

Parts Manual

Mfg. No: 5600866

61" iCD TURBO-Pro Max; Electric Dump
from Seat Grass Collection System
(3200/320)

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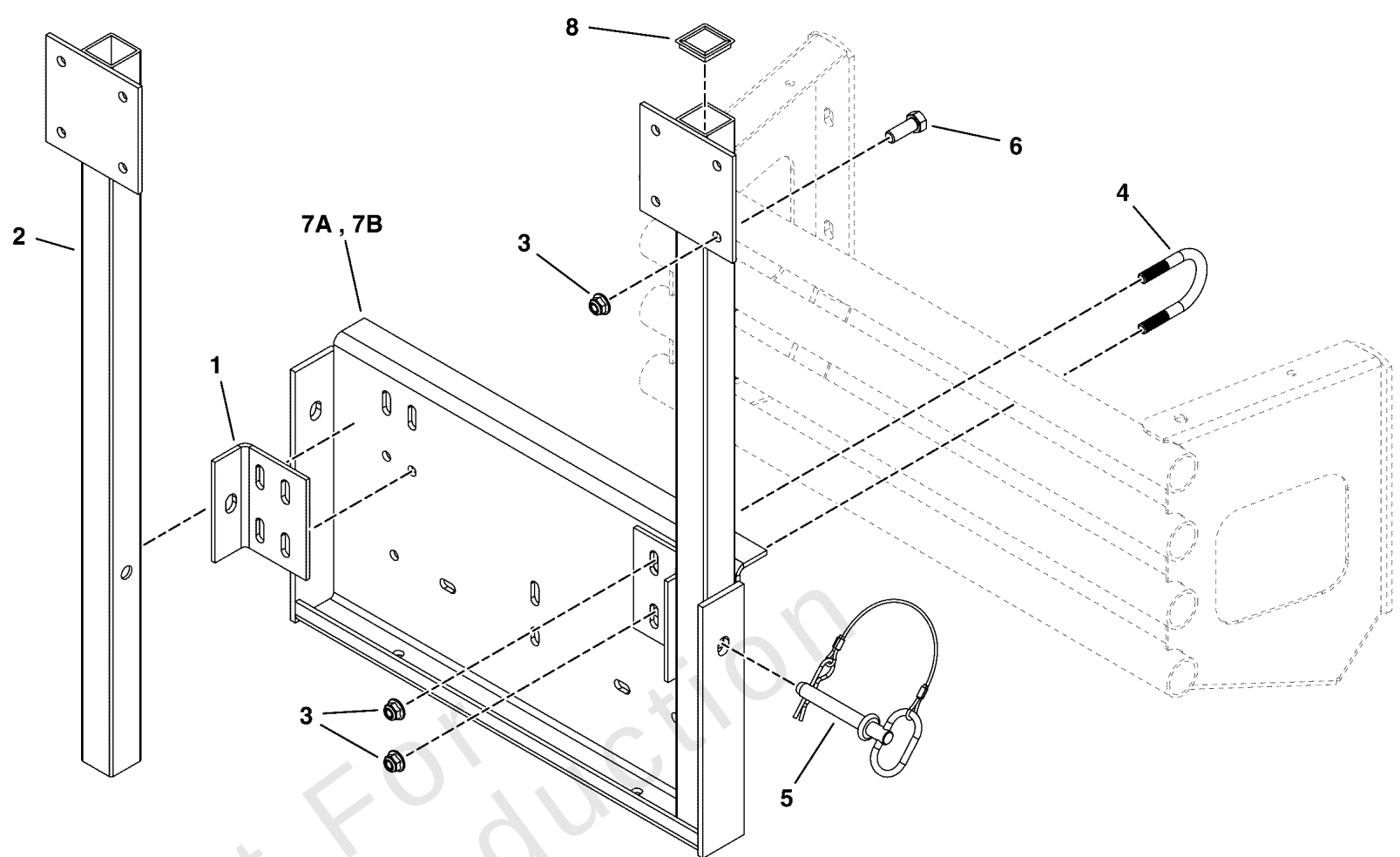
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2-Bag & 3-Bag Mount Group

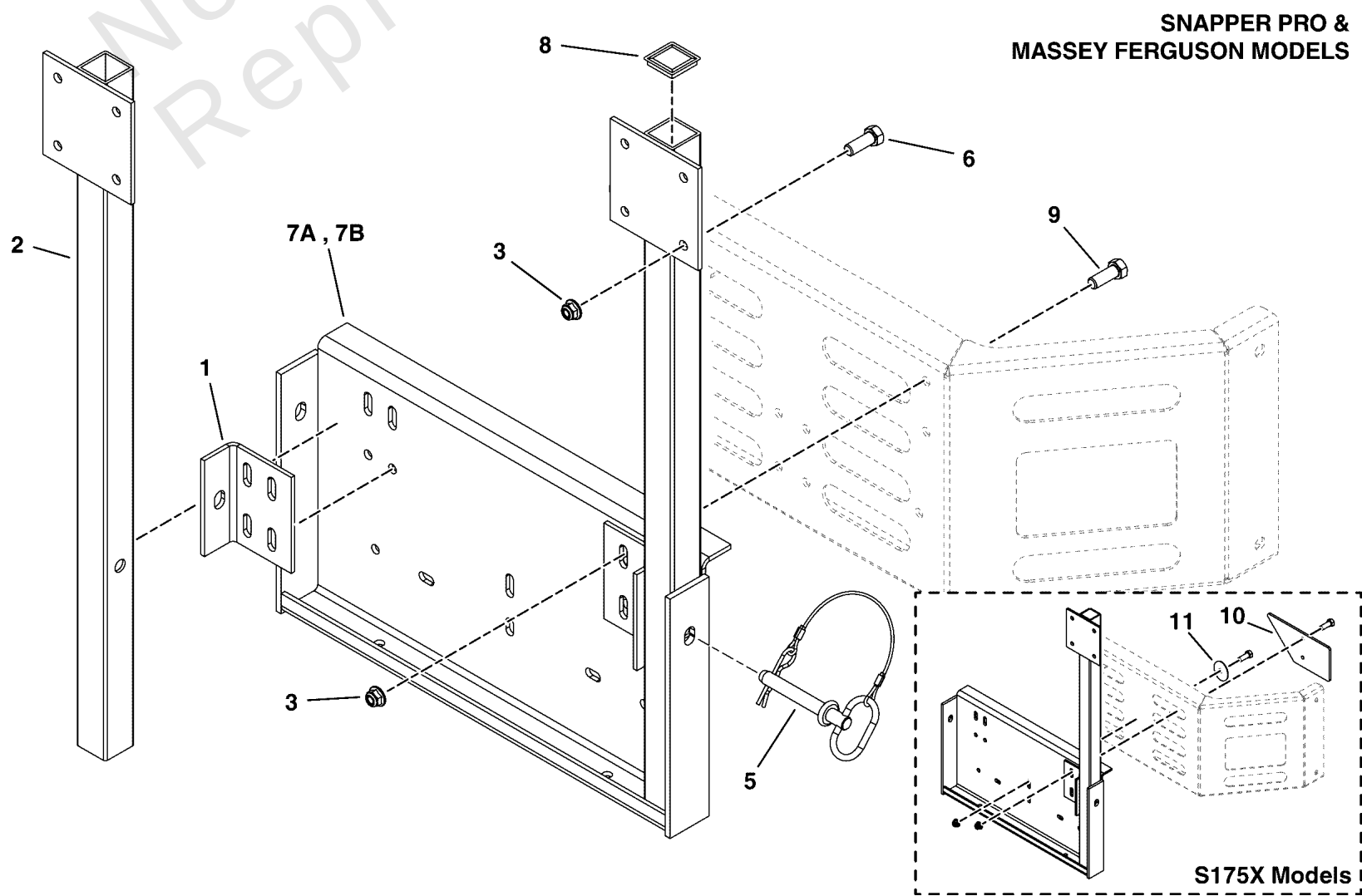
Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5600866

5300019



FERRIS MODELS



SNAPPER PRO &
MASSEY FERGUSON MODELS

S175X Models

2-Bag & 3-Bag Mount Group

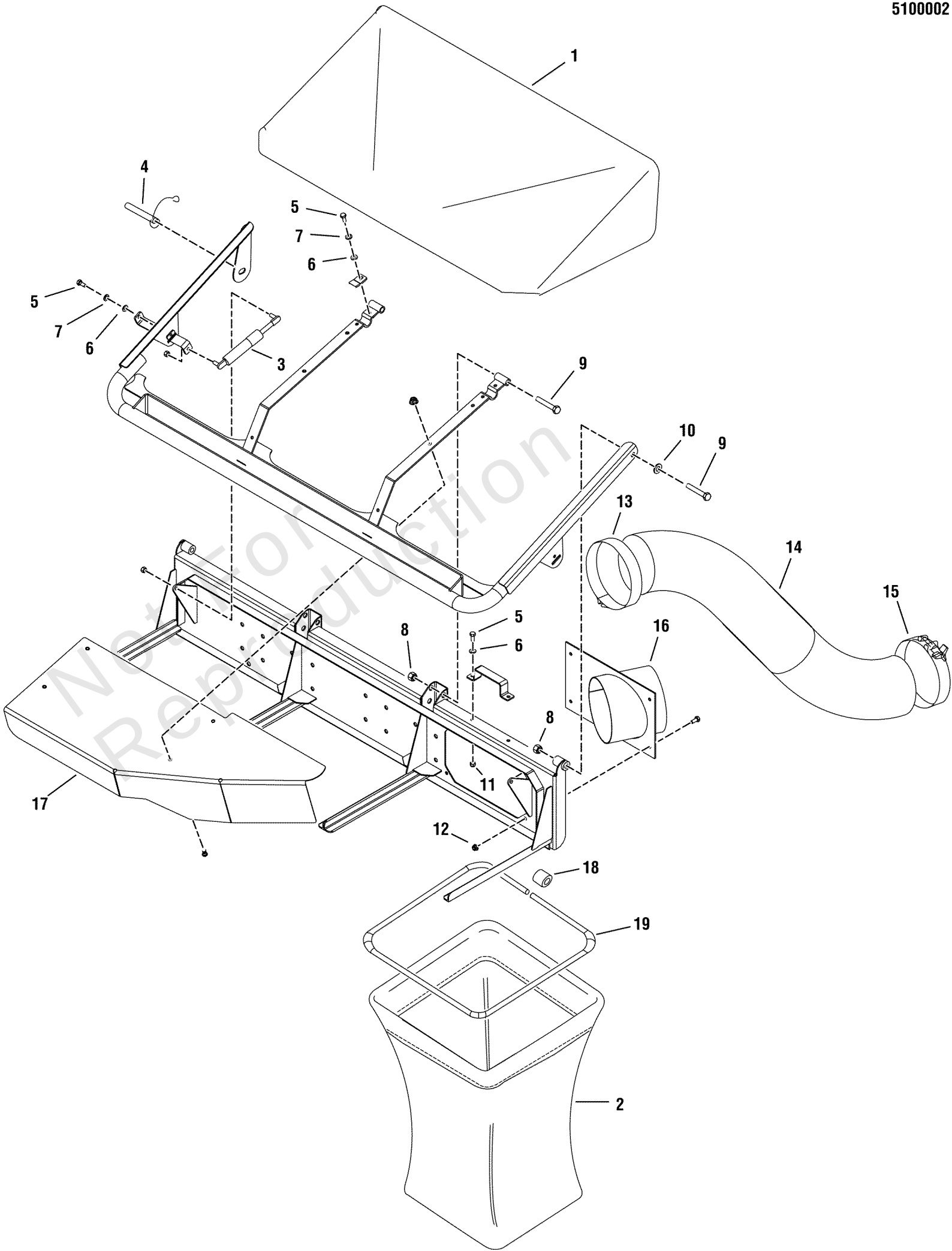
REF NO	PART NO	QTY	DESCRIPTION
1	5402665A	2	BRACKET, BAGGER MOUNT - BLK
2	5400043A	2	WELD, MOUNT, POST - BLK
3	5025394	14	NUT, 3/8 - 16 HEX NYLOCK FLANGE
4	5100009	3	U-BOLT, 3/8" X 1-1/4"
5	5100013	2	PIN, HITCH, .50 X 3.25 W/ LAY (SV)
6	5025013X8	8	BOLT, 3/8-16 X 1" GD5 CZ
7A	5408631A	1	WELD, BAGGER MOUNT, 2 BAG - BLK -(2-Bag Systems)
7B	5400149AYP	1	WELD, BAGGER MNT,1500 -(3-Bag Systems)
8	5022848	2	CAP, PLASTIC, 1-1/2" X 1-1/2"
9	5025013X10	6	BOLT, 3/8-16 X 1-1/4" GD5 CZ
10	5407783A	2	PLATE, SUPPORT, BAGGER MOUNT - BLK
11	5025326	1	WASHER, .39 X 2.00 X X .14

3-Bag Catcher & Cover Group

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5600866

5100002



3-Bag Catcher & Cover Group

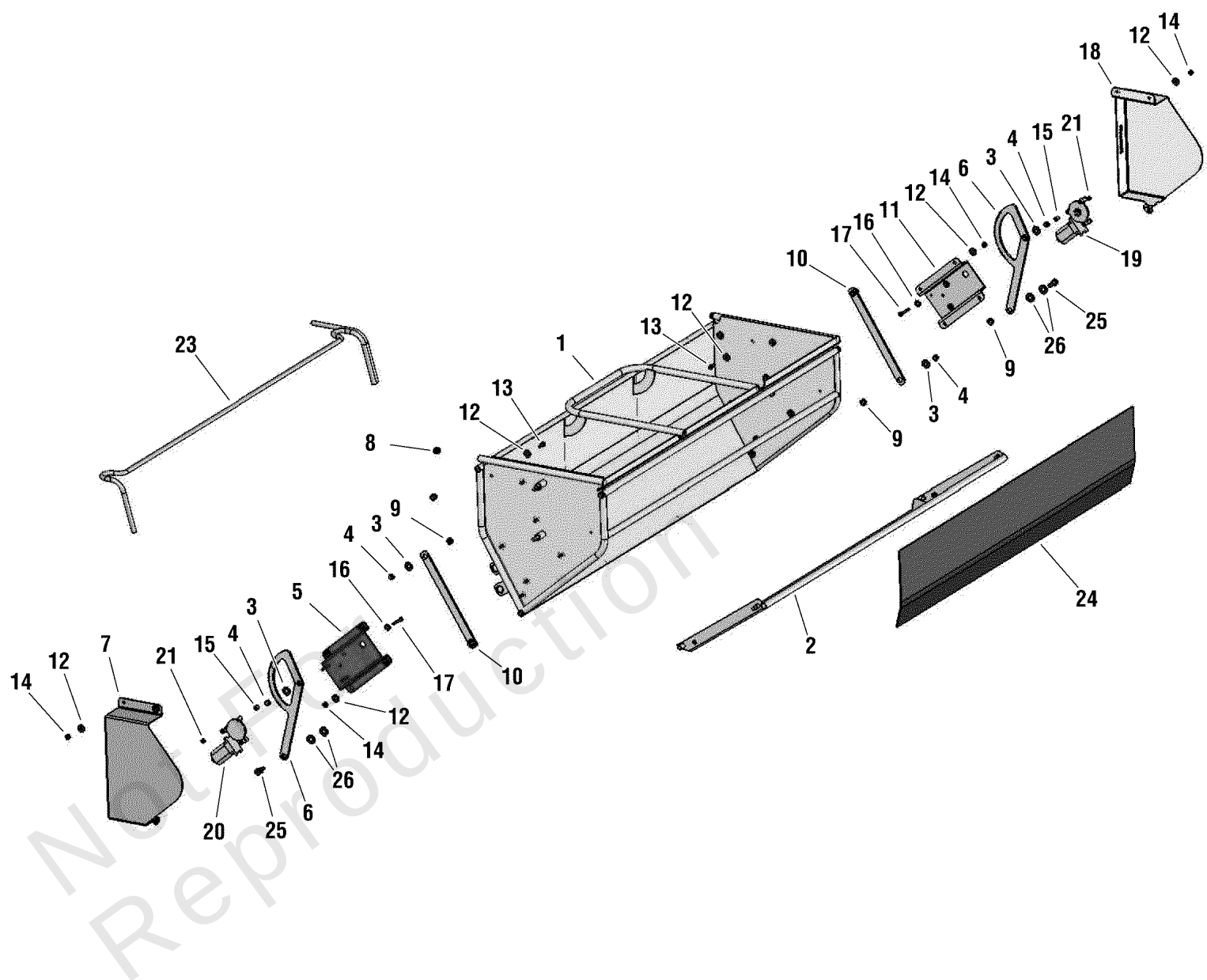
REF NO	PART NO	QTY	DESCRIPTION
1	5100154	1	3 BAG AIR DOME
2	5100150	3	CATCHER BAG W/ HANDLE
3	5100152	2	GAS CYLINDER
4	5100151	1	DETENT PIN W/ LANYARD
5	5025011X6	14	BOLT, 5/16-18 X 3/4 GD5
6	5025155	10	WASHER, 5/16" SAE
7	5025170	6	WASHER, 5/16 LOCK CZ
8	5025056	4	NUT, 1/2-13 HEX NYLON LOCK
9	5025018X24	4	BOLT, 1/2-20 X 3" GD5
10	5025158	2	WASHER, 1/2 SAE
11	5025057	4	NUT, 5/16-18 HEX NYLON LOCK
12	5025392	4	NUT, 5/16-18 HEX NYLOCK FLANGE
13	5022875	1	CLAMP, HOSE, UPPER
14	5103646	1	HOSE, FLEXIBLE, 7" DIA. X 58"
15	5022876	1	CLAMP, HOSE, LOWER
16	5400145A	1	WELD, INLET BLOWER 3-BAG BLACK
17	5400197A	1	BAFFLE
18	5100730	1	BAG FRAME CONNECTOR, PLASTIC
19	5100729	1	BAG FRAME

3-Bag Electric Dump From Seat

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5600866

5100856



3-Bag Electric Dump From Seat

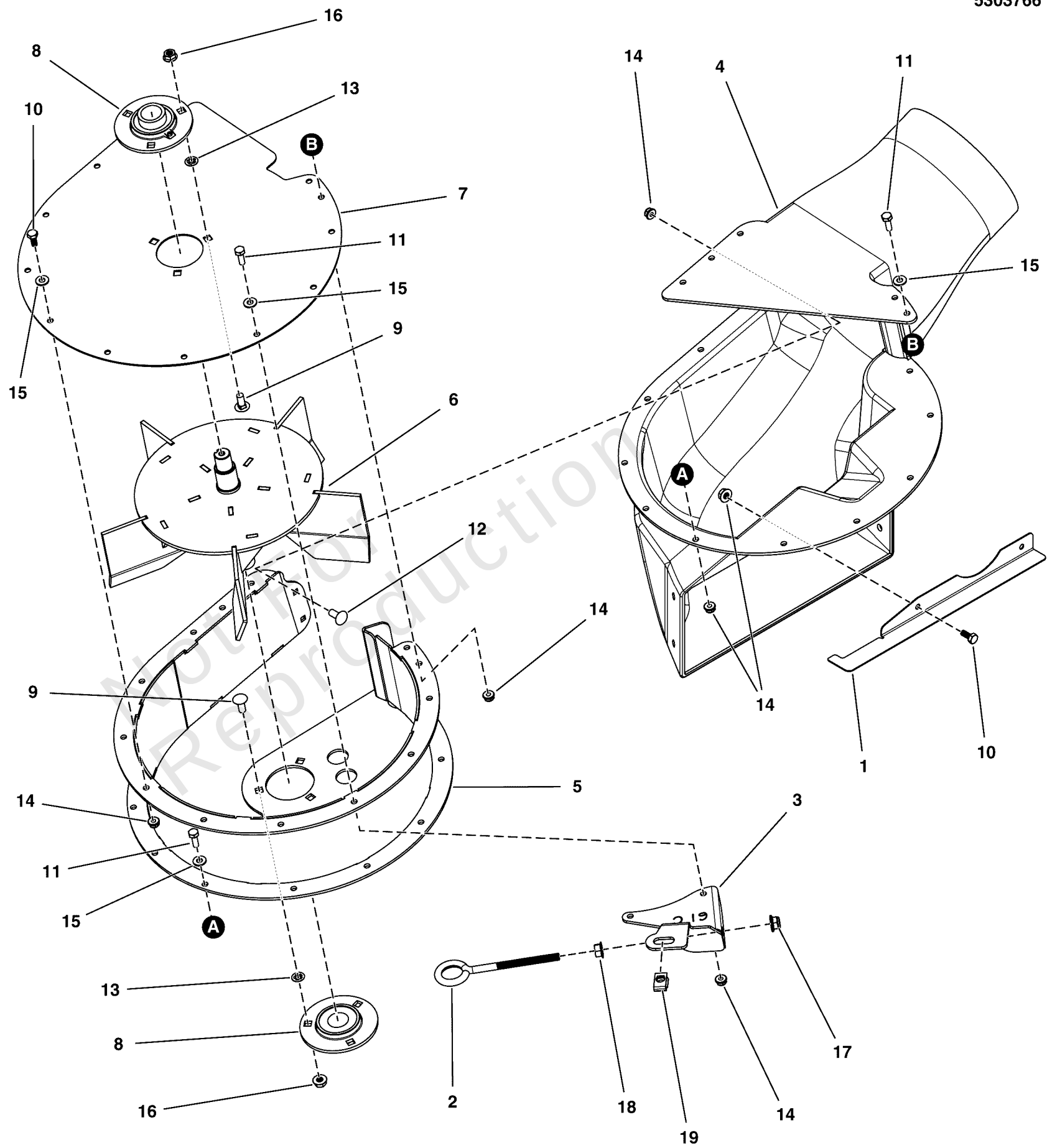
REF NO	PART NO	QTY	DESCRIPTION
1	-----	1	DUMP FRAME (HUMBOLDT)
2	-----	1	GATE ASSEMBLY (HUMBOLDT)
3	5025156	6	WASHER, 3/8 SAE
4	5025096	6	NUT, 3/8-16 HEX NYLON LOCK
5	5100857X44	1	MOTOR ADAPTER PLATE, FRA150573
6	5100857X45	2	DFS ELEC DRIVE RING-GREAR, FRA150568
7	5100857X46	1	DFS MOTOR GUARD, LEFT, FRA150571
8	-----	8	3/4" HOLE PLUG, PLASTIC (HUMBOLDT)
9	5100857X41	8	FLANGE BUSHING, FAS150945
10	5100857X47	2	MASTER LINK, FRA150569
11	5100857X48	1	MOTOR ADAPTER PLATE, FRA150574
12	5025292	28	WASHER, 5/16 GD.9 FLAT
13	5100857X49	14	CAP SCREW 5/16-18 X .75, FRA150799
14	5025057	14	NUT, 5/16-18 HEX NYLON LOCK
15	5100857X50	6	MOTOR OFFSET BOSS, FRA150575
16	5025288	6	WASHER, 1/4 FENDER
17	5100857X51	6	CAP SCREW 1/4-20 X 1 3/4, FRA150939
18	5100857X52	1	DFS MOTOR GUARD, RIGHT, FRA150572
19	5100857X53	1	ELECTRIC MOTOR, RIGHT HAND, FRA150549
20	5100857X54	1	ELECTRIC MOTOR, LEFT HAND, FRA150548
21	5025095	6	NUT, 1/4-20 HEX NYLON LOCK
22	5100857X55	1	DFS IMPLEMENT WIRING HARNESS, FRA150721
23	5100857X56	1	DFS 3-BAG WIRING HARNESS, FRA150723
24	5100857X57	1	3 BAG DFS FABRIC, 305 012 011
25	5100857X43	2	SHOULDER BOLT, FAS150947
26	5025158	4	WASHER, 1/2 SAE
27	5100856X1	1	SWITCH, TOGGLE, DFS, 24542 -(NOT SHOWN)

Blower Group, TURBO-Pro MAX S/N: 11/03/2021 and Earlier

Note: Unless noted otherwise, use the standard torque specifications

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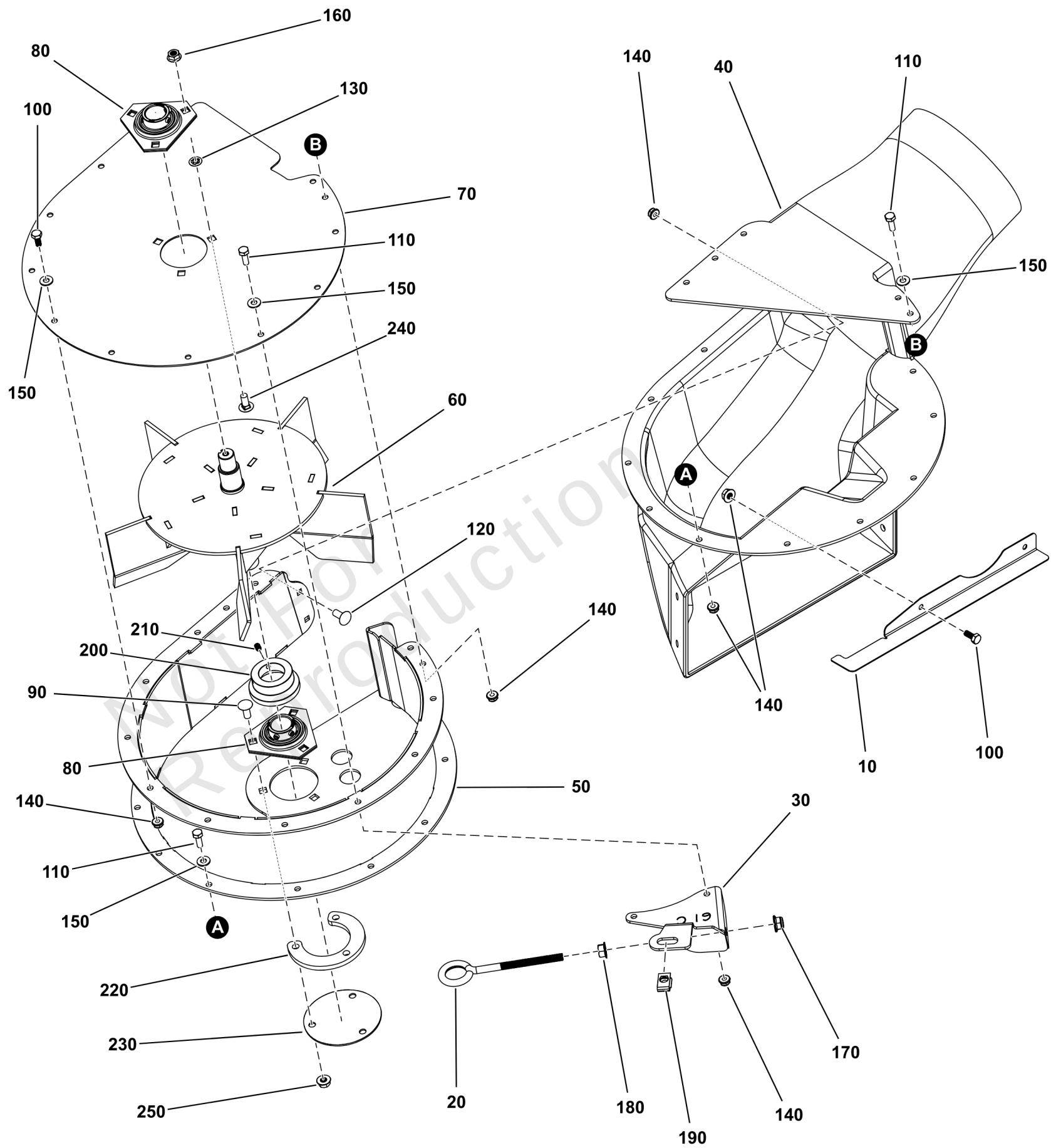
Blower Group, TURBO-Pro MAX S/N: 11/03/2021 and Earlier

REF NO	PART NO	QTY	DESCRIPTION
1	5412471AA	1	BRACKET, ADAPTER SEAL, COM BLOWER - BLK
2	5021812	1	EYE BOLT, 3/8-16 X 6, 3THRD, 1EYE, CZ
3	5411115AA	1	WELD, SPRING ANCHOR, COM - BLK
4	5103816	1	MOLDED HOUSING, COMMERCIAL TURBO VAC
5	5411079AA	1	WELD, FAN CAGE, BLOWER - BLK
6	5601360	1	KIT, T-MAX FAN UPDATE
7	5411077AA	1	PLATE, FAN, TOP - BLK
8	7100021SM	2	BEARING, FLANGE, 1" Bore
9	5025145X6	6	BOLT, 5/16-18 X 3/4, CARRIAGE
10	-----	8	HHCS, 1/4-20 X 0.625, GR5, ZINC/CLEAR
11	5025010X6	18	BOLT, 1/4-20 X 3/4 GD5 CZ
12	80003518	2	BOLT, 1/4-20X0.750, GR5, STD NECK, SQ, ZC/CL
13	5025498	6	5/16 PUSH-ON NUT RETAINER, STL, CZ
14	5025391	28	NUT, 1/4-20 HEX NYLOCK FLANGE
15	5025154	26	WASHER, 1/4 SAE
16	5025127	6	NUT, 5/16-18 HEX SERRATED FLANGE (SMALL)
17	5025394	1	NUT, 3/8-16 HEX NYLOCK FLANGE
18	5025128	1	NUT, 3/8-16 HEX SERRATED FLANGE
19	5022308	1	BODY CLIP, 5/16-18-7GA MATERIAL

Blower Group, TURBO-Pro MAX S/N: 11/04/2021 and Later

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Blower Group, TURBO-Pro MAX S/N: 11/04/2021 and Later

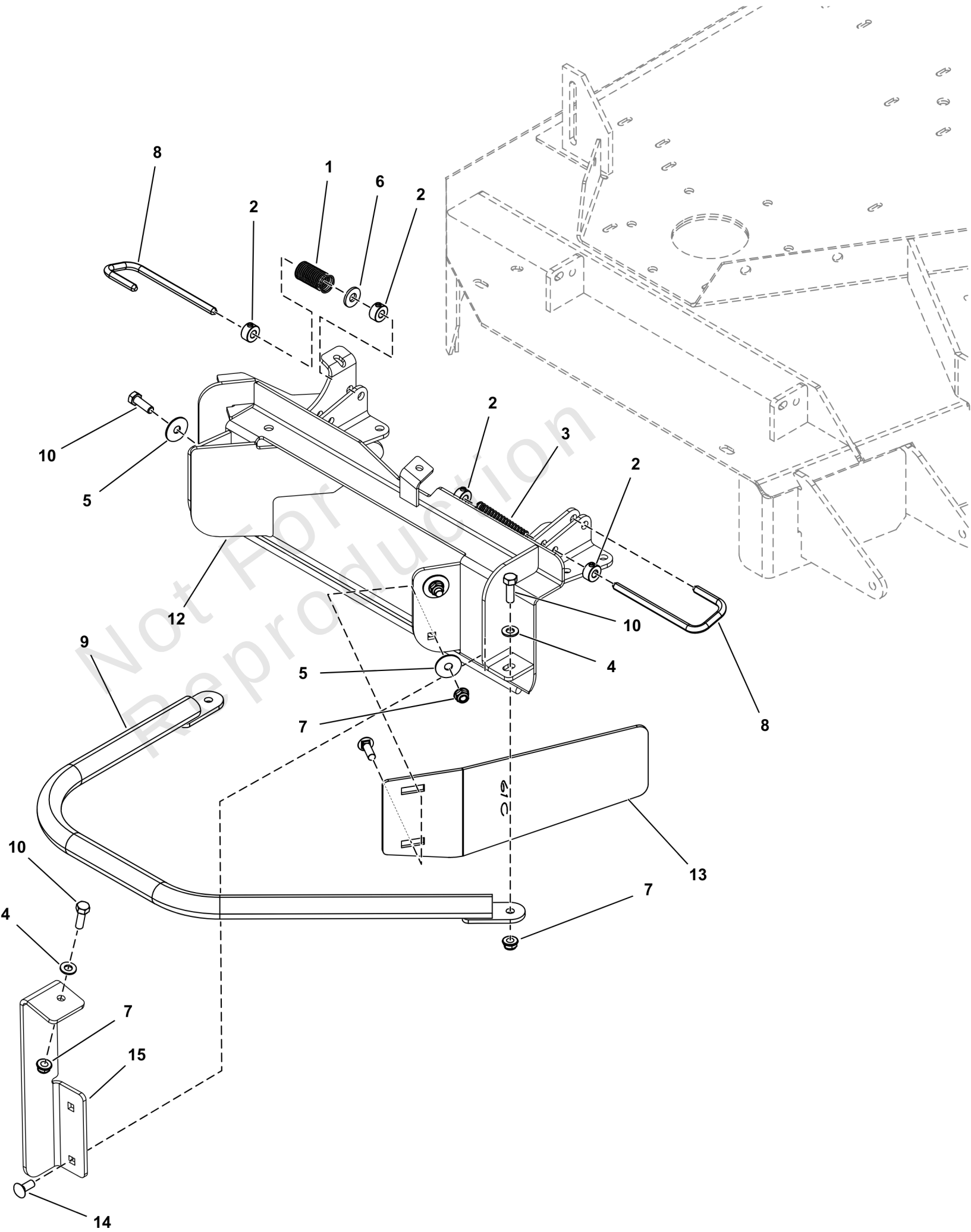
REF NO	PART NO	QTY	DESCRIPTION
10	5412471AA	1	BRACKET, ADAPTER SEAL, COM BLOWER - BLK
20	5021812SM	1	EYE BOLT, 3/8-16 X 4-
30	5411115AA	1	WELD, SPRING ANCHOR, COM - BLK
40	5103816FS	1	HOUSING, BLOWER
50	5411079AA	1	WELD, FAN CAGE, BLOWER - BLK
60	84007864	1	IMPELLER
70	5411077AA	1	PLATE, FAN, TOP - BLK
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	84008050	1	GUARD
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

Blower Mount Group - 61" Mower Decks, TURBO-Pro MAX

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Mfg. No: 5600866

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Blower Mount Group - 61" Mower Decks, TURBO-Pro MAX

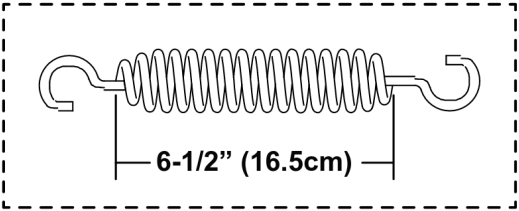
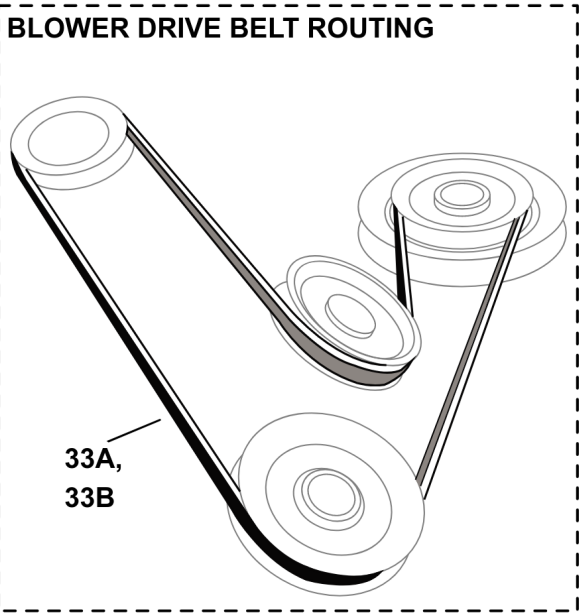
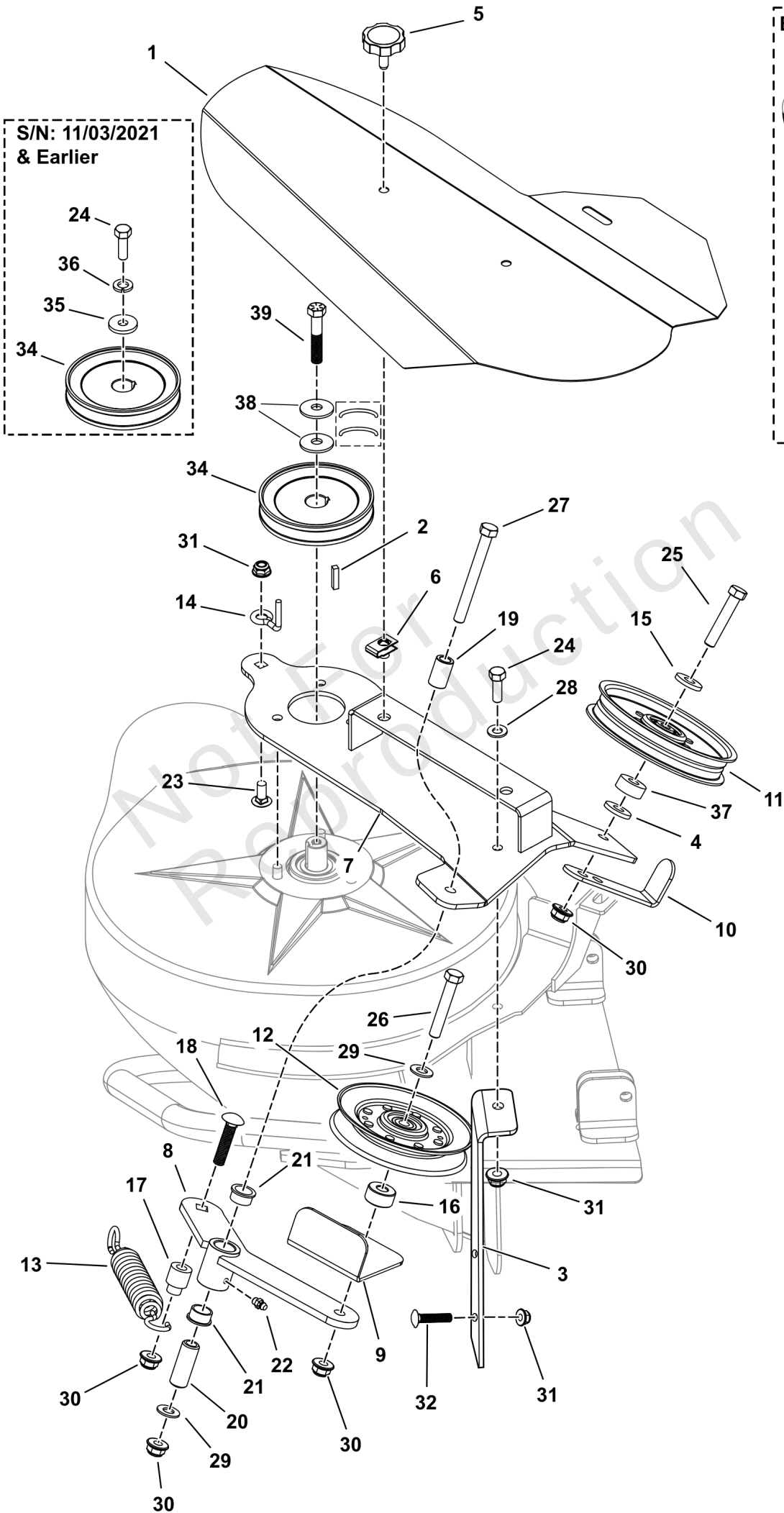
REF NO	PART NO	QTY	DESCRIPTION
1	1709660	1	SPRING-COMP 0.880ODX 02.187LG .062WIRE -(Date of Manufacture: Before 11/02/2021)
1	5020637	1	SPRING-COMP, .375IDX2.75LGX.054WR, SS -(Date of Manufacture: After 11/03/2021)
2	5020047	4	COLLAR, 5/16 SET
3	5020637	1	SPRING-COMP, .375IDX2.75LGX.054WR, SS
4	5025155	5	WASHER, 5/16" SAE -(Qty: 4 - Date of Manufacture: Before 11/02/2021)
5	5025164	4	WASHER, 5/16 FENDER
6	5025337	1	WASHER, 5/16 USS
7	5025392	6	NUT, 5/16-18 HEX NYLOCK FLANGE -(Qty: 5 - Date of Manufacture: Before 11/02/2021)
8	5104203	2	ROD, LOCKING PIN, BLOWER
9	5412625AA	1	WELD, NERF BAR, 61" T-MAX - BLK
10	5025011X8	6	BOLT, 5/16-18 X 1 GD5 CZ -(Qty: 5 - Date of Manufacture: Before 11/02/2021)
11	5025145X8	2	BOLT, 5/16-18 X 1, CARRIAGE
12	5411112AA	1	WELD, ADAPTER, 61" COM - BLK -(Date of Manufacture: Before 11/02/2021)
12	5422377AA	1	WELD, ADAPTER, 61" TMAX-BLK -(Date of Manufacture: After 11/03/2021)
13	84008397	1	BAFFLE, Front -(Date of Manufacture: Before 11/02/2021)
13	84008397	1	BAFFLE, Front -(Date of Manufacture: After 11/03/2021)
14	5025145X6	2	BOLT, 5/16-18 X 3/4, CARRIAGE, GD5, CZ -(Date of Manufacture: After 11/03/2021)
15	5422421AA	1	BRACKET, PLATE SUPPORT, TMAX-BLK -(Date of Manufacture: After 11/03/2021)

Blower Pulley Group, TURBO-Pro MAX

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Mfg. No: 5600866

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Blower Pulley Group, TURBO-Pro MAX

REF NO	PART NO	QTY	DESCRIPTION
1	5600740	1	HOOD W/ DECALS - TURBO PRO-MAX
2	5050403X4	1	KEY, 3/16" SQ. X 3/4
3	5411116AFS	1	SUPPORT -(Date of Manufacture: Before 11/02/2021)
3	5422421AA	1	BRACKET, PLATE SUPPORT, TMAX-BLK -(Date of Manufacture: After 11/03/2021)
4	5025165	1	WASHER, 3/8" Fender
5	5101731	3	KNOB, 5/16-18 X 1.00, ROSETTE BLACK
6	5022308	2	BODY CLIP, 5/16-18-7GA MATERIAL
7	5412606	1	ASSEMBLY, PULLEY PLATE, T-MAX (52,60,61)
8	5409892	1	ASSEMBLY, IDLER ARM - TURBO-VAC -(Includes Bushings and Fitting)
9	5409609AA	1	RETAINER, BELT, WIDE - BLK
10	5409610AA	1	RETAINER, BELT -(Refer to Note: *)
11	1725408	1	PULLEY-IDLER 04.00 OD 0.378ID 1.06 W BRG
12	5103456	1	PULLEY-IDLER-V, 4.85OB, .38ID
13	5022847	1	SPRING-EXT, 1.04 ODX6.935LGX.148WR, BLK
14	5103488	1	BELT KEEP, .19 X 1.25 - BK
15	80003616	1	WSHR,.406X1.0X.134,FLT,TYPE A,ZINC/CLEAR
16	5046860	1	SPACER, .39 X 1.00 X .50, PM, CZ
17	1706644	1	SPACER,3/8X3/4X15/16
18	80004559	1	BOLT,3/8-16X1.750,SHORT NECK CRRG,ZC/CL
19	5101933	1	SPACER, .39 X .63 X 1.00, YZ
20	5102322	1	SPACER, .38 X .625 X 1.62, YZ
21	1676148	2	BUSHING-0.628IDX0.751ODX0.400LG PWDR MTL
22	5020095	1	GREASE FITTING, 1/4-28 Straight
23	5025145X6	1	BOLT, 5/16-18 X 3/4, CARRIAGE, GD5, CZ
24	5025011X8	1	BOLT, 5/16-18 X 1" GRD5 YZ -(Qty: 2 - S/N: 11/03/2021 and Earlier)
25	5025013X14	1	BOLT, 3/8-16 X 1-3/4" GD5 CZ
26	5025013X18	1	BOLT, 3/8-16 X 2-1/4" GD5 CZ
27	5025013X28	1	BOLT, 3/8-16 X 3-1/2" GD5 CZ
28	5025155	1	WASHER, 5/16" SAE
29	5025156	2	WASHER, 3/8 SAE
30	5025394	4	NUT, 3/8 - 16 HEX NYLOCK FLANGE
31	5025392	4	NUT, 5/16-18 HEX NYLOCK FLANGE NUT
32	5025145X8	2	BOLT, 5/16-18 X 1, CARRIAGE, GD5, CZ
33A	5104289	1	BELT, A SEC, 81.1"EL, ARAMID, WRPD -(52" Mower Decks)
33B	84008031	1	BELT -(61" Mower Decks)
34	5103836	1	PULLEY, COMMERCIAL PRO
35	1919381	1	WASHER-0.312(0.34IDX1.00ODX.13THK)BLK -(S/N: 11/03/2021 and Earlier)
36	5025170	1	WASHER, 5/16 LOCK CZ -(S/N: 11/03/2021 and Earlier)
37	1667811	1	SPACER-0.390ID 0.90 OD 0.34 LG P'MTL YEL
38	5106588	2	BELLEVILLE WASHER, 1.187X.39X.089, SS -(S/N: 11/04/2021 and Later)

Footnotes:

Note: **Torque to 50 ft-lbs (68 Nm)).

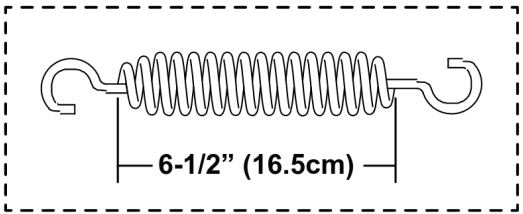
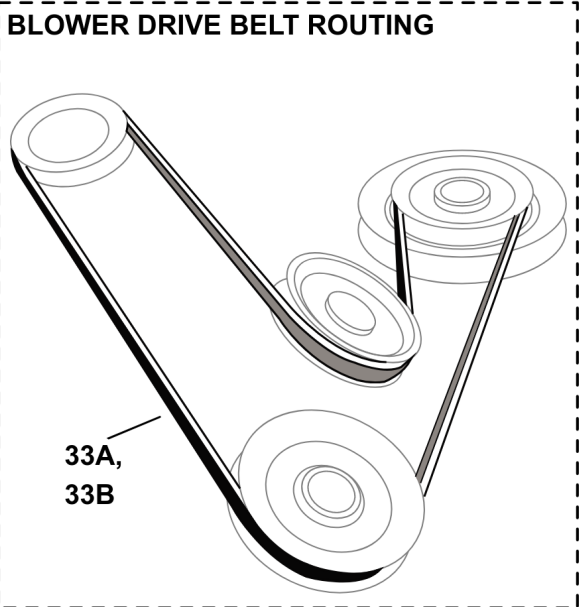
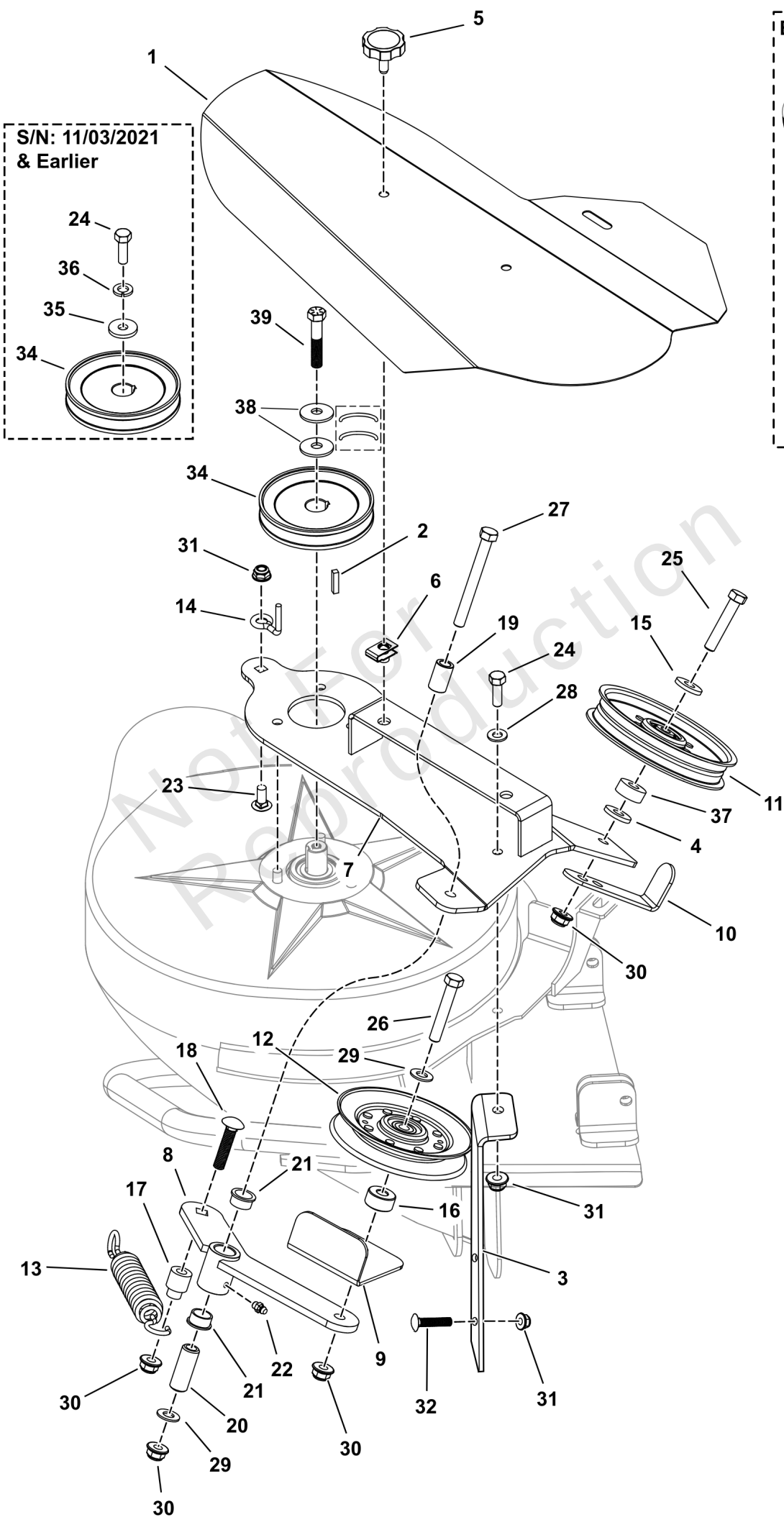
Note: *The hole closest to the bend is for models with 44", 48" or 61" decks. The hole furthest from the bend is for models with 52" decks.

Blower Pulley Group, TURBO-Pro MAX

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5600866

5303767



Blower Pulley Group, TURBO-Pro MAX

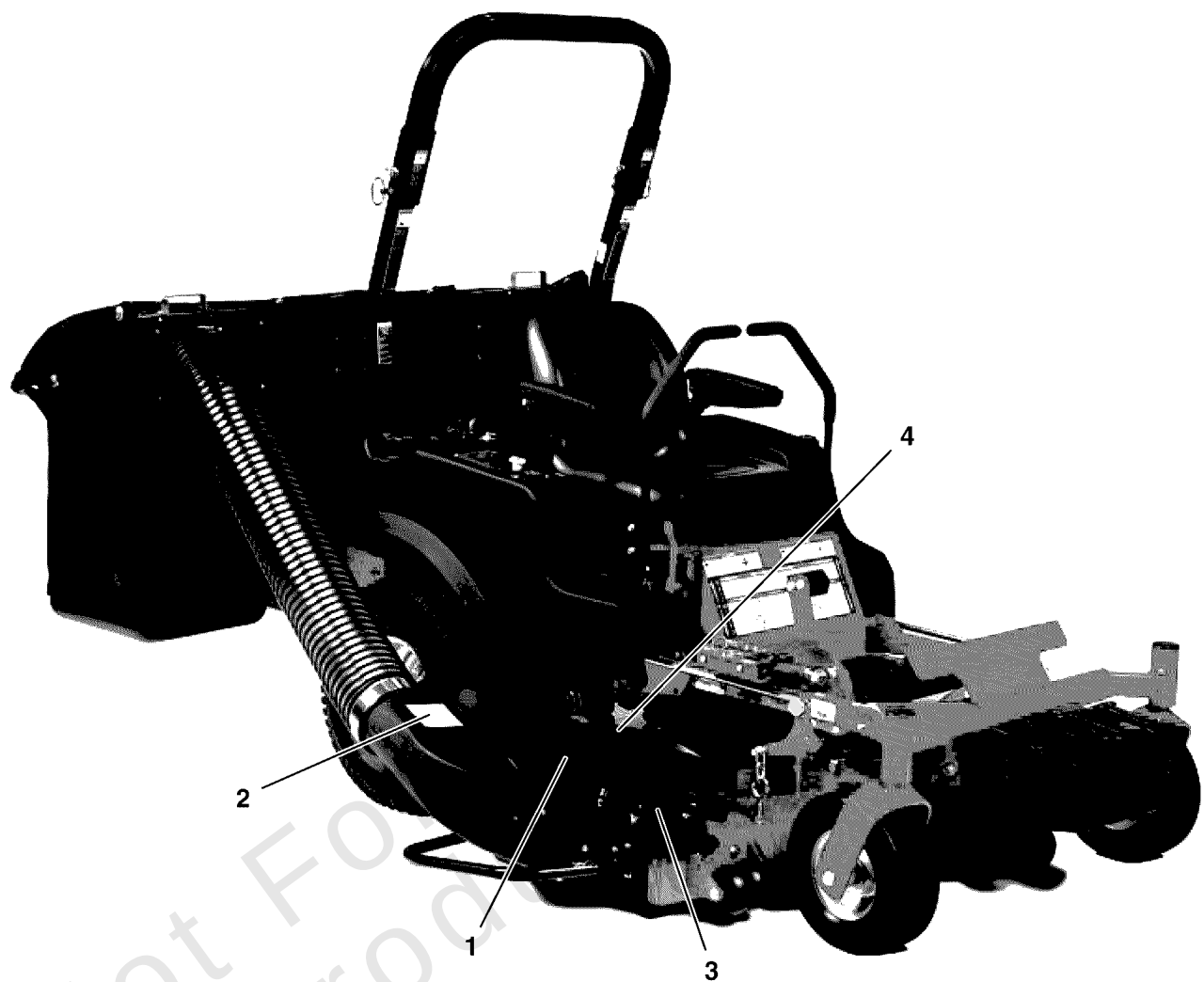
REF NO	PART NO	QTY	DESCRIPTION
39	5025676X16	1	BOLT, 3/8-16 X 2.0, GD8, PHOS -(S/N: 11/04/2021 and Later)(Refer to Note: **)

Not For
Reproduction

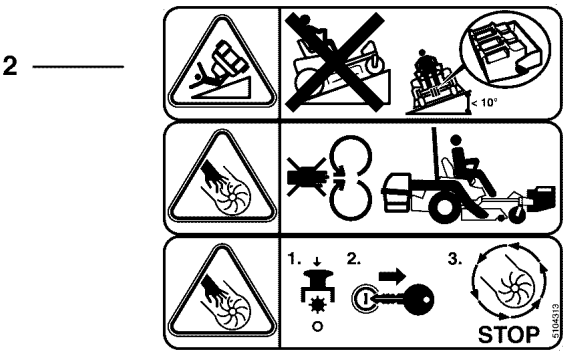
Footnotes:

Note: **Torque to 50 ft-lbs (68 Nm)).

Note: *The hole closest to the bend is for models with 44", 48" or 61" decks. The hole furthest from the bend is for models with 52" decks.



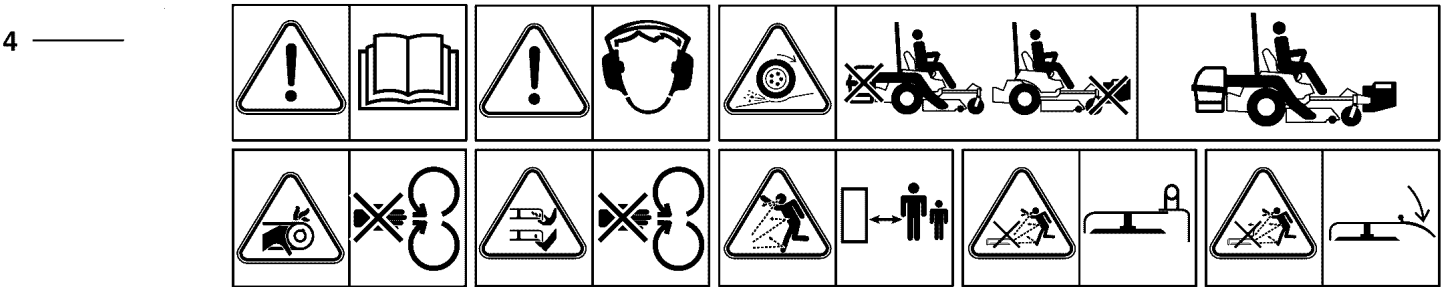
1 — **TURBO-Pro™ Max**



3 —

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

5104318



Decal Group - TURBO Pro MAX Blowers

REF NO	PART NO	QTY	DESCRIPTION
1	5104285	1	DECAL, TURBO PRO MAX
2	5104313	1	DECAL, BLOWER, SMALL, ICONS
3	5104318	1	DECAL, BELT, TURBO-PRO MAX
4	5104314	1	DECAL, BLOWER, MAIN, LARGE, ICONS

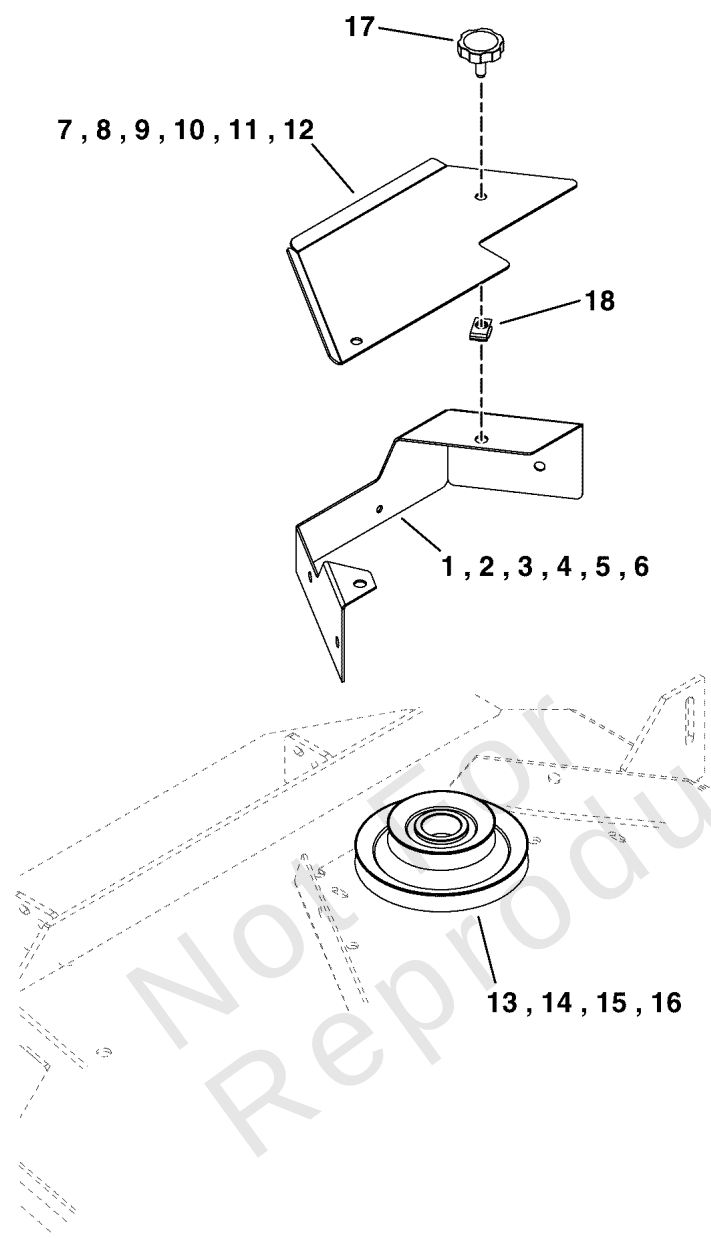
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Mower Deck Guards & Spindle Pulley

Note: Unless noted otherwise, use the standard torque specifications

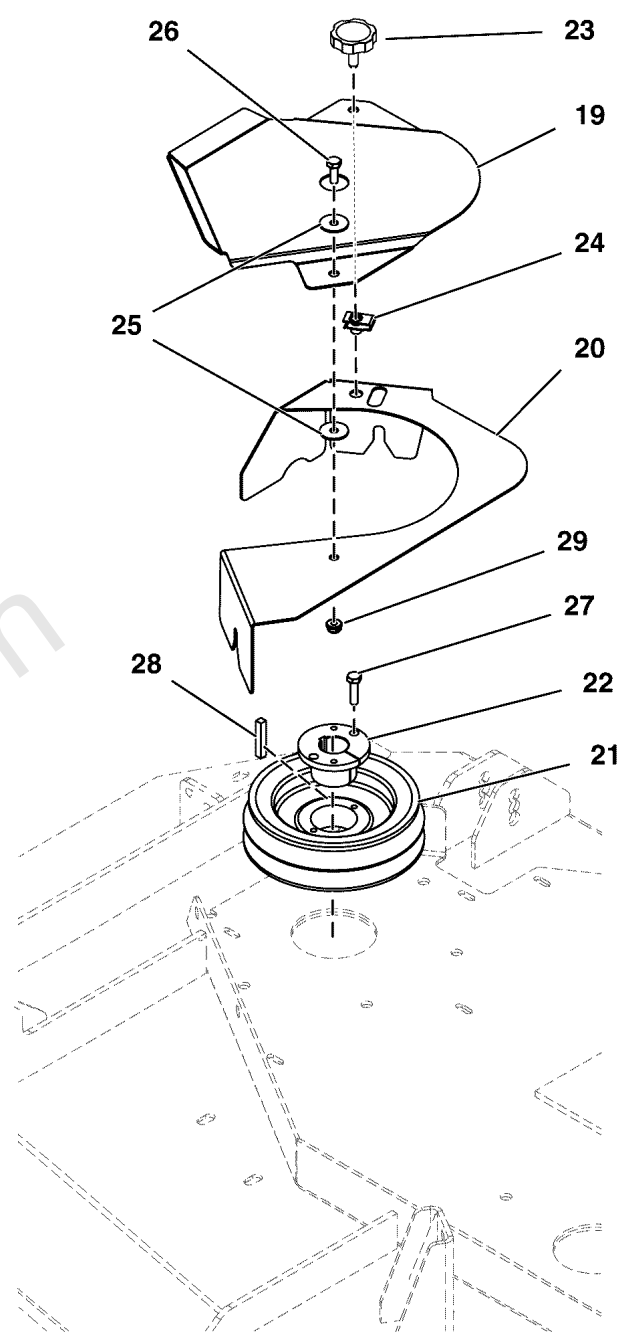
Mfg. No: 5600866

All Other Models



IS3200Z Models

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5304154



Mower Deck Guards & Spindle Pulley

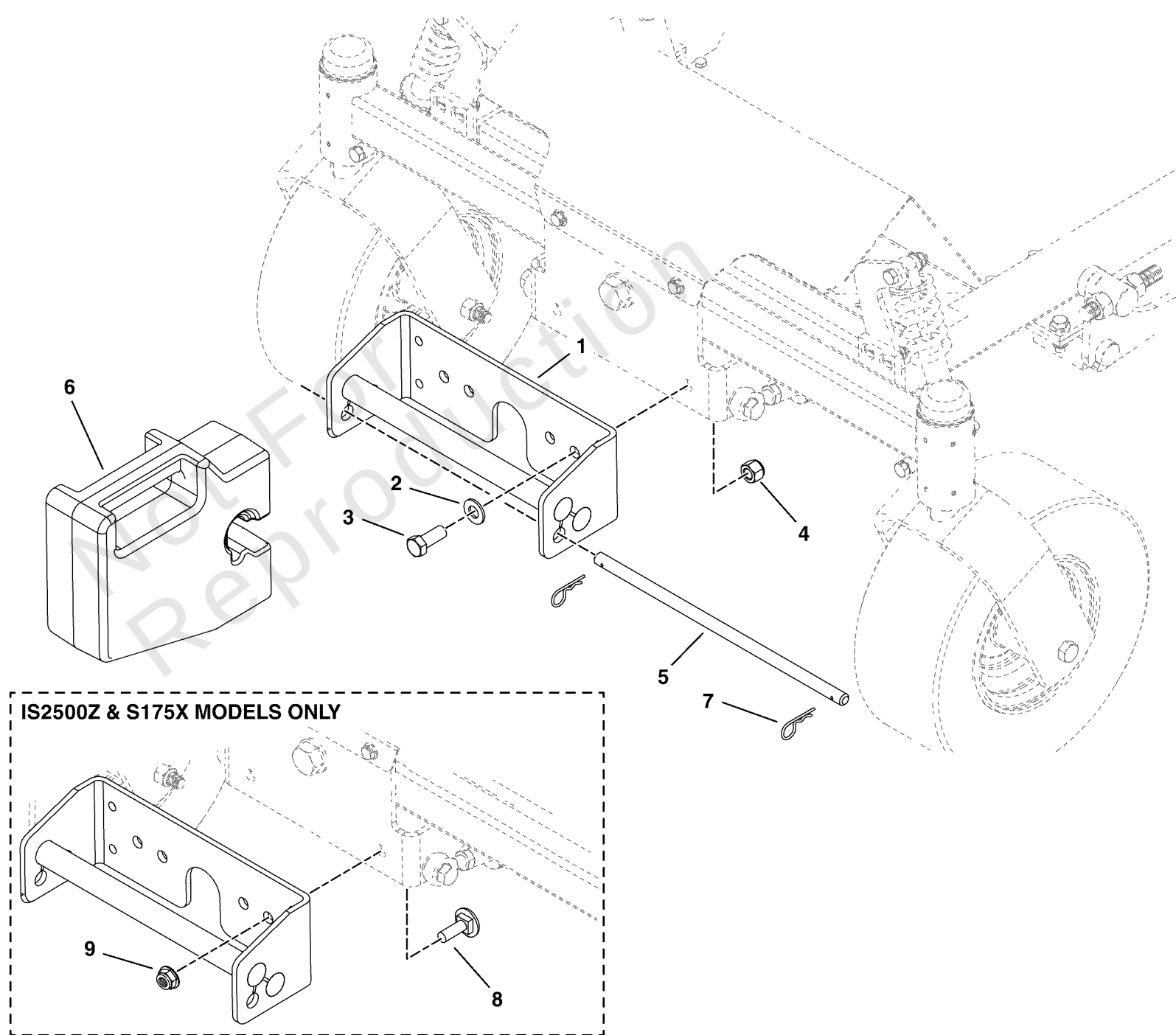
REF NO	PART NO	QTY	DESCRIPTION
1	84012937	1	GUARD, PULLEY -(IS2100Z-61")
2	5407843AA	1	GUARD, DECK, 61/200XT, FASTVAC - BLK -(S200XT-61" / F210Z-61")
3	5411995AA	1	WELD, DECK GUARD, COMM BLWR - BLK -(IS3100Z-61")
4	5412517AA	1	GUARD, DECK, 2100-52" - BLK -(IS2100Z-52")
5	5409534A	1	GUARD, DECK 48/52 - BLK -(S150XT-52" / F160Z-52")
6	5412577AA	1	WELD, PULLEY GUARD, 800-61, BLOWER - BLK -(800X-61")
7	5410223AA	1	PLATE, TOP GUARD, 61" - BLK -(IS2100Z-61")
8	5401436AA	1	GUARD, BELT, 61", 2000 FASTVAC - BLK -(S200XT-61" / F210Z-61")
9	5411993AA	1	BELT SHIELD, 61" COMM BLWR - BLK -(IS3100Z-61")
10	5412518AA	1	PLATE, TOP GUARD, 2100-52" - BLK -(IS2100Z-52")
11	5409536A	1	PLATE, TOP GUARD, 52 - BLK -(S150XT-52" / F160Z-52")
12	5412575AA	1	SHIELD, BELT, 800-61, BLOWER - BLK -(800X-61")
13	5103682	1	DOUBLE PULLEY, DECK, 61" TP -(IS2100Z-61" / S200XT-61" / F210Z-61")
14	5102067	1	PULLEY, DOUBLE, DH4600, 5.95 OD TAPERED -(IS3100Z-61")
15	5103468	1	PULLEY, DOUBLE, 52" DECK -(IS2100Z-52" / S150XT-52" / F160Z-52")
16	5104317	1	DOUBLE PULLEY, DECK, 800-61", T-MAX -(800X-61")
17	5101731	5	KNOB, 5/16-18 X 1.00, ROSETTE, BLK
18	5022308	4	BODY CLIP, 5/16-18-7GA MATERIAL
19	5413841AA	1	SHIELD, BELT, 3200-61", BLOWER - BLK -(IS3200Z-61" / F320Z-61")
20	5413834AA	1	GUARD, DECK PULLEY, 3200-61" - BLK -(IS3200Z-61" / F320Z-61")
21	5104573	1	PULLEY, DOUBLE, 5.95/6.43 OD, IS3200 -(IS3200Z-61" / F320Z-61")
22	5020819	1	BUSHING, TAPERED HUB -(IS3200Z-61" / F320Z-61")
23	5101731	1	KNOB, 5/16-18 X 1.00, ROSETTE, BLK -(IS3200Z-61" / F320Z-61")
24	5022308	1	BODY CLIP, 5/16-18-7GA MATERIAL -(IS3200Z-61" / F320Z-61")
25	5025288	2	WASHER, 1/4 FENDER -(IS3200Z-61" / F320Z-61")
26	5025010X6	1	BOLT, 1/4-20 X 3/4 GD5 CZ -(IS3200Z-61" / F320Z-61")
27	5025010X8	2	BOLT, 1/4-20 X 1" GD5 CZ -(IS3200Z-61" / F320Z-61")
28	5022726	1	KEY 1/4 SQ X 1 1/2 LONG -(IS3200Z-61" / F320Z-61")
29	5025391	1	NUT, 1/4-20 HEX NYLOCK FLANGE -(IS3200Z-61" / F320Z-61")

Weight Mount Group, 99/100/150 LBS

Note: Unless noted otherwise, use the standard torque specifications

Mfg. No: 5600866

5300189



Weight Mount Group, 99/100/150 LBS

REF NO	PART NO	QTY	DESCRIPTION
1	5049082A	1	HOLDER ASMY-WEIGHT CONS Z CAT - BLACK
2	5025158	2	WASHER, 1/2 SAE
3	5025018X10	2	BOLT, 1/2-20 X 1-1/4" GD8 CZ
4	5025098	2	NUT, Hex, Nylon Lock, 1/2-20
5	5049143	1	ROD-.500DIA 13.75LG YELLOW CON
6	1700000	3	WEIGHT-QUICK ATTACH 33LBS PAINTED BLACK -(2-Bag Collection Systems)
6	1717627	3	WEIGHT-QUICK ATTACH 50LB SUITCASE PAINTED -(3-Bag Collection Systems)
7	5025210	2	PIN, HAIR, .0915 X 1-7/8
8	5025324X10	2	BOLT, CARRIAGE 1/2-13 X 1-1/4 GD.5
9	5025396	2	NUT, Hex Flange, Nylock, 1/2-13

Not For
Reproduction

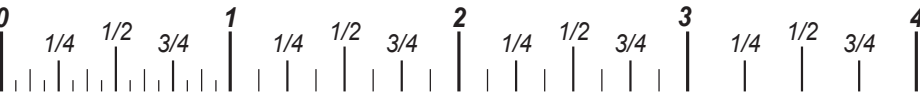
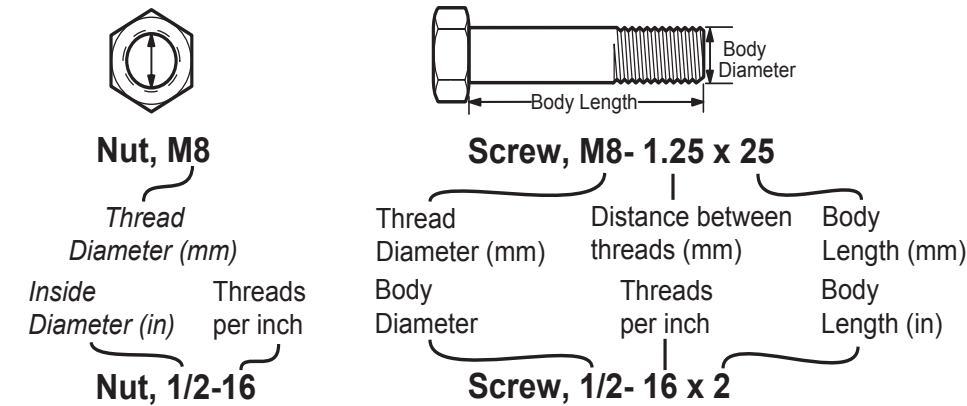
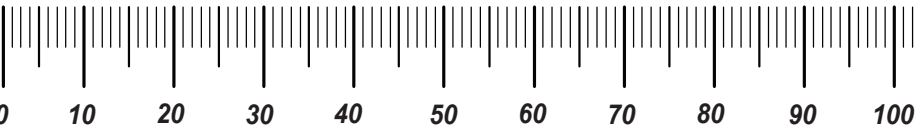
Footnotes:

(Older 2-Bag Collection Systems used two (2) 50 lbs weight (P/N: 1717627))

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).

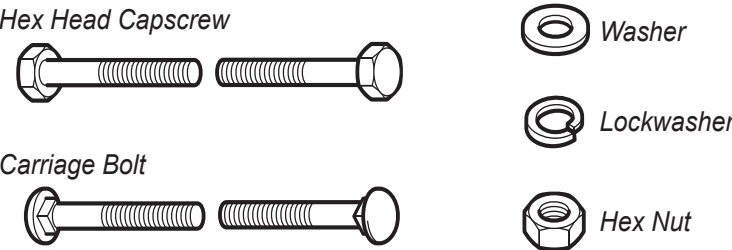
When bolt or capscrew is identified as 1/2 - 16 x 2" (M8 - 1.25 x 50), this means the *Nominal size*, or body diameter is 1/2 inch (8mm metric thread diameter), the second number, 16, represents the *threads per inch*, (*distance between threads*). The final number is the body length of the bolt or screw,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

