | CAPSCREW, Hex Washer Head Taptite, 5/16-18 x 1-1/2                      |
| 29     | 1960044SM  | 2   | WASHER-0.312(0.33IDX1                                                   |
| 30     | 1710437SM  | 1   | SPACER                                                                  |
| 31     | 1726400SM  | 1   | BUSHING, Fuel Tank                                                      |
| 32     | 1674792SM  | 1   | ELBOW, with Screen, Gas Tank To Fuel Line                               |
| 33     | 2860112SM  | 2   | CLAMP, Hose, Wire Type E                                                |
| 34     | 1718678SM  | 1   | HOSE, Fuel                                                              |
| 35     | 1933988SM  | 2   | NUT, Push                                                               |
| 36     | 1930591SM  | 6   | CAPSCREW, Hex Flange Whiz Lock, 5/16-18 x 3/4                           |
| 37     | 1728986SM  | 1   | PAD, Footrest, R.H.                                                     |
| 38     | 1728987SM  | 1   | PAD, Footrest, L.H.                                                     |
| 39     | 1729629SM  | 1   | FRAME & SPINDLES ASSEMBLY, (Includes Ref. Nos. 40, 41, 42, 43, 44 & 45) |
| 40     | 1716065SM  | 1   | ARM, Caster, L.H.                                                       |
| 41     | 2834712SM  | 2   | RING, E-Retaining                                                       |
| 42     | 1919394SM  | 4   | WASHER, 1                                                               |
| 43     | 1721682SM  | 4   | BUSHING                                                                 |
| 44     | 2821133SM  | 2   | FITTING, Lube                                                           |
| 45     | 1716066SM  | 1   | ARM, Caster, R.H.                                                       |
| 46     | 1920328SM  | 1   | CAPSCREW, Hex, 1/2-13 x 1-1/2                                           |
| 47     | 1664847SM  | 2   | SCREW, Hex Washer Head Taptite, 5/16-18 x 3/4                           |
| 48     | 1726024ASM | 1   | BRACKET, Footrest Support                                               |
| 49     | 1960368SM  | 2   | LUG NUT, Speed, 1/4-20                                                  |
| 50     | 1930641SM  | 3   | NUT, Hex Flange Whiz Lock, 1/4-20                                       |
| 51     | 1930644SM  | 1   | NUT-HEX FLANGE 1/2-1                                                    |

Frame, Body & Seat Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 2690431



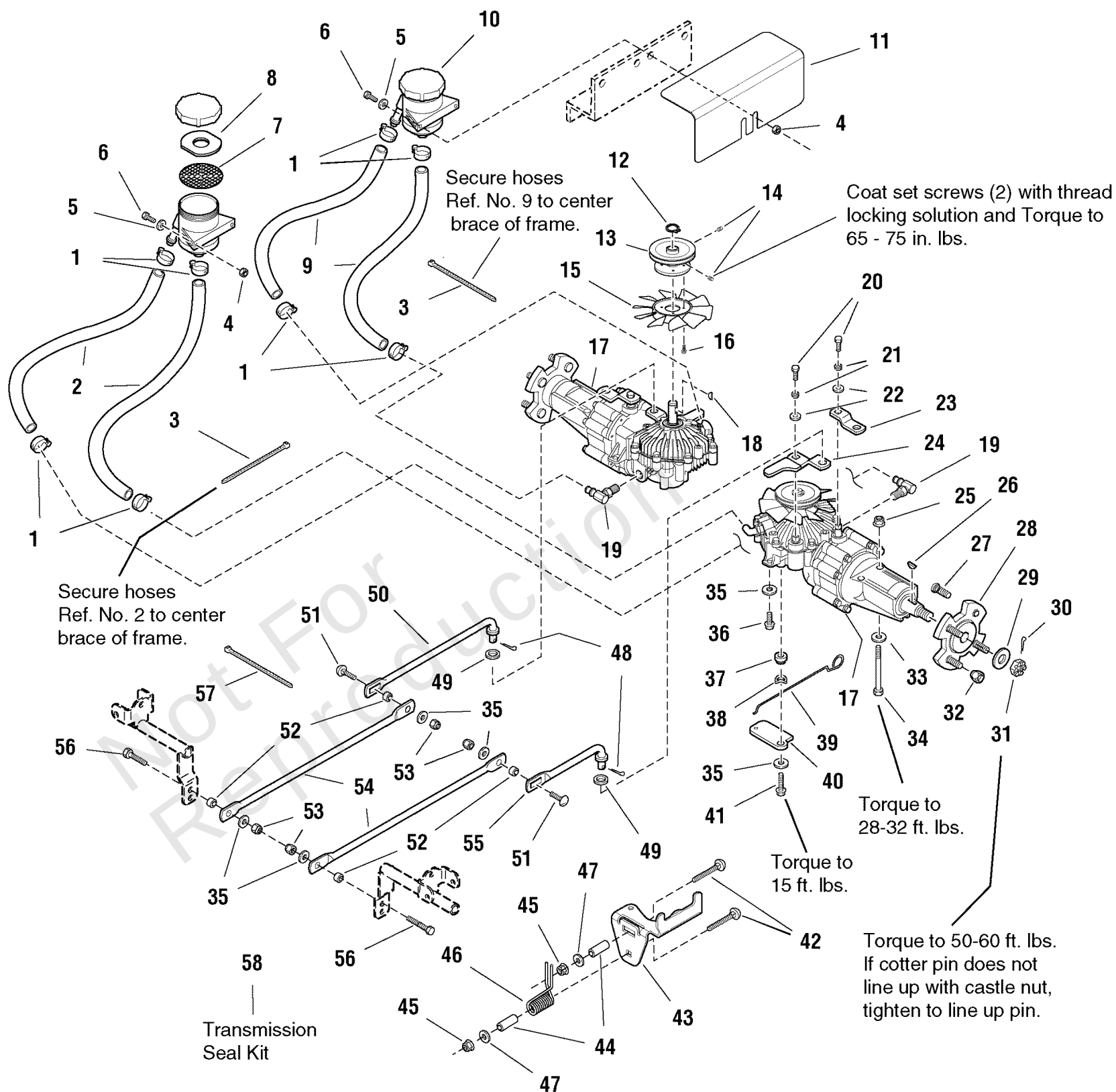
### ***Frame, Body & Seat Group***

| REF NO | PART NO    | QTY | DESCRIPTION                                    |
|--------|------------|-----|------------------------------------------------|
| 52     | 1709235SM  | 1   | SPACER                                         |
| 53     | 1716064ASM | 1   | HOOK & WASHER ASSEMBLY                         |
| 54     | 1726025A   | 1   | PANEL, Footrest                                |
| 55     | 1726306SM  | 1   | PAD, Footrest, Front                           |
| 56     | 1726504SM  | 2   | CAP, Hub                                       |
| 57     | 1725926SM  | 1   | PANEL, Front                                   |
| 58     | 1704626SM  | 2   | SPACER                                         |
| 59     | 1705249SM  | 2   | SPACER                                         |
| 60     | 1705248SM  | 2   | PIVOT, Hood                                    |
| 61     | 1704628SM  | 2   | PIN, Quick                                     |
| 62     | 1960373SM  | 2   | CAPSCREW, Hex Washer Head Taptite, 5/16-18 x 1 |
| 63     | 1935255SM  | 4   | NUT, SPEED, 5/16-18 L                          |
| 64     | 1960295SM  | 4   | SCREW, Hex Flange Whiz Lock, 1/4-20 x 5/8      |
| 65     | 1960738SM  | 1   | CAPSCREW, Exterior Thread, 5/16-18 x 1         |
| 66     | 1725929ASM | 1   | SUPPORT, Seat                                  |
| 67     | 1931333SM  | 1   | CARRIAGE BOLT, 5/16-18 3/4, G5                 |
| 68     | 1687021SM  | 1   | ARM REST KIT, (L.H. & R.H.)                    |
| 69     | 1726558ASM | 1   | SUPPORT, Fuel Tank                             |

# Transmission Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 2690431



## Transmission Group

| REF NO | PART NO    | QTY | DESCRIPTION                                                                                     |
|--------|------------|-----|-------------------------------------------------------------------------------------------------|
| 1      | 2833098SM  | 8   | CLAMP, Hose, Wire Type E                                                                        |
| 2      | 1719556SM  | 2   | HOSE, Hydraulic                                                                                 |
| 3      | 1701011SM  | 2   | TIE, Self Locking                                                                               |
| 4      | 1960294SM  | 4   | NUT, Hex, Whiz Lock, Flange, 1/4-20                                                             |
| 5      | 1921319SM  | 4   | WASHER, 1/4                                                                                     |
| 6      | 1921959SM  | 4   | CAPSCREW, Hex Head, 1/4-20 x 5/8, G5                                                            |
| 7      | 1719912SM  | 2   | FILTER, Reservoir                                                                               |
| 8      | 1723164SM  | 2   | WASHER, Special                                                                                 |
| 9      | 1719557SM  | 2   | HOSE, Hydraulic                                                                                 |
| 10     | 1702488SM  | 2   | RESERVOIR, Hydro Expansion                                                                      |
| 11     | 1726494SM  | 1   | COVER, Reservoir                                                                                |
| 12     | 2827731SM  | 2   | RING, Retaining                                                                                 |
| 13     | 1719382SM  | 2   | PULLEY                                                                                          |
| 14     | 1960617SM  | 4   | SET SCREW, Torx Head Cup Point, 1/4-28 x 1/4, G8                                                |
| 15     | 1719482SM  | 2   | FAN, 10 Blades, 6" Plastic                                                                      |
| 16     | 1925003SM  | 8   | CAPSCREW, Hex Washer Head Taptite, 1/4-20 x 5/8                                                 |
| 17     | 1687181SM  | 2   | TRANSMISSION ASSEMBLY, (Includes Ref. Nos. 20, 21, 22, 23, 24, 26, 31, 42, 43, 44, 45, 46 & 47) |
| 18     | 2830672SM  | 2   | KEY, Hi-Pro                                                                                     |
| 19     | 1719560SM  | 2   | FITTING, Hose Elbow, 3/8-18                                                                     |
| 20     | 1922234SM  | 4   | CAPSCREW, Hex Head, 1/4-28 x 5/8, G5                                                            |
| 21     | 1916964SM  | 4   | LOCKWASHER, Spring, 1/4                                                                         |
| 22     | 1921319SM  | 4   | WASHER, Flat, 1/4                                                                               |
| 23     | 1716044SM  | 2   | ARM, Transmission Brake                                                                         |
| 24     | 1726500SM  | 2   | ARM, Control                                                                                    |
| 25     | 1930645SM  | 4   | NUT, Hex Flange Two-Way Lock, 3/8-16                                                            |
| 26     | 2805126SM  | 2   | KEY, #15, 1/4 x 1                                                                               |
| 27     | 1663805SM  | 8   | BOLT, Wheel Knurled, 7/16-20 x 1                                                                |
| 28     | 1726351SM  | 2   | PLATE & HUB ASSEMBLY, Rear Wheel                                                                |
| 29     | 1911386SM  | 2   | WASHER, 3/4                                                                                     |
| 30     | 1923500SM  | 2   | PIN, Cotter                                                                                     |
| 31     | 1716060SM  | 2   | NUT, Hex Slotted, 3/4                                                                           |
| 32     | 2177725SM  | 8   | NUT, Hex, 7/16-20, for Wheel Bolt                                                               |
| 33     | 1924940SM  | 4   | WASHER, 5/16                                                                                    |
| 34     | 1922918SM  | 4   | CAPSCREW, Hex Head, 3/8-16 x 3-1/4, G5                                                          |
| 35     | 1919381SM  | 8   | WASHER, 5/16                                                                                    |
| 36     | 1960541SM  | 4   | CAPSCREW, Hex Head Taptite, 5/16-18 x 3/4                                                       |
| 37     | 1705590SM  | 2   | SPACER                                                                                          |
| 38     | 2170157SM  | 2   | WASHER, Shakeproof, 1/2                                                                         |
| 39     | 1715957SM  | 2   | ROD, Actuator                                                                                   |
| 40     | 1715968SM  | 2   | ACTUATOR, Tow Valve                                                                             |
| 41     | 1960373SM  | 2   | CAPSCREW, Hex Washer Head Taptite, 5-16-18 x 1                                                  |
| 42     | 1960273SM  | 4   | CARRIAGE BOLT, 5/16-18 x 2-1/4                                                                  |
| 43     | 1726438ASM | 2   | SUPPORT, Neutral Return                                                                         |
| 44     | 1713588SM  | 4   | SPACER-0.323IDX0.555O                                                                           |
| 45     | 1919438SM  | 4   | NUT, Flange ESNA, 5/16-18                                                                       |
| 46     | 1717165SM  | 2   | SPRING, Torsion                                                                                 |
| 47     | 1919381SM  | 4   | WASHER, Flat, 5/16                                                                              |
| 48     | 1918451SM  | 2   | PIN, Cotter                                                                                     |

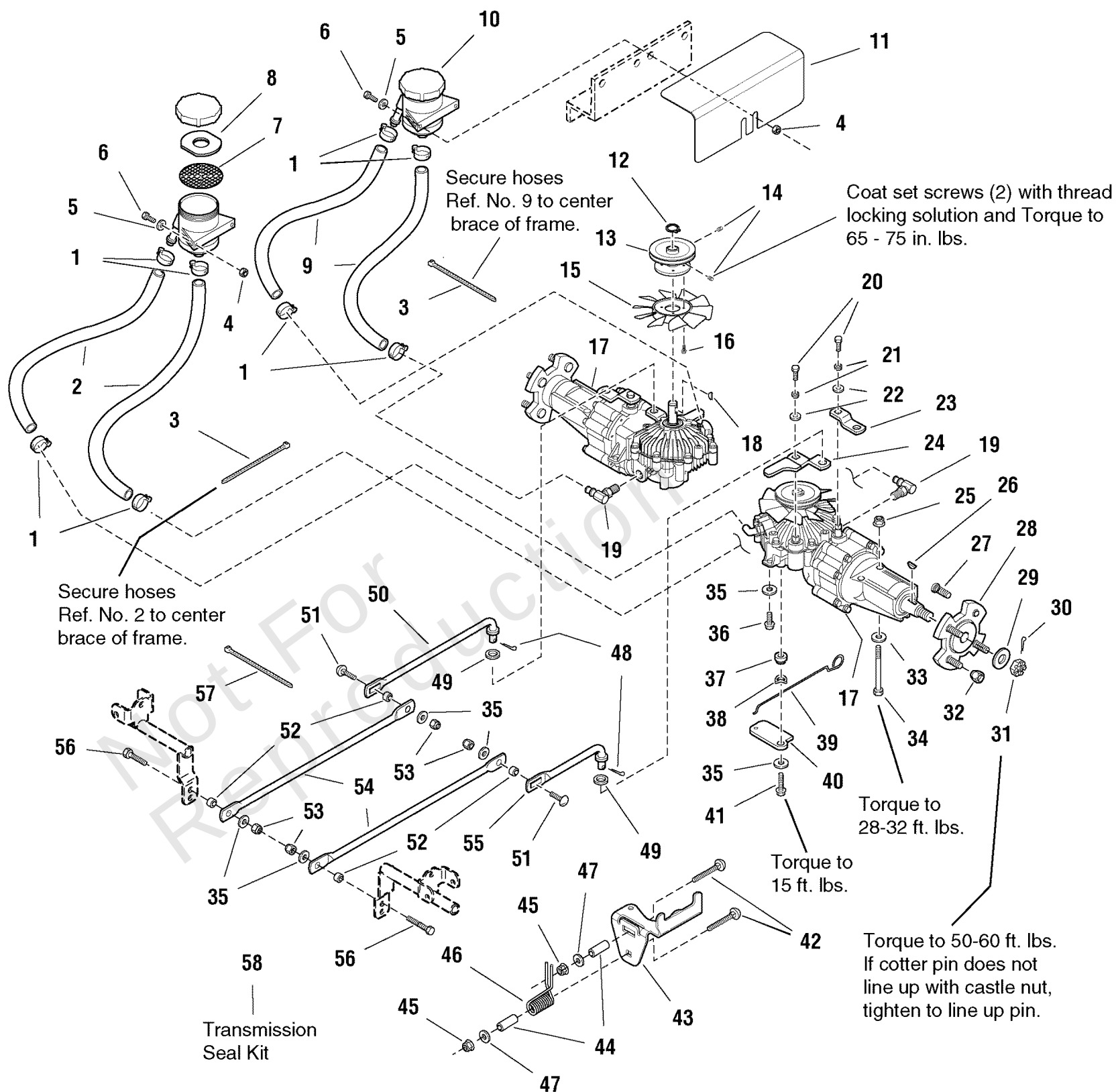
### Footnotes:

Note:\* Seal Failures use Ref. No. 58 to order Seal Kit for Transmission Assembly 1726487.

# Transmission Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 2690431



## Transmission Group

| REF NO | PART NO   | QTY | DESCRIPTION                             |
|--------|-----------|-----|-----------------------------------------|
| 49     | 1960027SM | 2   | WASHER, 1/2                             |
| 50     | 1715958SM | 1   | LINK, Control Rear, R.H.                |
| 51     | 1931335SM | 2   | BOLT, Carriage, Short Neck, 5/16-18 x 1 |
| 52     | 1703900SM | 4   | SPACER                                  |
| 53     | 1919438SM | 4   | NUT, Hex ESNA Light Lock, 5/16-18       |
| 54     | 1725945SM | 2   | ROD, Control                            |
| 55     | 1715959SM | 1   | LINK, Control Rear, L.H.                |
| 56     | 1960223SM | 2   | BOLT-RD HD SH SQ NK 5                   |
| 57     | 1701011SM | 1   | TIE, Self Locking                       |
| 58     | 1719442SM | 1   | * SEAL KIT, Transmission                |

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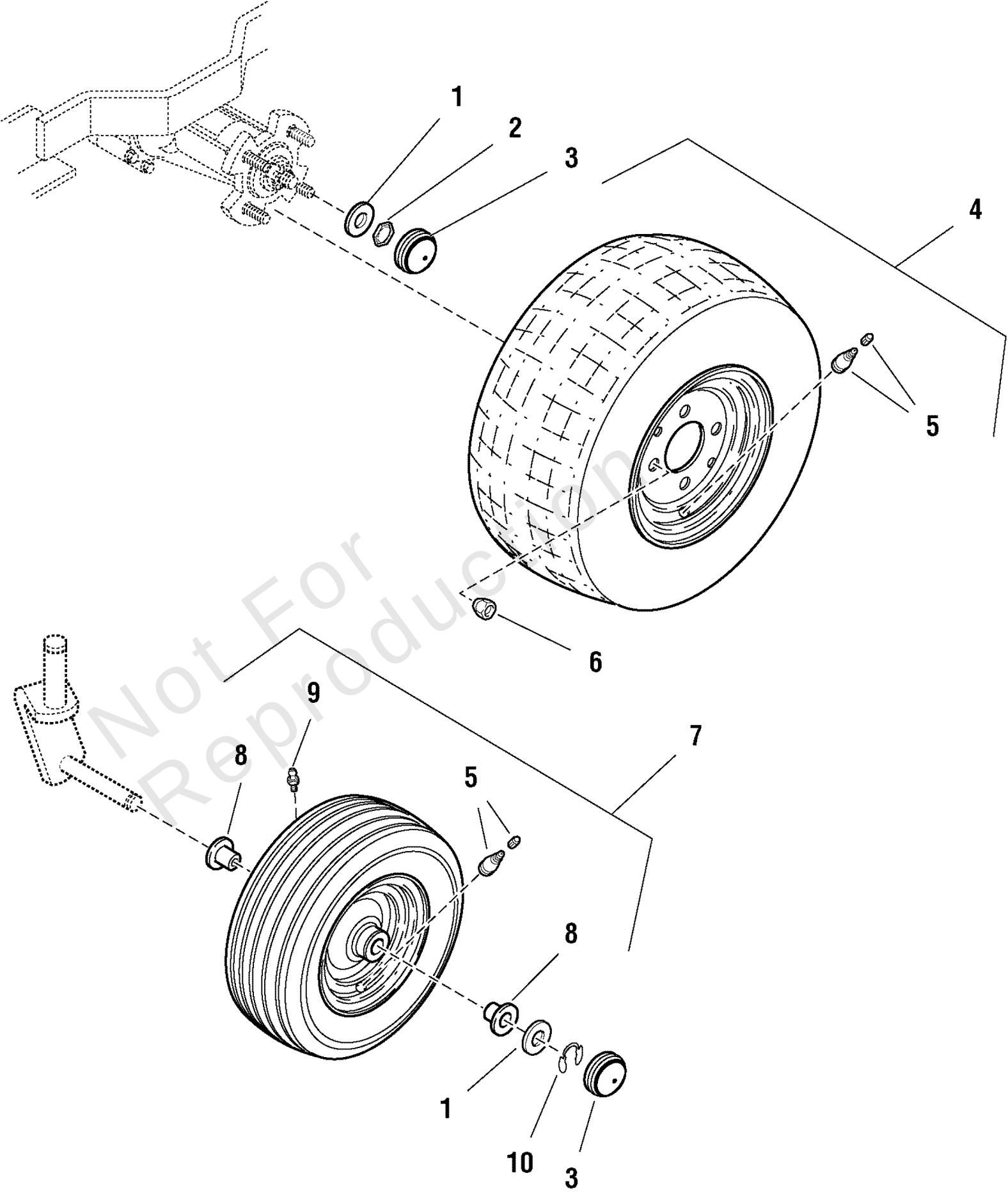
### Footnotes:

Note:\* Seal Failures use Ref. No. 58 to order Seal Kit for Transmission Assembly 1726487.

Wheels & Tires Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 2690431



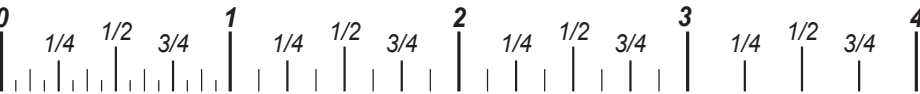
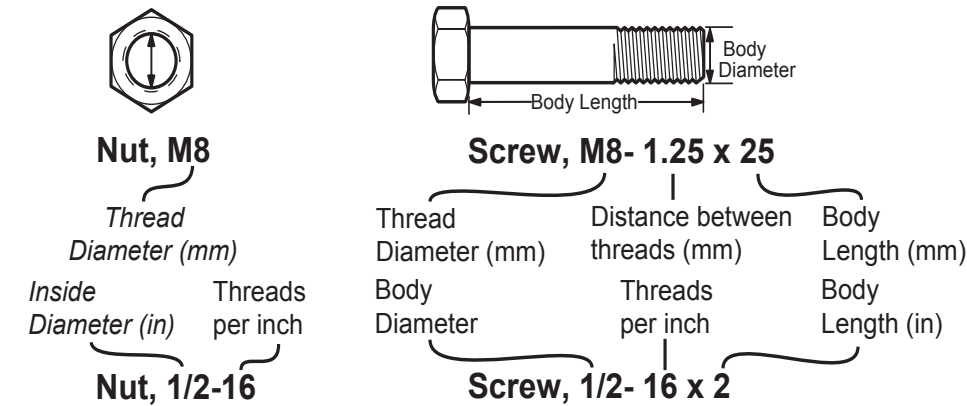
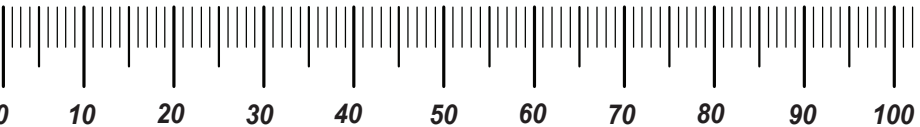
## ***Wheels & Tires Group***

| REF NO | PART NO   | QTY | DESCRIPTION                  |
|--------|-----------|-----|------------------------------|
| 1      | 2860202SM | 4   | WASHER, 3/4                  |
| 2      | 1716099SM | 2   | NUT, Hex Lock PAL, 3/4-20    |
| 3      | 1722675SM | 4   | CAP, Hub                     |
| 4      | 1726383SM | 2   | WHEEL & TIRE ASSEMBLY, Rear  |
| 5      | 2172353SM | 2   | VALVE STEM & CAP             |
| 6      | 2177725SM | 8   | NUT, Hex Lug, 7/16-20        |
| 7      | 1726382SM | 2   | WHEEL & TIRE ASEMBLY, Front  |
| 8      | 1713167SM | 4   | BUSHING, Wheel               |
| 9      | 2812808SM | 2   | FITTING, Lube                |
| 10     | 1611710SM | 2   | RING, Clipping for 3/4 Shaft |

# 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).

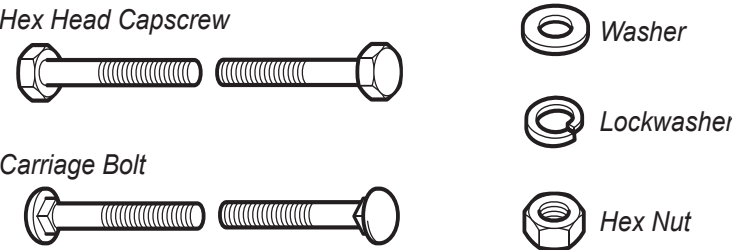
When bolt or capscrew is identified as 1/2 - 16 x 2" (M8 - 1.25 x 50), this means the *Nominal size*, or body diameter is 1/2 inch (8mm metric thread diameter), the second number, 16, represents the *threads per inch*, (*distance between threads*). The final number is the body length of the bolt or screw,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

