



Hopper and Drive Components

Tornado™ Hopper Spreader

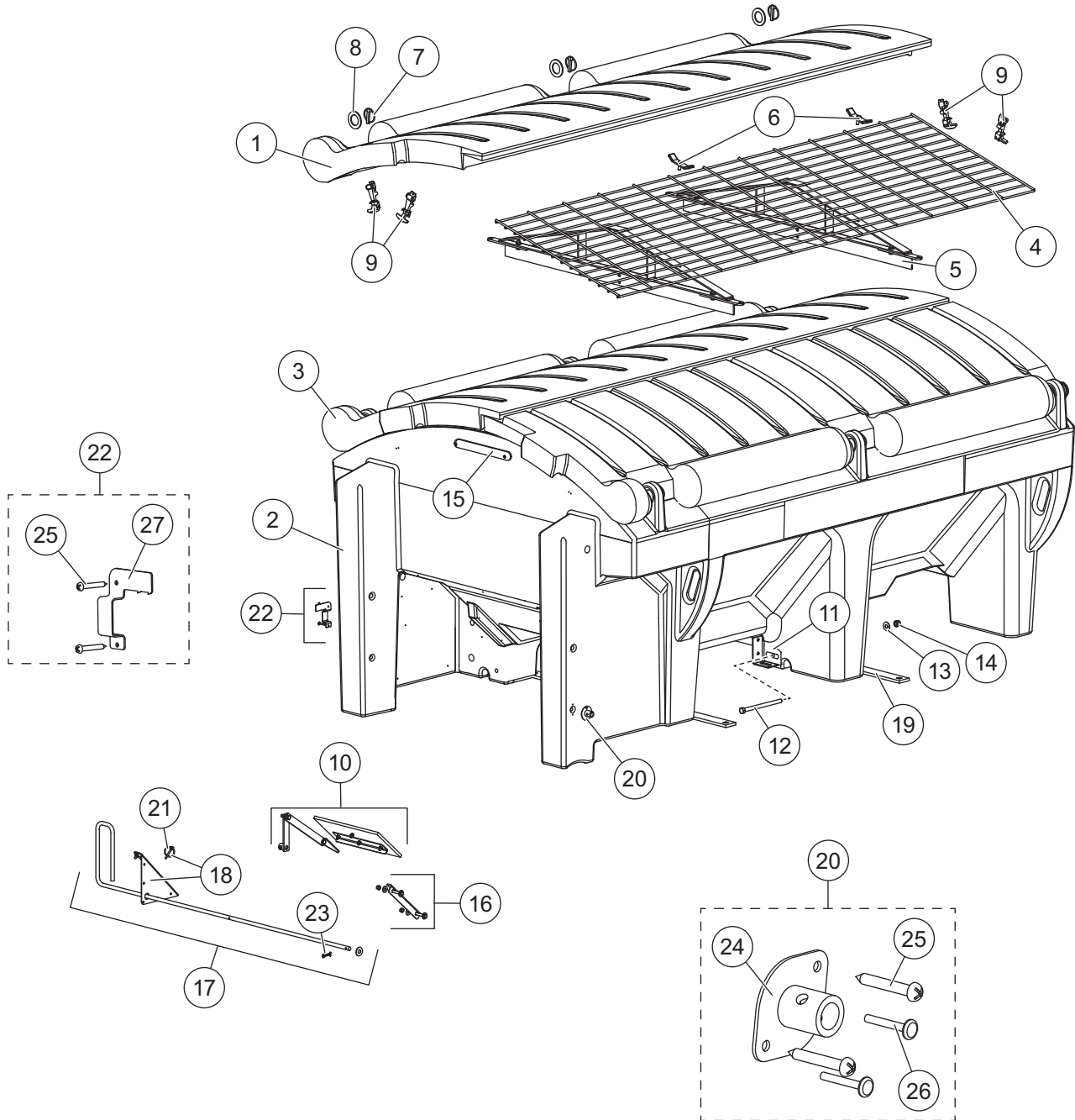
#78000-1, 78003-1, 78006-1

Parts List



This Parts List is for WESTERN® Tornado hopper spreaders
with serial numbers beginning with 160201 – 201210.

HOPPER COMPONENTS



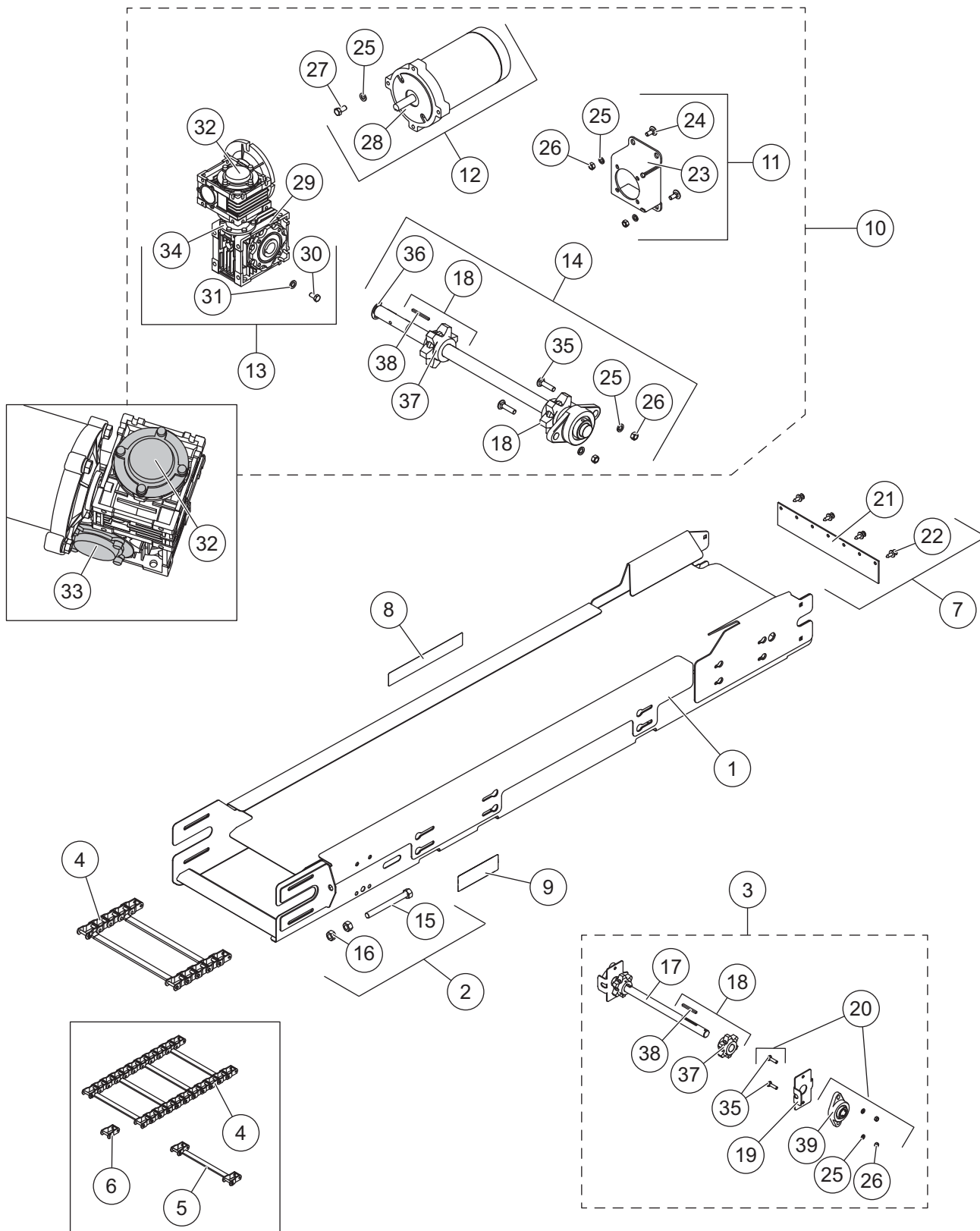
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Hopper Components							
Item	Part	Qty	Description	Item	Part	Qty	Description
1	78018*	1	Poly Hopper Lid, 7' (DS)	12		4	1/2-13 x 7-1/2 Hex Cap Screw SS
	78288†	1	Poly Hopper Lid, 7' (DS)	13		4	1/2 Flat Washer SS
	78019	1	Poly Hopper Lid, 8' (DS)	14		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.

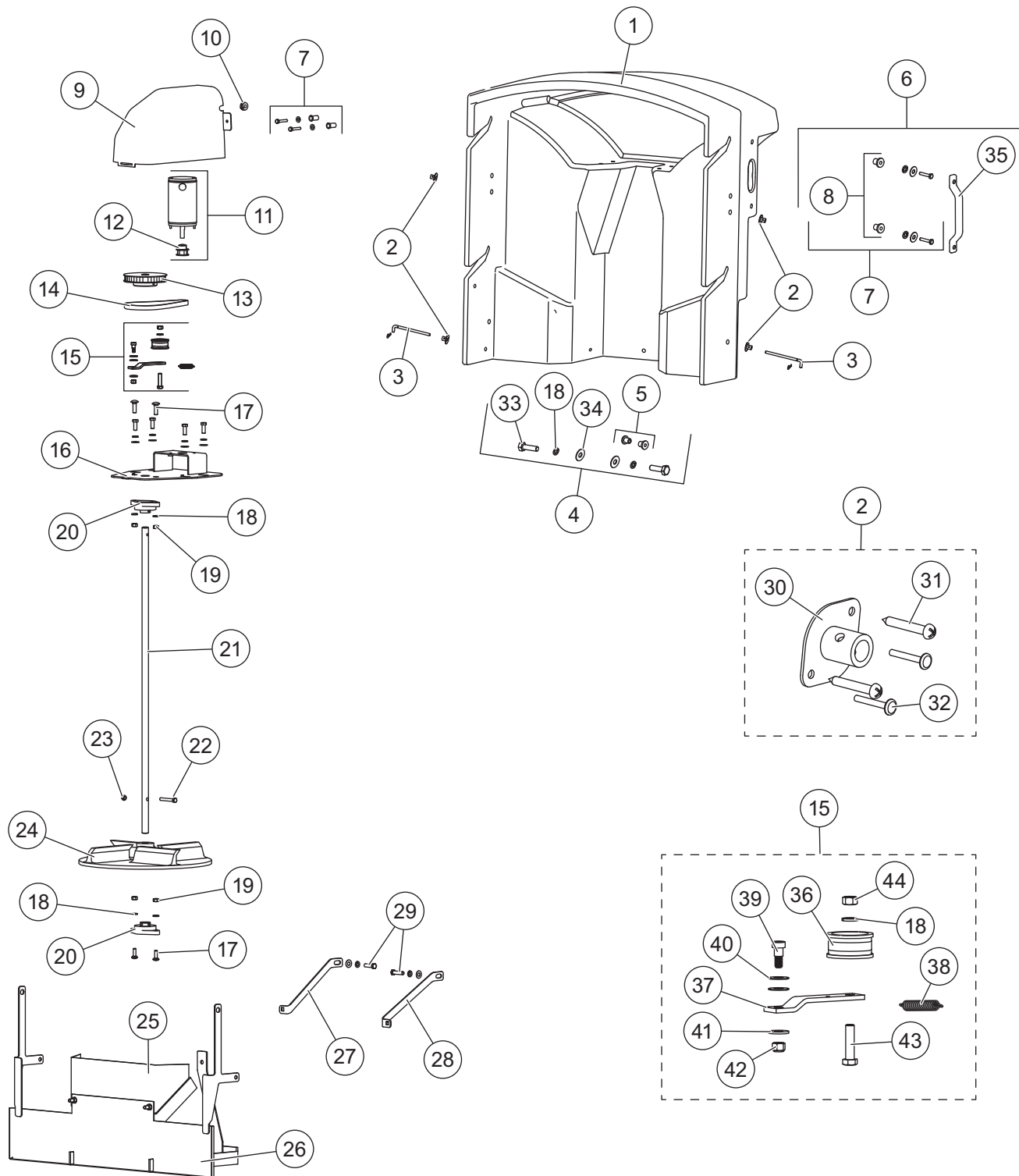
DRIVE COMPONENTS



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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	78560	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	94351	1	Idler Shaft	19	99765	2	Bearing Alignment Plate
18	99479	2	6-Tooth Sprocket	20	94953	1	Spreader Bearing Kit
Item 7 78266 Wiper Kit							
21	65642	1	Wiper Belt	22	99079	1	Rivet Kit (qty 4 PN 96014 push-type retainers)
Item 10 99091 Electric Conveyor Drive Kit							
11	99749	1	Gear Box Mounting Plate Kit	13	99087	1	Gear Box Kit
12	99085	1	Conveyor Motor Kit	14	99094	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							
29	99067	1	Gear Box 10 x 20 2X Worm Gear	32	86792	1	Gear Box Cover Kit, Primary
30		1	M8-1.25 x 16 Hex Cap Screw SS	33	86799	1	Gear Box Cover Kit, Secondary
31		4	M8 Lock Washer SS	34	30017	1	Connector Flange
Item 14 99094 Drive Shaft Kit							
18	99479	2	6-Tooth Sprocket	35		2	3/8-16 x 1-1/2 Carriage Bolt SS
25		2	3/8 Lock Washer SS	36	330	1	1" Retaining Ring
26		2	3/8-16 Hex Nut SS				
Item 18 99479 6-Tooth Sprocket							
37		1	Drive Sprocket 6T	38	95076	1	1/4 x 2-3/4 Machine Key
Item 20 94953 Spreader Bearing Kit							
25		2	3/8 Lock Washer SS	35		4	3/8-16 x 1-1/2 Carriage Bolt SS
26		2	3/8-16 Hex Nut SS	39	94536	2	Bearing 1-1/8 ID 2-Bolt Flange
ns = not shown		M = Metric		SS = Stainless Steel		AR = As Required	

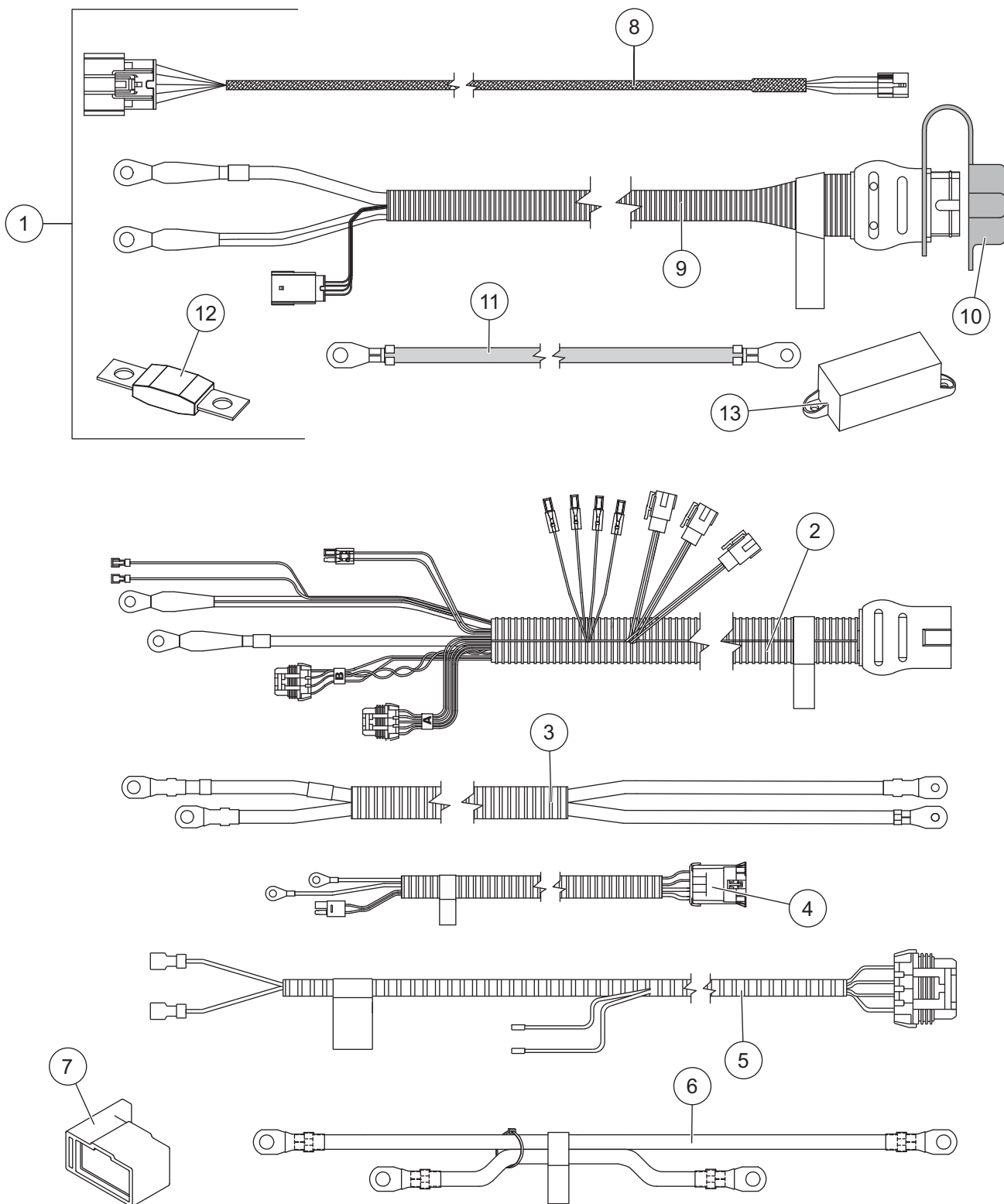
CHUTE ASSEMBLY



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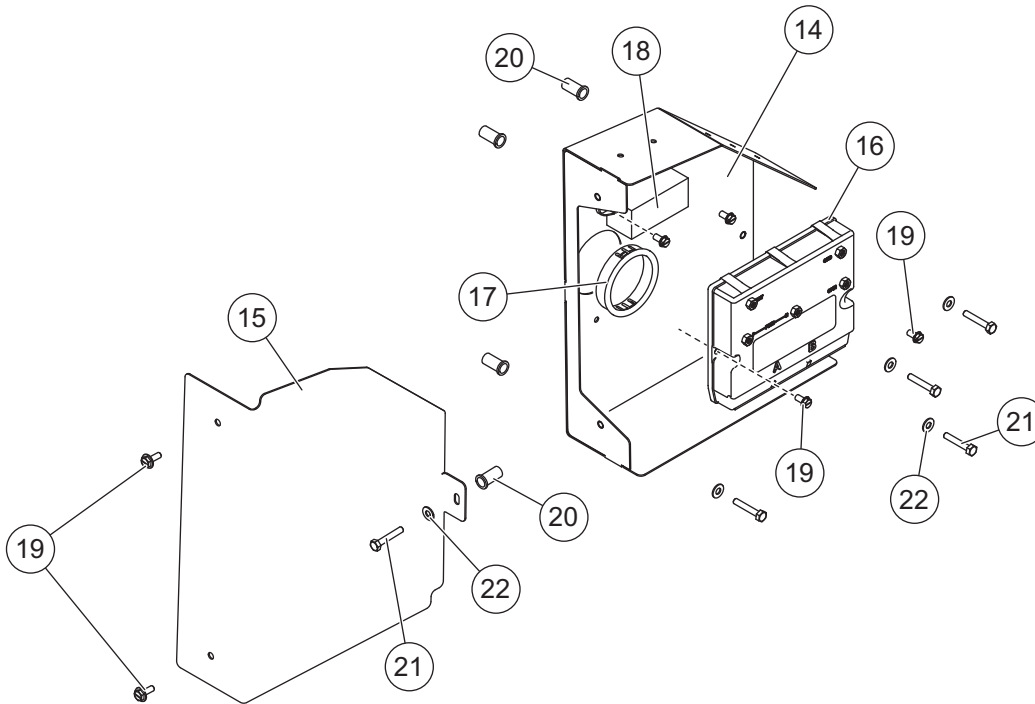
99780 Chute Assembly							
Item	Part	Qty	Description	Item	Part	Qty	Description
1	78022	1	Chute Cover	16	78297	1	Chute Motor Base Plate
2	78262	4	Chute Attachment Sleeve Kit	17		28	3/8-16 x 1 Carriage Bolt SS
3	78031	1	Chute Attachment Pin Bag (pkg of 2)	18		18	3/8 Lock Washer SS
4	78268	1	3/8 Well Nut Fastener Kit	19		7	3/8-16 Hex Nut SS
5	78267	1	3/8-16 Well Nut (pkg of 2)	20	96167	2	Pillow Block Bearing 3/4 Bore
6	78247	2	Chute Handle Kit	21	78283	1	Spinner Shaft
7	78270	1	1/4 Well Nut Fastener Kit	22		1	5/16-18 x 2-1/4 Hex Cap Screw SS
8	78269	1	1/4-20 Well Nut (pkg of 2)	23		1	5/16-18 Hex Nut SS
9	78287	1	Chute Motor Cover	24	94424	1	Spinner, Poly
10	66130	1	Grommet	25	78294	1	Deflector
11	78300	1	Motor 12V DC 1/3 hp (incl. item 12)	26	78130	1	Spinner Guard
12	93101	1	10-Tooth Cogged Belt Pulley	27	78302	1	Brace, PS
13	76796	1	40-Tooth Cogged Belt Pulley 3/4 Bore	28	78301	1	Brace, DS
14	78285	1	Gear Belt	29		5	3/8-16 x 3/4 Hex Cap Screw SS
15	78298	1	Idler Kit	ns	78199	1	CHMSL Harness Kit
Item 2 78262 Chute Attachment Sleeve Kit							
30		1	Pin Retainer	32		2	3/16 Pop Rivet Aluminum
31		2	#10 x 1-1/2 Pan Head Phillips SS				
Item 4 78268 3/8 Well Nut Fastener Kit							
5	78267	1	3/8-16 Well Nut (pkg of 2)	33		2	3/8-16 x 1-1/2 Hex Cap Screw SS
18		2	3/8 Lock Washer SS	34		2	3/8 Flat Washer Type A Wide SS
Item 6 78247 Chute Handle Kit							
7	78270	1	1/4 Well Nut Fastener Kit	35		1	Plastic Handle
Item 7 78270 1/4 Well Nut Fastener Kit							
8	78269	1	1/4-20 Well Nut (pkg of 2)			2	1/4 Lock Washer SS
		2	1/4 Flat Washer Type A Narrow SS			2	1/4-20 x 1-1/2 Hex Cap Screw SS
Item 15 78298 Idler Kit							
18		1	3/8 Lock Washer SS	40		2	3/8 Flat Washer Type A Wide SS
36		1	2" Idler Pulley	41		1	5/16 Flat Washer Type A Narrow SS
37		1	Idler Arm	42		1	5/16-18 Hex Locknut GB SS
38		1	Spring	43		1	3/8-16 x 1-3/4 Hex Cap Screw SS
39		1	3/8 x 5/16-18 Shoulder Bolt	44		1	3/8-16 Hex Nut SS
ns = not shown		SS = Stainless Steel			G = Grade		

CABLES & HARNESSING COMPONENTS



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ELECTRICAL ENCLOSURE COMPONENTS

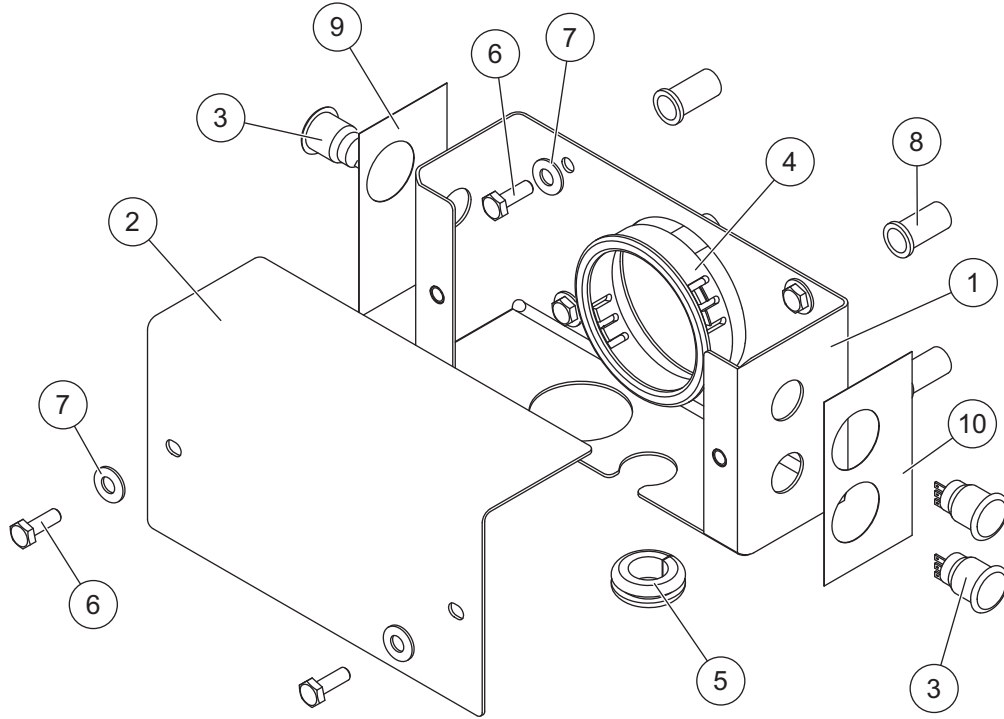


Cables & Harnessing / Electrical Enclosure Assembly							
Item	Part	Qty	Description	Item	Part	Qty	Description
1	78402	1	Vehicle-Side Harness Kit	4	78415	1	Spinner Motor Cable Assy, Hopper
2	78417	1	Hopper Harness Assembly	5	78412	1	Spinner Motor Cable Assembly, Chute
3	78418	1	Harness Assembly, Module 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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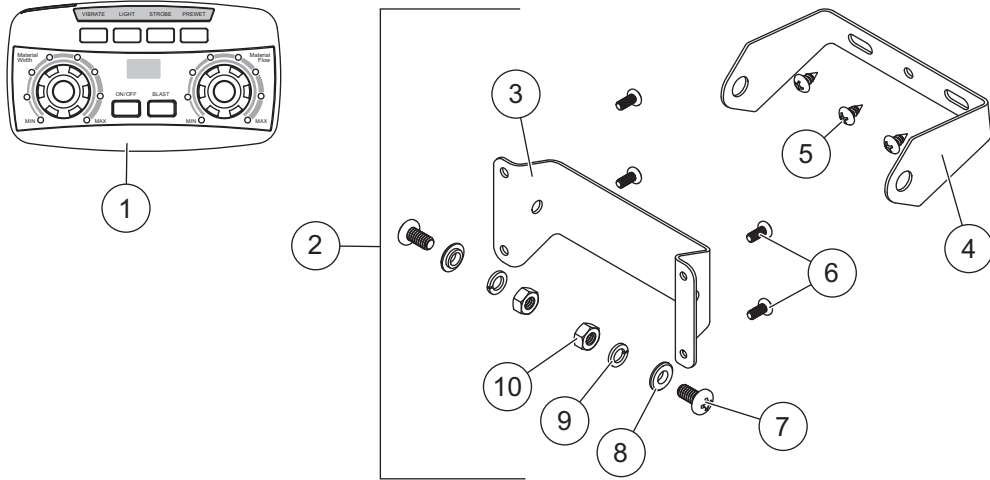
EXTERNAL ENCLOSURE



Switch Box Enclosure Assembly							
Item	Part	Qty	Description	Item	Part	Qty	Description
1	99746	1	External Enclosure, Body	7	6	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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