



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

For 1999-2004 Honda Odyssey, 2003-2006, 2007\* & 2008\* Honda Pilot, and 2001-2006 Acura MDX



1999-2004 Honda Odyssey



2003-2006 Honda Pilot 2007\* & 2008\* Honda Pilot - Door panel removal procedures are different from previous models –

see page 4.

THE safety accessory of the 21st Century.™

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### **INCLUDED ITEMS:**

left and 1 right Signal<sup>®</sup> mirror
left and 1 right wire harness
wire taps
ring connectors
instruction manual
nylon cable ties

- 2 invite lies
- 2 installation tubes

### **REQUIRED TOOLS:**

Ratchet with extension or ratcheting screwdriver 10mm socket Medium Philips screwdriver Non-scratchable Pry bar (Nylon) Gopher wire Needle nose pliers Wire crimper and stripper Masking tape Multimeter Sturdy gloves Safety glasses or goggles Dremel Tool 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: <u>www.muthco.com</u>

Or via E-mail: techsupport@muthco.com

### 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.

### Door Panel Removal

### Honda Odyssey & 2003-2006 Honda Pilot



**2007 & 2008 Honda Pilot** - Door panel removal procedures are different from previous models – see page 4.





Remove the door panel, kick panel, and plastic trim piece along the bottom of the door frame.

### Acura MDX

- 1. Open the driver side door and lower the window.
- 2. Remove the tweeter pod by pulling it away from the door starting at the top section.
- 3. Remove speaker grill using a small screwdriver to pull up the side under the armrest using the small screwdriver indention. Once you pull up the back slide the grill backwards to release the front.
- 4. Remove 3 brass speaker screws to remove speaker and disconnect wiring. Remove 3 black screws holding door panel.
- 5. Open screw cover in door handle using small screwdriver to lift the rear of the cover and then remove screw.
- 6. Push casing forward until the rear edge can be pulled away from door (you may want to use lever as though you are opening door) and use a small screwdriver to release handle rod. Now pull backwards to release the front of the casing so that it is free from door and disconnect wiring.
- 7. Open screw cover in armrest using small screwdriver to front rounded edge of the cover and remove screw.
- 8. Remove door control panel by lifting it from the rear and then sliding backwards to release front, disconnect all of the wiring.
- 9. Release door panel starting at the bottom by pulling firmly starting in the corners.
- 10. Reach behind and disconnect light harness.
- 11. Lift panel to clear window trim and remove.







### 2007 & 2008 Honda Pilot - Door Panel Removal



- 1) Open the driver side door and lower the window. Using a plastic pry bar, carefully remove corner trim.
- 2) Remove plastic cover in door release lever to reveal 2-screws. Remove these screws with a Phillips screwdriver.
- 3) Pry loose the control panel. Disconnect all wiring connections behind control panel and remove control panel. Remove the revealed screw behind control panel.
- 4) Remove screw hidden below the grab bar. Carefully pull on door panel until all snap inserts, around the perimeter of door panel, pop loose.
- 5) Hold door panel slightly away from door frame. Disconnect all wiring connections behind door panel.
- 6) Remove release lever rod from behind door panel. Remove and set aside door panel.

# **Mirror Housing Removal**

Acura MDX

Honda Odyssey & Honda Pilot



Disconnect the mirror wire harness. Remove the four mirror mounting nuts and remove the mirror housing from the vehicle.





- 1. Disconnect tweeter from wiring harness. Pull back top right corner of vapor barrier, disconnect mirror wiring harness, and slide off of T-shaped keeper.
- 2. Remove 1 brass and 3 black 10mm bolts (one is behind weather stripping) do not remove small torx screw. Use small screwdriver to gently push in sides of retaining device around torx screw and remove mirror.

# Mirror Replacement

Honda Odyssey, 2003 Honda Pilot, and Acura MDX

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





Press down on the upper edge of the mirror to pivot it fully outward. Reach behind the lower edge of the mirror. Gently slide the mirror up toward the top of the mirror housing until all (4) snaps, on the motor actuator, unsnap from the mirror backing plate. **If heated**, disconnect heater terminals and remove original mirror from the mirror housing.



Remove the foam insulation from the mirror housing sail. **If applicable, remove the 9 mm nut holding wiring clamp to housing sail.** Remove the small, plastic cover from the bottom of the mirror housing.



Using the shorter of the two harnesses from the kit, start on the inside of the mirror housing and guide the end without the mating connector alongside the existing factory wire harness. Leave 4 inches of wire exposed in the mirror housing.



Connect the *Signal*<sup>®</sup> mirror mating connector to 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.

# Mirror Replacement

2004 Honda Pilot only

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





Press down on the upper edge of the mirror to pivot it fully outward. Reach behind the lower edge of the mirror. Gently slide the mirror up toward the top of the mirror housing until all (4) snaps, on the motor actuator, unsnap from the mirror backing plate. **If heated**, disconnect heater terminals and remove original mirror from the mirror housing.



Remove the foam insulation from the mirror housing sail. **If applicable, remove the 9 mm nut holding wiring clamp to housing sail.** Remove the small, plastic cover from the bottom of the mirror housing.



Cut along the dotted line to remove the interference part from the motor actuator using a dremel tool. Cutting this portion out is crucial because it interferes with the optic module and prevents mirror travel. **Cutting this portion out will not adversely affect the operation of the motor actuator.** 



Using the shorter of the two harnesses from the kit, start on the inside of the mirror housing and guide the end without the mating connector alongside the existing factory wire harness. Leave 4 inches of wire exposed in the mirror housing.



Connect the *Signal*<sup>®</sup> mirror mating connector to 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.

### Mirror Replacement Continued

Honda Odyssey, Honda Pilot, and Acura MDX



Route the *Signal*<sup>®</sup> mirror wire harness, alongside OE wire harness, thru mirror housing sail and foam insulation. **If applicable, clamp both harnesses to housing sail using the wire clamp and the 9 mm nut.** Replace foam insulation to housing sail. Attach plastic cover to the bottom of mirror housing.



(8a & 8b) Tuck the *Signal*<sup>®</sup> mirror wire harness towards the back of the mirror housing. Align the (4) slots on the *Signal*<sup>®</sup> mirror motor mount with the (4) snaps on the motor actuator.



Gently push down on the bottom edge of the *Signal*<sup>®</sup> mirror to pivot if fully outward.



Reach behind the top edge of the *Signal*<sup>®</sup> mirror. Gently slide the *Signal*<sup>®</sup> mirror down toward the bottom of the mirror housing until all (4) snaps, on the motor actuator, snap into place. For proper installation, listen to the "clicking" sound of the snaps (4 snaps altogether) as it snaps into position. Failure to hear the "clicking" sound of the snaps, could result in mirror falling off due to improper engagement of the snaps. Press down on all sides of the *Signal*<sup>®</sup> mirror to ensure proper operation and engagement of the snaps.

### **Wiring** Honda Odyssey, Honda Pilot, and Acura MDX



Bolt the mirror housing on the door. Reconnect the factory mirror wire harness.



Pull back a portion of plastic insulation from the door. Dislodge both ends of the rubber boot from between the door and door frame. Guide the *Signal*<sup>®</sup> mirror wire harness down into the door and out of the hole vacated by the rubber boot.



Guide a piece of gopher wire through the rubber boot and secure the *Signal*<sup>®</sup> mirror wire harness to the end of the gopher wire. Pull the wire harness through the rubber boot. **If, for some reason, it is hard to get the wire harness through the rubber boot.** Then you may want to cut a small opening on both ends of the rubber boot and run the wire harness through and along the outside of the rubber boot. Insert the included tubing over the wire harness to help insulate and protect it. Cable tie the insulated wire harness to the rubber boot using the 2-supplied cable ties.



Guide the wire harness into the vehicle through the door frame. Replace the rubber boot between the door and door frame. Remove any slack in the wire.

# Wire Identification

Honda Odyssey and Honda Pilot



### **DRIVER SIDE WIRING LOCATION**



### **PASSENGER SIDE WIRING LOCATION**

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 is located behind the kick panel on the driver side door frame and the electrical wiring for the passenger side mirror is located behind the kick panel on the passenger side door frame.

- Guide the Signal<sup>®</sup> mirror wire harness from the driver side door down to the wire bundle. Locate the GREEN WITH BLUE STRIPE and DOUBLE GRAY RINGED wire (2003 and 2006 Honda Pilot Green with white stripe wire) from 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. Guide the *Signal*<sup>®</sup> mirror wire harness from the passenger side door down to the wire connector. Locate the GREEN WITH YELLOW STRIPE and DOUBLE GRAY RINGED wire (2003 Honda Pilot Green with yellow stripe wire) from 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'.

# Wire Identification

Acura MDX

#### Glove box removal (if necessary):

- A) Remove sill plate by pulling straight up, pull up on weather strip to expose side of kick plate, remove plastic "nut" from kick plate and remove kick plate.
- B) Remove two screws under the glove box.
- C) Open glove box and remove screw on the side. Carefully tilt and remove glove box.

### **DRIVER SIDE WIRING LOCATION**



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 is located behind the kick panel on the driver side door frame and the electrical wiring for the passenger side mirror is located behind the glove box.

- 2. Guide the *Signal*<sup>®</sup> mirror wire harness from the driver side door down to the wire bundle. Locate the GREEN WITH BLUE STRIPE and DOUBLE GRAY RINGED wire from 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 '<u>driver side turn</u>'.
- 3. Guide the *Signal*<sup>®</sup> mirror wire harness from the passenger side door down to the wire bundle. Locate the GREEN WITH YELLOW STRIPE and DOUBLE GRAY RINGED wire from 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'.







#### **PASSENGER SIDE WIRING LOCATION**





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

- 1. Splice the RED wire from the driver side harness into the wire previously labeled '<u>driver side turn</u>'. Strip the end of the black wire and crimp on one of the supplied ring connectors. Bolt the ring connector to a suitable ground location on the framework of the vehicle.
- 2. Splice the RED wire from the passenger side harness into the wire previously labeled 'passenger side turn'. Strip the end of the black wire and crimp on one of the supplied ring connectors. Bolt the ring connector to a suitable ground location on the framework of the vehicle.
- 3. Activate each turn indicator to verify that the *Signal*<sup>®</sup> mirrors are working.
- 4. Replace both door panels, speakers, door accessories, insulation, plastic moldings, and trim pieces.

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

5,014,167 5,128,659 5,207,492 5,355,284 5,361,190 5,481,409 3,075,779 5,005,009 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 D363,920 D394.833 D409.540 D425,466 D426.506 D426,507 D427,128 D428.372 D428.373 D428.842 D429,202 D430.088