

# Signal® Mirror Installation Instructions

2005 - 2009 Honda Odyssey





# THE safety accessory of the 21st Century. TM

P/N 210-0122-0

Rev. A4 (6/9/09), 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® mirror

1-left and 1-right wire harness

2-wire t-taps

2-ring connectors

4-rubber grommets

2-light blue quick connectors

1-3 ft. installation tube

1-instruction manual

#### **REQUIRED TOOLS:**

Ratchet with extension or ratcheting screwdriver

8 mm socket

10 mm socket

Socket wrench

Large slotted screwdriver

Small slotted screwdriver

Large Phillips screwdriver

Small Phillips screwdriver

Small pry bar (plastic)

Gopher rod (wire)

Electrical tape

Wire crimper and stripper

Needle nose pliers

Multimeter or wire tester

Sturdy gloves

Safety glasses or goggles

Utility knife

Portable (electric) drill

1/4" drill bit

1/2" drill bit



### **Door Panel Removal**















- 1) Start with opening the driver's side door and lowering the window.
- 2) Pry triangular plastic cover loose with a plastic pry bar.
- 3) Using a small slotted screw driver, slowly pry plastic cover to reveal screw. Remove screw with a Phillips screwdriver.
- 4) Repeat step-2 in location shown.
- 5) Using a plastic pry bar, carefully pop loose the control panel. Disconnect all wiring behind control panel and remove it.
- 6) Remove screw revealed by the removal of the control panel.
- 7) Unsnap around door panel until panel is loose. Lift up and slowly pull door panel out partially. Release the door handle rod. Reach behind and disconnect all wiring harnesses. Remove door panel and set it aside.

## Mirror Housing Removal



1) 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 10 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.

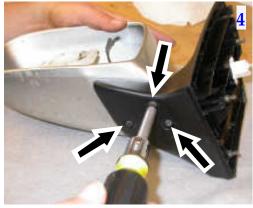
### Mirror Replacement

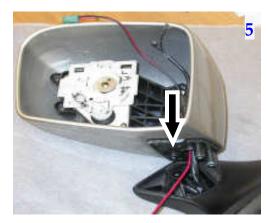
WARNING: Safety glasses and sturdy gloves are required for mirror replacement.













- Push down on the top 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. <u>If heated</u>, disconnect heater wires from heater terminals and remove mirror.
- 2) Remove the foam insulation on the housing sail.
- 3) Remove the screw securing the wire connector to the housing sail. Carefully remove the wire connector to gain access to the wire routing hole in the mirror sail.
- 4) Unscrew the (3) screws holding the sail to the housing and remove sail.
- 5) Using the shorter of the two wiring harnesses, route the end without the connector from inside mirror housing down and out the bottom of the housing. Gently pull the wire thru leaving about 4" to 6" of slack inside housing for connection purposes.
- 6) Connect the mating connectors on the new <code>Signal®</code> mirror and the <code>Signal®</code> mirror wire harness. Using electrical tape, secure the two connectors together to prevent future disconnection. <code>If heated</code>, reconnect the heater wires to the heater terminals on the back of the new <code>Signal®</code> mirror. <code>NOTE</code>: There is no polarity so the wires may be interchanged.

### Mirror Replacement Continued

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









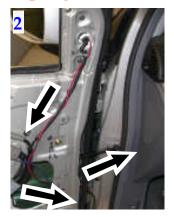
- 7) Carefully tuck all wiring behind motor actuator. Not doing so, could result in wiring interfering with mirror travel.

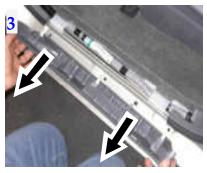
  Align and insert the two hinges into their respective slots. Pivot the new Signal® mirror down on the motor actuator. Push down on the lower half of the mirror with your thumbs until mirror snaps into place. Press down on all sides to ensure the new Signal® mirror is fully seated and functional. WARNING: Improper installation of the new Signal® mirror could result in mirror falling off.
- 8) Following original wire harness, guide the *Signal*® mirror wire harness thru the housing sail and foam insulation.
- 9) Replace the housing sail, wire connector, and foam insulation. <u>WARNING</u>: When assembling sail to the mirror housing, it is extremely important to not let wires get pinched or crushed at any time. Avoid all sharp edges at all times. Not doing so may cause circuit shortage problems in the long run.
- 10) 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. <a href="WARNING!">WARNING!</a> Do not over tighten the mirror mounting nuts. Reconnect the original mirror harness.

## Wire Routing

<u>WARNING:</u> 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.













<u>TIP</u>: 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. Drill a 1/4" pilot hole below the rubber boot on the door frame side. Repeat drilling a 1/2" access hole. <u>CAUTION</u>: When drilling, take care not to drill into the wire harnesses behind door frame. Apply one of the included rubber grommets to the drilled access hole.
- 2) Pull back the protective sheet, route the *Signal®* mirror wire harness alongside original wire harnesses, into the door frame and out the drilled access hole. Carefully pull to remove any slack in the *Signal®* mirror wire harness. Cable tie or tape the *Signal®* mirror wire harness to the original harness. Slide one of the installation tubing over the *Signal®* mirror wire harness until about 1" is inserted into the drilled access hole.
- 3) Unsnap and remove the plastic floor trim.
- 4) Remove the kick panel.
- 5) To gain more access to wire routing area, you may want to remove the bolt securing the fuse box by using a 10 mm socket. Remove the fuse box and set it aside. Drill a second 1/2" access hole on the vehicle frame below the rubber boot. CAUTION: When drilling, take care not to drill into the wire harnesses behind vehicle frame. Apply the other supplied rubber grommet into the newly drilled hole. Route the Signal® mirror wire harness thru the access hole and into the vehicle. Make sure about 1" of the installation tubing is securely inserted into the access hole. Pull on the Signal® mirror wire harness, removing any slack in it. OPTIONAL: If you elected not to drill the second hole, you may slice an access hole on the side of the rubber boot, insert the Signal® mirror wire harness thru and into vehicle. Seal the access hole with caulk.
- 6) Cable tie the Signal® mirror wire harness to the rubber boot. Replace fuse box.

### Wire Identification



Locate the grounding bolt within the kick panel. Cut and split the red 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.

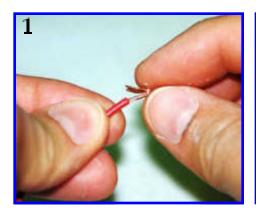
- \* Before proceeding, please read remainder of instructions for information regarding wiring identification and options\*
- \*\* Repeat all of the previous steps to replace the factory mirror on the passenger side door with the new Signal mirror.

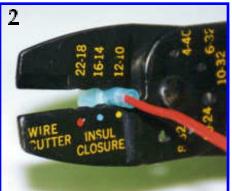


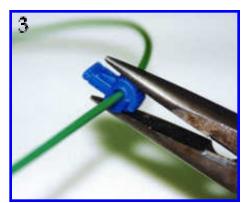
#### TURN ONLY

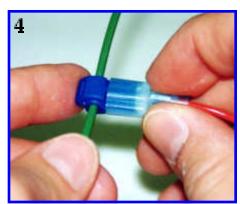
The vehicle's electrical wiring for the TURN is located within the wire bundle on the driver side floor trim. Route both red wires to this location and cut to length, making sure enough slack in each wire is left for splicing. Locate the RED w/BLUE stripe wire within the wire bundle. Turn the ignition 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 BROWN 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'.











## USE THE INCLUDED BLUE T-TAPS AND FOLLOW THE 4 STEPS ABOVE TO SPLICE INTO THE TURN INDICATOR AND GROUND WIRES

- 1. Make sure the harnesses are routed securely to the wire bundle(s) and enough slack is left for splicing.
- 2. Tap the RED wire from the driver side harness into the vehicle wire previously labeled 'driver side turn'.
- 3. Tap the RED wire from the passenger side harness into the vehicle wire previously labeled 'passenger side turn'.
- 4. Activate each turn indicator to verify that the Signal® mirrors are working.
- 5. Wrap an adhesive foam pad around each t-tap connection.
- 6. Replace both door panels, door accessories, insulation, plastic moldings, and trim pieces.

5,005,009 3,075,779 5,014,167 5,128,659 5,207,492 5,355,284 5,361,190 5,619,374 5,619,375 5,481,409 5,528,422 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 5,788,357 7,104,676 D363,920 D409,540 D425,466 D426,506 D426,507 D427,128 D428,372 D430,088 D394,833 D428,373 D428,842 D429,202