



# Parts Manual

Mfg. No: 5902107  
IS700Z Series w/ 52" Side Discharge iCD  
Mower Deck (IS700ZB2752SS)



5600371 - 52" iCD FAST-Vac; 3-Bag Soft Top System (125XT/150XT/IS700/F160).....

5600789 - 52" iCD FAST-Vac; 3-Bag Hard Top Grass Collection System (700/150XT/F160).....

5600601 - 52" iCD TURBO-Pro; 2-Bag Grass Collection System (150XT/F160).....

5600608 - 52" iCD TURBO-Pro; 3-Bag Grass Collection System.....

5600783 - 52" iCD TURBO-Pro; 3-Bag Hard Top Grass Collection System (700/150XT/F160).....

5600584 - Mulch Kit for ZTR w/ 52" Deck - S/N: 2015866745 & Above.....

5600656 - Seat Adapter Kit, IS700Z.....

5600647 - Headlight Kit.....

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

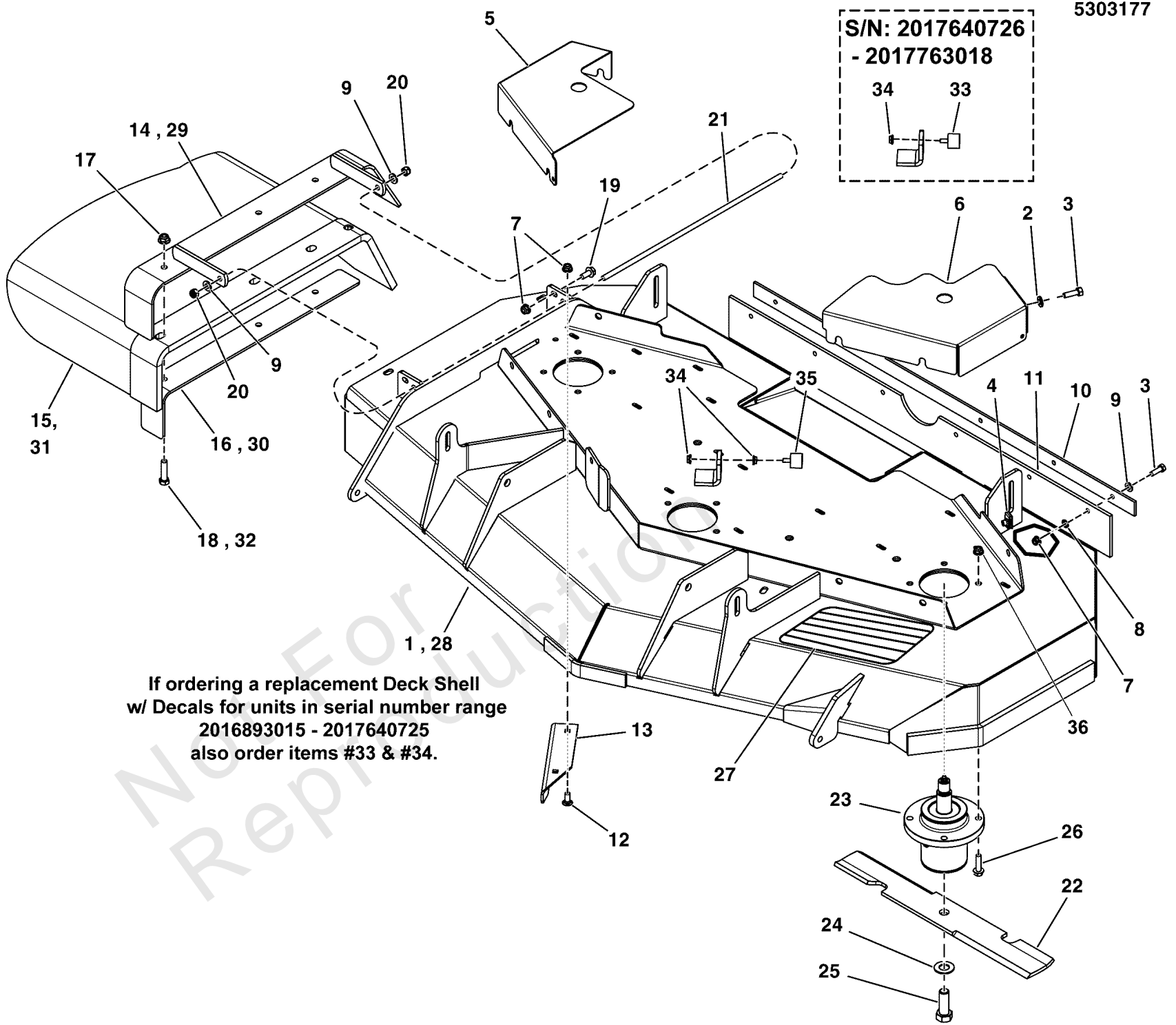
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# 52" Mower Deck - Housing, Covers, Spindles & Blades

Note: Unless noted otherwise, use the standard torque specifications

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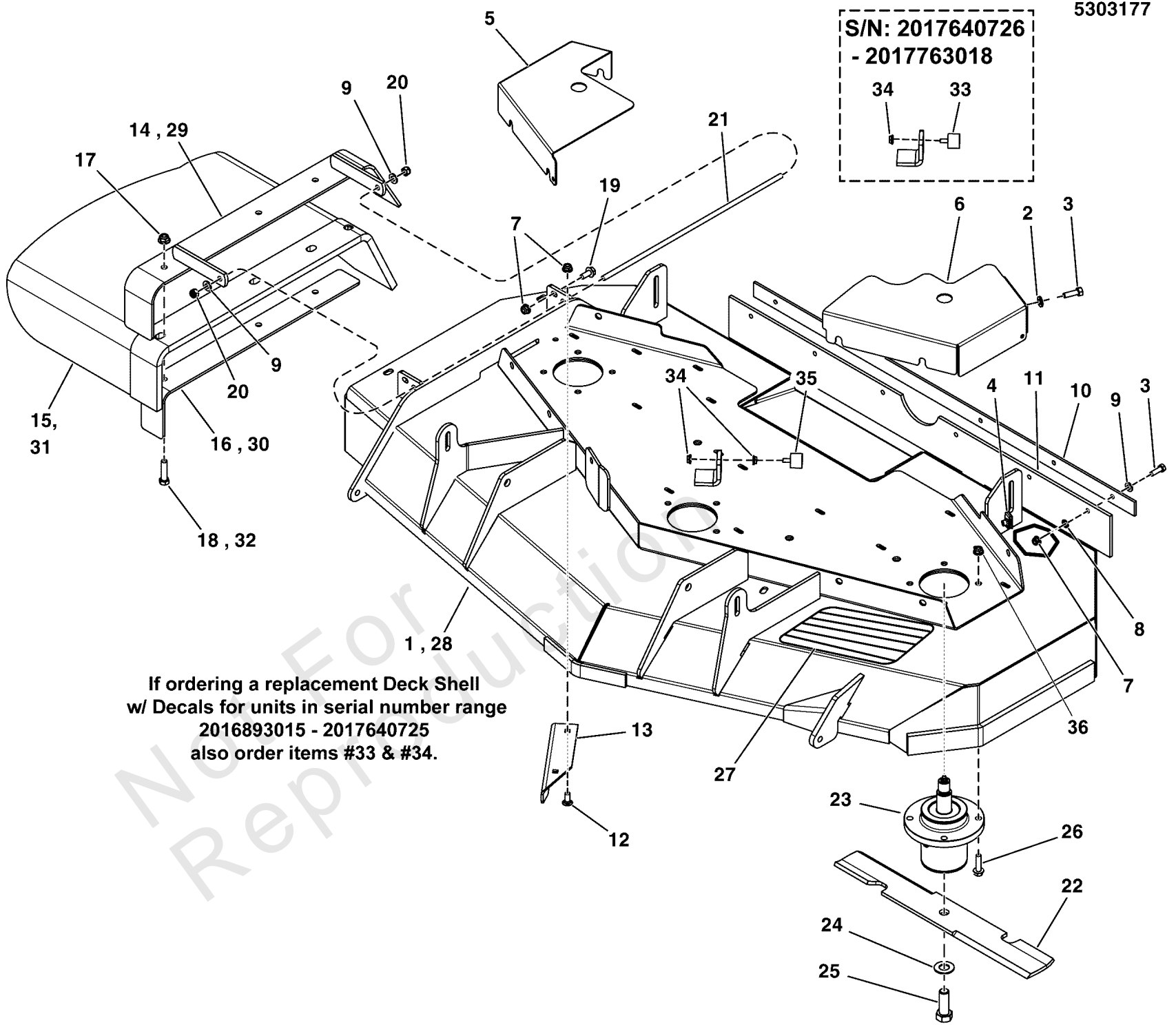
## 52" Mower Deck - Housing, Covers, Spindles & Blades

REF NO	PART NO	QTY	DESCRIPTION
1	5600652	1	DECK SHELL W/ DECALS, 52, IS700Z (SV) -(5410273B)(S/N: 2016893014 & Below)
1	5600810	1	DECK SHELL W/DECALS, 700-52 (5422053B) -(5422053B)(S/N: 2016893015 & Above)
2	5025155	6	WASHER, 5/16" SAE
3	5025011X8	6	BOLT, 5/16-18 X 1 GD5 YZ -(Qty: 12 - S/N: 2017612049 & Below)
4	5022308	6	BODY CLIP, 5/16-18-7GA MATERIAL
5	5415634B	1	GUARD, RH 52", 560/700/125
6	5410492B	1	GUARD, 52 DECK, IS700, LH - RED
7	5025392	3	NUT, 5/16-18 HEX NYLOCK FLANGE -(Qty: 21 - S/N: 2017612049 & Below)
8	5025498	6	5/16 PUSH-ON NUT RETAINER, STL, CZ -(S/N: 2017612049 & Below)
9	5025155	2	WASHER, 5/16" SAE -(Qty: 8 - S/N: 2017612049 & Below)
10	5405238A	1	PLATE, SUPPORT - BLK -(S/N: 2017612049 & Below)
11	5102015	1	FLAP, STRIPER, 52 DECK -(S/N: 2017612049 & Below)
12	5025145X6	2	BOLT, 5/16-18 X 3/4, CARRIAGE
13	5405557A	1	PLATE, DEFLECTOR, 52 DECK - BLK
14	5410498A	1	WELD, FRAME, CHUTE, 52 - BLK -(S/N: 2017100600 & Below)
15	5410575YP	1	CHUTE, Discharge -(S/N: 2017100600 & Below)
16	5410404A	1	SUPPORT, DISCHARGE CHUTE, 52 - BLK -(S/N: 2017100600 & Below)
17	5025394	3	NUT, 3/8-16 HEX NYLOCK FLANGE
18	5025013X12	3	BOLT, 3/8-16 X 1-1/2" GD5 CZ -(S/N: 2017100600 & Below)
19	5025011X6	1	BOLT, 5/16-18 X 3/4 GD5
20	5025045	2	NUT, 5/16-24 HEX NYLON LOCK
21	5061300	1	ROD, MOUNT, CHUTE 61, CZ
22	5101756S	3	BLADE, 18 X .25 X 2.5, 1 X 3.5 (SET OF 3)
23	5061095	3	ASSM, SPINDLE, LOW PROFILE -(Nut and Washer Sold Separately)
24	5025477	3	WASHER, 5/8 GRADE 8, YZ
25	5025320X14	3	BOLT, 5/8-11 X 1-3/4 GD8
26	5025390X10	12	BOLT, 3/8-16 X 1-1/4, FLANGE, GD 5, CZ
27	5101004	1	SAFETY WALK, 4.00 X 7.50
28	5600675	1	DECK SHELL W/DECALS, 52, IS700Z, ANSI-EXP (SV) -(5410273B)(S/N: 2016893014 & Below)
28	5600811	1	DECK SHELL W/DECALS, 700-52, (5422053B) -(5422053B)(S/N: 2016893015 & Above)
29	5413400A	1	WELD, MOUNT, DISCHARGE CHUTE - BLK -(S/N: 2017100601 & Above)
30	5413398A	1	SUPPORT, DISCHARGE CHUTE - BLK -(S/N: 2017100601 & Above)
31	84011105	1	CHUTE, RUBBER DISCHARGE (5104442) -(S/N: 2017100601 & Above)
32	5025146X12	3	BOLT, 3/8-16 X 1-1/2, CARRIAGE, GD5, CZ -(S/N: 2017100601 & Above)
33	5022673	1	BUMPER, RUBBER 1/4-20 -(S/N: 2017640726 - 2017763018)
34	5025126	2	NUT, 1/4-20 HEX SERR. FLANGE -(Qty: 1 - S/N: 2017640726 - 2017763018)

# 52" Mower Deck - Housing, Covers, Spindles & Blades

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## 52" Mower Deck - Housing, Covers, Spindles & Blades

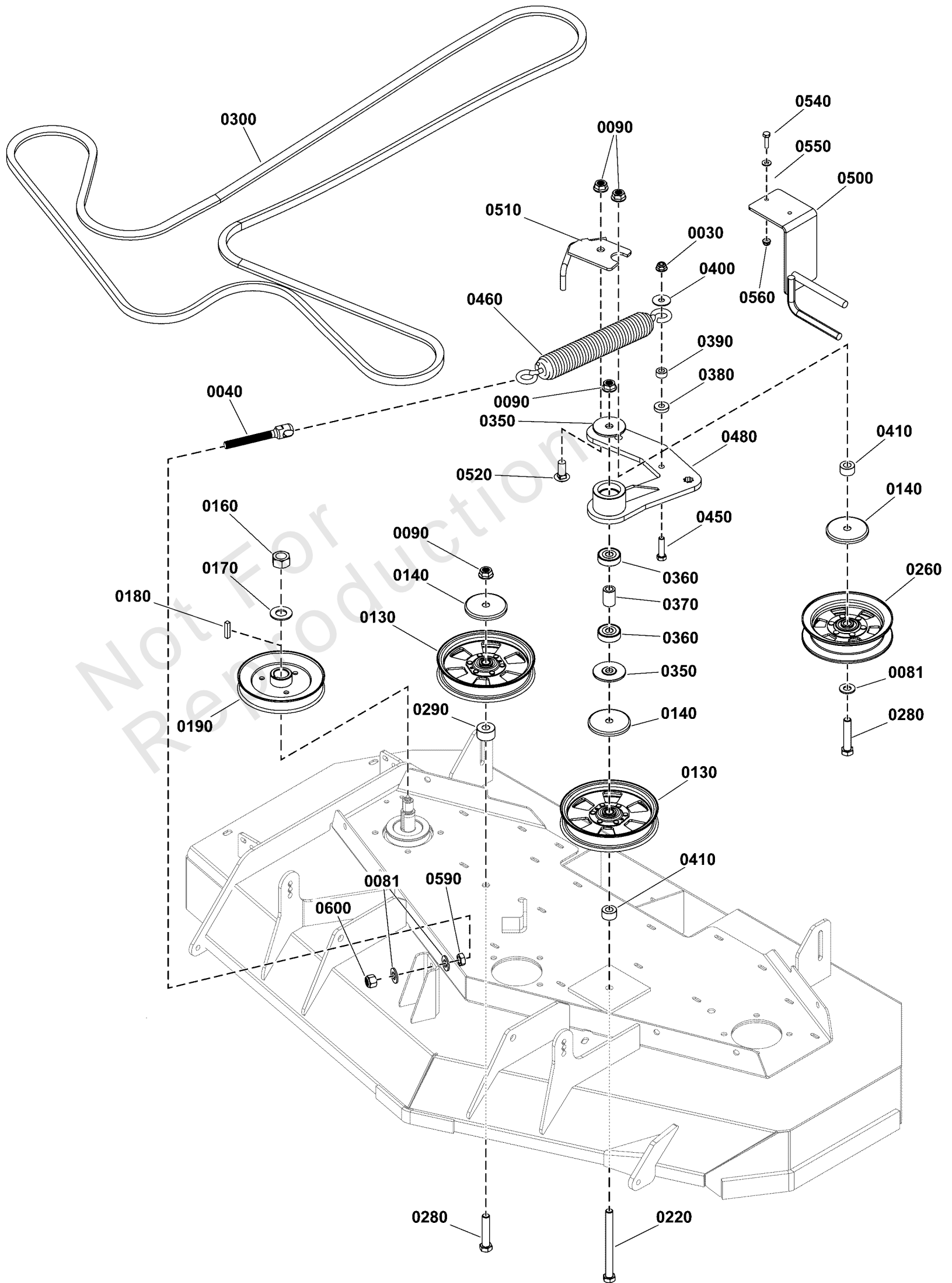
REF NO	PART NO	QTY	DESCRIPTION
35	5105237	1	BUMPER, RUBBER, 1/4-20 X 7/8" STUD -(S/N: 2017763019 & Above)
36	5025394	12	NUT, 3/8 - 16 HEX NYLOCK FLANGE

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# 52" Mower Deck - Pulleys, Belt, and Idler Arm S/N: 2018143579 and Above

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## 52" Mower Deck - Pulleys, Belt, and Idler Arm S/N: 2018143579 and Above

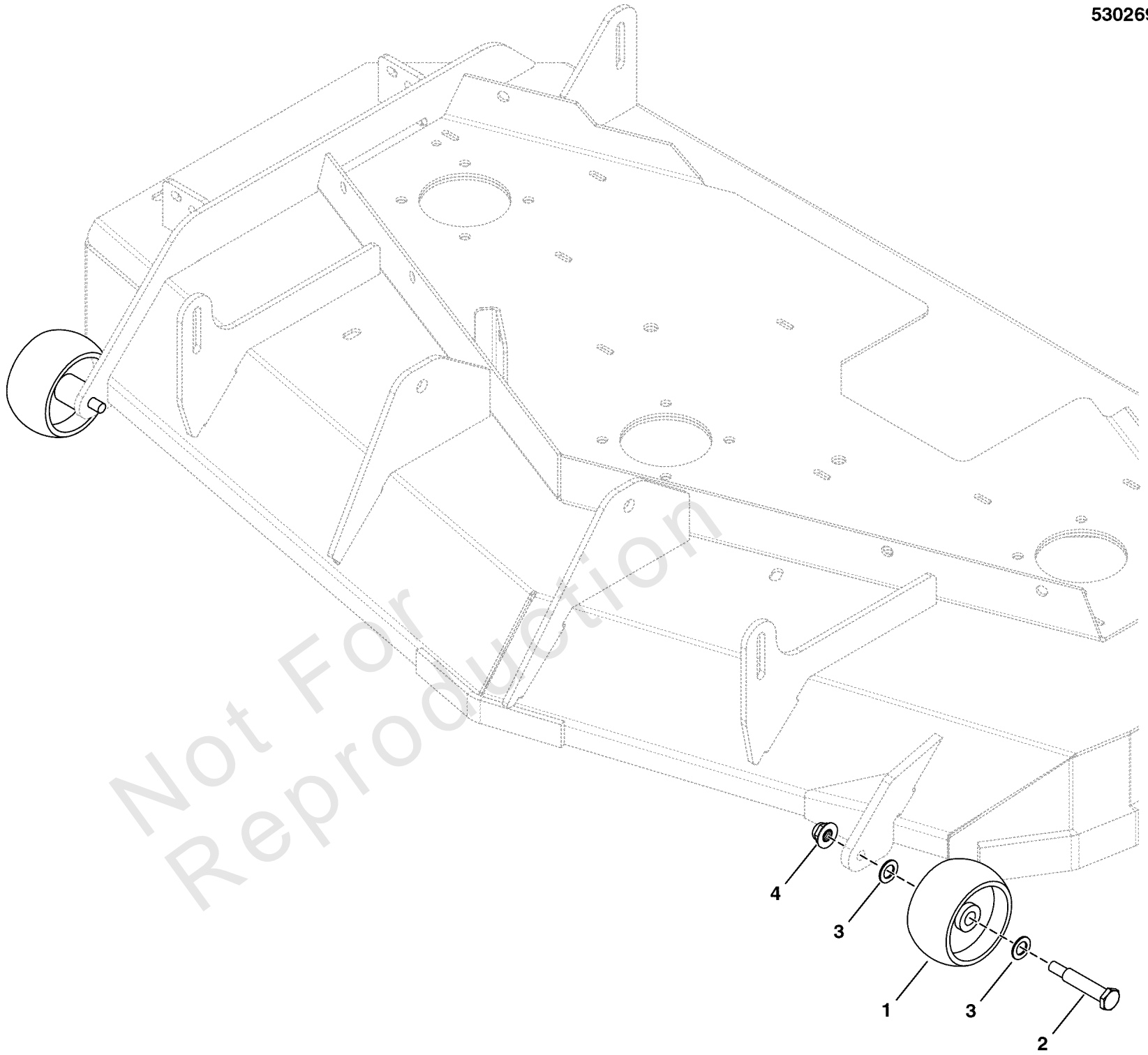
REF NO	PART NO	QTY	DESCRIPTION
0030	5025394	1	NUT, 3/8 - 16 HEX NYLOCK FLANGE
0040	5105844	1	SPRING PULLER, 1/2-20, 5.00
0081	5025158	3	WASHER, 1/2 SAE
0090	5025396	4	NUT, Hex Flange, Nylock, 1/2-13
0130	5104717	2	PULLEY, FLT IDLR, 6.0 X 1.0 X .50, CZ
0140	5105145	3	SHIELD, BEARING, 1/2 ID X 2-7/8 OD, CZ
0160	5025405	3	NUT, 3/4-16 Hex
0170	5025406	3	WASHER, 3/4 BELLEVILLE CL/ZC
0180	5050407X10	3	KEY, 1/4" SQ. X 1-1/4
0190	5101351	3	PULLEY, 5.926OB X .985ID, SINGLE B-SEC
0220	5025017X44	1	BOLT, 1/2-13 X 5-1/2" GD5 YZ
0260	5104716	1	PULLEY, IDLER, BACKSIDE, NOSEAM 6.25ODX.5ID
0280	5025017X20	2	BOLT, 1/2-13 X 2-1/2" GD5 CZ
0290	5047142	1	SPACER, .52 X 1.25 X .70, PM, CZ
0300	5103927	1	BELT, 5V, 162.40"EL, ARAMID WRPD, RC
0350	5104379	2	SPACER, IDLER ARM, 1/2 X 2.25
0360	5104383	2	BEARING, 6203-1/2", SEALED
0370	5104456	1	SPACER, .51 X .84 X 1.22, PM, CZ
0380	5044960	1	SPACER, .39 X 1.00 X .25, PM, CZ
0390	5044933	1	SPACER, .39 X .75 X .38, PM, CZ
0400	5025165	1	WASHER, 3/8" Fender
0410	5101162	2	SPACER, .52 X 1.00 X .56, PM, CZ
0450	5025013X12	1	BOLT, 3/8-16 X 1-1/2" GD5 CZ
0460	5104166	1	SPRING, EXT, 1.5ODX12.25X.234WIRE BLK
0480	5415907AYP	1	IDLER, Arm
0500	5415938AA	1	WELD, CLUTCH BELT GUIDE - BLK
0510	84003145	1	GUIDE, BELT
0520	5025324X10	1	BOLT, CARRIAGE 1/2-13 X 1-1/4 GD.5
0540	5025010X8	2	BOLT, 1/4-20 X 1" GD5 CZ
0550	5025154	2	WASHER, 1/4 SAE
0560	5025391	2	NUT, 1/4-20 Hex Nylock Flange
0590	5025098	1	NUT, Hex, Nylon Lock, 1/2-20
0600	5025089	1	NUT, 1/2-20 Hex Jam

# 52" Mower Deck - Rollers

Note: Unless noted otherwise, use the standard torque specifications

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5302697



## 52" Mower Deck - Rollers

REF NO	PART NO	QTY	DESCRIPTION
1	1714760	2	WHEEL- 2.00 WIDE 3.88 DIA 0.531ID POLY
2	2108765	2	BOLT-WHEEL 3/8-16X2.781 .750 THRD
3	80003590	4	WASHER,.516IDX.875ODX.06,FLAT,ZC/CL
4	5025100	2	NUT, 3/8-16 HEX SIDE LOCK

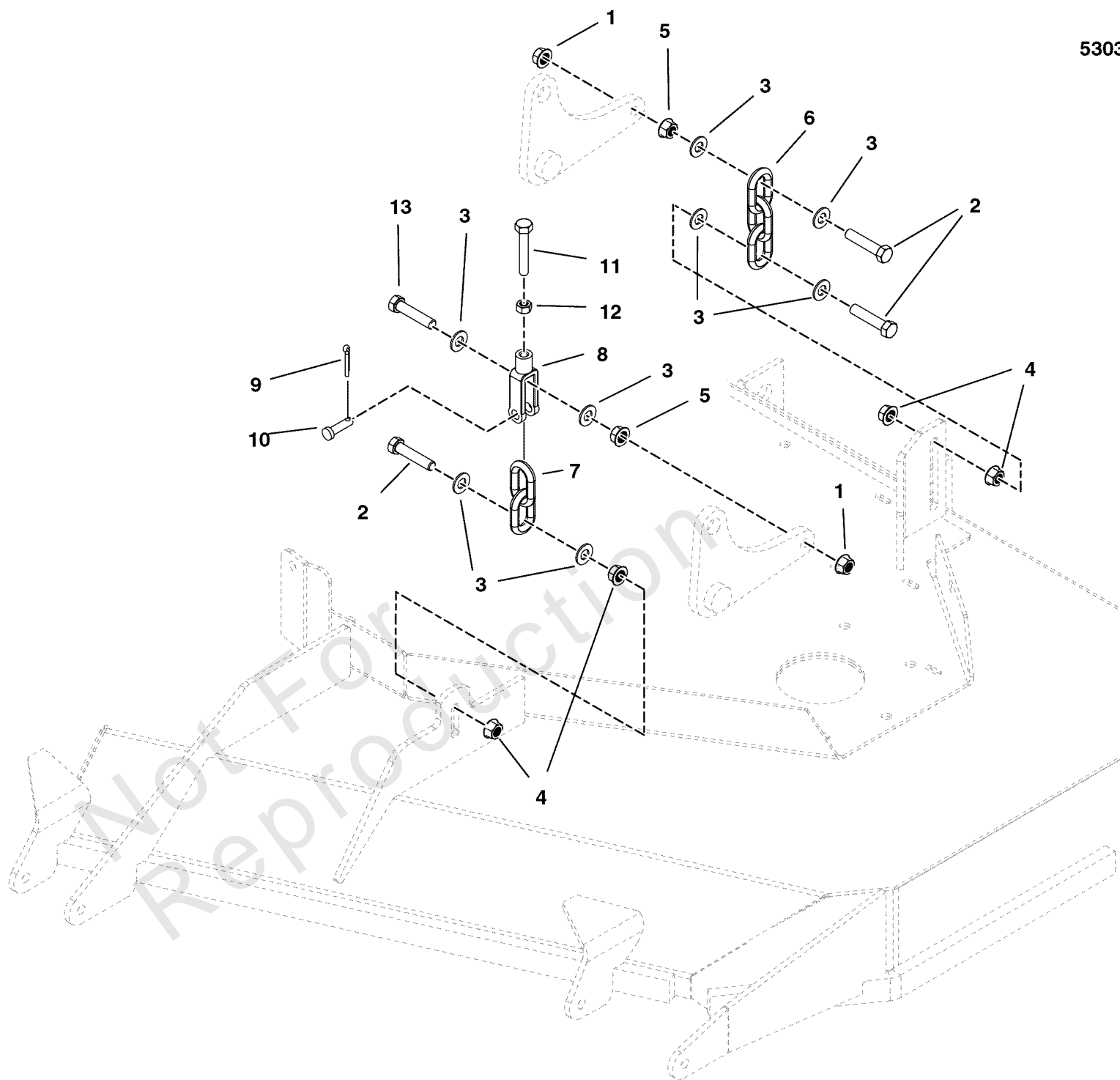
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# 52", 60", & 61" Mower Deck - Hanger Chains

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5902107

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## 52", 60", & 61" Mower Deck - Hanger Chains

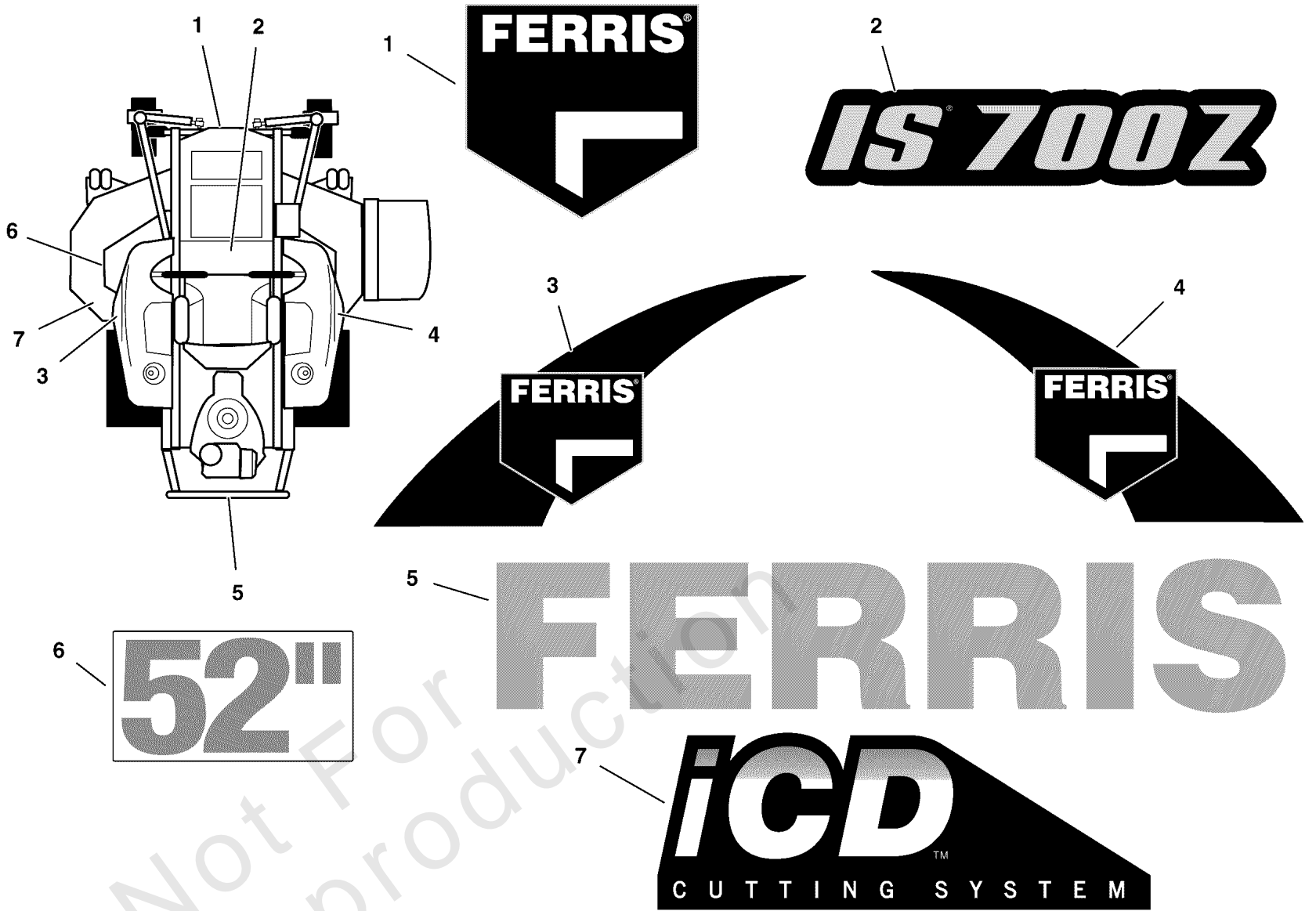
REF NO	PART NO	QTY	DESCRIPTION
1	5025394	4	NUT, 3/8-16 HEX NYLOCK FLANGE
2	5025013X14	6	BOLT, 3/8-16 X 1-3/4" GD5 CZ
3	5025156	16	WASHER, 3/8 SAE
4	5025128	8	NUT, 3/8-16 HEX SERRATED FLANGE
5	5025084	4	NUT, 3/8-16 HEX JAM
6	5050878X3	2	CHAIN, 5/16 GD30, 3 LINKS
7	5050878X2	2	CHAIN, 5/16 GD30, 2 LINKS
8	5100375	2	CLEVIS, 5/16-18, 3/8 PIN HOLE, CLR ZINC
9	80002736	2	PIN, 3/32 X 0.750, COT, ZINC/CLEAR
10	5025214X9	2	PIN, CLEVIS, 3/8 X 1-1/8, CZ
11	5025055X16	2	BOLT, 5/16-18 X 2 GD5 TFL
12	5025032	2	NUT, 5/16-18 HEX
13	80003522	2	HHCS, 3/8-16 X 2.00, GR5, ZINC/CLEAR

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**Decal Group - Brand and Model**

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5902107

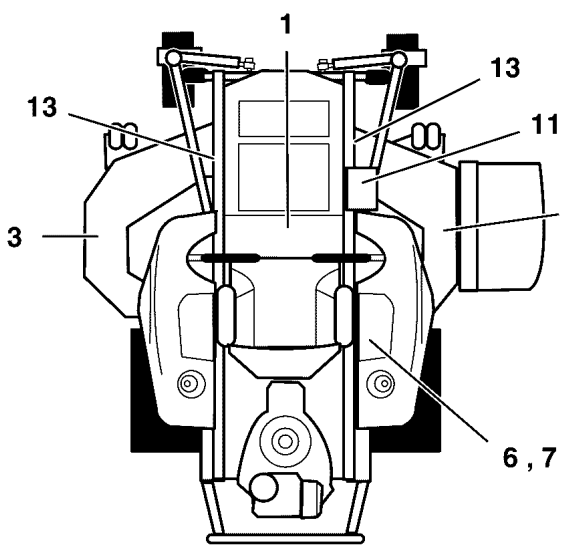


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### *Decal Group - Brand and Model*

REF NO	PART NO	QTY	DESCRIPTION
1	5104755FS	1	DECAL, BRAND
2	5104761FS	1	DECAL, MODEL
3	5109091	1	DECAL, TANK, SML, LH, FERRIS
4	5109092	1	DECAL, TANK, SML, RH, FERRIS
5	5103799	1	DECAL, FERRIS, 2.23" X 11.39"
6	5022812	1	DECAL, 52
7	5102210	1	DECAL, iCD CUTTING SYSTEM

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**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. Yard debris is combustible.

- Allow engine to cool for at least 3 minutes before refueling.
- Keep unit cleaned of yard 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**

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.
- Lock down, behind and to the side before changing directions.

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

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

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

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

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**

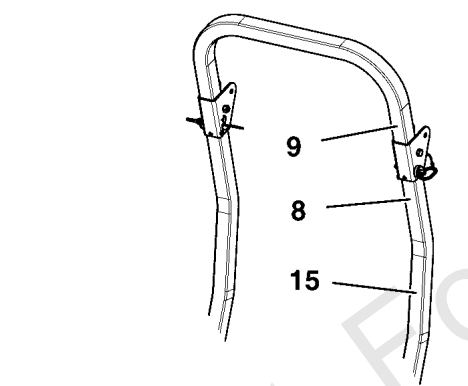
**Amputation and Pinch Point Hazard**

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

**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**

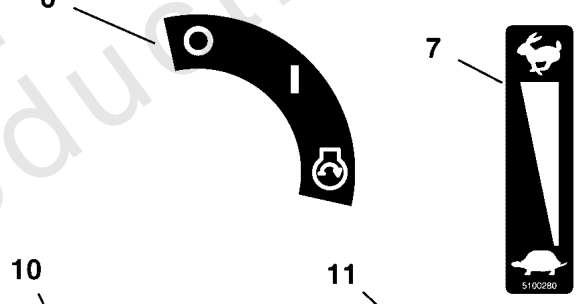
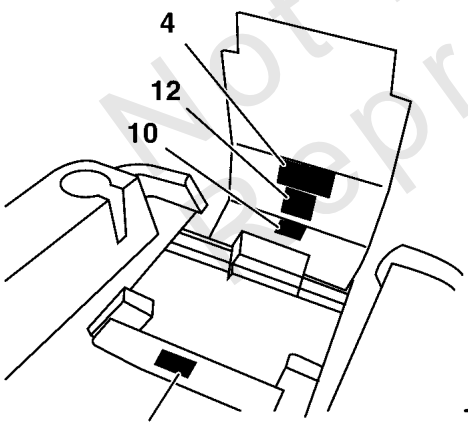
Transaxle Release Lever Location

**Ignition System (Gasoline Models)**  
This spark ignition system complies with Canadian standard ICES-002

**WARNING**

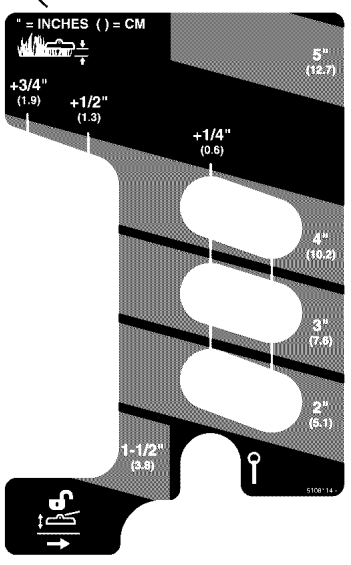
**Avoid serious injury or death from rollover.**

Do not operate without the rollbar installed and operational.



**HYDRAULIC OIL RESERVOIR**

USE SAE 20W-50 MOTOR OIL



**Belts & Blades**

Tractor	Part	Part Number
Tractor	Pump Drive Belt	5103653
	Deck Drive Belt	5103748
52" Mower	Mower Blade	5101756
	Deck Drive Belt	5103391
61" Mower	Mower Blade	5101755

**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.

**CAUTION**

**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.

**WARNING**

**PINCH POINT**

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

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

ECU	Clutch	Charge	Main
2A	15A	40A	30A

(Models with Kawasaki Fuel Injected Engines only.)



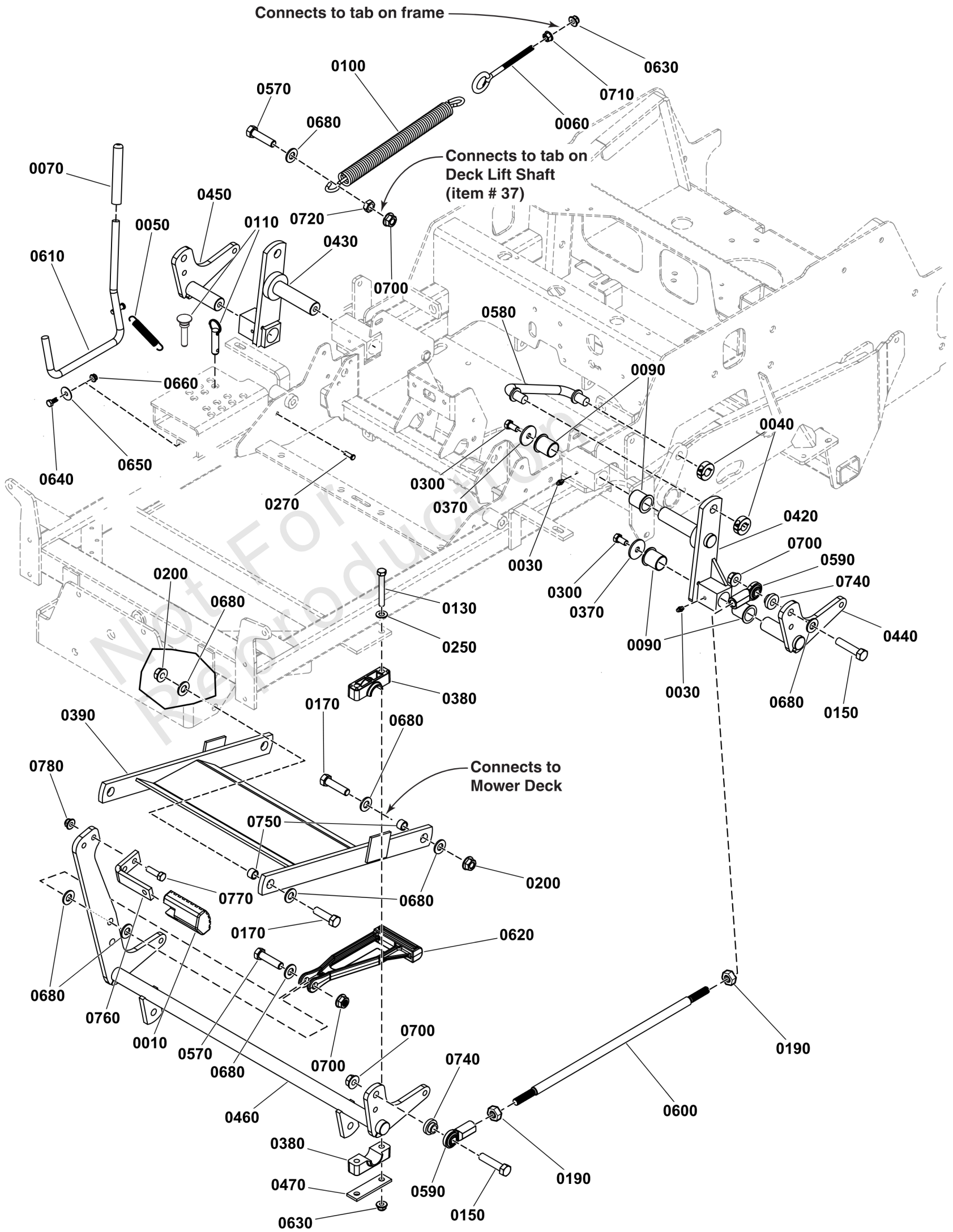
## Decal Group - Safety & Operation USA Models

REF NO	PART NO	QTY	DESCRIPTION
1	5103595	1	DECAL, MAIN SAFETY -(S/N: 4001737855 & BELOW)
1	84008252	1	DECAL, MAIN SAFETY -(S/N: 4001737856 & ABOVE)
2	5103184	1	DECAL, WARNING, HAND IN BELT, ENG ONLY
3	7101665	2	DECAL, DANGER DO NOT OPERATE W/O DEFLECT
4	5103725	1	DECAL, TRANSAXLE RELEASE, 600/700
5	5100683	2	DECAL, WARNING, ROLL BAR
6	5048970	1	DECAL, IGNITION SWITCH
7	5100280	1	DECAL, THROTTLE CONTROL
8	5104082	1	DECAL, WARNING, FOLDING ROLL BAR -(SV)
9	5100405	1	DECAL, WARNING OVERHANG, ROPS -(SV)
10	5100957	1	DECAL, HYDRAULIC OIL, SAE 20W50
11	5108114	1	DECAL, CUTTING HEIGHT
12	5103756	1	DECAL, BELT & BLADE, IS700Z/ZTS700
13	5061245	2	DECAL, PINCH POINT -(Qty: 1 for models with 52" mower deck)
14	5103619	1	DECAL, MANUAL AVAIL IN SPANISH
15	5104083	1	DECAL, CAUTION, FOLDING ROLL BAR -(SV)
16	5104809	1	DECAL, FUSE LOCATION, KAWI EFI -(Kawi EFI Models Only S/N: 2017612394 & Below)

# Deck Lift Group - S/N: 2017954956 & Above

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## Deck Lift Group - S/N: 2017954956 & Above

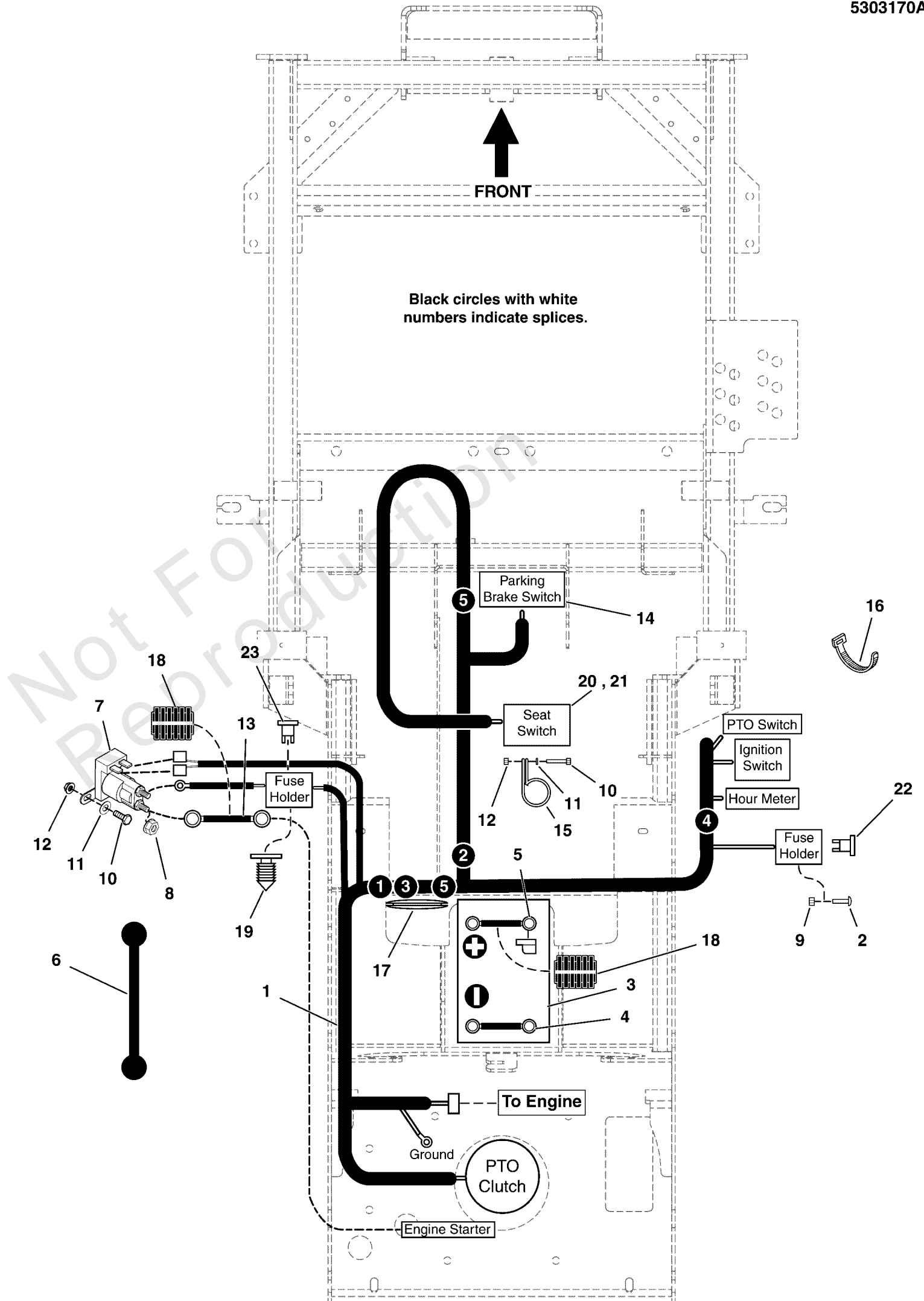
REF NO	PART NO	QTY	DESCRIPTION
0010	5104262	1	PEDAL, Rubber
0030	5020095	4	GREASE FITTING, 1/4-28 Straight
0040	5020441	4	COLLAR, 5/8" Split
0050	5010213	1	SPRING-EXT, .740 ODX2.025LGX.072WR, BLK
0060	5025429	1	EYEBOLT, 3/8-16 X 4, 2.13THRD, .75EYE, C
0070	5021880	1	GRIP, FOAM, .475 X 4.35 X .095
0090	5023343	8	BUSHING, 1.00 X 1.13 X 1.38, Plastic
0100	5023355	1	SPRING-EXT, 1.00 ODX13.25LGX.177WR, BLK
0110	5023498SM	1	PIN, HITCH, 1/2 X 2.0 -(Pin Style: Regular Deck Lift Pin)
0110	84008180	1	PIN, Magnetic Deck Lift -(Pin Style: Magnetic Deck Lift Pin)
0130	5025013X22	4	BOLT, 3/8-16 X 2-3/4" GD5 CZ
0150	703856	4	CAPSCREW, Hex Head, 1/2-13 X 2 1/4, GR5
0170	5025018X14	4	BOLT, 1/2-20 X 1-3/4" GD8 CZ
0190	5025089	4	NUT, 1/2-20 Hex Jam
0200	5025098	4	NUT, Hex, Nylon Lock, 1/2-20
0250	5025156	6	WASHER, 3/8 SAE
0270	5025212X4	1	PIN, CLEVIS, 1/4 X 1/2, PLATED
0300	5025443	4	BOLT, 3/8-16 X 3/4, PLT W/PATCH
0370	5100548	4	WASHER, .390 X 1.50 X .109, YZ
0380	5100634	4	PIVOT BLOCK, PLASTIC
0390	5410213A	1	WELD, PULLER BAR, IS700Z - BLK
0420	5105172	1	ASSM, DECK COMP LINK, LH-CAST
0430	5105173	1	ASSM, DECK COMP LINK, RH-CAST
0440	5401671A	1	WELD, DECK LIFT LEVER, LH - BLK
0450	5401672A	1	WELD, DECK LIFT LEVER, RH - BLK
0460	5412701A	1	WELD, DECK LIFT SHAFT - BLK
0470	5403925A	2	PLATE, PIVOT BLOCK SUPPORT - BLK
0570	5025017X16	2	BOLT, 1/2-13 X 2" GD5 CZ
0580	5103703	2	ROD, SUSPENSION LINK, IS700, CZ
0590	1702779	4	JOINT-BALL .500-20 THD .500ID, CLR ZINC
0600	5103758	2	ROD, DECK LIFT, 19.25, CZ
0610	84010944	1	KIT, Latch w/Grip
0620	5104133	1	LINK, DECK LIFT, CAST IRON
0630	5025394	6	NUT, 3/8 - 16 HEX NYLOCK FLANGE
0640	-----	2	HHCS, 1/4-20 X 0.625, GR5, ZINC/CLEAR
0650	5025288	2	WASHER, 1/4" Fender
0660	5025391	2	NUT, 1/4-20 Hex Nylock Flange
0680	5025158	14	WASHER, 1/2 SAE
0700	5025396	6	NUT, Hex Flange, Nylock, 1/2-13
0710	5025128	1	NUT, 3/8-16 Hex Large Serrated Flange
0720	5025301	1	NUT, Hex, Jam, 1/2-13
0740	5045023	4	SPACER, .52 X 1.00 X .44, CZ
0750	5020870	4	INSERT, Bearing
0760	5061569A	1	PEDAL, FOOT - BLK
0770	5025013X10	2	BOLT, 3/8-16 X 1-1/4" GD5 CZ
0780	5025394	1	NUT, 3/8 - 16 HEX NYLOCK FLANGE

# Electrical Group - Briggs & Stratton S/N: 2017612395 & Above

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5902107

5303170A



## Electrical Group - Briggs & Stratton S/N: 2017612395 & Above

REF NO	PART NO	QTY	DESCRIPTION
1	5416016	1	WIRE HARNESS, MAIN, SM, ZTR -(S/N: 2017954955 & Below)
1	5105536	1	HARNESS, Wiring, Small ZTR -(S/N: 2017954956 & Above)
2	5025299X6	2	USE 5106757 - SCREW,1/4-20X3/4, ZINC
3	-----	1	BATTERY, 11U1L, 350 CCA
4	5047690	1	BATTERY CABLE, NEG, 14, 5/16-13/32
5	5021405	1	BATTERY CABLE, POS, 22, 1/4-5/16
6	1722009	1	STRAP, BATTERY, 14 LONG, Rubber
7	1755382	1	SOLENOID, STD-BRACKET, 2-SPADE
8	80003921	2	NUT,1/4-20,KEPS,CONICAL WSHR,ZC/CL
9	5025033	2	NUT, Hex, 5/16-24
10	5025010X6	4	BOLT, 1/4"-20 X 3/4" GD5 YZ
11	5025154	4	WASHER, 1/4 SAE
12	5025391	5	NUT, 1/4-20 Hex Nylock Flange
13	5023488	1	BATTERY CABLE, POS, 22, 1/4-5/16
14	7022886	1	SWITCH, DP NO/NC SNAP-IN
15	5021500	3	CLAMP, VINYL INSULATED, 1.00
16	5021029	9	TIE, SELF-LOCKING, 12" -(Secures wire harness to wire carrier rod).
17	5102677	1	GROMMET, 1-1/2" ID FOR 1/4" METAL -(S/N: 2018023894 & Below)
18	5050927X18	2	WIRE LOOM, 3/8 ID X 18 IN
19	5103761	1	FIR TREE MOUNT, PACKARD
20	5100540	1	SWITCH, NC, W/ BOLT-IN BASE -(SV)
21	5100541	1	SWITCH, NC, W/ TWIST-IN BASE -(SV)
22	5101935	1	FUSE, ATO-15 (15 AMP)(SV) -(SV)
23	5021603	1	FUSE, ATO-20 (20 AMP)(SV) -(SV)

# Electrical Schematic - Charging Circuit B&S 44T977, 49T877 S/N: 2017954956 & Above

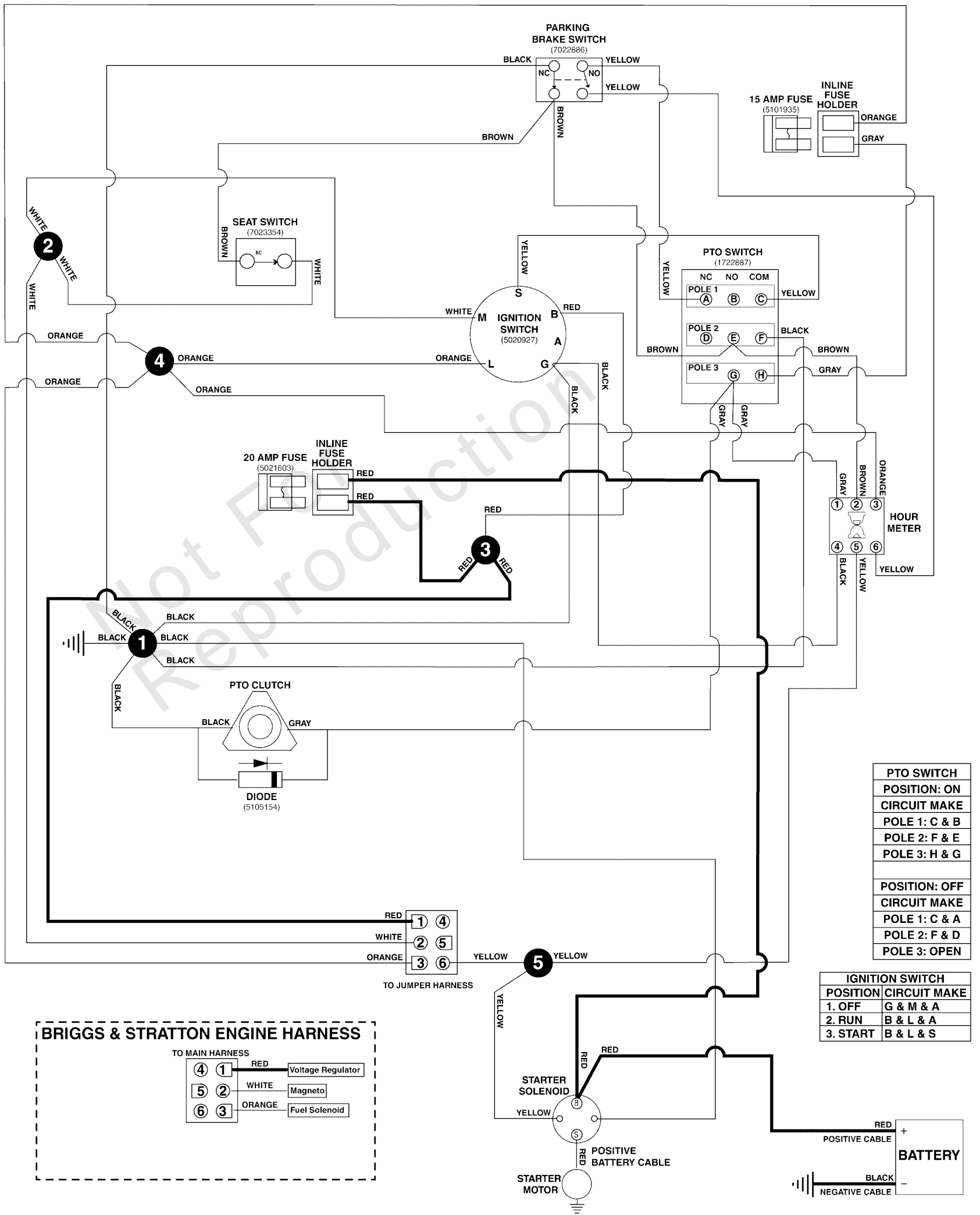
Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5902107

## 5105536 MAIN WIRE HARNESS - BRIGGS & STRATTON 44T977, 49T877 ENGINES

5105536A

(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.)



**Electrical Schematic - Charging Circuit B&S 44T977, 49T877 S/N: 2017954956 & Above**

REF NO	PART NO	QTY	DESCRIPTION
5105536	5105536	1	HARNESS, Wiring, Small ZTR

Not For Reproduction

# Electrical Schematic - Cranking Circuit B&S 44T977, 49T877 S/N: 2017954956 & Above

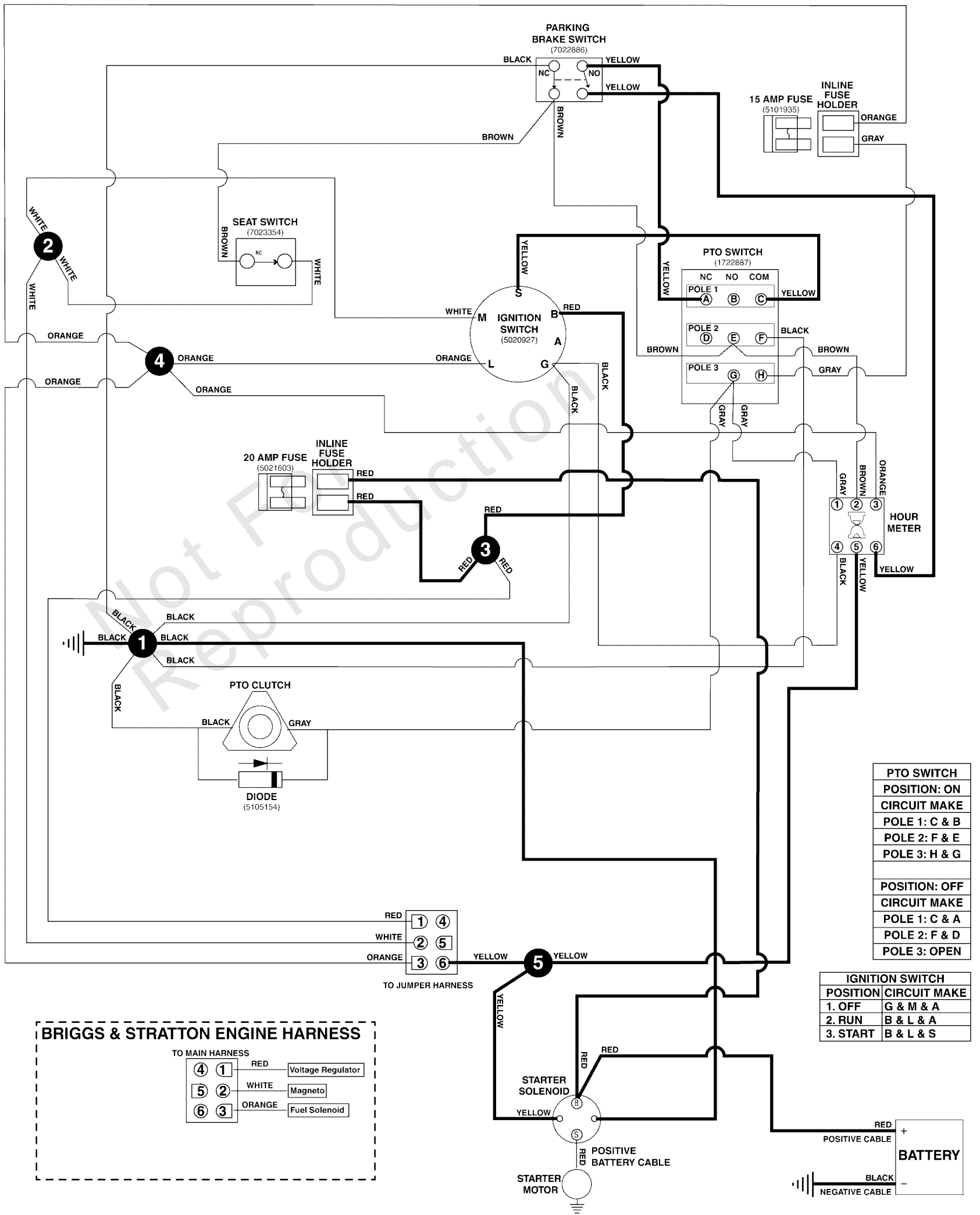
Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5902107

## 5105536 MAIN WIRE HARNESS - BRIGGS & STRATTON 44T977, 49T877 ENGINES

5105536A

(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.)





**Electrical Schematic - Cranking Circuit B&S 44T977, 49T877 S/N: 2017954956 & Above**

REF NO	PART NO	QTY	DESCRIPTION
5105536	5105536	1	HARNESS, Wiring, Small ZTR

Not For Reproduction

# Electrical Schematic - Ign. Grounding Circuit/Op. Pres. B&S 44T977, 49T877 S/N:

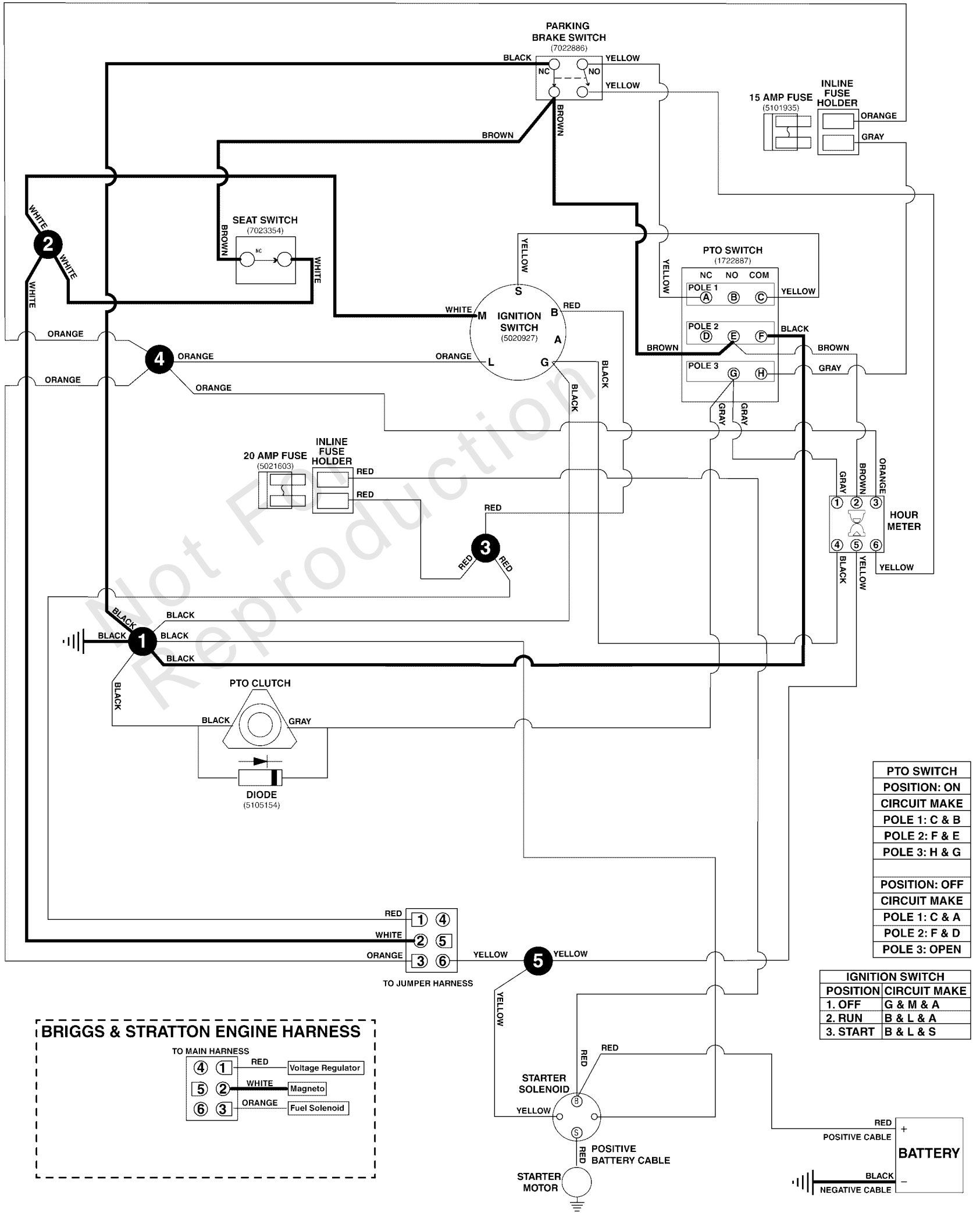
Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5902107

## 5105536 MAIN WIRE HARNESS - BRIGGS & STRATTON 44T977, 49T877 ENGINES

5105536A

(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.)



**Electrical Schematic - Ign. Grounding Circuit/Op. Pres. B&S 44T977, 49T877 S/N:**

REF NO	PART NO	QTY	DESCRIPTION
5105536	5105536	1	HARNESS, Wiring, Small ZTR

Not For Reproduction

# Electrical Schematic - PTO Clutch Circuit B&S 44T977, 49T877 S/N: 2017954956 &

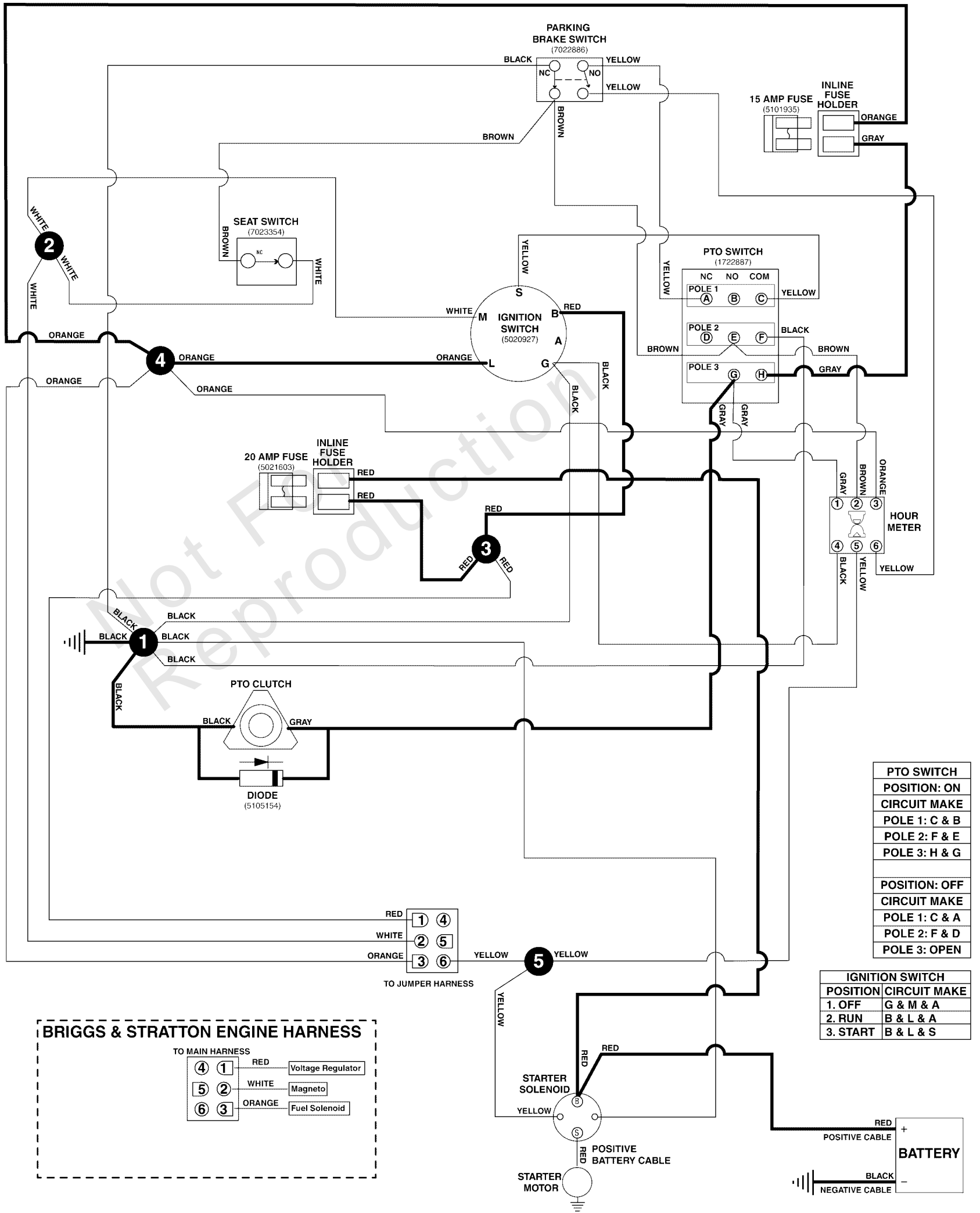
Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5902107

## 5105536 MAIN WIRE HARNESS - BRIGGS & STRATTON 44T977, 49T877 ENGINES

5105536A

(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.)



**Electrical Schematic - PTO Clutch Circuit B&S 44T977, 49T877 S/N: 2017954956 &**

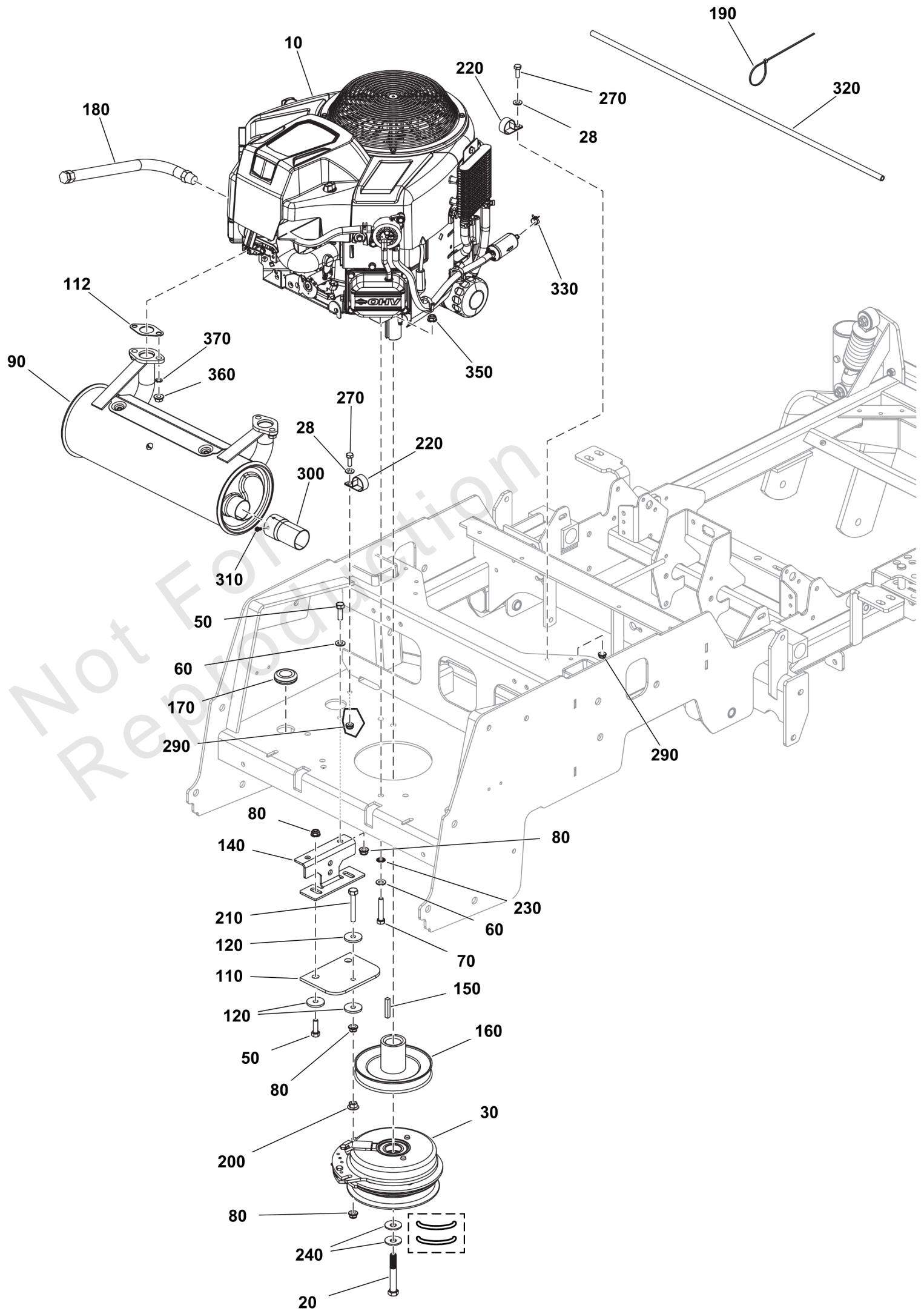
REF NO	PART NO	QTY	DESCRIPTION
5105536	5105536	1	HARNESS, Wiring, Small ZTR

Not For Reproduction

# Engine and PTO Group - Briggs & Stratton CXi

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5902107



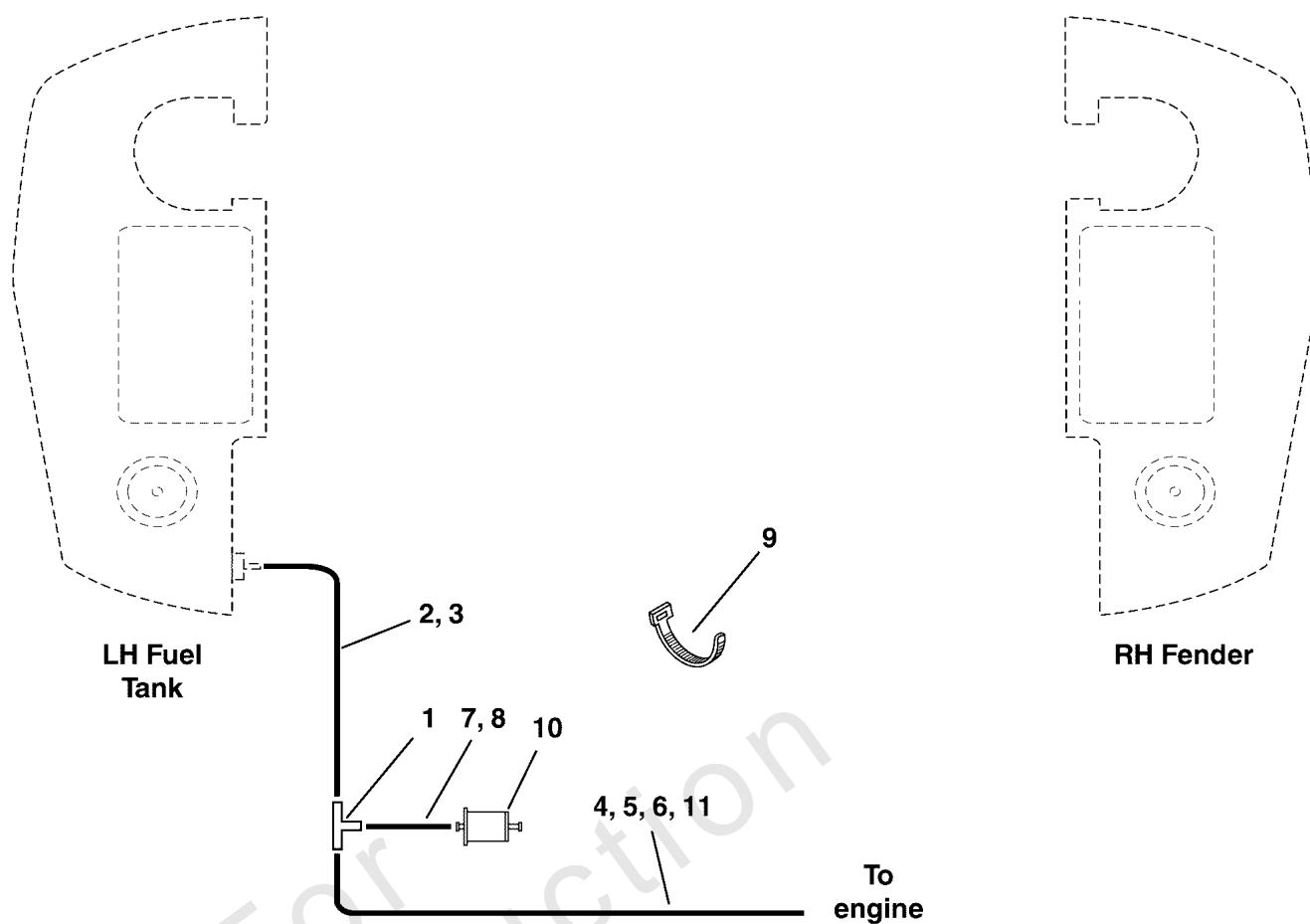
## Engine and PTO Group - Briggs & Stratton CXi

REF NO	PART NO	QTY	DESCRIPTION
10	-----	1	ENGINE, Briggs & Stratton CXi, 49T877-0046-G1
20	5102866YP	1	BOLT, CRANKSHAFT, 7/1
28	84007033	3	WASHER
30	5105090YP	1	CLUTCH
50	5025011X8FS	4	BOLT
60	703350	6	WASHER
70	5025025X14YP	4	BOLT
80	5025392FS	6	NUT
90	706900	1	MUFFLER, RIGHT OUTLET
110	5043636SM	1	CLUTCH ANCHOR PAD
112	690970	2	GASKET, Exhaust
120	5044617SM	4	WASHER, .34 X 1.25 X
140	5410367AYP	1	ANCHOR, CLUTCH
150	5022726YP	1	KEY 1/4 SQ X 1 1/2
160	5105108YP	1	PULLEY-CRANKSHAFT
170	5021379SM	1	GROMMET, 7/8
180	5048681SM	1	HOSE, OIL DRAIN
190	5101492YP	1	TIE, SELF-LOCKING, 24"
200	5025139SM	1	NUT, 5/16-18 HEX SERR
210	5025055X18YP	1	BOLT, 5/16-18 X 2-1/4
220	5021500FS	3	CLAMP
230	5025188SM	4	WASHER, 5/16" INT. TO
240	5025585YP	2	BELLEVILLE WASHER
270	5025010X6SM	3	BOLT, 1/4-20 X 3/4" G
290	5025391FS	3	NUT
300	5104348YP	1	EXTENSION, TAILPIPE
310	5025470YP	2	SCREW, SELF-TAP, #8-32
320	5050831X29SM	1	HOSE, 1/4" FUEL, 29.00"
340	5101073SM	1	CABLE, THROTTLE, 42
330	691038	2	CLAMP, Hose
350	5025616YP	4	NUT
360	690941	4	NUT
370	5023217SM	4	WASHER, 5/16 LIGHT LO

# EVAP Group - S/N : 2016816350 & Above

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5902107



5303807,  
5303808,  
5303811



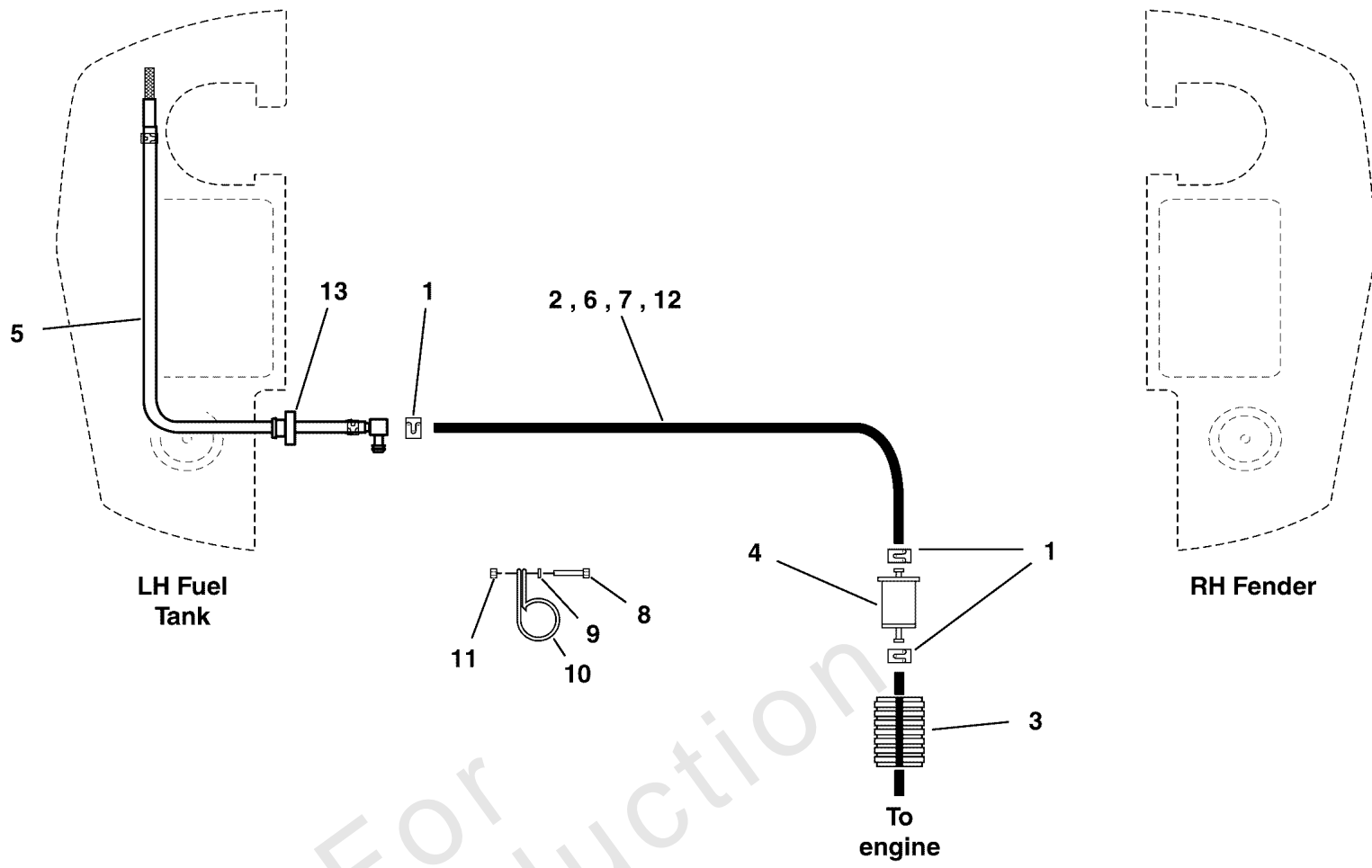
## EVAP Group - S/N : 2016816350 & Above

REF NO	PART NO	QTY	DESCRIPTION
1	5103062	1	FITTING, 3/16" TEE, BARB TYPE, HDPE
2	7700552X29	1	HOSE, VAPOR, 5MM ID, 29.00 LG -(Models equipped with B&S Commercial Turf Engines Only)
3	7700552X18	1	HOSE, VAPOR, 5MM ID, 18.00 LG -(Models equipped with Kawasaki Engines Only)
4	7700552X12	1	HOSE, VAPOR, 5MM ID, 12.00 LG -(Models equipped with B&S Commercial Turf Engines Only)
5	7700552X16	3	HOSE, VAPOR, 5MM ID, 16.00 LG -(Models equipped with Vanguard Engines Only)
6	7700552X20P5	1	HOSE, VAPOR, 5MM ID, 20.50 LG -(Models equipped with Kawasaki Carbureted Engines Only)
7	7700552X2	1	HOSE, VAPOR, 5MM ID, 2.00 LG -(Models equipped with B&S Commercial Turf Engines Only)
8	7700552X16	1	HOSE, VAPOR, 5MM ID, 16.00 LG -(Models equipped with Kawasaki Engines Only)
9	5021030	3	TIE, SELF-LOCKING, 6" -(Qty: 4 on models equipped with Kawasaki Engines)
10	80025019	1	FILTER, FUEL
11	7700552X21	1	HOSE, VAPOR, 5MM ID, 21.00 LG -(Models equipped with Kawasaki Fuel Injected Engines Only)

# Fuel Supply Hose & Tank Replacement Parts

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5902107



Not For  
Reproduction

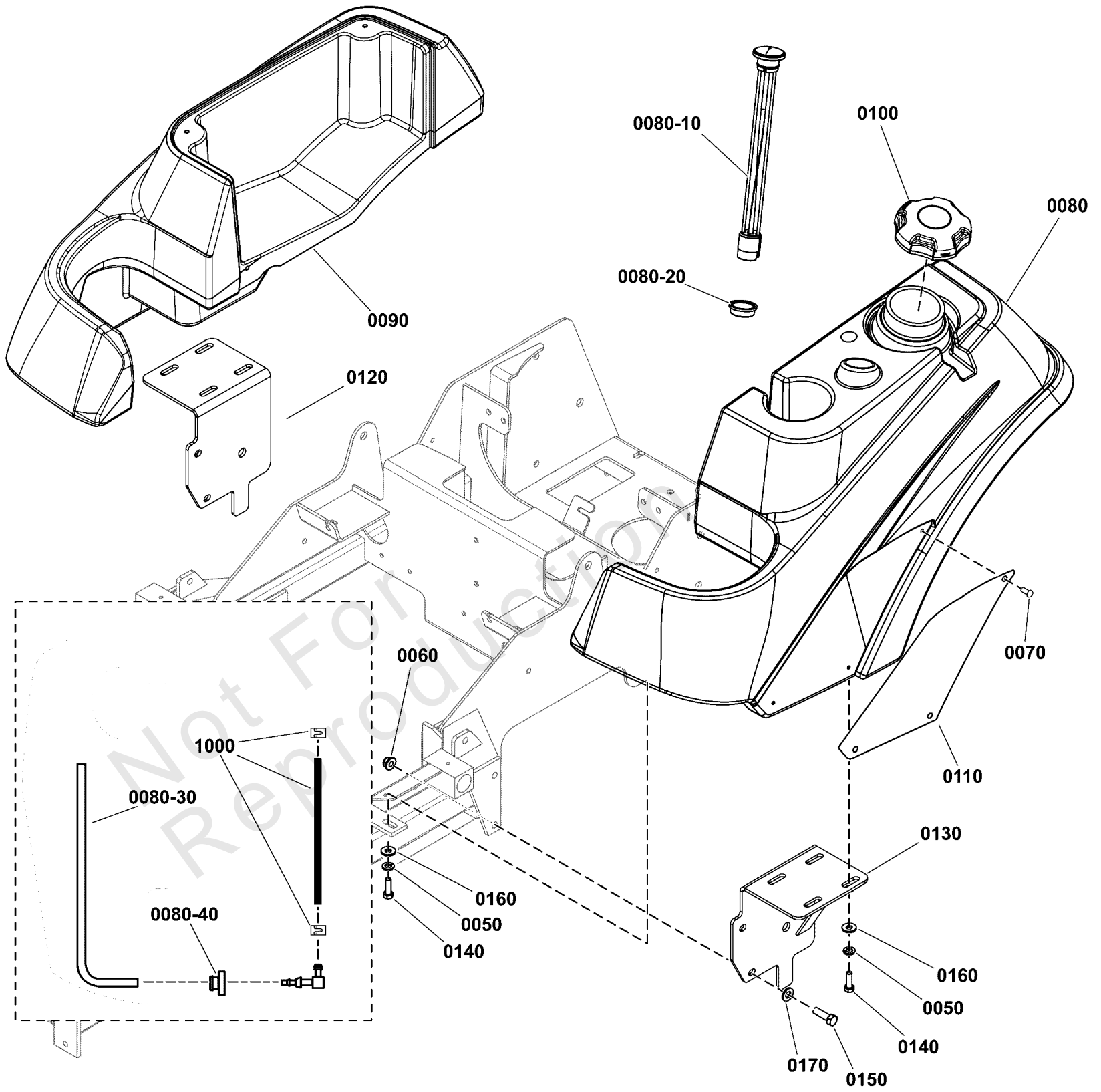
## Fuel Supply Hose & Tank Replacement Parts

REF NO	PART NO	QTY	DESCRIPTION
1	93807	2	CLAMP, Hose
2	5050831X29	1	1/4" Fuel Line, 29" Long -(Briggs & Stratton Commercial Turf Engines Only)
3	5050833X13	1	WIRE LOOM, 1/2 ID, 13.00 LONG -(Briggs & Stratton Commercial Turf Engines Only)
4	5021178X3	1	FUEL FILTER (SV) -(SV)
5	5101149	1	PICKUP TUBE ASM, FUEL TANK, 22" -(SV)
6	5050831X9	1	HOSE, 1/4" FUEL, 9.00" -(Kawasaki Carbureted Engines Only)
7	5050831X22P5	1	HOSE, 1/4" FUEL, 22.50" -(Briggs & Stratton Vanguard Engines Only)
8	5025010X6	2	BOLT, 1/4"-20 X 3/4" GD5 YZ -(Briggs & Stratton Commercial Turf & Kawasaki EFI Engines Only)
9	5025154	2	WASHER, 1/4 SAE -(Briggs & Stratton Commercial Turf & Kawasaki EFI Engines Only)
10	5021500	2	CLAMP, VINYL INSULATED, 1.00 -(Briggs & Stratton Commercial Turf & Kawasaki EFI Engines Only)
11	5025391	2	NUT, 1/4-20 Hex Nylock Flange -(Briggs & Stratton Commercial Turf & Kawasaki EFI Engines Only)
12	5050831X34	1	HOSE, 1/4" FUEL, 34.00" -(Kawasaki EFI Engines Only)
13	1726400	1	BUSHING-FUEL TANK RED RUBBER

# Fuel Tank & Mount Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5902107



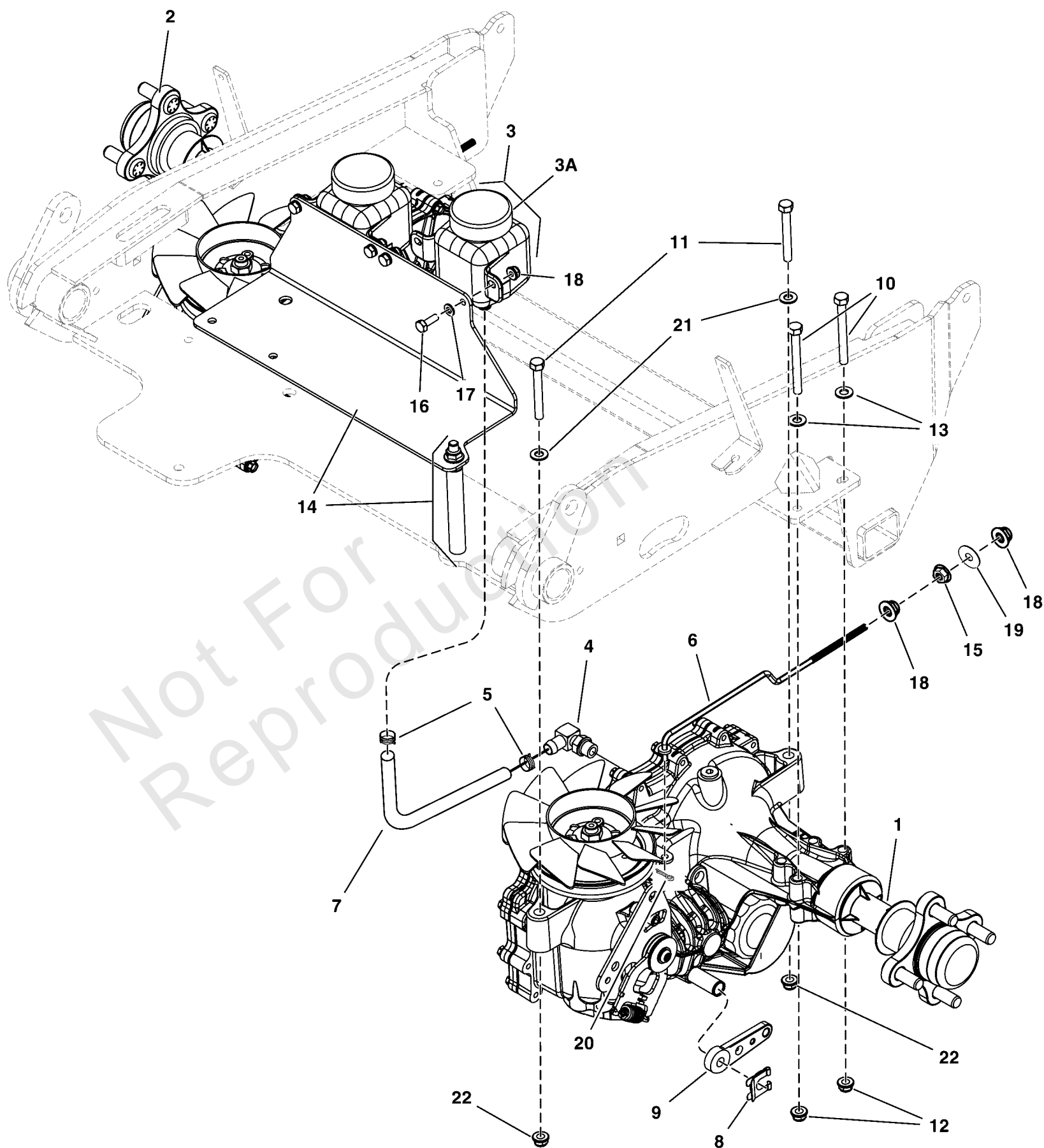
## Fuel Tank & Mount Group

REF NO	PART NO	QTY	DESCRIPTION
0050	5025170	10	WASHER, 5/16 LOCK CZ
0060	5025394	4	NUT, 3/8 - 16 HEX NYLOCK FLANGE
0070	5025386	6	SCREW, Allen Head, #10-24 x 3/8"
0080	5103176	1	TANK, FUEL - LH, IS500 & IS1500
0080-10	5022917	1	GAUGE, FUEL, 12
0080-20	5022917X1	1	GROMMET, FUEL GAUGE (SV)
0080-30	5101149	1	PICKUP TUBE ASM, FUEL TANK, 22" -(SV)
0080-40	1726400	1	BUSHING-FUEL TANK RED RUBBER -(SV)
0080-50	799624	1	GROMMET -(Not illustrated. This grommet is used to seat the remote vent assembly into the fuel tank.)
0080-60	770046	1	REMOTE VENT ASSEMBLY -(Not illustrated. This remote vent assembly connects to the evap lines.)
0090	5049948	1	TANK, FENDER, CITATION/ZT4000 - RH
0100	5103005	1	FUEL CAP, 3-1/2", MANAGED VENT OUT, 12"
0110	5400250B	2	PLATE, BADGE - IS1500 - RED
0120	5409854A	1	WELD, TANK MOUNT, RH - BLK
0130	5409856A	1	WELD, TANK MOUNT, LH - BLK
0140	5025011X6	10	BOLT, 5/16-18 X 3/4 GD5
0150	5025013X10	4	BOLT, 3/8-16 X 1-1/4" GD5 CZ
0160	5025292	10	WASHER, 5/16 GRADE 9, FLAT
0170	5025293	4	WASHER, 3/8" GR. 9 FLAT
1000	-----	1	Refer to: Engine & PTO Group

# Hydraulic Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5902107



## Hydraulic Group

REF NO	PART NO	QTY	DESCRIPTION
1	5106642	1	TRANSAXLE, ZT3200, LH, ZJ-KYEF-8T7C-1GRX -(S/N: 4001547047 and below)
1	5109254	1	TRANSAXLE, ZT-3200, LH,ZJ-KYEF-9T7C-1GRX -(S/N: 4001547048 and above)
2	5106643	1	TRANSAXLE, ZT3200, RH, ZJ-GYEF-8T7B-1GRX -(S/N: 4001547047 and below)
2	5109253	1	TRANSAXLE, ZT-3200, RH,ZJ-GYEF-9T7B-1GRX -(S/N: 4001547048 and above)
3	5100473	2	HYDRO RES. #71328, 350 ml
3A	5100778X1	2	RESERVIOR CAP -(SV)
4	5100370	2	FITTING, 9/16 O-RING-1/2" HOSE, 90 DEG
5	5025474	4	CLAMP, HOSE, .75 FREE DIA.
6	5103631	2	ROD, DUMP VALVE, IS600
7	5050857X9P5	2	HOSE, 1/2 PUSH-LOCK, 9.50
8	5104055	2	E-CLIP, BRAKE ARM, ZT3100 & ZT3400
9	5103750	2	BRAKE ARM, ZT3400
10	5025011X24	4	BOLT, 5/16-18 X 3 GD5 YZ
11	5025013X20	4	BOLT, 3/8-16 X 2-1/2" GD5 CZ
12	5025392	4	NUT, 5/16-18 HEX NYLOCK FLANGE
13	5025292	4	WASHER, 5/16 F436 FLAT
14	-----	0	See Pump Drive Group
15	5025126	2	NUT, 1/4-20 HEX SERR. FLANGE
16	5025010X6	4	BOLT, 1/4-20 X 3/4 GD5 YZ
17	5025154	4	WASHER, 1/4 SAE
18	5025391	8	NUT, 1/4-20 HEX NYLOCK FLANGE
19	5025288	2	WASHER, 1/4 FENDER
20	5025211	2	PIN, HAIR, .0585 X 1-1/8, 1/4 EYE, YZ
21	5025156	4	WASHER, 3/8 SAE
22	5025394	4	NUT, 3/8 - 16 HEX NYLOCK FLANGE

# Instrument Control Panel

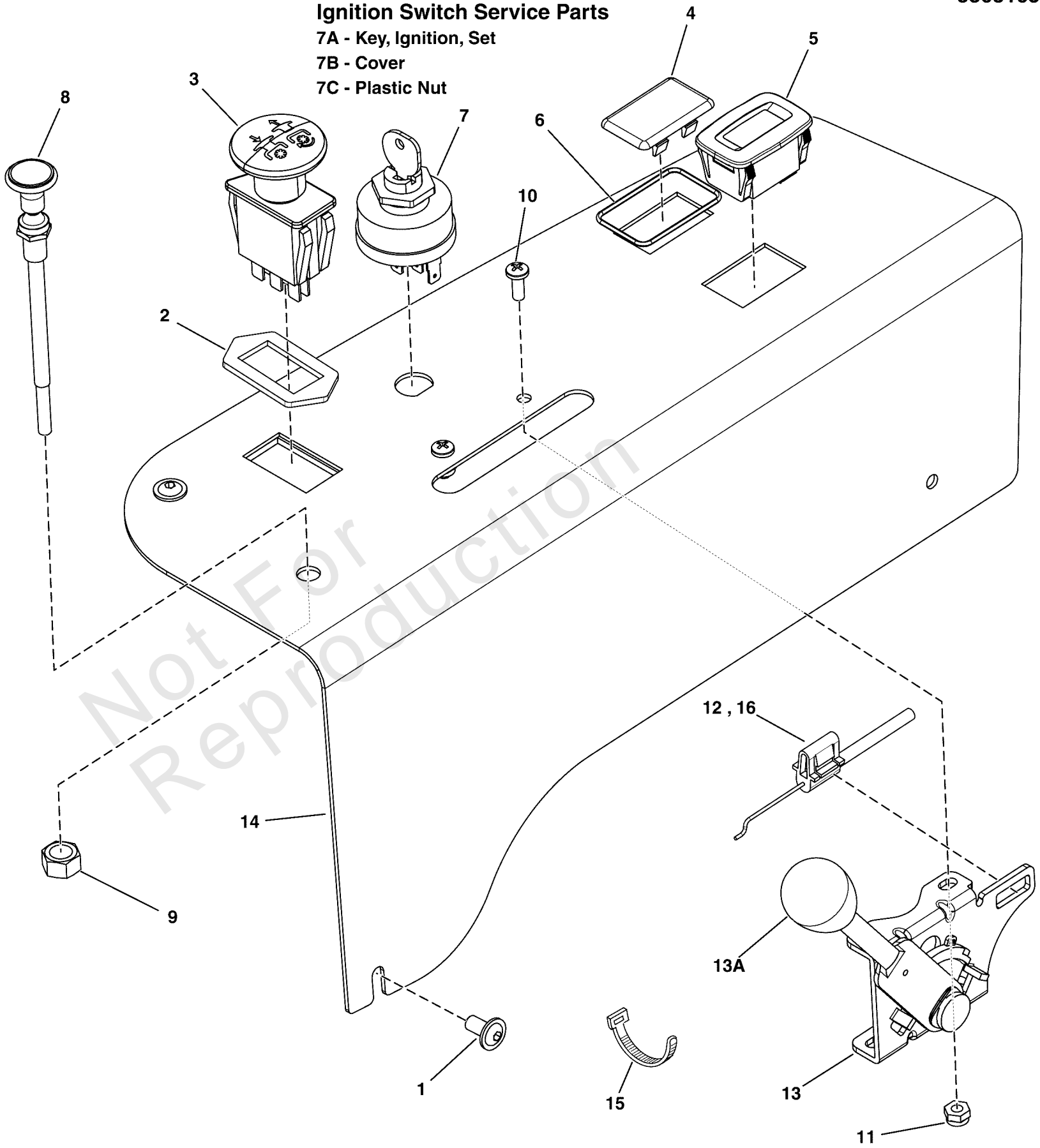
Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5902107

5303165

## Ignition Switch Service Parts

- 7A - Key, Ignition, Set
- 7B - Cover
- 7C - Plastic Nut





## Instrument Control Panel

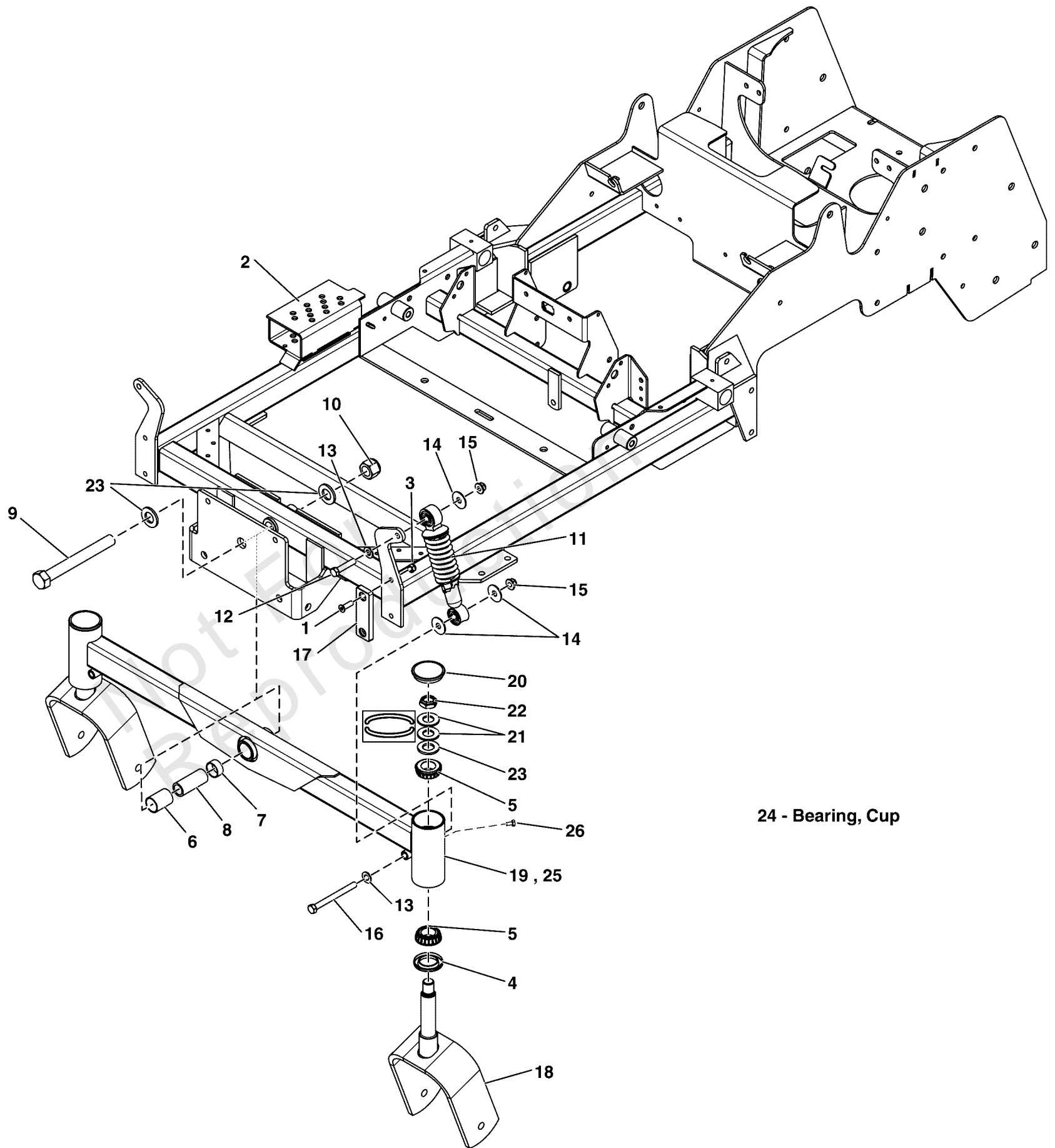
REF NO	PART NO	QTY	DESCRIPTION
1	5025299X4	3	SCREW, 1/4-20 X 1/2 ALLEN BH
2	5022222	1	RING, SWITCH RETAINER
3	5022180	1	SWITCH, BLADE ENGAGEMENT
4	1709188	1	PLUG, .820X1.44 HOLE, BLACK PLASTIC
5	84008768	1	HOURMETER -(Replaces hour meters equipped with two individual wires)
5	84008510	1	HOURMETER -(Replaces hour meters equipped with 6 pin connectors)
6	5022269	1	O-RING, 7/8 ID X 1/16 W
7	5020927	1	SWITCH, IGNITION, 6 POST
7A	5022789	1	KEY, IGNITION MOLDED SET -(SV)
7B	5022790	1	COVER, PLASTIC, SNAP ON -(SV)
7C	5022791	1	PLASTIC NUT -(SV)
8	5047779	1	CABLE, CHOKE CONTROL, 51 (Z)
9	5025309	1	NUT, 3/8-24 HEX JAM
10	5025179X6	2	SCREW, #10-24 X 3/4 ROUND PHILLIPS
11	5025271	2	NUT, #10-24 HEX NYLON LOCK
12	5101073	1	CABLE, THROTTLE, 42" -(All other models)
13	5101537	1	LEVER, THROTTLE CONTROL, HEAVY-DUTY
13A	5046360X1	1	THROTTLE CONTROL HANDLE/KNOB -(SV)
14	5410303A	1	PLATE, CONTROL PANEL, IS600Z - BLK
15	5021030	2	TIE, SELF-LOCKING, 6"
16	5101076	1	CABLE, THROTTLE 47" -(Briggs & Stratton Model 541777 Vanguard Engine Models)

# Main Frame & Front Suspension Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5902107

5303162



24 - Bearing, Cup

## Main Frame & Front Suspension Group

REF NO	PART NO	QTY	DESCRIPTION
1	5025594	4	SCREW, 5/16-18 X 1, PHILLIPS HD, BZ -(Was 5025303)
2	-----	1	WELD, MAIN FRAME, IS700Z - RED -(Refer to Note: *)
3	5025057	4	NUT, Hex, Nylon Locking, 5/16-18
4	5021072	2	SEAL, GREASE
5	5020884	4	BEARING, TAPERED ROLLER, 1"
6	5022852	1	PIVOT BEARING, 1.00" X 1.125" OD X 1.50"
7	5100358	1	PIVOT BEARING, 1.00" X 1.125" OD X .50"
8	5047489	1	SPACER, .75 x 1.00 x 2.38
9	5025265X52	1	BOLT, 3/4-16 X 6-1/2" YZ GD5
10	5025284	1	NUT, Hex, Nylon Lock, 3/4-16
11	5023483	2	SHOCK & SPRING ASSEMBLY
12	5025013X14	2	BOLT, 3/8-16 X 1-3/4" GD5 CZ
13	5025156	4	WASHER, 3/8 SAE
14	5025165	6	WASHER, 3/8" Fender
15	5025394	4	NUT, 3/8 - 16 HEX NYLOCK FLANGE
16	5025013X32	2	BOLT, 3/8-16 X 4" GD5 CZ
17	5102702	2	PAD, FRICTION, .375 X 1.25 X 4.00
18	5402208B	2	WELD, CASTER YOKE - RED MODEL -(S/N: 4000771923 and below)
18	5419196B	2	WELD, CASTER YOKE - RED -(S/N: 4000771924 and above)
19	5403810B	1	WELD, PIVOTING FRONT END - RED -(61" Models)
20	5109845	2	CAP, GREASE, LOW PROFILE
21	5025449	4	WASHER, BELLEVILLE - 1.500 X .755
22	5025448	2	NUT, 3/4-16, HEX JAM NYLON LOCK
23	5025160	4	WASHER, 3/4 SAE
24	5020883	4	CUP, BEARING (SV) -(SV)
25	5405923B	1	WELD, PIVOTING FRONT END - RED -(52" Models)
26	5025457	2	BOLT, 1/4-28 X 1/2, GD5 YZ

### Footnotes:

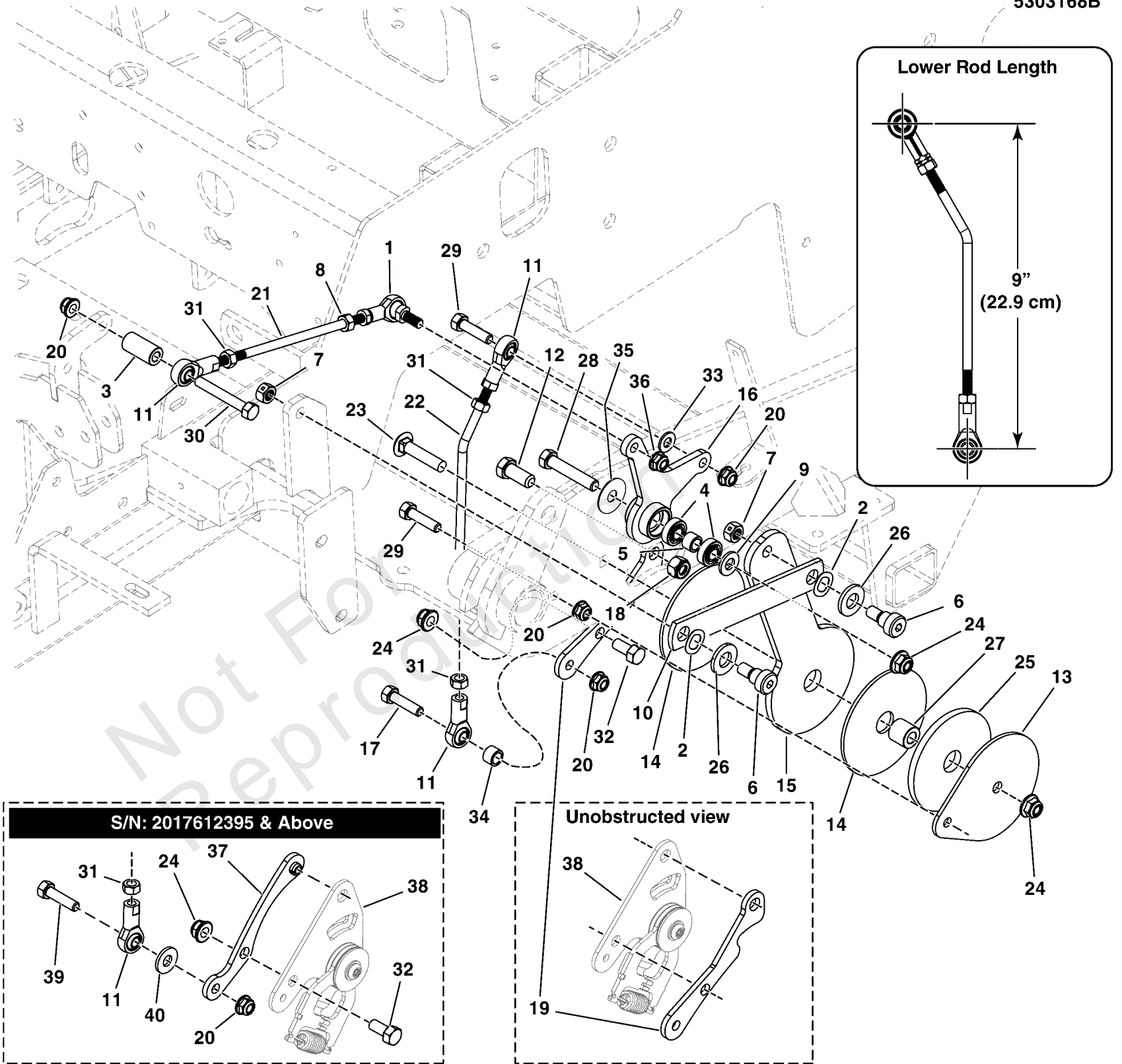
Note: \*If frame is damaged, call 1-800-933-6175 ext. 709

# Motion Control Group - Control System

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5902107

5303168B



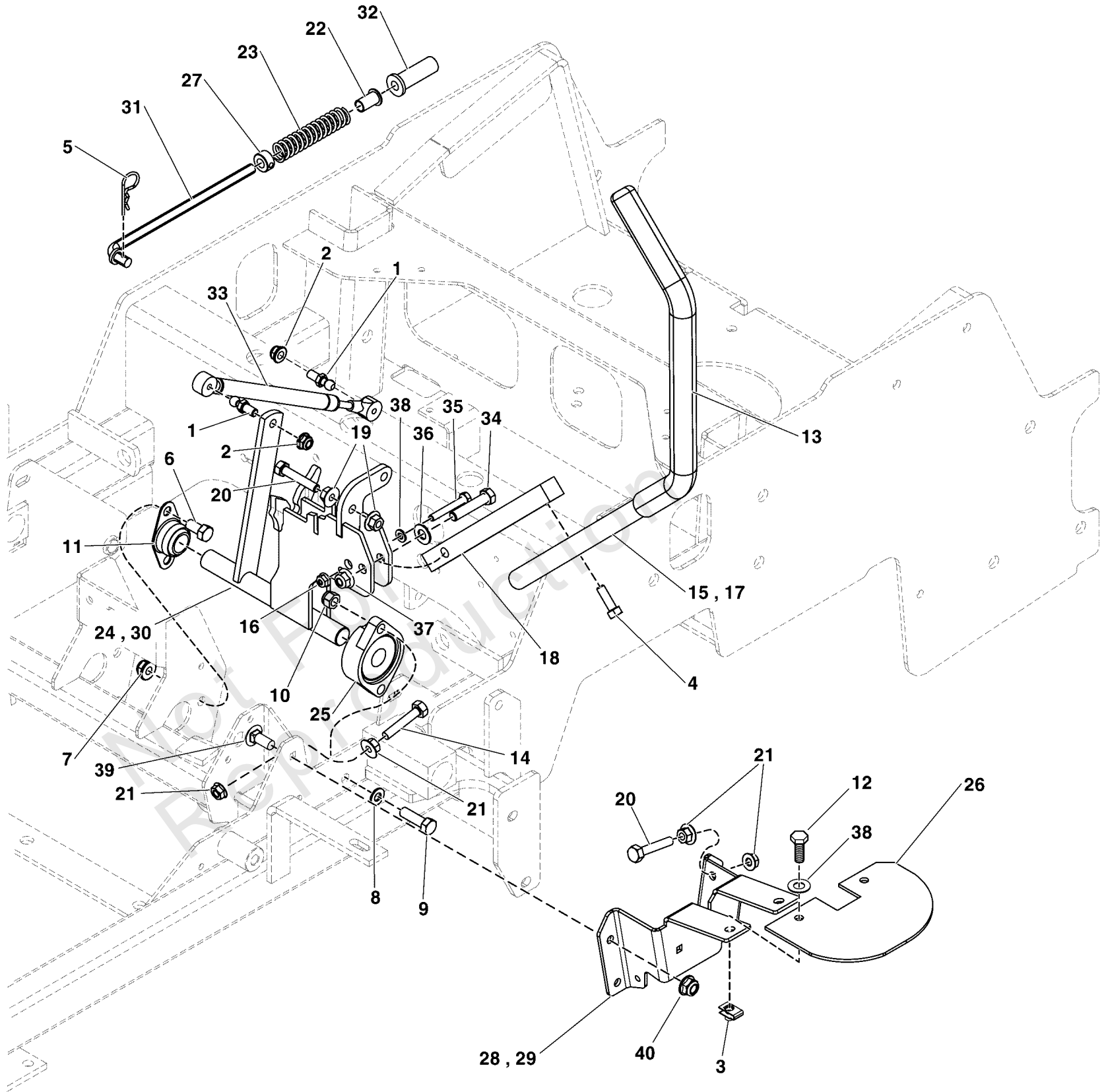
## Motion Control Group - Control System

REF NO	PART NO	QTY	DESCRIPTION
1	5104495	2	BALL JOINT, 5/16-24 LH FEMALE W/STUD, BR
2	5103784	4	WAVE WASHER, 1/2"ID X .087"OD X .01 THK.
3	5102599	2	SPACER, .38 X .75 X 1.25, PM, CZ
4	5102003	4	BEARING, .375" ID X .875" OD X .341" THK
5	5103676	2	SPACER, .39 X .55 X .38, PM, CZ
6	5025356	4	BOLT, 3/8-16 X 3/8", 1/2" SHOULDER
7	5025100	4	NUT, Hex, Side Lock, 3/8-16
8	5023212	2	NUT, 5/16-24 HEX, LH
9	5025293	2	WASHER, 3/8" GR. 9 FLAT
10	5410447AYP	2	LINK, Control
11	5104578	6	BALL JOINT 5/16-24 RH FEMALE STAMPED STL
12	5025015X6	2	BOLT, 7/16-14 X 3/4, GD 5 YZ -(S/N: 2017612394 & Below)
13	5410271A	2	PLATE, CONTROL SYSTEM LOCK - BLK
14	5103672	4	PAD, CONTROL SYSTEM
15	5410268	2	PLATE, CONTROL SYSTEM ARM - HT
16	5103718	2	PIVOT, CONTROL SYSTEM, S125XT
17	5025011X12	2	BOLT, 5/16-18 X 1-1/2" GD5 YZ -(S/N: 2017612394 & Below)
18	5025044	2	NUT, 7/16-14 HEX TOP LOCK -(S/N: 2017612394 & Below)
19	-----	2	REPLACE WITH COMPONENTS IN S/N: 2017612395 & ABOVE RANGE -(S/N: 2017612394 & Below)
20	5025392	6	NUT, 5/16-18 HEX NYLOCK FLANGE NUT
21	5103759	2	ROD, HYDRO LINKAGE, 7.75, CZ
22	5103760	2	ROD, CONTROL SYSTEM, IS700, CZ
23	5025146X12	2	BOLT, 3/8-16 X 1-1/2, CARRIAGE, GD5, CZ
24	5025394	6	NUT, 3/8 - 16 HEX NYLOCK FLANGE
25	5103704	2	PAD, .77 X 3.50 X .25, POLYURETHANE
26	5025440	4	WASHER, 1/2" GD9 YZ
27	5103705	2	SPACER, .39 X .75 X .69, PM, CZ
28	80003522	2	HHCS, 3/8-16 X 2.00, GR5, ZINC/CLEAR
29	5025011X10	10	BOLT, 5/16-18 X 1-1/4" GD5 YZ
30	5025011X20	2	BOLT, 5/16-18 X 2-1/2" GD5 YZ
31	5025033	6	NUT, Hex, 5/16-24
32	5025013X6	2	BOLT, 3/8-16 X 3/4" GD5 CZ
33	5025292	2	WASHER, 5/16 GRADE 9, FLAT
34	5103767	2	SPACER, .33 X .63 X .36, PM, CZ -(S/N: 2017612394 & Below)
35	5025165	2	WASHER, 3/8" Fender
36	5025045	2	NUT, 5/16-24 HEX NYLON LOCK
37	5105030	2	CONTROL ARM, ZT3400 -(S/N: 2017612395 & Above)
38	-----	0	TRANSAXLE CONTROL ARM (PART OF TRANSAXLE)
39	5025011X10	2	BOLT, 5/16-18 X 1-1/4" GD5 YZ -(S/N: 2017612395 & Above)
40	5025155	2	WASHER, 5/16" SAE -(S/N: 2017612395 & Above)

# Motion Control Group - Handles & Dampeners

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5902107



## Motion Control Group - Handles & Dampeners

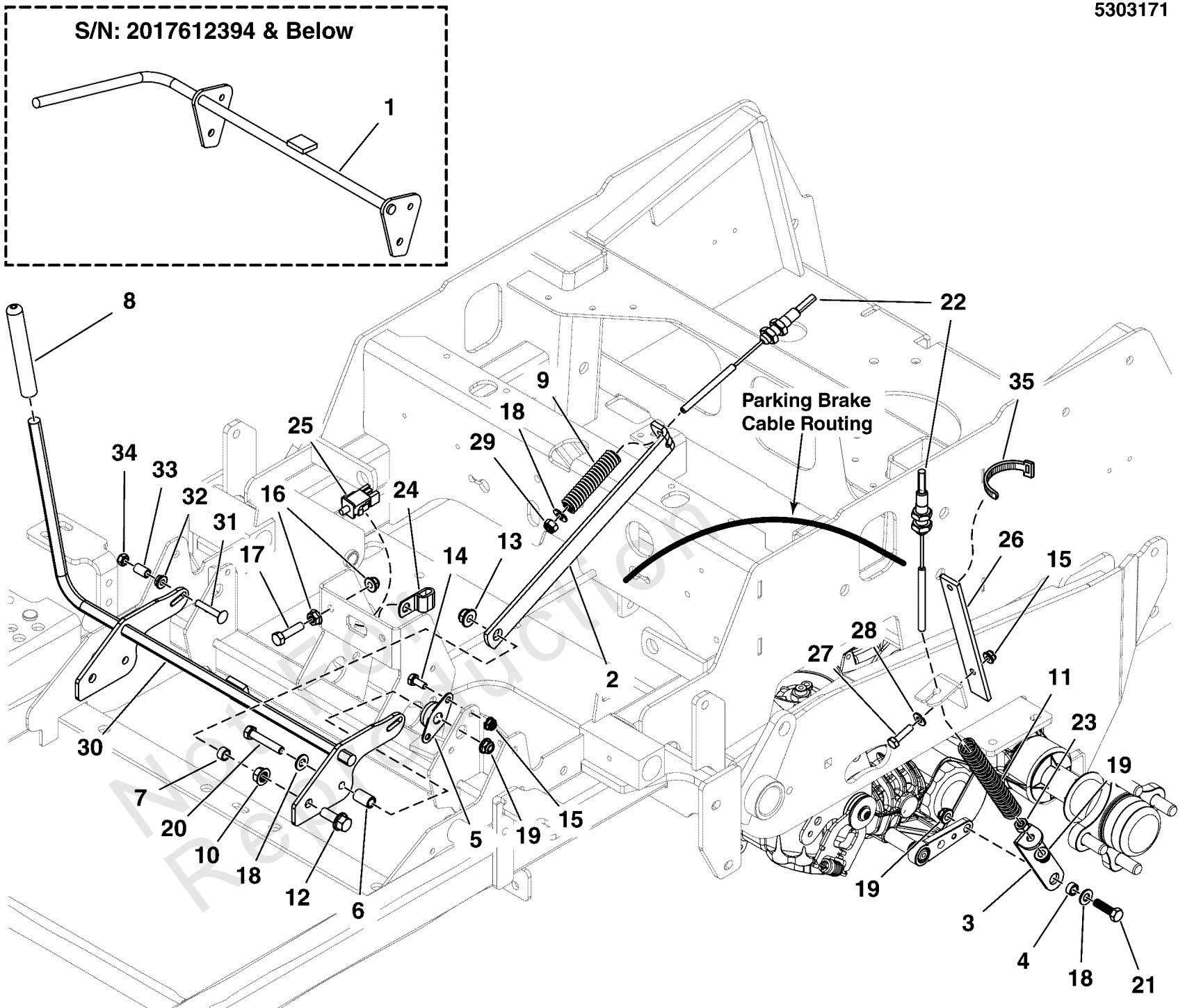
REF NO	PART NO	QTY	DESCRIPTION
1	5101307	4	10MM BALL STUD, 5/16-18 X 3/4 THDS
2	5025392	12	NUT, 5/16-18 HEX NYLOCK FLANGE NUT
3	5022665	4	BODY CLIP, 1/4-20 X 1/2" DEEP
4	80003531	4	SCREW, 5/16-18x0.750, GR5, WHIZ-LOCK, ZC
5	5025210	2	3/32 X 1-5/8 HAIR PIN CLIP
6	5025013X6	4	BOLT, 3/8-16 X 3/4" GD5 CZ
7	5025394	6	NUT, 3/8 - 16 HEX NYLOCK FLANGE
8	5025155	4	WASHER, 5/16" SAE
9	5025327	4	BOLT, Allen Head, 3/8-16 x 1-1/4
10	5025096	4	NUT, 3/8-16 HEX NYLON LOCK
11	5021098	2	BEARING, BRONZE FLANGE, 3/4"
12	5025010X6	4	BOLT, 1/4"-20 X 3/4" GD5 YZ
13	5104722	2	GRIP, FOAM, 1" ID, 16" LONG
14	5025055X10	2	BOLT, 5/16-18 X 1-1/4 GD5 TFL, CZ
15	5108430AA	1	WELD,HANDLE MOTION CNTRL-19.0,1.0-LH-BLK
16	5025391	6	NUT, 1/4-20 Hex Nylock Flange
17	5108431AA	1	WELD,HANDLE MOTION CNTRL-19.0,1.0-RH-BLK
18	5103106AA	2	MOUNT, CONTROL ARM - BLK
19	5025139	4	NUT, 5/16-18 HEX SERRATED FLANGE (LARGE)
20	5025055X14	2	BOLT, 5/16-18 X 1-3/4 TFL, GD5 YZ
21	5025127	8	NUT, 5/16-18 HEX SERRATED FLANGE (SMALL)
22	5023260	2	BUSHING, FLANGE 3/8ID X 7/8 LONG
23	5022645	2	SPRING, REVERSE RETURN
24	5416663A	1	WELD, CONTROL SHAFT, LOCKOUT, LH - BLK
25	5021499	2	BEARING, FLANGE
26	5410610AA	2	PLATE, NEUTRAL LOCK SHIELD - IS700 - BLK
27	5010546	2	COLLAR, 3/8" Set
28	5409982A	1	PLATE, NEUTRAL LOCK, LH - BLK
29	5409983AYP	1	LOCK, Neutral, RH -(Not illustrated)
30	5416664A	1	WELD, CONTROL SHAFT, LOCKOUT, RH - BLK -(Not illustrated)
31	5100947	2	ROD, NEUTRAL RETURN, CZ
32	5104375	2	FLANGED BUSHING, 3/8IDX.63ODX.8125FL
33	5100940	2	DAMPENER, CONTROL,#(P6709/P3610)
34	5025013X14	2	BOLT, 3/8-16 X 1-3/4" GD5 CZ
35	5025010X14	2	BOLT, 1/4 X 20 X 1-3/4 GD5 YZ
36	5025156	2	WASHER, 3/8 SAE
37	5025394	4	NUT, 3/8 - 16 HEX NYLOCK FLANGE
38	5025154	6	WASHER, 1/4 SAE
39	5025145X6	4	BOLT, 5/16-18 X 3/4, CARRIAGE, GD5, CZ
40	5025033	4	NUT, Hex, 5/16-24

# Parking Brake Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5902107

5303171





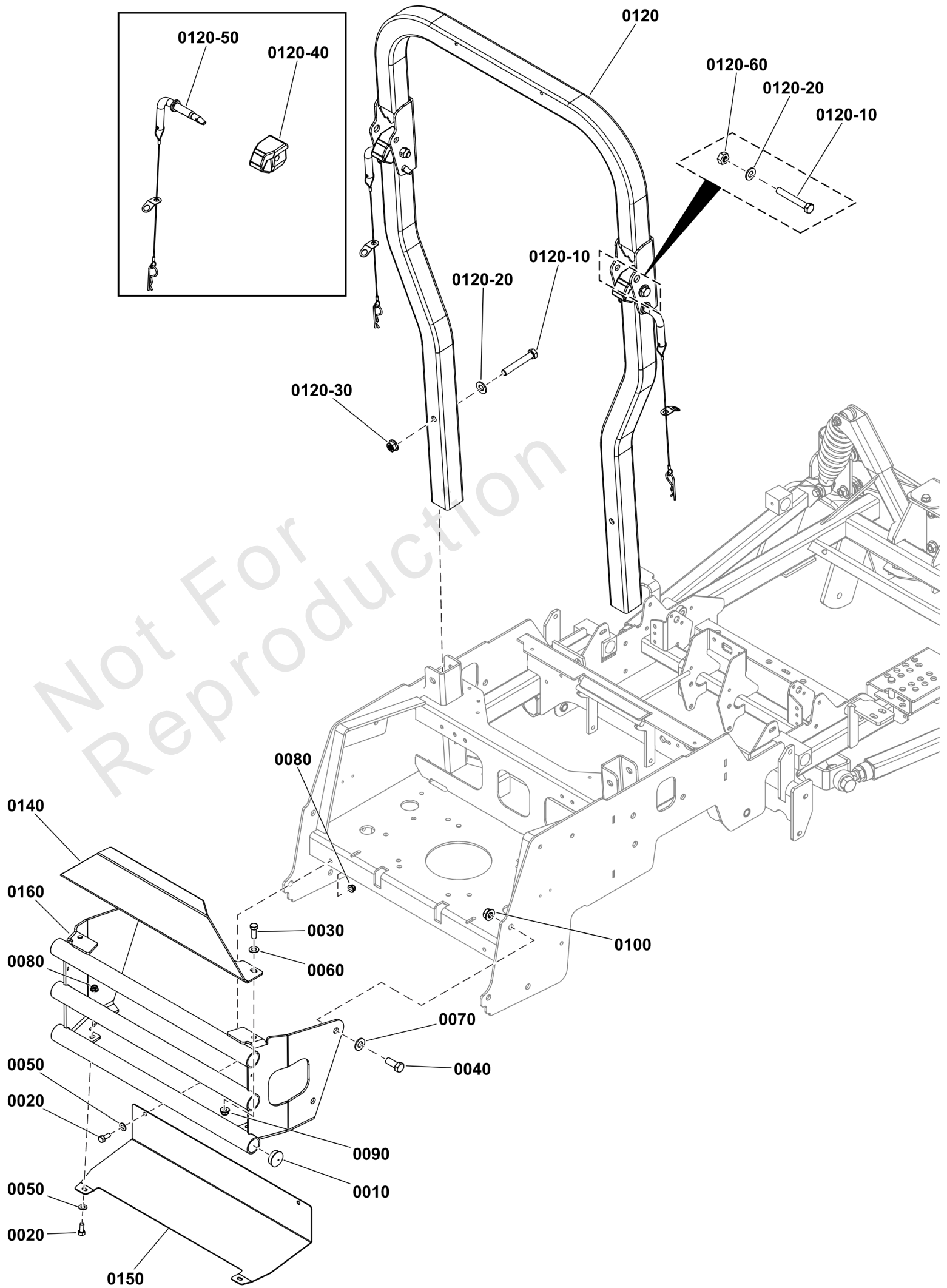
## Parking Brake Group

REF NO	PART NO	QTY	DESCRIPTION
1	5410216A	1	WELD, BRAKE SHAFT, IS600 - BLK
2	5410328AA	2	LINK, BRAKE LOCK, IS700 - BLK
3	5410294AA	2	LINK, LOWER BRAKE, IS700 - BLK
4	5102463	2	SPACER, .33 X .50 X .25, CZ
5	5101123	2	BEARING, 1/2 FLANGED, PLASTIC BALL
6	5103660	2	SPACER, .32 X .50 X .83, CZ
7	5041930	2	SPACER, .38 X .50 X .27, CZ
8	5021880	1	GRIP, FOAM, .475 X 4.35 X .095
9	5023242	2	SPRING-COMP, .496ID X 3.00LG X .112WR
10	5025128	2	NUT, 3/8-16 HEX SERRATED FLANGE
11	5021494	2	SPRING, COMPRESSION, 5-1/2
12	5025390X12	2	BOLT, 3/8-16 X 1-1/2, FLANGE, GD 5, CZ
13	5025394	2	NUT, 3/8-16 HEX NYLOCK FLANGE
14	----	4	HHCS, 1/4-20 X 0.625, GR5, ZINC/CLEAR
15	5025391	6	NUT, 1/4-20 HEX NYLOCK FLANGE
16	5025127	2	NUT, 5/16-18 HEX SERRATED FLANGE (SMALL)
17	5025055X10	1	BOLT, 5/16-18 X 1-1/4 GD5 TFL, CZ
18	5025155	6	WASHER, 5/16" SAE
19	5025392	6	NUT, 5/16-18 HEX NYLOCK FLANGE
20	5025011X12	2	BOLT, 5/16-18 X 1-1/2" GD5 YZ
21	5025011X9	2	BOLT, 5/16-18 X 1-1/8 GD5
22	5104276	2	CABLE, PARKING BRAKE, 31" (787.9 MM)
23	5025032	2	NUT, 5/16-18 HEX
24	5025430	1	CLAMP, 5/16 DOUBLE, WIRE & TUBE -(For stowing the spanner wrench.)
25	----	1	SEE ELECTRICAL GROUP
26	5410734AA	2	BRACKET, CABLE SUPPORT - BLK
27	5025010X6	2	BOLT, 1/4-20 X 3/4 GD5 YZ
28	5025154	2	WASHER, 1/4 SAE
29	5025045	2	NUT, 5/16-24 HEX NYLON LOCK
30	5415910AA	1	WELD, BRAKE SHAFT, 600/700/125/560 - BLK -(S/N: 2017612395 & Above)
31	80003564	2	BOLT, 1/4-20 X 1.500, GR5, SQ, ZINC/CLEA -(S/N: 2017612395 & Above)
32	5025126	2	NUT, 1/4-20 HEX SERR. FLANGE -(S/N: 2017612395 & Above)
33	5041483	2	SPACER, .25 X .38 X .63, CZ -(S/N: 2017612395 & Above)
34	5025095	2	NUT, 1/4-20 HEX NYLON LOCK -(S/N: 2017612395 & Above)
35	5021029	2	TIE, SELF-LOCKING, 12"

# Rear Bumper and ROPS Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5902107



Not For  
Reproduction

## Rear Bumper and ROPS Group

REF NO	PART NO	QTY	DESCRIPTION
0010	5023484	6	PLUG, PANEL, 1.25 - BLACK
0020	5025011X6	4	BOLT, 5/16-18 X 3/4 GD5
0030	5025013X8	2	BOLT, 3/8-16 X 1" GD5 CZ
0040	5025017X10	4	BOLT, 1/2-13 X 1-1/4 GD5 CZ
0050	5025155	4	WASHER, 5/16" SAE
0060	5025156	2	WASHER, 3/8 SAE
0070	5025158	4	WASHER, 1/2 SAE
0080	5025392	4	NUT, 5/16-18 HEX NYLOCK FLANGE NUT
0090	5025394	2	NUT, 3/8 - 16 HEX NYLOCK FLANGE
0100	5025396	4	NUT, Hex Flange, Nylock, 1/2-13
0120	-----	1	ROLL BAR -(Refer to Note: *)
0120-10	5025017X24	4	BOLT, 1/2-13 X 3" GD5 CZ
0120-20	5025158	4	WASHER, 1/2 SAE
0120-30	5025332	2	NUT, 1/2-13 Hex Side Lock
0120-40	5108027	2	BLOCK, ROPS
0120-50	5108350	2	HINGE PIN ASSEMBLY
0120-60	5025332	2	NUT, 1/2-13 Hex Side Lock
0140	5410486B	1	PLATE, CARB PROTECTOR - RED
0150	5410485AA	1	PLATE, HEAT SHIELD, IS700 - BLK
0160	5410483B	1	WELD, BUMPER - IS700 - RED

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### Footnotes:

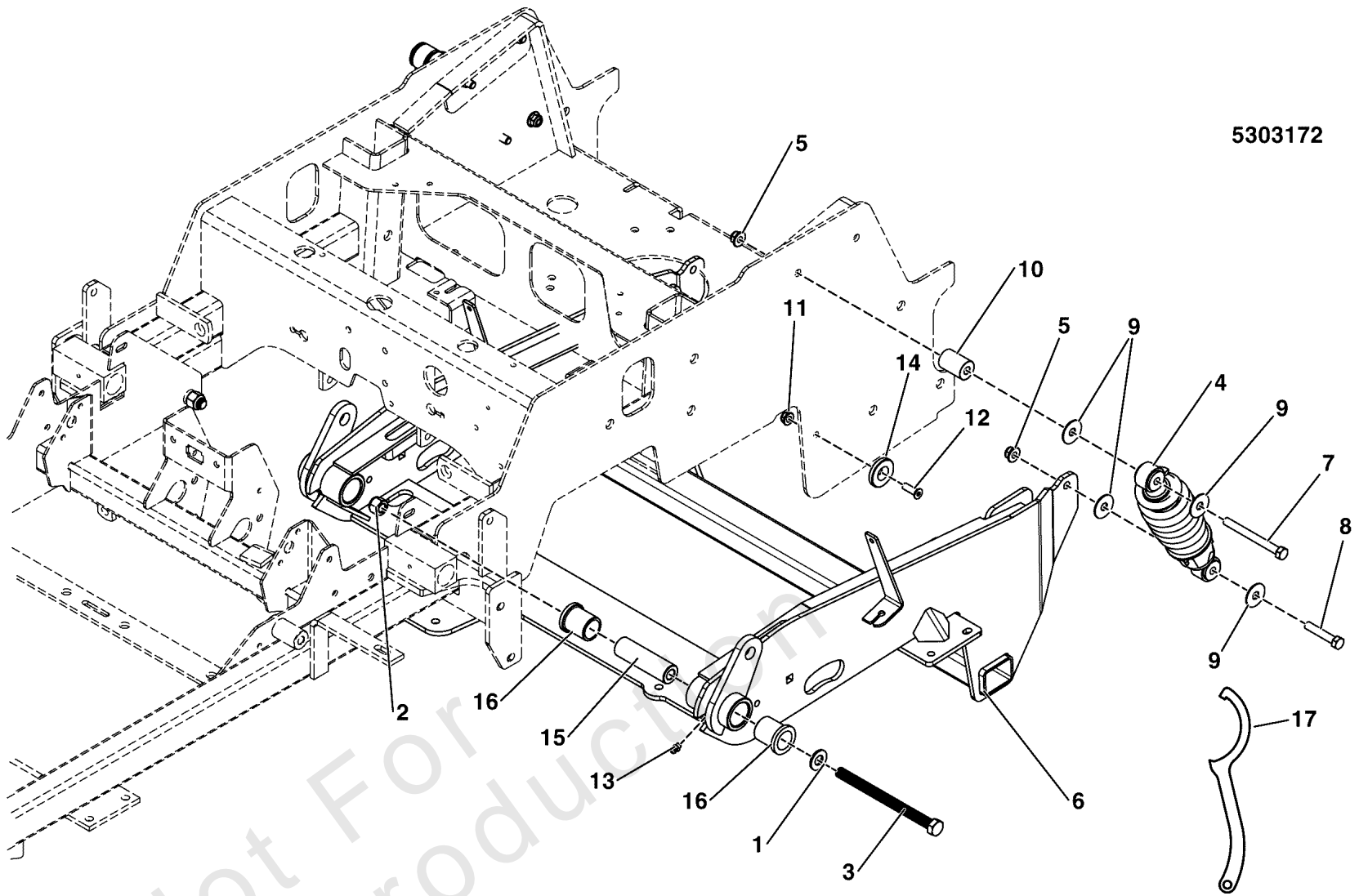
Note: \*Contact the Service Department at 1-800-933-6175 for roll bar replacement parts. You must provide the serial number of the roll bar system.

# Rear Suspension Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5902107

5303172



Not For  
Reproduction

## Rear Suspension Group

REF NO	PART NO	QTY	DESCRIPTION
1	5025158	2	WASHER, 1/2 SAE
2	5025056	2	NUT, 1/2-13 HEX NYLON LOCK
3	5025488X52	2	BOLT, 1/2-13 X 6-1/2" GD8 YZ
4	5023436	2	COIL - OVER SHOCK ASSEMBLY
5	5025394	4	NUT, 3/8 - 16 HEX NYLOCK FLANGE
6	84007762	1	CRADLE, Suspension
7	5025013X28	2	BOLT, 3/8-16 X 3-1/2" GD5 CZ
8	5025013X16	2	BOLT, 3/8-16 X 2, GD5, CZ
9	5025165	8	WASHER, 3/8" Fender
10	5103427	2	SPACER, .39 X 1.00 X 1.25, PM, CZ
11	5025392	2	NUT, 5/16-18 HEX NYLOCK FLANGE NUT
12	5025594	2	SCREW, 5/16-18 X 1, PHILLIPS HD, BZ
13	5020095	2	GREASE FITTING, 1/4-28 Straight
14	5102701	2	SPACER, .34 X 1.54 X .25 - UHMW
15	5061339	2	SPACER, .52 X 1.00 X 3.42
16	5021541	4	BUSHING, FLANGE
17	5022853	1	WRENCH, SPANNER, CZ

# Seat Mount and Floor Group S/N: 4001827762 and Above

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5902107

## Seat Service Parts:

0080-10 - Back Cover, Seat

0080-15 - Cushion Cover, Seat

0080-20 - Set of Non-Adjust Arms

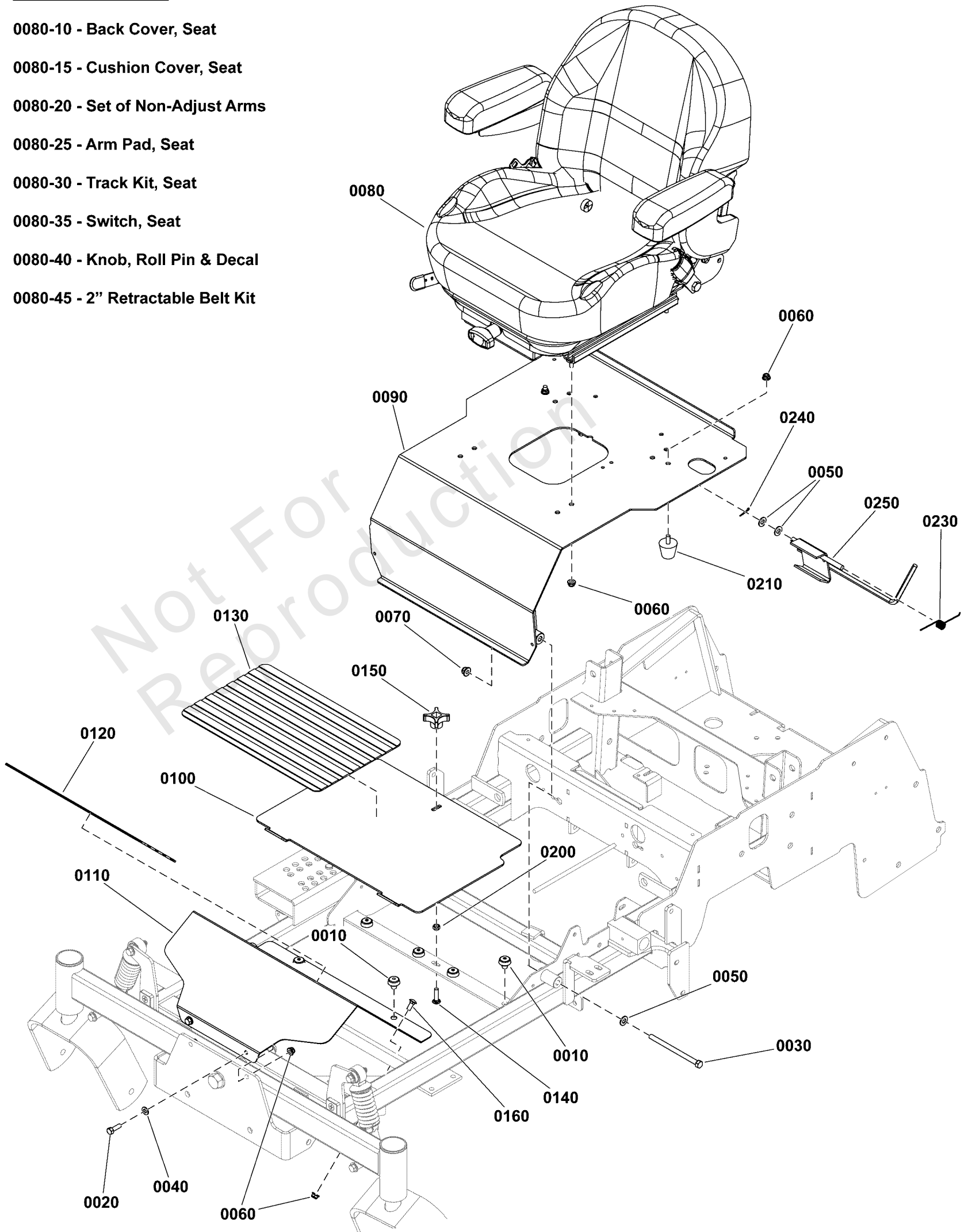
0080-25 - Arm Pad, Seat

0080-30 - Track Kit, Seat

0080-35 - Switch, Seat

0080-40 - Knob, Roll Pin & Decal

0080-45 - 2" Retractable Belt Kit



## Seat Mount and Floor Group S/N: 4001827762 and Above

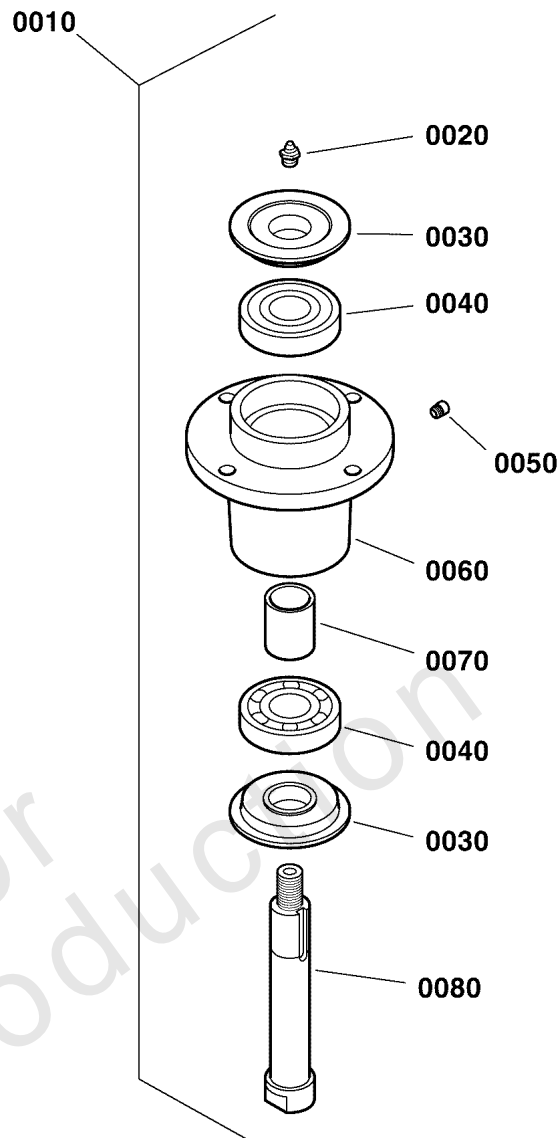
REF NO	PART NO	QTY	DESCRIPTION
0010	197546	6	MNT, VBRTN, RBBR
0020	5025011X8	2	BOLT, 5/16-18 X 1" GRD5 YZ
0030	5025013X44	2	BOLT, 3/8-16 X 5-1/2" GD5 CZ
0040	5025155	2	WASHER, 5/16" SAE
0050	5025156	4	WASHER, 3/8 SAE
0060	5025392	10	NUT, 5/16-18 HEX NYLOCK FLANGE NUT
0070	5025394	2	NUT, 3/8 - 16 HEX NYLOCK FLANGE
0080	5109530	1	SEAT, 110 SUSPENSION, W/ BELTS
0080-10	84005183	1	COVER, Back -(SV)
0080-15	84005184	1	CUSHION, Seat -(SV)
0080-20	5108520X5	1	SET OF NON-ADJUST ARMS -(SV)
0080-25	5106325X3	1	SET OF ARM PADS -(SV)
0080-30	5108520X1	1	TRACK KIT, SEAT -(SV)
0080-35	7023354	1	SWITCH, SEAT -(SV)
0080-40	84005187	1	KNOB, Adjuster -(SV)
0080-45	5106325X5	1	2" RETRACTABLE BELT KIT -(SV)
0090	5601294	1	SEAT PLATE W/DECALS, 800, ST LTCH -(USA Models)
0090	5601295	1	SEAT PLATE W/DECALS, 800, ST LATCH AUS -(Ansi-Export Models)
0100	5410296B	1	PLATE, FLOOR, REMOVABLE, IS700 - RED
0110	5410297B	1	PLATE, FLOOR, RIDGID, IS700 - RED
0120	5101374	1	SAFETY WALK, FLOOR REST, 16.00 X 6.00
0130	5101333	1	SAFETY WALK, FLOOR PLATE, S50X, 10X17.13
0140	5025145X10	1	BOLT, 5/16-18 X 1-1/4, CARRIAGE, GD5, CZ
0150	1670578	1	KNOB-INT THR .312-18 4-ARM 2.12WD 1.06LG
0160	5025145X6	2	BOLT, 5/16-18 X 3/4, CARRIAGE, GD5, CZ
0200	80003675	1	NUT, 5/16-1/8, HEX, CNTR LK, ZINC PHOS/OIL
0210	5106763	2	BUMPER, RUBBER, 5/16-18, 60 DURO
0230	5106644	1	SPRING, TORSION, LH, .0625OD
0240	80002736	1	PIN, 3/32 X 0.750, COT, ZINC/CLEAR
0250	5420950AA	1	WELD, SEAT LATCH HOOK, 700/800 - BLK

# Spindle SERVICE PARTS - 5061095

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5902107

5061095





## Spindle SERVICE PARTS - 5061095

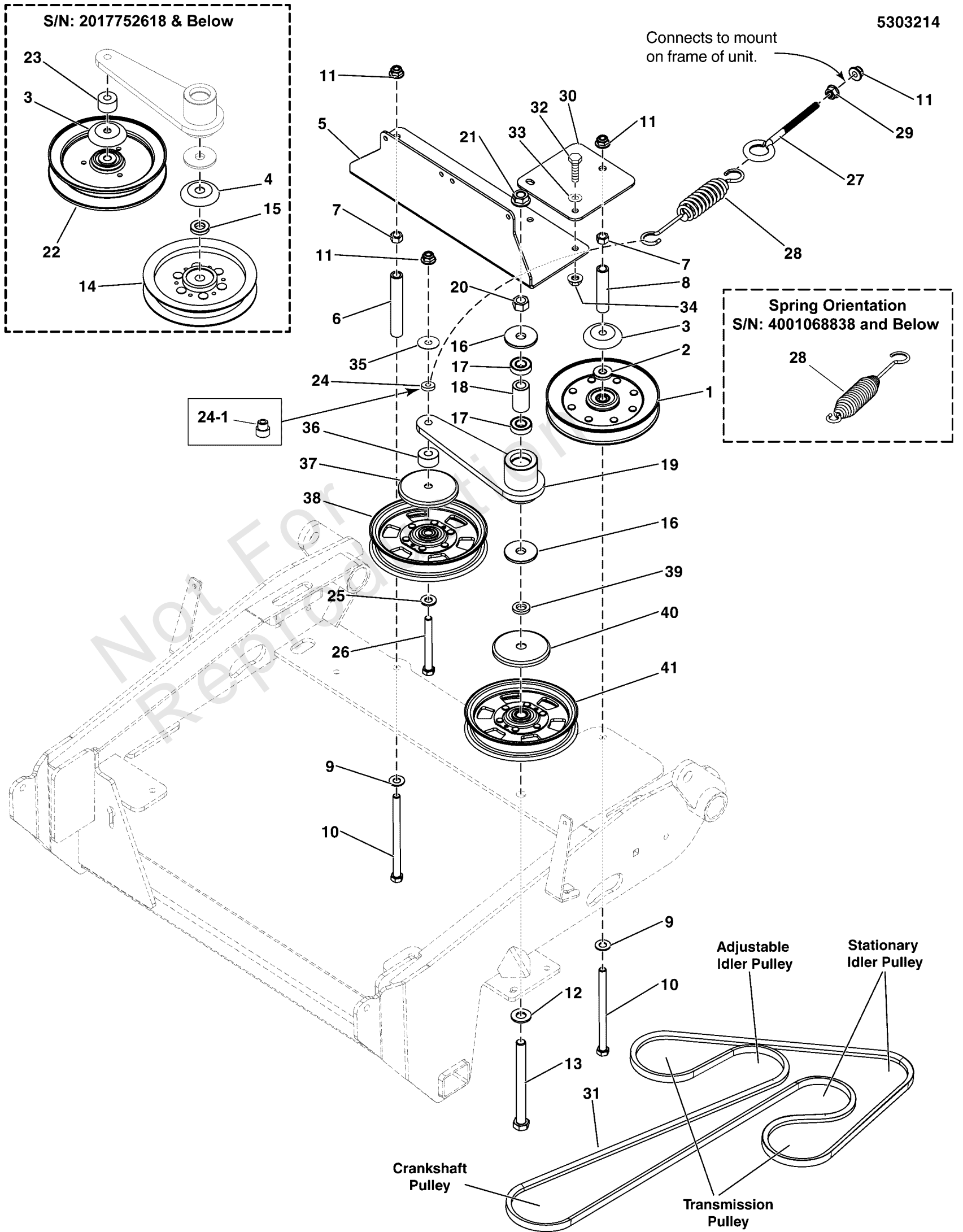
REF NO	PART NO	QTY	DESCRIPTION
0010	5061095	1	SPINDLE, ASSM, ALUMINUM - 5.25 -(Nut and Washer Sold Separately) (Includes items #0020 - 0080)
0020	5023329	1	FITTING, 1/8 NPT STR, SHORT
0030	5049793	2	TRASH SHIELD
0040	5023330	2	BEARING, .98 X 2.44 X .67
0050	5023296	1	FITTING, RELIEF, 1-5 PSI
0060	5061097	1	HOUSING, SPINDLE
0070	5061099	1	SPACER, 1.00 X 1.25 X 1.75
0080	5061098	1	SPINDLE SHAFT

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# Transaxle Drive Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5902107



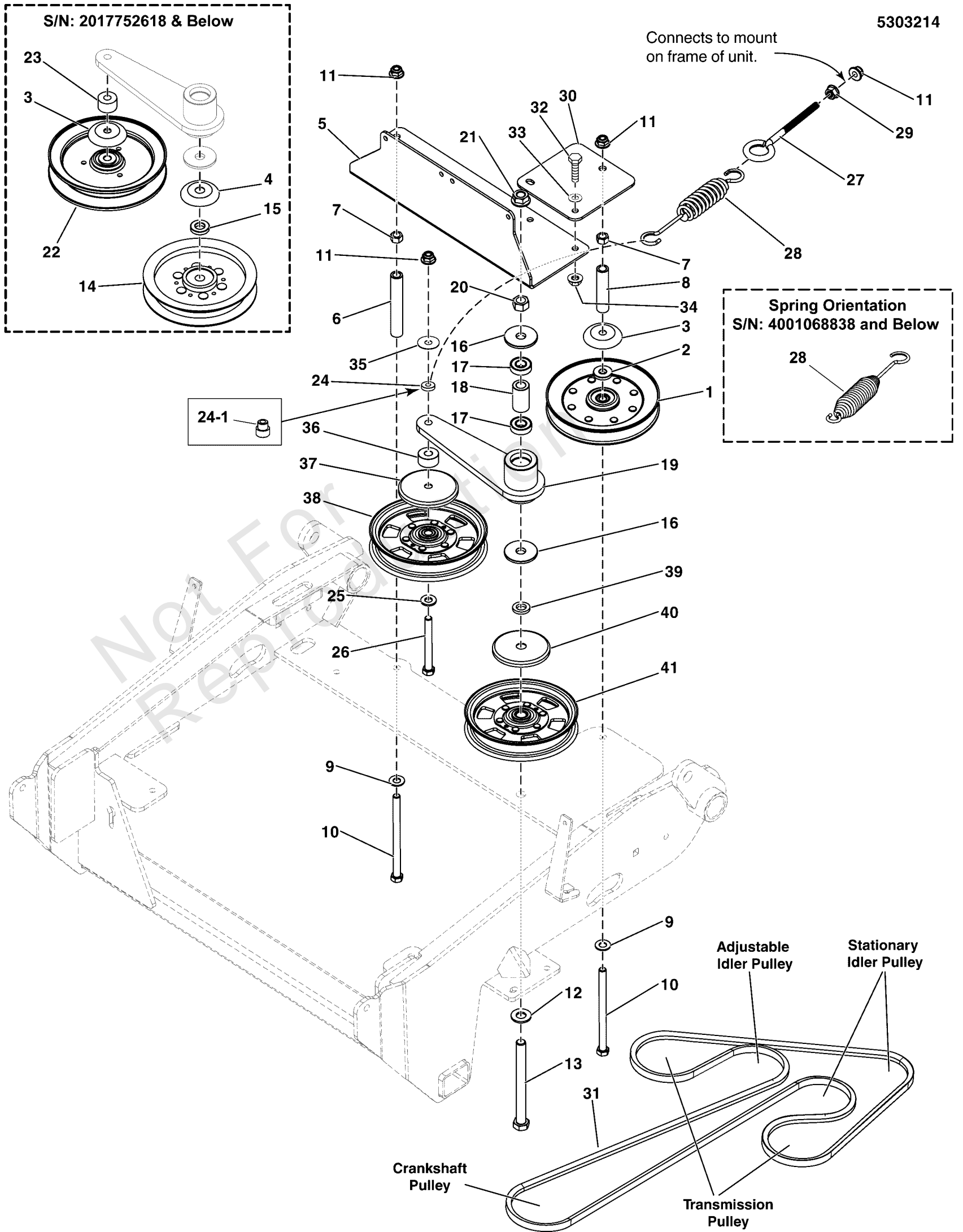
## Transaxle Drive Group

REF NO	PART NO	QTY	DESCRIPTION
1	5103792	1	PULLEY, IDLER-V, 5.83OB, .381ID, .94W
2	5101965	1	SPACER, .390 X 1.00 X .188, CZ
3	5103787	1	SHIELD, BEARING PULLEY, 3/8ID -(Qty: 2 - S/N: 2017752618 & Below)
4	5101103	1	SHIELD, PULLEY BEARING -(S/N: 2017752618 & Below)
5	5410310A	1	PLATE, RESERVOIR MOUNT - BLK
6	5103763	1	SPACER, .39 X .63 X 4.06, CZ
7	5025034	2	NUT, 3/8-16 HEX
8	5103765	1	SPACER, .39 X .63 X 2.81, CZ
9	5025156	2	WASHER, 3/8 SAE
10	5025013X44	2	BOLT, 3/8-16 X 5-1/2" GD5 CZ
11	5025394	4	NUT, 3/8-16 HEX NYLOCK FLANGE
12	5025158	1	WASHER, 1/2 SAE
13	5025017X44	1	BOLT, 1/2-13 X 5-1/2 GD5 YZ
14	5103764	1	PULLEY, IDLER 5"OD .500ID, .75W STL -(S/N: 2017752618 & Below)
15	5100520	1	SPACER, .52 X 1.00 X .22, PM, CZ -(S/N: 2017752618 & Below)
16	5103262	2	SPACER, IDLER ARM, 1/2"
17	7078243	2	BEARING, BALL, AXLE
18	5103812	1	SPACER, .52 X .84 X 1.53, PM
19	5412787AA	1	WELD, IDLER ARM, PUMP DRIVE, 6.38 - BLK
20	703340	1	NUT, 1/2-13, GR5, HEX, ZC
21	5025396	1	NUT, Hex Flange, Nylock, 1/2-13
22	5103789	1	PULLEY, C-SEC, V-IDLER, 6.25"ODX3/8ID -(S/N: 2017752618 & Below)
23	5100334	1	SPACER, .39 X 1.00 X .63, CZ -(S/N: 2017752618 & Below)
24	5044960	1	SPACER, .39 X 1.00 X .25, PM, CZ -(S/N: 4001068839 and Above)
24-1	5020923	1	SPACER, Shoulder -(S/N: 4001068838 and Below)
25	5025293	1	WASHER, 3/8 GD.9 FLAT
26	5025013X28	1	BOLT, 3/8-16 X 3-1/2" GD5 CZ -(S/N: 4001068838 and Below)
26	5025013X22	1	BOLT, 3/8-16 X 2-3/4" GD5 CZ -(S/N: 4001068839 and Above)
27	5021812	1	EYE BOLT, 3/8-16 X 6, 3.0 THREAD
28	5100632	1	SPRING-EXT, 1.25OD X 9.3LG X .142WR, BLK -(coil-to-coil spring measurement: 5-3/4")
29	5025128	1	NUT, 3/8-16 HEX SERRATED FLANGE
30	5410589AYP	1	PLATE, Support
31	5103653	1	BELT, A-SEC, 114.3"EL, ARAMID, WRPD
32	5025011X6	2	BOLT, 5/16-18 X 3/4 GD5
33	5025155	2	WASHER, 5/16" SAE
34	5025392	2	NUT, 5/16-18 HEX NYLOCK FLANGE
35	5025165	1	WASHER-3/8 FENDER
36	5046860	1	SPACER, .39 X 1.00 X .50, PM, CZ -(S/N: 2017752619 & Above)
37	5105146	1	SHIELD, BEARING, 3/8ID X 2-7/8OD, CZ -(S/N: 2017752619 & Above)
38	5105098	1	PULLEY, FLT IDLER, 5.0 X .75 X .38, CZ -(S/N: 2017752619 & Above)
39	5104239	1	SPACER, .52 X .88 X .14, BZ -(S/N: 2017752619 & Above)

# Transaxle Drive Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5902107



## Transaxle Drive Group

REF NO	PART NO	QTY	DESCRIPTION
40	5105145	1	SHIELD, BEARING, 1/2ID X 2-7/8 OD, CZ -(S/N: 2017752619 & Above)
41	5105101	1	PULLEY, FLT IDLER, 5.0 X .75 X .50SH, CZ -(S/N: 2017752619 & Above)

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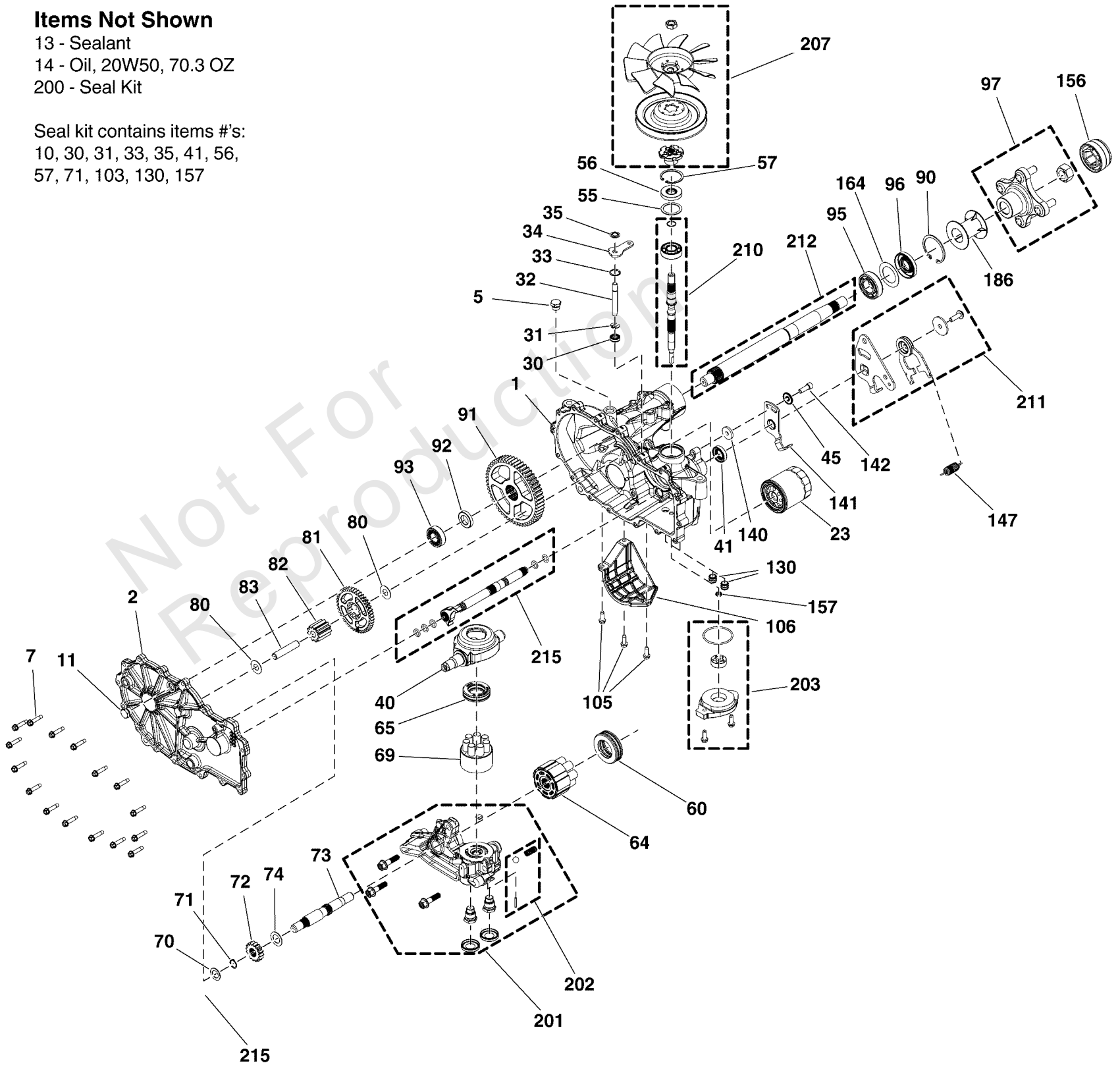
**Service Parts Schematic for Hydro-Gear® Transaxles:  
ZJ-KYEF-8T7C-1GRX (5106642)  
ZJ-GYEF-8T7B-1GRX (5106643)**

For components not listed see your authorized Hydro-Gear® service provider.

**Items Not Shown**

- 13 - Sealant
- 14 - Oil, 20W50, 70.3 OZ
- 200 - Seal Kit

Seal kit contains items #'s:  
10, 30, 31, 33, 35, 41, 56,  
57, 71, 103, 130, 157



**Transaxle SERVICE Parts - Hydro-Gear ZT3200 (5106643\_5106642)**

REF NO	PART NO	QTY	DESCRIPTION
1	----	1	KIT, MAIN HOUSING, LH, CHRG, CNTL
2	----	1	KIT, SIDE COVER, LH
5	----	1	PLUG EXTERNAL HEX VENT 9/16-18
7	----	16	SCREW, HEX WASHER
11	----	1	PLUG EXTERNAL HEX VENT 9/16-18
13	----	1	TUBE, SEALANT
23	5101026X1	1	FILTER, OIL, ZT2800
30	5104471X1	1	SEAL, .375 X .750 X .25 LIP, H/G 51626
31	----	1	BYPASS RETAINING RING 1
32	----	1	ROD, BYPASS .375 X 2.88
33	----	1	BYPASS RETAINING RING 2
34	----	1	ARM, BYPASS
35	----	1	RING, RETAINING .375 EXTERNAL
40	----	1	SWASHPLATE, TRUNNION
41	5101026X2	1	SEAL, CONTROL ARM, 18X32X7, #51140
45	----	1	WASHER, .34X.88X.06
55	1730272	1	SPACER (50951)
56	5101026X3	1	SEAL, LIP, 17 X 40 X 7
57	5101026X4	1	RING, RET 2.06 INT,
60	----	1	BEARING, THRUST 35 x 62 x 18
64	----	1	KIT, 16cc CYLINDER BLOCK ASSEMBLY
65	----	1	BEARING, THRUST 30 x 52 x 13
69	----	1	KIT, BLOCK 7 PISTON
70	----	1	WASHER, .63 X 1.00 X .05 FLAT
71	1706130	1	RING-SNAP (44145)
72	----	1	GEAR, 16T (STEEL)
73	----	1	SHAFT, MOTOR
74	----	1	WASHER, .71 X 1.16 X .04 FLAT
80	----	2	WASHER, .51 X 1.00 X .03 FLAT
81	----	1	GEAR, 43T
82	----	1	GEAR, 11T (STEEL)
83	----	1	PIN, JACKSHAFT
90	5101026X17	1	RING, RETAINING 2.25 INTERNAL (50859)
91	----	1	GEAR, 54T
92	----	1	SPACER, .750 X 1.320 X .257
93	5101026X18	1	KIT, BEARING (72749)
95	5101026X5	1	BEARING BALL, 1.0 X 52 X 15 OPEN 6205M
96	5103589X1	1	KIT, SEAL, AXLE - HG# 53699
97	5103589X8	1	ASSM, HUB
105	----	3	SCREW, HEX WASHER 1/4-20 X .75
106	----	1	GUARD, FILTER, LH
130	----	2	TUBE, CHARGE TRIPLE O-RING
140	----	1	SPACER, .320X1.005X.179
141	----	1	ARM, NEUTRAL, LH
142	----	1	SHCS, 5/16-24 X .875 (PATCH)
147	1735483	1	SPRING, Extension (Used on Hydro-Gear P/N ZC-AHBB-2A7B-1DPX and ZC-AHBB-2A7B-1DPX)
156	5103589X7	1	AXLE CAP,
157	----	1	KIT, GEROTOR SEAL
164	----	1	WASHER, 1.355 x 2.035 x .021 FLAT
186	5103589X9	1	DEBRIS GUARD HG #53496

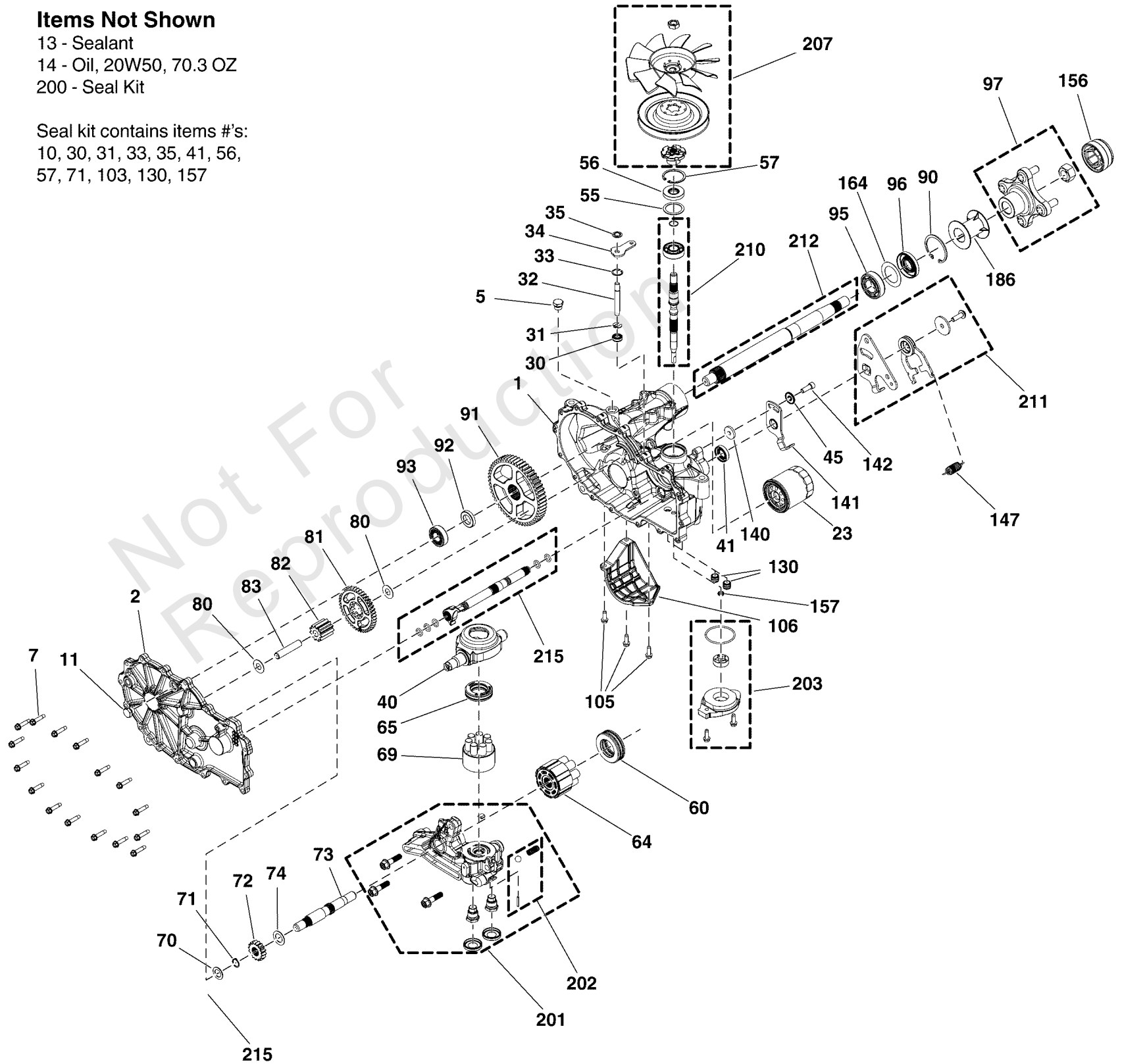
**Service Parts Schematic for Hydro-Gear® Transaxles:  
ZJ-KYEF-8T7C-1GRX (5106642)  
ZJ-GYEF-8T7B-1GRX (5106643)**

For components not listed see your authorized Hydro-Gear® service provider.

**Items Not Shown**

- 13 - Sealant
- 14 - Oil, 20W50, 70.3 OZ
- 200 - Seal Kit

Seal kit contains items #'s:  
10, 30, 31, 33, 35, 41, 56,  
57, 71, 103, 130, 157





**Transaxle SERVICE Parts - Hydro-Gear ZT3200 (5106643\_5106642)**

REF NO	PART NO	QTY	DESCRIPTION
200	5101026X8	1	KIT SEAL
201	-----	1	KIT, CENTER SECTION, LH CHARGE
202	-----	1	KIT, CHARGE RELIEF
203	-----	1	KIT, CHARGE
207	-----	1	KIT, FAN/ PULLEY
210	5101026X9	1	KIT, INPUT SHAFT
211	1735490	1	KIT, L.H. Control Arm
212	-----	1	SHAFT, AXLE
215	5104581X2	1	SEAL KIT BRAKE SHAFT ZT3400 RH 72754 NET

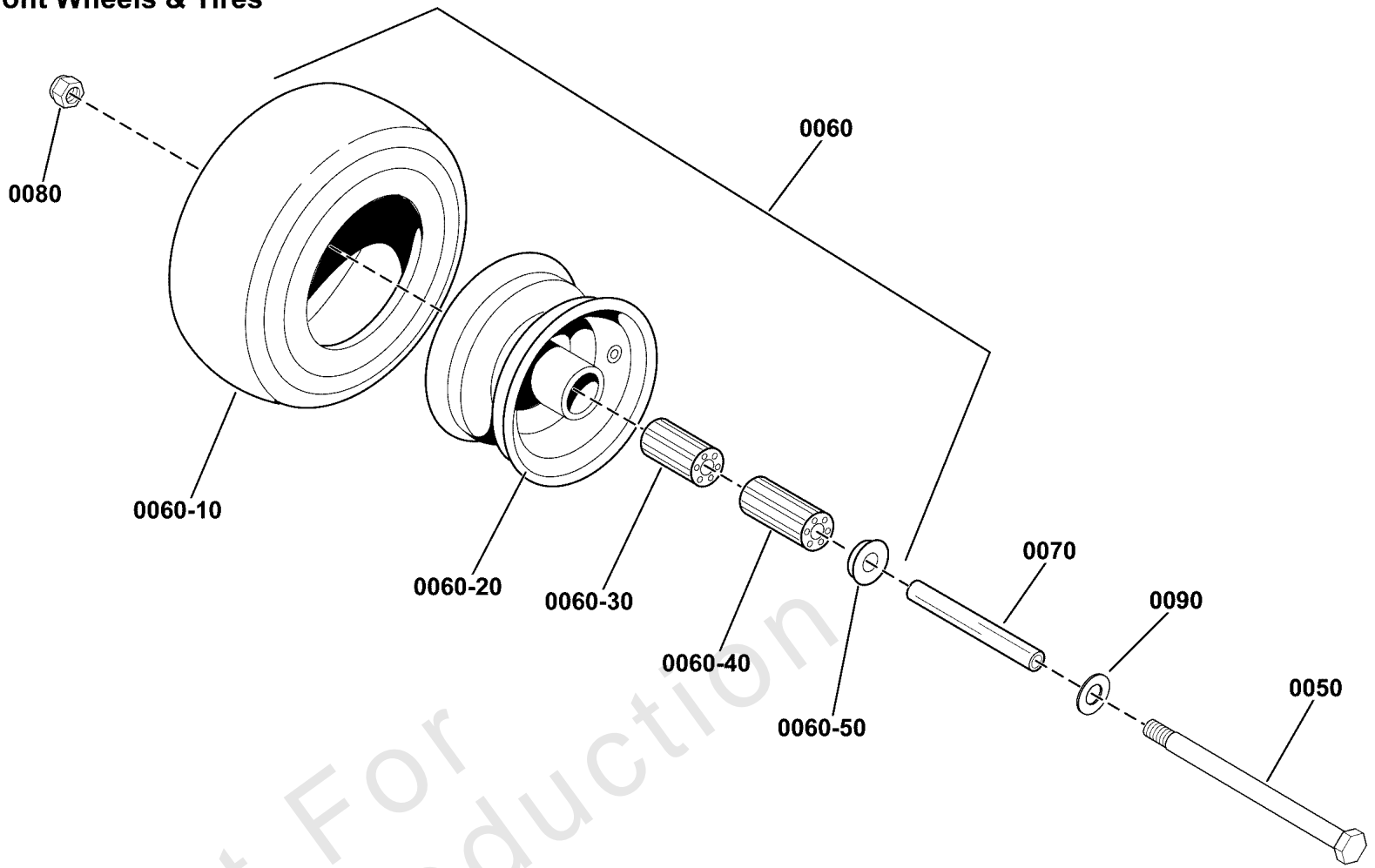
Not For Reproduction

# Wheel and Tire Group

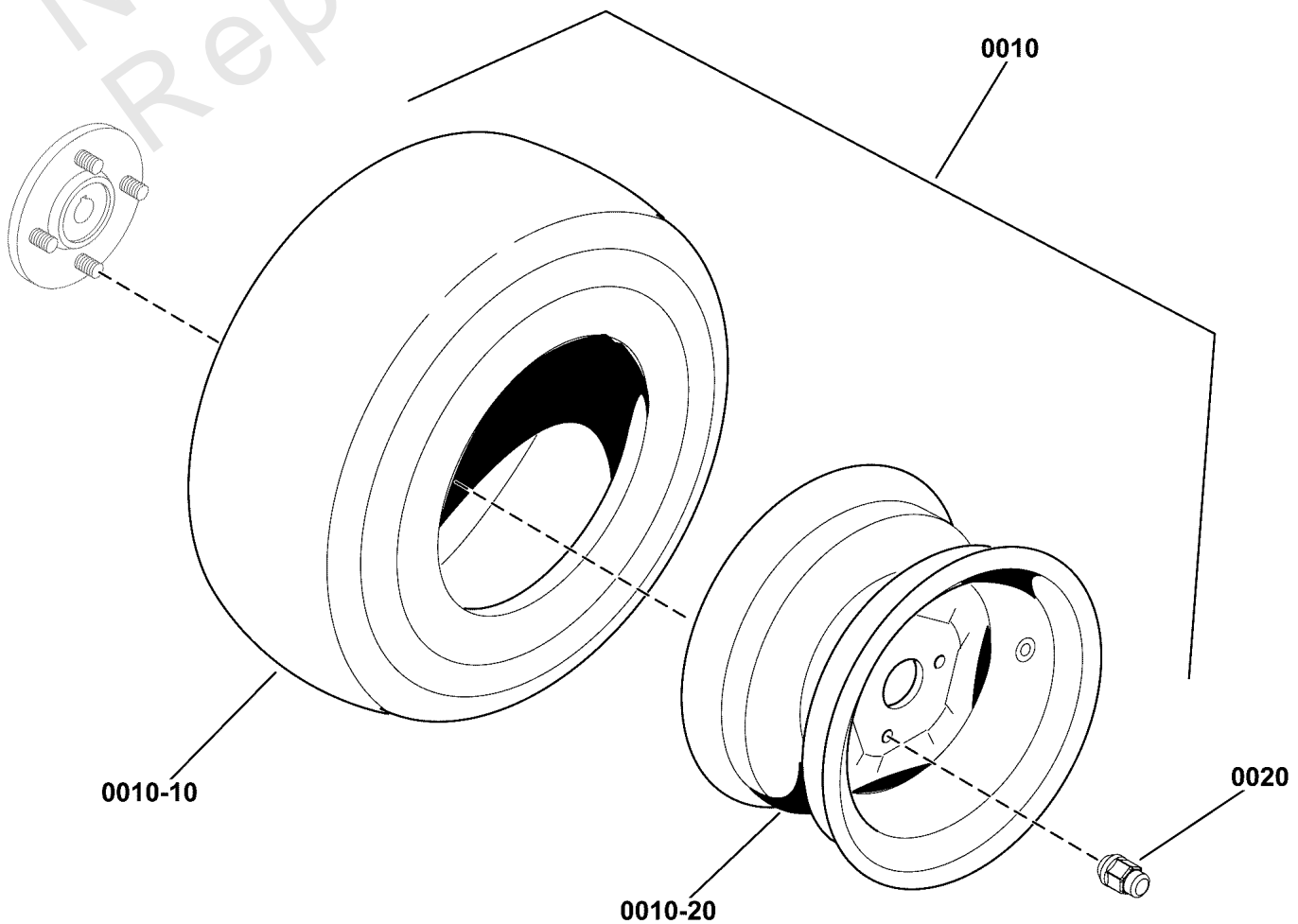
Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5902107

## Front Wheels & Tires



## Rear Wheels & Tires



## Wheel and Tire Group

REF NO	PART NO	QTY	DESCRIPTION
0010	5109047	2	TIRE ASM, 22 X 11 -10 TURF, 4 BOLT, BLK
0010-10	5023369X2	2	TIRE, 22 X 11.00 - 10, 4 PLY -(One per tire)
0010-20	-----	2	WHEEL RIM -(One per tire)
0020	-----	10	LUG NUT, Black -(Originally Black Lug nut - Replacement 5020601SM is silver in color).
0020	5020601SM	10	NUT, 1/2-20, FOR WHEEL BOLT SILVER -(Replacement 5020601SM is silver in color).
0050	5025017X72	2	BOLT, 1/2-13 X 9" GD5 YZ
0060	5109055	2	TIRE ASM, 13 X 6.5-6, RB, BLK, KENDA
0060-10	5022577	2	TIRE, RUBBER ONLY -(One per tire)
0060-20	-----	2	WHEEL RIM
0060-30	84008029	2	BEARING -(One per tire)
0060-40	5021182	2	BEARING, ROLLER 3/4" ID X 3.25" (ONE PER TIRE)(SV) -(One per tire)
0060-50	5021043	4	RETAINER, BEARING (TWO PER TIRE)(SV)
0070	5106587	2	CASTER AXLE SHAFT, .51"ID X .75"OD X7.16
0080	5025396	2	NUT, Hex Flange, Nylock, 1/2-13
0090	5025158	2	WASHER, 1/2 SAE

# 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.

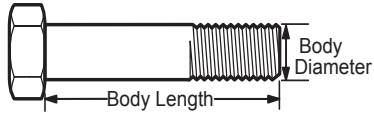


Nut, M8

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).

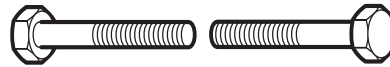
When bolt or capscrew is identified as 1/2 - 16 x 2" (M8 - 1.25 x 50), this means the *Nominal size*, or body diameter is 1/2 inch (8mm metric thread diameter), the second number, 16, represents the *threads per inch*, (*distance between threads*). The final number is the body length of the bolt or screw,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

