

Parts Manual

Mfg. No: 5901988

FW45 CE Series with 48" 3-in-1 Mower
Deck (FW45BV2648SRDCE)

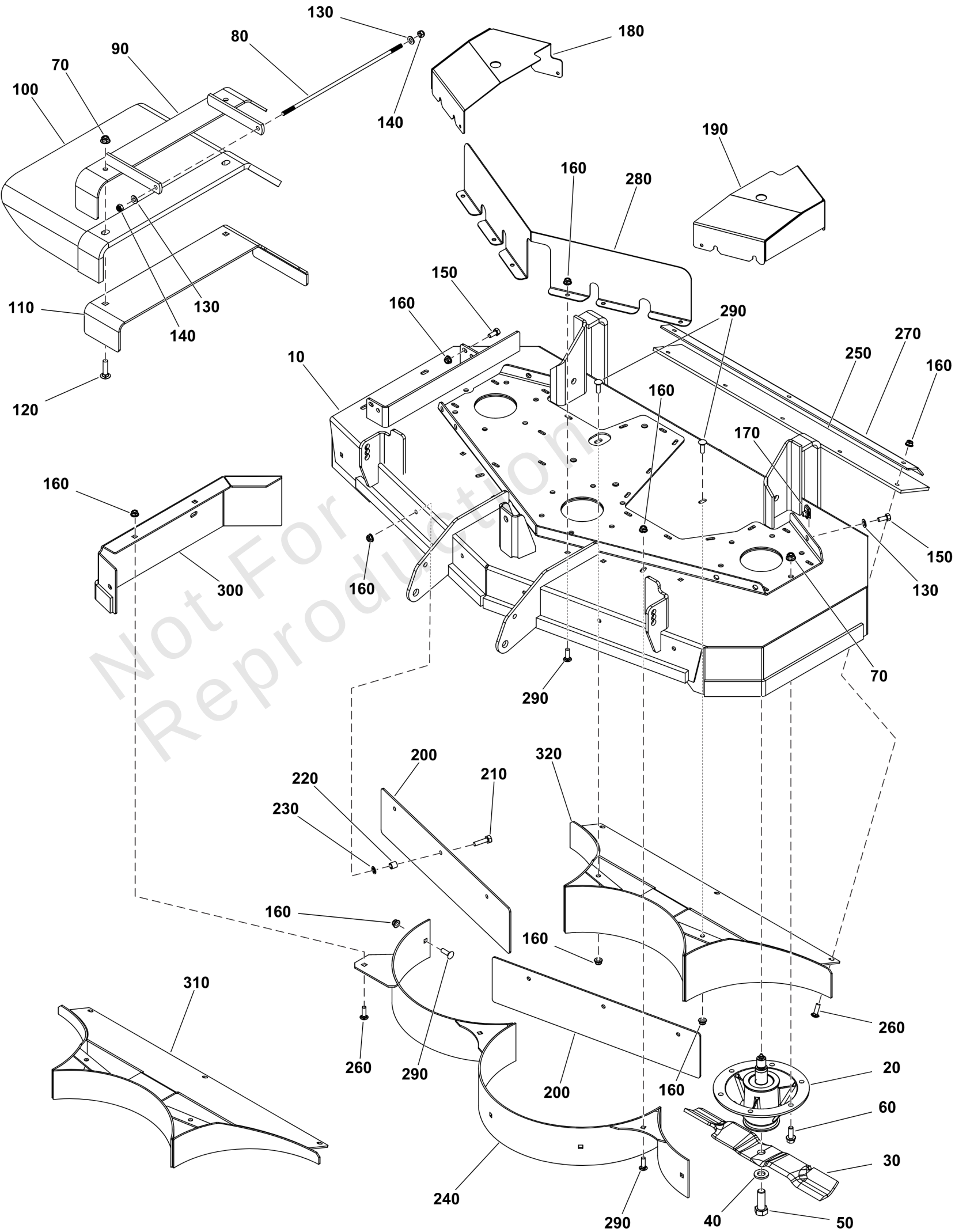


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48" Mower Deck Group - Housing, Covers, Spindles, and Blades

Note: Unless noted otherwise, use the standard torque specifications

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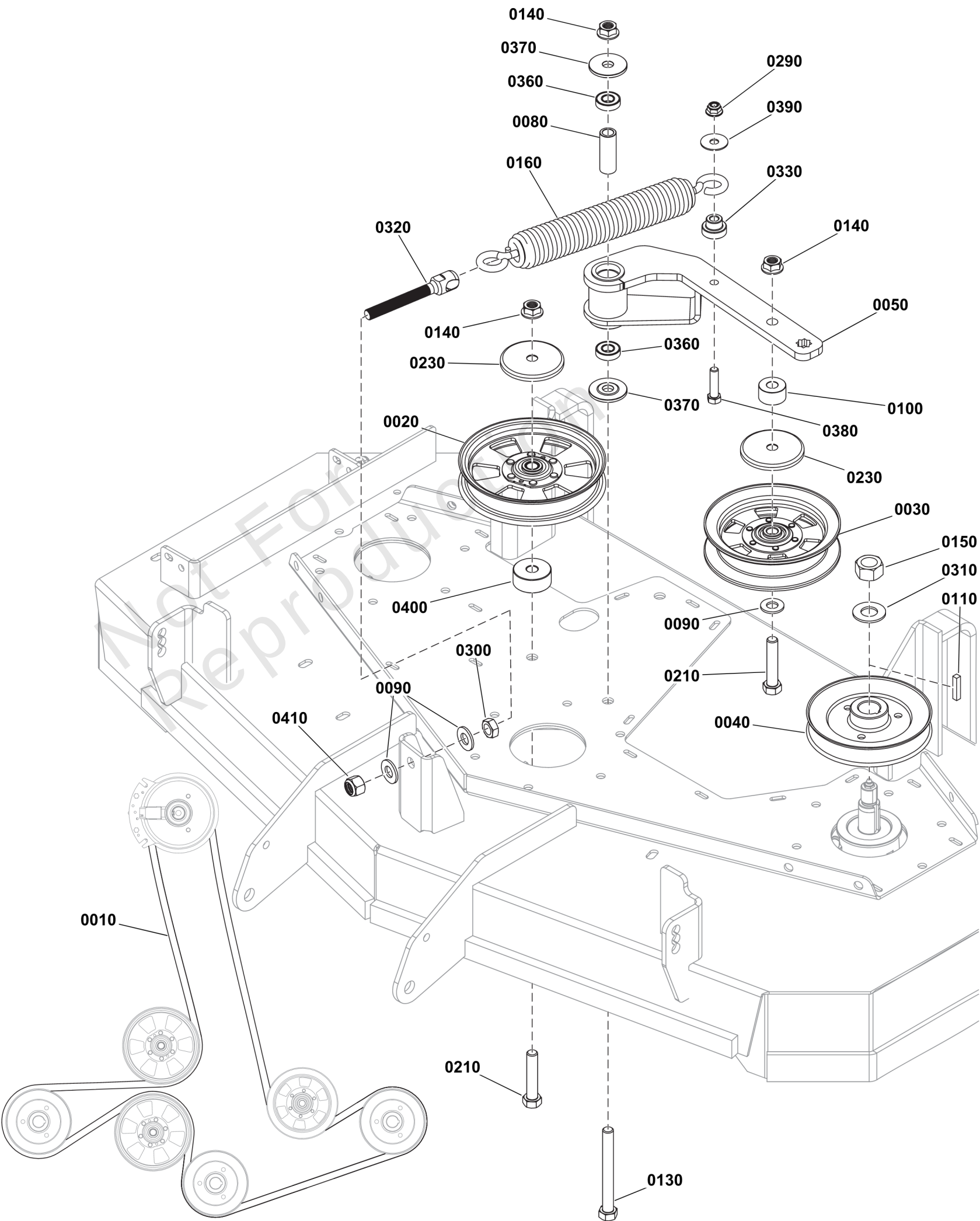
48" Mower Deck Group - Housing, Covers, Spindles, and Blades

REF NO	PART NO	QTY	DESCRIPTION
10	5601520	1	DECK SHELL W/DECALS, FW45-SRDCE
20	5100993SM	3	SPINDLE ASSY
30	5103303S	1	BLADE SET, MULCH, 48 DECK (SET OF 3)
40	5025477SM	3	WASHER, 5/8" YZ
50	770136	3	BOLT
60	5025390X8FS	18	BOLT
70	5025394SM	20	NUT, 3/8-16 HEX NYLOCK
80	5042555SM	1	ROD, BRAKE LINKAGE
90	5419051AA	1	WELD, CHUTE MOUNT, 36/48, CE - BLK
100	5413498	1	CHUTE, RUBBER DISCHARGE CHUTE (5104441)
110	5419201AA	1	SUPPORT, DISCHARGE CHUTE, 48, CE - BLK
120	5025146X12YP	2	BOLT, 3/8-16 X 1-1/2
130	703350	8	WASHER
140	5025045SM	2	NUT, 5/16-24 HEX NYLO
150	5025011X6SM	7	BOLT, 5/16-18 X 3/4"
160	5025392FS	27	NUT
170	5022308SM	6	BODY CLIP, 5/16-18 X
180	5412493BFS	1	GUARD
190	5412494BFS	1	GUARD, PULLEY
200	5412638BFS	2	BAFFLE, DISCHARGE
210	5025055X10YP	6	BOLT, 5/16-18 X 1-1/4
220	5102148YP	6	SPACER, .33 X .50X.50
230	5025498YP	6	NUT, PUSH ON, 5/16
240	5416972BFS	1	BAFFLE, FRONT
250	5402612FS	1	FLAP
260	5025145X8SM	4	BOLT, 5/16-18 X 1", C
270	84008497	1	BRACKET, Support
280	5419060B	1	PLATE, FRONT GUARD, FW35 48",SD CE - RED
290	5025145X6SM	16	BOLT, 5/16-18 X 3/4",
300	84008499	1	PLATE, Blockoff
310	84008500	1	BAFFLE, Rear
320	84008501	1	BAFFLE, Rear

48" Mower Deck Group - Pulleys, Belt, and Idler Arm

Note: Unless noted otherwise, use the standard torque specifications

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48" Mower Deck Group - Pulleys, Belt, and Idler Arm

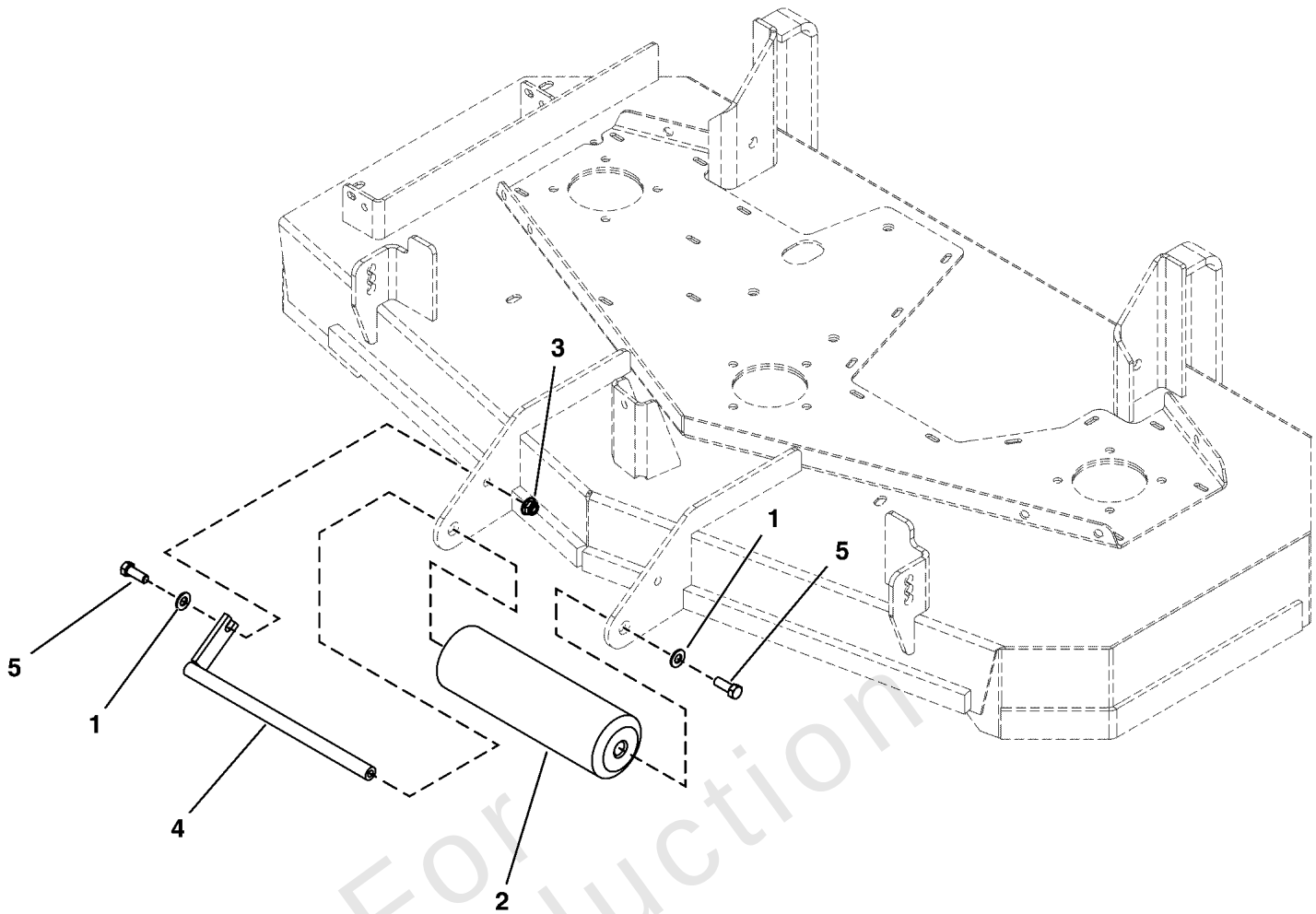
REF NO	PART NO	QTY	DESCRIPTION
0010	5104219	1	BELT, 5V, 139.30"EL, ARAMID, WRAP, RC
0020	5104717	2	PULLEY, FLT IDLR, 6.0 X 1.0 X .50, CZ
0030	5104716	1	PULLEY, IDLER, BACKSIDE, NOSEAM 6.25ODX.5ID
0040	5023175	3	PULLEY, 5.540OB X .985ID, SINGLE B-SEC
0050	5412371AA	1	WELD, TENSION ARM, CUTTER DECK - BLK
0080	5104172	1	SPACER, .505 X .75 X 2.085, CZ
0090	5025158	3	WASHER, 1/2 SAE
0100	5047142	1	SPACER, .52 X 1.25 X .70, PM, CZ
0110	5050407X10	3	KEY, 1/4" SQ. X 1-1/4
0130	5025017X36	1	BOLT, 1/2-13 X 4-1/2" GD5 YZ
0140	5025396	4	NUT, Hex Flange, Nylock, 1/2-13
0150	5025405	3	NUT, 3/4-16 Hex
0160	5104166	1	SPRING, EXT, 1.5ODX12.25X.234WIRE BLK -(Coil-to-coil spring length with deck set at 3-1/2" cutting height: 11" ±1/8")
0210	5025017X20	3	BOLT, 1/2-13 X 2-1/2" GD5 CZ
0230	5105145	3	SHIELD, BEARING, 1/2 ID X 2-7/8 OD, CZ
0290	5025394	1	NUT, 3/8 - 16 HEX NYLOCK FLANGE
0300	5025089	1	NUT, 1/2-20 Hex Jam
0310	5025406	3	WASHER, 3/4 BELLEVILLE CL/ZC
0320	5105844	1	SPRING PULLER, 1/2-20, 5.00
0330	5102406	1	SPACER, .38 X 1.13 X .781 STEP, CZ
0360	7078243	2	BEARING, BALL, AXLE
0370	5103262	2	SPACER, IDLER ARM, 1/2, PM
0380	5025013X12	1	BOLT, 3/8-16 X 1-1/2" GD5 CZ
0390	5025165	1	WASHER, 3/8" Fender
0400	5046916	2	SPACER, .51 x 1.75 x .75
0410	5025098	1	NUT, Hex, Nylon Lock, 1/2-20

48" Mower Deck Group - Rollers

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5901988

5300792



48" Mower Deck Group - Rollers

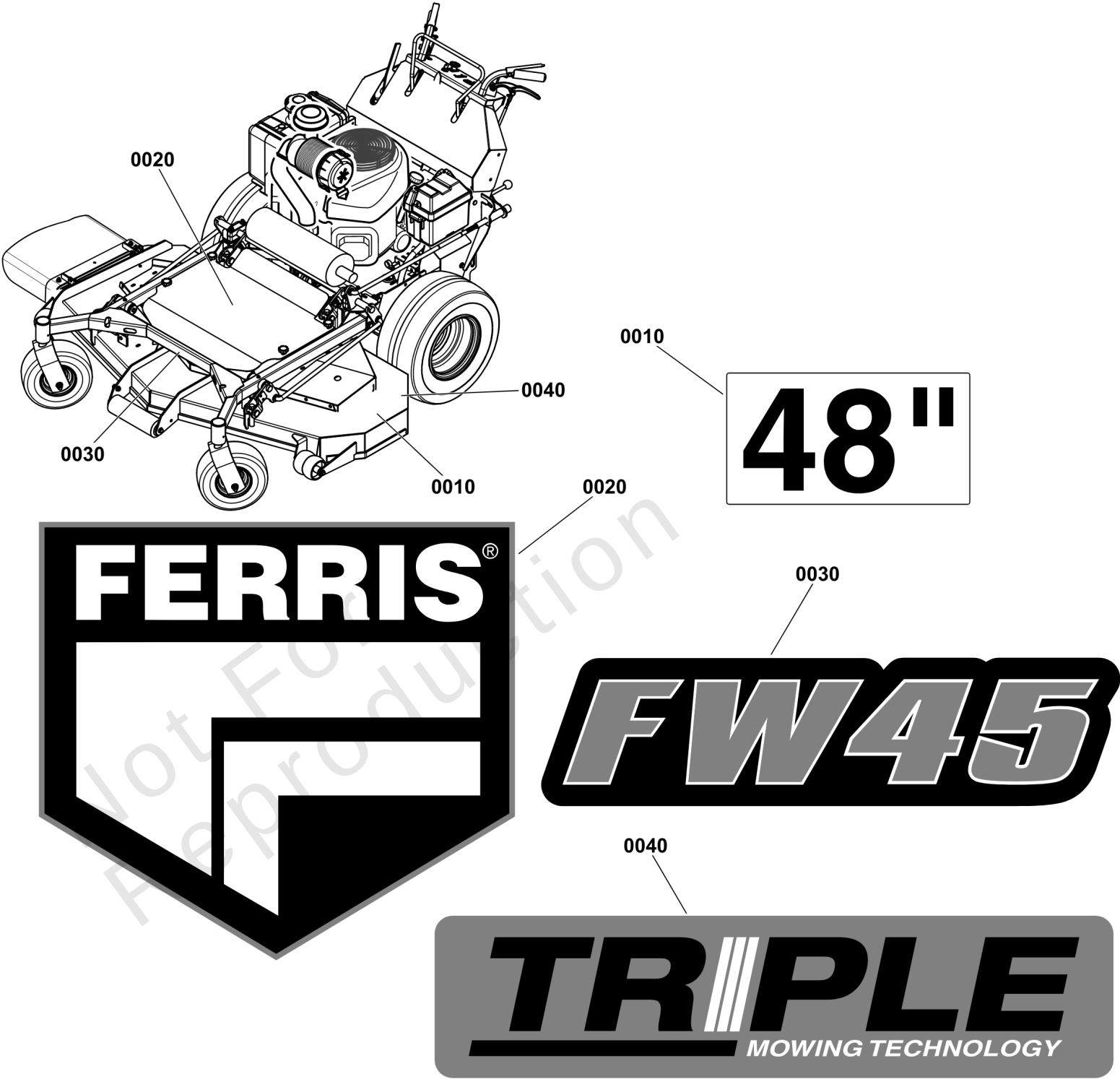
REF NO	PART NO	QTY	DESCRIPTION
1	5025156	2	WASHER, 3/8 SAE
2	5020785	1	ROLLER, DECK
3	5025394	1	NUT, 3/8-16 HEX NYLOCK FLANGE
4	5105755	1	PIN, ROLLER, CZ
5	5025013X8	2	BOLT, 3/8-16 X 1" GD5 CZ

Not For Reproduction

Decal Group - Brand and Model

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5901988



Decal Group - Brand and Model

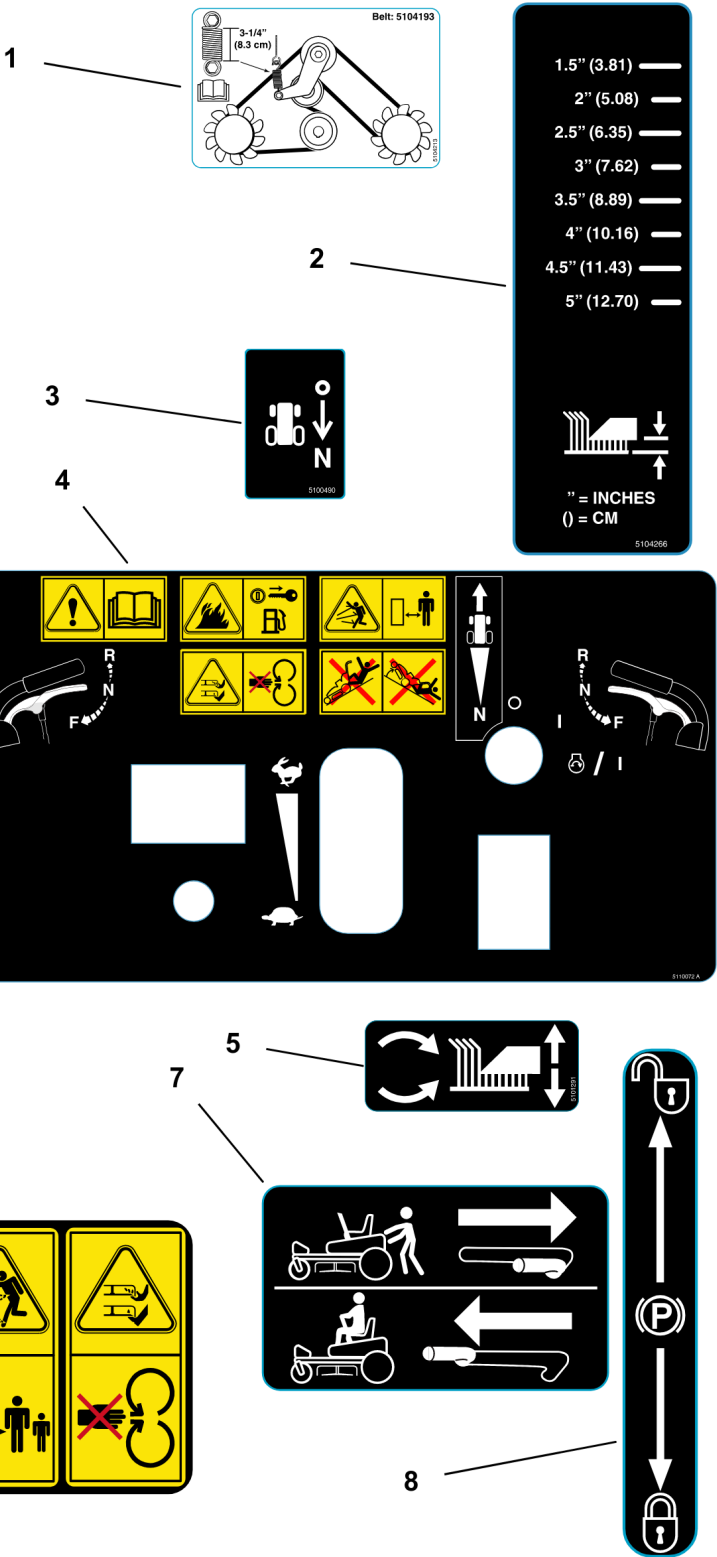
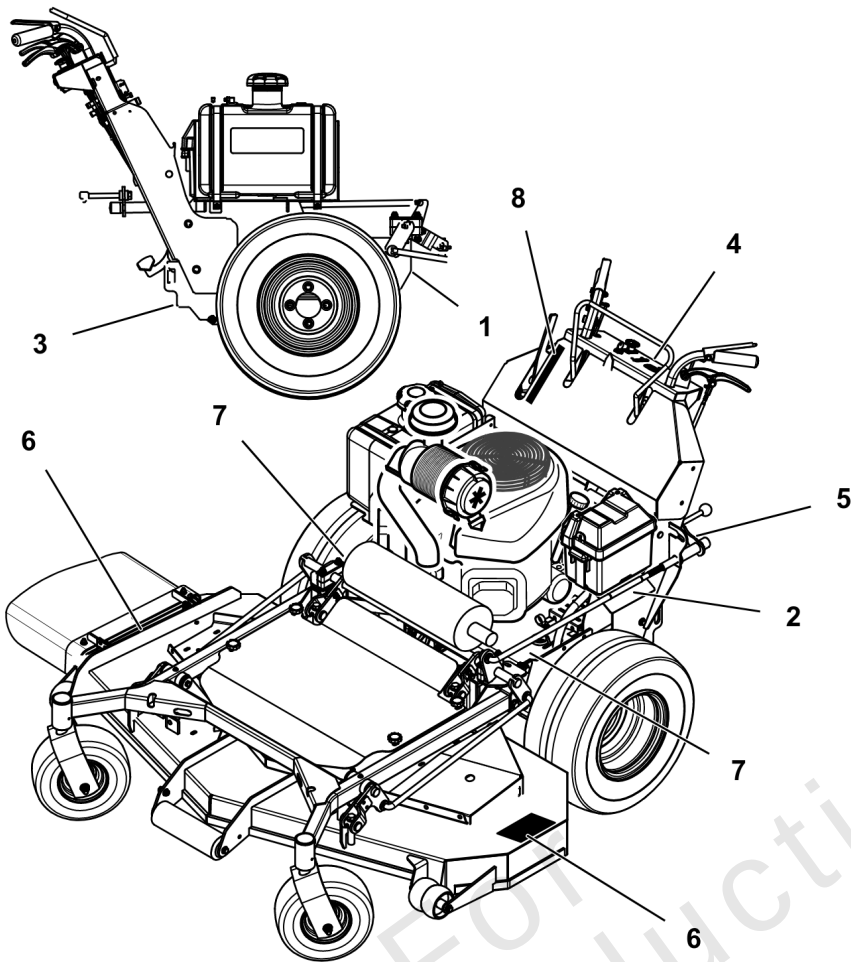
REF NO	PART NO	QTY	DESCRIPTION
0010	5022811	1	DECAL, 48
0020	5104767FS	1	DECAL, BRAND
0030	5108862	1	DECAL, MODEL, W45
0040	-----	1	DECAL, TRIPLE MOWING TECHNOLOGY

Not For Reproduction

Decal Group - Safety and Operation

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Mfg. No: 5901988



Decal Group - Safety and Operation

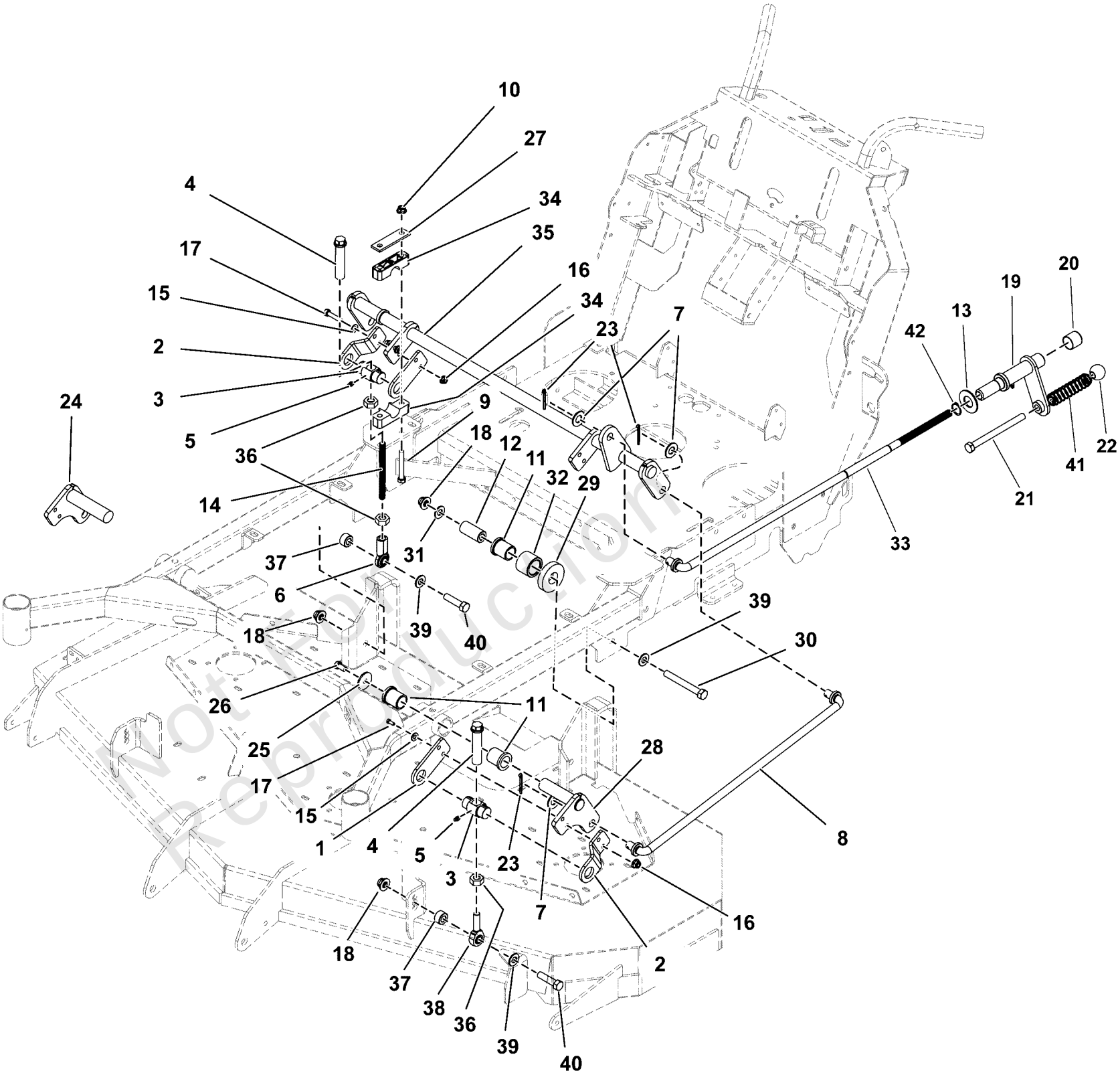
REF NO	PART NO	QTY	DESCRIPTION
1	5104213	1	DECAL, BELT ROUTING, F/SW35
2	5104266	1	DECAL, CUT HEIGHT, WB, 1.5"-5"
3	5100490	2	DECAL, PEDAL
4	84014307	1	DECAL, Warning/Safety
5	5101291	1	DECAL, CUT HEIGHT, SPDD
6	7106109	2	DECAL, DISCHARGE SAFETY, EXPORT
7	5102628	1	DECAL, PARKING BRAKE SYMBOLS
8	5104268	2	DECAL, TRANSAXLE RELEASE, WB

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Deck Lift Group

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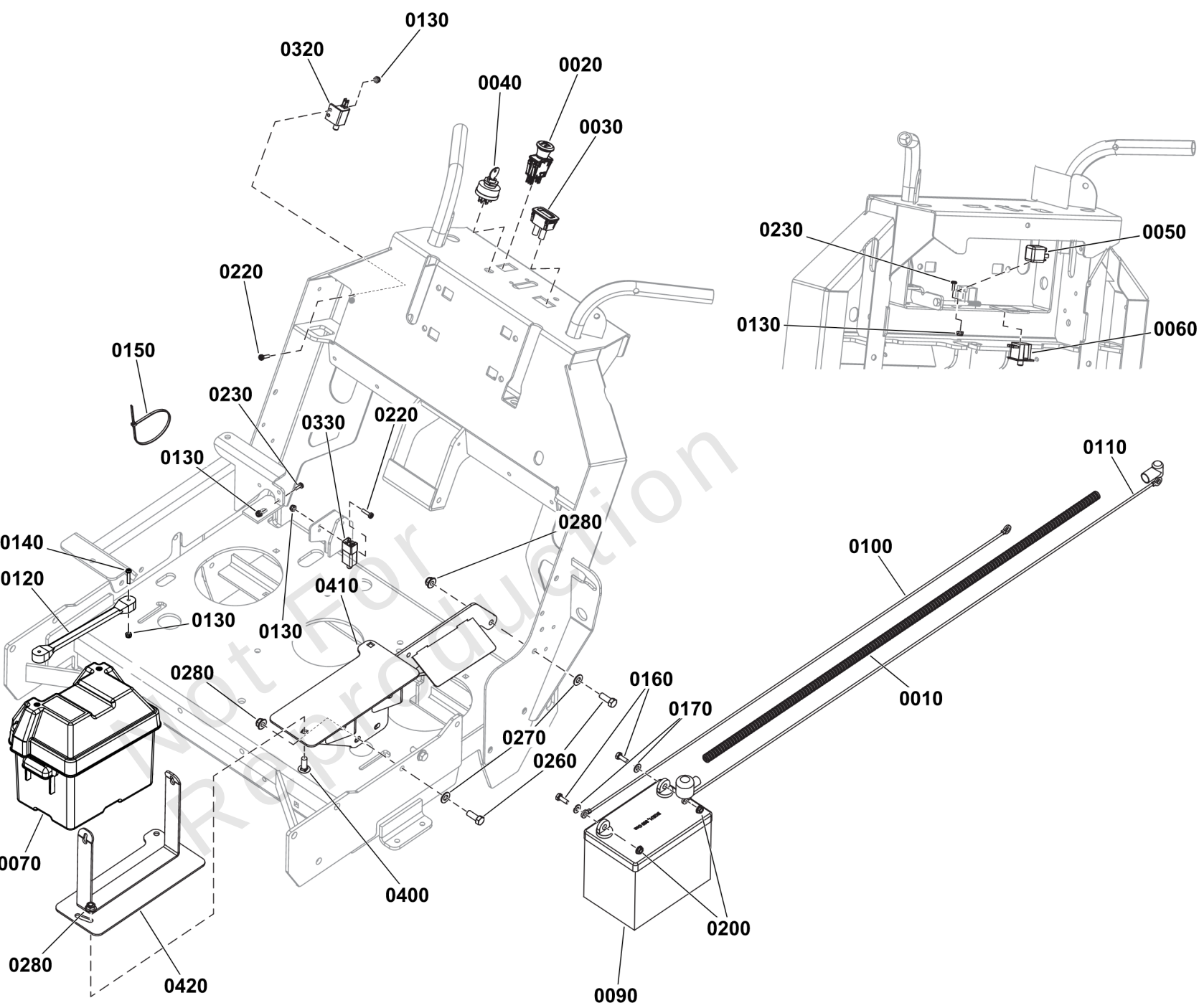
Mfg. No: 5901988



Deck Lift Group

REF NO	PART NO	QTY	DESCRIPTION
1	5413900AA	4	BRACKET, INNER TRUNION MNT - BLK
2	5413899AA	4	BRACKET, OUTER TRUNION MNT - BLK
3	5104238	4	PIVOT, DECK LIFT TRUNION, GREASABLE
4	5109915FS	4	ADJUSTER, HEIGHT
5	5020095	4	GREASE FITTING, 1/4-28 Straight
6	1702779	2	JOINT-BALL .500-20 THD .500ID, CLR ZINC
7	5025281	5	WASHER, 5/8" SAE
8	5104209	2	ROD, DECK LIFT TIMING, 48-52
9	5025013X22	4	BOLT, 3/8-16 X 2-3/4" GD5 CZ
10	5025394	4	NUT, 3/8 - 16 HEX NYLOCK FLANGE
11	5021541	6	BUSHING, FLANGE
12	5100732	2	SPACER, .52 X 1.00 X 2.09 - SS
13	5025162	1	WASHER-1.00 HYDRO CUT
14	5102665	2	ROD, 1/2-20 X 5.50 TFL, CZ
15	5025156	8	WASHER, 3/8 SAE
16	5025394	8	NUT, 3/8 - 16 HEX NYLOCK FLANGE
17	5025013X12	8	BOLT, 3/8-16 X 1-1/2" GD5 CZ
18	5025396	6	NUT, Hex Flange, Nylock, 1/2-13
19	5109449	1	CRANK, HANDLE, W45
20	5102086	1	CAP, VINYL, 1.062 X 1.00 BLK
21	5025017X48	1	BOLT, 1/2-13 X 6" GD5 YZ
22	5021733	1	KNOB, PLASTIC, 1/2-13
23	5025203X10	5	PIN, COTTER, 1/8 X 1-1/4
24	5413896AA	1	NLA - WELD, DECK LIFT LEVER, RH - BLK
25	5100548	2	WASHER, .390 X 1.50 X .109, YZ
26	5025443	2	BOLT, 3/8-16 X 3/4, PLT W/PATCH
27	5403925AA	2	PLATE, PIVOT BLOCK SUPPORT - BLK
28	5413895AA	1	WELD, DECK LIFT LEVER, LH - BLK
29	5061010	2	WASHER, FRICTION
30	5025017X26	2	BOLT, 1/2-13 X 3-1/4, HEX HD, GD5, CZ (SV)
31	5025150	2	WASHER, 1/2" USSZ
32	5100731	2	ROLLER, DECK HEIGHT
33	5104220	1	ROD, DECK HEIGHT
34	5100634	4	PIVOT BLOCK, PLASTIC
35	5413894AA	1	WELD, SHAFT, DECK LIFT, SW35 - BLK
36	5025089	6	NUT, 1/2-20 Hex Jam
37	5105392	4	WASHER, .515 X 1.00 X .25", CZ
38	5104267	2	BALL JOINT, 1/2-20, RH, MALE, METAL RACE
39	5025158	6	WASHER, 1/2 SAE
40	5025017X16	4	BOLT, 1/2-13 X 2" GD5 CZ
41	5107543	1	SPRING, FORWARD RETURN, FW15
42	5109482	1	SNAP RING, EXTERNAL, 15/16" SHAFT

0310 - Harness, W45 Wiring w/ Brake Switch



Electrical Group

REF NO	PART NO	QTY	DESCRIPTION
0010	5050927X39FS	1	WIRE, LOOM
0020	5104697FS	1	SWITCH, PTO
0030	84008510	1	HOURMETER (6 Pin Connector)
0040	5020927FS	1	SWITCH, IGNITION
0050	5021766SM	1	RELAY, 12V, 40A
0060	5101280YP	1	SWITCH, LOW PROF, NC/
0070	5100688YP	1	BATTERY BOX, W/ DRAIN
0090	-----	1	BATTERY, 11U1L, 350 CCA
0100	5105301FS	1	CABLE, BATTERY, BLACK
0110	5105300FS	1	CABLE, BATTERY, RED
0120	5021670SM	1	STRAP, RUBBER
0130	5025271FS	8	NUT
0140	5025270SM	2	SCREW, #10-24 X 1" RS
0150	5021029SM	8	TIE, Cable 11" Long
0160	5025010X6SM	2	BOLT, 1/4-20 X 3/4" G
0170	84007033	2	WASHER
0200	5025126FS	3	NUT
0220	5025179X6SM	4	SCREW - #10-24
0230	5025179X4SM	2	SCREW, #10-24 X 1/2" ROUND PHILLIPS
0260	5025013X8SM	3	BOLT, 3/8-16 X 1" GD5
0270	5025156FS	3	WASHER
0280	5025394SM	5	NUT, 3/8-16 HEX NYLOCK
0310	5108762FS	1	HARNESS, WIRING
0320	5021451SM	1	SWITCH, PLUNGER, N.O.
0330	1717050SM	1	SWITCH-PUSH BUTT
0400	703815	2	BOLT, RD SQ 3/8-16X1
0410	84008373	1	WELD, MNT BATTERY LOWER, OG, W45 - BLK
0420	84008374	1	WELD, MNT BATTERY UPPER, OG, W45 - BLK

Electrical Schematic - Charging Circuit

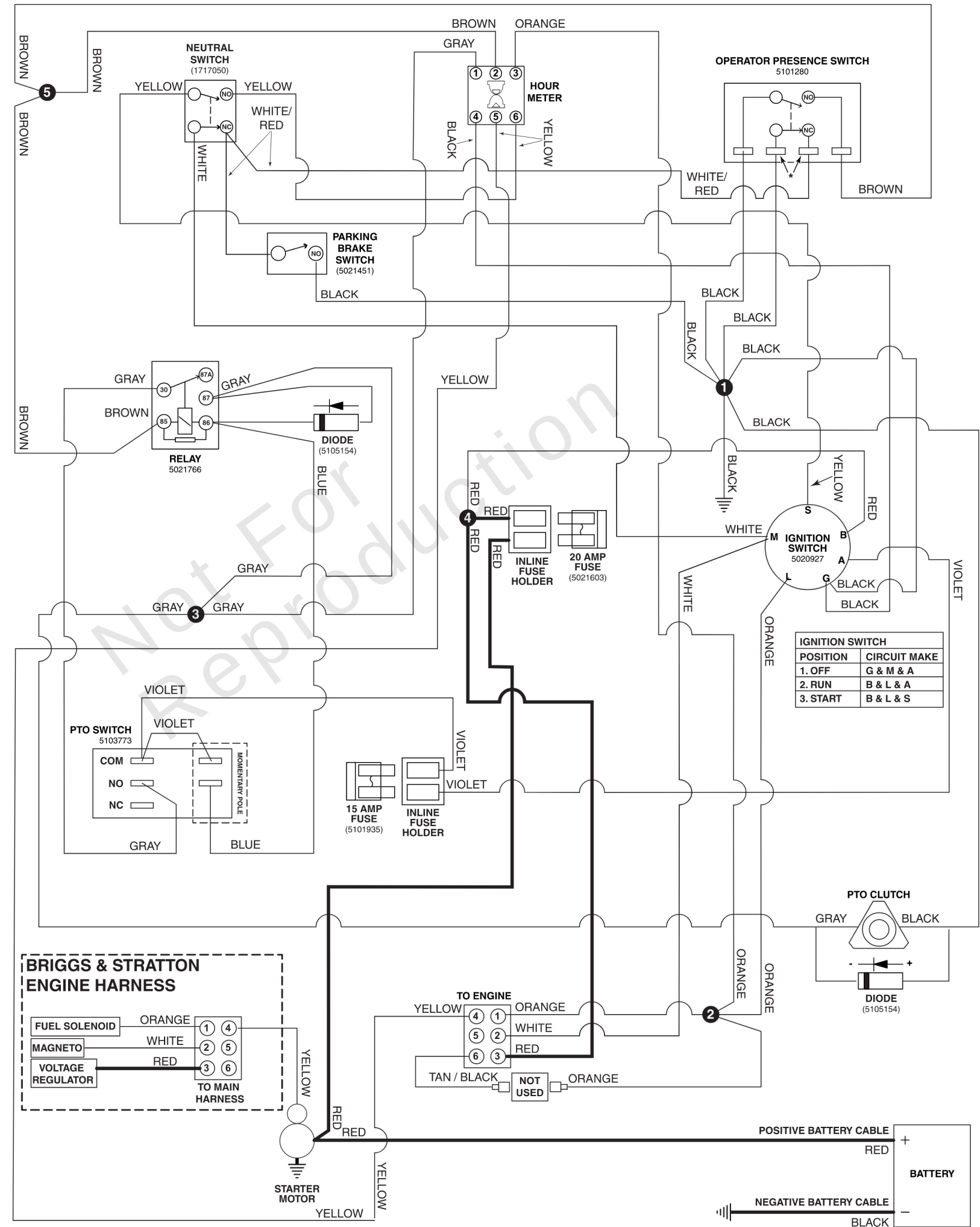
Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5901988

5108762 / MAIN WIRE HARNESS - BRIGGS & STRATTON 49R977 ENGINES

5108762E

(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.)
*This switch uses a "shorting" connector. When the connector is unplugged, the terminals going to the identified pole will have continuity.



Electrical Schematic - Charging Circuit

REF NO	PART NO	QTY	DESCRIPTION
5108762	5108762FS	1	HARNESS, WIRING

Not For Reproduction

Electrical Schematic - Cranking Circuit

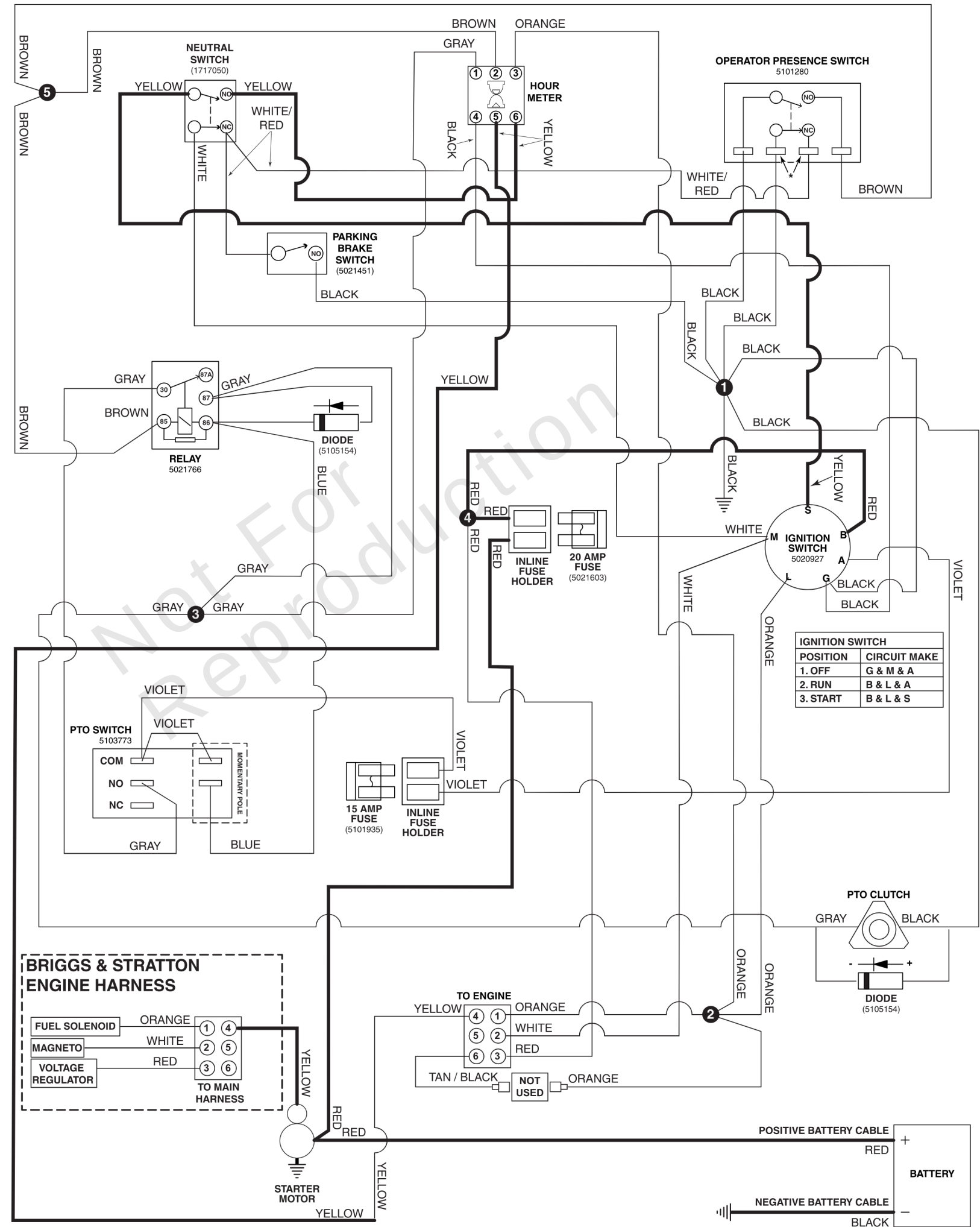
Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5901988

5108762 / MAIN WIRE HARNESS - BRIGGS & STRATTON 49R977 ENGINES

5108762E

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Electrical Schematic - Cranking Circuit

REF NO	PART NO	QTY	DESCRIPTION
5108762	5108762FS	1	HARNESS, WIRING

Not For Reproduction

Electrical Schematic - Ignition Grounding Circuit/Operator Presence

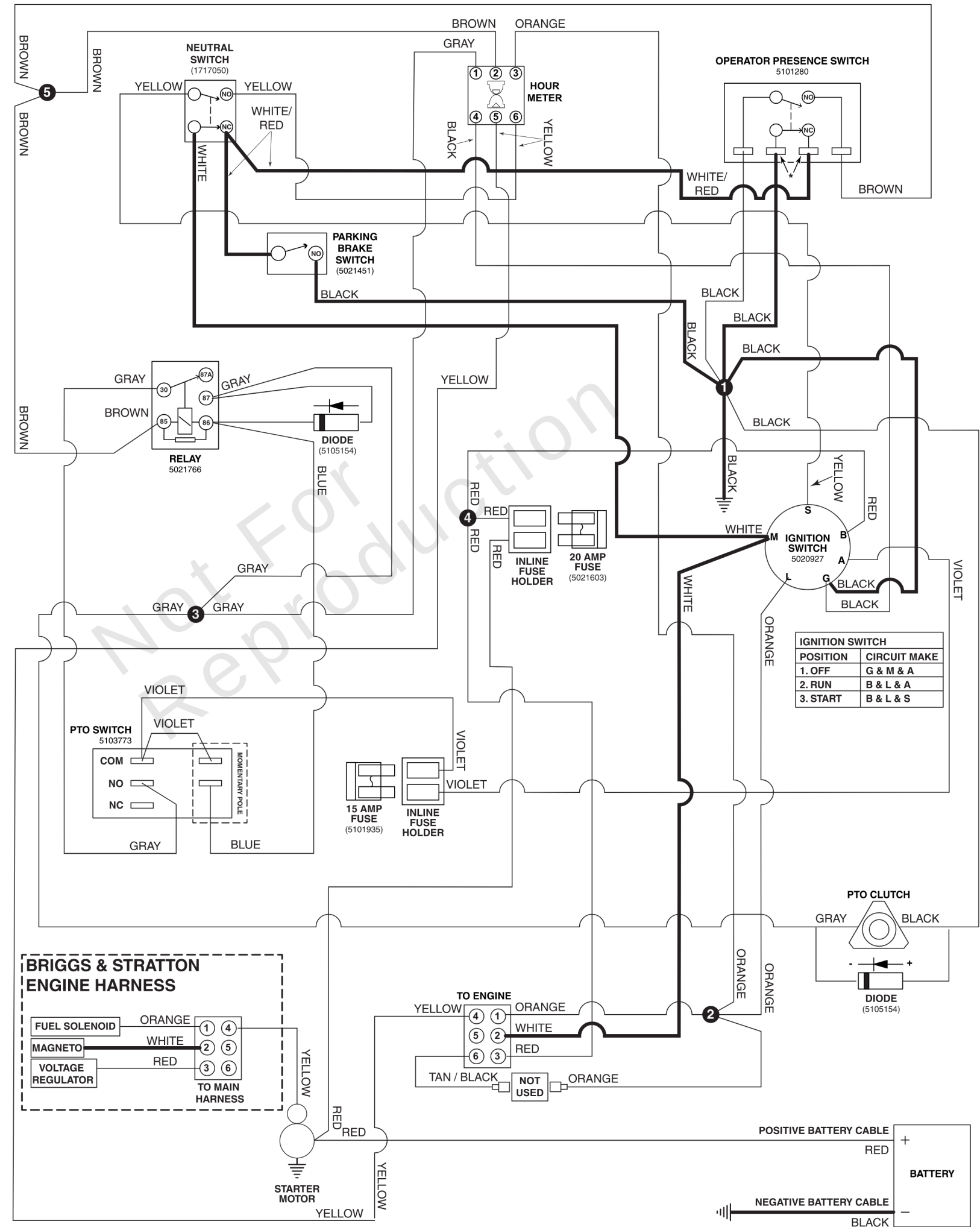
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5108762 / MAIN WIRE HARNESS - BRIGGS & STRATTON 49R977 ENGINES

5108762E

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Electrical Schematic - Ignition Grounding Circuit/Operator Presence

REF NO	PART NO	QTY	DESCRIPTION
5108762	5108762FS	1	HARNESS, WIRING

Not For Reproduction

Electrical Schematic - PTO Clutch Circuit

Note: Unless noted otherwise, use the standard torque specifications

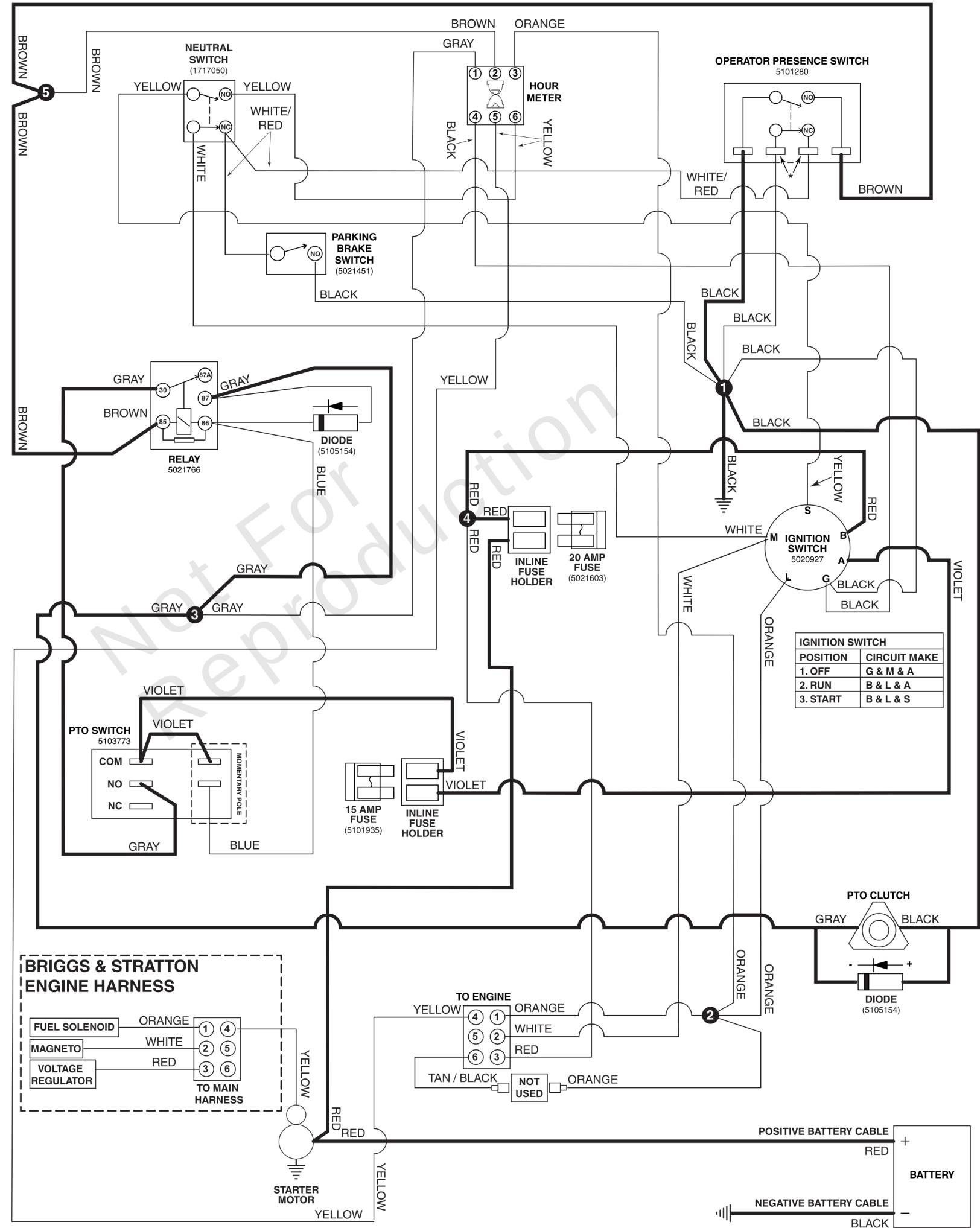
Mfg. No: 5901988

5108762 / MAIN WIRE HARNESS - BRIGGS & STRATTON 49R977 ENGINES

5108762E

(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.)

*This switch uses a "shorting" connector. When the connector is unplugged, the terminals going to the identified pole will have continuity.



Electrical Schematic - PTO Clutch Circuit

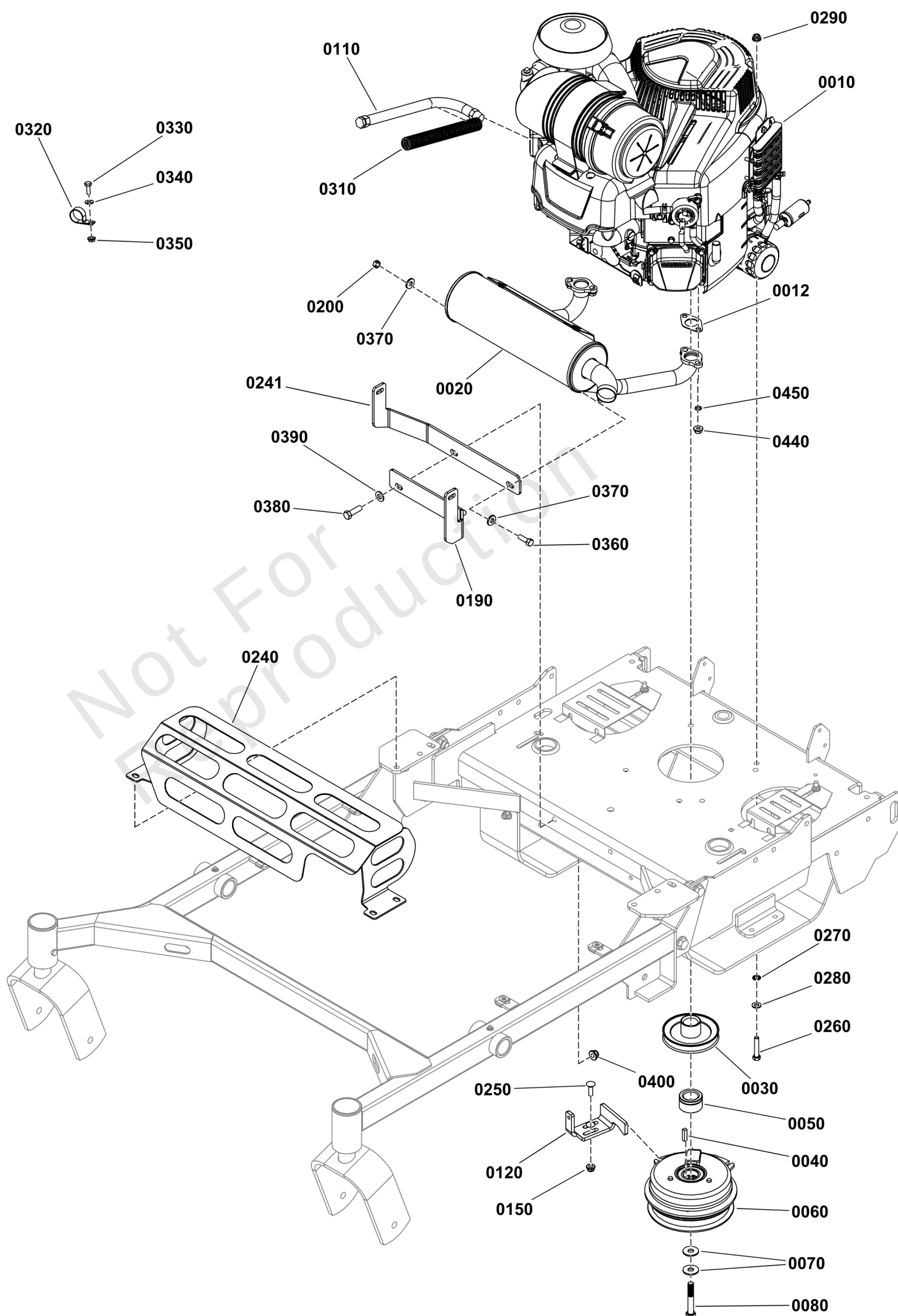
REF NO	PART NO	QTY	DESCRIPTION
5108762	5108762FS	1	HARNESS, WIRING

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Engine and PTO Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5901988



Engine and PTO Group

REF NO	PART NO	QTY	DESCRIPTION
0010	-----	1	ENGINE, Briggs & Stratton, 49R977-0019-G1 -(Refer to Note:*)
0012	273485	2	GASKET, EXHAUST
0020	5104306	1	MUFFLER, 26/28, B&S VANG, TWR/WALK
0030	5104236	1	PULLEY, CRANKSHAFT, 1.125ID X 4.50OD, OS
0040	5050407X8	1	KEY, 1/4 SQ X 1
0050	5047033	1	SPACER, 1.13 X 1.75 X 1.03, CZ
0060	5105090	1	CLUTCH WARNER 200 FT-LB 1.13 X 6.323
0070	5025585	2	BELLEVILLE WASHER, 1.1875 X .442 X .098
0080	5102865	1	BOLT, CRANKSHAFT, 7/16-20 X 2-3/4, GD8
0110	5048681	1	HOSE, OIL DRAIN
0120	5412326AA	1	PLATE, CLUTCH ANCHOR - BLK
0150	5025392	2	NUT, 5/16-18 HEX NYLOCK FLANGE NUT
0190	5415276AA	1	PLATE, MUFFLER SUPPORT, LH, W35 - BLKK
0200	80003675	2	NUT, 5/16-1/8, HEX, CNTR LK, ZINC PHOS/OIL
0240	5412407B	1	WELD, CE MUFFLER GUARD, FW35 - RED
0241	5415277AA	1	PLATE, MUFFLER SUPPORT, RH, W35 - BLK
0250	5025145X8	2	BOLT, 5/16-18 X 1, CARRIAGE, GD5, CZ
0260	5025025X14	4	BOLT, 5/16-24 X 1-3/4, GD8, PHOS
0270	5025188	4	WASHER, 5/16" Internal Tooth Lock
0280	5025155	4	WASHER, 5/16" SAE
0290	5025616	4	NUT, 5/16-24, TOP LOCK FLANGE, GD8 PHOS
0310	5050862X8	1	WIRE LOOM, 3/4 ID X 8.00" LG
0320	5021500	1	CLAMP, VINYL INSULATED, 1.00
0330	5025010X6	1	BOLT, 1/4"-20 X 3/4" GD5 YZ
0340	5025154	1	WASHER, 1/4 SAE
0350	5025126	1	NUT, 1/4-20 HEX SERR. FLANGE
0360	5025011X8	2	BOLT, 5/16-18 X 1" GRD5 YZ
0370	5025292	4	WASHER, 5/16 GRADE 9, FLAT
0380	5025013X10	2	BOLT, 3/8-16 X 1-1/4" GD5 CZ
0390	5025156	2	WASHER, 3/8 SAE
0400	5025394	2	NUT, 3/8 - 16 HEX NYLOCK FLANGE
0440	810086	4	NUT
0450	5023217	4	WASHER, Light Lock, 5/16

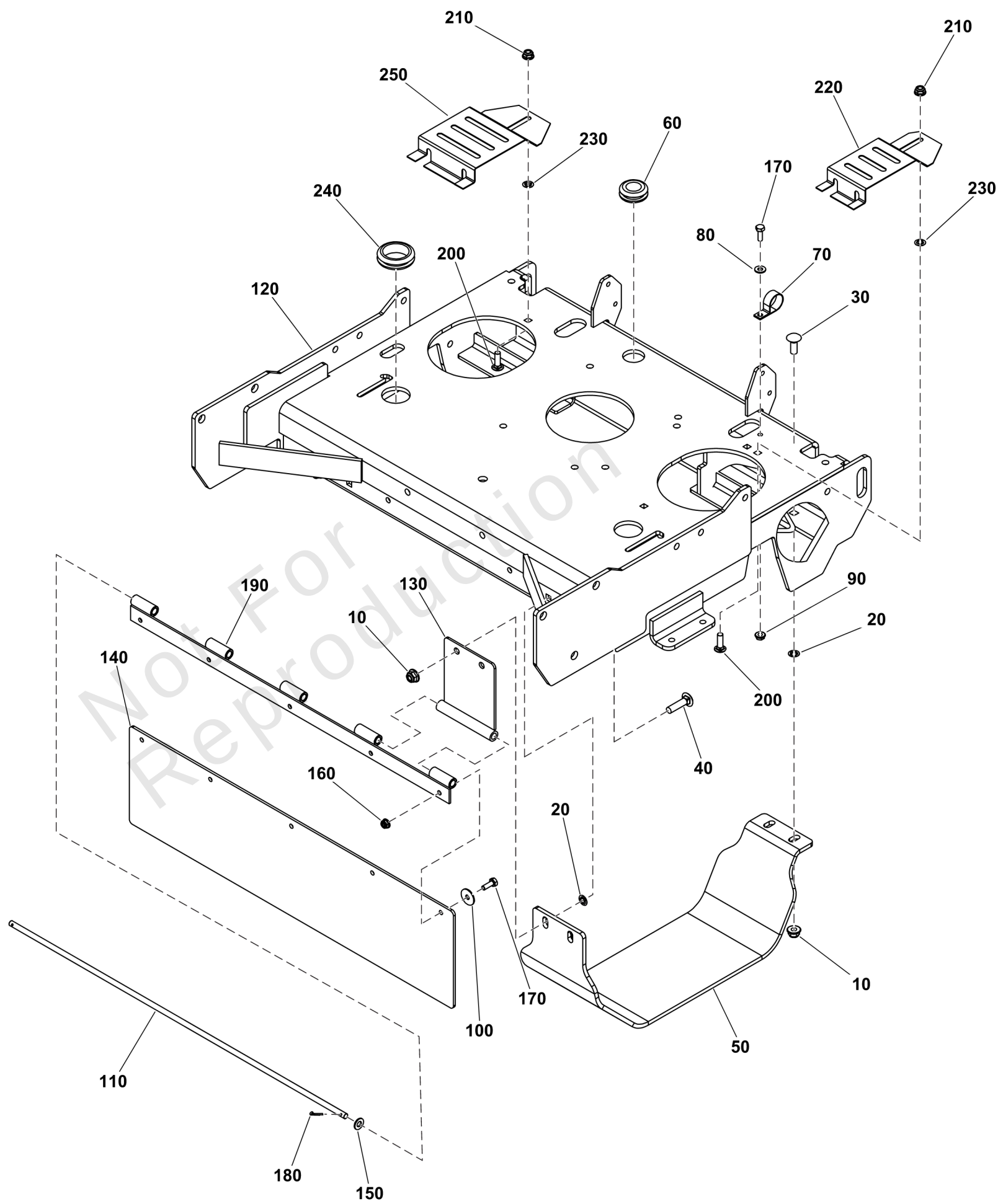
Footnotes:

*Note: Order engine replacement parts for authorized engine manufacturer service dealer.

Engine Deck Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5901988



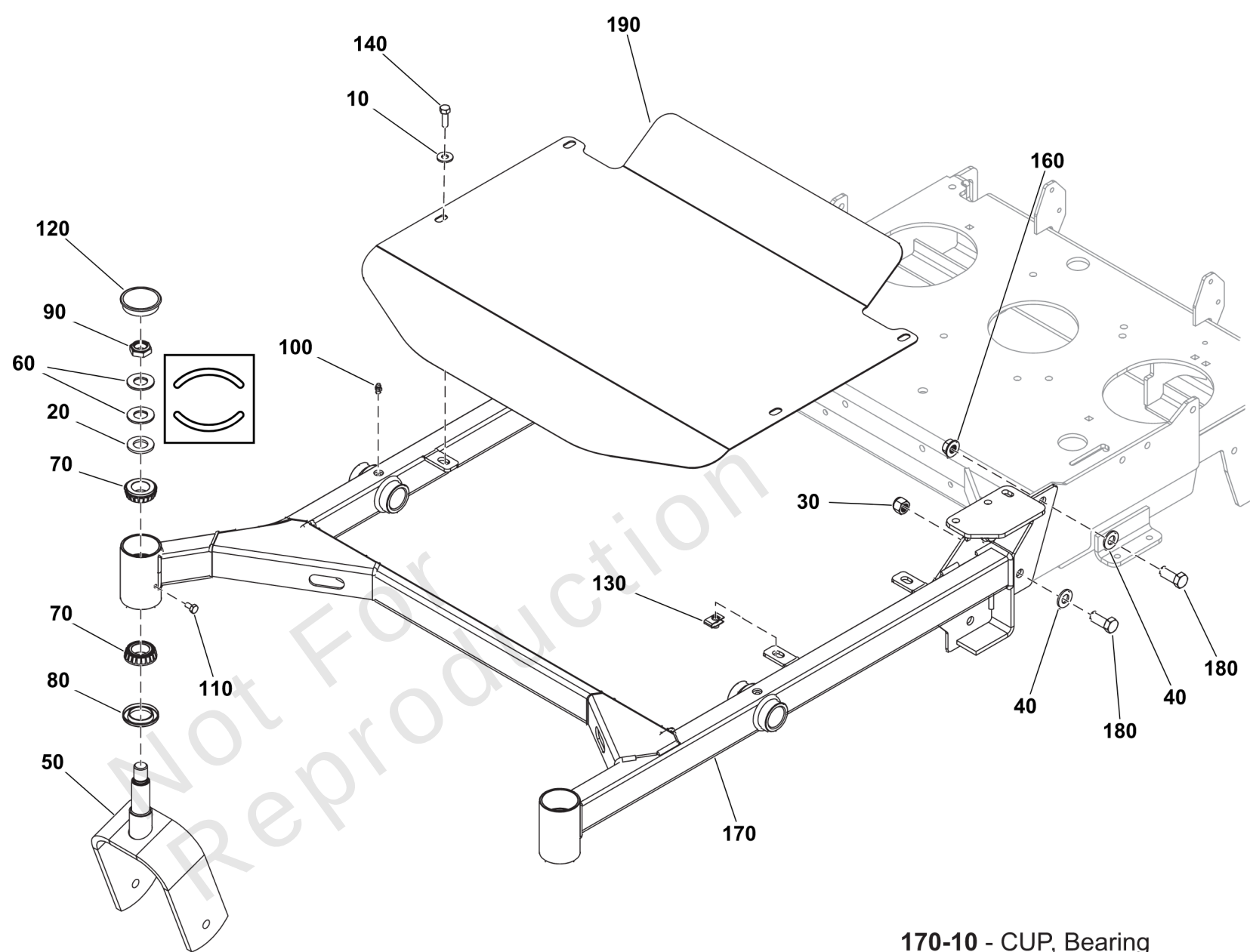
Engine Deck Group

REF NO	PART NO	QTY	DESCRIPTION
10	5025394SM	8	NUT, 3/8-16 HEX NYLOCK
20	703986	8	RETAINER, PUSHNUT,3/8
30	703814	4	BOLT, RD HD, 3/8-16X1
40	5025146X12YP	4	BOLT, 3/8-16 X 1-1/2
50	5420466AAFS	2	PLATE
60	5103944YP	1	GROMMET, 7/8"ID
70	5021500FS	1	CLAMP
80	84007033	1	WASHER
90	5025126FS	1	NUT
100	5025288YP	5	WASHER, 1/4 FENDER
110	5108918FS	1	ROD
120	5420312BFS	1	DECK, ENGINE
130	5420213AAFS	2	MOUNT
140	5108724FS	1	FLAP
150	703350	2	WASHER
160	5025391FS	5	NUT
170	5025010X6SM	6	BOLT, 1/4-20 X 3/4" G
180	703312	2	PIN, COTTER, 3/32X.75
190	5420214AAFS	1	MOUNT
200	5025145X8SM	2	BOLT, 5/16-18 X 1", C
210	5025392FS	2	NUT
220	5412600AA	1	PLATE, FAN GUARD, BV, LH - BLK
230	5025498YP	2	NUT, PUSH ON, 5/16
240	5102677YP	2	GROMMET, 1-1/2" ID FOR 1/4" METAL
250	5412030AA	1	PLATE, FAN GUARD - BLK

Front Frame Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5901988



170-10 - CUP, Bearing

Front Frame Group

REF NO	PART NO	QTY	DESCRIPTION
10	5025337FS	4	WASHER
20	5025160SM	2	WASHER, 3/4" SAE
30	5025056FS	2	NUT
40	5025158SM	6	WASHER, 1/2" SAE
50	5401759BFS	2	YOKE, CASTER
60	5025449SM	4	WASHER, BELLEVILLE
70	5020884SM	4	BEARING, TAPERED ROLL
80	5021072SM	2	SEAL, GREASE
90	5025448SM	2	NUT - 3/4-16 HEX JAM
100	5020095SM	2	GREASE FITTING, 1/4-2
110	5025457SM	2	BOLT - 1/4-28 X 1/2
120	5109845FS	2	CAP
130	5022308SM	4	BODY CLIP, 5/16-18 X
140	5025011X8FS	4	BOLT
160	770225	4	NUT
170	5422126BFS	1	FRAME, FRONT
170-10	5020883	2	CUP, BEARING (SV)
180	5025017X10YP	6	BOLT, 1/2-13 X 1-1/4
190	5412223BFS	1	GUARD, Front

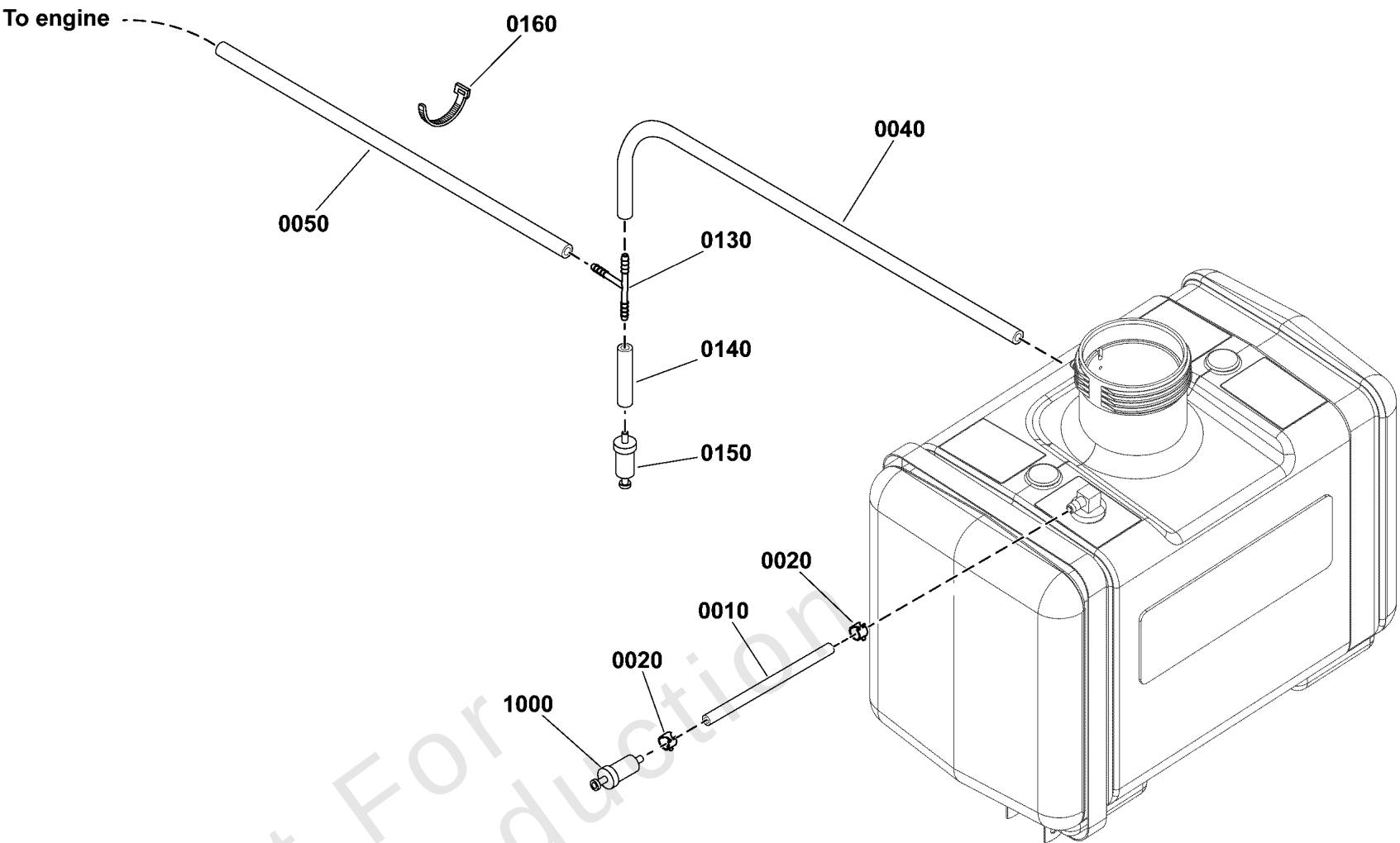
Footnotes:

(SV)

Fuel Supply Hose and Evap Group (No Canister)

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5901988



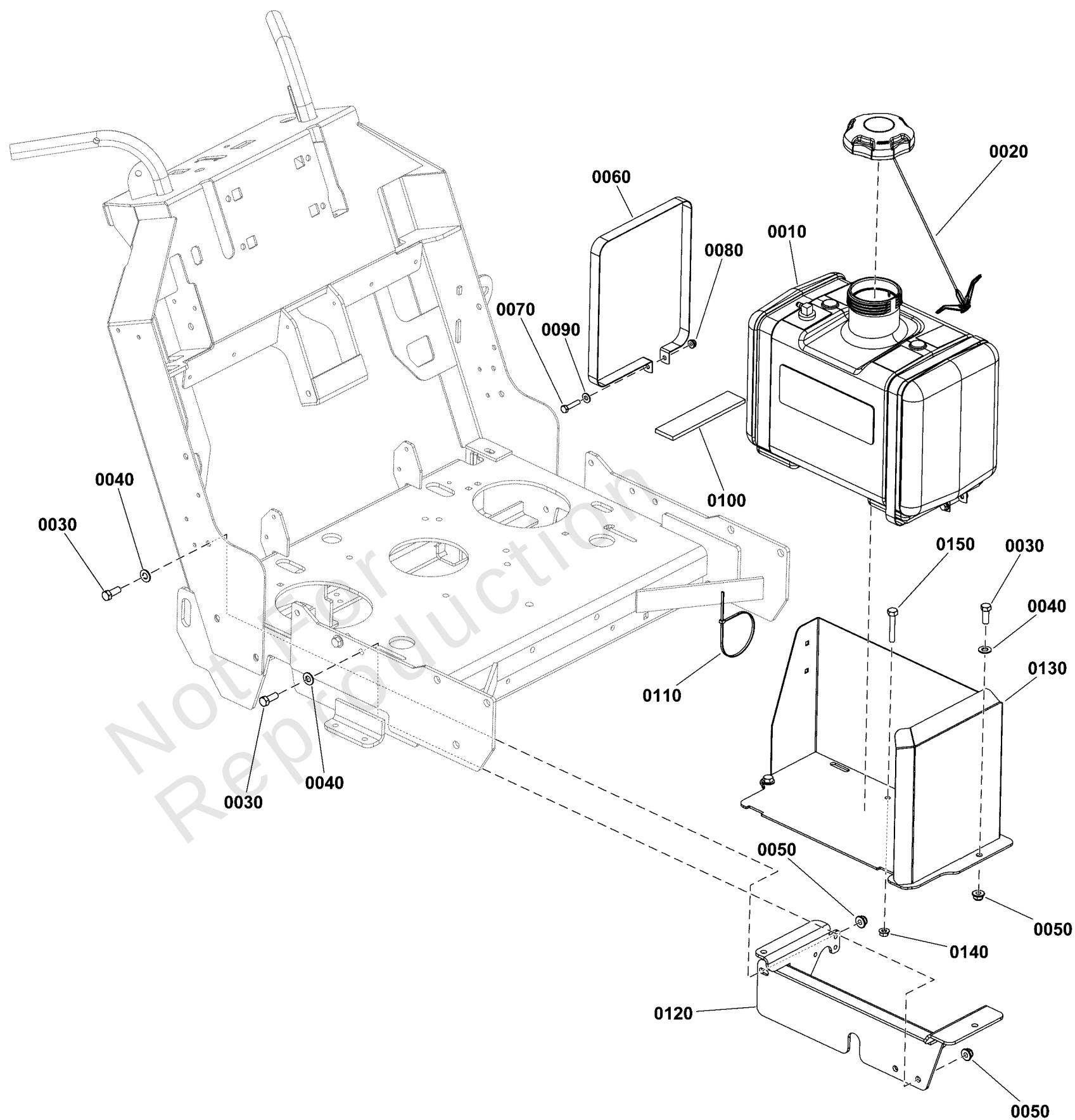
Fuel Supply Hose and Evap Group (No Canister)

REF NO	PART NO	QTY	DESCRIPTION
0010	5050831X29P5	1	HOSE, 1/4" FUEL, 29.50"
0020	93807	2	CLAMP, Hose
0040	7700552X15P5	1	HOSE, VAPOR, 5MM ID, 15.50 LG
0050	7700552X20P5	1	HOSE, VAPOR, 5MM ID, 20.50 LG
0130	5103062	1	FITTING, 3/16" TEE, BARB TYPE, HDPE
0140	7700552X4P5	1	HOSE, VAPOR, 5MM ID, 4.50 LG
0150	80025019	1	FILTER, FUEL
0160	5021030	2	TIE, SELF-LOCKING, 6"
1000	5021178X3	1	FUEL FILTER (SV) -(SV)

Fuel Tank and Mount Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5901988



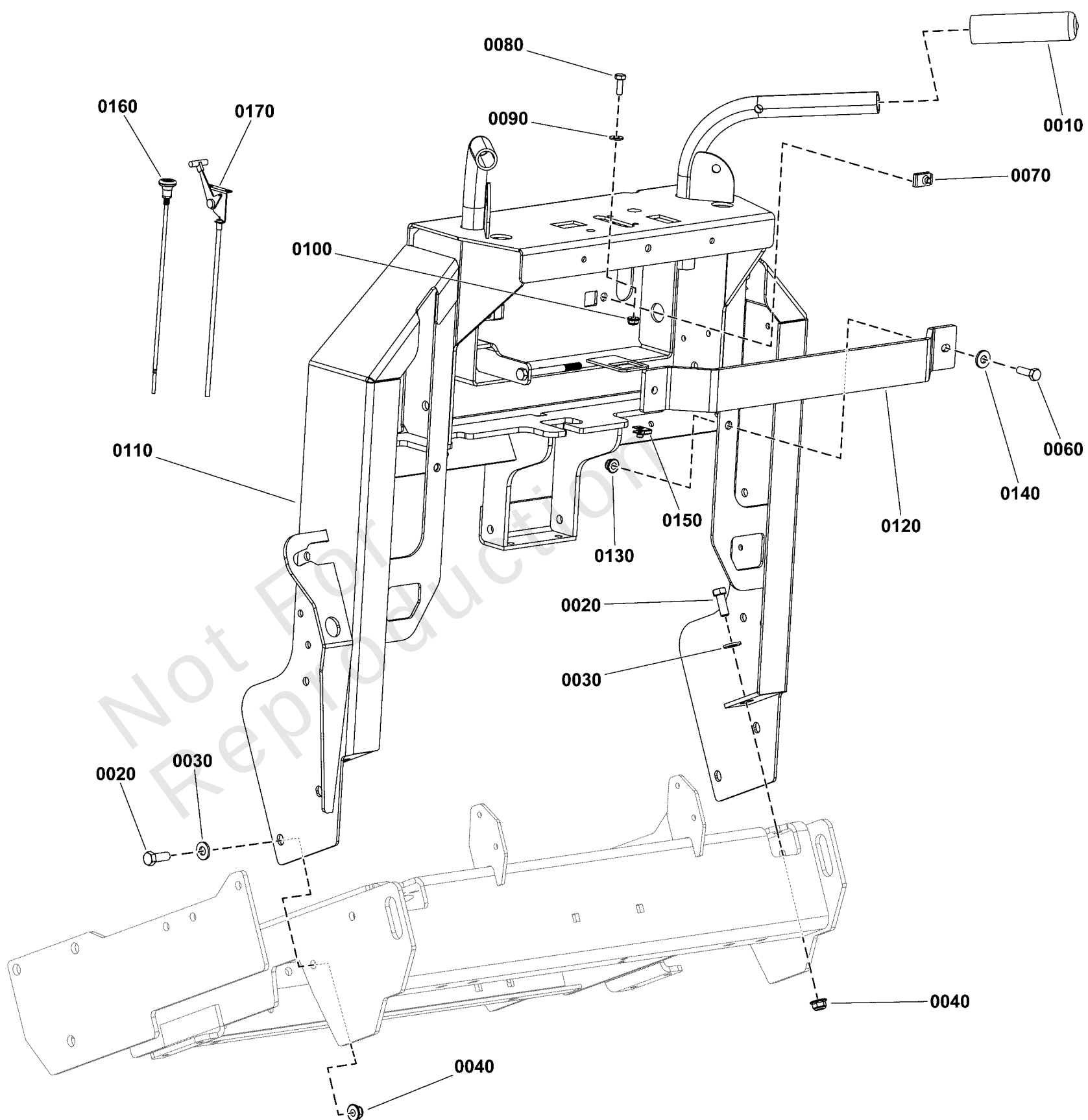
Fuel Tank and Mount Group

REF NO	PART NO	QTY	DESCRIPTION
0010	5102833YP	1	TANK, 5 GAL
0010-10	5102833X1	1	GROMMET -(Grommet for fuel tank 5102833)
0020	5108752	1	FUEL CAP, 3.5", MANAGED VENT OUT, 12" RT
0030	5025013X8	5	BOLT, 3/8-16 X 1" GD5 CZ
0040	5025156	5	WASHER, 3/8 SAE
0050	5025394	5	NUT, 3/8 - 16 HEX NYLOCK FLANGE
0060	5403445AA	2	STRAP, FUEL TANK - SNP PRO DDS - BLK
0070	5025010X10	2	BOLT, 1/4-20 X 1-1/4 GD5 CZ
0080	5025391	2	NUT, 1/4-20 Hex Nylock Flange
0090	5025154	2	WASHER, 1/4 SAE
0100	5100810	2	PAD, RUBBER MOUNT
0110	5021029	1	TIE, SELF-LOCKING, 12"
0120	5413950AA	1	WELD, FUEL TANK, MOUNT, LOWER, W35 - BLK
0130	5420158AA	1	WELD, TANK MOUNT, W45 - BLK
0140	5025127	1	NUT, 5/16-18 HEX SERRATED FLANGE (SMALL)
0150	5025055X16	1	BOLT, 5/16-18 X 2 GD5 TFL, CZ

Handle Bar Group S/N: 4001694245 and above

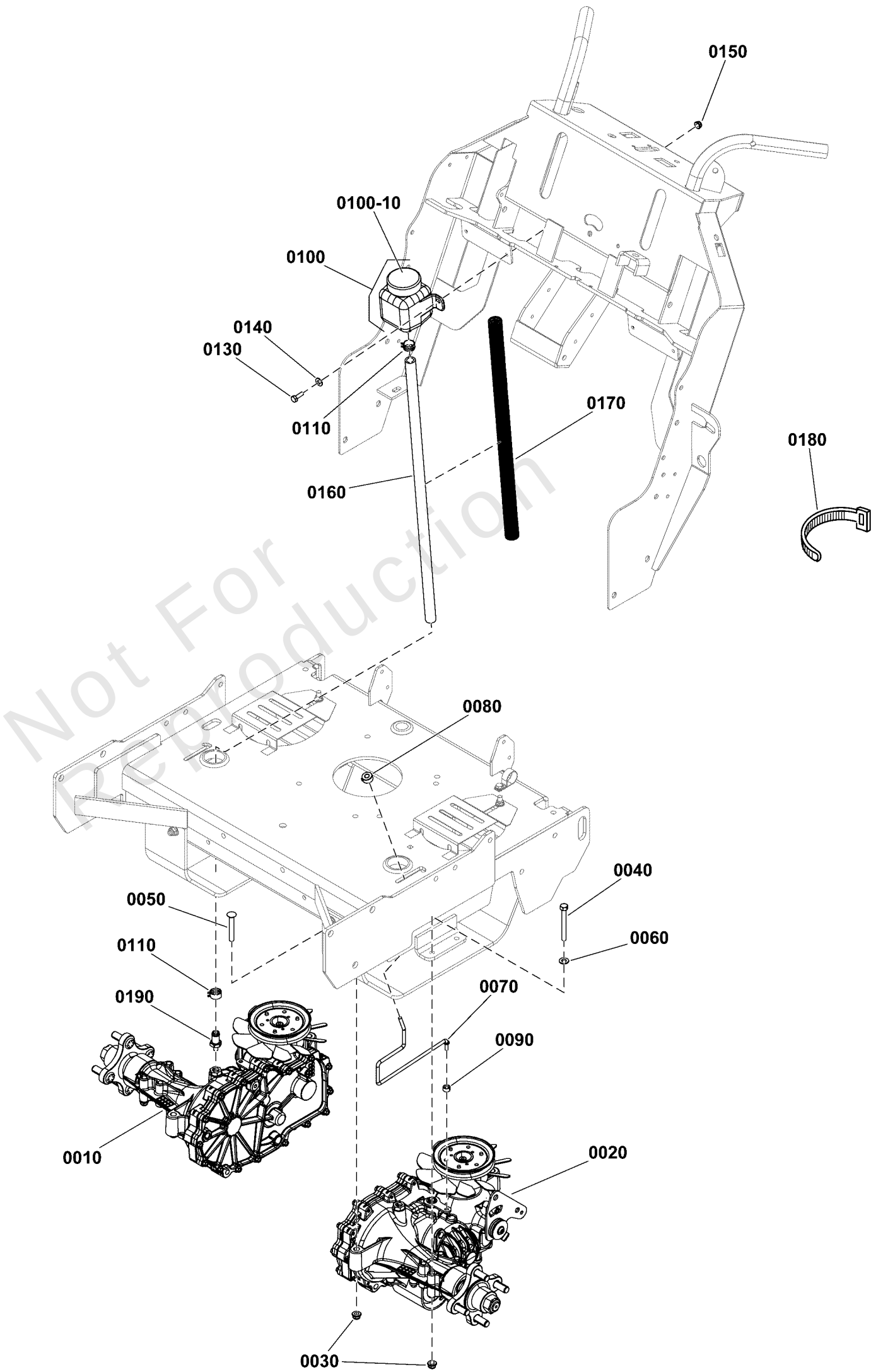
Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5901988



Handle Bar Group S/N: 4001694245 and above

REF NO	PART NO	QTY	DESCRIPTION
0010	5104659	2	GRIP, FOAM, .940" X 4.62" X .187"
0020	5025013X8	6	BOLT, 3/8-16 X 1" GD5 CZ
0030	5025293	6	WASHER, 3/8" GR. 9 FLAT
0040	5025394	6	NUT, 3/8 - 16 HEX NYLOCK FLANGE
0060	5025011X8	2	BOLT, 5/16-18 X 1" GRD5 YZ
0070	5022665	4	BODY CLIP, 1/4-20 X 1/2" DEEP -(For securing the oil cooler mount.)
0080	5025010X6	2	BOLT, 1/4"-20 X 3/4" GD5 YZ -(For securing the throttle control.)
0090	5025154	2	WASHER, 1/4 SAE -(For securing the throttle control.)
0100	5025391	2	NUT, 1/4-20 Hex Nylock Flange -(For securing the throttle control.)
0110	5420998B	1	WELD, HANDLE BAR, STD, W45 - RED
0120	5419312AA	1	BAR, SULKY GUARD, W25-W35 - BLK
0130	5025392	2	NUT, 5/16-18 HEX NYLOCK FLANGE NUT
0140	5025292	2	WASHER, 5/16 GRADE 9, FLAT
0150	5022649	1	BODY CLIP, 3/8-16 X .688" DEEP
0160	5100184	1	CABLE, CHOKE CONTROL, 43.5" -(Kawasaki powered models only)
0170	5104657	1	CABLE, THROTTLE, 43" DETENTED

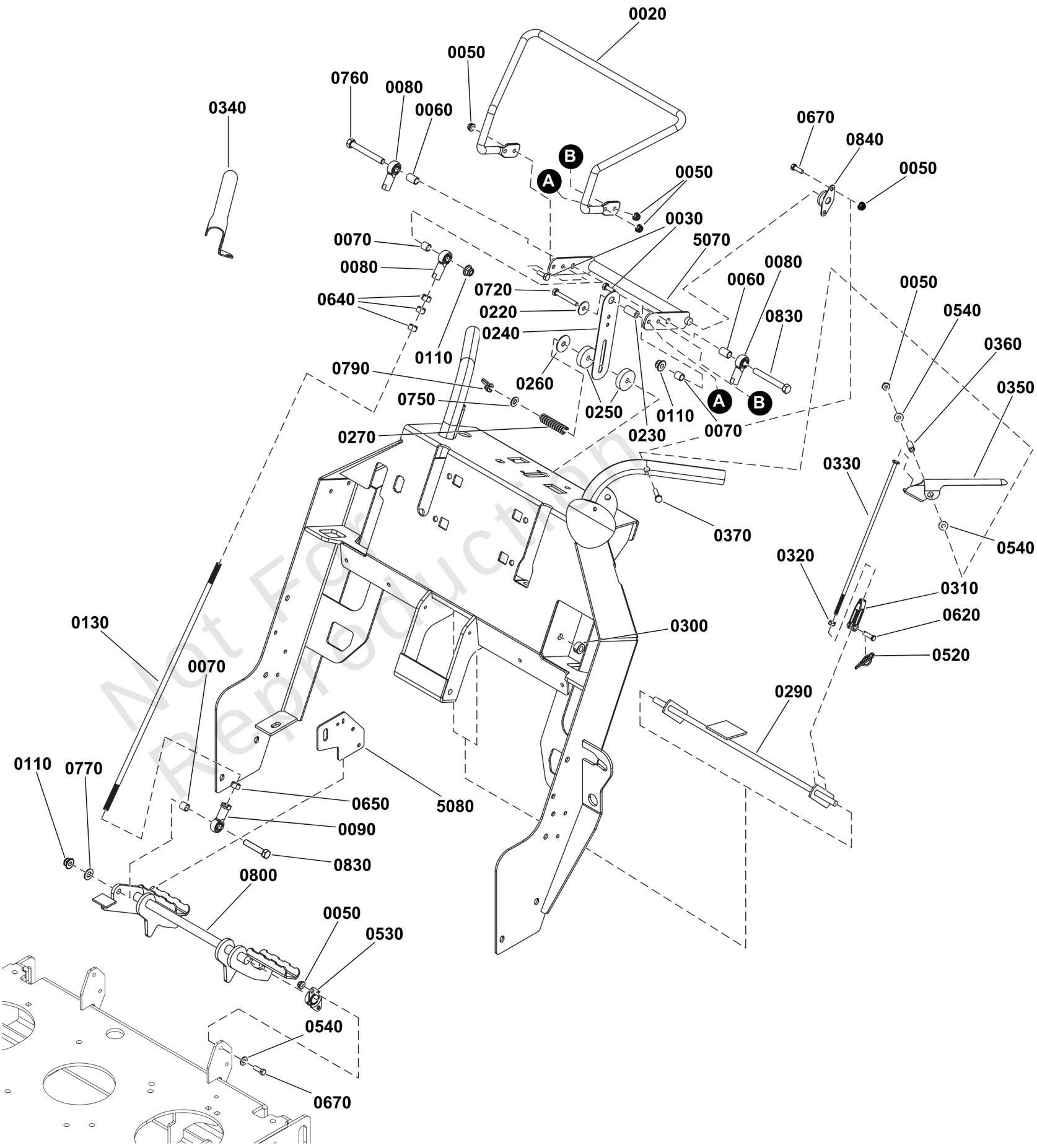


Hydraulic Group

REF NO	PART NO	QTY	DESCRIPTION
0010	5109241	1	TRANSAXLE, ZT-3100, RH,ZL-KMFE-SL5C-1PXX
0020	5109240	1	TRANSAXLE, ZT-3100, LH,ZL-GMFE-SL5B-1PXX
0030	5025392	8	NUT, 5/16-18 HEX NYLOCK FLANGE NUT
0040	5025011X22	4	BOLT, 5/16-18 X 2-3/4, GD 5, YZ
0050	5025145X18	4	BOLT, 5/16-18 X 2-1/4, CARRIAGE, GD5, CZ
0060	5025155	4	WASHER, 5/16" SAE
0070	5104532	2	ROD, HYDRO RELEASE, WALKS
0080	5020047	2	COLLAR, 5/16" Set
0090	5022481	2	COLLAR, Set, 1/4"
0100	5100473	2	RESERVOIR, HYDRO OIL, 350 ML
0100-10	5100778X1	2	RESERVIOR CAP -(SV)
0110	5025474	4	CLAMP, HOSE, .75 FREE DIA.
0130	5025010X6	4	BOLT, 1/4"-20 X 3/4" GD5 YZ
0140	5025154	4	WASHER, 1/4 SAE
0150	5025391	4	NUT, 1/4-20 Hex Nylock Flange
0160	5050857X24	2	HOSE, 1/2" PUSH-ON, 24.00"
0170	5050862X20	2	WIRE LOOM, 3/4 ID X 20 IN
0180	5100772	8	TIE, SELF-LOCKING, 15"
0190	5103687	2	FITTING, #6 O-RING 1/2 HOSE BARB, STRAIGHT

Motion Control Group - Forward Speed Control, Operator Presence, and Foot Pedal

Note: Unless noted otherwise, use the standard torque specifications Mfg. No: 5901988



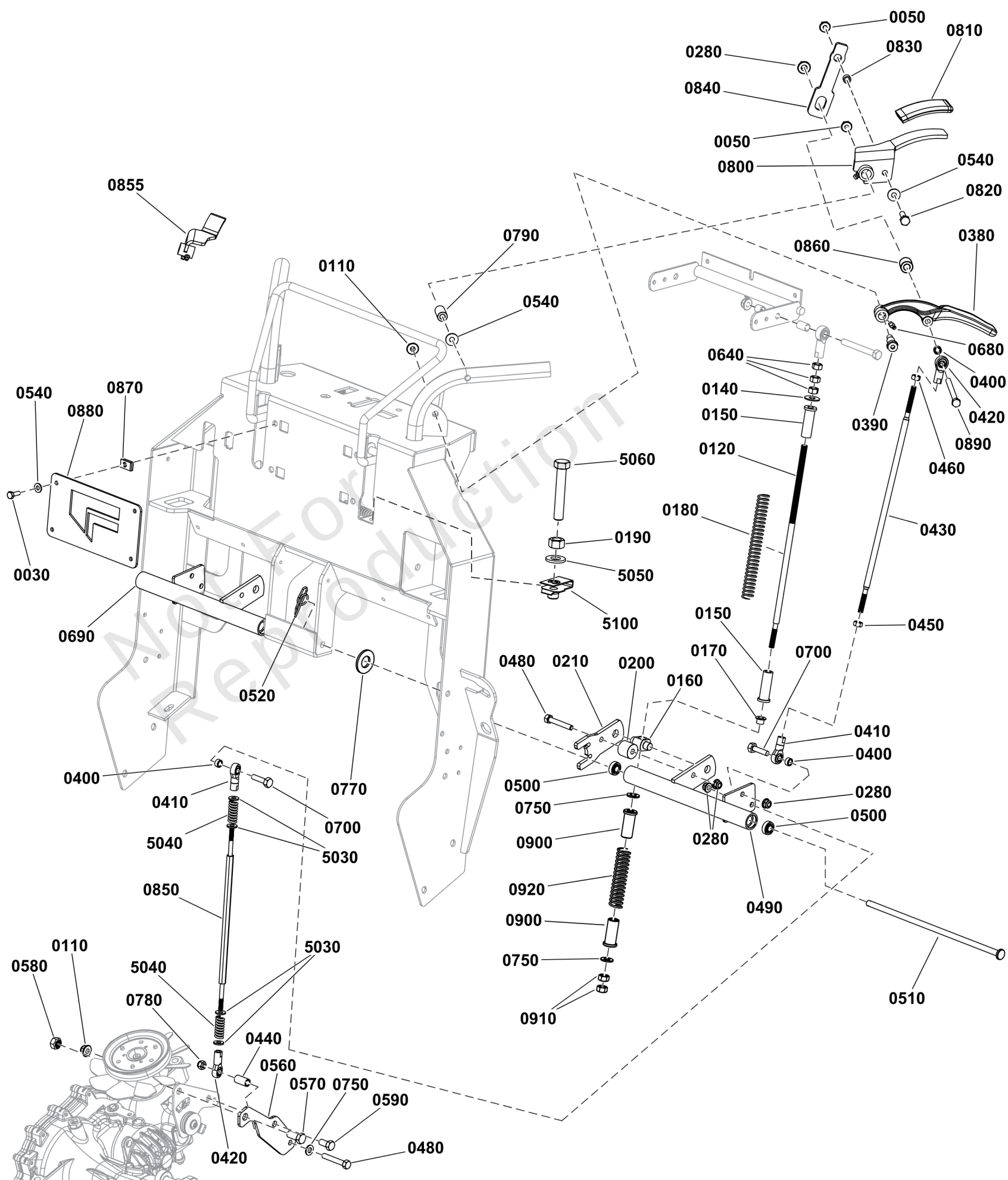
Motion Control Group - Forward Speed Control, Operator Presence, and Foot Pedal

REF NO	PART NO	QTY	DESCRIPTION
0020	5104216AAFS	1	BAR
0030	5025010X6SM	3	BOLT, 1/4-20 X 3/4" G
0050	5025391FS	14	NUT
0060	5047199FS	3	SPACER
0070	5101640YP	1	SPACER
0080	5021683FS	3	JOINT, BALL
0090	5022392FS	1	JOINT, BALL
0110	5025394SM	7	NUT, 3/8-16 HEX NYLOCK
0130	5104164FS	1	ROD
0220	5025288YP	1	WASHER, 1/4 FENDER
0230	5101274FS	1	SPACER
0240	5409272FS	1	PANEL, Control
0250	5104176FS	2	PAD, FRICTION
0260	5025164SM	1	WASHER, 5/16" FENDER
0270	5104221FS	1	SPRING, COMPRESSION
0290	5414516AA	1	WELD, OPC ROD, WALKBEHIND - BLK
0300	5010546SM	2	COLLAR, 3/8" SET
0310	84007748	2	CLEVIS
0320	703461	2	NUT, 1/4-28 Hex, GR5, Zinc/Clear
0330	5101242FS	2	ROD, LINK
0340	5104201AAFS	1	FLAP
0350	5104202AAFS	1	FLAP
0360	5101215YP	2	SPACER, .26 X .38 X 1
0370	5025010X14SM	2	BOLT, 1/4-20 X 1-3/4"
0520	7023590SM	4	PIN, Cotter, Self Locking, 1/4"
0530	5104270YP	2	BEARING-FLANGE
0540	84007033	8	WASHER
0620	5025212X7SM	2	PIN - CLEVIS .25X.875
0640	5025035SM	9	NUT (3/8-24 HEX)
0650	5025317FS	1	NUT
0670	703338	8	BOLT,1/4-20X5/8
0720	5025010X16FS	1	BOLT
0750	703350	5	WASHER
0760	5025013X24SM	2	BOLT, 3/8-16 X 3" GD5
0770	5025156FS	2	WASHER
0790	703429	1	NUT, Wing, 5/16-18
0800	5420287AAFS	1	PEDAL, FOOT
0830	703589	2	CAPSCREW, 3/8-16X2
0840	5101123SM	2	BEARING, 1/2 FLANGE
5070	84008503	1	PIVOT
5080	84008504	1	PLATE, SWITCH

Motion Control Group - Steering Levers

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5901988



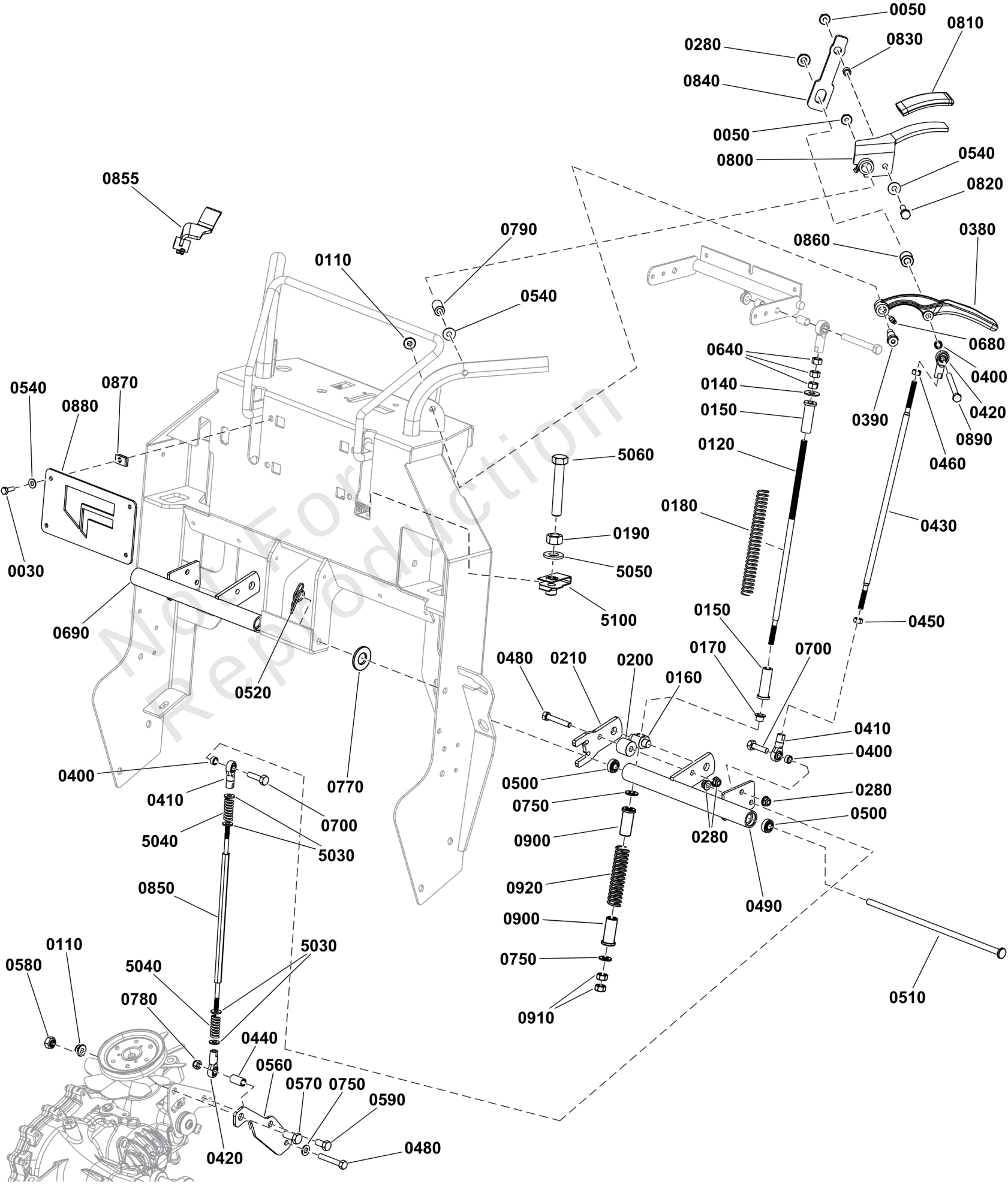
Motion Control Group - Steering Levers

REF NO	PART NO	QTY	DESCRIPTION
0030	5025010X6SM	4	BOLT, 1/4-20 X 3/4" G
0050	5025391FS	2	NUT
0110	5025394SM	7	NUT, 3/8-16 HEX NYLOCK
0120	5104165FS	2	ROD
0140	5025401YP	2	WASHER, 3/8 USS
0150	5104375YP	4	BUSHING, FLANGED, 3/8
0160	5103022FS	2	TRUNNION
0170	5102773FS	2	BUSHING
0180	5104374FS	2	SPRING, Compression
0190	5025034SM	5	NUT, 3/8-16 HEX
0200	5104351FS	2	SPACER
0210	5414411AAFS	2	PIVOT
0280	5025392FS	8	NUT
0380	5102556AAFS	2	HANDLE
0390	5109888FS	2	BOLT
0400	5102463YP	6	SPACER, .33 X .50X.25
0410	5104494YP	4	BALL JOINT 5/16-24 LH
0420	5104493YP	4	BALL JOINT 5/16-24 RH
0430	5104159FS	2	ROD
0440	84008514	2	SPACER (.325 X .496 X 1.000)
0450	5023212SM	2	NUT, 5/16-24 HEX, LH
0460	5025033FS	2	NUT
0480	5025011X16YP	2	BOLT
0490	5414184AAFS	1	PIVOT
0500	5102003YP	4	BEARING, .375ID
0510	5104171FS	2	ROD
0520	703355	4	COTTER PIN, 3/8
0540	84007033	8	WASHER
0560	84007883	2	MOUNT
0570	5025015X6SM	2	BOLT, 7/16-14
0580	5025044SM	2	NUT, 7/16-14 HEX
0590	5025013X6SM	2	BOLT, 3/8-16 X 3/4" G
0640	5025035SM	9	NUT (3/8-24 HEX)
0680	5020095SM	2	GREASE FITTING, 1/4-2
0690	5414183AA	1	WELD, W35 CONTROL PIVOT, RH - BLK
0700	5025055X10YP	4	BOLT, 5/16-18 X 1-1/4
0750	703350	5	WASHER
0770	5025156FS	2	WASHER
0780	5025057FS	2	NUT
0790	5100832FS	2	SLEEVE
0800	5408616AA	1	WELD, THUMB CONTROL, LH - BLK
0810	5103457FS	2	GRIP
0820	5025010X8SM	2	BOLT, 1/4-20 X 1", GD
0830	5102813FS	2	SPACER
0840	5408615AAFS	2	CONTROL, THUMB
0850	5109457FS	2	ROD
0855	5408617AAFS	1	CONTROL, Thumb
0860	5103225FS	2	SPACER
0870	5022665SM	4	BODY CLIP, 1/4-20 X 1
0880	5422273AA	1	PLATE, FRONT CE GUARD - BLK
0890	5025011X24SM	2	BOLT, 5/16-18

Motion Control Group - Steering Levers

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5901988



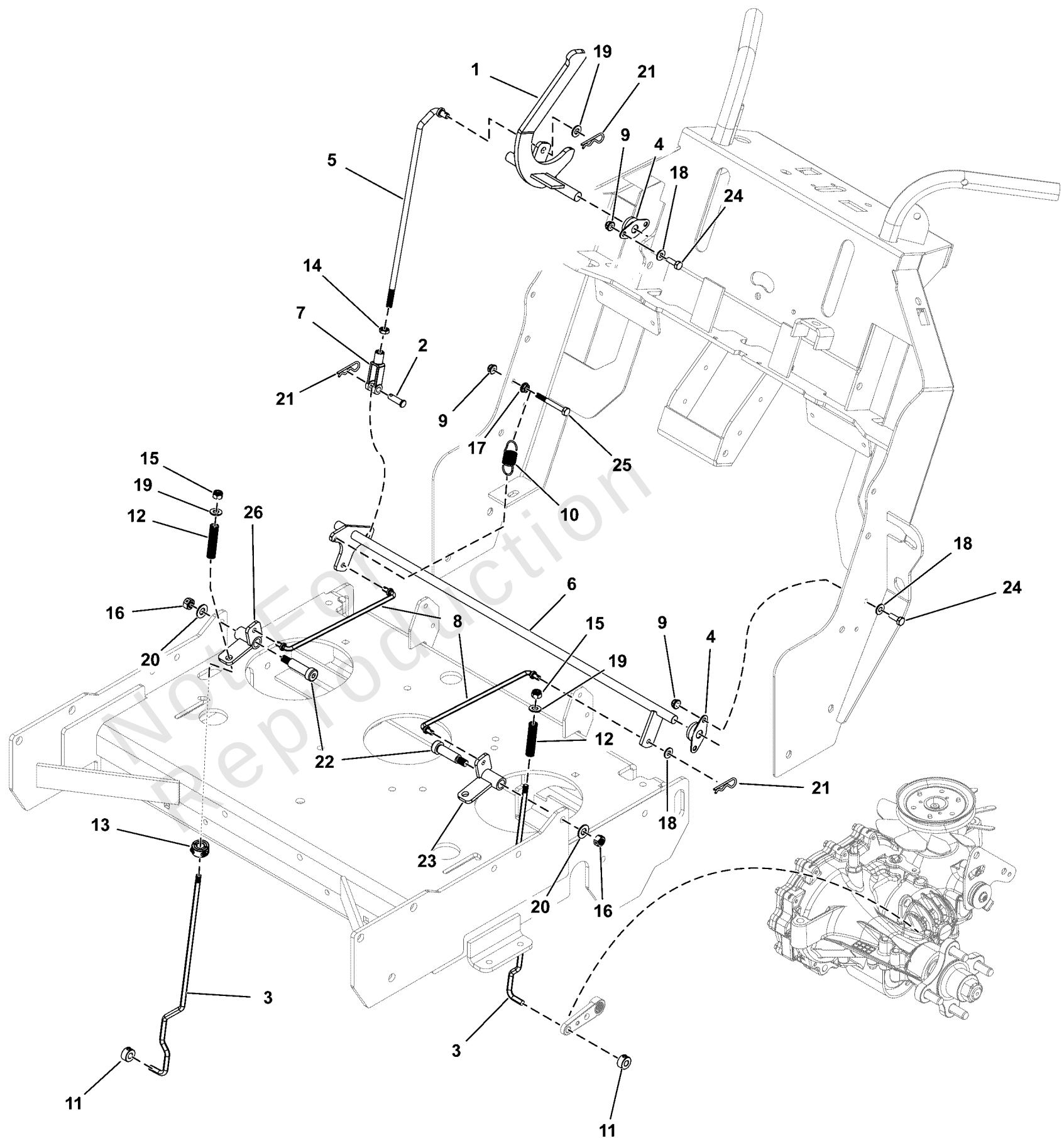
Motion Control Group - Steering Levers

REF NO	PART NO	QTY	DESCRIPTION
0900	5104161FS	4	BUSHING
0910	5025032SM	4	NUT, 5/16-18 HEX
0920	5104279FS	2	SPRING, COMPRESSION
5030	5025292SM	8	WASHER, 5/16" GD.9 FL
5040	5021773FS	4	SPRING, COMPRESSION
5050	5025293SM	1	WASHER, 3/8"
5060	5025058X18YP	1	BOLT
5100	5022649FS	1	CLIP

Parking Brake Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5901988



Parking Brake Group

REF NO	PART NO	QTY	DESCRIPTION
1	84012920	1	HANDLE, Brake -(Was 5421078AA)
2	5025213X8	1	PIN, CLEVIS, 5/16 X 1, PLATED
3	5108660	2	ROD, PARKING BRAKE, W45
4	5101123	4	BEARING, 1/2 FLANGED, PLASTIC BALL
5	5104641	1	ROD, PARKING BRAKE, W35, UPPER
6	5414628AA	1	WELD, BRAKE ROD, W35 - BLK
7	5023323	1	CLEVIS, 5/16-24, STEEL, CLEAR ZINC
8	5104642	2	ROD, PARKING BRAKE, W35, UPPER
9	5025391	9	NUT, 1/4-20 Hex Nylock Flange
10	5010213	1	SPRING-EXT, .740 ODX2.025LGX.072WR, BLK
11	5020047	2	COLLAR, 5/16" Set
12	5020637	2	SPRING-COMP, .375IDX2.75LGX.054WR, SS
13	5104748	2	COLLAR, DOUBLE SPLIT, 7MM
14	5023216	1	NUT, Hex Jam, 5/16-24
15	5025045	2	NUT, 5/16-24 HEX NYLON LOCK
16	5025100	2	NUT, Hex, Side Lock, 3/8-16
17	5025126	1	NUT, 1/4-20 HEX SERR. FLANGE
18	5025154	10	WASHER, 1/4 SAE
19	5025155	3	WASHER, 5/16" SAE
20	5025156	2	WASHER, 3/8 SAE
21	5025211	6	PIN, HAIR, .0585 X 1-1/8, 1/4 EYE, YZ
22	5025220	2	BOLT, 3/8-16 x 1-1/2", 1/2" SHOULDER
23	84008396	1	PIVOT
24	5025010X6	8	BOLT, 1/4"-20 X 3/4" GD5 YZ
25	5025010X18	1	BOLT, 1/4-20 X 2-1/4 GD5 CZ
26	5414630AA	1	WELD, BRAKE PIVOT, W35 - RH - BLK

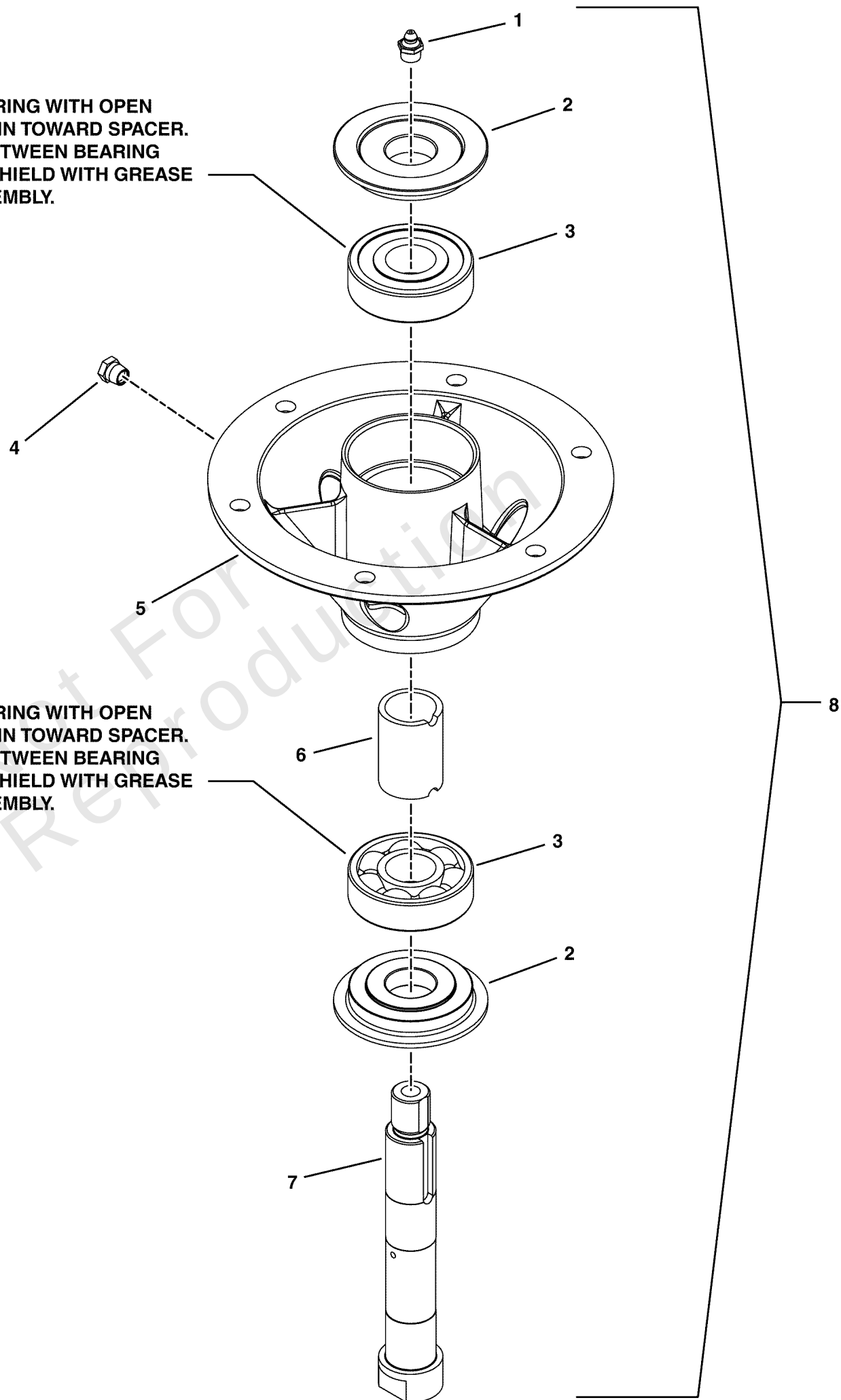
Spindle Service Parts - 5100993

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5901988

5100993

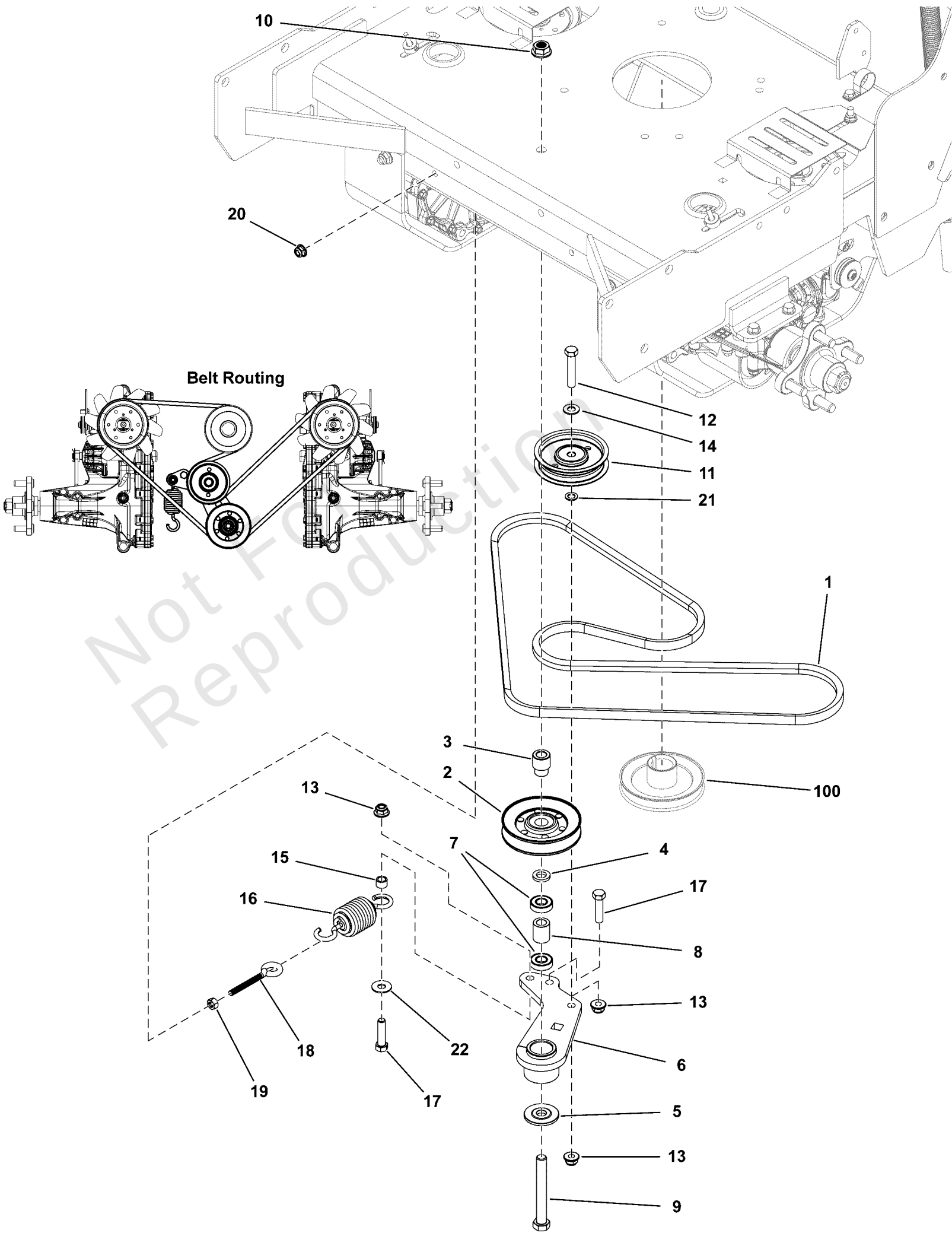
INSTALL BEARING WITH OPEN
SIDE FACING IN TOWARD SPACER.
FILL AREA BETWEEN BEARING
AND TRASH SHIELD WITH GREASE
DURING ASSEMBLY.



NOTE: FILL CAVITY WITH NLGI, GRADE 2, EP-2 GREASE
(SUPERPLEX EP-2, SHELL ALBIDA LCS, BP ENERGREASE LC)

Spindle Service Parts - 5100993

REF NO	PART NO	QTY	DESCRIPTION
1	5023329	1	FITTING
2	5049793	2	TRASH SHIELD
3	5023330	2	BEARING, .98 X 2.44 X .67
4	5023296	1	FITTING, RELIEF, 1-5 PSI
5	5101048	1	HOUSING, SPINDLE, BOTTOM MOUNT SM
6	5061099	1	SPACER, 1.00 X 1.25 X 1.75
7	5061098	1	SPINDLE SHAFT
8	5100993	1	SPINDLE ASSM, CAST IRON 8.0 - 6-BOLT -(Includes Ref No. 1 - 7)



Transaxle Drive Group

REF NO	PART NO	QTY	DESCRIPTION
1	5104193	1	BELT, A-SEC, COG TYPE, 76.2" EL ARAMID
2	5021225FS	1	PULLEY, Idler
3	5104237	1	INSERT, BEARING, .51ID X .90OD X 1.15L
4	5104286	1	SPACER, .52 X .88 X .14, HT
5	5103262	1	SPACER, IDLER ARM, 1/2, PM
6	5420337AA	1	WELD, IDLER, HYDRO, W45 - BLK
7	7078243	2	BEARING, BALL, AXLE
8	5104153	1	SPACER, .52 X .84 X 1.00, PM
9	5025017X32	1	BOLT, 1/2-13 X 4" GD5 CZ
10	5025396	1	NUT, Hex Flange, Nylock, 1/2-13
11	5104191	1	PULLEY, FLAT IDLER, 3-1/4" FLANGED
12	80003522	1	HHCS, 3/8-16 X 2.00, GR5, ZINC/CLEAR
13	5025394	3	NUT, 3/8 - 16 HEX NYLOCK FLANGE
14	5025156	1	WASHER, 3/8 SAE
15	5103676	1	SPACER, .39 X .55 X .38, PM, CZ
16	5104676	1	SPRING EXT, 1.50ODX4.75LGX.177WR, BLK
17	5025013X14	2	BOLT, 3/8-16 X 1-3/4" GD5 CZ
18	5025141X26	1	EYE BOLT, 5/16-18 X3.5, 2.13THRD, .55EYE, CZ
19	5025032	1	NUT, 5/16-18 HEX
20	5025392	1	NUT, 5/16-18 HEX NYLOCK FLANGE NUT
21	5104937	1	SPACER, .385"ID X .625" OD X .062" THK
22	5025401	1	WASHER, 3/8" USS
100	-----	1	Refer to: Engine & PTO Group

5102154

Hydro-Gear® Model ZJ-KMFE-3B5A-1PLX (P/N 5102154)

Hydro-Gear® Model ZJ-GMFE-3B51-1PLX (P/N 5102155)

Hydro-Gear® Model ZJ-KMFE-3B5C-1PLX (P/N 5102810)

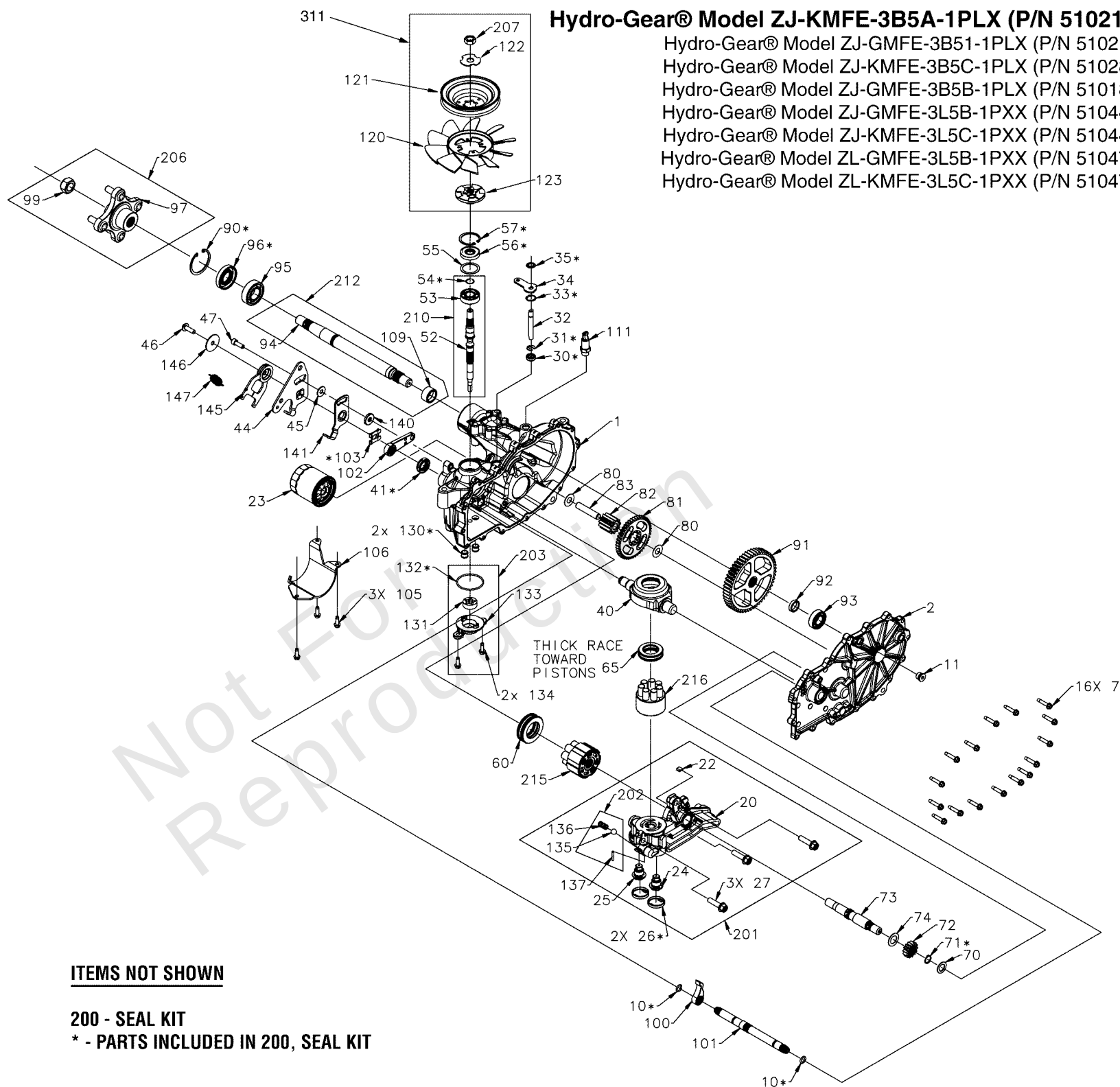
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Hydro-Gear® Model ZJ-GMFE-3L5B-1PXX (P/N 5104471)

Hydro-Gear® Model ZJ-KMFE-3L5C-1PXX (P/N 5104472)

Hydro-Gear® Model ZL-GMFE-3L5B-1PXX (P/N 5104707)

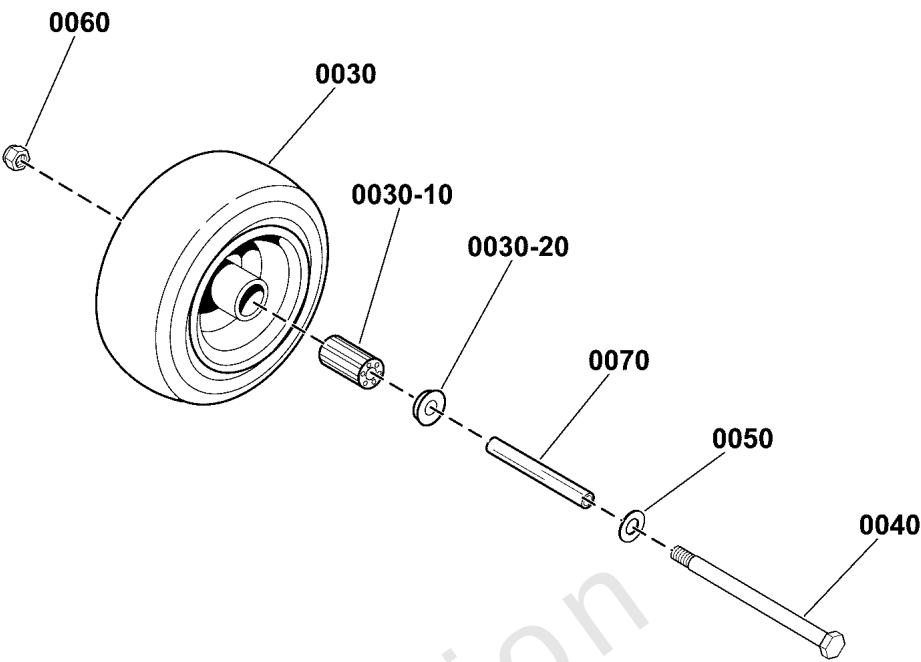
Hydro-Gear® Model ZL-KMFE-3L5C-1PXX (P/N 5104706)



Transaxle SERVICE PARTS - ZT3100

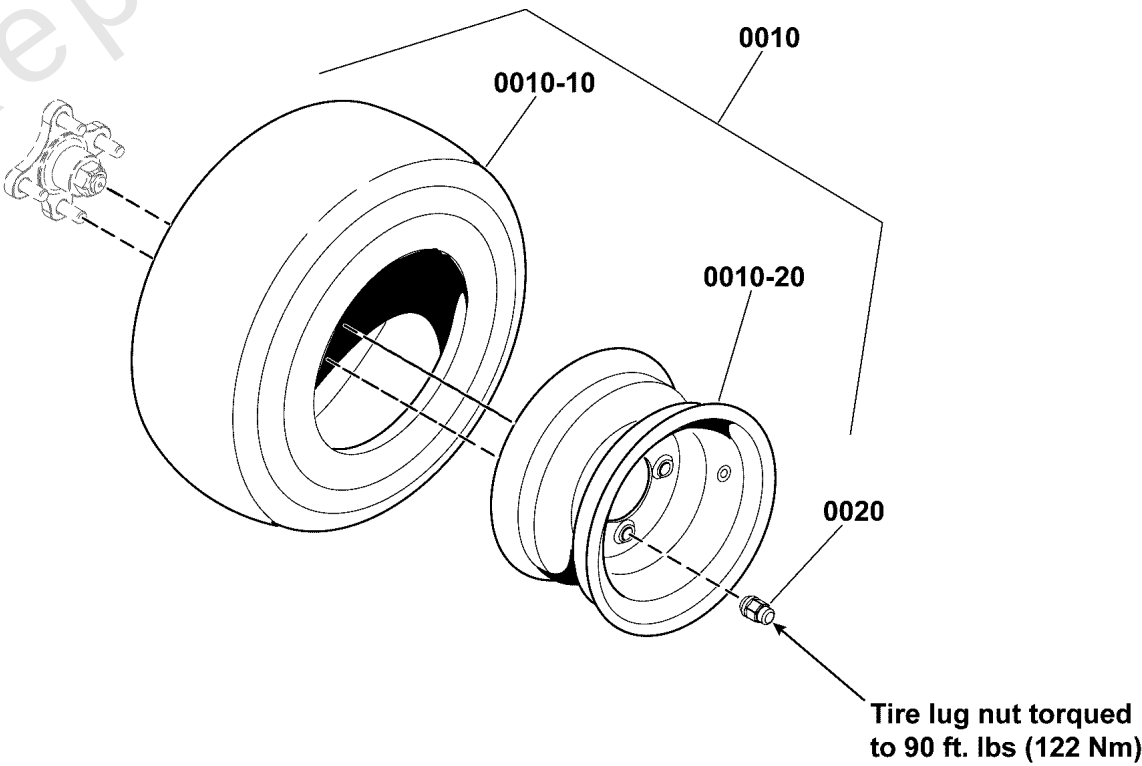
REF NO	PART NO	QTY	DESCRIPTION
23	5101026X1	1	FILTER, OIL, ZT2800
41	5101026X2	1	SEAL, CONTROL ARM, 18X32X7, #51140
56	5100161X3	1	OUTPUT SHAFT SEAL, 17X40X7, HR #51161
57	5101026X4	1	RING, RET 2.06 INT,
95	5101026X5	1	BEARING BALL, 1.0 X 52 X 15 OPEN 6205M
96	5101026X16	1	SEAL, LIP, AXLE, #53699
120	5101024X1	1	FAN
121	5102154X1	1	PULLEY, 4.5 INCH, HG #52364
121	5101024X2	1	PULLEY, HG #53804
122	5102914	1	WASHER, ZT5400, SLOTTED
123	5101024X3	1	HUB
200	5101026X8	1	KIT SEAL
203	5101026X12	1	KIT, CHARGE PUMP, ZT2800, ZT3100
206	5103382	1	HUB, ASM, TRANS 5101188/89 & 5102154/55
207	5102916	1	NUT, ZT5400
210	5101026X9	1	KIT, INPUT SHAFT
311	5102809X1	1	KIT, FAN AND PULLEY (72134)
1000	5104580X4	1	KIT, PLUG, BRAKE BORE, OUTBOARD -(FW25 & SW25 - S/N: All; FW35 & SW35 - S/N: 2017170235 & Above)
1001	5104580X5	1	KIT, PLUG, BRAKE BORE, INBOARD -(FW35 & SW35 - S/N: 2017170234 & Below)
1002	84009787	1	KIT, TRANSAXLE SERVICE PARTS -(Includes 10 Qts oil, 2 oil filters, 2 fittings, 2 vent hoses, 2 vent hose plugs, and 2 hose clamps.)

Front Wheels & Tires



Flat Free Tire

Rear Wheels & Tires



Inflate to 15 psi (1,03 bar)

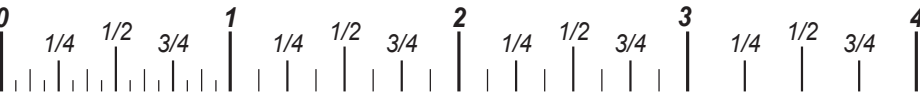
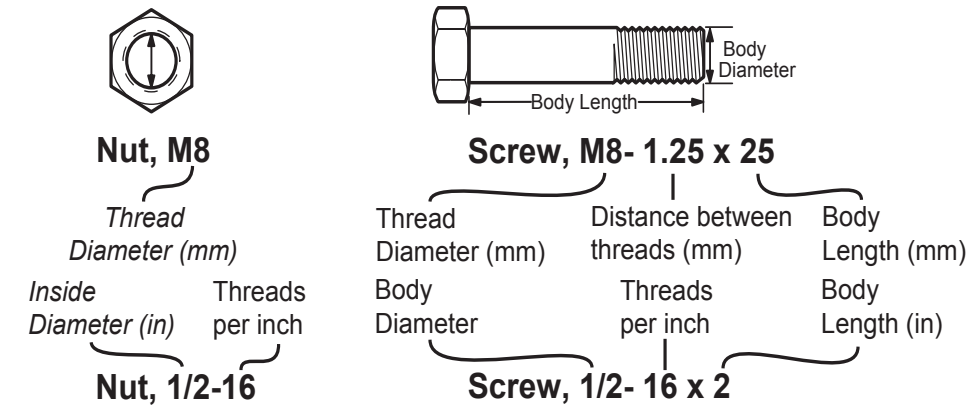
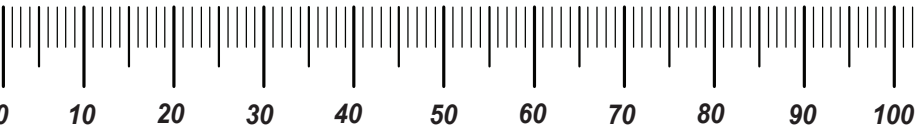
Wheel and Tire Group

REF NO	PART NO	QTY	DESCRIPTION
0010	5109053	2	TIRE ASM, 20 X 7-10, TURF, 4 BOLT, BLK
0010-10	5101068X1	2	TIRE, 20 X 7 -10 NHS, TURF MASTER -(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).
0030	5109032	2	TIRE ASM, 11 X 4 -5, FF / CB, BLK
0030-10	5101418X1	2	BEARING, CASTER WHEEL, 11 X 4.0 - 5 BEAD LOCK (SV) -(One per tire)
0030-20	5021043	4	RETAINER, BEARING (TWO PER TIRE)(SV) -(Two per tire)
0040	5025017X56	2	BOLT, HEX, 1/2-13 X 7, GD 8, YZ
0050	5025158	2	WASHER, 1/2 SAE
0060	5025396	2	NUT, Hex Flange, Nylock, 1/2-13
0070	5045996	2	AXLE, Front Caster

Hardware Identification & Torque Specifications

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

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



Standard Hardware Sizing

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

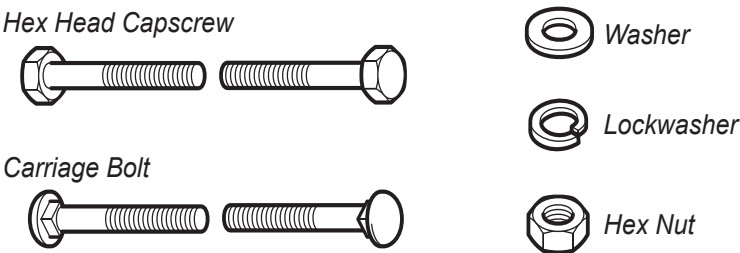
When bolt or capscrew is identified as 1/2 - 16 x 2" (M8 - 1.25 x 50), this means the *Nominal size*, or body diameter is 1/2 inch (8mm metric thread diameter), the second number, 16, represents the *threads per inch*, (*distance between threads*). The final number is the body length of the bolt or screw,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

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

NOTES

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

Common Hardware Types



Wrench & Fastener Size Guide

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

