



# ACURA INSTALLATION INSTRUCTIONS

Accessory

BACKUP SENSOR

Application

2005 MDX

Publications No.

BII 28200-28942

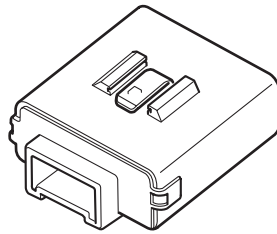
Issue Date

MARCH 2005

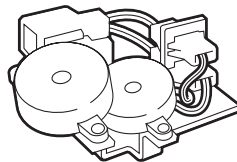
## PARTS LIST

Backup Sensor Attachment Kit:  
P/N 08V67-S3V-202F

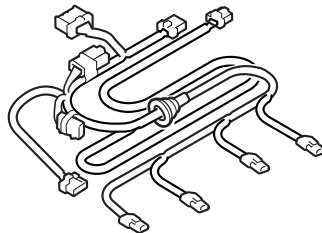
Control unit



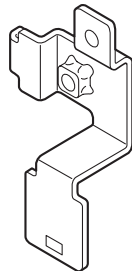
Beeper



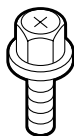
Backup sensor harness



Control unit bracket



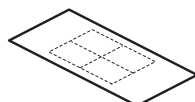
Flange bolt



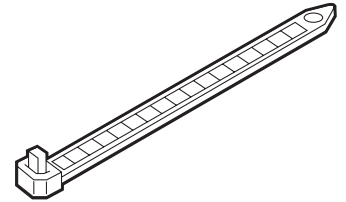
2 Clips



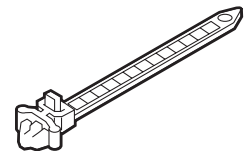
Fuse label



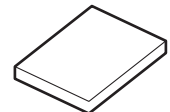
23 Wire ties



4 Wire ties with clip



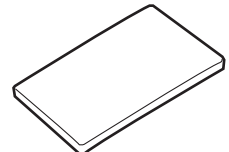
Double-sided adhesive tape



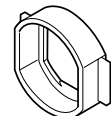
Switch



7 Cushion tapes



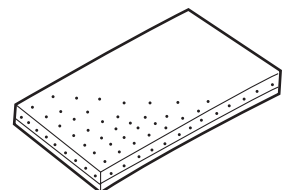
2 Spacers



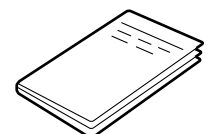
Template



3 EPT sealers



Owner's Manual



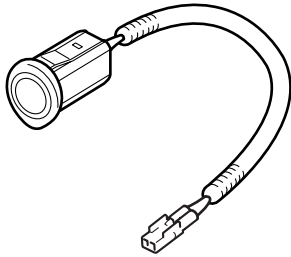
### Backup Sensor Kit:

P/N 08V67-SHJ-1XX

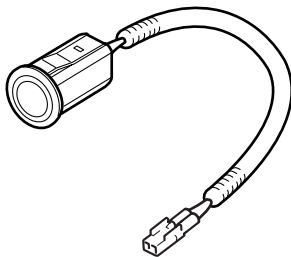
P/N 08V67-S3V-2XX

**NOTE: Refer to Parts Information Bulletin (PIB)  
B04-0012 for the proper color sensors.**

2 Corner sensors



2 Center sensors



### TOOLS AND SUPPLIES REQUIRED

Phillips screwdriver

Flat-tip screwdriver

Small flat-tip screwdriver

Ratchet

Wheel nut wrench (in vehicle tool kit)

P/N 89211-S3V-A11

Spare tire hoist P/N 747-S3V-A11

10 mm and 12 mm Sockets

Torque wrench

Diagonal cutters

Utility knife

Pushpin

Drill

3 mm Drill bit

Felt-tip pen

Plastic trim tool set

Isopropyl alcohol

Shop towel

Eye protection (safety goggles, face shield, etc.)

10 mm Combination wrench

Blanket

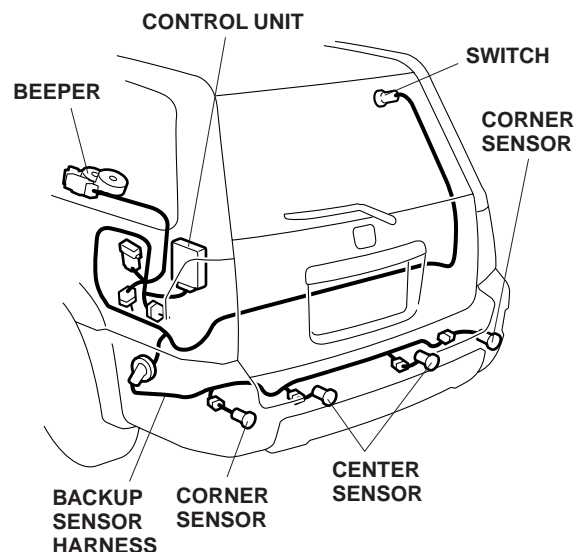
File

14 mm Box-end wrench

Clip remover

20 mm, 22 mm, and 26 mm Hole saws

### Illustration of the Backup Sensor Installed on the Vehicle



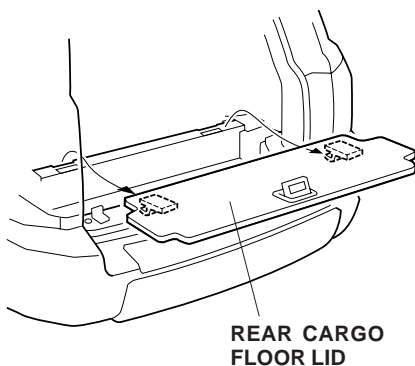
## INSTALLATION

**Customer Information:** The information in this installation instruction is intended for use only by skilled technicians who have the proper tools, equipment, and training to correctly and safely add equipment to your vehicle. These procedures should not be attempted by “do-it-yourselfers.”

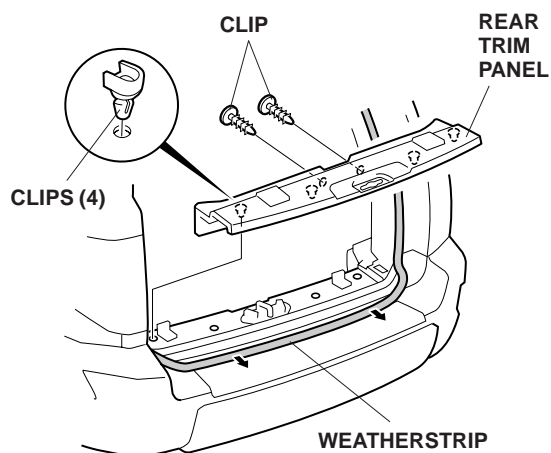
1. Make sure you have the anti-theft code for the radio, then write down the frequencies for the radio presets.
2. Disconnect the negative cable from the battery.

### Installing the Sensors in the Bumper

3. Open the tailgate, and remove the rear cargo floor lid.

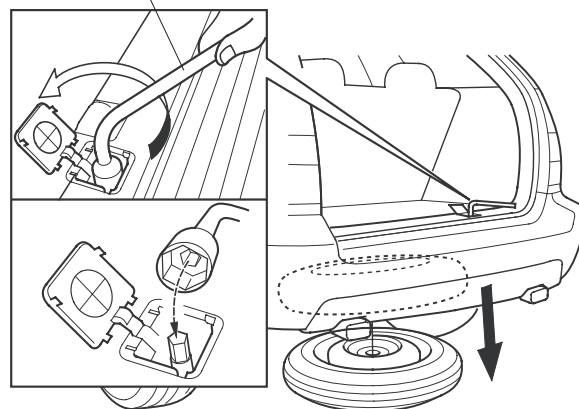


4. Remove the weatherstrip from the tailgate opening, and remove the rear trim panel (six clips).

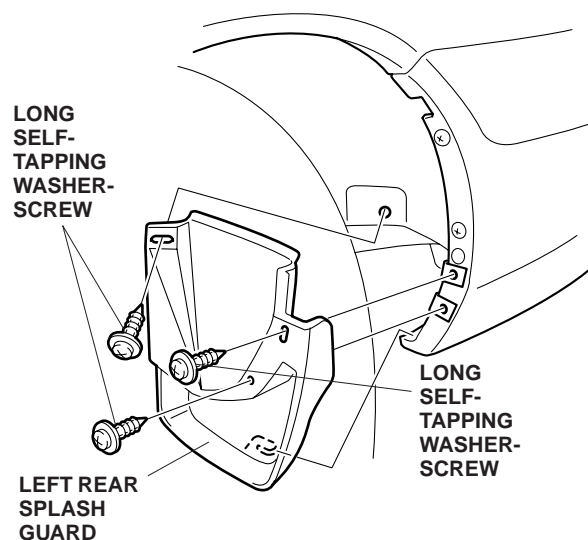


5. Using the wheel nut wrench in the vehicle tool kit, lower the spare tire.

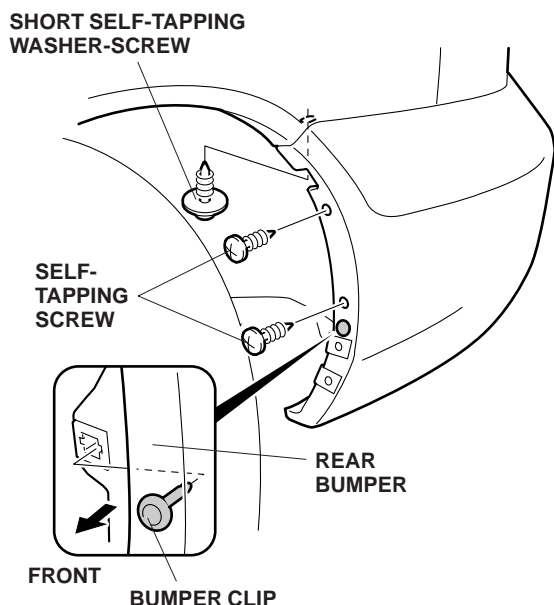
### WHEEL NUT WRENCH



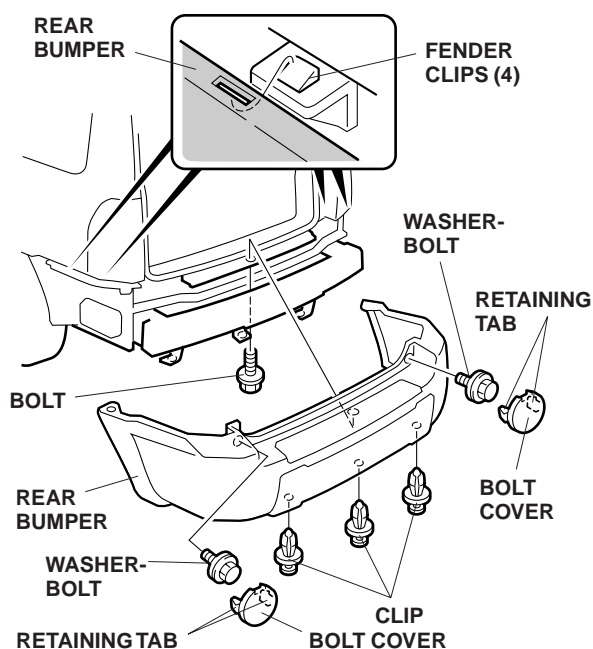
6. Remove the three long self-tapping washer-screws that secure the left rear splash guard. Remove the splash guard.



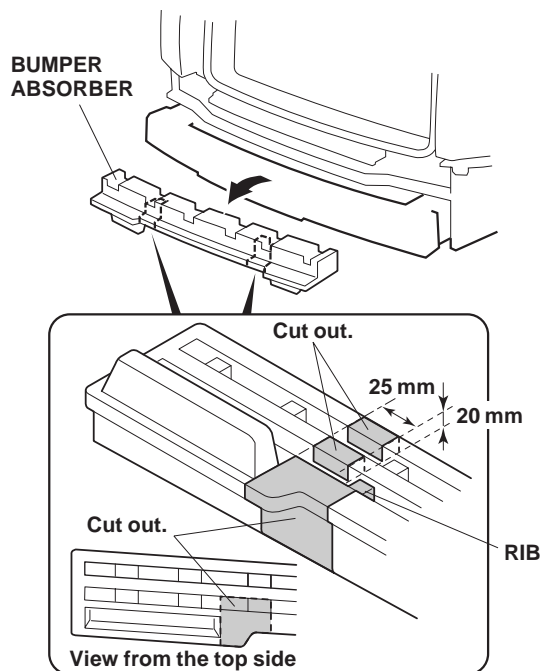
7. Remove the short self-tapping washer-screw and the two self-tapping screws that secure the rear bumper, then pull the bumper section of the rear bumper out toward you to remove the bumper clip.



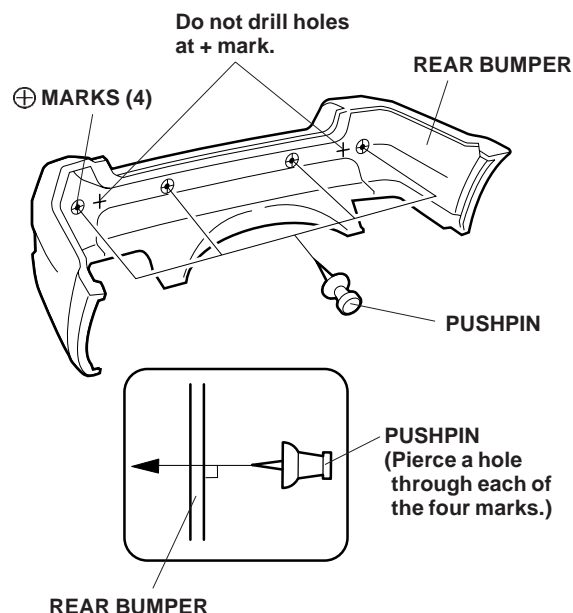
8. Repeat steps 6 and 7 on the right side of the vehicle.
9. Remove the two bolt covers from the rear bumper, then remove the two washer-bolts, three clips, and one bolt that secure the rear bumper. Remove the four fender clips, and remove the rear bumper. Set the rear bumper on a blanket.



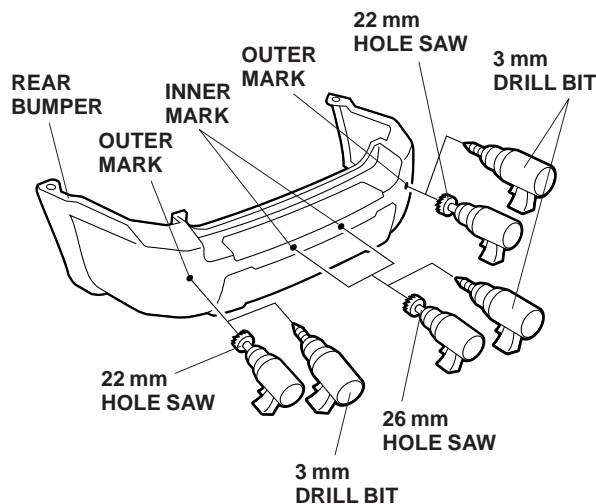
10. Remove the bumper absorber. Using a utility knife, cut out the bottom of the bumper absorber in the areas shown.



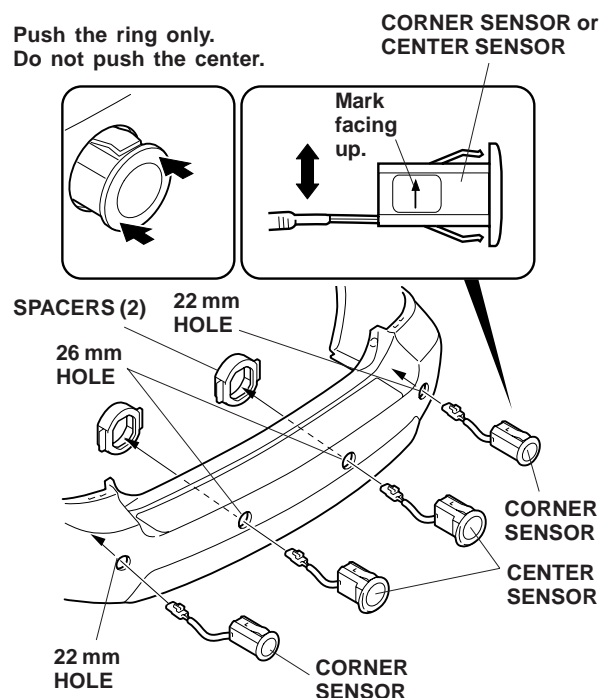
11. On the inside of the rear bumper, locate the four preset marks. Using a pushpin, pierce a hole through each of the four marks.



12. While wearing eye protection, drill a 22 mm hole through each of the two outer marks, and a 26 mm hole through each of the inner marks. Remove any burrs from the edges of the holes. First drill with a 3 mm drill bit, and then finish with a 22 mm hole saw or a 26 mm hole saw.



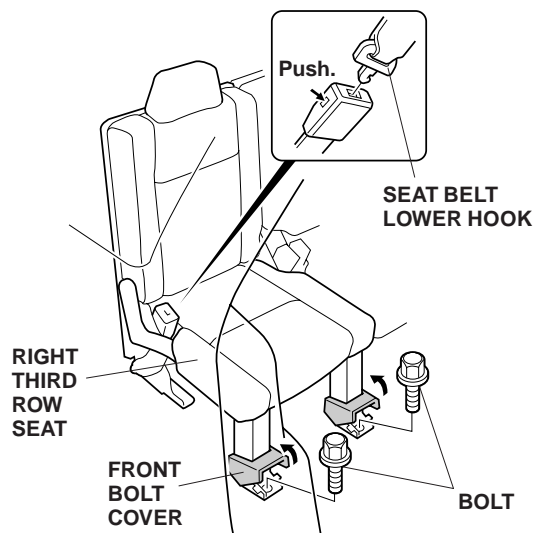
13. Install the two corner sensors by embedding them, as shown, in the two 22 mm holes you just made. Push only the ring at the sensor circumference. Pushing the center of the sensor could damage the sensor.



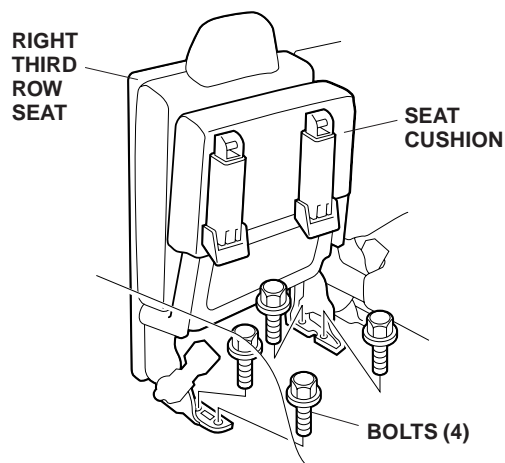
14. Install the two center sensors into the 26 mm holes. Install the two center sensors by embedding them, as shown, in the two 26 mm holes you just made. Secure the center sensors with one spacer for each sensor. Push only the ring on the sensor circumference. Pushing the center of the sensor could damage the sensor.

## Routing the Backup Sensor Harness

15. Inside the vehicle, slide the right, second row seat forward. Using a small flat-tip screwdriver or the ignition key, release the seat belt lower hook from the right, third row seat.

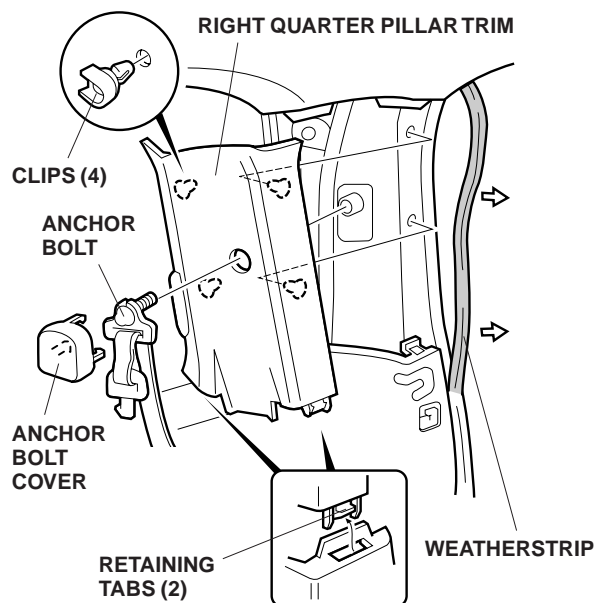


16. Raise the front bolt covers from the right third row seat, and remove the two bolts concealed under the covers.
17. Raise the right third row seat cushion, and remove the four bolts that fasten the right third row seat to the floor. Remove the right third row seat.



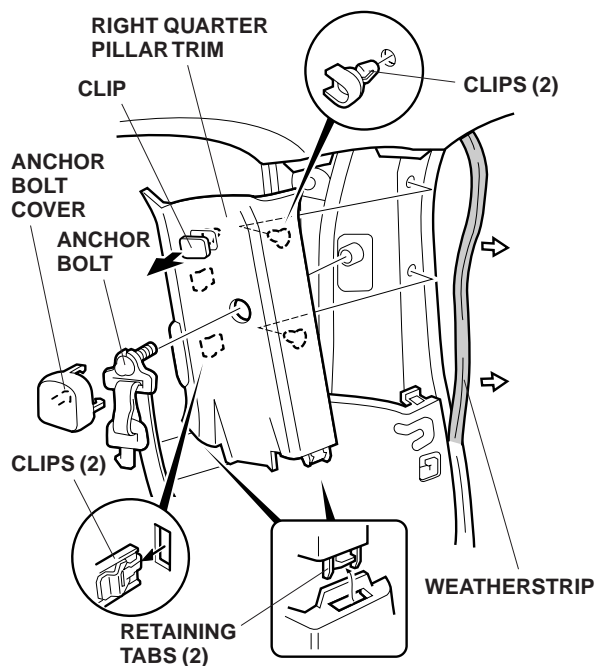
18. Repeat steps 15 thru 17 on the left side of the vehicle.

19. Remove the tailgate weatherstrip in the area shown. On the right quarter pillar trim, remove the anchor bolt cover from the seat belt anchor, and remove the bolt that secures the seat belt anchor.

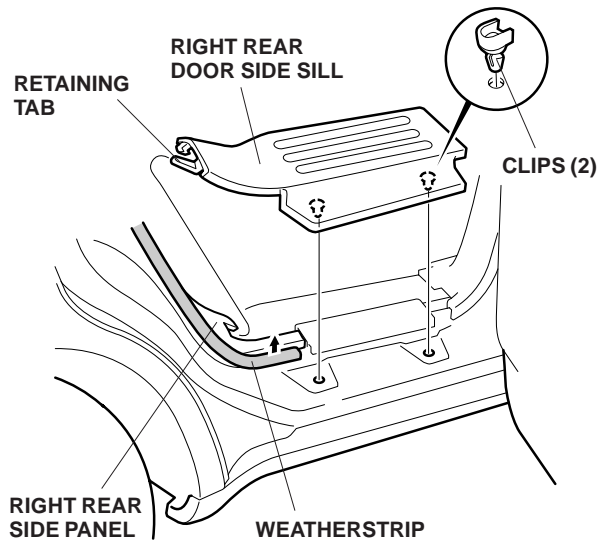


20. Remove the right quarter pillar trim (four clips and two retaining tabs).

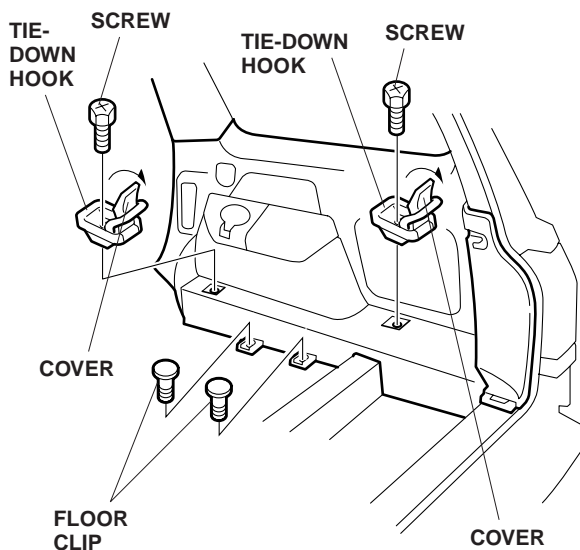
If the vehicle is equipped with a side curtain airbag, pull the clip at the top of the right, quarter pillar trim out toward you, and remove the pillar trim.



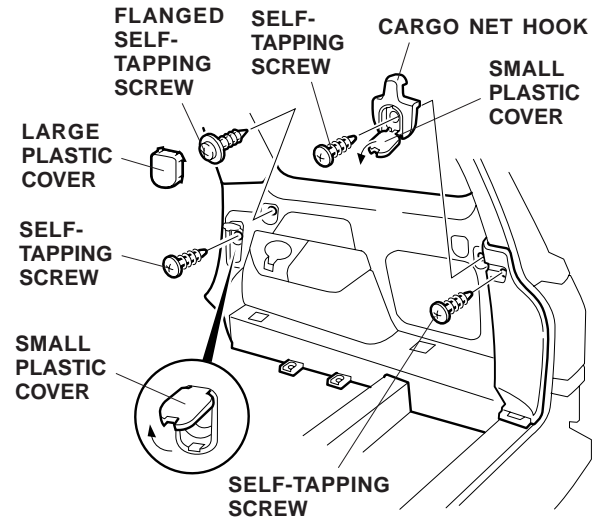
21. Remove the right rear door side sill (two clips and retaining tab). Remove the door weatherstrip around the right rear door side sill.



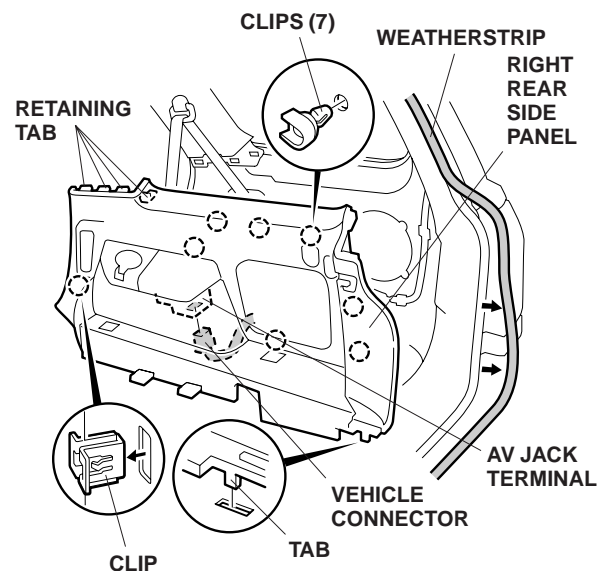
22. Repeat steps 19 thru 21 on the left side of the vehicle.
23. Using a trim tool, pry up on the two covers, remove the two screws, then remove the two tie-down hooks. Remove the two floor clips.



24. Remove the large plastic cover, and remove the flanged self-tapping screw under the cover. Pry out the small plastic cover with a trim tool, and remove the self-tapping screw. Pry out the small plastic cover, and remove the cargo net hook (one self-tapping screw). Remove the self-tapping screw.

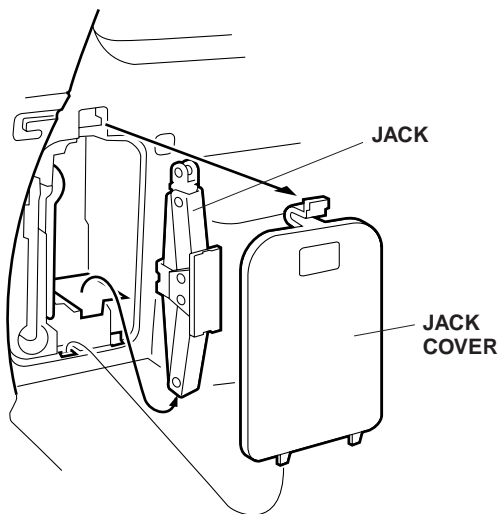


25. Remove the tailgate weatherstrip in the area shown. Remove the eight clips and the four retaining tabs, unplug the vehicle connector from the AV jack terminal (if equipped), and remove the right rear side panel.

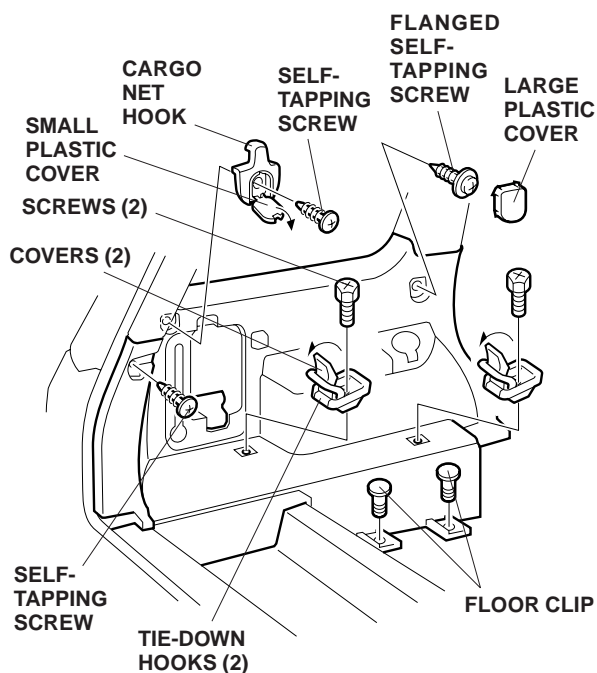




26. Remove the jack cover and jack.

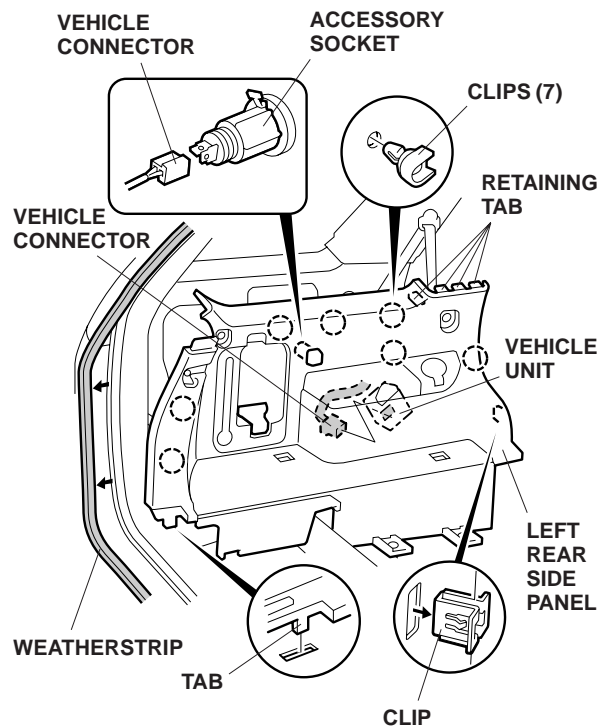


27. Pry up on the two covers with a trim tool, and remove the two screws concealed under the covers. Remove the two tie-down hooks. Remove the two floor clips.

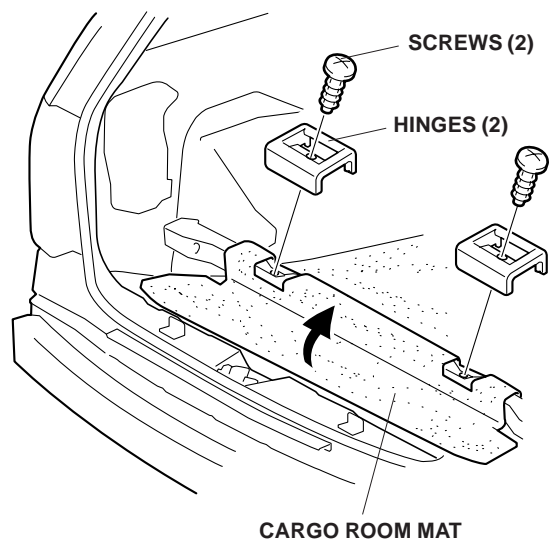


28. Remove the large plastic cover, and remove the flanged self-tapping screw concealed under the cover. Pry out the small plastic cover with a trim tool, and remove the cargo net hook (one self-tapping screw). Remove the self-tapping screw.

29. Remove the tailgate weatherstrip in the area shown. Remove the eight clips, unplug the vehicle connectors from the accessory socket and the vehicle unit, and remove the left rear side panel.

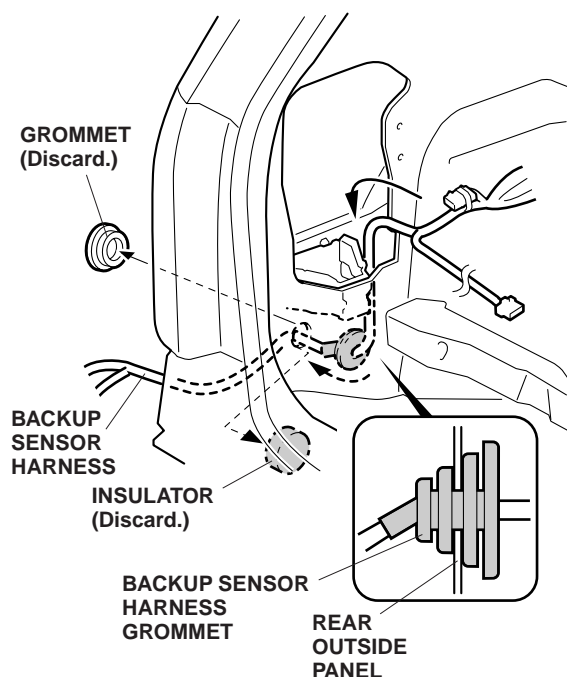


30. Remove the two hinges (two screws), and turn up the cargo room mat.

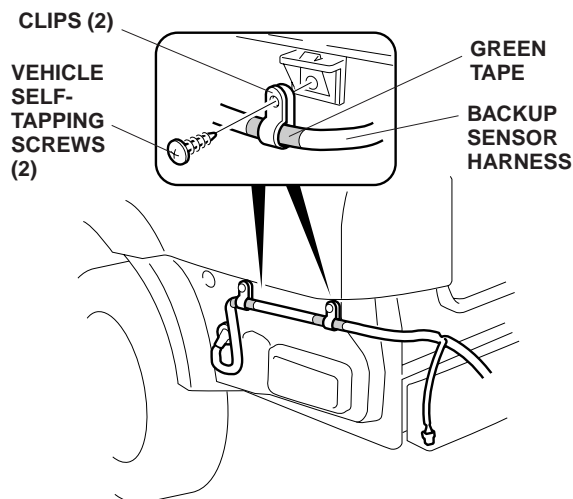




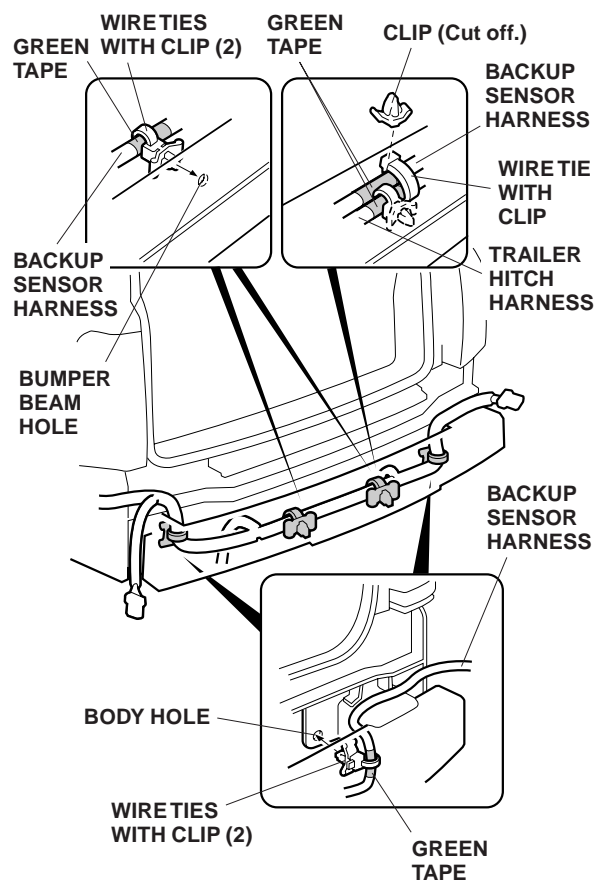
31. Remove and discard the insulator from the rear inside panel. On the outside of the vehicle, remove and discard the front grommet from the rear panel under the fender.



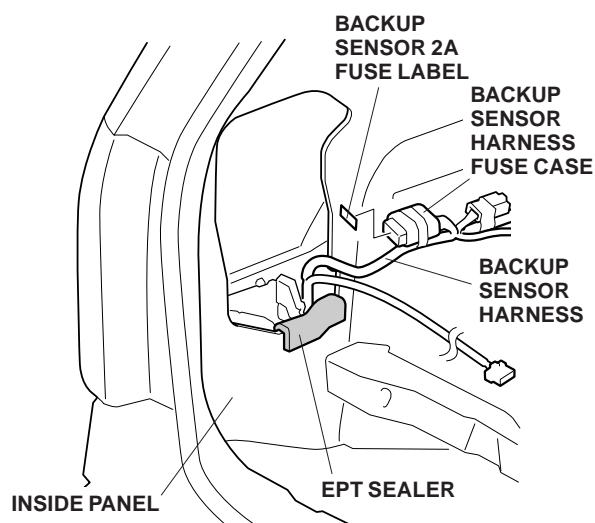
32. Pull the four backup sensor harness 2-pin connectors out through the grommet hole. Seat the backup sensor harness grommet in the grommet hole on the rear **outside** panel. Rotate the grommet so the wires face down. Make sure the grommet is fully seated on the second step.
33. Attach the two clips to the backup sensor harness at the green tape. Remove the two self-tapping screws from the vehicle, and secure the clips with these self-tapping screws.



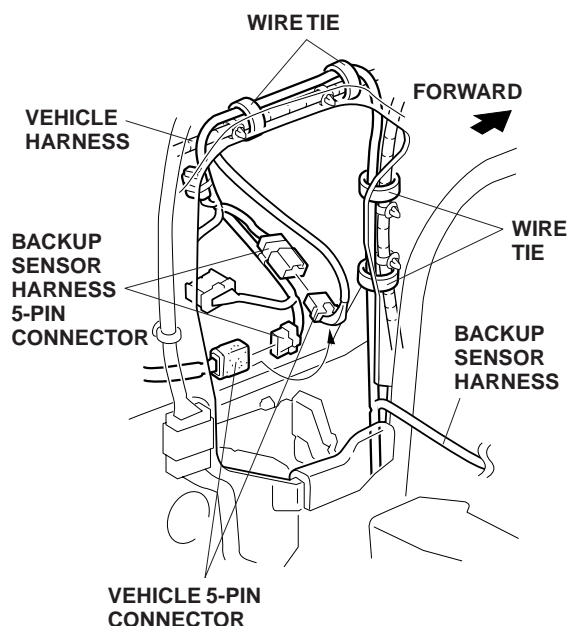
34. Attach the four wire ties with clip to the backup sensor harness where the green tape is located, then push the clips into the holes in the bumper beam and body frame. If a trailer hitch is installed, cut the clip off the wire tie with clip, align the green tapes on the trailer hitch and backup sensor harnesses, and then secure the harnesses with the wire tie.



35. Using isopropyl alcohol on a shop towel, clean the vehicle inside panel where the EPT sealer will attach. Attach the EPT sealer to the vehicle inside panel.

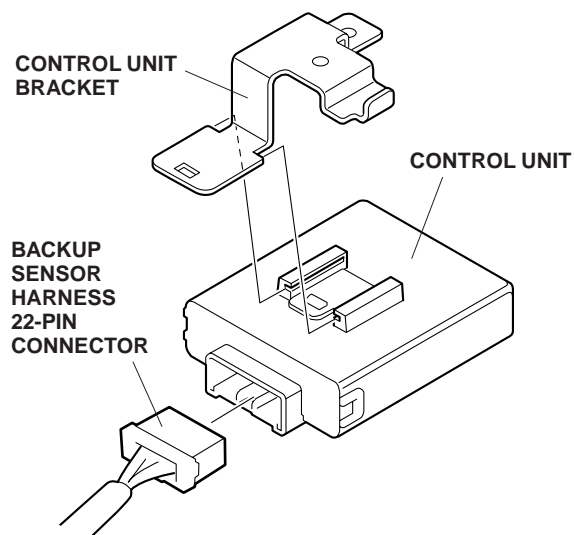


36. Attach the BACKUP SENSOR 2A fuse label to the fuse case on the backup sensor harness.
37. Route the backup sensor harness 5-pin connectors along the inner wall at the opening of the vehicle inside panel. Secure the backup sensor harness to the vehicle harness with four wire ties in the areas shown.

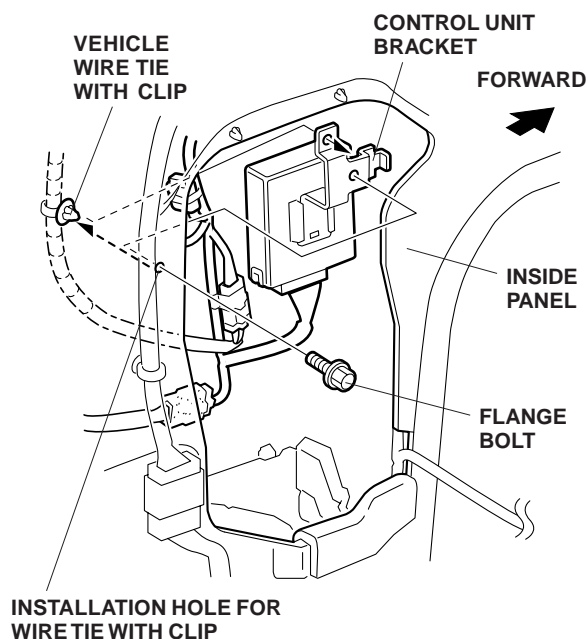


38. Unplug the vehicle 5-pin connectors, and plug them into the backup sensor harness 5-pin connectors.

39. Slide the control unit bracket onto the control unit.



40. Plug the backup sensor harness 22-pin connector into the control unit.
41. Remove the vehicle wire tie with clip that secures the vehicle harness to the inside panel, and install it in the hole in the control unit bracket.



42. Install the control unit bracket in the hole for the vehicle wire tie with clip with the flange bolt.

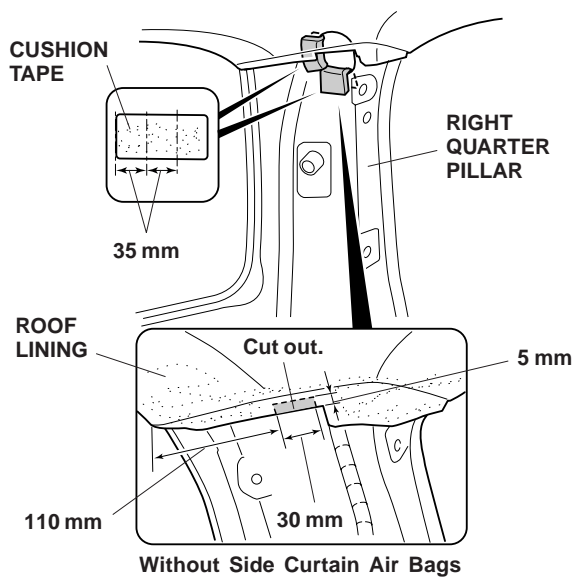
- 
- DOUBLE-SIDED ADHESIVE TAPE**
- ADHESIVE BACKING**
- BEEPER**
- BEEPER BRACKET**  
(Thoroughly clean with isopropyl alcohol.)

- 
- BEEPER**
- ADHESIVE BACKING**
- INSIDE REAR PANEL**
- 30 mm**
- CLEARANCE BETWEEN BEEPER'S 5-PIN CONNECTOR AND INSIDE REAR PANEL**
- 5 mm**
- Thoroughly clean with isopropyl alcohol.**
- HOLE**
- BEEPER 5-PIN CONNECTOR**
- BEEPER**
- INSIDE REAR PANEL**

- 
- A detailed line drawing showing the installation of a backup sensor harness. The diagram includes the following components and labels:
- WIRE TIE**: Points to a strap used to secure the vehicle harness.
  - CUSHION TAPE**: Points to a piece of tape used to secure the backup sensor harness.
  - BACKUP SENSOR HARNESS 5-PIN CONNECTOR**: Points to the connector on the backup sensor harness.
  - BEEPER 5-PIN CONNECTOR**: Points to the connector on the beeper harness.
  - BEEPER**: Points to the beeper component.
  - BACKUP SENSOR HARNESS**: Points to the main harness line.
  - EPT SEALER**: Points to a sealant applied to the vehicle harness.
  - VEHICLE HARNESS**: Points to the harness coming from the vehicle.

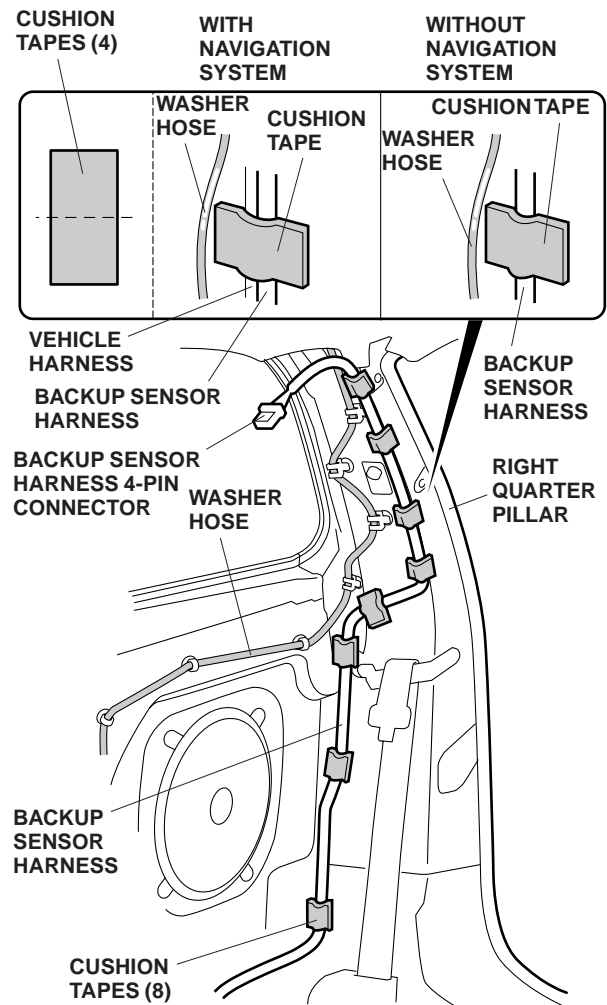
- 
- Diagram illustrating the installation of the backup sensor harness. The main diagram shows the harness running along the vehicle's frame, secured with wire ties. An inset shows a close-up of the harness being secured with a wire tie. Labels include:
- WIRE TIE
  - VEHICLE HARNESS
  - FORWARD (with an arrow pointing towards the front of the vehicle)
  - BACKUP SENSOR HARNESS
  - VEHICLE HARNESS
  - WIRE TIES (8)
  - BACKUP SENSOR HARNESS
  - BACKUP SENSOR HARNESS 4-PIN CONNECTOR

49. If the vehicle is not equipped with side curtain air bags, using a utility knife, cut a small piece out of the roof liner, just enough to expose the upper hole in the right quarter pillar.



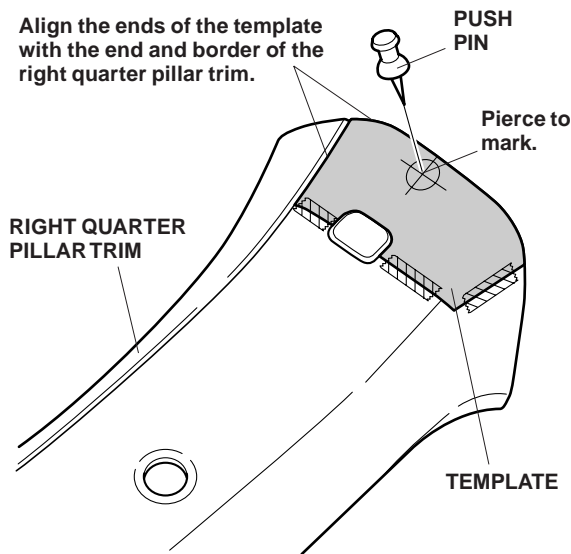
50. Using isopropyl alcohol on a shop towel, clean the area around the upper hole, then attach the cushion tape to the edge of the upper hole as shown.

51. Route the backup sensor harness 4-pin connector to the right quarter pillar as shown.

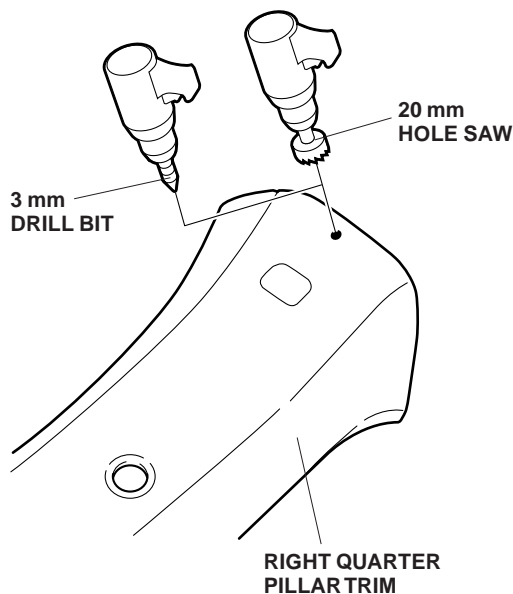


52. Using scissors, cut four cushion tapes into halves, as shown.
53. Using isopropyl alcohol on a shop towel, clean the vehicle panel where the cushion tapes will attach. Secure the backup sensor harness to the vehicle panel with the cushion tapes. Do not attach the cushion tapes to the washer hose.
54. Reinstall the cargo mat, and the right rear side panel. Check that all clips and retaining tabs are installed securely.

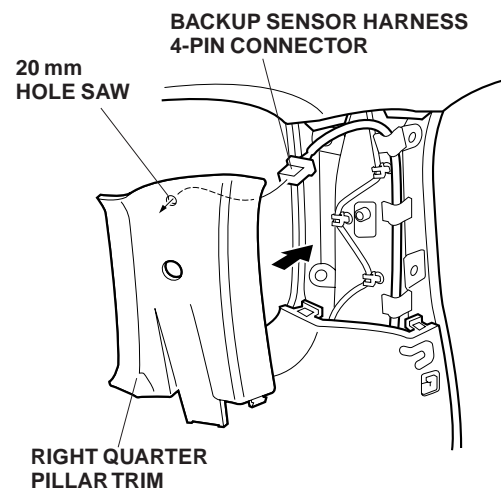
55. Position the template on the right quarter pillar trim and pierce a hole through the center of the mark on the template with a pushpin.



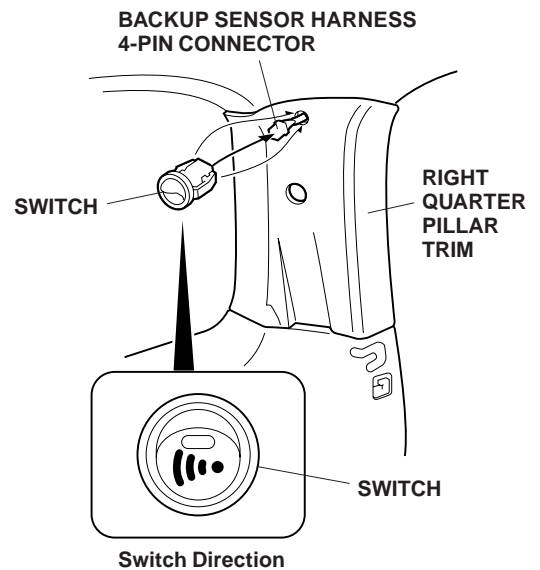
56. While wearing eye protection, drill a 20 mm hole through the mark you just made. Remove any burrs.
- First drill with a 3 mm drill bit, and finish with a 20 mm hole saw.



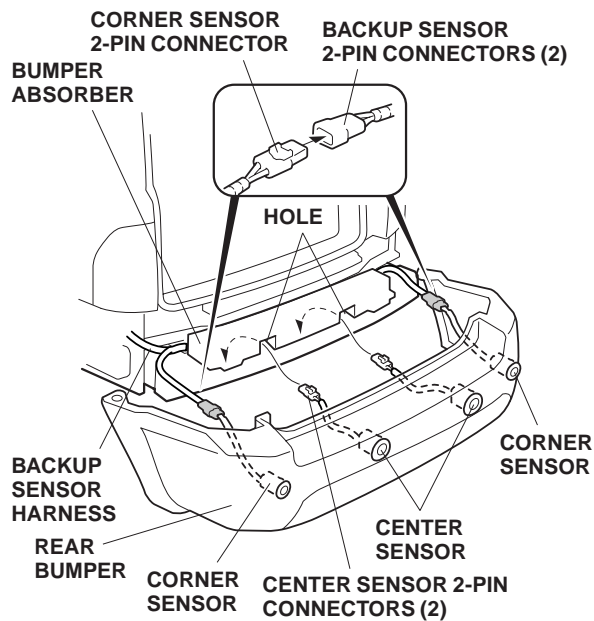
57. Pull the backup sensor harness 4-pin connector out through the 20 mm hole, then reinstall the right quarter pillar trim. Check that all clips and retaining tabs are installed securely.



58. Plug the backup sensor harness 4-pin connector into the switch, then install the switch into the hole in the right quarter pillar trim, in the direction shown.

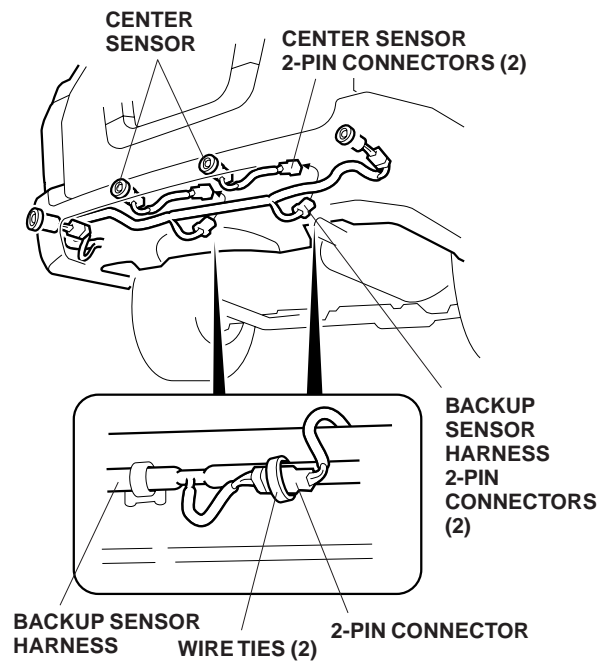


59. Reinstall the bumper absorber. While holding the rear bumper close to the vehicle, route the 2-pin connectors from the center sensors through the holes in the bumper absorber.

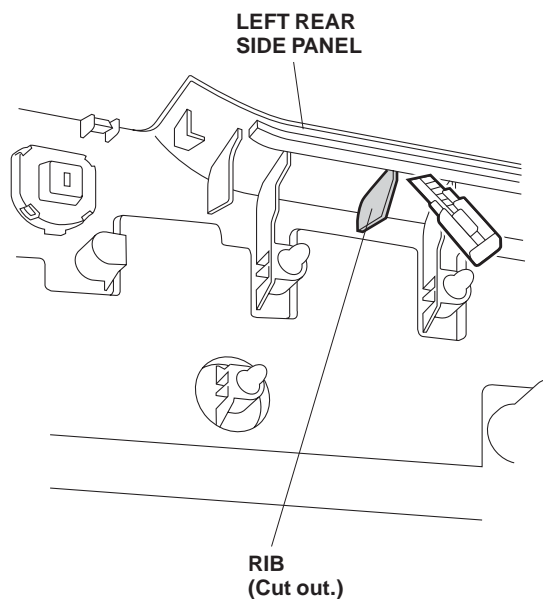


60. Connect the two outer backup sensor harness 2-pin connectors to the 2-pin connectors from the corner sensors. Reinstall the rear bumper. Check that all clips and retaining tabs are installed securely.

61. Connect the two inner backup sensor harness 2-pin connectors to the inner center sensors 2-pin connectors, then secure the 2-pin connectors to the backup sensor harness with two wire ties.



62. Using a utility knife, cut out the rib of the left rear side panel as shown. Reinstall the left rear side panel.



63. Check that all wire harnesses and cables are routed properly and that all connectors are plugged in.
64. Reinstall the third row seat, torque the seat bolts to 41 to 53 N·m (30 to 39 lb·ft).
65. Reinstall all removed parts.
66. Reconnect the negative cable to the battery.
67. Enter the customer's radio anti-theft code, and reset the radio station presets.
68. Reset the clock.
69. Check that the backup sensors work properly as described in the Owner's Manual supplied with the backup sensor kit.  
  
NOTE: Whenever the battery is disconnected, the driver's window AUTO function is disabled.
70. Start the engine. Push down on the driver's window switch until the window is fully open.
71. Pull up on the driver's window switch to close the window completely, then hold the switch for 2 seconds.
72. Lower and raise the window to check operation of the driver's window AUTO function.