

SNO-WAY®

SNOW & ICE CONTROL EQUIPMENT

INSTALLATION INSTRUCTIONS

SPREADER VIBRATOR MOTOR KIT 99101094

TO FIT:
4 CU. FT. BROADCAST SPREADER
6 & 9 CU. FT. BROADCAST SPREADER
V-BOX SPREADER

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1. THINK SAFETY, ALWAYS WEAR SAFETY GLASSES WHEN PERFORMING THE OPERATIONS PRESCRIBED IN THESE INSTRUCTIONS
2. READ ALL INSTRUCTIONS CAREFULLY BEFORE ATTEMPTING INSTALLATION
3. BEFORE BEGINNING WORK MAKE SURE TO SET PARKING BRAKE AND CHOCK WHEELS



MINIMUM VEHICLE RECOMMENATIONS

Heavy Duty Alternator
Heavy Duty Battery

ASSEMBLY TOOLS NEEDED

Wrenches 7/16" – 1-3/8"
Wrenches, Metric 10mm - 18mm
Torque Wrench

INSTALLATION NOTES

1. Unless otherwise specified, mount all kit components to vehicle before tightening any hardware.

2. It is recommended that LOCTITE®, or similar thread locking product, be used on ALL mounting hardware (i.e. Nuts, Cap Screws, Bolts, etc.).

3. Mechanical mounting instructions for all three model groups are separately listed in the following section, followed by an Electrical Installation section with instructions for all models grouped together.

MECHANICAL MOUNTING INSTRUCTIONS

4 Cu Ft Broadcast Spreader

1. Remove motor cover and hardware to access pulley and belt drive. Mount vibrator inside the motor cover section on the 4 Cubic Foot Spreader (See Figure 1) as follows:

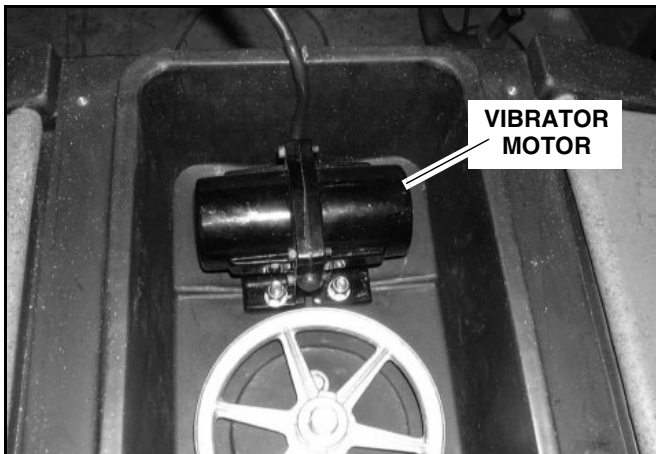


Figure 1

2. Remove pulley E-ring (See Figure 2).

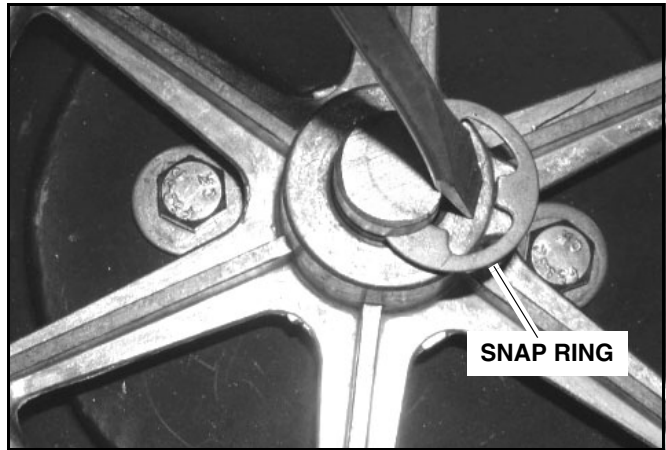


Figure 2

3. Loosen set screw and remove pulley (See Figure 3).

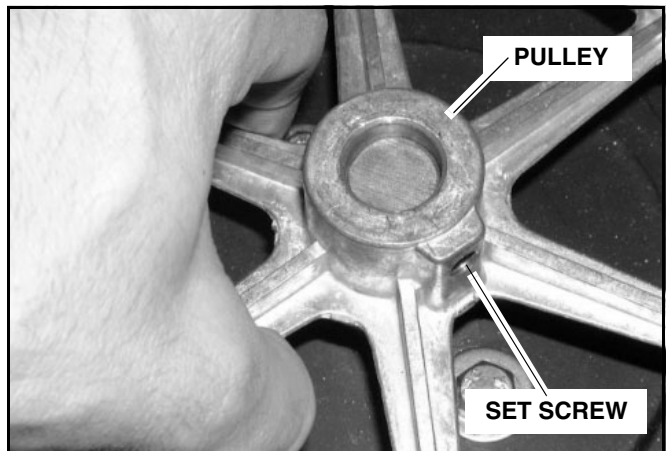


Figure 3

4. Remove spacer (See Figure 4).

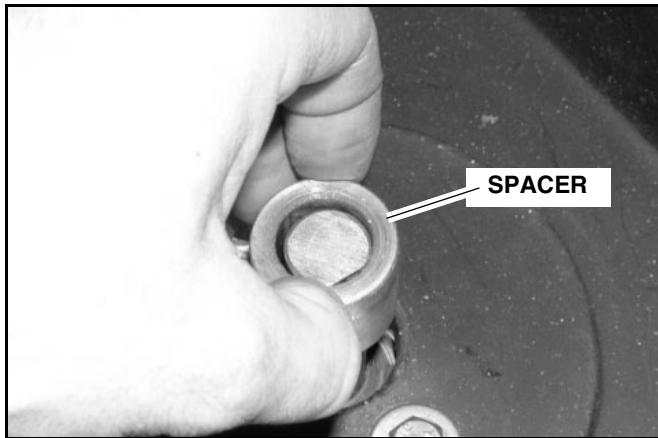


Figure 4

5. Remove the rim bolts and flat washers, and lift complete motor plate from hopper (See Figure 5).

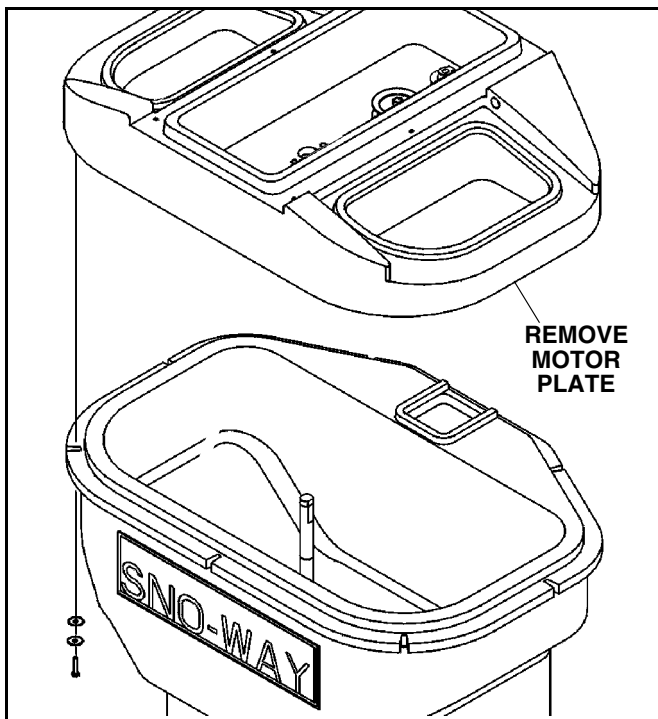


Figure 5

6. Position vibrator motor on motor plate. They will be a small space between the vibrator motor base and motor plate on the two holes shown (See Figure 6).

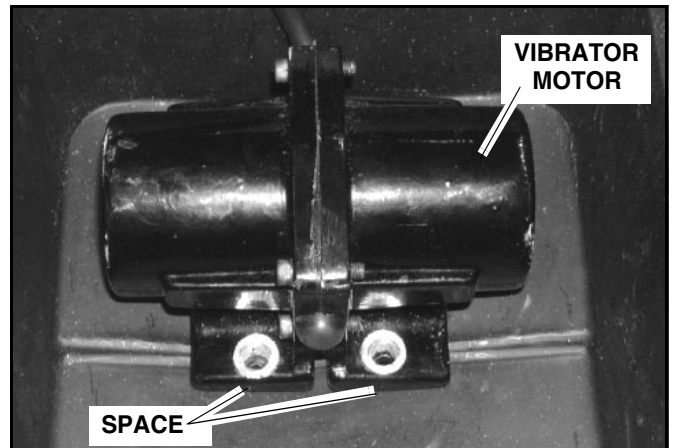


Figure 6

7. Drill four holes, through motor base, into motor plate (See Figure 7).

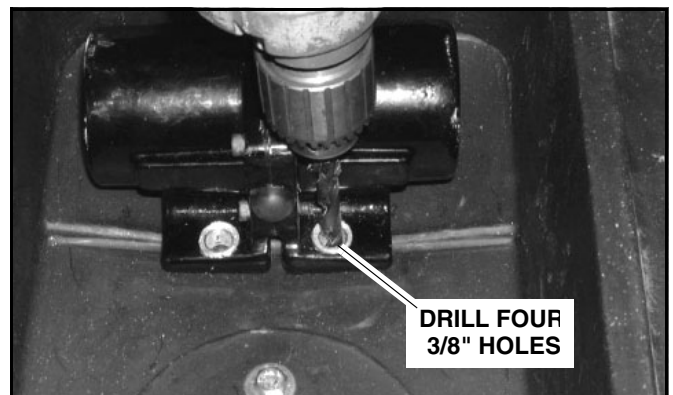


Figure 7

8. Align vibrator backing plate with four holes in motor plate. Install four carriage bolts through backing plate, motor plate and vibrator motor and secure with four nuts (See Figure 8).

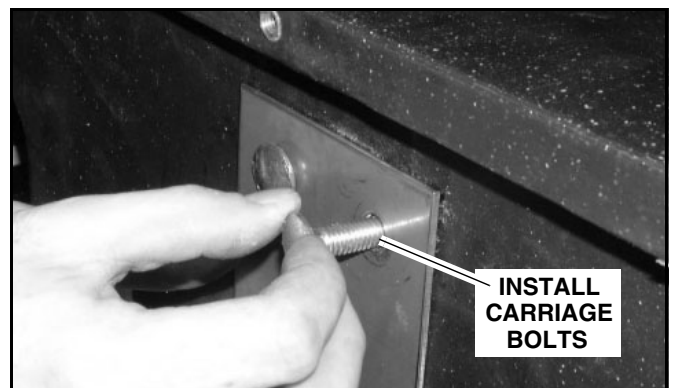


Figure 8

9. Tighten nuts to 50 lb. ft. (68 N-m). The plastic housing will compress. The material will stop stretching when the two walls of material in the motor plate housing are compressed together (See Figure 9).

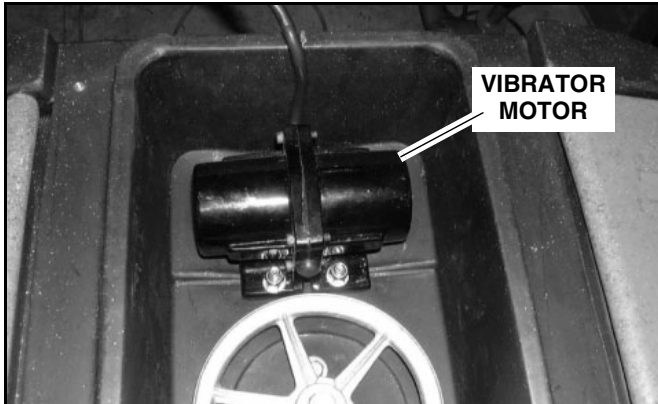


Figure 9

IMPORTANT: After an initial 5 hours of spreader vibrator usage, re-torque all vibrator motor bolts.

Routing the Vibrator Motor Wiring Harness

The harness on the vibrator motor has an electrical connector on it that must be positioned on the exterior of the spreader housing.

With the cover in position on the motor plate, a drill is used to make a hole in both pieces at the same time. Remove the cover and carefully using the side of a rotating drill bit or sharp utility knife, remove the rest of the material on the motor plate and cover.

Install the harness in the motor plate and seal the harness in the channel with silicone sealant.

1. Route motor harness through channel in motor plate rim (See Figure 10). Seal channel with silicone sealant.

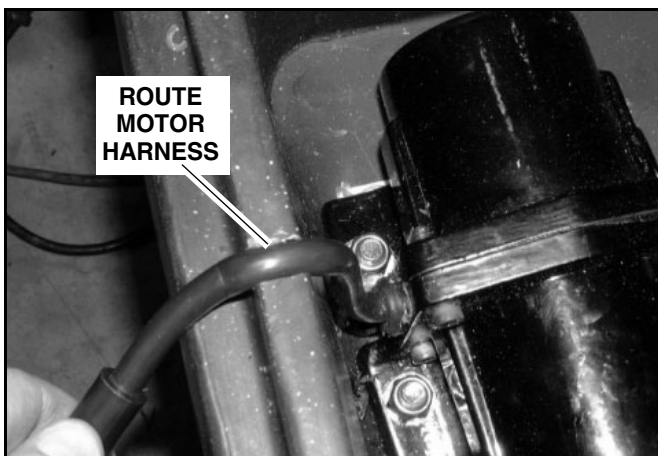


Figure 10

2. Remove material from cover for harness as shown (See Figure 11).

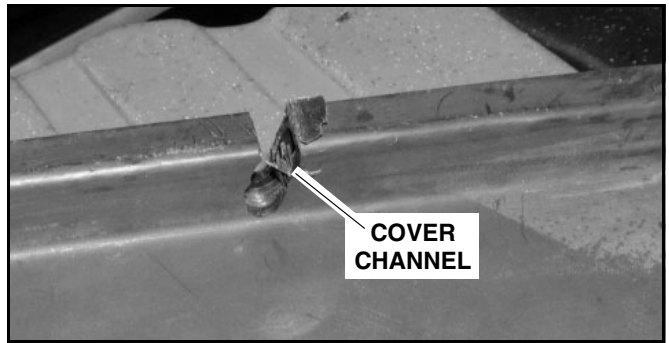


Figure 11

3. Install cover on motor plate (See Figure 12).

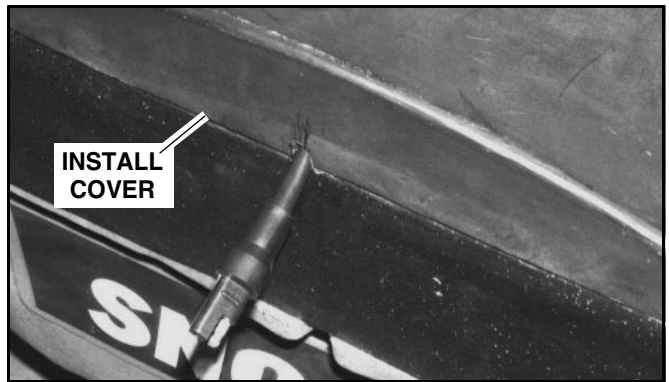


Figure 12

4. Put additional silicone sealant into the void area around the harness if required (See Figure 13).

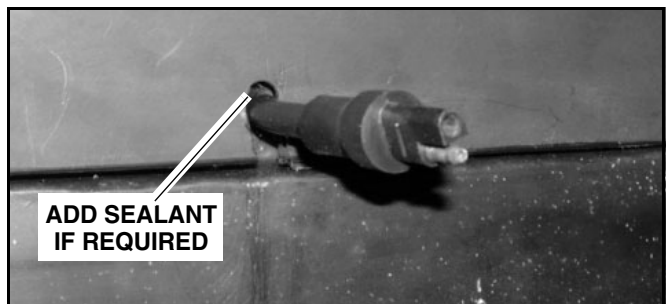


Figure 13

6 and 9 Cu Ft Broadcast Spreader

Mount the vibrator motor on the front face of the 6 and 9 cu. ft. spreader hopper housing, facing the vehicle when mounted on the vehicle as follows:

1. Position the vibrator approximately 6" to 8" from the top of the throat entry nearest the truck (See Figure 14).

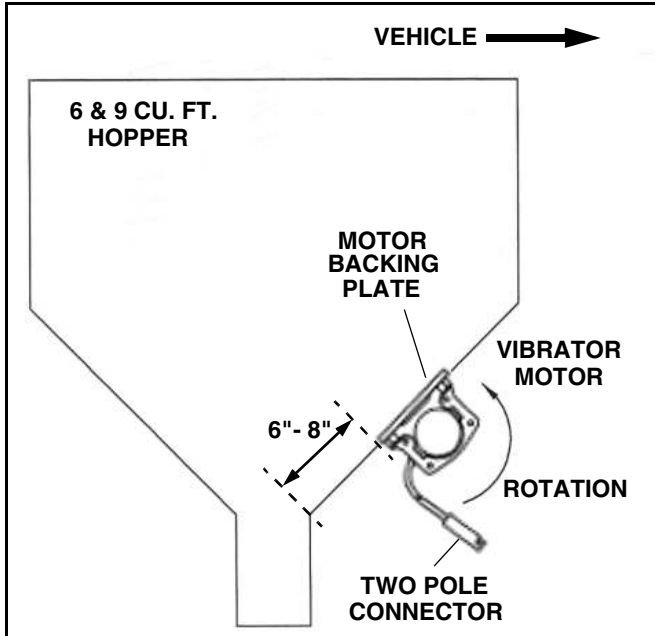


Figure 14

2. Mark the mounting holes (bolt pattern is 2" x 4") with the motor harness pointing down. Drill four 3/8" holes in the hopper.

3. Inside the hopper, align the vibrator backing plate with the 3/8" holes in the hopper.

4. Install 3/8" x 1-1/2 bolts through the backing plate, hopper and vibrator motor base. Secure bolts with four 3/8" nuts. Tighten nuts to 50 lb. ft. (68 N-m).

IMPORTANT: After an initial 5 hours of spreader vibrator usage, re-torque all vibrator motor bolts.

V-Box Broadcast Spreader

Mount the vibrator spreader motors on both side panels of the V-Box spreader hopper as follows:

1. Position one vibrator motor on the driver's side of the spreader in the center of the angled side portion approximately 8 to 10 inches from the top of the spreader main support frame (See Figure 15).

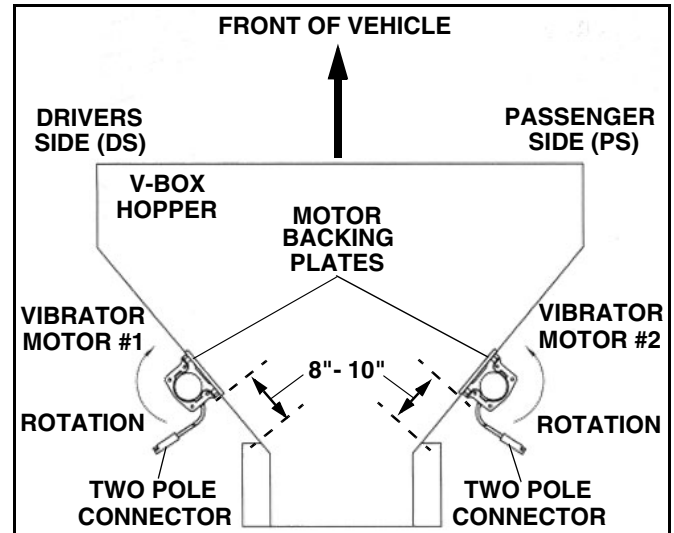


Figure 15

2. Mark the motor mounting holes (bolt pattern is 2" x 4") with the motor harness pointing down. Drill four 3/8" holes in the hopper side panel.

3. Inside the hopper, align the motor backing plate with the 3/8" holes in the hopper side panel.

4. Install 3/8" x 1-1/2 bolts through the backing plate, side panel and vibrator motor base. Secure bolts with four 3/8" nuts. Tighten nuts to 50 lb. ft. (68 N-m).

5. Repeat steps to install vibrator motor #2 on the passenger's side of the hopper body.

IMPORTANT: After an initial 5 hours of spreader vibrator usage, re-torque all vibrator motor bolts.

ELECTRICAL INSTALLATION

1. Disconnect positive (+) and negative (-) cables from vehicle battery.
2. Take harness assembly and connect molded connector to vibrator motor. Route harness from the vibrator motor installation point, along the vehicle frame, to the front of the vehicle (See Figure 16).

**WARNING**

Do not route harness assembly close to exhaust system, engine or near sharp or moving objects to **avoid serious bodily injury from electrical shock, short, fire, or explosion.**

FAILURE TO FOLLOW CAN RESULT IN INJURY OR DEATH

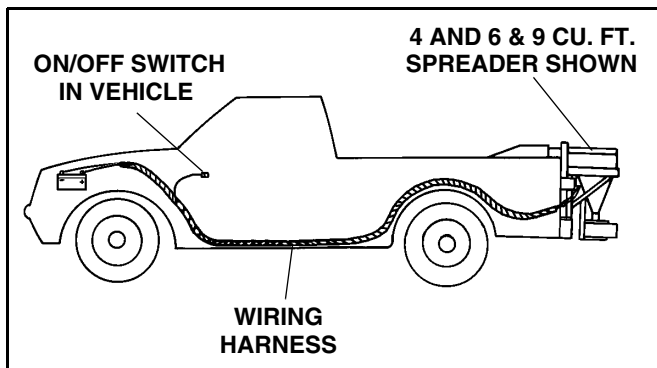


Figure 16

IMPORTANT: DO NOT connect the harness leads to the battery at this time. They will be connected later.

3. Position the front black harness lead close to the negative (-) battery terminal. Position the front red harness lead close to the positive (+) battery terminal (See Figure 17).

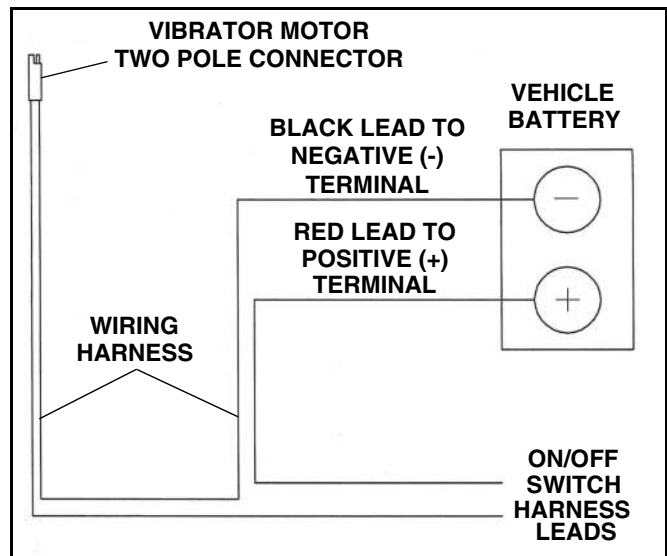


Figure 17

4. Drill a 17/32" hole in the firewall for the On/Off switch portion of the harness. Install the rubber grommet in the hole and route the red harness wires through the grommet.

NOTE: The In-line fuse size is: 6 amps minimum, 10 amps maximum.

5. Connect the battery side power lead to the in-line fuse with a blue butt connector. Connect the remaining in-line fuse lead to either On/Off switch lead using a red tab connector on the switch lead and a blue receptacle connector on the fuse lead.

6. Attach the remaining switch lead using a red tab connector to the blue receptacle installed on the harness power lead routed to the vibrator motor.

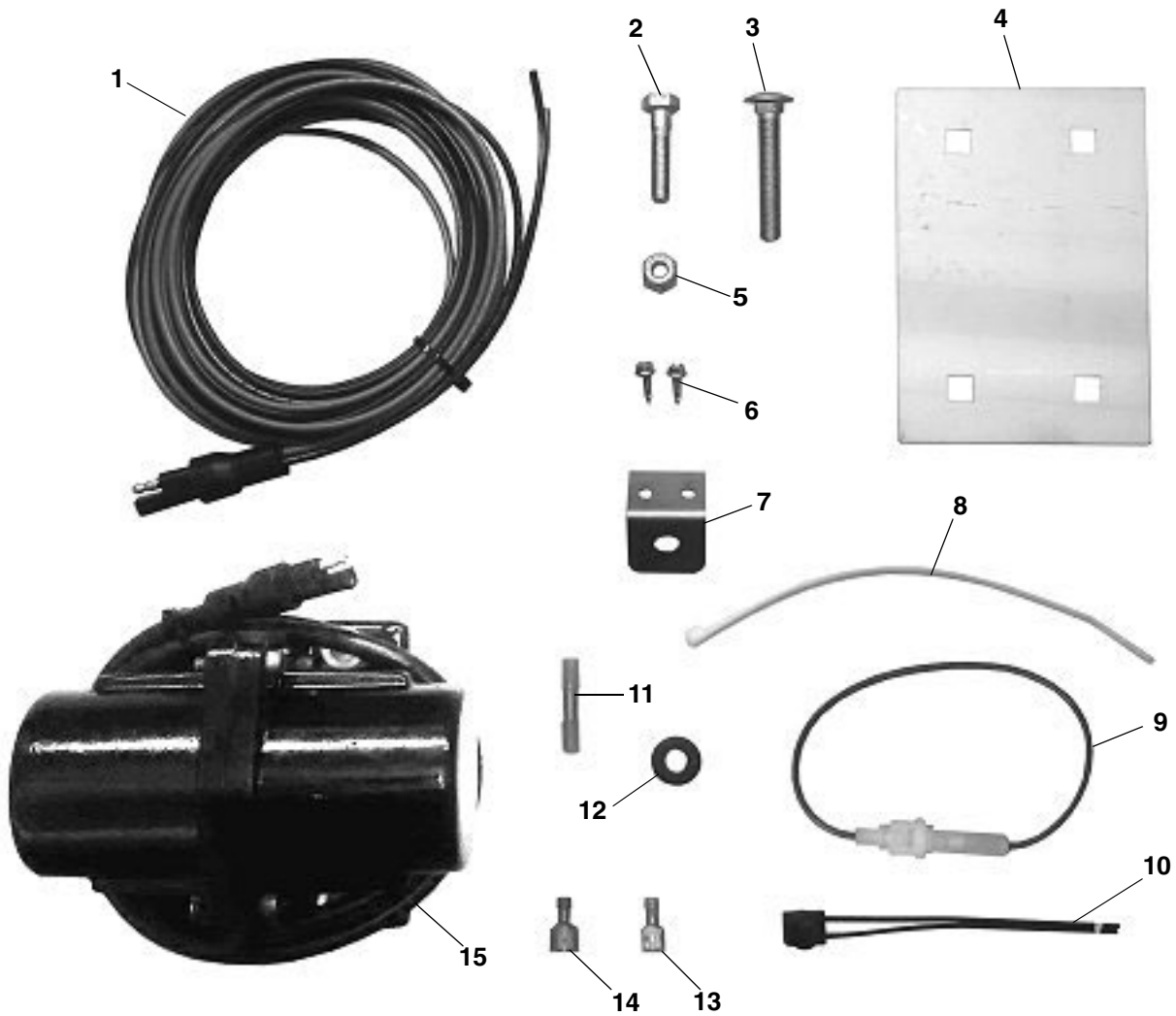
7. Install the switch mounting bracket in a suitable location inside the cab using two screws. Install the On/Off switch in the mounting bracket.

IMPORTANT: in a dual battery system, only connect the wiring harness(s) to the primary battery.

8. Attach wiring harness red positive (+) and black negative (-) power leads and vehicle battery cables to vehicle battery.

9. Use ty-wraps to secure from the wiring harness(s) from the vibrator motors to the front of the vehicle.

PARTS LIST



| ITEM | PART NO. | DESCRIPTION | QTY. |
|------|----------|---|------|
| | 99101094 | Spreader Vibrator Motor Kit (Includes Items 1 - 15) | |
| 1 | | Wiring Harness..... | 1 |
| 2 | | Bolt, 3/8" x 1-1/2"..... | 4 |
| 3 | | Carriage Bolt, 3/8" x 2-1/4"..... | 4 |
| 4 | | Vibrator Backing Plate, SS..... | 1 |
| 5 | | Nut, 3/8"..... | 4 |
| 6 | | Screw, Switch Mounting Bracket..... | 2 |
| 7 | | Switch, Mounting Bracket..... | 1 |
| 8 | | Tie Wrap..... | 6 |
| 9 | | Fuse Holder (with 6A Fuse)..... | 1 |
| 10 | | Switch, ON/OFF..... | 1 |
| 11 | | Connector, Butt, Blue, 14/16 GA..... | 2 |
| 12 | | Grommet, Rubber..... | 1 |
| 13 | | Connector, Receptacle, Blue 14/16 GA..... | 2 |
| 14 | | Connector, Receptacle, Red..... | 2 |
| 15 | | Vibrator Motor..... | 1 |

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