



## Hopper and Drive Components

Tornado™ Hopper Spreader

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

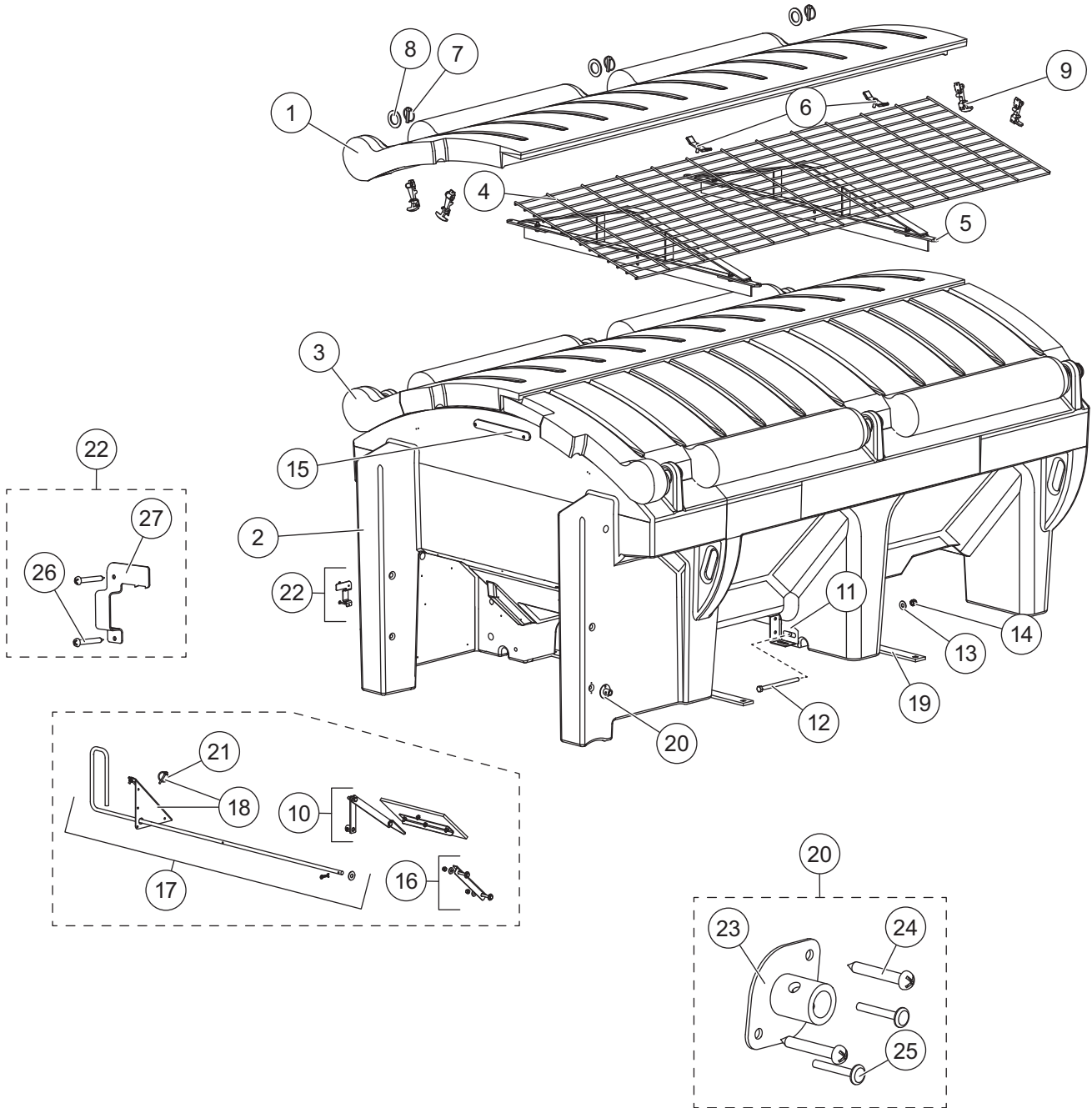
Parts List



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

# Tornado™ HOPPER SPREADER

## HOPPER COMPONENTS

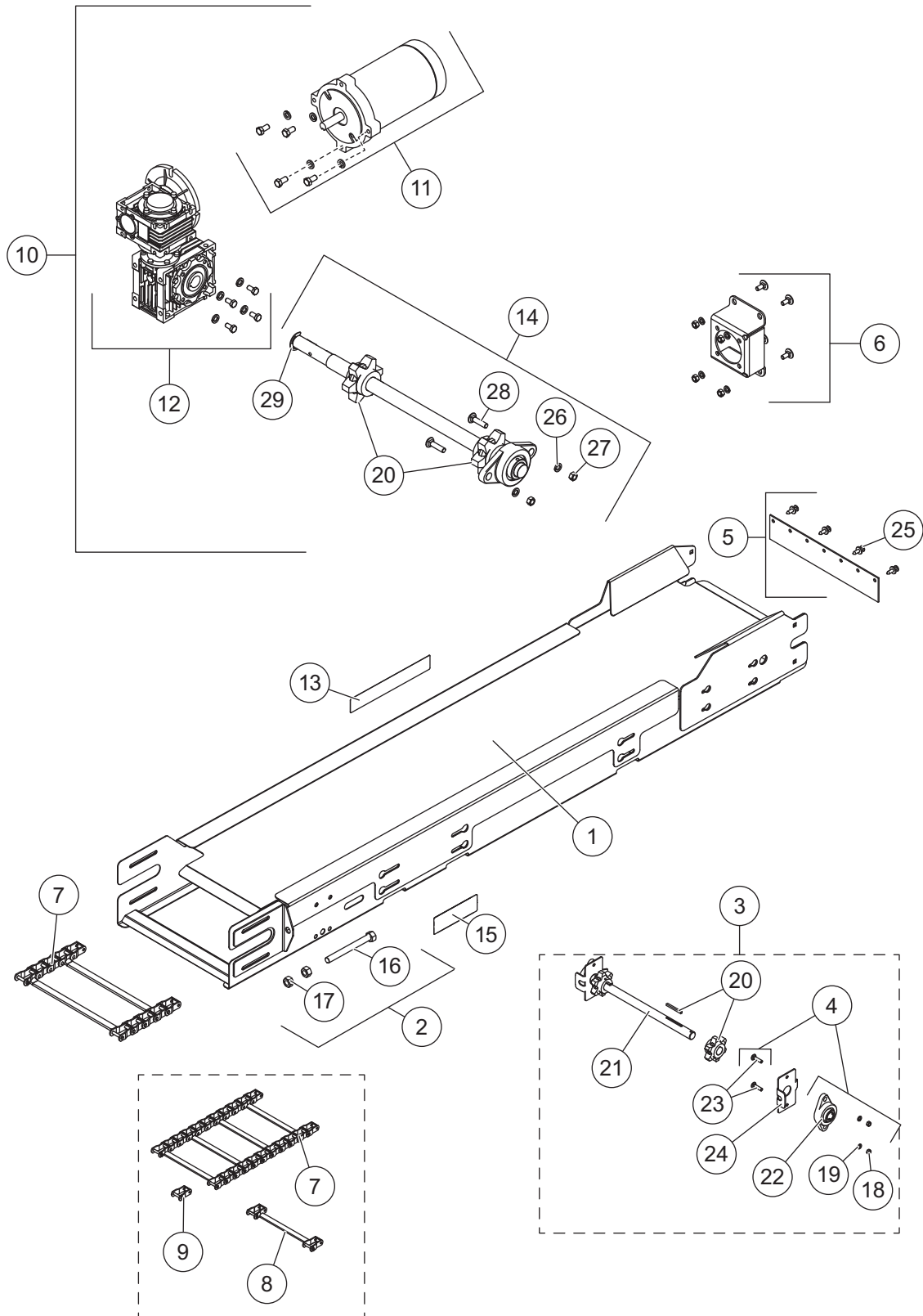


# Tornado™ HOPPER SPREADER

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

# Tornado™ HOPPER SPREADER

## DRIVE COMPONENTS

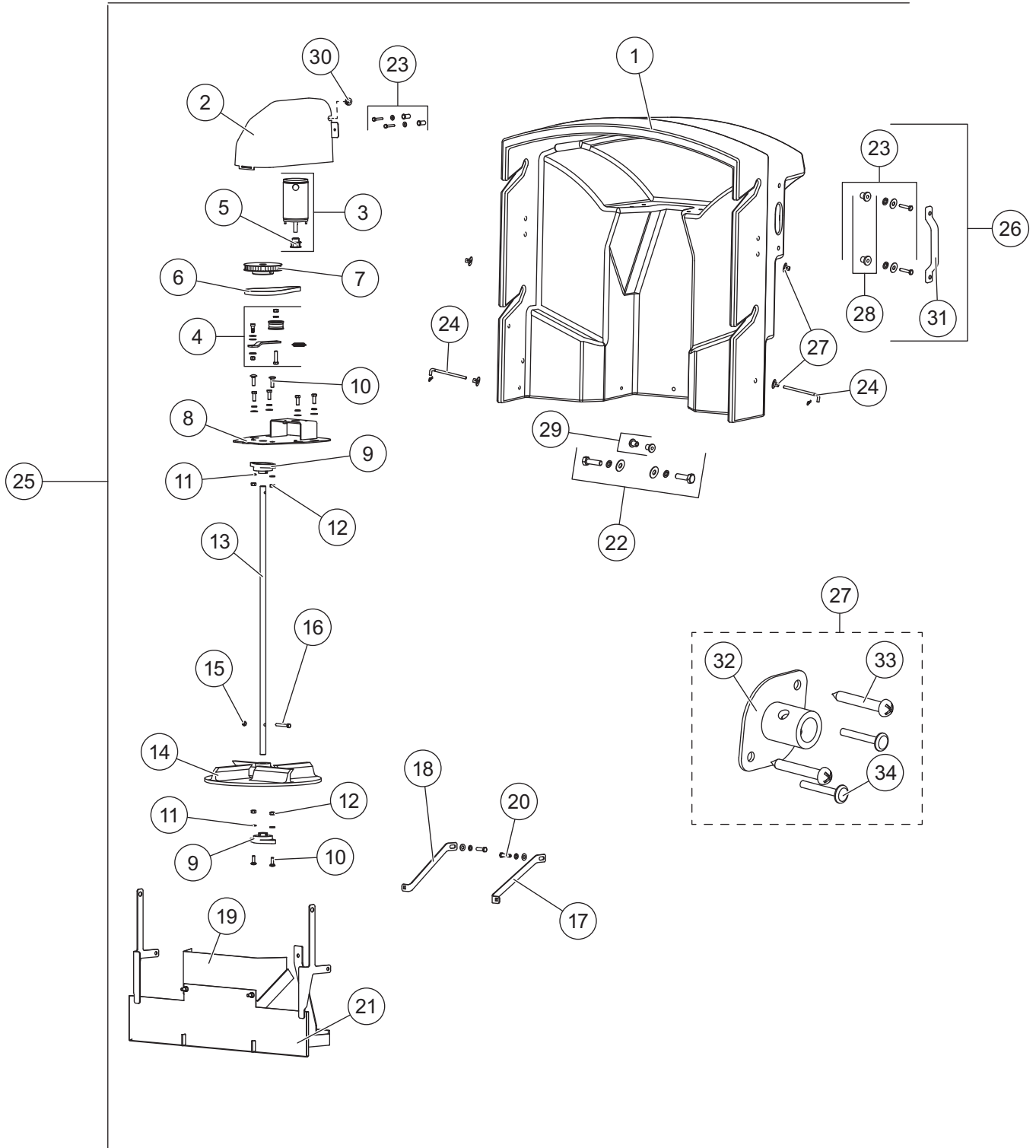


# Tornado™ HOPPER SPREADER

Drive Components							
Item	Part	Qty	Description	Item	Part	Qty	Description
1	99752	1	Sill, 7'	9	68475	AR	Conveyor Repair Link w/Pins & Cotters
	99753	1	Sill, 8'				
2	99073	1	Tension Bolt Kit	10	99091	1	Electric Conveyor Drive Kit
3	99480	1	Idler Shaft Assembly, Kit	11	99085	1	Conveyor Motor Kit
4	94953	1	Spreader Bearing Kit	12	99087	1	Gear Box Kit
5	78266	1	Wiper Kit	ns	86792	1	Gear Box Cover Kit, Primary
6	99749	1	Gear Box Mounting Plate Kit	ns	86799	1	Gear Box Cover Kit, Secondary
7	78076	1	Pintle Chain, 7' (99 link)	13	68584	1	Label – Warning/Caution, Spreaders
	94898	1	Pintle Chain, 8' (108 link)	14	99094	1	Drive Shaft Kit
8	68492	AR	Conveyor Repair Bar w/Pins & Cotters	15	11100	1	Label – Warning, Rear Camera
<b>Item 2</b>				<b>99073 Tension Bolt Kit</b>			
16		1	5/8-11 x 6 Take-Up Bolt SS	17		1	5/8-11 Hex Nut SS
<b>Item 3</b>				<b>99480 Idler Shaft Assembly Kit</b>			
18		2	3/8-16 Hex Nut SS	22	94536	2	Bearing 1-1/8 ID 2-Bolt Flange
19		2	3/8 Lock Washer SS	23		4	3/8-16 x 1-1/2 Carriage Bolt SS
20	99479	2	6-Tooth Sprocket Assembly	24	99532	2	Bearing Alignment Plate
21	94351	1	Idler Shaft				
<b>Item 4</b>				<b>94953 Spreader Bearing Kit</b>			
18		2	3/8-16 Hex Nut SS	22	94536	2	Bearing 1-1/8 ID 2-Bolt Flange
19		2	3/8 Lock Washer SS	23		4	3/8-16 x 1-1/2 Carriage Bolt SS
<b>Item 5</b>				<b>78266 Wiper Kit</b>			
	96014	4	Push-Type Retainer		65642	1	Wiper Belt
25	99079	1	Rivet Kit				
<b>Item 6</b>				<b>99749 Gear Box Mounting Plate Kit</b>			
		1	Gear Box Attachment Plate			4	3/8-16 Hex Nut SS
		4	3/8 Lock Washer SS			4	3/8-16 x 1 Carriage Bolt SS
<b>Item 10</b>				<b>99091 Electric Conveyor Drive Kit</b>			
11	99085	1	Conveyor Motor Kit	14	99094	1	Drive Shaft Kit
12	99087	1	Gear Box Kit				
<b>Item 11</b>				<b>99085 Conveyor Motor Kit</b>			
		2	3/8 Lock Washer SS			1	Motor 1/2 hp NEMA 56C
		4	3/8-16 x 3/4 Hex Cap Screw SS				
<b>Item 12</b>				<b>99087 Gear Box Kit</b>			
	99067	1	Gear Box 10 x 20 2X Worm Gear			4	M8 Lock Washer SS
		1	M8 x 1.25 x 16 Hex Cap Screw SS				
<b>Item 14</b>				<b>99094 Drive Shaft Kit</b>			
20	99479	2	6-Tooth Sprocket Assembly	28		2	3/8-16 x 1-1/2 Carriage Bolt SS
26		2	3/8-16 Hex Nut SS	29	330	1	1" Retaining Ring
27		2	3/8 Lock Washer SS			1	Drive Shaft Assembly
ns = not shown		M = Metric		SS = Stainless Steel		AR = As Required	

# Tornado™ HOPPER SPREADER

## DRIVE COMPONENTS

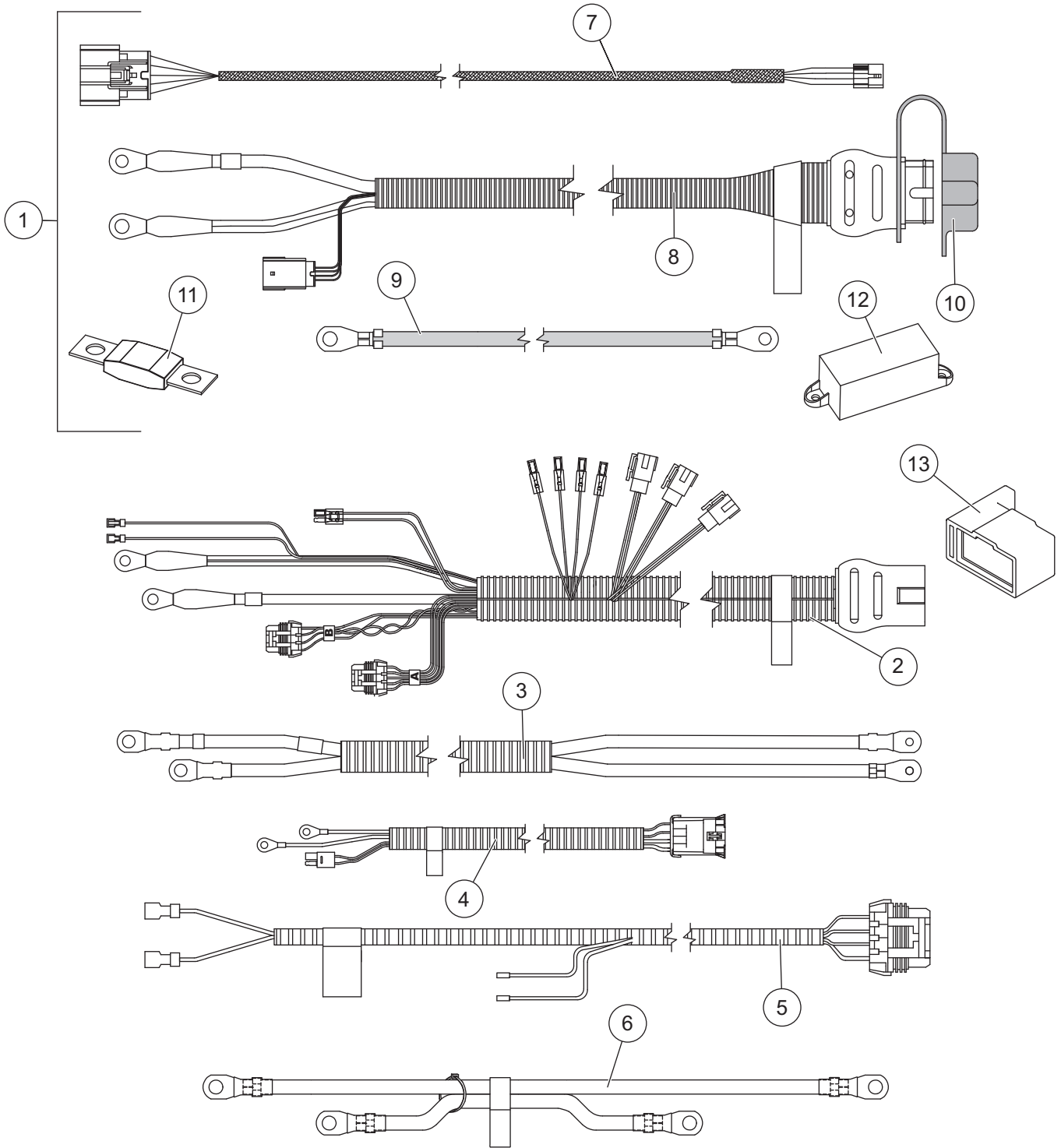


# Tornado™ HOPPER SPREADER

Drive Components							
Item	Part	Qty	Description	Item	Part	Qty	Description
1	78022	1	Chute Cover	17	78301	1	Brace, DS
2	78287	1	Chute Motor Cover	18	78302	1	Brace, PS
3	78300	1	Motor 12V DC 1/3 hp (incl. item 5)	19	78294	1	Deflector
4	78298	1	Idler Kit	20		5	3/8-16 x 3/4 Hex Cap Screw SS
5	93101	1	10-Tooth Cogged Belt Pulley	21	78130	1	Spinner Guard
6	78285	1	Gear Belt	22	78268	1	3/8 Well Nut Fastener Kit
7	78066	1	40-Tooth Cogged Belt Pulley 3/4 Bore	23	78270	1	1/4 Well Nut Fastener Kit
8	78297	1	Chute Motor Base Plate	24	78031	1	Chute Attachment Pin Bag (pkg of 2)
9	96167	2	Pillow Block Bearing 3/4 Bore	25	99780	1	Full Chute Assembly
10		28	3/8-16 x 1 Carriage Bolt SS	26	78247	2	Chute Handle Kit
11		18	3/8 Lock Washer SS	27	78262	4	Chute Attachment Sleeve Kit
12		7	3/8-16 Hex Nut SS	28	78269	1	1/4-20 Well Nut (pkg of 2)
13	78283	1	Spinner Shaft	29	78267	1	3/8-16 Well Nut (pkg of 2)
14	94424	1	Spinner, Poly	30	66130	1	Grommet
15		1	5/16-18 Hex Nut SS	ns	78199	1	CHMSL Harness Kit
16		1	5/16-18 x 2-1/4 Hex Cap Screw SS				
<b>Item 4</b>				<b>78298 Idler Kit</b>			
		1	Spring			1	3/8-16 Hex Nut SS
		1	Idler Arm			1	3/8 x 5/16-18 Shoulder Bolt
		1	Idler Pulley, 2"			1	5/16-18 Hex Locknut GB SS
		1	3/8-16 x 1-3/4 Hex Cap Screw SS			1	5/16 Flat Washer Type A Narrow SS
11		1	3/8 Lock Washer SS			1	3/8 Flat Washer Type A Wide SS
<b>Item 22</b>				<b>78268 3/8 Well Nut Fastener Kit</b>			
		2	3/8-16 Well Nut			2	3/8 Flat Washer Type A Wide SS
		2	3/8-16 x 1-1/2 Hex Cap Screw SS	11		2	3/8 Lock Washer Spring SS
<b>Item 23</b>				<b>78270 1/4 Well Nut Fastener Kit</b>			
28	78269	1	1/4-20 Well Nut (pkg of 2)			2	1/4 Lock Washer Spring SS
		2	1/4 Flat Washer Type A Narrow SS			2	1/4-20 x 1-1/2 Hex Cap Screw SS
<b>Item 25</b>				<b>99780 Full Chute Assembly</b>			
		1	Chute Assembly	1	78022	1	Chute Cover
<b>Item 26</b>				<b>78247 Chute Handle Kit</b>			
23	78270	1	1/4 Well Nut Fastener Kit	31		1	Plastic Handle
<b>Item 27</b>				<b>78262 Chute Attachment Sleeve Kit</b>			
32		1	Pin Retainer	34		2	3/16 Pop Rivet Aluminum
33		2	#10 x 1-1/2 Pan Head Phillips SS				
		ns = not shown				SS = Stainless Steel	
						G = Grade	

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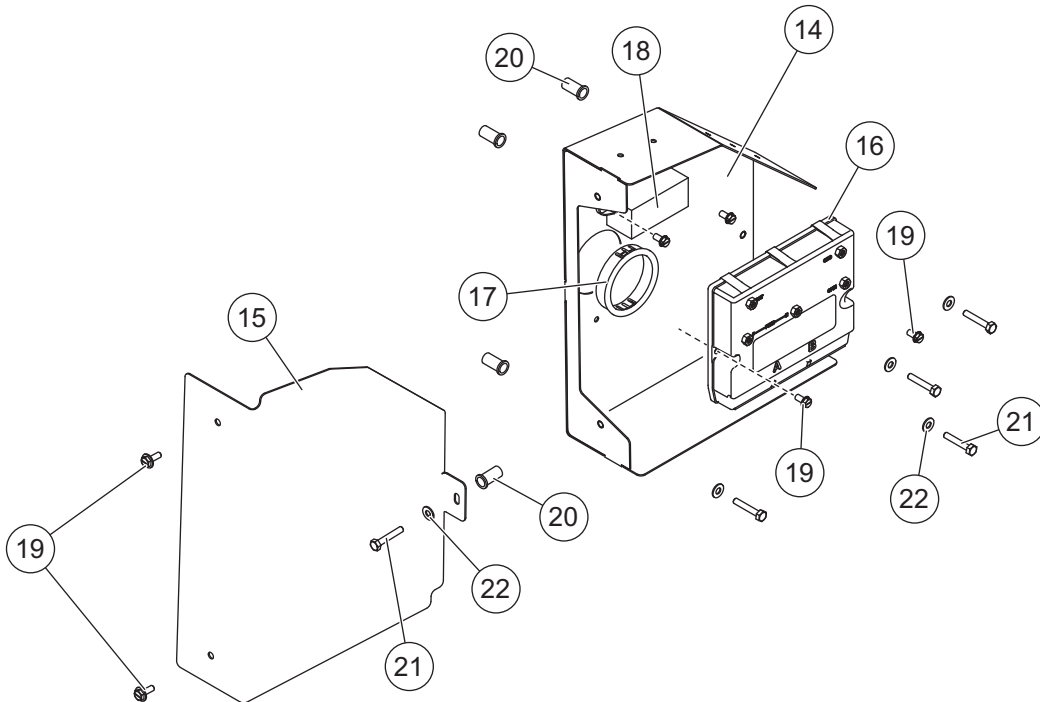
## HARNESSING COMPONENTS





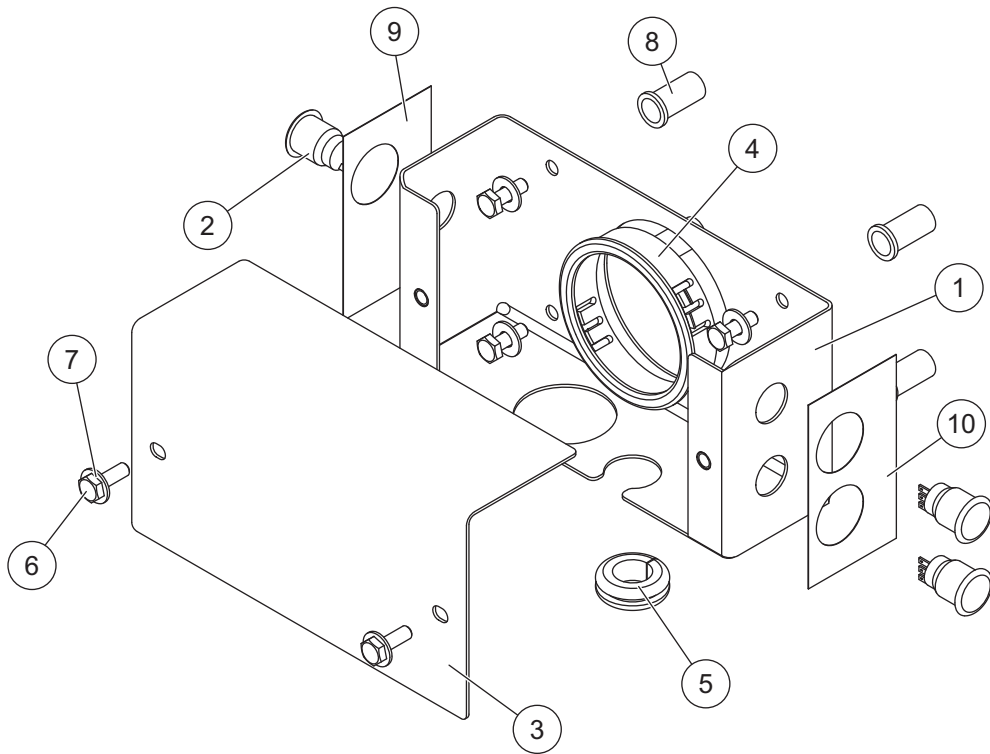
# Tornado™ HOPPER SPREADER

Cables & Harnessing / Electrical Enclosure Assembly							
Item	Part	Qty	Description	Item	Part	Qty	Description
1	78402	1	Vehicle-Side Harness Kit	4	78415	1	Cable Assembly, Spinner Motor, Hopper
2	78417	1	Hopper Harness Assembly	5	78412	1	Cable Assembly, Spinner Motor, Chute
3	78418	1	Harness Assembly, Module to Conveyor Motor	6	78394	1	Cable Assembly, Mod. to Isolated Stud
<b>Item 1                                78402 Vehicle-Side Harness Kit</b>							
7	69902	1	Vehicle Control Harness	11	95836	1	Fuse, 100A
8	76057	1	Vehicle Harness Assembly (incl. item 10)	12	95837	1	Fuse Holder
9	22511	1	22" Battery Cable – Red	13	69916	1	8-Pin Cable Boot
10	99759	1	Plug Cover	ns		6	Cable Tie, HD
				ns		10	Cable Tie, 15.35"
<b>Electrical Enclosure Assembly</b>							
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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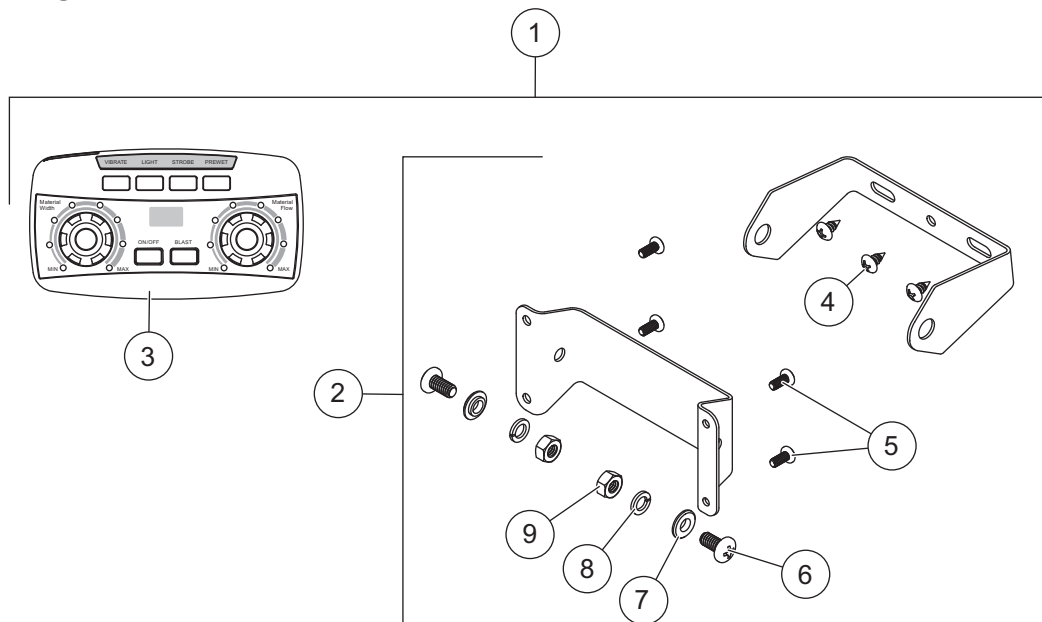
## EXTERNAL ENCLOSURE



External Enclosure							
Item	Part	Qty	Description	Item	Part	Qty	Description
1	99746	1	External Enclosure, Body	7		6	1/4 Flat Washer SS
2	99254	3	Push Button Switch	8	78263	4	Well Nut
3	99747	1	External Enclosure Cover	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			

# Tornado™ HOPPER SPREADER

## CAB CONTROL



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

## ACCESSORIES & PRE-WET KITS

Accessories			
Part	Description	Part	Description
78197	License Plate Light Kit	99504-1	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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