

# Installation Instructions

## TGSUVPRO SUV Salt Spreader

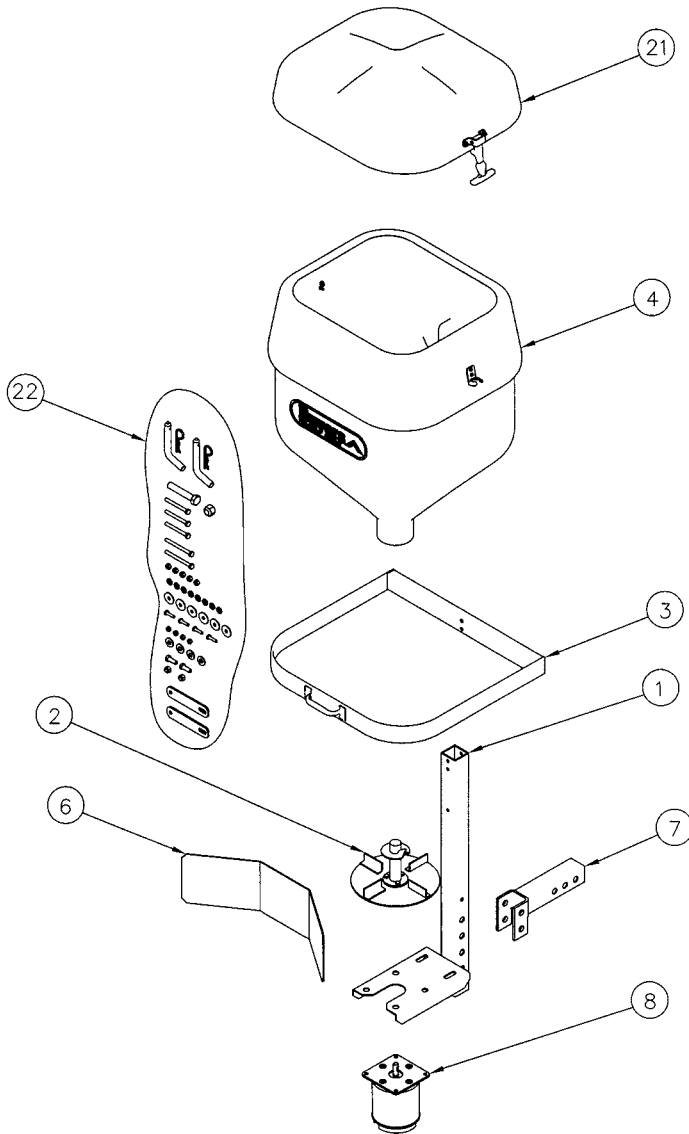


Fig. 1



### Bill of Materials

ITEM NO.	PART NO.	QTY.	DESCRIPTION
1	3003572	1	Frame, TGSUV1 Welded Assembly
2	3004863	1	Spinner Assembly, TGSUV-PRO
3	3003902	1	Band, TGSUV1, Weldment
4	3003715	1	Hopper, w/Insert & Graphics, Assy., TGSUV1
5	3003578	2	Strap, Support, TGSUV1
6	3002486	1	Shield, Spinner, TGS05A
7	3004589	1	Receiver Mount, TGSUV1 Weldment
8	0202000	1	Motor
9	3000544	1	Screw, HH Cap 5/8 x 3.5 Gr. 5 Zinc
10	FNE063011069	1	Nut, Nylock 5/8-11
11	FWF031075006SS	8	Washer, 5/16 SAE SST
12	FCS031018300SS	3	Screw, HH Cap 5/16-18 x 3 SST
13	92401113A	2	Screw, HH Cap 5/16-18 x 3-1/2 SST
14	FNE031018034SS	5	Nut, Nylock 5/16-18 SS
15	3001158	6	Washer, Fender 5/16 ID x 1.25 OD
16	FCS025020100SS	4	Screw, Cap Hex HD 1/4-20 x 1 SST
17	FNE025020031SS	4	Nut, Nylon Insert 1/4-20 SST
18	FWF038100007SS	4	Washer, Flat 3/8 USS SST
19	FCS038016100SS	2	Screw, HHC 3/8-16 x 1 304 SST
20	FNE038016044SS	2	Nut, Nylock 3/8-16 x 7/16 SST
21	3003580	1	Lid, TGSUV1 Assembly
22	3003831	1	Hardware Bag (includes all above hardware)
23	HP6253WC	2	Pin, Hitch, 5/8

### Spreader Assembly

See Fig. 1

Check contents of box against parts list to make sure all components are included. When ordering replacement or spare parts, refer to parts list for part numbers.

### Tools needed for assembly

- 3/8" or 1/2" drive ratchet with 7/16", 1/2", 9/16" & 15/16" sockets
- 7/16", 1/2", 9/16" & 15/16" wrenches

-continued

### Motor & Frame

See Fig. 2

Mount motor (2) to frame (1) with four 1/4-20 x 1 screws and nuts (15,16,17). The motor screws should be installed along with the large flat washers from the top side as shown in Fig. 2. Do not tighten the screws at this time. The motor will have to be aligned with the hopper later.

### Hopper & Band

See Fig. 3

Slide the support band (3) over the hopper (4) from the bottom until it touches the hopper lip. Slide the hopper/band assembly over the top of the frame tube until the holes in the hopper and band line up with the holes in the frame tube. Install 5/16-18 x 3-1/2 HH cap screws (13) from the outside of the frame tube at the top through the band and hopper. Install large washer (15) and nut (14) from the inside. Install 5/16-18 x 3 HH cap screw through the lower hole in the frame, into the hopper, and attach large washer and nut from the inside of hopper. See Fig. 3.

### Bottom Support Straps & Motor Alignment

See Fig. 4

Install bottom support straps (5) by sliding 5/16-18 x 3 HH cap screws through the support straps, frame and hopper as shown in Fig. 4. **CAUTION:** do not over tighten the screw that goes through the hopper; you may damage the hopper. At this time the motor should be aligned so that the auger does not rub any part of the hopper outlet. Move the motor around with the screws loose and turn the auger **BY HAND** to check for rubbing. When the motor is in the correct position tighten the motor screws and recheck one more time for rubbing.

### Spinner Shield & Receiver Mount

See Fig. 5 on page 4

Install the spinner shield (6) with 3/8-16 x 1 HH cap screws, flat washers and hex nuts (18,19, 20). Position the shield about a 1/2" away from the spinner plate and centered to start with. The shield position can be changed to alter the salt pattern if needed. Install 2" or 1-1/4" receiver mount (7 or 8) at a position that allows the motor to clear any obstacles (rocks, curbs landscape ties, etc.). We recommend the bottom most set of holes (at the motor end) to start with. Use 5/8 x 3-1/2 HH cap screw and hex nut (9, 10) on bottom hole and tighten securely. Use pin (23) on top hole of receiver mount. Pull pin to tilt unit down. **CAUTION: Do not tilt unit when the hopper contains spreading material.**

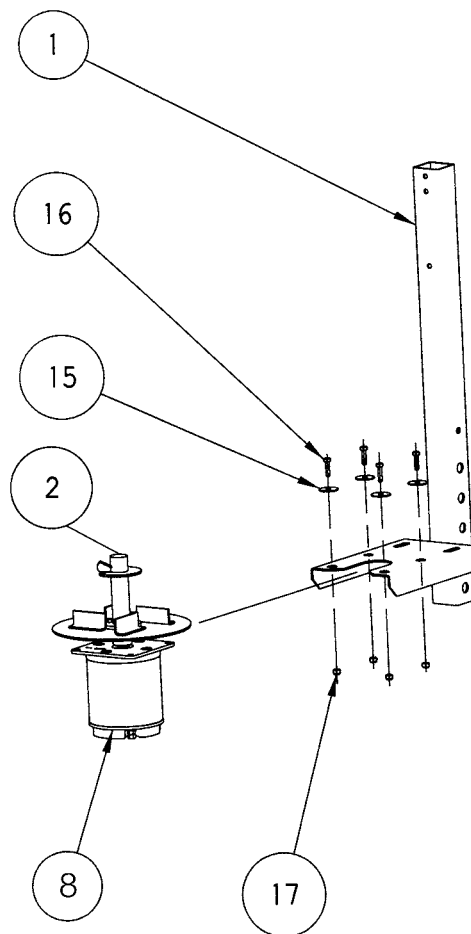


Fig. 2

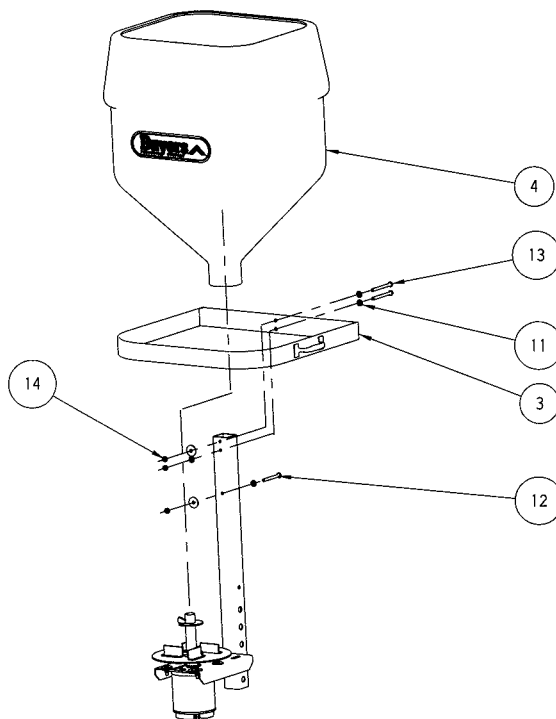
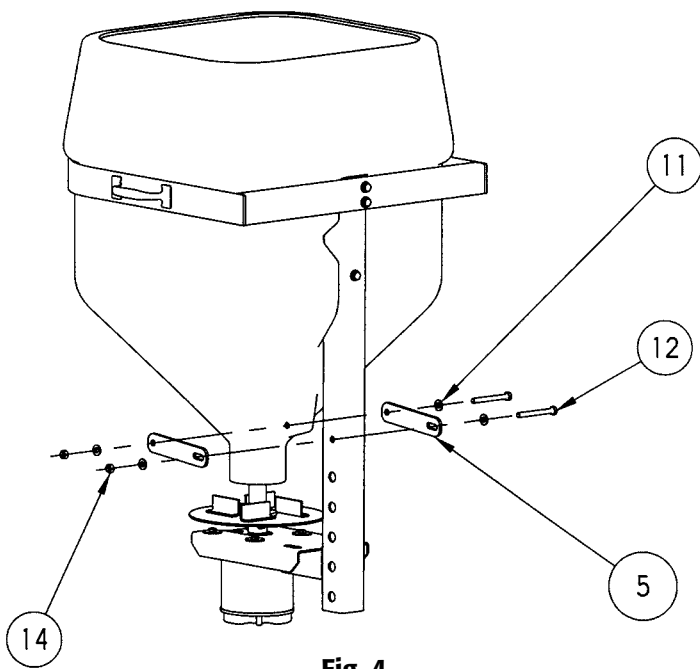


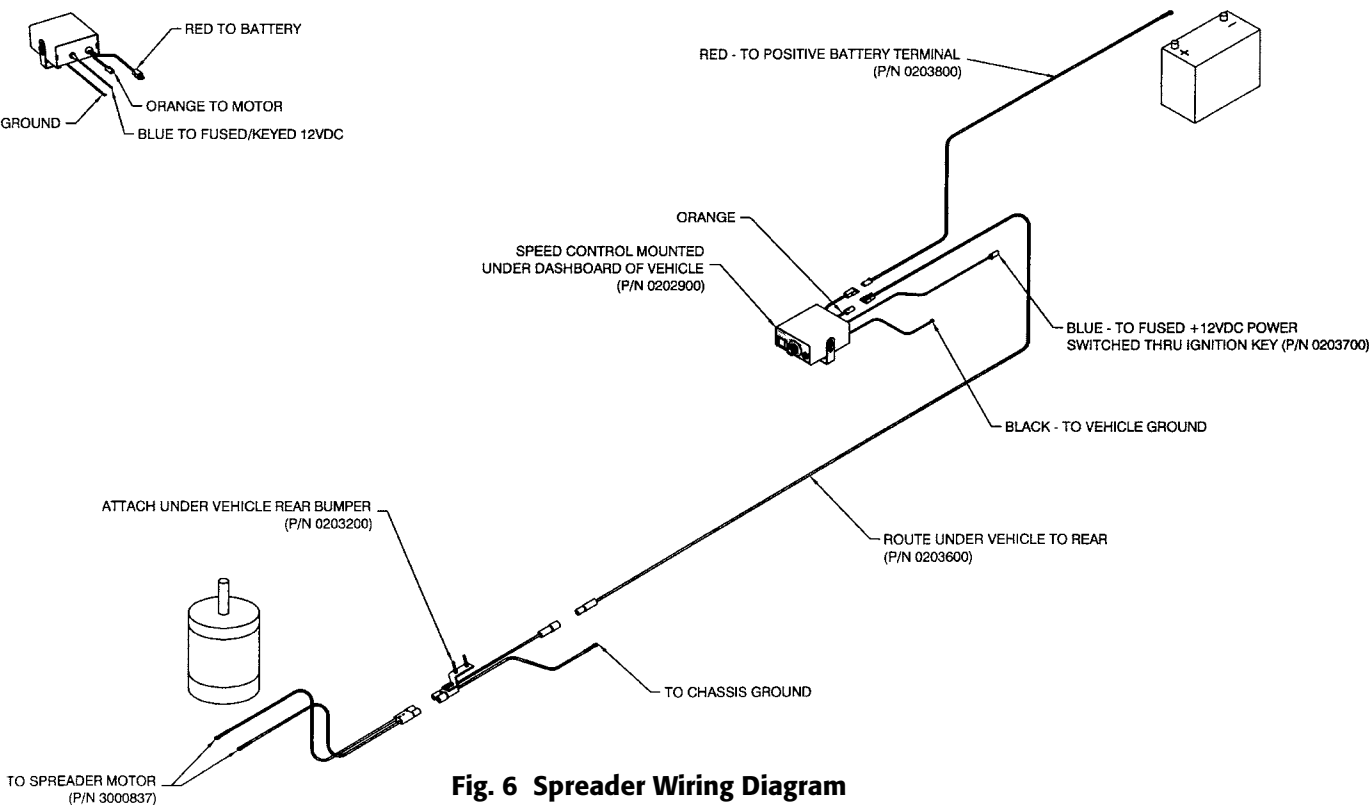
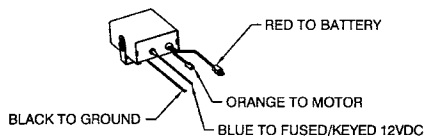
Fig. 3



**Fig. 4**

**Electrical Installation**

Find a location for the speed control that is within reach and convenient for the driver. Attach mounting bracket to the vehicle dash or floor. Make certain the speed control is grounded by connecting the black ground wire to a suitable vehicle ground or directly to the negative post of the battery. Route the blue wire from the speed control location to the vehicle fuse panel. Find an accessory terminal on the fuse block that is "ON" only when the vehicle key is "ON". **Do not** connect the blue wire to the speed control at this time. Connect the eyelet end of the 96" long red wire to the positive terminal of the battery and route the plug end through the firewall to the speed control. **Do not** connect the red wire to the speed control at this time. Route the 222" long red wire from the rear bumper of the vehicle to the speed control, the large rubber end goes at the rear bumper and the hard plastic plug end goes at the speed control. Attach the rubber socket and dummy plug with bracket to the underside of the truck preferably to the bumper so that the motor lead will have some slack when plugged into it. Connect the black wire from the rubber socket to the frame or bumper bracket of the vehicle, clean off any paint or rust that will prevent a good connection. Connect spreader motor plug to mating truck plug. Protect truck mounted plug from corrosion by inserting dummy plug when spreader is not mounted on truck. Perform a motor run test before connecting speed control. Inside the cab, connect the red wire from the battery



**Fig. 6 Spreader Wiring Diagram**

to the red wire going back to the motor with a jumper wire. The motor should run counter clockwise. If the motor runs clockwise then swap the wires at the motor terminals. If the motor does not run at all then chances are that the ground wire at the rear of the truck is not making a good connection. After the motor test is successful then connect the speed control in the cab. Test the spreader to make sure the speed can be adjusted and the blast feature is working. **CAUTION:** when connecting the speed control, do not allow the orange wire to touch any part of the vehicle or the case of the control itself This will cause a short in the speed control and permanently damage the transistors. This is not covered by warranty.

### Trouble Shooting

If the motor works in blast mode only then the small blue wire to the speed control is not getting 12VDC power, check to make sure the vehicle key is "ON" and then make sure the blue wire is getting power. Use a volt meter or test light if needed.

If the speed control is erratic or not controllable then most likely the small black ground wire from the controller is not getting a good connection. Clean the connection area from dirt and paint and reconnect or relocate the wire to a better place if necessary.

### Operation

Install unit on vehicle by sliding into receiver hitch. Be sure to install receiver safety pin. We recommend dumping 2-3 bags of #1 rock salt into the hopper at a time, this way there will not be a lot of extra salt in the unit when you are done. Place the lid on the hopper and secure. Start at one end of the driveway with the vehicle in low gear and idling. Start the spreader as soon as the vehicle starts to move. Do not accelerate the vehicle, best results are when the vehicle is moving in low gear at idle. Multiple passes over the driveway from both directions may be required. The spreader is designed to use dry loose #1 rock salt; using any other material may give unsatisfactory results. We do not recommend leaving the spreader on the vehicle when traveling on roads for long distances. If you must leave it on the vehicle when traveling, be sure the hopper is **EMPTY** and the plug is disconnected from the vehicle dash board. When the spreader is not in use empty the hopper and remove it from the vehicle. The spreader should be hosed off periodically to prevent corrosion of moving parts. Disconnect the wiring harness at the plug near the motor before hosing off spreader. Store the spreader upside down with the lid off in a dry place. Make sure the wiring harness plug and the motor is dry and free of ice before using the spreader again.

### FULL ONE YEAR WARRANTY

Manufacturer will repair, or at manufacturer's discretion will replace any part of this salt spreader which proves to be defective in workmanship or material under normal use for a period of one year from the date of delivery to the original purchaser. Any cost incurred in returning the product to the supplier is the responsibility of the consumer.

### EXCLUSIONS

Manufacturer shall not be liable for special, incidental, or consequential damages, or for damages resulting from lack of necessary maintenance, from misuse, abuse, acts of God, or alteration of the product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

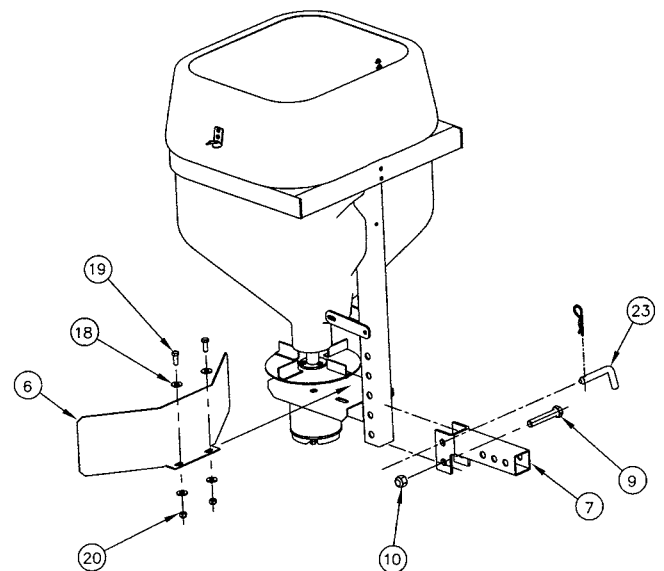


Fig. 5