# Accessory Harness & Enclosure Kit

## Stainless Steel Hopper Spreader – Hydraulic

### PARTS LIST

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**Bolt Bag – Accessory Harness Kit**

- 1/4 x 1/2 hex cap screw in bolt bag not used for this application.

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* 1/4 x 1/2 hex cap screw in bolt bag not used for this application.

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A DIVISION OF DOUGLAS DYNAMICS, LLC
INSTALLATION INSTRUCTIONS

**WARNING**
Do not exceed GVWR or GAWR ratings as found on the driver-side vehicle door cornerpost.

**CAUTION**
Read this document before installing the Accessory Enclosure and Harness.

**CAUTION**
Use standard methods and practices when attaching spreader and installing accessories, including proper personal protective safety equipment.

Park the vehicle on a smooth, level, hard surface, such as concrete. Turn the vehicle ignition to the "OFF" position and remove the key.

**Install Hopper-Side Accessory Cable Assembly**

1. **Detach the accessory enclosure cover from the enclosure base. Set aside the cover and fasteners.**

2. **Install the accessory enclosure body to the hydraulic power group base, at the rear (chute side) of the feed gate, using three 1/4" x 3/4" cap screws and 1/4" locknuts.**

3. **One of the two supplied fuse holders will serve as an isolated stud block. Install the isolated stud block to the accessory enclosure as shown using two #10 x 1/2" machine screws and #10 locknuts.**

4. **The hopper-side accessory cable assembly will be routed into the accessory enclosure through the farthest right break-through plug. Cut a hole through the plug to ensure a tight fit around the cable. Run the accessory cable through the break-through plug and into the enclosure.**

(Cable assembly not shown.)
5. Remove the cover of the isolated stud block. Connect the ring terminal on the accessory cable's red wire to the left stud and the ring terminal on the black wire to the right stud.

6. Secure the hopper-side accessory cable assembly to the passenger side of the accessory enclosure using the supplied clamp loop, 1/4" x 3/4" cap screw, and 1/4" locknut.

7. Once the desired spreader accessories have been installed, replace the cover on the isolated stud block and reinstall the accessory enclosure cover using the retained fasteners.

Install Vehicle-Side Accessory Cable Assembly

1. Before beginning this installation, disconnect the battery cables from the vehicle battery.

2. Position the supplied fuse holder near the vehicle battery so the 22" red battery cable can reach both the POSITIVE (+) battery terminal and the fuse holder. Install the fuse holder using 1/4" x 3/4" cap screws, 14" flat washers, and 1/4" locknuts. Hand tighten the nuts.

NOTE: An accessory 50" or 90" battery cable may be installed in place of the standard 22" cable for applications requiring a longer cable.

3. Remove the fuse holder cover. Remove the lock washers and nuts from both studs. Insert the supplied 60-amp fuse. Connect one end of the battery cable to one of the fuse holder studs so that the ring terminal is on top of the fuse.

4. Lay out a path for routing the vehicle-side accessory cable from the rear of the truck bed to the vehicle battery, making sure avoid any hot, sharp, or moving parts of the truck. Routing may vary from truck to truck.

5. Route the vehicle-side accessory cable as laid out in Step 4. Secure the vehicle accessory cable assembly to the truck using cable ties. Verify that the cable assembly cannot drop onto the road when it is disconnected from the spreader.

6. Connect the red wire from the vehicle-side accessory cable to the second fuse holder stud so that the ring terminal is on top of the fuse. Replace the lock washers and nuts on both studs.

7. Tighten the fuse holder nuts to 106–159 in-lb. Snap the fuse holder cover back in place.

8. Connect the other end of the 22" battery cable to the POSITIVE (+) battery terminal. Connect the black wire from the vehicle-side accessory cable to the NEGATIVE (–) battery terminal.

NOTE: When using a 50" or 90" battery cable, connect the black wire from the vehicle-side accessory cable to a ground bolt on the vehicle frame or engine. Clean off any paint or dirt to ensure a good connection.

9. Reconnect the vehicle battery cables.
Install Accessory Switch Harness

When installing the accessory switch dash bracket, choose a location that is within easy reach of the vehicle operator without restricting access to vehicle controls or vehicle instrumentation. Do not mount the control in areas prohibited by the vehicle manufacturer for crashworthiness. See the vehicle's body builder's book, owner's manual or service manual for details. The shaded areas in the illustration below show the most commonly restricted areas.

**CAUTION**

Do not alter, modify or install additional components in shaded areas shown below. Failure to comply may interfere with airbag deployment or cause injury to operator in an accident.

NOTE: Use dielectric grease on all electrical connections.

1. Lay out a path for routing the accessory switch harness from its connection with the vehicle accessory cable assembly into the cab of the truck. Make sure the path avoids any hot, sharp, or moving parts of the truck. Routing may vary from truck to truck.

2. Identify a convenient location for the accessory switch bracket that can be reached by the accessory switch harness. The bracket has two sets of mounting holes so it can be installed on either a horizontal or a vertical surface.

3. Drill a 5/8” hole in the fire wall so the accessory switch harness can reach to the desired switch bracket location.

4. Insert the supplied rubber grommet into the hole.

5. Route the accessory switch harness as laid out in Step 1.

6. Secure the accessory switch harness to the truck using cable ties.

7. Plug the accessory switch harness's connector into the mating connector on the vehicle-side accessory cable assembly. (Refer to the Vehicle-Side Harness Diagram.)

**CAUTION**

Before drilling any holes, check both sides of the material for any wires, fuel lines, fuel tanks, etc. that may be damaged by drilling.
Install Switch Bracket and Switches

1. Position the switch bracket at the previously selected location in the vehicle cab.

2. Using the switch bracket as a template, drill three 7/32" holes that align with the mounting holes in the top or rear face of the bracket.

3. Install the switch bracket using three #10 x 3/8" tapping screws, #10 lock washers and #10 hex nuts.

4. Install the 4 rocker switches into the switch bracket with the red surface facing up. Gently push the switches into the rectangular holes until they snap into place.

   **CAUTION**
   Before drilling any holes, check both sides of the material for any wires, fuel lines, fuel tanks, etc. that may be damaged by drilling.

5. Strip 1/4" of insulation from the white, orange, blue, and gray non-terminated accessory switch harness wires and crimp a female push-on terminal onto each prepared wire. (Refer to the Vehicle-Side Harness Diagram.)

6. Connect the colored wires to the rocker switch terminals as follows:
   - WHITE strobe lights
   - ORANGE pre-wet system
   - BLUE vibrator
   - GRAY work light
   - GREEN (extra switch)

7. Strip 1/4" of insulation from the black wire in the accessory switch harness and crimp it onto the insulated butt splice connector of the 4-position jumper assembly. Connect the push-on terminals of the 4-position jumper to the remaining terminals of the rocker switches.
HOPPER-SIDE HARNESS DIAGRAM

Isolated Stud Block (shown with cover removed)

Accessory Cable Assembly – Hopper Side

Accessory Relay/Fuse Assemblies (Not included in 99627 kit.)

Work/Strobe Lights

Vibrator
VEHICLE-SIDE HARNESS DIAGRAM

Accessories Switch Harness Assembly

Battery

Fuse Holder w/60A Fuse

22 RED CABLE

Infused Butt Splice

BLK - Common

GRN - Pre-Wet

WHT - Strobe Light

GRY - Work Light

BLU - Extra

4-Position Jumper Assembly

Vibrator

W2 SW3 W4

Terminals

Accessory Cable Assembly – Vehicle Side

Accessory Switch Harness Assembly