



Solenoid Controller Kit

Workman® HDX-Auto Utility Vehicle

Model No. 131-8308

Form No. 3390-719 Rev A

Installation Instructions

⚠ WARNING

CALIFORNIA Proposition 65 Warning

This product contains a chemical or chemicals known to the State of California to cause cancer, birth defects, or reproductive harm.

The purpose of this kit is to add a solenoid controller to the electrical system. The solenoid controller is used to automatically modulate the current to the differential solenoid.

Preparing to Install the Kit

1. Move the machine to a level surface and set the parking brake.
2. For machine models with a utility bed, perform the following:
 - A. Raise the bed until the lift cylinders are fully extended; refer to the *Operator's Manual* for the machine.
 - B. Remove the bed support from the storage brackets on back of the ROPS panel ([Figure 1](#)).

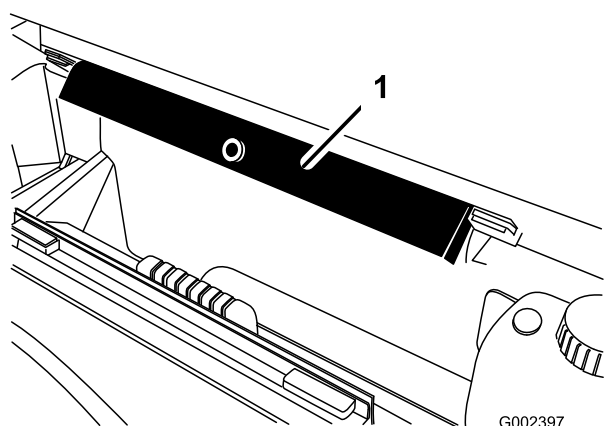


Figure 1

1. Bed Support

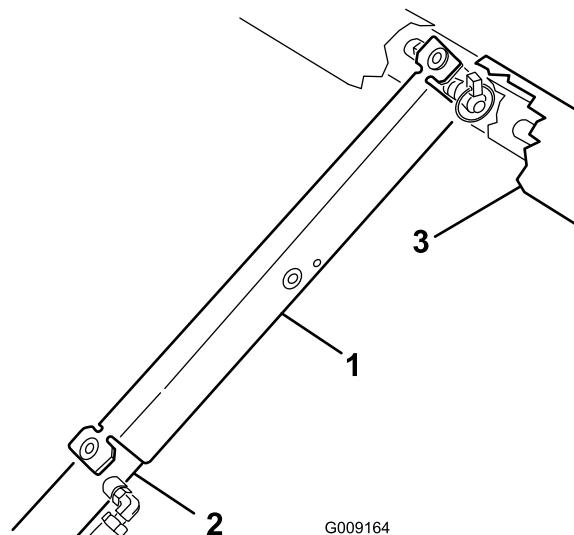


Figure 2

1. Bed support
 2. Cylinder barrel
 3. Bed
3. Shut off the engine, set the parking brake, and remove the key from the ignition switch.
 4. Disconnect the battery as follows:
 - A. Squeeze the battery cover to release the tabs from battery base ([Figure 3](#)).

- C. Place the bed support onto the cylinder rod, making sure that the support end tabs rest on the end of cylinder barrel and on the cylinder rod end ([Figure 2](#)).



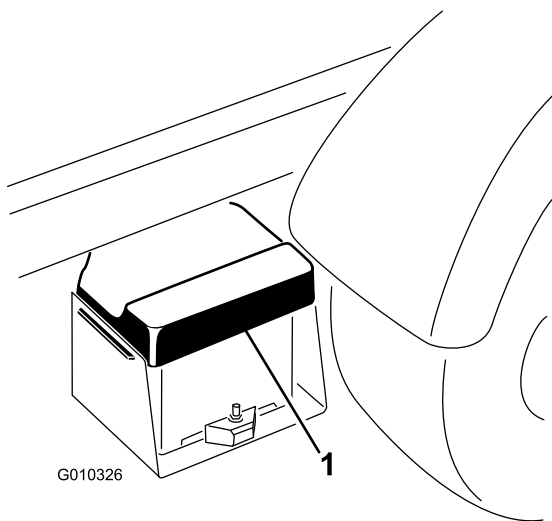


Figure 3

- B. Remove the battery cover from the battery base (Figure 3).
- C. Remove the terminal of the positive battery cable from the battery post (Figure 4).

Note: Ensure that the terminal positive battery cable does not touch the battery post.

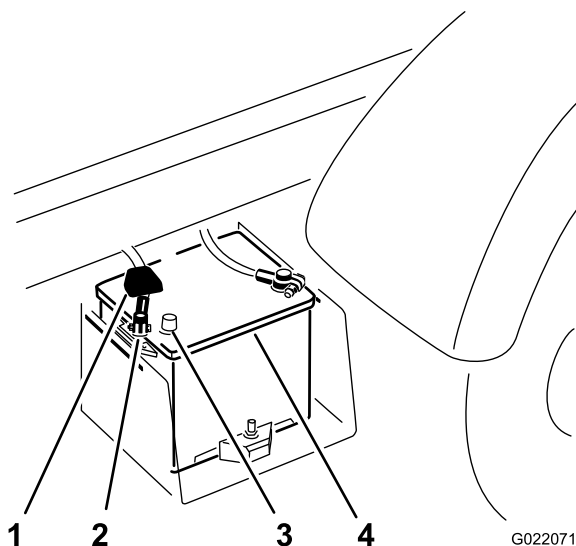


Figure 4

1. Terminal cover
2. Positive terminal
3. Battery post
4. Battery

5. Bleed the hydraulic pressure from the machine by fully moving the lift control for the cargo box forward and backward several times.

Note: The engine is shut off when bleeding the hydraulic pressure from the machine.

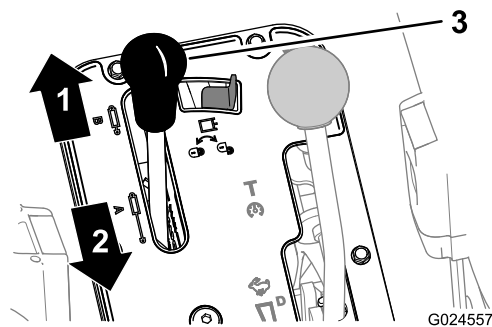


Figure 5

1. Forward
2. Backward
3. Lift control (cargo box)

Installing the Relay-Controller and Adapter Harness

Installing the Relay Controller and Adapter Harness to the Machine

1. Disconnect the 2-pin connector of the wiring harness for the machine from the 2 socket harness connector for the solenoid of the differential (Figure 6).

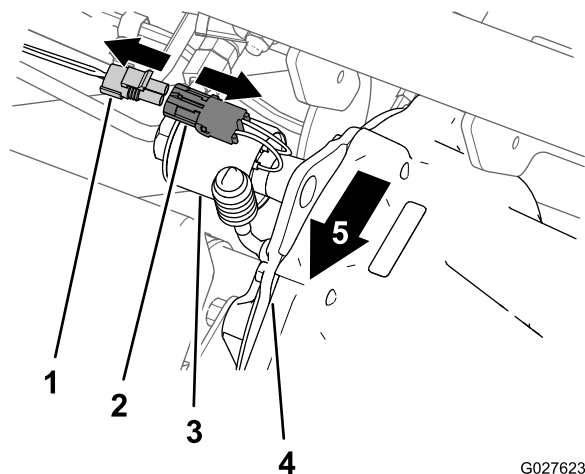
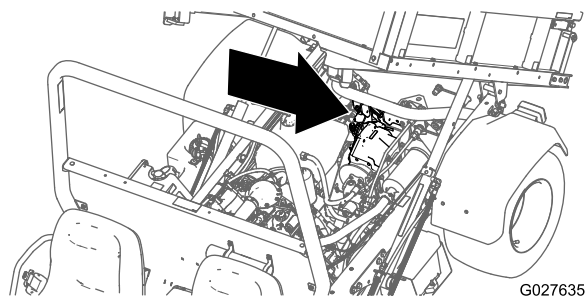


Figure 6

1. 2 pin connector (machine wiring harness)
2. 2 socket connector (solenoid harness—differential)
3. Solenoid
4. Differential
5. Front of the machine

2. Remove the 2 flanged locknuts that secure the differential support to the differential mount (Figure 7).

Important: Do not remove the 2 bolts from the differential support and mount.

Note: Retain the flanged locknuts for installation in step 4.

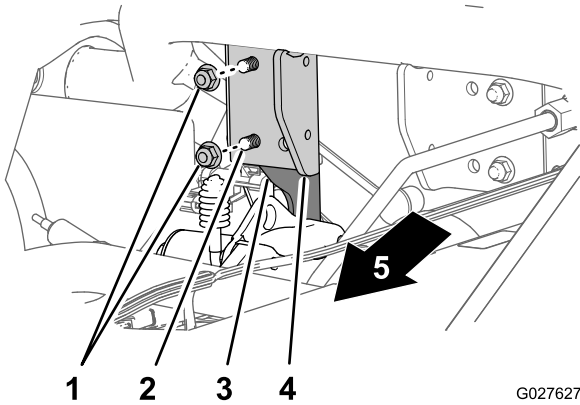


Figure 7

- | | |
|-----------------------------------|-------------------------|
| 1. Flanged locknuts | 4. Differential support |
| 2. Bolts (Do not remove) | 5. Front of the machine |
| 3. Differential mount | |

3. Align the holes in the bracket for the relay controller and adapter harness assembly over the 2 bolts that fasten the differential support to the differential mount (Figure 8).

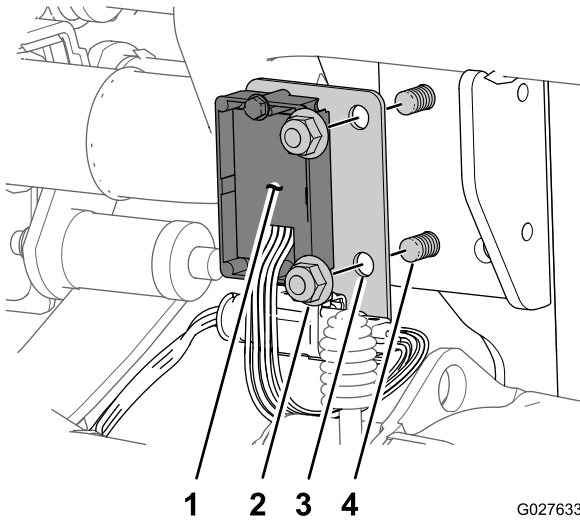


Figure 8

- | | |
|---------------------|-------------------------------|
| 1. Relay controller | 3. Bracket (relay controller) |
| 2. Flanged locknut | 4. Bolt |

4. Assemble the bracket to the support and mount with the bolts and flanged-lock nuts (Figure 8).
5. Torque the flanged locknuts to 37 to 45 N-m (27 to 33 ft-lb)

Connecting the Relay Controller and Adapter Harness to the Machine

1. Connect the 2-pin connector that you disconnected in step 1 of [Installing the Relay Controller and Adapter Harness to the Machine](#) (page 2) to the 2-socket connector of the adapter harness (Figure 9).

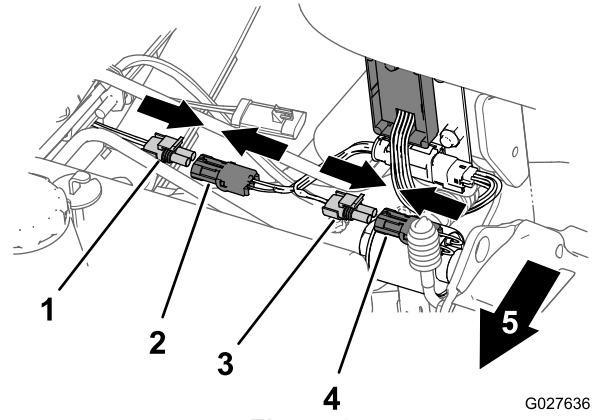


Figure 9

- | | |
|---|---|
| 1. 2 pin connector (machine wiring harness) | 4. 2 socket connector (solenoid harness—differential) |
| 2. 2-pin socket (adapter harness) | 5. Front of the machine |
| 3. 2-pin connector (adapter harness) | |

2. Connect the 2-pin connector of the adapter harness to the 2-socket connector of the differential solenoid harness (Figure 9).

Connecting the Battery

1. Connect the positive battery cable to the battery (Figure 4); refer to [Preparing to Install the Kit](#).
2. Squeeze the battery cover, align the tabs to battery base, and release battery cover (Figure 3); refer to [Preparing to Install the Kit](#).

Lowering the Bed

For machine models with a utility bed, perform the following:

1. Remove the bed support from the cylinder rod and remove the support (Figure 2); refer to [Preparing to Install the Kit](#).
2. Insert the bed support into the brackets on the back of the ROPS panel (Figure 1); refer to [Preparing to Install the Kit](#).
3. Lower the bed; refer to the *Operator's Manual*.



Count on it.