



Fisher Engineering

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April 15, 2025
Lit. No. 32942, Rev. 03

TEMPEST™

Hopper and Drive Components

TEMPEST™ Poly Hopper Spreaders

#P150A, P220A, P150C, P220C

Parts List

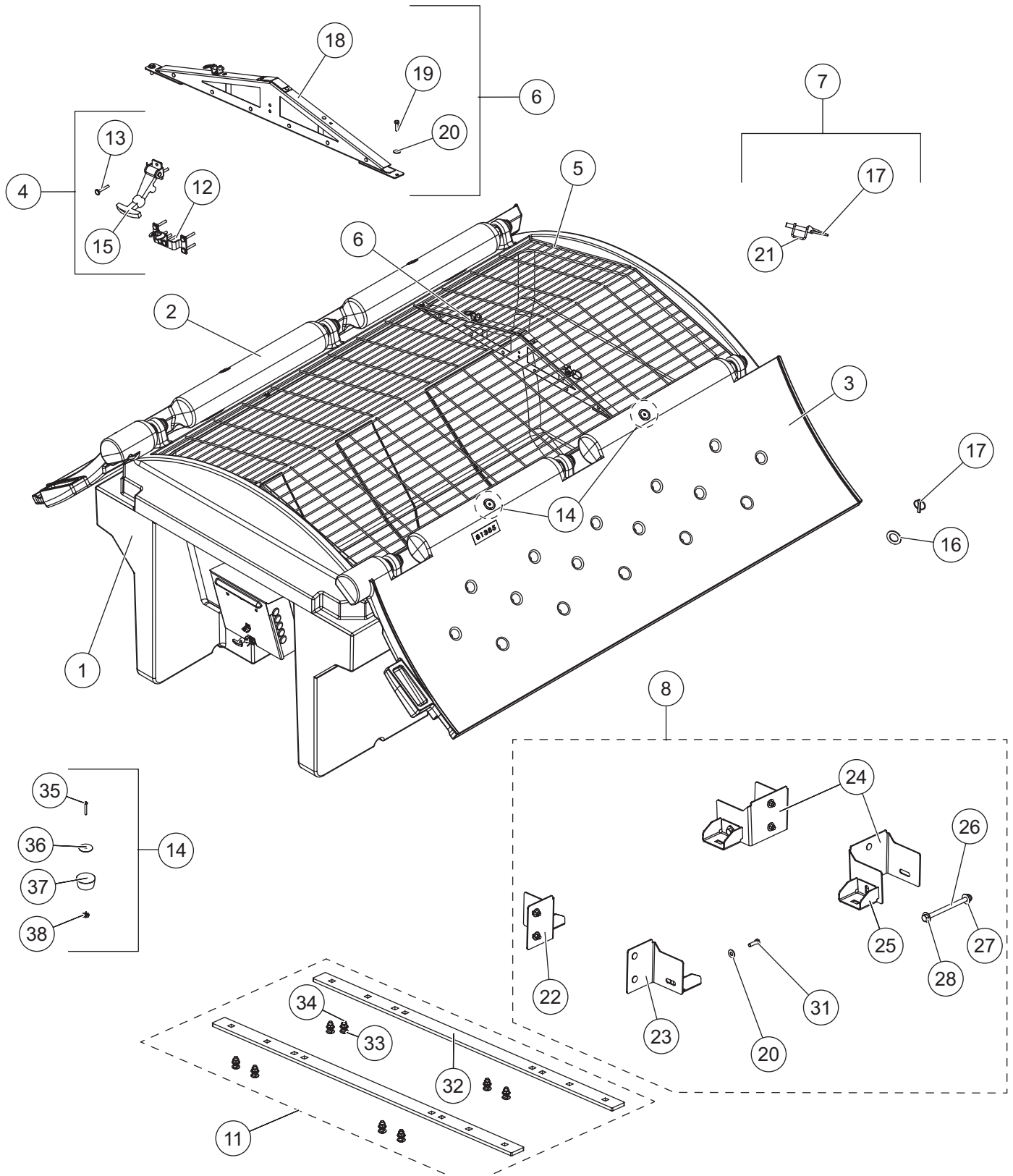


This Parts List is for FISHER® TEMPEST Poly Hopper Spreaders
with serial numbers beginning with 240110 and higher.

A DIVISION OF FISHER, LLC

TEMPEST™ POLY HOPPER SPREADERS

HOPPER ASSEMBLY COMPONENTS – AUGER MODELS



Not drawn to scale.

Illustration continues on page 4

TEMPEST™ POLY HOPPER SPREADERS

Hopper Assembly Components – Auger Models							
Item	Part	Qty	Description	Item	Part	Qty	Description
1	90535	1	Hopper Body Kit – P150	7	99578	1	Screen Attachment Kit (set of 4)
	90715	1	Hopper Body Kit – P220	8	90365	1	Poly Auger Leg Brackets
2	90220	1	Poly Hopper Lid Kit, DS – P150	9*	90385	1	Inverted V Kit – P150
	90240	1	Poly Hopper Lid Kit, DS – P220	10*	78120-1	1	Inverted V Kit – P220
3	90230	1	Poly Hopper Lid Kit, PS – P150	11	90260	1	Mounting Bar (set of 2)
	90250	1	Poly Hopper Lid Kit, PS – P220	ns	31594EN	2	Label – Warning/Caution Spreaders
4	90435	2	Lid Latch Assembly – Poly	ns	30916EN	1	Label – Warning, Rotating Parts
5	78115	2	Top Screen – P150	ns	76059	3	Bundling Clips
	78116	2	Top Screen – P220	ns	59223	3	Cable Ties
6	78117-3	2	Top Screen Support Kit				
Item 1 90535 (P150) / 90715 (P220) Hopper Body Kit							
		1	Hopper Body – P150	ns		4	3/16 Pop Rivet, Aluminum
		1	Hopper Body – P220	ns		2	Keeper
12		2	Hold Down Assembly Offset Bracket	ns		6	1/4-20 Well Nut
13		8	3/16 Pop Rivet				
Item 2 90220 (P150) / 90240 (P220) Poly Hopper Lid Kit, DS							
		1	Poly Hopper Lid, DS – P150	16	78097	3	2.5 OD x 1.53 ID Washer SS
		1	Poly Hopper Lid, DS – P220	17	93010	3	7/16 Linchpin
14	90305	1	Lid Plug Assembly (set of 2)	13		4	3/16 Pop Rivet
15		2	Rubber Hold-Down Strap				
Item 3 90230 (P150) / 90250 (P220) Poly Hopper Lid Kit, PS							
		1	Poly Hopper Lid, PS – P150	16	78097	3	2.5 OD x 1.53 ID Washer SS
		1	Poly Hopper Lid, PS – P220	17	93010	3	7/16 Linchpin
14	90305	1	Lid Plug Assembly (set of 2)				
Item 4 90435 Lid Latch Assembly – Poly							
12		1	Hold Down Assembly Offset Bracket	ns		2	3/16 Pop Rivet, Aluminum
15		1	Rubber Hold-Down Strap	ns		1	Keeper
13		6	3/16 Pop Rivet				
Item 6 78117-3 Top Screen Support Kit							
18		1	Top Screen Support	20		2	3/8 Flat Washer, Type A Wide SS
19		2	3/8-16 x 1 Hex Cap Screw SS	ns		2	3/8 Lock Washer SS
Item 7 99578 Screen Attachment Kit (set of 4)							
21		4	Pin Tab	ns		4	1/4 Flat Washer, Type A Narrow SS
17	93010	4	7/16 Linchpin	ns		4	1/4-20 Hex Locknut GB
ns		4	1/4-20 x 3/4 Carriage Bolt				
Item 8 90365 Poly Auger Leg Brackets							
22		1	Poly Auger DS Leg Bracket	28		2	1/2-13 Hex Locknut GB
23		1	Poly Auger PS Leg Bracket	29		8	3/8-16 x 1 Carriage Bolt SS
24		2	Poly U-Leg Bracket	20		10	3/8 Flat Washer, Type A Wide SS
25		4	Poly Auger BB Bracket	30		8	3/8-16 Hex Locknut GB SS
26		2	1/2-13 x 7-1/2 Hex Cap Screw SS	31		2	3/8-16 x 1-1/4 Hex Cap Screw SS
27		4	1/2 Flat Washer, Type A Wide				
Item 11 90260 Mounting Bar (set of 2)							
32		2	Bolting Bar	34		8	1/2-13 Flanged Locknut
33		8	1/2-13 x 1-1/2 Carriage Bolt G8				
Item 14 90305 Lid Plug Assembly							
35		2	#10-24 x 1-1/2 Button Cap Screw SS	37		2	Rubber Plug
36		2	#10-24 x 1-1/2 Fender Washer SS	38		2	#10-24 T-Nut SS
G = Grade				ns = not shown		SS = Stainless Steel	

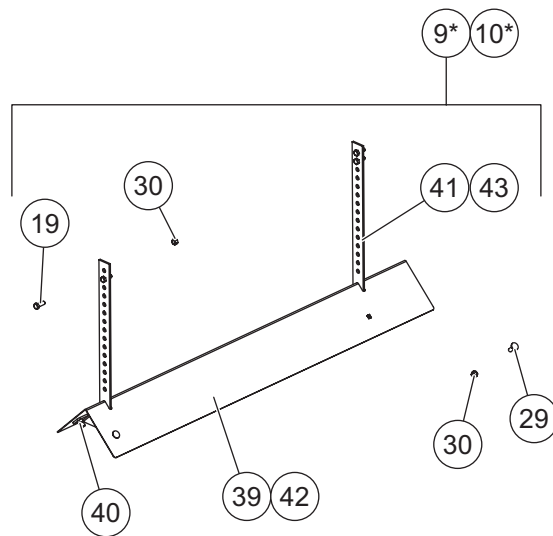
* Inverted V Kit is standard on auger models. Available as an accessory for chain models.
Kit illustration and components are shown on the following pages.

Parts table continues on page 5

TEMPEST™ POLY HOPPER SPREADERS

HOPPER ASSEMBLY COMPONENTS – AUGER MODELS

Illustration continued from page 2



TEMPEST™ POLY HOPPER SPREADERS

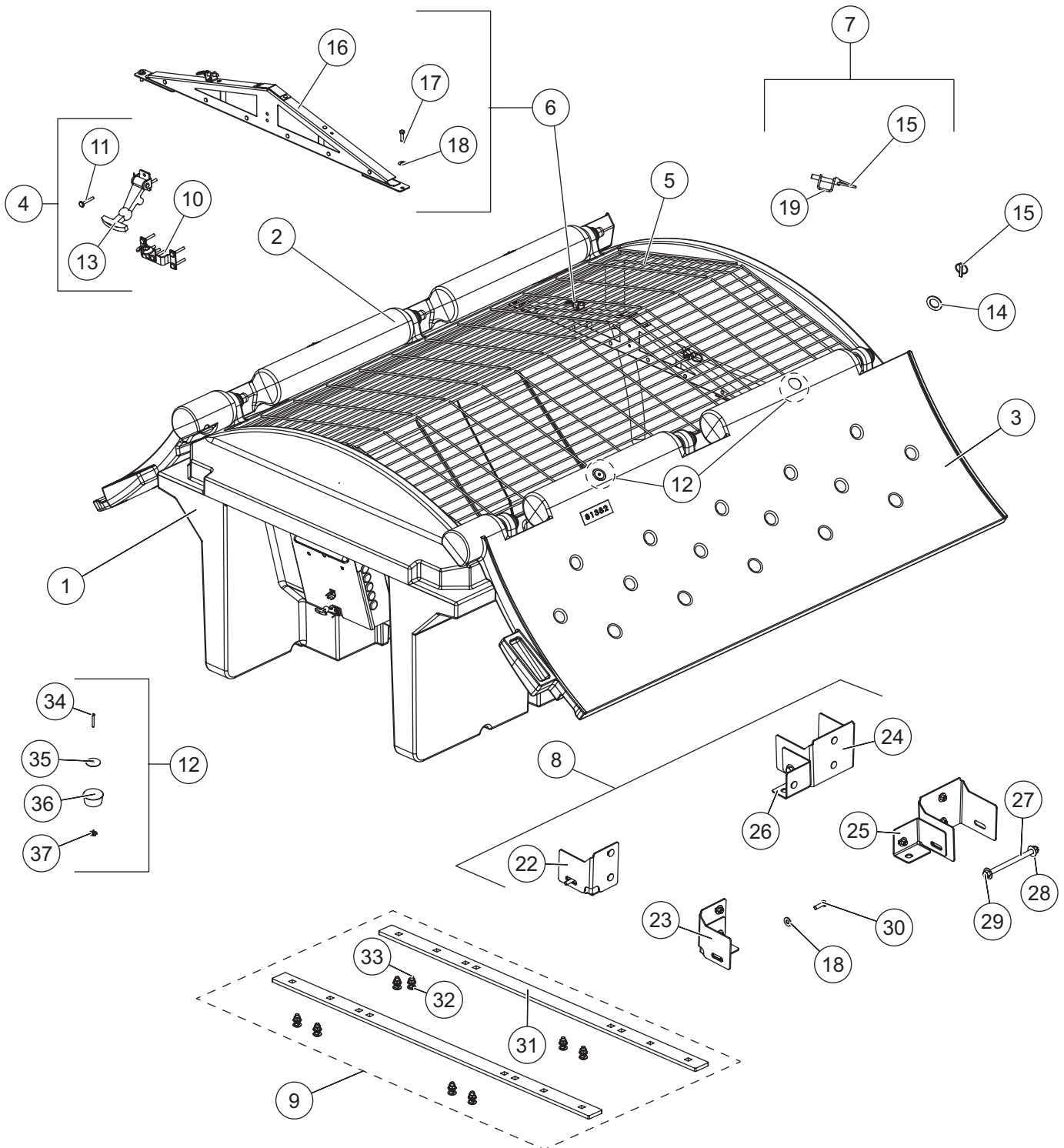
Table continued from page 3

Item	Part	Qty	Description	Item	Part	Qty	Description
Item 9*				90385 Inverted V Kit – P150			
39		1	Inverted V – Poly	29		6	3/8-16 x 1 Carriage Bolt SS
40		2	Inverted V Brace – Poly	30		10	3/8-16 Hex Locknut GB SS
41	78144	2	Inverted V Hanger Bar – P150	19		4	3/8-16 x 1 Hex Cap Screw SS
Item 10*				78120-1 Inverted V Kit – P220			
42		1	Inverted V – Poly	29		6	3/8-16 x 1 Carriage Bolt SS
40		2	Inverted V Brace – Poly	30		10	3/8-16 Hex Locknut GB SS
43	31318	2	Inverted V Hanger Bar – P220	19		4	3/8-16 x 1 Hex Cap Screw SS
G = Grade				ns = not shown			
				SS = Stainless Steel			

* Standard on auger models. Available as an accessory for chain models.

TEMPEST™ POLY HOPPER SPREADERS

HOPPER ASSEMBLY COMPONENTS – CHAIN MODELS



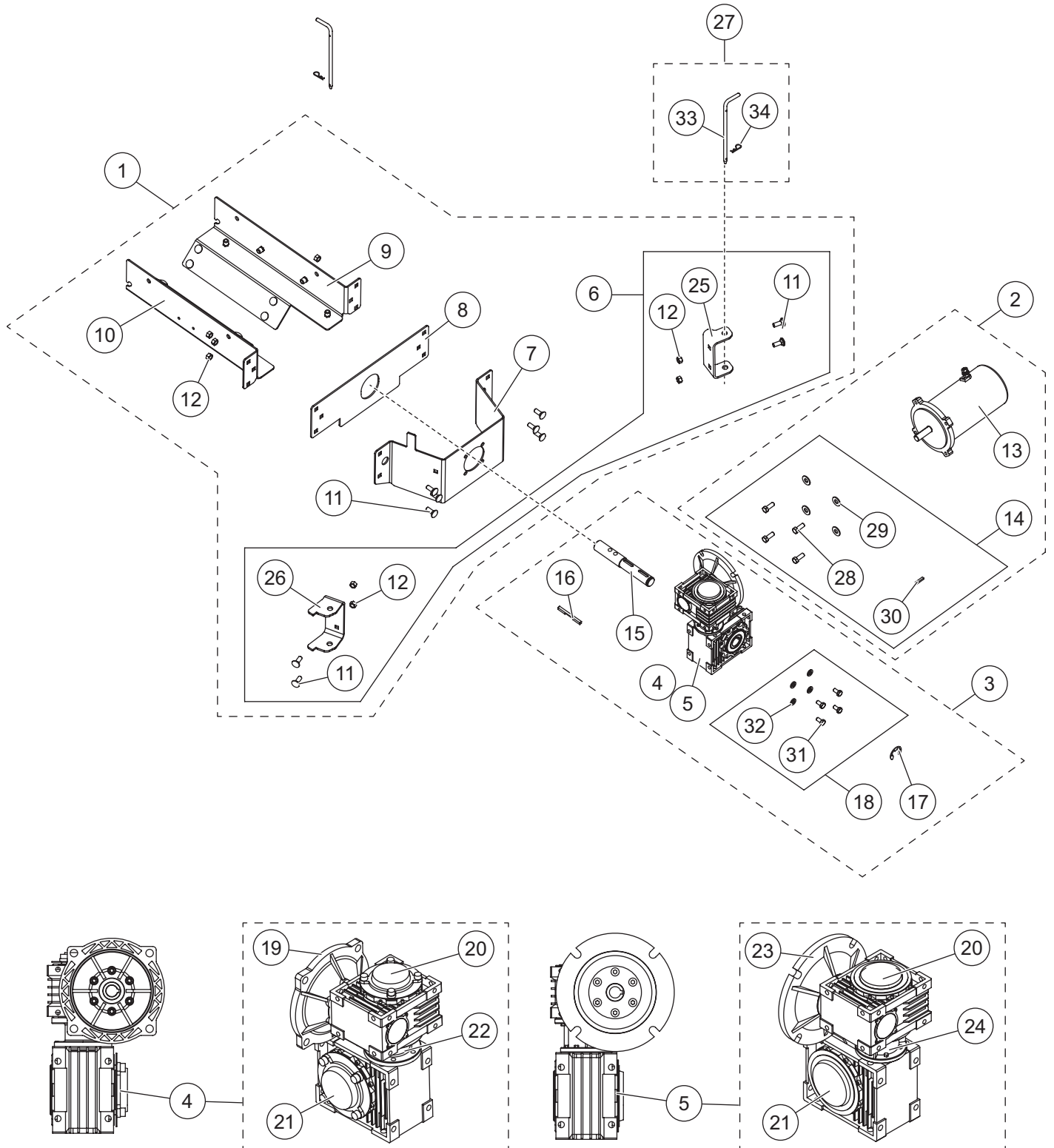
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TEMPEST™ POLY HOPPER SPREADERS

Hopper Assembly Components – Chain Models							
Item	Part	Qty	Description	Item	Part	Qty	Description
1	90510	1	Hopper Body Kit – P150	6	78117-3	2	Top Screen Support Kit
	90595	1	Hopper Body Kit – P220	7	99578	1	Screen Attachment Kit (set of 4)
2	90220	1	Poly Hopper Lid Kit, DS – P150	8	90410	1	Poly Chain Leg Brackets
	90240	1	Poly Hopper Lid Kit, DS – P220	9	90260	1	Mounting Bar (set of 2)
3	90230	1	Poly Hopper Lid Kit, PS – P150	ns	31594EN	2	Label – Warning/Caution Spreaders
	90250	1	Poly Hopper Lid Kit, PS – P220	ns	30916EN	1	Label – Warning, Rotating Parts
4	90435	2	Lid Latch Assembly – Poly	ns	76059	3	Bundling Clips
5	78115	2	Top Screen – P150	ns	59223	3	Cable Ties
	78116	2	Top Screen – P220				
Item 1 90510 (P150) / 90595 (P220) Hopper Body Kit							
		1	Hopper Body – P150	ns		4	3/16 Pop Rivet, Aluminum
		1	Hopper Body – P220	ns		2	Keeper
10		2	Hold Down Assembly Offset Bracket	ns		6	1/4-20 Well Nut
11		8	3/16 Pop Rivet				
Item 2 90220 (P150) / 90240 (P220) Poly Hopper Lid Kit, DS							
		1	Poly Hopper Lid, DS – P150	14	78097	3	2.5 OD x 1.53 ID Washer SS
		1	Poly Hopper Lid, DS – P220	15	93010	3	7/16 Linchpin
12	90305	1	Lid Plug Assembly (set of 2)	11		4	3/16 Pop Rivet
13		2	Rubber Hold-Down Strap				
Item 3 90230 (P150) / 90250 (P220) Poly Hopper Lid Kit, PS							
		1	Poly Hopper Lid, PS – P150	14	78097	3	2.5 OD x 1.53 ID Washer SS
		1	Poly Hopper Lid, PS – P220	15	93010	3	7/16 Linchpin
12	90305	1	Lid Plug Assembly (set of 2)				
Item 4 90435 Lid Latch Assembly – Poly							
10		1	Hold Down Assembly Offset Bracket	ns		2	3/16 Pop Rivet, Aluminum
13		1	Rubber Hold-Down Strap	ns		1	Keeper
11		6	3/16 Pop Rivet				
Item 6 78117-3 Top Screen Support Kit							
16		1	Top Screen Support	18		2	3/8 Flat Washer, Type A Wide SS
17		2	3/8-16 x 1 Hex Cap Screw SS	ns		2	3/8 Lock Washer SS
Item 7 99578 Screen Attachment Kit (set of 4)							
19		4	Pin Tab	ns		4	1/4 Flat Washer, Type A Narrow SS
15	93010	4	7/16 Linchpin	ns		4	1/4-20 Hex Locknut GB
ns		4	1/4-20 x 3/4 Carriage Bolt				
Item 8 90410 Poly Chain Leg Brackets							
22		1	Poly Chain DS Leg Bracket	28		4	1/2 Flat Washer, Type A Wide
23		1	Poly Chain PS Leg Bracket	29		2	1/2-13 Hex Locknut GB
24		2	Poly U-Leg Bracket	ns		10	3/8-16 x 1 Carriage Bolt SS
25		2	Poly Chain BB Bracket 1	18		12	3/8 Flat Washer, Type A Wide SS
26		2	Poly Chain BB Bracket 2	ns		12	3/8-16 Hex Locknut GB SS
27		2	1/2-13 x 7-1/2 Hex Cap Screw SS	30		2	3/8-16 x 1-1/4 Hex Cap Screw SS
Item 9 90260 Mounting Bar (set of 2)							
31		2	Bolting Bar	33		8	1/2-13 Flanged Locknut
32		8	1/2-13 x 1-1/2 Carriage Bolt G8				
Item 12 90305 Lid Plug Assembly							
34		2	#10-24 x 1-1/2 Button Cap Screw SS	36		2	Rubber Plug
35		2	#10-24 x 1-1/2 Fender Washer SS	37		2	#10-24 T-Nut SS
G = Grade				ns = not shown		SS = Stainless Steel	

TEMPEST™ POLY HOPPER SPREADERS

POWERGROUP ASSEMBLY – AUGER DRIVE



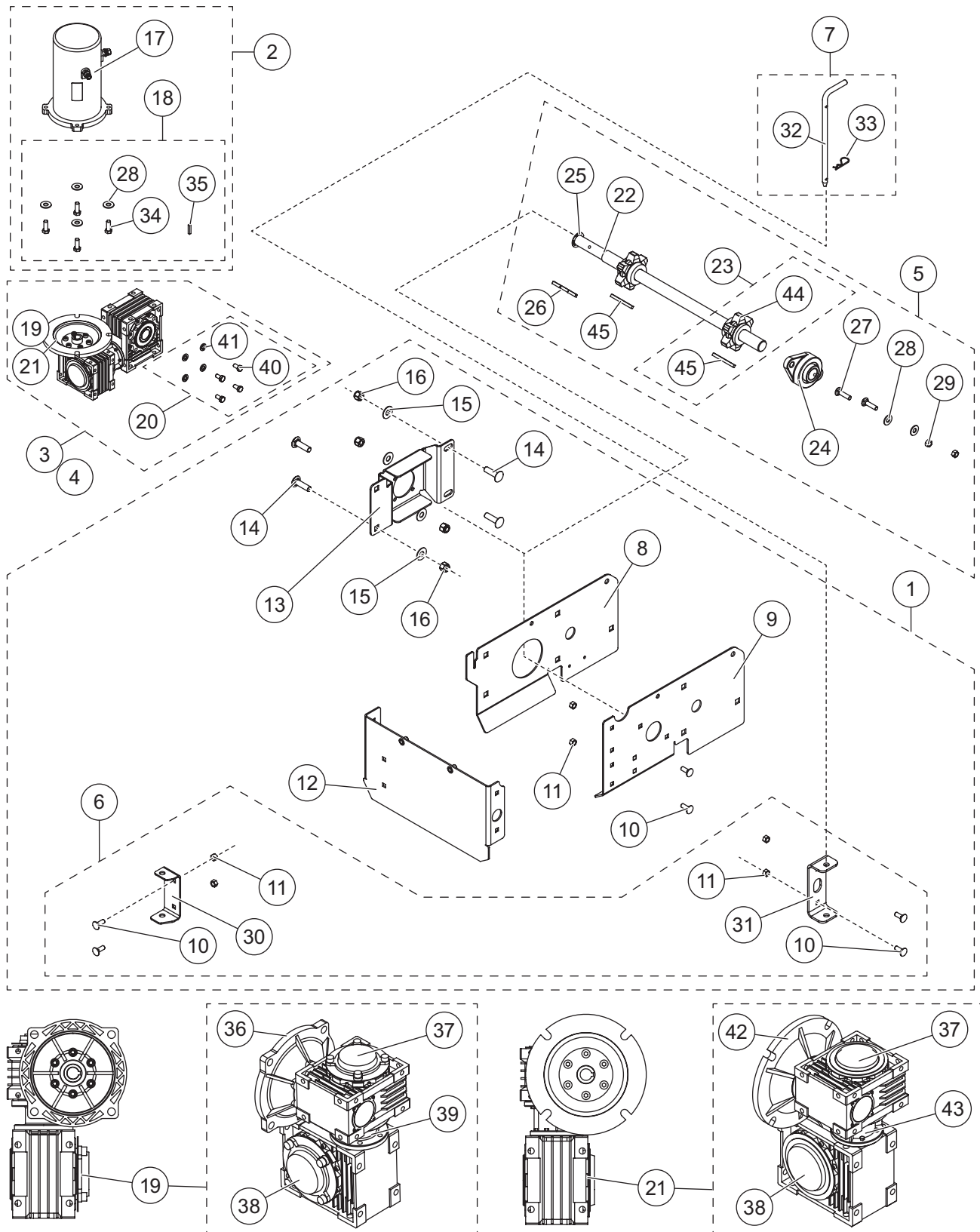
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Drivetrain Assembly Components – Auger Drive							
Item	Part	Qty	Description	Item	Part	Qty	Description
1	90470	1	Poly Auger Powergroup	4	99067	1	Gear Box – Flange w/Holes
2	99085	1	Driveline Motor Kit	5	31098	1	Gear Box – Flange w/Slots
3	85431	1	Transmission Kit				
Item 1 90470 Poly Auger Powergroup							
6	31930	1	Chute Attachment Kit – Auger	ns		14	3/8 Flat Washer, Type A Wide SS
7		1	Poly Auger Gear Box Mount	12		14	3/8-16 Hex Locknut GB SS
8		1	Auger Mounting Plate	ns		4	3/8-16 x 1 Flanged Hex Cap Screw SS
9		1	Powergroup Support – PS	ns	11926	4	3/8-16 Hex Rivnut SS
10		1	Powergroup Support – DS	ns	99769	2	Motor Terminal Cover
11		14	3/8-16 x 1 Carriage Bolt SS	ns	69916	1	8-Pin Cable Boot
Item 2 99085 Driveline Motor Kit							
13	D6825-1	1	Motor 1/2 hp, NEMA 56C	14	99086	1	Bolt Bag – Driveline Motor
Item 3 85431 Transmission Kit							
4	99067	1	Gear Box – Flange w/Holes	17	330	1	1" Retaining Ring
15	11892-1	1	Auger Drive Shaft	18	99088	1	Bolt Bag – Gear Box Kit
16	99572	1	Machine Key, 1/4 x 3				
Item 4 99067 Gear Box – Flange w/Holes							
19	30456	1	Motor Flange (with holes)	21	86799	1	Gear Box Cover Kit, Secondary
20	86792	1	Gear Box Cover Kit, Primary	22	30017	1	Connector Flange
Item 5 31098 Gear Box – Flange w/Slots							
23	31101	1	Motor Flange (with slots)	21	86799	1	Gear Box Cover Kit, Secondary
20	86792	1	Gear Box Cover Kit, Primary	24	31102	1	Connector Flange
Item 6 31930 Chute Attachment Kit – Auger							
25		1	Auger Chute Bracket	27	78031	1	Chute Attachment Pin Kit
26		1	Auger Chute Bracket Locking	ns	31928	1	Bolt Bag – Chute Attachment Kit
Item 14 99086 Bolt Bag – Driveline Motor							
28		4	3/8-16 x 3/4 Hex Cap Screw SS	30	65195	1	3/16 x 1 Machine Key
29		4	3/8 Flat Washer, Type A Wide SS				
Item 18 99088 Bolt Bag – Gear Box Kit							
31		4	M8-1.25 x 16 Hex Cap Screw SS	32		4	M8 Lock Washer SS
Item 27 78031 Chute Attachment Pin Kit							
33		2	1/2 x 9 Chute Pin	34		2	3/32 x 2-1/4 Cotter Pin
31928 Bolt Bag – Chute Attachment Kit							
11		4	3/8-16 x 1 Carriage Bolt SS	ns		4	3/8 Flat Washer, Type A Wide SS
12		4	3/8-16 Hex Locknut GB SS				
M = Metric				ns = not shown		SS = Stainless Steel	

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TEMPEST™ POLY HOPPER SPREADERS

POWERGROUP ASSEMBLY – CHAIN DRIVE



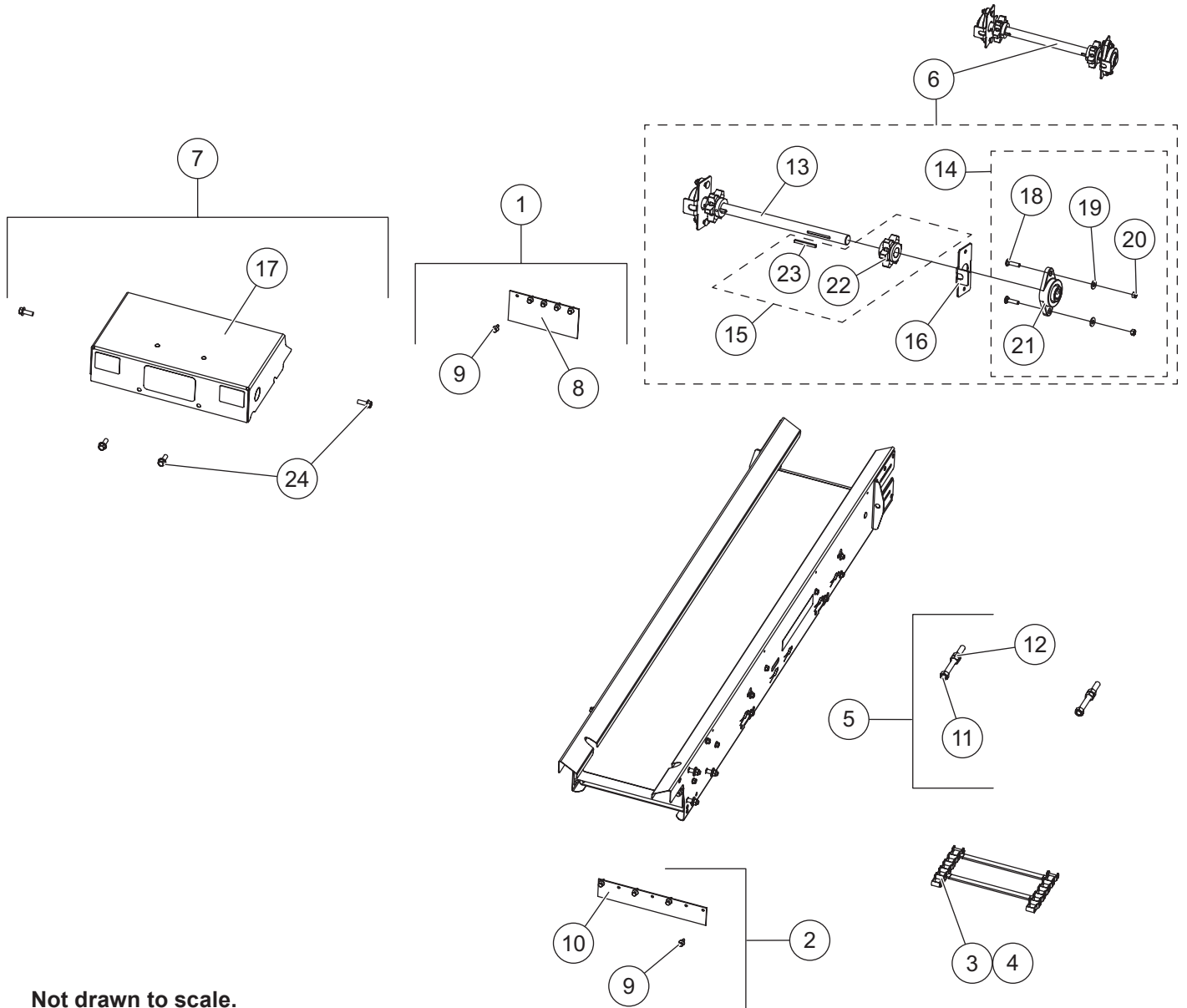
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TEMPEST™ POLY HOPPER SPREADERS

Drivetrain Assembly Components – Chain Drive							
Item	Part	Qty	Description	Item	Part	Qty	Description
1	90310	1	Poly Chain Powergroup	5	99094	1	Drive Shaft Kit
2	99085	1	Driveline Motor Kit	6	31927	1	Chute Attachment Kit – Chain
3	99087	1	Gear Box Kit – Flange w/Holes	7	78031	1	Chute Attachment Pin Kit
4	31549	1	Gear Box Kit – Flange w/Slots				
Item 1 90310 Poly Chain Powergroup							
8		1	Powergroup Side Plate DS	14		4	1/2-13 x 1-3/4 Carriage Bolt
9		1	Powergroup Side Plate PS	15		4	1/2 Flat Washer, Type A Wide SS
10		6	3/8-16 x 1 Carriage Bolt SS	16		4	1/2-13 Hex Locknut SS
ns		6	3/8 Flat Washer, Type A Wide SS	ns	99769	2	Motor Terminal Cover
11		6	3/8-16 Hex Locknut GB SS	ns	69916	1	8-Pin Cable Boot
12		1	Powergroup Brace	ns	11926	2	3/8-16 Hex Rivnut SS
13		1	Gear Box Mount Bracket				
Item 2 99085 Driveline Motor Kit							
17	D6825-1	1	Motor 1/2 hp, NEMA 56C	18	99086	1	Bolt Bag – Driveline Motor
Item 3 99087 Gear Box Kit – Flange w/Holes							
19	99067	1	Gear Box – Flange w/Holes	20	99088	1	Bolt Bag – Gear Box Kit
Item 4 31549 Gear Box Kit – Flange w/Slots							
21	31098	1	Gear Box – Flange w/Slots	20	99088	1	Bolt Bag – Gear Box Kit
Item 5 99094 Drive Shaft Kit							
22		1	Drive Shaft	27		2	3/8-16 x 1-1/2 Carriage Bolt SS
23	99479	2	6-Tooth Sprocket Kit	28		2	3/8 Flat Washer, Type A Wide SS
24	94536	1	Bearing, 1.125 ID 2-Bolt Flange	29		2	3/8-16 Hex Nut SS
25	330	1	1" Retaining Ring	45		2	1/4 x 2-3/4 Machine Key
26	99572	1	1/4 x 3 Machine Key	ns		2	3/8 Lock Washer SS
Item 6 31927 Chute Attachment Kit – Chain							
30		1	Chain Chute Front Bracket	ns	31928	1	Bolt Bag – Chute Attachment Kit
31		1	Chain Chute Side Bracket				
Item 7 78031 Chute Attachment Pin Kit							
32		2	1/2 x 9 Chute Pin	33		2	3/32 x 2-1/4 Cotter Pin
Item 18 99086 Bolt Bag – Driveline Motor							
34		4	3/8-16 x 3/4 Hex Cap Screw SS	35	65195	1	3/16 x 1 Machine Key
28		4	3/8 Flat Washer, Type A Wide SS				
Item 19 99067 Gear Box – Flange w/Holes							
36	30456	1	Motor Flange (with holes)	38	86799	1	Gear Box Cover Kit, Secondary
37	86792	1	Gear Box Cover Kit, Primary	39	30017	1	Connector Flange
Item 20 99088 Bolt Bag – Gear Box Kit							
40		4	M8-1.25 x 16 Hex Cap Screw SS	41		4	M8 Lock Washer SS
Item 21 31098 Gear Box – Flange w/Slots							
42	31101	1	Motor Flange (with slots)	38	86799	1	Gear Box Cover Kit, Secondary
37	86792	1	Gear Box Cover Kit, Primary	43	31102	1	Connector Flange
Item 23 99479 6-Tooth Sprocket Kit							
44		1	Drive Sprocket 6T	45	95076	1	1/4 x 2-3/4 Machine Key
31928 Bolt Bag – Chute Attachment Kit							
10		4	3/8-16 x 1 Carriage Bolt SS	11		4	3/8-16 Hex Locknut GB SS
M = Metric				ns = not shown			
				SS = Stainless Steel			

TEMPEST™ POLY HOPPER SPREADERS

CHAIN ASSEMBLY COMPONENTS



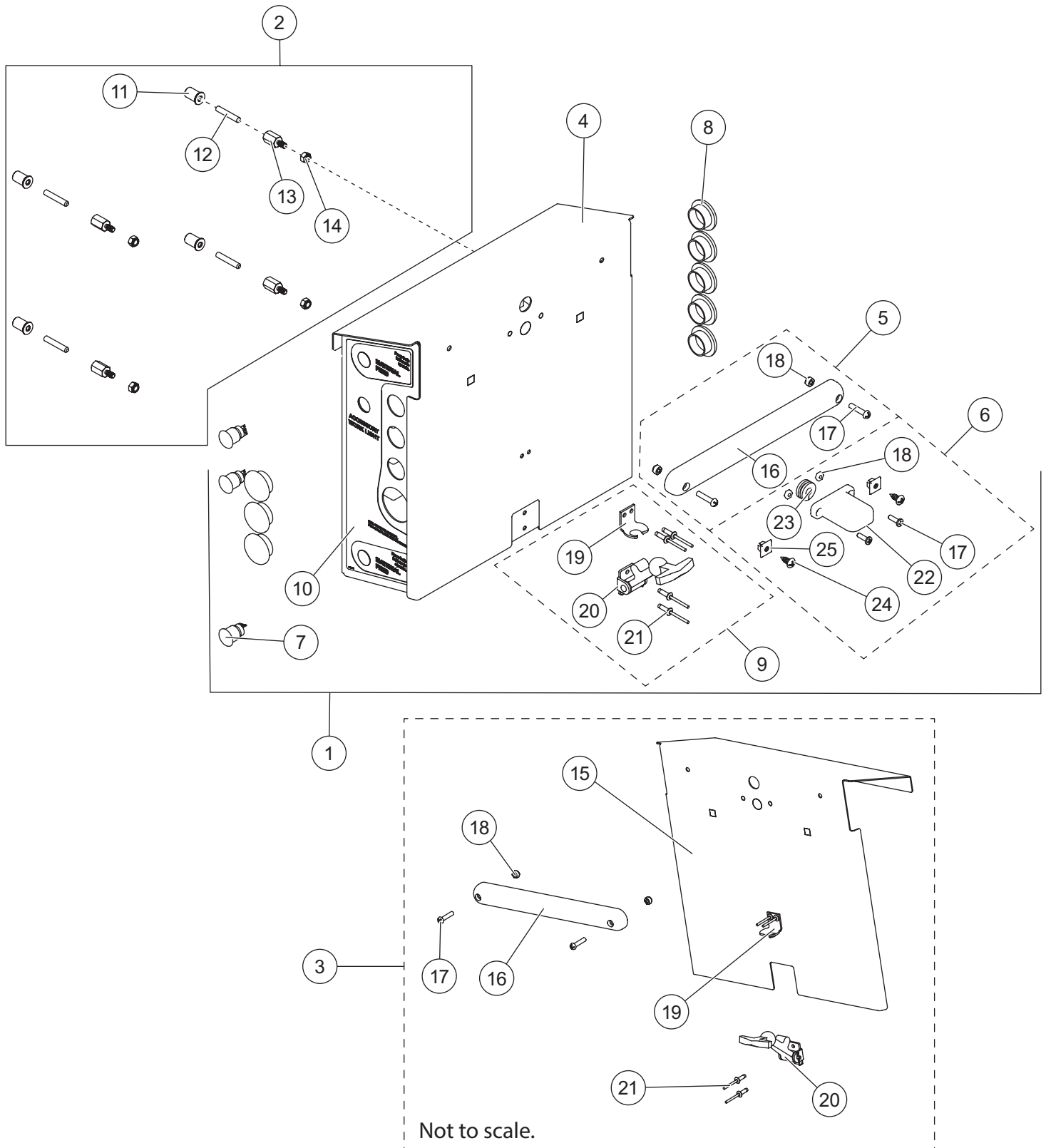
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TEMPEST™ POLY HOPPER SPREADERS

Chain Assembly Components							
Item	Part	Qty	Description	Item	Part	Qty	Description
1	90300	1	Poly Chain Wiper Assembly	7	90450	1	Poly Chain Cover
2	78266	1	Wiper Replacement Kit – Chain	ns	68492	1	Conveyor Repair Bar (incl. pins & cotters)
3	78076	1	Pintle Chain (99-link) – P150C	ns	68475	1	Conveyor Repair Link (incl. pins & cotters)
4	94898	1	Pintle Chain (108-link) – P220C				
5	99073	2	Tensioner Bolt Kit				
6	99480	1	Idler Shaft Assembly Kit				
Item 1 90300 Poly Chain Wiper Assembly							
8			Poly Chain Wiper	9	99079	1	Push Retainer Kit, Wiper (pkg of 5)
Item 2 78266 Wiper Replacement Kit – Chain							
10	1		Chain Wiper Belt	9	99079	1	Push Retainer Kit, Wiper (pkg of 5)
Item 5 99073 Tensioner Bolt Kit							
11	1		5/8-11 x 6 Take-Up Bolt	12		2	5/8-11 Hex Nut
Item 6 99480 Idler Shaft Assembly Kit							
13	94351	1	Idler Shaft	15	99479	2	6-Tooth Sprocket Kit
14	94953	2	Spreader Bearing Kit	16	99765	2	Bearing Alignment Plate
Item 7 90450 Poly Chain Cover							
17		1	Poly Chain Cover	ns	31983	1	Bolt Bag – Extension Cover
Item 14 94953 Spreader Bearing Kit							
18		2	3/8-16 x 1-1/2 Carriage Bolt SS	20		2	3/8-16 Hex Locknut GB SS
19		2	3/8 Flat Washer, Type A Wide SS	21	94536	1	2-Bolt Flanged Bearing, 1.125 ID
Item 15 99479 6-Tooth Sprocket Kit							
22		1	Drive Sprocket 6T	23	95076	1	1/4 x 2-3/4 Machine Key
31983 Bolt Bag – Extension Cover							
24		4	3/8-16 x 1 Flanged Hex Cap Screw SS				
ns = not shown				SS = Stainless Steel			

TEMPEST™ POLY HOPPER SPREADERS

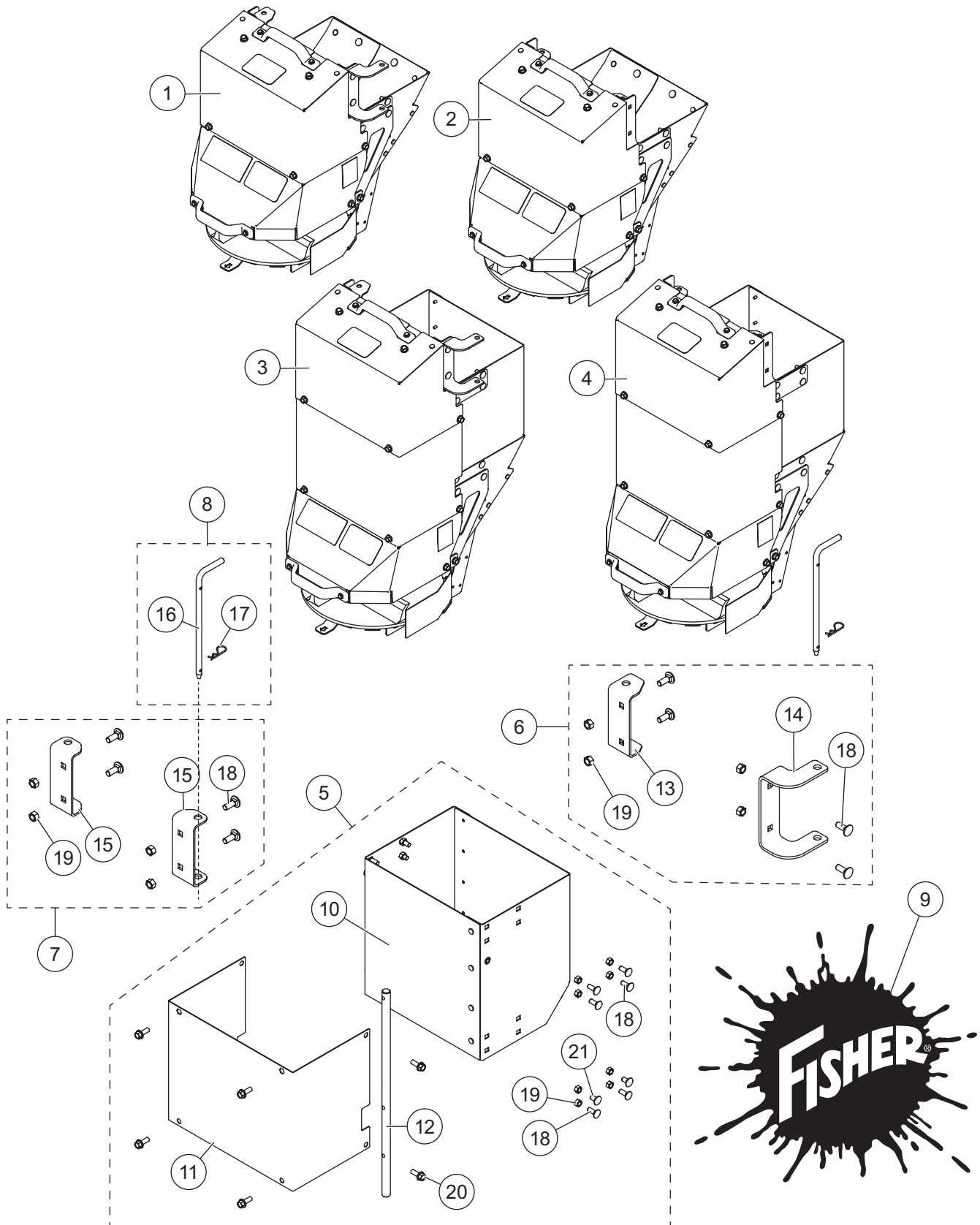
ELECTRICAL BOX ASSEMBLY



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TEMPEST™ POLY HOPPER SPREADERS

CHUTE ASSEMBLIES

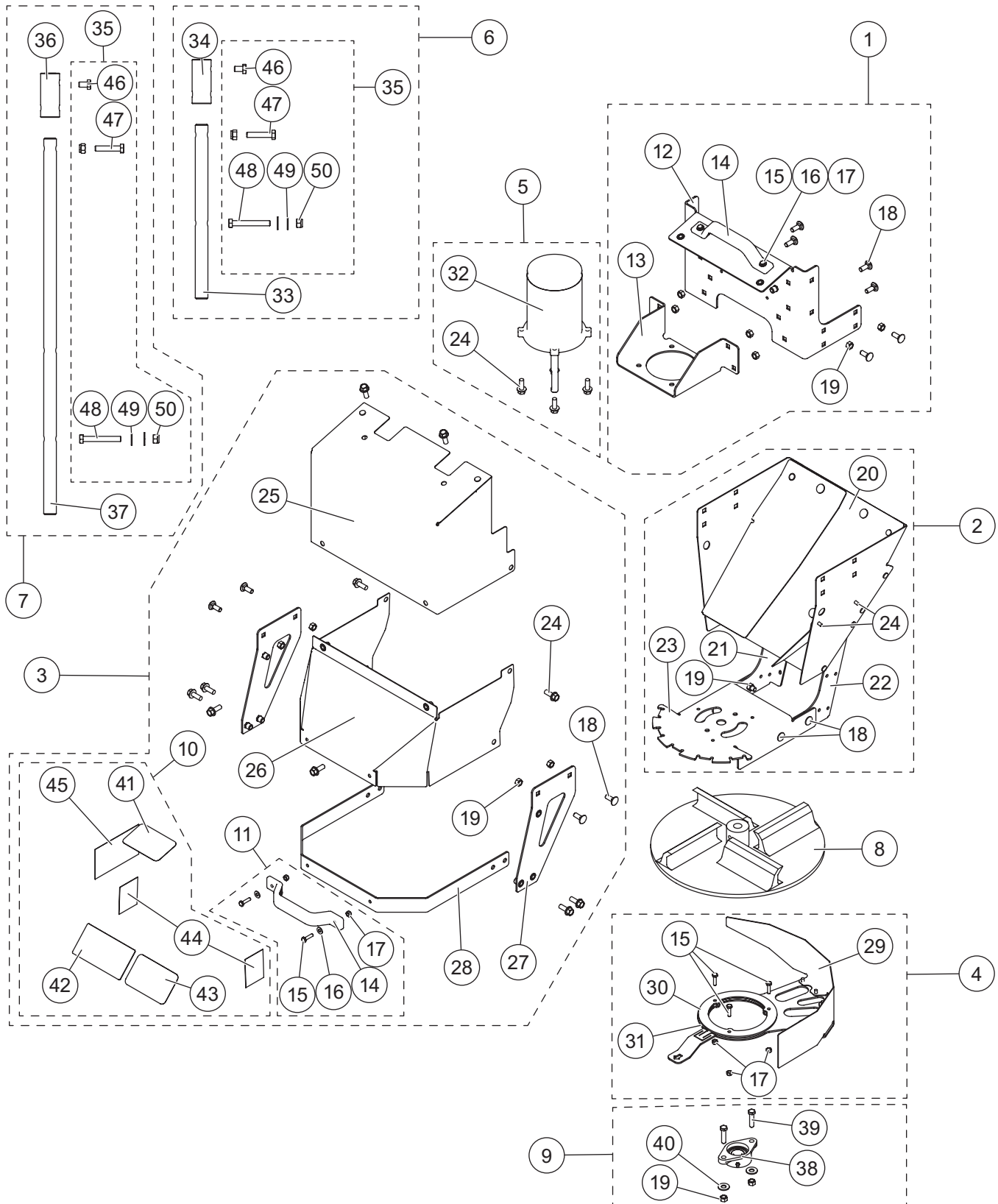


TEMPEST™ POLY HOPPER SPREADERS

Chute Assembly Components							
Item	Part	Qty	Description	Item	Part	Qty	Description
1	31942	1	Short Chute – Chain	6	31934	1	Chute Attachment Kit – Chain
2	31943	1	Short Chute – Auger	7	31935	1	Chute Attachment Kit – Auger
3	31944	1	Long Chute – Chain	8	78031	1	Chute Attachment Pin Kit
4	31946	1	Long Chute – Auger	9	96991	1	Label – Logo, FISHER® Splatter, Chute
5	31936	1	Chute Extension Kit				
Item 5				31936 Chute Extension Kit			
10		1	12" Chute Extension	12		1	Chute Shaft – Long
11	31938	1	Chute Extension Cover	ns	31939	1	Bolt Bag – Chute Extension Kit
Item 6				31934 Chute Attachment Kit – Chain			
13		1	Chain Chute Bracket	ns	31928	1	Bolt Bag – Chute Attachment Kit
14		1	Chain Chute Bracket Wrap				
Item 7				31935 Chute Attachment Kit – Auger			
15		2	Auger Chute Bracket	ns	31928	1	Bolt Bag – Chute Attachment Kit
Item 8				78031 Chute Attachment Pin Kit			
16		2	1/2 x 9 Chute Pin	17		2	3/32 x 2-1/4 Cotter Pin
				31939 Bolt Bag – Chute Extension Kit			
18		13	3/8-16 x 1 Carriage Bolt SS	20		4	3/8-16 x 1 Flanged Hex Cap Screw SS
19		17	3/8-16 Hex Locknut GB SS	21		4	3/8-16 x 3/4 Carriage Bolt SS
				31928 Bolt Bag – Chute Attachment Kit			
18	90375	4	3/8-16 x 1 Carriage Bolt SS	19	91351	4	3/8-16 Hex Locknut GB SS
G = Grade				ns = not shown			
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TEMPEST™ POLY HOPPER SPREADERS

CHUTE ASSEMBLIES

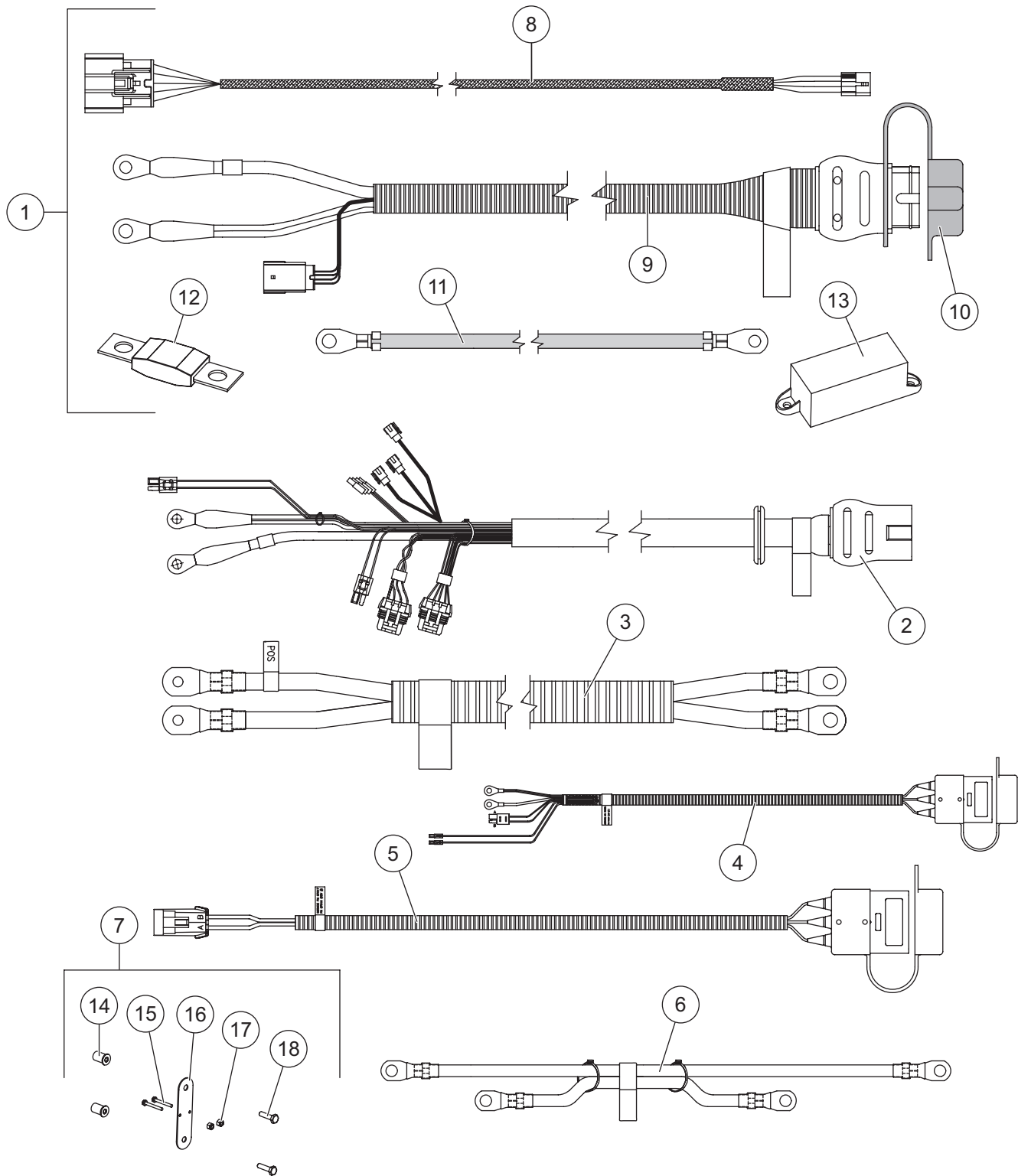


TEMPEST™ POLY HOPPER SPREADERS

Chute Assembly Components							
Item	Part	Qty	Description	Item	Part	Qty	Description
1	31947	1	Chute Mounting Kit	7	31964	1	Chute Spinner Shaft Kit – Long
2	31948	1	Chute Body Kit	8	94424	1	Spinner, Black Poly – CCW Rotation
3	31949	1	Chute Cover Kit	9	31965	1	Bearing Kit
4	31961	1	Chute Shutter Kit	10	31970	1	Chute Label Kit
5	31962	1	Chute Motor Kit	11	99098	1	Handle Kit, SH
6	31963	1	Chute Spinner Shaft Kit – Short				
Item 1 31947 Chute Mounting Kit							
12		1	Chute Hanger	16		2	1/4 Flat Washer SS
13		1	Chute Motor Mount	17		2	1/4-20 Hex Locknut SS
14		1	Plastic Handle	18		12	3/8-16 x 1 Carriage Bolt SS
15		2	1/4-20 x 1 Hex Cap Screw SS	19		12	3/8-16 Hex Locknut GB SS
Item 2 31948 Chute Body Kit							
18		8	3/8-16 x 1 Carriage Bolt SS	22		1	Chute Support – PS
19		8	3/8-16 Hex Locknut GB SS	23		1	Chute Shutter Mount
20		1	Chute Body	ns		1	Chute Cross Brace
21		1	Chute Support – DS	24		4	3/8-16 x 1 Flanged Hex Cap Screw SS
Item 3 31949 Chute Cover Kit							
10	31970	1	Chute Label Kit	27		2	Chute Guard Bracket
14		1	Plastic Handle	28		1	Chute Guard
25		1	Chute Cover – Top	ns	31981	1	Bolt Bag – Chute Cover Kit
26		1	Chute Cover – Bottom				
Item 4 31961 Chute Shutter Kit							
15		3	1/4-20 x 1 Hex Cap Screw SS	30		2	Deflector Ring
17		3	1/4-20 Hex Locknut SS	31		1	Centering Ring
29		1	Adjustable Deflector				
Item 5 31962 Chute Motor Kit							
24		4	3/8-16 x 1 Flanged Hex Cap Screw SS	32	D6887	1	Spinner Motor, Direct Drive
Item 6 31963 Chute Spinner Shaft Kit – Short							
33		1	Spinner Shaft Coupler	35	31982	1	Bolt Bag – Chute Spinner Shaft Kit
34		1	Spinner Shaft – Short				
Item 7 31964 Chute Spinner Shaft Kit – Long							
35	31982	1	Bolt Bag – Chute Spinner Shaft Kit	37		1	Spinner Shaft – Long
36		1	Spinner Shaft Coupler				
Item 9 31965 Bearing Kit							
19		2	3/8-16 Hex Locknut GB SS	39		2	3/8-16 x 1-1/2 Hex Cap Screw SS
38	96167	1	Pillow Block Bearing 3/4 Bore	40		2	3/8 Flat Washer, Type A Wide SS
Item 10 31970 Chute Label Kit							
41	30917EN	1	Label – No Step	44	32593EN	2	Label – Warning, Multiple Pinch Points
42	11100	1	Label – Warning, Rear Camera	45	92969	1	Label – Chute Disconnect
43	30918EN	1	Label – Warning, GVWR/Loading				
Item 11 99098 Handle Kit – SH							
14		1	Plastic Handle	ns	99099	1	Bolt Bag – Handle Kit SH
Item 35 31982 Bolt Bag – Chute Spinner Shaft Kit							
46		1	5/16-18 x 1/2 Hex Cap Screw SS	49		2	5/16 Flat Washer SS
47		1	5/16-18 x 1-1/2 Hex Cap Screw SS	50		2	5/16-18 Locknut SS
48		1	5/16-18 x 2-1/4 Hex Cap Screw SS				
31981 Bolt Bag – Chute Cover Kit							
15		2	1/4-20 x 1 Hex Cap Screw SS	18		4	3/8-16 x 1 Carriage Bolt SS
16		2	1/4 Flat Washer SS	19		4	3/8-16 Hex Locknut GB SS
17		2	1/4-20 Hex Locknut SS	24		10	3/8-16 x 1 Flanged Hex Cap Screw SS
ns = not shown				SS = Stainless Steel			

TEMPEST™ POLY HOPPER SPREADERS

ELECTRICAL COMPONENTS

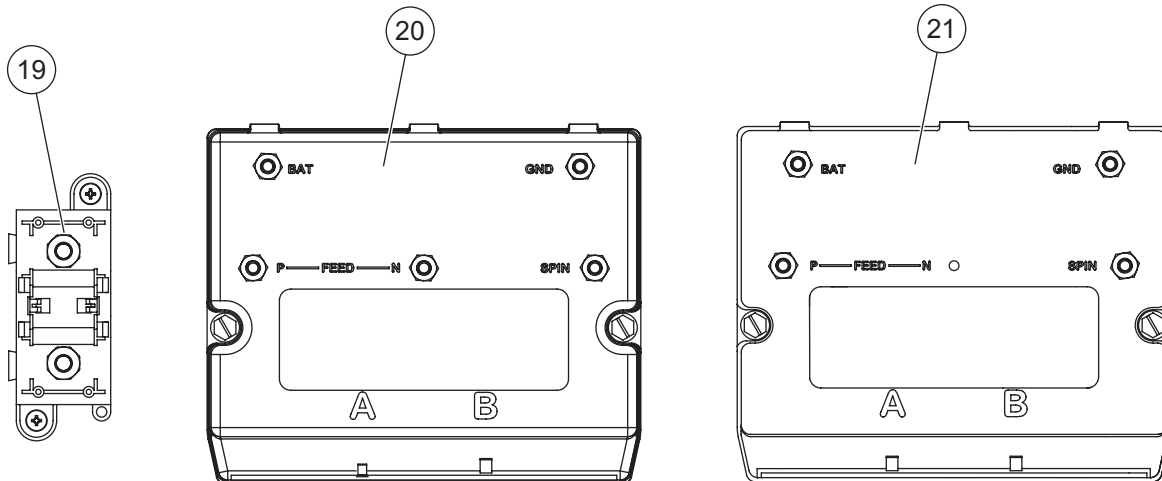


Not drawn to scale.

TEMPEST™ POLY HOPPER SPREADERS

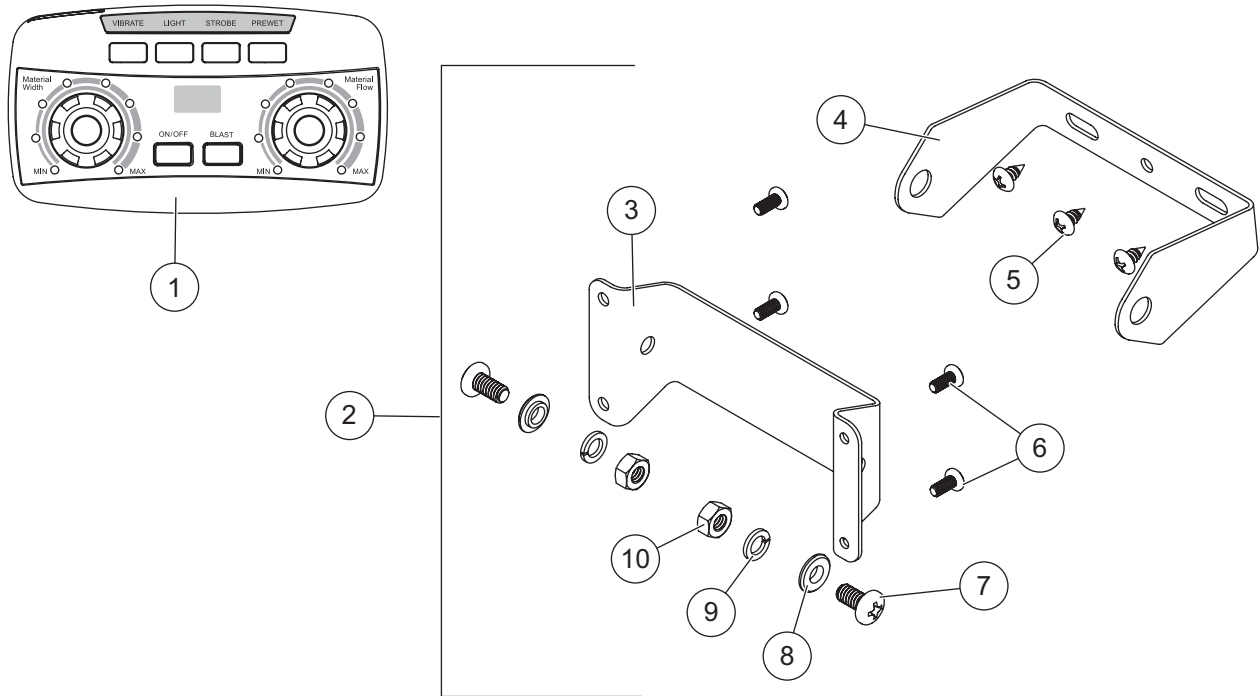
ELECTRICAL COMPONENTS

Cables & Harnessing / Electrical Enclosure Assembly							
Item	Part	Qty	Description	Item	Part	Qty	Description
1	78402	1	Vehicle-Side Harness – 300" Kit	5	87617	1	Chute Motor Side Cable Assembly
2	83688	1	Hopper Cable Assembly	6	78385	1	Module to Isolated Stud Cable Assy
3	78987	1	Module to Auger Motor Cable Assy	7	90295	1	Chute Motor Side Cable Mount
4	87632	1	Chute Module Side Cable Assembly				
Item 1 78402 Vehicle-Side Harness Kit – 300"							
8	69902	1	Vehicle Control Harness	12	95836	1	Fuse, 100A
9	76057	1	Vehicle Harness Assy (incl. item 10)	13	31179	1	Fuse Holder/Isolated Stud Block
10	99759	1	Plug Cover	ns		6	Cable Tie, HD
11	22511	1	22" Battery Cable – Red	ns		10	Cable Tie, 14" Black
Item 7 90295 Chute Motor Side Cable Mount							
14		2	1/4-20 Well Nut	17		2	#6-32 Hex Locknut GB SS
15		2	#6-32 x 1-1/4 Hex Cap Screw SS	18		2	1/4-20 x 1 Hex Cap Screw SS
16		1	Chute Harness Bracket				
Electrical Box Components – Auger Spreader							
19	31179	1	Fuse Holder/Isolated Stud Block	20	52375	1	Spreader Module, 5-Post
Electrical Box Components – Chain Spreader							
19	31179	1	Fuse Holder/Isolated Stud Block	21	52385	1	Spreader Module, 4-Post
ns = not shown				G = Grade		SS = Stainless Steel	



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CONTROL COMPONENTS



99533 Cab Control Kit							
Item	Part	Qty	Description	Item	Part	Qty	Description
1	99773	1	Cab Control 2-Knob	2	52345	1	Cab Control Bracket Kit
Item 2				52345 Cab Control Bracket Kit			
3		1	Bracket, Control Inner	7		2	1/4-20 x 5/8 Pan Head Machine Screw SS
4		1	Bracket, Control Outer	8		2	1/4 Shoulder Washer – Black
5		3	#10 x 3/8 Pan Head 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 SS
SS = Stainless Steel				G = Grade			

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ACCESSORIES

Part	Description	Part	Description
90555	Vibrator Kit	90385	Inverted V – S150 (chain only)
90565	Strobe Light Kit	78120-1	Inverted V – S220 (chain only)
99505-2	Primary Work Light Kit	11763-1	Central Point Grease Kit (chain only)
99732-2	Secondary Work Light Kit	93265-1	50-Gallon Pre-Wet and DLA System
31210	Rearview Material Monitoring Camera	32725	Feed Gate Kit
68790	Ratchet Tie-Down Kit		

TEMPEST™ POLY HOPPER SPREADERS



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