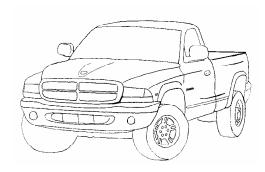
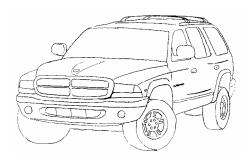


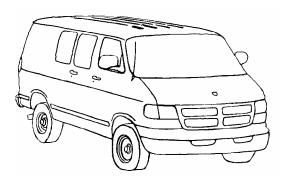
SIGNAL® MIRROR INSTALLATION INSTRUCTIONS



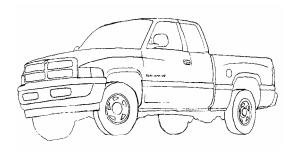
1997 - 2000 Dodge Dakota 6 X 9 mirror style only



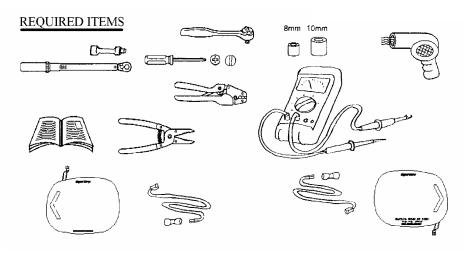
1998 – 2000 Dodge Durango 6 X 9 mirror style only



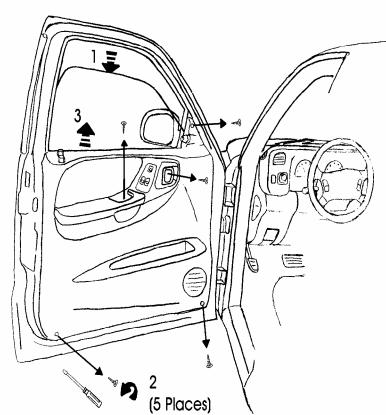
1998 - 2002 Dodge Ram Van 6 X 9 mirror style only



1998 - 2001 Dodge Ram Pickup 1997 – 2001 Dodge Ram Pickup (fold-away) 6 X 9 mirror style only



Instructions part number: 210-0005-0 Rev B2, 7/12/04, GG

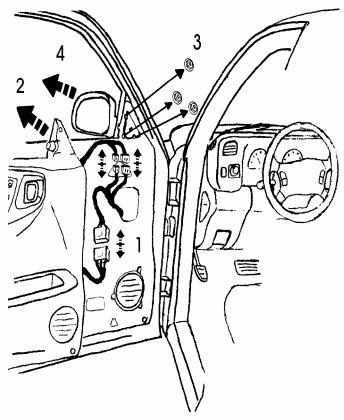


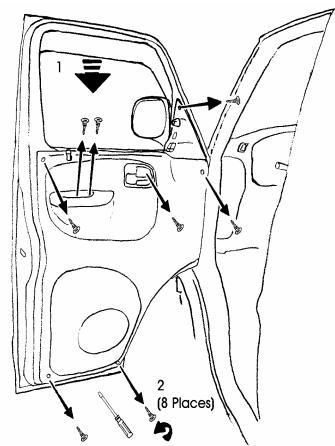
<u>Procedure A1 – Door Panel Removal:</u> Dakota/Durango (See A2 for Ram Van and A3 for Ram Pickup)

- 1) Lower window.
- 2) Remove 5 screws holding door panel in place.
- 3) Gently raise door panel to expose door wiring.

Procedure B1 - Mirror Housing Removal: Dakota/Durango (See B2 for Ram Van and B3 for Ram Pickup)

- 1) Unplug the connections for the mirror, door lock, and window control wires.
- 2) Remove door panel.
- 3) While securing mirror with one hand, and being sure not to drop components into the door, remove 3 nuts holding mirror to door.
- 4) Remove mirror from door.



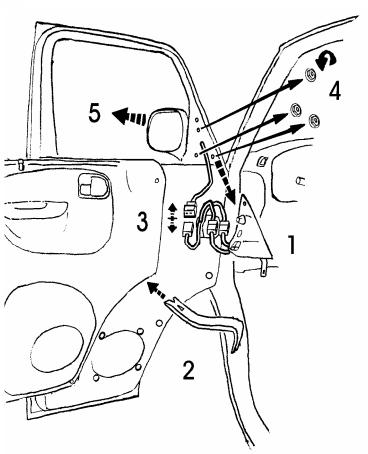


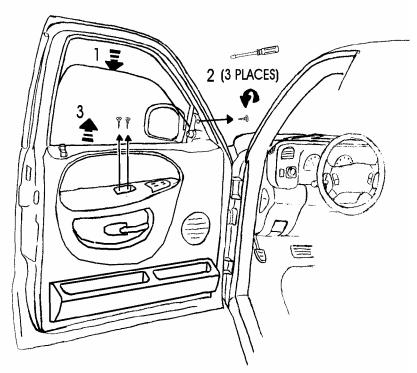
<u>Procedure A2 - Door Panel Removal:</u> Ram Van

- 1) Lower window.
- 2) Remove 8 screws holding door panel in place.

<u>Procedure B2 - Mirror Housing Removal:</u> Ram Van

- 1) Remove window/lock/mirror control module.
- 2) Pry around the bottom of the door panel with a small pry bar or door panel removal tool in order to unsnap and remove door panel.
- 3) Unplug the harness that runs from the mirror to the control module.
- 4) While securing mirror with one hand, and being sure not to drop components into the door, remove 3 nuts holding mirror to door.
- 5) Remove mirror from door.



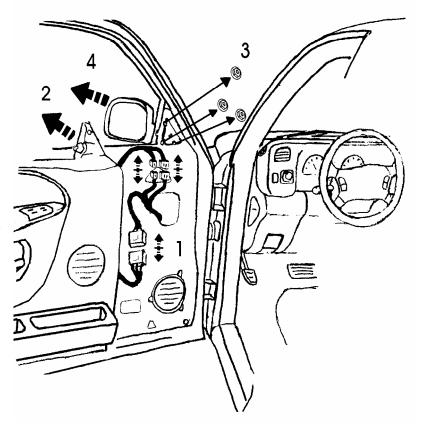


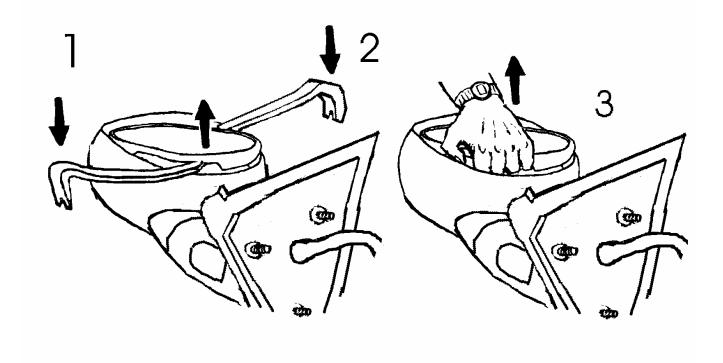
<u>Procedure A3 - Door Panel Removal:</u> Ram Pickup

- 1) Lower window.
- 2) Remove 3 screws holding door panel in place.
- 3) Gently raise door panel to expose door wiring.

<u>Procedure B3 – Mirror Housing Removal:</u> Ram Pickup

- 1) Unplug the connections for the mirror, door lock, and window control wires.
- 2) Remove door panel.
- 3) While securing mirror with one hand, and being sure not to drop components into the door, remove 3 nuts holding mirror to door.
- 4) Remove mirror from door.





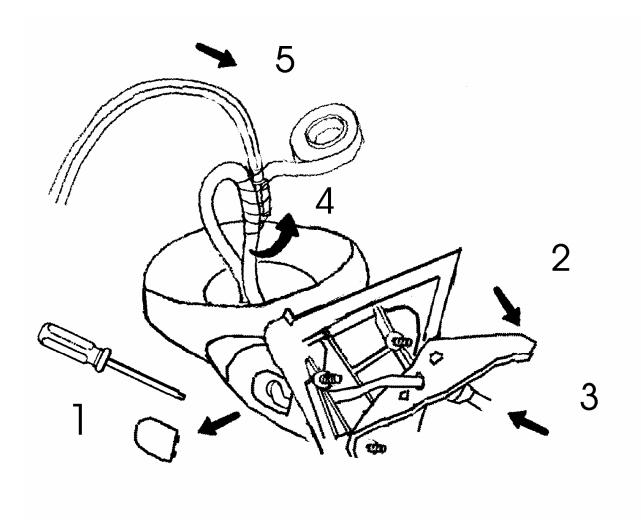
Procedure C - Mirror Glass Removal:

NOTE: The following six (6) procedures are the same for all vehicles.

Warning! Be sure to wear safety glasses during this operation as there is the potential for broken glass. Sturdy gloves are recommended.

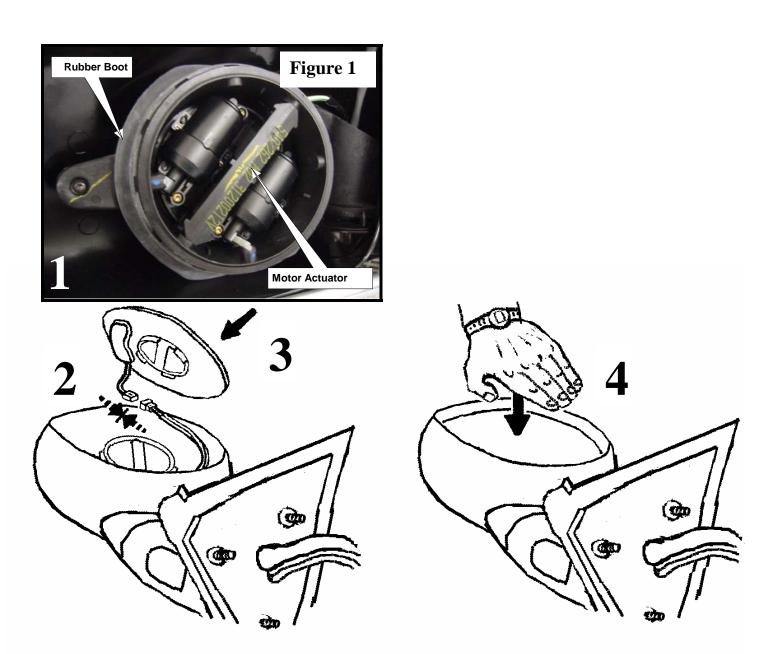
- 1) Place mirror housing on a clean level surface. Push on the outer edge of the mirror to manually pivot it fully outward so a small pry bar can be inserted under its inner edge. Apply pressure with the pry bar until the mirror backing plate begins to unsnap from the motor.
- 2) Move the pry bar around the mirror and pry again until the mirror backing plate further unsnaps from the motor.
- 3) Pull the mirror off of the motor. Some force may be required to free any remaining snaps. If you can not remove the mirror by hand, apply the pry bar further around its edge to loosen more snaps. Then try again.

(If you have heated mirrors, disconnect the wires to the heater at this time.)



Procedure D - Inserting Harness:

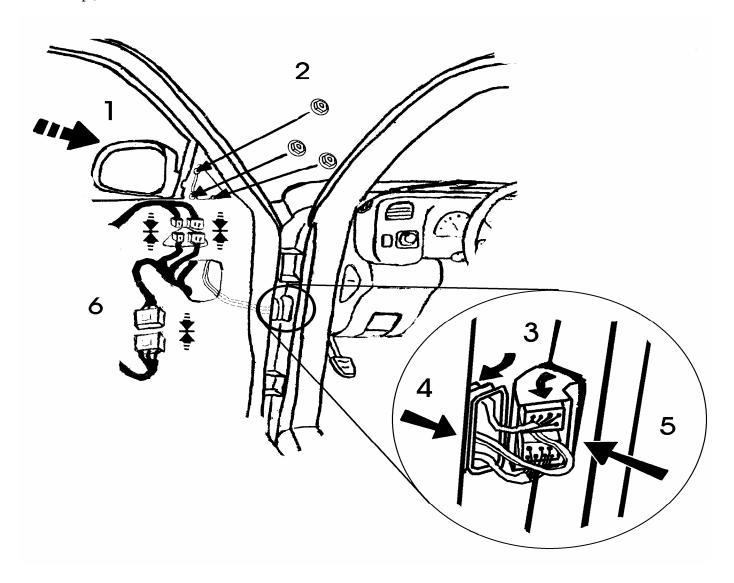
- 1) Unsnap the access panel at the bottom of the mirror with a small screw driver.
- 2) Carefully pull back the foam insulation to reveal wire routing passage.
- 3) Push the motor controller harness a few inches back through the housing. (Some models may have a strain relief clip that needs to be removed before this operation.)
- 4) Tape the end of the Signal® mirror harness that has no connector to the motor harness.
- 5) Pull both harnesses through the routing passage. Remove the tape and pull the *Signal*® mirror harness through so that approximately 6 inches of slack is left near the motor. Replace the access panel. (If you removed a strain relief clip, replace it now.)



Procedure E - Snapping Signal® Mirror in Place:

Warning! Be sure to wear safety glasses during this operation as there is the potential for broken glass. Sturdy gloves are recommended.

- 1) **See Figure 1** above: For both driver and passenger side mirrors, remove the rubber boot around the motor actuator PRIOR to installing the *Signal*® mirror into the mirror housing. **NOTE: 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.**
- 2) Connect the *Signal*® mirror leads to the harness. (If you have heated mirrors, connect the wires to the heater terminals at this time. Either wire can be hooked up to either terminal.)
- 3) Place the *Signal*® mirror over the motor puck.
- **4)** Place the palm of your hand on the center of the glass and press firmly until you hear the snaps engage
 - onto the motor puck. Press on the top, bottom and both sides of the mirror to ensure complete attachment to the motor puck. (Mirror should be pivoted through its full range of travel during this



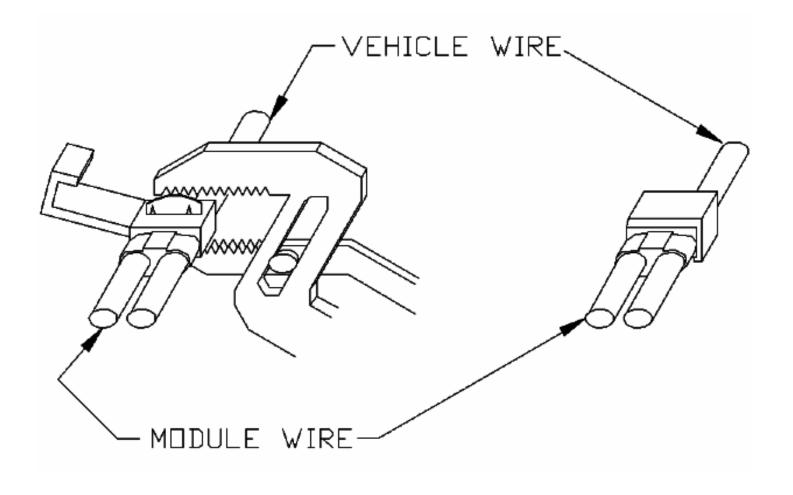
Procedure F - Routing Wires Through Door:

- 1) Feed wires into door and place mirror on door.
- 2) Attach mirror with 3 nuts.
- 3) Remove boot from the connector housing mounted in the door frame of the vehicle and slide connector housing outward.
- 4) Pass the *Signal*® mirror harness through the boot.
- 5) Pass the *Signal*® mirror harness between the two connectors found in the connector housing and into the vehicle. (Note: The kick plate covering the emergency brake will need to be removed in order to facilitate wire routing.)
- 6) Reconnect the mirror, door lock, and window controls and hang door panel in place temporarily. Do not tighten screws until all under dash wiring is complete.



Procedure G - Finding Turn Indicator Wires:

- 1) Find the bundle of wires just above the emergency brake. (Note: Dakota wiring may be located above the courtesy lamp in a series of small wiring blocks.)
- 2) Locate the light green wire.
- 3) Turn the ignition key so that electrical power is on and activate the driver side turn indicator. Probe the light green 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.
- 4) Locate the light brown wire and activate the passenger side turn indicator.
- 5) Probe the light brown 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 passenger side turn.



Procedure H - Splicing Into Turn Indicator Wires:

- 1) Make sure the harnesses are routed securely and enough slack is left for splicing.
- 2) Following the pictures above, splice the red wire from the driver side harness into the light green wire previously labeled as driver side turn.
- 3) Following the diagrams above, splice the red wire from the passenger side harness into the light brown wire previously labeled as 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 Signal® mirrors are working.
- 6) Replace all panels and moldings.



PROBLEMS? / QUESTIONS?

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

1-800-844-6616

between 8:00 AM and 5:00 PM Central Standard Time

Or contact us at the Muth web site: www.muthco.com Or via e-mail: techsupport@muthco.com