

Parts Manual

Mfg. No: 5901855
ISX3300 Series w/ 61" Mower Deck &
ROPS (ISX3300BVE3761SS)



5600960 - Striping Kit, 61 iCD Deck (Units with wider chassis).....

5600865 - 61" iCD FAST-Vac; 3-Bag Soft Top System (3200/320).....

5100856 - 3-Bag Electric Dump From Seat.....

5600867 - 61" iCD FAST-Vac; Electric Dump From Seat (3200Z/320).....

5023279 - Flat Free Tire Assembly.....

5600864 - 61" iCD TURBO-Pro Max; 3-Bag Soft Top Grass Collection System (3200/320).....

5600866 - 61" iCD TURBO-Pro Max; Electric Dump from Seat Grass Collection System (3200/320).....

5600898 - Mulch Kit for ZTR w/ 61" Deck - S/N: 2015340577 & Above / Walk Behind w/ 61" Deck - S/N:

5600891 - Roll Bar Mounted LED Headlight Kit.....

5601080 - Service Jack Kit.....

5601235 - Service Jack Mount Kit (7.25") 2200/3300.....

5106748S - Laser Edge Blade Set, 61" Deck.....

5106751X1 - Terra Trac Tire, 26 X 12 - 12.....

5601240 - 61" iCD FAST-Vac; EZ Dump XL 14 cu. ft. Hopper (ISX3300).....

5601241 - 61" iCD TURBO-Pro MAX; EZ Dump XL 14 cu. ft. Hopper (ISX3300).....

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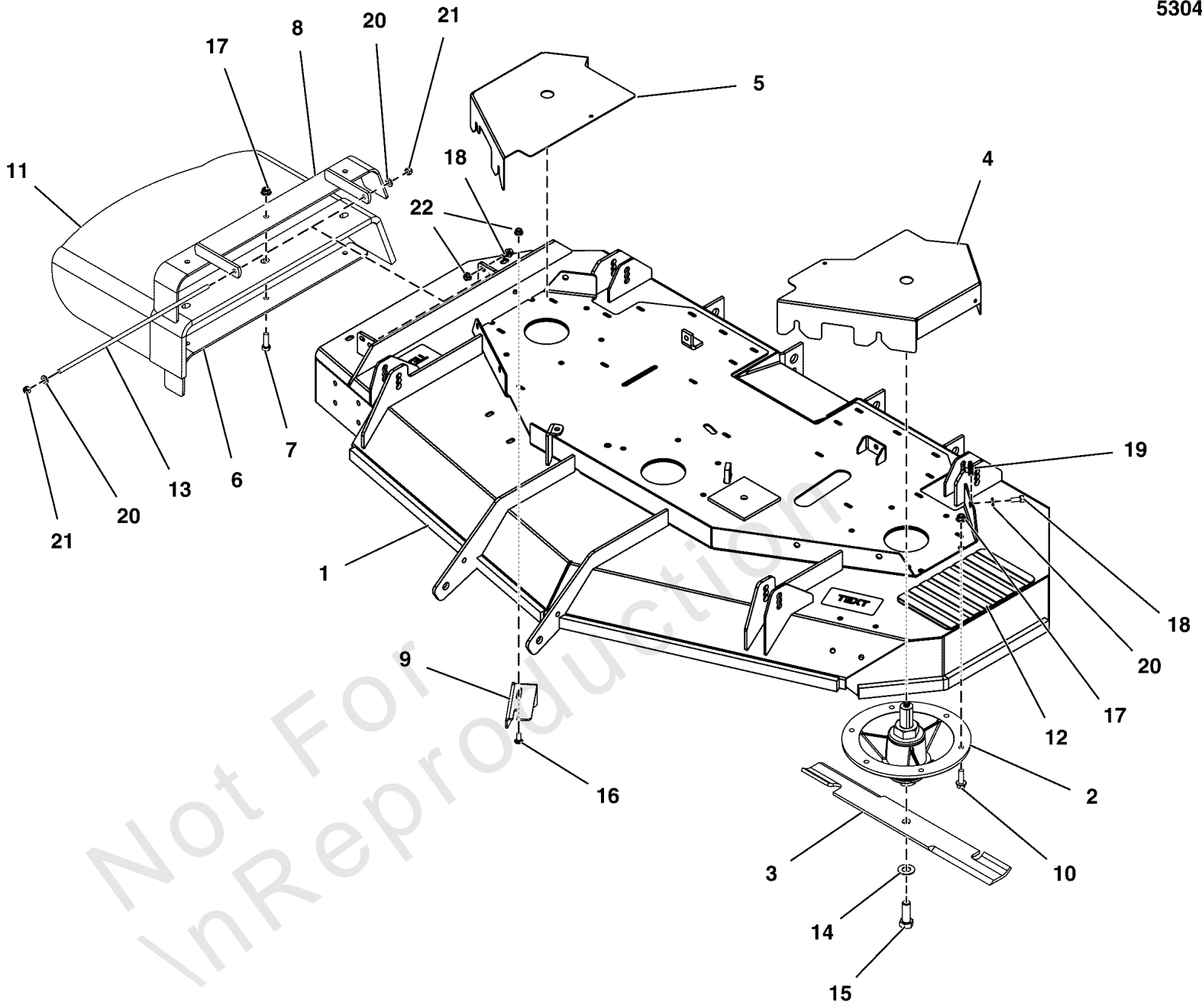
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61" Mower Deck - Housing, Covers, Spindles & Blades (2 Belt System)

Note: Unless noted otherwise, use the standard torque specifications

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5304618



61" Mower Deck - Housing, Covers, Spindles & Blades (2 Belt System)

REF NO	PART NO	QTY	DESCRIPTION
1	5600980	1	DECK SHELL W/DECALS, 61, 3200Z (5414316B) -(Domestic Models - S/N: 2017954955 & Below)
1	5601126	1	DECK SHELL W/DECALS, 61-3200E (5414316B) -(Export Models - S/N: 2017954955 & Below)
1	5601121	1	DECK SHELL W/DECALS, 3200-61 (5417000B) -(Domestic Models - S/N: 2017954956 & Above)(Refer to Note: *)
1	5601122	1	DECK SHELL W/DECALS, 3200-61E (5417000B) -(Export Models - S/N: 2017954956 & Above)(Refer to Note: *)
2	5413009	3	SPINDLE, ASSM, CAST IRON - 10.0
3	5101755S	1	BLADE SET, 61 DECK (3) -(SV)(Set of 3 blades)
4	5413169B	1	GUARD, IS3200Z, LH 61" - RED
5	5415578B	1	GUARD, MOWER DECK, IS3200-61, RH - RED
6	5413385A	1	SUPPORT, DISCHARGE CHUTE - BLK
7	5025146X12	3	BOLT, 3/8-16 X 1-1/2, CARRIAGE, GD5, CZ
8	5413387A	1	WELD, MOUNT, DISCHARGE CHUTE - BLK
9	5401344A	1	PLATE, DEFLECTOR - BLK
10	5025390X10	18	BOLT, 3/8-16 X 1-1/4, FLANGE, GD 5, CZ -(Torque spindle mounting bolts to 30 ft-lbs (41 Nm))
11	5413499	1	CHUTE, RUBBER DISCHARGE (5104442)
12	5101005	1	SAFETY WALK, 9.75 X 6.00
13	5061300	1	ROD, MOUNT, CHUTE, 61, CZ
14	5025477	3	WASHER, BLADE BOLT, 9/16" F436, CZ
15	5025320X14	3	BOLT, 5/8-11 X 1-3/4 GD8 -(Torque blade mounting bolts to 120 ft-lbs (163 Nm))
16	5025145X6	2	BOLT, 5/16-18 X 3/4, CARRIAGE, GD5, CZ
17	5025394	21	NUT, 3/8 - 16 HEX NYLOCK FLANGE
18	5025011X6	7	BOLT, 5/16-18 X 3/4 GD5
19	5022308	6	BODY CLIP, 5/16-18 7GA. MATERIAL
20	5025155	6	WASHER, 5/16" SAE
21	5025045	2	NUT, Hex, Nylon Lock, 5/16-24
22	5025392	3	NUT, 5/16-18 HEX NYLOCK FLANGE NUT

Footnotes:

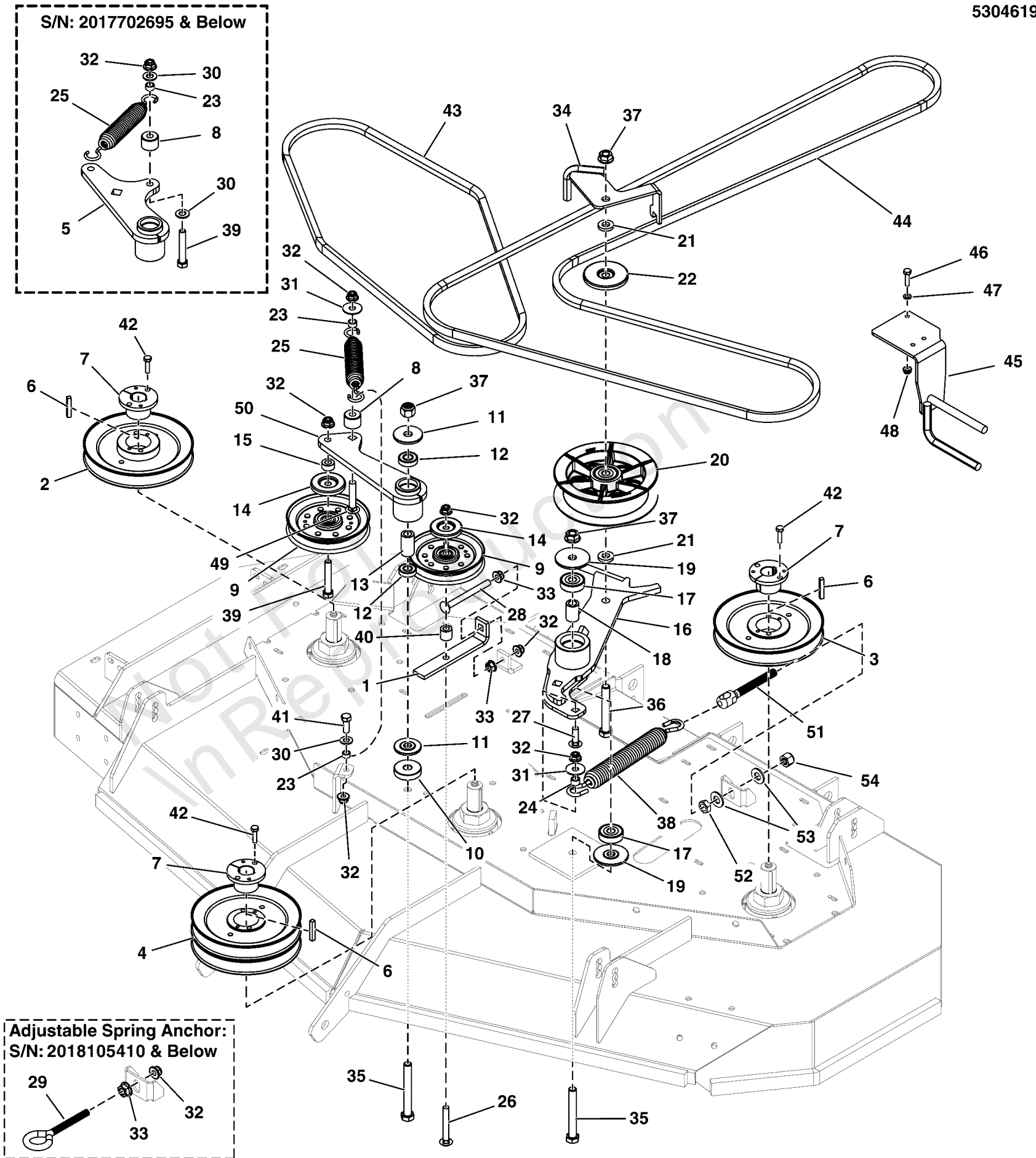
Note: * If replacing the deck shell with decals on units in serial number range 2017954956 - 2018105410, you must also order 5105844 - Qty: 1, 5025098 - Qty: 1, 5025089 - Qty: 1, 5025158 - Qty: 2.

61" Mower Deck Group - Pulleys, Belts & Idler Arms (2 Belt System)

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5901855

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61" Mower Deck Group - Pulleys, Belts & Idler Arms (2 Belt System)

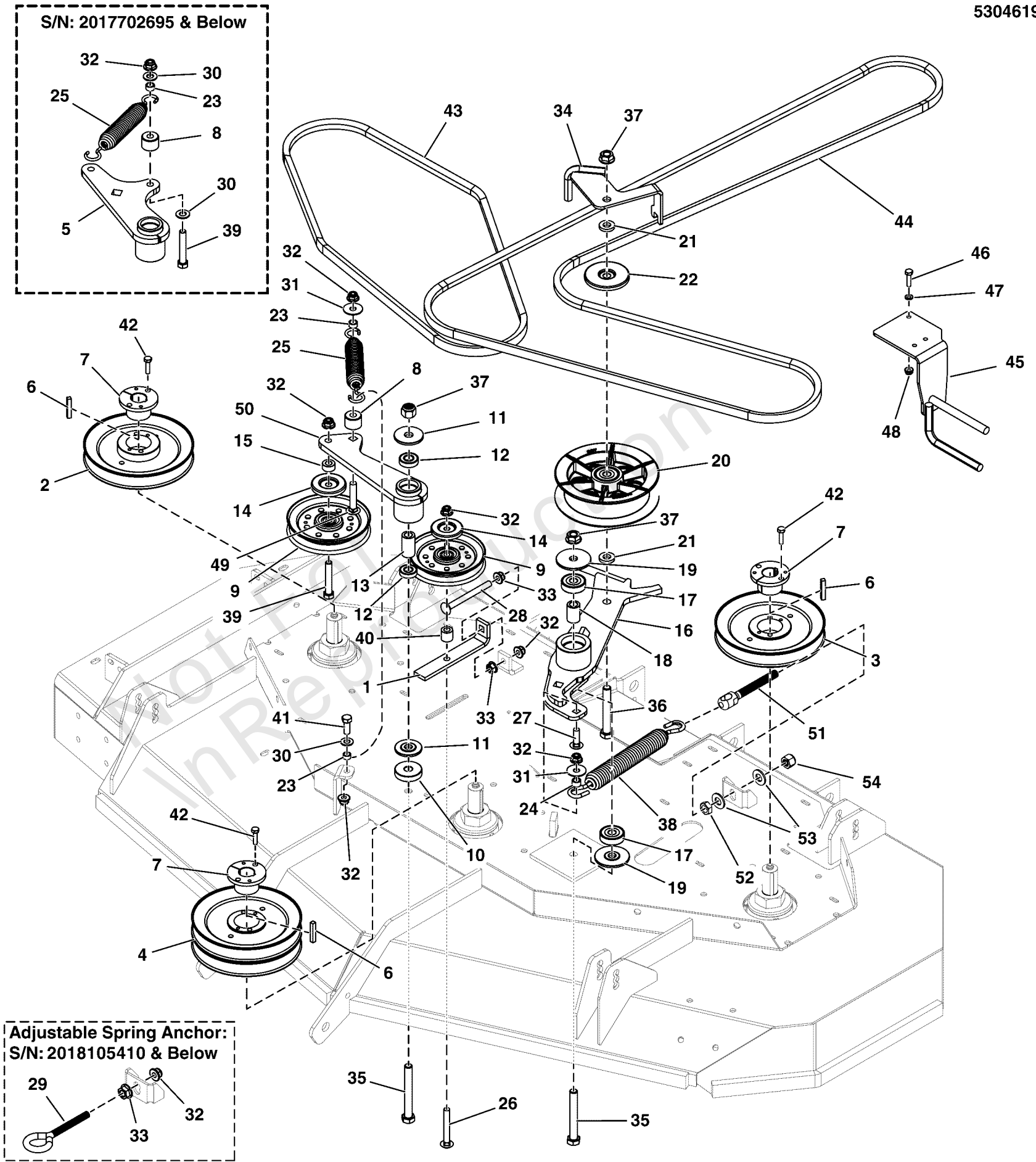
REF NO	PART NO	QTY	DESCRIPTION
1	5415374A	1	PLATE, IDLER PULLER - BLK
2	5105005	1	PULLEY, SPNDL, 7.032"OB, HQ BORE - RH
3	5105019	1	PULLEY, SPNDL, 7.032"OB, HQ BORE - LH
4	5105006	1	PULLEY, SPNDL, 7.032"OB-DBL, HQ BORE
5	-----	1	REPLACE W/ 5416161A & 5025146X16 -(S/N: 2017702695 & Below)
6	5022726	3	KEY 1/4 SQ X 1 1/2 LONG
7	5020819	3	BUSHING, Tapered Hub
8	5043815	1	SPACER, .39 X 1.00 X .75, CZ
9	5108772	2	PULLEY, V-IDLER, 5"OD X 3/8", CZ, TE
10	5105066	1	SPACER, .52 X 1.75 X .420, CZ
11	5103262	2	SPACER, IDLER ARM, 1/2, PM
12	7078243	2	BEARING, BALL, AXLE
13	5103812	1	SPACER, .52 X .84 X 1.53, PM
14	5105033	2	SHIELD, PULLEY, 3/8"ID X 2"OD, CZ
15	5105429	1	SPACER, .39 X 1.00 X .38
16	5415997A	1	WELD, IDLER ARM, 2B DECK DRIVES - BLK
17	5104383	2	BEARING, 6203-1/2", SEALED
18	5104456	1	SPACER, .51 X .84 X 1.22, PM, CZ
19	5104379	2	SPACER, IDLER ARM, 1/2 X 2.25
20	5105009	1	PULLEY, IDLER, 5.50, CI, DBL BEARING
21	5100520	2	SPACER, .52 X 1.00 X .22, PM, CZ
22	5105041	1	SHIELD, PULLEY, 1/2"ID X 2-7/8"OD, CZ
23	5041930	2	SPACER, .38 X .50 X .27, CZ
24	5105297	1	SPACER, .39 X .63 X .375M DOM CZ
25	5022847	1	SPRING-EXT, 1.04 ODX6.935LGX.148WR, BLK
26	5025146X20	1	BOLT, 3/8-16 X 2-1/2, CARRIAGE, GD5, CZ
27	5025146X12	1	BOLT, 3/8-16 X 1-1/2, CARRIAGE, GD5, CZ
28	5025146X36	1	BOLT, 3/8-16 X 4-1/2, CARRIAGE, GD5, CZ
29	5023497	1	EYE BOLT, 3/8-16 X 5, 2.88THRD, 1EYE, CZ -(S/N: 2018105410 & Below)
30	5025156	1	WASHER, 3/8 SAE -(Qty: 3 - S/N: 2017702695 & Below)
31	5025165	2	WASHER, 3/8" Fender
32	5025394	6	NUT, 3/8 - 16 HEX NYLOCK FLANGE -(Qty: 7 - S/N: 2018105410 & Below)
33	5025128	2	NUT, 3/8-16 Hex Large Serrated Flange -(Qty: 3 - S/N: 2018105410 & Below)
34	5415996A	1	WELD, UPPER ARM GUIDE - BLK
35	5025017X32	2	BOLT, 1/2-13 X 4" GD5 CZ
36	5025017X28	1	BOLT, 1/2-13 X 3-1/2, HEX HD, GD5, CZ (SV)
37	5025396	3	NUT, Hex Flange, Nylock, 1/2-13
38	5105068	1	SPRING, EXT1.22"ODX10.5"FLX.192"WIRE BLK
39	5025013X18	1	BOLT, 3/8-16 X 2-1/4" GD5 CZ -(Qty: 2 - S/N: 2017702695 & Below)
40	5100334	1	SPACER, .39 X 1.00 X .63, CZ
41	5025013X8	1	BOLT, 3/8-16 X 1" GD5 CZ
42	5025010X8	6	BOLT, 1/4-20 X 1" GD5 CZ
43	5104780	1	BELT, B-SEC, 64.00 EL, ARAMID, WRPD
44	5104982	1	BELT, 5V/SPB, 138.50 EL, LG ARAMID, WRPD
45	5416020A	1	WELD, CLUTCH BELT GUIDE - BLK
46	5025010X8	2	BOLT, 1/4-20 X 1" GD5 CZ
47	5025154	2	WASHER, 1/4 SAE

61" Mower Deck Group - Pulleys, Belts & Idler Arms (2 Belt System)

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61" Mower Deck Group - Pulleys, Belts & Idler Arms (2 Belt System)

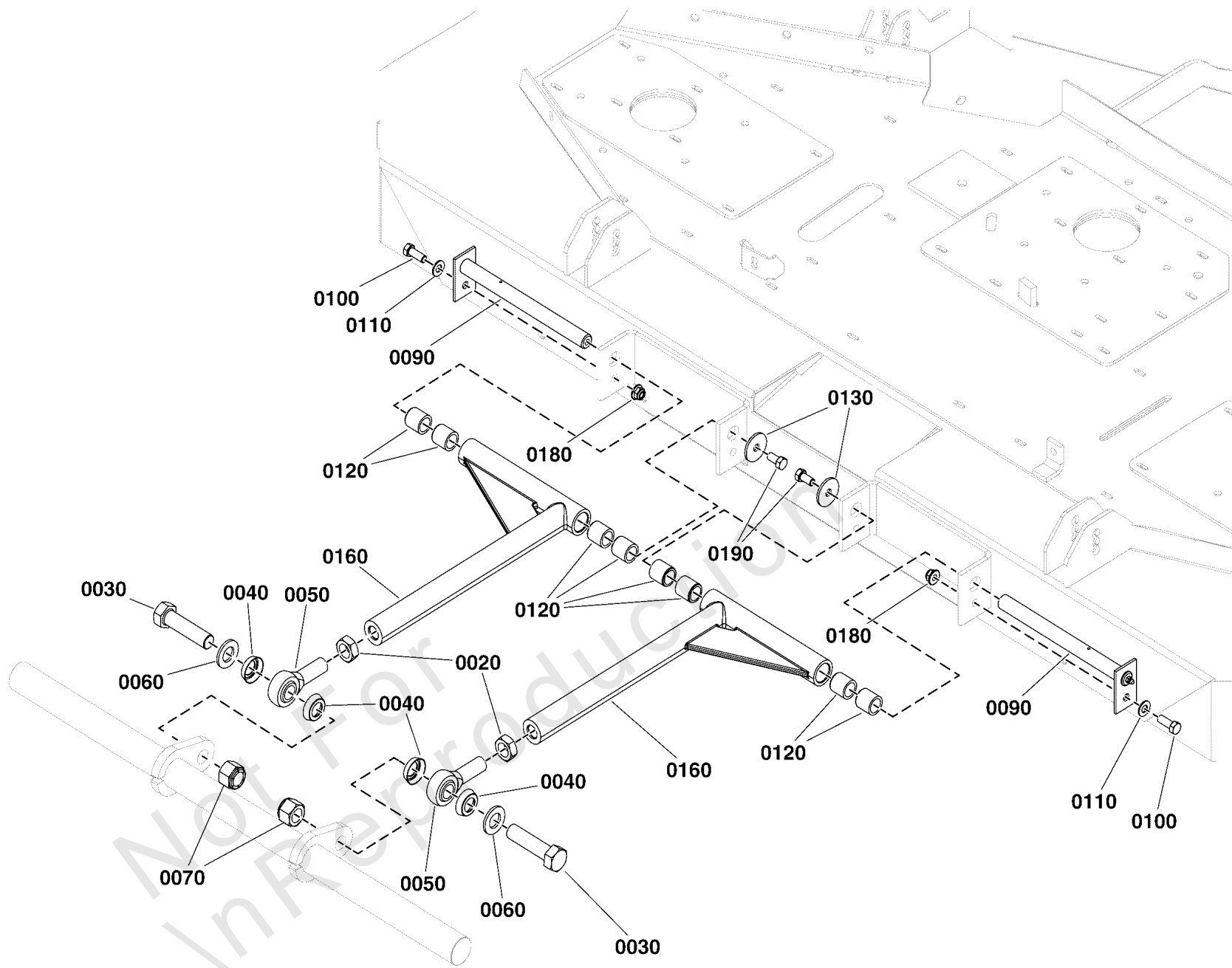
REF NO	PART NO	QTY	DESCRIPTION
48	5025391	2	NUT, 1/4-20 Hex Nylock Flange
49	5025146X16	1	BOLT, 3/8-16 X 2, CARRIAGE, GD5, CZ -(S/N: 2017702696 & Above)
50	5416161A	1	WELD, IDLER ARM, 2 BELT DRIVE - BLK -(S/N: 2017702696 & Above)
51	5105844	1	SPRING PULLER, 1/2-20, 5.00 -(S/N: 2018105411 & Above)
52	5025089	1	NUT, 1/2-20 Hex Jam -(S/N: 2018105411 & Above)
53	5025158	2	WASHER, 1/2 SAE -(S/N: 2018105411 & Above)
54	5025098	1	NUT, Hex, Nylon Lock, 1/2-20 -(S/N: 2018105411 & Above)

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61" Mower Deck Group - Pusher Bars

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61" Mower Deck Group - Pusher Bars

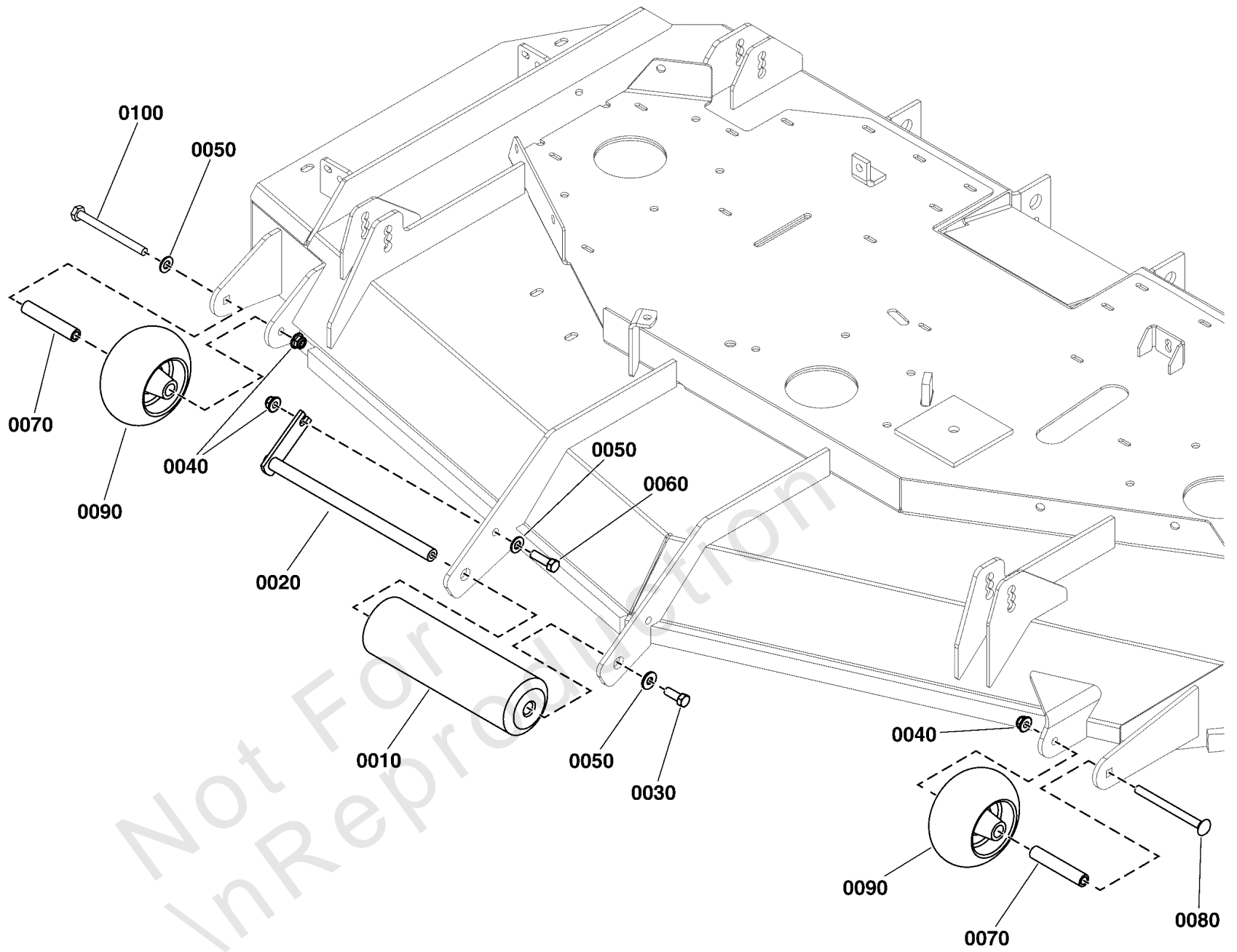
REF NO	PART NO	QTY	DESCRIPTION
0020	5025093	2	NUT, Hex, Jam, 3/4-16
0030	5025265X24	2	BOLT, 3/4-16 X 3" YZ GD5
0040	5022111	4	SEAL, 3/4" ROD END
0050	5022039	2	BALL JOINT, 3/4-16, MALE
0060	5025160	4	WASHER, 3/4" SAE
0070	5025284	2	NUT, Hex, Nylon Lock, 3/4-16
0090	5415240	2	WELD, DECK MOUNT SHAFT
0100	5025013X8	2	BOLT, 3/8-16 X 1" GD5 CZ
0110	5025156	2	WASHER, 3/8 SAE
0120	5023344	8	BUSHING, .75 X 1.00 X 1.00, Plastic
0130	5100548	2	WASHER, .390 X 1.50 X .109, YZ
0160	5104978	2	PUSHER BAR, CAST
0180	5025394	2	NUT, 3/8 - 16 HEX NYLOCK FLANGE
0190	5025443	2	BOLT, 3/8-16 X 3/4, PLT W/PATCH

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61" Mower Deck Group - Rollers

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61" Mower Deck Group - Rollers

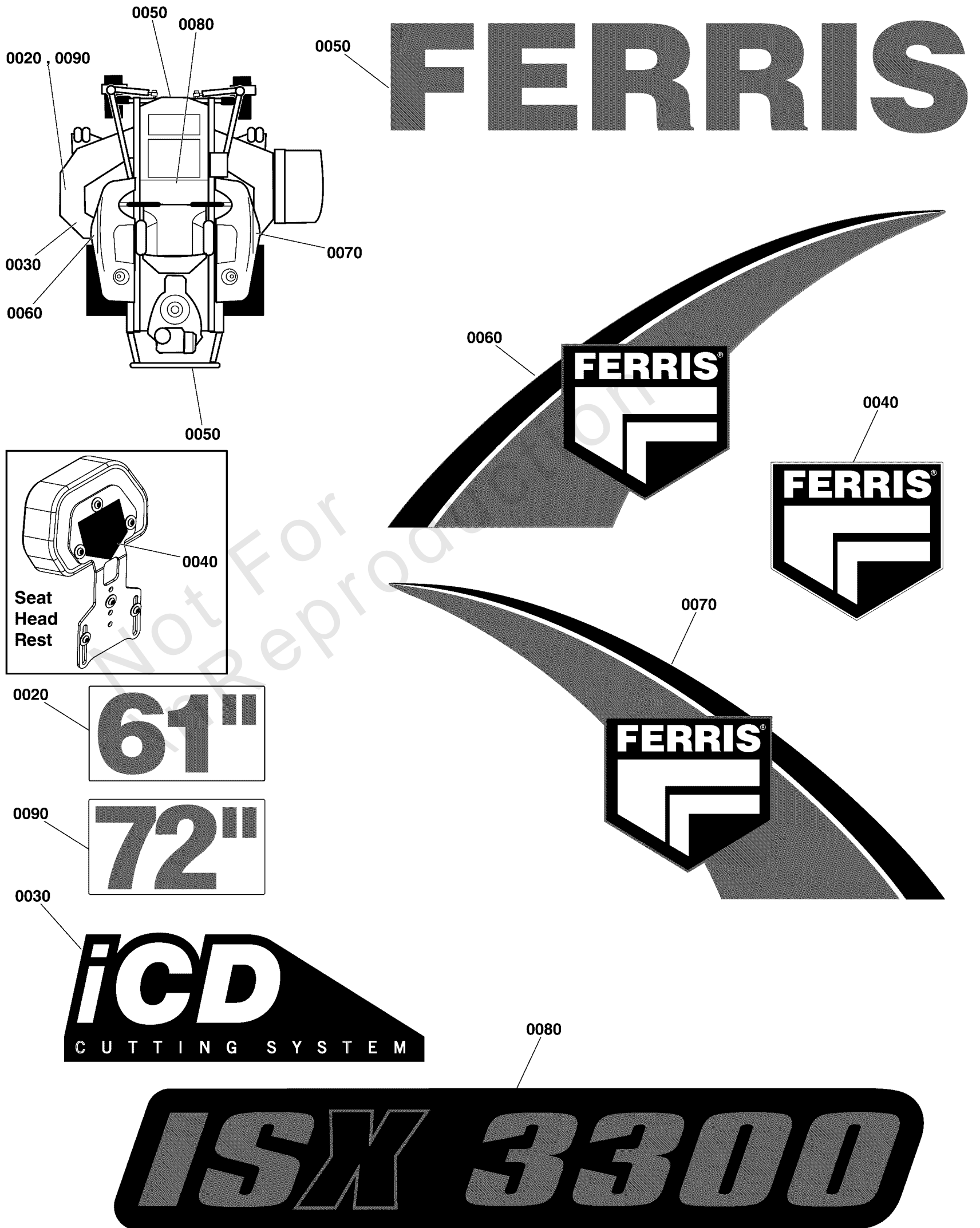
REF NO	PART NO	QTY	DESCRIPTION
0010	5020785	1	ROLLER, DECK
0020	5041655A	1	WELD, BRACKET, ROLLER PIN - BLK
0030	5025013X8	1	BOLT, 3/8-16 X 1" GD5 CZ
0040	5025394	3	NUT, 3/8 - 16 HEX NYLOCK FLANGE
0050	5025156	3	WASHER, 3/8 SAE
0060	5025013X10	1	BOLT, 3/8-16 X 1-1/4" GD5 CZ
0070	5105554	2	SPACER, .38 X .63 X 3.38, CZ
0080	5025146X36	1	BOLT, 3/8-16 X 4-1/2, CARRIAGE, GD5, CZ
0090	5105521	2	WHEEL, ANTI SCALP, 5"
0100	5025013X36	1	BOLT, 3/8-16 X 4-1/2" GD5 CZ

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Decal Group - Brand and Model

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5901855



Decal Group - Brand and Model

REF NO	PART NO	QTY	DESCRIPTION
0020	5022813	1	DECAL, 61" -(Models with 61" Mower Decks)
0030	5102210	1	DECAL, iCD CUTTING SYSTEM
0040	5104756	1	DECAL, FERRIS LOGO, SMALL
0050	5103799	2	DECAL, FERRIS LETTERS, 2.23 X 11.39
0060	5104751	1	DECAL, TANK, MED, LH, FERRIS
0070	5104752	1	DECAL, TANK, MED, RH, FERRIS
0080	5108272	1	DECAL, ISX3300
0090	5022814	1	DECAL, 72" -(Models with 72" Mower Decks)

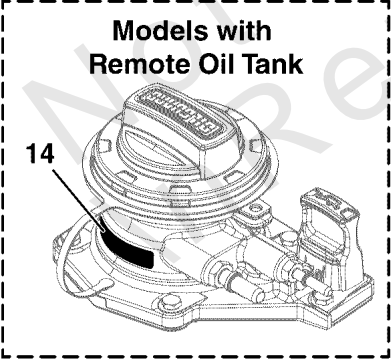
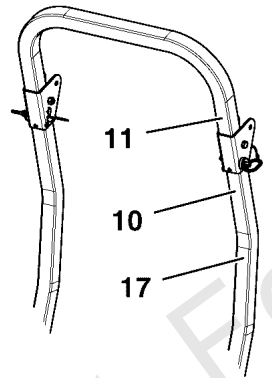
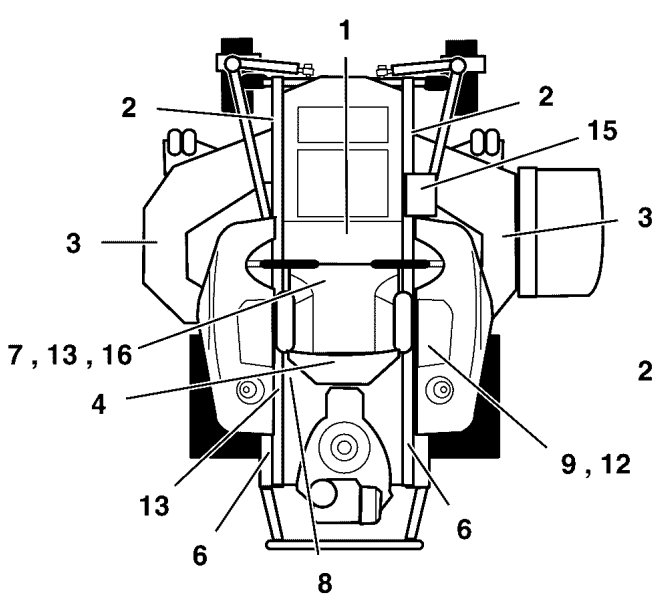
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Decal Group - Safety & Operation (North America Models)

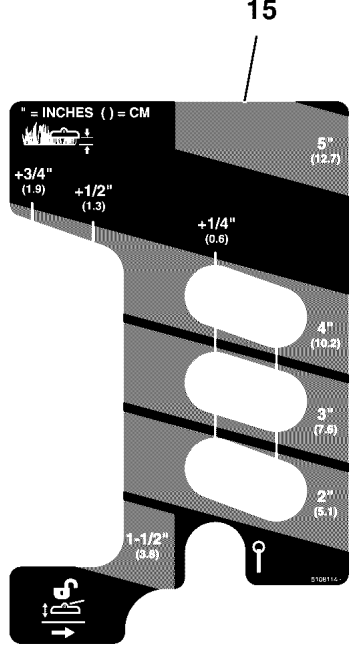
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5304898



14
FACTORY-FILLED WITH
15W-50 Full-Synthetic
MOTOR OIL



WARNING

Avoid serious injury or death

- Read operator's manual before using this product.
- Do NOT operate this machine unless you are trained.
- Know the location and function of all controls.
- Keep safety devices (guards, shields, switches, etc.) in place and working.
- Remove objects that could be thrown by the blade.
- Be sure blades and engine are stopped before placing hands or feet near blades.
- When leaving machine, shut off, remove key and set parking brake.

Fire Hazard

Gasoline is flammable. Debris is combustible.

- Allow engine to cool for at least 3 minutes before refueling.
- Keep unit cleaned of debris.
- This equipment may create sparks that can start fires around dry vegetation. A spark arrester may be required. Contact local fire agencies for regulations relating to fire prevention requirements.

DANGER

Amputation hazard

Rotating blades cut off arms and legs.

- Stop the mower when children or others are near.
- Do not carry riders (especially children) even with the blades off. They may fall off or return for another ride when you are not expecting it.
- Look down, behind and to the side before changing directions.

Water, retaining walls and drop-off hazards

Wheels dropping over edges may result in serious injury, death or drowning.

- Do NOT operate near water, retaining walls or drop-offs.
- Give yourself a minimum of two mower widths of clearance around these hazards.

Loss of control and roll-over hazard

Operating on slopes can be hazardous and cause loss of control and roll-overs.

- Avoid sudden turns or rapid speed changes.
- Reduce speed and use extreme caution on slopes.
- Go across slopes, NOT up and down.
- Do not operate on slopes over 15 degrees.
- If machine stops forward motion on a slope, stop the blades and drive slowly off the slope.

15° Max.

Wet or soft slope hazard

Wet or soft slopes can cause sliding and loss of control.

- Do NOT operate on slopes when grass is wet.
- Do NOT operate on slopes when soil is soft (such as after heavy rains).

WARNING

PINCH POINT

To avoid injury from loaded spring, read operator's manual before removing spring.

DANGER

Amputation and thrown objects hazard

- Keep hands and feet away from deck.
- Do not operate mower unless discharge chute or entire grass catcher is in its proper place.

WARNING

Amputation and Pinch Point Hazard

To avoid injury from rotating parts, stay clear of parts and keep all shields and guards in place.

The operator's manual is available in Spanish. La manual del operador está disponible en Español.

WARNING

Avoid serious injury or death from rollover.

Do not operate without the rollbar installed and operational.

WARNING

Ignition System (Gasoline Models)

This spark ignition system complies with Canadian standard ICES-002

ACN 008 578 656

WARNING

AVOID SERIOUS INJURY OR DEATH FROM ROLL OVER:

Keep roll bar in the raised position and use seat belt.

THERE IS NO ROLL OVER PROTECTION WHEN THE ROLL BAR IS DOWN

Lower the roll bar only when necessary and NEVER remove it.

Do NOT use seat belt when the roll bar is down.

Raise the roll bar as soon as clearance permits.

Do NOT jump off if mower tips.

Read and follow all operating instructions and warnings in the operator's manual.

WARNING

LOW OVERHANGING OBSTACLES HAZARD

Check for overhead clearances before driving under any objects. Do NOT allow roll bar to contact low overhanging obstacles, such as tree branches and guide wires.

HYDRAULIC OIL RESERVOIR

USE SAE 20W-50 MOTOR OIL

Belts & Blades

Tractor	
Pump Drive Belt	5104378
61" Mower	
Deck Drive Belt - Long LH	5104982
Deck Drive Belt - Short RH	5104780
Mower Blade	5101755S
72" Mower	
Deck Drive Belt - Long LH	5105035
Deck Drive Belt - Short RH	5105036
Mower Blade	5102227S

WARNING

ROLL OVER PROTECTIVE STRUCTURE

To maintain operator protection and roll bar certification:

Replace a damaged roll bar, do NOT attempt to repair or modify.

Any alteration of the roll bar must be approved by the manufacturer.

DO NOT exceed the machine weight rating of the roll bar.

Decal Group - Safety & Operation (North America Models)

REF NO	PART NO	QTY	DESCRIPTION
1	5106563	1	DECAL, MAIN SAFETY
2	5061245	2	DECAL, PINCH POINT
3	7101665	2	DECAL, DANGER DO NOT OPERATE W/O DEFLECT
4	5103184	1	DECAL, WARNING, HAND IN BELT, ENG ONLY
5	5103619	1	DECAL, MANUAL AVAIL IN SPANISH
6	5100683	2	DECAL, WARNING, ROLL BAR
7	5102090	1	DECAL, TRANSAXLE RELEASE, S200XT
8	5100342	1	DECAL, FUEL VALVE
9	5100280	1	DECAL, THROTTLE CONTROL
10	5104082	1	DECAL, WARNING, FOLDING ROPS
11	5100405	1	DECAL, WARNING OVERHANG, ROPS (SV)
12	5048970	1	DECAL, IGNITION SWITCH
13	5100957	1	DECAL, HYDRAULIC OIL, 20W50 -(Located on cross rail by hydraulic tanks)
14	-----	1	LABEL, OIL INFORMATION -(Models w/ Remote Oil Tank Only)
15	5108114	1	DECAL, CUTTING HEIGHT
16	5105192	1	DECAL, BELT & BLADE IS3200Z 2BELT
17	5104083	1	DECAL, CAUTION, FOLDING ROPS

Deck Lift Group

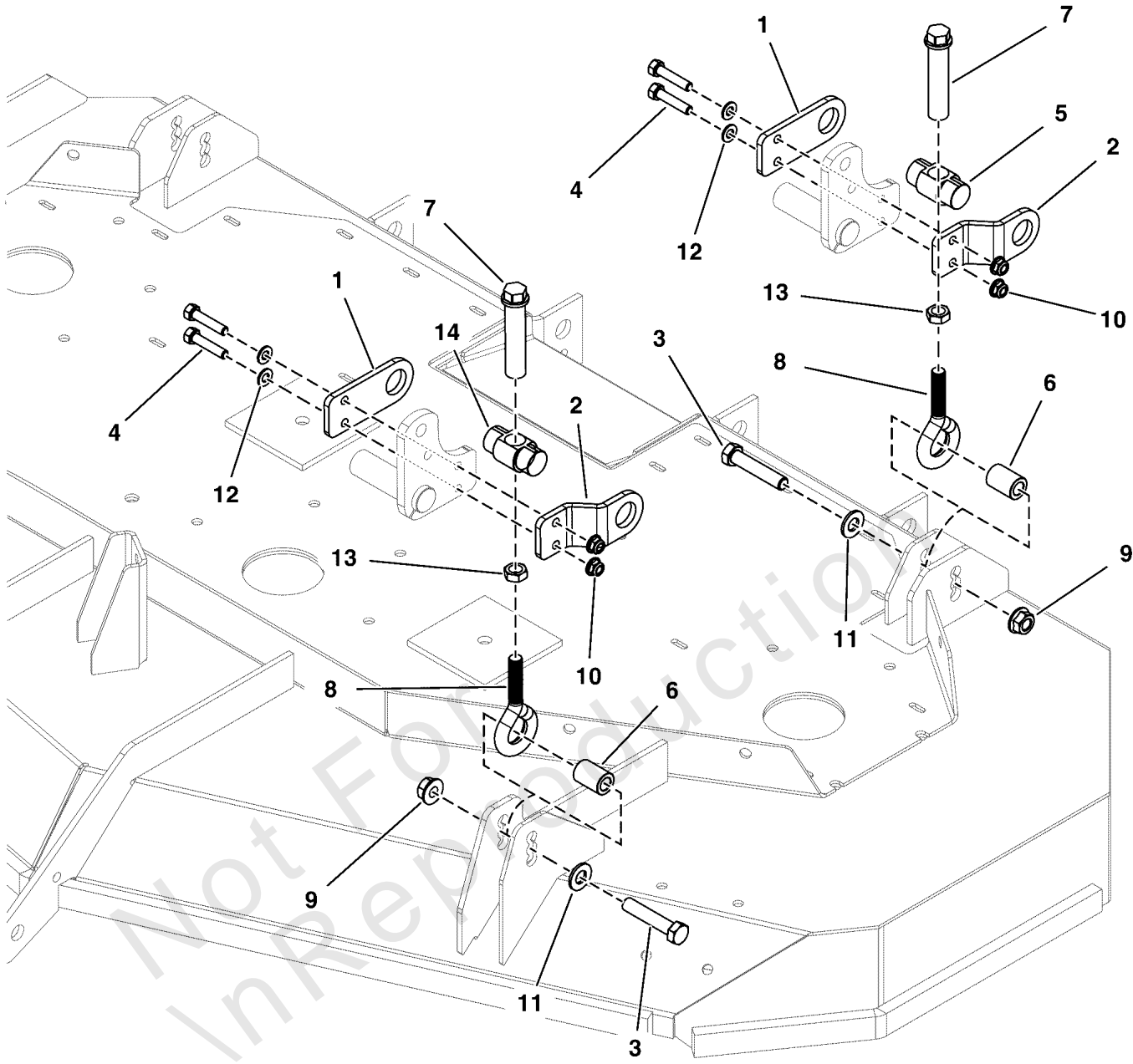
REF NO	PART NO	QTY	DESCRIPTION
0010	5104262	1	PEDAL, Rubber
0020	5020095	8	GREASE FITTING, 1/4-28 Straight
0030	5020441	4	COLLAR, 5/8" Split
0040	5010213	1	SPRING-EXT, .740 ODX2.025LGX.072WR, BLK
0060	5021880	1	GRIP, FOAM, .475 X 4.35 X .095
0070	5023343	12	BUSHING, 1.00 X 1.13 X 1.38, Plastic
0090	5023498	1	PIN, HITCH, 1/2 X 2.00 OAL, YP
0100	-----	2	HHCS, 1/4-20 X 0.625, GR5, ZINC/CLEAR
0110	5025013X10	2	BOLT, 3/8-16 X 1-1/4" GD5 CZ
0140	5025056	4	NUT, Hex, Nylon Lock, 1/2-13
0150	5025089	8	NUT, 1/2-20 Hex Jam
0180	5025288	2	WASHER, 1/4" Fender
0210	5025212X4	1	PIN, CLEVIS, 1/4 X 1/2, PLATED
0230	5025394	6	NUT, 3/8 - 16 HEX NYLOCK FLANGE
0240	5025443	6	BOLT, 3/8-16 X 3/4, PLT W/PATCH
0250	5045178	1	SPACER, .52 X 1.00 X .75, CZ
0270	5100548	6	WASHER, .390 X 1.50 X .109, YZ
0280	5100634	4	PIVOT BLOCK, PLASTIC
0290	5410317A	1	WELD, Rod, Deck Lift - BLK
0300	5104133	1	LINK, DECK LIFT, CAST IRON
0310	5413901B	2	WELD, DECK LIFT, LEVER, LH - RED
0320	5413902B	2	WELD, DECK LIFT, LEVER, RH - RED
0330	5105172	1	ASSM, DECK COMP LINK, LH-CAST
0340	5105173	1	ASSM, DECK COMP LINK, RH-CAST
0370	5403925A	2	PLATE, PIVOT BLOCK SUPPORT - BLK
0380	5420030AA	1	WELD, DECK LIFT SHAFT - BLK
0390	5061569A	1	PEDAL, FOOT - BLK
0410	5025017X22	1	BOLT, 1/2-13 X 2-3/4 GD5 CZ
0420	5103710	2	ROD, DECK LIFT, EXTERNAL THRD, 20.63
0430	5104475	2	BAR, DECK LIFT, 17.75"
0440	1702779	8	JOINT-BALL .500-20 THD .500ID, CLR ZINC
0450	5025391	2	NUT, 1/4-20 Hex Nylock Flange
0470	5100520	3	SPACER, .52 X 1.00 X .22, PM, CZ
0480	5025017X20	1	BOLT, 1/2-13 X 2-1/2" GD5 CZ
0500	5025013X22	4	BOLT, 3/8-16 X 2-3/4" GD5 CZ
0520	5103703	2	ROD, SUSPENSION LINK, IS700, CZ
0530	5025158	5	WASHER, 1/2 SAE
0590	5025156	6	WASHER, 3/8 SAE
0640	5025396	3	NUT, Hex Flange, Nylock, 1/2-13
0650	5025017X16	2	BOLT, 1/2-13 X 2" GD5 CZ
0660	5045178	1	SPACER, .52 X 1.00 X .75, CZ
0710	5023392	2	SPRING-EXT, 1.393 ODX13.25LGX.218WR, BLK
0720	5021811	2	EYE BOLT, 3/8-16 X 8, 3THRD, 1EYE, CZ
0730	5025034	2	NUT, 3/8-16 HEX, YZ
0740	5100380	2	* ADJUSTER, DECK HANGER
0750	5025096	2	NUT, Hex, Nylon Locking, 3/8-16
0760	5025203X6	2	* PIN, COTTER, 1/8" X 3/4
0770	5045023	2	SPACER, .52 X 1.00 X .44, CZ
0780	5025017X24	2	BOLT, 1/2-13 X 3" GD5 CZ
0790	5045178	1	SPACER, .52 X 1.00 X .75, CZ

Deck Lift Group - Deck Hangers

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5901855

5303886C
5303958C



Deck Lift Group - Deck Hangers

REF NO	PART NO	QTY	DESCRIPTION
1	5413900A	4	BRACKET, INNER TRUNION MNT - BLK
2	5413899A	4	BRACKET, OUTER TRUNION MNT - BLK
3	5025017X20	4	BOLT, 1/2-13 X 2-1/2" GD5 CZ
4	5025013X12	8	BOLT, 3/8-16 X 1-1/2" GD5 CZ
5	5104238	2	PIVOT, DECK LIFT TRUNION, GREASABLE
6	5103054	4	SPACER, .52 X .87 X 1.25, CZ
7	5102664	4	ADJUSTER, DECK LIFT, CZ
8	5025615	4	EYE BOLT, 1/2-20X6", 2.5"THRD,
9	5025396	4	NUT, Hex Flange, Nylock, 1/2-13
10	5025394	8	NUT, 3/8 - 16 HEX NYLOCK FLANGE
11	5025158	4	WASHER, 1/2 SAE
12	5025156	8	WASHER, 3/8 SAE
13	5025089	4	NUT, 1/2-20 Hex Jam
14	5105405	2	PIVOT, DECK LIFT, TRUNION, HT, BZ

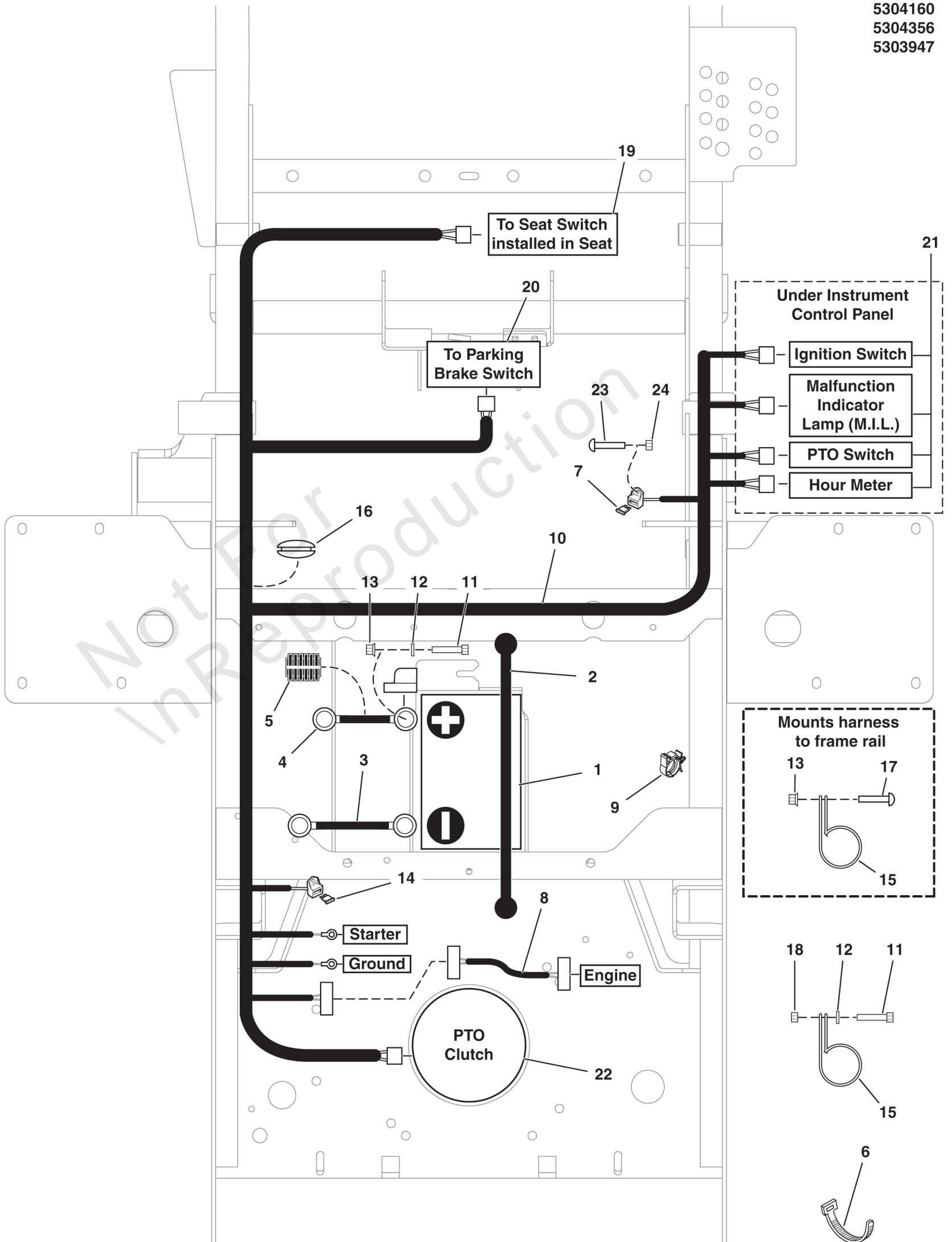
Not For InReproduction

Electrical Group - Briggs & Stratton Models

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5901855

5304160
5304356
5303947



Electrical Group - Briggs & Stratton Models

REF NO	PART NO	QTY	DESCRIPTION
1	-----	1	BATTERY, WET (BCIU1, 340 CCA)
2	1722009	1	STRAP, BATTERY, 14 LONG, Rubber
3	5021406	1	BATTERY CABLE, NEG, 22, 1/4-5/16
4	5021405	1	BATTERY CABLE, POS, 22, 1/4-5/16
5	5050927X16	1	WIRE LOOM, 3/8 ID X 16 IN
6	5021029	8	TIE, SELF-LOCKING, 12"
7	5102710	1	FUSE, ATO, 25 AMP -(SV)
8	5415669	1	WIRE HARNESS, VANGUARD BIG BLOCK,JUMPER
9	5104705	2	ROSEBUD LOOM CLIP
10	5105535	1	HARNESS, Wiring, Large ZTR
11	5025010X6	3	BOLT, 1/4"-20 X 3/4" GD5 YZ
12	5025154	3	WASHER, 1/4 SAE
13	5025126	4	NUT, Hex, Serrated Flange, 1/4-20
14	5101935	2	FUSE, ATO-15 (15 AMP)(SV) -(SV)
15	5021500	3	CLAMP, VINYL INSULATED, 1.00
16	5102677	1	GROMMET, 1-1/2" ID FOR 1/4" METAL
17	5025299X8	2	SCREW, 1/4-20 X 1, ALLEN BH, CZ
18	5025391	3	NUT, 1/4-20 Hex Nylock Flange
19	-----	1	Refer to: Seat Mount & Floor Group
20	-----	1	Refer to: Parking Brake Group
21	-----	1	Refer to: Instrument Control Panel Group
22	-----	1	Refer to: Engine & PTO Group
23	5025179X4	1	SCREW, #10-24 X 1/2" ROUND PHILLIPS
24	5025271	1	NUT, Hex, Nylon Lock, #10-24

Electrical Schematic - Charging Circuit - B&S 61E877

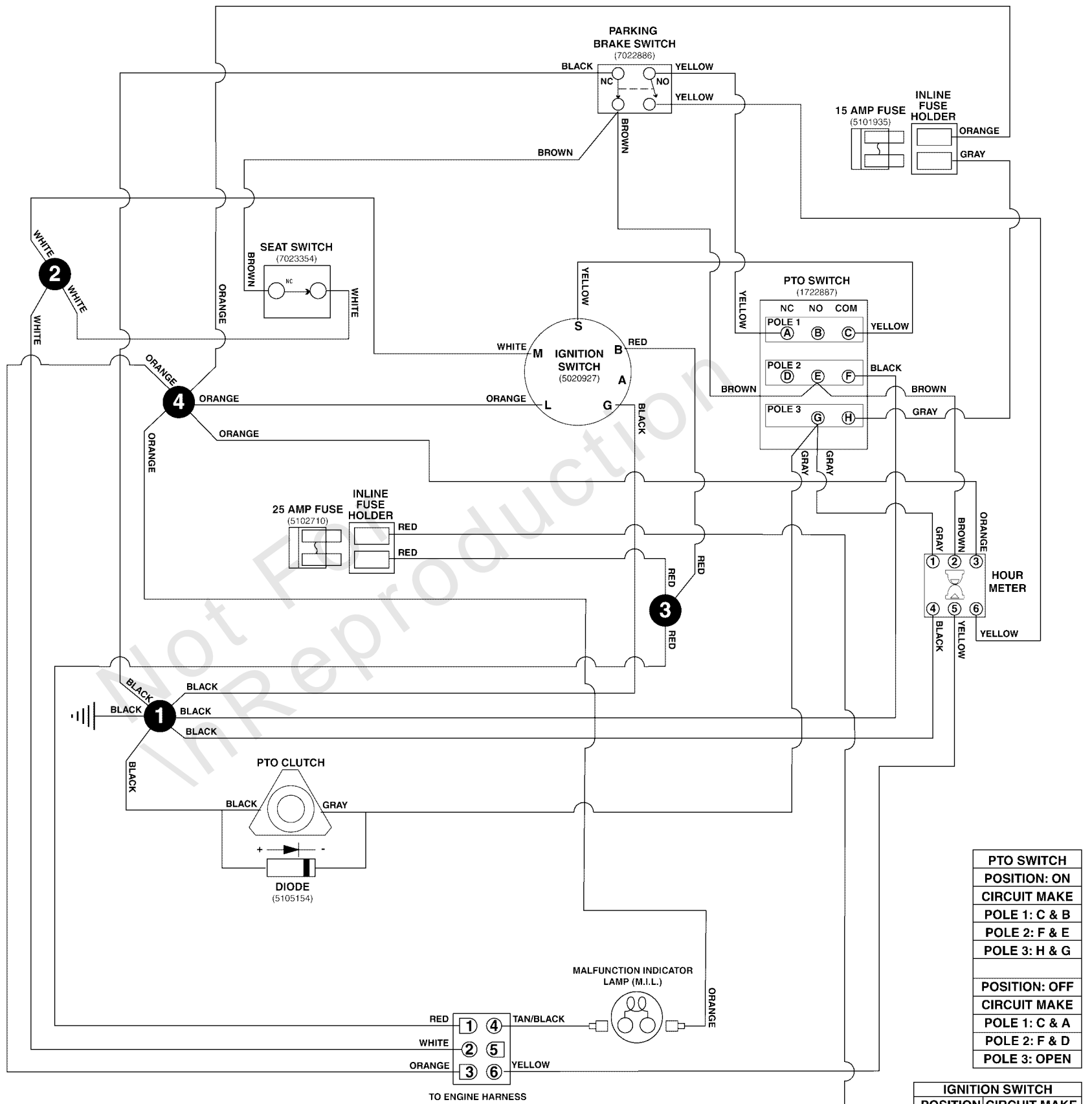
Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5901855

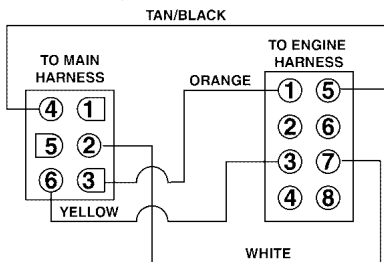
5105535 MAIN WIRE HARNESS - BRIGGS & STRATTON 61E877 EFI ENGINES

5105535B

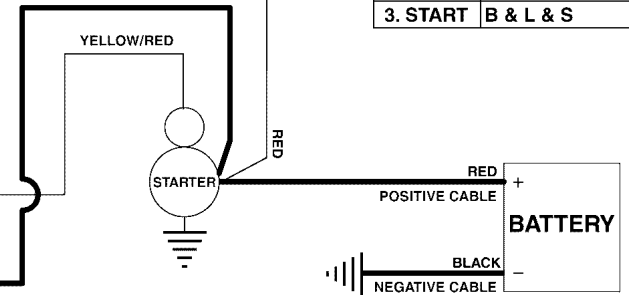
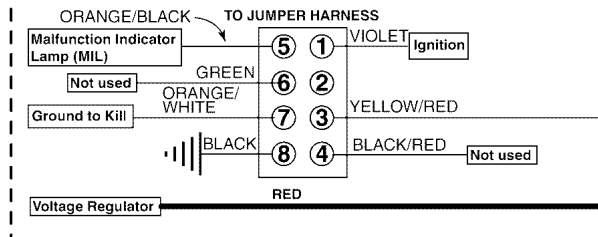
(If internal schematic of the switch is not shown, the image of the switch represents the back view of the connector as it is connected to the switch.)



5415669 / JUMPER HARNESS



BRIGGS & STRATTON ENGINE HARNESS



Electrical Schematic - Charging Circuit - B&S 61E877

REF NO	PART NO	QTY	DESCRIPTION
5105535	5105535	1	HARNESS, Wiring, Large ZTR
5415669	5415669	1	WIRE HARNESS, VANGUARD BIG BLOCK,JUMPER

Not For In Reproduction

Electrical Schematic - Cranking Circuit - B&S 61E877

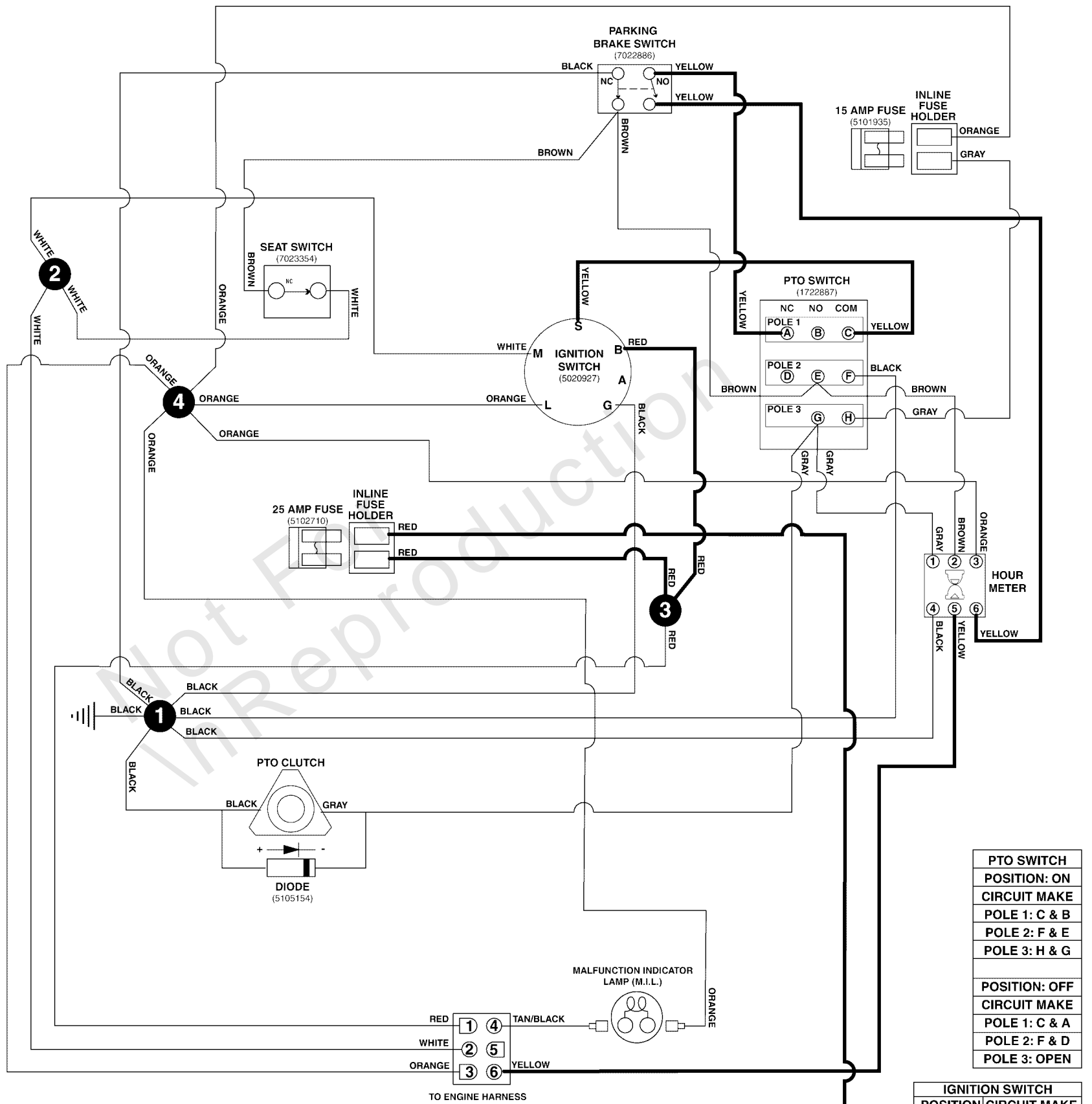
Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5901855

5105535 MAIN WIRE HARNESS - BRIGGS & STRATTON 61E877 EFI ENGINES

5105535B

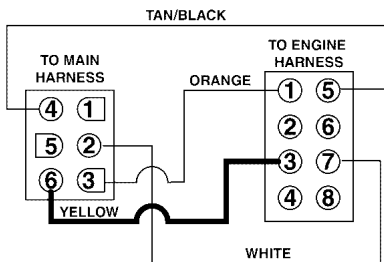
(If internal schematic of the switch is not shown, the image of the switch represents the back view of the connector as it is connected to the switch.)



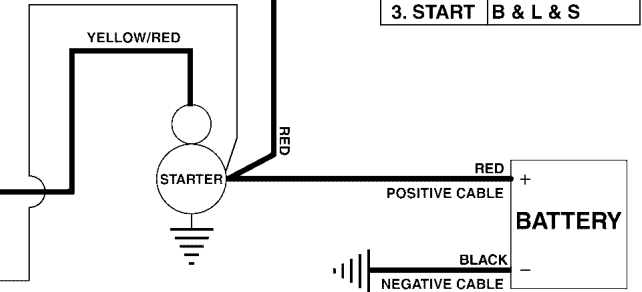
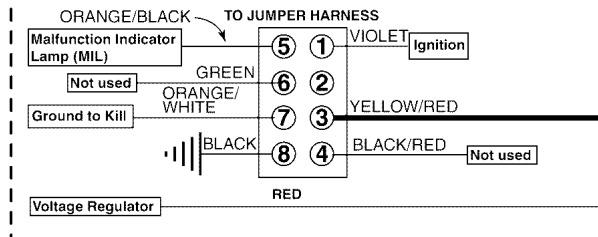
PTO SWITCH	
POSITION: ON	CIRCUIT MAKE
POLE 1: C & B	
POLE 2: F & E	
POLE 3: H & G	
POSITION: OFF	CIRCUIT MAKE
POLE 1: C & A	
POLE 2: F & D	
POLE 3: OPEN	

IGNITION SWITCH	
POSITION	CIRCUIT MAKE
1. OFF	G & M & A
2. RUN	B & L & A
3. START	B & L & S

5415669 / JUMPER HARNESS



BRIGGS & STRATTON ENGINE HARNESS



Electrical Schematic - Cranking Circuit - B&S 61E877

REF NO	PART NO	QTY	DESCRIPTION
5105535	5105535	1	HARNESS, Wiring, Large ZTR
5415669	5415669	1	WIRE HARNESS, VANGUARD BIG BLOCK,JUMPER

Not For In Reproduction

Electrical Schematic - Ign. Ground Circuit/Op Pres. - B&S 61E877

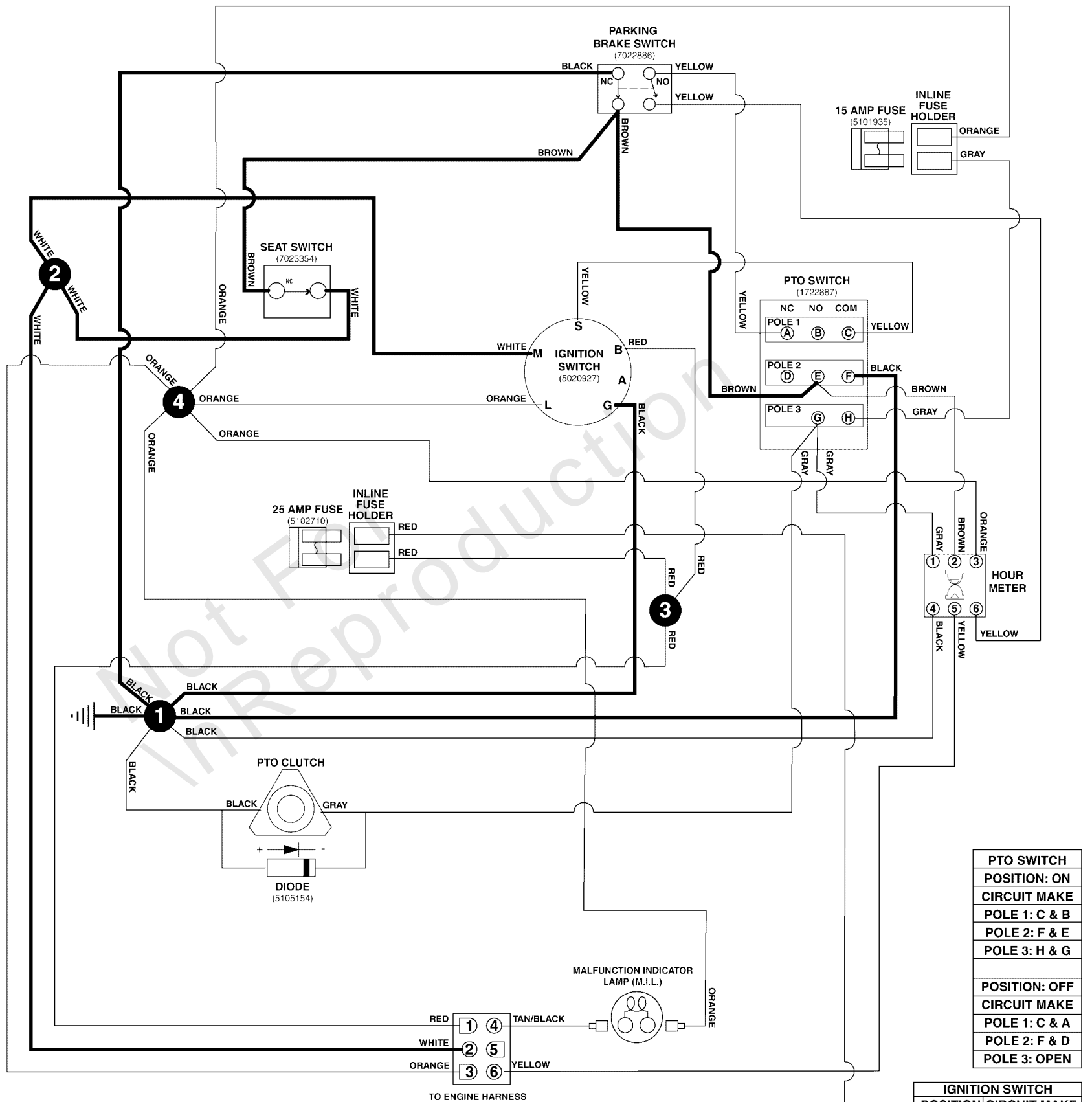
Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5901855

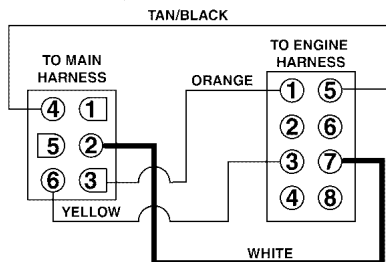
5105535 MAIN WIRE HARNESS - BRIGGS & STRATTON 61E877 EFI ENGINES

5105535B

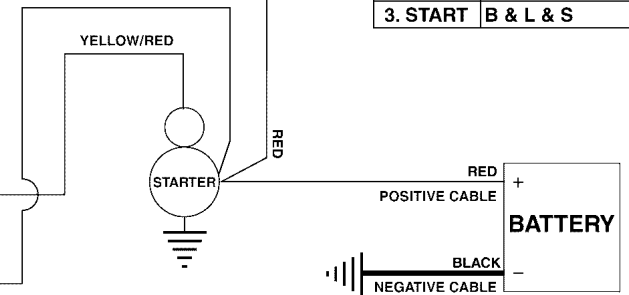
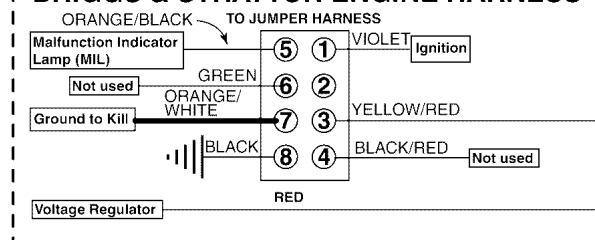
(If internal schematic of the switch is not shown, the image of the switch represents the back view of the connector as it is connected to the switch.)



5415669 / JUMPER HARNESS



BRIGGS & STRATTON ENGINE HARNESS



Electrical Schematic - Ign. Ground Circuit/Op Pres. - B&S 61E877

REF NO	PART NO	QTY	DESCRIPTION
5105535	5105535	1	HARNESS, Wiring, Large ZTR
5415669	5415669	1	WIRE HARNESS, VANGUARD BIG BLOCK,JUMPER

Not For In Reproduction

Electrical Schematic - PTO Clutch Circuit - B&S 61E877

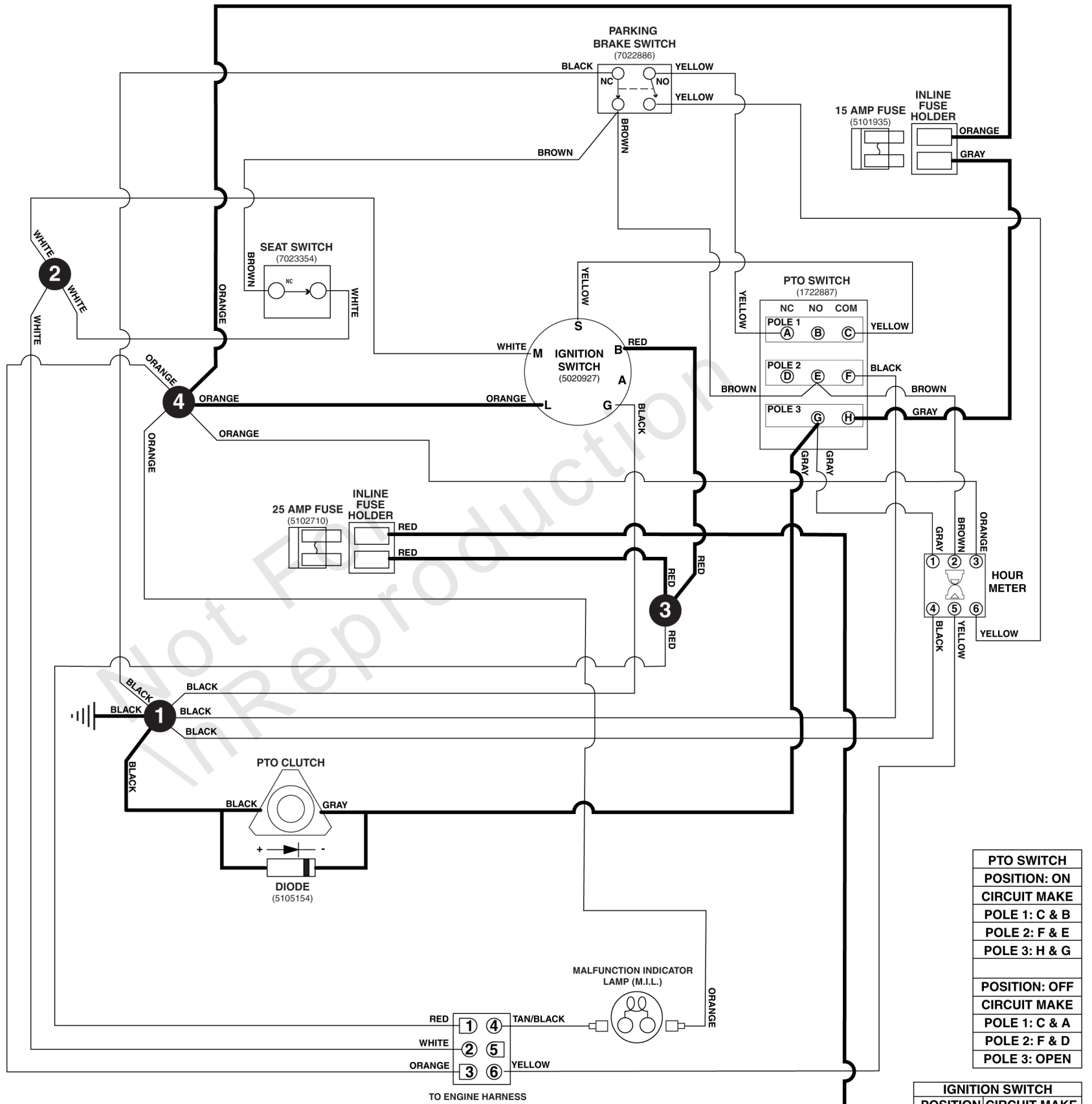
Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5901855

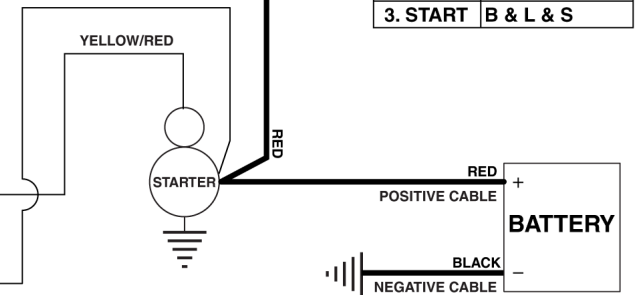
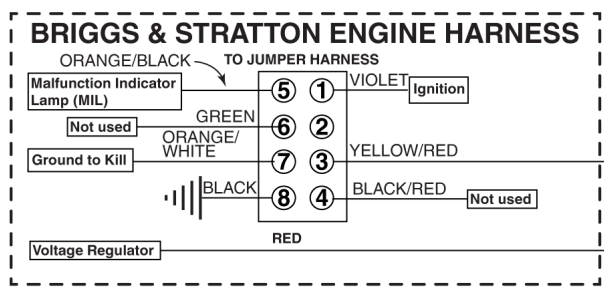
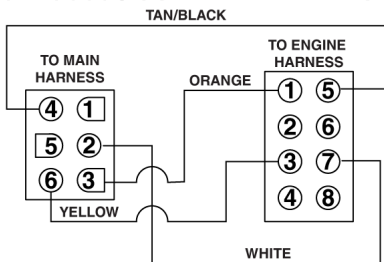
5105535 MAIN WIRE HARNESS - BRIGGS & STRATTON 61E877 EFI ENGINES

5105535B

(If internal schematic of the switch is not shown, the image of the switch represents the back view of the connector as it is connected to the switch.)



5415669 / JUMPER HARNESS



Electrical Schematic - PTO Clutch Circuit - B&S 61E877

REF NO	PART NO	QTY	DESCRIPTION
5105535	5105535	1	HARNESS, Wiring, Large ZTR
5415669	5415669	1	WIRE HARNESS, VANGUARD BIG BLOCK,JUMPER

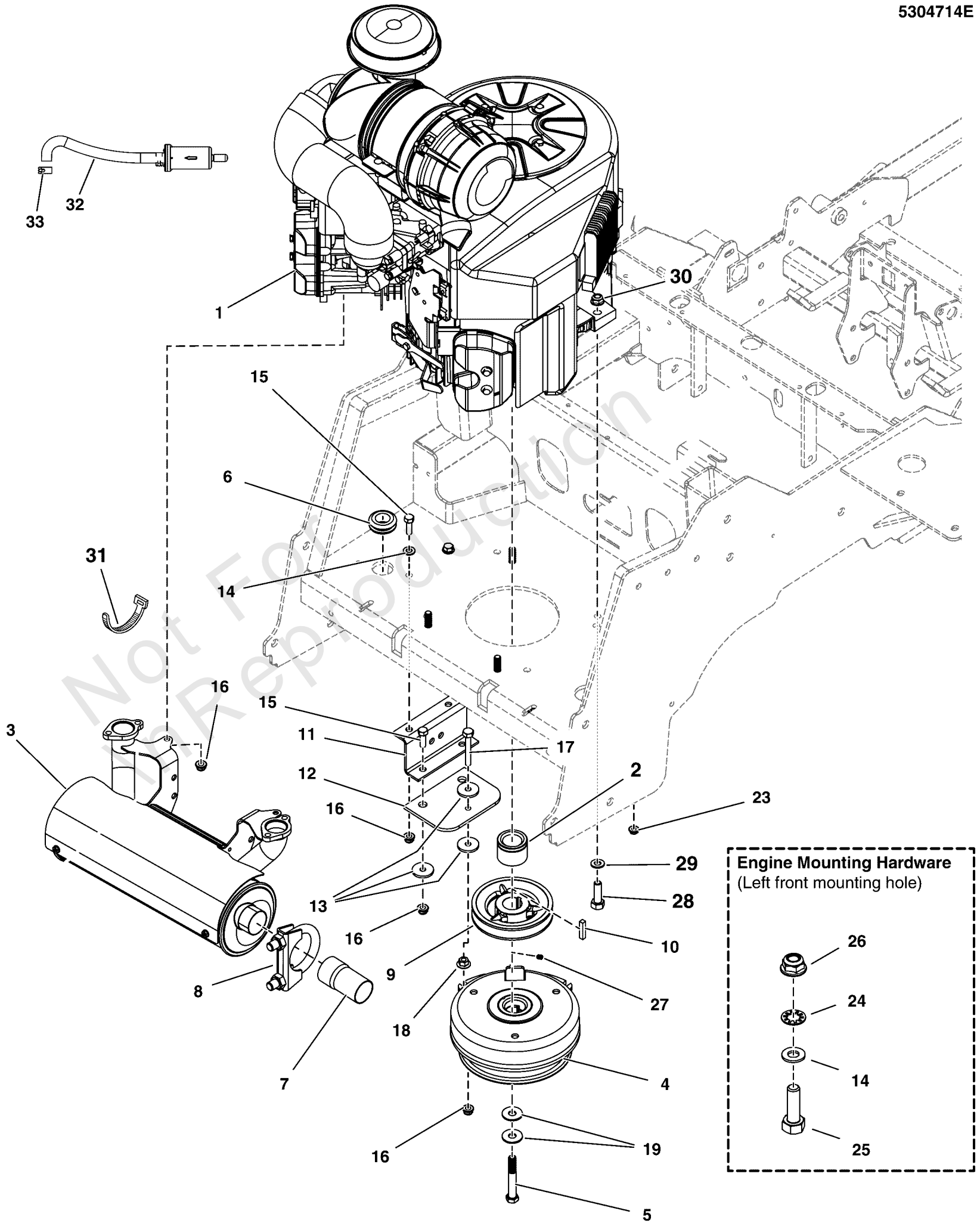
Not For In Reproduction

Engine & PTO Group - Briggs & Stratton EFI (Remote Oil Tank)

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5901855

5304714E



Engine & PTO Group - Briggs & Stratton EFI (Remote Oil Tank)

REF NO	PART NO	QTY	DESCRIPTION
1	-----	1	ENGINE, 37HP EFI, B&S, OIL GUARD -(Refer to Note: *)
2	5100926	1	SPACER, 1.13 X 1.75 X 1.35, CZ
3	-----	1	MUFFLER ASSY (846511) -(See Engine Manufacturer for Replacement Muffler)
4	5105060	1	CLUTCH, WARNER, 250 FT-LB, 1.13" x 6.323
5	5103300	1	BOLT, CRANKSHAFT, 7/16-20 X 3-1/4, GD 8
6	5103944	1	GROMMET, 7/8"ID, 1/4" THICK STK
7	5104512	1	TAIL PIPE EXTENTION, 1.78"ID X 5" LG
8	5104512X1	1	CLAMP, TAILPIPE, 1-7/8"
9	5021682	1	PULLEY, 4.75 OD X 1-1/8 BORE, BC-48
10	5050407X10	1	KEY, 1/4 SQ X 1-1/4
11	5410367A	1	ANCHOR, CLUTCH, IS600-IS700 - BLK
12	5043636	1	CLUTCH ANCHOR PAD
13	5044617	4	WASHER, .34 X 1.25 X 10 GA
14	5025155	3	WASHER, 5/16" SAE
15	5025011X8	4	BOLT, 5/16-18 X 1 GD5 CZ
16	5025392	6	NUT, 5/16-18 HEX NYLOCK FLANGE
17	5025055X18	1	BOLT, 5/16-18 X 2-1/4 TFL, GD5 YZ
18	5025139	1	NUT, 5/16-18 HEX SERRATED FLANGE (LARGE)
19	5025585	2	BELLEVILLE WASHER 1.1875 X .442 X .089
20	5021500	1	CLAMP, VINYL INSULATED, 1.00
21	5025154	1	WASHER, 1/4 SAE
22	5025010X6	1	BOLT, 1/4-20 X 3/4 GD5 CZ
23	5025126	1	NUT, 1/4-20 HEX SERR. FLANGE
24	5025188	1	WASHER, 5/16 INT. TOOTH LOCK
25	5025025X14	1	BOLT, 5/16-24 X 1-3/4, GD8, PHOS
26	5025616	1	NUT, 5/16-24, TOP LOCK FLANGE, GD8 PHOS
27	5025531	2	SET SCREW, 5/16-18 X 3/8, KNURL (SV)
28	5025013X14	3	BOLT, 3/8-16 X 1-3/4" GD5 CZ
29	5025156	3	WASHER, 3/8 SAE
30	5025394	3	NUT, 3/8-16 HEX NYLOCK FLANGE
31	5021030	1	TIE, SELF-LOCKING, 6"
32	846732	1	HOSE/FILTER ASSY -(SV)
33	5102046	1	CLAMP, HOSE, EXTERNAL, 9/16

Footnotes:

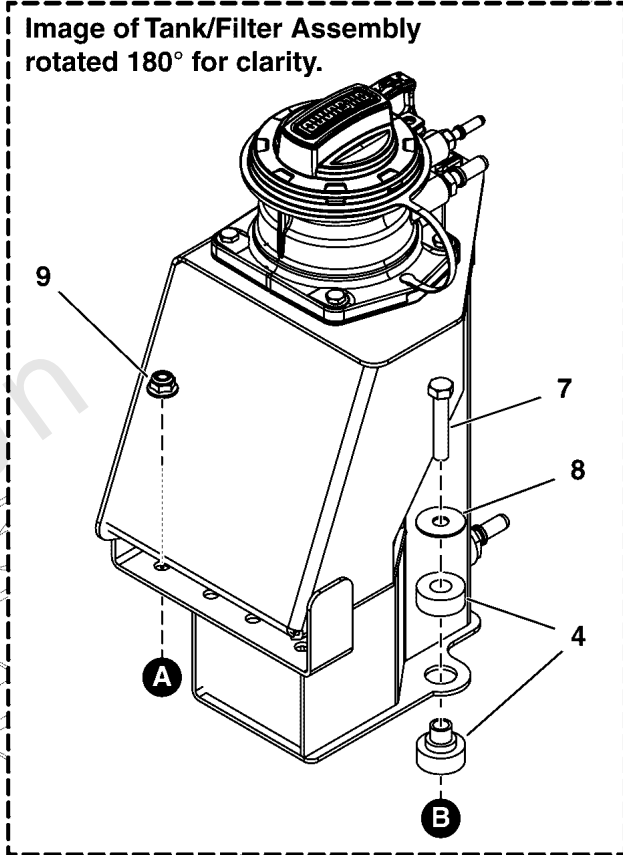
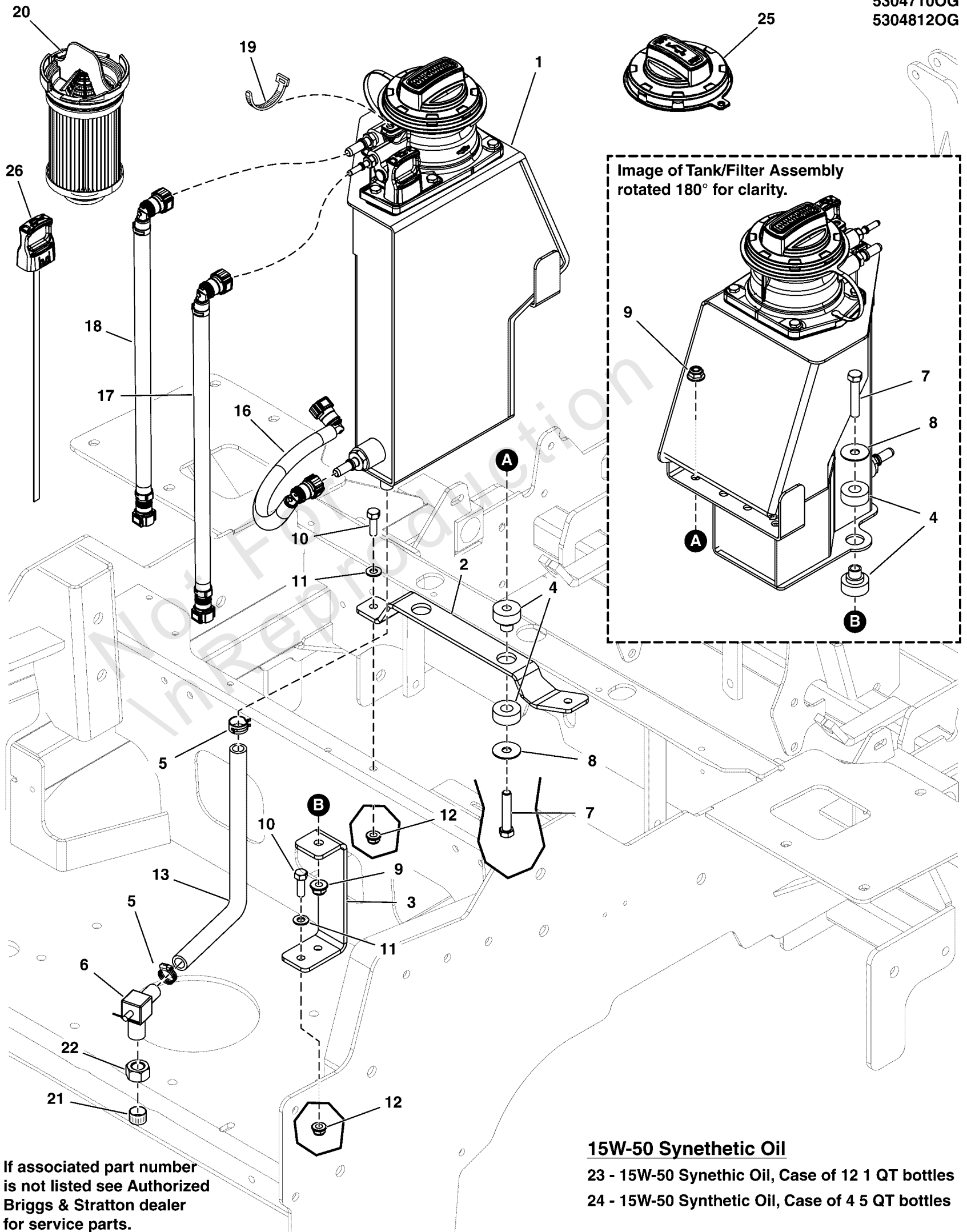
Note:* Refer to your local Briggs & Stratton distributor for parts and service.

Engine Remote Oil Tank, Hoses, & Mount Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5901855

53047100G
53048120G



If associated part number is not listed see Authorized Briggs & Stratton dealer for service parts.

15W-50 Synthetic Oil

23 - 15W-50 Synthetic Oil, Case of 12 1 QT bottles

24 - 15W-50 Synthetic Oil, Case of 4 5 QT bottles

Engine Remote Oil Tank, Hoses, & Mount Group

REF NO	PART NO	QTY	DESCRIPTION
1	595945	1	TANK, Oil -(Refer to Note: *)
2	5415308A	1	TANK MOUNT, FRONT, 3200 - BLK
3	5415309A	1	TANK MOUNT, LOWER, 3200 - BLK
4	5023131	3	MOUNT, ISO, BOTTOM, RAD 5000Z-DIESEL
5	5021392	2	CLAMP, #6 HOSE, STAINLESS
6	5105177	1	VALVE, OIL DRAIN, M16X1.5 TO 1/2"
7	5025013X14	3	BOLT, 3/8-16 X 1-3/4" GD5 CZ
8	5025165	3	WASHER, 3/8" Fender
9	5025394	3	NUT, 3/8 - 16 HEX NYLOCK FLANGE
10	5025011X8	4	BOLT, 5/16-18 X 1" GRD5 YZ
11	5025155	4	WASHER, 5/16" SAE
12	5025392	4	NUT, 5/16-18 HEX NYLOCK FLANGE NUT
13	5105493	1	HOSE, Formed, Oil Guard
16	847349	1	HOSE, Oil Supply -(Refer to Note: *)
17	847350	1	HOSE, Oil Scavenge -(Refer to Note: *)
18	847351	1	HOSE, Oil Vent -(Refer to Note: *)
19	-----	1	TIE, Cable, Yellow 7.6"
20	595930	1	FILTER, Oil
21	5105317	1	OIL DRAIN CAP, OIL GUARD, DAPCO 4692
22	5105318	1	NUT, HEX, M16-1.5, DAPCO 4071
23	5105281	1	OIL, 15W-50, SYNTHETIC, CASE X 12- 1QT
24	5105282	1	OIL, 15W-50, SYNTHETIC, CASE X 4- 5QT
25	595931	1	CAP, Oil Fill
26	595934	1	DIPSTICK

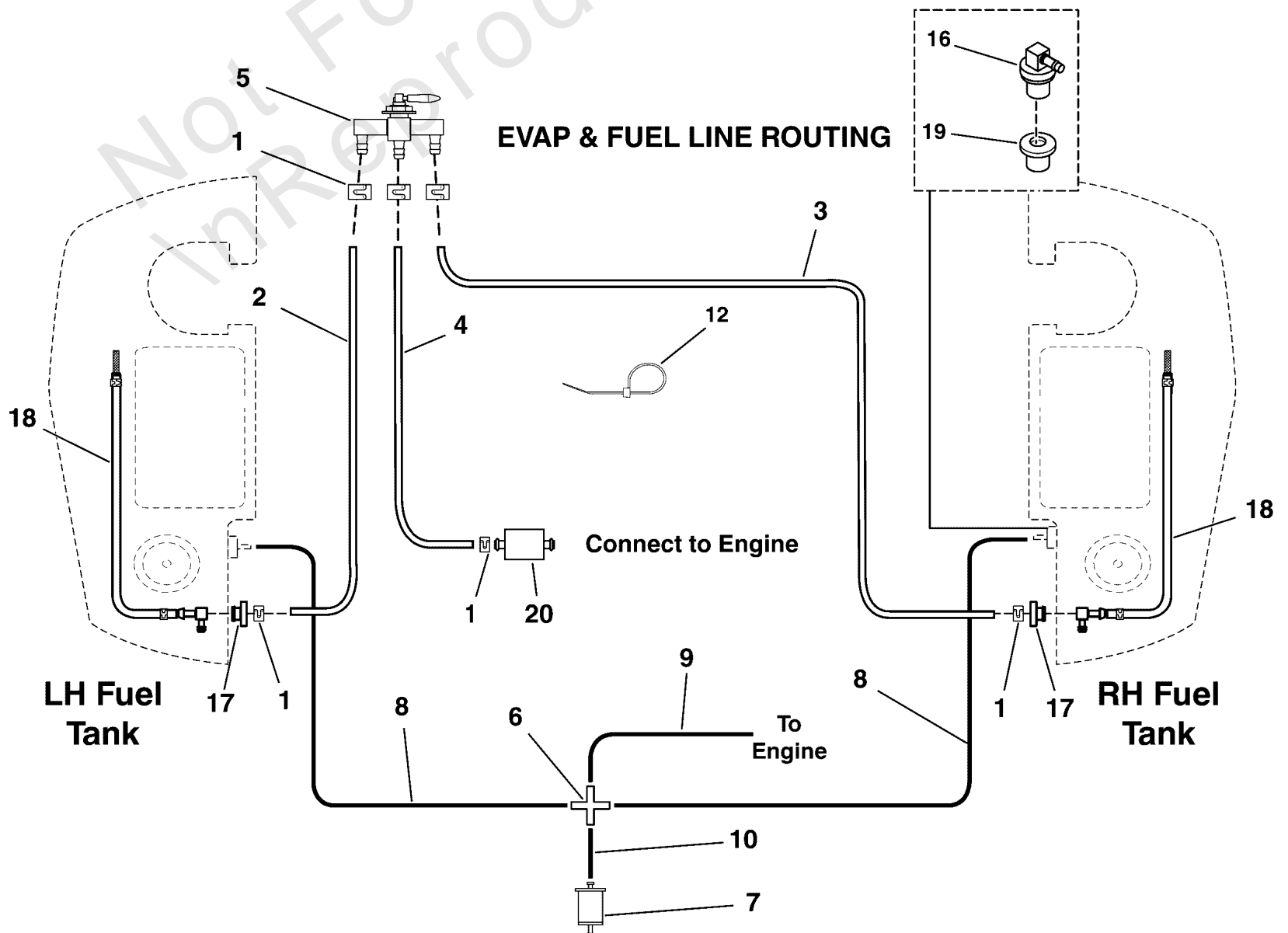
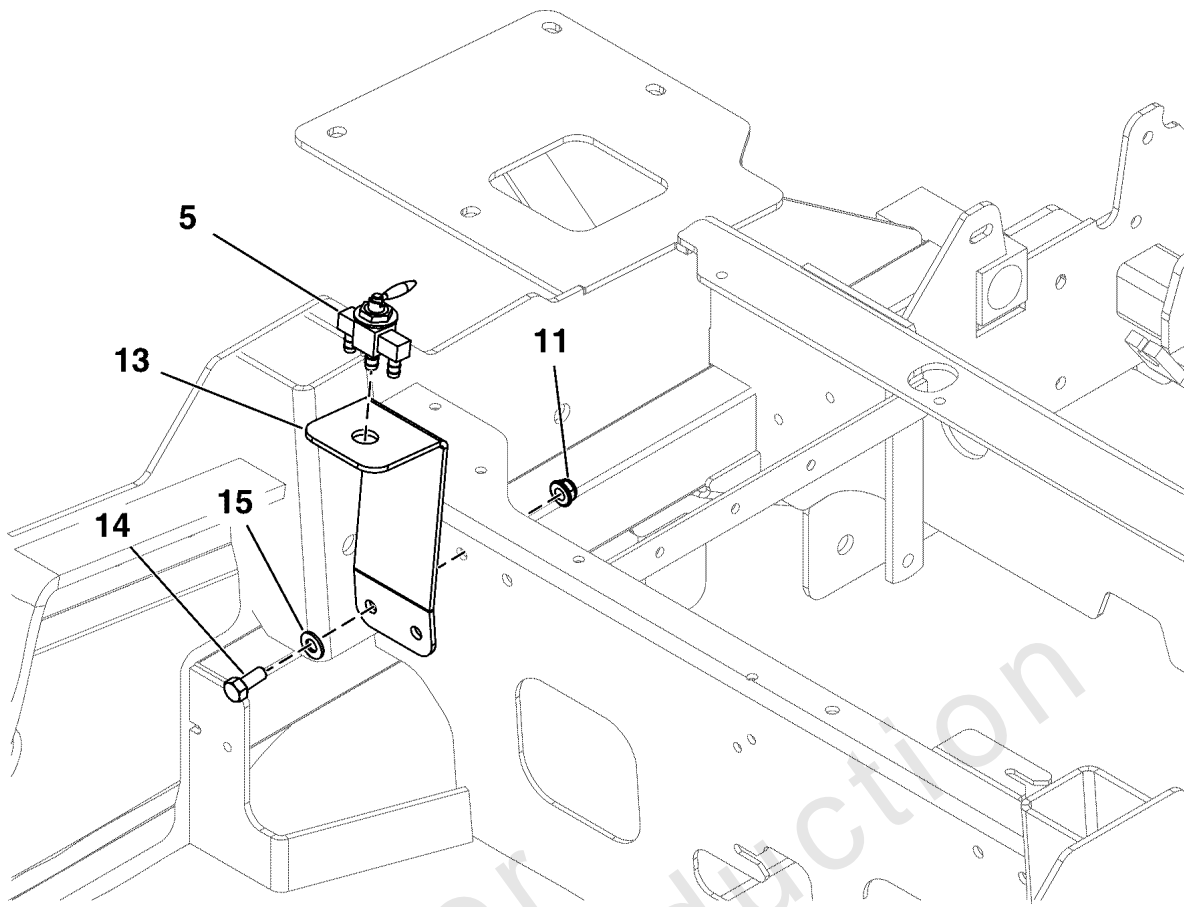
Footnotes:

Note: *Order Oil Guard replacement parts from your Authorized Briggs & Stratton Engine Service Provider

Fuel Supply Hose, Tank Replacement Parts, and EVAP Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5901855



Fuel Supply Hose, Tank Replacement Parts, and EVAP Group

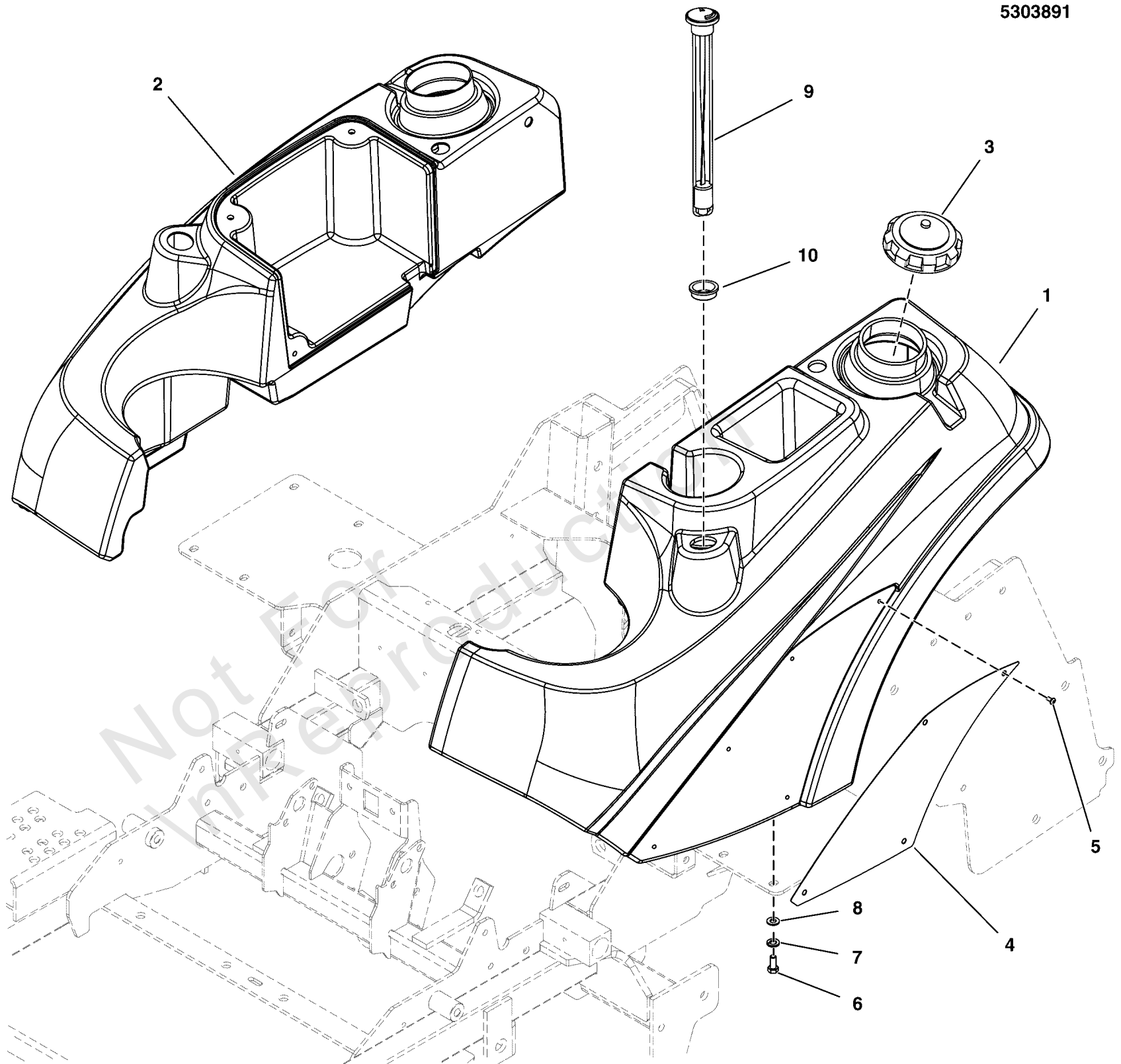
REF NO	PART NO	QTY	DESCRIPTION
1	93807	6	CLAMP, Hose
2	5050831X14P5	1	HOSE, 1/4" FUEL, 14.50"
3	5050831X28P5	1	HOSE, 1/4" FUEL, 28.50"
4	5050831X12P5	1	HOSE, 1/4" FUEL, 12.50"
5	5023358	1	VALVE, FUEL STRAIGHT, OUTLET
6	5105394	1	FITTING, BARBED CROSS, 3/16" BLK NYLON
7	80025019	1	FILTER, FUEL
8	7700552X25P5	2	HOSE, VAPOR, 5MM ID, 25.50 LG
9	7700552X19	1	HOSE, VAPOR, 5MM ID, 19.00 LG
10	7700552X3	1	HOSE, VAPOR, 5MM ID, 3.00 LG
11	5025392	2	NUT, 5/16-18 HEX NYLOCK FLANGE NUT
12	5021029	7	TIE, SELF-LOCKING, 12"
13	5412704A	1	BRACKET, FUEL VALVE, IS2100 - BLK
14	5025011X6	2	BOLT, 5/16-18 X 3/4 GD5
15	5025155	2	WASHER, 5/16" SAE
16	770046	2	REMOTE VENT ASSEMBLY
17	1726400	2	BUSHING-FUEL TANK RED RUBBER (SV)
18	5101144	2	PICKUP TUBE ASSEMBLY, FUEL LINE (SV)
19	209043	2	GROMMET (SV)
20	5021178X3	2	FUEL FILTER (SV)

Fuel Tank & Mount Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5901855

5303891



Fuel Tank & Mount Group

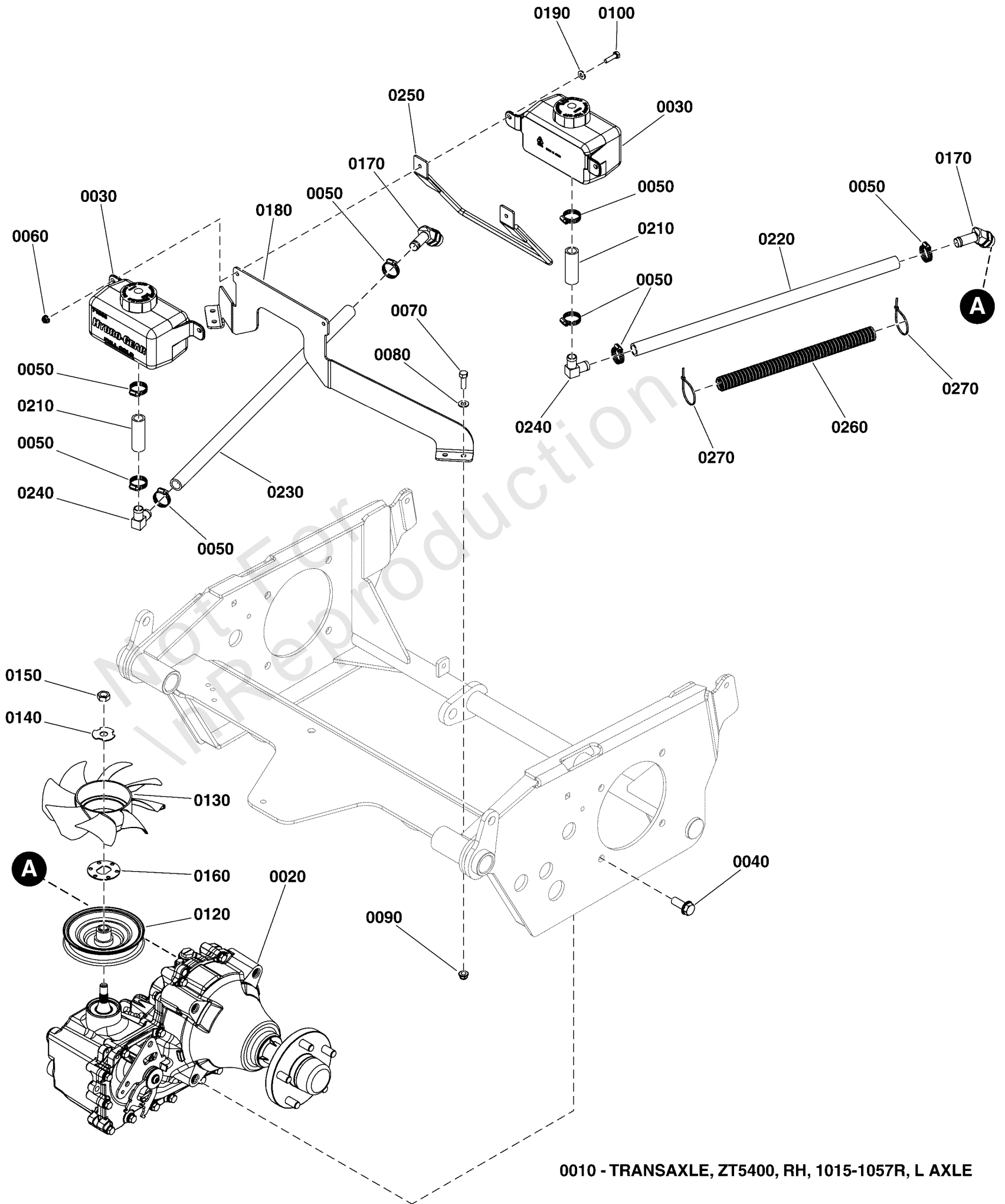
REF NO	PART NO	QTY	DESCRIPTION
1	5108364	1	TANK, FUEL, LEFT
2	5108363	1	TANK, FUEL, RIGHT
3	5103005	2	FUEL CAP, 3-1/2", MANAGED VENT OUT, 12"
4	5401095B	2	BADGE, IS2000 - IS3000 - RED
5	5025386	8	SCREW, #10-24 X 3/8 ALLEN BHBZ
6	5025011X6	8	BOLT, 5/16-18 X 3/4 GD5
7	5025170	8	WASHER, 5/16 LOCK YZ
8	5025292	8	WASHER, 5/16 F436 FLAT
9	5022917	2	GAUGE, FUEL, 12 (SV)
10	5022917X1	2	GROMMET, FUEL GAUGE (SV)

Not For In Reproduction

Hydraulic Group S/N: 4001063571 and Below

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5901855



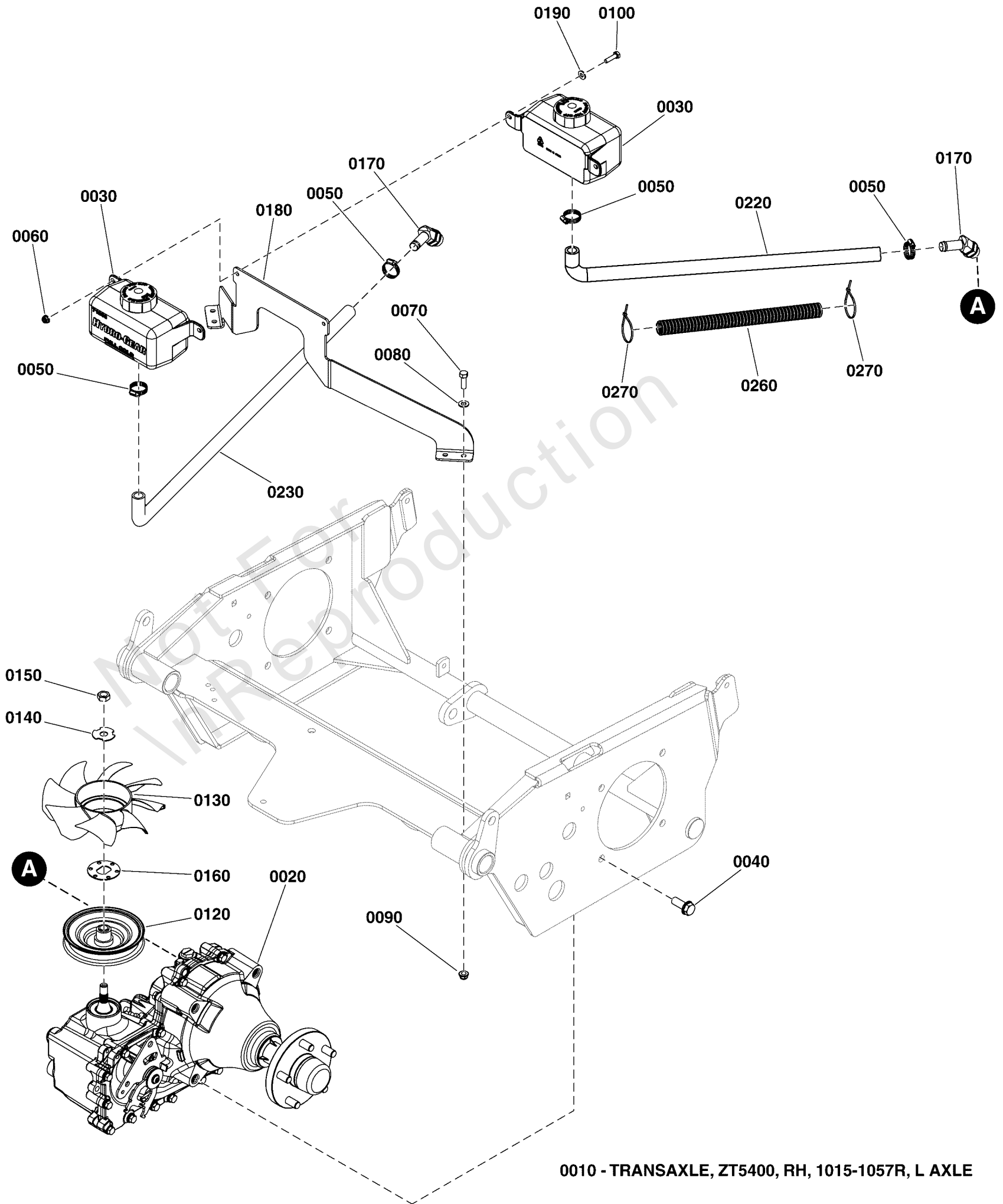
Hydraulic Group S/N: 4001063571 and Below

REF NO	PART NO	QTY	DESCRIPTION
0010	5103963	1	TRANSAXLE, ZT5400, RH, LONG AXLE (1015-1057R) -(Not illustrated)
0020	5103964	1	TRANSAXLE, ZT5400, LH, LONG AXLE (1015-1057L)
0030	5101998	2	HYDRO TANK, HYDRO-GEAR 71938, 1 LITER -(Includes item #0030-10)
0030-10	5100778X1	2	RESERVOIR CAP (SV) -(Not illustrated)
0040	5025535	8	BOLT,HEX FLG,SER,GD8 1/2-13X1-1/4W/PATCH -(Torque transmission mounting bolts to 95-115 ft-lbs (129-156 Nm))
0050	5021164	8	CLAMP, #10 HOSE, STAINLESS
0060	5025391	2	NUT, 1/4-20 Hex Nylock Flange
0070	5025011X8	4	BOLT, 5/16-18 X 1" GRD5 YZ
0080	5025155	4	WASHER, 5/16" SAE
0090	5025392	4	NUT, 5/16-18 HEX NYLOCK FLANGE NUT
0100	5025010X8	2	BOLT, 1/4-20 X 1" GD5 CZ
0120	5102873	2	PULLEY, ZT5400 (53179)
0130	5102874	2	FAN, ZT5400
0140	5102914	2	WASHER, ZT5400, SLOTTED
0150	5102916	2	NUT, ZT5400
0160	5102917	2	SPACER, ANTI-ROTATE, ZT5400
0170	5103923	2	FITTING, 45, 5/8 TUBE TO 7/8-14 O-RING
0180	5416042A	1	PLATE, RESERVOIR MOUNT - BLK
0190	5025154	2	WASHER, 1/4 SAE
0210	5050933X2P5	2	HOSE, 5/8, PUSH-LOCK, 2.50
0220	5050933X20P5	1	HOSE, 5/8, PUSH-LOCK, 20.50
0230	5050933X23P5	1	HOSE, 5/8" PUSH-LOCK, 23.50"
0240	5023119	2	FITTING, ELBOW, 5/8" (SV)
0250	5419495AA	1	WELD, HOSE SUPPORT - BLK -(S/N: 4000464004 & Above)
0260	5050862X12	2	WIRE LOOM, 3/4 ID X 12 IN -(S/N: 4000464004 & Above)
0270	5021030	4	TIE, SELF-LOCKING, 6" -(S/N: 4000464004 & Above)

Hydraulic Group S/N: 4001063572 and Above

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5901855



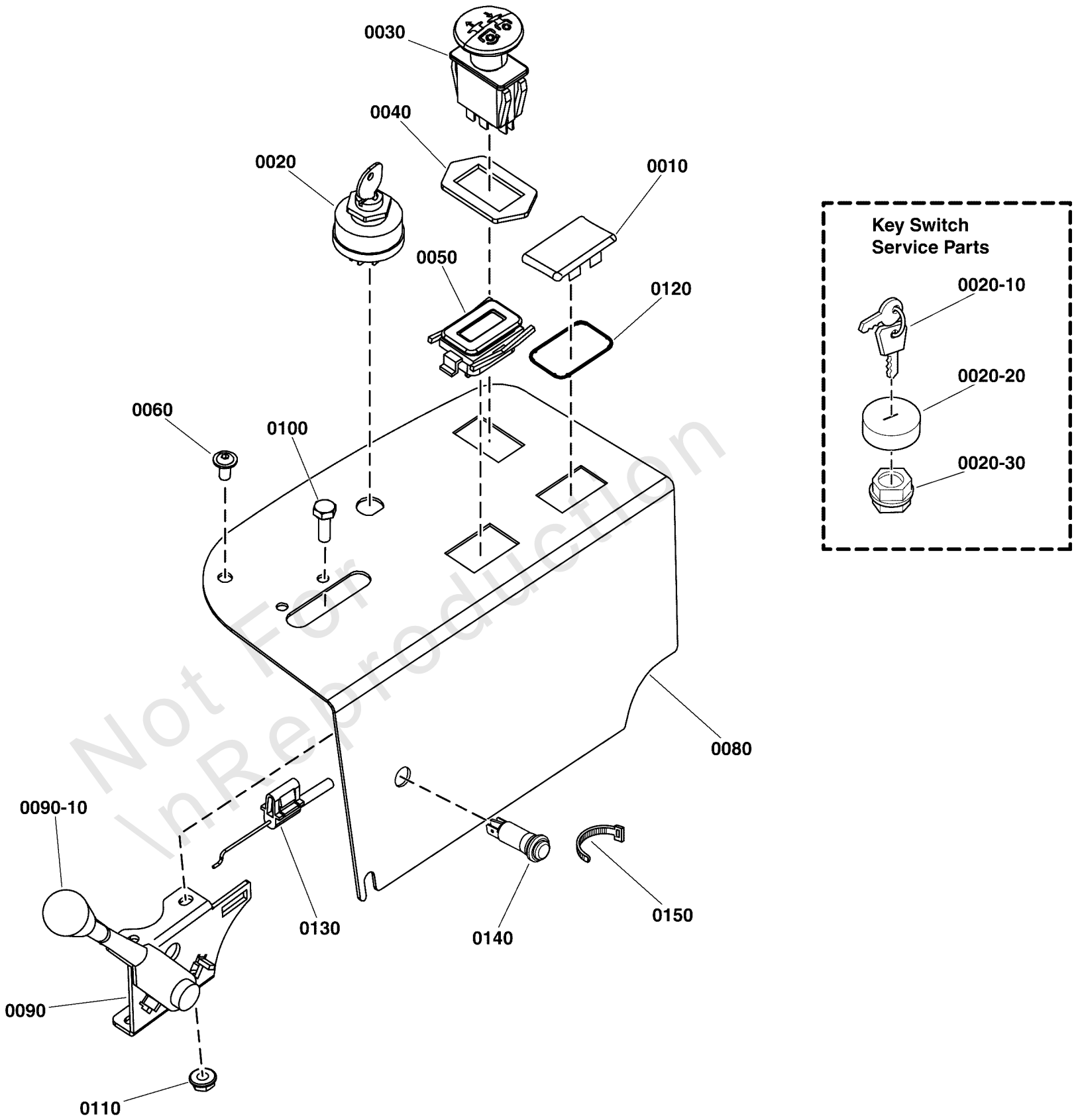
Hydraulic Group S/N: 4001063572 and Above

REF NO	PART NO	QTY	DESCRIPTION
0010	5103963	1	TRANSAXLE, ZT5400, RH, LONG AXLE (1015-1057R) -(Not illustrated)
0020	5103964	1	TRANSAXLE, ZT5400, LH, LONG AXLE (1015-1057L)
0030	5101998	2	HYDRO TANK, HYDRO-GEAR 71938, 1 LITER -(Includes item #0030-10)
0030-10	5100778X1	2	RESERVOIR CAP (SV) -(Not illustrated)
0040	5025535	8	BOLT,HEX FLG,SER,GD8 1/2-13X1-1/4W/PATCH -(Torque transmission mounting bolts to 95-115 ft-lbs (129-156 Nm))
0050	5021164	4	CLAMP, #10 HOSE, STAINLESS
0060	5025391	2	NUT, 1/4-20 Hex Nylock Flange
0070	5025011X8	4	BOLT, 5/16-18 X 1" GRD5 YZ
0080	5025155	4	WASHER, 5/16" SAE
0090	5025392	4	NUT, 5/16-18 HEX NYLOCK FLANGE NUT
0100	5025010X8	2	BOLT, 1/4-20 X 1" GD5 CZ
0120	5102873	2	PULLEY, ZT5400 (53179)
0130	5102874	2	FAN, ZT5400
0140	5102914	2	WASHER, ZT5400, SLOTTED
0150	5102916	2	NUT, ZT5400
0160	5102917	2	SPACER, ANTI-ROTATE, ZT5400
0170	5103923	2	FITTING, 45, 5/8 TUBE TO 7/8-14 O-RING
0180	5416042A	1	PLATE, RESERVOIR MOUNT - BLK
0190	5025154	2	WASHER, 1/4 SAE
0220	5108444	1	HOSE, FORMED, TRANS OVERFLOW, 20.50"
0230	5108445	1	HOSE, FORMED, TRANS OVERFLOW, 23.50"
0260	5050862X12	2	WIRE LOOM, 3/4 ID X 12 IN
0270	5021030	4	TIE, SELF-LOCKING, 6"

Instrument Control Panel

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5901855



Instrument Control Panel

REF NO	PART NO	QTY	DESCRIPTION
0010	1709188	1	PLUG, .820X1.44 HOLE, BLACK PLASTIC
0020	5020927	1	SWITCH, IGNITION, 6 POST
0020-10	5022789	1	KEY, IGNITION MOLDED SET
0020-20	5022790	1	COVER, PLASTIC, SNAP ON
0020-30	5022791	1	PLASTIC NUT
0030	1722887	1	SWITCH-PTO PUSH
0040	5022222	1	RING, SWITCH RETAINER
0050	-----	1	HOUR METER, 2 CHANNEL -(Refer to Note: *)
0060	5106469	3	SCREW, FLANGE, ALLEN HD, 1/4-20X.5 S/S
0080	5412044A	1	PANEL, CONTROL, IS2100/3200 - BLK
0090	5101537	1	LEVER, THROTTLE CONTROL
0090-10	5046360X1	1	THROTTLE CONTROL HANDLE/KNOB
0100	5025179X6	2	SCREW, #10-24 X 3/4" ROUND PHILLIPS
0110	5025271	2	NUT, Hex, Nylon Lock, #10-24
0120	5022269	1	O-RING, 7/8" ID X 1/16" W
0130	5101076	1	CABLE, THROTTLE 47"
0140	5103809	1	LIGHT, INDICATOR, PANEL, LED, RED
0150	5021029	1	TIE, SELF-LOCKING, 12"

Footnotes:

Note: *If replacing contact the Service Department at 1-800-933-6175.

Main Frame and Front Suspension Group

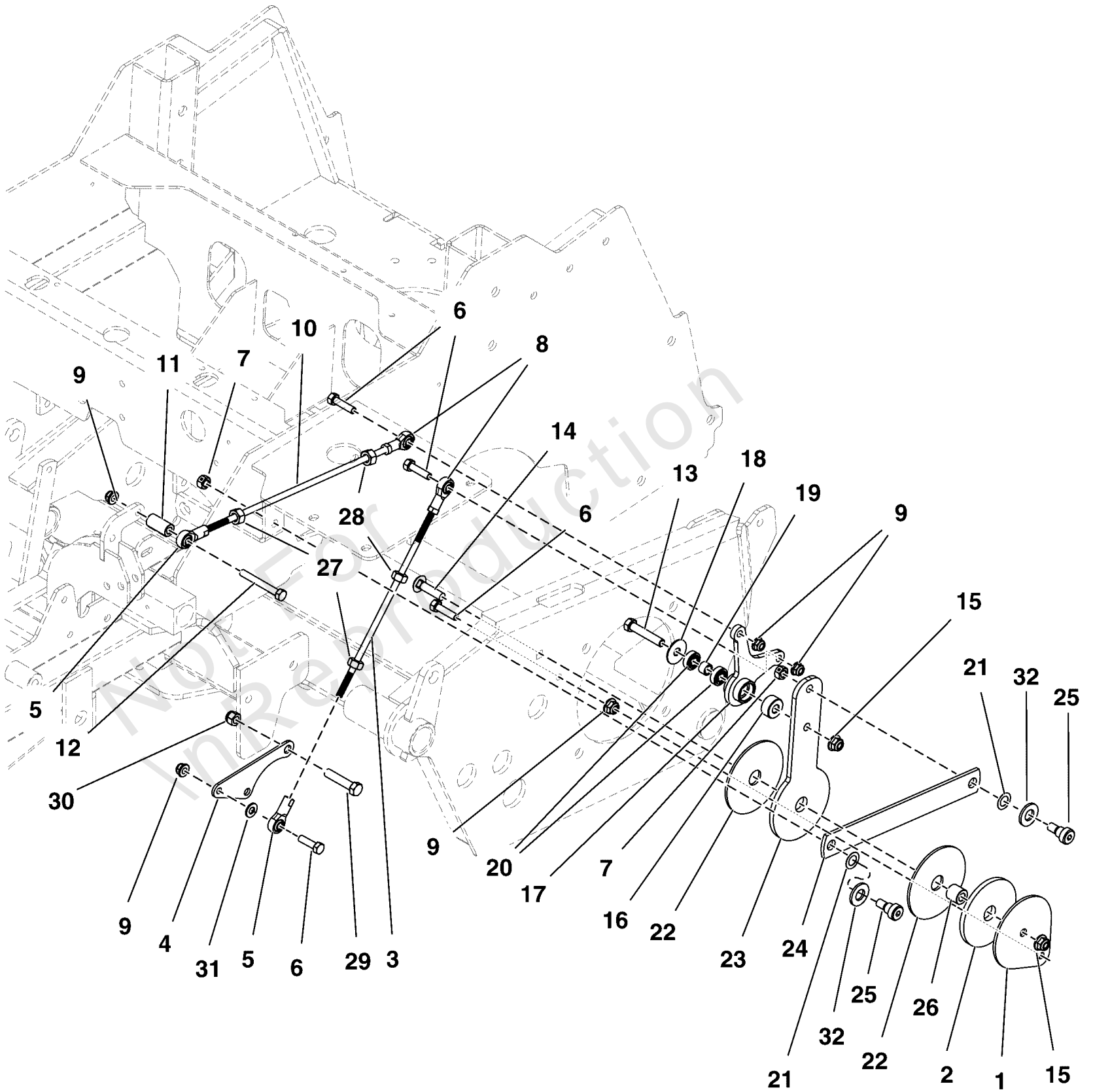
REF NO	PART NO	QTY	DESCRIPTION
0010	5022039	2	BALL JOINT, 3/4-16, MALE
0020	5046093	2	SPACER, .75 X 1.50 X 1.00, CZ
0030	5047461	2	SPACER, .76 x 1.00 x .25
0040	5020884	4	BEARING, TAPERED ROLLER, 1"
0050	5021072	2	SEAL, Grease
0060	5418824B	1	WELD, A-ARM, IS3300Z, RH - RED
0070	5418823B	1	WELD, A-ARM, IS3300Z, LH - RED
0080	5102929	2	CAP, LOW PROFILE, STEEL
0090	5025448	2	NUT, 3/4-16, HEX JAM NYLON LOCK
0100	5025449	4	WASHER, BELLEVILLE - 1.500 X .755
0110	5419196B	2	WELD, CASTER YOKE - RED
0120	5108733	8	SPACER, .765 X 1.500 X .283, TPRD CZ
0130	5108008	2	SHOCK, SPRING ASSM
0140	5108184	4	SPACER, .39 X 1.00 X .24, SHOCK, ISX
0150	5025265X20	4	BOLT, 3/4-16 X 2-1/2" YZ GD5
0160	5025679	4	NUT, THIN NYLON INSERT, 3/4-16 GR5
0170	5025160	10	WASHER, 3/4" SAE
0180	5419629B	1	PLATE, FRONT MOUNT, ISX3300 - RED
0190	5108732	4	SPACER, .765 X 1.500 X .500, TPRD CZ
0200	-----	1	WELD, MAIN FRAME, ISX3300Z - RED
0210	5108560	4	CONTROL ARM, IX3300, PTFE
0220	5025265X24	4	BOLT, 3/4-16 X 3" YZ GD5
0230	5025156	8	WASHER, 3/8 SAE
0240	5025013X20	2	BOLT, 3/8-16 X 2-1/2" GD5 CZ
0250	5025394	8	NUT, 3/8 - 16 HEX NYLOCK FLANGE
0260	80003522	2	HHCS, 3/8-16 X 2.00, GR5, ZINC/CLEAR
0270	5025265X28	2	BOLT, 3/4-16 X 3-1/2" YZ GD5
0280	5025284	6	NUT, Hex, Nylon Lock, 3/4-16
0290	5025013X8	4	BOLT, 3/8-16 X 1" GD5 CZ
0300	5025430	1	CLAMP, 5/16", DOUBLE, WIRE & TUBE
0310	5025154	1	WASHER, 1/4 SAE
0320	5025010X6	1	BOLT, 1/4"-20 X 3/4" GD5 YZ
0330	5025391	1	NUT, 1/4-20 Hex Nylock Flange
0340	5022673	2	BUMPER, RUBBER, 1/4-20
0350	5025126	2	NUT, Hex, Serrated Flange, 1/4-20
0360	5020095	2	GREASE FITTING, 1/4-28 Straight
0370	5025457	2	BOLT, 1/4-28 X 1/2, GD5 YZ
0380	5025093	2	NUT, Hex, Jam, 3/4-16
1000	5020883	2	CUP, BEARING (SV) -(Not illustrated)

Motion Control Group - Control System

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5901855

5303882L



Motion Control Group - Control System

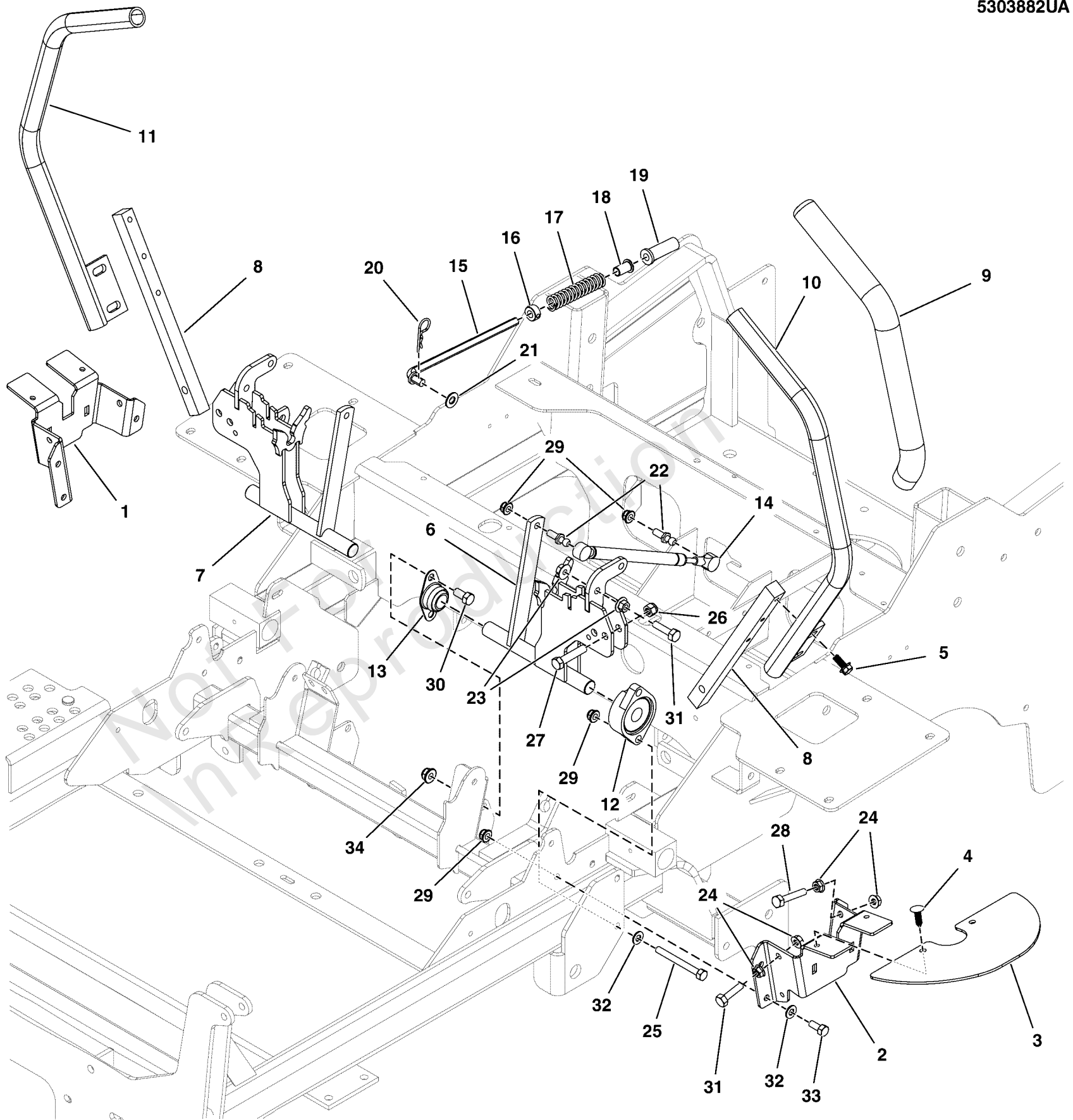
REF NO	PART NO	QTY	DESCRIPTION
1	5410271A	2	PLATE, CONTROL SYSTEM LOCK - BLK
2	5103704	2	PAD, .77 X 3.50 X .25, POLYURETHANE
3	5101135	2	ROD, HYDRO LINKAGE
4	5411301A	2	PLATE, CONTROL MOUNT - BLK
5	5104493	4	BALL JOINT 5/16-24 RH FEMALE BRONZE RACE
6	5025055X10	12	BOLT, 5/16-18 x 1-1/4" TFL GD 5
7	5025100	4	NUT, Hex, Side Lock, 3/8-16
8	5104494	4	BALL JOINT 5/16-24 LH FEMALE BRONZE RACE
9	5025392	8	NUT, 5/16-18 HEX NYLOCK FLANGE NUT
10	5102255	2	ROD, HYDRO LINKAGE, 14.63
11	5102599	2	SPACER, .38 X .75 X 1.25, PM, CZ
12	5025011X20	2	BOLT, 5/16-18 X 2-1/2" GD5 YZ
13	5025013X20	2	BOLT, 3/8-16 X 2-1/2" GD5 CZ
14	5025146X12	2	BOLT, 3/8-16 X 1-1/2, CARRIAGE, GD5, CZ
15	5025394	6	NUT, 3/8 - 16 HEX NYLOCK FLANGE
16	5046860	2	SPACER, .39 X 1.00 X .50, PM, CZ
17	5103718	2	PIVOT, CONTROL SYSTEM, S125XT
18	5025165	2	WASHER, 3/8" Fender
19	5103676	2	SPACER, .39 X .55 X .38, PM, CZ
20	5102003	4	BEARING, .375" ID X .875" OD X .341" THK
21	5103784	4	WAVE WASHER, 1/2"ID X .087"OD X .01 THK.
22	5103672	4	PAD, CONTROL SYSTEM
23	5410268	2	PLATE, CONTROL SYSTEM ARM - HT
24	5411375A	2	LINK, CONTROL SYSTEM ARM, IS2100 - BLK
25	5025356	4	BOLT, 3/8-16 X 3/8", 1/2" SHOULDER
26	5103705	2	SPACER, .39 X .75 X .69, PM, CZ
27	5025033	4	NUT, Hex, 5/16-24
28	5023212	4	NUT, 5/16-24 HEX, LH
29	5025015X6	2	BOLT, 7/16-14 X 3/4, GD 5 YZ
30	5025044	2	NUT, 7/16-14 HEX TOP LOCK
31	5025155	2	WASHER, 5/16" SAE
32	5025440	4	WASHER, 1/2" GD9 YZ

Motion Control Group - Handles & Dampeners

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5901855

5303882UA



Motion Control Group - Handles & Dampeners

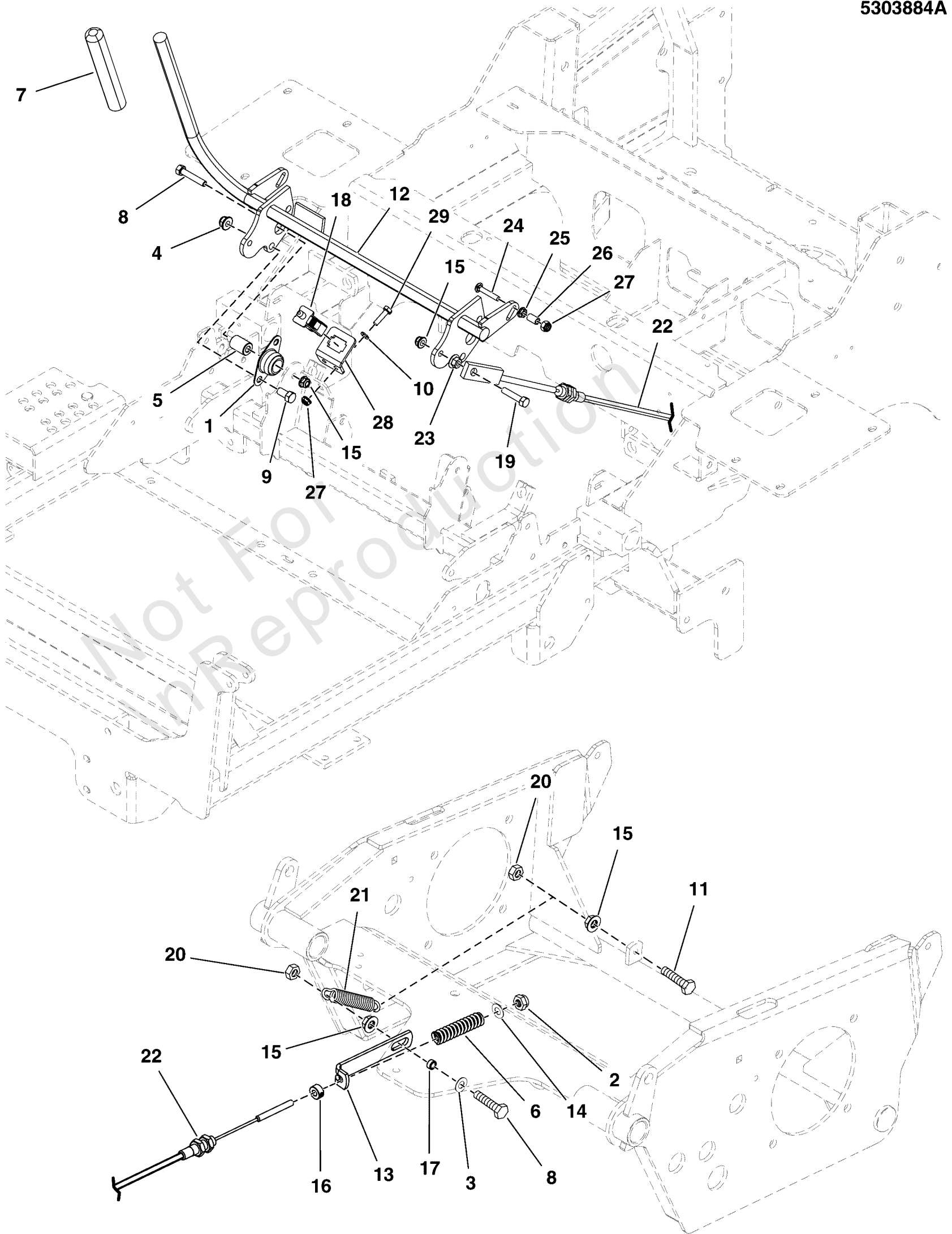
REF NO	PART NO	QTY	DESCRIPTION
1	5416170A	1	PLATE, Neutral Lock, RH - BLK
2	5416171A	1	PLATE, Neutral Lock, LH - BLK
3	5401248	2	GUARD, RUBBER MOTION CONTROLS
4	5025431	4	PUSH RIVET (TREE TYPE), BLACK
5	80003531	4	SCREW, 5/16-18X0.750, GR5, WHIZ-LOCK, ZC
6	5416663A	1	WELD, CONTROL SHAFT, LOCKOUT, LH - BLK
7	5416664A	1	WELD, CONTROL SHAFT, LOCKOUT, RH - BLK
8	5103106A	2	MOUNT, CONTROL ARM - BLK
9	5104722	2	GRIP, FOAM, 1" ID, 16" LONG
10	5414427A	1	WELD, HANDLE MOTION CNTRL, 16.5, 1.0, LH - BLK
11	5414428A	1	WELD, HANDLE MOTION CNTRL, 16.5, 1.0, RH - BLK
12	5021499	2	BEARING, FLANGE
13	5021098	2	BEARING, BRONZE FLANGE, 3/4"
14	5100940	2	DAMPENER, CONTROL,#(P6709/P3610)
15	5100947	2	ROD, NEUTRAL RETURN, CZ
16	5010546	2	COLLAR, 3/8" Set
17	5022645	2	SPRING, REVERSE RETURN
18	5023260	2	BUSHING, FLANGE 3/8ID X 7/8 LONG
19	5104375	2	FLANGED BUSHING, 3/8IDX.63ODX.8125FL
20	5025210	2	3/32 X 1-5/8 HAIR PIN CLIP
21	5025156	2	WASHER, 3/8 SAE
22	5101307	4	10MM BALL STUD, 5/16-18 X 3/4 THDS
23	5025139	4	NUT, 5/16-18 HEX SERRATED FLANGE (LARGE)
24	5025127	8	NUT, 5/16-18 HEX SERRATED FLANGE (SMALL)
25	5025011X24	4	BOLT, 5/16-18 X 3" GD5 YZ
26	5025096	4	NUT, Hex, Nylon Locking, 3/8-16
27	5025013X14	4	BOLT, 3/8-16 X 1-3/4" GD5 CZ
28	5025055X14	2	BOLT, 5/16-18 X 1-3/4 TFL, GD5 YZ
29	5025392	12	NUT, 5/16-18 HEX NYLOCK FLANGE NUT
30	5025013X6	6	BOLT, 3/8-16 X 3/4" GD5 CZ
31	5025055X10	4	BOLT, 5/16-18 x 1-1/4" TFL GD 5
32	5025155	10	WASHER, 5/16" SAE
33	5025011X6	6	BOLT, 5/16-18 X 3/4 GD5
34	5025394	4	NUT, 3/8 - 16 HEX NYLOCK FLANGE

Parking Brake Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5901855

5303884A



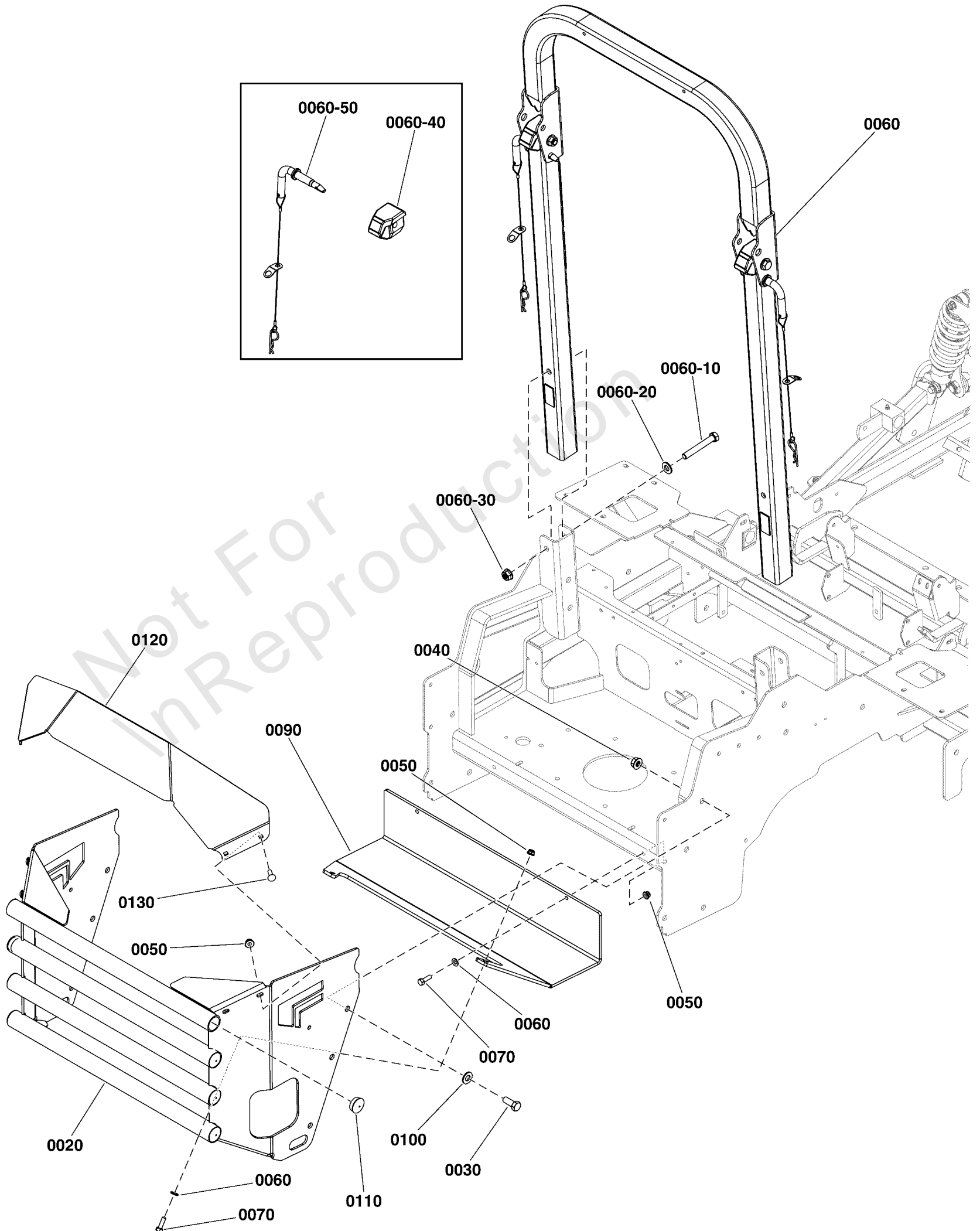
Parking Brake Group

REF NO	PART NO	QTY	DESCRIPTION
1	5021098	2	BEARING, 3/4" FLANGED, BRONZE
2	5025045	2	NUT, 5/16-24 HEX NYLON LOCK
3	5025155	2	WASHER, 5/16" SAE
4	5025394	4	NUT, 3/8-16 HEX NYLOCK FLANGE
5	5042134	2	SPACER, .32 X .75 X 1.06, PM
6	5100385	2	SPRING, COMP. 1/2 ID X .140 WIRE X 3.25
7	5101038	1	GRIP, FOAM, 3/4 ID X 6 X .187
8	5025011X14	4	BOLT, 5/16-18 X 1-3/4 GD5 CZ
9	5025013X6	4	BOLT, 3/8-16 X 3/4" GD5 CZ
10	5025154	2	WASHER, 1/4 SAE
11	5025055X10	2	BOLT, 5/16-18 x 1-1/4" TFL GD 5
12	5415423A	1	WELD, BRAKE SHAFT, LOCKOUT, 21" - BLK
13	5411363A	2	LINK, BRAKE LOCK - BLK
14	5025337	2	WASHER, 5/16 USS
15	5025392	8	NUT, 5/16-18 HEX NYLOCK FLANGE
16	5020047	2	COLLAR, 5/16 SET
17	5102463	2	SPACER, .33 X .50 X .25, PM, CZ
18	7022886	1	SWITCH, DP NO/NC SNAP-IN
19	5025011X12	2	BOLT, 5/16-18 X 1-1/2 GD5 CZ
20	80003675	4	NUT, 5/16-18, HEX, CNTR LK,ZINC PHOS/OIL
21	5103969	2	SPRING, EXTENSION, .521 X 4.12, BLACK
22	5104235	2	CABLE, PARKING BRAKE, 32"
23	5025139	2	NUT, 5/16-18 HEX SERRATED FLANGE (LARGE)
24	80003564	2	BOLT, 1/4-20 X 1.500, GR5, SQ, ZINC/CLEA
25	5025126	1	NUT, 1/4-20 HEX SERR. FLANGE
26	5041483	2	SPACER, .25 X .38 X .63, CZ
27	5025095	4	NUT, 1/4-20 HEX NYLON LOCK
28	5415932A	1	TAB, SWITCH PLATE, BOLT-ON - BLK
29	5025010X6	2	BOLT, 1/4-20 X 3/4 GD5 CZ

Rear Bumper and ROPS Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5901855



Rear Bumper and ROPS Group

REF NO	PART NO	QTY	DESCRIPTION
0020	5108311B	1	WELD, REAR BUMPER, ISX3300 - RED
0030	5025017X10	6	BOLT, 1/2-13 X 1-1/4 GD5 CZ
0040	5025396	6	NUT, Hex Flange, Nylock, 1/2-13
0050	5025392	8	NUT, 5/16-18 HEX NYLOCK FLANGE NUT
0060	5025155	4	WASHER, 5/16" SAE
0060	-----	1	ROPS, ISX3300 -(Refer to Note: *)
0060-10	5025017X24	2	BOLT, 1/2-13 X 3" GD5 CZ
0060-20	5025158	2	WASHER, 1/2 SAE
0060-30	5025332	2	NUT, 1/2-13 Hex Side Lock
0060-40	5108027	2	BLOCK, ROPS
0060-50	5108350	2	HINGE PIN ASSEMBLY
0070	5025011X8	4	BOLT, 5/16-18 X 1" GRD5 YZ
0090	5419532AA	1	PLATE, HEAT SHIELD, ISX3300 - BLK
0100	5025158	6	WASHER, 1/2 SAE
0110	5023484	8	PLUG, PANEL, 1.25 - BLACK
0120	5108310B	1	PLATE, ENG GUARD, ISX3300 - RED
0130	5025145X8	4	BOLT, 5/16-18 X 1, CARRIAGE, GD5, CZ

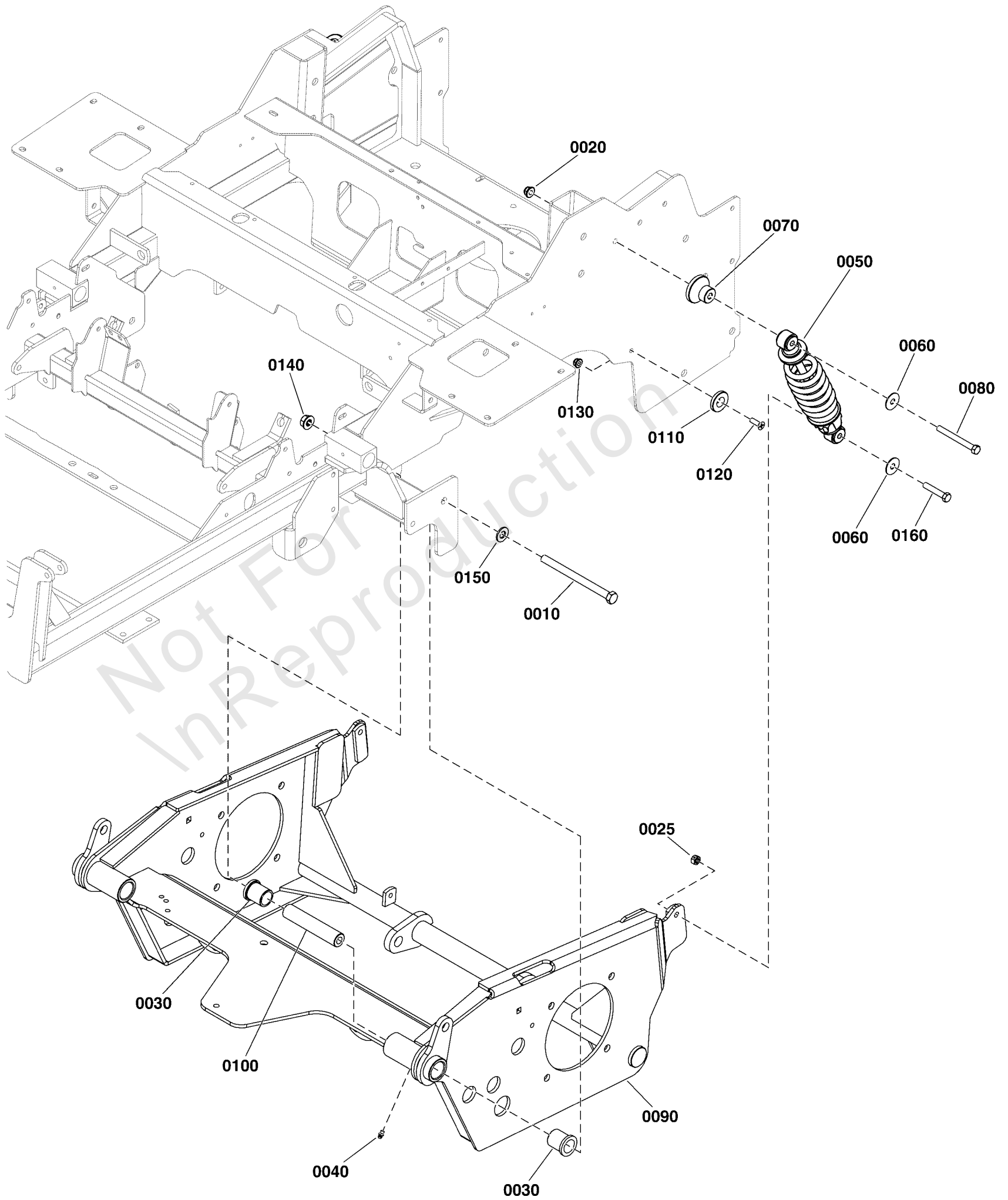
Footnotes:

Note: *Contact the Service Department at 1-800-933-6175 for roll bar replacement parts. You must provide the serial number of the roll bar system.

Rear Suspension Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5901855



Rear Suspension Group

REF NO	PART NO	QTY	DESCRIPTION
0010	5025488X52	2	BOLT, 1/2-13 X 6-1/2" GD8 YZ
0020	5025394	2	NUT, 3/8 - 16 HEX NYLOCK FLANGE
0025	5025100	2	NUT, Hex, Side Lock, 3/8-16
0030	5021541	4	BUSHING, FLANGE
0040	5020095	2	GREASE FITTING, 1/4-28 Straight
0050	5108022	2	SHOCK, SPRING ASSM --
0060	5025165	4	WASHER, 3/8" Fender
0070	5104704	2	SPACER, .39 X 2.00 X 1.35, PM
0080	5025013X28	2	BOLT, 3/8-16 X 3-1/2" GD5 CZ
0090	5413016B	1	WELD, TRANSMISSION CARRIAGE, IS3200 -RED
0100	5100194	2	SPACER, .52 X 1.00 X 5.00
0110	5102701	2	SPACER, .34 X 1.54 X .25 - UHMW
0120	5025594	2	SCREW, 5/16-18 X 1, PHILLIPS HD, BZ
0130	5025392	2	NUT, 5/16-18 HEX NYLOCK FLANGE NUT
0140	5025396	2	NUT, Hex Flange, Nylock, 1/2-13
0150	5025158	2	WASHER, 1/2 SAE
0160	80003522	2	HHCS, 3/8-16 X 2.00, GR5, ZINC/CLEAR

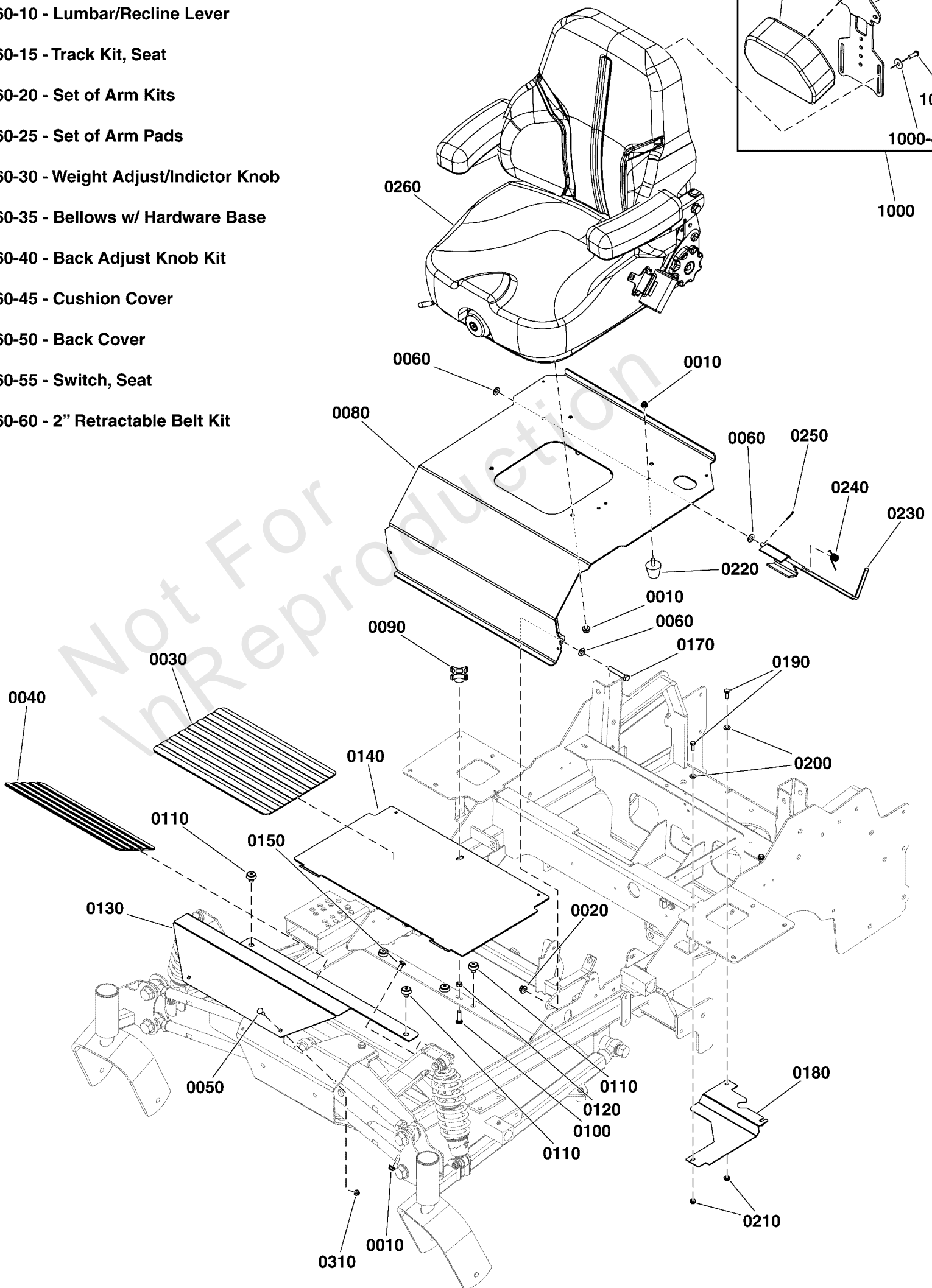
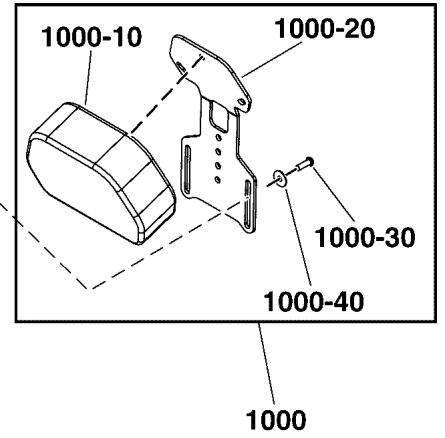
Seat Mount and Floor Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5901855

Seat (P/N 5108194) Service Parts:

- 0260-10 - Lumbar/Recline Lever
- 0260-15 - Track Kit, Seat
- 0260-20 - Set of Arm Kits
- 0260-25 - Set of Arm Pads
- 0260-30 - Weight Adjust/Indicator Knob
- 0260-35 - Bellows w/ Hardware Base
- 0260-40 - Back Adjust Knob Kit
- 0260-45 - Cushion Cover
- 0260-50 - Back Cover
- 0260-55 - Switch, Seat
- 0260-60 - 2" Retractable Belt Kit



Seat Mount and Floor Group

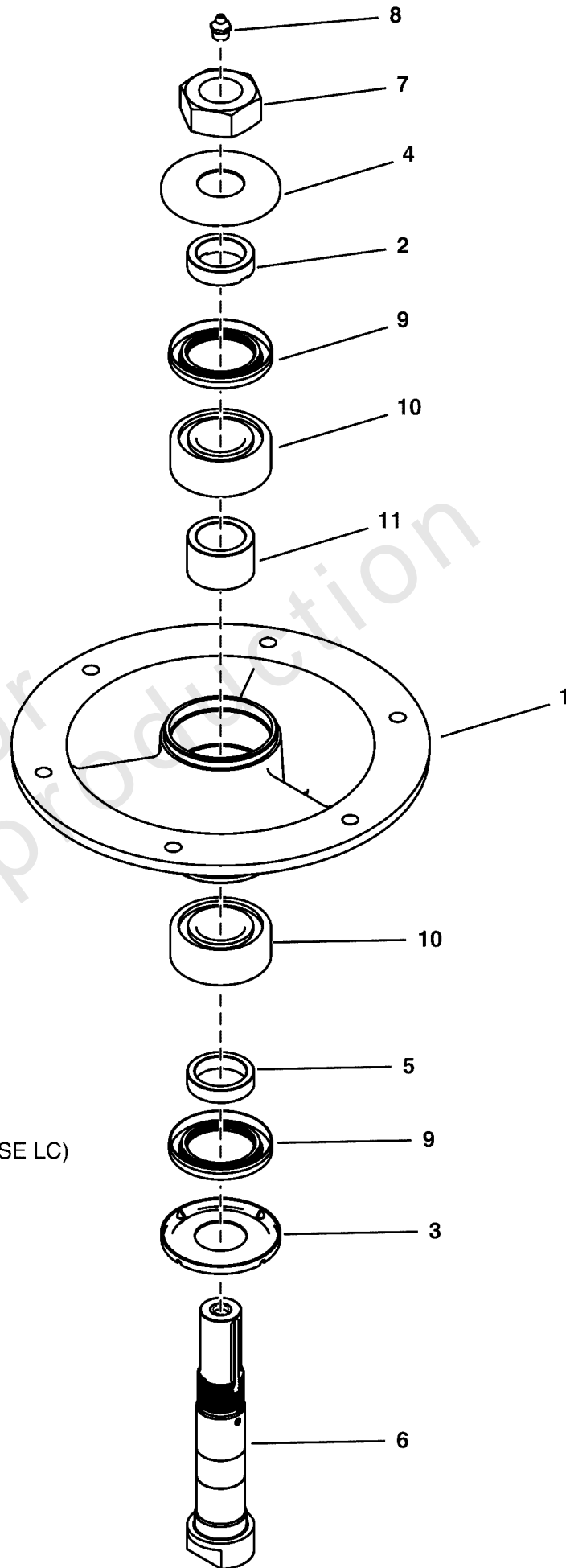
REF NO	PART NO	QTY	DESCRIPTION
0010	5025392	8	NUT, 5/16-18 HEX NYLOCK FLANGE NUT
0020	5025394	2	NUT, 3/8 - 16 HEX NYLOCK FLANGE
0030	5101333	1	SAFETY WALK, FLOOR PLATE, S50X, 10X17.13
0040	5101374	1	SAFETY WALK, FLOOR REST, 16.00 X 6.00
0050	1960252	2	BOLT-RD HD SH SQ NK 1/4-20X0.625 G5 BLK
0060	5025156	4	WASHER, 3/8 SAE
0080	5601175	1	ASSM, SEAT PLATE W/ DECALS, DOMESTIC -(USA Models Only)
0080	5601203	1	ASSM, SEAT PLATE W/ DECALS, IS3200-CEHYD -(Export Models Only)
0090	1670578	1	KNOB-INT THR .312-18 4-ARM 2.12WD 1.06LG
0100	5025145X10	1	BOLT, 5/16-18 X 1-1/4, CARRIAGE, GD5, CZ
0110	197546	6	MNT, VBRTN, RBBR
0120	80003675	1	NUT, 5/16-1/8, HEX, CNTR LK, ZINC PHOS/OIL
0130	5419415B	1	PLATE, FRONT FLOOR, ISX3300 - RED
0140	5412905B	1	PLATE, FLOOR, REMOVABLE, IS3100Z - RED
0150	5025145X6	2	BOLT, 5/16-18 X 3/4, CARRIAGE, GD5, CZ
0170	5025013X18	2	BOLT, 3/8-16 X 2-1/4" GD5 CZ
0180	5417762A	1	GUARD, DEBRIS, IS3200Z - BLK
0190	5025010X6	3	BOLT, 1/4"-20 X 3/4" GD5 YZ
0200	5025154	3	WASHER, 1/4 SAE
0210	5025126	3	NUT, Hex, Serrated Flange, 1/4-20
0220	5106763	2	BUMPER, RUBBER, 5/16-18, 60 DURO
0230	5418223A	1	WELD, SEAT LATCH HOOK - BLACK
0240	5106644	1	SPRING, TORSION, LH, .0625OD
0250	80002736	1	PIN, 3/32 X 0.750, COT, ZINC/CLEAR
0260	5108194	1	SEAT, HIGH BACK,SUSP,SWITCH & SEAT BELTS
0260-10	5105099X2	1	LUMBAR/RECLINE/ISO LVR W/ RLL PIN BS -(SV)
0260-15	5104720X1	1	4" SINGLE LOCKING TRACKS BASE -(SV)
0260-20	5106325X2	1	SET OF ARM KITS -(SV)
0260-25	5106325X3	1	SET OF ARM PADS -(SV)
0260-30	5104720X2	1	WEIGHT ADJUST INDICATOR KNOB ASSY BASE -(SV)
0260-35	5104720X3	1	BELLOWS W/ HARDWARE BASE -(SV)
0260-40	5106325X4	1	BACK ADJUSTMENT KNOB KIT -(SV)
0260-45	5108194X1	1	CUSHION COVER -(SV)
0260-50	5108194X2	1	SEAT BACK COVER -(SV)
0260-55	7023354	1	SWITCH, SEAT -(SV)
0260-60	5106325X5	1	2" RETRACTABLE BELT KIT -(SV)
0310	5025391	2	NUT, 1/4-20 Hex Nylock Flange
1000	5601135	1	KIT, HEAD REST
1000-10	5106645	1	HEAD REST HIGH BACK SEAT
1000-20	5418483A	1	PLATE, MOUNTING BRACKET, HEADREST - BLK
1000-30	5025652	6	SCREW, 5/16-18X1, BUT HD, BLK, W/PATCH
1000-40	5107404	6	WASHER, FENDER, 1.00 OD X .315 ID X .055

Spindle Service Parts - 5413009

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5901855

5413009SV



NOTE:
FOR FINAL ASSEMBLY, APPLY
LOCTITE - GRADE 272 TO NUT
PRIOR TO TORQUING.

FINAL TORQUE OF RETAINING
NUT TO BE 165-225 FT-LBS.

FILL CAVITY WITH NLGI, GRADE 2,
EP-2 GREASE THROUGH GREASE
FITTING AFTER FINAL ASSEMBLY
AND TORQUE. (SUPERPLEX EP-S,
SHELL ALBIDA LC2, BP ENERGREASE LC)

Spindle Service Parts - 5413009

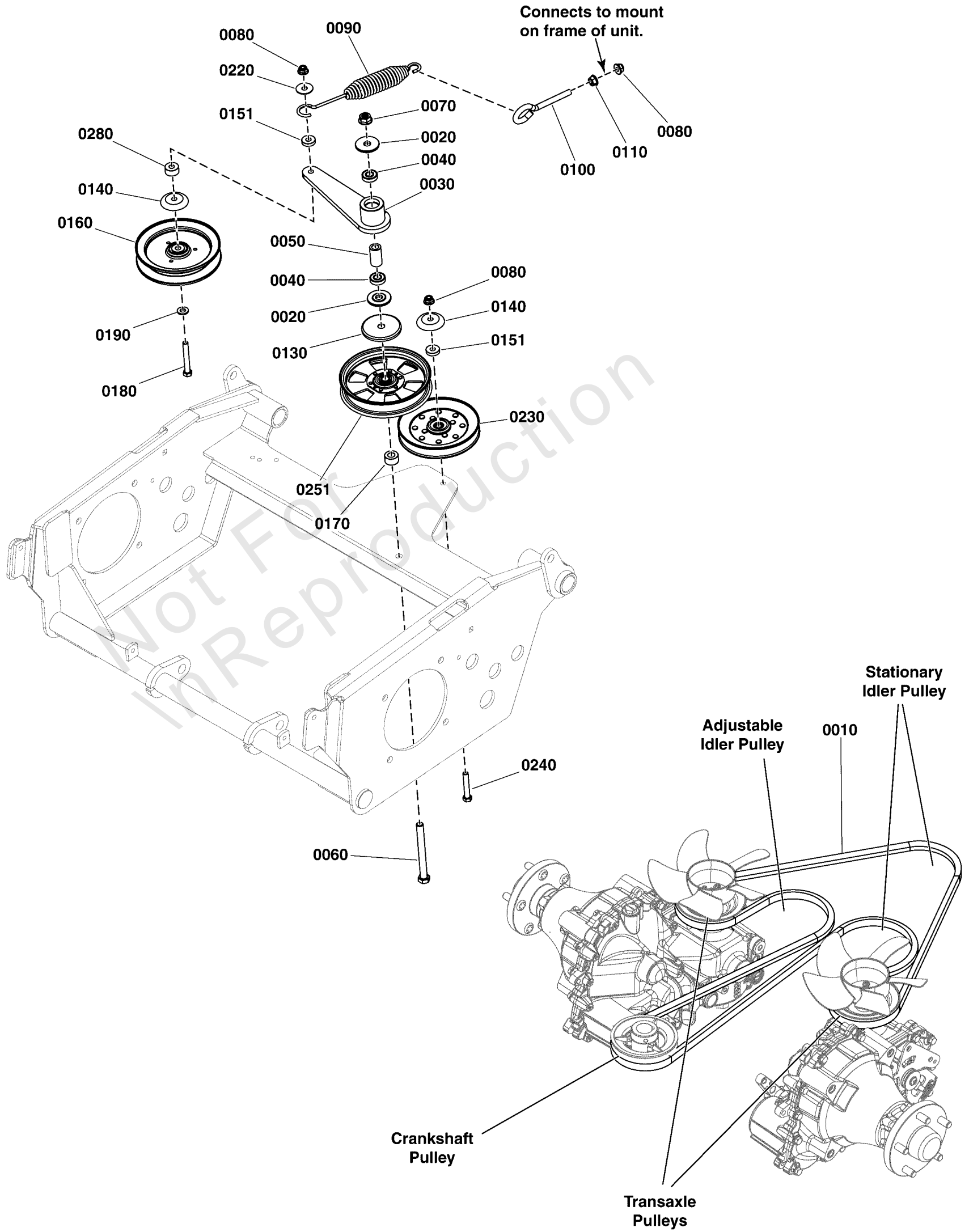
REF NO	PART NO	QTY	DESCRIPTION
1	5104359	1	HOUSING, SPINDLE, HD
2	5104366	1	SPACER, 1.183 x 1.625 x 0.420
3	5049434	1	SHIELD, TRASH, BOTTOM
4	5104367	1	SHIELD, TRASH, TOP
5	5104448	1	SPACER, 1.25 X 1.63 X .383
6	5104365	1	SHAFT, SPINDLE, HD
7	5104358	1	NUT, 1-1/ 8- 12 UNF, CZ
8	5023329	1	FITTING, 1/8 NPT STR, SHORT
9	5049445	2	SEAL, GREASE DOUBLE LIP
10	5104336	2	BEARING, #3206, DOUBLE ROW RADIAL BALL
11	5104360	1	SPACER, 1.183 x 1.625 x 1.030

Not For In Reproduction

Transaxle Drive Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5901855



Transaxle Drive Group

REF NO	PART NO	QTY	DESCRIPTION
0010	5104378	1	BELT, B-SEC, 129"EL, ARAMID, WRAPED
0020	5103262	2	SPACER, IDLER ARM, 1/2, PM
0030	5413140A	1	WELD, IDLER ARM, 7.50, BEARINGS - BLK
0040	7078243	2	BEARING, BALL, AXLE
0050	5103812	1	SPACER, .52 X .84 X 1.53, PM
0060	5025017X40	1	BOLT, 1/2-13 X 5" GD5 YZ
0070	5025396	1	NUT, Hex Flange, Nylock, 1/2-13
0080	5025394	3	NUT, 3/8 - 16 HEX NYLOCK FLANGE
0090	5100632	1	SPRING-EXT, 1.25OD X 9.3LG X .142WR, BLK
0100	5025429	1	EYEBOLT, 3/8-16 X 4, 2.13THRD, .75EYE, C
0110	5025128	1	NUT, 3/8-16 Hex Large Serrated Flange
0130	5105145	1	SHIELD, BEARING, 1/2 ID X 2-7/8 OD, CZ
0140	5103787	2	SHIELD, BEARING PULLEY, 3/8ID, CZ
0151	5044960	2	SPACER, .39 X 1.00 X .25, PM, CZ
0160	5103789	1	PULLEY, C-SEC, V-IDLER, 6.25"ODX3/8ID
0170	5101162	1	SPACER, .52 X 1.00 X .56, PM, CZ
0180	5025013X22	1	BOLT, 3/8-16 X 2-3/4" GD5 CZ
0190	5025293	1	WASHER, 3/8" GR. 9 FLAT
0220	5025165	1	WASHER, 3/8" Fender
0230	5102093	1	PULLEY-IDLER-V, 5.83OB, .38ID, .94W, STL
0240	5025013X18	1	BOLT, 3/8-16 X 2-1/4" GD5 CZ
0251	5104717	1	PULLEY, FLT IDLR, 6.0 X 1.0 X .50, CZ
0280	5046860	1	SPACER, .39 X 1.00 X .50, PM, CZ

Transaxle SERVICE PARTS - ZT5400

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5901855

HYDRO-GEAR MODEL 1015-1014L (P/N: 5101988)

HYDRO-GEAR MODEL 1015-1014R (P/N: 5101987)

HYDRO-GEAR MODEL 1015-1017L (P/N: 5102254)

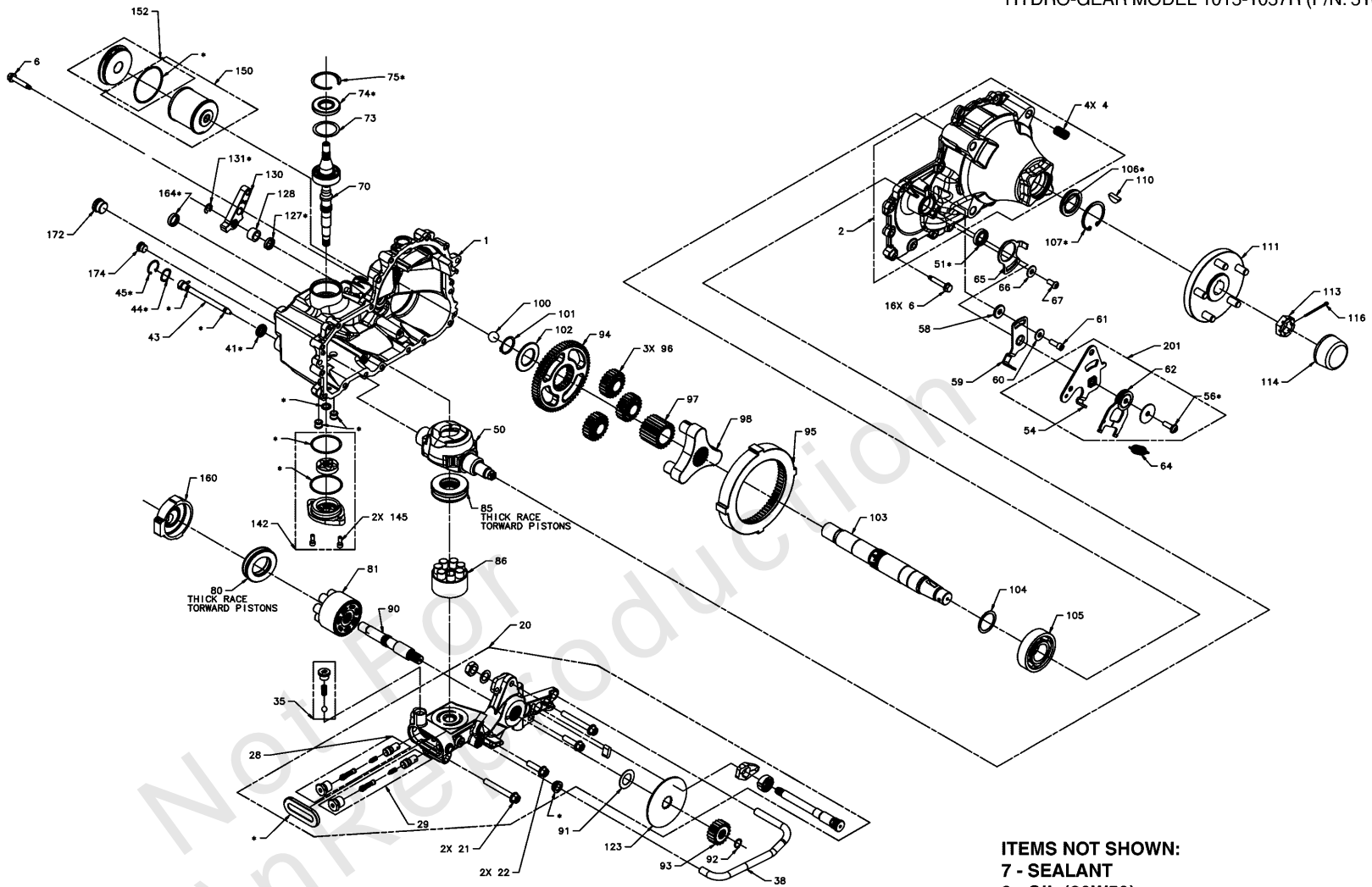
HYDRO-GEAR MODEL 1015-1017R (P/N: 5102253)

HYDRO-GEAR MODEL 1015-1024L (P/N: 5102870)

HYDRO-GEAR MODEL 1015-1024R (P/N: 5102871)

HYDRO-GEAR MODEL 1015-1057L (P/N: 5103964)

HYDRO-GEAR MODEL 1015-1057R (P/N: 5103963)



ITEMS NOT SHOWN:
7 - SEALANT
8 - OIL (20W50)
200 - SEAL KIT (*) PARTS INCLUDED IN SEAL KIT

Transaxle SERVICE PARTS - ZT5400

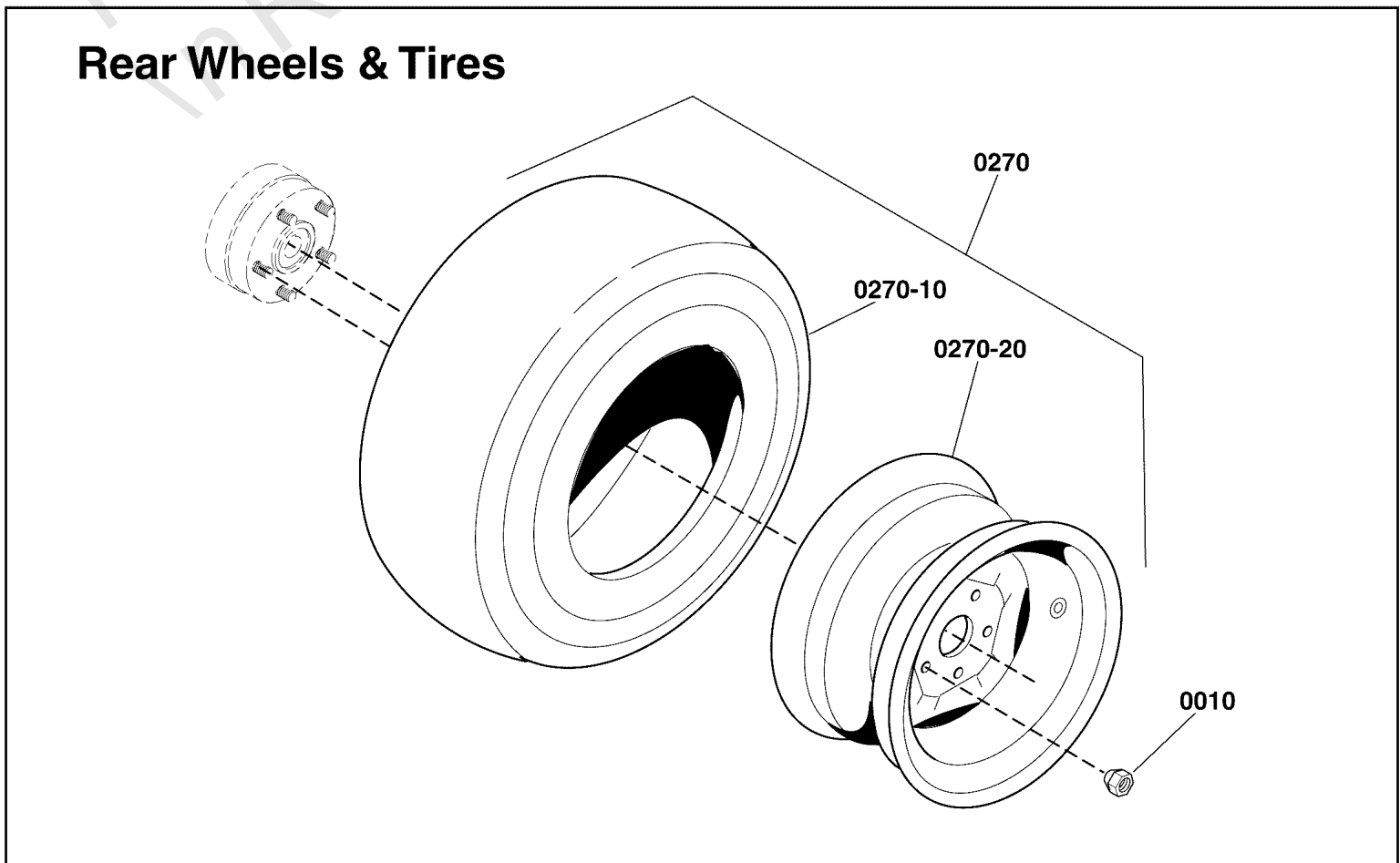
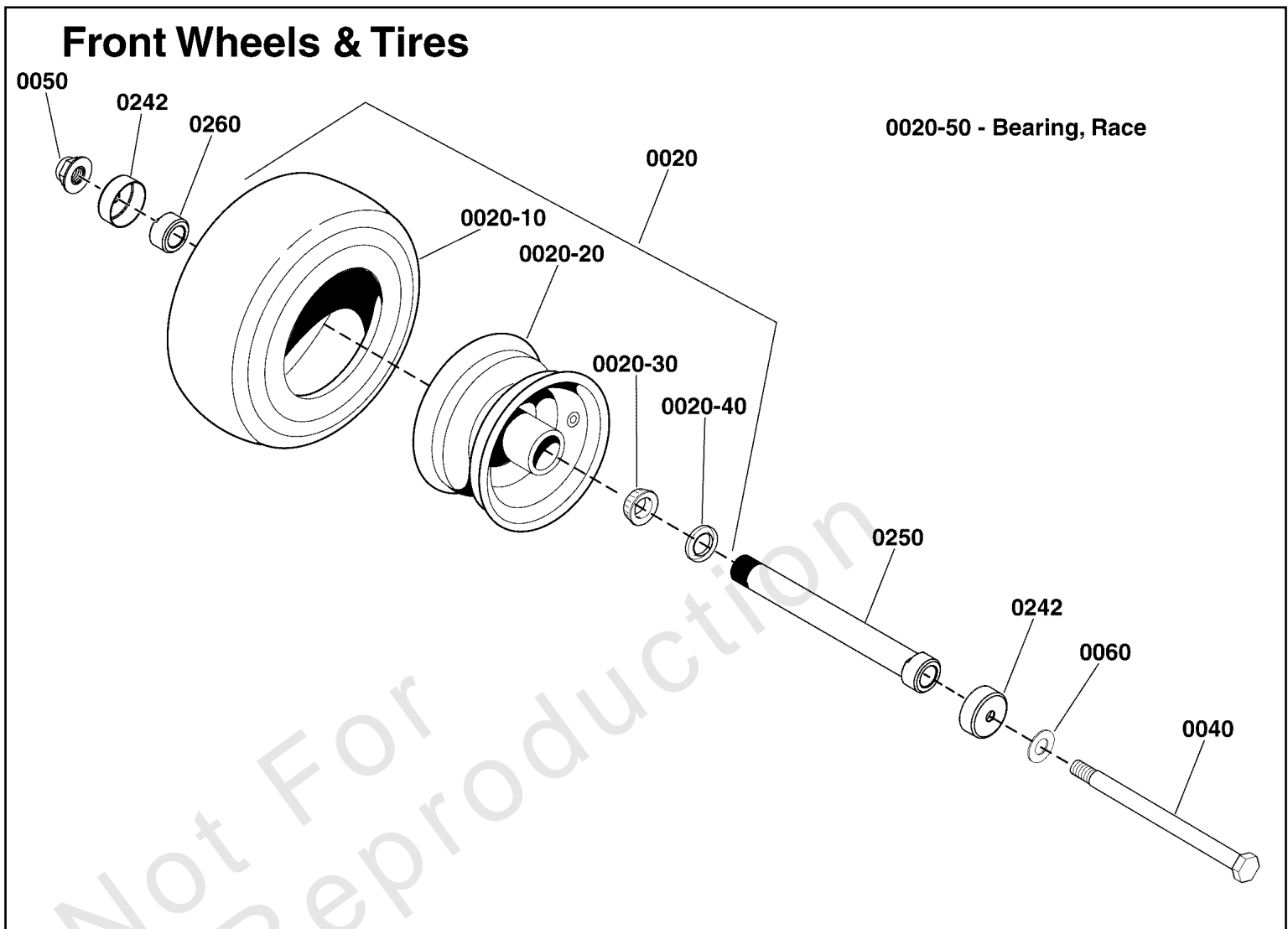
REF NO	PART NO	QTY	DESCRIPTION
114	5101987X5	1	AXLE CAP, ZT5400 -(Hydro-Gear P/N 53724)
150	5101987X2	1	KIT, FILTER -(Hydro-Gear P/N 71943)
200	5101987X4	1	KIT, SEAL, ZT5400 -(Hydro-Gear P/N 71945)
51	5104385X6	1	KIT, CONTROL ARM SEAL -(Hydro-Gear P/N 52989)
70	5101987X8	1	KIT, INPUT SHAFT (BEARING AND SHAFT ONLY) -(Hydro-Gear P/N 71941)
74	5101987X7	1	KIT, INPUT SEAL -(Hydro-Gear P/N 51280)
111	5101987X6	1	ASSM, HUB, STANDARD AXLE TRANSMISSIONS (ZT5400) -(Hydro-Gear P/N 72039)
111	5102253X1	1	ASSM, HUB, LONG AXLE TRANSMISSIONS (ZT5400) -(Hydro-Gear P/N 72102)
106	5104385X5	1	KIT, AXLE SEAL -(Hydro-Gear P/N 53008)

Not For In-Production

Wheel and Tire Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5901855



Wheel and Tire Group

REF NO	PART NO	QTY	DESCRIPTION
0010	5020601	10	NUT, 1/2-20, FOR WHEEL BOLT SILVER
0020	5023136	2	WHEEL & TIRE ASSEMBLY, 13 x 6.5 x 6, Complete
0020-10	5022577	2	TIRE, Rubber Only -(One per tire)
0020-20	5023136X1	2	WHEEL ASSEMBLY, FOR 13 X 6.5 X 6 TIRES (INCLUDES BEARING AND SEALS) -(One per tire)
0020-30	5022631SX2	4	BEARING, Tapered Roller -(Two per tire)
0020-40	5022631SX3	4	SEAL, GREASE -(Two per tire)
0020-50	5022631SX4	2	BEARING, RACE -(Not illustrated)
0040	5025017X72	2	BOLT, 1/2-13 X 9" GD5 YZ
0050	5025396	2	NUT, Hex Flange, Nylock, 1/2-13
0060	5025158	2	WASHER, 1/2 SAE
0242	5103594	4	DEBRIS, COVER, CASTER WHEELS
0250	5103649	2	BEARING ADJUSTER, SPACER, 7.062 LG
0260	5103650	2	NUT, BEARING ADJUSTER, AXLE
0270	5108099	2	TIRE WHEEL ASM, 26X12.00-12, MULTI TRAC
0270-10	5108099X2	2	TIRE, MULTI TRAC, 26X12.00-12 -(One per tire)
0270-20	5104380X1	2	WHEEL, 12 X 9.5, SOLD, 4.063" OFFSET (SV) -(One per tire)

Hardware Identification & Torque Specifications

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

Torque Specification Chart						
FOR STANDARD MACHINE HARDWARE (Tolerance ± 20%)						
Hardware Grade	No Marks		SAE Grade 5		SAE Grade 8	
	SAE Grade 2		SAE Grade 5		SAE Grade 8	
Size Of Hardware	in/lbs	Nm.	in/lbs	Nm.	in/lbs	Nm.
	ft/lbs		ft/lbs		ft/lbs	
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

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

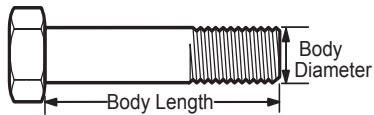


Nut, M8

Thread Diameter (mm)

Inside Diameter (in) Threads per inch

Nut, 1/2-16

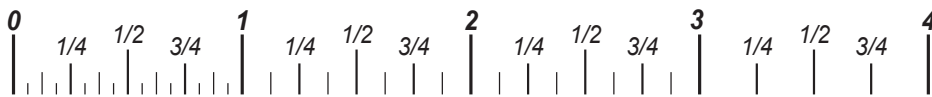


Screw, M8- 1.25 x 25

Thread Diameter (mm) Distance between threads (mm) Body Length (mm)

Body Diameter Threads per inch Body Length (in)

Screw, 1/2- 16 x 2



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).

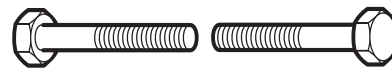
When bolt or capscrew is identified as 1/2 - 16 x 2" (M8 - 1.25 x 50), this means the *Nominal size*, or body diameter is 1/2 inch (8mm metric thread diameter), the second number, 16, represents the *threads per inch*, (*distance between threads*). The final number is the body length of the bolt or screw,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

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

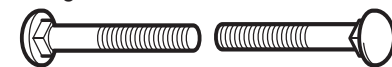
Hex Head Capscrew



Washer



Carriage Bolt



Hex Nut

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

