



## *H-MOD (Heated Mirrors on Demand) Installation*

### *Heater Upgrade Kit*

Upgrade a vehicle with unheated mirrors to heated *Signal<sup>®</sup> Mirrors!*

*To be used with new *Signal<sup>®</sup> Mirror* installations only.*



For use with *Signal<sup>®</sup> mirrors*

***THE safety accessory of the 21<sup>st</sup> Century.*** <sup>TM</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 general guide only. Door removal procedures and wiring location may differ depending on vehicle's make, model, and year. The installer is responsible for any damage that may occur during installation.**

### **INCLUDED ITEMS:**

1 heated mirror conversion kit  
1 left and (1) right heater wire harness  
1 t-tap  
1 toggle switch  
1 male quick connect  
4 2.8mm female terminals  
4 4.8mm female terminals  
1 installation instruction manual  
4 cable ties  
4 foam pads  
**(For CK Heated Kits – (4) additional butt-splices will be needed (not supplied with kit)).**

### **REQUIRED TOOLS:**

Ratchet with extension or ratcheting screwdriver  
10mm socket  
Socket wrench  
Large slotted screwdriver  
Small pry bar  
Gopher wire  
Hole punch  
1/8" drill bit  
3/4" drill bit or 3/4" hole saw  
Electric/cordless drill  
Electrical tape  
Wire crimper and stripper  
Needle nose pliers  
Multimeter or wire tester  
Sturdy gloves  
Safety glasses or goggles  
Vehicle's Schematic  
Marker or felt-tip pen

**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

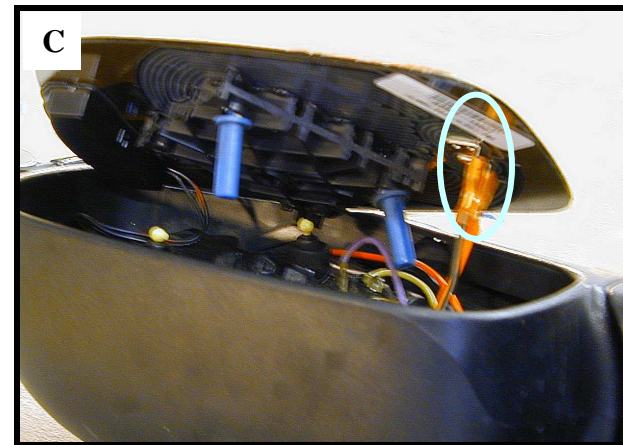
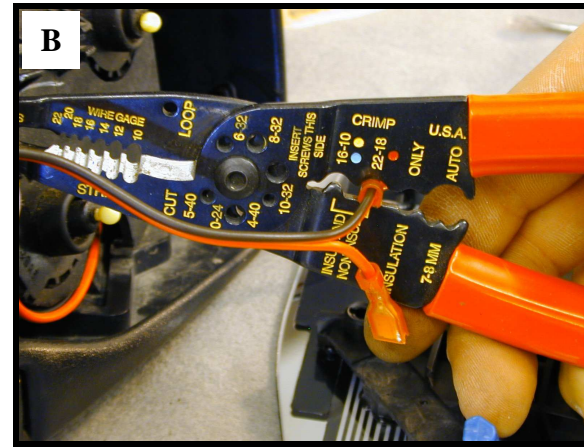
Or through the Muth web site:

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

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

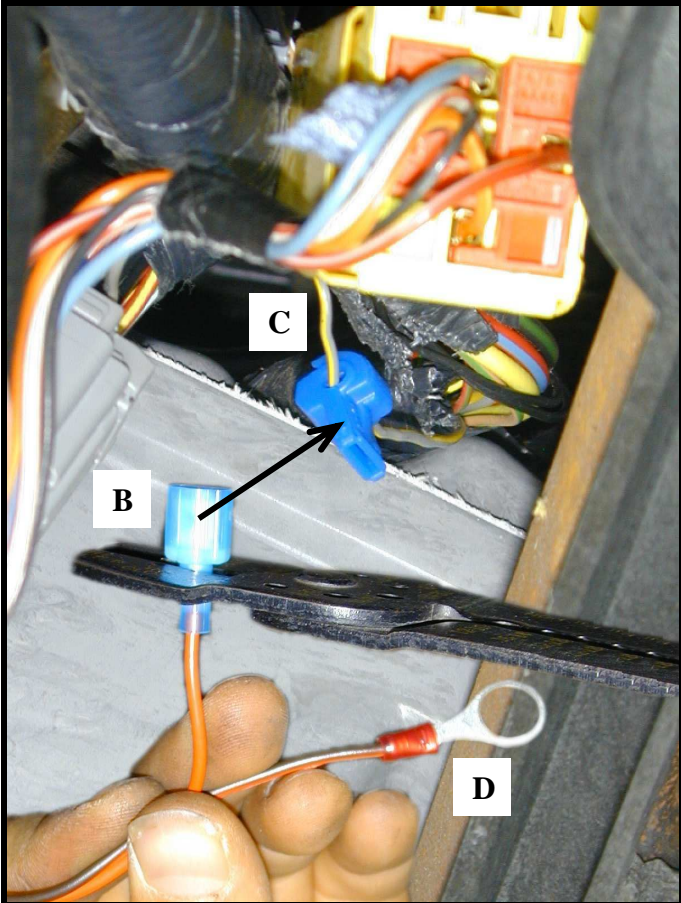
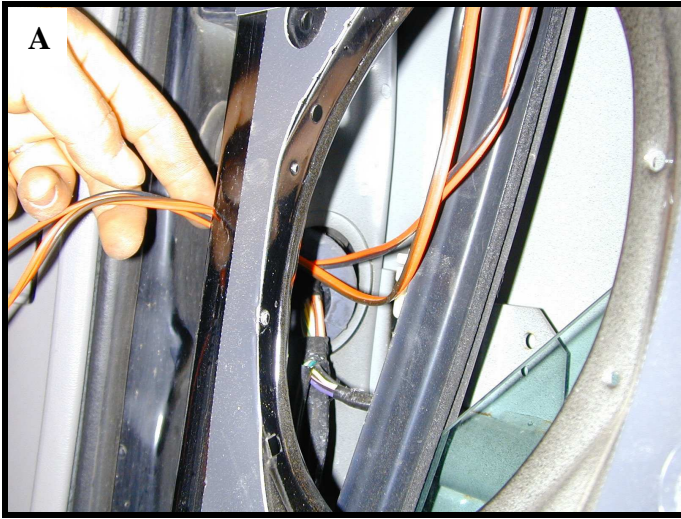
**\*\*For CK (Kit #220-0235-0/H) Signal<sup>®</sup> mirror with Heated Mirror Conversion Kit skip to page 4.\*\***

# General Signal® mirror with H-MOD (excluding kit #220-0235-0/H see page 4 for this kit)



1. Start with opening the driver's side door and lowering the window (A).
2. Remove door panel and mirror housing from vehicle – see *Signal*® mirror installation instruction.
3. Take the shorter of the two heater wire harnesses - route the heater wire, along with OE and *Signal*® mirror wire harnesses, from inside mirror housing, leaving about 6" of slack within mirror housing.
4. Separate the heater wires to about 1" to 2". Remove the partial strip wire insulation and attach a supplied female terminal connector to each wire. Crimp the connectors into place as shown. (B)
5. Attach the newly crimped terminal connectors to the heater terminals on the back of the *Signal*® mirror. **Note: There is no polarity on the (2) heater terminals, so it does not matter which terminal is connected to the red or black wire from the heater wire harness.** Make sure all wiring connections are secure and connected. Carefully tuck all wires into the back of mirror housing to avoid any interference with mirror travel. Align mirror mount with mirror housing actuator. With a glove hand, gently push down on the center until motor mount snaps into place – see *Signal*® mirror installation instruction on mirror replacement. (C)

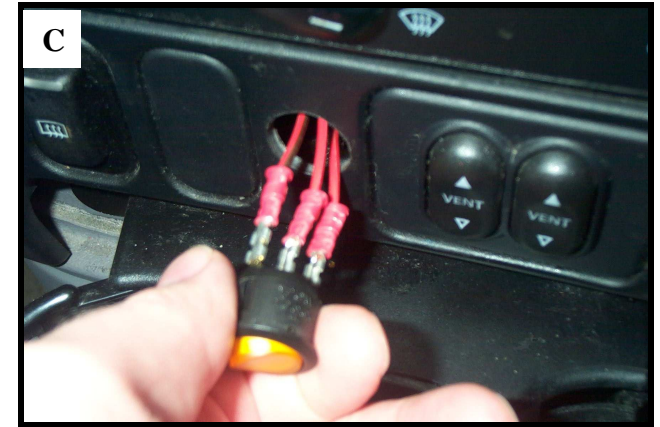
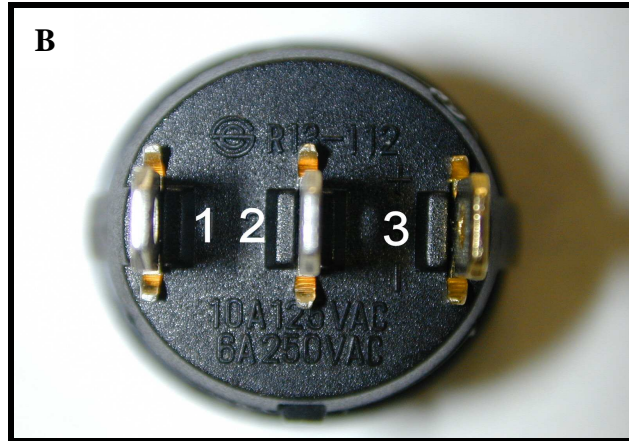
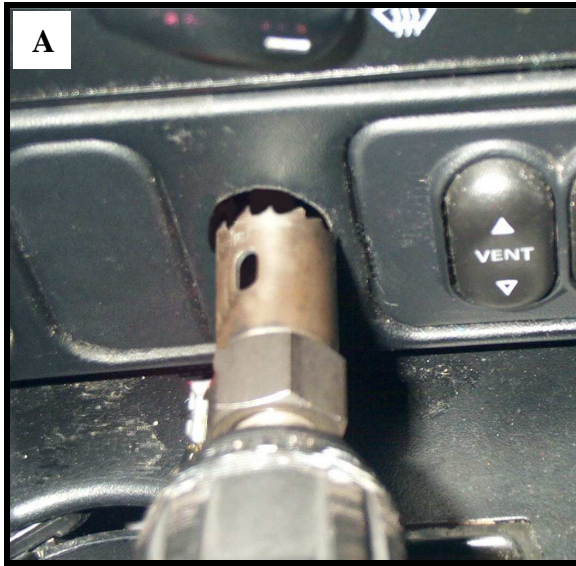
## Wiring Routing



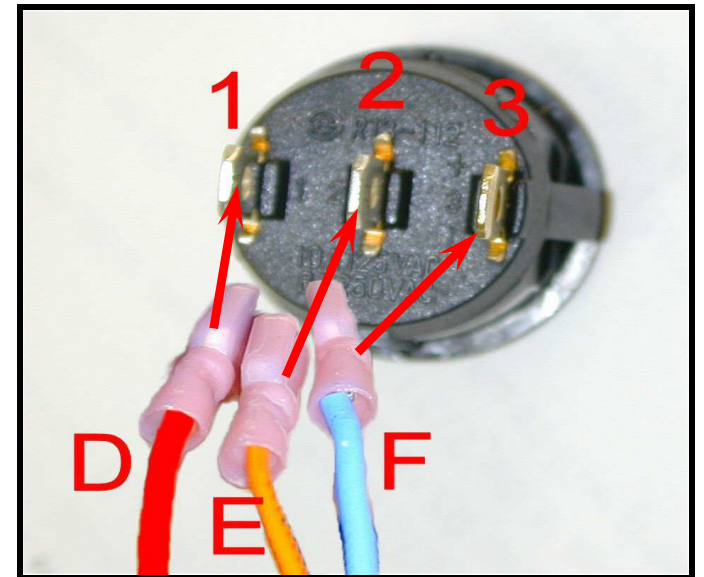
6. Attach mirror housing to vehicle (see *Signal*® mirror installation instruction for details).
7. Route heater wire harness along with *Signal*® mirror wire harness, through door frame and rubber boot, into vehicle (A). For specifics on wire routing pertaining to your vehicle model, please refer to *Signal*® mirror installation instruction. Wiring location for H-Mod is located close to the steering column. Route the heater wire to the driver side knee plate area.
8. Repeat all steps for the passenger side H-Mod and *Signal*® mirror.
9. Attach a supplied quick connector (male) to the power wire coming from the H-Mod (B).
10. T-tap vehicle's ACC wire (C). **NOTE: Wiring schematic may be needed to locate ACC wire.** To gain access to the vehicle's ACC wire, you may need to remove knee plate and dash board.
11. Attach the power wire from the H-Mod (B) to the T-tap on the vehicle's ACC wire (C).
12. Split and ground the grounding ring (D) to a suitable grounding source.

**NOTE:** The cable ties and the foam pads are supplied for your usage while routing wires. If you find areas where there are potential for wires to rattle, wrap the foam pads around the wires. Using the supplied cable ties, secure the foam padded wires to a suitable place.

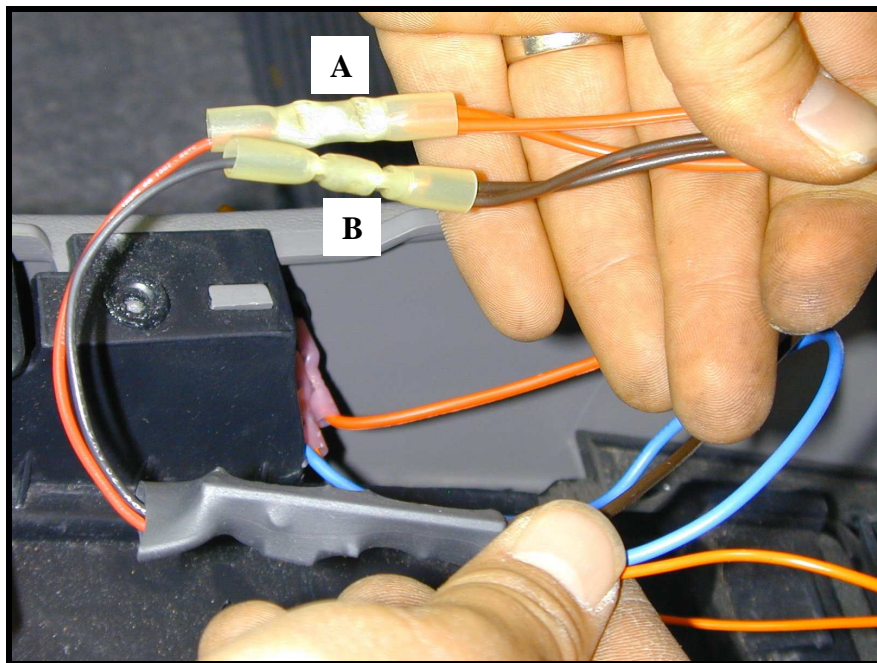
## Wiring and Switch Mounting



13. Find a suitable place to mount the supplied heater switch. Mark the center with a hole punch.
14. Using a drill and a 1/8" drill bit, pre-drill the hole through. **Caution: Before drilling, make sure there are no metal plates behind plastic trim/panel where the drilling will occur.** Drill through the second time using a 3/4" drilling bit or 3/4" hole saw (A).
15. Turn the supplied switch over until you are looking at the (3) terminals (B), label the terminals as shown. Route the RED WIRE (from fuse holder), ORANGE WIRE (from circuit board), and BLUE WIRE (from circuit board) thru the newly drilled hole (C).
16. Connect the RED WIRE (D) coming from the fuse holder to terminal 1. The ORANGE WIRE (E) coming from the circuit board should be connected to terminal 2. Connect the BLUE WIRE (F) coming from the circuit board to terminal 3.



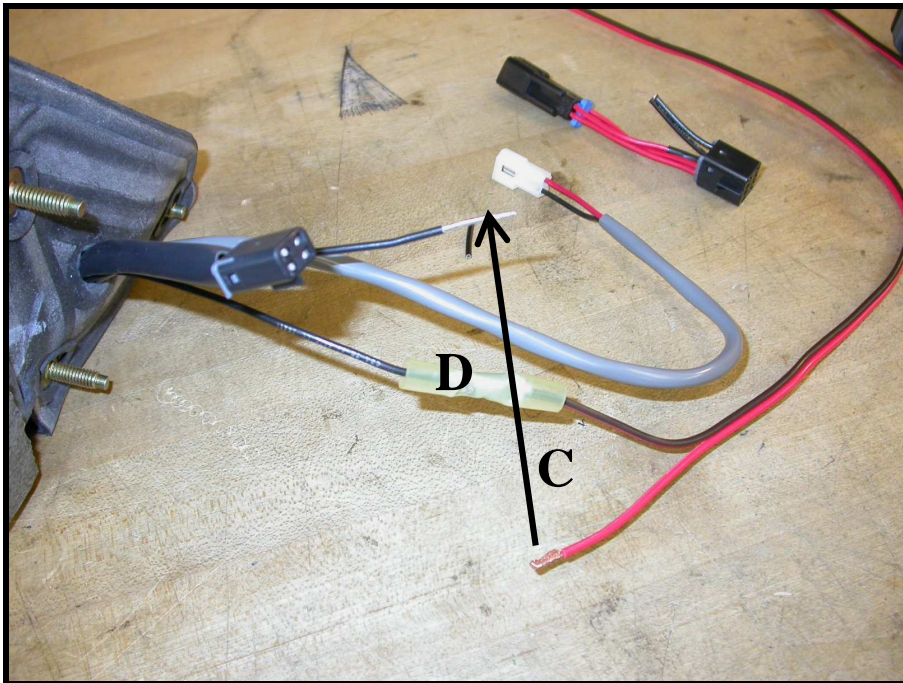
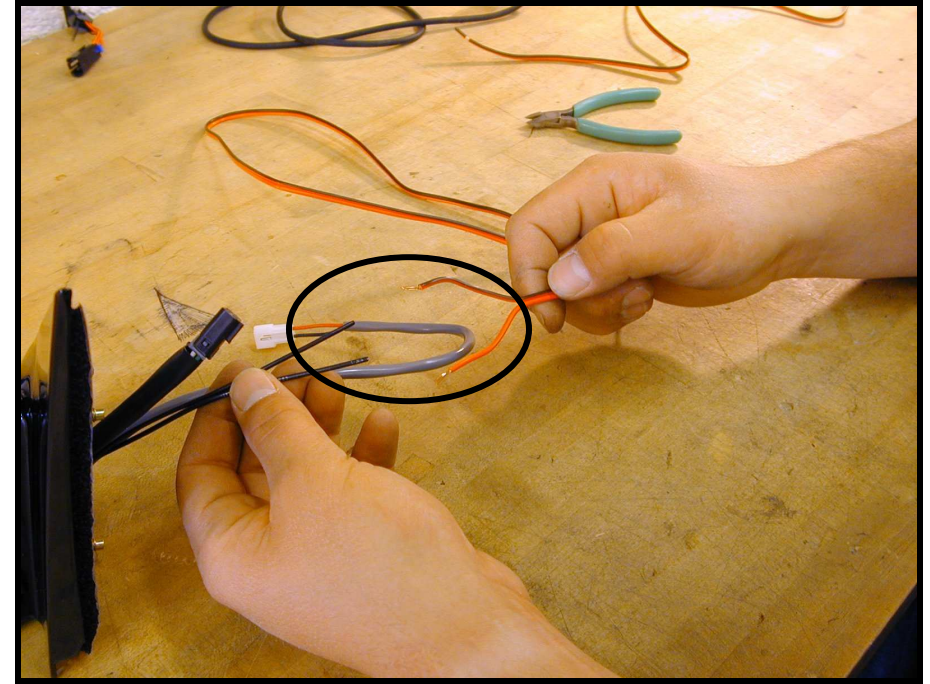
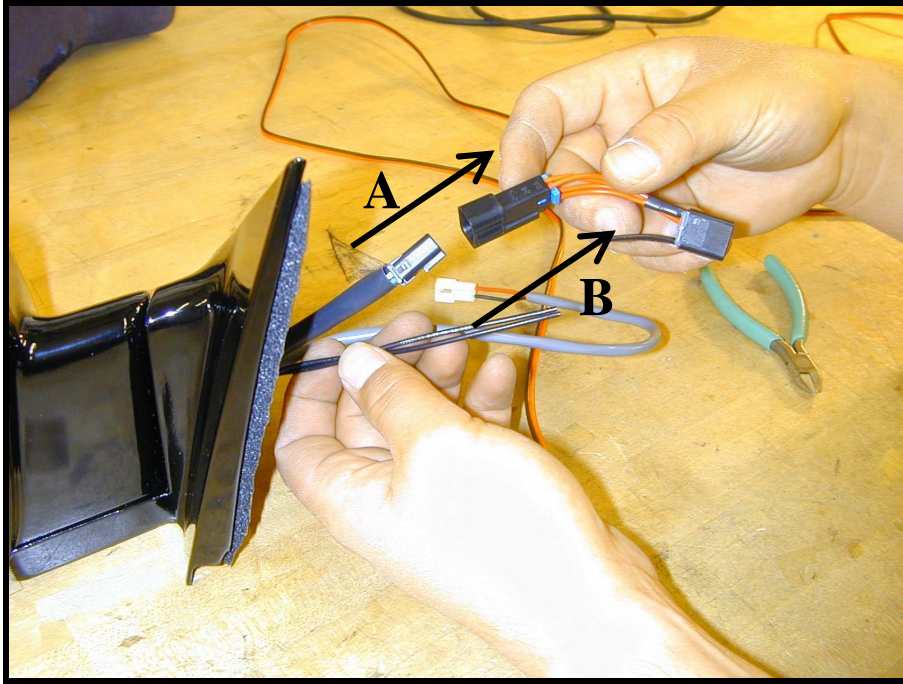
## Wiring Continued



17. Route both side heater wire harnesses to the H-Mod circuit board area. Cut to length and split the red and black wire up to about 2"-3". Strip about 1/4"-3/8" off of each wire coming from both heater wire harnesses. Twist together the (2) red wires coming from each of the heater wire harnesses. Do the same to the (2) black wires coming from each of the heater wire harnesses. Butt-splice the (2) red wires coming from heater wire harnesses to the red wire coming off of the H-Mod circuit board (A). Butt-splice the black wire coming off of the H-Mod circuit board to the (2) black wires coming from the heater wire harnesses (B). To test the functionality of the H-Mod, put the key in the ignition and turn the car on. Flip the control switch to "on" position. After a few minutes, put the back of your hand against one of the side-view mirrors. You should feel the mirror getting warmed up. **CAUTION: Examine the control switch when turning it "ON". If the control switch is dimly lit or hardly lit at all, the connections behind the control switch may be reversed. Reconnect the connections by following the diagram in step 16.** The control switch should stay lit for 10 minutes each time you turn it on. If you leave the control switch in the "ON" position, the switch will flash after 10 minutes and the heaters will shut off. An additional 10-minute cycle can be achieved by turning the switch 'OFF' and back 'ON' again.
18. Once the H-Mod is fully functional, replace the plastic door frame moldings and trim, door panels, and all accessories.

**\*Special note:** If you would like to use a different switch color (only amber is included with this kit – (C)), Del City carries the switch that we use under part number 7500037. You could go to their web site, [www.delcity.net](http://www.delcity.net), and do a search for this part number. You will find other colors available for purchase. **Be sure to use a switch that has identical specifications. Failure to do so may damage your vehicle and void your warranty.\***

# For CK (Kit #220-0235-0/H) Signal® Mirror with H-MOD



- 1) Open the driver side door and lower window. Remove door panel and OE mirror housing from vehicle – see *Signal®* mirror installation instruction for door panel and mirror housing removal.
- 2) Disconnect the 4-pin to 8-pin connector on the new *Signal®* mirror (A). Cut the (2) black wires as shown (B).
- 3) Driver side – Locate the shorter of the two included wire harnesses, split/separate the two wires up about 2” - 3”. Strip about 1” off on all four wires (two black wires coming from mirror housing, the red and black wires from the heater harness.) Twist and fold the stripped end of each wire in half.
- 4) Butt-splice the red wire from the heater harness to one of the black wires coming from the mirror housing (C). Do the same with the black wire from the heater harness and the other black wire from the mirror housing (D). **Note: There is no polarity on the (2) black wires coming from the mirror housing, so it does not matter which wire is connected to the red or black wire from the heater harness.**

**\*\*\*Continue on with step #6 on bottom half of page 2\*\*\***

