

Parts Manual

Mfg. No: 5601419

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

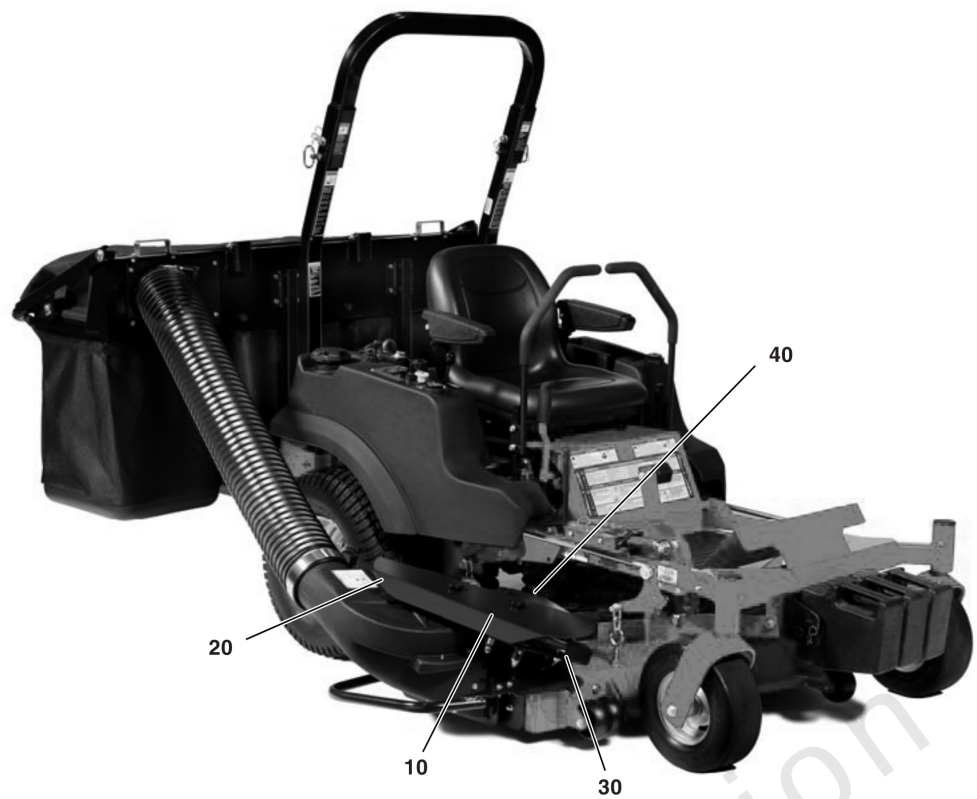
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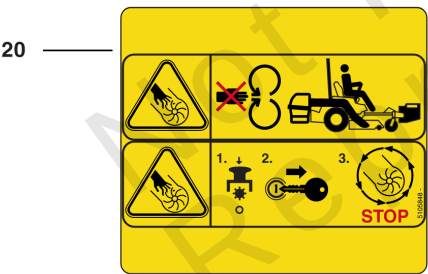
Blower Group - Decals

Note: Unless noted otherwise, use the standard torque specifications

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10 **TURBO-Pro™ Max**



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Model Number: 5901335	
Blower Drive Belt	
Deck Size	Part Number
52"	5104289
61"	1721532

5104312



Blower Group - Decals

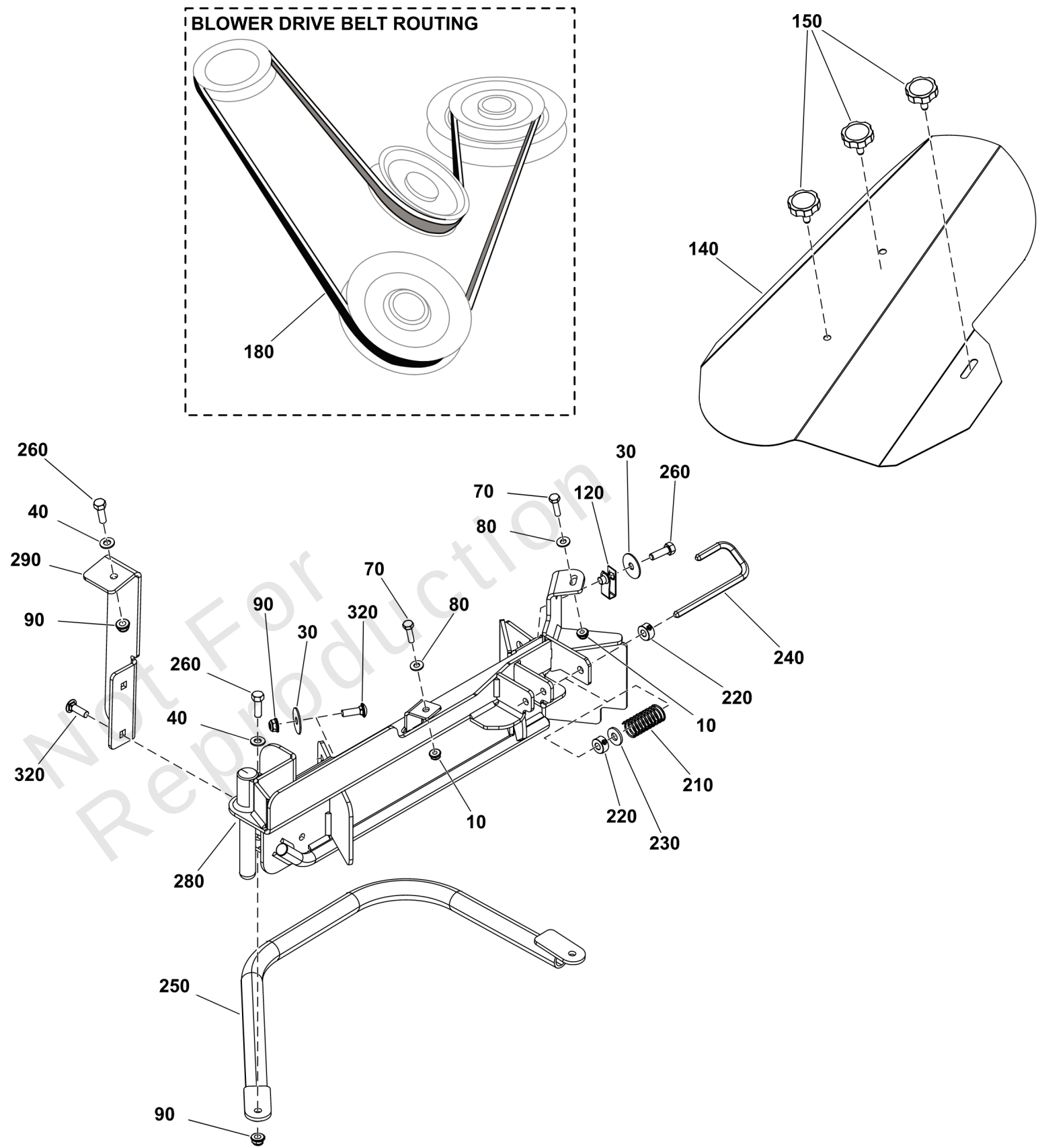
REF NO	PART NO	QTY	DESCRIPTION
10	5104285FS	1	DECAL, MODEL
20	84008038	1	DECAL
30	5104318FS	1	DECAL, MODEL
40	5104314YP	1	DECAL, BLOWER, MAIN

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Blower Group - Deck Adapter

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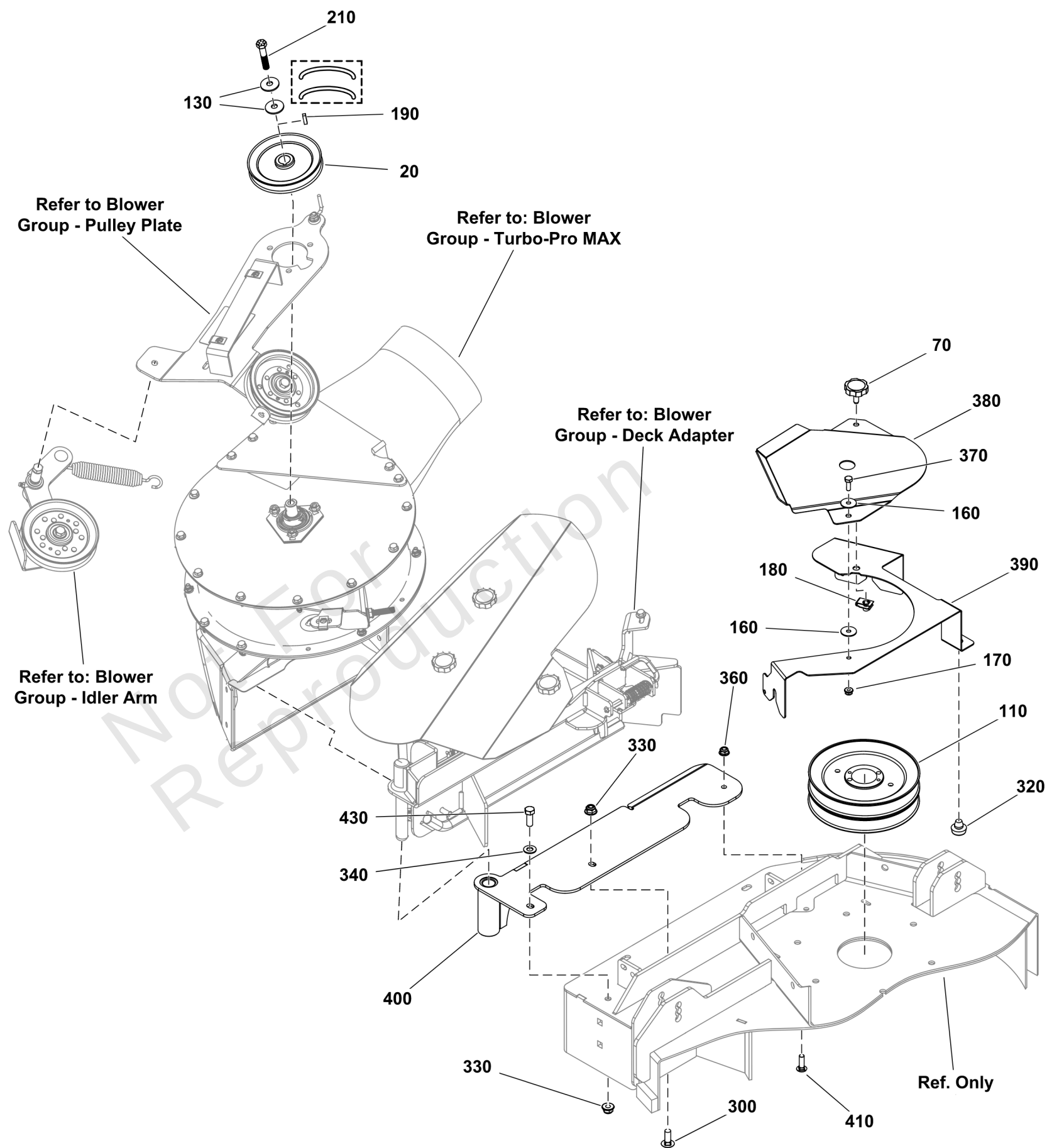
Blower Group - Deck Adapter

REF NO	PART NO	QTY	DESCRIPTION
10	5025391FS	2	NUT
30	5025164SM	4	WASHER, 5/16" FENDER
40	703350	3	WASHER
70	5025010X8SM	2	BOLT, 1/4-20 X 1", GD
80	703332	2	WASHER
90	5025392FS	5	NUT
120	5025452YP	2	CLIP
140	5600740FS	1	DECAL, MODEL
150	5101731YP	3	KNOB, 5/616-18 X 1
180	84008031	1	BELT
210	1709660SM	1	SPRING-COMP 0.880ODX
220	5020047SM	2	COLLAR, 5/16" SET
230	5025337FS	1	WASHER
240	5104203FS	1	ROD
250	84008032	1	BAR
260	5025011X8FS	5	BOLT
280	84008033	1	ADAPTER
290	84008034	1	BRACKET
320	5025145X8SM	4	BOLT, 5/16-18 X 1", C

Blower Group - Guards, Pulleys, and Deck Mount

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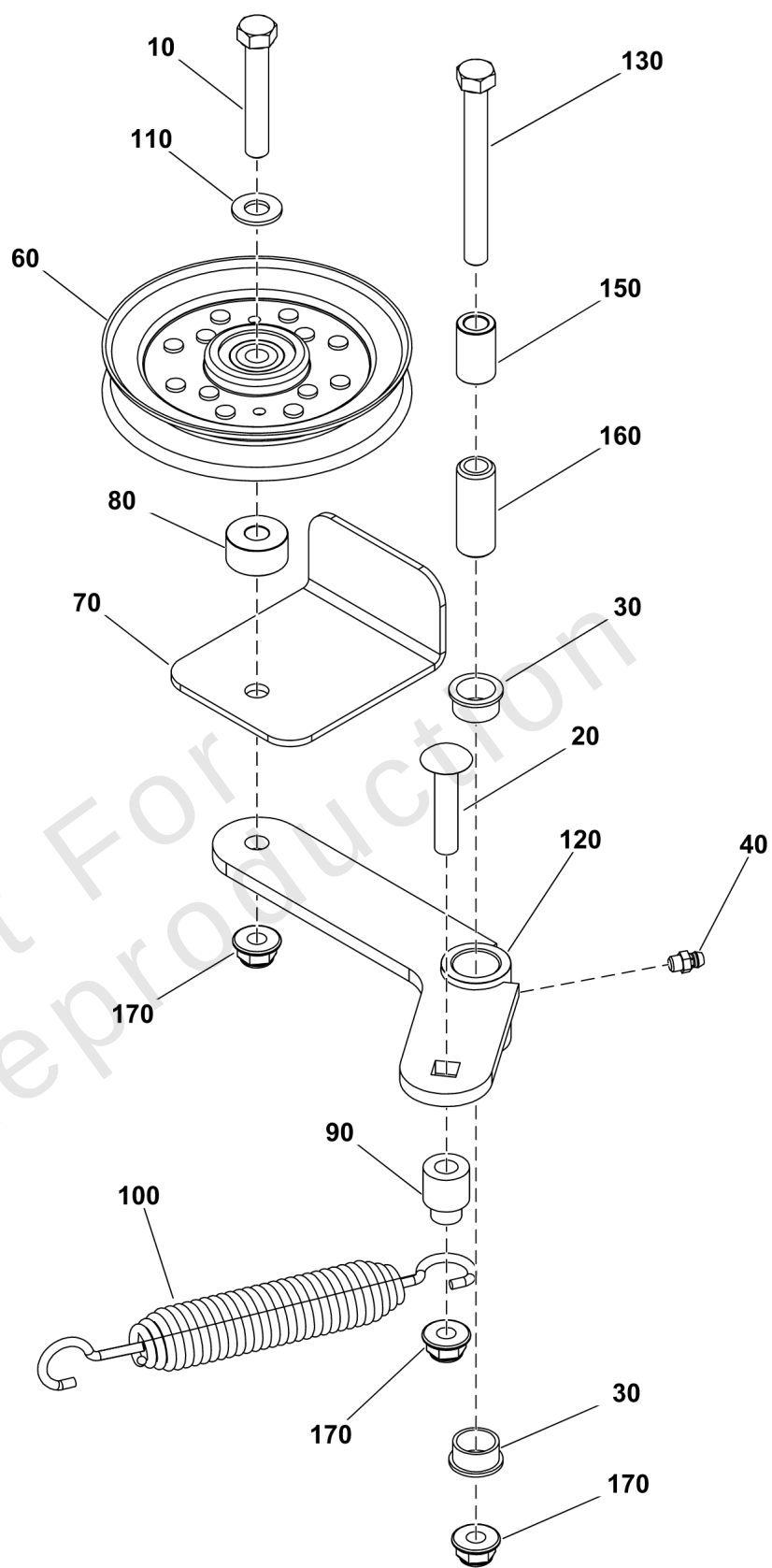
Blower Group - Guards, Pulleys, and Deck Mount

REF NO	PART NO	QTY	DESCRIPTION
20	5103836FS	1	PULLEY
70	5101731YP	1	KNOB, 5/616-18 X 1
110	84003250	1	PULLEY
130	5106588FS	2	WASHER, BEVELED
160	5025288YP	2	WASHER, 1/4 FENDER
170	5025391FS	1	NUT
180	5022308SM	1	BODY CLIP, 5/16-18 X
190	5050403X4YP	1	KEY, SQUARE
210	84008037	1	BOLT -(Torque to pulley mounting bolt to: 50 ft-lbs (68 Nm))
300	703814	1	BOLT, RD HD, 3/8-16X1
320	197546GS	1	MOUNT-VIBRATION
330	5025394SM	2	NUT, 3/8-16 HEX NYLOCK
340	5025156FS	1	WASHER
360	5025392FS	1	NUT
370	5025010X6SM	1	BOLT, 1/4-20 X 3/4" G
380	5413841AFS	1	SHIELD, BELT
390	84008035	1	GUARD, Pulley
400	84008036	1	MOUNT
410	5025145X8SM	1	BOLT, 5/16-18 X 1", C
430	5025013X8SM	1	BOLT, 3/8-16 X 1" GD5

Blower Group - Idler Arm

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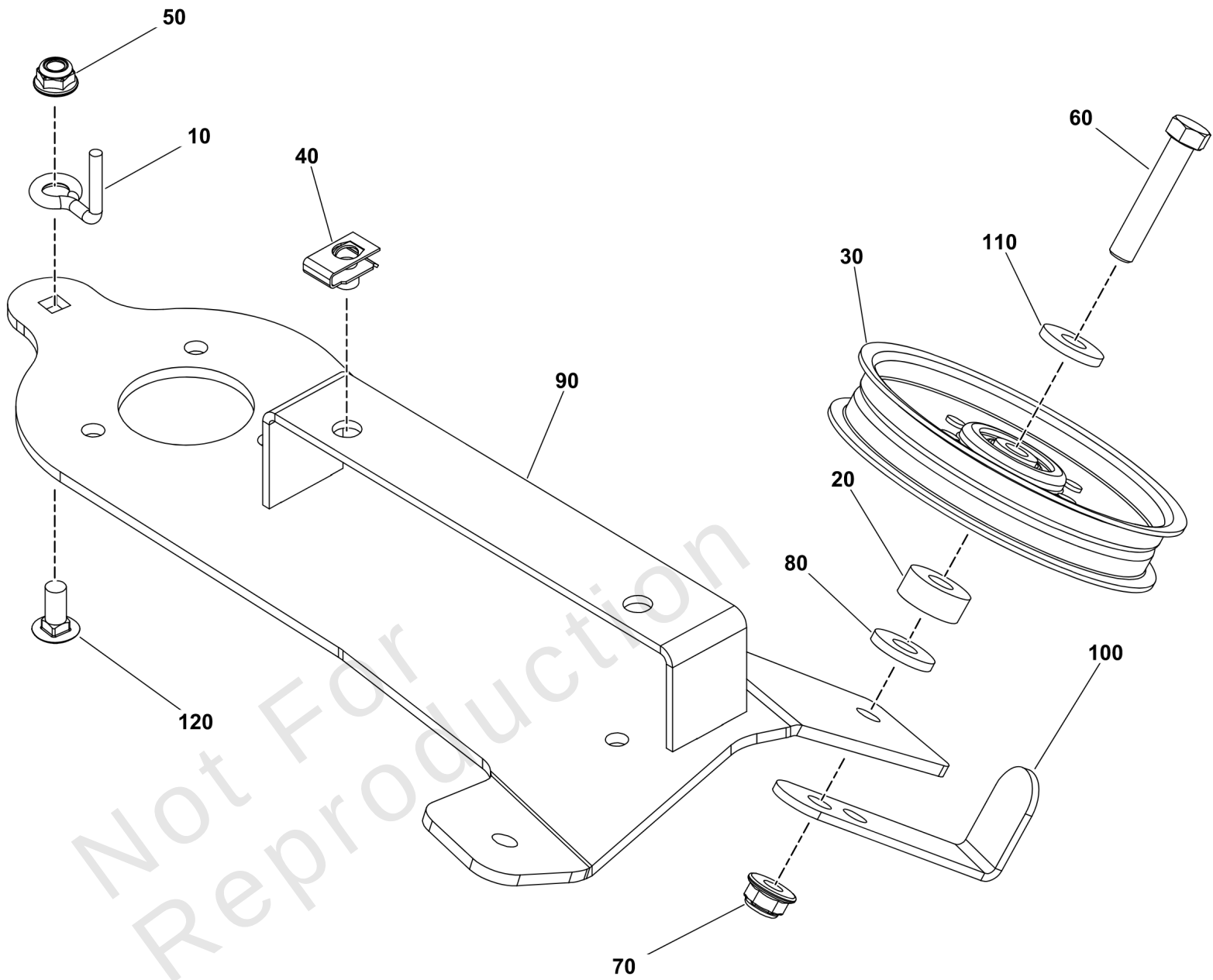
Blower Group - Idler Arm

REF NO	PART NO	QTY	DESCRIPTION
10	5025013X18SM	1	BOLT, 3/8-16 X 2-1/4"
20	703858	1	BOLT, 3/8-16X1.75
30	1676148SM	2	BUSHING-0.628IDX
40	5020095SM	1	GREASE FITTING, 1/4-2
60	5103456YP	1	PULLEY-IDLER-V, 4.85OB, .38ID
70	5409609AFS	1	RETAINER
80	5046860SM	1	SPACER
90	1706644SM	1	SPACER,3/8X3/4X15/16
100	5022847SM	1	SPRING, EXTENSION, SW
110	5025156FS	2	WASHER
120	5409892YP	1	ARM-IDLER -(Includes items # 30 and 40).
130	5025013X28SM	1	BOLT, 3/8-16 X 3-1/2"
150	5101933YP	1	SPACER
160	5102322YP	1	SPACER
170	5025394SM	3	NUT, 3/8-16 HEX NYLOCK

Blower Group - Pulley Plate

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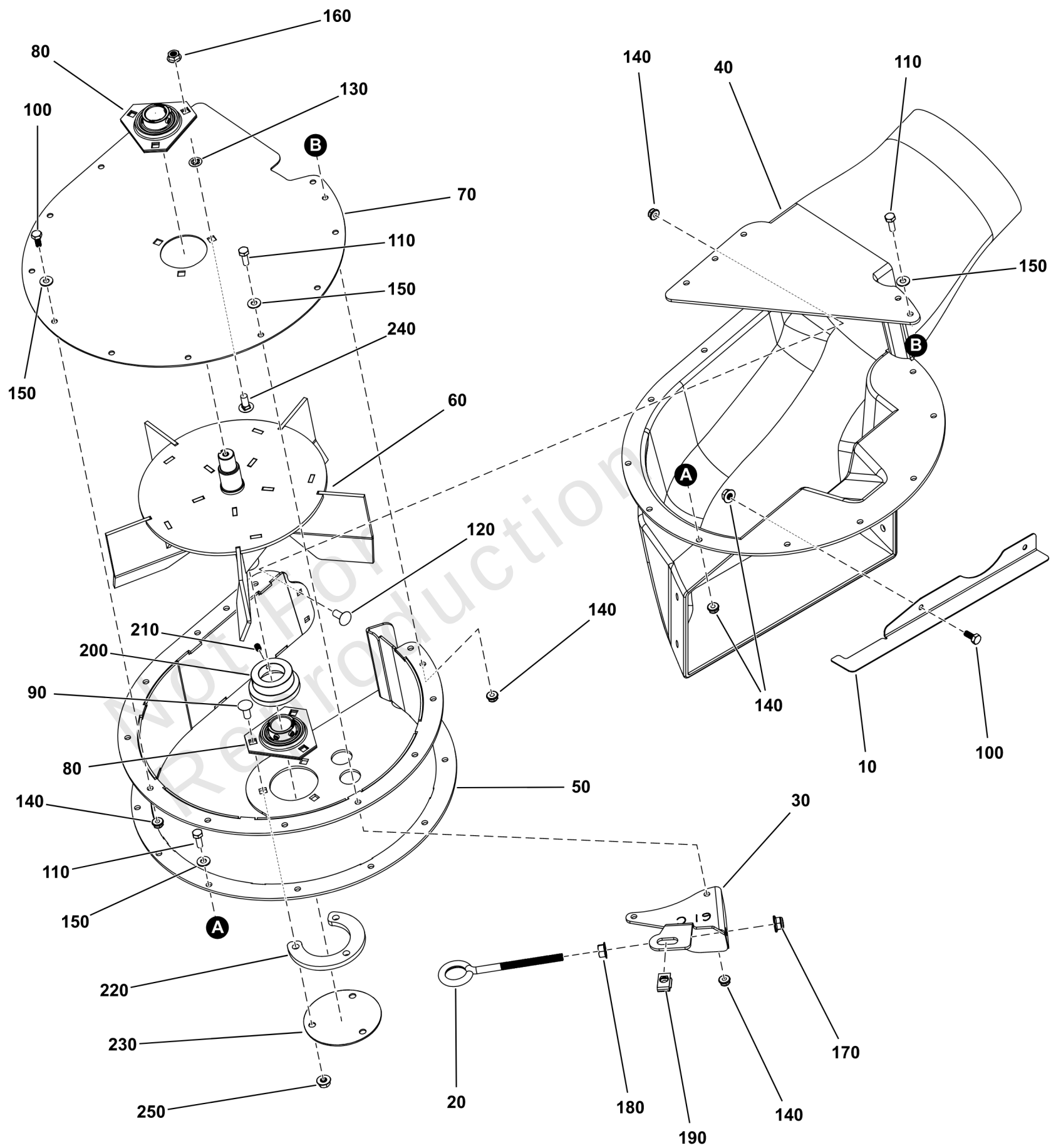
Blower Group - Pulley Plate

REF NO	PART NO	QTY	DESCRIPTION
10	5103488YP	1	KEEPER
20	1667811SM	1	SPACER
30	84008041	1	PULLEY, Idler
40	5022308SM	2	BODY CLIP, 5/16-18 X
50	5025392FS	1	NUT
60	703589	1	CAPSCREW, 3/8-16X2
70	5025394SM	1	NUT, 3/8-16 HEX NYLOCK
80	5025165SM	1	WASHER, 3/8" FENDER
90	5412606	1	ASSEMBLY, PULLEY PLATE, T-MAX (52,60,61)
100	5409610AFS	1	RETAINER
110	704128	1	WASHER
120	5025145X6SM	1	BOLT, 5/16-18 X 3/4",

Blower Group, TURBO-Pro MAX

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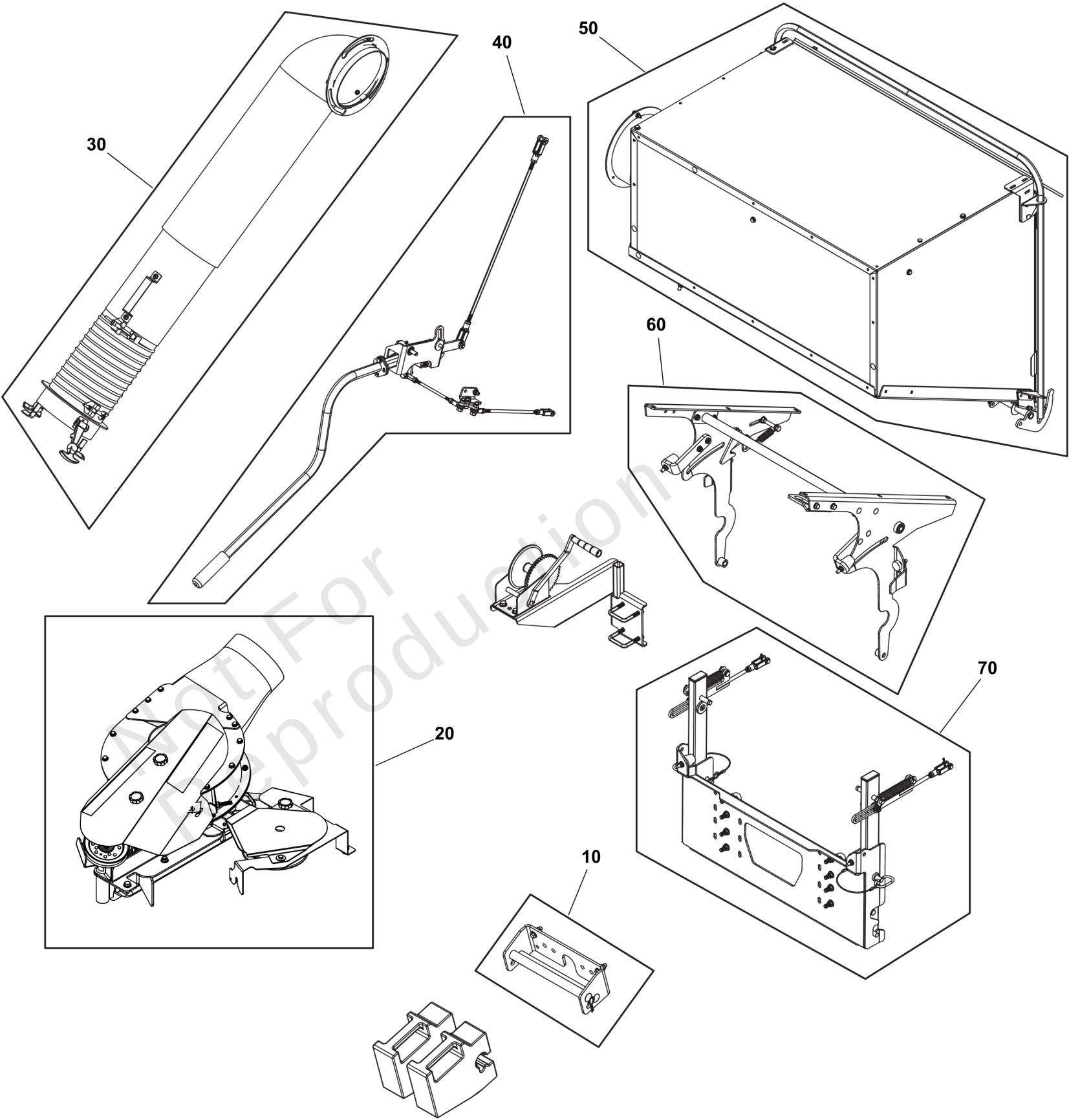
Blower Group, TURBO-Pro MAX

REF NO	PART NO	QTY	DESCRIPTION
10	5412471AA	1	BRACKET, ADAPTER SEAL, COM BLOWER - BLK
20	5021812SM	1	EYE BOLT, 3/8-16 X 4-
30	5411115AA	1	WELD, SPRING ANCHOR, COM - BLK
40	5103816FS	1	HOUSING, BLOWER
50	5411079AA	1	WELD, FAN CAGE, BLOWER - BLK
60	84007864	1	IMPELLER
70	5411077AA	1	PLATE, FAN, TOP - BLK
80	5110099FS	2	BEARING, FLANGE -(Torque set screws to 87 in-lbs (9.8 Nm). Use Loctite 271 Threadlocker on threads).
90	5025145X8SM	3	BOLT, 5/16-18 X 1", C
100	5025010X8SM	7	BOLT, 1/4-20 X 1", GD
110	5025010X6SM	17	BOLT, 1/4-20 X 3/4" G
120	703575	2	BOLT, 1/4-20X.750, SQ
130	5025498YP	3	NUT, PUSH ON, 5/16
140	5025391FS	26	NUT
150	703332	24	WASHER
160	5025127SM	3	NUT, 5/16-18 HEX SERR
170	5025394SM	1	NUT, 3/8-16 HEX NYLOCK
180	5025128SM	1	NUT, 3/8-16 HEX SERRA
190	5022308SM	1	BODY CLIP, 5/16-18 X
200	5110057	1	GUARD, BEARING, TMAX
210	5110109	2	SET SCREW, 1/4-20 X 3/8, KNURLED CUP -(Torque to 87 in-lbs (9.8 Nm). Use Loctite 271 Threadlocker on threads).
220	5422390AA	1	PLATE, C-SHAPED SPACER, TMAX - BLK
230	5422388AA	1	PLATE, INNER COVER, TMAX - BLK
240	703185	3	BOLT, Round Head, Short Square Neck
250	5025392FS	3	NUT

Collection Sub Kits

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Collection Sub Kits

REF NO	PART NO	QTY	DESCRIPTION
10	84008698	1	MOUNT
20	84008726	1	KIT, Blower & Adapter
30	84008701	1	TUBE ASSEMBLY
40	84008718	1	KIT, Handle
50	84008700	1	KIT, HOPPER ASSEMBLY
60	84008716	1	KIT, Support
70	84008723	1	KIT, Collector Mount

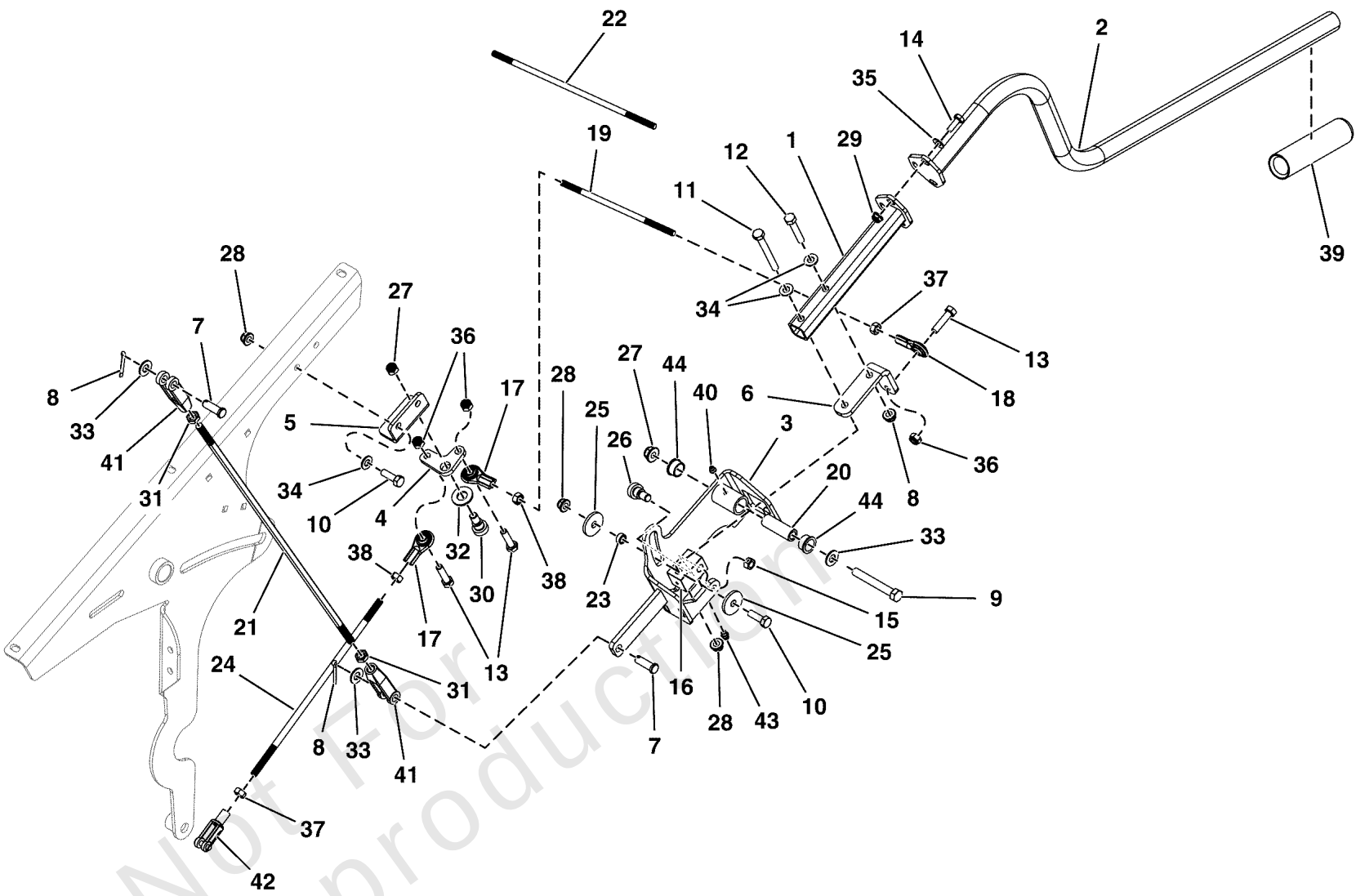
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Dump Handle Group

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5304389



Dump Handle Group

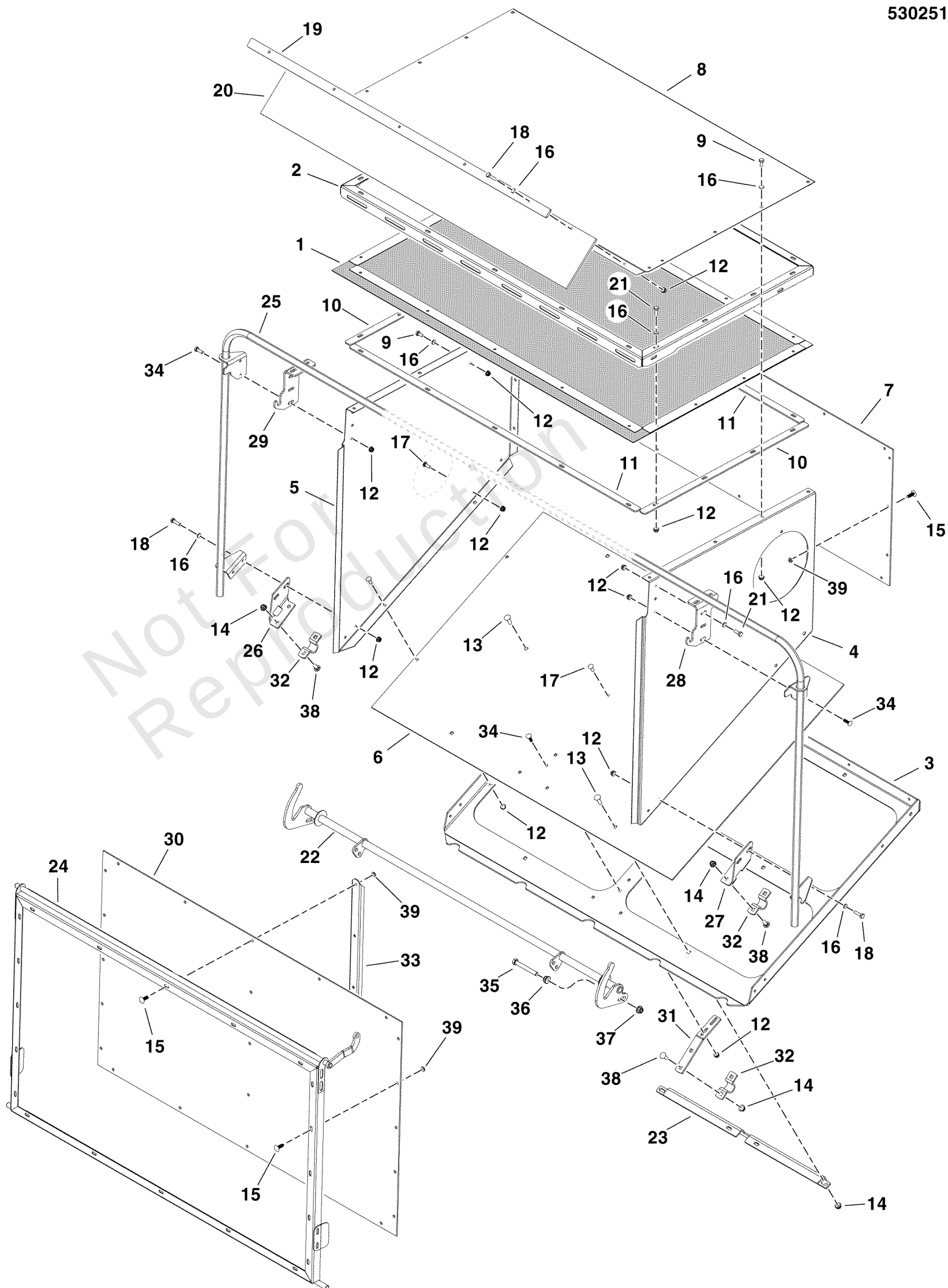
REF NO	PART NO	QTY	DESCRIPTION
1	5414426A	1	WELD, STUB SHAFT, HOPPER - BLK
2	5414424A	1	WELD, HANDLE, DUMP - BLK
3	5414387A	1	WELD, HANDLE MOUNT, HOPPER - BLK
4	5414383A	1	PLATE, PIVOT, HOPPER - BLK
5	5414382A	1	BRACE, PIVOT, HOPPER - BLK
6	5414381A	1	PLATE, HINGE, LOWER - BLK
7	5025214X9	2	PIN, CLEVIS, 3/8 X 1-1/8, PLATED
8	80002736	2	PIN, 3/32 X .750, COT, ZINC/CLEAR
9	5025013X22	1	BOLT, 3/8-16 X 2-3/4" GD5 CZ
10	5025011X8	3	BOLT, 5/16-18 X 1 GD5 CZ
11	5025011X22	1	BOLT, 5/16-18 X 2-3/4 GD5 CZ
12	5025011X14	1	BOLT, 5/16-18 X 1-3/4 GD5 CZ
13	5025011X10	3	BOLT, 5/16-18 X 1-1/4 GD5 CZ
14	5025010X6	3	BOLT, 1/4-20 X 3/4 GD5 CZ
15	80003675	1	NUT, 5/16-18, HEX, CNTR LK,ZINC PHOS/OIL
16	5104828	1	BLOCK, PIVOT, HANDLE, CZ
17	5104579	2	BALL JOINT 5/16-24 LH FEMALE STAMPED STL
18	5104578	1	BALL JOINT 5/16-24 RH FEMALE STAMPED STL
19	5103674	1	ROD, 5/16 X 7.00, LH-RH, CZ -(12 cu. Ft. Hoppers Only)
20	1657242	1	SPACER-0.390ID 0.625OD 1.85 LG HARDENED
21	5102630	1	ROD, GATE PULL, HOPPER
22	5102064	1	ROD, 5/16 X 10.25, CZ -(14 cu. Ft. Hoppers Only)
23	1666697	1	SPACER-0.328ID 0.497OD 0.218LG PM
24	5046420	1	ROD, HYDRO LINKAGE, CZ
25	5044617	2	WASHER, .34 X 1.25 X 10 GA
26	5025627	1	BOLT, 5/16-18, 3/8 X 1-1/4 SHOULDER
27	5025394	2	NUT, 3/8-16 HEX NYLOCK FLANGE
28	5025392	5	NUT, 5/16-18 HEX NYLOCK FLANGE
29	5025391	3	NUT, 1/4-20 HEX NYLOCK FLANGE
30	5025356	1	BOLT, 3/8-16 X 3/8, 1/2 SHOULDER
31	5025309	2	NUT, 3/8-24 HEX JAM
32	5025158	1	WASHER, 1/2 SAE
33	5025156	3	WASHER, 3/8 SAE
34	5025155	7	WASHER, 5/16" SAE
35	5025154	3	WASHER, 1/4 SAE
36	5025057	3	NUT, 5/16-18 HEX NYLON LOCK
37	5025033	2	NUT, 5/16-24 HEX
38	5023212	2	NUT, 5/16-24 HEX, LH
39	5104659	1	GRIP, FOAM, .940" X 4.62" X .187"
40	5021637	1	GREASE FITTING, PRESS, SHORT
41	5101800YP	2	CLEVIS, 3/8-24 RH
42	5020980FS	1	CLEVIS -(Includes clevis pin and cotter pin)
43	5020095	1	GREASE FITTING, 1/4-28 STRAIGHT
44	1676148	2	BUSHING-0.628IDX0.751ODX0.400LG PWDR MTL

Hopper Group - 14 cu. ft.

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5302514



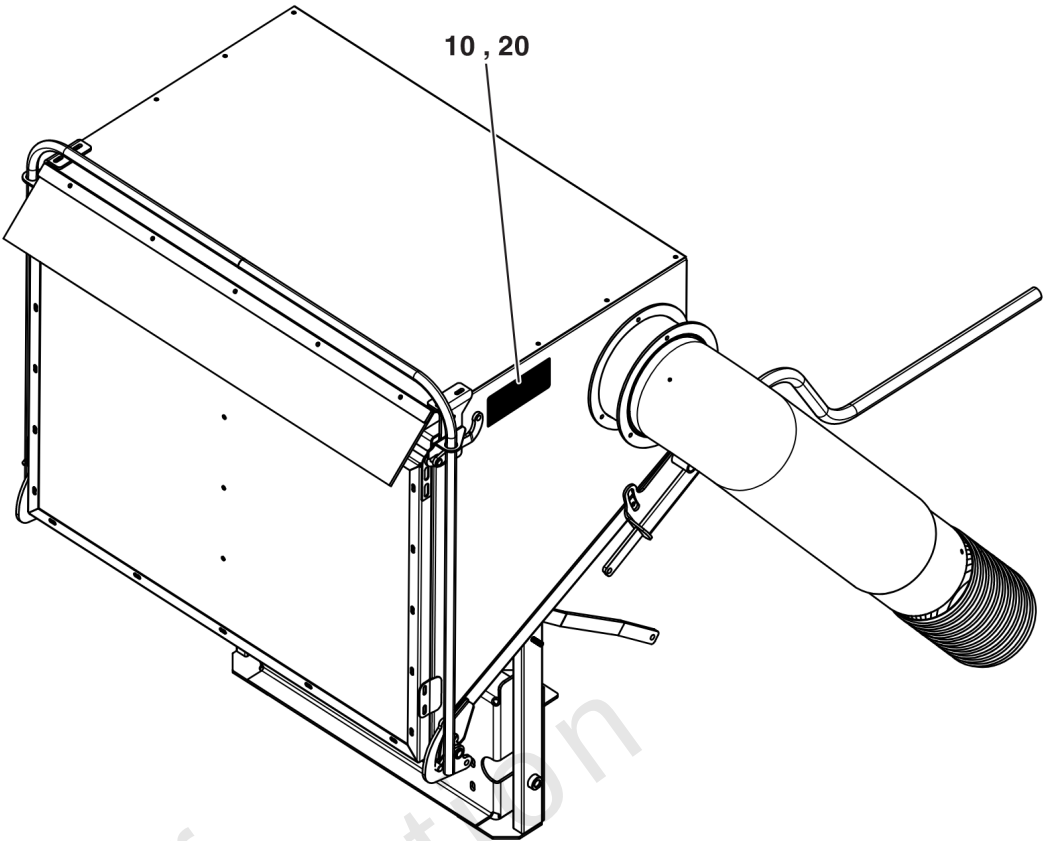
Hopper Group - 14 cu. ft.

REF NO	PART NO	QTY	DESCRIPTION
1	5102890	1	SCREEN, ASM, COLLECTOR
2	5406311A	1	WELD, SCREEN FRAME - BLK
3	5406778A	1	WELD, SUBFRAME, HOPPER - BLK
4	5406321A	1	PANEL, RIGHT, 14FT HOPPER - BLK
5	5406320A	1	PANEL, LEFT, 14FT HOPPER
6	5406322	1	PANEL, BOTTOM, 14FT HOPPER
7	5406318	1	PANEL, FRONT, 14FT HOPPER
8	5406319A	1	PANEL, TOP, 14FT HOPPER - BLK
9	-----	7	HHCS, 1/4-20 X 0.625, GR5, ZINC/CLEAR
10	5407171A	2	STRIP, SCREEN CLAMP, SHORT - BLK
11	5407172A	2	STRIP, SCREEN CLAMP, LONG - BLK
12	5025391	55	NUT, 1/4-20 Hex Nylock Flange
13	5025145X8	6	BOLT, 5/16-18 X 1, CARRIAGE, GD5, CZ
14	5025392	12	NUT, 5/16-18 HEX NYLOCK FLANGE NUT
15	5025431	39	PUSH RIVET (TREE TYPE), BLACK
16	5025154	40	WASHER, 1/4 SAE
17	80003518	7	BOLT,1/4-20X0.750,GR5,STD NECK,SQ,ZC/CL
18	5025010X8	11	BOLT, 1/4-20 X 1" GD5 CZ
19	5407607A	1	BAR, DEFLECTOR - BLK
20	5102901	1	DEFLECTOR, RUBBER, HOPPER
21	5025010X6	22	BOLT, 1/4"-20 X 3/4" GD5 YZ
22	5407209A	1	WELD, LATCH ASSY, GATE - BLK
23	5407533A	1	WELD, SUPPORT BRACKET - BLK
24	5406762A	1	WELD, ASSY, GATE FRAME - BLK
25	5406248A	1	WELD, ARCH ASSEMBLY - BLK
26	5406463A	1	BRACKET, GATE LATCH, LEFT - BLK
27	5406464A	1	BRACKET, GATE LATCH, RIGHT - BLK
28	5405711A	1	PLATE, HINGE RIGHT, HOPPER - BLK
29	5405710A	1	PLATE, HINGE LEFT, HOPPER - BLK
30	5406792	1	PANEL, HDPE, GATE, HOPPER
31	5406465A	1	BRACE, CENTER, SHAFT - BLK
32	1761690HYP	3	STRAP, ROCKER SHAFT
33	5406760A	1	BRACKET, RIB, HOPPER - BLK
34	7090496YP	8	RHSSNB, 1/4C X1 GR5 Z
35	5025013X24	2	BOLT, 3/8-16 X 3" GD5 CZ
36	5025128	2	NUT, 3/8-16 Hex Large Serrated Flange
37	5025394	2	NUT, 3/8 - 16 HEX NYLOCK FLANGE
38	5025145X6	6	BOLT, 5/16-18 X 3/4, CARRIAGE, GD5, CZ
39	5025607	39	WASHER, #12 SAE FLAT, .25X.531X.051, CZ

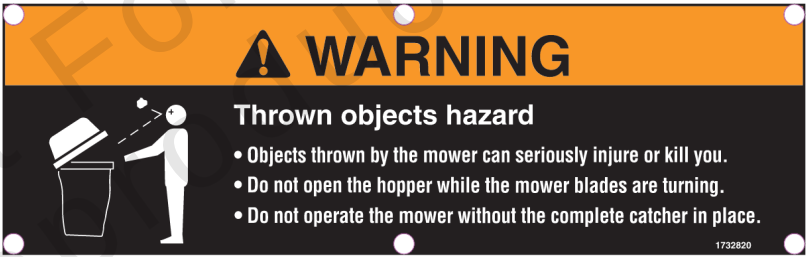
Hopper Group - Decals

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Hopper Group - Decals

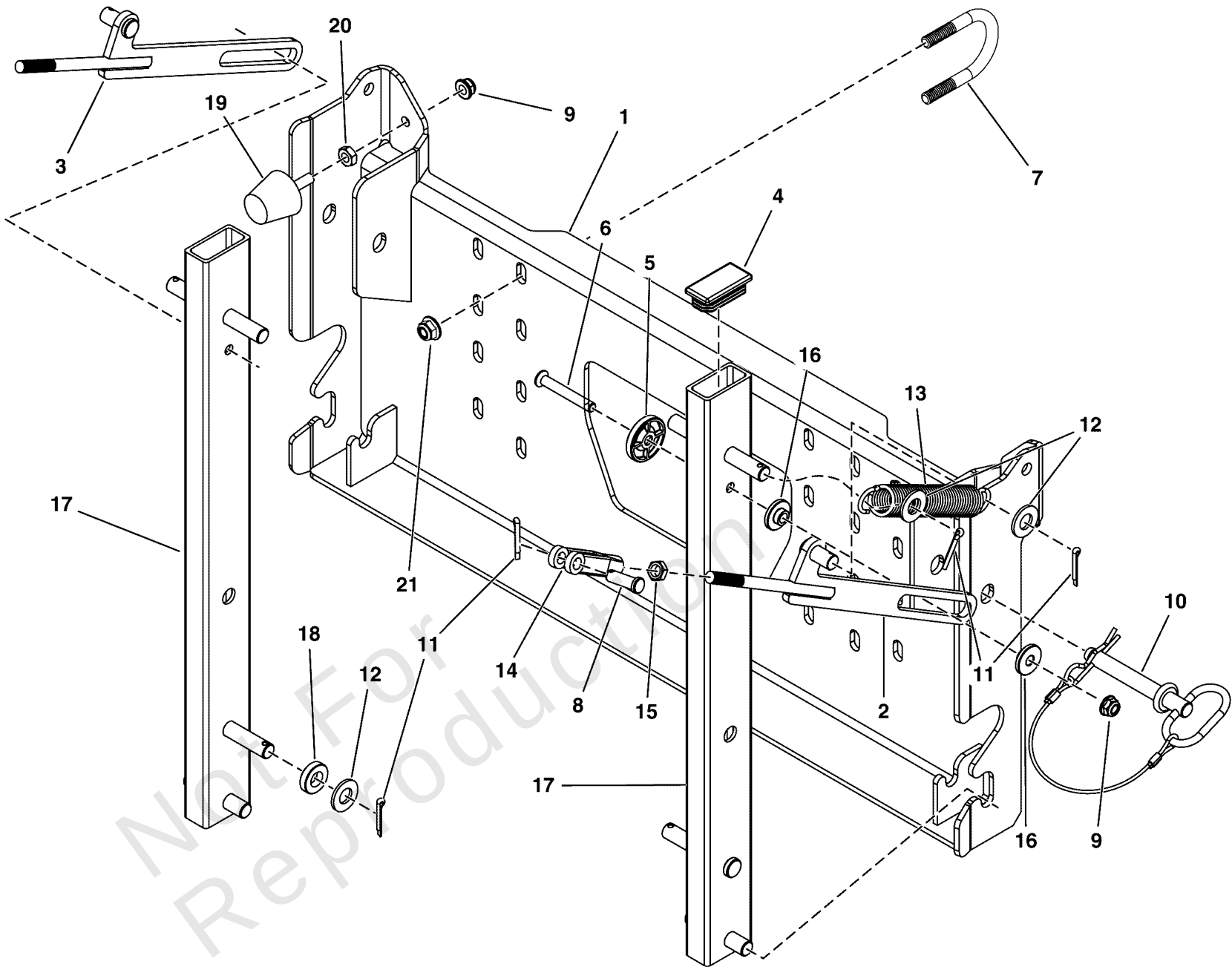
REF NO	PART NO	QTY	DESCRIPTION
10	1732820SM	1	DECAL, Safety -(S/N: 06/2014 & Below)
20	5104315FS	1	DECAL -(S/N: 07/2014 & Above)

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Hopper Mount Group

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Hopper Mount Group

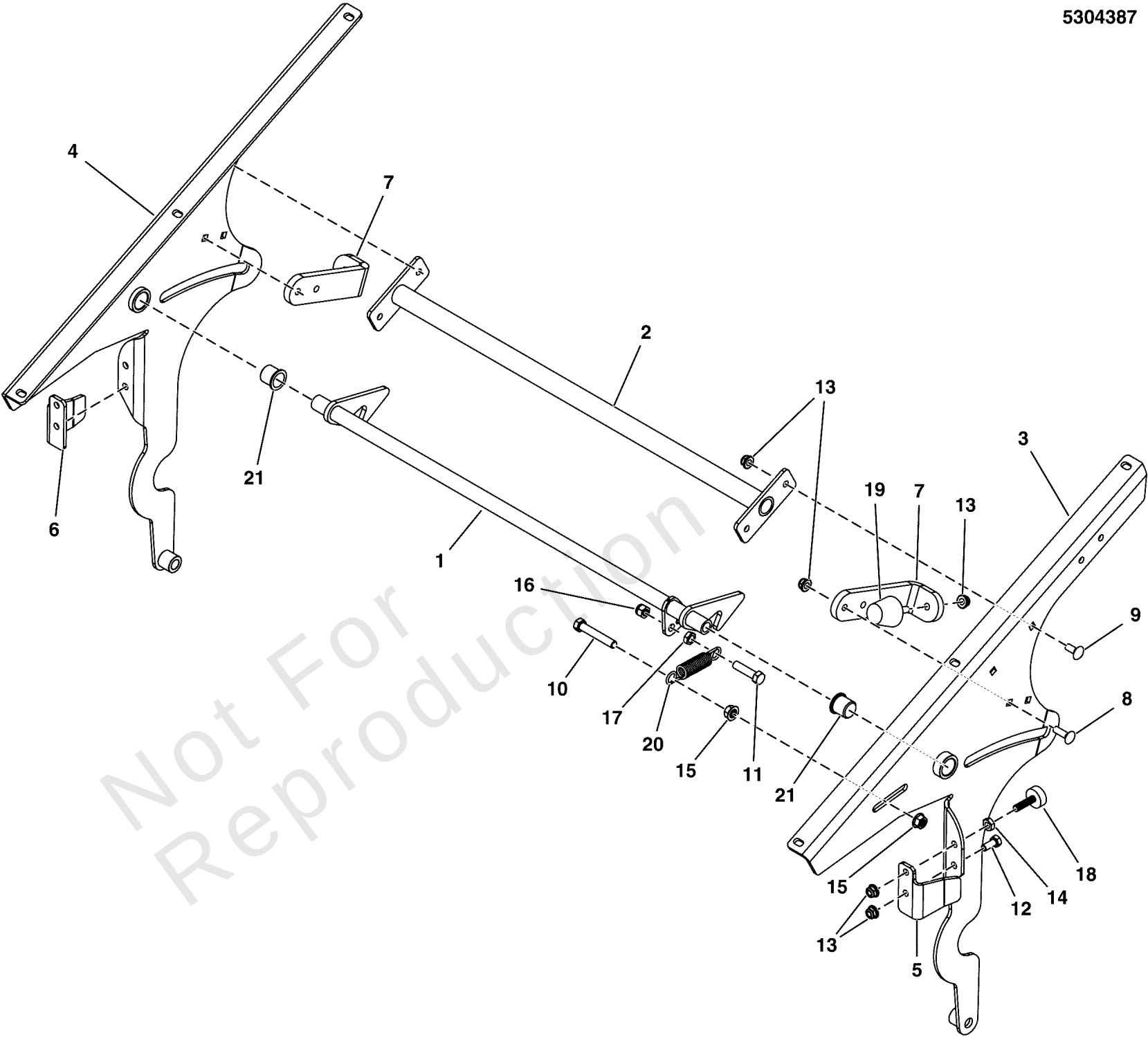
REF NO	PART NO	QTY	DESCRIPTION
1	5420002AA	1	WELD, HOPPER MOUNT, 2200/3300 - BLK
2	5414565A	1	WELD, RIGHT LATCH PULL, ZTR - BLK
3	5414566A	1	WELD, LEFT LATCH PULL, ZTR - BLK
4	5102392	2	PLUG, 1 X 2, 10-14 GA. TUBING
5	5102701	2	SPACER, .34 X 1.54 X .25 - UHMW
6	5025303X18	2	SCREW, 5/16-18X2.25, FLAT HEAD SOC, CZ
7	5100009	4	U-BOLT, 3/8" X 1-1/4"
8	5025214X9	2	PIN, CLEVIS, 3/8 X 1-1/8, PLATED
9	5025392	4	NUT, 5/16-18 HEX NYLOCK FLANGE NUT
10	5100013	2	PIN, HITCH, .50 X 3.25 W/ LAY (SV)
11	80002736	8	PIN, 3/32 X 0.750, COT, ZINC/CLEAR
12	5025158	8	WASHER, 1/2 SAE
13	1715435	2	SPRING, EXTENSION, 1.00
14	5101800YP	2	CLEVIS, 3/8-24 RH
15	5025309	2	NUT, 3/8-24 Hex Jam
16	1723244	4	SPACER, HYDRAULIC LIFT PIVOT
17	5414454A	2	WELD, SUPPORT TUBE, HOPPER - BLK
18	5101376	2	SPACER, .52 X 1.00 X .25, CZ
19	5022612	2	BUMPER, RUBBER 5/16-18
20	5025388	2	NUT, 5/16-18 HEX JAM
21	5025394	8	NUT, 3/8 - 16 HEX NYLOCK FLANGE

Hopper Support Group

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5304387



Hopper Support Group

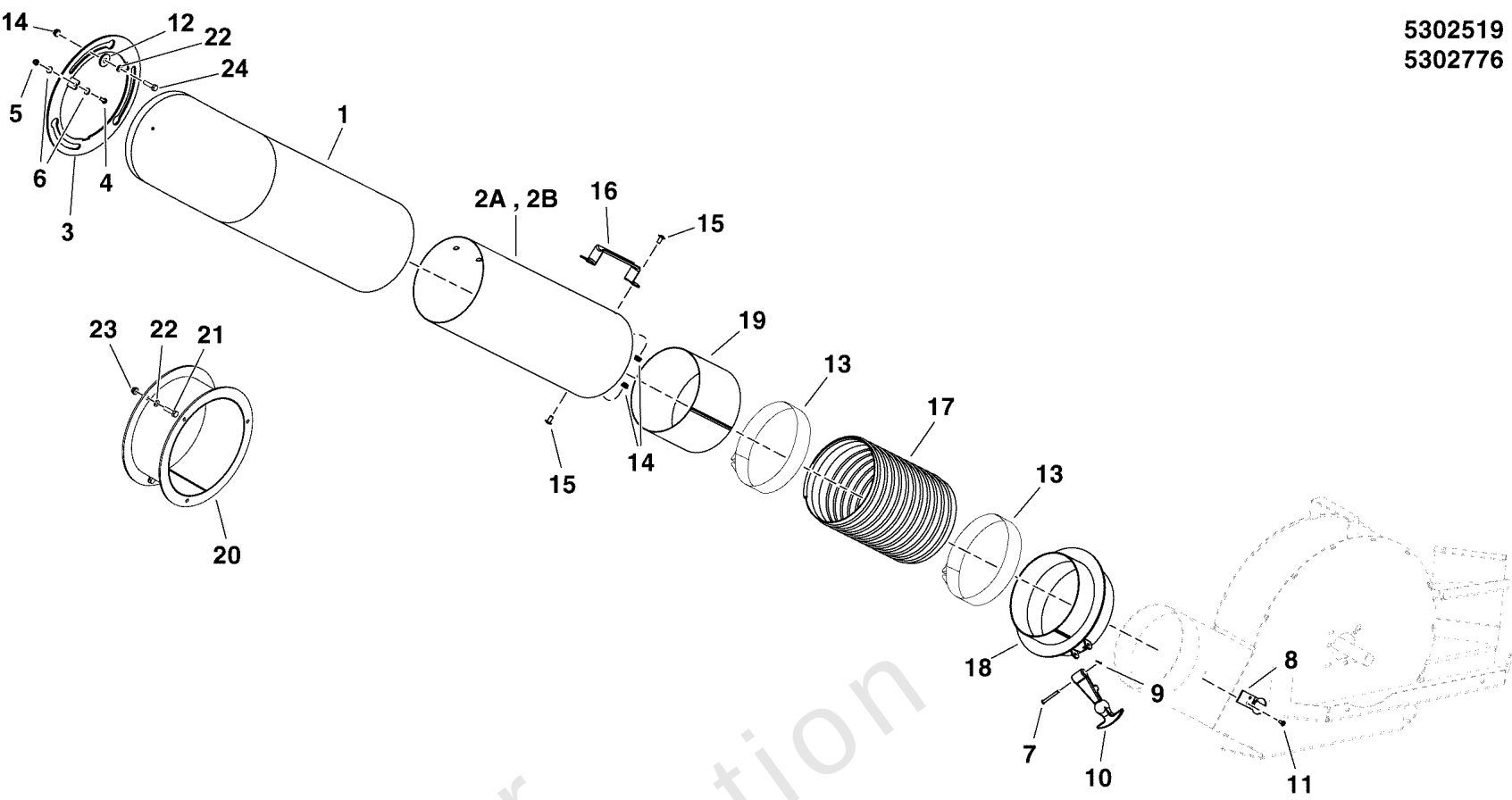
REF NO	PART NO	QTY	DESCRIPTION
1	5414572A	1	WELD, LATCH ASSY, CENTER - BLK
2	5414570A	1	WELD, CROSS MEMBER - BLK
3	5414448A	1	WELD, RIGHT SUPPORT, HOPPER - BLK
4	5414447A	1	WELD, LEFT SUPPORT, HOPPER - BLK
5	5414357A	1	BRACKET, RIGHT KEEPER - BLK
6	5414356A	1	BRACKET, LEFT KEEPER - BLK
7	5407170A	2	BAR, STOP, HOPPER - BLK
8	5025145X8	4	BOLT, 5/16-18 X 1, CARRIAGE
9	5025145X6	4	BOLT, 5/16-18 X 3/4, CARRIAGE
10	5025013X18	1	BOLT, 3/8-16 X 2-1/4" GD5 CZ
11	5025013X12	1	BOLT, 3/8-16 X 1-1/2" GD5 CZ
12	5025011X6	2	BOLT, 5/16-18 X 3/4 GD5
13	5025392	14	NUT, 5/16-18 HEX NYLOCK FLANGE
14	5025388	2	NUT, 5/16-18 HEX JAM
15	5025128	2	NUT, 3/8-16 HEX SERRATED FLANGE
16	5025096	1	NUT, 3/8-16 HEX NYLON LOCK
17	5025084	1	NUT, 3/8-16 HEX JAM
18	5022807	2	BUMPER, RUBBER, 5/16-18
19	5022612	2	BUMPER, RUBBER 5/16-18
20	5021242	1	SPRING, EXTENSION
21	2176440	2	BUSHING-0.765ID 0.885OD 0.877LG NYLON

Tube Assembly

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5302776



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Tube Assembly

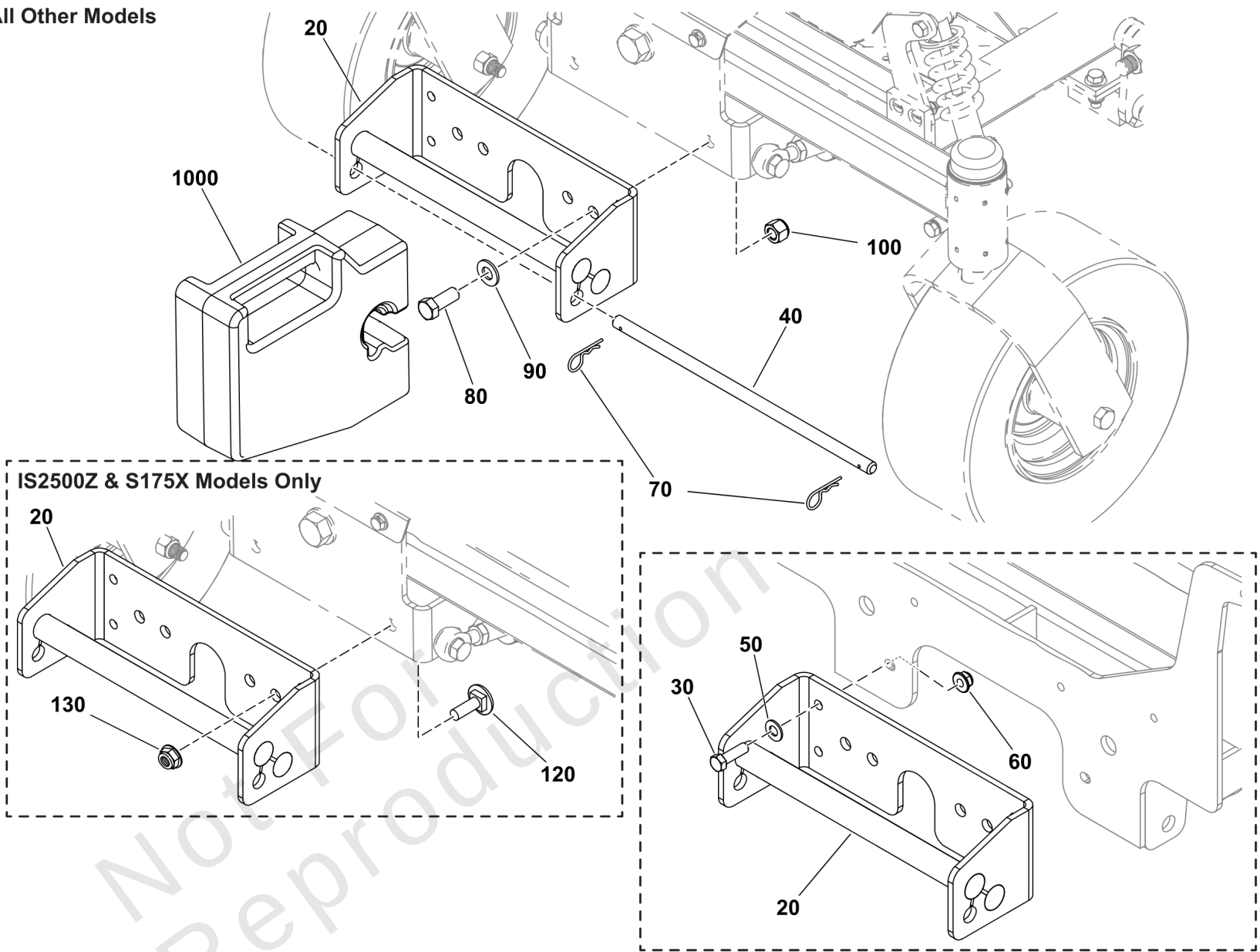
REF NO	PART NO	QTY	DESCRIPTION
1	5407079	1	ELBOW, ABS PLASTIC, HOPPER
2A	5102388	1	TUBE, IS3100Z, FAST-VAC -(ZTR Models)
2B	5102387	1	TUBE, S800X, FAST-VAC -(Outfront Models)
3	5406308A	1	WELD, FLANGE ASSY - BLK
4	5025179X6	3	SCREW, #10-24 X 3/4 ROUND PHILLIPS
5	5025271	3	NUT, #10-24 HEX NYLON LOCK
6	1910531SM	6	WASHER, Rivet, 3/16
7	5020841X4	2	PIN, CLEVIS
8	5020841X2	2	LATCH, RUBBER, KEEPER
9	5020841X5	2	PIN, COTTER
10	5020841X1	2	LATCH, RUBBER
11	1675044	4	RIVET-POP.188 .429L AL,AL STEM.37HD DIA
12	5109477	3	SPACER, STEP, HOPPER
13	5022875	2	CLAMP, HOSE, UPPER
14	5025391	6	NUT, 1/4-20 HEX NYLOCK FLANGE
15	5025299X4	3	SCREW, 1/4-20 X 1/2 ALLEN BH
16	720533CK	1	HANDLE CONNECT TUBE, BLACK TEXTURED
17	5102391	1	HOSE, FLEXIBLE, FAST-VAC
18	5407219A	1	WELD, HOSE ATTACHMENT - BLK
19	5406305A	1	WELD, THIMBLE, BAGGER - BLK
20	5412387A	1	WELD, ELBOW EXTENSION, HOPPERS - BLK
21	5025010X8	3	BOLT, 1/4-20 X 1" GD5 CZ
22	5025154	6	WASHER, 1/4 SAE
23	5025391	3	NUT, 1/4-20 HEX NYLOCK FLANGE
24	5025010X6	3	BOLT, 1/4"-20 X 3/4" GD5 YZ

Weight Mount and Weight Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5601419

All Other Models



Weight Mount and Weight Group

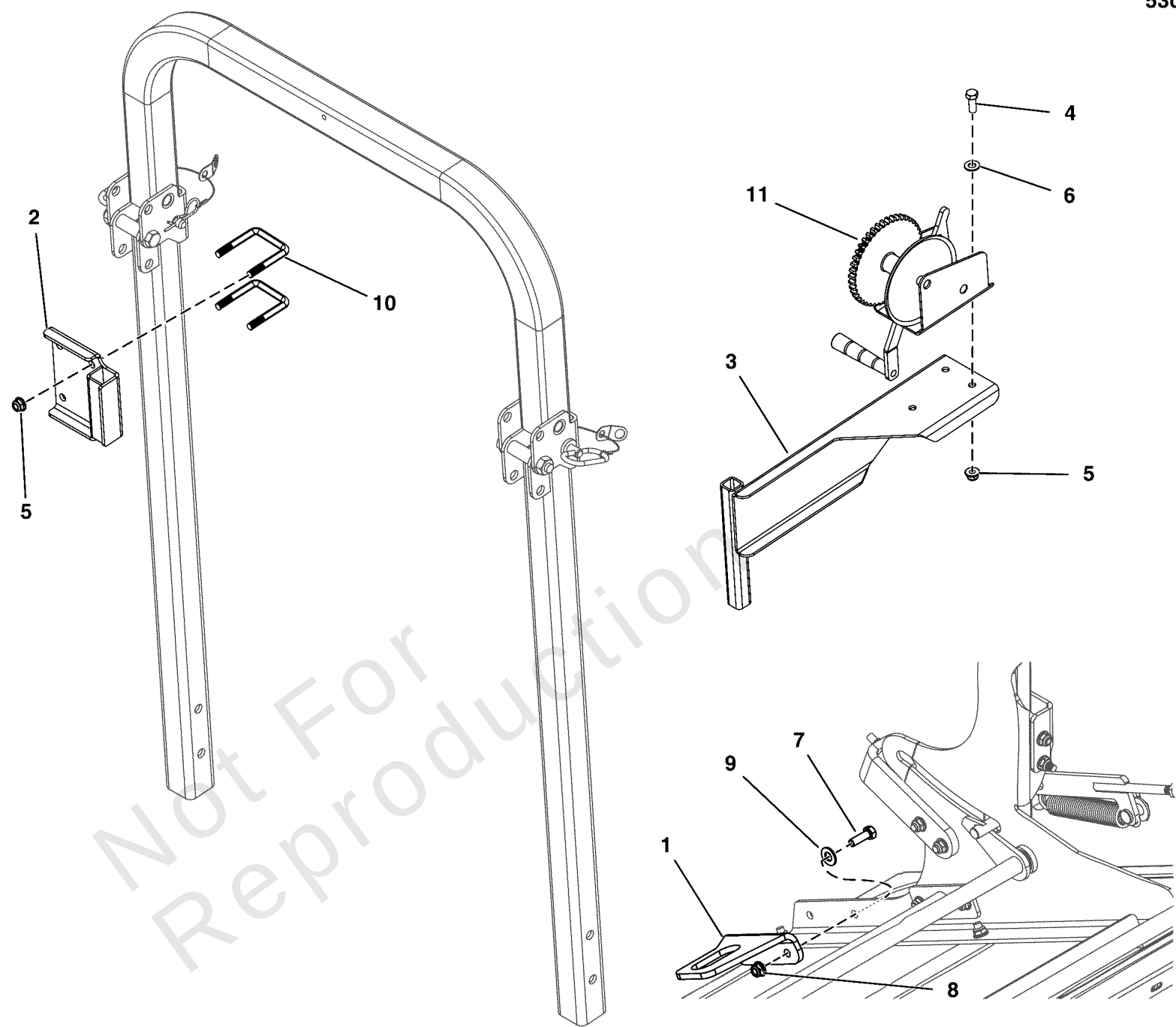
REF NO	PART NO	QTY	DESCRIPTION
20	5049082ASM	1	HOLDER ASSEMBLY, Weight
30	5025013X10SM	2	BOLT, 3/8-16 X 1-1/4"
40	5049143SM	1	ROD-.500DIA 13.75LG Y
50	5025156FS	2	WASHER
60	5025394SM	2	NUT, 3/8-16 HEX NYLOCK
70	5025210YP	2	PIN, HAIR, .0915 X 1-7/8
80	5025018X10SM	2	BOLT, 1/2-20 X 1-1/4" GD8 CZ
90	5025158SM	2	WASHER, 1/2" SAE
100	5025098SM	2	NUT, 1/2-20 HEX NYLON
120	5025324X10YP	2	BOLT
130	770225	2	NUT
1000	1692939SM	2	WEIGHT, QUICK ATTACH

Winch and Mount Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5601419

5304535



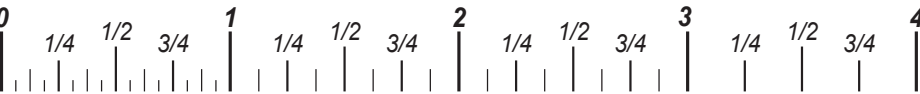
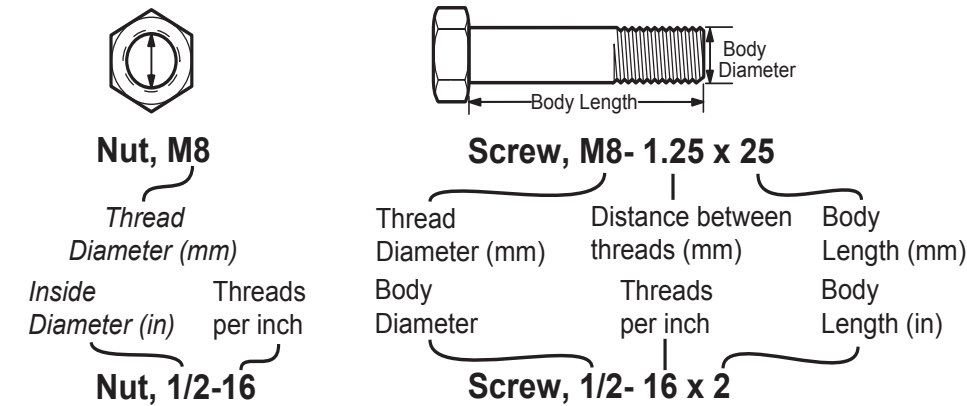
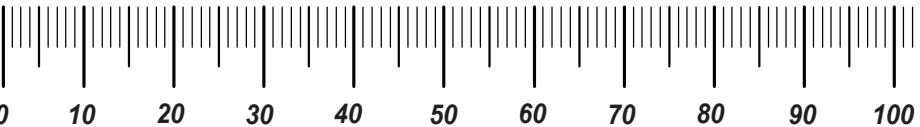
Winch and Mount Group

REF NO	PART NO	QTY	DESCRIPTION
1	5414664A	1	BRACKET, ANCHOR, WINCH - BLK
2	5414800A	1	WELD, QUICK MOUNT, WINCH - BLK
3	5414894A	1	WELD, ASSY, WINCH BASE - BLK
4	5025013X8	3	BOLT, 3/8-16 X 1" GD5 CZ
5	5025394	7	NUT, 3/8-16 HEX NYLOCK FLANGE
6	5025156	3	WASHER, 3/8 SAE
7	5025011X8	2	BOLT, 5/16-18 X 1 GD5 CZ
8	5025392	2	NUT, 5/16-18 HEX NYLOCK FLANGE
9	5025155	2	WASHER, 5/16" SAE
10	5025630	2	U-BOLT, SQR, 3/8 X 2 X 2-5/8, CZ
11	5600908	1	KIT, HOPPER WINCH, ZTR

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).

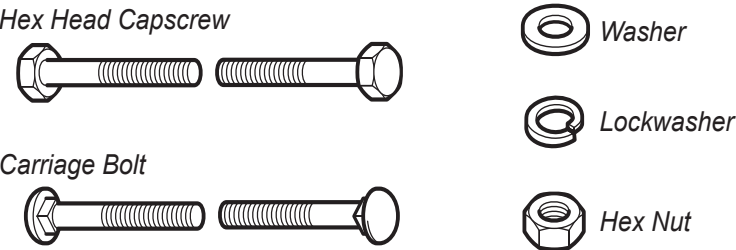
When bolt or capscrew is identified as 1/2 - 16 x 2" (M8 - 1.25 x 50), this means the *Nominal size*, or body diameter is 1/2 inch (8mm metric thread diameter), the second number, 16, represents the *threads per inch*, (*distance between threads*). The final number is the body length of the bolt or screw,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

