

Installation Instructions

SaltDog® Spreader Hopper Poly Eletricial 4.0 cubic yards



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General Information

Overall Length: 107.62 inches
 Overall Width: 74 inches
 Overall Height: 44 inches
 Empty Weight: 774 lbs
 Capacity Struck: 4.0 cu. yd.

Vehicle Requirements

Trucks with GVWR 15,000 to 26,000 lbs.
 135 AMP or higher alternator is recommended.

Average Material Weights

<u>Materials to use</u>	<u>Weight (pounds per cubic yard)</u>
Fine Salt-Dry	2,250
Coarse Salt-Dry	1,431
Sand Coarse-Dry	2,565

Note: To calculate the total spreader weight (including ice control material), add the empty spreader weight plus the ice control material and spreader accessories.

WARNING

Observe the following Safety Precautions before, during and after operating this spreader. By following these precautions and common sense, possible injury to persons and potential damage to this machine may be avoided.

Safety Precautions

1. Read this entire Owners Manual before operating this spreader.
2. Read all safety decals on the spreader before operating.
3. Check to make sure all safety guards are securely mounted into place before operating this spreader.
4. Verify that all personnel are clear of the spreader spray area before starting or operating this spreader.
5. Do not over-load your vehicle beyond payload limits. If there are any questions, contact the vehicle manufacturer.
6. Do not adjust, clean, lubricate or unclog material jams without first turning off the spreader.
7. Do not climb on or in the spreader during operation. Do not ride on the spreader while the vehicle is in motion.
8. Make sure the spreader is securely fastened to the vehicle in accordance with this manual.
9. Do not operate a spreader that is in need of maintenance or repairs.
10. Always disconnect the battery before removing or replacing electrical components.

Installation Instructions

1. Mounting the Spreader onto the Vehicle:

- A.** Remove the tailgate from the vehicle (if equipped) as well as any other object which will interfere with the spreader.
- B.** Check truck's bed for all kinds of sharp debris or foreign objects. They can cut and seriously damage poly hopper.
- C.** Next, set the spreader in the truck body. Use openings in both inverted vee brackets to lift the spreader (Fig.1).

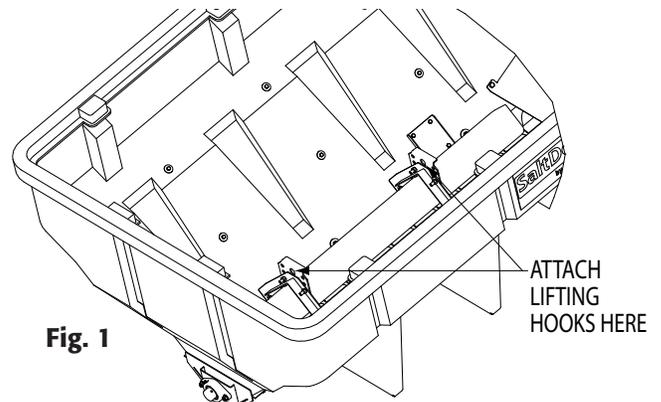


Fig. 1

CAUTION

Do not overload vehicle beyond the vehicle's GVWR or GAWR. Check vehicle's load rating certification sticker for maximum vehicle capacity.

—continued inside

D. Lower spreader into the truck bed. Attach chute to the spreader. If necessary, slide spreader rearward to have at least 1" clearance between chute and rearmost vertical obstruction.

E. Make sure the spreader is centered from side to side and rear gussets rest fully on trucks body.

F. Using holes in gussets as templates transfer six (6) holes positions on trucks bed. Make sure that these holes will not interfere with any important trucks components. Drill six 9/16" holes. Dimensions between holes are shown in Fig.2. Bolt spreader to the vehicle. Using 1/2" grade 5 hardware.

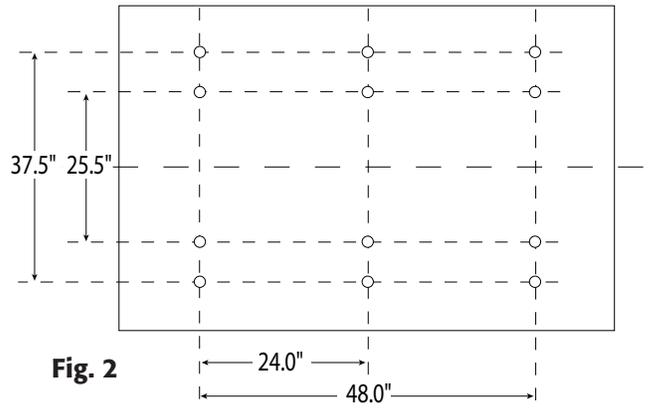


Fig. 2

G. Attach tie-down hooks to the hopper. Secure spreader using four ratchet straps as shown. Tighten straps evenly to secure spreader in the middle of the truck box (Fig.3). *Inspect straps and hardware after each time spreader is loaded. Tighten straps and hardware if necessary.*

WARNING
Do not drill holes into fuel tanks, fuel lines, through electrical wiring, etc that may be damaged by drilling.

WARNING
**Important! Do not use ratchet straps exclusively!
Always bolt spreader to the vehicle.**

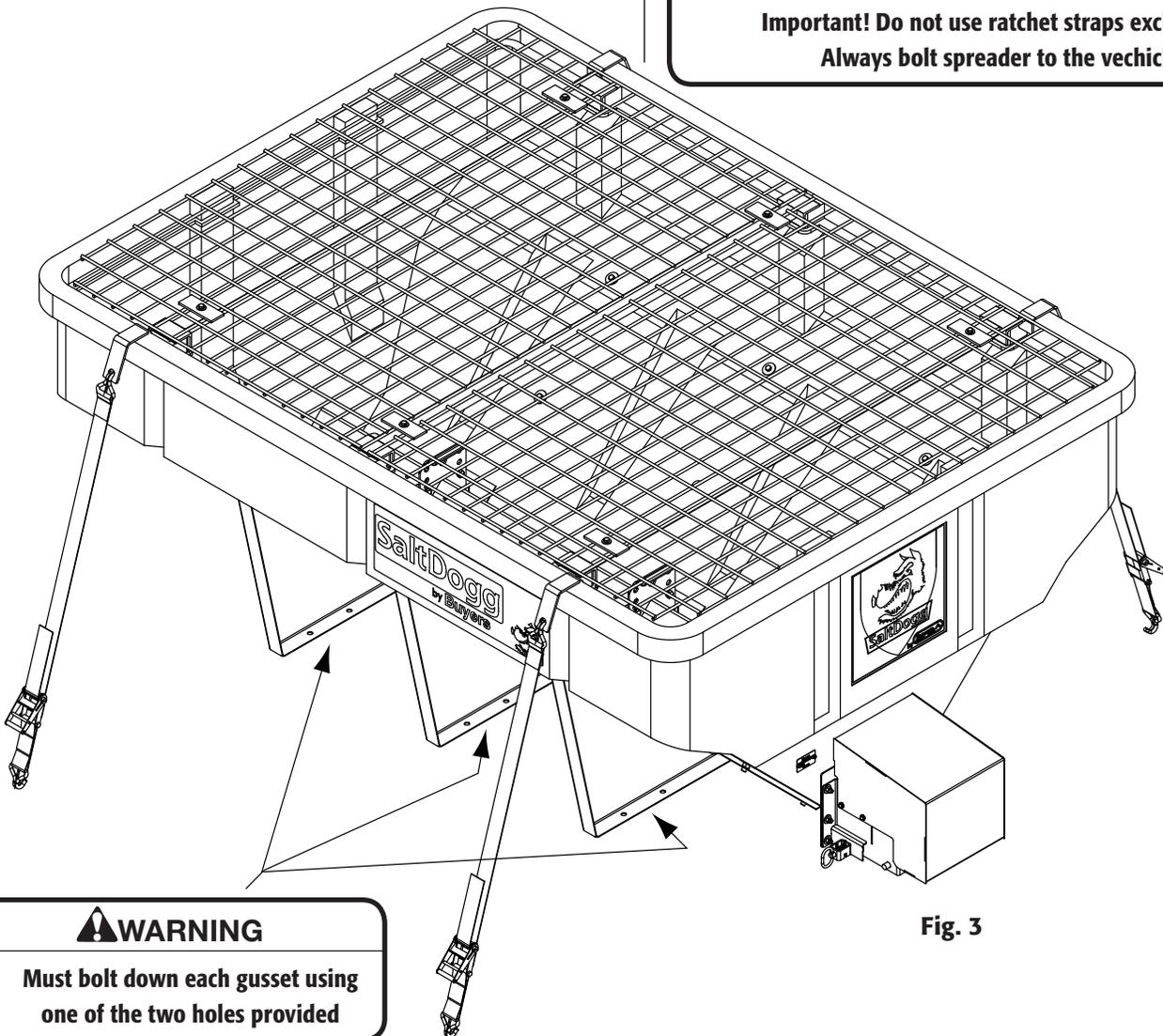


Fig. 3

WARNING
Must bolt down each gusset using one of the two holes provided

As alternative method spreader can be installed into dump bed using Tailgate Latch Kit #3013744 (sold separately). Fig.4. To insure proper installation follow instructions supplied with kit #3013744.

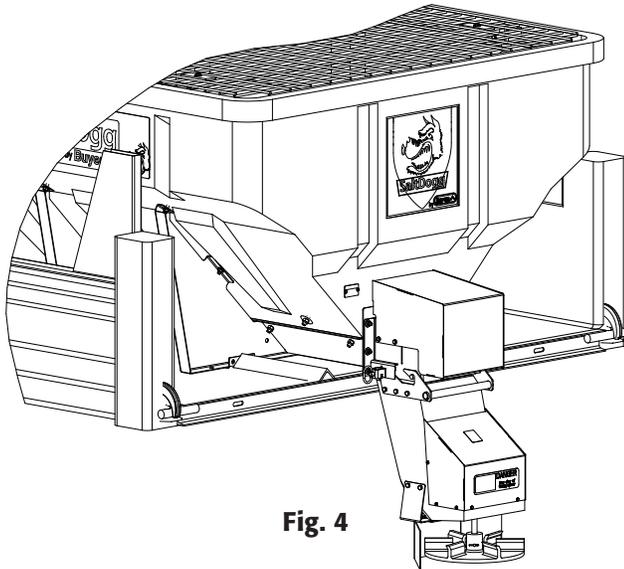


Fig. 4

2. Control Box and Vehicle Wiring Harness Installation

To insure good performance of your spreader, check the condition of truck's electrical system. Using digital voltmeter, check alternator and battery voltage. With engine running

⚠ WARNING

Use extreme caution when working around an operating vehicle engine.

and head lights and heater fan on good voltage reading should fall between 13.0 and 15.3 volts. If voltage reading falls out of this range, check and adjust your electric system.

A. Lay out a wiring path for the Vehicle Wiring Harness. Connect the Wire Harness smaller connector to the Chute's harness, large connector to the Hopper's harness. Drill all necessary holes or use existing ones to pass the round connector into the trucks cab. Attach harness to truck's frame.

⚠ WARNING

Do not install controller in the deployment path of an air bag. Refer to vehicle manufacturer's manual for air bag deployment area(s).

B. Mount the Controller in a convenient location in the truck cab. It is recommended not to mount Controller directly in front of the heat vents.

C. Connect the Wire Harness round terminal to the Controller round terminal.

D. Lay out path for the Power Cable in the truck's engine compartment. Drill hole in the firewall or use an existing one to pass wire harness. It is recommended to pass the Power Cable from inside of the cab to the battery due to the large high amperage connector. Do not route close to exhaust system!

E. Connect Power Cable terminal to Controller.

F. Connect the Power Cable ring terminals to the truck's battery, white-positive, and black-negative.

G. Make sure that the Controller is OFF. Connect blue wire's small female terminal to Controller's Ignition wire. Connect the blue wire from the Controller to an accessory wire/terminal that is controlled by the vehicle's ignition switch. (Fig.5)

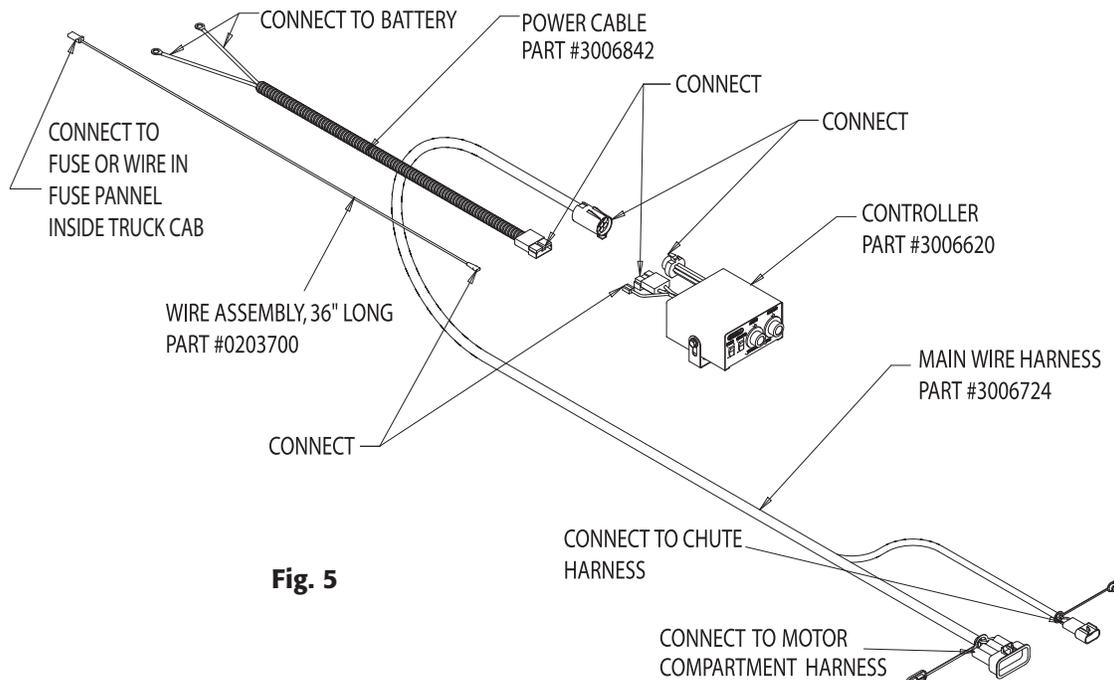


Fig. 5

Spreader Operation

1. SHPE4000 spreader is equipped with a dual independent speed Controller with warning lights and a Vibrator switch. To start the spreader, press the ON-OFF switch. Switch will illuminate. The auger will accelerate to full speed for 2 sec., then slow down to dialed speed. The spinner will accelerate to full speed for 2 sec., then slow down to dialed speed.
2. To activate the Vibrator press the Vibrator switch ON. Vibrator switch will illuminate.
3. To stop the spreader push ON-OFF switch to OFF position.

Material Flow Adjustments

Always use screen during spreader operation! Various materials have different moisture absorption rate, some materials may not perform as desired. Therefore, the substitution of the alternate material may be necessary for optimum performance.

SHPE4000 equipped with adjustable inverted vee. Use lowest setting for salt and raise inverted vee when salt/sand mixture or sand is used. Material spray pattern can be adjusted by changing chute shield position.

Warning Lights.

SaltDogg® Controller has two warning lights: "Overload" and "Jam". The "Overload" light will be illuminated when the auger is in "Unclogging" mode.

In this mode auger will automatically reverse several times to free itself. If the auger will not be able to unclog itself, the "Jam" light will be illuminated and the Controller will shut-off.

SaltDogg® Controller has an internal circuit breaker in the vibrator circuit. The vibrator circuit breaker will trip and the light in the vibrator switch will go out in an overload situation. To reset the vibrator circuit breaker: Turn off the vibrator switch for 30 seconds. Turn the vibrator switch on to restart the vibrator.

Do not run the vibrator longer than 45 minutes with 15 minutes between runs to avoid overheating.

Spreader Maintenance

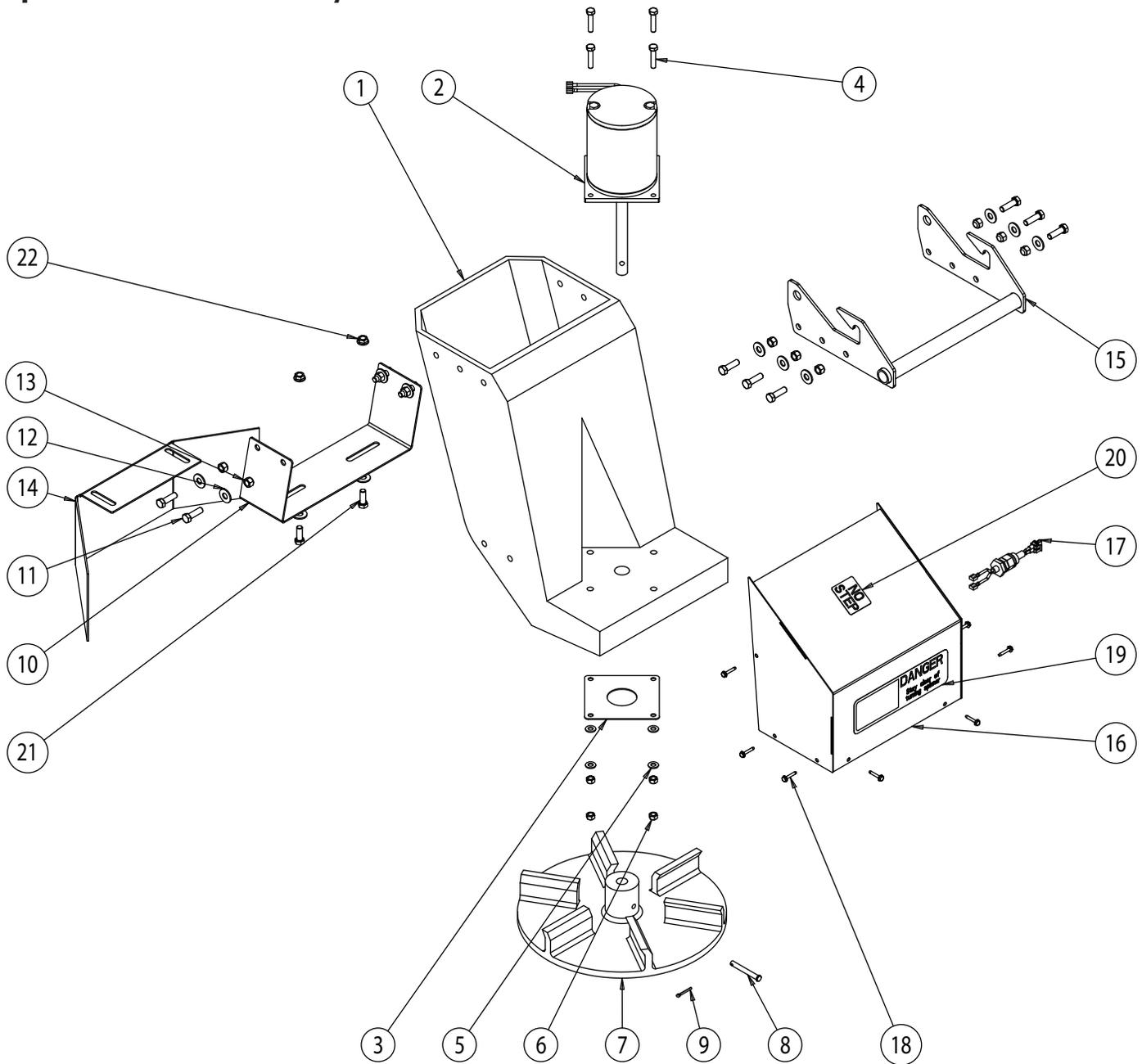
WARNING! Always disconnect power when servicing spreader.

1. Use dielectric grease on all electrical connectors before an electrical connection is made or after connector is disconnected
2. Grease Auger bearings after every 20 hours of use.
3. Empty the spreader of all ice control materials when not in use. Wash out the spreader to prevent material builds up.
4. It is recommended to cover spreader with the tarp during storage periods. Tarp can be attached to side gussets. Vibrator is not serviceable. Controller is not serviceable.

Warning! Never attempt to remove spreader with material in hopper.

Warning! Never leave material in the hopper for extended period of time. Material may freeze and seriously damage spreader!

Repair Parts-Chute Assembly

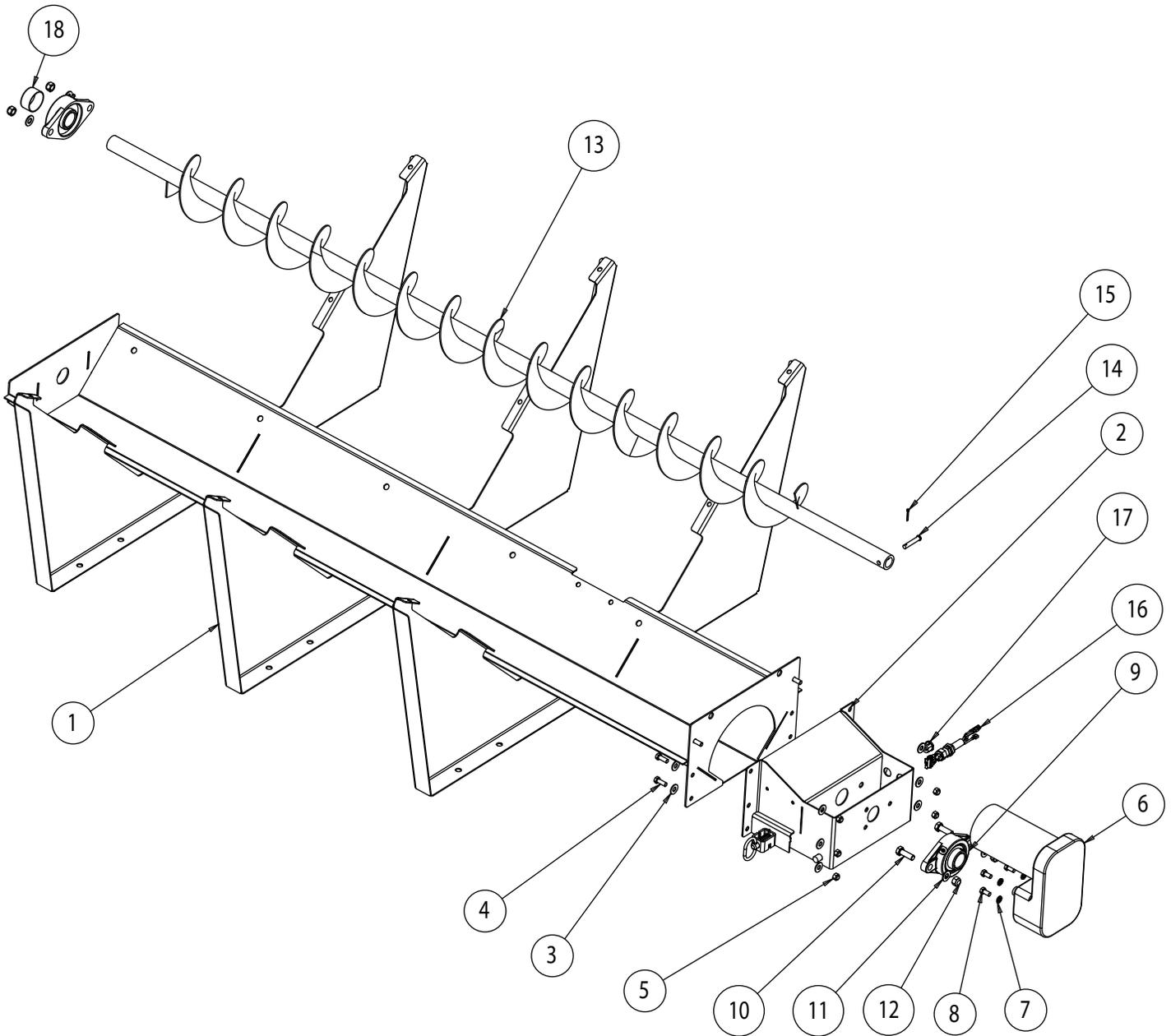


Bill of Materials

ITEM	PART NO.	QTY.	DESCRIPTION
1	3012374	1	Chute, SHPE4000
2	3012058	1	Motor 12 VDC, TGS
3	3012802	1	Retainer, Motor, Chute
4	-	4	Screw, HHC 5/16-18 x 1.5 SST
5	-	4	Washer, 5/16 SAE SST
6	-	4	Nut, Nylock 5/16-18 SS
7	3012393	1	Spinner, 14" Ploy CW
8	-	1	Pin, Clevis, 5/16 x 2-1/2, .141 Hole ZN
9	-	1	Cotter Pin, 1/8 x 1, ZN
10	3012397	1	Bracket, Shield Chute
11	-	10	Screw, HHC - 3/8-16 x 1.25 SST

ITEM	PART NO.	QTY.	DESCRIPTION
12	-	12	Washer, Flat 3/8 USS SST
13	-	10	Nut, Nylock 3/8-16 x 7/16 SST
14	3012396	1	Shield Chute SHPE4000
15	3013427	1	Handle Weldment, Chute
16	3012834	1	Cover Weldment, Chute
17	3006753	1	Wire Harness, Chute
18	-	8	Screw, Sheet Mtl #12x1.0 Hex Washer HD SST
19	3007844	1	Decal, Danger Stay Clear
20	3002631	1	Label, "NO STEP"
21	-	2	Screw, HHC 3/8-16 x 1 304 SST
22	-	2	Nut, Hex Flng - 3/8-16 SST

Repair Parts-Trough Assembly

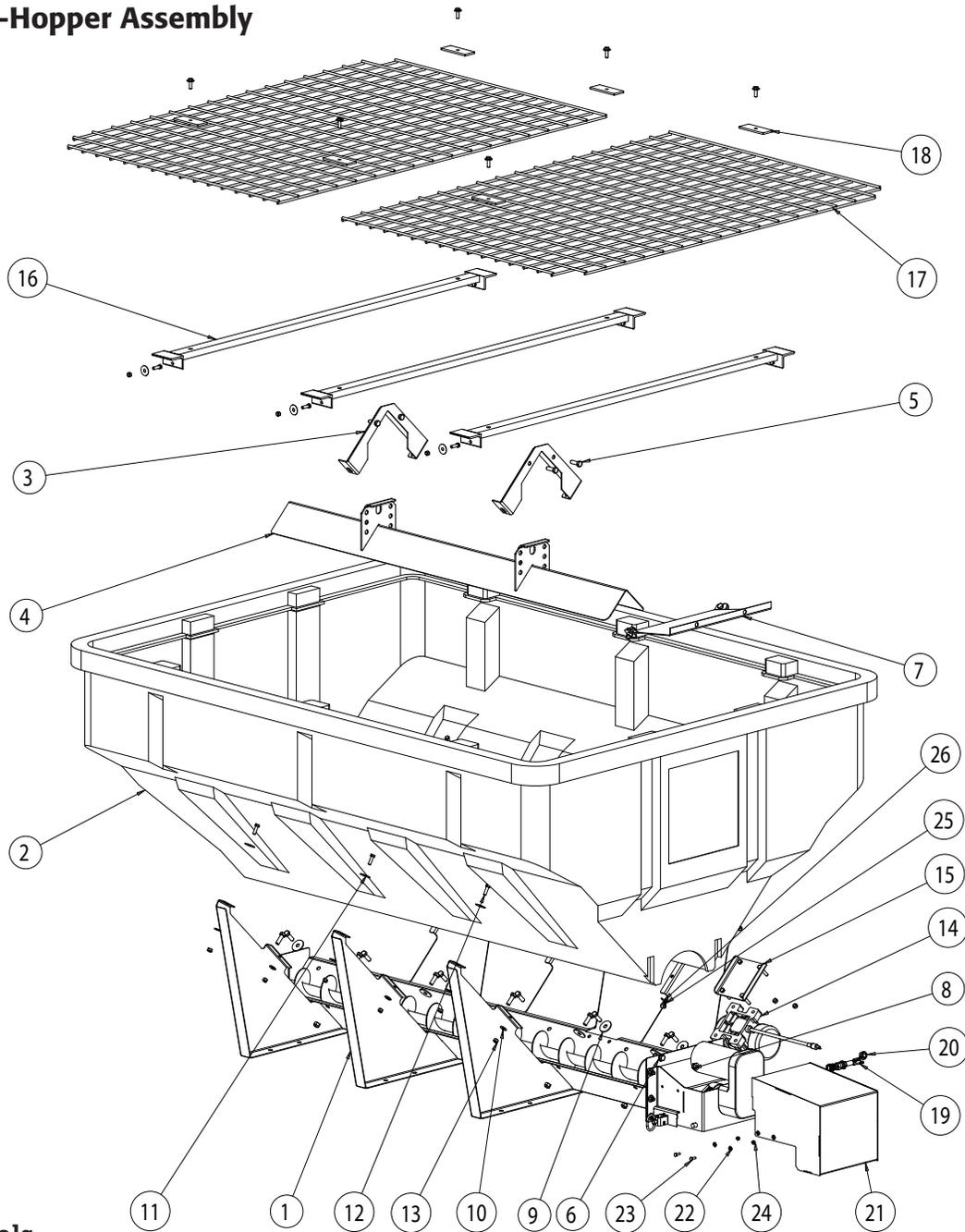


Bill of Materials

ITEM	PART NO.	QTY.	DESCRIPTION
1	3013270	1	Trough Weldment, SHPE4000
2	3012093	1	Bracket, Weldment Gear Motor
3	-	10	Washer, Flat 3/8 USS SST
4	-	4	Screw, HHC 3/8-16 x 1 304 SST
5	-	6	Nut, Nylock 3/8-16 x 7/16 SST
6	3012057	1	Gear Motor, Auger SHPE
7	-	3	Washer, Lock RHS - 3/8 SST
8	-	3	Screw, HHC - 3/8-16 x 3/4 SST
9	2F24SCR	2	Bearing Flange 2 Holes, 1.5 ID Set Screw

ITEM	PART NO.	QTY.	DESCRIPTION
10	-	2	Screw, HHC - 1/2-13 x 1 SST
11	-	4	Washer, Flat 1/2 ID SST
12	-	4	Nut, Nylock 1/2-13 ZN
13	3012001	1	Auger SHPE4000
14	-	1	Pin, Clevis, 3/8 x 2, 1038 ST, YZN
15	-	1	Cotter Pin, 1/8 x 1 ZN
16	3006844	1	Wire Harness, Spreader
17	3007821	1	Strain Relief Bushing
18	3013541	1	Cap Vinyl 2.0 ID 1.0 Lg

Repair Parts-Hopper Assembly

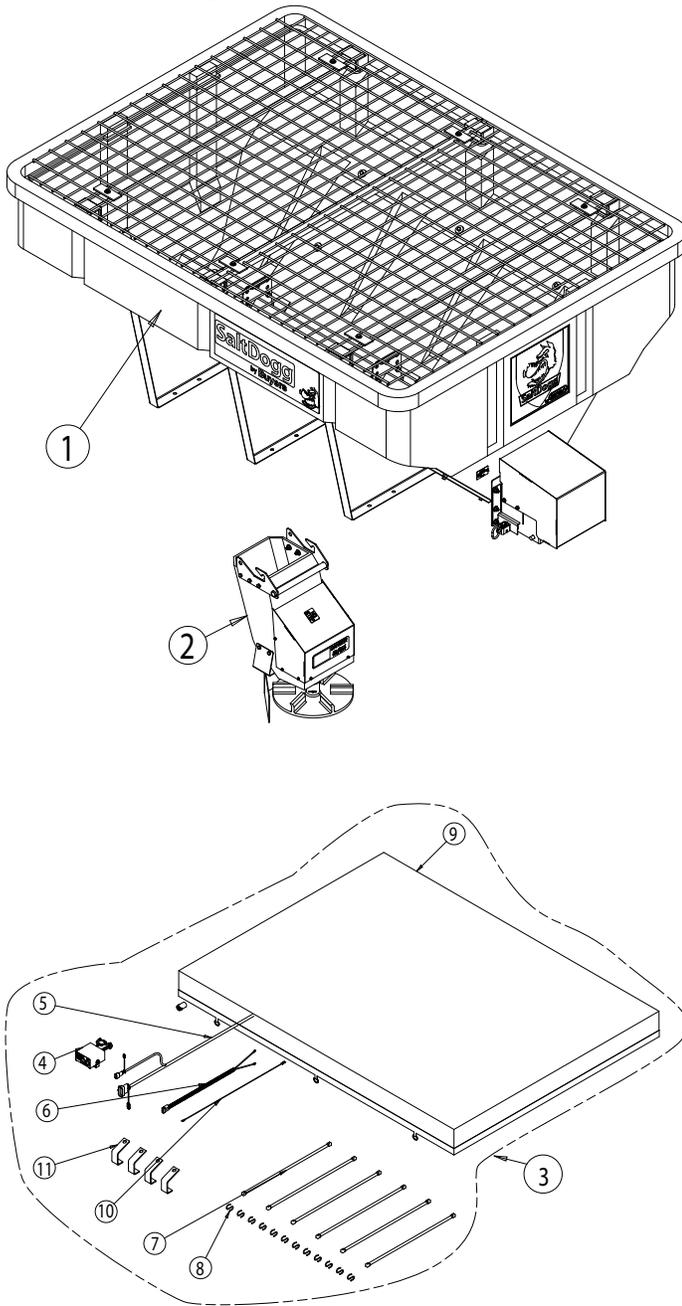


Bill of Materials

ITEM	PART NO.	QTY.	DESCRIPTION
1	-	1	Trough Assembly SHPE4000
2	3011999	1	Hopper Ply 4 Cu Yd
3	3013442	2	Bracket Weldment, Inert. Vee
4	3013444	1	Inverted Vee, Weldment
5	-	20	Screw, HHC - 1/2-13 x 1 SST
6	-	4	Washer, Flat 1/2 ID SST
7	3012607	1	Cover Discharge
8	-	16	Nut, Nylock 1/2-13 ZN
9	-	10	Washer, Flat 1/2 ID 2.0 OD .135 Thk SST
10	-	18	Washer, Flat 3/8 USS SST
11	-	18	Washer, Flat 3/8 x 1.5 x .048 SST
12	-	24	Screw, HHC - 3/8-16 x 1.25 SST
13	-	22	Nut, Nylock 3/8-16 x 7/16 SST

ITEM	PART NO.	QTY.	DESCRIPTION
14	3012081	1	Vibrator 450 lbs, 12 VDC
15	3013518	1	Retainer Vibrator, Weldment
16	3013279	3	Screen Support, SHPE4000
17	3012458	2	Wire Mesh, Top Screen
18	3012795	6	Retainer, Screen
19	3006844	1	Wire Harness, Spreader
20	3007821	1	Strain Relief Bushing
21	3012408	1	Cover, Weldment, Gear Motor
22	-	8	Washer, Flat 1.4 SAE, ZN/Clear
23	-	4	Screw, Cap 1/4-20 x 3/4 SST
24	-	4	Nut, Nylon Insert 1/4-20 SST
25	4375	1	Clamp, Hose .4375, 9/32 Hole
26	-	1	Screw, Sheet Mtl #12x1.0 Hex Washer HD SST

Repair Parts-Spreader



SHPE4000 SALTDogg® SPREADER WARRANTY INFORMATION

This warranty replaces all previous warranties and no employee of this company is authorized to extend additional warranties, or agreements, or implications not explicitly covered herein.

Buyers Products Company warrants all parts of the product to be free from defects in material and workmanship for a period of one (1) year. Parts must be properly installed and used under normal conditions. Normal wear is excluded.

Any part, which has been altered, including modifications, misuse, accident, or lack of maintenance will not be considered under this warranty.

The sole responsibility of Buyers Products Company under this warranty is limited to repairing or replacing any part(s), which are returned, prepaid, 30 days after such defect is discovered, and returned part(s) are found to be defective by Buyers Products Company.

Authorization from Buyers Products Company must be obtained before returning any part. The following information must accompany defective parts returned to Buyers Products Company: RMA #, spreader model, serial number, date installed, and distributor from whom purchased.

Buyers Products Company shall not be liable for damage arising out of failure of any unit to operate properly, or failure, or delay in work, or for any consequential damages. No charges for transportation or labor performed on any part will be allowed under this warranty.

Bill of Materials

ITEM	PART NO.	QTY.	DESCRIPTION
1	3012015	1	Hopper Assembly, SHPE4000
2	3012377	1	Chute Assembly, SHPE4000
3	3012961	1	Accessories Box, SHPE4000
4	3006620	1	Controller, SHPE1500, Buyers Logo
5	3006724	1	Wire Harness, Main
6	3006842	1	Power Cable, Control Box
7	TS31	6	Strap, Rubber Tarp 31"
8	9225	12	S-Hook, 2.5" ZN, Tarp Strap
9	3012959	1	Tarp, SHPE4000
10	0203700	1	Wire Assembly, 36 Long
11	3013589	4	Hook, Tie-Down SHPE4000