



Hopper and Drive Components

Tornado™ Hopper Spreader

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

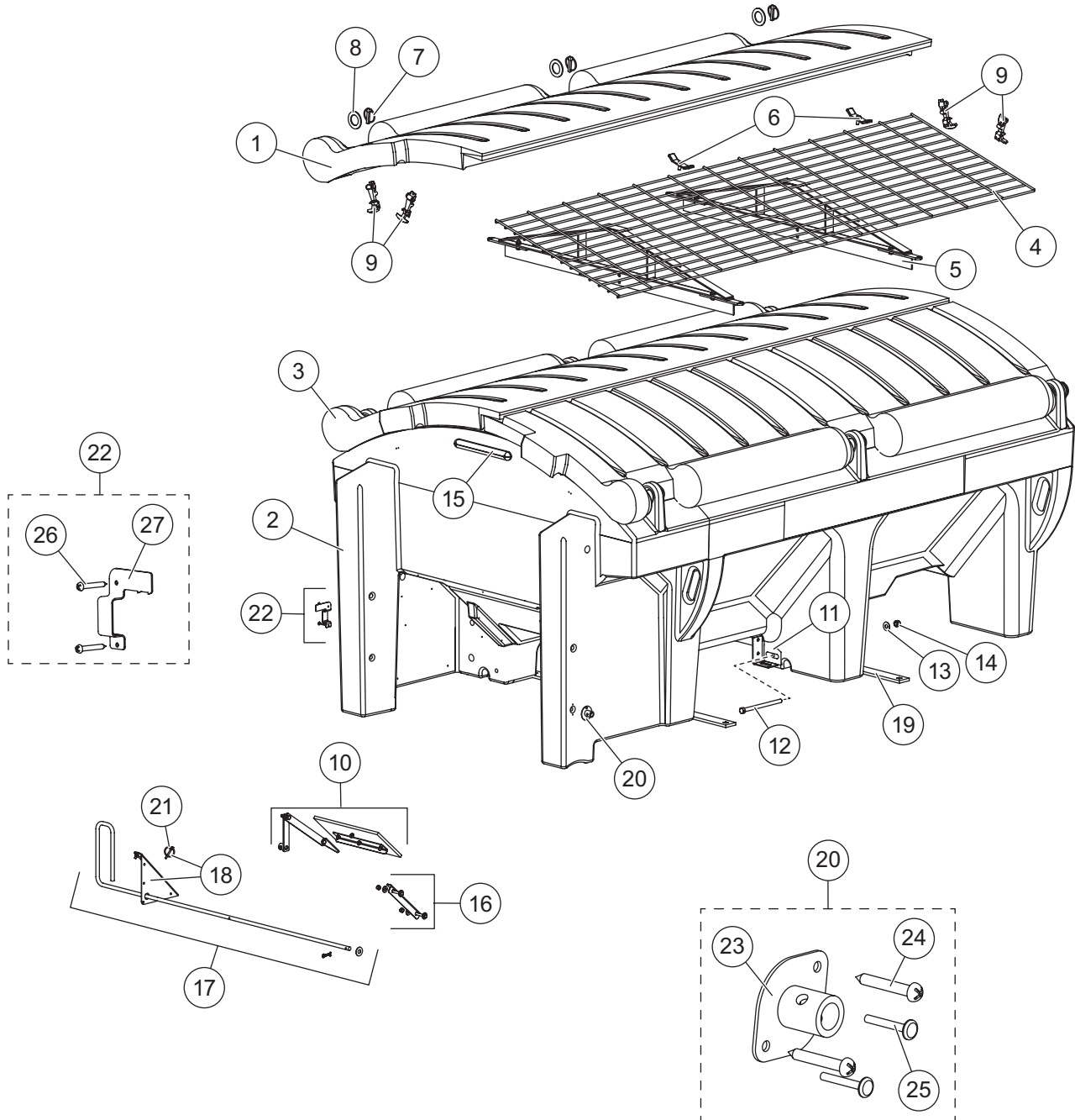
Parts List



This Parts List is for WESTERN® Tornado Hopper Spreaders
with serial numbers beginning with 160201 and higher.

Tornado™ HOPPER SPREADER

HOPPER COMPONENTS



Tornado™ HOPPER SPREADER

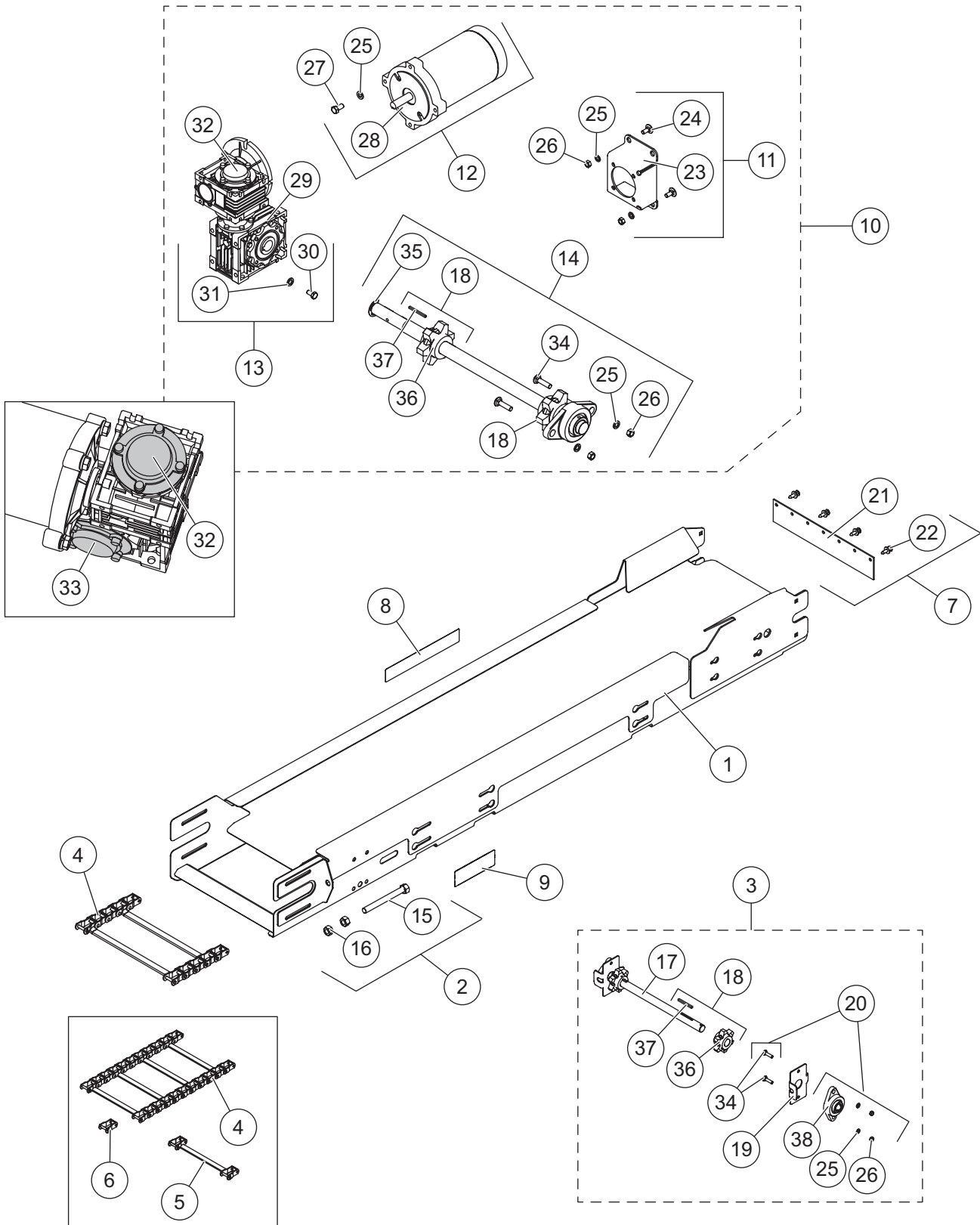
Hopper Components							
Item	Part	Qty	Description	Item	Part	Qty	Description
1	78018*	1	Poly Hopper Lid, 7' (DS)	12		4	1/2-13 x 7-1/2 Hex Cap Screw SS
	78288†	1	Poly Hopper Lid, 7' (DS)	13		4	1/2 Flat Washer SS
	78019	1	Poly Hopper Lid, 8' (DS)	14		4	1/2-13 Hex Locknut SS
ns	78020*	1	Poly Hopper Lid, 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, Poly Hopper			
	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		14	4	1/2-13 Hex Locknut SS
	90601	2	1/4 x 1-1/2 Cotter Pin				
Item 20				78262 Chute Attachment Sleeve Kit			
	23	1	Pin Retainer		25	2	3/16 Pop Rivet Aluminum
	24	2	#10 x 1-1/2 Pan Head Phillips SS				
Item 22				99748 Chute Connector Clip Kit			
	26	2	#10 x 1-1/2 Pan Head Phillips 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

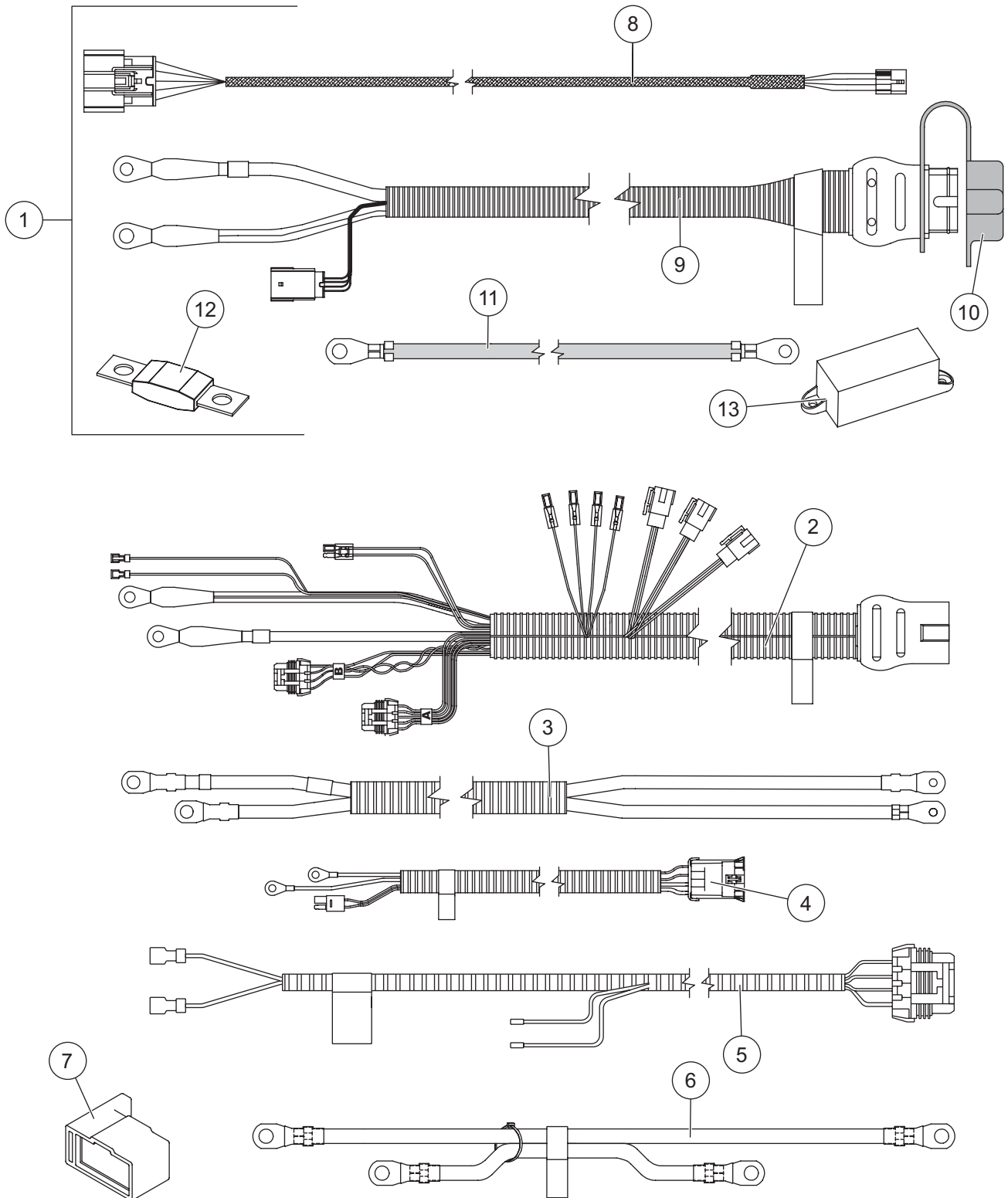


Tornado™ HOPPER SPREADER

Drive Components							
Item	Part	Qty	Description	Item	Part	Qty	Description
1	99752	1	Sill, 7'	7	78266	1	Wiper Kit
	99753	1	Sill, 8'	8	68584	1	Label – Warning/Caution, Spreaders
2	99073	1	Tension Bolt Kit	9	11100	1	Label – Warning, Rear Camera
3	99480	1	Idler Shaft Assembly Kit	10	99091	1	Electric Conveyor Drive Kit
4	78076	1	Pintle Chain, 7' (99 link)	11	99749	1	Gear Box Mounting Plate Kit
	94898	1	Pintle Chain, 8' (108 link)	12	99085	1	Conveyor Motor Kit
5	68492	AR	Conveyor Repair Bar w/Pins & Cotters	13	99087	1	Gear Box Kit
6	68475	AR	Conveyor Repair Link w/Pins & Cotters	14	99094	1	Drive Shaft Kit
Item 2				99073 Tension Bolt Kit			
	15	1	5/8-11 x 6 Take-Up Bolt SS		16	1	5/8-11 Hex Nut SS
Item 3				99480 Idler Shaft Assembly Kit			
	17	1	Idler Shaft		19	2	Bearing Alignment Plate
	18	2	6-Tooth Sprocket		20	1	Spreader Bearing Kit
Item 7				78266 Wiper Kit			
	21	1	Wiper Belt		21	1	Rivet Kit (qty 4 PN 96014 Push-Type Retainers)
Item 10				99091 Electric Conveyor Drive Kit			
	11	1	Gear Box Mounting Plate Kit		13	1	Gear Box Kit
	12	1	Conveyor Motor Kit		14	1	Drive Shaft Kit
Item 11				99749 Gear Box Mounting Plate Kit			
	23	1	Gear Box Attachment Plate		25	4	3/8 Lock Washer SS
	24	4	3/8-16 x 1 Carriage Bolt SS		26	4	3/8-16 Hex Nut SS
Item 12				99085 Conveyor Motor Kit			
	25	2	3/8 Lock Washer SS		28	1	Motor 1/2 hp NEMA 56C
	27	4	3/8-16 x 3/4 Hex Cap Screw SS				
Item 13				99087 Gear Box Kit			
	20	1	Gear Box 10 x 20 2X Worm Gear		32	1	Gear Box Cover Kit, Primary
	30	1	M8 x 1.25 x 16 Hex Cap Screw SS		33	1	Gear Box Cover Kit, Secondary
	31	4	M8 Lock Washer SS				
Item 14				99094 Drive Shaft Kit			
	18	2	6-Tooth Sprocket		34	2	3/8-16 x 1-1/2 Carriage Bolt SS
	25		3/8 Lock Washer SS		35	1	1" Retaining Ring
	26	2	3/8-16 Hex Nut SS				
Item 18				99479 6-Tooth Sprocket			
	36	1	Drive Sprocket 6T		37	1	1/4 x 2-3/4 Machine Key
Item 20				94953 Spreader Bearing Kit			
	25	2	3/8 Lock Washer SS		34	4	3/8-16 x 1-1/2 Carriage Bolt SS
	26	2	3/8-16 Hex Nut SS		38	2	Bearing 1-1/8 ID 2-Bolt Flange
ns = not shown		M = Metric		SS = Stainless Steel		AR = As Required	

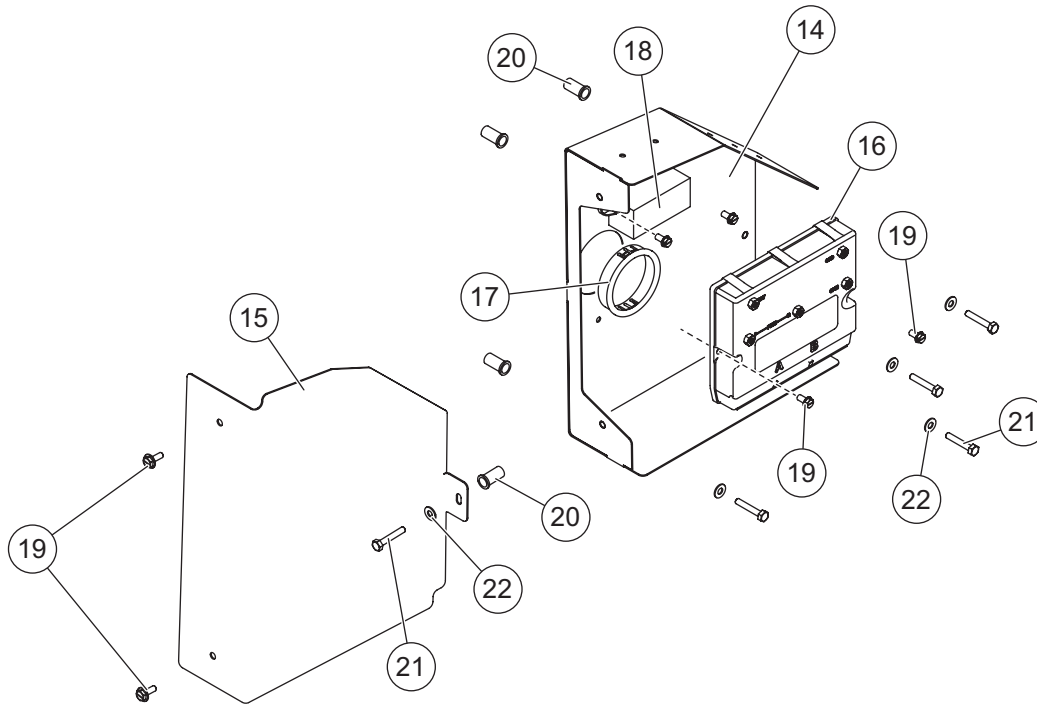
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CABLES & HARNESSING COMPONENTS



Tornado™ HOPPER SPREADER

ELECTRICAL ENCLOSURE COMPONENTS

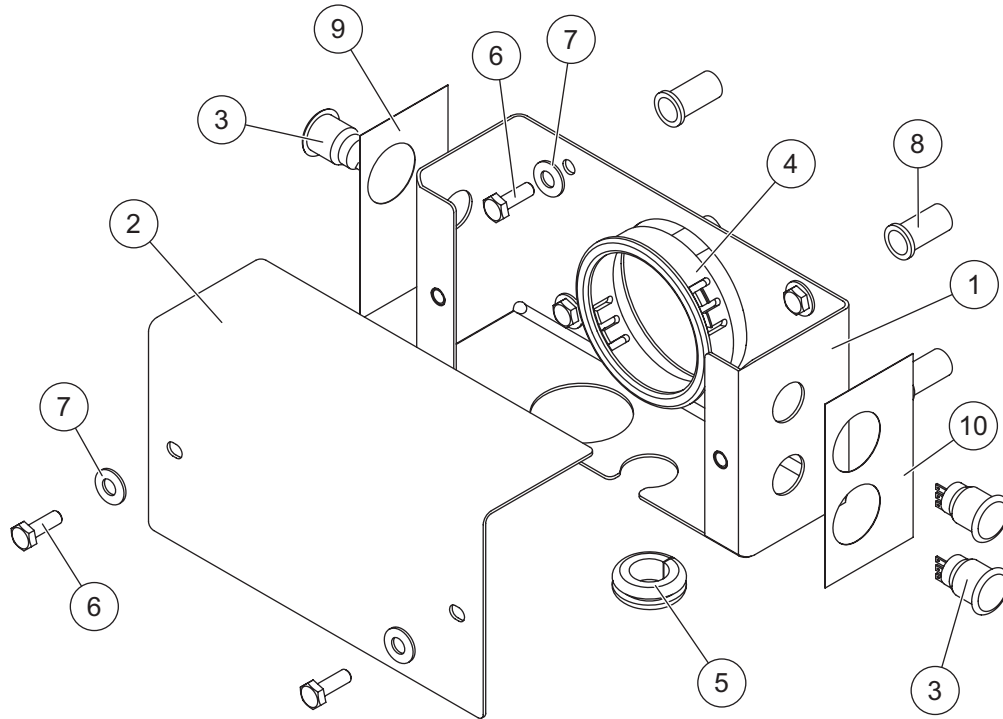


Cables & Harnessing / Electrical Enclosure Assembly							
Item	Part	Qty	Description	Item	Part	Qty	Description
1	78402	1	Vehicle-Side Harness Kit	4	78415	1	Spinner Motor Cable Assy, Hopper
2	78417	1	Hopper Harness Assembly	5	78412	1	Spinner Motor Cable Assembly, Chute
3	78418	1	Harness Assembly, Module 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				
ns = not shown				SS = Stainless Steel			

* Includes Plug Cover (item 10).

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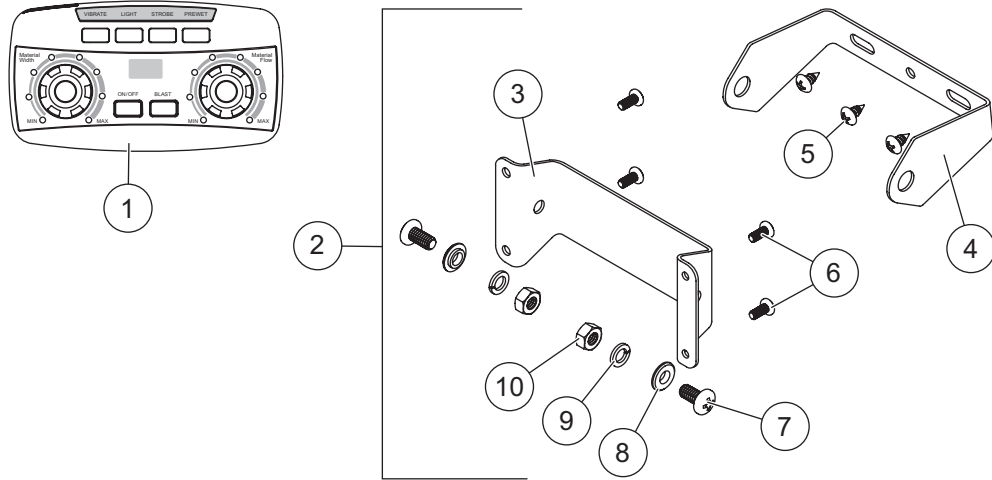
EXTERNAL ENCLOSURE



Switch Box Enclosure Assembly							
Item	Part	Qty	Description	Item	Part	Qty	Description
1	99746	1	External Enclosure, Body	7	6	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				
ns = not shown				SS = Stainless Steel			

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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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