



# Parts Manual

Mfg. No: 2691488-00  
SPX210, 46" (117cm) 17.5 Gross HP



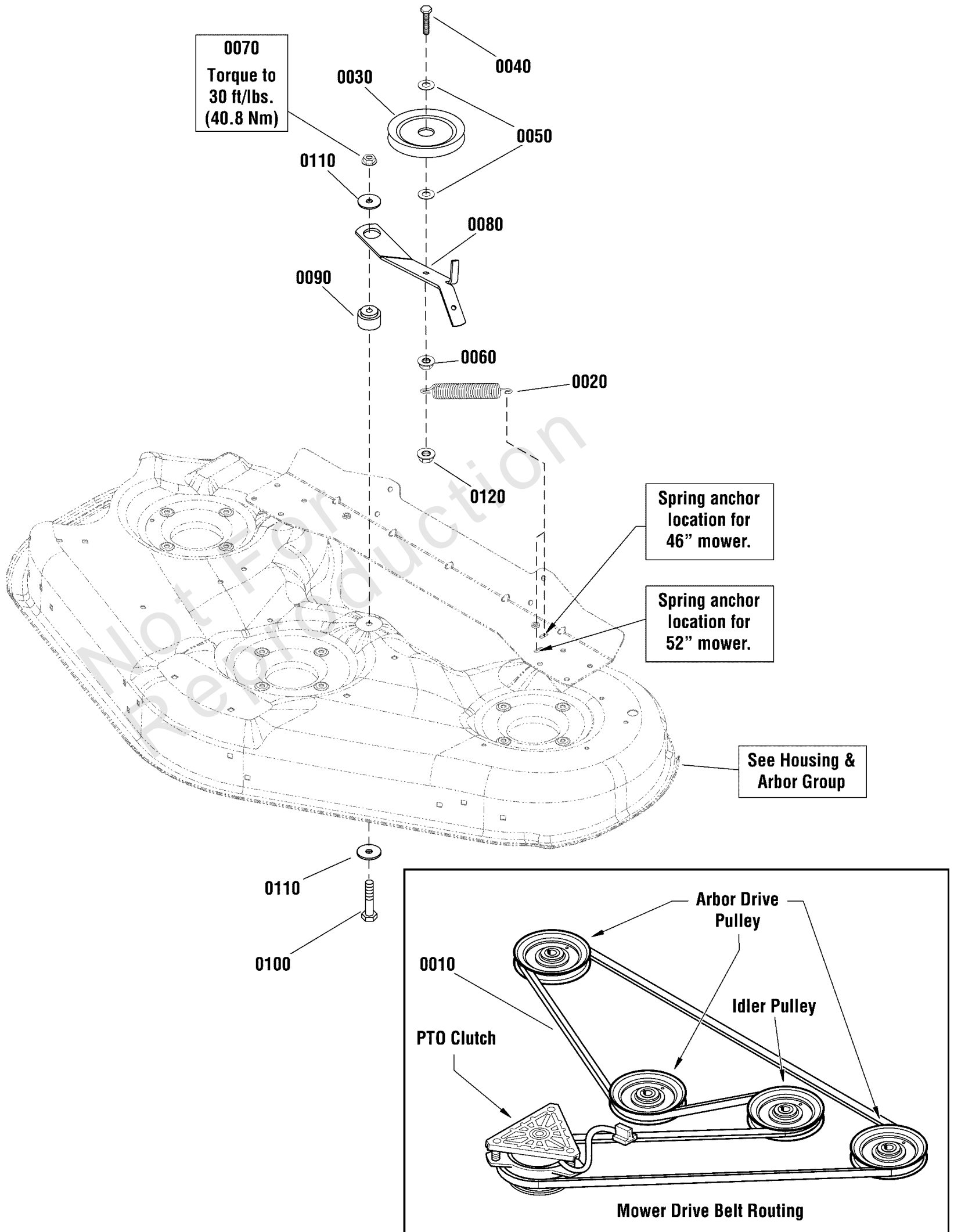


<b>Model Components</b>	<b>Page</b>
46" (117cm) Mower Deck - Clutch Group.....	4
46" (117cm) Mower Deck - French Guard Group.....	6
46" (117cm) Mower Deck - Height Adjustment Group.....	8
46" (117cm) Mower Deck - Housing, Arbor & Blades Group.....	10
Controls Group.....	12
Decals Group.....	14
Electrical Group.....	16
Electrical Schematic -.....	20
Electrical Schematic - Charging Circuit.....	22
Electrical Schematic - Cranking Circuit.....	24
Electrical Schematic - Headlight Circuit.....	26
Electrical Schematic - Height of Cut.....	28
Electrical Schematic - Hour Meter.....	30
Electrical Schematic - Ignition Shutdown.....	32
Electrical Schematic - PTO Clutch.....	34
Engine Group.....	36
EU Guard Group.....	38
Frame & Front Axle Group.....	40
Front Axle Group.....	42
Hood, Grille & Dash Group.....	44
Lift Group - Manual.....	46
Seat Deck & Fuel Tank Group.....	48
Seat Group.....	50
Steering Group.....	52
Transmission Group - Tuff Torq K46BL.....	54
Transmission SERVICE PARTS - Tuff Torq K46BL.....	56
Wheels & Tires Group.....	60
Torque Specification Chart.....	62

# 46" (117cm) Mower Deck - Clutch Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 2691488-00



## 46" (117cm) Mower Deck - Clutch Group

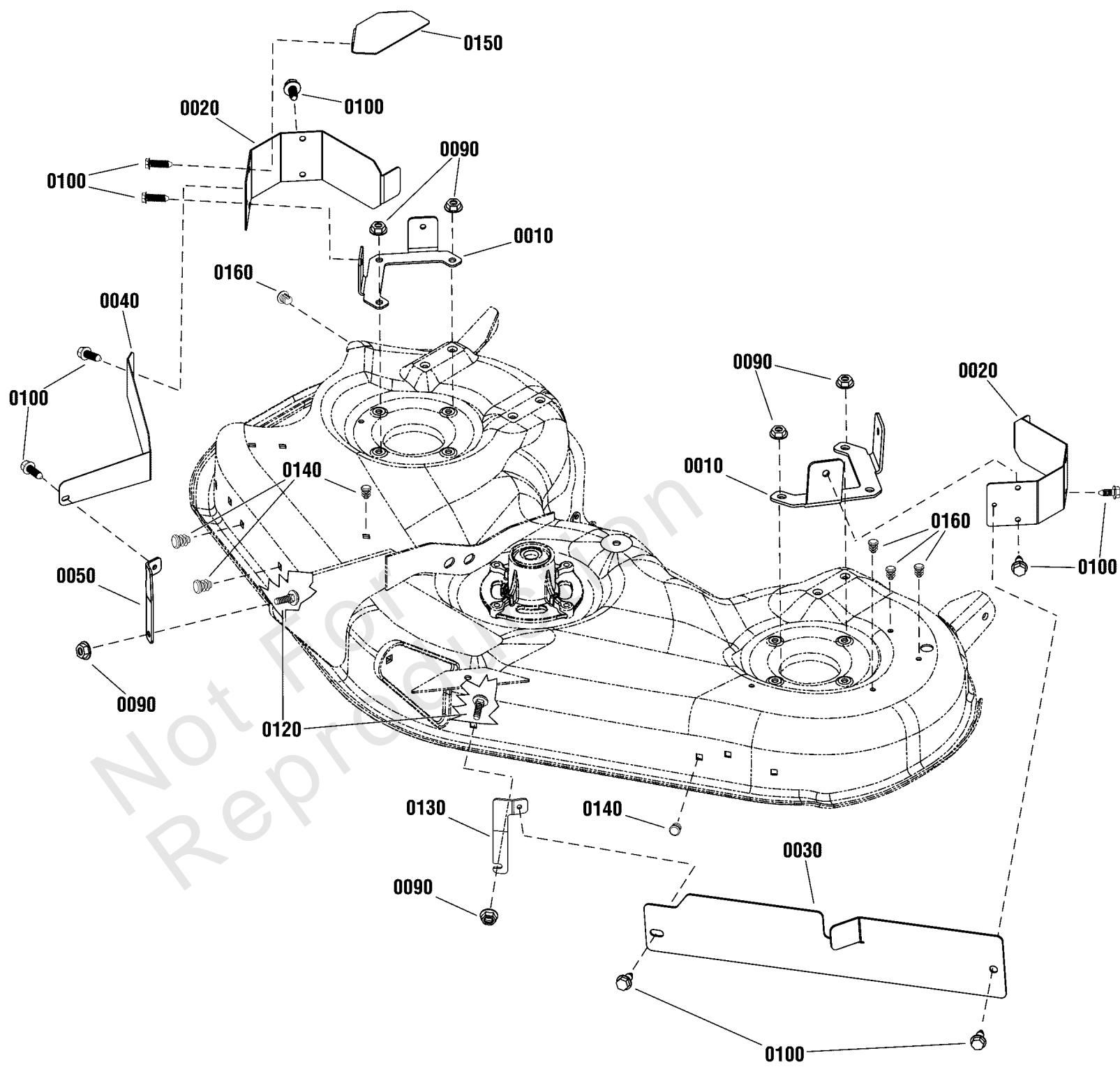
REF NO	PART NO	QTY	DESCRIPTION
0010	1719911SM	1	V-BELT, HA, 117"
0020	1715772SM	1	SPRING, Extension, 1 OD x 5-1/4" Long
0030	1736540YP	1	PULLEY, Idler
0040	1933685SM	1	CAPSCREW, Hex Head, 3/8-16 x 2-1/2, G5
0050	1922755SM	2	WASHER, 3/8 x 1 OD
0060	1931211SM	1	NUT, Hex Flange Whiz Lock, 3/8-16
0070	1960339SM	1	NUT, Hex Flange, 3/8-16
0080	1736551AYP	1	ARM, Idler
0090	1729007SM	1	SPACER, 3/8 ID X 1-1/2 OD x 1-1/32
0100	1923701SM	1	CAPSCREW, Hex Head, 3/8-16 x 2, G5
0110	1924356SM	2	WASHER, 3/8 x 1-1/2 OD
0120	7091585SM	1	NUT, Center Lock, 3/8-16 YZ

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Reproduction

# 46" (117cm) Mower Deck - French Guard Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 2691488-00



## 46" (117cm) Mower Deck - French Guard Group

REF NO	PART NO	QTY	DESCRIPTION
0010	1759800CJYP	2	BRACKET, Spindle
0020	1759801CJYP	2	GUARD, Spindle
0030	TBD	1	The service part is in development.
0040	1759803CJYP	1	GUARD, RH
0050	1759804CJYP	1	SUPPORT, Front, RH
0090	703409	8	NUT, Serrated Lock Flange, 5/16-18
0100	703235	10	SCREW, Taptite, 5/16-18 x 3/4
0120	704065	2	BOLT, Carriage, Short Neck, 5/16-18 X 7/8
0130	1759831CJYP	1	SUPPORT, Front, LH
0140	7046780SM	4	PLUG, Hole, .44" OD
0150	1760023CJYP	1	COVER, Spindle, RH
0160	7073293YP	4	PLUG, Hole, .30 OD

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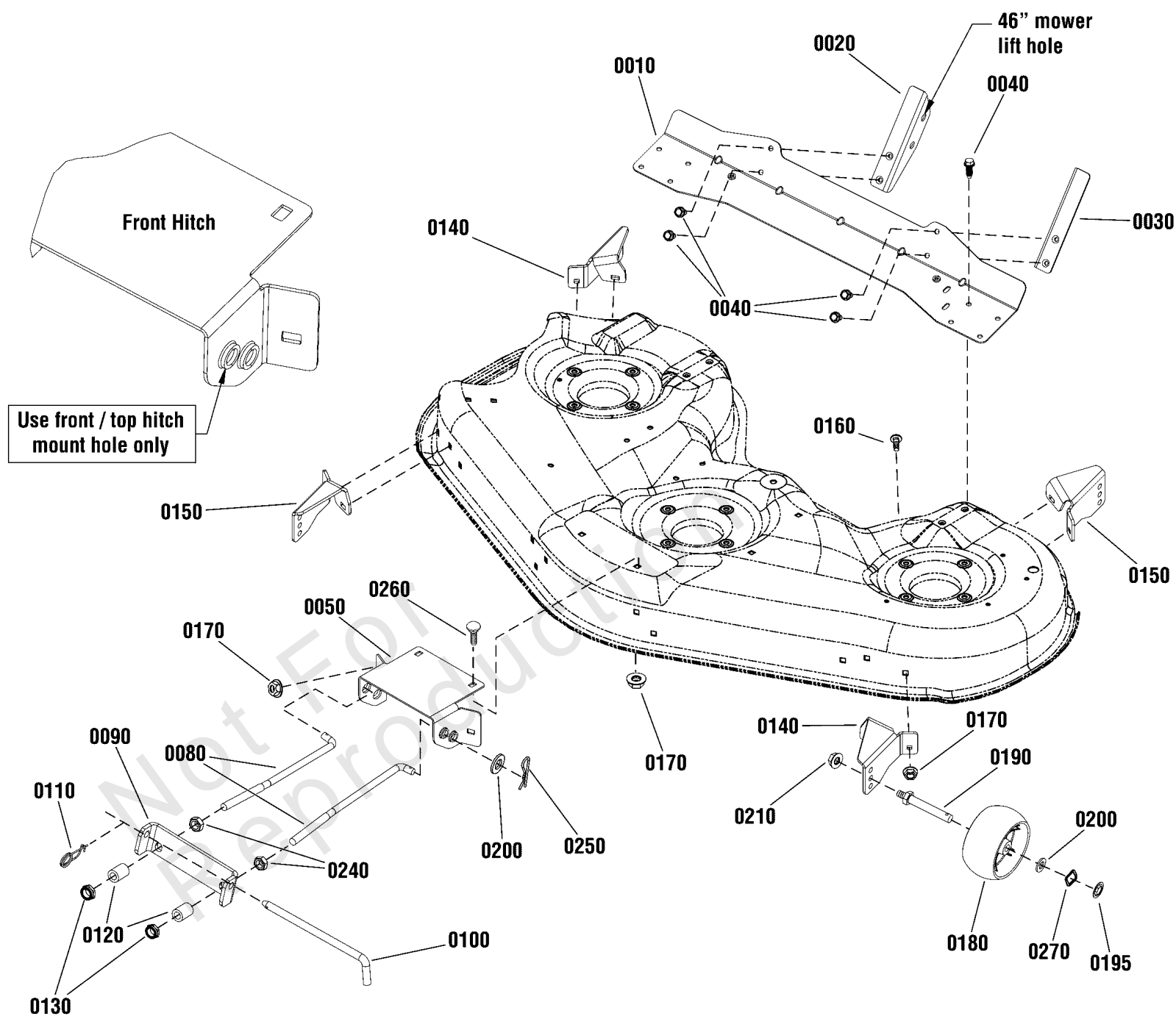
**Footnotes:**

0

# 46" (117cm) Mower Deck - Height Adjustment Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 2691488-00



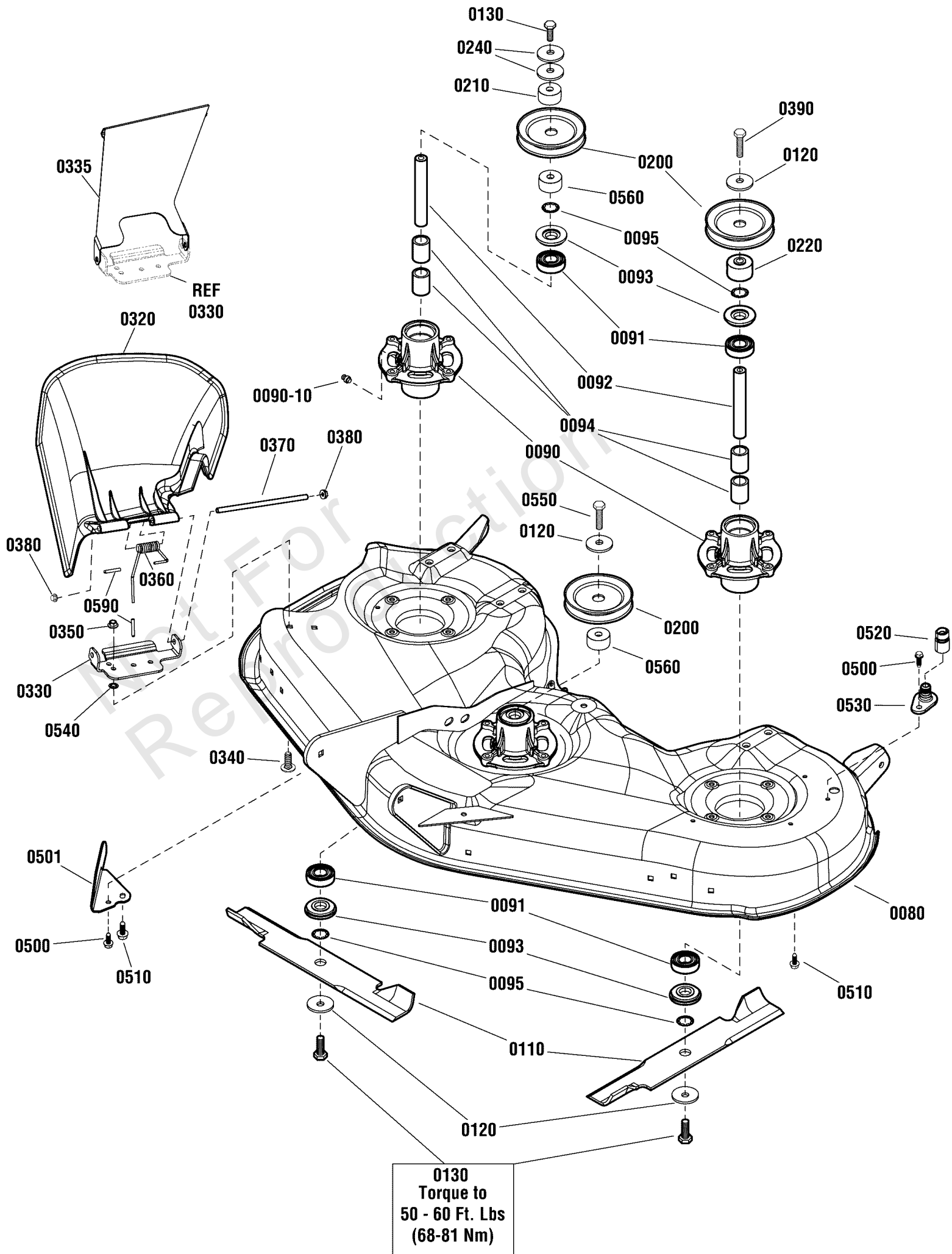
## 46" (117cm) Mower Deck - Height Adjustment Group

REF NO	PART NO	QTY	DESCRIPTION
0010	1736070BMYP	1	SUPPORT, Rear Cross
0020	1736072AYP	1	BRACKET, Rear Mower Pickup
0030	1736073AYP	1	BRACKET, Rear Mower Pickup
0040	703228	8	SCREW, Washer Head Taptite, 5/16-18 X 3/4
0050	1736071BMYP	1	HITCH, Front
0080	1736081YP	2	ROD, Front Bail
0090	1737059AYP	1	HANGER, Front Mower
0100	1731414SM	1	ROD, Latch, 1/2 x 9
0110	703852	1	PIN, Retainer, 5/16 x 3/8
0120	1679166SM	2	SPACER, 1/2 x 7/8 x 1 3/16
0130	1960379SM	2	NUT, Hex Lock, 1/2-13
0140	1736074BMYP	2	BRACKET, Gauge Wheel
0150	1736075BMYP	2	BRACKET, Gauge Wheel
0160	704065	11	BOLT, Carriage, Short Neck, 5/16-18 X 7/8
0170	703409	13	NUT, Serrated Lock Flange, 5/16-18
0180	1736896YP	4	WHEEL, Gauge, .505" ID, 5" OD, 2.58
0190	1736539	4	BOLT, 3/8-16X.63, 3.0"X 1/2
0195	705437	4	PUSHNUT, 1/2
0200	703853	6	WASHER, 1/2
0210	703893	4	NUT, Hex, Flange, Two Way Lock, 3/8-16
0240	1913744SM	2	NUT, Hex Jam, 1/2-13
0250	703300	2	PIN, Hair, 3/32 x 1 5/8
0260	703185	2	BOLT, Carriage, 5/16-18 X 3/4
0270	0020X3MA	4	WASHER, Spring

# 46" (117cm) Mower Deck - Housing, Arbor & Blades Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 2691488-00



## 46" (117cm) Mower Deck - Housing, Arbor & Blades Group

REF NO	PART NO	QTY	DESCRIPTION
0080	1687461YP	1	HOUSING, Mower Deck, 46"
0090	1735573YP	3	HOUSING, w/Lube Fitting
0090-10	1704314SM	3	FITTING, Grease
0091	1735399YP	6	BEARING, Ball, 20mm
0092	1735326YP	3	SHAFT, Spindle
0093	1735323YP	6	SHIELD, Arbor
0094	1735328YP	6	SPACER, Bearing
0095	1960766YP	6	RING, Self Lock
0110	1739889AYP	3	BLADE, 46" Mower
0120	1656916SM	5	WASHER, Spring, 0.475ID x 1-3/4 OD
0130	1920676SM	4	CAPSCREW, Hex Head, 7/16-14 X 1
0200	1735686YP	3	PULLEY, 4.6, Split
0210	1735579YP	1	SPACER, Lower Drive
0220	1757967YP	1	SPACER, Pulley"
0240	1960769YP	2	WASHER, Belleville"
0320	1754745YP	1	DEFLECTOR, 46/52"
0330	1758935AYP	1	BRACKET, Support
0335	1758935AYP	1	BRACKET, Support
0340	703125	2	BOLT, Carriage, 5/16-18 x 5/8, GR5
0350	703409	2	NUT, Serrated Lock Flange, 5/16-18
0360	1759042YP	1	SPRING, Torsion
0370	1759064YP	1	ROD, Deflector
0380	7012542YP	2	NUT, Push, 5/16"
0390	706301	1	CAPSCREW, Hex Head, 7/16-14 x 2-1/2, GR5
0500	703228	2	SCREW, Washer Head Taptite, 5/16-18 X 3/4
0501	1737279BMYP	1	BAFFLE, Pinchoff
0510	1930600SM	12	SCREW, Hex Washer Head, Taptite, 5/16-18 x 1-1/2"
0520	1756246YP	1	CONNECTOR, Washout Port
0530	1756247YP	1	ADAPTER, Washout Port"
0540	703297	2	RETAINER, 5/16, GR5
0550	703171	1	CAPSCREW, Hex Head, 7/16-14 x 1-3/4, GR5
0560	1736445YP	1	SPACER, Pulley
0590	5023489SM	2	PROTECTOR, Cap

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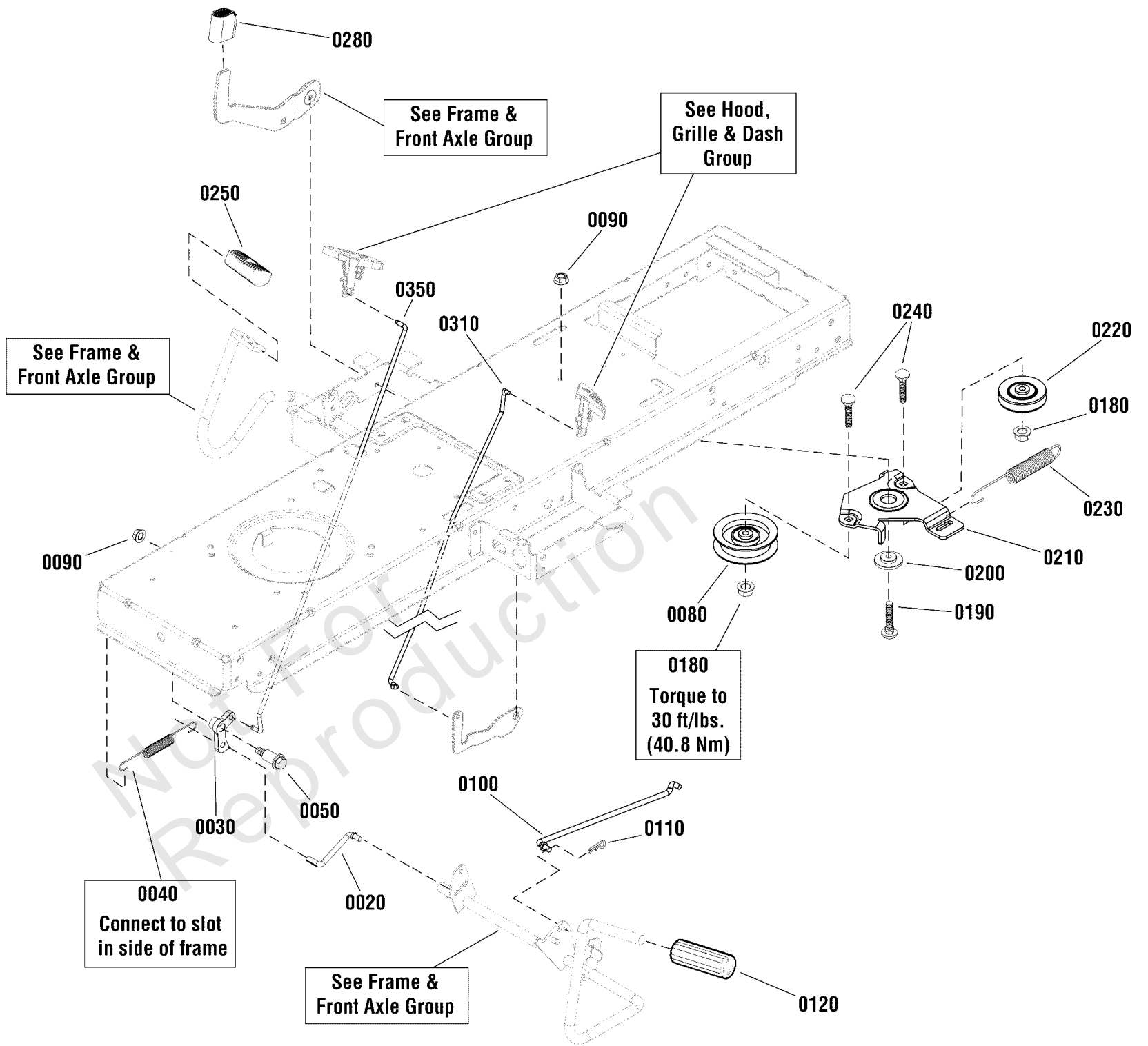
**Footnotes:**

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# Controls Group

Note: Unless noted otherwise, use the standard torque specifications

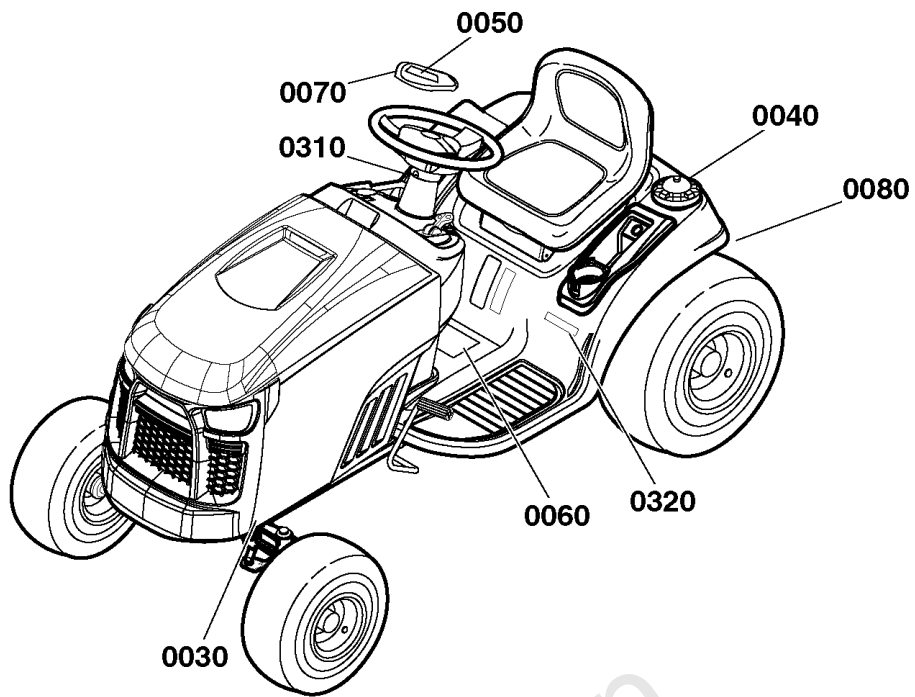
Mfg. No: 2691488-00



## Controls Group

REF NO	PART NO	QTY	DESCRIPTION
0020	1727899SM	1	ROD, Cruise Latch, 5/16 Dia. x 2-13/16 Long
0030	1727897SM	1	LATCH, Cruise
0040	2159181SM	1	SPRING, Extension, 9/16 OD x 7-3/4
0050	1728976SM	1	BOLT, Shoulder, 5/16-18 x 1-5/8
0080	1728000SM	1	PULLEY, Idler, 3-1/8 OD, 3/8 ID
0090	1931277SM	2	NUT, Hex Flange Whiz Lock, 5/16-18
0100	1727254SM	1	ROD, Brake Return, 5/16 Dia. x 12-5/8 Long
0110	1722460SM	1	PIN, Quick, 1-3/16 Long
0120	1727261SM	1	PEDAL, Brake
0180	1960687SM	2	NUT, Hex Flange, ESNA, 3/8-16
0190	1931335SM	1	BOLT, Carriage, Short Neck, 5/16-18 x 1
0200	1727935SM	1	SPACER, Pivot 11/32 ID 1-3/4 OD
0210	1727894ASM	1	BRACKET, Idler
0220	1728001SM	1	PULLEY, 3 OD, 3/8 ID
0230	1729620SM	1	SPRING, Extension, 1 OD x 7-1/2
0240	1931352SM	2	BOLT, Carriage, Short Neck, 3/8-16 x 1-1/2
0250	1721675SM	1	PAD, Foot Pedal, Forward
0280	1727259SM	1	PAD, Foot Pedal, Reverse
0310	1739876YP	1	ROD, Parking Brake, 1/4 Dia. x 16-3/8 Long
0350	1739877YP	1	ROD, Cruise Latch, 1/4 Dia. x 17

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0030



0040



0050



0310



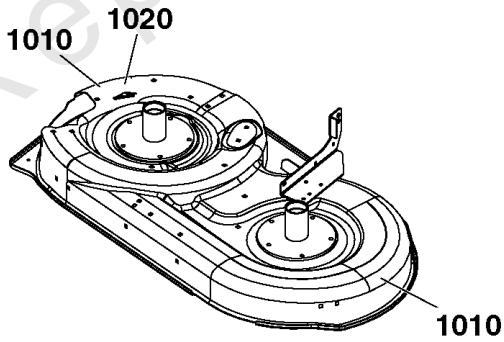
0320



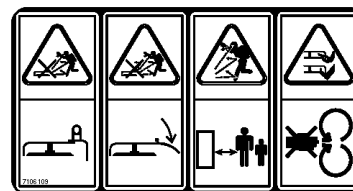
0060



0080



1010



1020

## ***Decals Group***

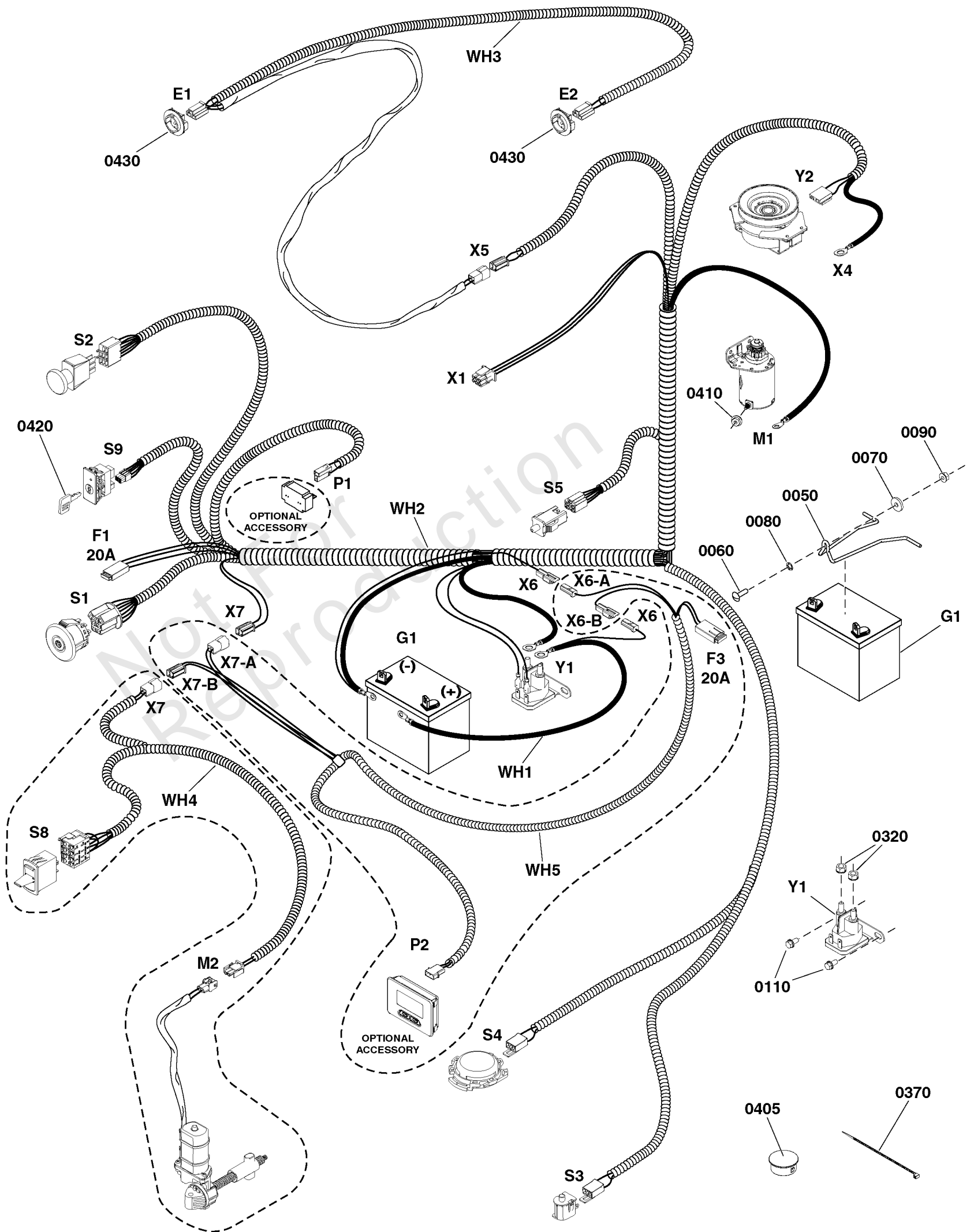
<b>REF NO</b>	<b>PART NO</b>	<b>QTY</b>	<b>DESCRIPTION</b>
0030	7104875YP	2	DECAL, Front Cover, SPX Series
0040	1750913YP	1	DECAL, Logo, Snapper
0050	84002249	1	DECAL, Snapper Logo
0060	1750191YP	1	DECAL, Tunnel, Export
0070	84002250	1	CAP, Steering Wheel, Snapper
0080	1730202SM	1	DECAL, Transmission Tow / Release Lever
0310	1754246YP	1	DECAL, Powered by Briggs
0320	84002248	1	DECAL, SPX210
1010	1755718YP	1	DECAL, 46"/117cm
1020	7106109YP	1	DECAL, Danger

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# Electrical Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 2691488-00



## Electrical Group

REF NO	PART NO	QTY	DESCRIPTION
E1	-----	1	HEADLIGHT, Left
E2	-----	1	HEADLIGHT, Right
F1	1731957SM	1	FUSE, Wiring Harness
F3	1731957SM	1	FUSE, Wiring Harness
G1	-----	1	CE BATTERY - 7U1L -(7U1L, 12V, 195CCA)
M1	592599	1	MOTOR, Starter
M2	1761788YP	1	MOTOR, Electric -(Optional Accessory)
P1	1731185SM	1	HOUR METER, Digital, No Alarms -(Optional Accessory)
P2	1758654YP	1	DISPLAY, Mini Meter -(Optional Accessory)
S1	1761507YP	1	SWITCH, Ignition
S2	1722887YP	1	SWITCH, PTO Push/Pull, Yel Knob w/Symbols, 8 Terminal
S3	1720411SM	1	SWITCH, NO, Black, Push Button W/Boot -(Reverse Switch)
S4	1714771SM	1	SWITCH, Seat, Gray Switch, Gray Retainer
S5	7022886YP	1	SWITCH, DP, NO/NC, Snap-In -(Brake Pedal Switch)
S8	1761475YP	1	SWITCH, Height of Cut -(Optional Accessory)
S9	1761897YP	1	SWITCH, Reverse Mow Option
WH1	1759779YP	1	HARNESS, Battery, Solenoid
WH2	84003000	1	HARNESS, Main
WH3	1761298YP	1	HARNESS, Headlight
WH4	1761347YP	1	HARNESS, Height of Cut -(Optional Accessory)
WH5	84003001	1	HARNESS, Mini Meter with Height of Cut Harness -(Optional Accessory)
X1	-----	1	CONNECTOR, Engine
X4	-----	1	CHASSIS GROUND POINT
X5	-----	1	CONNECTOR, Main Harness to Headlight Harness
X6	-----	1	CONNECTOR, Battery Solenoid Harness to Main Harness
X6-A	ES-X6-A	1	CONNECTOR, Mini Meter with Height of Cut Harness to Main Harness
X6-B	ES-X6-B	1	CONNECTOR, Mini Meter with Height of Cut Harness to Battery Solenoid
X7	-----	1	CONNECTOR, Main Harness to Height of Cut Harness
X7-A	ES-X7-A	1	CONNECTOR, Mini Meter with Height of Cut Harness to Main Harness
X7-B	ES-X7-B	1	CONNECTOR, Mini Meter with Height of Cut Harness to Height of Cut Harness
Y1	1755381YP	1	SOLENOID -(Starter Solenoid)
Y2	1760986YP	1	OGURA CLUTCH -(PTO Clutch)
0050	1730007SM	1	HOLD DOWN, Battery, 1/4 Dia.
0060	1931318SM	1	BOLT, Carriage, Short Neck, 1/4-20 x 7/8 G5
0070	703229	1	WASHER, 1/4 x 27/32
0080	703826	1	NUT, Nylock, 5/16-18
0090	703463	1	NUT, Nylock Flanged, 1/4-20
0110	704130	2	SCREW, Hex Head, 1/4-20 X 1/2
0320	2860750SM	2	NUT, Hex Lock, KEPS, 5/16-24
0370	703586	3	TIE, Cable
0405	1732007SM	1	PLUG, Hole, 7/8 Dia.
0410	703061	1	NUT, 1/4-20, Keps, Conical Washer
0420	1726557SM	2	KEY, No Mow Module (Yellow)



## *Electrical Group*

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REF NO	PART NO	QTY	DESCRIPTION
0430	1760239YP	2	LED HEADLIGHT AND SOCKET ASSEMBLY

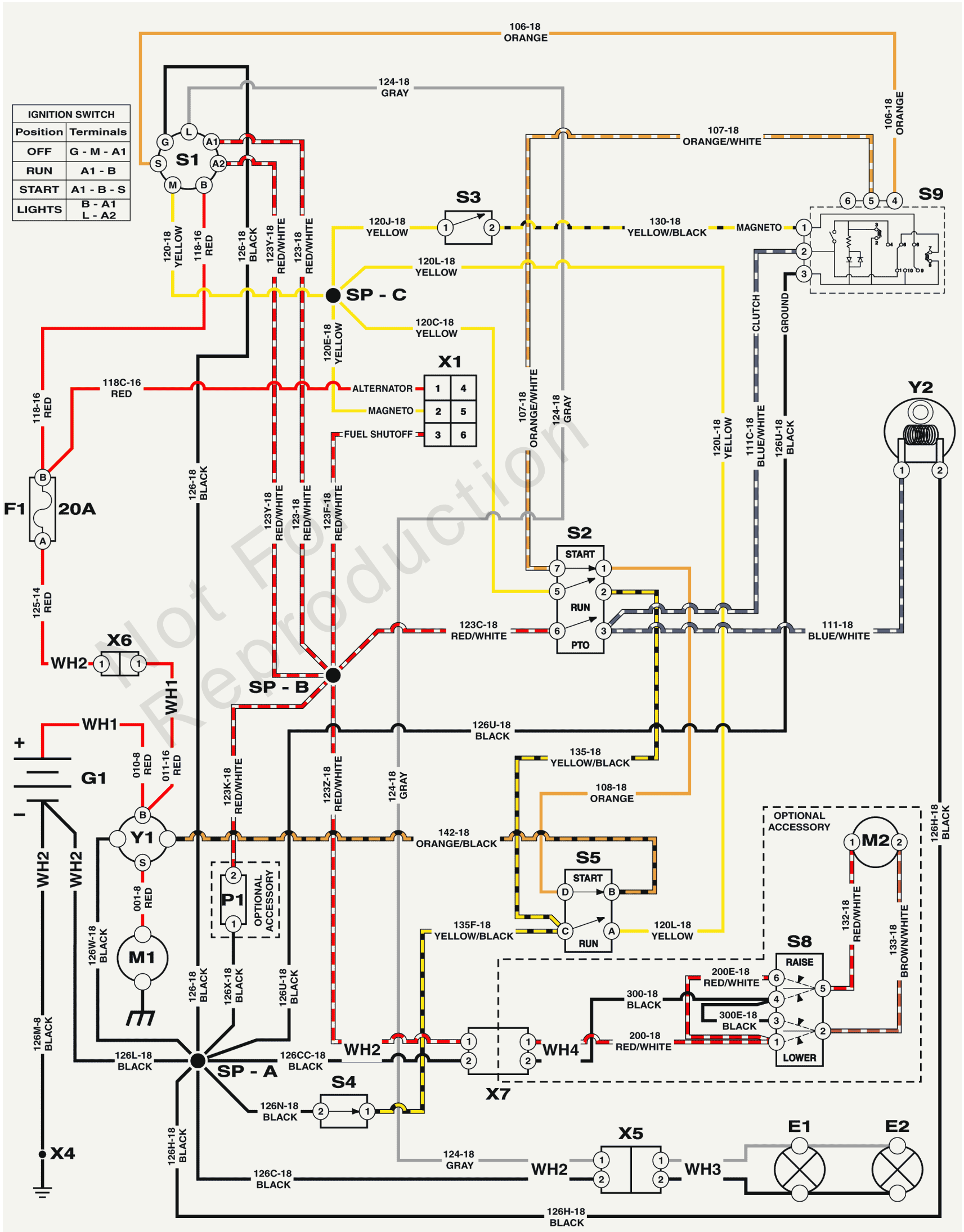
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# Electrical Schematic -

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 2691488-00



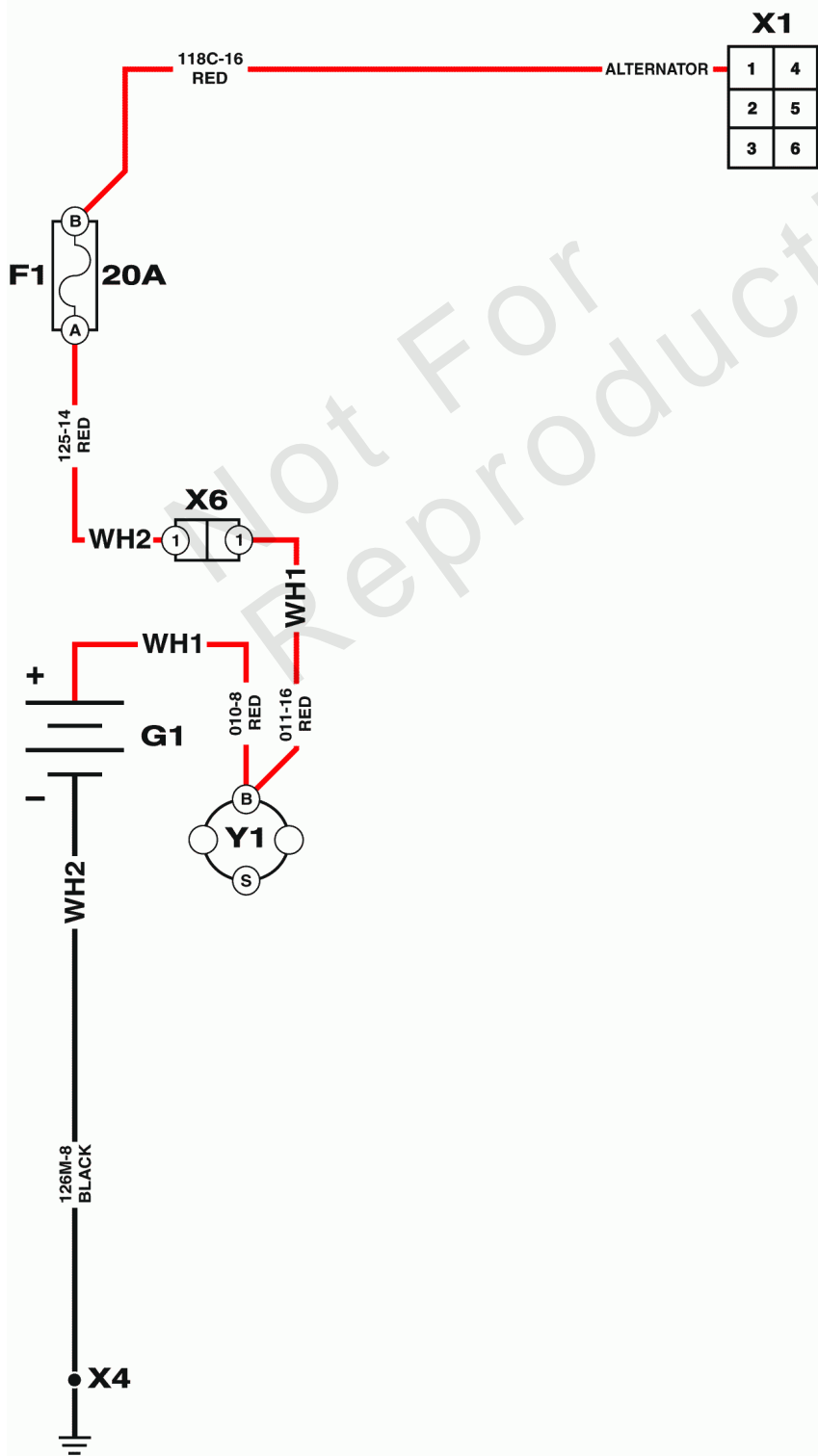
## Electrical Schematic -

REF NO	PART NO	QTY	DESCRIPTION
	-----		NOTE: All electrical components represented within this electrical schematic are at rest state (no power applied).
E1	-----	1	HEADLIGHT, Left
E2	-----	1	HEADLIGHT, Right
F1	1731957SM	1	FUSE, Wiring Harness
G1	-----	1	CE BATTERY - 7U1L
M1	592599	1	MOTOR, Starter
M2	1761788YP	1	MOTOR, Electric -(Optional Accessory)
P1	1731185SM	1	HOUR METER, Digital, No Alarms -(Optional Accessory)
S1	1761507YP	1	SWITCH, Ignition
S2	1722887YP	1	SWITCH, PTO Push/Pull, Yel Knob w/Symbols, 8 Terminal
S3	1720411SM	1	SWITCH, NO, Black, Push Button W/Boot -(Reverse Switch)
S4	1714771SM	1	SWITCH, Seat, Gray Switch, Gray Retainer
S5	7022886YP	1	SWITCH, DP, NO/NC, Snap-In -(Brake Pedal Switch)
S8	1761475YP	1	SWITCH, Height of Cut -(Optional Accessory)
S9	1761897YP	1	SWITCH, Reverse Mow Option
SP-A	-----	1	SPLICE - A -(Splices are internal to the wire harness.)
SP-B	-----	1	SPLICE - B -(Splices are internal to the wire harness.)
SP-C	-----	1	SPLICE - C -(Splices are internal to the wire harness.)
WH1	1759779YP	1	HARNESS, Battery, Solenoid
WH2	1761300YP	1	HARNESS, Main
WH3	1761298YP	1	HARNESS, Headlight
WH4	1761347YP	1	HARNESS, Height of Cut -(Optional Accessory)
X1	-----	1	CONNECTOR, Engine
X4	-----	1	CHASSIS GROUND POINT
X5	-----	1	CONNECTOR, Main Harness to Headlight Harness
X6	-----	1	CONNECTOR, Battery Solenoid Harness to Main Harness
X7	-----	1	CONNECTOR, Main Harness to Height of Cut Harness
Y1	1755381YP	1	SOLENOID -(Starter Solenoid)
Y2	1760986YP	1	OGURA CLUTCH -(PTO Clutch)

# Electrical Schematic - Charging Circuit

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 2691488-00



## Electrical Schematic - Charging Circuit

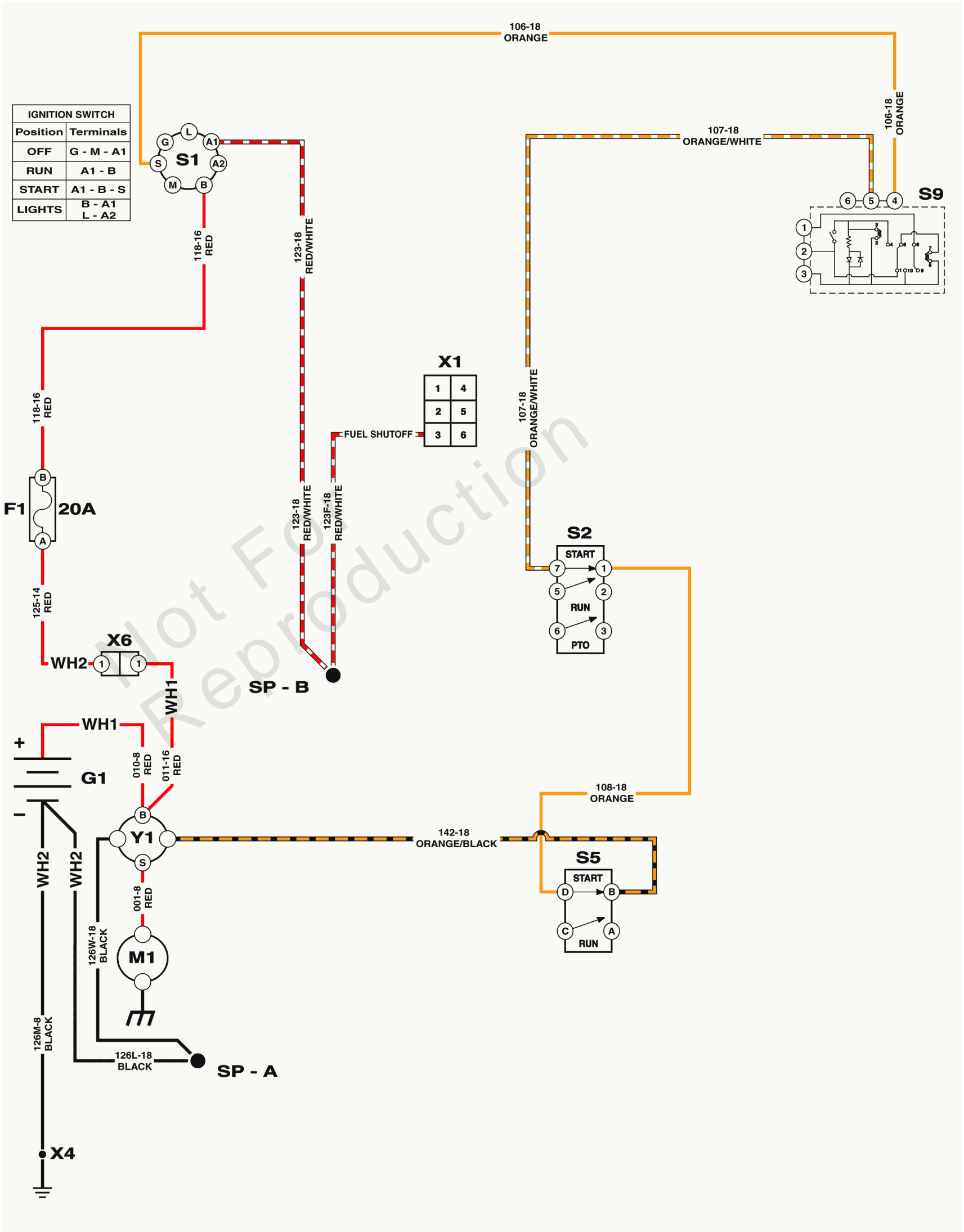
REF NO	PART NO	QTY	DESCRIPTION
	-----		NOTE: All electrical components represented within this electrical schematic are at rest state (no power applied).
F1	1731957SM	1	FUSE, Wiring Harness
G1	-----	1	CE BATTERY - 7U1L -(7U1L, 12V, 195CCA)
WH1	1759779YP	1	HARNESS, Battery, Solenoid
WH2	1761300YP	1	HARNESS, Main
X1	-----	1	CONNECTOR, Engine
X4	-----	1	CHASSIS GROUND POINT
X6	-----	1	CONNECTOR, Battery Solenoid Harness to Main Harness
Y1	1755381YP	1	SOLENOID -(Starter Solenoid)

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# Electrical Schematic - Cranking Circuit

Note: Unless noted otherwise, use the standard torque specifications

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## Electrical Schematic - Cranking Circuit

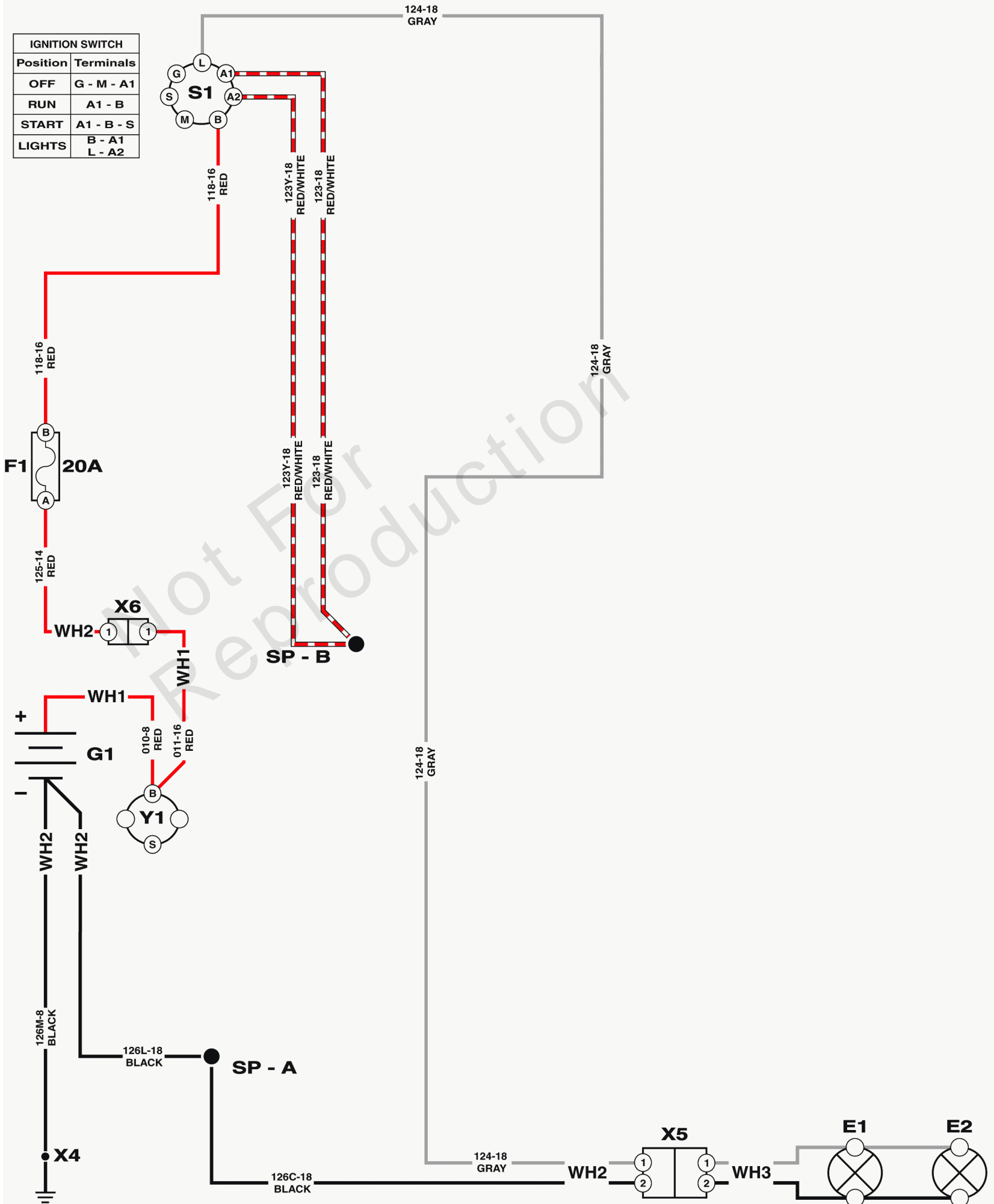
REF NO	PART NO	QTY	DESCRIPTION
	-----		NOTE: All electrical components represented within this electrical schematic are at rest state (no power applied).
F1	1731957SM	1	FUSE, Wiring Harness
G1	-----	1	CE BATTERY - 7U1L -(7U1L, 12V, 195CCA)
M1	592599	1	MOTOR, Starter
S1	1761507YP	1	SWITCH, Ignition
S2	1722887YP	1	SWITCH, PTO Push/Pull, Yel Knob w/Symbols, 8 Terminal
S5	7022886YP	1	SWITCH, DP, NO/NC, Snap-In -(Brake Pedal Switch)
S9	1761897YP	1	SWITCH, Reverse Mow Option
SP-A	-----	1	SPLICE - A -(Splices are internal to the wire harness.)
SP-B	-----	1	SPLICE - B -(Splices are internal to the wire harness.)
WH1	1759779YP	1	HARNESS, Battery, Solenoid
WH2	1761300YP	1	HARNESS, Main
X1	-----	1	CONNECTOR, Engine
X4	-----	1	CHASSIS GROUND POINT
X6	-----	1	CONNECTOR, Battery Solenoid Harness to Main Harness
Y1	1755381YP	1	SOLENOID -(Starter Solenoid)

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# Electrical Schematic - Headlight Circuit

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 2691488-00



## Electrical Schematic - Headlight Circuit

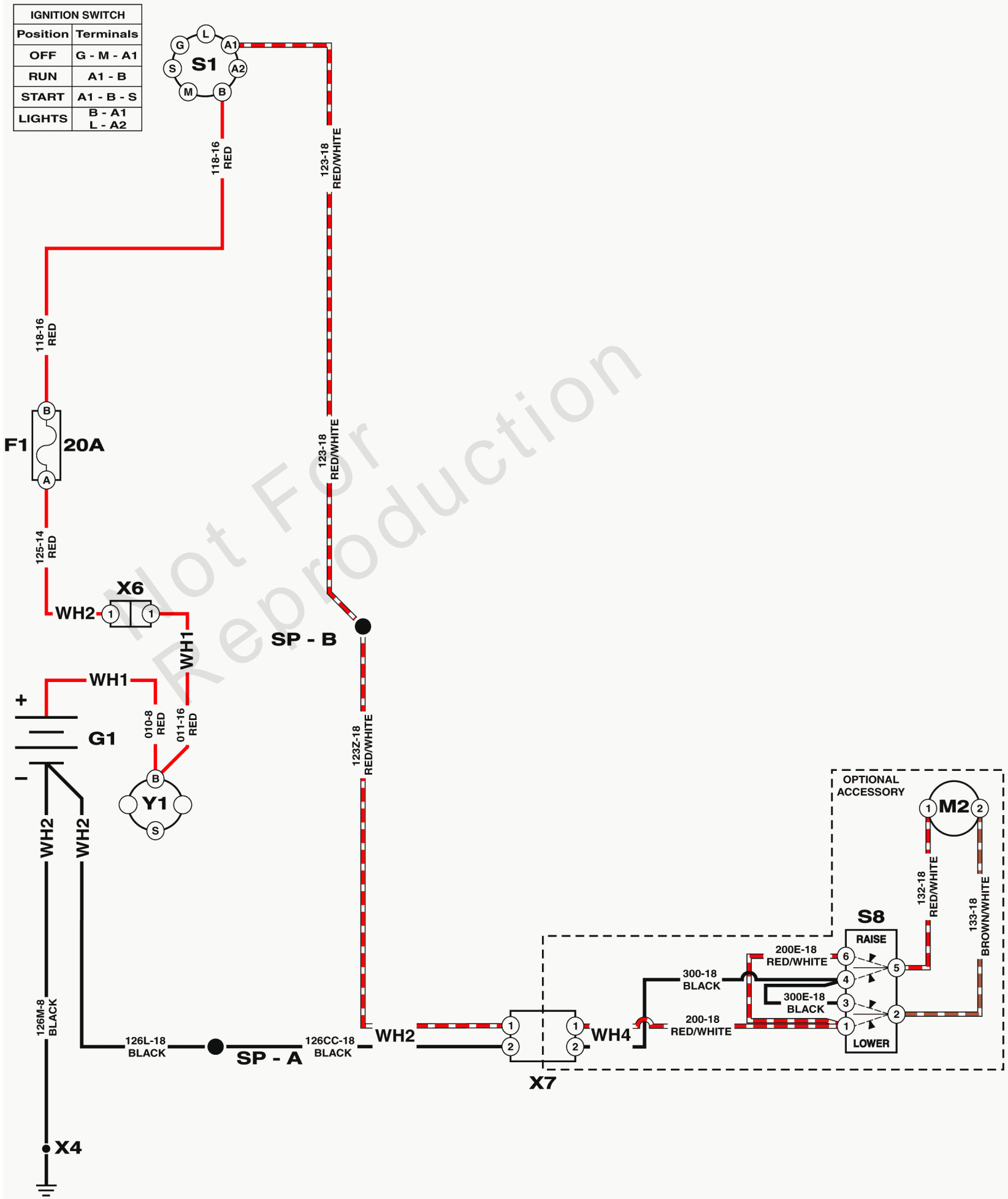
REF NO	PART NO	QTY	DESCRIPTION
	-----		NOTE: All electrical components represented within this electrical schematic are at rest state (no power applied).
E1	-----	1	HEADLIGHT, Left
E2	-----	1	HEADLIGHT, Right
F1	1731957SM	1	FUSE, Wiring Harness
G1	-----	1	CE BATTERY - 7U1L -(7U1L, 12V, 195CCA)
S1	1761507YP	1	SWITCH, Ignition
SP-A	-----	1	SPLICE - A -(Splices are internal to the wire harness.)
SP-B	-----	1	SPLICE - B -(Splices are internal to the wire harness.)
WH1	1759779YP	1	HARNESS, Battery, Solenoid
WH2	1761300YP	1	HARNESS, Main
WH3	1761298YP	1	HARNESS, Headlight
X4	-----	1	CHASSIS GROUND POINT
X5	-----	1	CONNECTOR, Main Harness to Headlight Harness
X6	-----	1	CONNECTOR, Battery Solenoid Harness to Main Harness
Y1	1755381YP	1	SOLENOID -(Starter Solenoid)

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# Electrical Schematic - Height of Cut

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 2691488-00



## Electrical Schematic - Height of Cut

REF NO	PART NO	QTY	DESCRIPTION
	-----		NOTE: All electrical components represented within this electrical schematic are at rest state (no power applied).
F1	1731957SM	1	FUSE, Wiring Harness
G1	-----	1	CE BATTERY - 7U1L -(7U1L, 12V, 195CCA)
M2	1761788YP	1	MOTOR, Electric -(Optional Accessory)
S1	1761507YP	1	SWITCH, Ignition
S8	1761475YP	1	SWITCH, Height of Cut -(Optional Accessory)
SP-A	-----	1	SPLICE - A -(Splices are internal to the wire harness.)
SP-B	-----	1	SPLICE - B -(Splices are internal to the wire harness.)
WH1	1759779YP	1	HARNESS, Battery, Solenoid
WH2	1761300YP	1	HARNESS, Main
WH4	1761347YP	1	HARNESS, Height of Cut -(Optional Accessory)
X4	-----	1	CHASSIS GROUND POINT
X6	-----	1	CONNECTOR, Battery Solenoid Harness to Main Harness
X7	-----	1	CONNECTOR, Main Harness to Height of Cut Harness
Y1	1755381YP	1	SOLENOID -(Starter Solenoid)

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## Electrical Schematic - Hour Meter

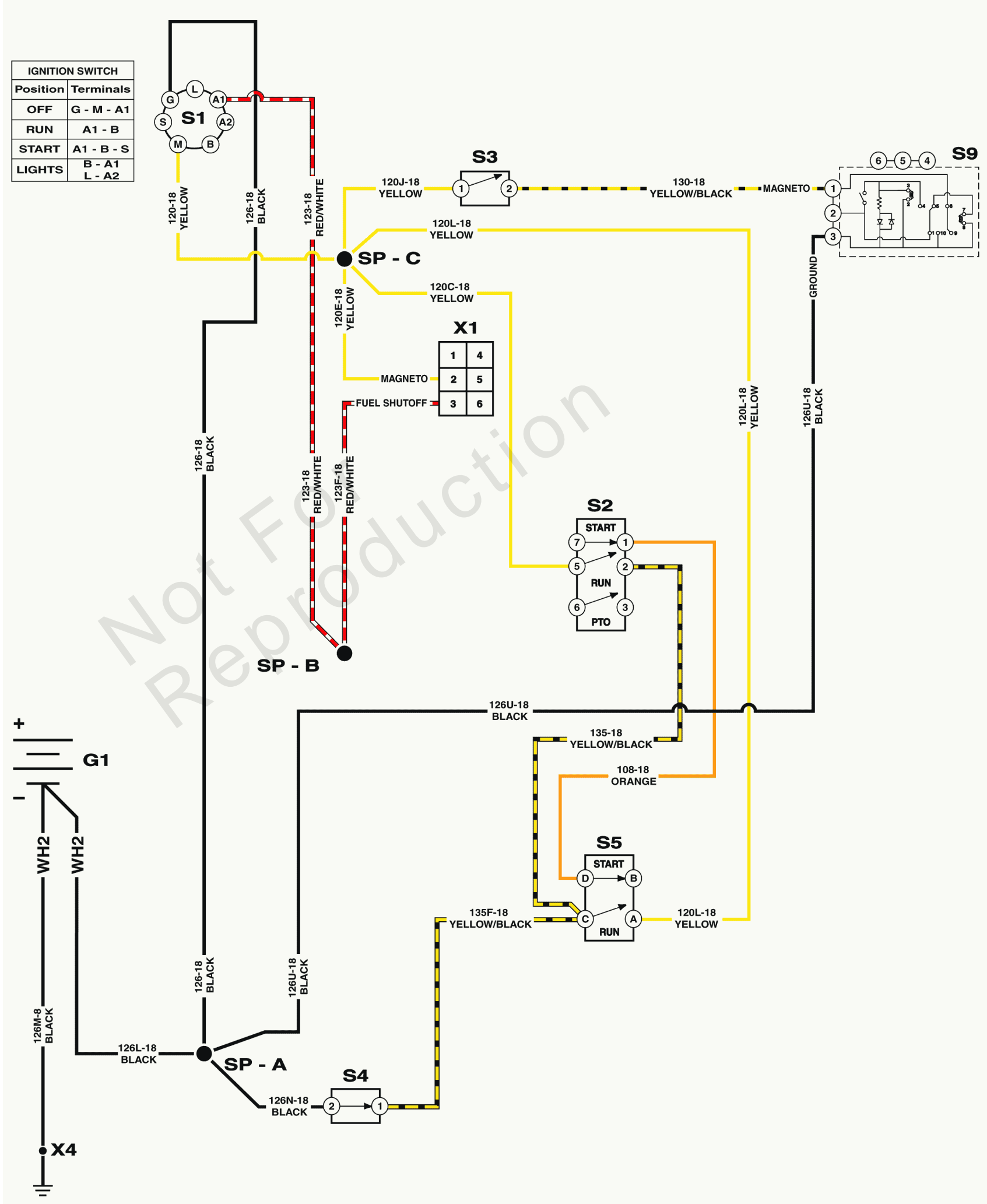
REF NO	PART NO	QTY	DESCRIPTION
	-----		NOTE: All electrical components represented within this electrical schematic are at rest state (no power applied).
F1	1731957SM	1	FUSE, Wiring Harness
G1	-----	1	CE BATTERY - 7U1L -(7U1L, 12V, 195CCA)
P1	1731185SM	1	HOUR METER, Digital, No Alarms -(Optional Accessory)
S1	1761507YP	1	SWITCH, Ignition
SP-A	-----	1	SPLICE - A -(Splices are internal to the wire harness.)
SP-B	-----	1	SPLICE - B -(Splices are internal to the wire harness.)
WH1	1759779YP	1	HARNESS, Battery, Solenoid
WH2	1761300YP	1	HARNESS, Main
X4	-----	1	CHASSIS GROUND POINT
X6	-----	1	CONNECTOR, Battery Solenoid Harness to Main Harness
Y1	1755381YP	1	SOLENOID -(Starter Solenoid)

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# Electrical Schematic - Ignition Shutdown

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 2691488-00



IGNITION SWITCH	
Position	Terminals
OFF	G - M - A1
RUN	A1 - B
START	A1 - B - S
LIGHTS	B - A1 L - A2

X1	
1	4
2	5
3	6

## Electrical Schematic - Ignition Shutdown

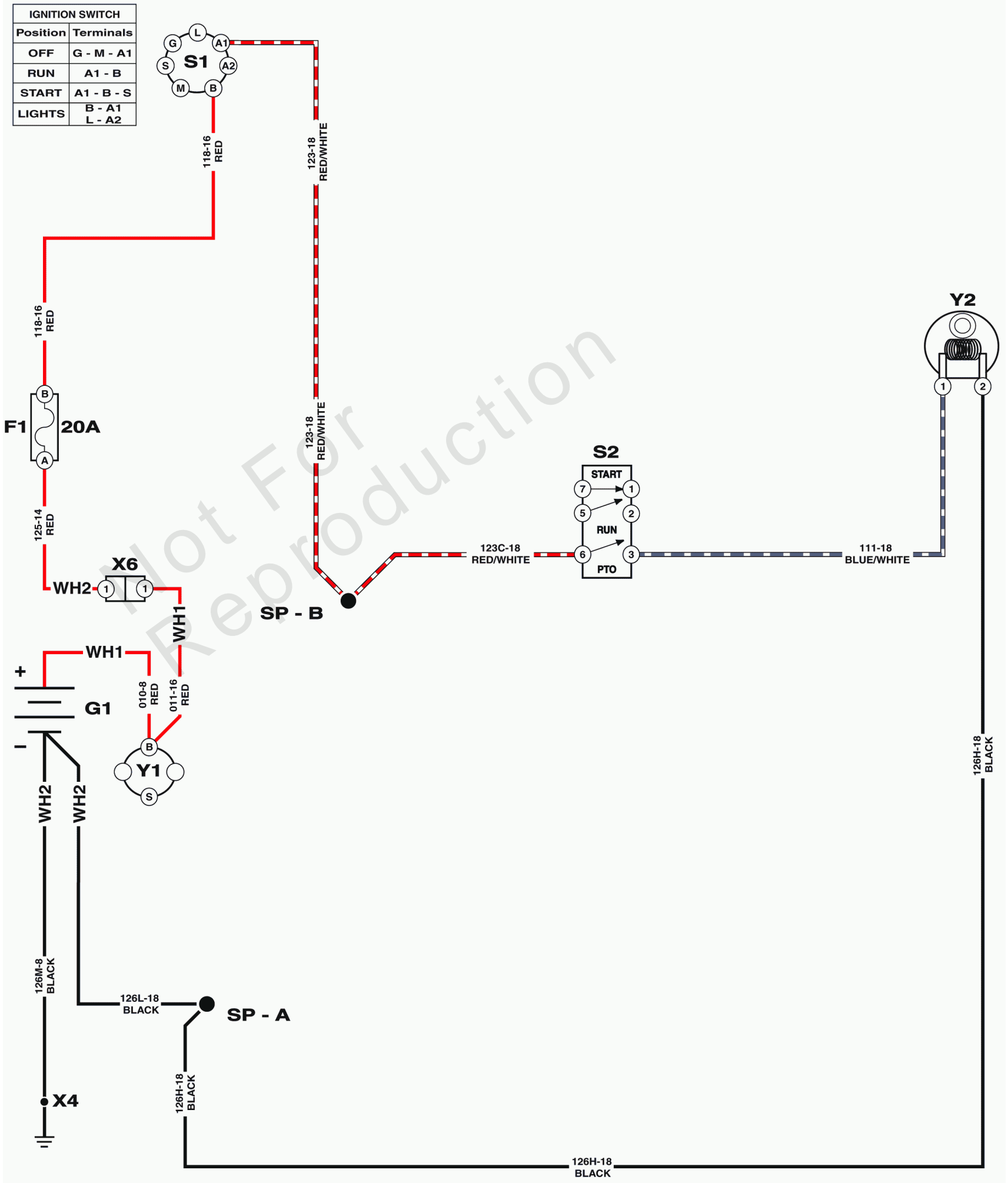
REF NO	PART NO	QTY	DESCRIPTION
	-----		NOTE: All electrical components represented within this electrical schematic are at rest state (no power applied).
G1	-----	1	CE BATTERY - 7U1L -(7U1L, 12V, 195CCA)
S1	1761507YP	1	SWITCH, Ignition
S2	1722887YP	1	SWITCH, PTO Push/Pull, Yel Knob w/Symbols, 8 Terminal
S3	1720411SM	1	SWITCH, NO, Black, Push Button W/Boot -(Reverse Switch)
S4	1714771SM	1	SWITCH, Seat, Gray Switch, Gray Retainer
S5	7022886YP	1	SWITCH, DP, NO/NC, Snap-In -(Brake Pedal Switch)
S9	1761897YP	1	SWITCH, Reverse Mow Option
SP-A	-----	1	SPLICE - A -(Splices are internal to the wire harness.)
SP-B	-----	1	SPLICE - B -(Splices are internal to the wire harness.)
SP-C	-----	1	SPLICE - C -(Splices are internal to the wire harness.)
WH2	1761300YP	1	HARNESS, Main
X1	-----	1	CONNECTOR, Engine
X4	-----	1	CHASSIS GROUND POINT

Not For  
Reproduction

# Electrical Schematic - PTO Clutch

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 2691488-00



## Electrical Schematic - PTO Clutch

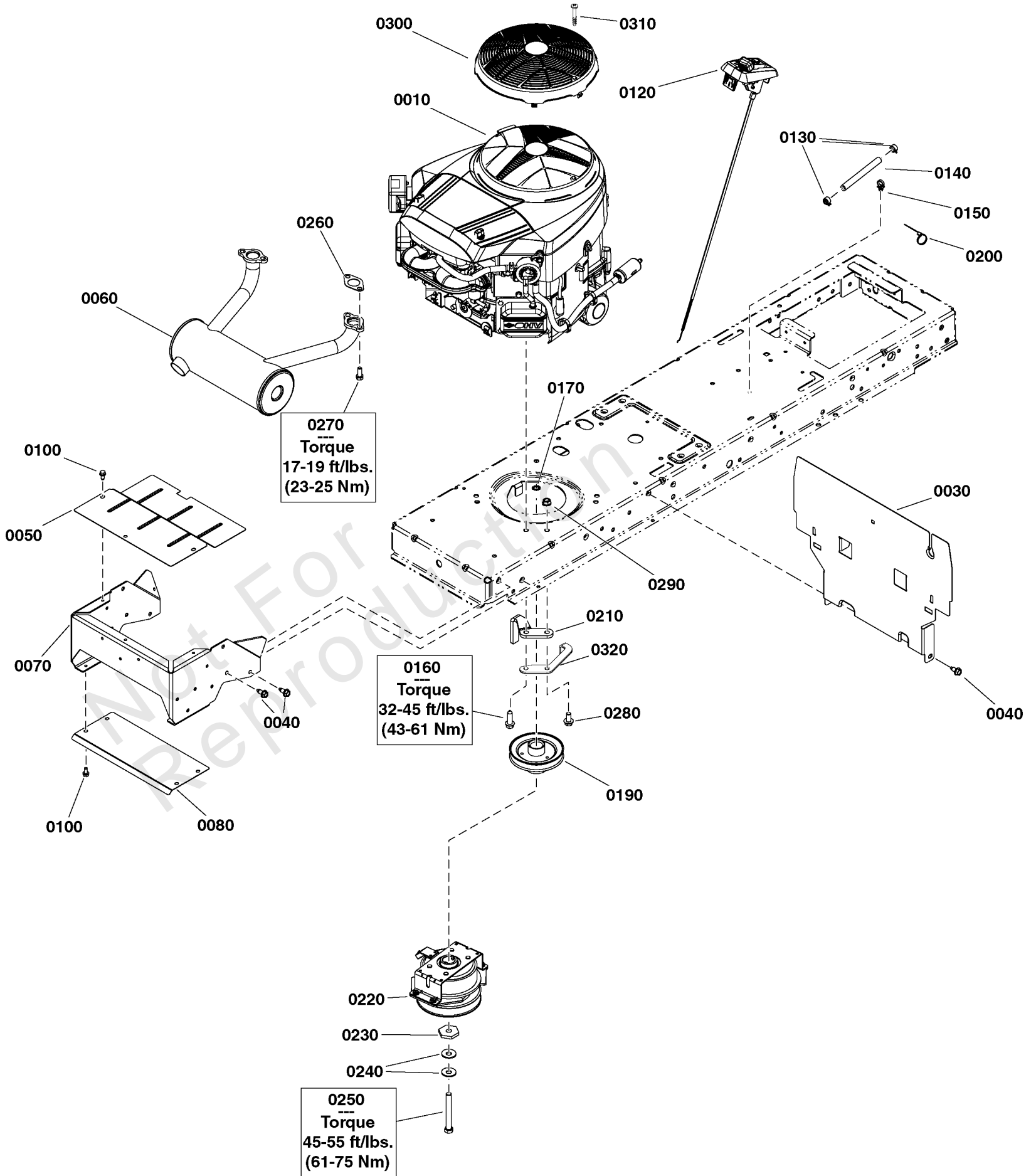
REF NO	PART NO	QTY	DESCRIPTION
	-----		NOTE: All electrical components represented within this electrical schematic are at rest state (no power applied).
F1	1731957SM	1	FUSE, Wiring Harness
G1	-----	1	CE BATTERY - 7U1L -(7U1L, 12V, 195CCA)
S1	1761507YP	1	SWITCH, Ignition
S2	1722887YP	1	SWITCH, PTO Push/Pull, Yel Knob w/Symbols, 8 Terminal
SP-A	-----	1	SPLICE - A -(Splices are internal to the wire harness.)
SP-B	-----	1	SPLICE - B -(Splices are internal to the wire harness.)
WH1	1759779YP	1	HARNESS, Battery, Solenoid
WH2	1761300YP	1	HARNESS, Main
X4	-----	1	CHASSIS GROUND POINT
X6	-----	1	CONNECTOR, Battery Solenoid Harness to Main Harness
Y1	1755381YP	1	SOLENOID -(Starter Solenoid)
Y2	1760986YP	1	OGURA CLUTCH -(PTO Clutch)

Not For  
Reproduction

# Engine Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 2691488-00



## Engine Group

REF NO	PART NO	QTY	DESCRIPTION
0010	40N877-0031-B5	1	* ENGINE, 23 Gross HP, Briggs & Stratton Twin, Pro Series, Mod. 40N877-0031-B5
0030	1738380AYP	1	HEAT SHIELD, Engine
0040	703228	6	SCREW, Washer Head Taptite, 5/16-18 X 3/4
0050	1761064CJYP	1	HEAT SHIELD
0060	1761127YP	1	MUFFLER, Twin
0070	1761211CJYP	1	Support, Muffler
0080	1761063CJYP	1	HEAT SHIELD, Bottom
0100	704130	7	SCREW, Hex Head, 1/4-20 X 1/2
0120	1759240YP	1	THROTTLE
0130	791850	2	CLAMP, Hose
0140	845503	1	LINE, Fuel
0150	1730268SM	2	CLIP, Hose, 1/2 Dia., Push In
0160	2828635SM	4	SCREW, Taptite, 3/8-16 X 1 1/4
0160	704010	1	CAPSCREW, Hex Head, Taptite, 3/8-16 x 1-1/2 (For 1692768)
0170	703864	1	WASHER, External, 3/8
0190	1732576SM	1	PULLEY & HUB ASSEMBLY, Engine
0200	703586	1	TIE, Cable
0210	1760323CJYP	1	CLUTCH, Anchor
0220	1760986YP	1	OGURA CLUTCH -(Position clutch as illustrated)
0230	1708264SM	1	WASHER, Hex
0240	1960769YP	2	WASHER, Belleville
0250	771023	1	CAPSCREW, Hex Head, Loctite, 7/16-20 x 3 1/2
0260	690970	2	GASKET, Exhaust
0270	690341	4	SCREW
0280	703955	1	BOLT, 3/8-16X0.75, Serrated Flange, GR5, Zinc/Clear
0290	703333	1	NUT, 3/8-16, Flanged Lock, GR5, Zinc/Clear
0300	797420YP	1	GUARD, Debris Screen
0310	95957YP	1	SCREW, #8-18 X 7/8", Pan Head Hi/Lo Thread Rolling (Not Shown)
0320	TBD	1	The service part is in development.

---

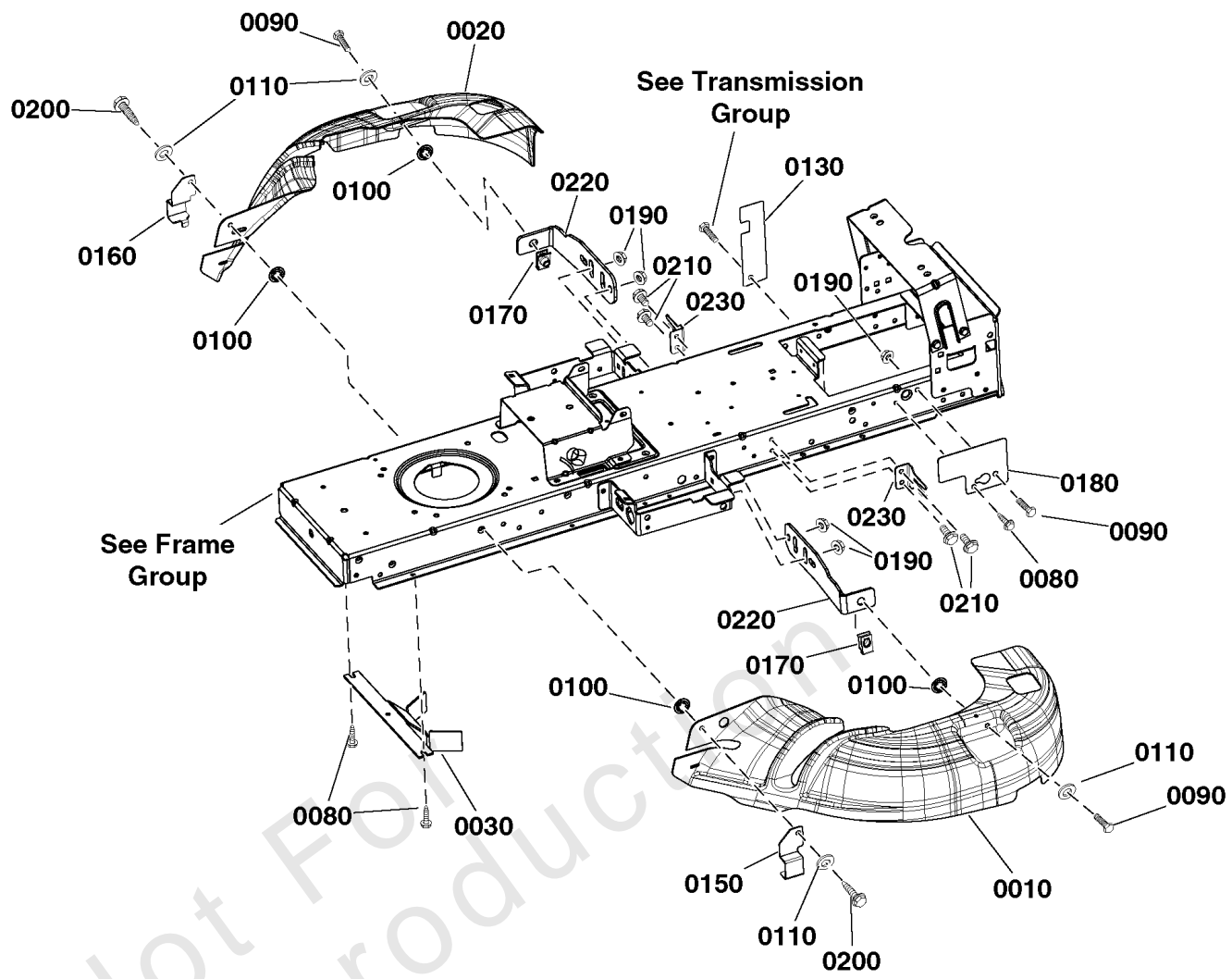
### Footnotes:

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

# EU Guard Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 2691488-00



## *EU Guard Group*

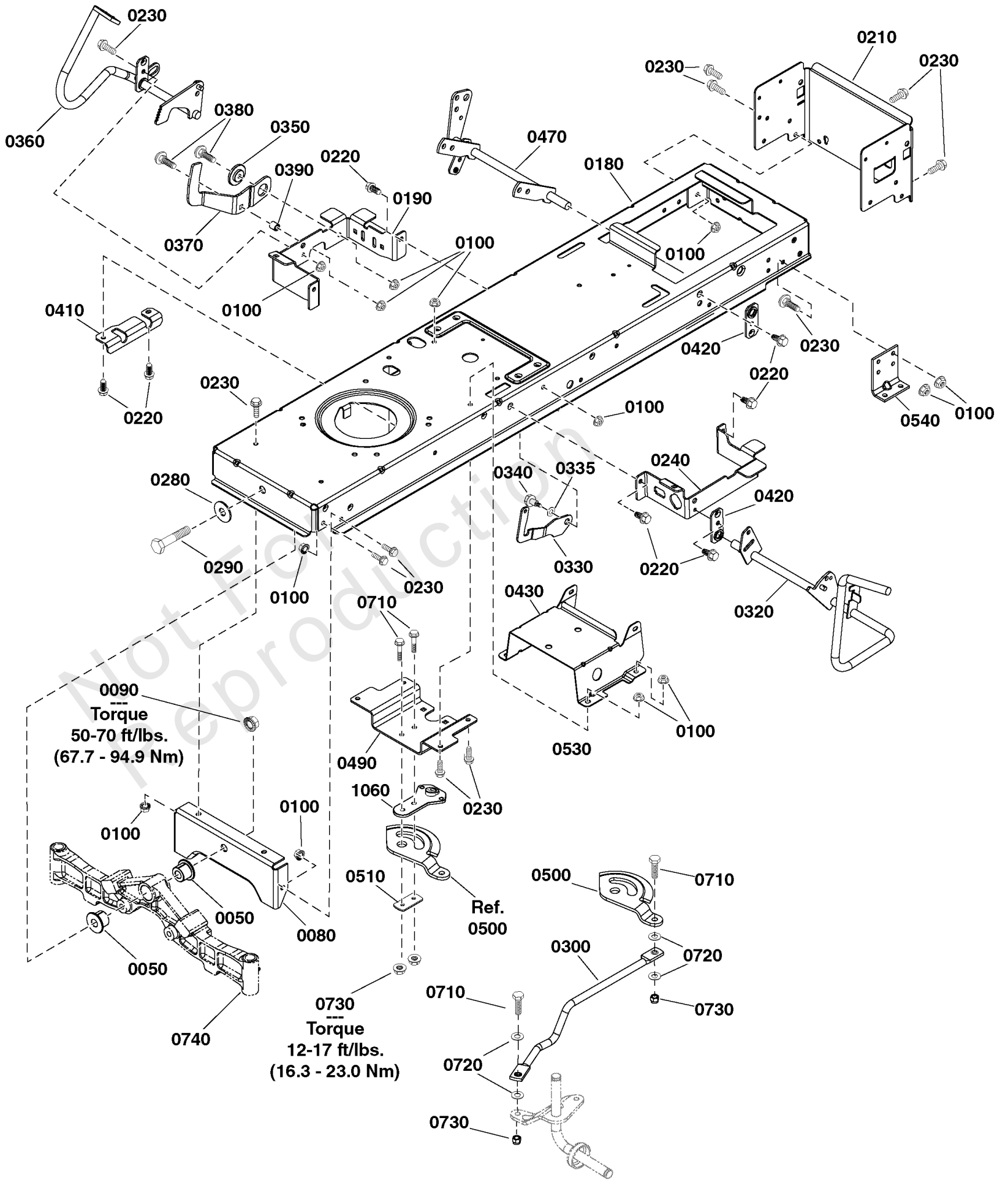
REF NO	PART NO	QTY	DESCRIPTION
0010	1759735YP	1	GUARD, L.H., 46"
0020	1759736YP	1	GUARD, R.H., 46"
0030	84002238	1	GUARD, Clutch, Front
0080	703228	3	SCREW, Washer Head Taptite, 5/16-18 X 3/4
0090	703408	3	SCREW, Hex Head Cap, 5/16-18 X 7/8, GR5
0100	703297	4	RETAINER, 5/16 X 5/8
0110	703350	4	WASHER, 5/16, Flat SAE, Zinc/Clear
0130	1736025BMYP	1	GUARD, Pulley, Rear
0150	1759985BMYP	1	SUPPORT, Guarding, L.H.
0160	1759989BMYP	1	SUPPORT, Guarding, R.H.
0170	1935255SM	2	NUT, Speed, Lug Type, 5/16-18
0180	1760016CJYP	1	GUARD, Rear
0190	703409	5	NUT, Serrated Lock Flange, 5/16-18
0200	704146	2	SCREW, Hex Washer Head, Taptite, 5/16-18 x 1
0210	703985	4	SCREW, Hex Washer Head, Taptite, 5/16-18 x 1/2
0220	1759729CJYP	2	SUPPORT
0230	84002241	2	SUPPORT, Frame, Guarding
0240	703185	4	BOLT, Carriage, 5/16-18 X 3/4

Not For  
Reproduction

# Frame & Front Axle Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 2691488-00



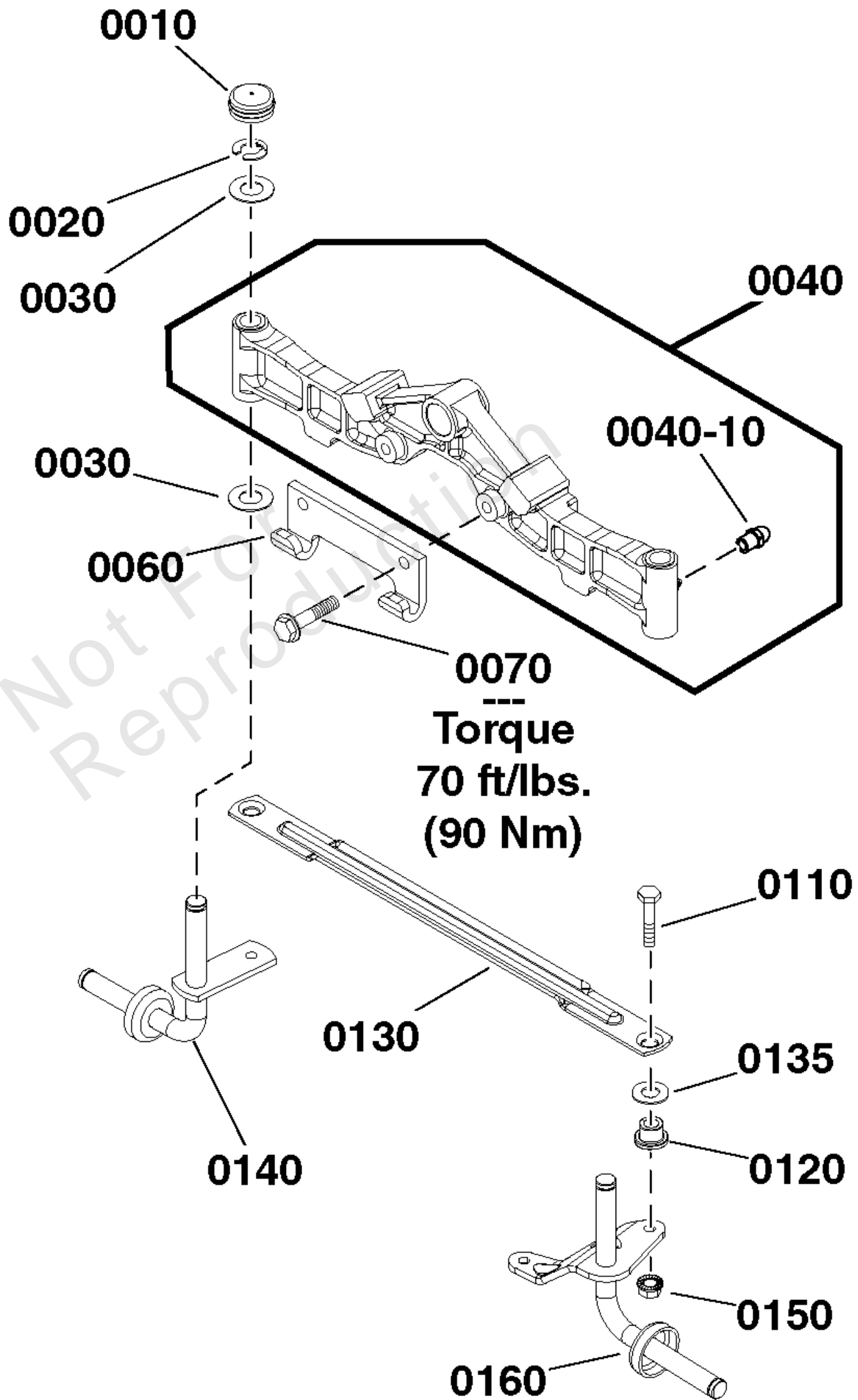
## Frame & Front Axle Group

REF NO	PART NO	QTY	DESCRIPTION
0050	1730186SM	2	BUSHING, Axle Pivot
0080	1727902SM	1	PLATE, Axle Support
0090	2860646SM	1	NUT, Hex Flange, 5/8-11
0100	703409	26	NUT, Serrated Lock Flange, 5/16-18
0180	-----	1	FRAME
0190	1759842BMYP	1	SUPPORT, Front Footrest, RH
0210	1758690YP	1	SUPPORT, Rear Frame
0220	703949	9	SCREW, Washer Head, 5/16-18 X 5/8
0230	703354	23	SCREW, Flange, Whiz-Lock, 5/16-18 X 3/4
0240	1759841BMYP	1	SUPPORT, Front Footrest, LH
0280	1960035SM	1	WASHER, 5/8
0290	2860744SM	1	CAPSCREW, Hex Head, 5/8-11 x 3 1/4
0300	1738051YP	1	LINK, Drag (with Bearing), 5/16
0320	1736404AYP	1	BRAKE PEDAL ASSEMBLY
0330	1735595YP	1	LATCH, Brake Lock
0335	7014296YP	1	WASHER, Shim
0340	703851	1	BOLT, Shoulder, 5/16-18 x 1 1/8
0350	1727935SM	1	SPACER, Pivot
0360	1736714AYP	1	FORWARD PEDAL ASSEMBLY
0370	1727246SM	1	PEDAL, Reverse
0380	703446	2	BOLT, Carriage, 5/16-18 X 1 1/4, GR5
0390	1728024SM	1	SPACER, Foot Pedal
0410	885591YP	1	BRACKET, Pedal Pivot
0420	1727911ASM	2	PLATE, Bearing
0430	1727282ASM	1	SUPPORT, Battery 12 GA
0470	1737957YP	1	LIFT SHAFT ASSEMBLY
0490	1761009YP	1	BRACKET, Sector Support
0500	1751110YP	1	GEAR, Steering
0510	1761011CJYP	1	PLATE, Sector Gear
0530	703185	2	BOLT, Carriage, 5/16-18 X 3/4
0540	1727903ASM	2	SUPPORT, Transmission
0710	703570	4	CAPSCREW, Hex Head, 5/16-18 x 1 1/4
0720	1919326SM	4	WASHER, 5/16
0730	704067	6	NUT, Hex Flange, 5/16-18 -(Torque to 12-17 ft/lbs)
0740	-----	1	Refer to: Front Axle Group
1060	1761010YP	1	SUPPORT, Steering

# Front Axle Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 2691488-00



## Front Axle Group

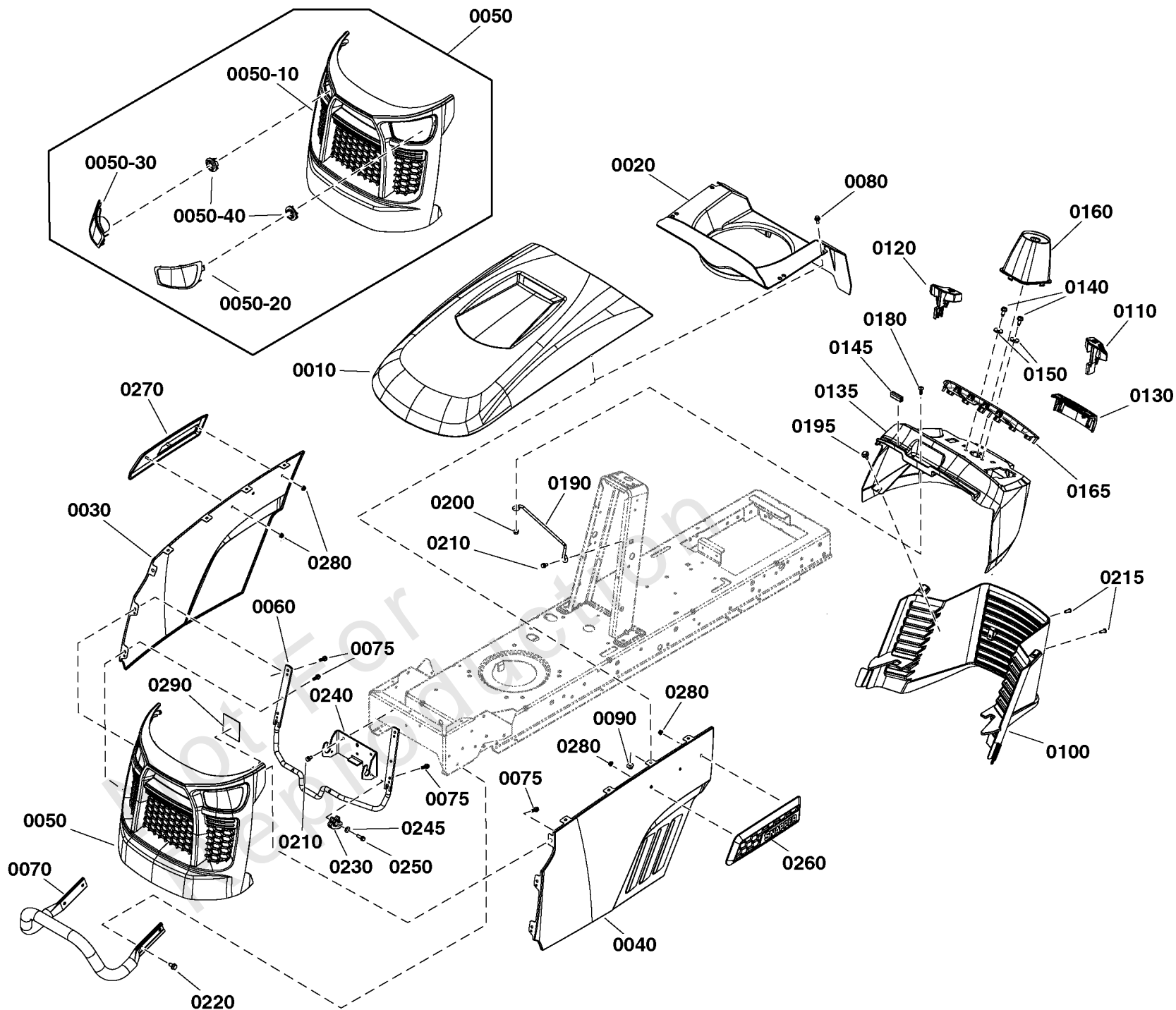
REF NO	PART NO	QTY	DESCRIPTION
0010	1734135SM	2	CAP, Hub
0020	1611710SM	2	E-RING, 3/4
0030	2860183SM	4	WASHER, Flat, 3/4
0040	1756386YP	1	AXLE, Front
0040-10	1704314SM	2	FITTING, Zerk -( Included with Ref. No. 0040 )
0060	1721918ASM	1	HOOK, Mower, Hitch
0070	1960652SM	2	SCREW, Hex Flange, Whiz Lock, 7/16-14 x 1-1/2
0110	1960032SM	2	SCREW, Hex Head, 3/8-16 x 1 1/4
0120	1731912SM	2	BUSHING, 3/8 ID x 5/8 OD x 1/2
0130	1751964YP	1	TIE ROD
0135	1960703SM	2	WASHER, 5/8
0140	1727872ASM	1	SPINDLE ASSEMBLY, R.H.
0150	703893	2	NUT, Hex, Flange, Two Way Lock, 3/8-16
0160	1751922YP	1	SPINDLE ASSEMBLY, L.H.

Not For  
Reproduction

# Hood, Grille & Dash Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 2691488-00



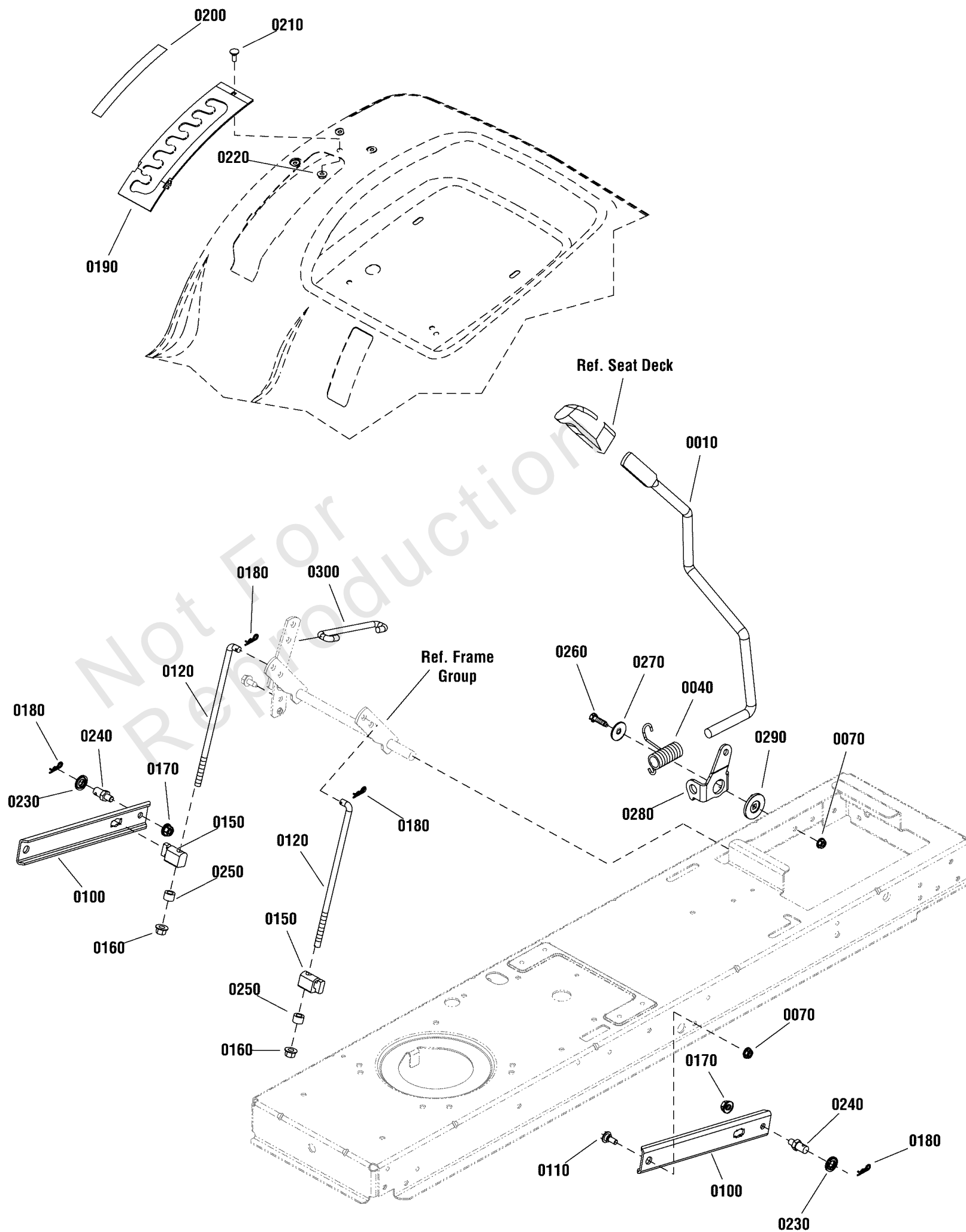
## Hood, Grille & Dash Group

REF NO	PART NO	QTY	DESCRIPTION
0010	1728031DSM	1	HOOD, with Scoop
0020	7102326YP	1	AIR DUCT, Plenum
0030	1761214DYP	1	PANEL, Side RH
0040	1761215DYP	1	PANEL, Side, LH
0050	1761263YP	1	GRILLE, Assembly -(Incl. Ref. Nos. 0050-10, 0050-20, 0050-30 & 0050-40)
0050-10	1761175YP	1	GRILLE, Front -(Included with Ref. No. 0050)
0050-20	1761333YP	1	HEADLIGHT, LH -(Included with Ref. No. 0050)
0050-30	1761334YP	1	HEADLIGHT, RH -(Included with Ref. No. 0050)
0050-40	1760239YP	2	LED HEADLIGHT AND SOCKET ASSEMBLY -(Included with Ref. No. 0050)
0060	1761070YP	1	ROD, Hood Hinge
0070	1761254DYP	1	BUMPER, Tube
0075	706369	6	SCREW, Hex Washer Head, 1/4-10 x 3/4
0080	1960295SM	8	CAPSCREW, Hex Flange, Whiz Lock, 1/4-20 x 5/8
0090	703161	8	NUT, 1/4-20, Hex Flange Whiz Lock
0100	1761508YP	1	LOWER DASH ASSEMBLY
0110	1761401YP	1	KNOB, Parking Brake
0120	1761402YP	1	KNOB, Cruise
0130	1761510YP	1	DECORATIVE TRIM
0135	1761253YP	1	DASH, Upper
0140	703228	2	SCREW, Washer Head Taptite, 5/16-18 X 3/4
0145	1761773YP	2	EDGING, Rubber
0150	703298	2	WASHER, 5/16
0160	1761399YP	1	COVER, Steering Shaft
0165	1761463YP	1	DASH BEZEL
0180	770135	1	SCREW, Truss HD, 1/4-20 x 3/4
0190	1761481YP	1	ROD, Dash Support
0195	2860664SM	2	SCREW, Conical Washer, 1/4-20 x 7/8 Dog Point
0200	703463	1	NUT, Nylock Flanged, 1/4-20
0210	704130	4	SCREW, Hex Head, 1/4-20 X 1/2
0215	1960556SM	2	SCREW, Pan Head Torx, Taptite, 1/4-20 x 3/4
0220	703985	4	SCREW, Hex Washer Head, Taptite, 5/16-18 x 1/2
0230	1761068YP	2	CLIP, Hood Hinge
0240	1761212CJYP	1	BRACKET, Hood Hinge
0245	703332	2	WASHER, Flat, 1/4
0250	703466	2	SCREW, Self Tapping, 1/4-20 x 3/4, GR5
0260	1761342YP	1	BADGE, Snapper, LH
0270	1761343YP	1	BADGE, Snapper, RH
0280	189164GS	4	PALNUT, 3/16
0290	1761818YP	1	INSULATION, Thermal

# Lift Group - Manual

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 2691488-00



## Lift Group - Manual

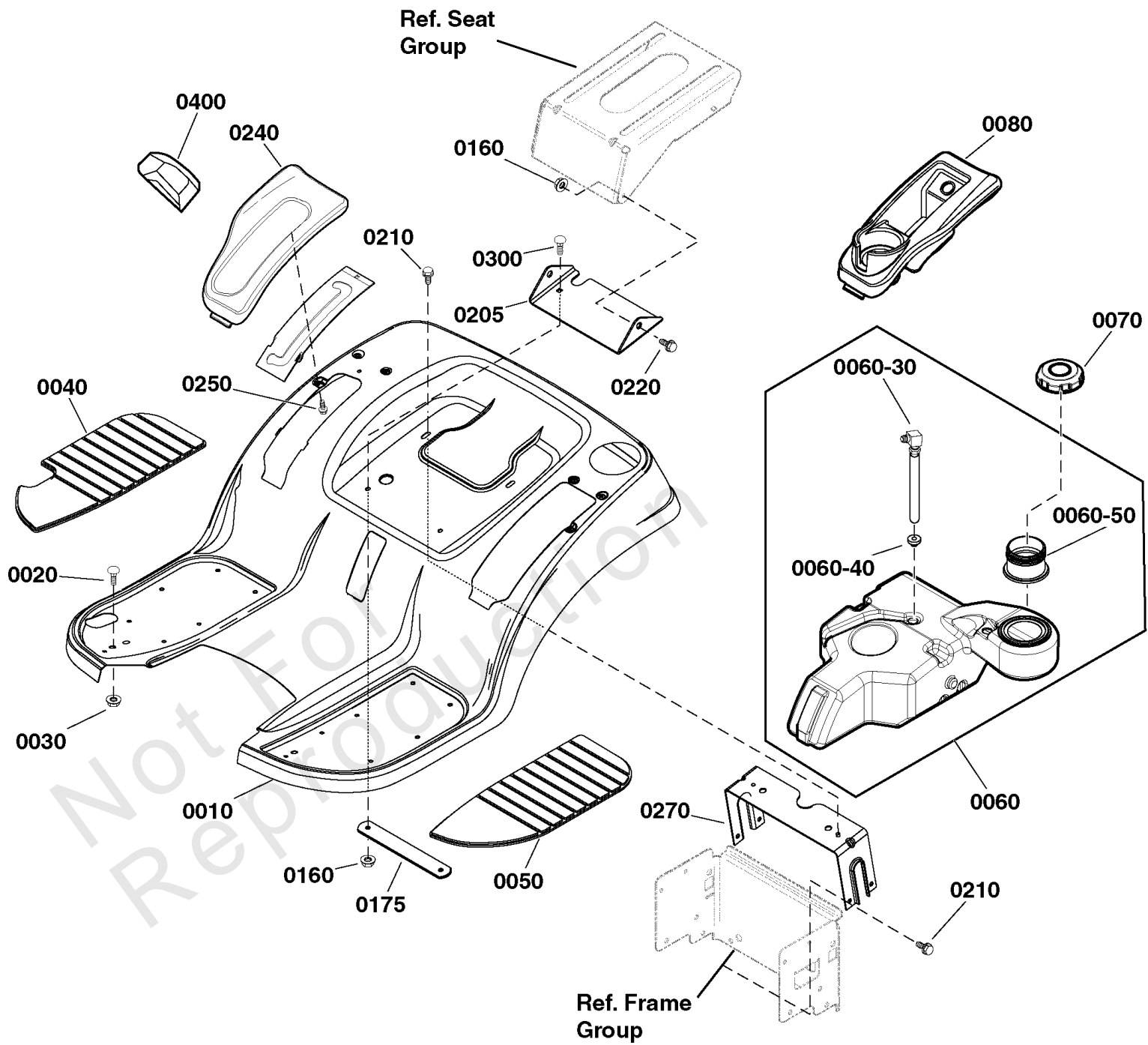
REF NO	PART NO	QTY	DESCRIPTION
0010	1728070SM	1	ROD, Lift Handle, 17.7
0040	1729652SM	1	SPRING, Torsion
0070	1931277SM	3	NUT, Hex Flange, 5/16-18
0100	1731417SM	2	ARM, Rear Lift
0110	1732426SM	2	BOLT, Shoulder
0120	1727955SM	2	ROD, Lower Lift, 10.00 LG
0150	1731894SM	2	TRUNNION
0160	1960687SM	2	NUT, Hex Flange, ESNA, 3/8-16
0170	1931211SM	2	NUT, Hex, Flange Lock, 3/8-16
0180	1960074SM	4	CLIP, Spring
0190	1727985SM	1	QUADRANT, Lift Height
0200	1730264SM	1	DECAL, Height Of Cut
0210	1960252SM	1	BOLT, Carriage, 1/4-20 x 5/8
0220	1930641SM	1	NUT, Hex Flange Whiz, 1/4-20
0230	1960170SM	2	WASHER, 1/2
0240	094067MA	2	PIN, Threaded Shoulder
0250	1666294SM	2	SPACER
0260	1921333SM	1	CAPSCREW, Hex Head, 5/16-18 x 1
0270	1960044SM	1	WASHER, Plain, 21/64 x 1-1/4
0280	1728990ASM	1	CLEVIS, Lift
0290	1727935SM	1	SPACER, Pivot, 5/16 ID, 1-3/4 OD
0300	1727954SM	1	ROD, Lift, 5.43 LG

Not For  
Reproduction

# Seat Deck & Fuel Tank Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 2691488-00



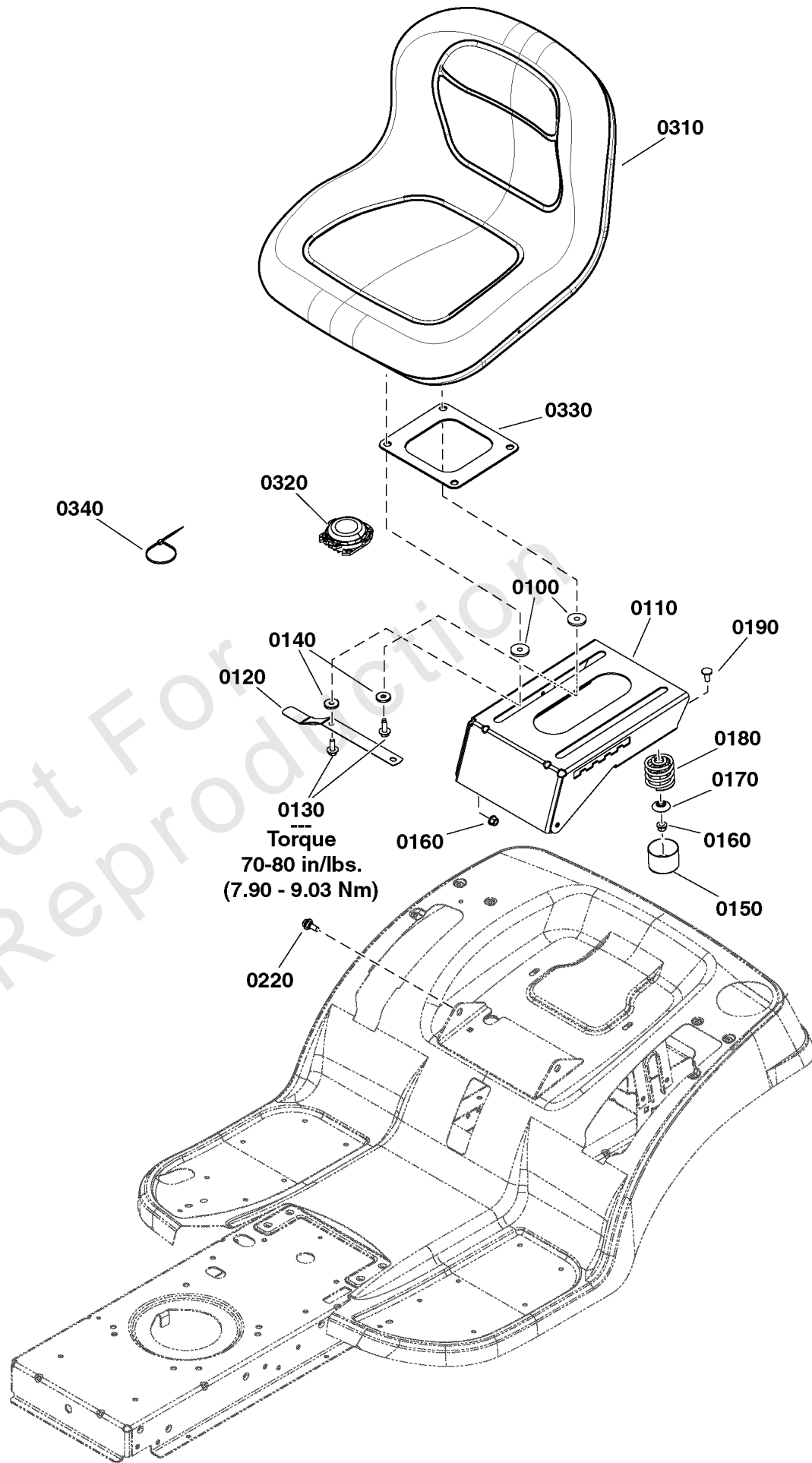
## Seat Deck & Fuel Tank Group

REF NO	PART NO	QTY	DESCRIPTION
0010	1727264DSM	1	SEAT DECK
0020	703185	2	BOLT, Carriage, 5/16-18 X 3/4
0030	703409	2	NUT, Serrated Lock Flange, 5/16-18
0040	1728007SM	1	PAD, Footrest, R.H.
0050	1728006SM	1	PAD, Footrest, L.H.
0060	1738932YP	1	TANK, Fuel (Without Sender) -(Incl. Ref. Nos 0060-30, 0060-40 & 0060-50)
0060-30	1736609YP	1	FITTING & HOSE ASSEMBLY, Fuel Tank
0060-40	1654930SM	1	BUSHING, Fuel Tank
0060-50	1751624YP	1	NECK, Fuel Filler (Not Shown)
0070	5101651SM	1	CAP, Fuel, Vented
0080	1739535YP	1	POD, L.H.
0160	703115	2	NUT, Flange Nylock, 5/16-18
0175	1759177CJYP	1	BRACKET, Support, Seat Pivot
0205	1757755BMYP	1	SUPPORT, Seat Pivot
0210	703949	6	SCREW, Washer Head, 5/16-18 X 5/8
0220	703851	2	BOLT, Shoulder, 5/16-18 x 1 1/8
0240	1739537YP	1	POD, R.H.
0250	1960536SM	6	CAPSCREW, Hex Washer Head, Plastite, 1/4 x 1/2
0270	1731310SM	1	SUPPORT, Seat Deck
0300	704065	2	BOLT, Carriage, Short Neck, 5/16-18 X 7/8
0400	1722302SM	1	GRIP, Black

# Seat Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 2691488-00



## Seat Group

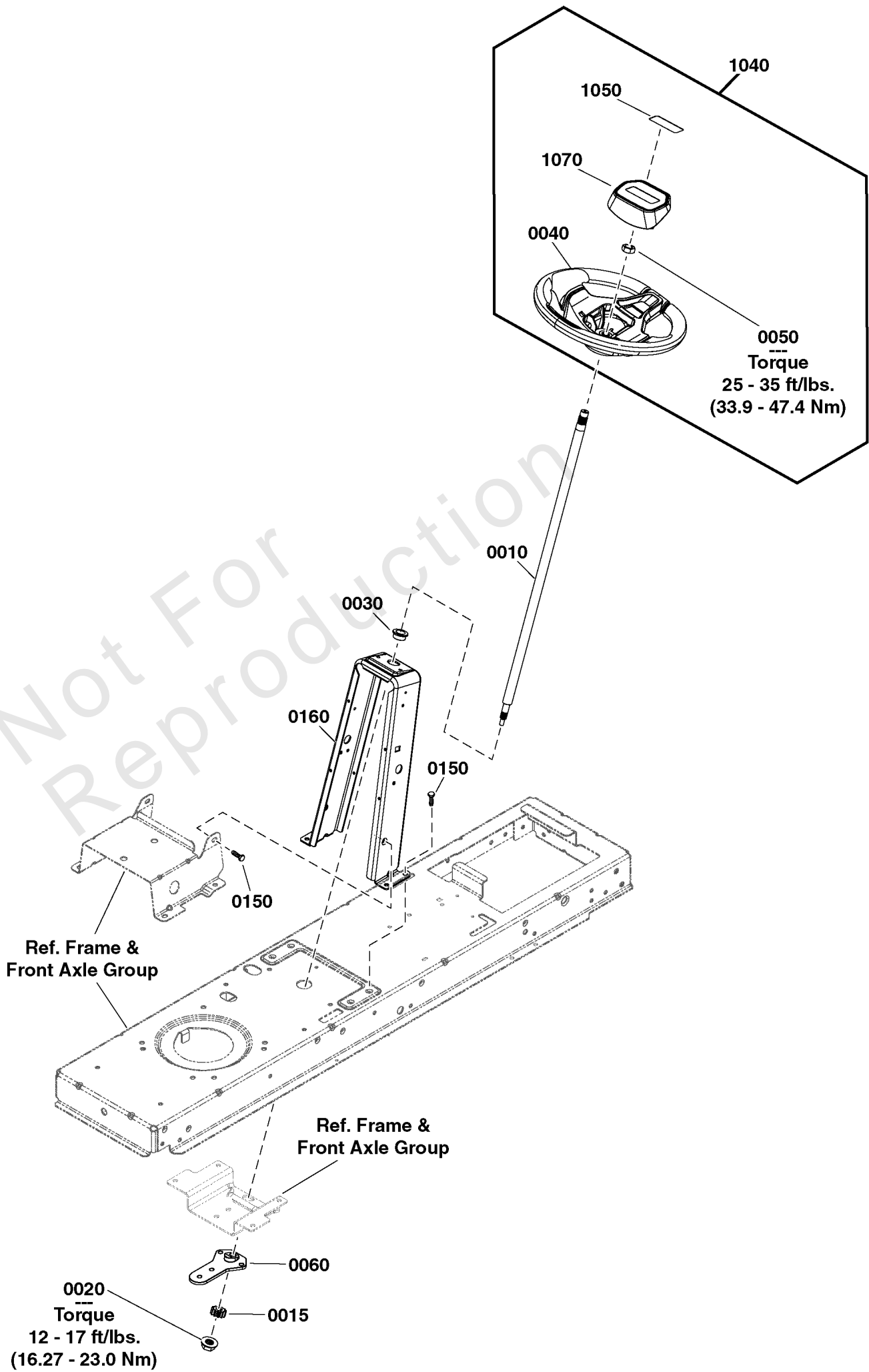
REF NO	PART NO	QTY	DESCRIPTION
0100	1731300SM	4	SPACER, 5/16 ID x 1-1/4 OD x 5/16"
0110	1755767BMYP	1	SUPPORT, Seat
0120	1727268BMYP	1	LATCH, Seat
0130	1930595SM	4	CAPSCREW, Hex Head Flange Lock, 5/16-18 x 1-1/4
0140	703298	4	WASHER, 5/16
0150	1704724SM	2	COVER, Spring, 1-1/2"
0160	703115	4	NUT, Flange Nylock, 5/16-18
0170	1709256SM	2	WASHER, Spring, 5/16 x 1 1/4
0180	1704728SM	2	SPRING, Compression, 2"
0190	703225	2	BOLT, Carriage, 5/16-18 x 3/4
0220	703851	2	BOLT, Shoulder, 5/16-18 x 1 1/8
0310	1761589YP	1	SEAT, 15", Vinyl, Black
0320	1714771SM	1	SWITCH, Seat, Gray Switch, Gray Retainer
0330	1739571AYP	1	SPACER, Plate
0340	703586	1	TIE, Cable

Not For  
Reproduction

# Steering Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 2691488-00



## Steering Group

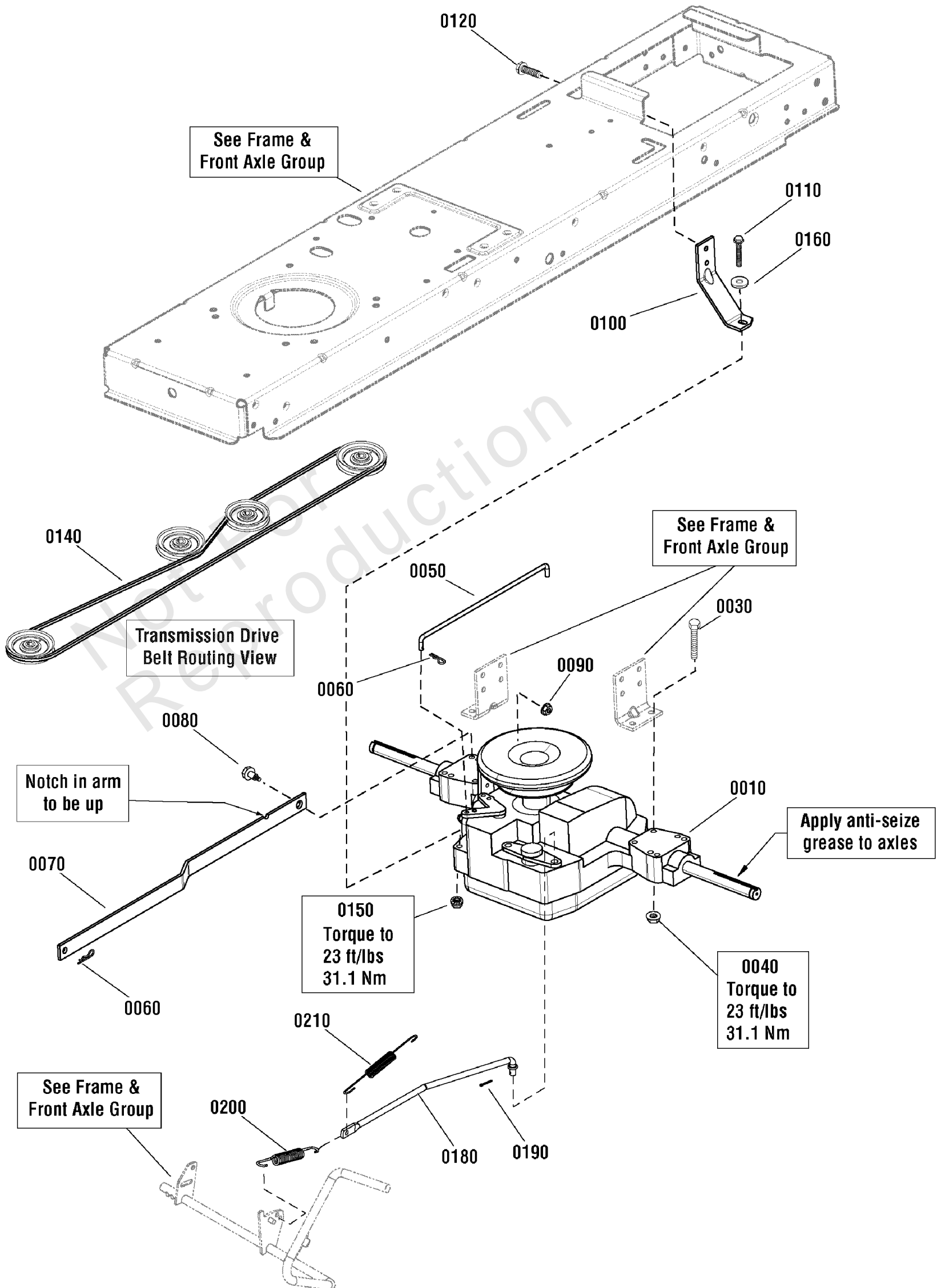
REF NO	PART NO	QTY	DESCRIPTION
0010	1761012YP	1	SHAFT, Steering
0015	1761013YP	1	GEAR, Pinion
0020	704067	1	NUT, Hex Flange, 5/16-18
0030	1729665SM	1	BUSHING, Steering, 3/4 ID
1040	84001122	1	KIT, Steering Wheel -( Incl. Ref. Nos. 0040, 0050, 1050 & 1070 )
0040	-----	1	STEERING WHEEL
0050	1960576SM	1	NUT, Hex Lock, ESNA Light, 5/8-18
1050	84002249	1	DECAL, Snapper Logo
1070	84002250	1	CAP, Steering Wheel, Snapper
0060	1761010YP	1	SUPPORT, Steering
0150	703949	6	SCREW, Washer Head, 5/16-18 X 5/8
0160	1761498CJYP	1	TOWER, Steering

Not For  
Reproduction

# Transmission Group - Tuff Torq K46BL

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 2691488-00



## Transmission Group - Tuff Torq K46BL

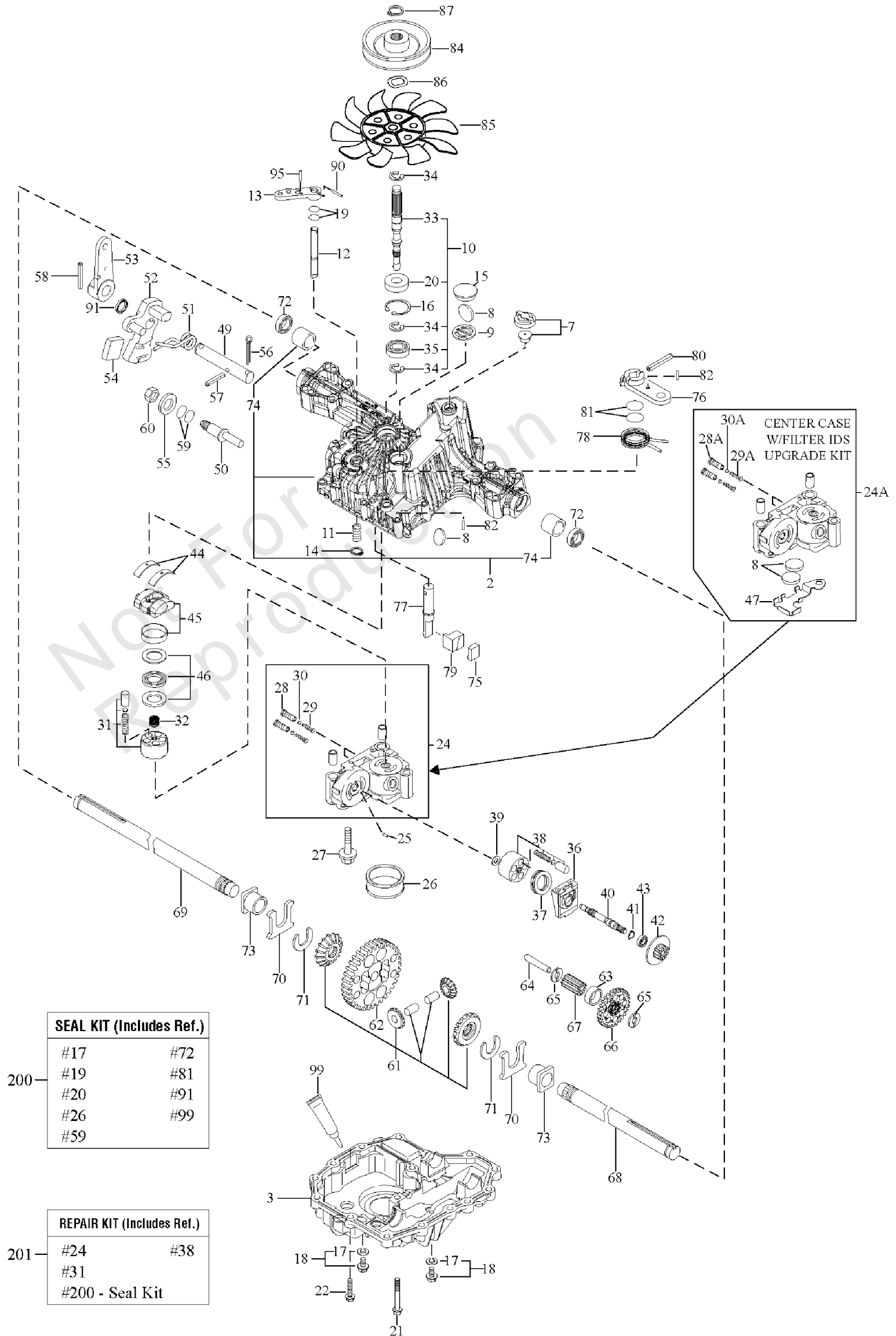
REF NO	PART NO	QTY	DESCRIPTION
0010	1761325YP	1	TRANSMISSION ASSEMBLY, K46BL
0030	1960586SM	4	CAPSCREW, Hex Flange, Whiz Lock, 5/16-18 x 2-1/2
0040	703409	4	NUT, Serrated Lock Flange, 5/16-18
0050	1728120SM	1	ROD, Bypass, 1/4 x 11 7/16
0060	1722460SM	2	PIN, Hair
0070	1727258SM	1	ARM, Control, 23.69" Lg
0080	1732426SM	1	BOLT, Shoulder, 5/16-18
0090	1935048SM	1	NUT, Hex Flange, Two Way Lock, 5/16-18
0100	1754842BMYP	1	STRAP, Torque 7 GA
0110	1922127SM	1	SCREW, Hex Head Cap, 5/16-18 x 1 3/4
0120	703228	1	SCREW, Washer Head Taptite, 5/16-18 X 3/4
0140	1728008SM	1	V-BELT, HA, 89-1/4" Long
0150	703115	1	NUT, Flange Nylock, 5/16-18
0160	703298	1	WASHER, 5/16
0180	1727253SM	1	ROD, Brake, 3/8 Dia. x 15-1/8 Long
0190	703312	1	PIN, Cotter, 3/32 X 3/4
0200	1731262SM	1	SPRING, Extension, 11/16 x 3-3/8
0210	1721995SM	1	SPRING, Extension, 5/8 x 6-5/8

Not For  
Reproduction

# Transmission SERVICE PARTS - Tuff Torq K46BL

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 2691488-00



## Transmission SERVICE PARTS - Tuff Torq K46BL

REF NO	PART NO	QTY	DESCRIPTION
1	1729589		* TRANSMISSION, Tuff Torq K46BL
2	-----		KIT, Upper Case
3	-----		LOWER CASE
7	1718052		VENT VALVE 15
8	1724279		MAGNET
9	-----		*MAGNET HOLDER
10	-----		*KIT, Pump Shaft/Bearing
11	-----		*SPRING 25
12	1724281		BYPASS SHAFT A
13	1720418		LEVER, Bypass
14	1718061		RING, Snap, 10
15	1724282		SEALING CAP 30
16	1708650		RING, Snap, C 35
17	1724323		SEAL WASHER 8
18	-----		KIT, Drain Bolt
19	1708691		O-RING, 1A P10A
20	1708651		SEAL TC 153507
21	-----		*SCREW, Tapping, 8 * 55
22	1707789		SCREW, Tapping, 8 * 30
24	-----		*CENTER CASE K W/ 1.2 FILTER IDS KIT
25	1718070		PIN 3 * 9.8
26	-----		FILTER 105
27	1720805		BOLT, 10 * 75
28	-----		*IDS VALVE 1.2
29	-----		*IDS SPRING
30	-----		*IDS FILTER 300
31	-----		*KIT, Cylinder Block (Pump)
32	-----		*SPRING
33	1739892		PUMP SHAFT
34	1718076		E-RING 15
35	1708673		BEARING, 6202C3
36	1718077		MOTOR HOUSING
37	-----		*THRUST BEARING 51106
38	1718079		KIT, Cylinder Block
39	1718084		WASHER, 12 * 24 * 1
40	1724943		MOTOR SHAFT
41	1708672		RING, Snap, S15
42	1724944		BRAKE DISC/MOTOR GEAR (10T)
43	-----		*BEARING, 6202 RSR C3
44	1718089		THRUST METAL
45	-----		*SWASH PLATE CMP
46	1718086		THRUST BEARING K81105
49	-----		*CONTROL SHAFT
50	-----		*FULCRUM
51	-----		*SPRING, Torsion
52	-----		*CONTROL ARM A
53	1724347		CONTROL LEVER C
54	-----		*JERKY PLATE

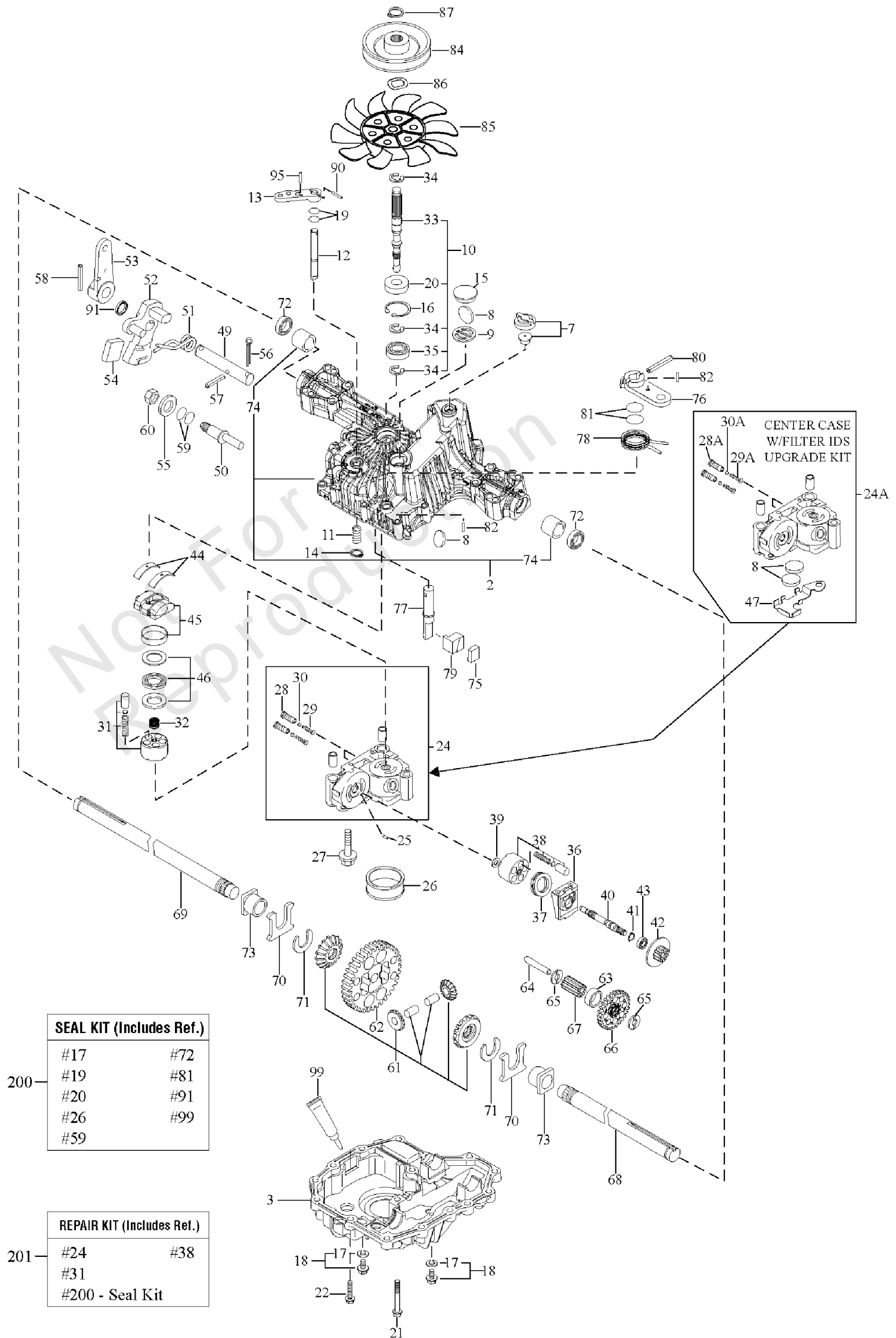
### Footnotes:

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

# Transmission SERVICE PARTS - Tuff Torq K46BL

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 2691488-00



## Transmission SERVICE PARTS - Tuff Torq K46BL

REF NO	PART NO	QTY	DESCRIPTION
55	1708689		WASHER, 12
56	1724349		COTTER PIN, 1/8 * 3/4
57	1724296		SPRING PIN 6 * 36
58	1718100		ROLL PIN 6 * 40
59	1707879		O-RING 1A P14
60	1708692		NUT 12
61	-----		*KIT, Diff Gear
62	-----		*FINAL GEAR (54T)
63	-----		*FINAL PINION COLLAR
64	-----		*REDUCTION SHAFT
65	1724948		WASHER, 12 * 32 * 3.2
66	1724949		REDUCTION GEAR (38T)
67	-----		*FINAL PINION GEAR (10T)
68	1724303		AXLE SHAFT, Left
69	1724304		AXLE SHAFT, Right
70	1718112		THRUST WASHER
71	1718113		RING 17
72	1718111		SEAL 19 * 32 * 8
73	1718110		BUSHING, 19 * 25
74	-----		*BUSHING, 19.05
75	1724305		BRAKE SHOE
76	1724306		BRAKE LEVER
77	-----		*BRAKE SHAFT
78	-----		*SPRING, Brake Return
79	1724309		BRAKE ACTUATOR
80	1724310		SPRING PIN 5 * 32
81	1708690		O-RING 1A P12
82	1724311		SPRING PIN 4 * 16
84	1732918		PULLEY D
85	1724314		FAN, White
86	1724315		WASHER, Wave
87	1724316		RING, Snap
90	-----		*SPRING PIN 3.0A * 20
91	1724318		OIL SEAL 16 * 22 * .03
95	-----		*SPRING PIN 3.0A * 16
99	-----		*SEALANT
200	1727541		K46 & T40 SEAL KIT (ALL MODELS)
201	-----		*REPAIR KIT K46

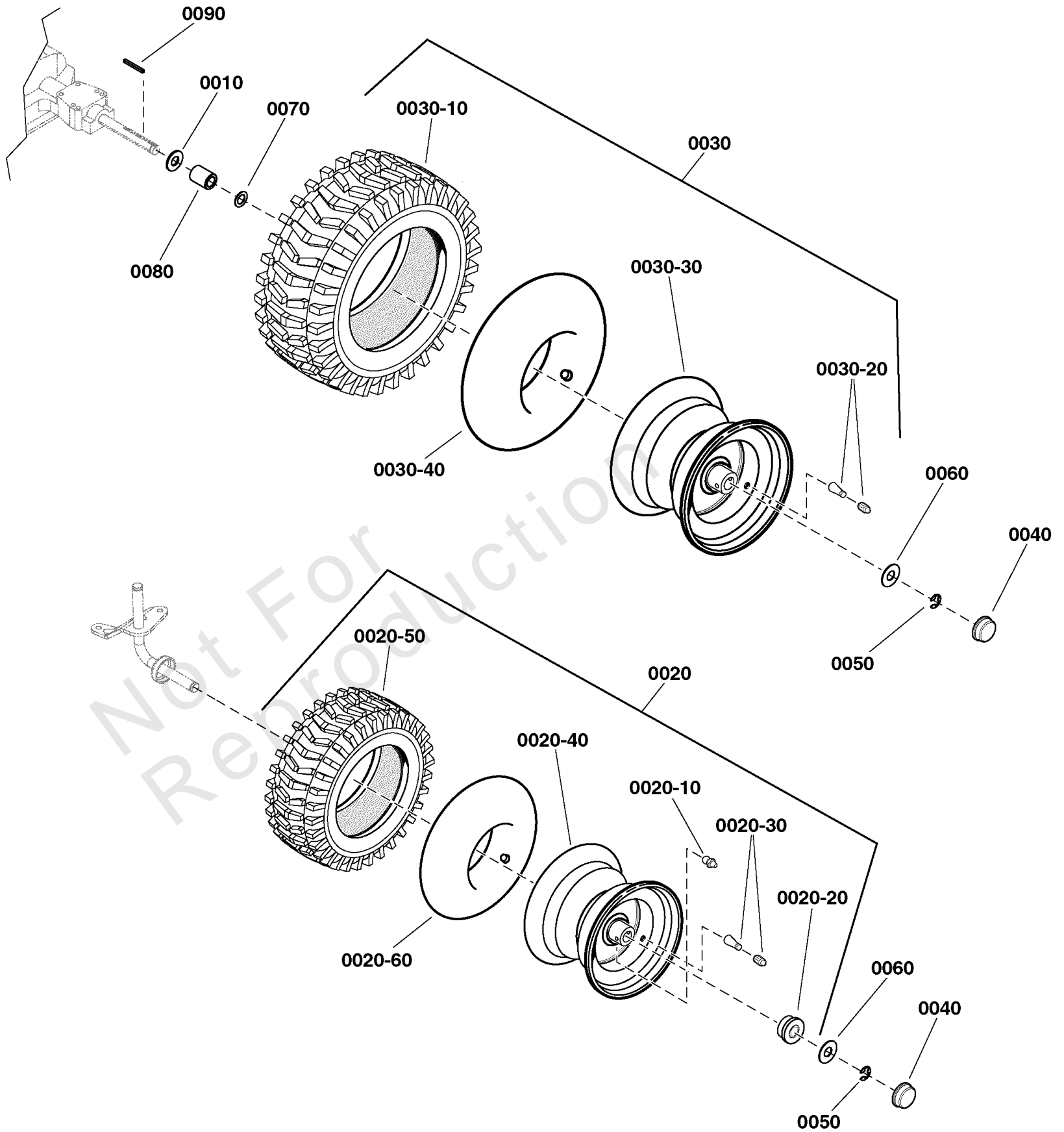
### Footnotes:

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# Wheels & Tires Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 2691488-00



## Wheels & Tires Group

REF NO	PART NO	QTY	DESCRIPTION
0010	2860202SM	1	WASHER, 3/4 x 1-5/8 OD x 1/8 Thick
0020	1761503YP	1	WHEEL AND TIRE ASSEMBLY, Front, 15 x 6-6
0020-10	84003425	1	ZERK, Grease Fitting
0020-20	84003424	1	BEARING, Ball
0020-30	2172353SM	1	VALVE STEM & CAP
0020-40	-----	1	WHEEL, Front, 6" -(Refer to Note: *)
0020-50	7101556YP	1	TIRE, 15 x 6 2 Ply K358
0020-60	1664090SM	1	TUBE, Tire, Front
0030	1732324SM	1	WHEEL AND TIRE ASSEMBLY, Rear, 22 x 10 - 8
0030-10	7101559YP	1	TIRE, 20 x 8-8, K358
0030-20	2172353SM	1	VALVE STEM & CAP
0030-30	-----	1	RIM -(Refer to Note: *)
0030-40	2173477SM	1	TUBE
0040	094618MA	4	HUB CAP
0050	2827794SM	4	RING, Klipring EXT For .75 Dia Shaft blk
0060	17X195MA	4	WASHER, Flat 1-3/4
0070	17X160MA	2	WASHER, Flat, 3/4 x 1-1/4 x 16
0080	1730181SM	2	SPACER, 3/4 ID x 1-1/4 OD x 1-5/8
0090	021553MA	2	KEY, Square, 3/16

Not For  
Reproduction

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**Footnotes:**

Note\* Not a serviceable part, service wheel complete

# 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		in/lbs		in/lbs		in/lbs	
	ft/lbs	Nm.	ft/lbs	Nm.	ft/lbs	Nm.	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

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		in/lbs		in/lbs	
	ft/lbs	Nm.	ft/lbs	Nm.	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

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

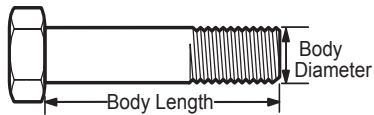


Nut, M8

Thread Diameter (mm)

Inside Diameter (in)      Threads per inch

Nut, 1/2-16

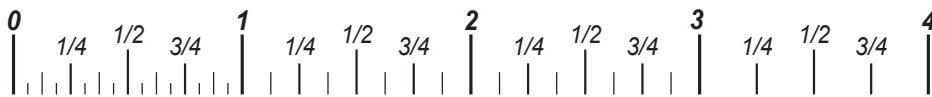


Screw, M8- 1.25 x 25

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).

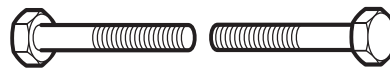
When bolt or capscrew is identified as 1/2 - 16 x 2" (M8 - 1.25 x 50), this means the *Nominal size*, or body diameter is 1/2 inch (8mm metric thread diameter), the second number, 16, represents the *threads per inch*, (*distance between threads*). The final number is the body length of the bolt or screw,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

