

Signal[®] Mirror Installation Instructions

Chrysler Town and Country 1996-2000, Dodge Caravan/Grand Caravan 1996-2000, Plymouth Voyager/Grand Voyager 1996-2000



THE safety accessory of the 21st Century.TM

Rev A (12/2/04), BTV

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P/N 210-0105-0

INCLUDED ITEMS:

left and 1 right Signal[®] mirror
 left and 1 right wire harness
 wire taps
 ring connectors
 1 instruction manual

REQUIRED TOOLS:

Ratchet with extension or ratcheting screwdriver 10mm socket 8mm socket Small slotted screwdriver Medium Philips screwdriver Needle nose pliers Small pry bar Heater Gun Gopher wire Electrical tape Wire crimper and stripper 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: www.muthco.com

Or via E-mail: techsupport@muthco.com

Mirror Housing Removal



- 1. Unsnap and remove the molding at the base of the mirror housing.
- 2. Remove 2 screws beneath the housing exposed by the removal of the molding.
- 3. Open the door and lower the window. While securing the housing with one hand, loosen the screw on its interior edge so that it can be removed.



- 1. Pull the mirror housing away from the vehicle slightly.
- 2. Unplug the wires connected inside the mirror housing.
- 3. Unsnap the molding from the A-Pillar along the windshield.

Mirror Replacement

WARNING! Safety glasses and sturdy gloves are recommended for mirror glass replacement.





Press down on the upper edge of the mirror to pivot it fully outward. Reach behind the lower edge of the mirror. Gently slide the mirror up toward the top of the mirror housing until all (4) snaps, on the motor actuator, unsnap from the mirror backing plate. Disconnect heater terminals and remove original mirror from the mirror housing.



Remove the foam insulation from the mirror housing sail. Using the shorter of the two harnesses from the kit, start on the inside of the mirror housing and guide the end without the mating connector alongside the existing factory wire harness. Leave 4 inches of wire exposed in the mirror housing. Replace foam insulation to housing sail once the wire harness has been routed through.



Connect the *Signal*[®] mirror mating connector to the *Signal*[®] mirror wire harness. Reconnect the heater wires to the heater terminals on the back of the new *Signal*[®] mirror. **NOTE:** There is no polarity so the wires may be interchanged.

Mirror Replacement Continued



(**5a & 5b**) Tuck the *Signal*[®] mirror wire harness towards the back of the mirror housing. Align the (4) slots on the *Signal*[®] mirror motor mount with the (4) snaps on the motor actuator.



Gently push down on the bottom edge of the *Signal*[®] mirror to pivot if fully outward.



Reach behind the top edge of the *Signal*[®] mirror. Gently slide the *Signal*[®] mirror down toward the bottom of the mirror housing until all (4) snaps, on the motor actuator, snap into place. For proper installation, listen to the "clicking" sound of the snaps (4 snaps altogether) as it snaps into position. Failure to hear the "clicking" sound of the snaps, could result in mirror falling off due to improper engagement of the snaps. Press down on all sides of the *Signal*[®] mirror to ensure proper operation and engagement of the snaps.

Mirror Housing Attachment



- Run the Signal[®] mirror harness through the wire hole in the A-pillar and down beside the dashboard into the pedal area.
 Reconnect the mirror control wires to the receptacles inside the mirror housing.
 Replace the mirror housing on the vehicle with its original mounting screws. Be sure to tighton the set screw in the
- mounting screws. Be sure to tighten the set screw in the upper part of the mirror mounting structure.
- 1. Unsnap the lower plastic dash panel and pull to the side. Leave the panel attached to the parking brake handle. It is problematic to remove and there should be no need to do so.
- 2. Unscrew and remove the metal panel below the steering column.

Wiring



- Find two terminal blocks just above the hood release. Locate the <u>front driver side turn</u> wire. It is <u>GREEN WITH A RED STRIPE</u> and is connected to the second terminal from the right on the top row of the terminal block. Turn the ignition key so that electrical power is on and activate the driver side turn indicator. Probe the wire to verify that flashing turn indicator power is present. Deactivate the turn indicator and depress the brake to make sure you have not located the rear turn wire. Label that wire as front, driver side turn.
- 2. Locate the front <u>passenger side turn wire</u>. It is <u>BROWN WITH A RED STRIPE</u> and is connected to the second terminal from the top in the right side column of the terminal block. Activate the passenger side turn indicator and probe the wire to verify that flashing turn indicator power is present. Deactivate the turn indicator and depress the brake to make sure you have not located the rear turn wire. Label that wire as front, **passenger side turn**.



USE THE INCLUDED WIRE TAPS AND FOLLOW THE FOUR STEPS ABOVE TO SPLICE INTO THE TURN INDICATOR WIRES

- 1. Make sure the harnesses are routed securely under the dash and enough slack is left for splicing.
- 2. Splice the RED wire from the driver side harness into the green with a red stripe wire previously labeled 'driver side turn'.
- 3. Splice the RED wire from the passenger side harness into the brown with a red stripe wire previously labeled 'passenger side turn'.
- 4. Strip and twist together the ends of the black wires from each harness. Crimp them together in the supplied ring connector and ground to a suitable nearby location on the metal framework of the vehicle.
- 5. Activate each turn indicator to verify that the Signal[®] mirrors are working.
- 6. Replace any door accessories, door panels, plastic moldings, and trim pieces.