

Signal[®] Mirror Installation Instructions

Dodge Ram Pick-Up 1500/2500 1994-1997 (tubular mount)

THE safety accessory of the 21st Century.™

Rev B2 (6-28-04), GG

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P/N 210-0052-0

Note: Professional Installation Recommended

Warranty does not cover damage to the vehicle or mirror housing due to improper installation. The following installation instructions are to be considered as a guide only. Door removal procedures, indicator wire color and location may have changed since publication of these instructions. The installer is responsible for any damage that may occur during installation.

INCLUDED ITEMS:

- left and 1 right Signal[®] mirror
 left and 1 right wire harness
 butt splices
 ring connector
- 1 instruction manual

REQUIRED TOOLS:

Ratchet with extension or ratcheting screwdriver 10mm socket T27 size torx screwdriver Medium Philips screwdriver Small pry bar Gopher wire Wire crimper and stripper Needle nose pliers Masking tape Multimeter or wire tester Sturdy gloves Safety glasses or goggles Please read instructions prior to installation.

PROBLEMS OR QUESTIONS?

Technical Assistance is available by calling Muth Mirror Systems Technicians at:

1-800-844-6616

Monday through Friday Between 8:00 a.m. and 5:00 p.m. CST

Or through the Muth web site: <u>www.muthco.com</u>

Or via E-mail: sales@muthco.com

Mirror Housing Removal



- 1. Open the driver side door and lower the window.
- 2. Remove the door panel, kick panel, plastic trim piece along the bottom of the door frame, and the lower driver side dash panel.
- 3. Disconnect the mirror wire harness. Remove the three mirror mounting nuts and remove the mirror housing from the vehicle.

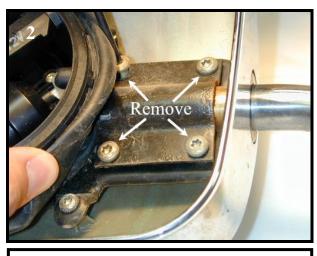




Mirror Replacement



Using sturdy gloves, press down on the inboard side of the mirror to pivot it fully outward. Reach behind the outboard edge of the mirror. Pull back on the mirror until it unsnaps from the motor mount. Remove the mirror from the mirror housing.



Use a T27 size torx screwdriver and remove the four torx screws from the arm face plate on the inside of the mirror housing.



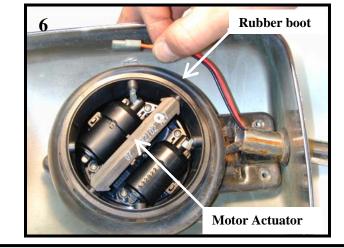
Remove any foam insulation from the mirror mount. Remove the tree torxs screws holding the mirror housing sail to the mirror mount.



Separate the mirror housing sail from the mirror mount. Dislodge the wire harness from around the mirror mount

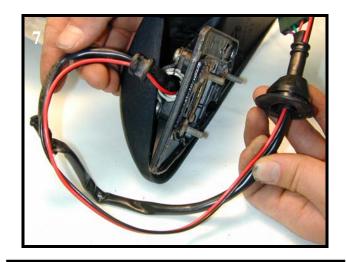


Using the shorter of the two harnesses from the kit, guide the end without the mating connector alongside the factory wire harness by going through the mirror arm and out of the mirror mount.

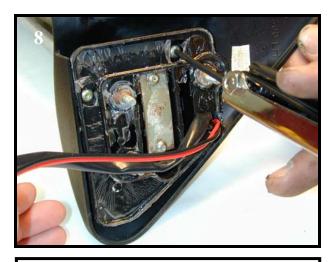


For both driver and passenger side mirrors, remove the rubber boot around the motor actuator <u>PRIOR</u> to installing the *Signal*® mirror into the mirror housing. <u>NOTE:</u> Permanent removal of rubber boot, by pulling it over the motor, is required for this application and will not negatively affect operation or durability, per the mirror motor manufacturer.

Mirror Replacement Continued



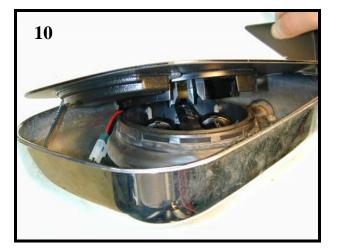
Pull the wire harness through the mirror mount until about 4 inches of wire remain inside the mirror housing. Guide the $Signal^{\textcircled{0}}$ mirror wire harness along the existing path of the factory wire harness and through the rubber grommet. Remove any slack in the wire



Reposition the factory wire harness around the mirror mount. Screw the mirror sail back onto the mirror mount. Replace the foam insulation on the mirror housing sail.



Connect the *Signal*[®] mirror mating connector to the *Signal*[®] mirror wire harness.



Tuck the wire harness behind the *Signal*[®] mirror. Align the *Signal*[®] mirror over the cross bar on the motor mount. Lay the bottom of the *Signal*[®] mirror into the mirror housing.

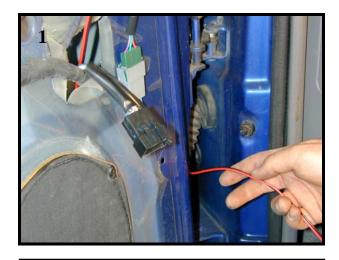


Use the palm of your hand and firmly press down in the center of the *Signal*[®] mirror until it snaps into position.



Press down on all sides of the $Signal^{\otimes}$ mirror to ensure proper operation.

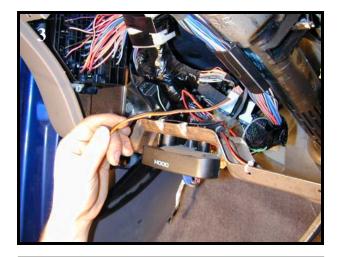
Wiring



Bolt the mirror housing on the door. Reconnect the factory mirror wire harness. Pull back a portion of plastic insulation from the door. Dislodge the rubber boot from between the door and door frame. Guide the *Signal*[®] mirror wire harness down into the door and out of the hole vacated by the rubber boot.

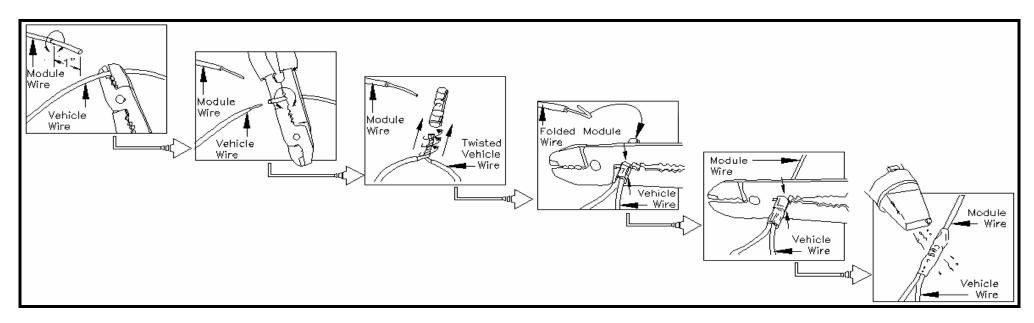


Pull the rubber boot out from the door frame. Guide a piece of gopher wire through the rubber boot and secure the *Signal*[®] mirror wire harness to the end of the gopher wire. Pull the wire harness through the rubber boot.



Guide the wire harness into the vehicle by going through the door frame. Replace the rubber boot between the door and door frame. Guide the wire harness up under the dash and remove any slack in the wire.

USE THE DIAGRAM BELOW TO SPLICE INTO THE TURN INDICATOR WIRES



- 1. Repeat all of the previous steps to replace the factory mirror on the passenger side door with the new *Signal*[®] mirror. The vehicle's electrical wiring is located under the driver side dash and next to the bottom right side of a large connector. Guide the new wire harnesses from both sides of the vehicle to the electrical wiring. Locate the LIGHT GREEN WITH YELLOW STRIPE wire from within the wire bundle. Turn the ignition key so that electrical power is on and activate the driver side turn indicator. Probe the wire with the wire tester to verify that flashing turn indicator power is present. Label that wire as 'driver side turn'.
- 2. Locate the TAN WITH BLACK STRIPE wire from within the wire bundle. Activate the passenger side turn indicator and probe the wire with the wire tester to verify that flashing turn indicator power is present. Label that wire as 'passenger side turn'. Make sure the harnesses are routed securely to the wire bundle and enough slack is left for splicing.
- 3. Splice the RED wire from the driver side harness into the light green with yellow stripe wire previously labeled 'driver side turn'.
- 4. Splice the RED wire from the passenger side harness into the tan with black stripe wire previously labeled 'passenger side turn'.
- 5. Strip and twist together the ends of the black wires from both harnesses. Crimp them together in the supplied ring connector and ground to a suitable nearby location on the metal framework of the vehicle.
- 6. Activate each turn indicator to verify that the *Signal*[®] mirrors are working.
- 7. Replace the door panels, door accessories, kick panels, plastic moldings, lower dash panel, and trim pieces.

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