



# *Signal*® Mirror Installation Instructions

Lincoln Town Car 1998-2010



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

P/N 210-0045-0

Rev C8 (10/6/09), BTV

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### PROFESSIONAL INSTALLATION RECOMMENDED

Warranty does not cover damage to the vehicle or mirror housing due to improper installation. Muth Mirror Systems, LLC (MMS) assumes no responsibility with regard to the accuracy of this information. MMS assumes no liability or responsibility resulting from improper installation, even in reliance upon this information. Proper installation is the responsibility of the installer. It is your responsibility to verify any circuit before interfacing with it using a digital multimeter.

### 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  
5mm socket  
8mm socket  
Medium Philips screwdriver  
T27 torx screwdriver  
Gopher wire  
Wire crimper and stripper  
Masking tape  
Multimeter  
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](http://www.muthco.com)

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



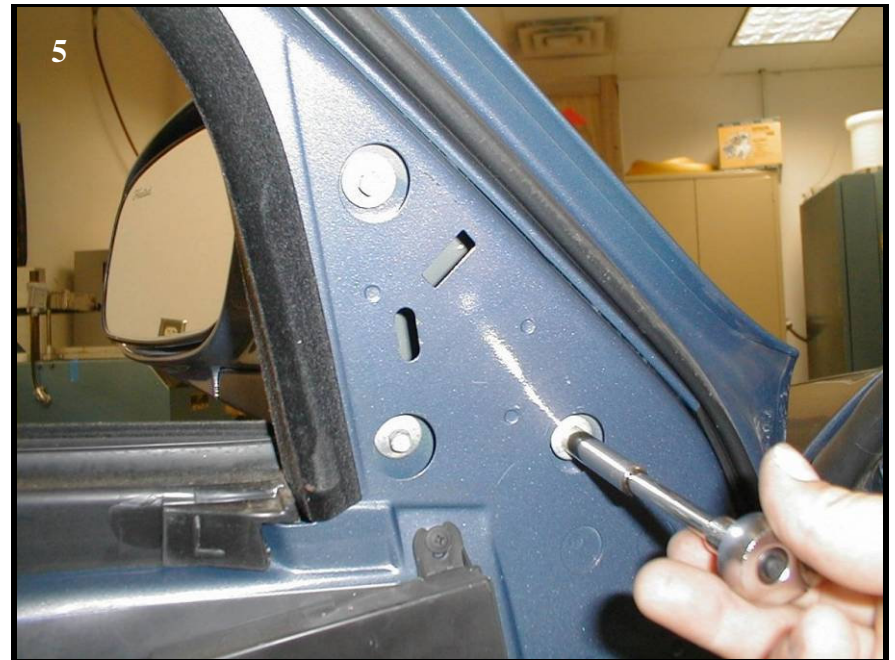
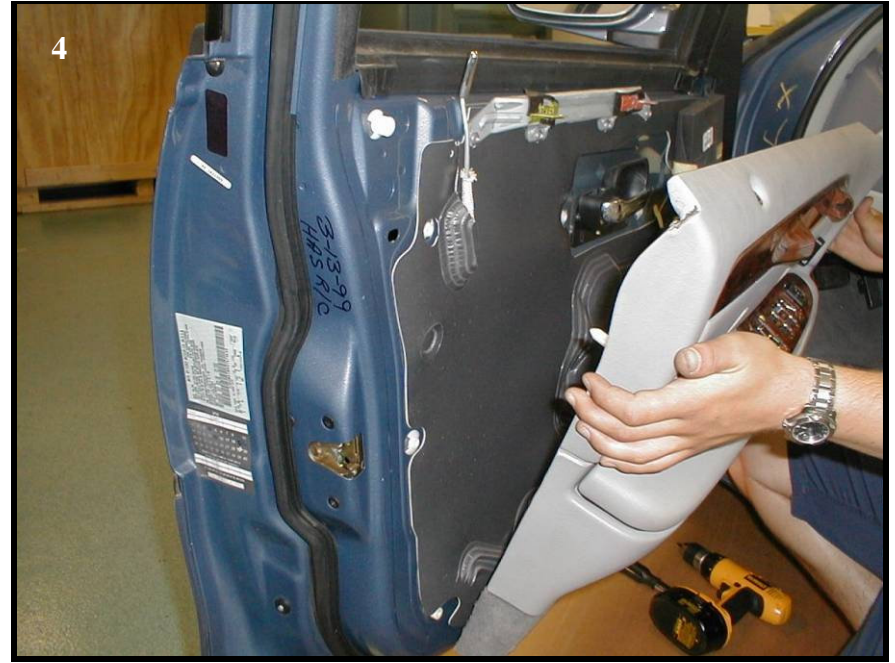
# Mirror Housing Removal



1. Open the driver side door and lower the window.
2. Remove plastic cover on grab bar and remove (2) Phillips screws on the grab bar. Remove plastic cover in door lever. Using a T-15 torx wrench, remove the torx screw in door lever.
3. Locate the (3) Phillips screws along the bottom half of the door panel. Using a Phillips screwdriver, remove the (3) screws to loosen the door panel.



4. Remove the door panel, kick panel, and plastic trim piece along the bottom of the door frame. Disconnect and remove the speaker from the door. Disconnect the mirror wire harness.
5. Remove the three mirror mounting nuts and remove the mirror housing from the vehicle.

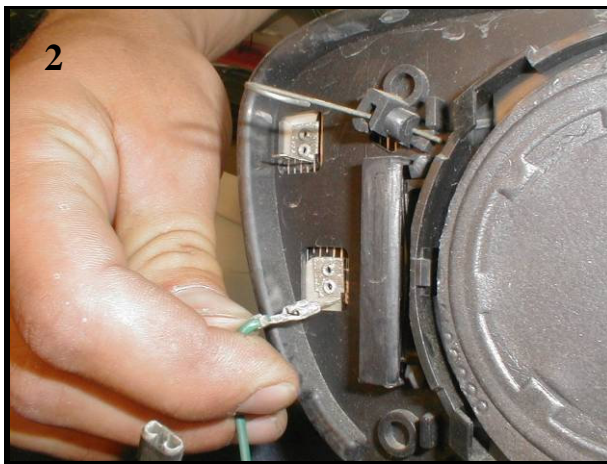




# Mirror Replacement



Lay the mirror housing on a cloth covered, flat surface. Push on the top edge of the mirror to manually pivot it fully outward. Insert a large flathead screwdriver between the glass backing plate and mirror motor. Once slightly dislodged, give the screwdriver a 1/4 turn with the wrist to completely disengage original mirror. Lift up backing plate and disconnect heater connections if heated. Remove OE mirror from mirror housing.



Disconnect the heater wires from the back of the mirror and remove the mirror from the mirror housing.



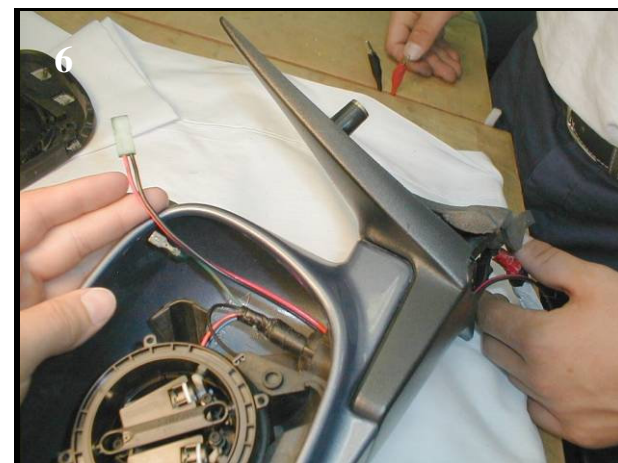
Remove the foam disc from the back of the mirror mount.



Remove the foam insulation from the mirror housing sail.



Guide a piece of gopher wire through the mirror mount. Start on the inside of the mirror housing and go out through the base of the mirror sail. Using the shorter of the two harnesses from the kit, attach the end without the mating connector to the gopher wire.



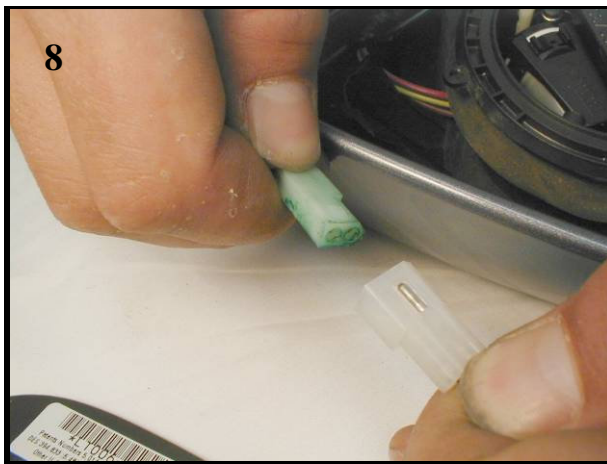
Pull the wire harness through the mirror mount and out through the bottom of the mirror sail. Leave about six inches of wire in the mirror housing.



## Mirror Replacement Continued



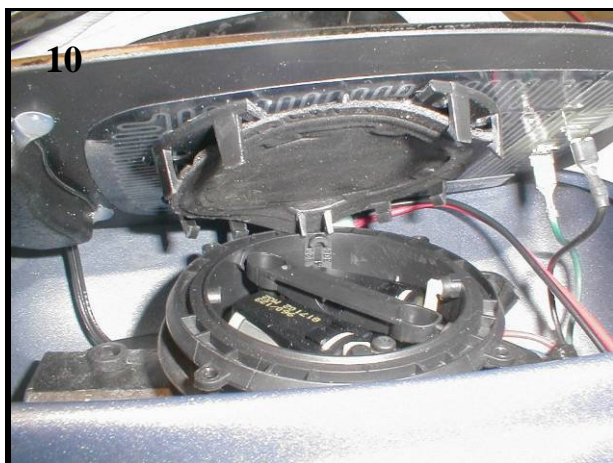
Lay the new *Signal*® mirror on a clean, flat surface. Position the foam disc on the back of the mirror mount. Cut slots in the foam to fit around the anti-rotation prongs.



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



Reconnect the heater terminals to the heater posts on the back of the *Signal*® mirror. NOTE: There is no polarity with the heater wires, so they may be interchanged.



Tuck the wire harness toward the back of the mirror housing. Center the *Signal*® mirror over the motor mount. Lay the bottom of the *Signal*® mirror into the mirror housing.



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

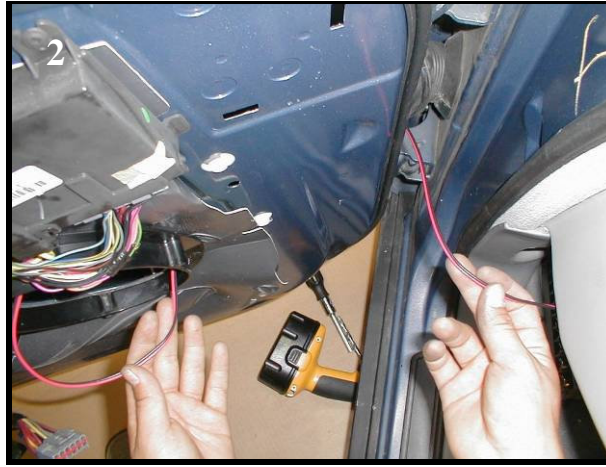


Press down on all sides of the *Signal*® mirror to ensure proper operation.

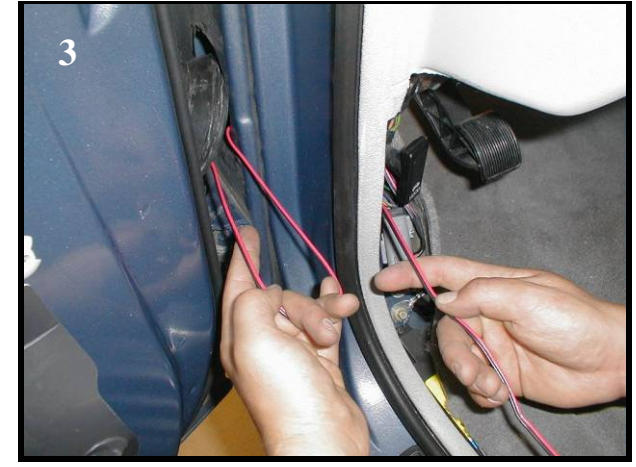
# Wiring



Remove the rubber boot from between the door and door frame.



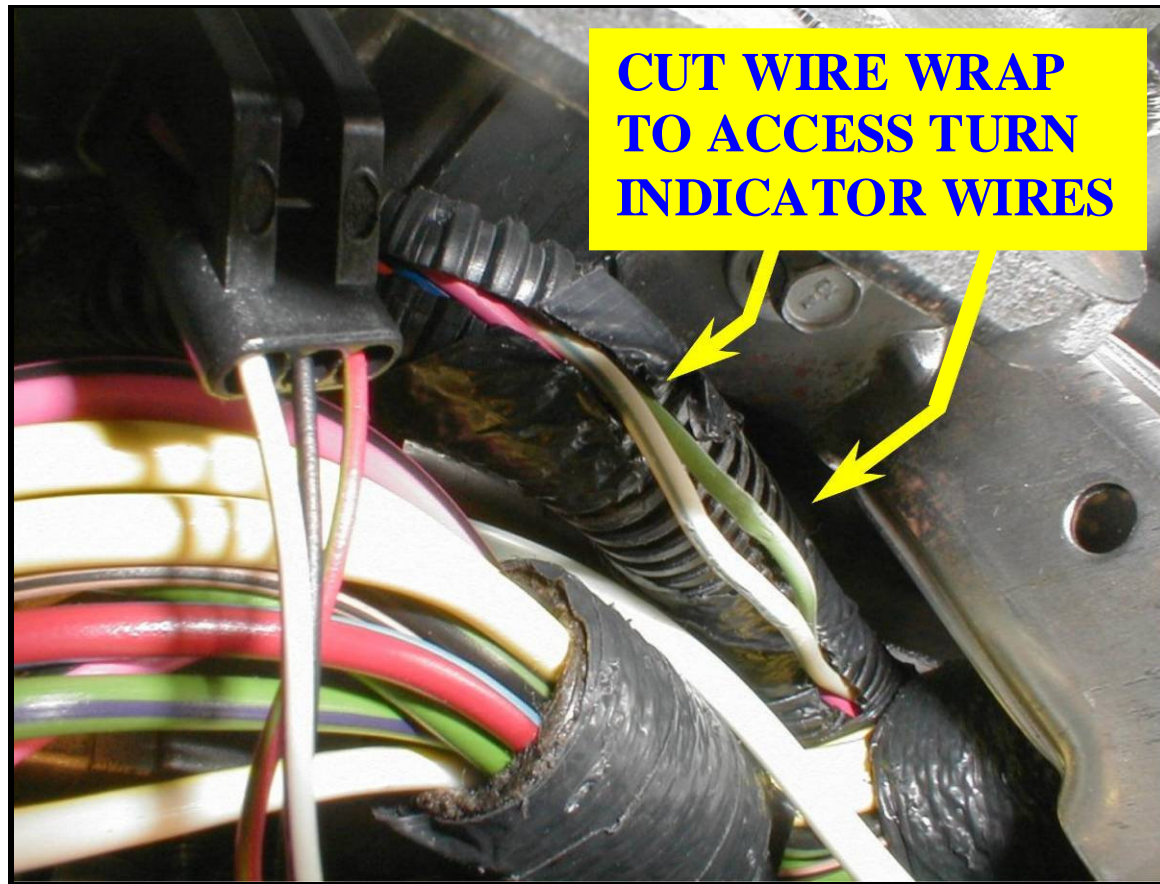
Secure the mirror housing to the mirror mount with the mounting nuts. Reconnect the factory wire harness. Pass the *Signal*<sup>®</sup> mirror wire harness down into the door and through the hole vacated by the rubber boot. Remove any slack in the wire.



Guide the *Signal*<sup>®</sup> mirror wire harness through the rubber boot and into the vehicle by going through the door frame. Remove any slack in the wire and replace the rubber boot.



## Wire Identification

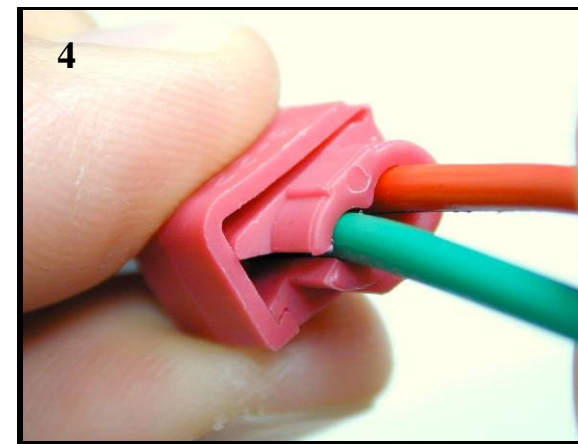
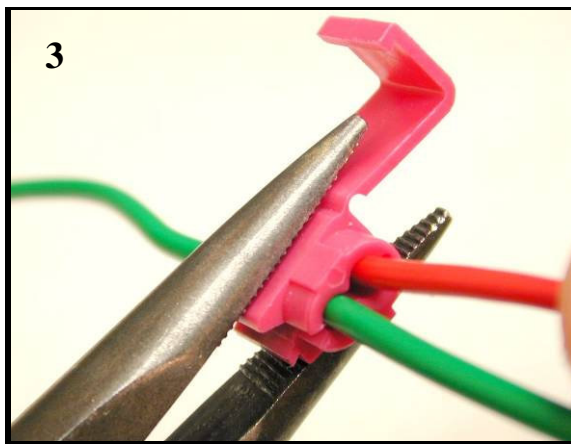
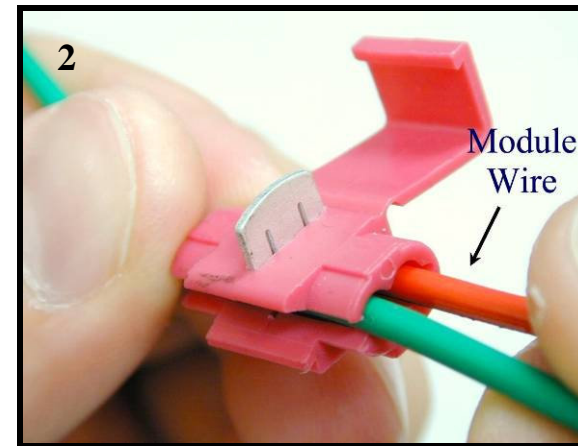
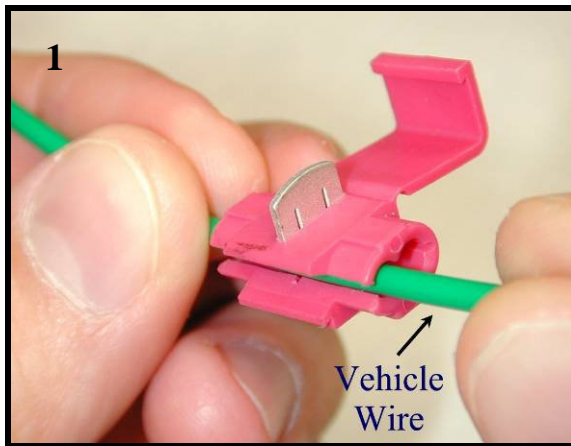


1. Repeat all of the previous steps to replace the factory mirror on the passenger side door with the new *Signal*<sup>®</sup> mirror.

**NOTE:** The vehicle's electrical wiring for the driver side mirror and passenger side mirror is located underneath the dash in a bundle of wires and covered in a wire wrap. You will need to cut the wire wrap open to access the turn indicator wires.

2. Guide the new wire harnesses from both sides of the vehicle to the electrical wiring. Locate the LIGHT GREEN w/ WHITE 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'.
3. Locate the WHITE w/ LIGHT BLUE 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'.





**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 to the wire bundle and enough slack is left for splicing.
2. Splice the BLACK w/ RED TRACE wire from the driver side harness into the light green with white stripe wire previously labeled 'driver side turn'.
3. Splice the BLACK w/ RED TRACE wire from the passenger side harness into the white with light blue stripe wire previously labeled 'passenger side turn'.
4. 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.
5. Activate each turn indicator to verify that the *Signal*® mirrors are working.
6. Replace both door panels, door accessories, insulation, plastic moldings, and trim pieces.

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

3,075,779	5,005,009	5,014,167	5,128,659	5,207,492	5,355,284	5,361,190	5,481,409	5,528,422	5,619,374	5,619,375
5,788,357	6,005,724	6,045,243	6,076,948	6,257,746	6,700,123	6,749,325	6,918,685	7,008,091	7,015,642	7,104,676
D394,833	D409,540	D425,466	D426,506	D426,507	D427,128	D428,372	D428,373	D428,842	D429,202	D430,088