



Parts Manual

Mfg. No: 2691506-00

ZT2342, 42" (107cm) Fabricated Mower



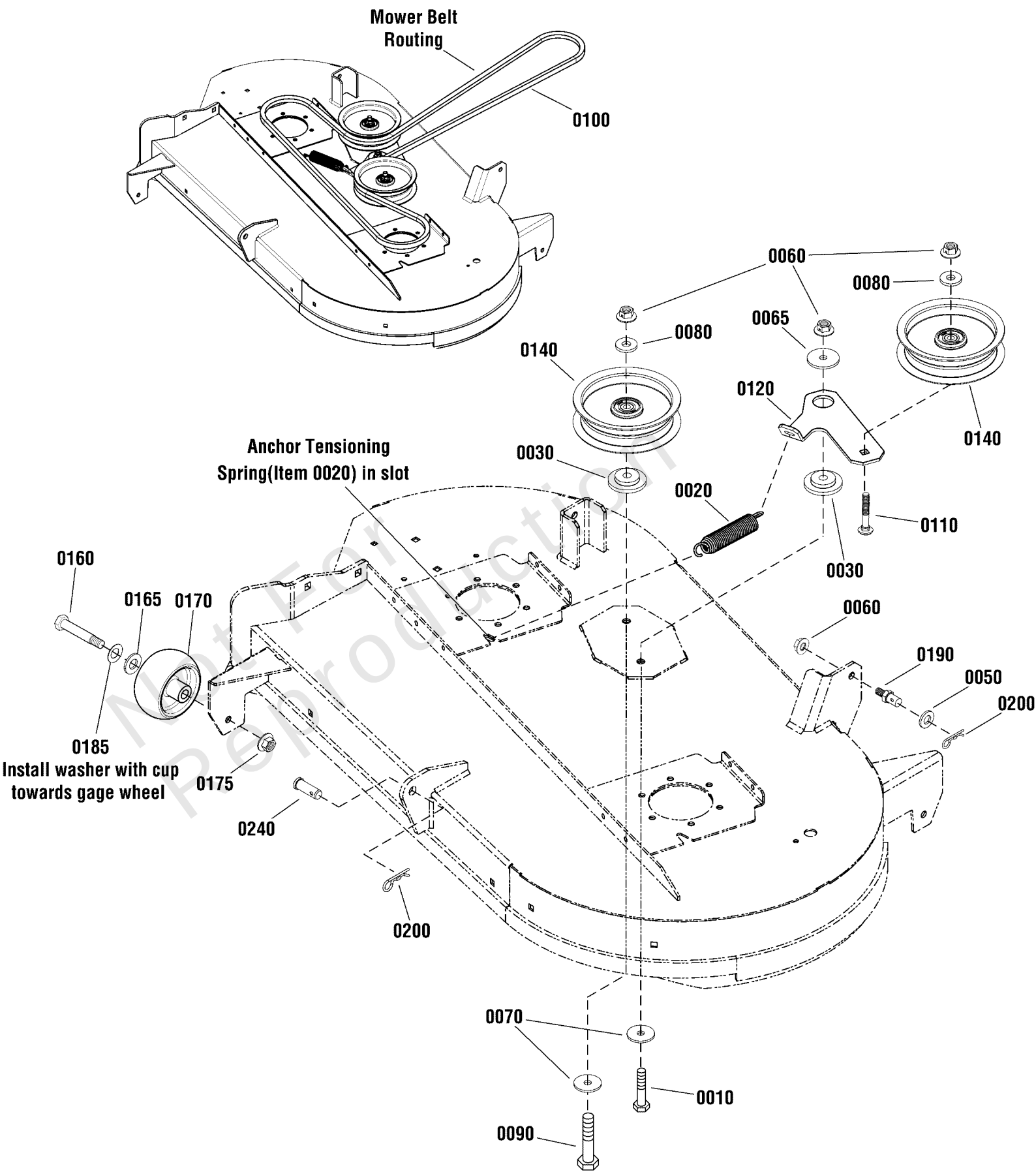
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Not For
Reproduction

42" Mower Deck - Clutch & Support Group

Note: Unless noted otherwise, use the standard torque specifications

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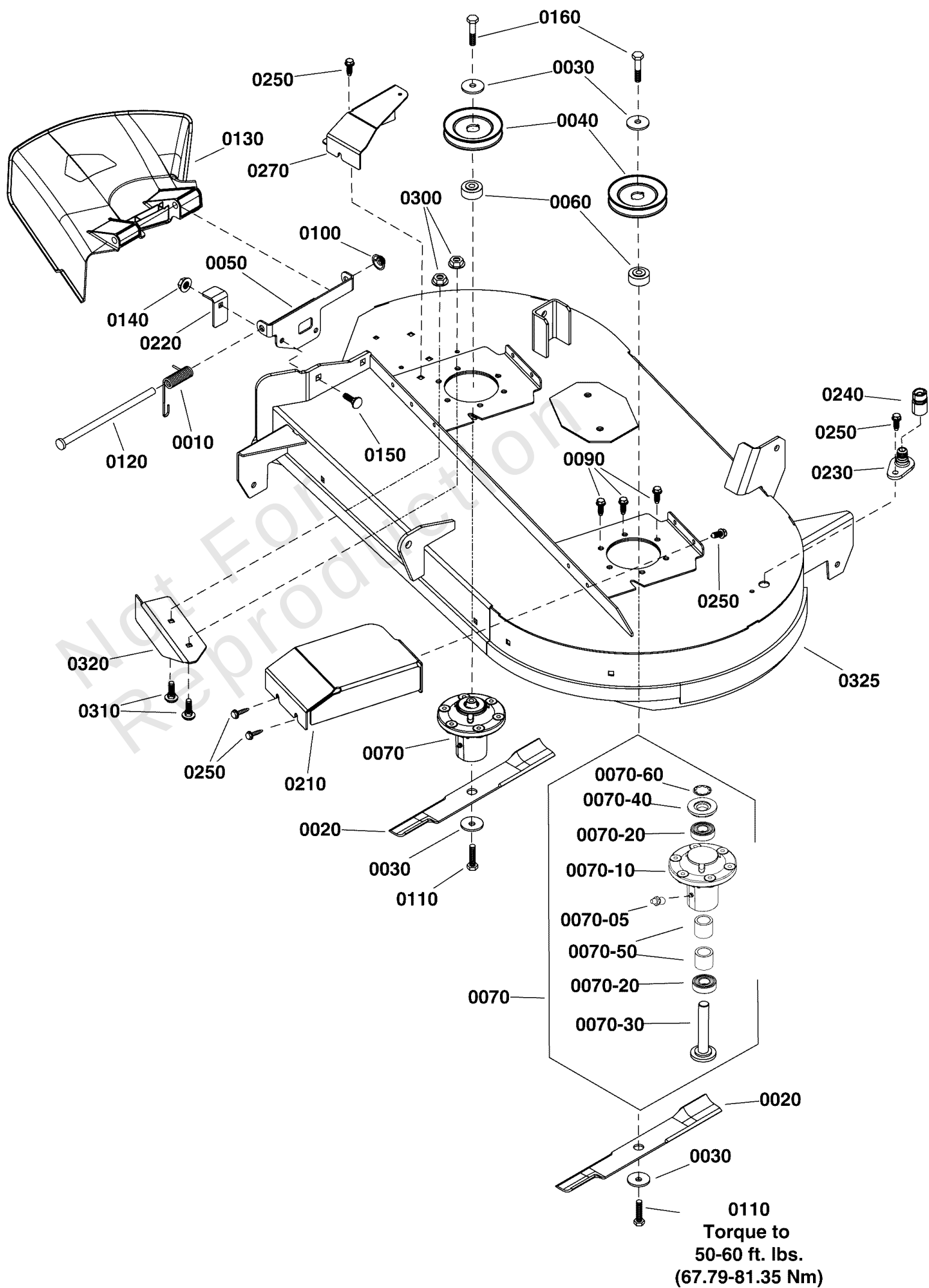
42" Mower Deck - Clutch & Support Group

REF NO	PART NO	QTY	DESCRIPTION
0010	703406	1	CAPSCREW, Hex Head, 3/8-16 X 1 1/2, GR5
0020	1715772SM	1	SPRING, Extension
0030	706128	2	SPACER, Idler
0050	703853	2	WASHER, 1/2
0060	703158	5	NUT, Hex Flange, 3/8-16
0065	5025305SM	1	WASHER, .41 X 1.75 X .14
0070	703591	2	WASHER, Flat, 13/32 x 1 1/2 x 1/8
0080	703878	2	WASHER, Flat, 13/32 x 7/8 x .083
0090	703133	1	CAPSCREW, Hex Head, 3/8-16 X 2 3/4, GR5
0100	1758101YP	1	BELT, 113.0 Effective Length
0110	7900009SM	1	BOLT, Carriage, 3/8-16 X 2 1/4
0120	1758789AYP	1	ARM, Idler
0140	7034422SM	2	PULLEY, Flat Idler
0160	2108765SM	2	BOLT, Wheel, 3/8-16 X 2.781
0165	703853	2	WASHER, 1/2
0170	1714760SM	2	WHEEL
0175	703158	2	NUT, Hex Flange, 3/8-16
0185	0020X3MA	2	WASHER, Spring
0190	704054	2	PIN, Threaded Shoulder, 3/8-16 X 11/16
0200	703300	3	PIN, Hair, 3/32 x 1 5/8
0240	5025479YP	1	PIN, Clevis, 1/2 X 1 23/64

42" Mower Deck - Housing, Arbor & Blade Group

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42" Mower Deck - Housing, Arbor & Blade Group

REF NO	PART NO	QTY	DESCRIPTION
0010	7035813SM	1	SPRING, Torsion
0020	1758878BMYP	2	BLADE, 21.31" Long
0030	1656916SM	4	WASHER, Spring
0040	1737835YP	2	PULLEY, 4.50
0050	1758982AYP	1	BRACKET, Deflector
0060	1737457YP	2	SPACER, Pulley
0070	1760727	2	ARBOR ASSEMBLY -(*See footnote)
0070-05	1704314SM	1	FITTING, Lube, 1/4
0070-10	1755437YP	1	HOUSING, w/Lube Fitting
0070-20	1735399YP	2	BEARING, Ball, 20mm
0070-30	1760276YP	1	SHAFT, Spindle
0070-40	1735323YP	2	SHIELD, Arbor
0070-50	1735328YP	2	SPACER, Bearing
0070-60	1960766YP	2	RING, Self Locking
0090	704146	12	SCREW, Hex Washer Head, Taptite, 5/16-18 x 1
0100	703179	1	PUSHNUT, 1/2
0110	1920676SM	2	CAPSCREW, Hex Head, 7/16-14 X 1
0120	7104640YP	1	ROD, Deflector
0130	7104733YP	1	DEFLECTOR
0140	703793	2	NUT, Lock, Flange, 3/8-16
0150	703815	2	BOLT, Carriage, 3/8-16 X 1
0160	1921212SM	2	CAPSCREW, Hex Head, 7/16-14 X 1 1/2
0210	1758992BMYP	1	COVER, Pulley, LH
0220	1758593BMYP	1	PROP, Deflector
0230	1756247YP	1	ADAPTER, Washout Port
0240	1756246YP	1	CONNECTOR, Washout Port
0250	1664847CAYP	7	SCREW, Hex Washer Head, Taptite, 5/16-18 x 3/4
0270	1759616AYP	1	COVER, Pulley, RH
0300	703115	2	NUT, Flange Nylock, 5/16-18
0310	703185	2	BOLT, Carriage, 5/16-18 X 3/4
0320	1758581BMYP	1	BAFFLE, Pinchoff
0325	1687859YP	1	KIT, Mower Deck w/Decals, 42"

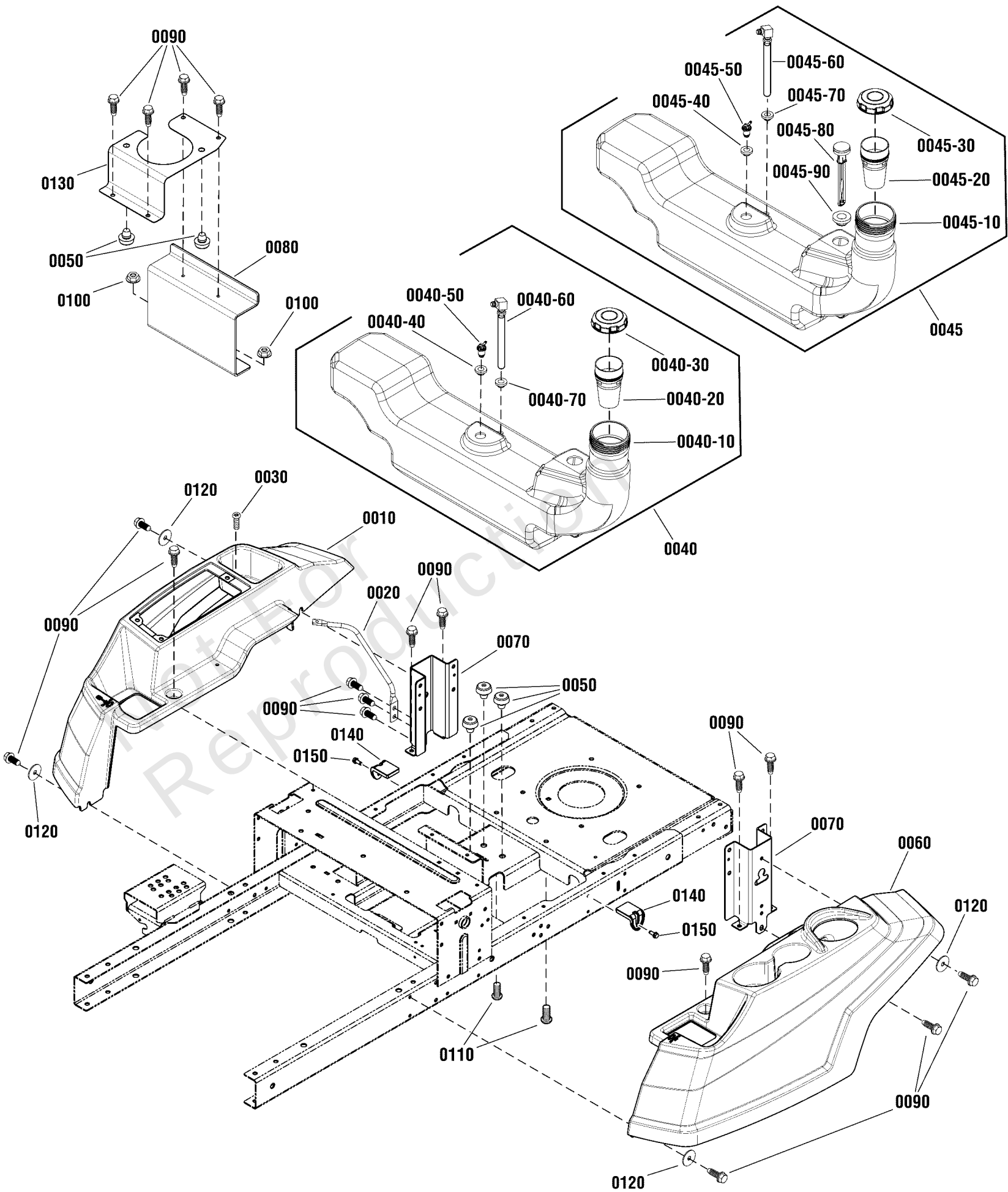
Footnotes:

Note:* Not serviced as an assembly, order components separately.

Body & Fuel Tank Group

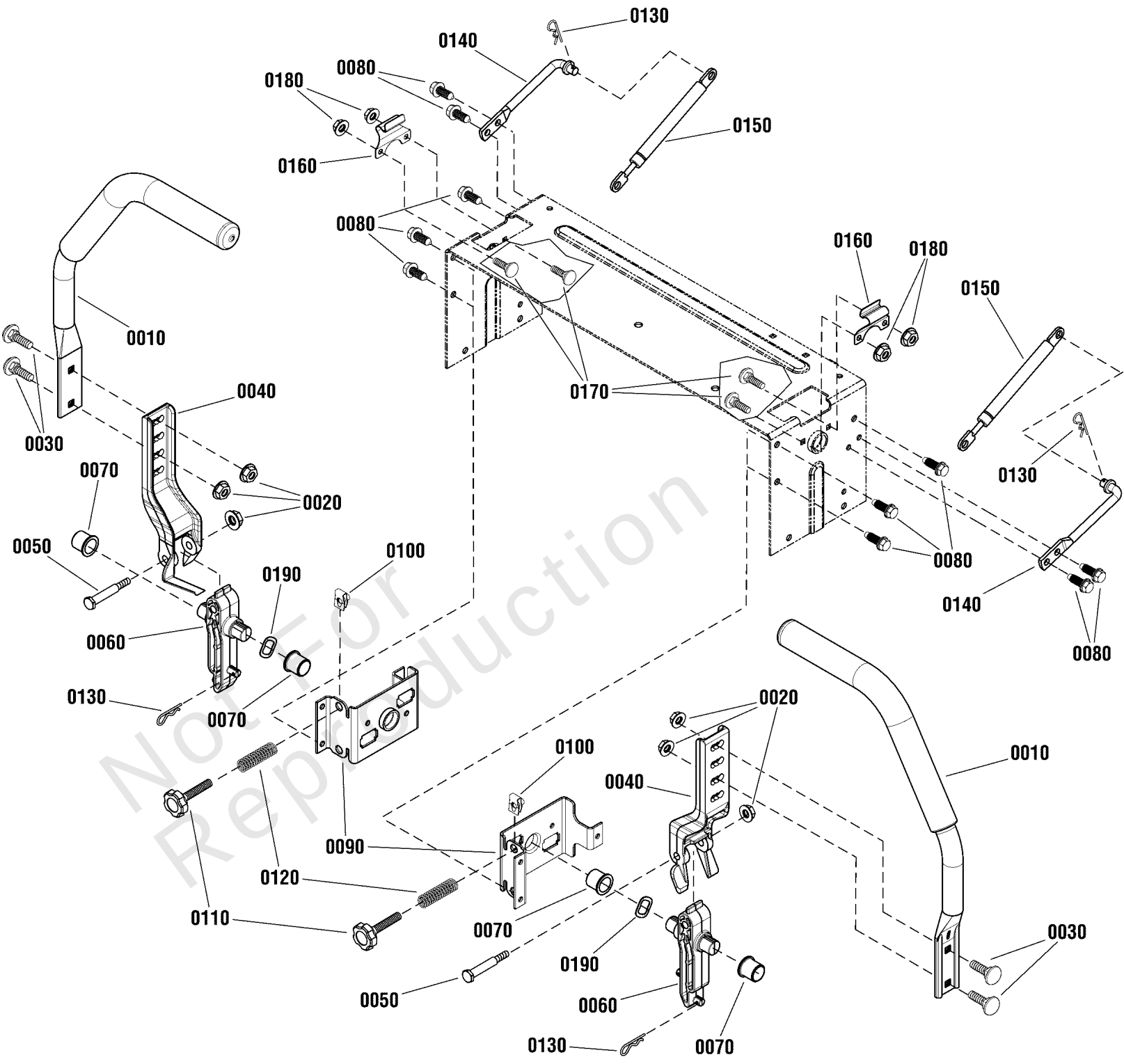
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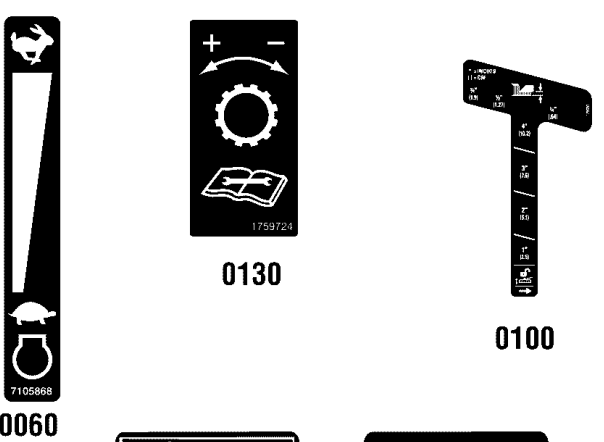
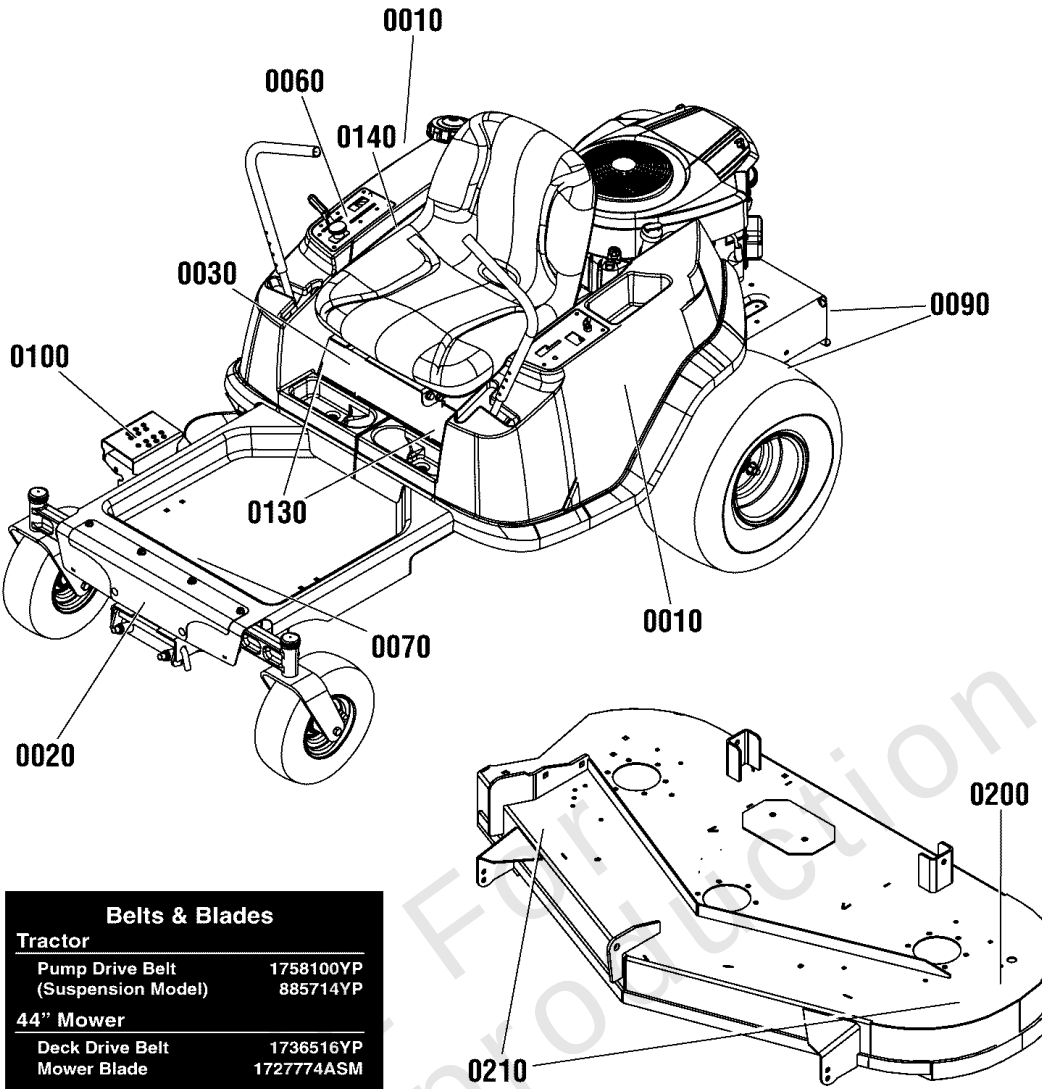
Body & Fuel Tank Group

REF NO	PART NO	QTY	DESCRIPTION
0010	1758077YP	1	FENDER, RH
0020	1759369YP	1	ROD, Support
0030	703953	1	SCREW, Torx Pan Head Self-Tapping, 1/4-20 X 5/8,
0040	1758202YP	1	FUEL TANK ASSEMBLY, No Fuel Gauge -(Includes item Nos. 0040-10 thru 0040-70)
0040-10	-----	1	TANK, Fuel -(Order item 0040)
0040-20	1758282YP	1	NECK, Fuel Filter
0040-30	1758314YP	1	CAP, Fuel (Non Vented)
0040-40	799624	1	GROMMET
0040-50	770046	1	VENT, Remote
0040-60	1758927YP	1	TUBE, Fuel Pickup
0040-70	1726400SM	1	BUSHING
0045	1758919YP	1	FUEL TANK ASSEMBLY. W / Fuel Gauge
0045-10	-----	1	TANK, Fuel -(Order item 0045)
0045-20	1758282YP	1	NECK, Fuel Filter -(Includes item Nos. 0045-10 thru 0045-90)
0045-30	1758314YP	1	CAP, Fuel (Non Vented)
0045-40	799624	1	GROMMET
0045-50	770046	1	VENT, Remote
0045-60	1758927YP	1	TUBE, Fuel Pickup
0045-70	1726400SM	1	BUSHING
0045-80	1758928YP	1	GAUGE, Fuel
0045-90	1722337SM	1	GROMMET
0050	197546GS	5	MOUNT, Vibration
0060	1758076YP	1	FENDER, LH
0070	1758239AYP	2	SUPPORT, Rear Fender
0080	1758889AYP	1	SUPPORT, Seat Spring
0090	703228	18	SCREW, Washer Head Taptite, 5/16-18 X 3/4
0100	5025394SM	2	NUT, Hex Flange, Nylock, 3/8-16
0110	707790	2	SCREW, Button Head, 3/8-16 X .88
0120	1960044SM	4	WASHER, Flat, 5/16
0130	1759140AYP	1	STRAP, Fuel Tank
0140	1760244YP	2	SUPPORT, Fuel Tank
0150	703054	2	SCREW, Hex Washer Head, 1/4-20 x 5/8



Controls Group

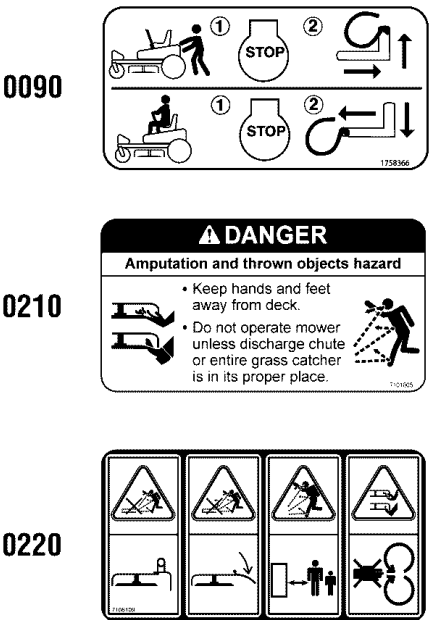
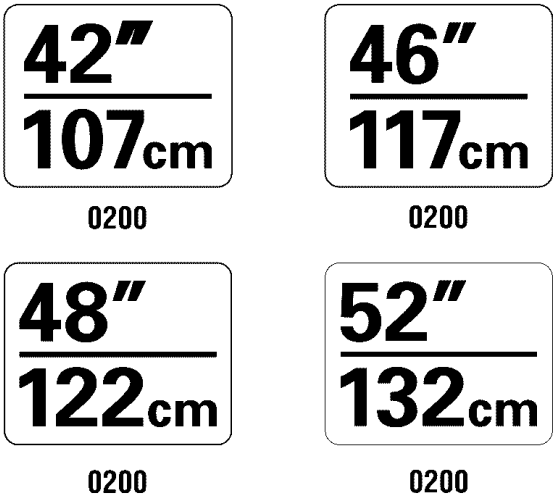
REF NO	PART NO	QTY	DESCRIPTION
0010	1758372YP	2	HANDLE, Control w/Grip
0020	703115	4	NUT, Flange Nylock, 5/16-18
0030	703483	4	BOLT, Carriage, 5/16-18 X 1
0040	1757965YP	2	ARM, Upper Control
0050	707624	2	BOLT, Shoulder, 5/16-18 X 3/8
0060	1757964YP	2	ARM, Lower Control
0070	2176440SM	4	BUSHING
0080	703949	10	SCREW, Washer Head, 5/16-18 X 5/8
0090	1758087AYP	2	PIVOT, Inner Control
0100	1960717SM	2	NUT, Speed, 5/16-1*
0110	1758373YP	2	KNOB, Stud, 5/16-18 X 2 1/2
0120	1650347SM	2	SPRING, Compression
0130	1722460SM	4	PIN, Hair
0140	1758463YP	2	ROD, Dampner Mount
0150	1758152YP	2	CONTROL, Dampner
0160	1759182YP	2	LATCH, Control Arm
0170	1960252SM	4	BOLT, Carriage, 1/4-20 x 5/8
0180	703463	4	NUT, Nylock Flanged, 1/4-20
0190	707625	2	WASHER, Wave, 3/4



Belts & Blades	
Tractor	
Pump Drive Belt	1758100YP
(Suspension Model)	885714YP
44" Mower	
Deck Drive Belt	1736516YP
Mower Blade	1727774ASM
46" Mower	
Deck Drive Belt	1736516YP
Mower Blade	1737228BZYP
48" Mower	
Deck Drive Belt	1736516YP
Mower Blade	1759055YP

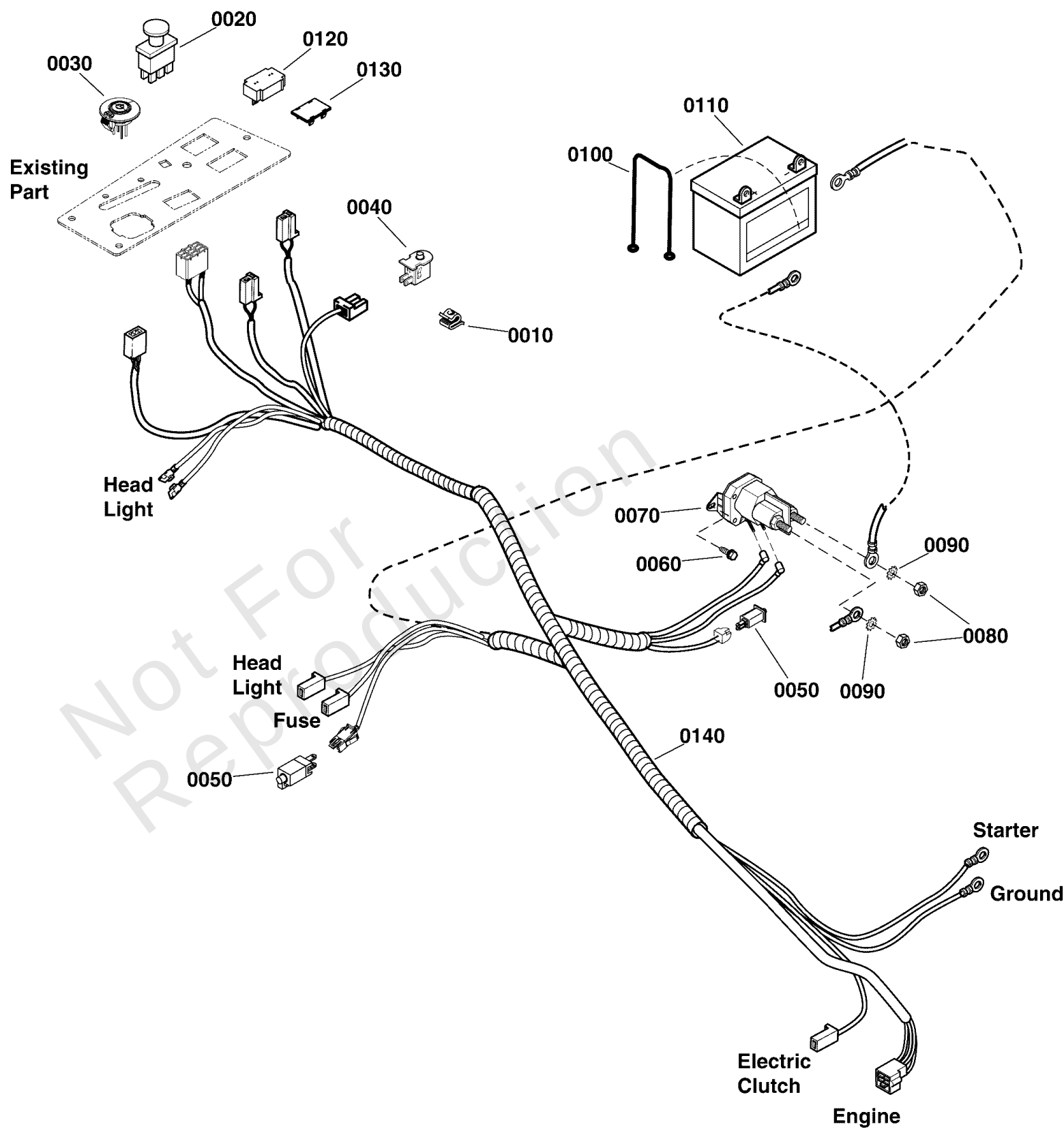


Belts & Blades	
Tractor	
Pump Drive Belt	1758100YP
(Suspension Models)	885714YP
42" Mower	
Deck Drive Belt	1758101YP
Mower Blade	1758878BMYP
52" Mower	
Deck Drive Belt	1757901YP
Mower Blade	1756152AYP



Decals Group

REF NO	PART NO	QTY	DESCRIPTION
0010	1760170YP	2	DECAL, Logo, Snapper
0020	1750913YP	1	DECAL, Logo, Snapper
0030	1758364YP	1	DECAL, 360Z
0040	7101665YP	2	DECAL, Danger
0060	7105868YP	1	DECAL, Engine Speed
0070	1758193YP	1	DECAL, Safety Inst.
0070	1759648YP	1	DECAL, Safety Inst.
0090	1758366YP	2	DECAL, Tow Release
0100	1759253YP	1	DECAL, Height of Cut
0130	1759724YP	2	DECAL, Tracking
0140	1759772YP	1	DECAL, Service Parts
0140	1759773YP	1	DECAL, Service Parts
0200	1755716YP	1	DECAL, 42"/107cm
0200	1755718YP	1	DECAL, 46"/117cm
0200	1755719YP	1	DECAL, 48"/122cm
0200	1755721YP	1	DECAL, 52"/132cm
0210	7101665YP	2	DECAL, Danger
0220	706111	2	DECAL, Discharge Safety
0340	1760952YP	1	DECAL, NOM/LASE 1412 (Spanish)



Electrical Group

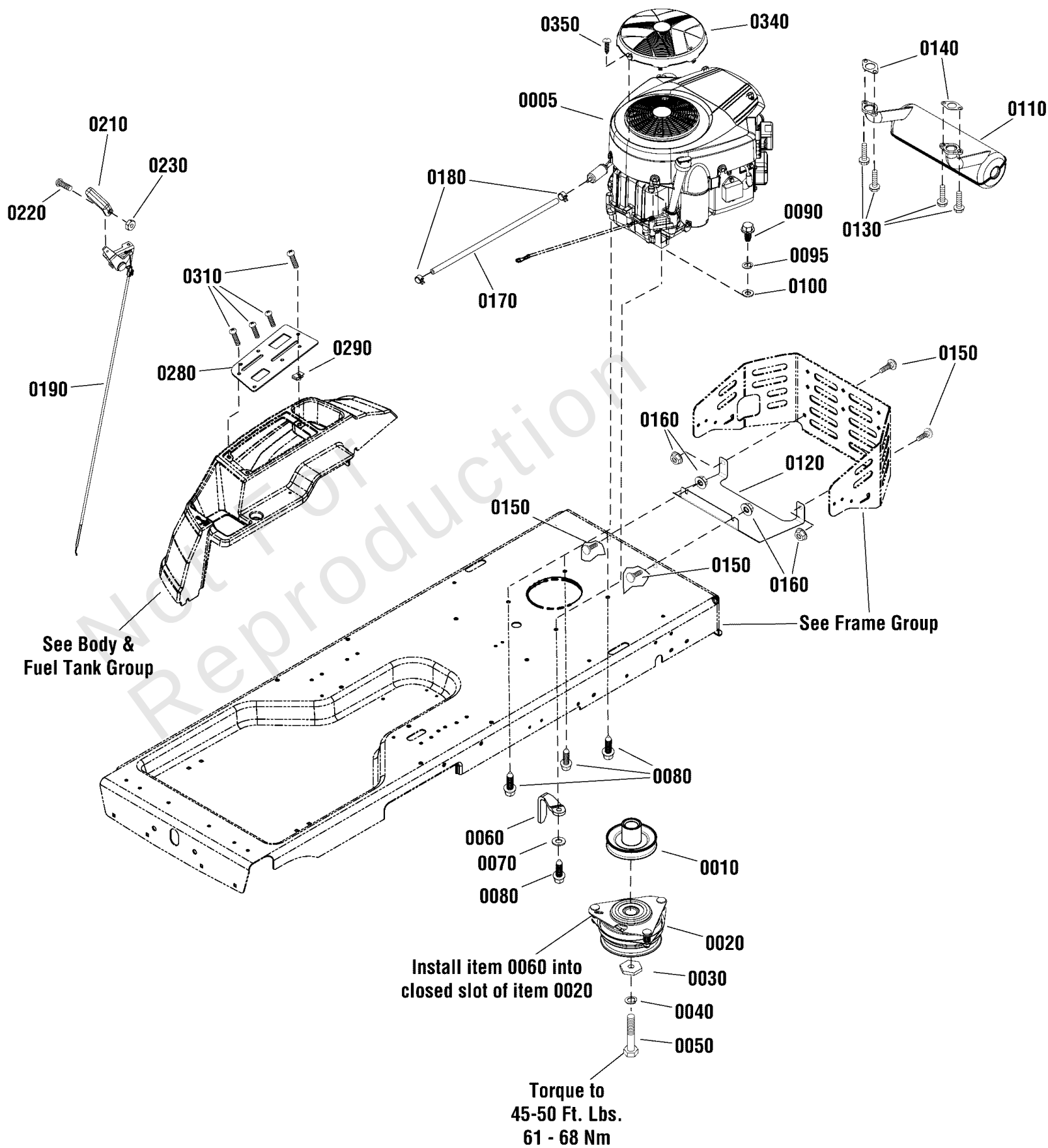
REF NO	PART NO	QTY	DESCRIPTION
0010	2172434SM	2	CLIP, Wire, .390 Dia.
0020	5022180SM	1	SWITCH, Blade Engage
0030	7106169YP	1	SWITCH, Ignition, Delta (3 Postition)
0040	7023354YP	1	SWITCH, Seat, Push Button (NC)
0050	7022886YP	2	SWITCH, DP, NO/NC, Snap-In
0060	1960252SM	2	BOLT, Carriage, 1/4-20 x 5/8
0070	1755382YP	1	SOLENOID, 1/4-20 STD, 2 Spade
0080	703463	2	NUT, Nylock Flanged, 1/4-20
0090	703061	3	NUT, 1/4-20, Keps, Conical Washer
0100	1722009SM	1	STRAP, Rubber, 13"
0110	----	1	BATTERY, 12 Volt, 230 CCA
0120	1731185SM	1	HOUR METER, Digital, No Alarms
0130	1722611SM	1	PLUG, Hole, .85 X 1.73
0140	1758084YP	1	HARNESS, Main, EU, ZTR

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Engine Group

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Engine Group

REF NO	PART NO	QTY	DESCRIPTION
0005	44S777-0017-G1	1	* ENGINE, 23 Gross HP B&S PRO Series Twin -(Engine Model: 44S777-0017-G1)
0005	44S977-0022-G1	1	* ENGINE, 25 Gross HP B&S PRO Series Twin -(Engine Model: 44S977-0022-G1)
0005	44U777-0003-G1	1	* ENGINE, 23 Gross HP B&S PRO Series Twin -(Engine Model: 44U777-0003-G1)
0010	1757995YP	1	PULLEY ASSEMBLY
0020	1736105SM	1	CLUTCH, Ogura
0030	1708264SM	1	WASHER, Hex
0040	704007	1	WASHER, Lock, 7/16
0050	1960649SM	1	CAPSCREW, Hex Head, 7/16-20 X 3 1/2, G5
0060	1737421AYP	1	GUIDE, Belt
0070	703878	1	WASHER, Flat, 13/32 x 7/8 x .083
0080	2828635SM	4	SCREW, Taptite, 3/8-16 X 1 1/4
0090	703054	1	SCREW, Hex Washer Head, 1/4-20 x 5/8
0095	71067MA	1	WASHER, 1/4, Flat, GR5 Zinc/Clear
0100	1921880SM	1	WASHER, Lock, 1/4
0110	1758350YP	1	MUFFLER
0120	1759502AYP	1	SHIELD, Heat
0130	690341	4	SCREW
0140	690970	2	GASKET, Exhaust
0150	703185	4	BOLT, Carriage, 5/16-18 X 3/4
0160	703115	4	NUT, Flange Nylock, 5/16-18
0170	327290MA	1	HOSE, Fuel
0180	93053B	2	CLAMP, Hose
0190	1759205YP	1	CONTROL, Throttle
0210	1739312YP	1	KNOB, Throttle
0220	797483	1	Screw
0230	703460	1	Nut
0280	1759429AYP	1	PANEL, Control -(Used on Key Start)
0280	1759430AYP	1	PANEL, Control -(Used on Pushed Button Start)
0290	705876	3	NUT, Speed, 1/4-20
0310	7090999SM	5	SCREW, Phillips Head, 1/4-20 X 5/8
0340	797420YP	1	GUARD, Debris Screen
0350	799359	1	Screw

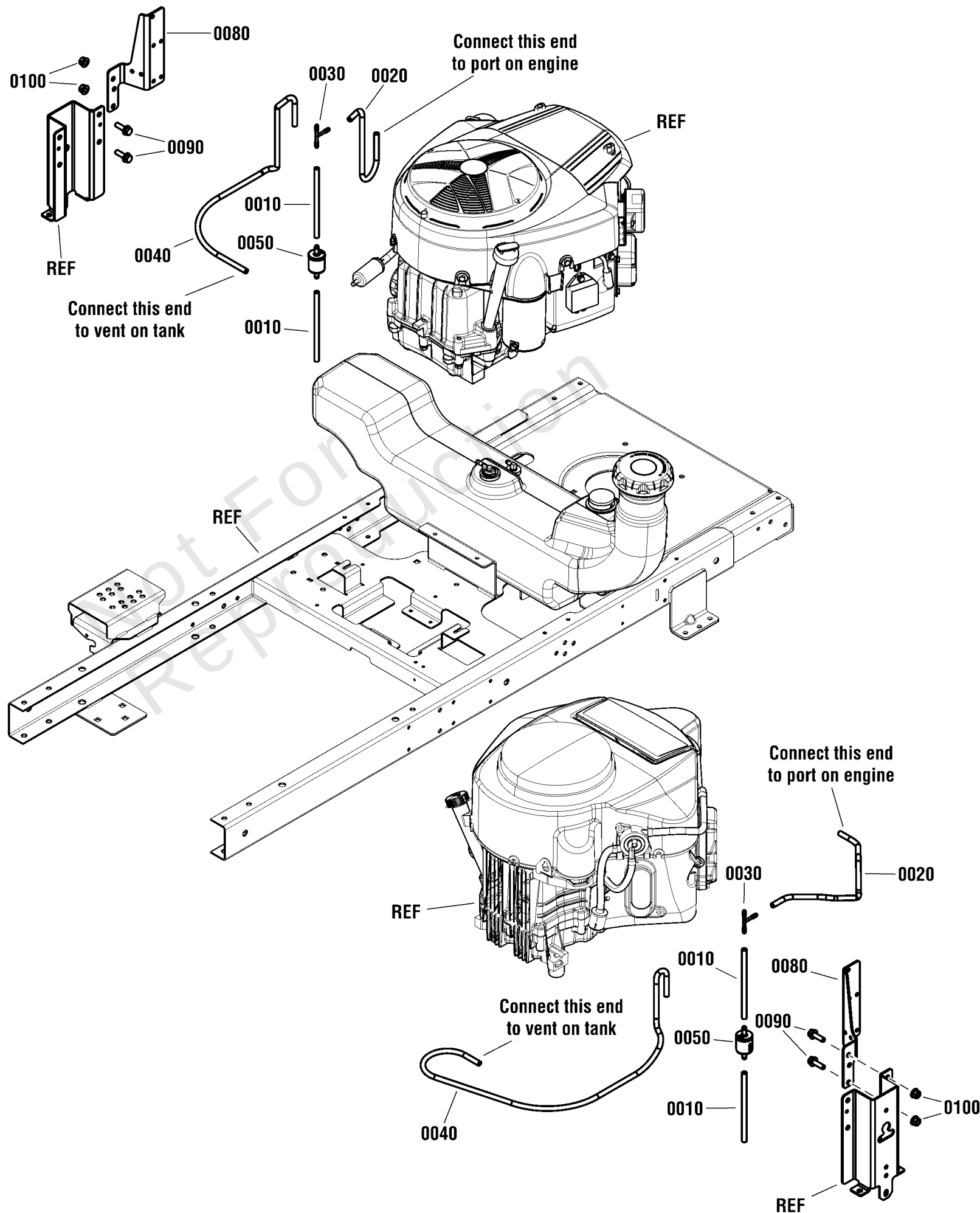
Footnotes:

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

Evap Group

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Evap Group

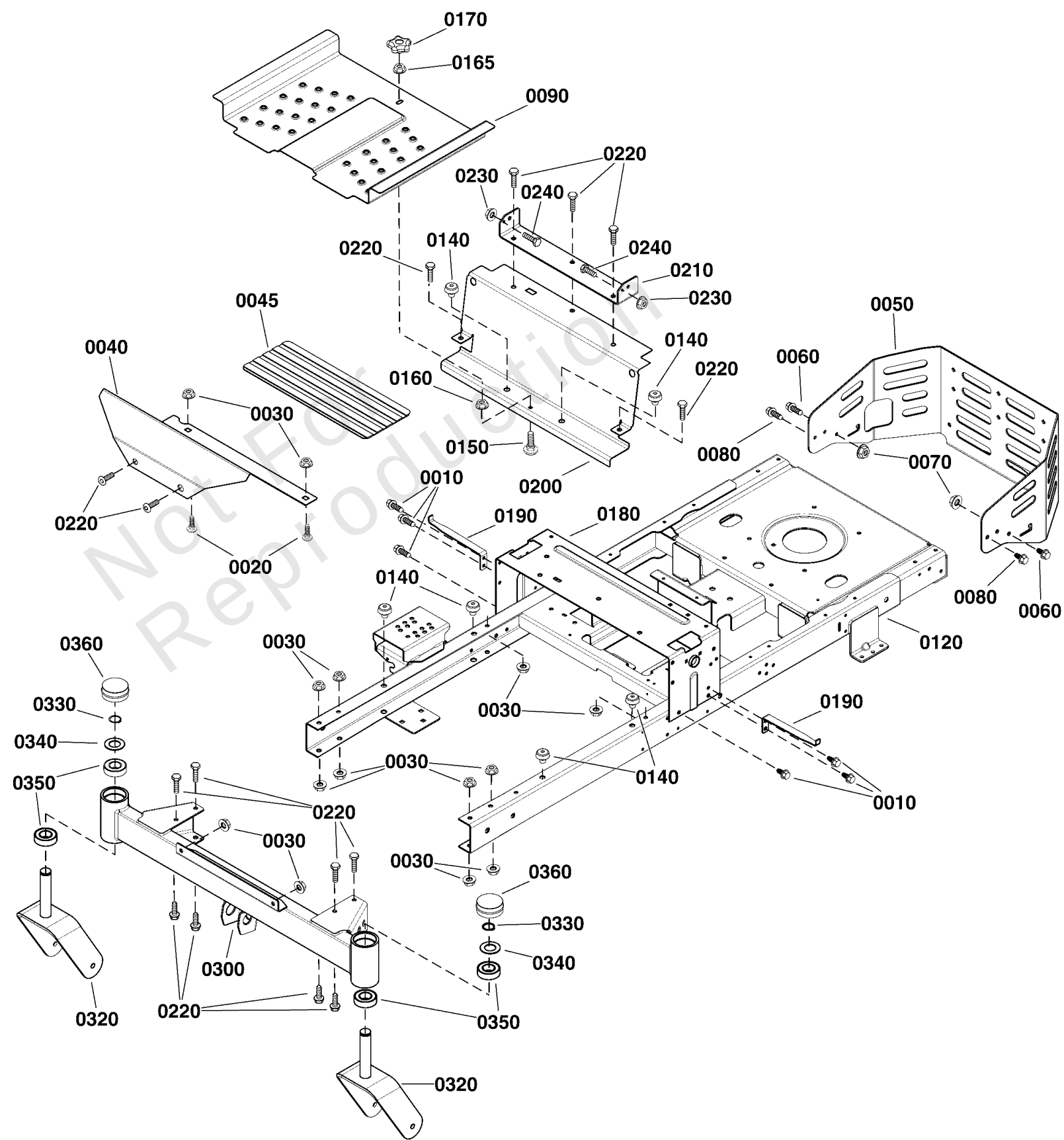
REF NO	PART NO	QTY	DESCRIPTION
0010	7700552X6YP	2	HOSE, VAPOR, 5MM ID, 6.00 LG
0020	7700552X12YP	1	HOSE, Vapor, 5 MM ID X 9 MM OD X 12"
0030	5103062YP	1	FITTING, 3/16" TEE, BARB TYPE, HDPE
0040	7700552X26YP	1	HOSE, Vapor, 5 MM ID, 26.00 LG -(Cut to length)
0050	691035	1	FILTER, Fuel
0070	5021030SM	5	TIE, 6" Self-Locking -(Not Shown)
0080	1760538AYP	1	BRACKET, Vent Hose Mount - BS Twin (BLK)
0090	703410	2	BOLT, Serrated Flange, 5/16-18 X 1.0
0100	703115	2	NUT, Flange Nylock, 5/16-18

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Frame Group

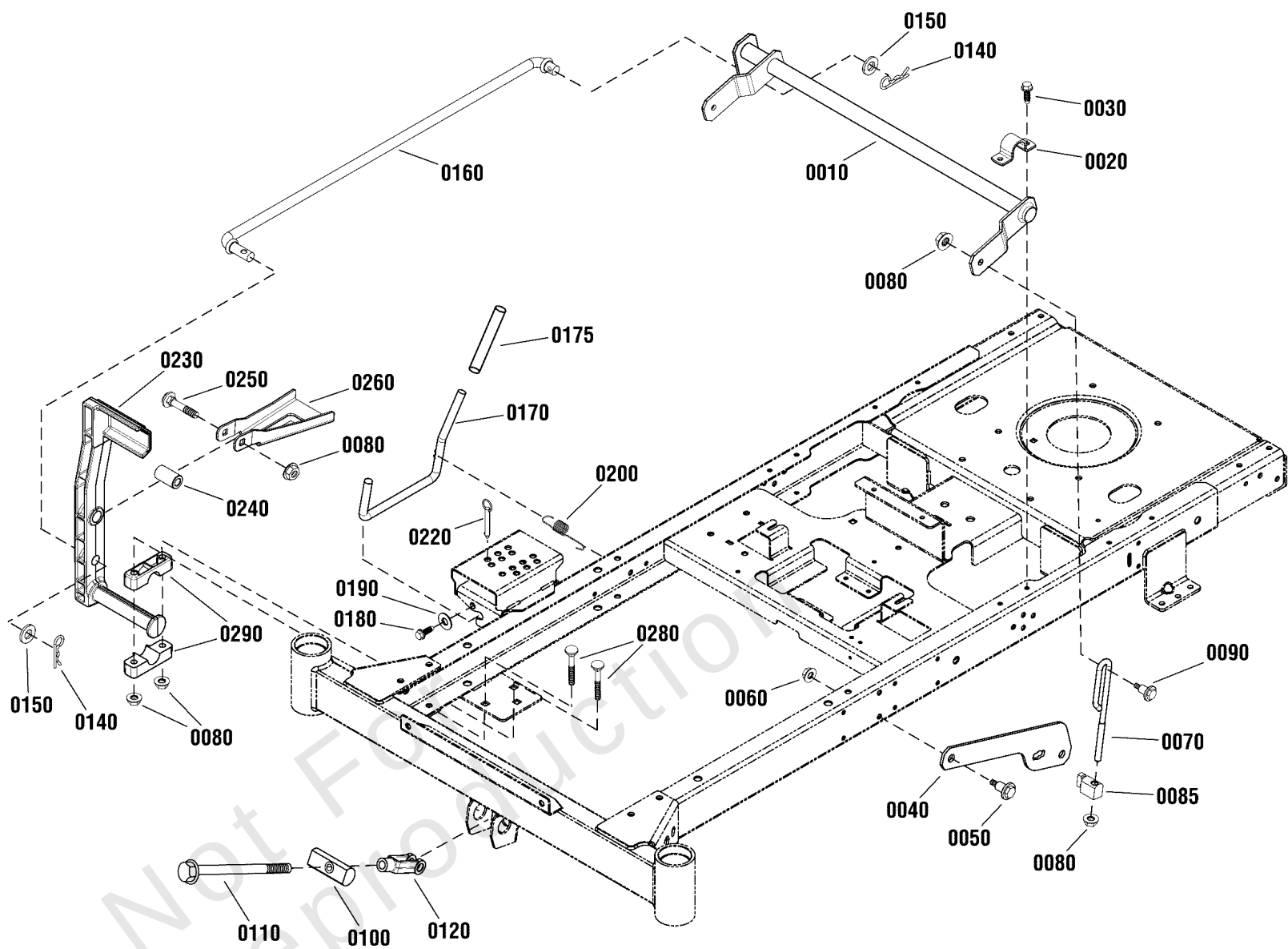
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Frame Group

REF NO	PART NO	QTY	DESCRIPTION
0010	703949	6	SCREW, Washer Head, 5/16-18 X 5/8
0020	703448	2	BOLT, Carriage, 3/8-16 X 3/4, GR5
0030	5025394SM	17	NUT, Hex Flange, Nylock, 3/8-16
0040	1758894DYP	1	FOOTREST
0045	5101374YP	1	SAFETY WALK
0050	1759501DYP	1	BUMPER, Rear
0060	703410	2	BOLT, Serrated Flange, 5/16-18 X 1.0
0070	703115	2	NUT, Flange Nylock, 5/16-18
0080	1664847CAYP	2	SCREW, Hex Washer Head, Taptite, 5/16-18 x 3/4
0090	1757813DYP	1	PAN, Bottom
0120	-----	1	FRAME, Fixed ZT -(Not a serviceable part)
0140	197546GS	6	MOUNT, Vibration
0150	7090496YP	1	BOLT, Carriage, 1/4C X 1, GR5
0160	703233	1	NUT, Serrated, Flange, 1/4-20, GR5
0165	703954	1	NUT, Centrelock, 1/4-20, GR5
0170	707785	1	KNOB, 5 Prong
0180	1758010DYP	1	BRACKET, Control
0190	1758240AYP	2	BRACKET, Fender
0200	1757796DYP	1	BRACKET, Brand
0210	84001615	1	BRACKET, Seat
0220	707790	15	SCREW, Button Head, 3/8-16 X .88
0230	5025339YP	2	NUT, Hex, 8-32
0240	707790	2	SCREW, Button Head, 3/8-16 X .88
0300	84001615		BRACKET, Seat
0320	84001615	2	BRACKET, Seat
0330	703993	2	RETAINER, Ring
0340	703199	2	WASHER, Flat
0350	1758354YP	4	BEARING, 25 MM
0360	5105524YP	2	CAP, Caster



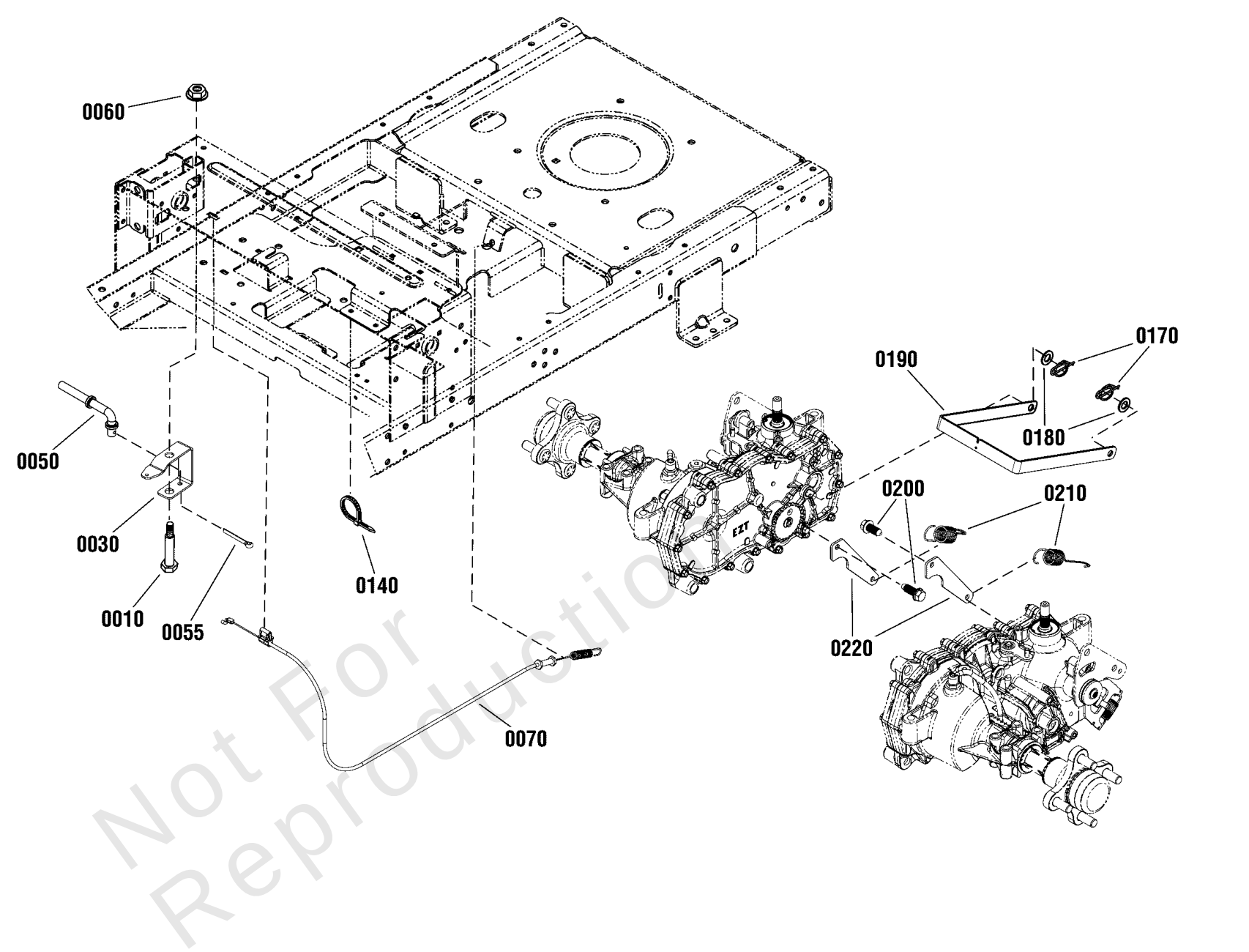
Lift Group

REF NO	PART NO	QTY	DESCRIPTION
0010	1757958AYP	1	SHAFT, Lift
0020	1720147BZYP	2	STRAP
0030	703949	4	SCREW, Washer Head, 5/16-18 X 5/8
0040	1757953AYP	2	ARM, Lift
0050	1732426SM	2	BOLT, Shoulder, 5/16-18
0060	703115	2	NUT, Flange Nylock, 5/16-18
0070	1757936YP	2	ROD, Lift
0080	703158	9	NUT, Hex Flange, 3/8-16
0085	1731894SM	2	TRUNNION
0090	009X51MA	2	BOLT, Shoulder, 3/8-16
0100	1757955YP	1	PIVOT
0110	1757954YP	1	ROD, Hitch
0120	5023174SM	1	CLEVIS, 1/2-20
0140	403162MA	2	PIN, Hair, 3/32 X 1.6
0150	5025281SM	2	WASHER, 5/8
0160	1758121YP	1	ROD, Foot Assist
0170	1758246YP	1	ROD, Transport
0175	1759817YP	1	GRIP, Foam
0180	703054	2	SCREW, Hex Washer Head, 1/4-20 x 5/8
0190	5025288YP	2	WASHER, 1/4
0200	1758283YP	1	SPRING, Extension
0220	5103021YP	1	PIN, Hitch, 3/8 X 2 1/2
0230	1758232YP	1	PEDAL, Lift
0240	1756612YP	1	BUSHING
0250	7900009SM	1	BOLT, Carriage, 3/8-16 X 2 1/4
0260	1758284AYP	1	STOP, Height of Cut
0280	1960615SM	4	BOLT, Carriage, 3/8-16 X 2 1/2
0290	5100634SM	4	BLOCK

Parking Brake Group

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Parking Brake Group

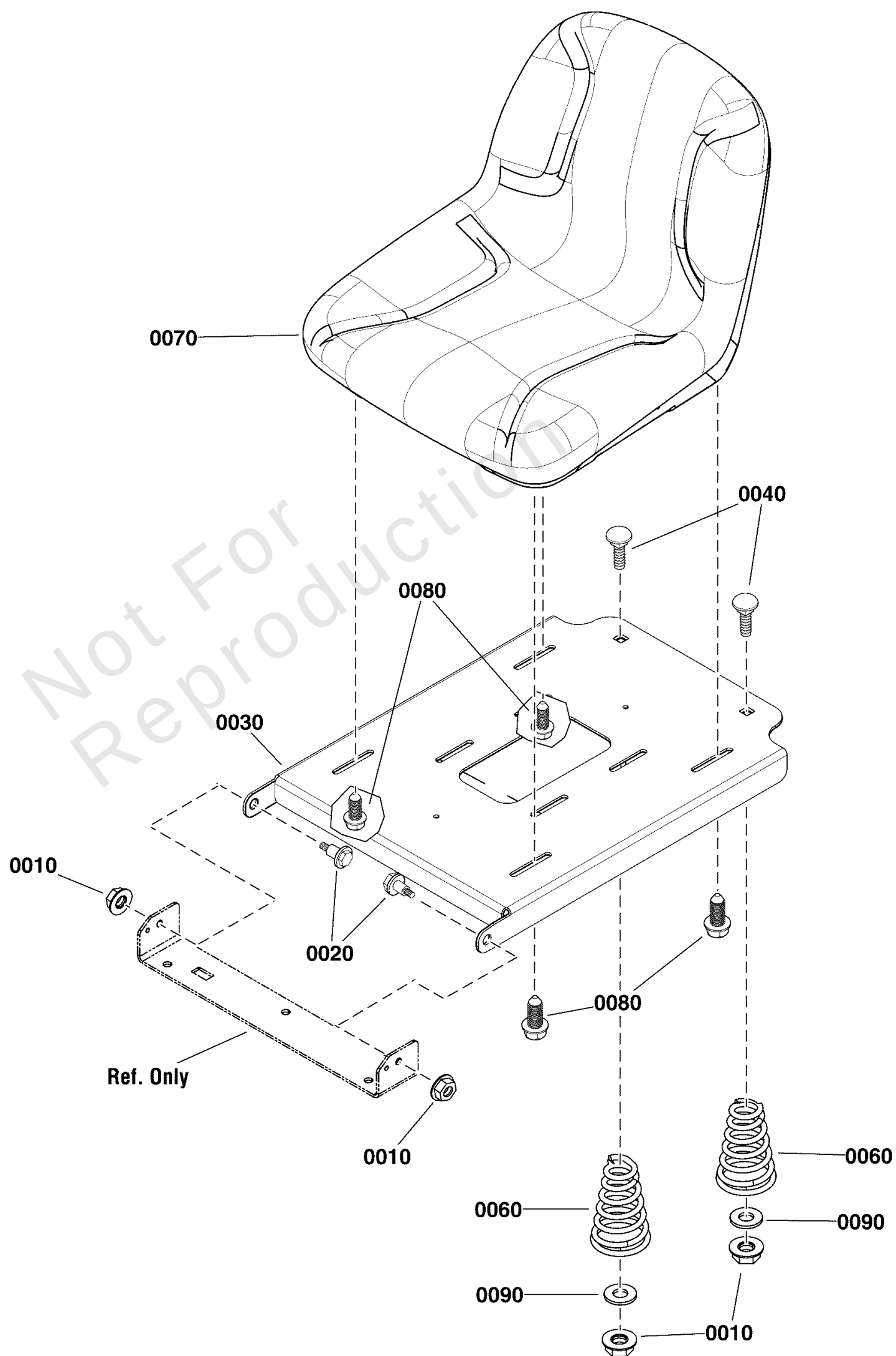
REF NO	PART NO	QTY	DESCRIPTION
0010	1736539YP	1	BOLT, Shoulder, 3/8-16 X 3.41
0030	1758091YP	1	BELLCRANK, Parking Brake
0050	1758088YP	1	ROD, Parking Brake
0055	703312	1	PIN, Cotter, 3/32 X 3/4
0060	703158	1	NUT, Hex Flange, 3/8-16
0070	1759207YP	1	CABLE, Park Brake
0140	703586	1	TIE, Cable
0170	7091594SM	2	PIN, Cotter, 1/2
0180	703946	2	WASHER, Flat
0190	1758126AYP	1	ARM, Parking Brake
0200	708964	2	SCREW, Taptite, M6 x 1.0-12
0210	1758283YP	2	SPRING, Extension
0220	1759349YP	2	BRACKET, Spring

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Seat Group (2992501)

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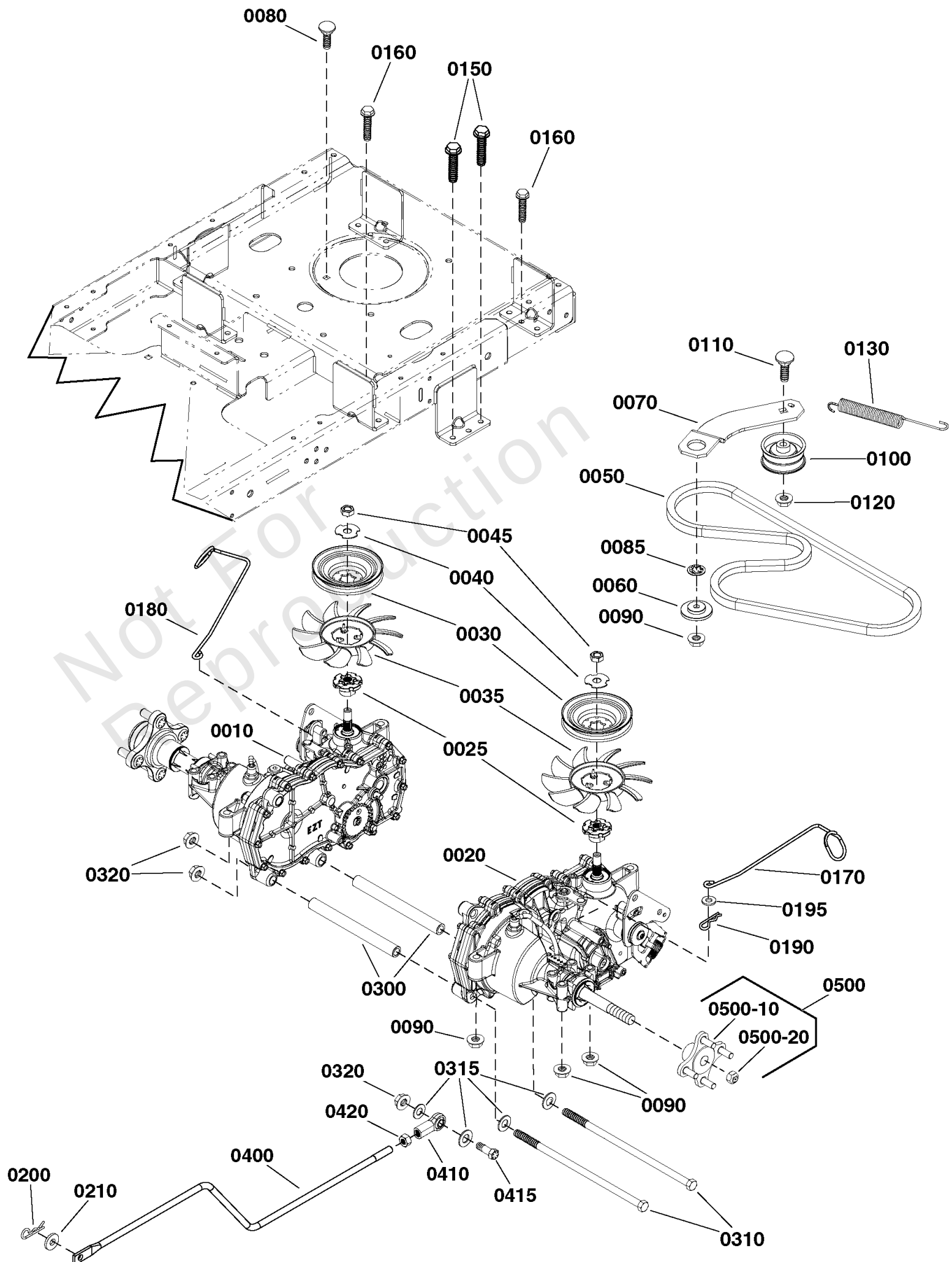
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Seat Group (2992501)

REF NO	PART NO	QTY	DESCRIPTION
0010	703115	4	NUT, Flange Nylock, 5/16-18
0020	1752802YP	2	BOLT, Shoulder, 5/16-18 x 1.03LG
0030	84001618	1	SLIDE, Seat
0040	703483	2	BOLT, Carriage, 5/16-18 X 1, GR5
0060	1717051SM	2	SPRING, Seat
0070	1759012YP	1	KIT, Seat, 15"
0080	770697	4	SCREW, Hex Flange, 5/16-18 x 1
0090	703591	4	WASHER, Flat, 13/32 x 1 1/2 x 1/8

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Transmission Group

REF NO	PART NO	QTY	DESCRIPTION
0010	1759443YP	1	TRANSMISSION, Hydro Gear, RH -(Refer to Note: *) (Model: (ZD-DUBB-2A7C-2XPX)
0020	1759444YP	1	TRANSMISSION, Hydro Gear, LH -(Refer to Note: *) (Model: ZD-AUBB-2A7B-3XPX)
0025	1759450YP	2	SPACER, Transmission
0030	1759447YP	2	PULLEY, Transmission
0035	1759448YP	2	FAN, Input
0040	5102914YP	2	WASHER, Slotted
0045	5102916YP	2	NUT, ZT5400
0050	1758100YP	1	BELT, Transmission
0060	1727935SM	1	SPACER, Pivot
0070	1758044AYP	1	ARM, Idler
0080	703800	1	BOLT, Carriage, 5/16-18 X 1
0085	703297	1	RETAINER, 5/16 X 5/8
0090	703115	9	NUT, Flange Nylock, 5/16-18
0100	1668477SM	1	PULLEY, Idler, 2.25" OD, .378 ID
0110	703879	1	BOLT, Carriage, 3/8-16X1-3/4, GR5
0120	5025394SM	1	NUT, Hex Flange, Nylock, 3/8-16
0130	1758045YP	1	SPRING, 7.18"Long, .75" OD, Extension
0150	707943	4	SCREW, Washer Head, 5/16-18 X 3
0160	707944	4	SCREW, Washer Head, 5/16-18 X 2 1/4
0170	1759245YP	1	ROD, Release, LH
0180	1759246YP	1	ROD, Release, RH
0190	1722460SM	2	PIN, Hair
0195	703332	2	WASHER, Flat, 1/4
0200	703300	2	PIN, Hair, 3/32 x 1 5/8
0210	704128	2	WASHER, Flat
0300	1759392YP	2	SPACER, Transmission
0310	707945	2	CAPSCREW, HexHead, 7/16-14 X 11 1/4
0315	703183	6	WASHER, 7/16
0320	1930650SM	4	NUT, Hex Two Way, 7/16-14
0400	1757966YP	2	ROD, Control
0410	1759799YP	2	ROD, 7/16-20 RH, Female
0415	703579	2	CAPSCREW, Hex Head, 7/16-14 x 1-1/4, GR8
0420	7090460SM	2	NUT, 7/16F, GR5, Hex
0500	7600158YP	1	KIT, Hub Replacement -(Includes Ref. 0500-10 & 0500-20)
0500-10	-----	1	HUB, EZT Transmission
0500-20	-----	1	NUT, EZT Transmission

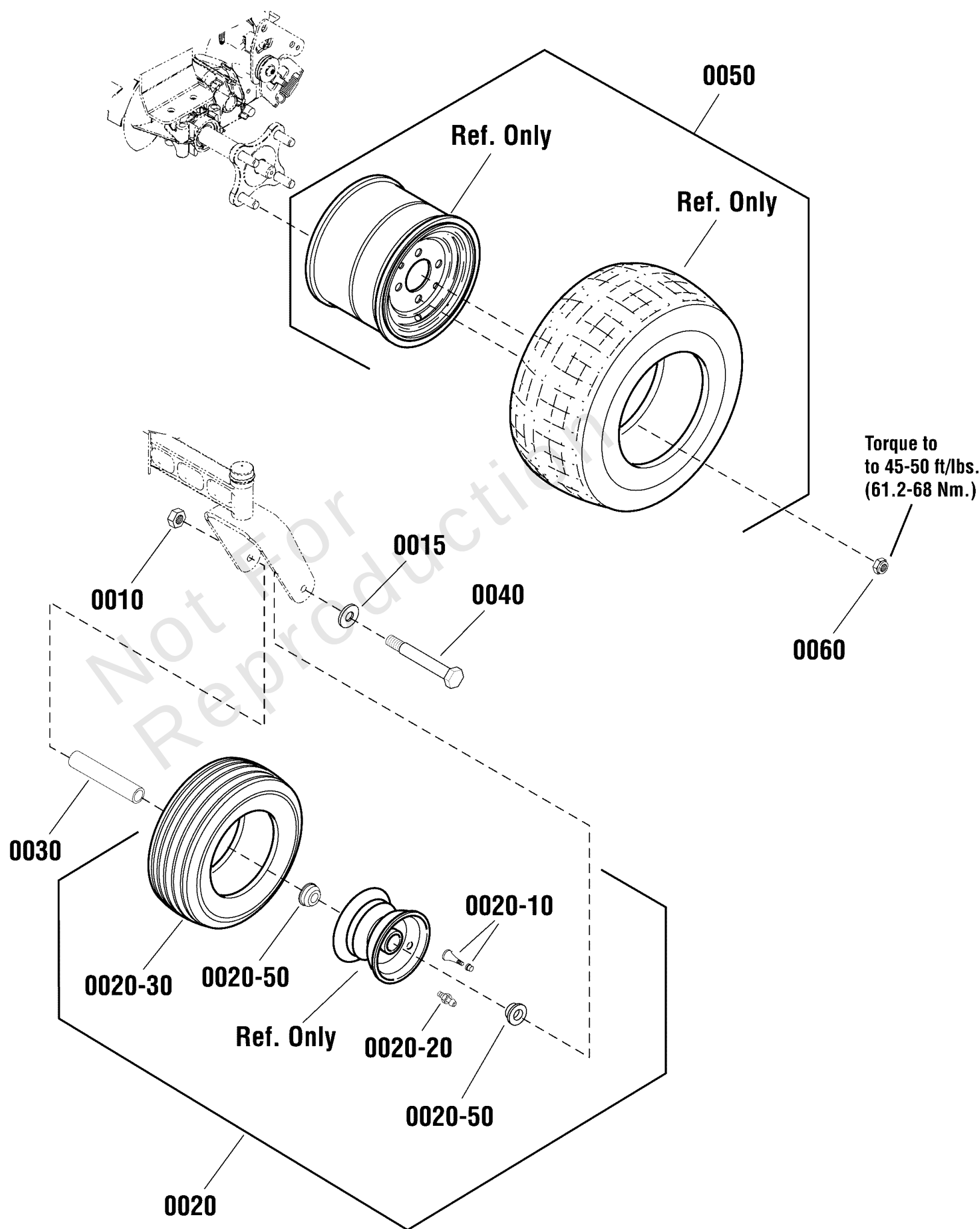
Footnotes:

Note *See your local Hydro Gear dealer for parts and service.

Wheel & Tire Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 2691506-00



Wheel & Tire Group

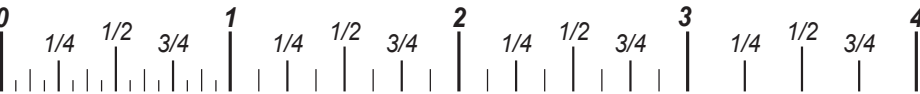
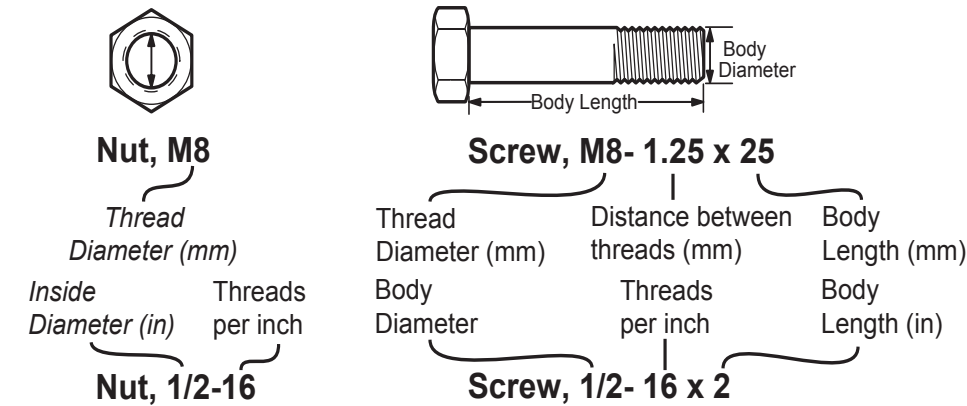
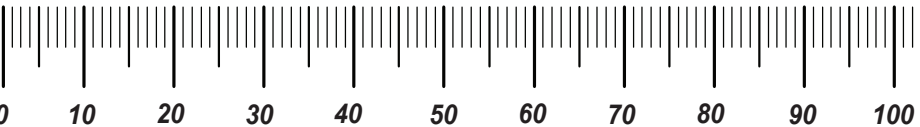
REF NO	PART NO	QTY	DESCRIPTION
0010	1930650SM	2	NUT, Hex Two Way, 7/16-14
0015	703183	2	WASHER, 7/16
0020	1734013SM	2	ASSEMBLY, Wheel & Tire, Front Caster, 11 X 4-5
0020-10	2172353SM	4	VALVE STEM & CAP
0020-20	7104428YP	2	ZERK, Grease
0020-30	1734875SM	2	TIRE, 11 X 4-5
0020-50	1739281YP	4	BUSHING, 0.632ID, 1.377OD, 0.62 LG
0030	1734841SM	2	TUBE, Caster Wheel
0040	7091772SM	2	SCREW, 7/16-14 x 6 Hex Head Cap, GR 5
0050	1758998YP	2	ASSEMBLY, Wheel & Tire, 18 X 8.5-8 (K505)
0050	1759161YP	2	ASSEMBLY, Wheel & Tire, 20 X 8-8 (K505)
0050	1759585YP	2	ASSEMBLY, Wheel Rear, 20 X 10-8
0060	5020601SM	8	NUT, Lug, 1/2-20

Not For
Reproduction

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).

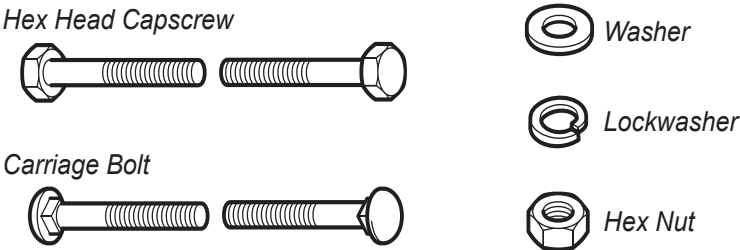
When bolt or capscrew is identified as 1/2 - 16 x 2" (M8 - 1.25 x 50), this means the *Nominal size*, or body diameter is 1/2 inch (8mm metric thread diameter), the second number, 16, represents the *threads per inch*, (*distance between threads*). The final number is the body length of the bolt or screw,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

