



Manuals.plus /

› CURT /

› CURT 51451 Brake Control Harness Instruction Manual

CURT 51451

CURT 51451 Brake Control Harness Instruction Manual

INTRODUCTION

This manual provides instructions for the proper installation, operation, and maintenance of the CURT 51451 Quick Plug Brake Control Harness. This harness is designed to facilitate the connection of a CURT trailer brake controller to specific vehicle models without requiring cutting or splicing of wires. Ensure you read and understand all instructions before proceeding with installation.

PRODUCT OVERVIEW

The CURT 51451 is a vehicle-specific wiring adapter for trailer brake controllers. It features a vehicle-specific plug on one end and a CURT-specific connector on the other, allowing for a direct plug-and-play installation. The harness is approximately two feet long and includes a slit loom sleeve for wire protection.

FEATURES & BENEFITS

Representative Image

Slit-loom sleeve contains and protects wires

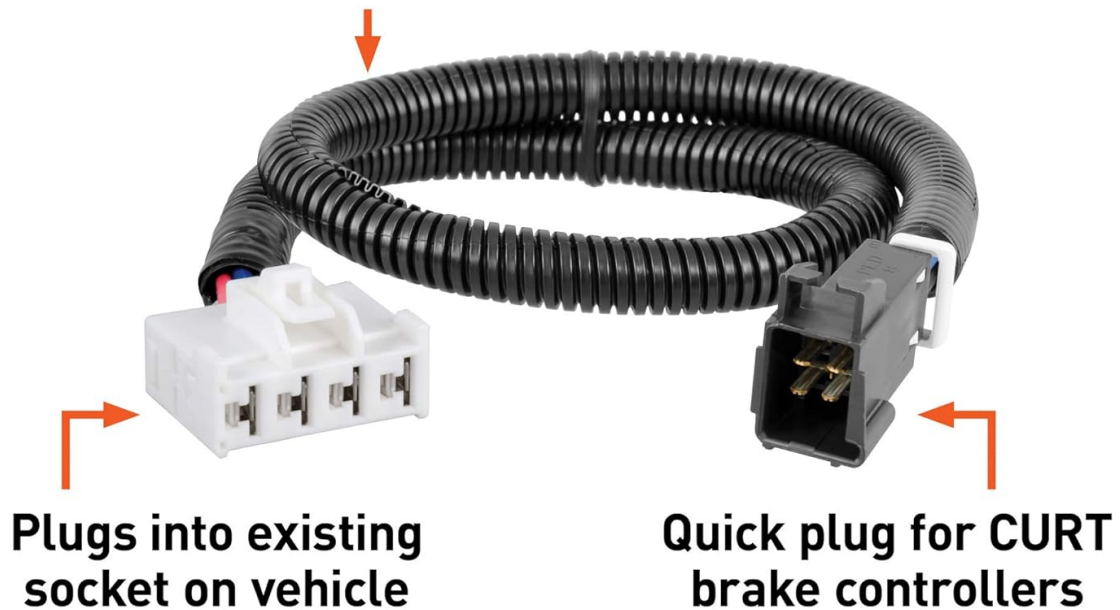


Image: The CURT 51451 Brake Control Harness, showing the vehicle-specific connector on the left and the CURT brake controller connector on the right, encased in a protective slit loom sleeve.

SETUP AND INSTALLATION

The installation of the CURT 51451 Brake Control Harness is designed to be straightforward and typically takes approximately 5 minutes.

- 1. Locate the Vehicle's OEM Brake Control Socket:** Identify the factory brake controller socket in your vehicle. This location varies by vehicle make and model. Refer to your vehicle's owner's manual or a vehicle-specific wiring diagram if you are unsure of its location.
- 2. Connect the Vehicle-Specific Plug:** Take the vehicle-specific end of the CURT 51451 harness and firmly insert it into the OEM factory brake controller socket. Ensure a secure connection.

PLUG OUTPUT

CURT Brake Controller

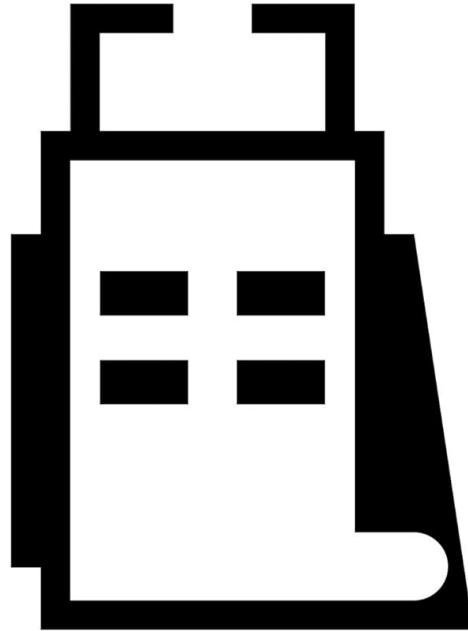


Image: A detailed view of the vehicle-specific connector, designed to plug directly into the vehicle's factory socket.

3. **Connect to the CURT Trailer Brake Controller:** Take the other end of the CURT 51451 harness, which is the CURT-specific connector, and plug it into your CURT trailer brake controller.



Image: A close-up of the CURT-specific connector, which interfaces with compatible CURT trailer brake controllers.

4. **Secure the Wiring:** Use the provided zip ties to secure any excess wiring and ensure the harness is contained and out of sight, preventing it from interfering with vehicle operation or being damaged. The slit loom sleeve provides additional protection against abrasions and crushing.



Image: Two black zip ties, used for securing the harness and maintaining a tidy installation.

Once both ends are securely connected, your CURT trailer brake controller should be ready for operation, provided it is also properly mounted and configured.

OPERATING THE HARNESS

The CURT 51451 Brake Control Harness is a passive adapter. Its function is to provide a reliable electrical connection between your vehicle's factory wiring and your CURT trailer brake controller. Once installed, the harness itself does not require active operation. The operation of your trailer brakes will be controlled directly by the connected CURT trailer brake controller, according to its specific instructions.

MAINTENANCE

The CURT 51451 Brake Control Harness requires minimal maintenance. Periodically inspect the harness for any signs of wear, damage, or loose connections. Ensure the slit loom sleeve remains intact to protect the wires from environmental factors and physical damage. Keep the connectors clean and free of dirt or corrosion. If any damage is observed, replace the harness to ensure safe and reliable trailer braking.

TROUBLESHOOTING

If you experience issues with your trailer brake controller after installing the CURT 51451 harness, consider the following troubleshooting steps:

- **No Power to Brake Controller:** Verify that both ends of the harness are fully seated and securely connected. Check your vehicle's fuse box for any blown fuses related to the trailer wiring or brake controller circuit.
- **Intermittent Connection:** Ensure there are no kinks or severe bends in the harness wiring. Inspect the connectors for any bent pins or debris that might be obstructing a solid connection.
- **Brake Controller Error Codes:** If your brake controller displays an error code, consult the instruction manual for your specific CURT brake controller model. The issue might be with the controller itself or the trailer's wiring, rather than the harness.
- **Vehicle Compatibility:** Double-check that the CURT 51451 harness is indeed compatible with your specific vehicle make, model, and year. Incompatible harnesses will not function correctly.

If problems persist after these checks, contact CURT customer support for further assistance.

SPECIFICATIONS

Specification	Detail
Model Number	51451
Brand	CURT
Material	Polyvinyl Chloride (PVC)
Item Dimensions (L x W x H)	1.5 x 1 x 6 inches (packaged)
Item Weight	0.21 Pounds
Connector Type	Vehicle-specific to CURT-specific
Cable Type	Custom
Included Components	Brake Control Harness
Compatible Vehicles	Certain years of Cadillac Escalade, Escalade ESV, Chevy Silverado, GMC Sierra 1500, 1500 LD, 1500 Limited, 2500HD, 3500HD Suburban, Suburban 1500, Suburban 3500HD, Tahoe, Yukon, Yukon XL (verify fitment)

WARRANTY

The CURT 51451 Brake Control Harness comes with a **Limited Lifetime Warranty**. For specific terms and conditions, please refer to the official CURT warranty documentation or contact CURT customer support.

SUPPORT

For additional assistance, technical support, or warranty claims, please contact CURT Manufacturing directly. Visit the official CURT website for contact information and further resources.

Official Product Video

Your browser does not support the video tag.

Video: A general CURT Towing Video showcasing various towing scenarios and the importance of reliable towing products. While not specific to the 51451 harness installation, it highlights the brand's commitment to safe towing.