

Installation Instructions

3014199 SHPE Spreader Controller

Serial Number 50000 and higher

⚠ IMPORTANT

Before installation, check your truck's battery and alternator using load tester. Do not proceed to installation if truck electrical system does not function properly.

NOTE: Always disconnect battery before attempting to install electrical components on your vehicle.

Installation

1. Mount the controller in a convenient location in the truck cab. It is not recommended to mount the controller directly in front of heat vents. Allow ample air space around controller.
2. Route both wire harnesses into truck cab through firewall (it may be necessary to drill holes). Insulate hole to avoid water leaks. Insure no wires are nicked or damaged during installation.
3. Connect the main harness' round connector to the control box.
4. Connect the 2-pin rectangular connector on the power cable to the control box.
5. Lay out a path for the power cable to the battery, use quick ties to secure power cable.

DO NOT CONNECT TO BATTERY AT THIS TIME!

6. Lay out path for wire harness to the rear of the vehicle. Stay clear of the exhaust system. Excess heat can damage the wire harnesses. Use quick ties to secure harness to underbody.
7. Connect the wire harness to the motors and vibrator.
8. Connect power cable red wire to circuit breaker. Connect cable #3001379 smaller ring terminal to circuit breaker. Connect larger terminal of #3001379 cable to battery positive terminal. Secure circuit breaker inside truck's engine compartment.
9. Connect power cable black wire to battery negative terminal.

**THIS IS A WIRE GROUND ELECTRICAL SYSTEM!
NO CONNECTIONS TO TRUCK'S FRAME OR BODY ALLOWED!**
In trucks with dual battery systems always connect power cable to primary battery (larger capacity/ truck starting battery).



10. Optional light can be connected in following way. Connect light's positive wire to brown wire in main wire harness. Connect light's negative wire to truck chassis. Light will turn ON when controller is turned ON.

DO NOT CONNECT LIGHT'S WIRES TO ANY PART OF THE SPREADER! IT CAN DAMAGE CONTROLLER!

Buyers Products Company assumes no responsibility for installations not made in accordance with these instructions.

Operation

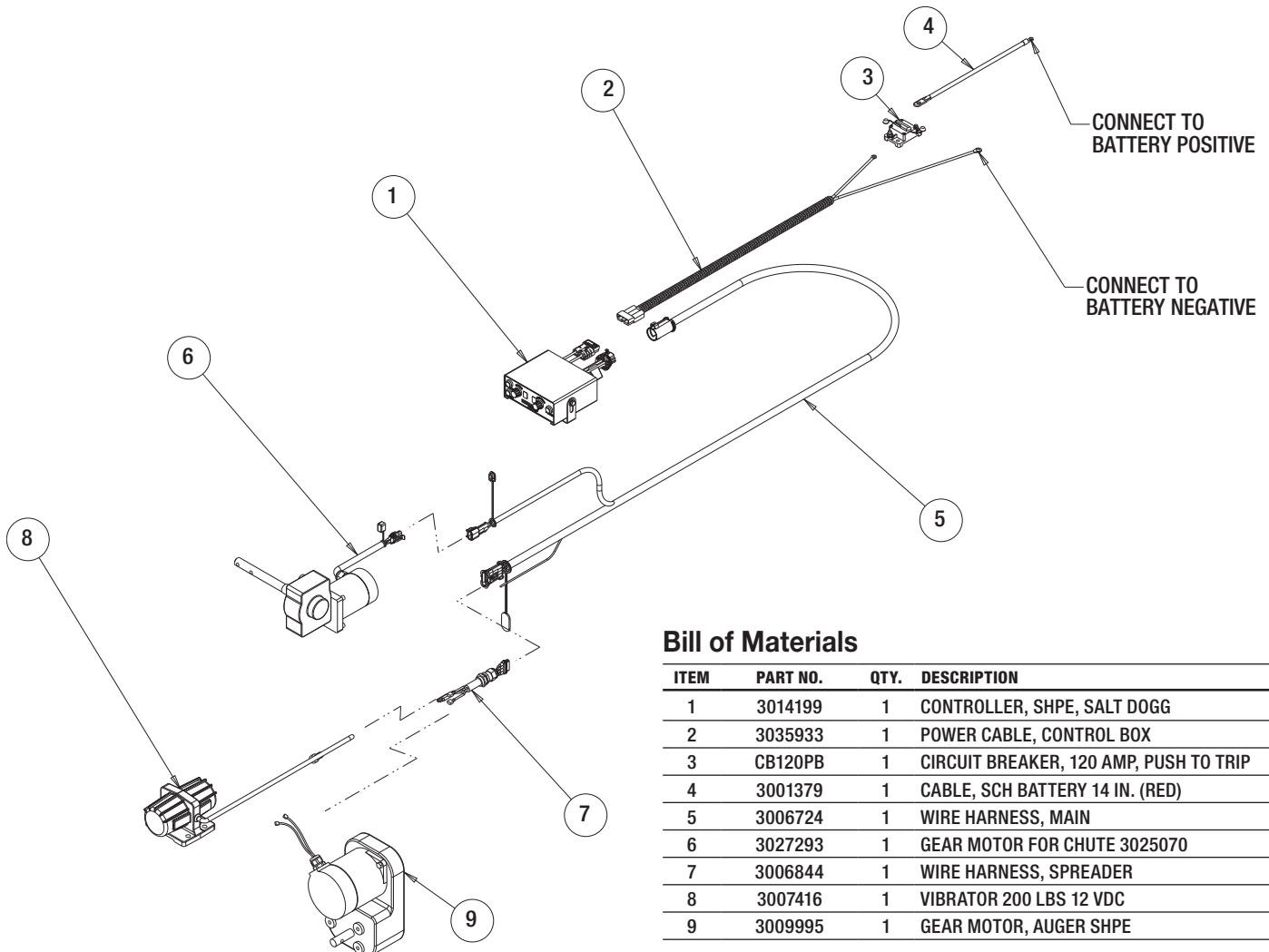
1. To start spreader, be sure that truck engine is running to prevent battery from discharging. Push power button to start controller. Controller buttons will illuminate. Auger and spinner speed will be shown on displays.
2. To adjust speed simply rotate speed knobs until desired speed number is achieved.
3. To activate vibrator push the Vibrator button to ON position. To turn vibrator OFF push Vibrator button again.
4. To turn controller OFF push Power button again.
5. If battery voltage drops below 10 VDC, controller shuts off automatically.
6. To Pause Auger and Vibrator push Pause button. To restart Auger and Vibrator push Pause button again. Auger motor will return to same speed.

WARRANTY

Buyers Products Co. warrants all truck/trailer hardware manufactured or distributed by it, to be free from defects in material and workmanship for a period of one year from date of shipment. Parts must be properly installed and used under normal conditions. Any product which has been altered, including modification, misuse, accident or lack of maintenance will not be considered under warranty. Normal wear is excluded. The sole responsibility of Buyers Products Co. under this warranty is limited to repairing or replacing any part or parts which are returned, prepaid, and are found to be defective by Buyers Products Co. Authorization from Buyers Products Co. must be obtained before returning any part. No charges for transportation or labor performed on Buyers' products will be allowed under this warranty.

Controller Codes and Troubleshooting

| SYSTEM STATUS | AUGER DISPLAY | SPINNER DISPLAY | VIBRATOR SWITCH | NOTE |
|--|---------------|-----------------|-----------------|--|
| Auger initial current calibration signal out of the specification | C | X | X | Replace Controller |
| Spinner initial current calibration signal out of the specification | X | C | X | Replace Controller |
| Auger fuse OFF | F | X | X | Open controller, replace 40 AMP fuse, marked Auger. |
| Spinner fuse OFF | X | F | X | Open controller box, replace 40 AMP fuse marked Spinner |
| Vibrator fuse OFF or Vibrator motor disconnected | U | F | ON | Inspect and reconnect Vibrator. Replace 30 AMP fuse on Gray wire. |
| Spinner motor disconnected | X | P | X | Inspect and re-connect gear motor, wire harness. |
| Auger motor disconnected | A | X | X | Inspect, re-connect wire harnesses, gear motor. |
| Spinner motor OVERLOAD | X | P | X | P letter blink . Clear spinner disk. |
| Auger motor OVERLOAD | A | X | X | A letter blink . Stop spreader. Clear jam. |
| Spinner motor JAMMED | X | J | X | Turn controller OFF, clear jam. |
| Auger motor JAMMED | J | X | X | Controller will automatically reverse auger motor 3 times. If this action will not clear jam, controller will turn OFF. Clear jam, restart controller. |
| Low voltage (less than 10V for more than 10 seconds) applied to the system | L | O | X | Controller shuts OFF automatically. |
| Auger motor or wires short | H | X | X | Inspect, replace wire harness. |
| Spinner motor or wires short | X | H | X | Inspect, replace wire harness. |
| Inside temperature over 70 degrees C. | C | C | | Controller shuts OFF automatically. You can re-start controller after temperature drops below 70 degrees C. |



Bill of Materials

| ITEM | PART NO. | QTY. | DESCRIPTION |
|------|----------|------|--|
| 1 | 3014199 | 1 | CONTROLLER, SHPE, SALT DOGG |
| 2 | 3035933 | 1 | POWER CABLE, CONTROL BOX |
| 3 | CB120PB | 1 | CIRCUIT BREAKER, 120 AMP, PUSH TO TRIP |
| 4 | 3001379 | 1 | CABLE, SCH BATTERY 14 IN. (RED) |
| 5 | 3006724 | 1 | WIRE HARNESS, MAIN |
| 6 | 3027293 | 1 | GEAR MOTOR FOR CHUTE 3025070 |
| 7 | 3006844 | 1 | WIRE HARNESS, SPREADER |
| 8 | 3007416 | 1 | VIBRATOR 200 LBS 12 VDC |
| 9 | 3009995 | 1 | GEAR MOTOR, AUGER SHPE |