

# Installation Instructions

## Salt Dogg Spreader Hopper Poly Electrical 2.0 cubic yards

Serial numbers 2500 and higher

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### General Information

#### Spreader models:

- SHPE2000- spreader with standard length chute
- SHPE2000X- spreader with extended length chute

**Overall Length:** 96 inches

**Overall Width:** 47-1/2 inches

**Overall Height:** (installed): 40 inches

**Empty Weight:** 437 lbs. (standard chute), 441 lbs. (extended chute)

**Capacity Struck:** 2.0 cu. yd.

### Vehicle Requirements

- 3/4 or 1 ton pick-up truck above 8500# GVWR.
- 135 AMP or higher alternator is recommended.



**CAUTION**

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

### 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/Salt up to 50/50 Mix-Dry	2,700

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



### SHPE2000 SALT DOGG 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.

**Safety Precautions**

**⚠ WARNING**

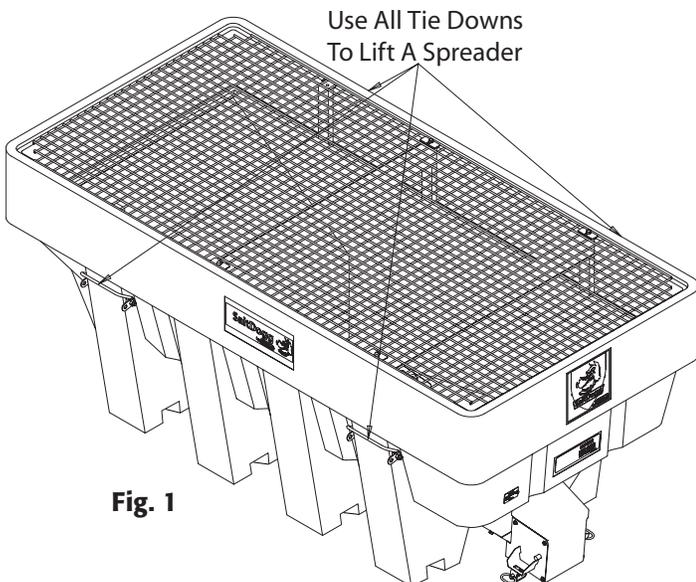
**Observe the following Safety Precautions before, during and after operating this spreader. By following these precautions and common sense, possible injury to persons and potential damage to this machine may be avoided.**

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**

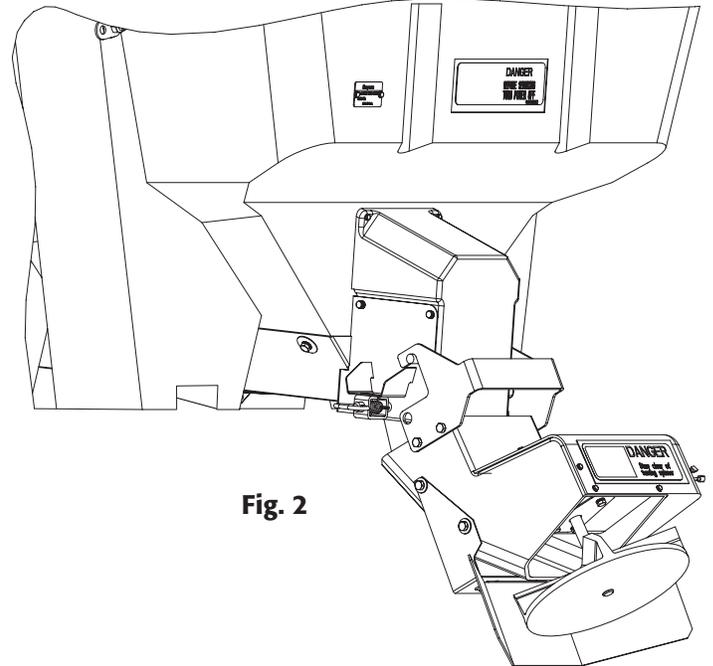
**1. Mounting the Spreader onto the Vehicle:**

- A. Remove the tailgate from the vehicle.
- B. Check truck's bed for all kinds of sharp debris or foreign objects. They can cut and seriously damage poly hopper.
- C. Lift spreader using tie downs (fig. 1), or using fork lift.



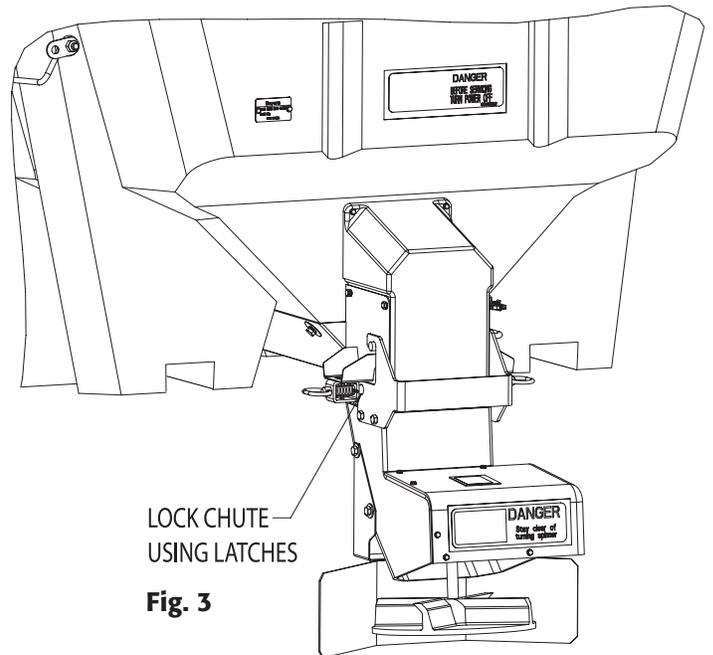
**Fig. 1**

- D. Lower spreader into the truck bed.
- E. Center the spreader from side to side on the vehicle.
- F. Attach the Chute Assembly to the spreader. First, hook the Chute to the spreader by openings in the Chute's handle.



**Fig. 2**

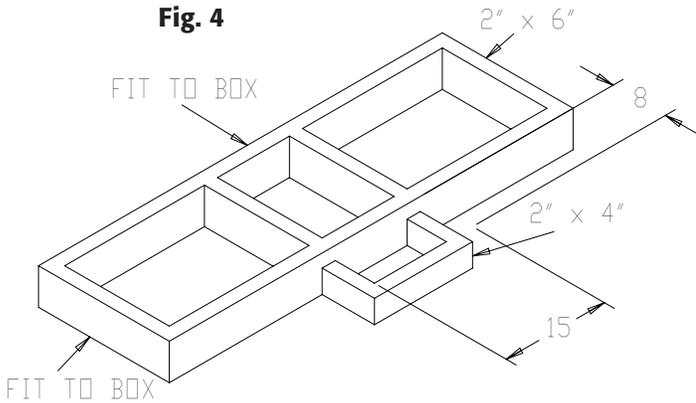
Then rotate the Chute into operating position and lock using two spring latches.



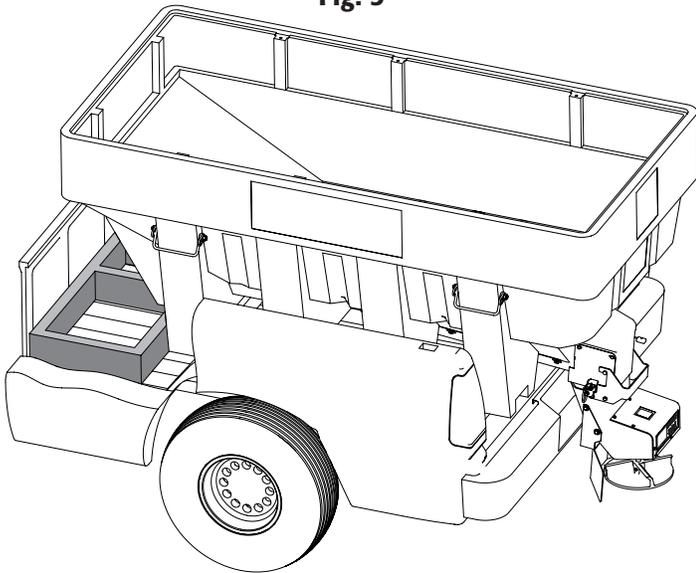
**Fig. 3**

- G. Slide spreader towards front of the truck leaving adequate space between chute and truck (2-3 inches). Measure the distance from the front of the truck bed to front of the hopper's front legs. Fabricate spacer to fit between front of the spreader and front of the bed per Fig. 4 and Fig. 5

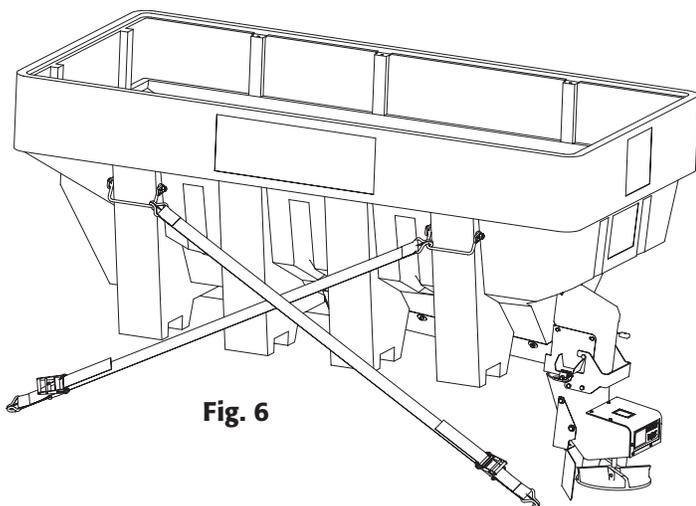
**Fig. 4**



**Fig. 5**



H. Secure spreader using four ratched straps as shown in Fig. 6. Tighten straps evenly to secure spreader in the middle of the truck box.



**Fig. 6**

**Verify with the vehicle's manufacturer that the factory installed anchor points are designed for tie-down such load. Inspect straps and hardware after each time spreader is loaded. Tighten straps and hardware if necessary.**

**2. Control Box and Vehicle Wiring Harness Installation**

**⚠ WARNING**

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

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 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.

**⚠ WARNING**

**Use extreme caution when working around an operating vehicle engine.**

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

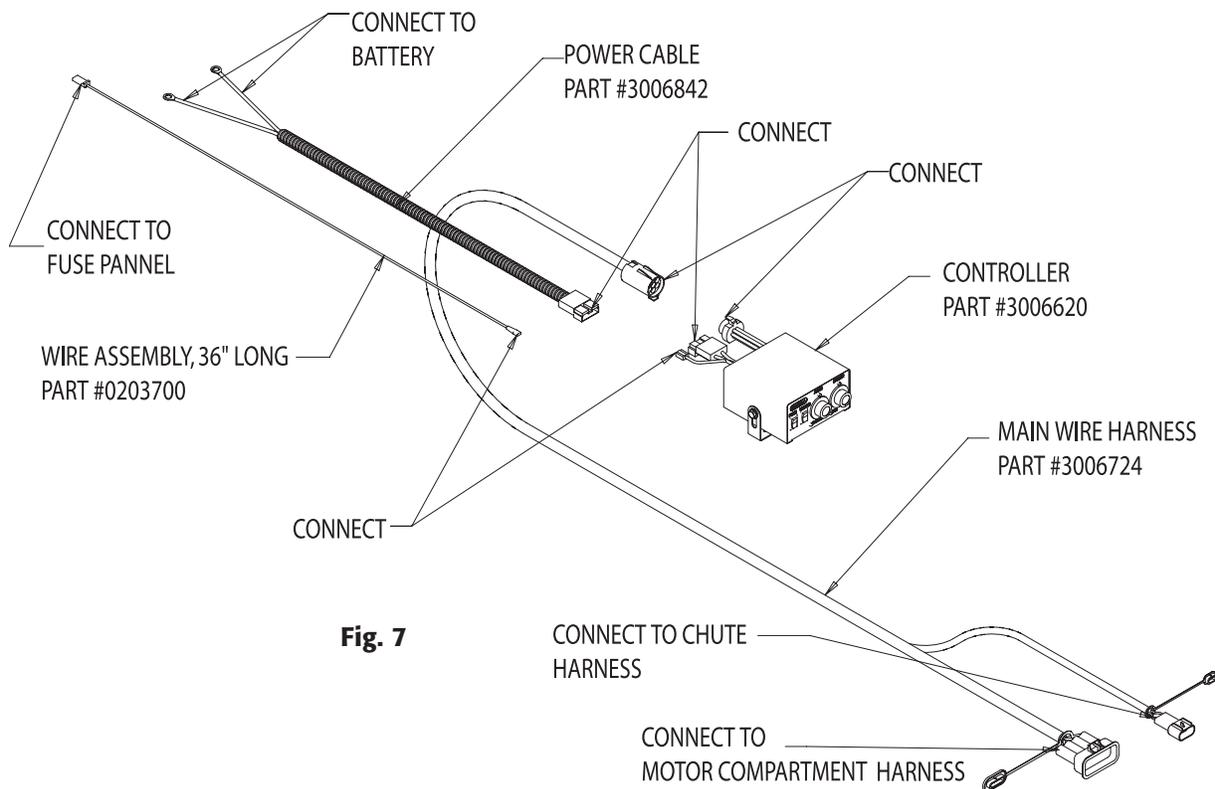
**⚠ WARNING**

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

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 (See Fig. 7).

**Spreader Operation**

**1.** SHPE2000 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.,



**Fig. 7**

- 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.**

SHPE2000 has two discharge openings in the bottom of the hopper. Material flow through these openings can be controlled using two sliding baffles. The spreader is shipped from the factory with baffles adjusted for dry bagged salt. In this setting rear baffle has 4.0" opening and baffle in the middle of the hopper has 2.0" opening. However if you are using a sand/salt mixture or any chunky and hard to flow materials, it is advised to increase the open portion of discharge openings.

**IMPORTANT! -Always open rear (closer to gear motor compartment) opening first. Always turn off power before adjusting baffles!**

### Warning Lights

Salt Dogg 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. To unclog auger manually, first remove the chute. Apply 1-1/4" open wrench on auger's nut. Turn auger counterclockwise several times. Salt Dogg 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 30 minutes with 15 minutes between runs to avoid overheating.

### Spreader Maintenance

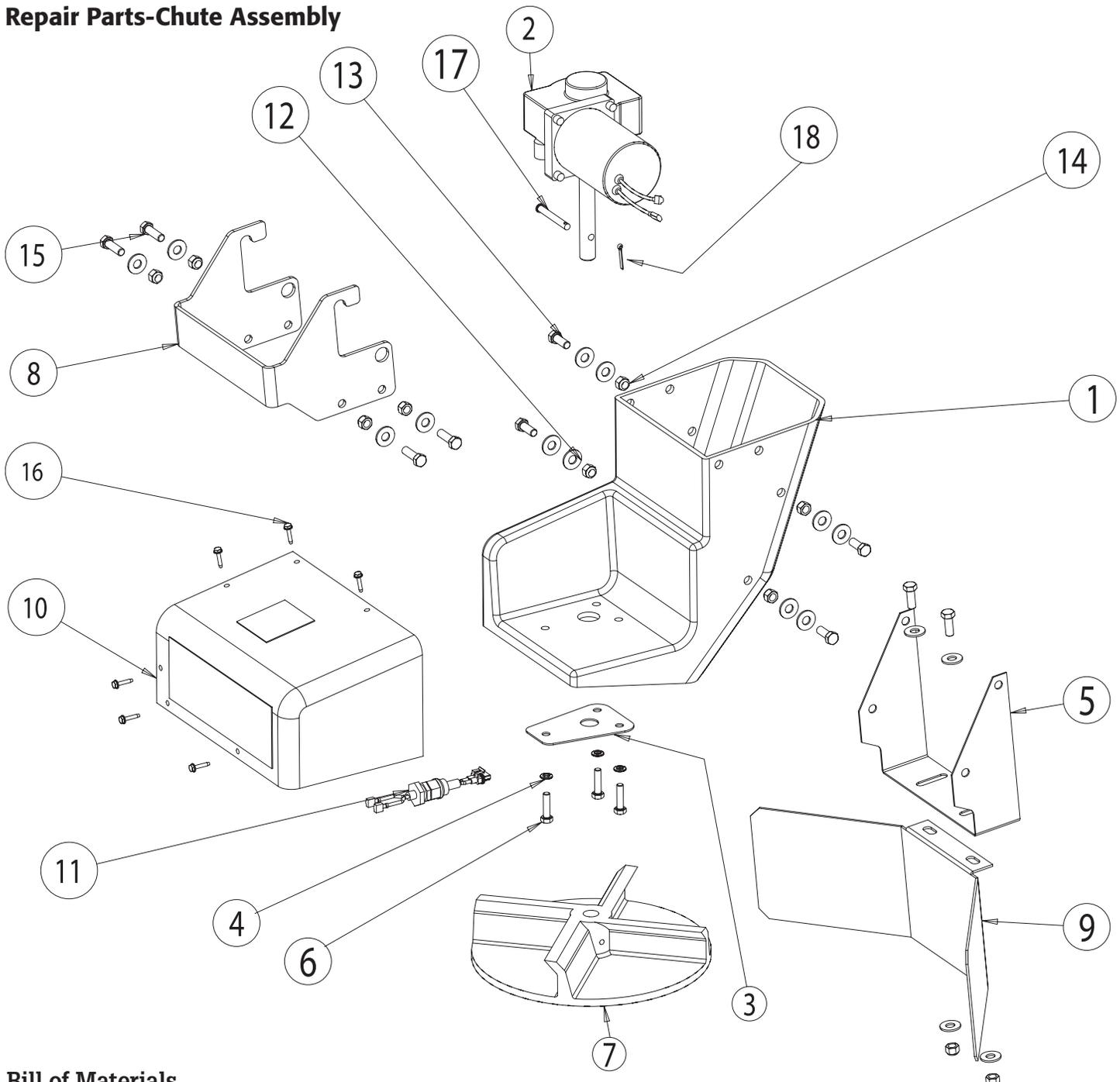
**WARNING! Always disconnect power when servicing spreader.**

1. Use dielectric grease on all electrical connectors before an electrical connection is made or after connector is disconnected
2. Grease Auger bearing 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 anchors on both sides of tie downs. 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

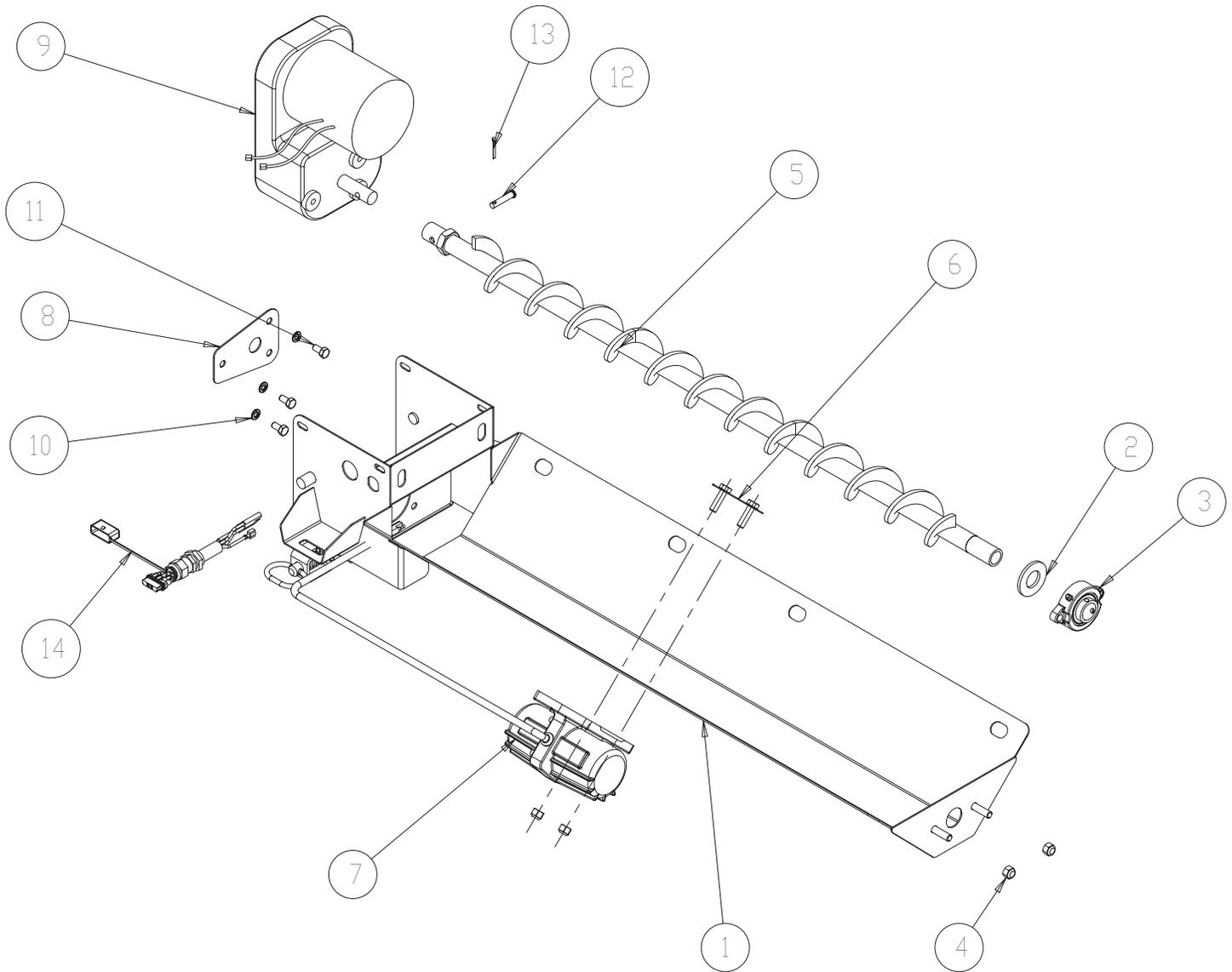


### Bill of Materials

ITEM	PART NO.	QTY.	DESCRIPTION
1	3007329	1	Chute Poly Std. Length
1	3007526	1	Chute Poly Ext. Length
2	3006833	1	Gear Motor 12 VDC Spinner
3	3007824	1	Retainer Gearmotor
4	-	3	Washer, 5/16 Lock SST
5	3007564	1	Bracket, Shield SST
6	-	3	Screw, Hex HD Cap 5/16 - 18 x 1-1/4 SST
7	3004611	1	Spinner, 11.5" Poly
8	3007299	1	Handle, Chute
9	3007004	1	Shield, Spinner
10	3007413	1	Cover, Gear Motor, Chute

ITEM	PART NO.	QTY.	DESCRIPTION
11	3006753	1	Wire Harness, Chute
12	-	16	Washer, Flat 3/8 USS SST
13	-	6	Screw, HHC 3/8 - 16 x 1 304 SST
14	-	10	Nut, Nylock 3/8 - 16 x 7/16 SST
15	-	4	Screw, HHC 3/8 - 16 x 1.25 SST
16	-	6	Screw, Sheet Mtl #12 x 3/4 Hex Washer HD SST
17	-	1	Pin, Clevis, 5/16 x 2-1/2, .141 Hole ZN
18	-	1	Cotter Pin, 1/8 x 1, Zinc
19	3002631	1	Label, "No Step"
20	3007844	1	Decal, "Danger, Stay Clear"

## Repair Parts-Trough Assembly

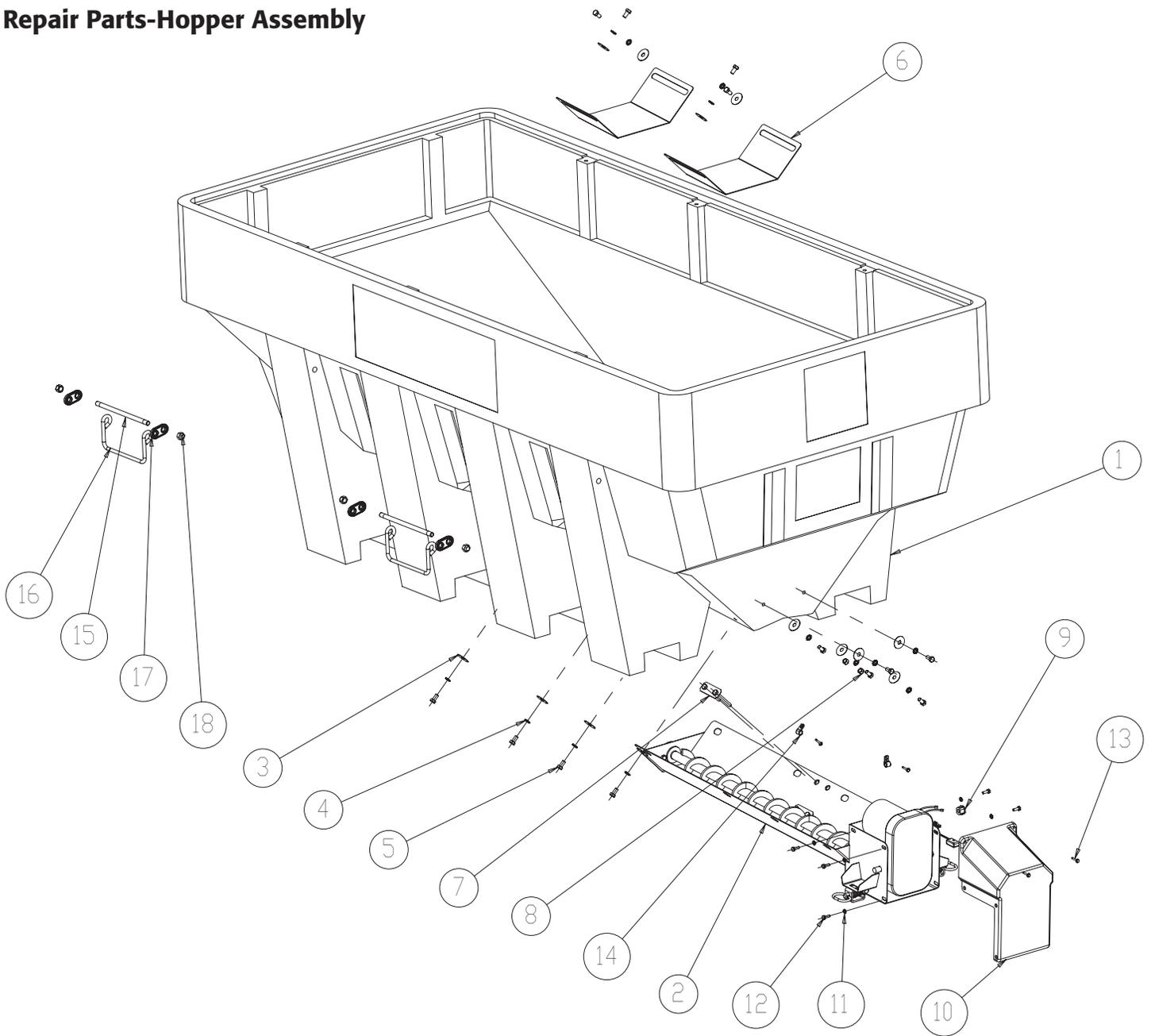


### Bill of Materials

ITEM	PART NO.	QTY.	DESCRIPTION
1	3007357	1	Trough Weldment SHPE1500
2	3007000	1	Gasket, Felt Bearing
3	1411000	1	Bearing, 2-Hole Flanged 1"
4	-	4	Nut, Nylock 3/8-16 x 7/16 SST
5	3006831	1	Auger
6	3007730	1	Bracket, Vibrator Short
7	3007416	1	Bibrator, 200lbs. 12 VDC

ITEM	PART NO.	QTY.	DESCRIPTION
8	3007824	1	Retainer Gear Motor, Chute
9	3009995	1	Gear Motor, Auger SHPE
10	-	3	Washer, 5/16 Lock SST
11	-	3	Screw, HHC 5/16-18 x 5/8 SST
12	-	1	Pin, Clevis, 5/16 x 1 1/2, w/ 5/32PH ZN
13	1	1	Cotter Pin, 1/8 x 1 ZN
14	3006844	1	Wire Harness

## Repair Parts-Hopper Assembly

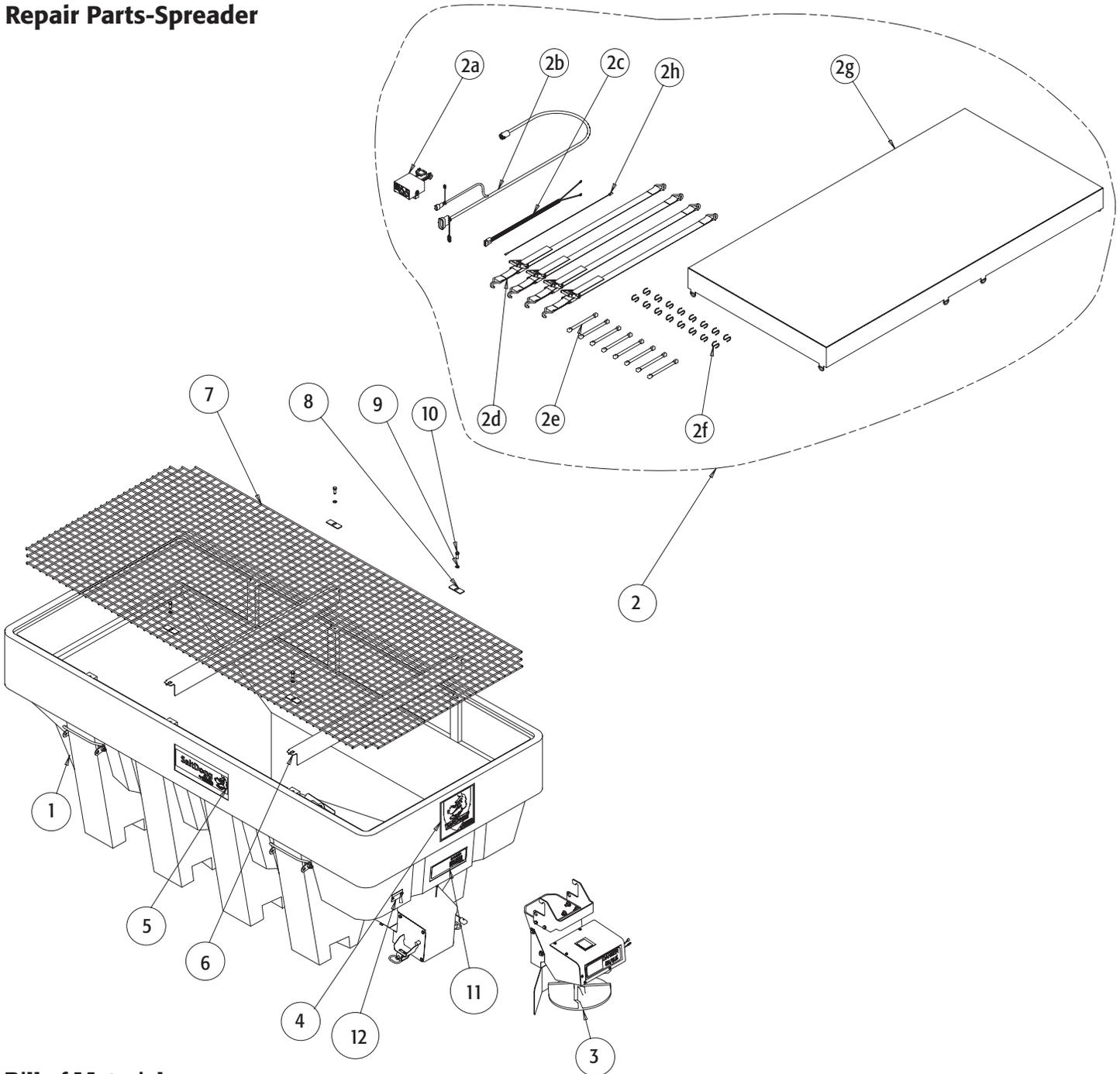


### Bill of Materials

ITEM	PART NO.	QTY.	DESCRIPTION
1	3008001	1	Hopper Polymer 2 Cu.Yd.
2	3011865	1	Trough Assembly, SHPE
3	-	14	Washer, Flat 3/8 x 1.5 x .048 SST
4	-	14	Washer, Lock RHS 3/8 SST
5	-	14	Screw, HHC 3/8-16 x 3/4 SST
6	3006959	2	Baffle, SHPE1500
7	3007731	1	Bracket Vibrator, Long SST
8	-	2	Nut, Nylock 3/8-16 x 7/16 SST
9	3007821	1	Strain Relief Bushing

ITEM	PART NO.	QTY.	DESCRIPTION
10	3007236	1	Cover Gear Motor
11	-	6	Washer, 1/4" Spring Lock SST
12	-	6	Screw, Cap 1/4-20 x 3/4 SST
13	-	4	Screw, Sheet Mtl. #12x1.0 Hex Washer HD SST
14	4375	2	Clamp, Hose .4375, 9/32 Hole
15	3006974	4	Stud, 1/2-13 x .75 Both Ends, 9.75 LG, ZN
16	3006958	4	Tie Down
17	3009802	8	Anchor, Tarp, Poly SHPE
18	-	8	Nut, Nylock 1/2-13 ZN

## Repair Parts-Spreader



### Bill of Materials

ITEM	PART NO.	QTY.	DESCRIPTION
1	3008011	1	Hopper Poly 2 cu. yards Assembly
2	3008884	1	Accessories Box, SHPE2000
2a	3006620	1	Controller, Buyers Logo
2b	3006724	1	Wire Harness, Main
2c	3006842	1	Power Cable, Control Box
2d	1496505	1	Hold Down Kit, Spreader (4 Straps)
2e	TS9	8	Strap, Rubber Tarp 9"
2f	9225	16	S-Hook, 2.5" ZN, Tarp Strap
2g	3008838	1	Tarp SHPE2000
2h	0203700	1	Wire Assembly, 36 Long

ITEM	PART NO.	QTY.	DESCRIPTION
3	3007412	1	Chute Poly Standard SHPE
3	3007527	1	Chute Poly Extended SHPE
4	3006839	1	Decal, SaltDogg, Rear
5	3006911	2	Decal, SaltDogg, Side
6	3008391	2	Support, Top Screen SST
7	3008390	1	Screen, SHPE2000
8	3008787	4	Retainer, Screen
9	-	4	Washer, Lock RHS - 3/8 SST
10	-	4	Screw, HHC 3/8 - 16 x 304 SST
11	9240132	1	Decal #2, Danger Before SVCE
12	-	2	Screw, Sheet MTL #12 x 3/4 Hex Washer HD SST