



## *Signal*<sup>®</sup> Mirror Installation Instructions

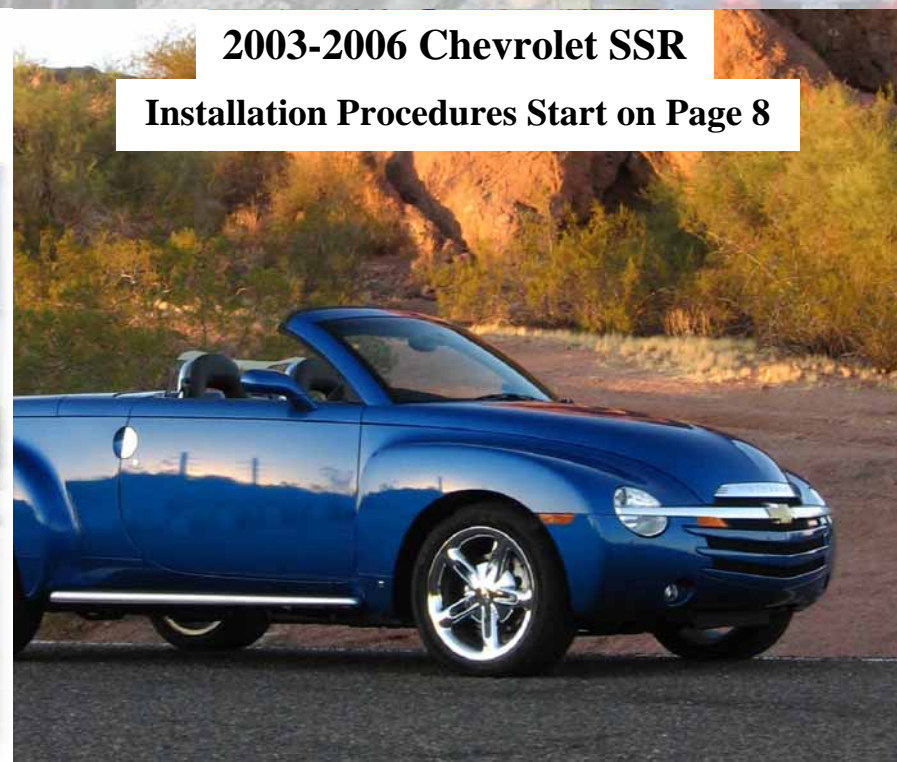


1997 - 2004 Chevy Corvette C5



2003-2006 Chevrolet SSR

Installation Procedures Start on Page 8



***THE safety accessory of the 21<sup>st</sup> Century.***<sup>™</sup>

**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*<sup>®</sup> 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  
7mm socket  
10mm socket  
Socket wrench  
T-27 Torx wrench  
Slotted screwdriver  
Phillip screwdriver  
Small pry bar (flat bladed plastic pry tool)  
Gopher wire  
Electrical tape  
Wire crimper and stripper  
Needle nose pliers  
Multimeter or wire tester  
Sturdy gloves  
Safety glasses or goggles  
Utility knife

**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:

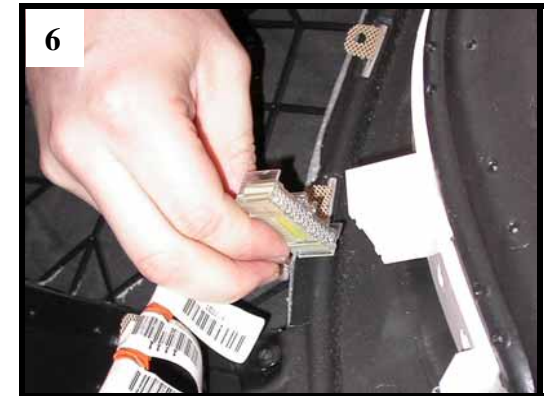
[www.muthco.com](http://www.muthco.com)

Or via E-mail: [techsupport@muthco.com](mailto:techsupport@muthco.com)

# Door Panel Removal



1. Start with opening the driver's side door and lowering the window.
2. Using a small slotted screwdriver, carefully pry and push down on the locking tab to remove the small plastic cover behind door handle.
3. Remove the (2) screws behind door handle using a T-27 Torx wrench.



4. Carefully pry around and remove plastic cover on the door lever.
5. With a pry bar, starting from the lower outboard door frame, carefully pry around door panel until it disengages from the door frame. Hold the door panel away from the door slightly.
6. Disconnect panel control console wiring connector behind door panel and remove door panel.

# Housing Removal

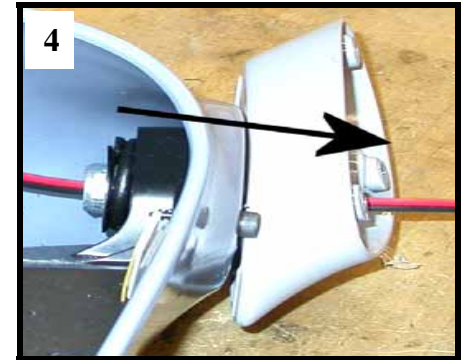
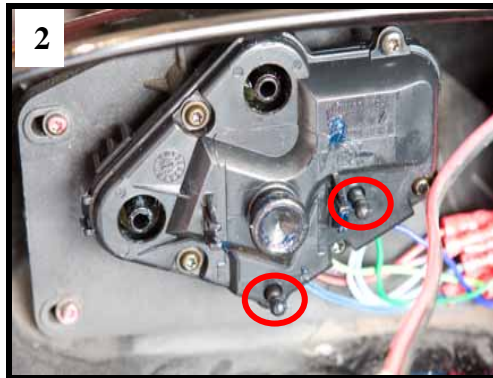


1. Using a 7mm socket wrench, remove (7) screws holding the speakers in place.
2. Disconnect speaker wiring connection and remove speaker from door frame.
3. Using a Phillips screwdriver, remove the screw located in the upper inboard edge of the door frame.
4. Grab and slide the window felt outboard to disengage it. Remove window felt.
5. Disconnect the mirror wire harness from inside the door. Remove the (3) nuts holding the mirror housing to the door frame by using a 10mm socket wrench. Remove mirror housing from door frame.

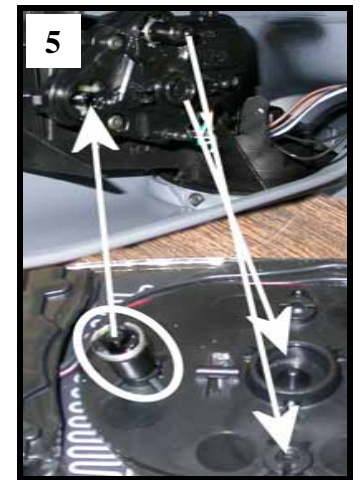


# Mirror Removal & Replacement

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



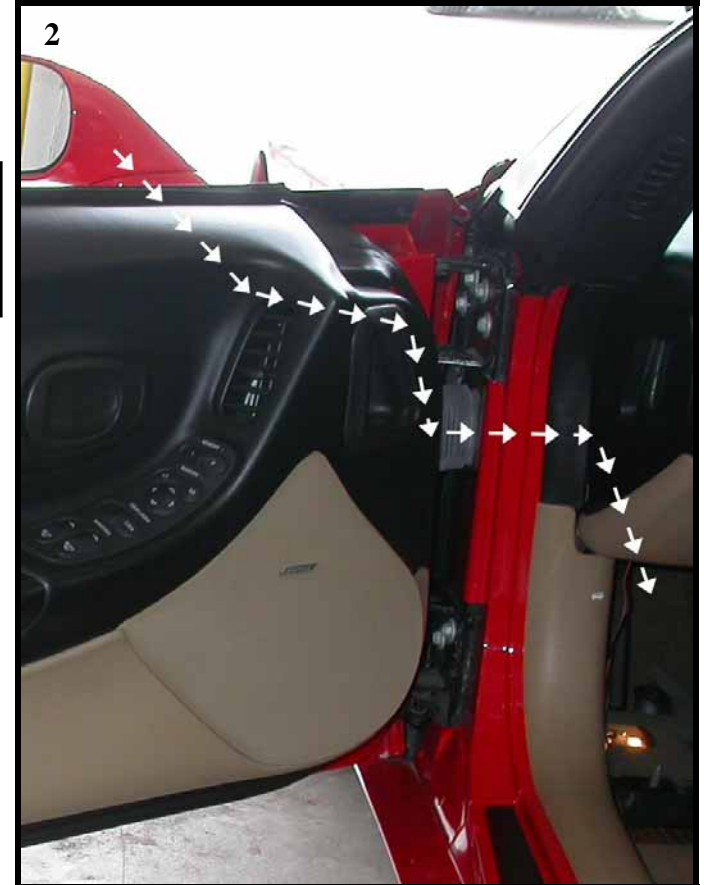
1. Push down on the lower inboard edge of glass until mirror pivots fully outward. Insert a large flathead screwdriver (pry bar) in between the motor mount and the motor actuator. Carefully pry and twist screwdriver until original mirror pops off. **If heated**, disconnect heater wires from heater terminals and remove mirror. **Note:** During the removal of the original mirror, if motor pins stay attached to the back plate, use “V” end in small pry bar or needle nose pliers to disengage pins from back plate.
2. **CAUTION FOR MEMORY MIRROR ONLY:** For sensory feedback to function, these memory pins must be fully engaged on the motor actuator. If these memory pins came loose during mirror removal process, please re-insert these pins back into their respective slot until they are fully engaged.
3. Carefully place one of the drive pins back into the upper socket on the motor actuator. Align the nub of the drive pin so it points to the round plug in the center of the mirror mount.
4. Using the shorter of the two harnesses from the wiring kit, guide the end without the mating connector into the mirror housing and out through the mirror mount. Pull the *Signal*<sup>®</sup> mirror wire harness thru housing sail leaving about 4” to 6” of the wire harness inside housing. Connect the mating connectors on the new *Signal*<sup>®</sup> mirror and the *Signal*<sup>®</sup> mirror wire harness. **If heated**, reconnect the heater wires to the heater terminals on the back of the new *Signal*<sup>®</sup> mirror. **NOTE:** There is no polarity so the wires may be interchanged. Carefully tuck all wiring behind motor actuator. **Not doing so, could result in wiring interfering with mirror travel.**
5. Place the other drive pin into the socket closest to the optic module on the motor mount. **CRITICAL:** Align the socket in the center of the *Signal*<sup>®</sup> mirror over the plug on the center of the motor actuator. Align all drive pins to their mating slots.
6. With the palm of your hand, slowly push down on the center of the glass until the new *Signal*<sup>®</sup> mirror snaps into position. Press down on the upper edge and outboard edge of the *Signal*<sup>®</sup> mirror to engage both drive pins in their socket. Press down on all sides to ensure the new *Signal*<sup>®</sup> mirror is fully seated and functional. **WARNING:** Improper installation of the new *Signal*<sup>®</sup> mirror could result in mirror falling off.



# Wire Routing



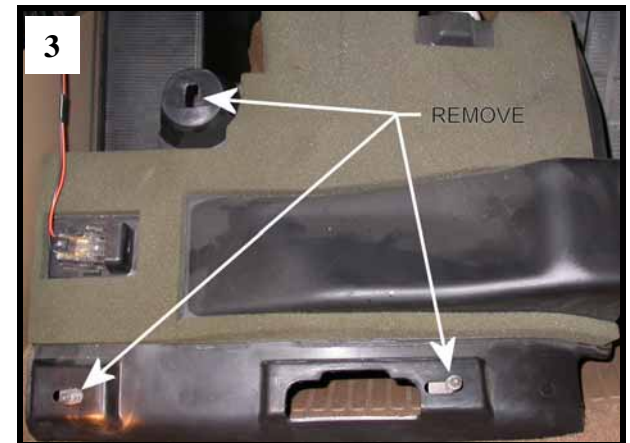
A gopher wire may be used to help ease/assist in these wire routing procedures.



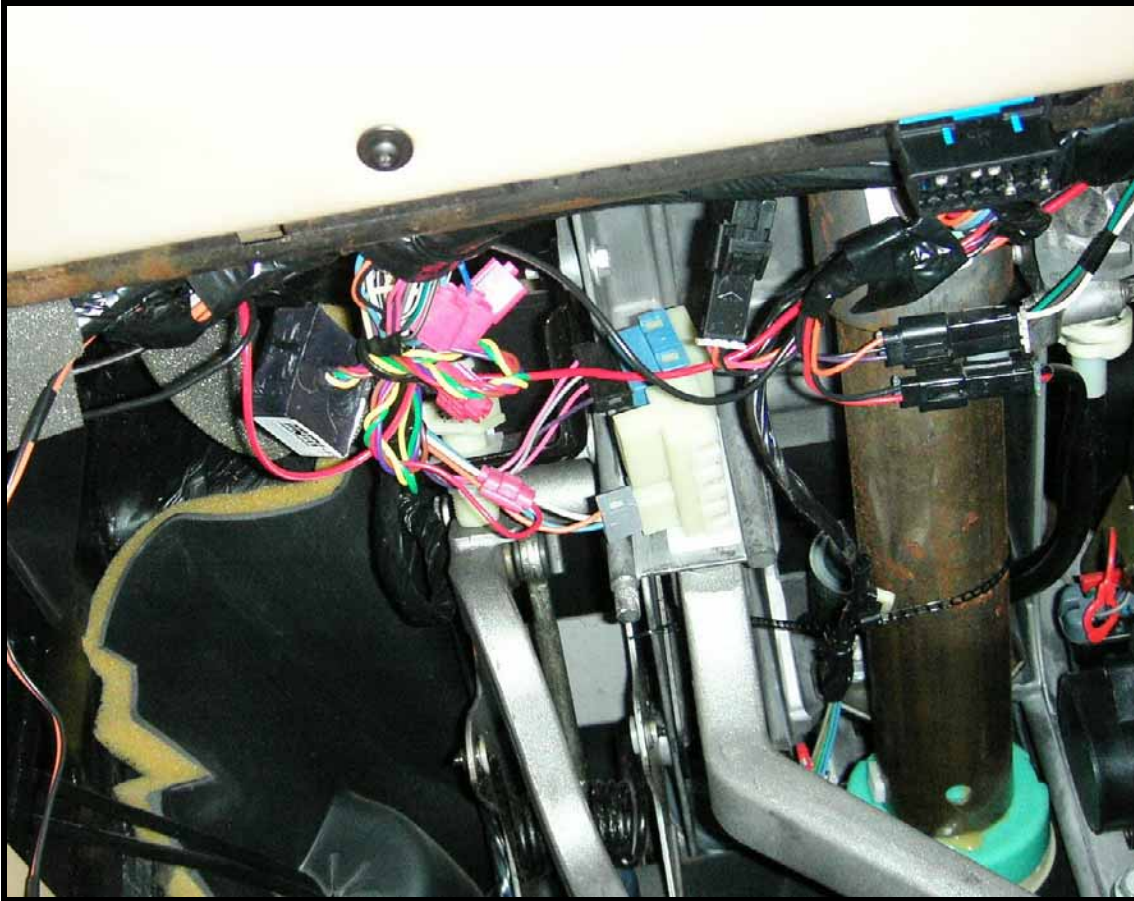
1. Guide the wire harnesses through the opening in the door frame and position the mirror housing assembly on the mirror mount. Attach the mirror housing to the mirror mount with three mirror mounting nuts. **WARNING! Do not over tighten the mirror mounting nuts.**
2. Remove floor trim and kick panel. Push in and pull out the two ends of the rubber grommet between door frame and vehicle frame. Route the *Signal*<sup>®</sup> mirror wire harness inside door frame through rubber grommet and into vehicle – see fig. 2. Gently pull on the *Signal*<sup>®</sup> mirror wire harness to remove any slack during wire routing. **WARNING! When routing wire into vehicle, it is extremely important to not let wire get pinched or crushed at any time. Avoid window track and sharp edges at all times. Not doing so may cause circuit shortage problems down the road.** Replace rubber grommet.

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

3. Remove the (2) plastic screws and (1) metal retainer from underneath the knee panel. Remove the knee panel to gain access to wiring location.



# Wire Identification

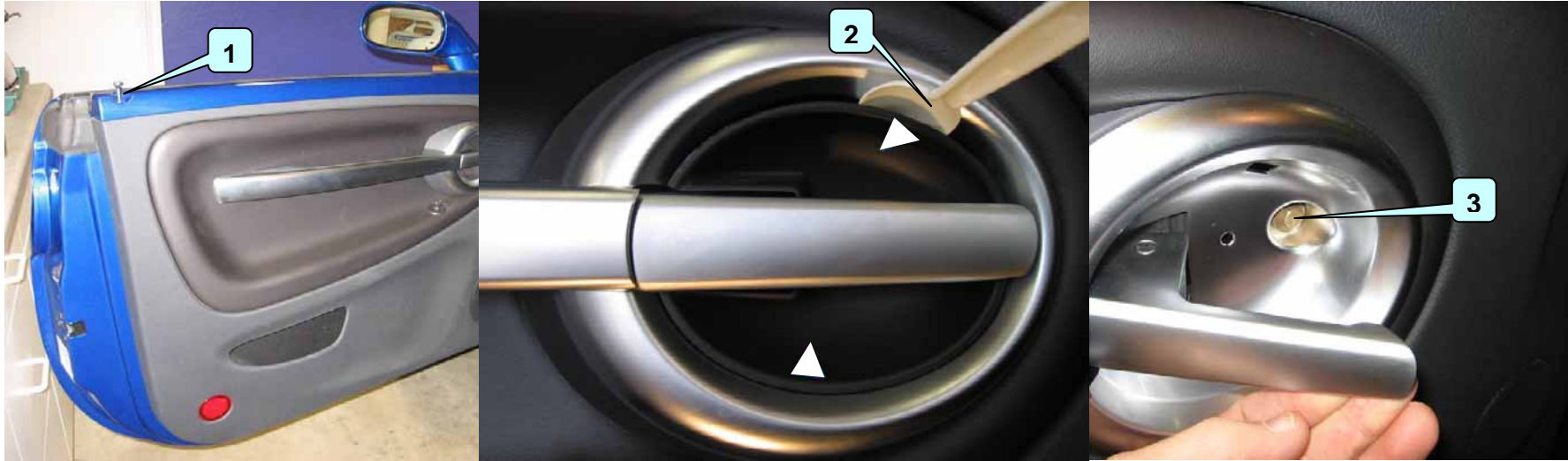


The vehicle's electrical wiring is located within the wire bundle behind the knee panel. Locate the LIGHT BLUE wire within the wire bundle. Turn the ignition key so that electrical power is on and activate the driver side turn indicator. Probe the wire with the wire tester to verify that flashing turn directional power is present. Label that wire as 'driver side indicator'. Locate the DARK BLUE wire and 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'.

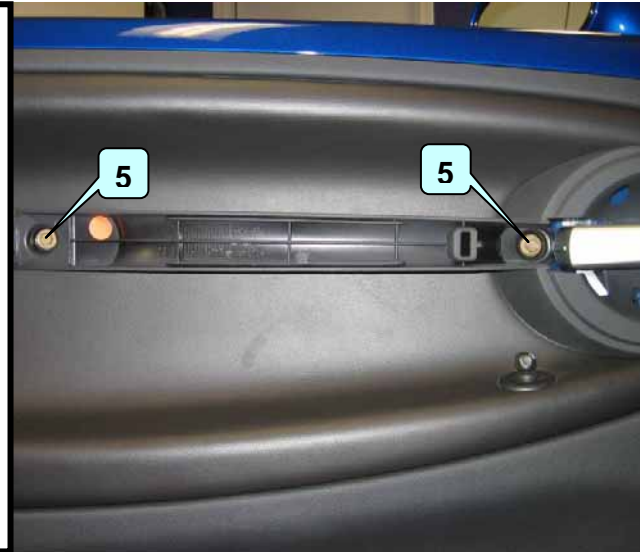
**GROUNDING:** Locate a suitable grounding source within the driver side kick panel. Cut and strip the black wire from the driver side harness to length. Crimp the driver side black wire to one of the supplied ring connectors and attach it to a suitable grounding location on the metal framework of the vehicle. Repeat for the passenger side black wire.

# Chevy SSR – Installation Instruction

## Door Panel Removal



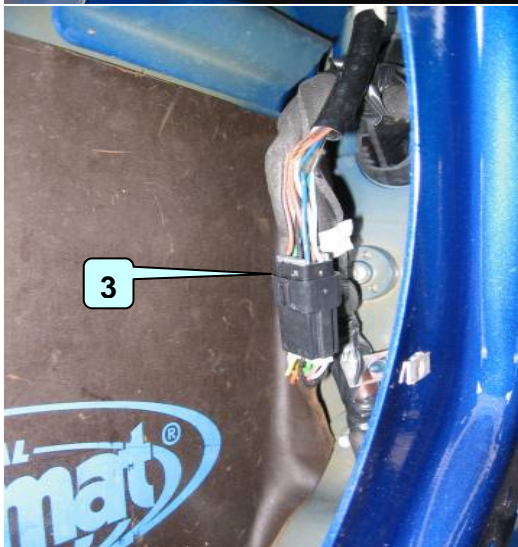
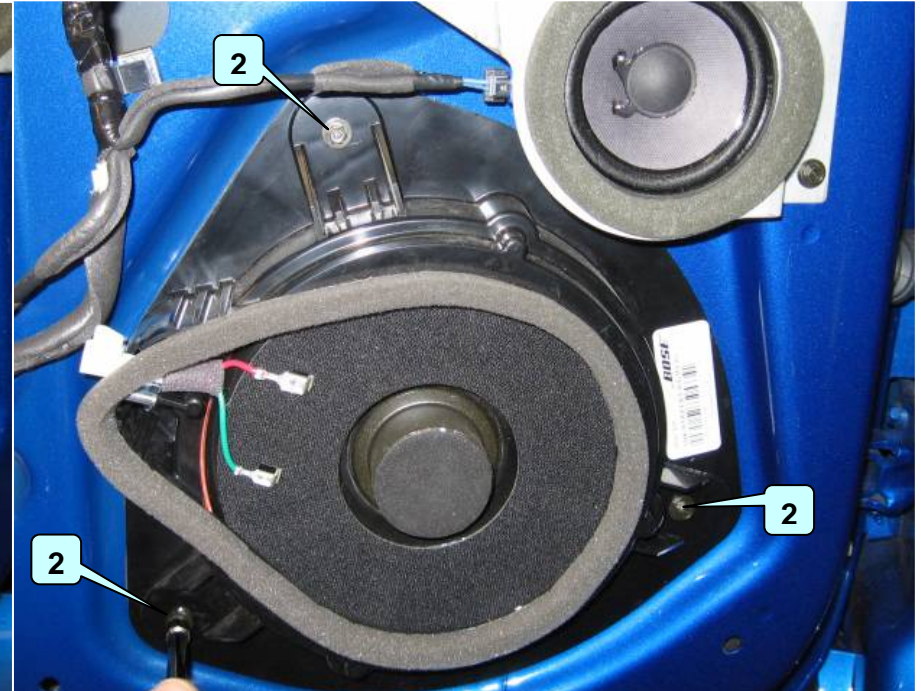
1. Start by opening the driver's side door, lowering the window and removing the lock knob.
2. Use a flat bladed plastic pry tool to remove the small black plastic cover behind door handle. A plastic spoon can be used. The blue arrows indicate retention points.
3. Use a 10mm socket to remove the bolt behind the door handle.
4. Remove the satin chrome trim from the door panel by pulling directly away from the panel. Start the removal from the front first.
5. Use a 10 mm socket to remove the two bolts that secure the panel to the door.



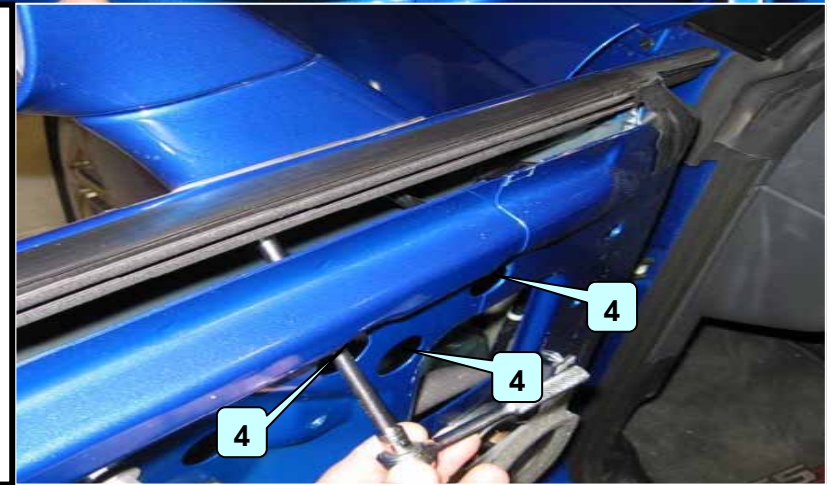
6. With a flat pry bar, starting from the hinge side of door frame, carefully pry around door panel until it disengages from the door frame.
7. Lift straight up to remove the panel and then disconnect the mirror control connector on the back of the door panel.



# Housing Removal

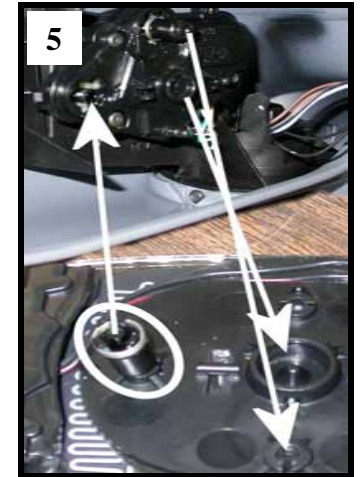
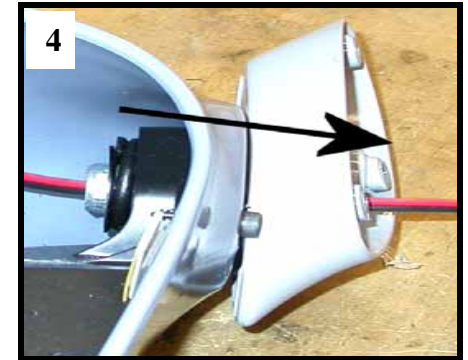
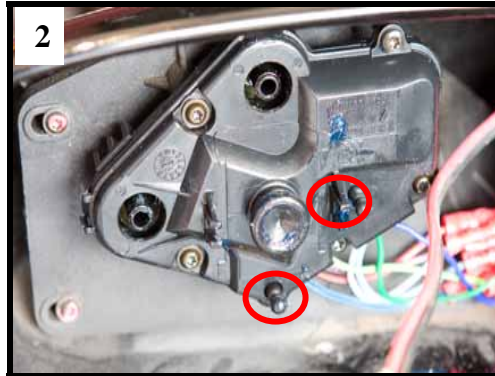


1. Disconnect the wiring connection from the large speaker.
2. Using a 7mm socket wrench, remove (3) screws and remove the large speaker from the door frame.
3. Disconnect the mirror wire harness from inside the door.
4. Remove the (3) nuts holding the mirror housing to the door frame by using a 10mm socket wrench. Remove mirror housing from door frame.



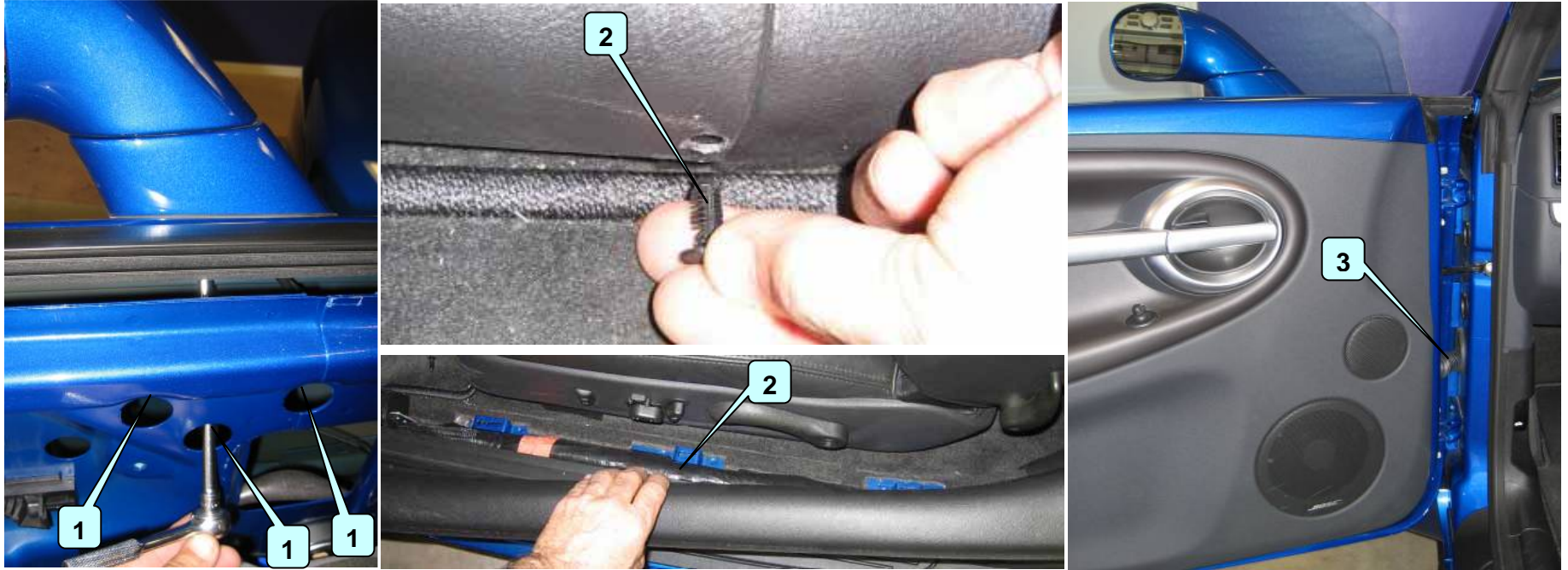
# Mirror Removal & Replacement

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



1. Push down on the lower inboard edge of glass until mirror pivots fully outward. Insert a large flathead screwdriver (pry bar) in between the motor mount and the motor actuator. Carefully pry and twist screwdriver until original mirror pops off. **If heated**, disconnect heater wires from heater terminals and remove mirror. **Note:** During the removal of the original mirror, if motor pins stay attached to the back plate, use "V" end in small pry bar or needle nose pliers to disengage pins from back plate.
2. **CAUTION FOR MEMORY MIRROR ONLY:** For sensory feedback to function, these memory pins must be fully engaged on the motor actuator. If these memory pins came loose during mirror removal process, please re-insert these pins back into their respective slot until they are fully engaged.
3. Carefully place one of the drive pins back into the upper socket on the motor actuator. Align the nub of the drive pin so it points to the round plug in the center of the mirror mount.
4. Using the shorter of the two harnesses from the wiring kit, guide the end without the mating connector into the mirror housing and out through the mirror mount. Pull the *Signal*<sup>®</sup> mirror wire harness thru housing sail leaving about 4" to 6" of the wire harness inside housing. Connect the mating connectors on the new *Signal*<sup>®</sup> mirror and the *Signal*<sup>®</sup> mirror wire harness. **If heated**, reconnect the heater wires to the heater terminals on the back of the new *Signal*<sup>®</sup> mirror. **NOTE:** There is no polarity so the wires may be interchanged. Carefully tuck all wiring behind motor actuator. **Not doing so, could result in wiring interfering with mirror travel.**
5. Place the other drive pin into the socket closest to the optic module on the motor mount. **CRITICAL:** Align the socket in the center of the *Signal*<sup>®</sup> mirror over the plug on the center of the motor actuator. Align all drive pins to their mating slots.
6. With the palm of your hand, slowly push down on the center of the glass until the new *Signal*<sup>®</sup> mirror snaps into position. Press down on the upper edge and outboard edge of the *Signal*<sup>®</sup> mirror to engage both drive pins in their socket. Press down on all sides to ensure the new *Signal*<sup>®</sup> mirror is fully seated and functional. **WARNING:** Improper installation of the new *Signal*<sup>®</sup> mirror could result in mirror falling off.

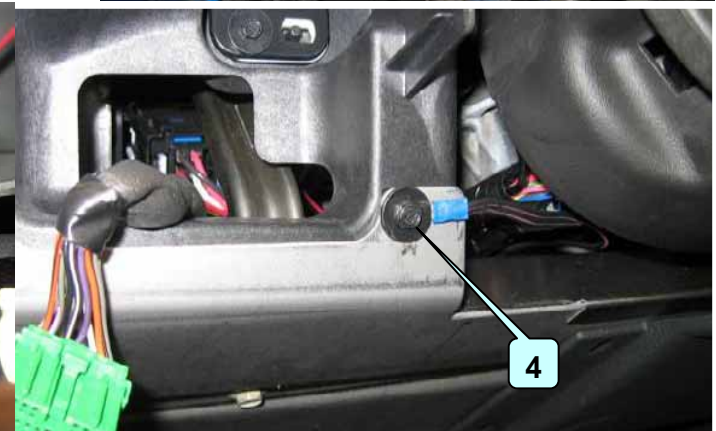
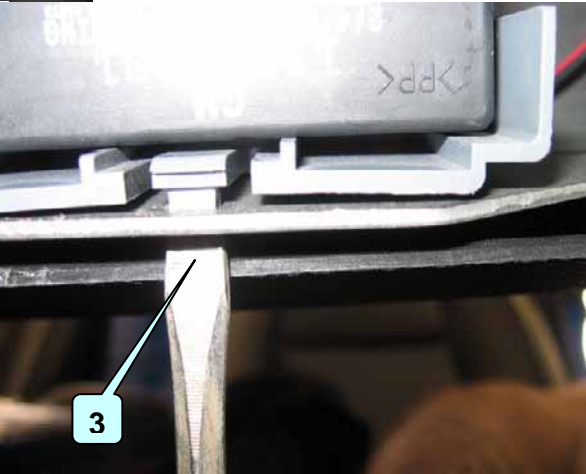
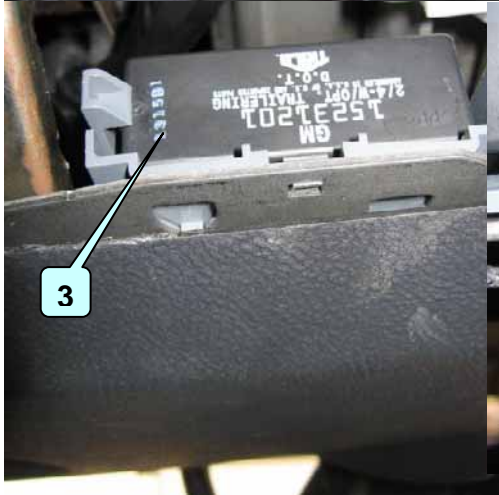
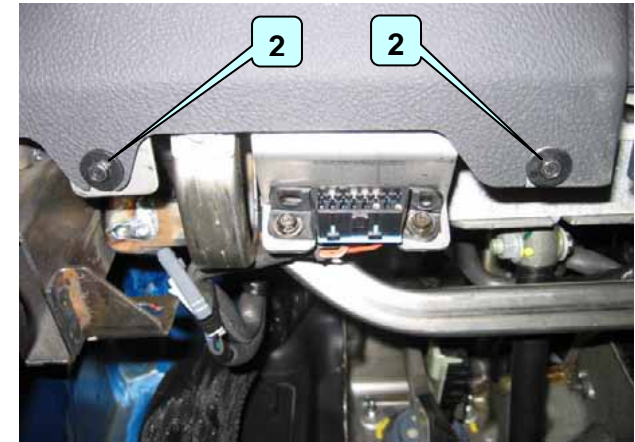
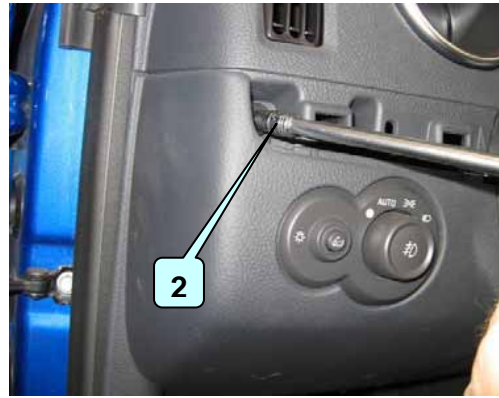
# Wire Routing



1. Guide the wire harnesses through the opening 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.** Re-route the original mirror wire harness and reconnect the electrical plug at the bottom of the door panel.
2. Remove the push pin at the door sill joint, lift out the sill cover and then remove the kick panel. Push in and pull out the two ends of the rubber boot between door frame and vehicle frame.
3. Route the *Signal*<sup>®</sup> mirror wire harness inside the door frame (following the mirror harness) through rubber boot and into vehicle. Gently pull on the *Signal*<sup>®</sup> mirror wire harness to remove any slack during wire routing. **WARNING! When routing wire into vehicle, it is extremely important to not let wire get pinched or crushed at any time. Avoid window track and sharp edges at all times. Failure to do so may cause circuit shortage problems down the road.** Replace rubber boot.

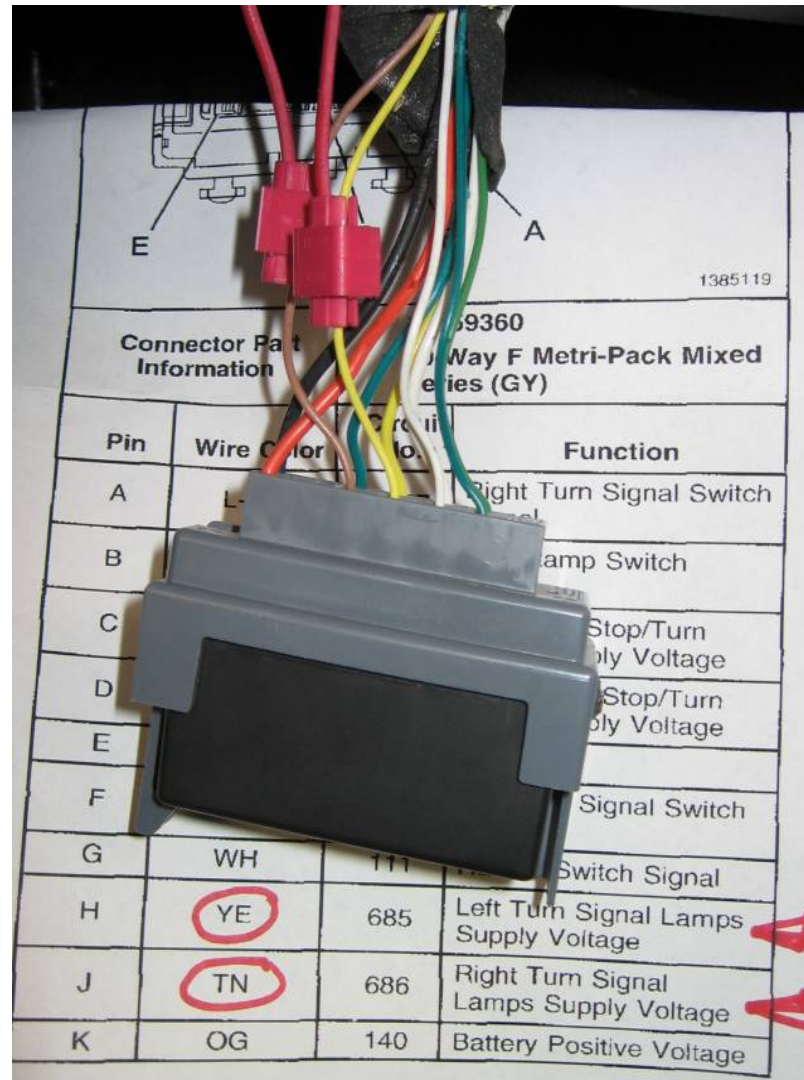
\*\*\* Repeat all of the previous steps to replace the factory mirror on the passenger side door with the new *Signal*<sup>®</sup> mirror.

## Wire Routing Continued



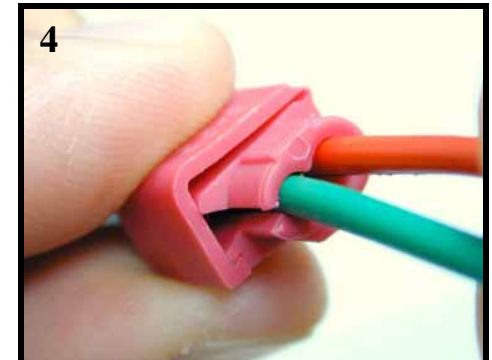
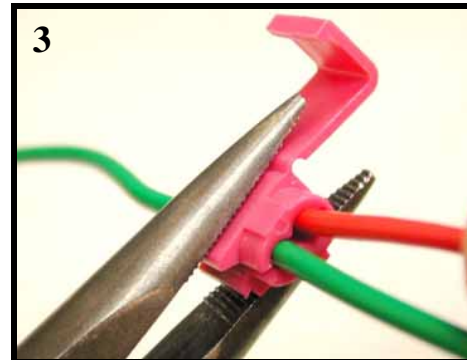
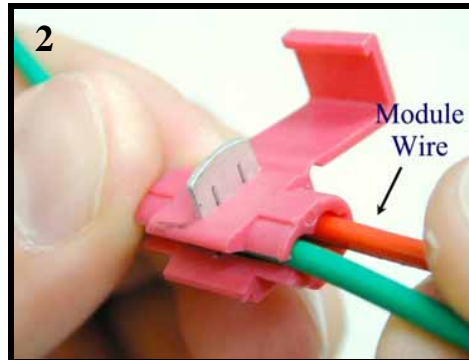
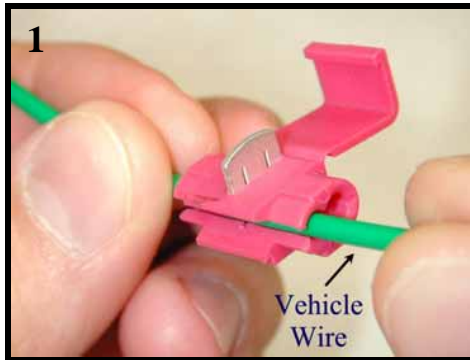
1. Remove the left dash trim piece by prying out with a flat bladed plastic pry tool (a plastic spoon will do).
2. Remove the three screws that hold the lower left knee bolster, pull away from dash and disconnect light switch assembly.
3. Remove the turn indicator flasher assembly from the metal brace that is directly above the driver's right knee. This is accomplished by pushing up on the center release tab and sliding the plastic assembly forward and down.
4. Route the *Signal*® mirror wiring from both mirrors to the vicinity of the flasher unit. Route and tie appropriately to prevent dangling, chafing or pinching any wires. Join the black wires together, crimp on a blue ring terminal and attach under the indicated mounting screw for a good ground connection.

# Wire Identification



1. Peel back the insulating wrap on the wiring harness at the turn indicator flasher unit. Locate the YELLOW wire within the wire bundle. Turn the ignition key so that electrical power is on and activate the left turn indicator. Probe the wire in the connector with the wire tester to verify that flashing turn directional power is present. Label that wire as 'DRIVER SIDE INDICATOR'. Locate the TAN wire and activate the right turn indicator. Probe the wire in the connector with the wire tester to verify that flashing turn directional power is present. Label that wire as 'PASSENGER SIDE INDICATOR'.

# Wire Splicing Procedures



**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 RED wire from the driver side harness into the wire previously labeled 'DRIVER SIDE INDICATOR'.
- C. Splice the RED wire from the passenger side harness into the wire previously labeled 'PASSENGER SIDE INDICATOR'.
- D. Activate each turn indicator to verify that the *Signal*<sup>®</sup> 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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