



Parts Manual

Mfg. No: 2690037

Lancer, 17HP Hydro and 40" Mower Deck
(CE/Export)

1694344 - 40" Mower Deck (CE/Export).....	
1694317 - Lancer, 17HP Hydro (CE/Export).....	

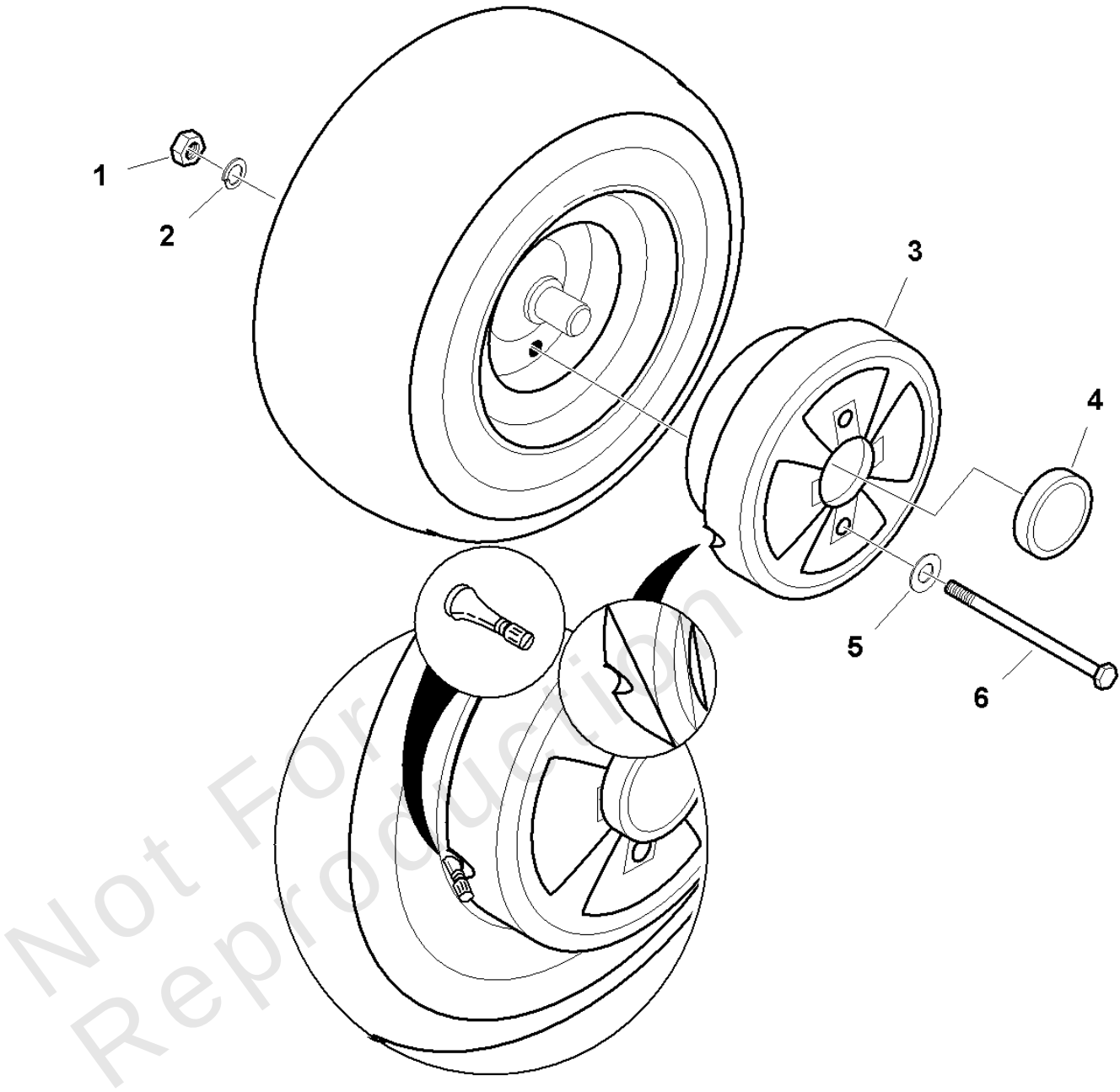
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Reproduction

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1694363 - Weight, Wheel (1694363)

Note: Unless noted otherwise, use the standard torque specifications

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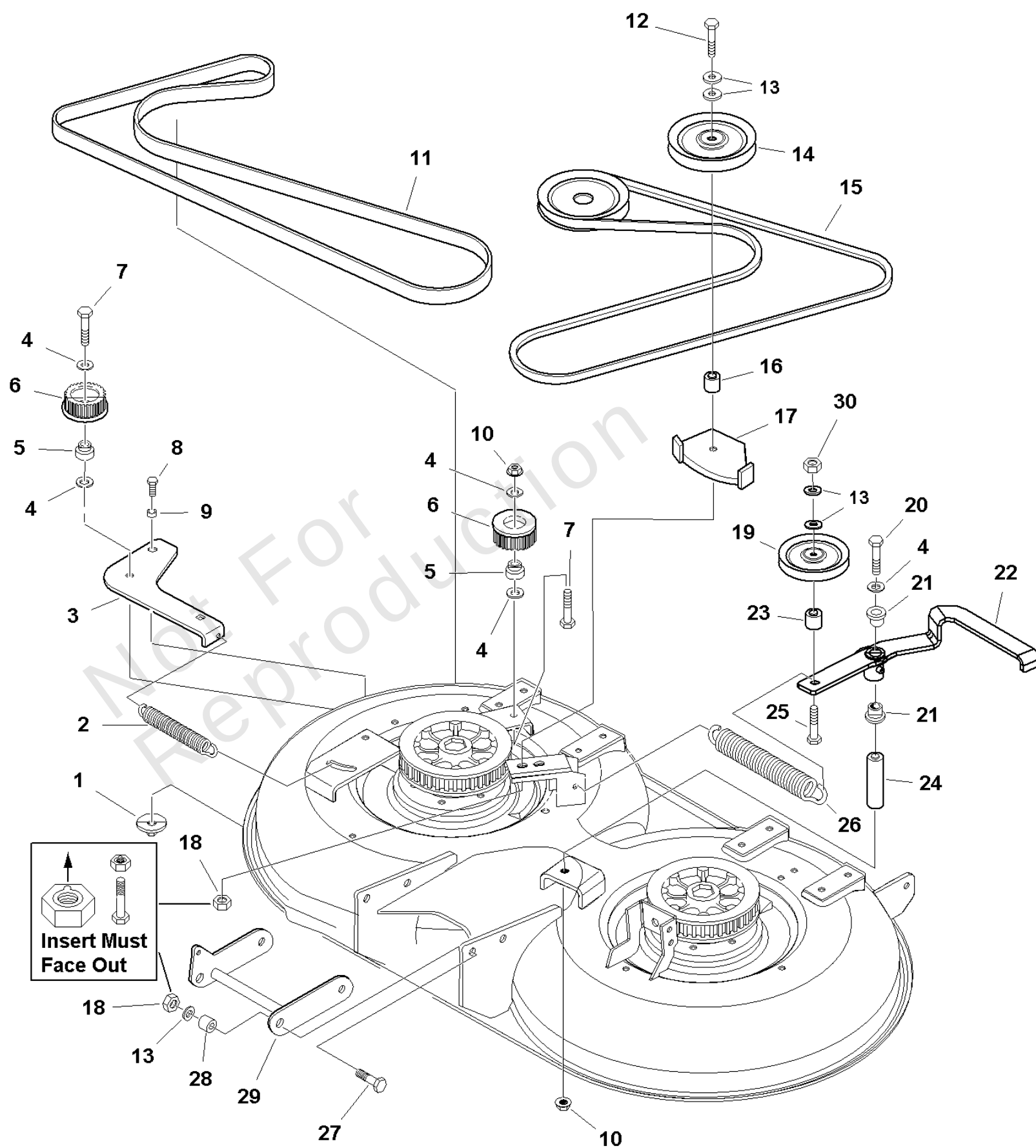
1694363 - Weight, Wheel (1694363)

REF NO	PART NO	QTY	DESCRIPTION
1	1916950SM	4	NUT, Hex, 3/8-16
2	1916965SM	4	LOCKWASHER, 3/8
3	1724450SM	2	WEIGHT, Wheel (Includes Ref. Nos. 1, 2, 4, 5 & 6)
4	-----	2	CAP, Wheel Weight
5	1924940SM	4	WASHER, 3/8
6	1960513SM	4	CAPSCREW, Hex, 3/8-16 x 8
--	1694363	1	KIT, Wheel Weight

40" Mower Deck - Belt, Idler Arm & Hitch

Note: Unless noted otherwise, use the standard torque specifications

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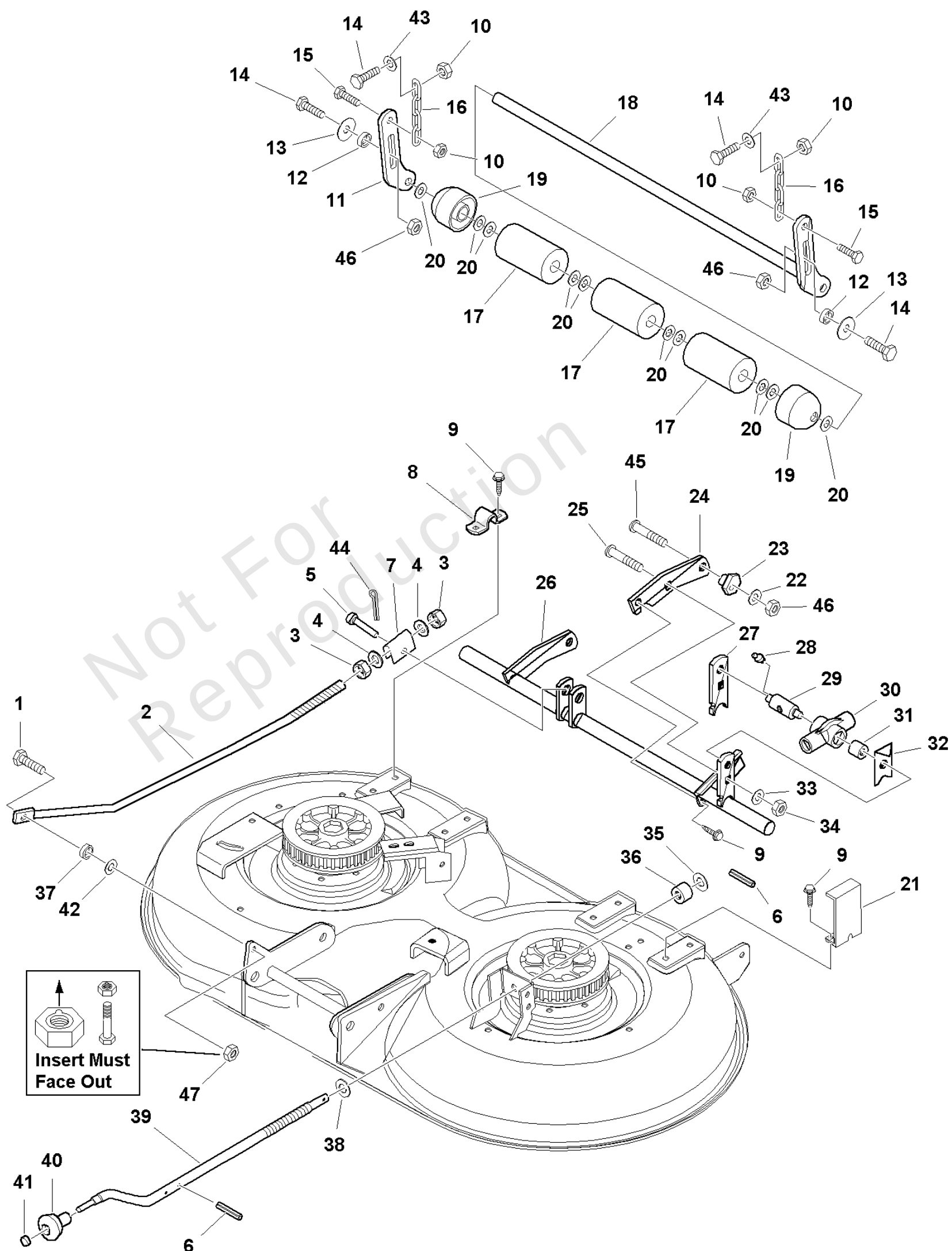
40" Mower Deck - Belt, Idler Arm & Hitch

REF NO	PART NO	QTY	DESCRIPTION
1	1721425SM	1	WASHER & LOCK NUT ASSEMBLY
2	1674671SM	1	SPRING, Extension, 3/4
3	1726387	1	ARM, Idler
4	1922755SM	7	WASHER, 3/8, Black
5	1719221SM	2	HUB
6	1731892SM	2	PULLEY, Idler, 38 Tooth
7	1960746SM	2	SCREW, Hex Flange Head, 3/8-16 x 2
8	1930601SM	1	CAPSCREW, Hex Head, 5/16-18 x 5/8, Black
9	1666697SM	1	SPACER
10	1928352SM	2	NUT, Hex Flange Whiz Lock, 3/8-16, Black
11	1724625SM	1	BELT, Timming, 38 Tooth
12	1960315SM	1	CARRIAGE BOLT, 3/8-16 x 2
13	1924940SM	6	WASHER, 3/8, Black
14	1725408SM	1	PULLEY, Idler
15	1719746SM	1	BELT, Arbor Drive
16	1667812SM	1	SPACER
17	1724650A	1	PLATE & ROD ASSEMBLY
18	2860681SM	3	NUT, Hex Flange, 3/8-16
19	1723952SM	1	PULLEY, Idler
20	1928957SM	1	CAPSCREW, Hex Head, 3/8-16 x 2-3/4, Black
21	1663114SM	2	BUSHING
22	1724646SM	1	ARM ASSEMBLY, w/Bushungs & Lube Fitting
23	1667811SM	1	SPACER
24	1657242SM	1	SPACER
25	1922606SM	1	CAPSCREW, Hex Head, 3/8-16 x 1-3/4
26	1715435SM	1	SPRING, EXTENSION, 1.
27	1921968SM	2	CAPSCREW, Hex, 3/8-16 x 1-3/8
28	1732443SM	2	SPACER, 3/8 x 3/4 x 3/4
29	1722040ASM	1	HITCH ASSEMBLY, 40" Front Cut
30	1919439SM	1	NUT, Hex Flange Lock, 3/8-16, Black

40" Mower Deck - Height Adjustment & Roller Bar

Note: Unless noted otherwise, use the standard torque specifications

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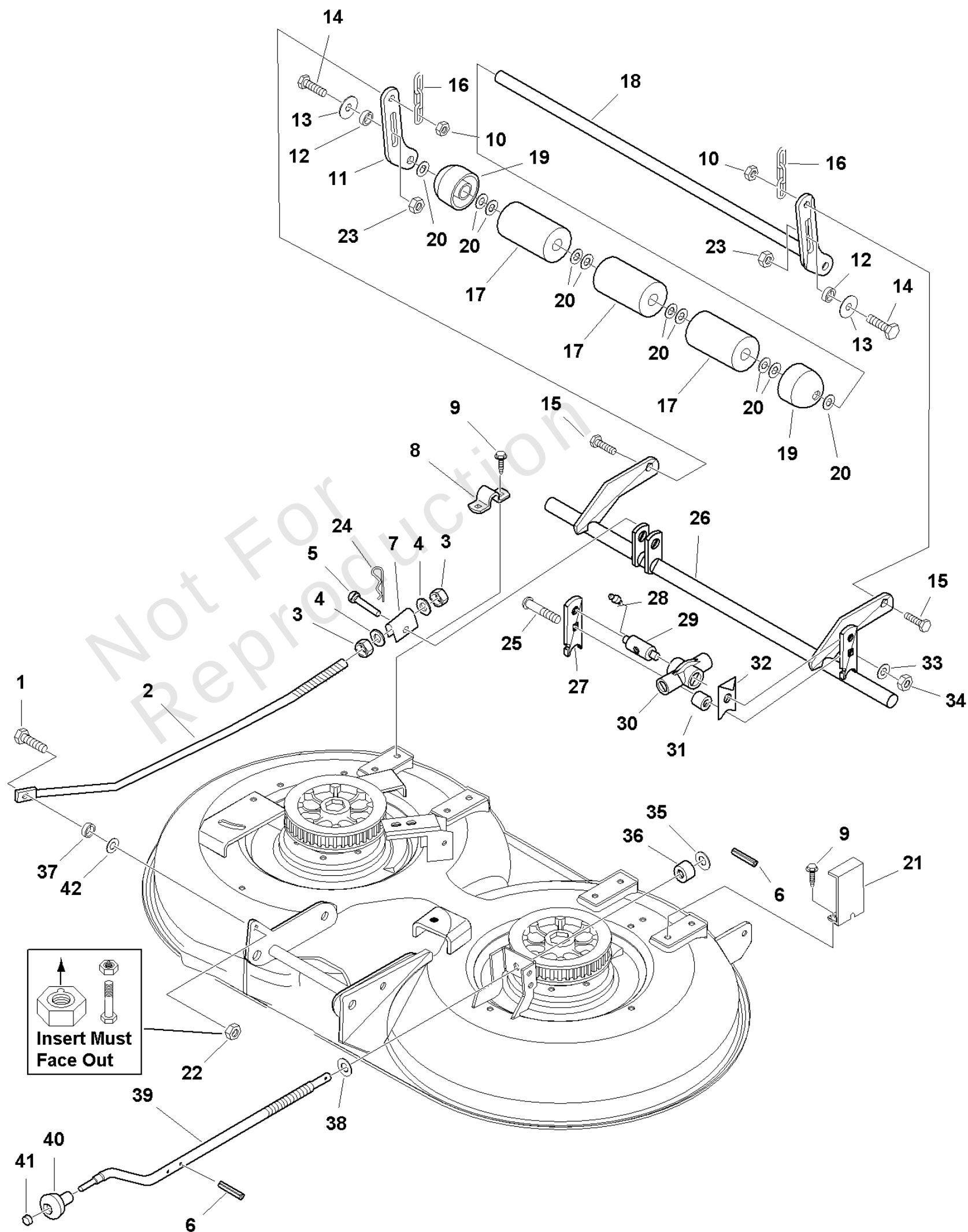
40" Mower Deck - Height Adjustment & Roller Bar

REF NO	PART NO	QTY	DESCRIPTION
1	1922606SM	1	CAPSCREW, Hex Head, 3/8-16 x 1-3/4
2	1723900SM	1	ROD & STRAP ASSEMBLY
3	1915726SM	2	NUT, Hex, 5/8-11, Black
4	1924366SM	2	WASHER, 5/8
5	2118053SM	1	PIN, Round Head, Drilled, 3/8 x 2, Black
6	2816001SM	3	PIN-SPRING .188 X 1.0
7	1706645ASM	1	TRUNNION-2.00WD-BLACK
8	1665374SM	3	STRAP-1.00WD 3.06LG .
9	1664847SM	9	CAPSCREW, Hex Washer Head, Tap Tite, 5/16-18 x 3/4, Black
10	1960339SM	5	NUT, Hex Flange Lock, 3/8-16, Black
11	1723150ASM	1	BAR, Roller
12	1960236SM	2	SPACER
13	1960044SM	2	WASHER-0.312(0.33IDX1
14	1921969SM	4	CAPSCREW, Hex Head, 3/8-16 x 1-1/2, Black
15	1921977SM	2	CAPSCREW, Hex Head, 5/16-18 x 1 1/4
16	1669241SM	2	CHAIN, Link, 5-5/8 Long, 4 Links
17	1668513SM	3	ROLLER, .652 ID, 2.50 OD, 4.10 LG
18	1722078A	1	SHAFT & BAR ASSEMBLY
19	1717675SM	2	ROLLER, .650 ID, 2.5" OD, 2.05" Long, Rounded End
20	1924366SM	12	WASHER, 5/8
21	1723148A	1	PLATE, Indicator
22	1924874SM	1	WASHER, 5/16, Black
23	1714879SM	1	CAM, Eccentric
24	1722056SM	1	ARM
25	1960489SM	1	BOLT-RD HD SQ NK 1/2-
26	1722077SM	1	SHAFT ASSEMBLY, Rocker
27	1722978ASM	1	ARM
28	1704314SM	1	LUBE FITTING, .250 DR
29	1715892SM	1	TRUNNION
30	1716424SM	1	COVER, Rod
31	1679166SM	1	SPACER, 1/2 x 7/8 x 1 3/16
32	1723147A	1	POINTER, Height of Cut
33	1916966SM	1	LOCKWASHER, Spring, 1/2
34	1916951SM	1	NUT, Hex, 1/2-13, Black
35	2860171SM	1	WASHER, Special, Nylon
36	1715891SM	1	BEARING, Thrust
37	1706644SM	1	SPACER, 3/8X3/4X15/16
38	1960035SM	1	WASHER-0.625(0.64IDX1
39	1723153SM	1	CRANK, Height of Cut
40	1714084SM	1	KNOB, Spinner
41	1960093SM	1	NUT, Push, 3/8
42	1924940SM	1	WASHER, 3/8, Black
43	1922755SM	2	WASHER, 3/8
44	1918452SM	1	PIN, Cotter
45	1960655SM	1	CARRIAGE BOLT, 5/16-18 x 1-1/4
46	2860643SM	3	NUT, Hex Lock, 3/8-16
47	2860681SM	1	NUT, Hex Flange, 3/8-16

40" Mower Deck - Height Adjustment & Roller Bar

Note: Unless noted otherwise, use the standard torque specifications

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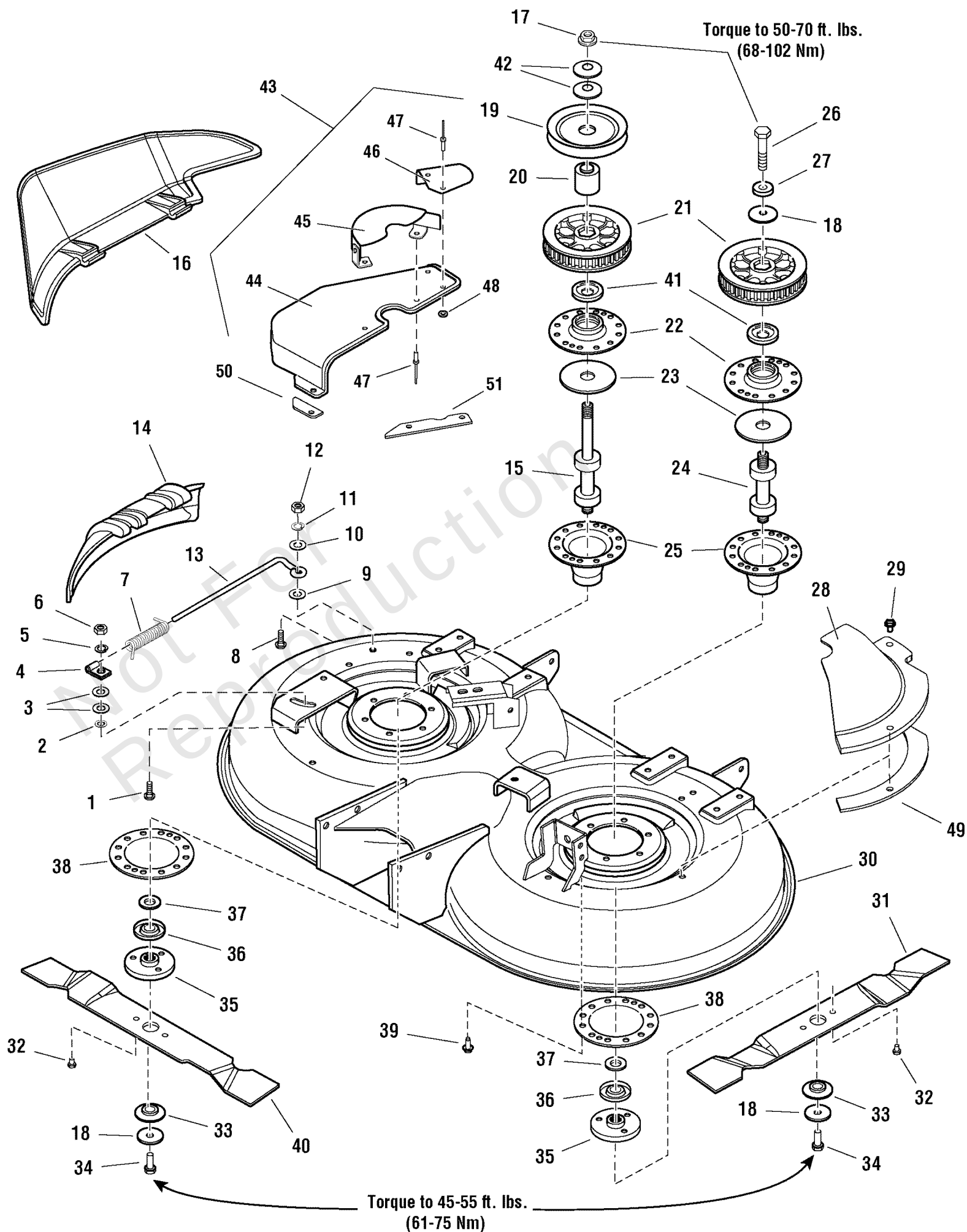
40" Mower Deck - Height Adjustment & Roller Bar

REF NO	PART NO	QTY	DESCRIPTION
1	1923701SM	1	CAPSCREW, Hex Head, 3/8-16 x 2, GR 8, Black
2	1723900SM	1	ROD & STRAP ASSEMBLY
3	1915726SM	2	NUT, Hex, 5/8-11, Black
4	1924366SM	2	WASHER, 5/8
5	2118053SM	1	PIN, Round Head, Drilled, 3/8 x 2, Black
6	2816001SM	3	PIN-SPRING .188 X 1.0
7	1706645ASM	1	TRUNNION-2.00WD-BLACK
8	1665374SM	3	STRAP-1.00WD 3.06LG .
9	1664847SM	9	CAPSCREW, Hex Washer Head, Tap Tite, 5/16-18 x 3/4, Black
10	1960339SM	3	NUT, Hex Flange Lock, 3/8-16, Black
11	1723150ASM	1	BAR, Roller
12	1960236SM	2	SPACER
13	1960044SM	2	WASHER-0.312(0.33IDX1
14	1921969SM	2	CAPSCREW, Hex Head, 3/8-16 x 1-1/2, Black
15	1921977SM	2	CAPSCREW, Hex Head, 5/16-18 x 1 1/4
16	1656835A	2	CHAIN, Link, 3 Links
17	1668513SM	3	ROLLER, .652 ID, 2.50 OD, 4.10 LG
18	1722078A	1	SHAFT & BAR ASSEMBLY
19	1717675SM	2	ROLLER, .650 ID, 2.5" OD, 2.05" Long, Rounded End
20	1924366SM	12	WASHER, 5/8
21	1723148A	1	PLATE, Indicator
22	2860681SM	1	NUT, Hex Flange, 3/8-16
23	2860643SM	3	NUT, Hex Lock, 3/8-16
24	1960074SM	1	CLIP, HAIR PIN .093DI
25	1960489SM	1	BOLT-RD HD SQ NK 1/2-
26	1724970A	1	SHAFT ASSEMBLY, Rocker
27	1722978ASM	1	ARM
28	1704314SM	1	LUBE FITTING, .250 DR
29	1715892SM	1	TRUNNION
30	1716424SM	1	COVER, Rod
31	1679166SM	1	SPACER, 1/2 x 7/8 x 1 3/16
32	1723147A	1	POINTER, Height of Cut
33	1916966SM	1	LOCKWASHER, Spring, 1/2
34	1916951SM	1	NUT, Hex, 1/2-13, Black
35	2860171SM	1	WASHER, Special, Nylon
36	1715891SM	1	BEARING, Thrust
37	1706644SM	1	SPACER, 3/8X3/4X15/16
38	1960035SM	1	WASHER-0.625(0.64IDX1
39	1723153SM	1	CRANK, Height of Cut
40	1714084SM	1	KNOB, Spinner
41	1960093SM	1	NUT, Push, 3/8
42	1924940SM	1	WASHER, 3/8, Black

40" Mower Deck - Housing, Arbors & Blades

Note: Unless noted otherwise, use the standard torque specifications

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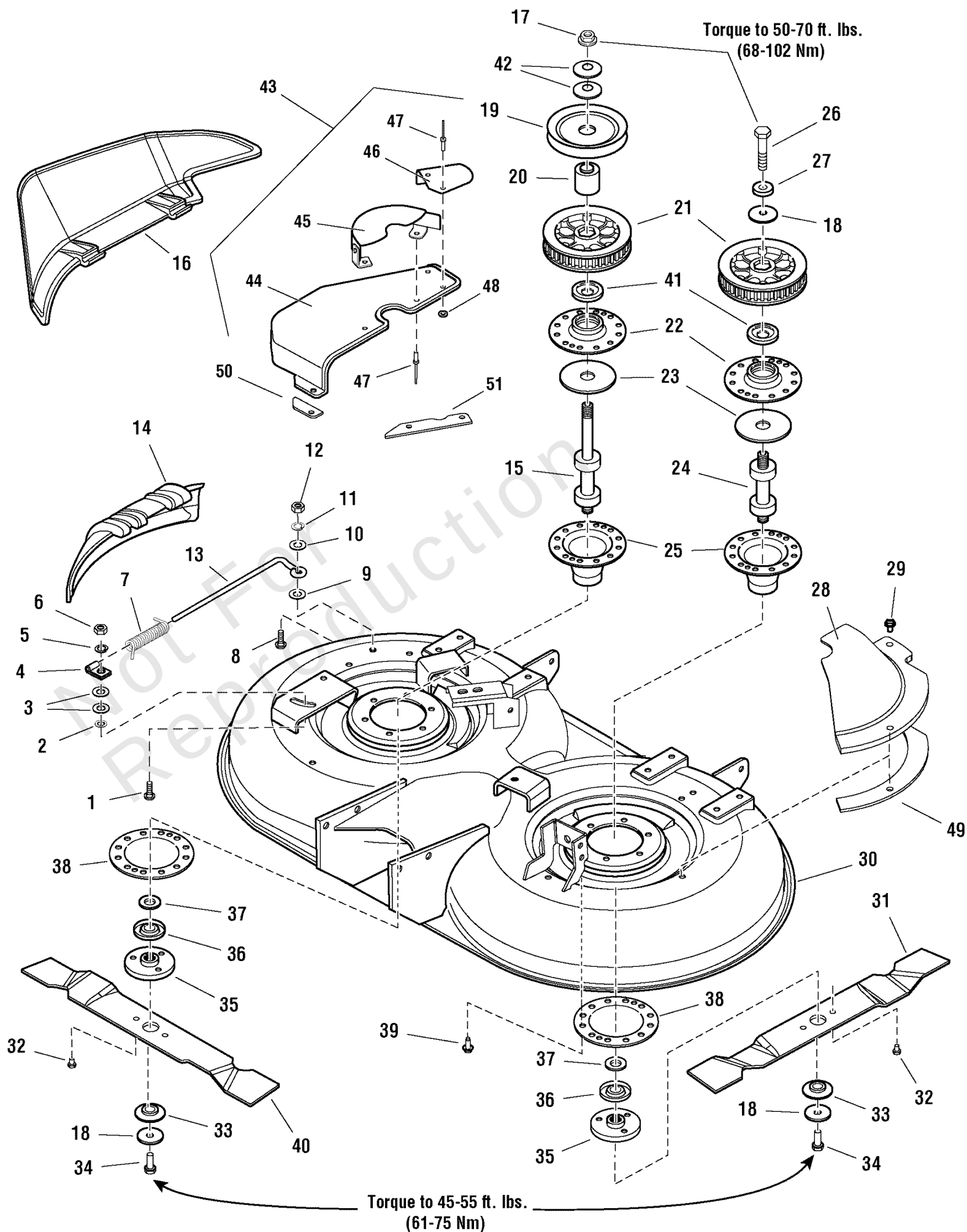
40" Mower Deck - Housing, Arbors & Blades

REF NO	PART NO	QTY	DESCRIPTION
1	1931318SM	1	CARRIAGE BOLT,1/4-20 x 7/8, Black
2	1960518SM	1	NUT, Push, 1/4, Black
3	1960353SM	2	WASHER, 1/4, Black
4	1704873SM	1	CLAMP, WIRE, .312DIA
5	1916964SM	1	LOCKWASHER, 1/4, Black
6	1916622SM	1	NUT, Hex, 1/4-10, Black
7	1723938SM	1	SPRING, Torsion, Black
8	1931335SM	1	BOLT, Carriage, Short Neck, 5/16-18 x 1
9	1933988SM	1	NUT, Push, 5/16, Black
10	1919381SM	1	WASHER, 5/16, Black
11	1917356SM	1	LOCKWASHER, 5/16, Black
12	1917372SM	1	NUT, Hex, 5/16, Black
13	1719617SM	1	ROD
14	1719597SM	1	DOOR, Mulching
15	1726825SM	1	ARBOR SHAFT & BEARING ASSEMBLY
16	1720600SM	1	DEFLECTOR, Discharge
17	1714419SM	1	NUT, Hex Flange, 9/16-18
18	1656916SM	3	WASHER, SPRING 0.475I
19	1713091SM	1	PULLEY, 5" OD x 1" ID
20	1719870SM	1	HUB
21	1687229SM	2	SPROCKET & FLANGE ASSEMBLY, 38 Tooth, w/Screws
22	1655729ASM	2	HOUSING-ARBOR TOP - B
23	1707335SM	2	GASKET, Foam
24	1722396SM	1	ARBOR SHAFT & BEARINGS ASSEMBLY
25	1703273ASM	2	HOUSING, Arbor, Bottom, w/Lube Fitting
26	1930584SM	1	CAPSCREW, Hex Head, 7/16-14 x 2-3/4, GR 8, Black
27	1933263SM	1	WASHER, 7/16, Black
28	1724601SM	1	COVER, Arbor, LH, Black
29	1664847SM	6	CAPSCREW, Hex Washer Head, Tap Tite, 5/16-18 x 3/4, Black
30	1686977SM	1	HOUSING ASSEMBLY -(Orange)
30	1687315SM	1	HOUSING ASSEMBLY -(Red)
31	1719624ASM	1	BLADE-MOWER 20.38 .1
32	1722258SM	2	PIN, Blade
33	1722257SM	2	WASHER, Spline
34	2827120SM	2	CAPSCREW, Hex Head, 7/16-14 x 1-1/4, GR 8
35	1655777SM	2	ADAPTER, Blade
36	1700229SM	2	SHIELD, Bearing
37	1700230SM	2	WASHER, Shim, Black
38	1677274ASM	2	ADAPTER, Arbor
39	1960373SM	12	CAPSCREW, Hex Head, 5/16-18 x 1, Black
40	1719623ASM	1	BLADE, Mower, 20-3/8, RH
41	1657969SM	2	SHIELD, Bearing Upper, Arbor
42	1713675SM	2	WASHER, Bellville .56ID x 1.34 OD x .05T
43	1721155SM	1	COVER ASSEMBLY, Arbor, RH (Includes Ref. Nos. 43 thru 48)
44	1724600SM	1	COVER, Arbor RH
45	1721259ASM	1	GUARD ASSEMBLY, RH
46	1721132ASM	1	GUARD, Extension
47	1675044SM	1	RIVET-POP.188 .429L A
48	1960096SM	4	WASHER, 3/16 x 3/4 x 1/16
49	1732964SM	1	SHIM-Cover LH 7GA 40" Mowers

40" Mower Deck - Housing, Arbors & Blades

Note: Unless noted otherwise, use the standard torque specifications

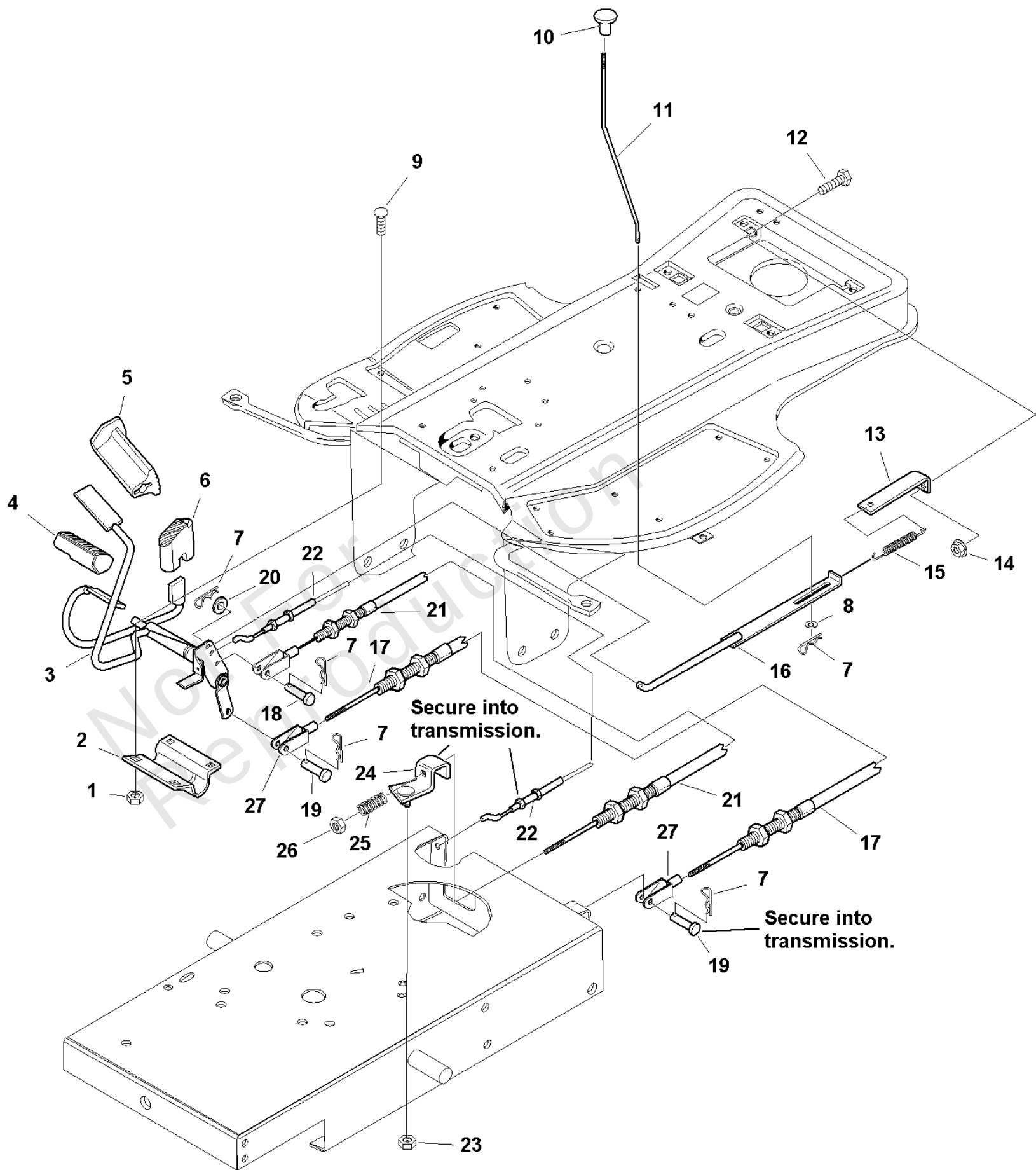
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40" Mower Deck - Housing, Arbors & Blades

REF NO	PART NO	QTY	DESCRIPTION
50	1732963SM	1	SHIM-Cover RH 7GA 2.8 LG 40" Mowers
51	1732961SM	1	SHIM-Cover RH 7GA 6.5 LG 40" Mowers

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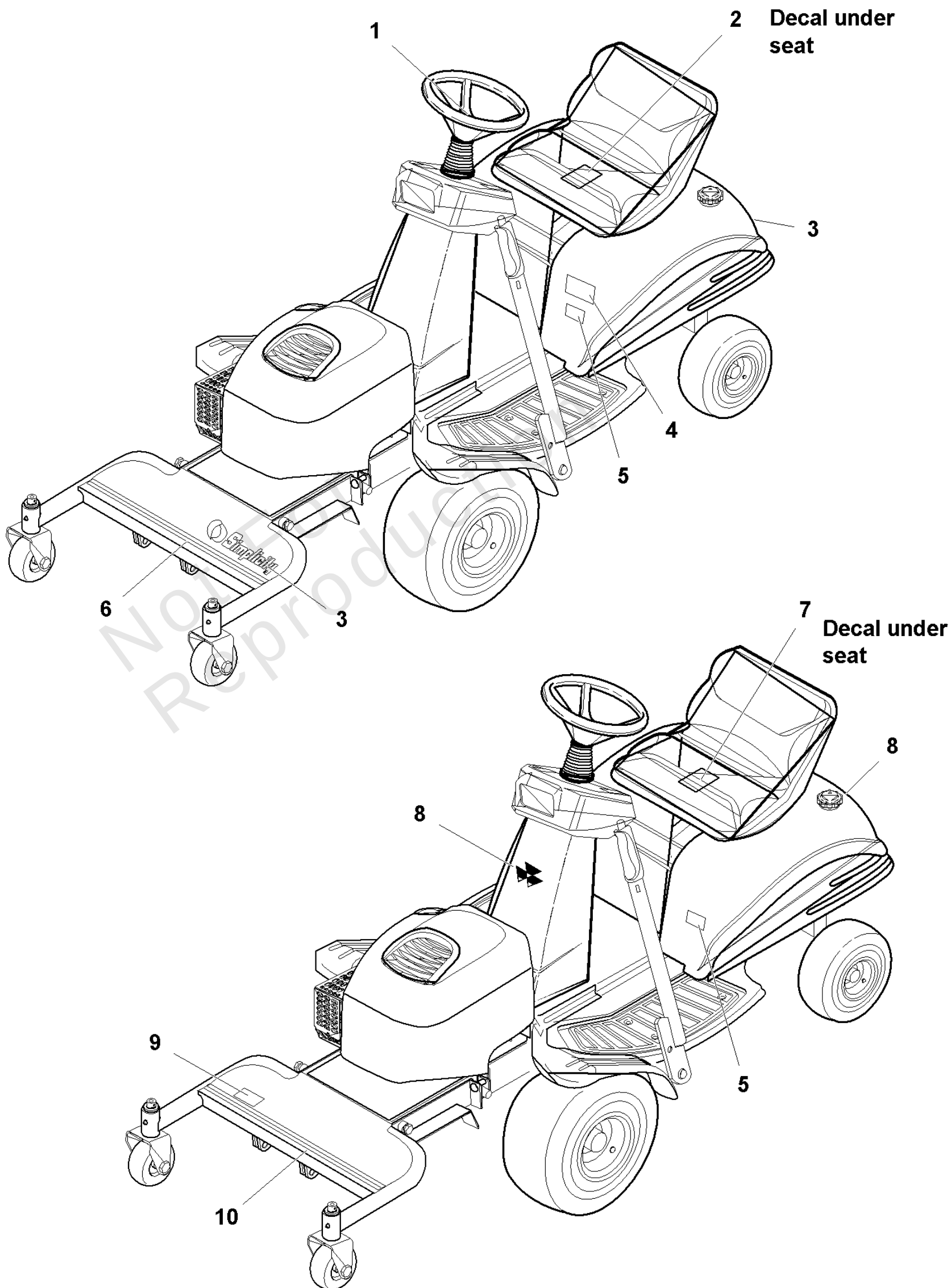
Controls Group

REF NO	PART NO	QTY	DESCRIPTION
1	1919438SM	4	NUT, Hex Lock ESNA, 5/16-18, Black
2	1713784SM	1	CLAMP
3	1722524ASM	1	FOOT PEDAL & BRAKE ARM ASSEMBLY
4	1715834SM	1	PEDAL, Foot, Forward
5	1721577SM	1	PAD, Brake Pedal
6	1715835SM	1	PEDAL, Foot, Reverse
7	1960221SM	5	CLIP, Hair Pin, Black
8	1921319SM	1	WASHER, 1/4, Black
9	1931333SM	4	CARRIAGE BOLT, 5/16-18 x 3/4, Black
10	1713855SM	1	KNOB, 1/4-20 Thread
11	1714385SM	1	ROD, Parking Brake, Yellow
12	1930591SM	1	CAPSCREW, Hex Head, Whiz Lock 5/16-18 x 3/4, Black
13	1723794A	1	BRACKET
14	1931277SM	1	NUT, Hex, 5/16, Black
15	2165068SM	1	SPRING, Extension, 6-1/2" Long
16	1722529SM	1	LEVER & ROD ASSEMBLY
17	1722974SM	1	CABLE, Forward/Reverse
18	1960261SM	1	PIN, Yoke, Drilled, 1/4 x 3/4, Black
19	1711115	2	PIN, Clevis, 11/32 x 1-1/4
20	1919326SM	1	WASHER, 5/16
21	1722616SM	1	CABLE, Brake Control
22	1722617SM	1	CABLE, Clutch Control
23	1935048SM	1	NUT, Hex Flange Lock, 5/16-18, Black
24	1717728SM	1	GUIDE BELT & STUD ASSEMBLY
25	1725508SM	1	SPRING, Compression
26	1960608SM	1	NUT, Hex Center Lock, 1/4-20
27	1722975SM	2	CLEVIS

Decals - Brand & Model

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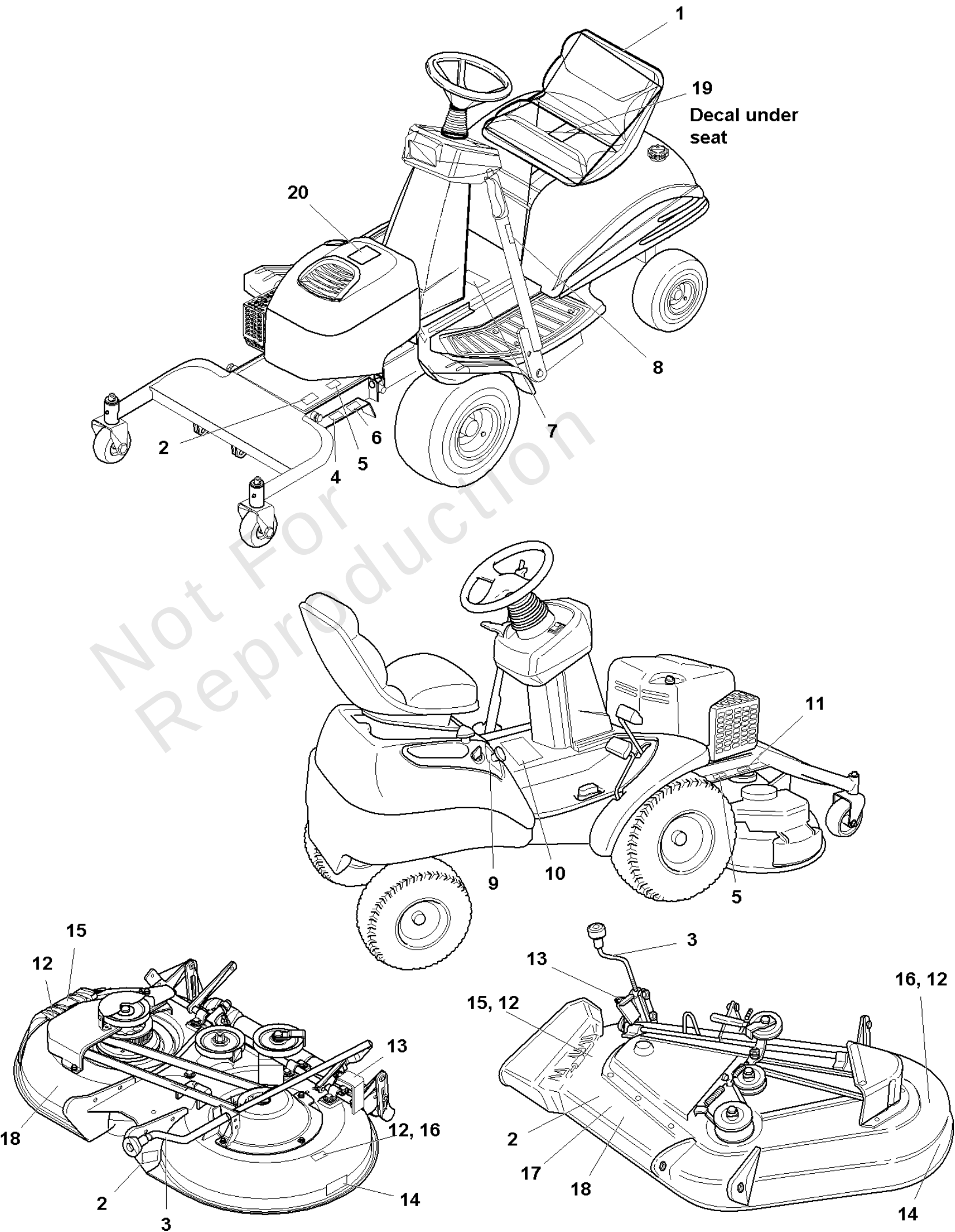
Decals - Brand & Model

REF NO	PART NO	QTY	DESCRIPTION
1	1731418SM	1	DECAL, Icon, Simplicity
2	1720454SM	1	DECAL, Touch-up Paint, Deep Orange and Black
3	1722551SM	2	DECAL, Simplicity, Silver & Blue, w/Icon
4	1722832SM	1	DECAL, Lancer, Silver & Blue
5	1722548SM	1	DECAL, 15HP
5	1722550SM	1	DECAL, 17HP
6	1723785SM	1	DECAL, Stripe, Blue & Silver
7	1725072SM	1	DECAL, Touch-up Paint, Red and Black
8	1714363SM	2	DECAL, Massey Ferguson, 3 Triangle Logo
9	1723920SM	1	DECAL, Model 4416
9	1724254SM	1	DECAL, Model 4417
10	1723919SM	1	DECAL, Stripe, Massey Ferguson

Decals - Safety & Common

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Decals - Safety & Common

REF NO	PART NO	QTY	DESCRIPTION
1	1708927	1	DECAL, USA Logo
2	-----	2	LABEL, CE & Serial Number, Export (Not Serviced)
2	-----	1	DECAL, Serial Number (Not Serviced)
3	1723825SM	1	DECAL, Cutting Height Icons
4	1723786SM	1	DECAL, Belt Removal
5	1723823SM	2	DECAL, Warning Shear Point (Export Only)
6	-----	1	DECAL, Patent (Not Serviced)
7	1723160SM	1	DECAL, Transmission Release Valve
8	1723143SM	1	DECAL, Lift Lever Symbols
9	1723826SM	1	DECAL, Ignition Switch
10	1723175SM	1	DECAL, Operating Instructions, Icons (Export Only)
10	1722814SM	1	DECAL, Operating Instructions,
11	1723824SM	1	DECAL, Caution, Read Manual
12	1720389SM	2	DECAL-DANGER ROTATING
13	1723470SM	1	DECAL, Height of Cut
13	1720919SM	1	DECAL, Height of Cut, 40" (Export)
14	1722771SM	1	DECAL, Free Floating
15	1704277SM	1	DECAL, Danger, Do Not Operate W/O Deflector
16	1704276SM	1	DECAL-DANGER DO NOT P
17	1722789SM	1	DECAL, 44"
18	-----	1	DECAL, OPEI, (Not Serviced)
19	1724379SM	1	DECAL, Belt & Blade, 56 Tooth
19	1727574SM	1	DECAL, Belt & Blade, 38 Tooth
20	1723071SM	1	DECAL, 17 HP Intek, Briggs & Stratton

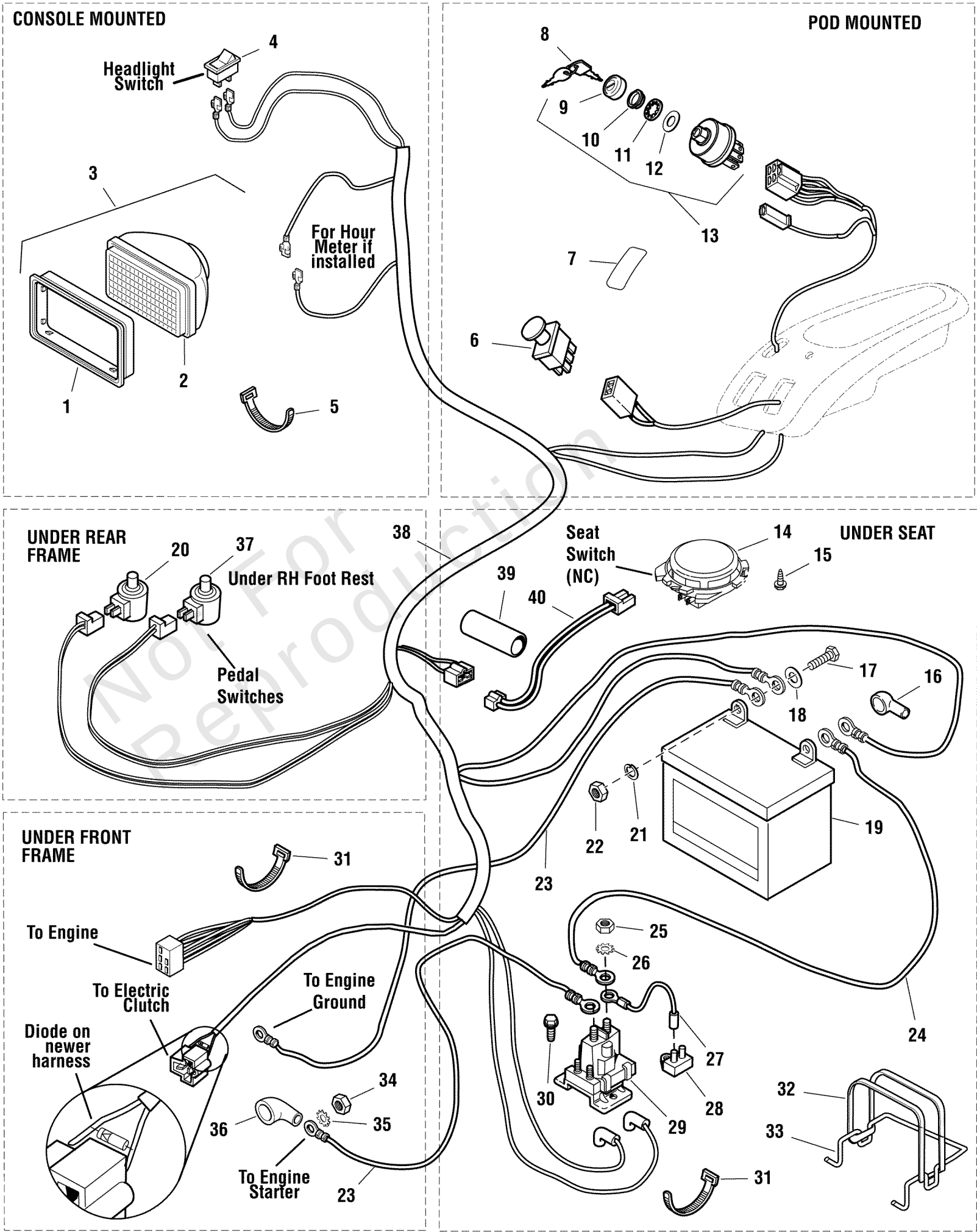
Footnotes:

Note:* Not a service Part.

Electrical Group

Note: Unless noted otherwise, use the standard torque specifications

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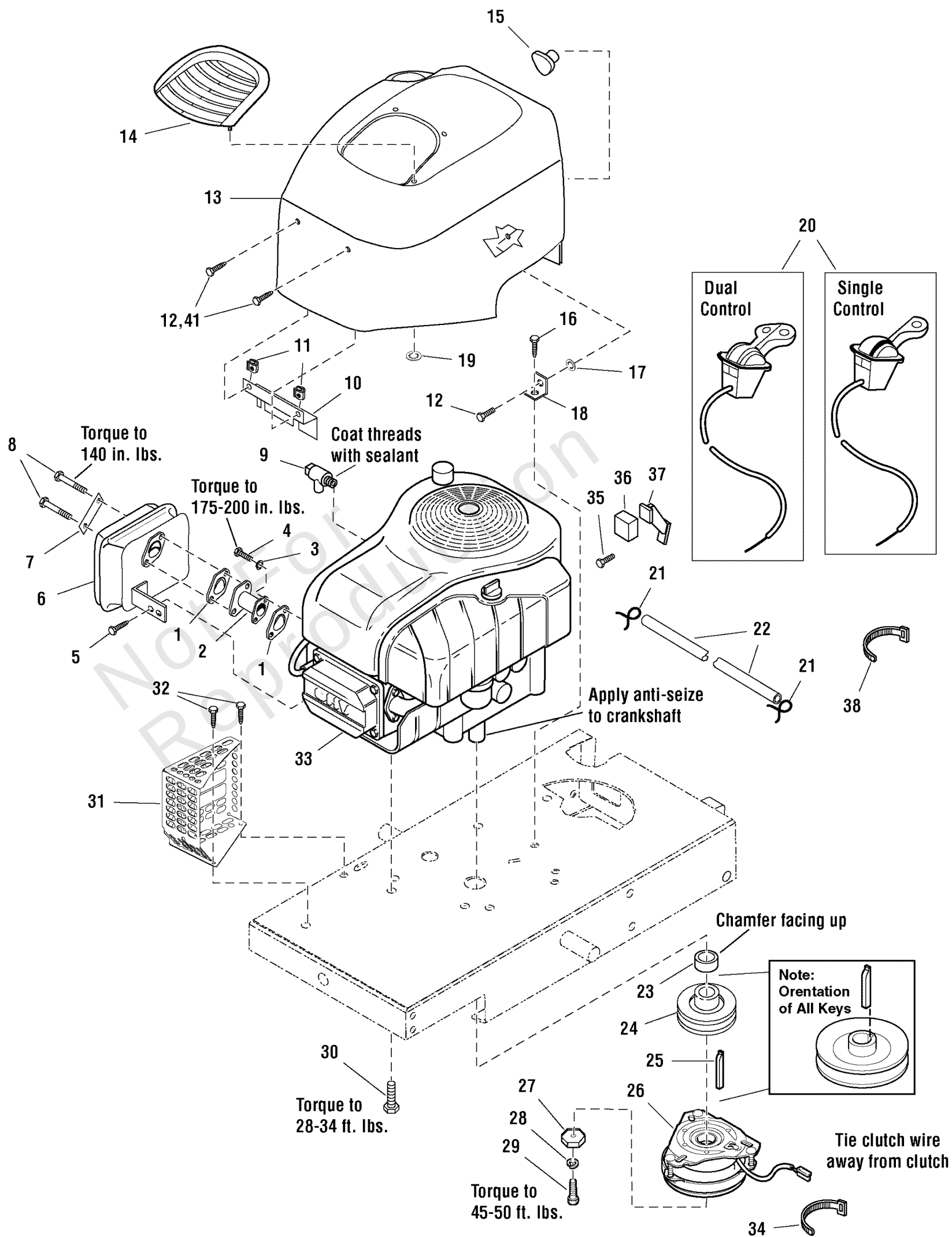
Electrical Group

REF NO	PART NO	QTY	DESCRIPTION
1	1719227SM	1	BEZEL, Headlight
2	1719230SM	1	HEADLIGHT HOUSING
3	1719230SM	1	HEADLIGHT ASSEMBLY (Includes Ref. Nos. 1 & 2)
4	1703799SM	1	SWITCH, HEADLIGHT
5	2832747SM	1	TIE, Self Locking, 3-5/8, Black
6	1722887SM	1	SWITCH-PTO PUSH
7	1709188SM	1	PLUG, BLACK PLASTIC
8	1717163SM	2	KEY-IGNITION INDAK
9	1717550SM	1	COVER, Ignition Switch
10	1717549SM	1	NUT, Hex, 5/8-32
11	1960547SM	1	LOCKWASHER-INTERNAL
12	2101025SM	1	WASHER, 5/8, Thin, Black
13	1686734SM	1	IGNITION SWITCH
14	1714771SM	1	SWITCH, Seat, Gray Switch, Gray Retainer -(Lancer 17HP - SERIAL NO. 02000-02016, Lancer 17 HP Export - SERIAL NO. 02100-02394 & 4417 17HP - SERIAL NO. 02100-02394 Only)
14	1718981SM	1	SWITCH, Seat, Gray Switch, Black Retainer
15	1960536SM	2	SCREW, HEX WSHR HD PL
16	1677296SM	1	BOOT,INSULATOR BATTER
17	2823341SM	2	CAPSCREW, Hex Head, 1/4-20 x 3/4
18	2821319SM	2	WASHER, 1/4
19	1685215SM	1	BATTERY,12V
20	1720401SM	1	SWITCH, Push,Grey, Pedal Switch, (Domestic Only)
21	2816964SM	2	LOCKWASHER, 1/4
22	2816622SM	3	NUT, Hex, 1/4-20
23	1703484SM	2	CABLE, # 6 x 42-1/2" Long, 2 Ring Terminals
24	1716549SM	1	CABLE, # 6 x 10" Long, 2 Ring Terminals
25	2820263SM	2	NUT, Hex, 5/16-24
26	2820426SM	2	LOCKWASHER, External Tooth, 5/16
27	1665237SM	1	WIRE, 12GA, 6" Long Red
28	1665238SM	1	BREAKER-CIRCUIT
29	1686981SM	1	SOLENOID, 4 Pole 12Volt
30	1927429SM	2	CAPSCREW, Hex Head Taptite, 14-20 x 5/8
31	1701011SM	2	TIE, Self Locking, 7-5/16 Long, Black
32	1665872SM	1	STRAP, Black Rubber
33	1667805SM	1	BRACE, Battery
34	2816950SM	1	NUT, Hex, 3/8-16
35	2820427SM	1	LOCKWASHER, External Tooth, 3/8
36	2122023SM	1	COVER, Terminal, Red
37	1720411SM	1	SWITCH, Push, Black, Pedal Switch
38	1724903SM	1	HARNESS, Wiring
39	1715014SM	1	SHRINK TUBE
40	1715010SM	1	WIRE ASSEMBLY, 16GA, 16" Long, Black/Tan

Engine Group - Electric Clutch - 15HP & 17HP Briggs & Stratton

Note: Unless noted otherwise, use the standard torque specifications

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Engine Group - Electric Clutch - 15HP & 17HP Briggs & Stratton

REF NO	PART NO	QTY	DESCRIPTION
1	-----	2	GASKET, Ehaust
2	1723468SM	1	ADAPTER, Muffler
3	1917356SM	2	LOCKWASHER, 5/16
4	1936228SM	2	CAPSCREW, Hex Socket Head, 5/16-18 x 3/4
5	1927429SM	1	CAPSCREW, Hex Washer Head, Taptite, 1/4-20 x 5/8
6	1723469SM	1	MUFFLER
7	-----	1	LOCK, Screw
8	-----	2	CAPSCREW
9	1708405SM	1	VALVE, Shut Off
10	1723298A	1	BRACKET, Engine Cover
11	1926018SM	2	NUT, Speed, 1/4-20
12	1930594SM	3 / 1	CAPSCREW, Hex Head, Whiz Lock, 1/4-20 x 3/4 -* Export / Domestic
13	1723113SM	1	COVER, Engine
14	1722111SM	1	SCOOP, Hood
15	1713855SM	1	KNOB, 3 Sided Soft Plastic
16	1930601SM	1	CAPSCREW, Hex Washer Head, Taptite, 5/16-18 x 5/8
17	1960518SM	1	PUSH NUT, 1/4
18	1668500A	1	BRACKET
19	1933988SM	4	PUSH NUT, 5/16
20	1724012SM	1	CONTROL, Throttle, Dual, W/Knob
20	1722955SM	1	CONTROL, Throttle, Single, W/Knob
21	2860112SM	2	CLAMP, Hose
22	1718678SM	1	HOSE, Fuel
23	1723390SM	1	SPACER
24	1713187SM	1	PULLEY & HUB ASSEMBLY
25	2105337SM	1	KEY, Hi Pro, 1/4 x 2
26	1686883SM	1	CLUTCH, Electric
27	1708264SM	1	WASHER, HEX, 0.453ID
28	1918199SM	1	LOCKWASHER, 7/16
29	1960649SM	1	CAPSCREW, Hex Head, 7/16-20 x 3-1/2
30	704010	4	SCREW, HEX, 3/8-16
31	1723476A	1	HEAT SHIELD, Muffler
32	1664847SM	2	CAPSCREW, Hex Washer Head, Taptite, 5/16-18 x 3/4
33	-----	1	ENGINE, 15HP Briggs & Stratton Intek, Model 31F777, Type 0111
33	-----	1	ENGINE, 17HP Briggs & Stratton Intek, Model 31F770, Type 0110
34	2832747SM	1	TIE, Self Locking, 3-5/8" Long
35	2860661SM	1	SCREW, Flat Head, #6 x 5/8, (Export Only)
36	1723949SM	1	PAD, Rubber, (Export Only)
37	1708442SM	1	STOP, Throttle, (Export Only)
38	1701011SM	1	TIE, Self Locking, 7-5/16" Long
41	1935023SM	0 / 2	SCREW, Double Wing 1/4-20 x 5/8 -* Export / Domestic

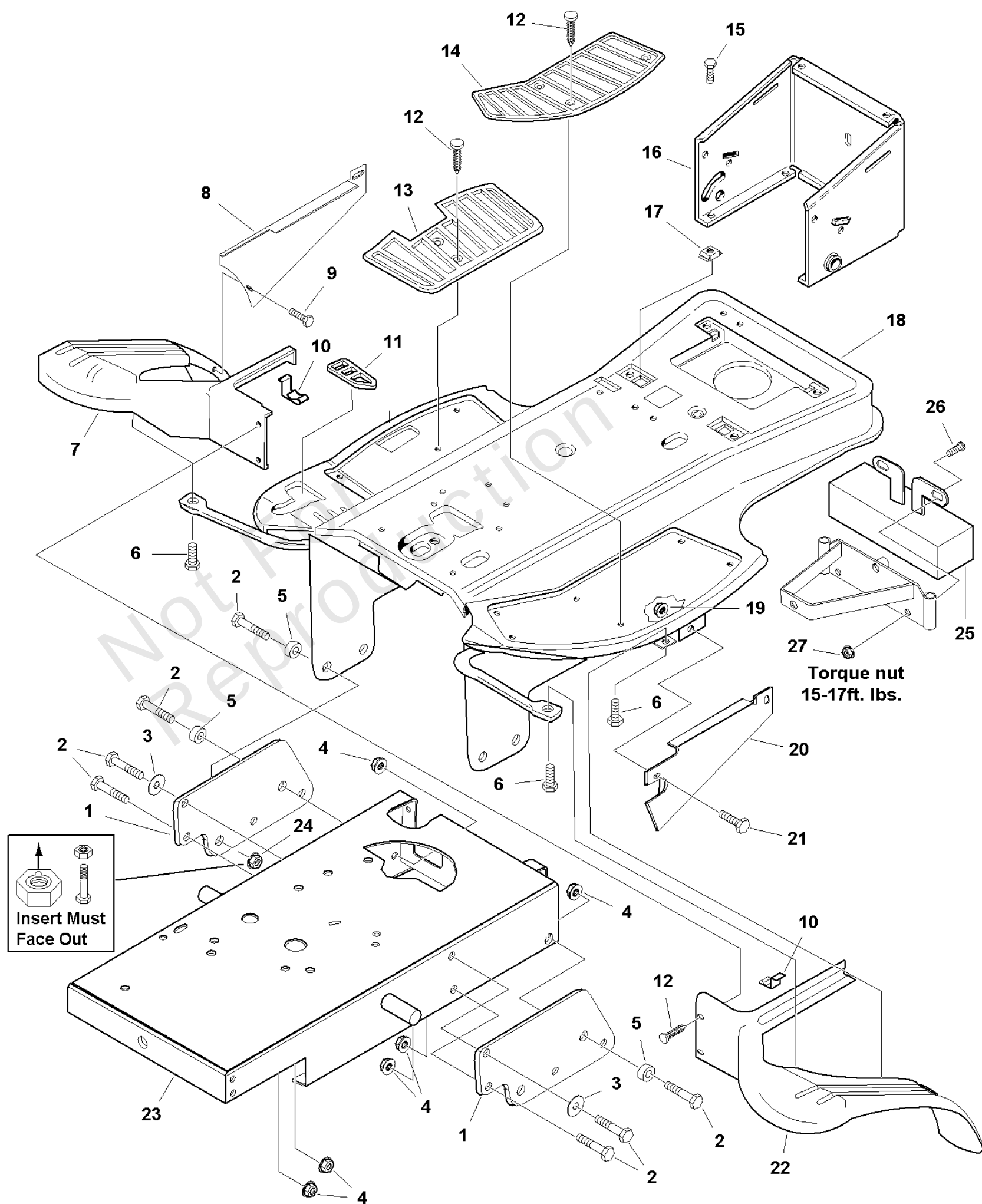
Footnotes:

Note:* See your local Briggs & Stratton distributor for parts and service.

Frame Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 2690037

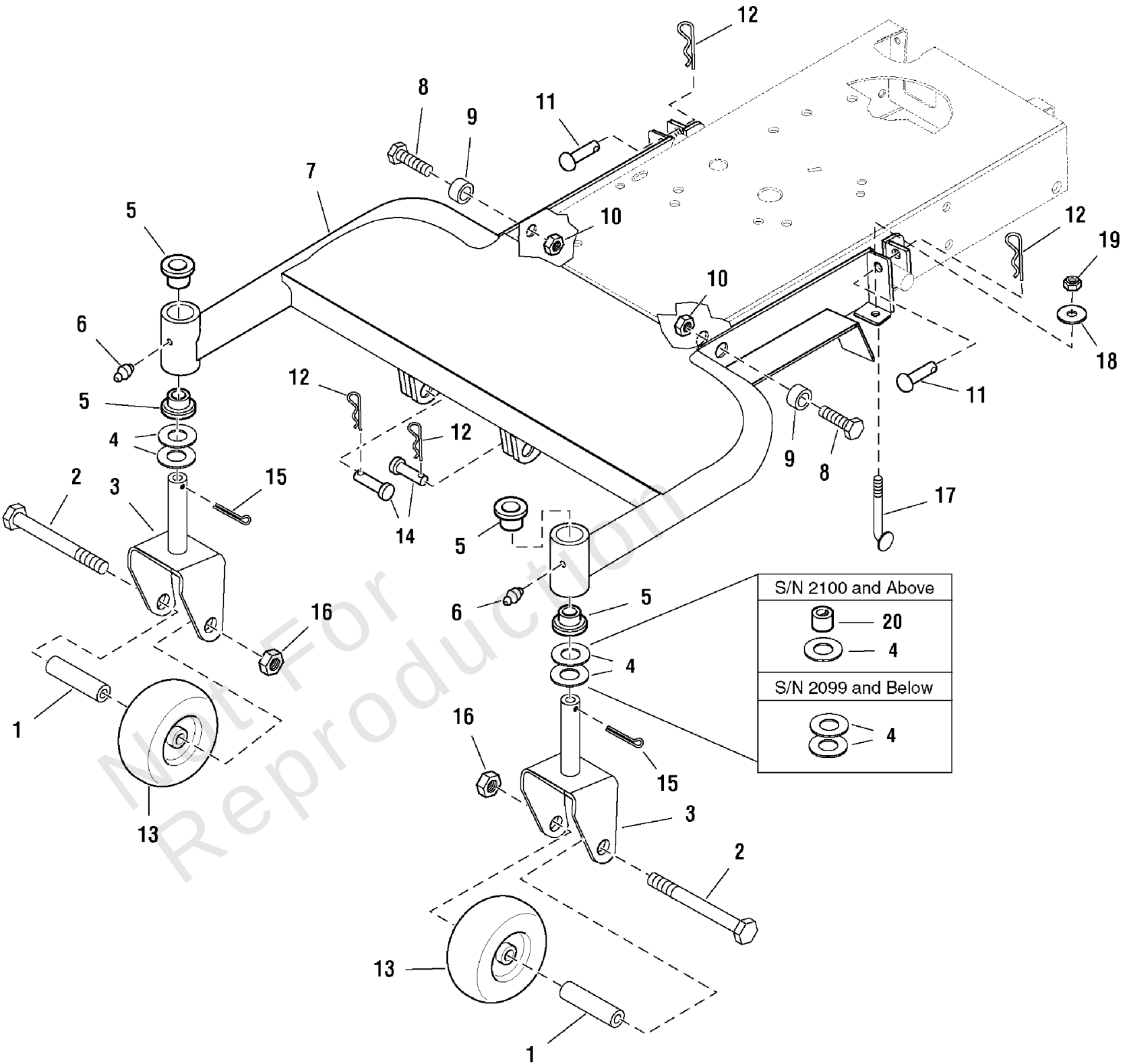


Frame Group

REF NO	PART NO	QTY	DESCRIPTION
1	1722359ASM	2	PLATE, Pivot
2	1920415SM	8	CAPSCREW, Hex Head, 3/8-16 x 1-1/4, Black
3	1960071SM	2	WASHER-0.375(0.41IDX1
4	1928352SM	6	NUT, Hex Flange Lock, Black
5	2154177SM	4	SPACER
6	1931648SM	6	CAPSCREW, Hex Head, Flange Lock, 5/16-18 x 1/2, Black
7	1723144SM	1	SHROUD, Wheel, RH
8	1723290ASM	1	SKIRT, Side, RH
9	1960001SM	2	CAPSCREW, Hex Washer Head, Plastite, # 10-14 x 5/8, Black
10	1723691SM	2	CLIP, Shroud
11	1715015SM	1	PLUG, Hole
12	1704351SM	14	FASTENER, Panel
13	1714418SM	1	PAD, Footrest, RH
14	1714417SM	1	PAD, Footrest, LH
15	1930591SM	4	CAPSCREW, Hex Head Whiz Lock, 5/16-18 x 3/4, Black
16	1722453ASM	1	WRAPPER, Rear Frame
17	1935255SM	4	NUT, SPEED, 5/16-18 L
18	1722514ASM	1	FRAME ASSEMBLY, Rear
19	1960294SM	1	NUT, Hex, Flange, 1/4-20, Black
20	1723289ASM	1	SKIRT, Side, LH
21	1924009SM	1	CAPSCREW, Hex Head, 1/4-20 x 7/8, Black
22	1723145SM	1	SHROUD, Wheel, LH
23	1722494ASM	1	FRAME ASEMBLY, Transmission
24	2860681SM	2	NUT, Hex Flange, 3/8-16
25	1723873ASM	1	WEIGHT & TAB ASSEMBLY, 75 lbs.
26	1931335SM	2	BOLT, Carriage, Short Neck, 5/16-18 x 1
27	1927557SM	2	NUT, Hex, Flange Whiz Lock, 5/16-18

Frame Group - Mower with Height Adjustment

Note: Unless noted otherwise, use the standard torque specifications
 Mfg. No: 2690037



Frame Group - Mower with Height Adjustment

REF NO	PART NO	QTY	DESCRIPTION
1	1722952SM	2	SPACER
2	1923161SM	2	CAPSCREW, Hex Head, 1/2-13 x 4-1/2, Black
3	1726385ASM	2	BRACKET & SHAFT ASSEMBLY
4	2860202SM	*4	WASHER, 3/4, Black
5	1666001SM	4	BUSHING
6	1704314SM	2	LUBE FITTING, .250 DR
7	1724960C	1	FRAME ASSEMBLY
7	1724960D	1	FRAME ASSEMBLY
8	1920415SM	2	CAPSCREW, Hex Head, 3/8-16 x 1-1/4, Black
9	2154177SM	2	SPACER
10	1928352SM	2	NUT, Hex Flange Lock, 3/8-16, Black
11	2118053SM	2	PIN, Round Head, Drilled, 3/8 x 2, Black
12	1960074SM	4	CLIP, HAIR PIN .093DI
13	1722951SM	2	WHEEL, Caster
14	1724107SM	2	PIN-CLEVIS .494DIAX1.
15	1918452SM	2	PIN, Cotter, 1/4 x 2, Black
16	1960379SM	2	NUT, Hex Lock, 1/2-13
17	1724959SM	2	ROD, Height Adjuster
18	1919326SM	2	WASHER, 5/16
19	1919438SM	2	NUT, Hex Lock, 5/16-18
20	1725762SM	2	SPACER

Footnotes:

Note:* Only for S/N 2100 & Above

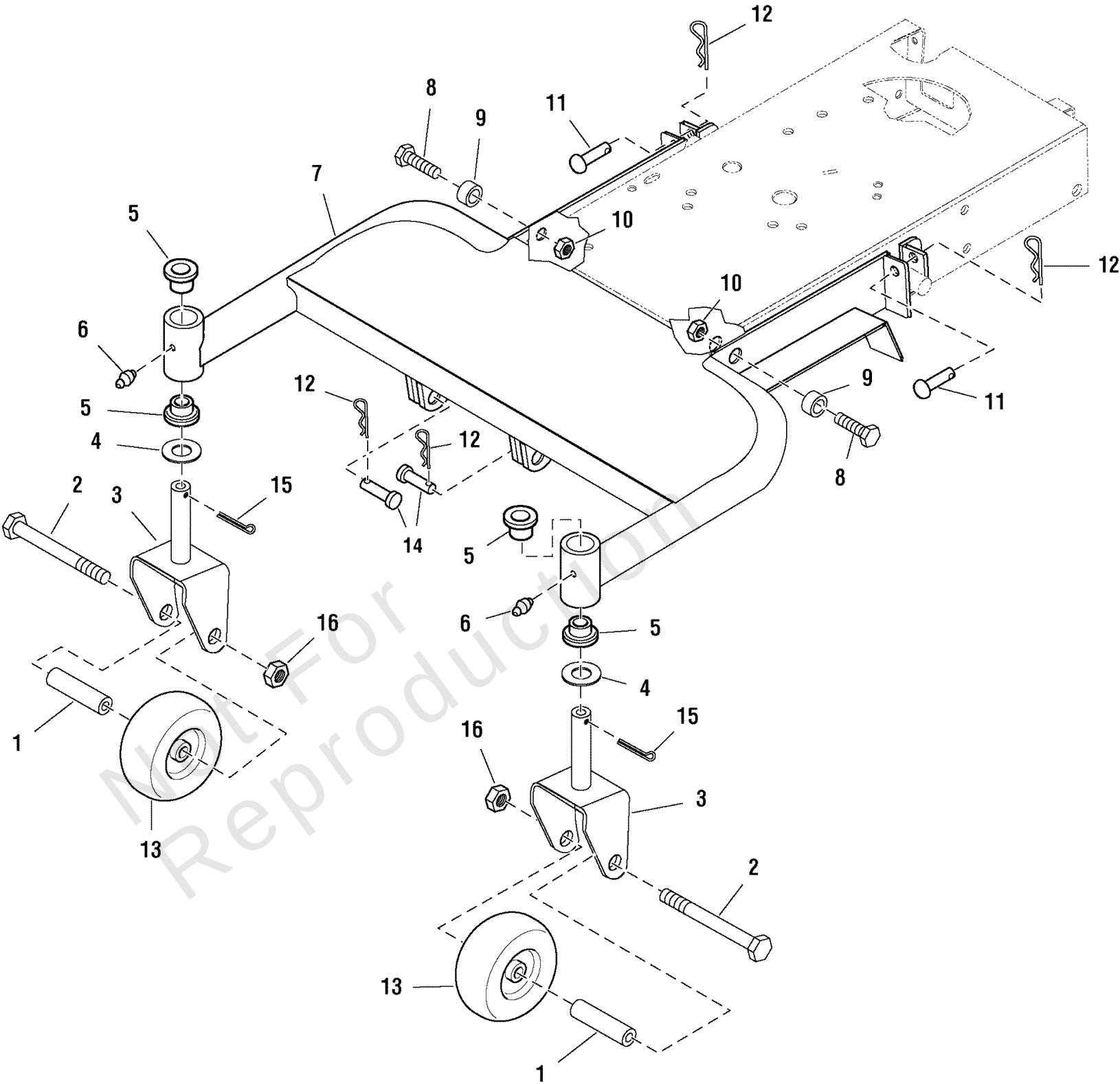
Note:* S/N 2099 & Below Quantity is 4; S/N 2100 & Above Quantity is 2

Note:* For S/N 2100 & Above use P/N 1725760C, 1725760D

Frame Group - Mower without Height Adjustment

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 2690037



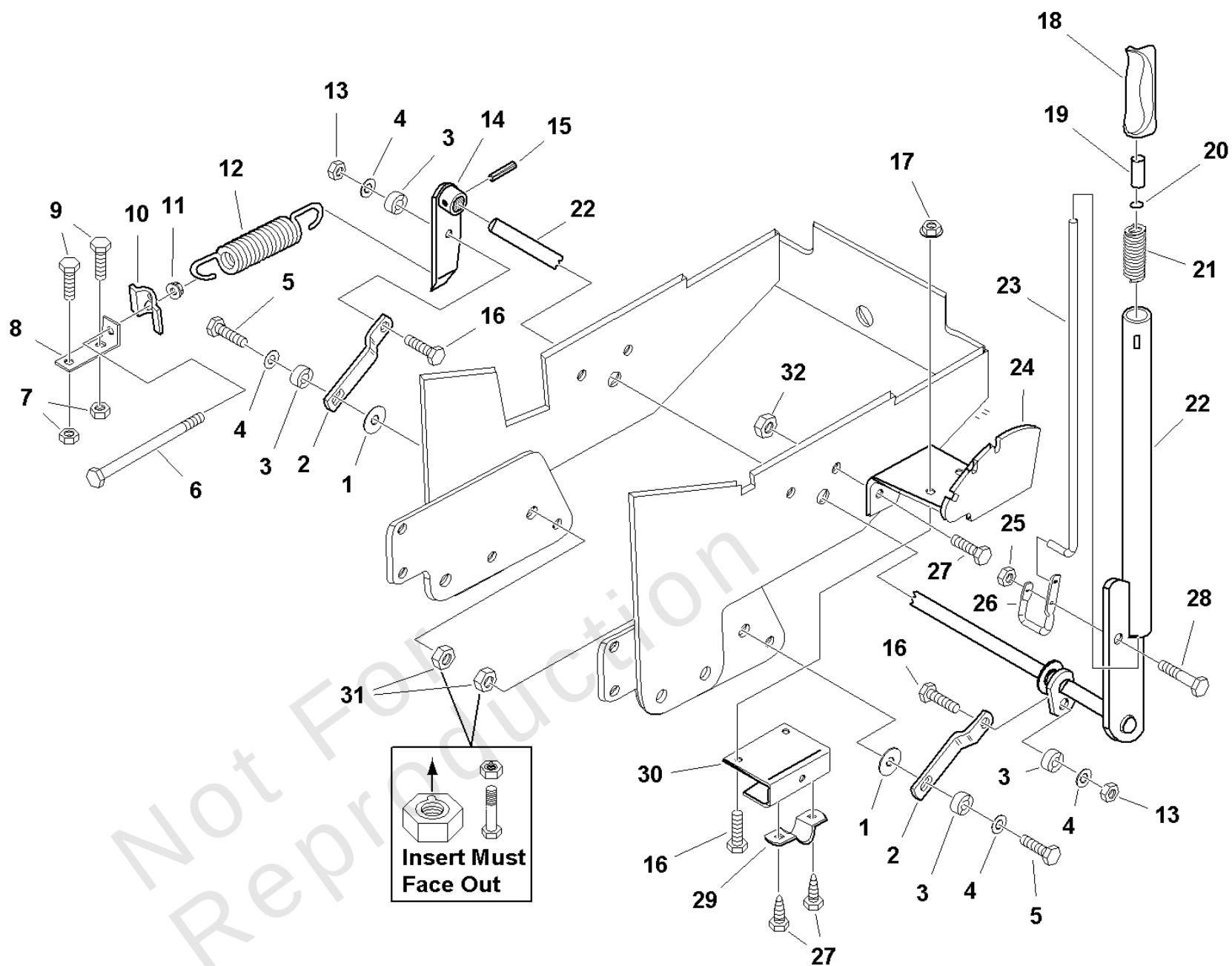
Frame Group - Mower without Height Adjustment

REF NO	PART NO	QTY	DESCRIPTION
1	1722952SM	2	SPACER
2	1923161SM	2	CAPSCREW, Hex Head, 1/2-13 x 4-1/2, Black
3	1721878SM	2	BRACKET & SHAFT ASSEMBLY
4	2860202SM	2	WASHER, 3/4, Black
5	1666001SM	4	BUSHING
6	1704314SM	2	LUBE FITTING, .250 DR
7	1686984SM	1	FRAME ASSEMBLY
8	1920415SM	2	CAPSCREW, Hex Head, 3/8-16 x 1-1/4, Black
9	2154177SM	2	SPACER
10	1928352SM	2	NUT, Hex Flange Lock, 3/8-16, Black
11	2118053SM	2	PIN, Round Head, Drilled, 3/8 x 2, Black
12	1960074SM	4	CLIP, HAIR PIN .093DI
13	1722951SM	2	WHEEL, Caster
14	1724107SM	2	PIN-CLEVIS .494DIAX1.
15	1918452SM	2	PIN, Cotter, 1/4 x 2, Black
16	1960379SM	2	NUT, Hex Lock, 1/2-13

Lift Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 2690037



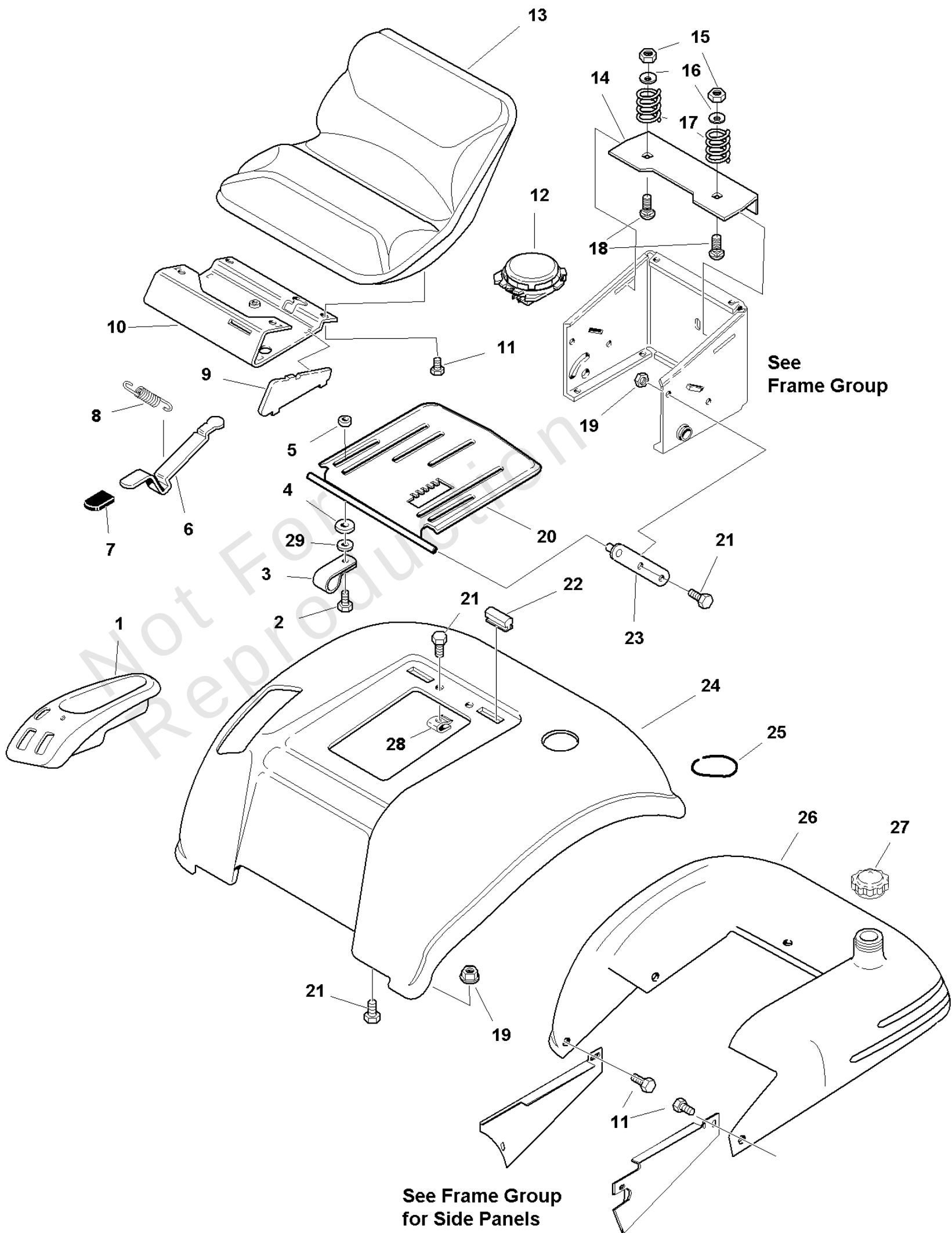
Lift Group

REF NO	PART NO	QTY	DESCRIPTION
1	1960071SM	2	WASHER-0.375(0.41IDX1
2	1723194ASM	2	LINK, Lift
3	2154177SM	4	SPACER
4	1922755SM	4	WASHER,3/8, Black
5	1921971SM	2	CAPSCREW, Hex Head, 3/8-16 x 1-3/4, Black
6	1722357SM	1	CAPSCREW, Hex Washer Head, 5/16-18 x 4-1/2, Black
7	1917372SM	2	NUT, Hex, 5/16-18, Black
8	1723202ASM	1	ANCHOR, Spring
9	1921719SM	2	CAPSCREW, Hex Head, 5/16-18 x 2-1/2
10	1723499SM	1	RETAINER, Spring
11	1935255SM	1	NUT, SPEED, 5/16-18 L
12	1675232SM	1	SPRING,COMPRESSION
13	1930645SM	4	NUT, Hex Flange Lock, 3/8-16, Black
14	1723203ASM	1	BAR & HUB ASSEMBLY
15	2815523SM	1	PIN, Spring, 5/16 x 1-1/2
16	1920415SM	4	CAPSCREW, Hex Head, 3/8-16 x 1-1/4, Black
17	1931277SM	2	NUT, Hex Flange Whiz Lock, 5/16-18, Black
18	1722291SM	1	GRIP,LIFT LEVER
19	1723124SM	1	BUTTON, Red
20	1960674SM	1	NUT-PUSH PAL .250 DIA
21	1723321SM	1	SPRING-COMP 0.715ODX
22	1723200ASM	1	HANDLE ASSEMBLY, Lift
23	1723224SM	1	ROD
24	1723285ASM	1	QUADRANT, Lift
25	1920397SM	1	NUT, Hex Lock ESNA, 1/4-20, Black
26	1720599SM	1	LATCH "U" Wire
27	1930591SM	4	CAPSCREW, Hex Head, Whiz Lock, 5/16-18 x 3/4, Black
28	1921159SM	1	CAPSCREW, Hex Head, 1/4-20 x 2-1/4, Black
29	1665374SM	1	STRAP-1.00WD 3.06LG .
30	1723529ASM	1	BRACE, Support
31	2860681SM	2	NUT, Hex Flange, 3/8-16
32	1928352SM	2	NUT, Hex Whiz Lock , 3/8-16

Seat Deck & Fuel Tank Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 2690037



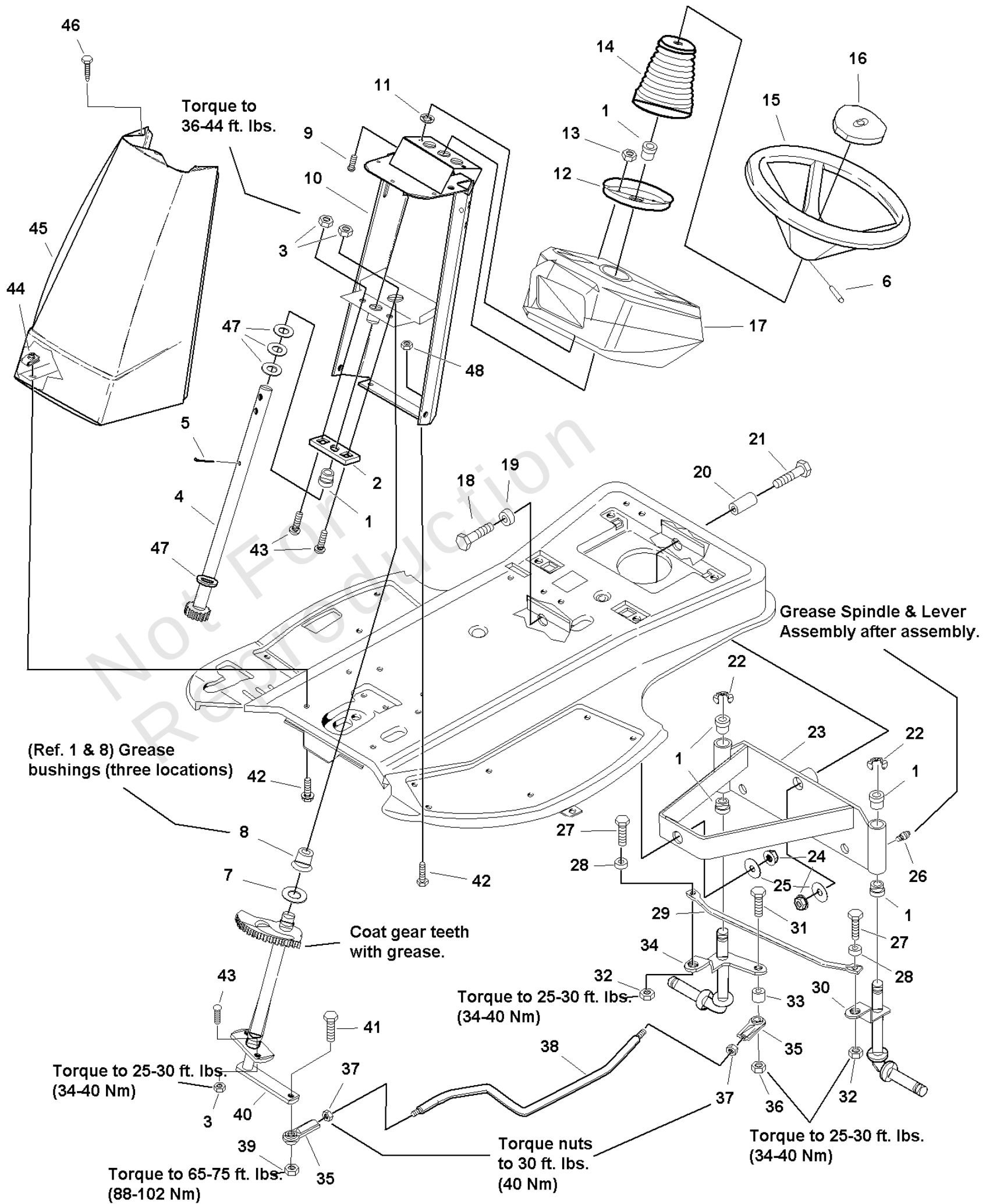
Seat Deck & Fuel Tank Group

REF NO	PART NO	QTY	DESCRIPTION
1	1714542SM	1	POD, Control
2	1960086SM	3	SCREW, TRUSS HD TORX
3	1708008SM	1	CLAMP, Wire
4	1668681SM	3	WASHER, Curved, Special
5	1666697SM	3	SPACER
6	1713597SM	1	LEVER, Seat Latch, Black
7	1715047SM	1	CAP, Black
8	2159106SM	1	SPRING, Extension, 4-1/4 Long
9	1714318SM	2	PANEL, Side
10	1713595SM	1	SLIDE, Seat
11	1931648SM	11	CAPSCREW, Hex Head Whiz Lock, 5/16-18 x 1/2, Black
12	1718981SM	1	SEAT SWITCH, NC
13	1687020SM	1	MILSCO SEAT SERVICE K
14	1715768A	1	PLATE, Spring
15	1919438SM	2	NUT, Hex Lock ESNA, 5/16-18, Black
16	1709256SM	2	WASHER, Spring, 5/16 x 1 1/4
17	1717051SM	2	SPRING
18	1931335SM	2	BOLT, Carriage, Short Neck, 5/16-18 x 1
19	1931277SM	6	NUT, Hex Whiz Lock, 5/16-18, Black
20	1718985SM	1	PAN & ROD ASEMBLY
21	1930591SM	12	CAPSCREW, Hex Head, Whiz Lock, 5/16-18 x 3/4, Black
22	1713794SM	2	STOP, Seat
23	1713758SM	2	BAR
24	1722918CSM	1	SEAT DECK
25	1719104SM	6	MOLDING, PCV, 12-3/8" Long
26	1722904SM	1	FUEL TANK
27	1722905SM	1	CAP, Fuel
28	1935255SM	6	NUT, SPEED, 5/16-18 L
29	1919326SM	3	WASHER, 5/16

Steering Group

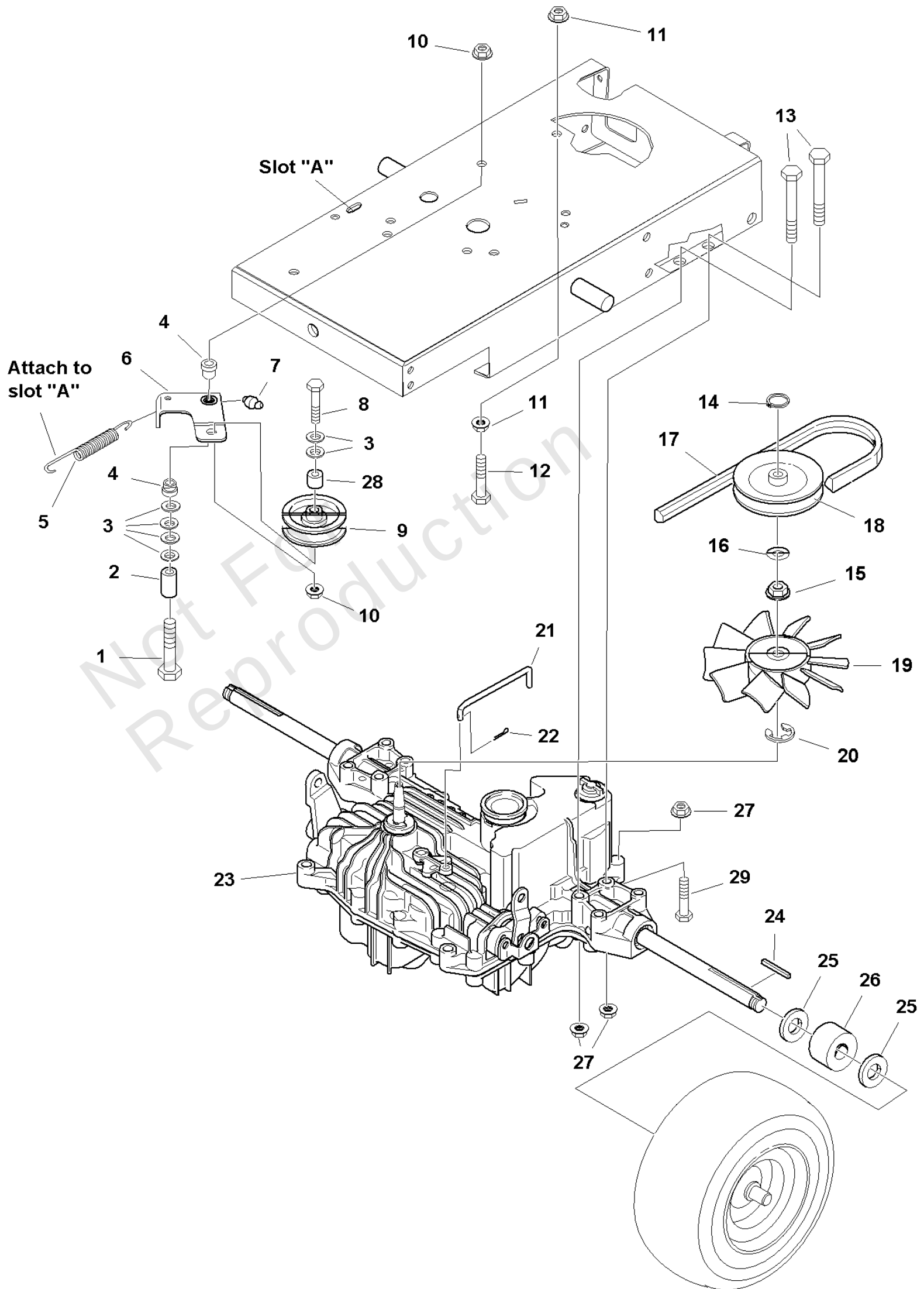
Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 2690037



Steering Group

REF NO	PART NO	QTY	DESCRIPTION
1	2176440SM	6	BUSHING-0.765IDX
2	1703508ASM	1	PLATE, Mounting
3	1928352SM	4	NUT, Hex Flange Whiz Lock, 3/8-16, Black
4	1722495SM	1	SHAFT & PINION ASSEMBLY
5	1919314SM	1	PIN, Cotter, Black
6	1960540SM	1	PIN, Spring, 5/16 x 2-1/2, Black
7	2860202SM	1	WASHER, 3/4
8	1666001SM	1	BUSHING, Metal
9	1931317SM	2	CARRIAGE BOLT, 1/4-20 x 3/4
10	1722497ASM	1	SUPPORT ASSEMBLY
11	1960518SM	2	NUT, Push, 1/4, Black
12	1721736ASM	1	PLATE, Mounting
13	2828732	2	NUT, Hex KEPS, 1/4-20, Black
14	1722749SM	1	COVER, Black Rubber
15	1722738SM	1	STEERING WHEEL
16	1722319SM	1	CAP, Steering Wheel, Simplicity -(Decal Not Included)
17	1723111SM	1	DASHBOARD
18	1921525SM	1	CAPSCREW, Hex Head, 1/2-13 x 1-3/4, Black
19	2105386SM	1	SPACER
20	1723129SM	1	SPACER
21	1960245SM	1	CAPSCREW, Hex Head, 1/2-13 x 3, Black
22	1611710SM	2	RING, Klip, External 3/4, Black
23	1724616SM	1	AXLE ASSEMBLY,w/Bushings & Lube Fitting
24	1960355SM	2	NUT, Hex Lock ESNA Heavy, 1/2-13, Black
25	1918431SM	2	WASHER, 1/2, Black
26	2821133SM	3	FITTING, Lube
27	1921210SM	2	CAPSCREW, Hex Head, 3/8-16 x 1, Black
28	1611705SM	2	SPACER-0.385IDX0
29	1722387SM	1	ROD, Tie
30	1677131ASM	1	SPINDLE & LEVER ASSEMBLY, RH (Lancer LH)
31	1921969SM	1	CAPSCREW, Hex Head, 3/8-16 1-1/2
32	1960339SM	2	NUT, Hex Flange Lock, 3/8-16, Black
33	1708236SM	1	SPACER
34	1677133ASM	1	SPINDLE & LEVER ASSEMBLY, LH (Lancer RH)
35	1702779SM	2	JOINT-BALL .500-20 TH
36	1930645SM	1	NUT, Hex Flange Lock, 3/8-16, Black
37	1919262SM	2	NUT, Hex Head, 1/2-20, Black
38	1722504SM	1	DRAG LINK
39	1930644SM	1	NUT-HEX FLANGE 1/2-1
40	1724793ASM	1	SHAFT & GEAR ASSEMBLY
41	1920328SM	1	CAPSCREW, Hex, 1/2-13 x 1-1/2
42	1930591SM	2	CAPSCREW, Hex Head, 5/16-18 x 3/4
43	1931350SM	4	BOLT, RD HD SH SQ NK
44	1935255SM	6	NUT, SPEED, 5/16-18 L
45	1715998CSM	1	SHROUD, Steering (Orange)
45	1715998DSM	1	SHROUD, Steering (Red)
46	1927429SM	3	CAPSCREW, Hex Head, 1/4-20 x 5/8, Black
47	1960114SM	4	WASHER, 3/4, Black
48	1927557SM	2	NUT, Hex Flange Lock, 5/16-18, Black



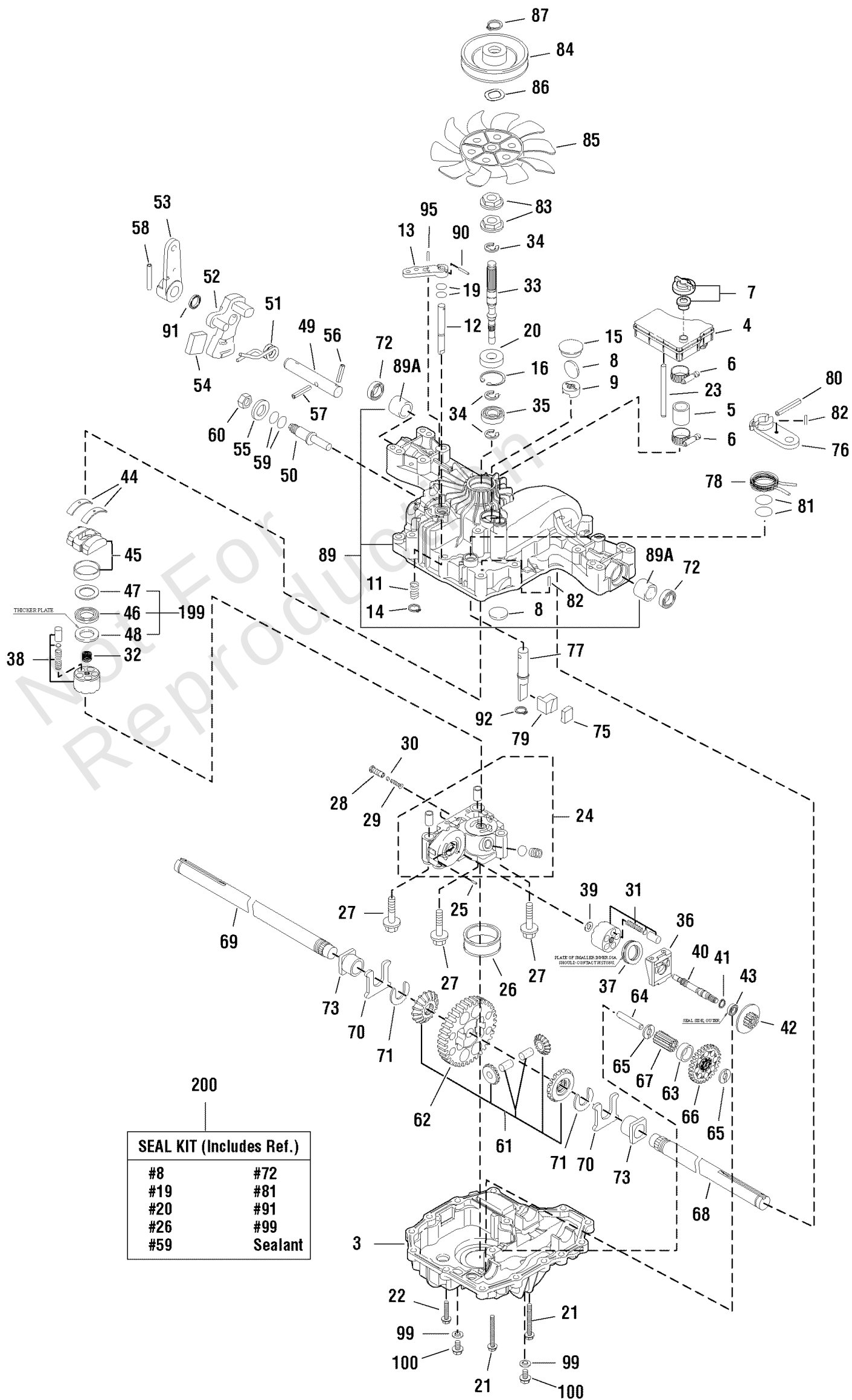
Transmission Group

REF NO	PART NO	QTY	DESCRIPTION
1	1923701SM	1	CAPSCREW, Hex Head, 3/8-16 x 2, Black
2	1674669SM	1	SPACER-0.39 IDX0.625O
3	1924940SM	7	WASHER, 3/8, Black
4	1676148SM	2	BUSHING-0.628IDX
5	1725250SM	1	SPRING, Extension, 7-3/4" Long
6	1722969ASM	1	ARM ASSEMBLY
7	2812808SM	1	FITTING, Lube
8	1921969SM	1	CAPSCREW, Hex Head, 3/8-16 x 1-1/2, Black
9	1724387SM	1	PULLEY, Idler, 3-1/4
10	1960339SM	2	NUT, Hex Flange Lock, 3/8-16, Black
11	1927557SM	2	NUT, Hex Flange Lock, 5/16-18, Black
12	1921978SM	1	CAPSCREW, Hex Head 5/16-18 x 2 G5
13	1921719SM	6	CAPSCREW, Hex Head, 5/16-18 x 2-1/2, Black
14	1724316SM	2	SNAP RING
15	1724312SM	2	SPLINE COLAR
16	1723415SM	1	LOCKWASHER
17	1715128SM	1	V-BELT
18	1724313SM	1	PULLEY
19	1724314SM	1	FAN
20	1718076SM	1	"E" RING
21	1723161SM	1	ROD, Hydro Bypass
22	1923360SM	1	PIN, Cotter
23	1721022SM	1	TRANSMISSION ASSEMBLY, Foot Control, K46Q
24	1717749SM	2	KEY, Parallel
25	2860202SM	4	WASHER, 3/4
26	1723820SM	2	SPACER
27	1935048SM	7	NUT, Hex Flange Lock, 5/16-18
28	1666294SM	1	SPACER
29	1960585SM	1	CAPSCREW, Hex Head, 5/16-18 x 1-3/4

Transmission SERVICE PARTS - Tuff Torq K46Q (1721022)

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 2690037



Transmission SERVICE PARTS - Tuff Torq K46Q (1721022)

REF NO	PART NO	QTY	DESCRIPTION
3	-----	1	*LOWER HOUSING
4	-----	1	*RESERVOIR TANK
5	-----	1	*TUBE
6	1724336SM	2	MINIATURE CLAMP
7	1718052SM	1	VENT VALVE 15
8	1724279SM	2	MAGNET
9	-----	1	*HOLDER, Magnet
11	1725730SM	1	SPRING 25
12	-----	1	*SHAFT, Bypass
13	1720418SM	1	LEVER, Bypass
14	1718061SM	1	RING, Snap, 10
15	1724282SM	1	SEALING CAP, 30
16	1708650SM	1	RING, Snap, C 35
19	1708691SM	2	O-RING, 1A P10A
20	1708651SM	1	SEAL TC 153507
21	1707789SM	14	SCREW, Tapping, 8 * 30
22	-----	2	*SCREW, Tapping
23	-----	1	*SUPPORT
24	1724340SM	1	CENTER CASE, Complete
25	1718070SM	1	PIN, 3 * 9.8
26	-----	1	*FILTER K55
27	1720805SM	3	BOLT, 10 * 75
28	-----	2	*IDS VALVE
29	1724287SM	2	IDS SPRING
30	-----	2	*BALL, 3/16
31	1718079SM	1	KIT, Cylinder Block
32	1724290SM	1	SPRING
33	1724291SM	1	PUMP SHAFT
34	1718076SM	3	E-RING, 15
35	1718083SM	1	BEARING, 6202UC3
36	1718077SM	1	MOTOR HOUSING
37	1718078SM	1	BEARING, Motor Thrust, 51106
38	-----	1	*CYLINDER BLOCK
39	1718084SM	1	WASHER, 12 * 24 * 1
40	1724293SM	1	SHAFT MOTOR
41	1708672SM	1	RING, Snap, S15
42	1724294SM	1	BRAKE DISC/MOTOR GEAR (11T)
43	1718083SM	1	BEARING, 6202UC3
44	1724342SM	2	THRUST METAL
45	1720426SM	1	SWASH PLATE ASSEMBLY
46	1718086SM	1	THRUST BEARING K81105
47	1718087SM	1	THRUST PLATE, A
48	1718088SM	1	THRUST PLATE, B
49	-----	1	*CONTROL SHAFT
50	-----	1	*FULCRUM, Eccentric
51	1724345SM	1	SPRING, Torsion, Standard
52	1724346SM	1	LEVER, Control
53	1724347SM	1	CONTROL LEVER C

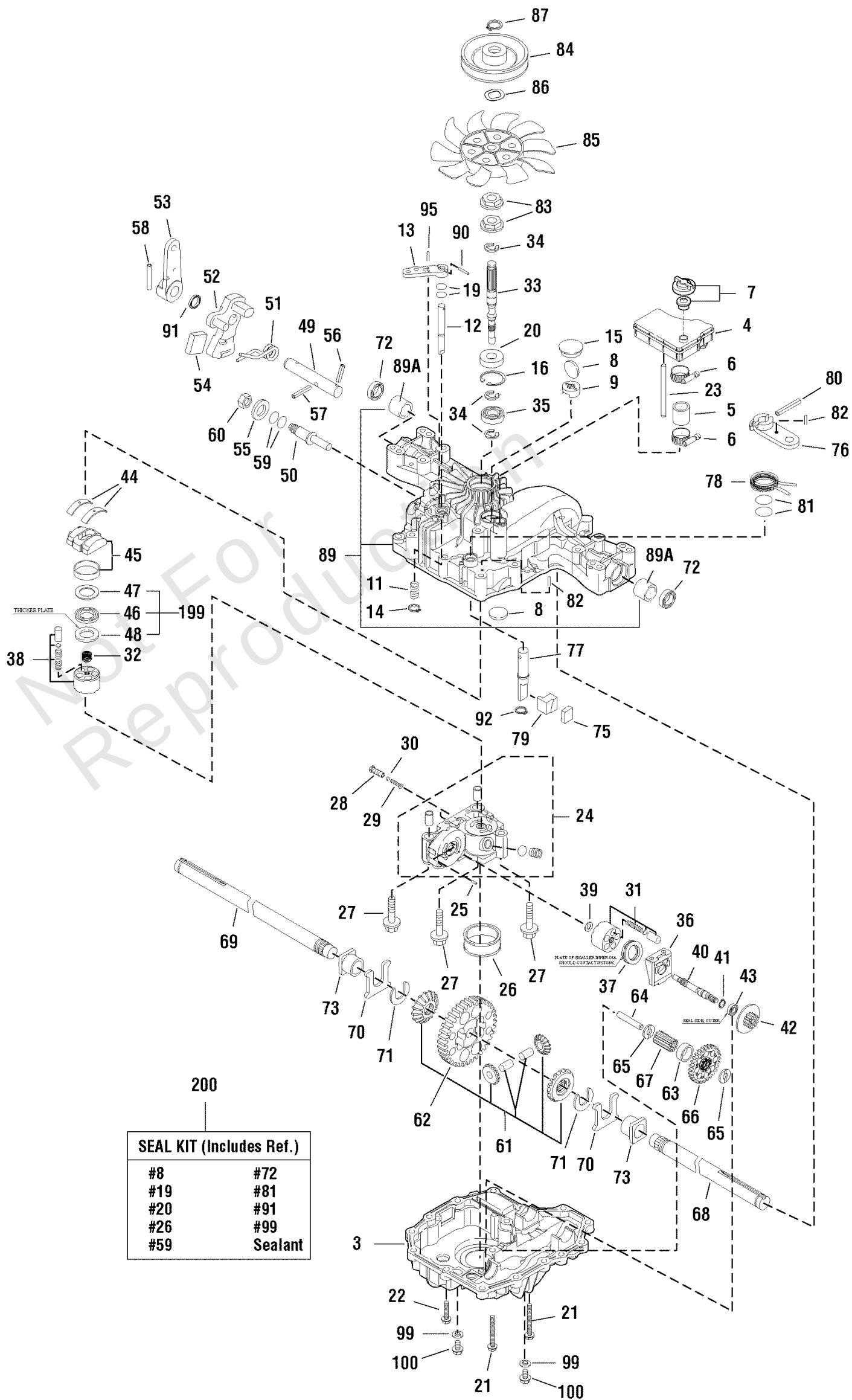
Footnotes:

Note:* See your local authorized dealership for parts and warranty or contact Tuff Torq at www.tufftorqservices.com (U.S. 1-866-572-3441 Int'l 01-423-585-1977)

Transmission SERVICE PARTS - Tuff Torq K46Q (1721022)

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 2690037

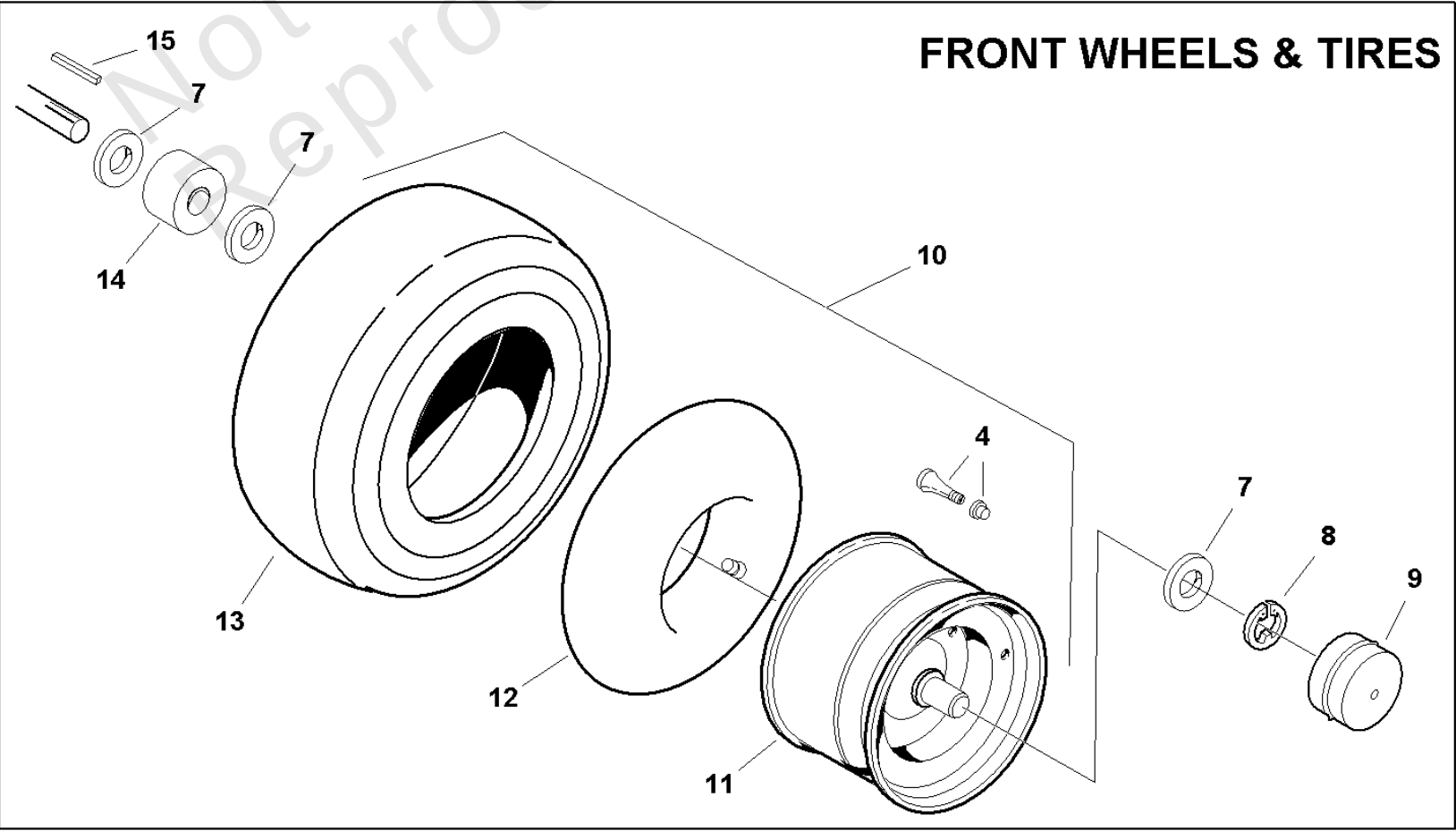
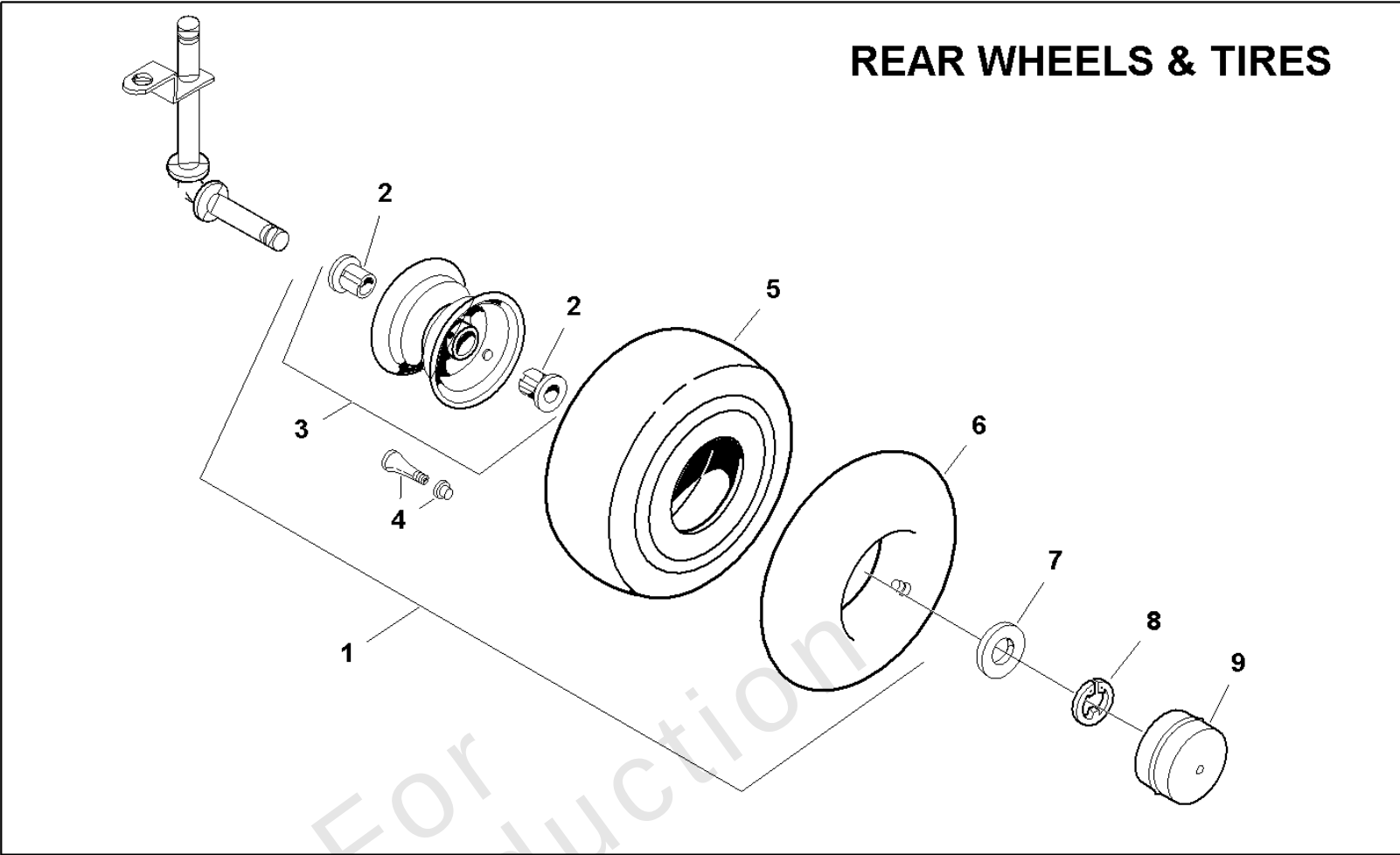


Transmission SERVICE PARTS - Tuff Torq K46Q (1721022)

REF NO	PART NO	QTY	DESCRIPTION
54	1724348SM	1	JERKY PLATE
55	1708689SM	1	WASHER, 12
56	1724349SM	1	COTTER PIN, 1/8 * 3/4
57	1724311SM	2	SPRING PIN 4 * 16
58	1718100SM	1	ROLL PIN 6 * 40
59	1707879SM	2	O-RING 1A P14
60	1708692SM	1	NUT 12
61	1724297SM	2	DIFFERNIAL PINION
62	-----	1	*FINAL GEAR
63	-----	1	*COLLAR, Final
64	-----	1	*REDUCTION SHAFT
65	-----	2	*WASHER
66	1724301SM	1	REDUCTION GEAR
67	1724302SM	1	FINAL PINION
68	1724303SM	1	AXLE SHAFT, Left
69	1724304SM	1	AXLE SHAFT, Right
70	1718112SM	2	THRUST WASHER
71	1718113SM	2	RING, 17
72	1718111SM	2	SEAL, 19 * 32 * 8 -(For this part only contact B&S Tech support)
73	1718110SM	2	BUSHING, 19 * 25
75	1724305SM	1	BRAKE SHOE
76	1724306SM	1	BRAKE LEVER
77	-----	1	*SHAFT, Brake
78	1724308SM	1	RETURN SPRING B
79	1724309SM	1	BRAKE ACTUATOR
80	1724310SM	1	SPRING PIN, 5 * 32
81	1708690SM	2	O-RING 1A P12
82	1707839SM	2	SPRING PIN, 3.0A * 20
83	1724312SM	2	SPLINE COLLAR
84	1724313SM	1	PULLEY D
85	1724314SM	1	FAN, White
86	1724315SM	1	WASHER, Wave
87	1724316SM	2	RING, Snap
89	-----	1	*UPPER HOUSING -(Includes Ref. No. 89A)
89A	-----	2	*BUSHING
90	1707839SM	1	SPRING PIN, 3.0A * 20
91	1724318SM	1	OIL SEAL 16 * 22 * .03
99	1708649SM	2	WASHER, Seal 8
100	-----	2	*SCREW, Cap
199	-----	1	*BEARING, Thrust -(Includes Ref. Nos. 46, 47 & 48)
200	1727541YP	1	K46 & T40 SEAL KIT -(Includes Ref. Nos. 8, 19, 20, 26, 59, 72, 81, 91, 99 & Sealant)
201	-----	1	*KIT, Repair -(Not Shown)

Footnotes:

Note:* See your local authorized dealership for parts and warranty or contact Tuff Torq at www.tufftorqservices.com (U.S. 1-866-572-3441 Int'l 01-423-585-1977)



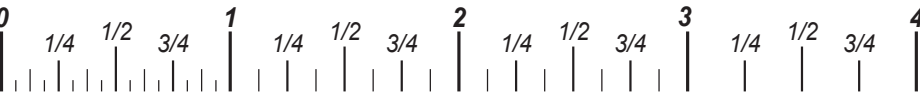
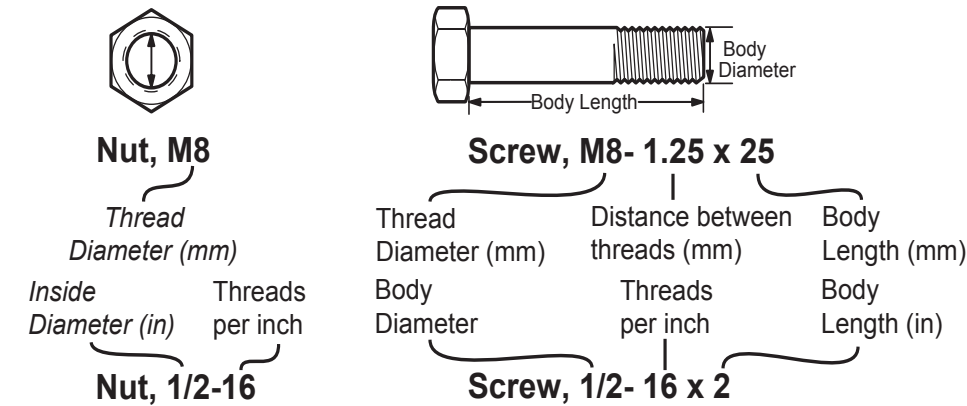
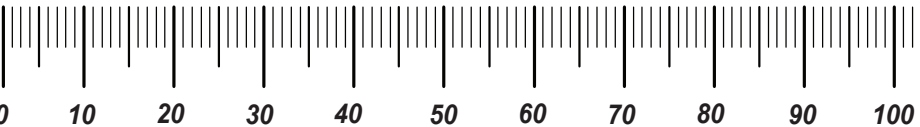
Wheels & Tires Group

REF NO	PART NO	QTY	DESCRIPTION
1	1723227SM	2	WHEEL & TIRE ASEMBLY, Rear, (Includes Ref. Nos. 2, 3, 4, 5, & 6)
2	1713167SM	2	BEARING, Ball
3	1726301SM	1	WHEEL & BUSHINGS ASSEMBLY, (Includes Ref. No. 2)
4	2172353SM	4	VALVE STEM & CAP ASSEMBLY
5	1723777SM	1	TIRE, 15 X 6.00, 6 SUPER TURF TL
6	1664090SM	1	TUBE, Tire, 4.10/3.50, Rear
7	2860202SM	8	WASHER
8	2827794SM	4	KLIPRING, .75 Dia Shaft
9	1722675SM	4	CAP, Hub
10	1723228SM	2	WHEEL & TIRE ASSEMBLY, Front, (Includes Ref. Nos. 4, 11, 12, & 13)
11	1716132SM	1	WHEEL, 7.00 x 8.00
12	2164247SM	1	TUBE, Tire, 16 x 6.50
13	1723778SM	1	TIRE, 18 x 9.50, 8 SUPER TURF TL
14	1723820SM	2	SPACER
15	1717749SM	2	KEY, Parellel

Hardware Identification & Torque Specifications

Torque Specification Chart								
FOR STANDARD METRIC MACHINE HARDWARE (Tolerance ± 20%)								
Property Class	 Class 5.6		 Class 8.8		 Class 10.9		 Class 12.9	
Size Of Hardware	in/lbs ft/lbs	Nm.	in/lbs ft/lbs	Nm.	in/lbs ft/lbs	Nm.	in/lbs ft/lbs	Nm.
M3	5.88	.56	13.44	1.28	19.2	1.80	22.92	2.15
M4	13.44	1.28	30.72	2.90	43.44	4.10	52.56	4.95
M5	26.4	2.50	60.96	5.75	5.97	8.10	7.15	9.7
M6	44.64	4.3	7.3	9.9	10.3	14	12.1	16.5
M7	5.2	7.1	12.1	16.5	16.9	23	19.9	27
M8	7.7	10.5	17.7	24	25	34	29	40
M10	15	21	35	48	50	67	59	81
M12	26	36	61	83	86.2	117	103	140
M14	42	58	101	132	136	185	162	220
M16	64	88	147	200	210	285	250	340
M18	89	121	202	275	287	390	346	470
M20	126	171	290	390	405	550	486	660
M22	169	230	390	530	559	745	656	890
M24	217	295	497	375	708	960	840	1140
M27	320	435	733	995	1032	1400	1239	1680
M30	435	590	995	1350	1401	1900	1681	2280
M33	590	800	1349	1830	1902	2580	2278	3090
M36	759	1030	1740	2360	2441	3310	2935	3980
M39	988	1340	2249	3050	3163	4290	3798	5150

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



Standard Hardware Sizing

When a washer or nut is identified as 1/2" (M8), this is the *Nominal size*, meaning the *inside diameter* is 1/2 inch (8mm metric thread diameter); if a second number is present it represents the *threads per inch* (distance between threads).

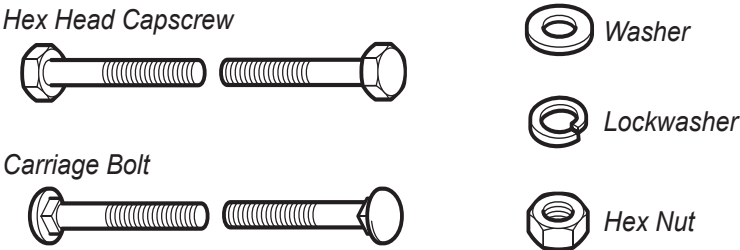
When bolt or capscrew is identified as 1/2 - 16 x 2" (M8 - 1.25 x 50), this means the *Nominal size*, or body diameter is 1/2 inch (8mm metric thread diameter), the second number, 16, represents the *threads per inch*, (*distance between threads*). The final number is the body length of the bolt or screw,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

Torque Specification Chart						
FOR STANDARD MACHINE HARDWARE (Tolerance ± 20%)						
Hardware Grade	 SAE Grade 2		 SAE Grade 5		 SAE Grade 8	
Size Of Hardware	in/lbs ft/lbs	Nm.	in/lbs ft/lbs	Nm.	in/lbs ft/lbs	Nm.
8-32	19	2.1	30	3.4	41	4.6
8-36	20	2.3	31	3.5	43	4.9
10-24	27	3.1	43	4.9	60	6.8
10-32	31	3.5	49	5.5	68	7.7
1/4-20	66	7.6	8	10.9	12	16.3
1/4-28	76	8.6	10	13.6	14	19.0
5/16-18	11	15.0	17	23.1	25	34.0
5/16-24	12	16.3	19	25.8	29	34.0
3/8-16	20	27.2	30	40.8	45	61.2
3/8-24	23	31.3	35	47.6	50	68.0
7/16-14	30	40.8	50	68.0	70	95.2
7/16-20	35	47.6	55	74.8	80	108.8
1/2-13	50	68.0	75	102.0	110	149.6
1/2-20	55	74.8	90	122.4	120	163.2
9/16-12	65	88.4	110	149.6	150	204.0
9/16-18	75	102.0	120	163.2	170	231.2
5/8-11	90	122.4	150	204.0	220	299.2
5/8-18	100	136	180	244.8	240	326.4
3/4-10	160	217.6	260	353.6	386	525.0
3/4-16	180	244.8	300	408.0	420	571.2
7/8-9	140	190.4	400	544.0	600	816.0
7/8-14	155	210.8	440	598.4	660	897.6
1-8	220	299.2	580	788.8	900	1,244.0
1-12	240	326.4	640	870.4	1,000	1,360.0

NOTES

- These torque values are to be used for all hardware excluding: locknuts, self-tapping screws, thread forming screws, sheet metal screws and socket head setscrews.
- Recommended seating torque values for locknuts:
 - for prevailing torque locknuts - use 65% of grade 5 torques.
 - for flange whizlock nuts and screws - use 135% of grade 5 torques.
- Unless otherwise noted on assembly drawings, all torque values must meet this specification.

Common Hardware Types



Wrench & Fastener Size Guide

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

