

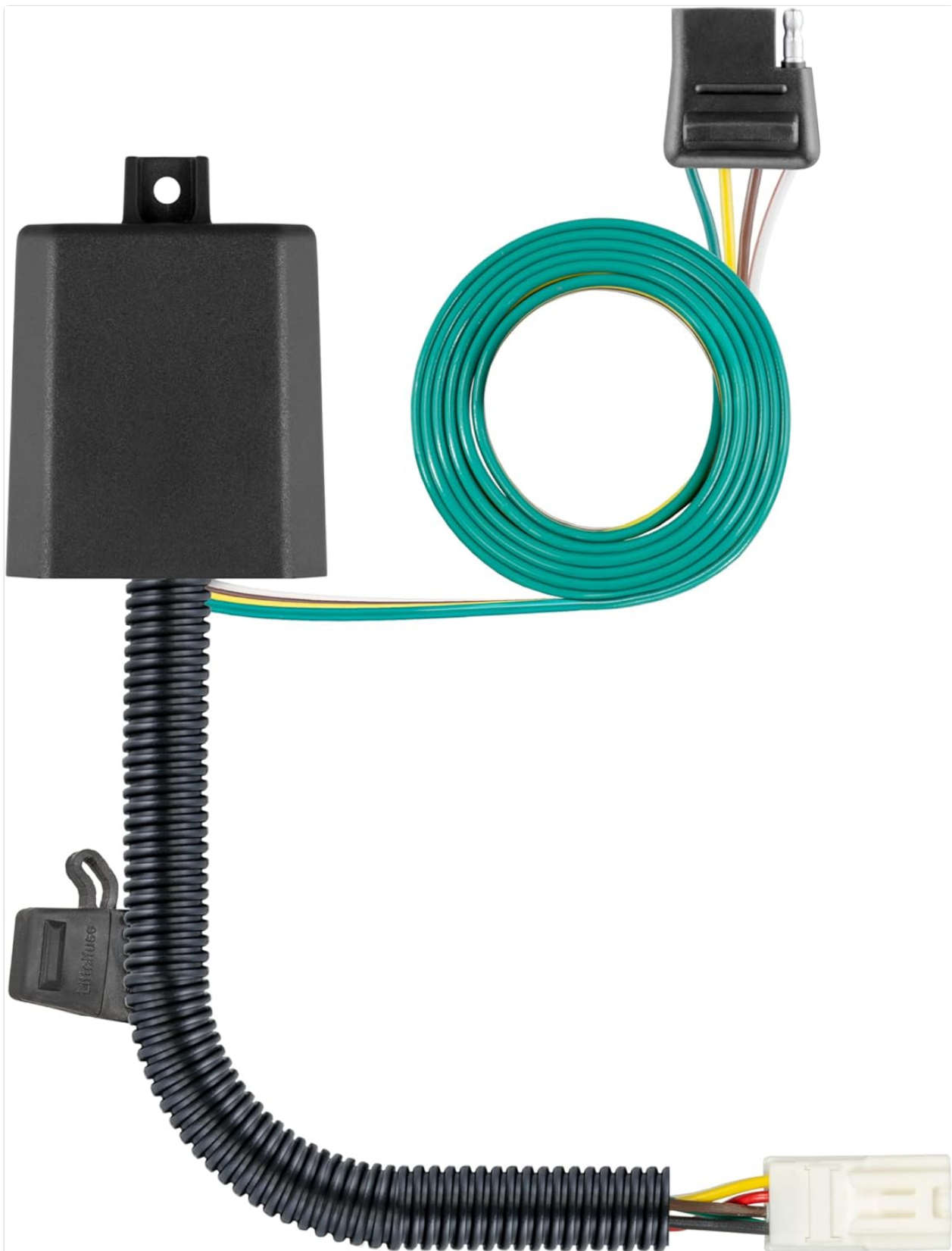
CURT 56494

CURT 56494 Vehicle-Side Custom 4-Pin Trailer Wiring Harness for Mazda CX-70, CX-90 Instruction Manual

Model: 56494 | Brand: CURT

1. PRODUCT OVERVIEW

The CURT 56494 custom wiring connector is designed to provide a reliable 4-pin trailer wiring connection for select Mazda CX-70 and CX-90 vehicles. This harness utilizes existing factory wiring, offering a simple, plug-and-play installation without the need for cutting, splicing, or soldering. It provides a standard 4-way flat socket for connecting trailer tail lights, brake lights, and turn signals, ensuring vehicle-to-trailer compatibility. A factory tow package is required for vehicle compatibility.



This image displays the complete CURT 56494 Vehicle-Side Custom 4-Pin Trailer Wiring Harness, including the main converter module, vehicle-specific connector, 4-way flat output, and protective conduit.

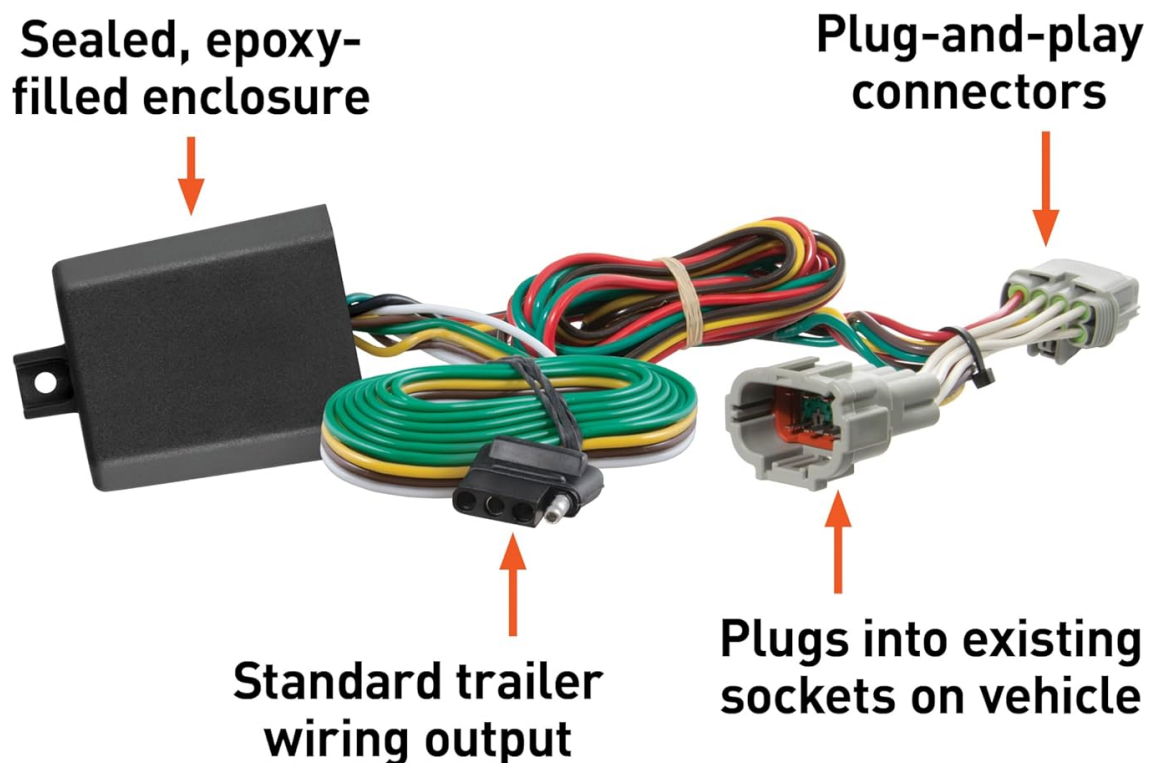
Key Features

- **Easy Installation:** Plugs directly into existing factory wiring, eliminating the need for cutting or splicing.
- **Standard 4-Pin Connector:** Provides a universal 4-way flat output for trailer tail lights, brake lights, and turn signals.
- **Vehicle-Specific Design:** Custom-fitted for select Mazda CX-70 and CX-90 models (requires factory tow package).

- **Reliable Power:** Built with surface mount technology for reduced heat generation, optimal light intensity, and durable performance.
- **Dust Cover Included:** Comes with a rubber dust cover to protect the 4-way flat connector from outdoor elements when not in use.

FEATURES & BENEFITS

Representative Image



An illustrative diagram highlighting key features such as the sealed, epoxy-filled enclosure for durability, plug-and-play connectors for easy installation, and the standard 4-way trailer wiring output.

2. PACKAGE CONTENTS

Verify that all components are present before beginning installation:

- Custom Wiring Harness with Converter Module
- Vehicle-Specific Connector
- 4-Way Flat Output Connector
- Rubber Dust Cover
- Zip Ties
- Grounding Screw
- Fuse Holder with Fuse



CIRCUIT PROTECTED CONVERTER SYSTEMS

This product has been 100% tested under the full rated load at the factory. The wire harness installed as part of your tow package includes an electronic module that provides internal circuit protection.

If a short circuit or overload situation occurs in a trailer lighting circuit, the module is designed to shut the circuit down to protect the tow vehicle and module.

If tow vehicle lamps are working but the trailer lamps are not working, shut power off to the faulted circuit for a few seconds then try the circuit again.

If trailer lamps return to normal function the fault has been corrected.

If lamps light for a few seconds and then go off:

1. Check ground wire on both the harness and trailer.
2. Check / correct an overload condition (too many bulbs).

If the circuit fails to light:

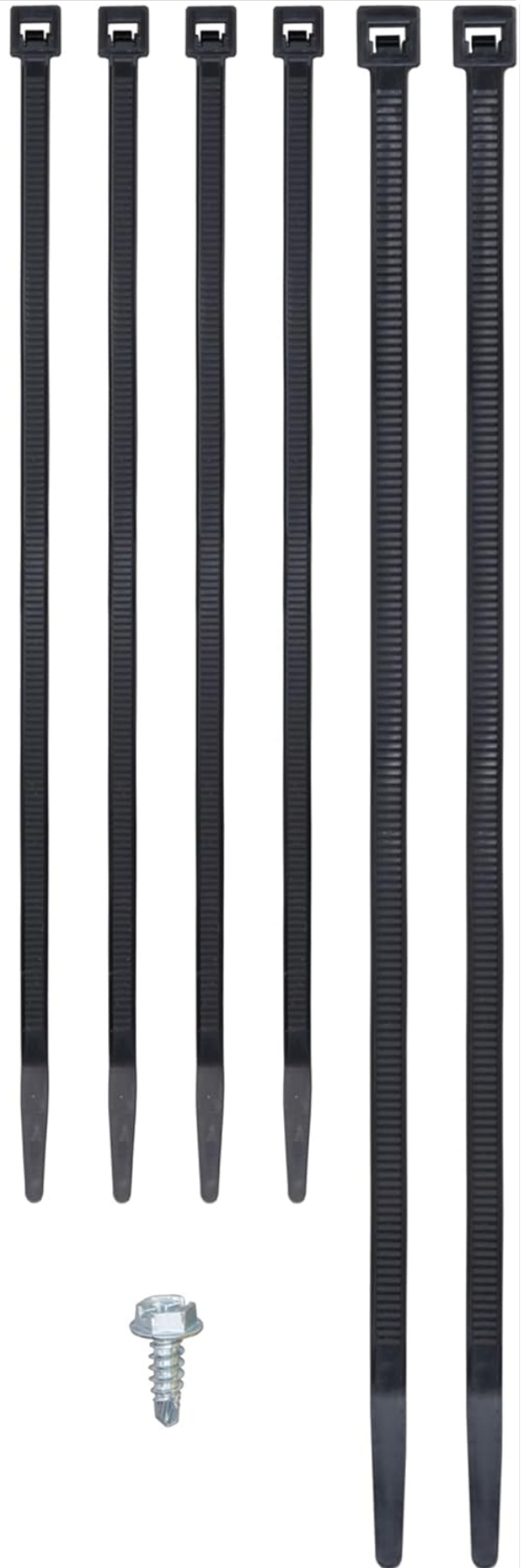
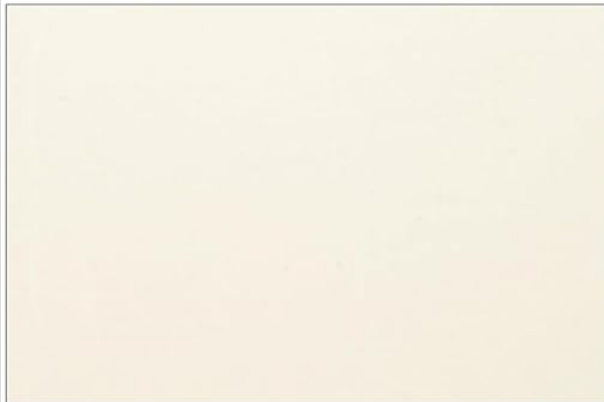
1. Check tow vehicle fuses.
2. Check trailer for broken connections.
3. Check the trailer lamp bulbs.
4. Check ground wire on both the harness and trailer.
5. Locate and correct a short.

Note: Using a tester can help confirm system function.

If problems persist, see your installer for corrective action.

Important: Check trailer lights before towing and frequently while towing.

CME-P183-RA



This image shows additional components included with the harness, such as zip ties for securing wiring, a grounding screw, and a label detailing the circuit protected converter system's functionality and troubleshooting tips for lamp issues.

3. SAFETY INFORMATION

Always exercise caution when working on your vehicle. Ensure the vehicle is turned off and the parking brake

is engaged. Wear appropriate personal protective equipment, such as safety glasses and gloves. If you are unsure about any step, consult a qualified professional.

Proposition 65 Warning: This product may contain chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.

4. INSTALLATION GUIDE

This section provides general instructions for installing the CURT 56494 wiring harness. Specific vehicle access points may vary. Refer to your vehicle's owner's manual for detailed information on accessing tail light wiring.

Tools Required (Not Included)

- Basic hand tools (e.g., screwdriver, pliers)
- Wire strippers/crimpers (if necessary for grounding)
- Test light or multimeter (for verifying connections)

Pre-Installation Steps

1. Ensure the vehicle is off and the parking brake is set.
2. Locate the vehicle's factory tow package wiring connector, typically found behind the rear bumper or near the tail lights.
3. Clean any dirt or debris from the connection area.

Wiring Harness Installation

1. Connect the vehicle-specific connector from the CURT harness to the corresponding factory connector on your Mazda CX-70 or CX-90. Ensure a secure and tight connection.



A detailed view of the vehicle-side plug-and-play connector, designed to integrate seamlessly with the existing factory wiring of compatible Mazda CX-70 and CX-90 models.

2. Mount the converter module in a secure, dry location using the provided zip ties or a suitable adhesive. Avoid areas with excessive heat or moving parts.
3. Route the 4-way flat output connector to the exterior of the vehicle, typically near the trailer hitch. Secure it using zip ties to prevent it from dragging or getting caught.

FEATURES & BENEFITS

Standard trailer wiring output

Trailer end
not included



A close-up of the standard 4-way flat connector, which provides connections for trailer tail lights, brake lights, and turn signals.

4. Connect the white ground wire to a clean, unpainted metal surface on the vehicle's frame using the provided grounding screw. Ensure a good electrical connection.
5. Install the included fuse into the fuse holder and connect the fuse holder to the vehicle's battery (if applicable, follow specific instructions for power connection).
6. Test all trailer light functions (tail lights, brake lights, left turn, right turn) with a test light or by connecting a trailer.
7. When not in use, protect the 4-way flat connector with the included rubber dust cover.

FEATURES & BENEFITS

Dust cover included



The 4-way flat connector shown with its included rubber dust cover, designed to protect the terminals from dirt, moisture, and corrosion when not in use.

Installation Video

This video provides a visual guide for installing the CURT 56494 Vehicle-Side Custom 4-Pin Trailer Wiring Harness. It demonstrates the plug-and-play connection process and highlights key features of the harness.

5. OPERATING INSTRUCTIONS

To use your CURT 4-pin trailer wiring harness:

1. Ensure the vehicle is off before connecting or disconnecting the trailer.
2. Remove the dust cover from the 4-way flat connector.
3. Align the 4-way flat connector from your trailer with the vehicle's 4-way flat output and push firmly until fully seated.
4. Verify that all trailer lights are functioning correctly before driving.
5. When disconnecting, pull firmly on the connector bodies (not the wires) to separate them.
6. Replace the dust cover on the vehicle's 4-way flat output when not towing.

6. MAINTENANCE

- Regularly inspect the wiring harness for any signs of wear, damage, or corrosion.
- Keep the 4-way flat connector clean and free of dirt, moisture, and debris. Use the provided dust cover when not in use.
- Check all electrical connections periodically to ensure they remain secure.
- If any part of the harness or converter module appears damaged, replace it immediately to ensure safe towing.

7. TROUBLESHOOTING

If you experience issues with your trailer lights, refer to the following common troubleshooting steps:

- **If lamps light for a few seconds and then go off:**
 - Check the ground wire connection on both the harness and the trailer. Ensure it is secure and on a clean, unpainted metal surface.
 - Check for an overload condition (e.g., too many bulbs on the trailer). Reduce the load if necessary.
- **If the circuit fails to light:**
 - Check the tow vehicle's fuses. Replace any blown fuses.
 - Inspect the trailer for broken connections or damaged wiring.
 - Check the trailer lamp bulbs. Replace any burnt-out bulbs.
 - Verify the ground wire connection on both the harness and the trailer.
 - Locate and correct any short circuits in the wiring.

Note: Always use a tester to verify and confirm system function. If problems persist, consult your trailer dealer for corrective action. It is important to check trailer lights before towing.

8. SPECIFICATIONS

Manufacturer	CURT
Brand	CURT
Model	Custom Wiring
Item Model Number	56494
Item Weight	14.4 ounces
Package Dimensions	8.62 x 5.67 x 2.95 inches
Position	Rear

9. WARRANTY AND SUPPORT





For warranty information or technical support, please refer to the official CURT website or contact their customer service directly. Keep your purchase receipt and product model number (56494) handy for any


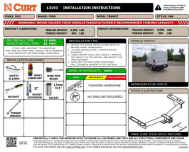
inquiries.

Online Resources: Visit the [CURT Manufacturing website](#) for additional product information, installation videos, and FAQs.

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Related Documents - 56494

	<p>CURT 55513 Custom Wiring Harness Installation Guide for Toyota Tacoma, T-100, Hilux</p> <p>Step-by-step installation instructions for the CURT 55513 custom wiring harness, featuring 4-way flat output, for Toyota Tacoma, T-100, and Hilux vehicles. Includes safety warnings, tools needed, and application details.</p>
	<p>CURT 56325 Installation Instructions: Trailer Wiring Harness for Cadillac XT5 & GMC Acadia</p> <p>Detailed installation guide for the CURT 56325 custom vehicle-trailer wiring harness. Includes application details for Cadillac XT5 and GMC Acadia, wiring location, tools needed, and safety warnings.</p>
	<p>CURT 58979 Universal RV Wiring Harness Installation Manual</p> <p>Detailed installation guide for the CURT 58979 Universal Splice-In Towed-Vehicle RV Wiring Harness for Dinghy Towing. Includes wiring types, location guides, tools, and step-by-step instructions.</p>
	<p>CURT 56207 Custom Wiring Harness Installation Instructions for Cadillac CTS/CTS-V</p> <p>Step-by-step installation guide for the CURT 56207 custom wiring harness, designed for Cadillac CTS Sedan and CTS-V Sedan models. Includes wiring location details, tools required, safety warnings, and comprehensive installation procedures.</p>

	<p>Curt Trailer Hitches: Comprehensive Numerical Guide</p> <p>A detailed numerical listing of trailer hitches by Curt Manufacturing, organized by vehicle make, model, and year, including part numbers, ratings, and replacement information.</p>
	<p>CURT 13193 Trailer Hitch Installation Guide for Ford Transit</p> <p>Step-by-step installation instructions for the CURT 13193 trailer hitch designed for the Ford Transit van. Includes parts list, tools required, safety information, and towing capacity details.</p>