



Hopper and Drive Components

Tornado™ Hopper Spreader

#78000-1, 78003-1, 78006-1

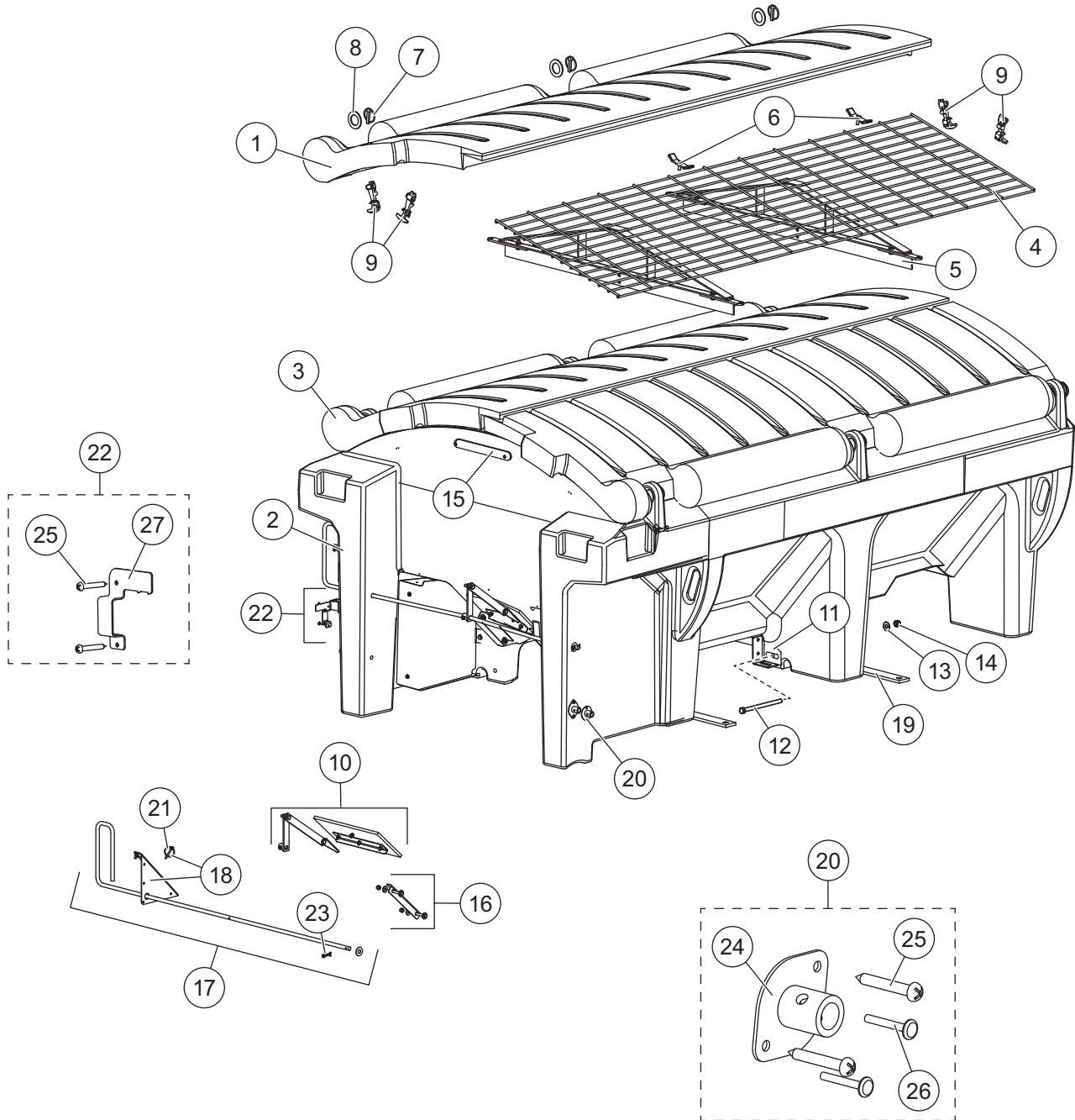
Parts List



This Parts List is for WESTERN® Tornado hopper spreaders
with serial numbers beginning with 201211 and higher.

Tornado™ HOPPER SPREADER

HOPPER COMPONENTS



Tornado™ HOPPER SPREADER

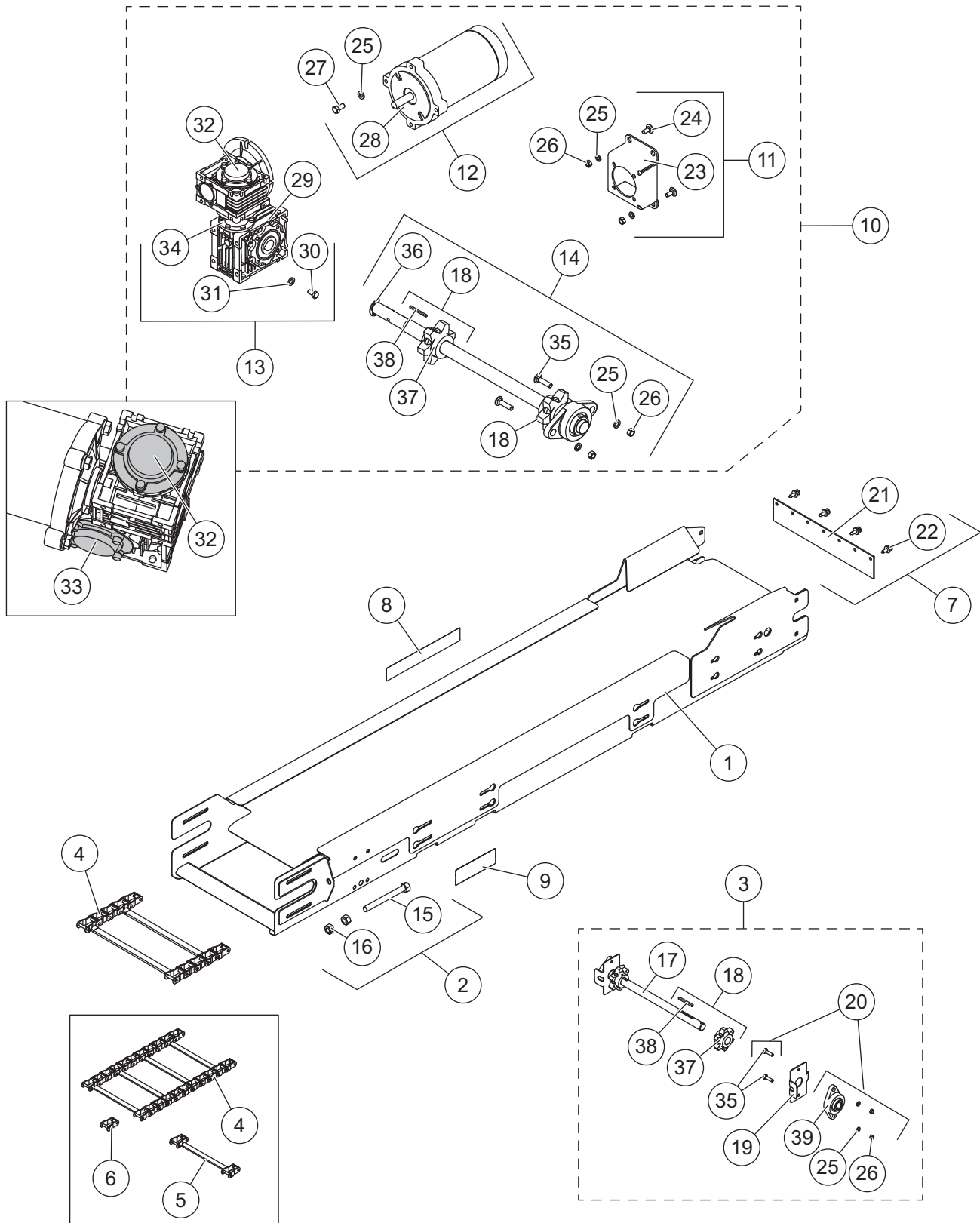
Hopper Components							
Item	Part	Qty	Description	Item	Part	Qty	Description
1	78018*	1	Poly Hopper Lid, 7' (DS)	12		4	1/2-13 x 7-1/2 Hex Cap Screw SS
	78288†	1	Poly Hopper Lid, 7' (DS)	13		4	1/2 Flat Washer SS
	78019	1	Poly Hopper Lid, 8' (DS)	14		4	1/2-13 Hex Locknut SS
ns	78020*	1	Poly Hopper Lid, 7' (PS)	ns		8	3/8-16 x 1 Carriage Bolt SS
	78290†	1	Poly Hopper Lid, 7' (PS)	ns		8	3/8 Lock Washer SS
	78021	1	Poly Hopper Lid, 8' (PS)	ns		8	3/8-16 Hex Nut SS
2	78009	1	Poly Hopper Body, 7'	15	78048-1	1	CHMSL Kit (w/fasteners)
	78012	1	Poly Hopper Body, 8'	16	78083	1	Feed Gate Guide w/Fasteners Kit
3	78226	1	Poly Hopper Collar, 8'	17	78094	1	Feed Gate Handle Kit
4	78115	2	Top Screen, 7' (painted)	18	78098	1	Feed Gate Detent Bracket Kit
	78116	2	Top Screen, 8' (painted)	ns		4	3/8-16 x 1-1/2 Hex Cap Screw
5	78117-2	2	Top Screen Brace w/Label	19	78109	2	Mounting Bar w/Hardware
6	96038	4	Wing Bolt	ns	78242	1	Poly Hopper Collar Hardware Kit
7	93010	6	7/16 Linchpin	20	78262	2	Chute Attachment Sleeve Kit
8	78097	6	Washer 2.5 OD x 1.53 ID SS	21	93042	1	3/16 Linchpin
9	65224	4	Rubber Hold-Down Strap	22	99748	1	Chute Connector Clip Kit
ns	99775	1	Cable Boot	ns	68584	2	Label – Warning/Caution, Spreaders
10	78118	1	Feed Gate Assembly Kit	ns	11100	1	Label – Warning, Rear Camera
11	78119	3	Hopper Mounting Bracket (PS)	ns	67272		Label – Caution, Do Not Lift
ns	78133	3	Hopper Mounting Bracket (DS)				
Item 10				78118 Feed Gate Assembly Kit			
	78093	1	Feed Gate Sub Assembly	90601	1	1/4 x 1-1/2 Cotter Pin	
Item 16				78083 Feed Gate Guide w/Fasteners Kit			
	94495	2	5/16-18 x 2-1/4 Hex Cap Screw SS	91350	2	5/16-18 Hex Locknut SS	
	78047	1	Feed Gate Slide				
Item 17				78094 Feed Gate Handle Kit			
	78029	1	Feed Gate Actuator Shaft		4	1/2 Flat Washer Type A Wide SS	
23	90601	2	1/4 x 1-1/2 Cotter Pin				
Item 20				78262 Chute Attachment Sleeve Kit			
24		1	Pin Retainer	26	2	3/16 Pop Rivet Aluminum	
25		2	#10 x 1-1/2 Pan Head Phillips Screw SS				
Item 22				99748 Chute Connector Clip Kit			
25		2	#10 x 1-1/2 Pan Head Phillips Screw SS	ns	99758	1	Label – Warning, Chute Connector Dump Switch
27		1	Chute Connector Clip				
ns = not shown				SS = Stainless Steel			

* Fits units with serial numbers beginning with 180530 and lower.

† Fits units with serial numbers beginning with 180531 and higher.

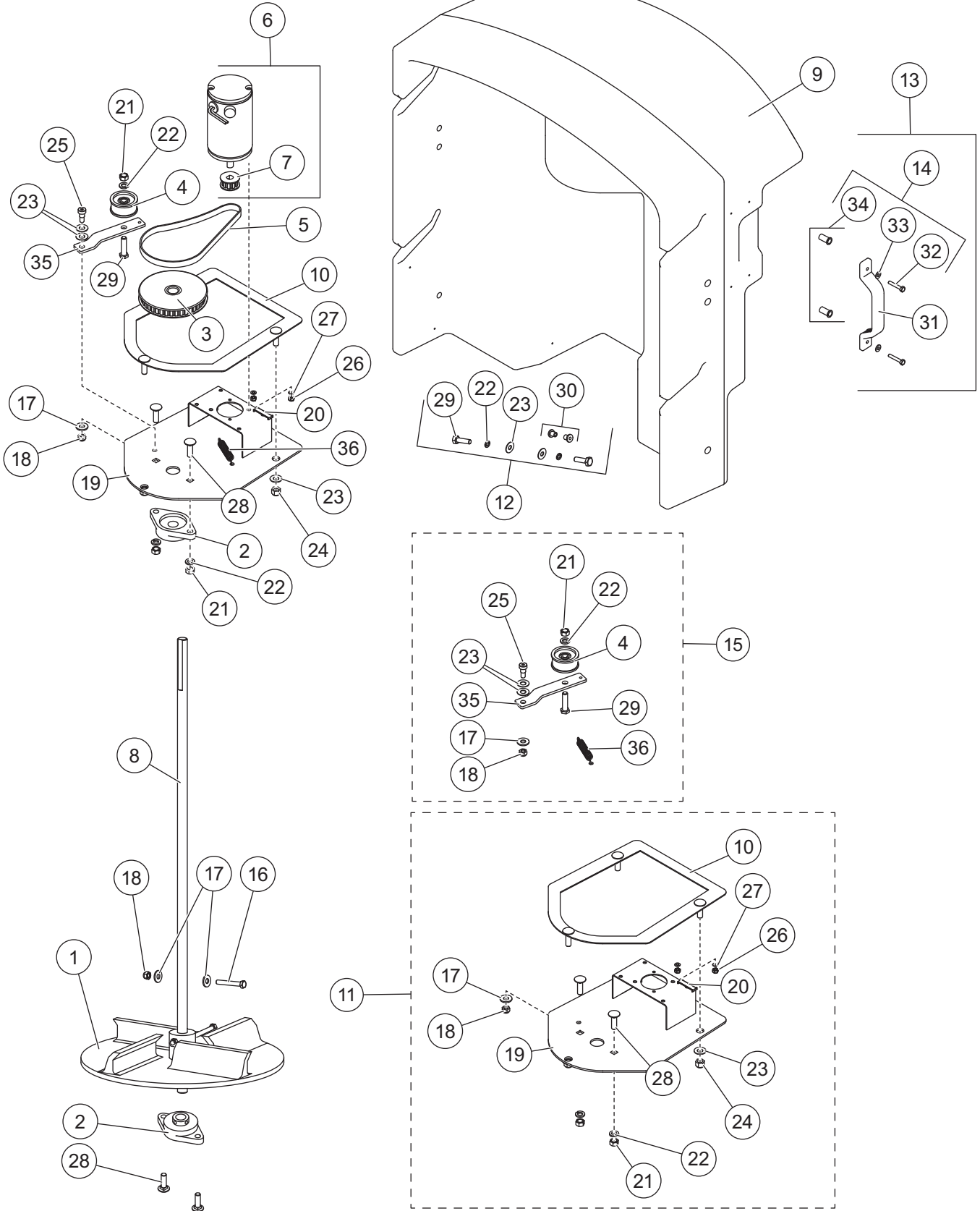
Tornado™ HOPPER SPREADER

DRIVE COMPONENTS



Tornado™ HOPPER SPREADER

CHUTE & SPINNER ASSEMBLY

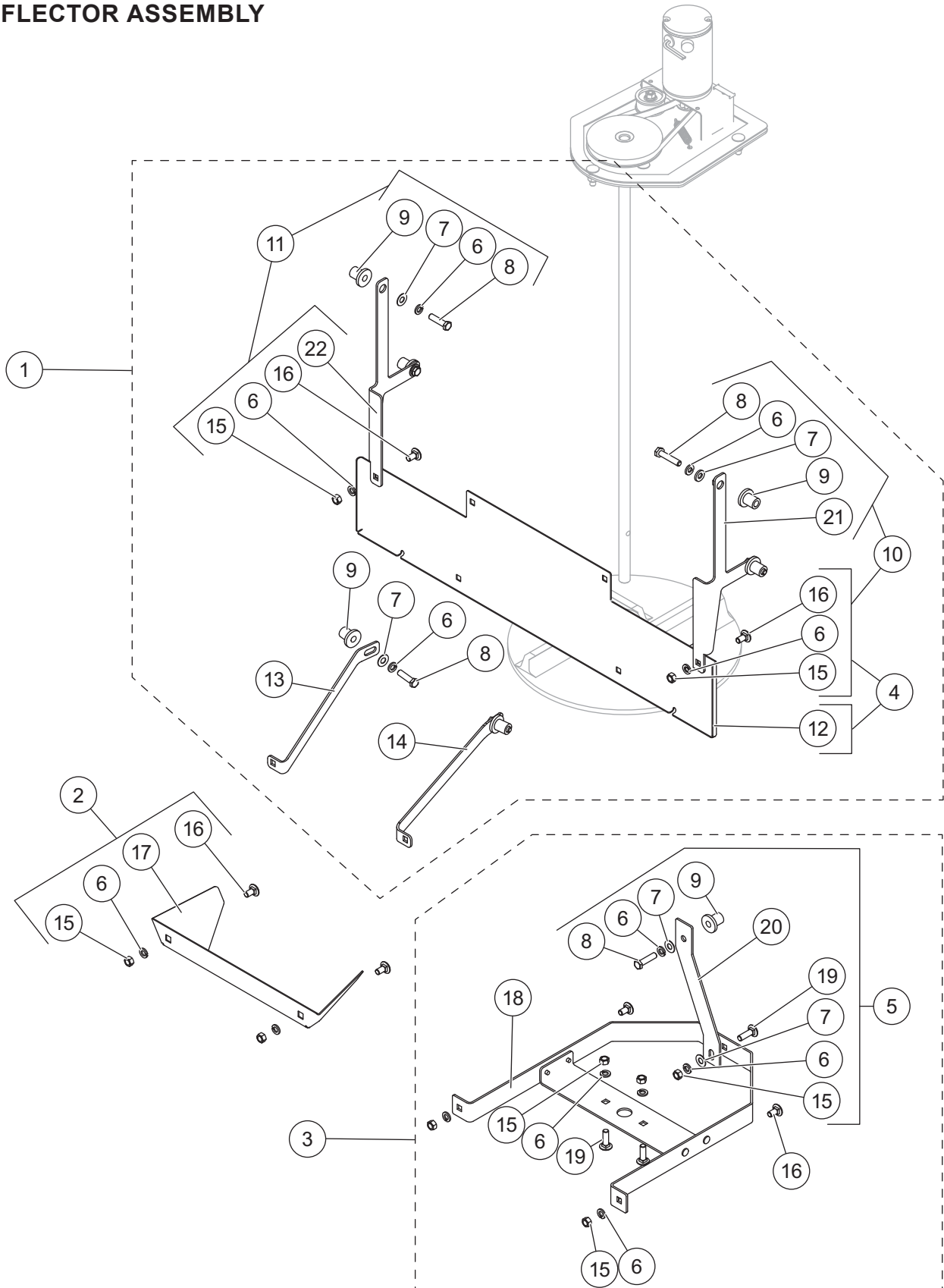


Tornado™ HOPPER SPREADER

89770 Chute Assembly							
Item	Part	Qty	Description	Item	Part	Qty	Description
1	94424	1	Spinner, Poly Two-Stage	10	30377	1	Bolt Plate (incl. items 23 and 24)
2	96167	2	2-Bolt Flanged Bearing, 0.750 ID	11	71236	1	Motor Mount Kit
3	76796	1	Cogged Belt Pulley, 40-Tooth, 0.75 ID	12	78268	2	3/8 Well Nut Fastener Kit
4	65509	1	2" Idler Pulley	13	78247	2	Chute Handle Kit
5	78285	1	Gear Belt, 3/8 Pitch	14	78270	4	1/4 Well Nut Fastener Kit
6	78300	1	Motor 12V DC 1/3 hp (incl. item 10)	15	78298	1	Idler Kit
7	76795	1	Cogged Belt Pulley, 10-Tooth, 0.5 ID	16		1	5/16-18 x 2-1/4 Hex Cap Screw SS
8	78283	1	Shaft, 0.75	17		2	5/16 Flat Washer Type A Narrow
9	30372	1	Chute Cover	18		1	5/16-18 Hex Locknut GB SS
Item 11				71236 Motor Mount Kit			
10	30377	1	Bolt Plate (incl. items 23 and 24)	23		3	3/8 Flat Washer Type A Wide SS
17		1	5/16 Flat Washer Type A Narrow	24		3	3/8-16 Hex Locknut Brass
18		1	5/16-18 Hex Locknut GB SS	26		2	#10-32 Hex Locknut GB SS
19		1	Motor Mount	27		2	#10 Flat Washer Type A SS
20	76059	1	Bundling Clip	28		2	3/8-16 x 3/4 Carriage Bolt
21		2	3/8-16 Hex Nut SS	ns		2	Cable Tie
22		2	3/8 Spring Lock Washer SS				
Item 12				78268 3/8 Well Nut Fastener Kit			
22		2	3/8 Lock Washer SS	29		2	3/8-16 x 1-1/2 Hex Cap Screw SS
23		2	3/8 Flat Washer Type A Wide SS	30	78267	1	3/8-16 Well Nut (pkg of 2)
Item 13				78247 Chute Handle Kit			
14	78270	1	1/4 Well Nut Fastener Kit	31		1	Handle
Item 14				78270 1/4 Well Nut Fastener Kit			
32		2	1/4-20 x 1-1/2 Hex Cap Screw SS	34	78269	1	1/4-20 Well Nut (pkg of 2)
33		2	1/4 Flat Washer Type A Narrow SS				
Item 15				78298 Idler Kit			
4	65509	1	2" Idler Pulley	23		2	3/8 Flat Washer Type A Wide SS
17		1	5/16 Flat Washer Type A Narrow	25		1	3/8 x 3/8 x 5/16-18 Shoulder Bolt
18		1	5/16-18 Hex Locknut GB SS	29		1	3/8-16 x 1-1/2 Hex Cap Screw SS
21		2	3/8-16 Hex Nut SS	35		1	Idler Arm
22		1	3/8 Spring Lock Washer SS	36		1	Spring
ns = not shown				G = Grade		SS = Stainless Steel	

Tornado™ HOPPER SPREADER

DEFLECTOR ASSEMBLY

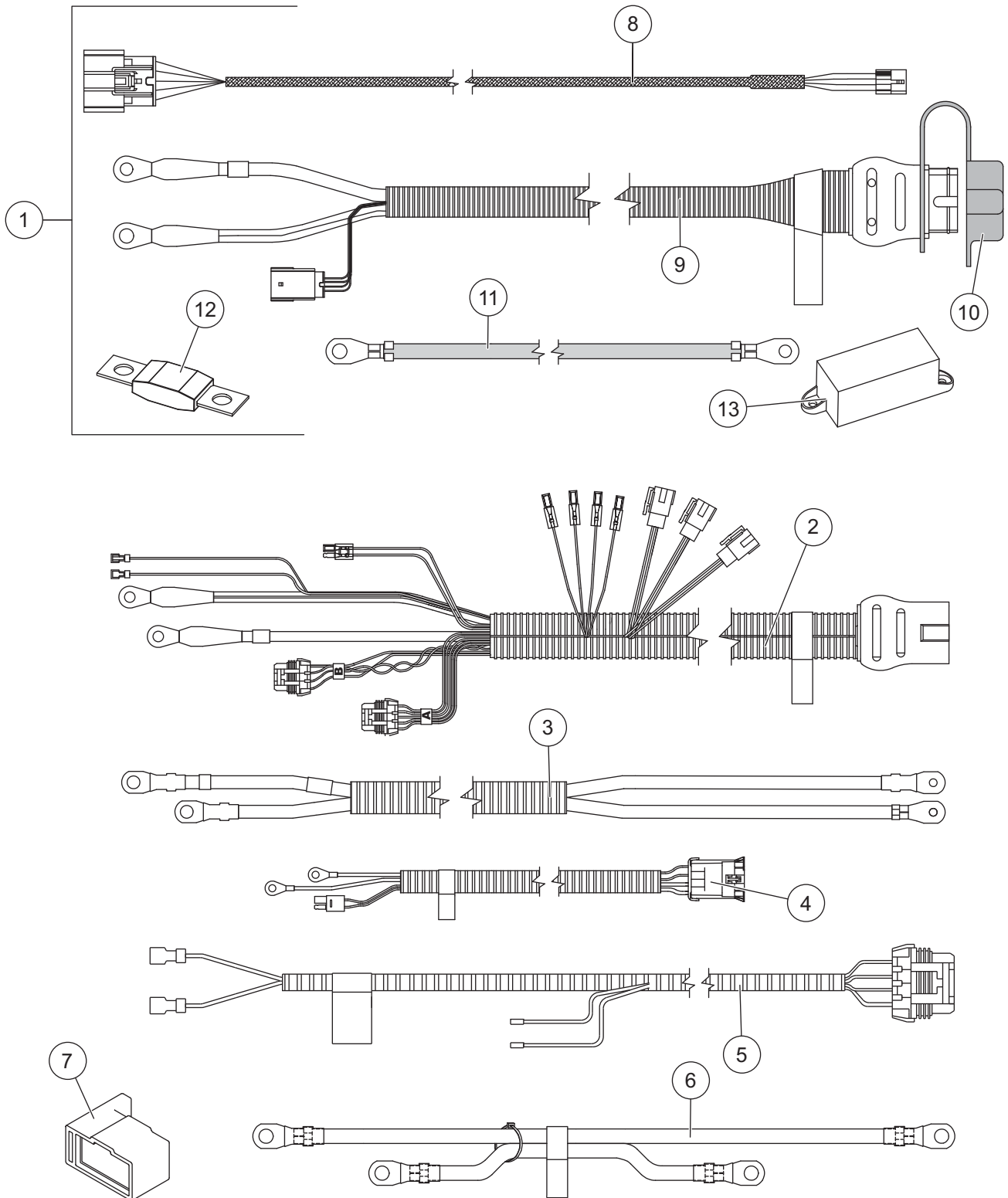


Tornado™ HOPPER SPREADER

Deflector Assembly							
Item	Part	Qty	Description	Item	Part	Qty	Description
1	77538	1	Chute Strut Kit	4	30376	1	Rear Deflector Kit
2	77539	1	Flow Guide Kit	5	30375	1	Front Deflector Support Kit
3	77543	1	Spinner Bump Guard Kit				
Item 1				77538 Chute Strut Kit			
6		12	3/8 Spring Lock Washer SS	11		1	Deflector Support Kit – PS
7		6	3/8 Flat Washer Type A Wide SS	12		1	Rear Deflector, Short
8		6	3/8-16 x 1-1/2 Hex Cap Screw SS	13	78302	1	Brace, PS
9		6	3/8-16 Well Nut	14	78301	1	Brace, DS
10		1	Deflector Support Kit – DS				
Item 2				77539 Flow Guide Kit			
6		2	3/8 Spring Lock Washer SS	16		2	3/8-16 x 3/4 Carriage Bolt
15		2	3/8-16 Hex Nut SS	17		1	Material Flow Guide
Item 3				77543 Spinner Bump Guard Kit			
5		1	Front Deflector Support Kit	16		2	3/8-16 x 3/4 Carriage Bolt
6		4	3/8 Spring Lock Washer SS	18		1	Hoop Assembly
15		4	3/8-16 Hex Nut SS	19		2	3/8-16 x 1-1/4 Carriage Bolt
Item 4				30376 Rear Deflector Kit			
6		6	3/8 Spring Lock Washer SS	15		6	3/8-16 Hex Nut SS
12		1	Rear Deflector, Short	16		6	3/8-16 x 3/4 Carriage Bolt
Item 5				30375 Front Deflector Support Kit			
6		2	3/8 Spring Lock Washer SS	15		1	3/8-16 Hex Nut SS
7		2	3/8 Flat Washer Type A Wide SS	19		1	3/8-16 x 1-1/4 Carriage Bolt
8		1	3/8-16 x 1-1/2 Hex Cap Screw SS	20		1	Front Deflector Support
9		1	3/8-16 Well Nut				
Item 10				30374 Deflector Support Kit – DS			
6		2	3/8 Spring Lock Washer SS	15		1	3/8-16 Hex Nut SS
7		1	3/8 Flat Washer Type A Wide SS	16		1	3/8-16 x 3/4 Carriage Bolt
8		1	3/8-16 x 1-1/2 Hex Cap Screw SS	21		1	Deflector Support – DS
9		1	3/8-16 Well Nut				
Item 11				30373 Deflector Support Kit – PS			
6		2	3/8 Spring Lock Washer SS	15		1	3/8-16 Hex Nut SS
7		1	3/8 Flat Washer Type A Wide SS	16		1	3/8-16 x 3/4 Carriage Bolt
8		1	3/8-16 x 1-1/2 Hex Cap Screw SS	22		1	Deflector Support – PS
9		1	3/8-16 Well Nut				
SS = Stainless Steel				G = Grade			

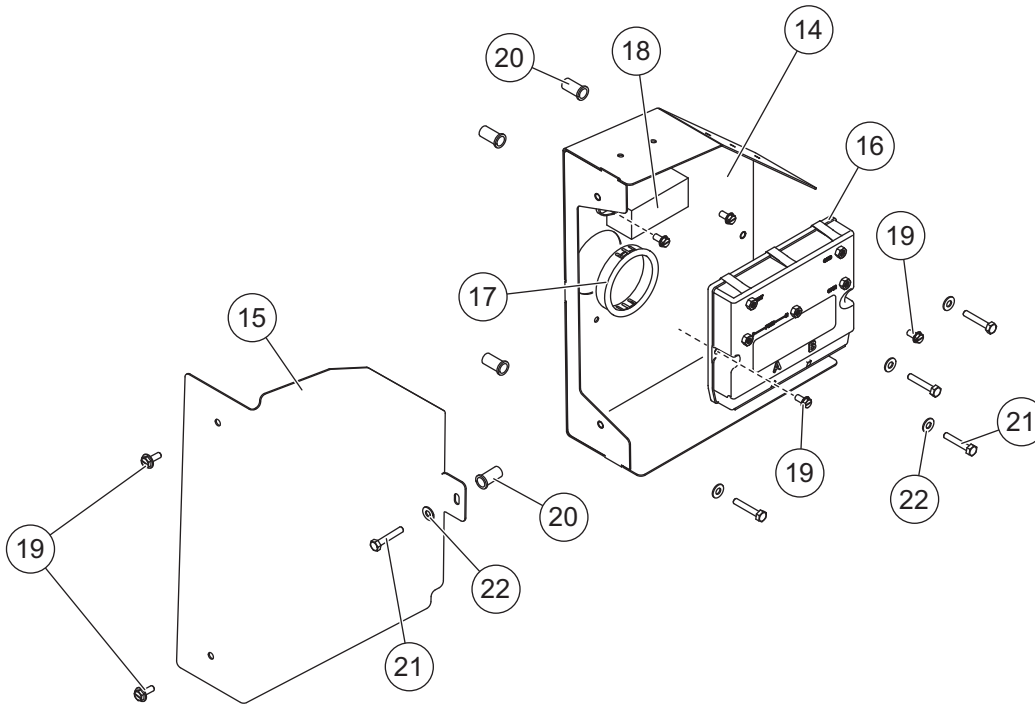
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CABLES & HARNESSING COMPONENTS



Tornado™ HOPPER SPREADER

ELECTRICAL ENCLOSURE COMPONENTS

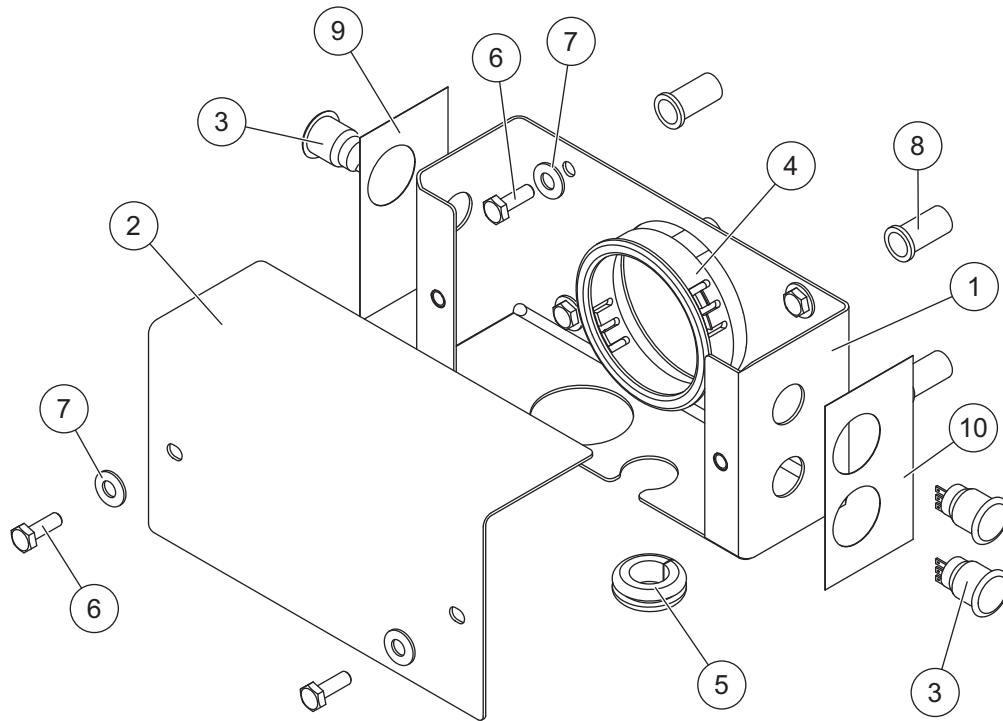


Cables & Harnessing / Electrical Enclosure Assembly							
Item	Part	Qty	Description	Item	Part	Qty	Description
1	78402	1	Vehicle-Side Harness Kit	4	78415	1	Spinner Motor Cable Assy, Hopper
2	78417	1	Hopper Harness Assembly	5	78412	1	Spinner Motor Cable Assembly, Chute
3	78418	1	Harness Assembly, Module to Conveyor Motor	6	78394	1	Cable Assembly, Mod. to Isolated Stud
				7	69916	1	8-Pin Cable Boot
Item 1				78402 Vehicle-Side Harness Kit			
8	69902	1	Vehicle Control Harness	12	95836	1	Fuse, 100A
9	76057	1	Vehicle Harness*	13	95837	1	Fuse Holder
10	99759	1	Plug Cover	ns		6	Cable Tie, HD
11	22511	1	22" Battery Cable – Red	ns		10	Cable Tie, 15.35"
Electrical Enclosure Assembly							
14	95073	1	Electrical Enclosure Body	19		6	1/4-20 x 1/2 Hex Washer-Head Machine Screw SS
15	99745	1	Electrical Enclosure Cover	20	78263	5	Well Nut
16	52385	1	4-Post Spreader Module	21		5	1/4-20 x 1-1/2 Hex Cap Screw SS
17	78434	1	Snap-In Grommet	22		5	1/4 Flat Washer SS
18	95837	1	Isolated Stud Block				
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* Includes plug cover (item 10).

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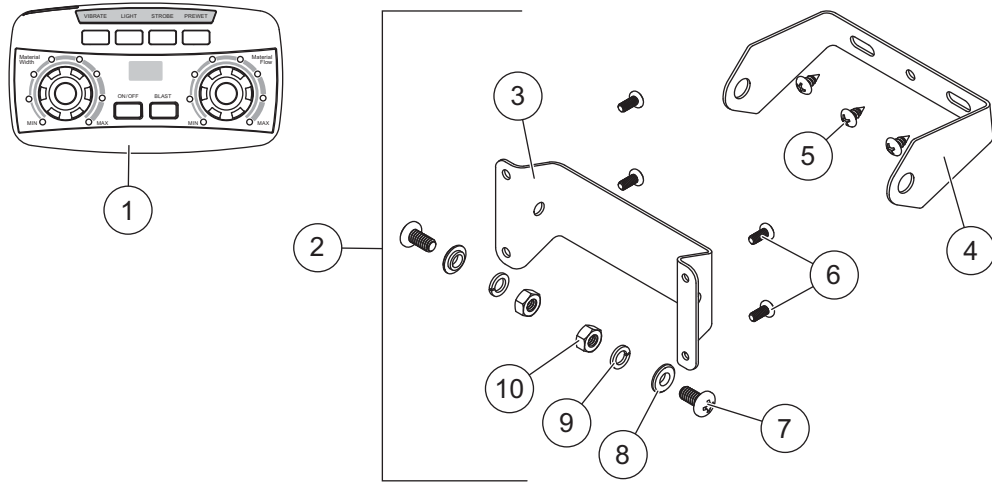
EXTERNAL ENCLOSURE



Switch Box Enclosure Assembly							
Item	Part	Qty	Description	Item	Part	Qty	Description
1	99746	1	External Enclosure, Body	7	6	6	1/4 Flat Washer SS
2	99747	1	External Enclosure, Cover	8	78263	4	Well Nut
3	99254	3	Push Button Switch	ns	95077	1	Dump Switch Label Kit (incl. items 9 & 10)
4	78434	1	Snap-In Grommet	9		1	One-Button Label
5	99195	2	Break-Thru Plug	10		1	Two-Button Label
6		6	1/4-20 x 3/4 Hex Cap Screw SS				
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CAB CONTROL



99534 Cab Control Kit							
Item	Part	Qty	Description	Item	Part	Qty	Description
1	99774	1	Cab Control 2-Knob	2	52345	1	Cab Control Bracket Kit
Item 2				52345 Cab Control Bracket Kit			
3		1	Control Bracket, Inner	7		2	1/4-20 x 1/2 Pan Head Machine Screw SS – Black Oxide
4		1	Control Bracket, Outer	8		2	1/4 Shoulder Washer – Black Oxide
5		3	#10 x 3/8 Tapping Screw SS	9		2	1/4 Lock Washer SS
6		4	#8-32 x 3/8 Phillips Pan Head Machine Screw	10		2	1/4-20 Hex Nut G5 – Black Oxide
G = Grade				SS = Stainless Steel			

ACCESSORIES & PRE-WET KITS

Accessories			
Part	Description	Part	Description
78197	License Plate Light Kit	76668	Vibrator Kit
99505-1	Primary Work Light Kit	78120	Inverted V Kit, 8' Model
99732-1	Secondary Work Light Kit	78150	Inverted V Kit, 7' Model
99766	Strobe Light Kit	68790	Ratchet Tie-Down Kit
Pre-Wet Kits			
76400	Standard Pump Kit, On-Off System	76425	50-Gallon Tank Kit (2 x 25 gal)
76420	Deluxe Pump Kit, Full-Feature System		

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