



Signal® Mirror Installation Instructions

2006-2009 Dodge Charger, 2005-2008 Dodge Magnum, 2005-2009 Chrysler 300



THE safety accessory of the 21st Century.™

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:

1-left and 1-right *Signal*® mirror
1-left and 1-right wire harness
2-wire taps
2-ring connectors
1-instruction manual

REQUIRED TOOLS:

Ratchet with extension or ratcheting screwdriver
8 mm socket
Socket wrench
Large slotted screwdriver
Small slotted screwdriver
Large Phillips screwdriver
Small Phillips screwdriver
Small pry bar
Gopher rod (wire)
Electrical tape
Wire crimper and stripper
Needle nose pliers
Multimeter or wire tester
Sturdy gloves
Safety glasses or goggles
Utility knife
Heat gun
7/16 T-Handle

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

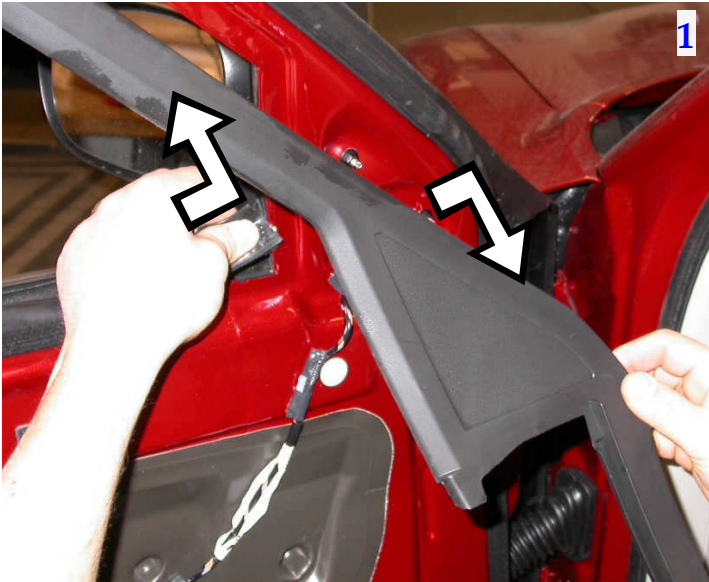
Or via E-mail: techsupport@muthco.com

Door Panel Removal



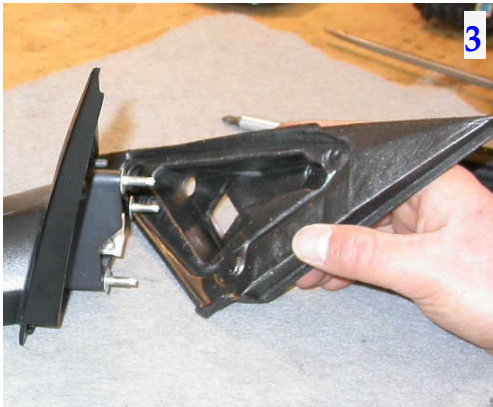
- 1) Start with opening the driver's side door and lowering the window.
- 2) Using a small slotted screw driver, slowly pry plastic cover to reveal screw. Remove screw with a Phillips screwdriver.
- 3) Repeat step-2 in location shown.
- 4) Remove (3) screws on the bottom of the door panel using a Phillips screwdriver.
- 5) With a 7/16 T-Handle, slowly push in the center of the rivet to disengage rivet from door frame (5-Total, located around the perimeter of the door panel). **CAUTION: These rivets are fragile and break easily. Be very gentle in disengaging and removing these rivets.** In case the rivets break, you can buy replacement rivets at your local Dodge Dealership. Tan Rivet Part #: wx68bd1aa, Black Rivet Part #: wx68dx9aa.
- 6) Lift up and slowly pull door panel out partially.
- 7) Release the door handle rod. Reach behind and disconnect all wiring harnesses. Remove door panel.
- 8) Using a small pry bar, carefully pry the (2) plastic inserts from door frame.
- 9) Replace the (2) plastic inserts into their slot on the back of the door panel. Set door panel aside.

Mirror Housing Removal



- 1) Lift up on the foam insulation, carefully pull and displace insulation trim around the upper right hand corner of the door frame.
- 2) Disconnect the mirror wire harness. Secure the mirror housing with one hand, remove the (3) nuts holding the mirror housing to the door frame using a 8 mm socket. **WARNING: Not securing mirror housing with one hand before loosening the nuts could cause the mirror housing to fall and become damaged.** Carefully remove mirror housing from door frame and set mirror housing on a cloth covered surface.

Mirror Replacement

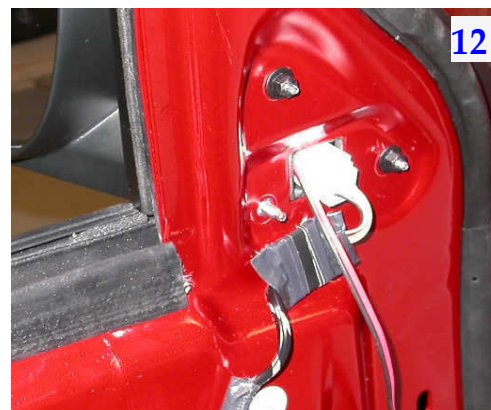
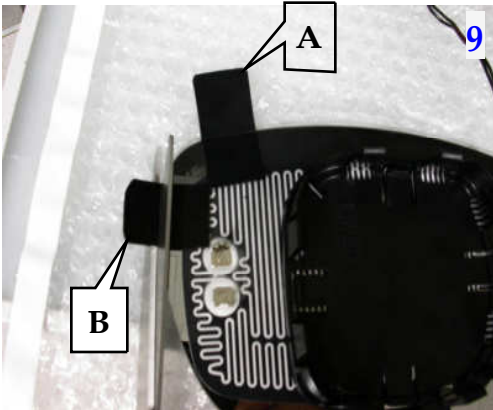
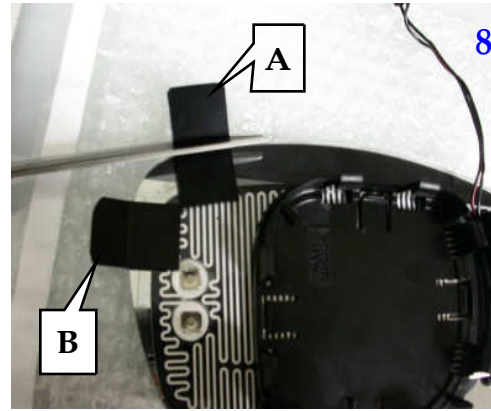


WARNING: Safety glasses and sturdy gloves are required for mirror replacement.

- 1) To prevent glass breakage, tape the glass with tape as shown. Using a heat gun, heat around the centered of the original glass for about 1-minute.
- 2) Push down on the inboard edge of glass until mirror pivots fully outward. Insert a large slotted screwdriver in between the mirror backing plate and motor actuator. Carefully pry and twist screwdriver until original mirror pops off. If heated, disconnect heater wires from heater terminals and remove mirror.
- 3) Remove the foam insulation on the housing sail.
- 4) Carefully remove the wire connector to gain access to the wire routing hole in the mirror sail.
- 5) Remove the screw that secures the sail mount to the housing sail.
- 6) Pop off the sail mount.

Mirror Replacement Continued

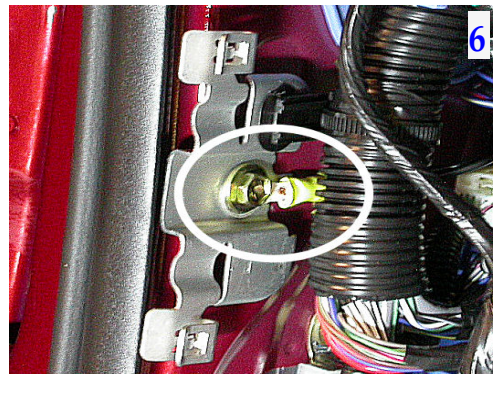
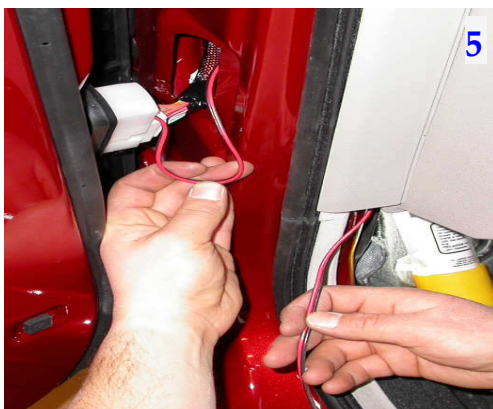
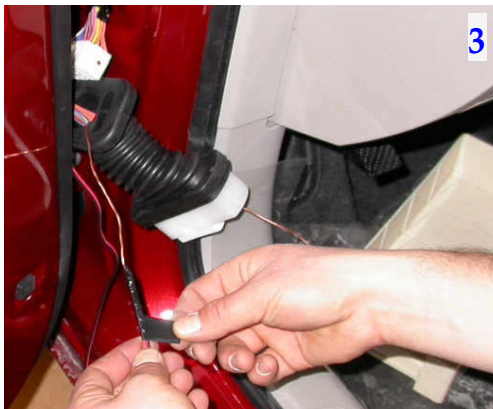
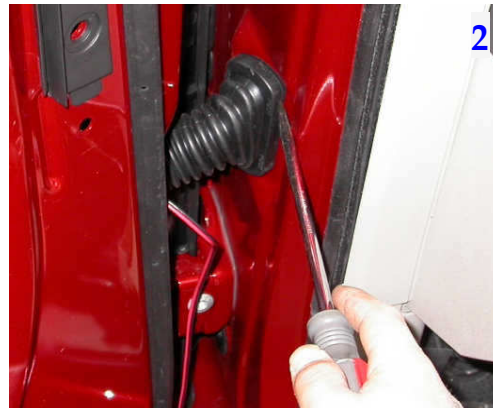
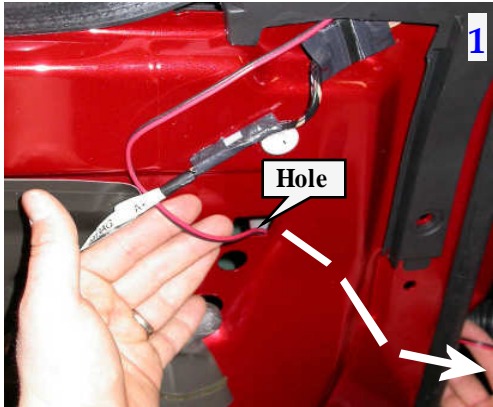
WARNING: Safety glasses and sturdy gloves are required for mirror replacement.



- 7) Using the longer of the two harnesses from the wiring kit, route the end without the connector from inside mirror housing thru to the housing sail.
- 8) **One of the anti-vibration tabs must be removed to complete your installation. Please read to determine which style mirror you have and remove the appropriate tab.** Does your mirror have a painted cap? If so, please remove tab "A" by carefully cutting along the bend of the tab using a scissors.
- 9) If your mirror does not have the painted cap, remove tab "B" by carefully cutting along the bend of the tab with a scissors.
CAUTION: Be careful not to chip or drop the new *Signal*® mirror when cutting the anti-vibration tab.
- 10) Pull the *Signal*® mirror wire harness thru housing sail leaving about 4" to 6" of the wire harness inside mirror housing. Connect the mating connectors on the new *Signal*® mirror and the *Signal*® mirror wire harness. Using electrical tape, secure the two connectors together to prevent future disconnection. If heated, 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.
- 11) Carefully tuck all wiring behind motor actuator. **Not doing so, could result in wiring interfering with mirror travel.** If anti-vibration tab is present, carefully tuck the anti-vibration tab within mirror housing. Align and center the motor mount onto the motor actuator. With the palm of your hand, slowly push down on the glass until the new *Signal*® mirror snaps into position. Press down on all sides to ensure the new *Signal*® mirror is fully seated and functional. Following original wire harness, guide the *Signal*® mirror wire harness thru the sail mount and foam insulation. Replace the wire connector, foam insulation and sail mount onto the housing sail.
- 12) Guide all wire harnesses thru the access hole in the door frame and position the mirror housing assembly on the mirror mount. Attach the mirror housing to the mirror mount with three mirror mounting nuts. **WARNING!** Do not over tighten the mirror mounting nuts. Reconnect the original mirror harness.

Wire Routing

WARNING: When routing wires into vehicle, it is extremely important to not let wires get pinched or crushed at any time. Avoid window track and sharp edges at all times. Not doing so may cause circuit shortage problems in the long run.



TIP: A gopher rod (wire) maybe use to assist in the *Signal*® mirror wire harness routing processes.

- 1) Find the rubber boot located between the door frame and vehicle frame. Using your fingers, push in and pull out door frame end of the rubber boot. Pull back the protective sheet, route the *Signal*® mirror wire harness alongside original wire harnesses, into the hole, and out the access hole vacated by the removal of the rubber boot. Carefully pull to remove any slack in the *Signal*® mirror wire harness.
- 2) Using the slotted screw driver, push and pry the rubber boot connector off of the vehicle frame side.
- 3) Route the *Signal*® mirror wire harness thru the rubber boot.
- 4) Unsnap and remove the plastic trim and kick panel.
- 5) Route the *Signal*® mirror wire harness thru the access hole into the vehicle. Replace the rubber boot back into position. Pull on the *Signal*® mirror wire harness, removing any slack in it.
- 6) Locate the grounding bolt within the kick panel. Cut and split the BLACK w/ RED TRACE and BLACK wires on the *Signal*® mirror wire harness. Route the BLACK wire to the grounding bolt location. Cut the BLACK wire to length, making sure enough slack is left for splicing. Splice the BLACK wire and attach it to one of the supplied grounding rings. Attach the grounding ring to the grounding bolt on the vehicle frame.

* Before proceeding, please read remainder of instructions for information regarding wiring identification and options*

** Repeat all of the previous steps to replace the factory mirror on the passenger side door with the new *Signal*® mirror.

Wire Identification

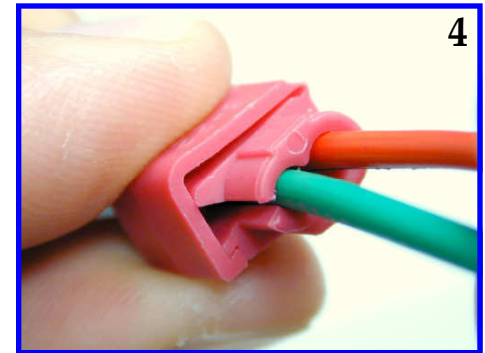
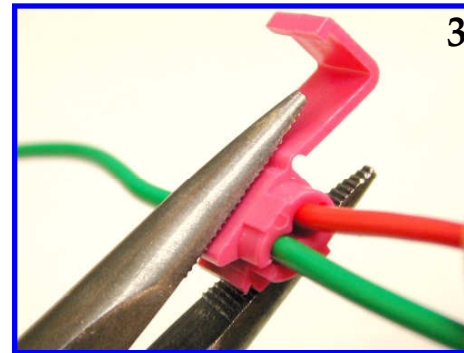
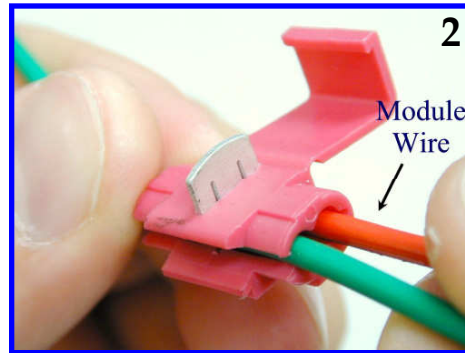
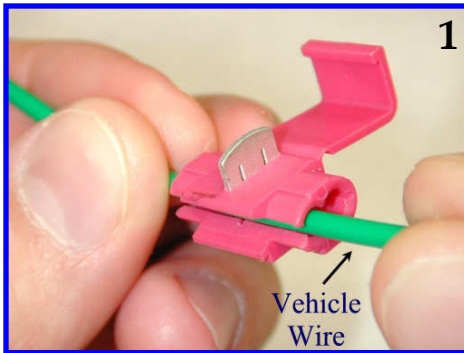


TURN & BRAKE

The vehicle's electrical wiring for the TURN & BRAKE is located within the wire bundle on the passenger side kick panel. Route both BLACK w/ RED TRACE wires to this location and cut to length, making sure enough slack in each wire is left for splicing. Locate the WHITE w/ DARK GREEN stripe wire 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 directional power is present. Label that wire as 'driver side indicator'. Find the WHITE w/ YELLOW stripe wire from within the wire bundle. Turn the ignition key to on. Activate the passenger side turn indicator. Probe the wire with the wire tester to verify that flashing turn directional power is present. Label that wire as 'passenger side indicator'.

TURN ONLY

The wiring location for the TURN ONLY is located in the front control module, in the engine bay. Extra wire will be needed to go from inside the vehicle, through passenger side firewall opening/grommet and then to the wire loom. Locate the WHITE w/ LIGHT GREEN stripe wire within the wire loom. 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 directional power is present. Label that wire as 'driver side indicator'. Find the WHITE w/ TAN stripe wire within the wire loom. Turn the ignition key to on. Activate the passenger side turn indicator. Probe the wire with the wire tester to verify that flashing turn directional power is present. Label that wire as 'passenger side indicator'.



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

- A. Make sure the harnesses are routed securely and enough slack is left for splicing.
- B. Splice the BLACK w/ RED TRACE wire from the driver side harness into the wire previously labeled 'driver side indicator'.
- C. Splice the BLACK w/ RED TRACE wire from the passenger side harness into the wire previously labeled 'passenger side indicator'.
- D. Activate each turn indicator to verify that the *Signal*® mirrors are working properly.
- E. Reconnect all original wiring. Turn the ignition power to on, check to verify all features are working properly.
- F. Replace the plastic door frame moldings, trim, door panels, and all accessories.

Muth products are protected by these, and other pending, United States Patents

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