

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

### Honda CRV 1997-2003



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

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## 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:**

left and 1 right Signal<sup>®</sup> mirror
left and 1 right wire harness
rubber tubes
rubber grommets
wire taps
ring connector
instruction manual

### **REQUIRED TOOLS:**

Ratchet with extension or ratcheting screwdriver 8mm socket, 10mm socket Small Philips screwdriver Medium Philips screwdriver Small pry bar Small utility knife Power drill, 5/16" drill bit Wire crimper and stripper Needle nose pliers 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

Or via E-mail: <a href="mailto:techsupport@muthco.com">techsupport@muthco.com</a>

**Door Panel & Mirror Housing Removal** 

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- 4. Open door and lower window.
- 5. Remove screw and plastic grommet on inside corner of door.
- 6. Remove plastic cover from corner of door.



- 1. Open door and lower window.
- 2. Remove plastic cover from corner of door.
- 3. Pop-out and remove plastic inserts.

## **Door Panel & Mirror Housing Removal Continued**







- 5. Remove three mirror mounting nuts.
- 6. Remove mirror housing assembly from door.









- 4. Remove door handle plastic cover.
- 5. Unscrew the (2) screws revealed by the removal of the door handle cover.
- 6. Pry out door handle as shown. Disengage latch behind door handle and remove door handle.



## **Door Panel & Mirror Housing Removal Continued**

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## Mirror Replacement

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While using sturdy gloves, insert a small pry bar underneath the mirror at the bottom edge of the mirror housing. Lift up on the bottom of the mirror to release it from the snaps.



Pivot the mirror upward on its top edge and lift the mirror out of the mirror housing.



Carefully remove the foam insulation from the mirror housing sail.



**NOTE:** In order to make room for the *Signal*<sup>®</sup> mirror optics about 1/4" of the left edge of the mirror mount will need to be removed. Use a pair of side cutters and begin cutting at the left edge of the mirror mount, starting in the upper left corner. Continued removal of any mirror mount surface (interfering with *Signal*<sup>®</sup> mirror optic) may be necessary.



Continue cutting down alongside the left edge of the mirror mount and discard the excess molding.



Carefully peel back the plastic screw covers on the bottom of the mirror bracket. Remove the three screws that hold the mirror bracket in place.

## Mirror Replacement Continued

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Using the shorter of the two wires from the kit, starting from the inside of the mirror housing, guide the end without the mating connector down alongside the existing factory mirror harness.



Leave about 7 inches of wire exposed in the mirror housing. Guide the wire harness through the mirror bracket and remove any slack.



Replace the three screws and screw covers on the bottom of the mirror bracket. Guide the wire harness through the foam insulation and reposition the foam insulation on the mirror bracket.



Lay the *Signal*<sup>®</sup> mirror on a clean, flat surface. Connect the *Signal*<sup>®</sup> mirror mating connector to the *Signal*<sup>®</sup> mirror wire harness.



Position the guides on the top of the  $Signal^{\$}$  mirror into the slots on the top of the mirror mount. Tuck the wire harness to the back of the mirror housing. Pivot the  $Signal^{\$}$  mirror down on the mirror mount.



Firmly press down on the bottom edge of the *Signal*<sup>®</sup> mirror to snap it into position.

## Wire Routing

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- 1. Pull out a portion of the rubber door insulation above the mirror mount.
- 2. Drill a 5/16" hole leading into the mirror mount area.
- 3. Remove any debris and insert one of the included rubber grommets into the drilled hole.





- 1. Mount the mirror housing back onto the door frame using the (3) mirror mounting nuts. Remove door frame plastic cover partly. Re-connect all OEM wiring harnesses.
- 2. Guide *Signal*<sup>®</sup> mirror wire harness through the door frame and inside the rubber boot.

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- 4. Pass the *Signal*<sup>®</sup> mirror wire harness into the mirror mounting area and up through the rubber grommet. Remove any slack.
- 5. Bolt the mirror housing on the door using the three mirror mounting nuts.
- 6. Reconnect the factory mirror wire harness.







- 3. Remove the footrest on the driver side floorboard by removing the two bolts.
- 4. Remove the plastic grommet in the upper right corner of the plastic trim in the corner of the door.
- 5. Dislodge the plastic grommet from the center of the plastic trim and remove the trim from the corner of the door. Route the *Signal*<sup>®</sup> mirror wire harness from inside the rubber boot into the vehicle.



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- 7. Cut a small slit in the rubber door insulation, level with the rubber boot, between the door and door frame.
- 8. Guide the *Signal*<sup>®</sup> mirror wire harness into the preexisting slit (under the rubber door insulation) above the mirror mount.
- 9. Pass the wire harness down through the rubber door insulation and out of the hole created in step 7.

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- 10. Remove the footrest on the driver side floorboard by removing the two bolts.
- 11. Remove the plastic grommet in the upper right corner of the plastic trim in the corner of the door.
- 12. Dislodge the plastic grommet from the center of the plastic trim and remove the trim from the corner of the door.

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- 13. Slide the provided rubber tubing over the wire harness and guide 1 inch of tubing into the rubber door insulation.
- 14. There is a small hole in the top corner of the plastic trim piece along the door frame. Guide the wire harness and rubber tubing into the hole and pass the wire harness into the vehicle.

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## Wire Identification



- 15. Repeat all of the previous steps to replace the factory mirror on the passenger side door with the new  $Signal^{\text{®}}$  mirror. The vehicle's electrical wiring is located underneath the dash behind the fuse block assembly. Guide the new wire harnesses from both sides of the vehicle to the electrical wiring. Locate the GREEN WITH RED STRIPE and SINGLE GRAY RINGED 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'.
- 16. Locate the GREEN WITH YELLOW STRIPE and SINGLE GRAY RINGED wire from within the wire bundle. **NOTE: There are two or more wires with the same color pattern.** 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

- 7. Make sure the harnesses are routed securely underneath the dash and enough slack is left for splicing.
- 8. Splice the RED wire from the driver side harness into the green with red stripe and single gray ring wire previously labeled 'driver side turn'.
- 9. Splice the RED wire from the passenger side harness into the green with yellow stripe and single gray ring wire previously labeled 'passenger side turn'.
- 10. 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.
- 11. Activate each turn indicator to verify that the Signal<sup>®</sup> mirrors are working.
- 12. Replace any door accessories, insulation, plastic moldings, and trim pieces.