ACURA

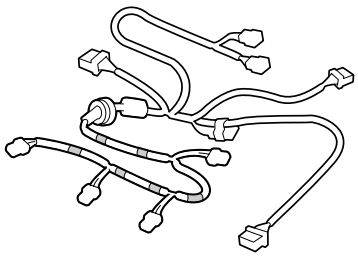
INSTALLATION INSTRUCTIONS

Accessory	Application	Publications No.
BACKUP SENSOR ATTACHMENT	**2003 MDX**	**BII 24543**
		Issue Date **OCT 2002**

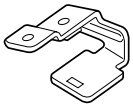
PARTS LIST

Backup Sensor Attachment Kit (sold separately) P/N 08V67-S3V-200F

Backup sensor harness



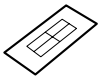
Control unit bracket



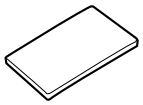
Flange bolt, 6 x 12 mm

2 Clips

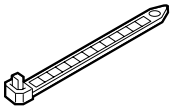
Fuse label



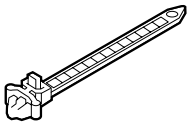
5 Cushion tapes



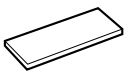
22 Wire ties



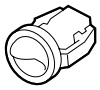
4 Wire ties with clip



Double-sided adhesive tape

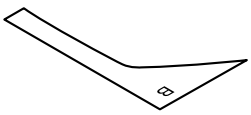


Switch



Template A

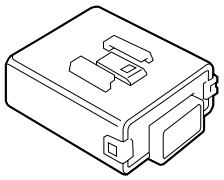
Template B



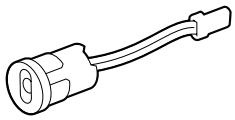
Flange bolt, 6 x 8 mm

Backup Sensor Kit (sold separately) P/N 08V67-S3V-200

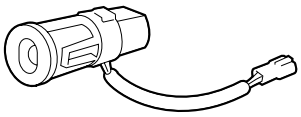
Control unit



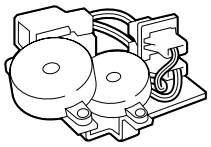
2 Corner sensors



2 Center sensors

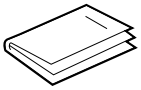


Beeper



2 Retainer clips

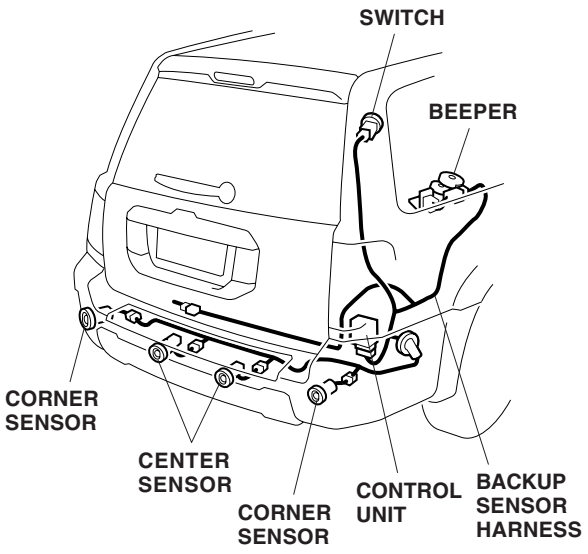
Owner's Manual



TOOLS AND SUPPLIES REQUIRED

Phillips screwdriver
Flat-tip screwdriver
Small flat-tip screwdriver
Ratchet
10 mm, 12 mm, and 14 mm Sockets
Torque wrench
Diagonal cutters
Utility knife
Pushpin
Drill
20 mm and 26 mm Hole saws
Masking tape
Felt-tip pen
Tape measure
Isopropyl alcohol
Shop towel
Eye protection (safety goggles, face shield, etc.)
10 mm Combination wrench
Blanket
File
14 mm Box-end wrench
Clip remover

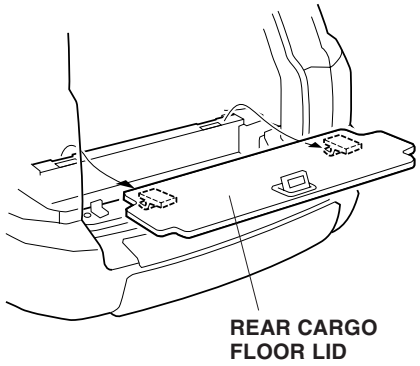
Illustration of the Backup Sensor Installed on the Vehicle



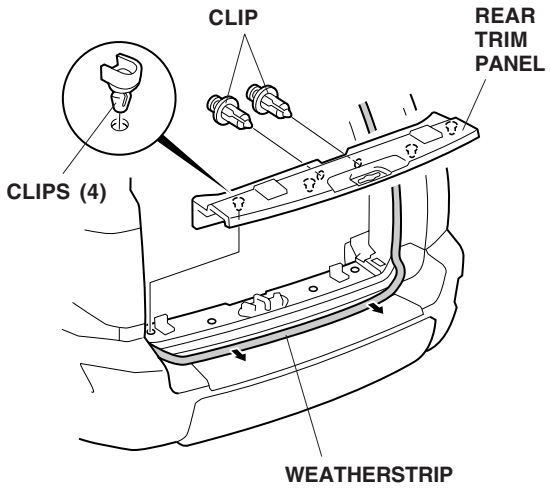
INSTALLATION

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 preset buttons.
2. Disconnect the negative cable from the battery.
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).



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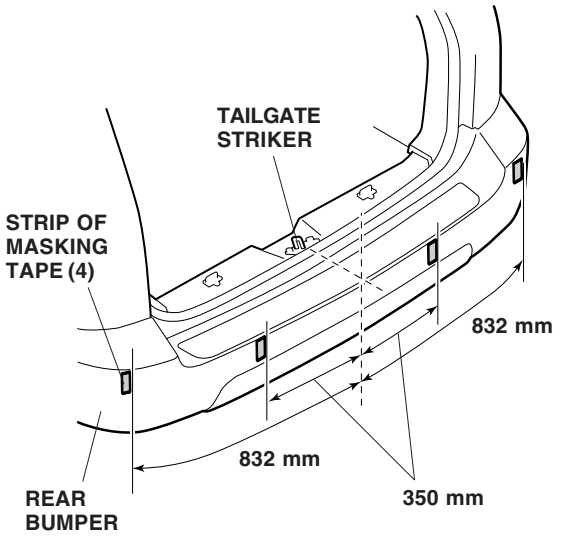
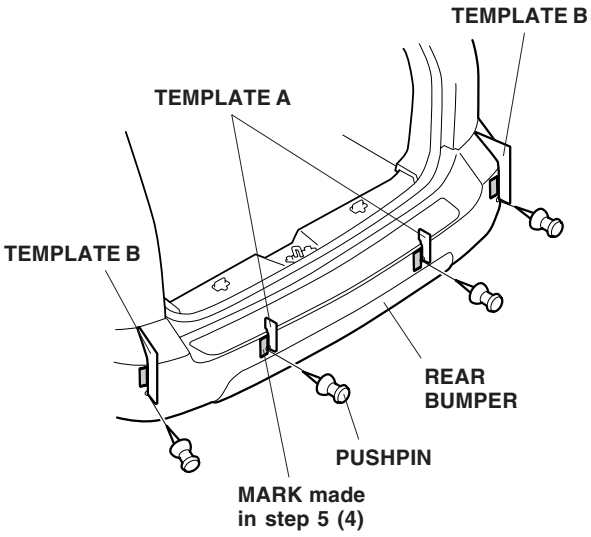
Installing the Sensors in the Bumper

5. Measure 350 mm and 832 mm from the tailgate striker and mark the measurements with masking tape as shown.

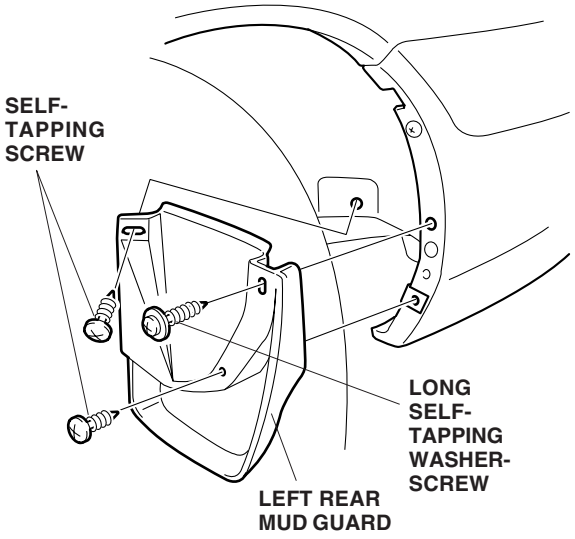


6. Position the templates A and B on the rear bumper and align them with the marks you just made. Using a pushpin, further mark the rear bumper at the bottoms of the templates A and B.

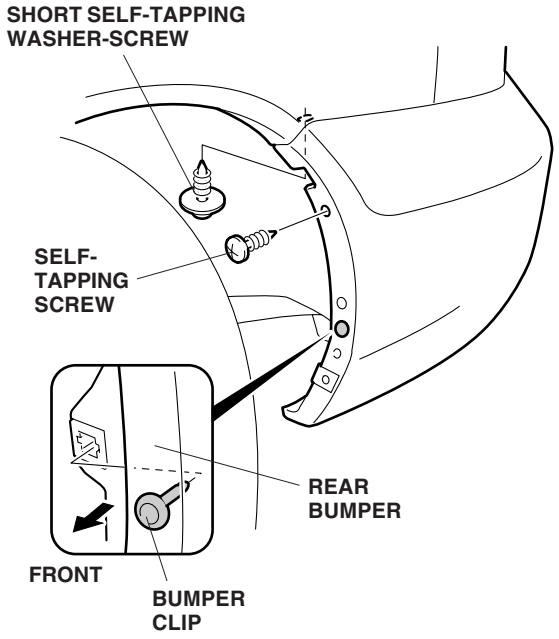


7. Remove the masking tape.

8. Remove the two self-tapping screws and one long self-tapping washer-screw securing the left rear mud guard. Remove the mud guard.

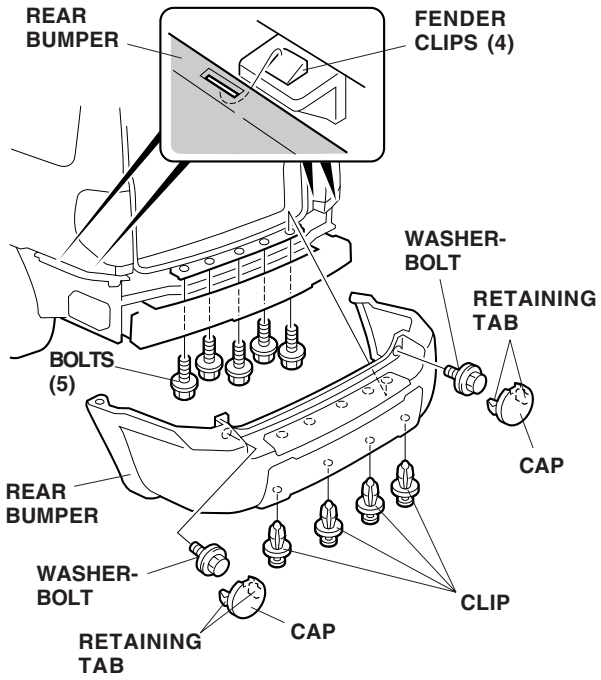


9. Remove the one short self-tapping washer-screw and self-tapping screw securing the rear bumper, then pull the rear bumper out toward you to remove the bumper clip.

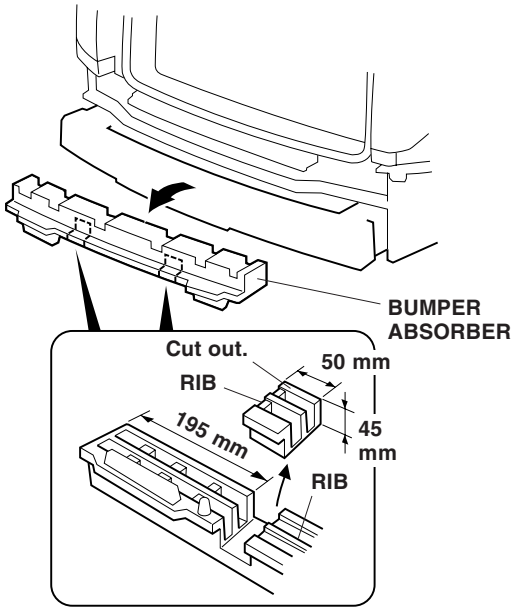


10. Repeat for the right side.

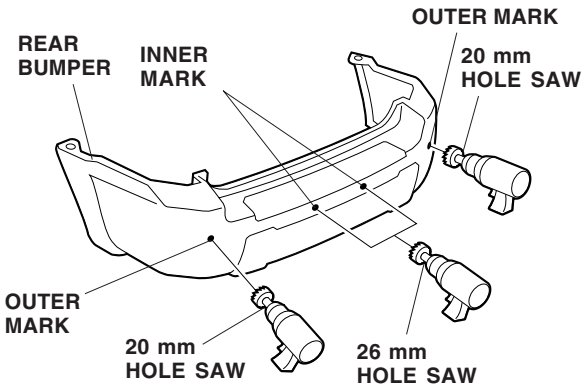
11. Remove the two caps from the rear bumper, then remove the two washer-bolts, four clips and five bolts securing the rear bumper. Further remove the four fender clips and remove the rear bumper. To prevent damage, set the rear bumper on cardboard or a blanket.



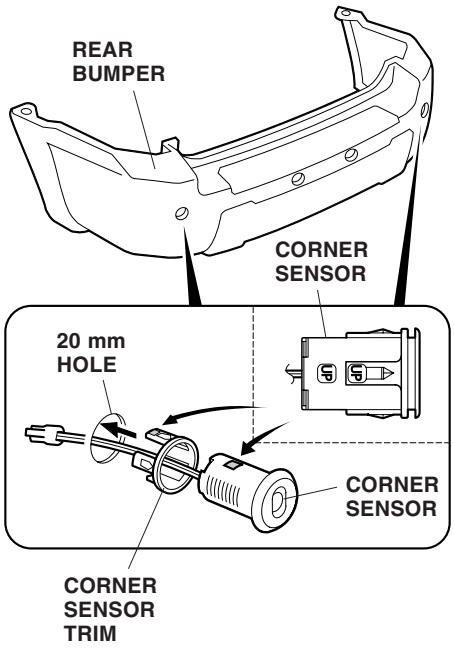
12. Remove the bumper absorber. On the bottom edge of the bumper absorber, measure in about 195 mm and locate the rib. Using a utility knife, cut out the bottom of the bumper absorber in the areas shown.



13. While wearing eye protection, drill a 20 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.



14. Separate the corner sensors from the corner sensor trims. Install the corner sensor trims first, and the install the corner sensors through the 20 mm holes you just made, with the “UP” mark facing up.



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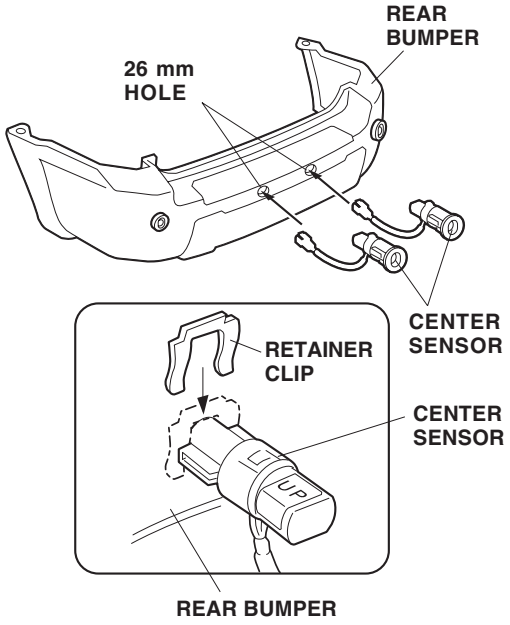
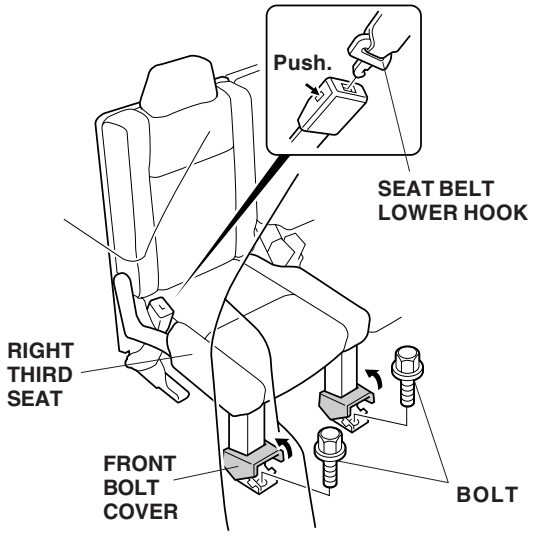
15. Install the two center sensors into the 26 mm holes. Secure the center sensors with one retainer clip for each sensor.



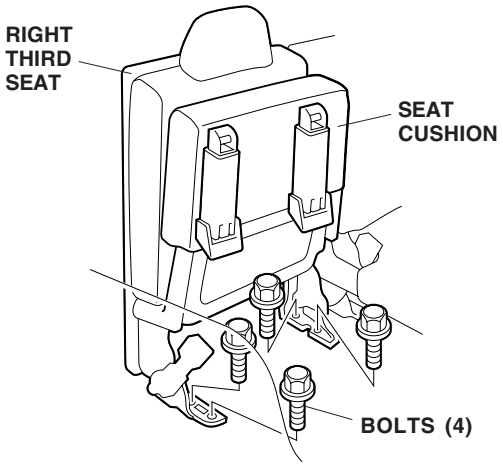
Routing the Backup Sensor Harness

16. Using a small flat-tip screwdriver or the ignition key, release the seat belt lower hook from the right third seat.

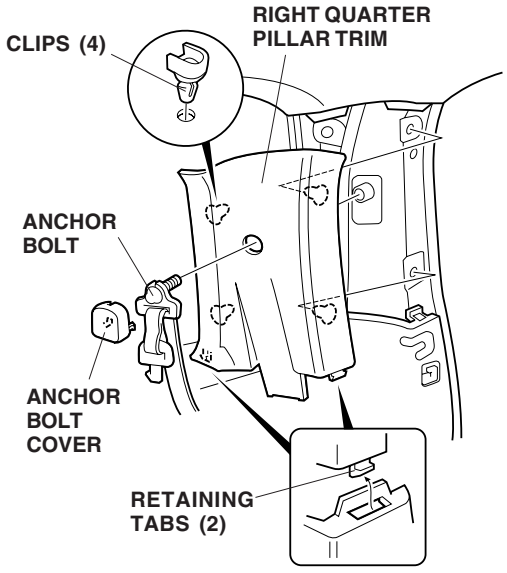


17. Raise the front bolt covers of the right third seat, and remove the two bolts concealed under the covers.

18. Raise the right third seat cushion, and remove the four bolts that fasten the rear right third seat to the floor. Remove the right third seat.

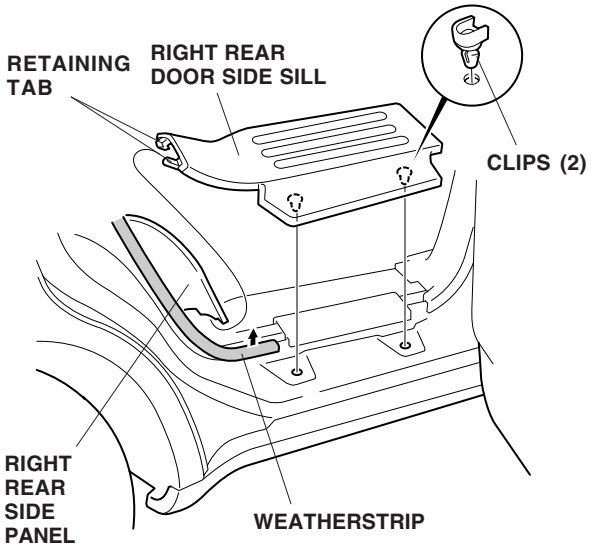


19. On the right quarter pillar trim, remove the anchor bolt cover from the seat belt anchor, and remove the bolt that secures the seat belt anchor.

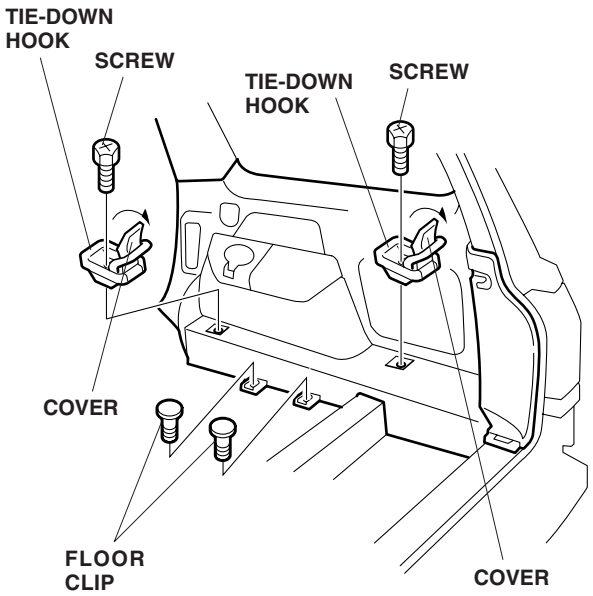


20. Remove the right quarter pillar trim (four clips and two retaining tabs).

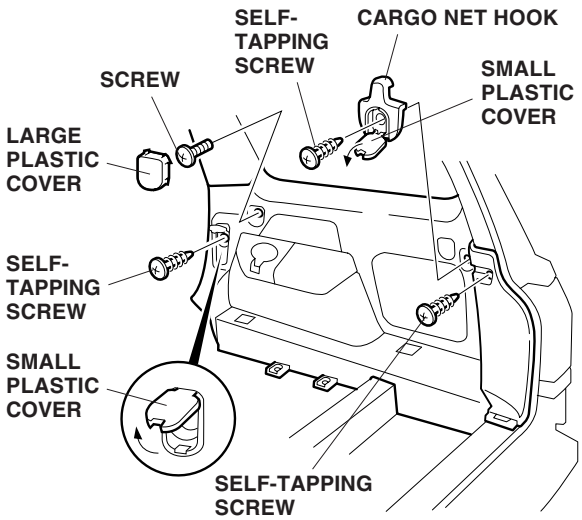
21. Remove the door weatherstrip around the right rear door side sill. Remove the right rear door side sill (two clips and two retaining tabs).



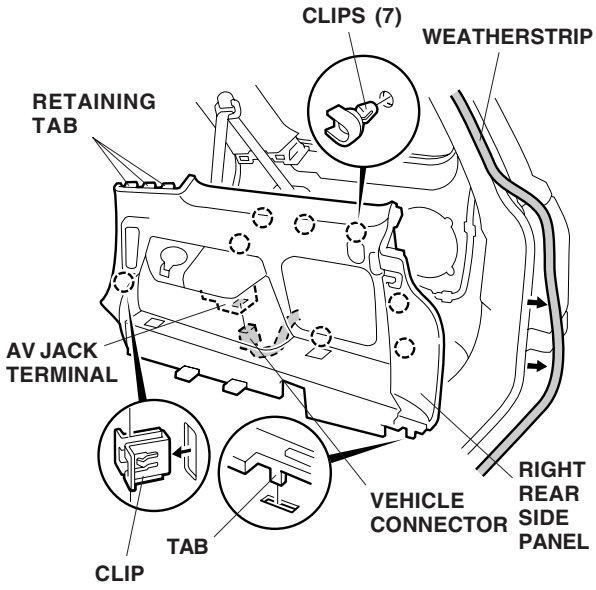
22. Pry out the two covers, and remove the two screws concealed under the covers. Remove the two tie-down hooks. Remove the two floor clips.



23. Remove the large plastic cover, and remove the screw concealed under the cover. Pry out the small plastic cover, 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.



24. Remove the tailgate weatherstrip in the area shown. Remove the eight clips, unplug the vehicle connector from the AV jack terminal, and remove the right rear side panel.



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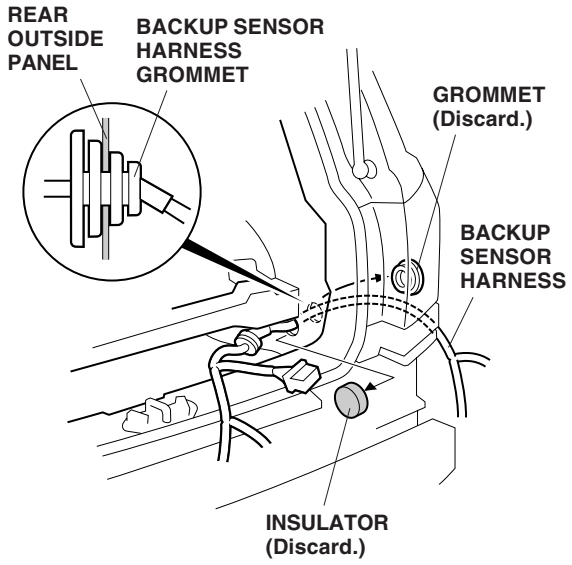
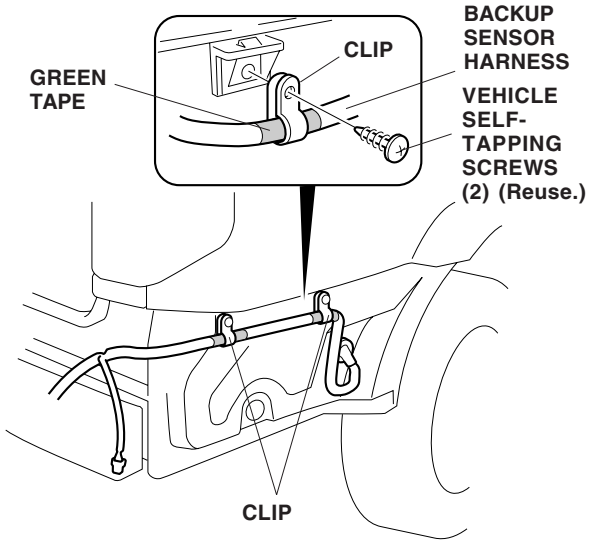
25. Remove and discard the insulator from the rear inside panel. On the outside of the vehicle, remove and discard the front grommet from the rear panel.

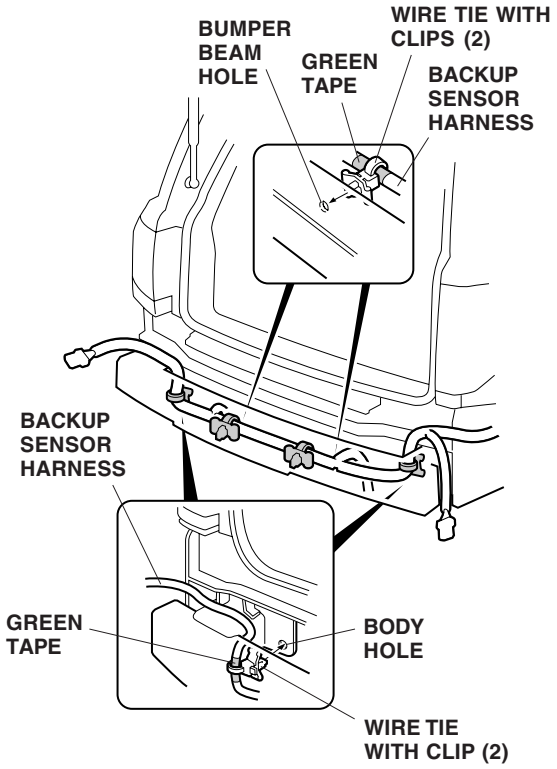


26. Pull the four backup sensor harness 2-pin connectors out through the grommet hole. Seat the backup sensor harness grommet in the grommet hole of the rear ***outside*** panel. Rotate the grommet so the wires face down.

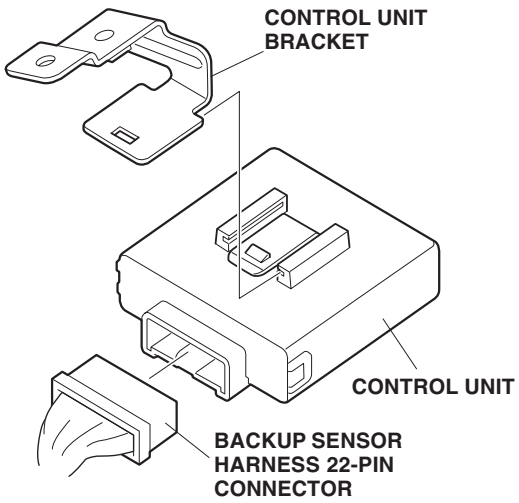
27. Attach the two clips to the backup sensor harness at the green tape. Remove the two self-tapping screws from the vehicle, and secure the clips with these self-tapping screws.



28. 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.



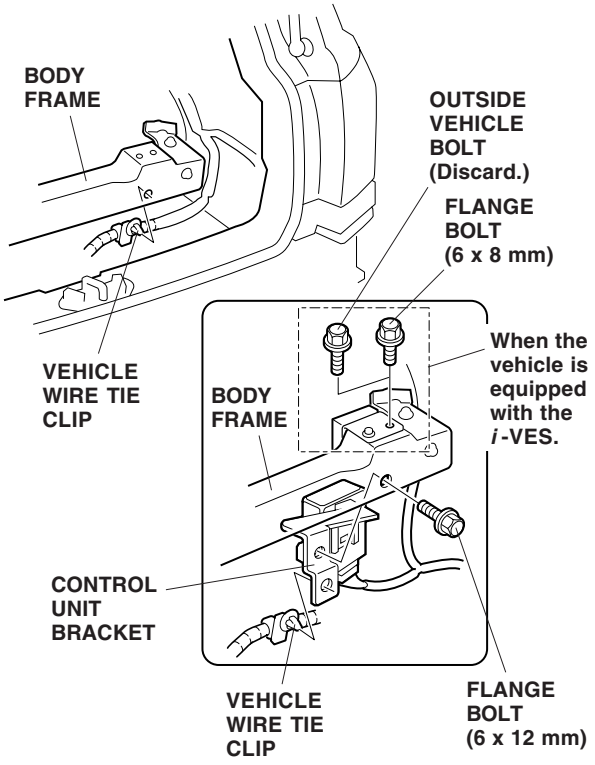
29. Slide the control unit bracket onto the control unit.



30. Plug the backup sensor harness 22-pin connector into the control unit.

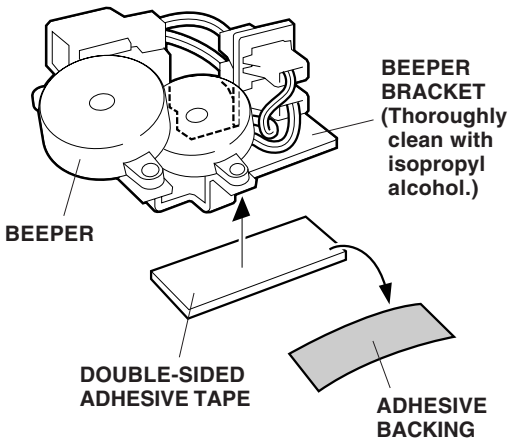
31. Release the vehicle wire tie clip from the body frame, and position the control unit bracket on the body frame. Attach the control unit to the body frame using the 6 x 12 mm flange bolt supplied.

    - On the *i*-VES equipped model, replace the outer bolt securing the vehicle unit with the 6 x 8 mm flange bolt provided.

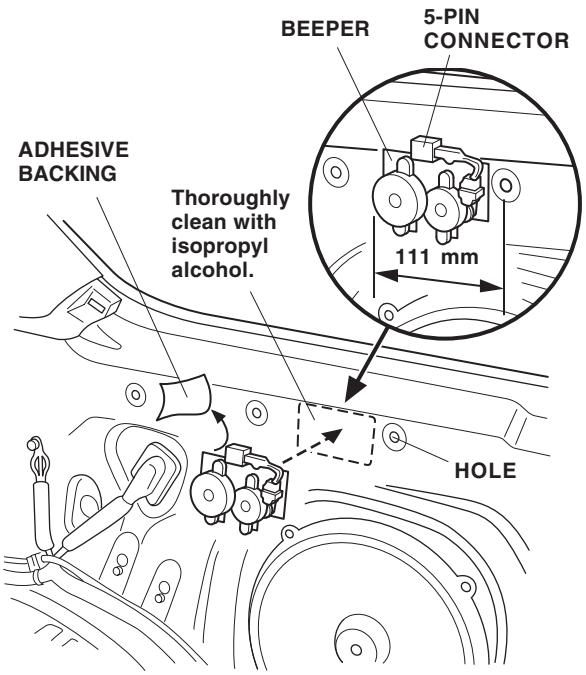


32. Attach the vehicle wire tie clip into the control unit bracket hole.

33. Using isopropyl alcohol, thoroughly clean the buzzer bracket where the double-sided adhesive tape will attach. Remove one adhesive backing from the double-sided adhesive tape and attach the tape to the beeper bracket.



34. Using isopropyl alcohol, thoroughly clean the inside rear panel where the beeper will attach. Remove the adhesive backing from the double-sided tape on the beeper, and attach the beeper to the inside rear panel between the panel ribs.



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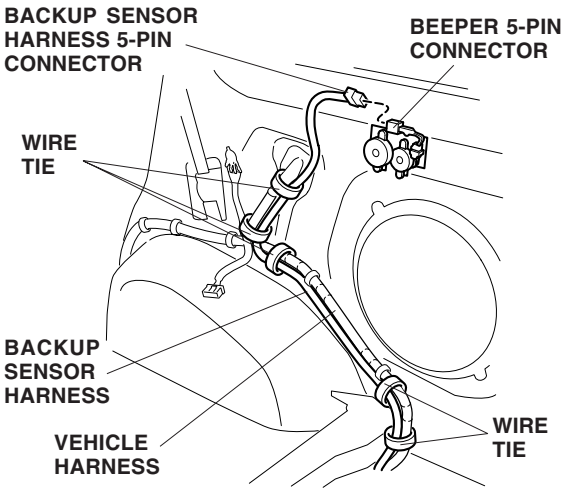
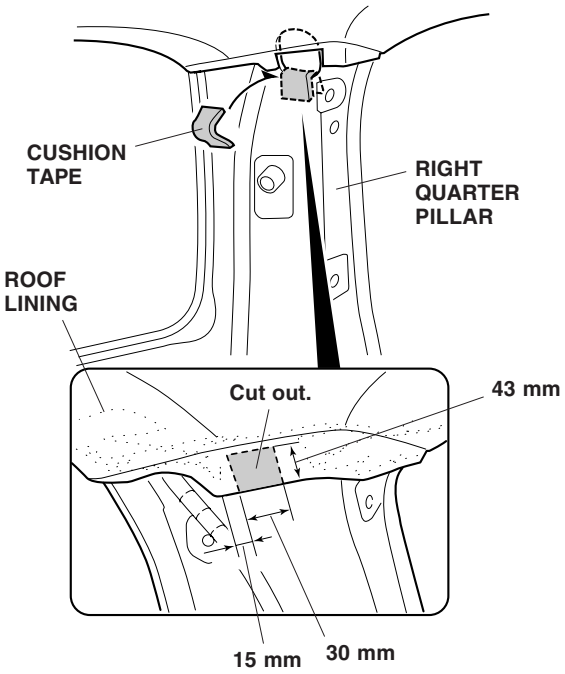
35. Plug the backup sensor harness 5-pin connector into the beeper 5-pin connector.



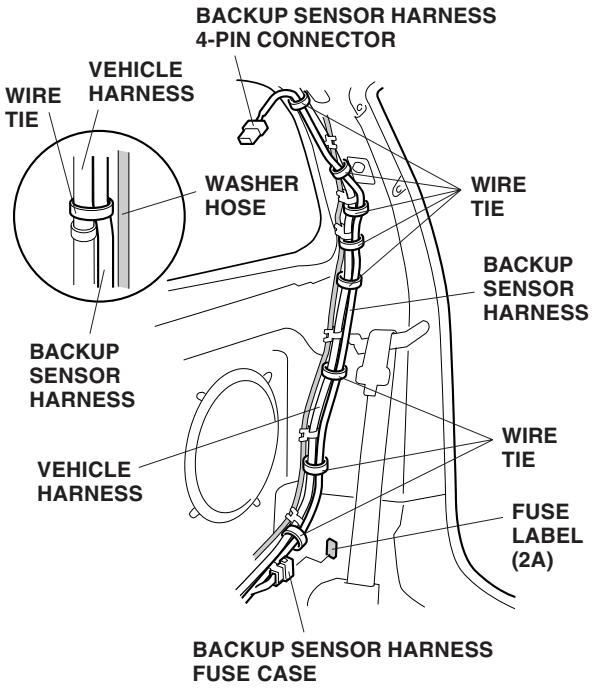
36. Secure the backup sensor harness to the vehicle harness with five wire ties in the areas shown.

37. 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.



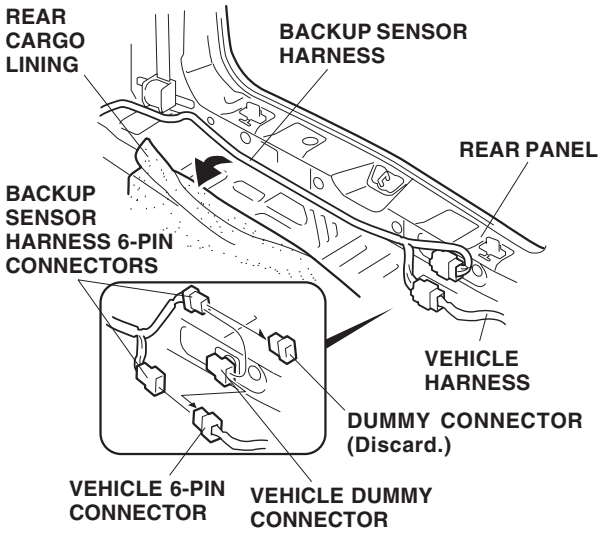
38. Using isopropyl alcohol, thoroughly clean the area around the upper hole, then attach the cushion tape to the edge of the upper hole as shown.

39. Attach the fuse label (BACKUP SENSOR 2A) to the fuse case on the backup sensor harness.



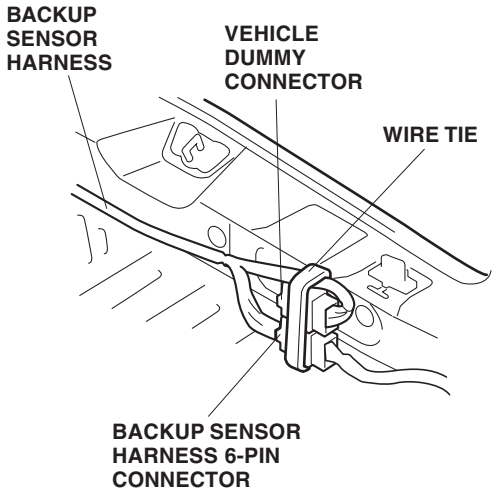
40. Route the 4-pin connector end of the backup sensor harness up along the vehicle harness on the right quarter pillar. Secure the backup sensor harness to the vehicle harness with eight wire ties in the areas shown. Do not attach the wire ties to the washer hose.

41. Turn over the rear cargo lining and route the backup sensor harness 6-pin connector to the left along the rear panel.



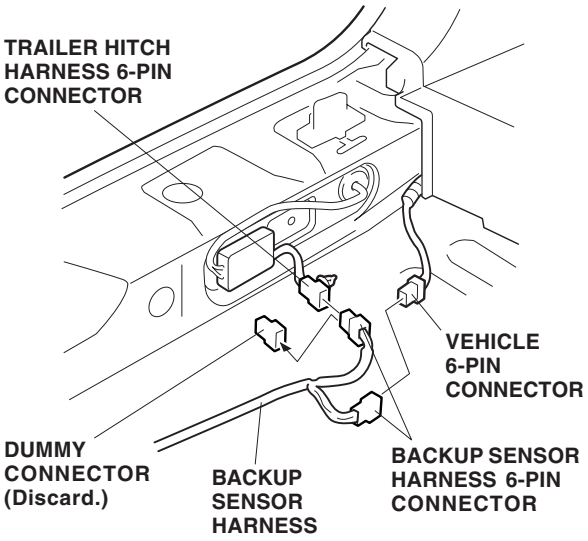
42. Unplug the vehicle 6-pin connector from the vehicle dummy connector. Unplug the dummy connector from the backup sensor harness 6-pin connector. Plug the back up sensor harness 6-pin connector between the vehicle dummy connector and vehicle 6-pin connector.

43. Secure the backup sensor harness 6-pin connector to the vehicle dummy connector with a wire tie.

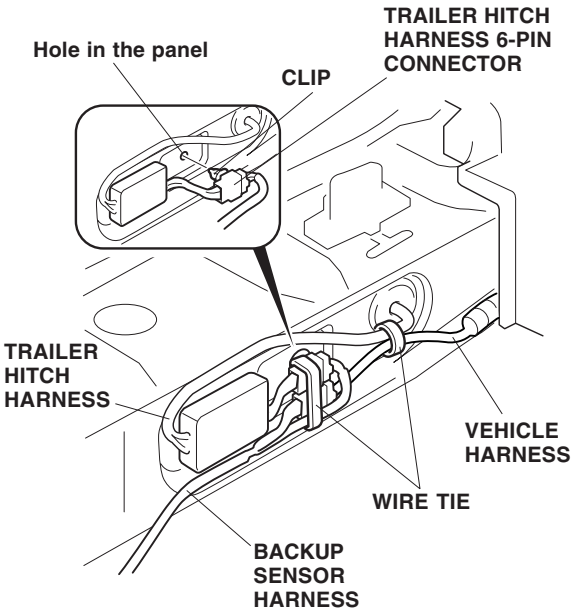


44. If you are also installing a trailer hitch, go to step 45. Otherwise, continue with step 48.

45. Unplug the dummy connector from the backup sensor harness 6-pin connector. Then, plug the backup sensor harness 6-pin connector between the trailer hitch harness 6-pin connector and vehicle 6-pin connector.



46. Push the clip on the trailer hitch harness 6-pin connector into the hole in the panel.



47. Secure the trailer hitch harness and the backup sensor harness with two wire ties.

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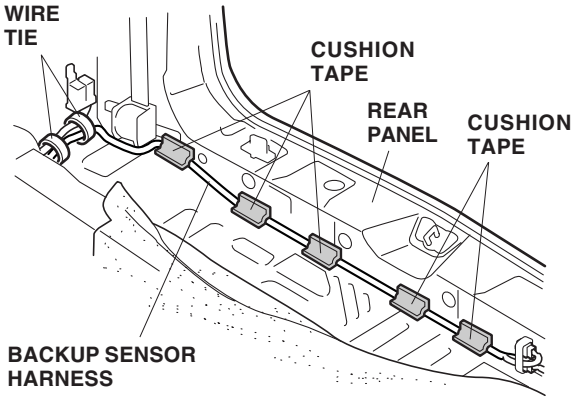
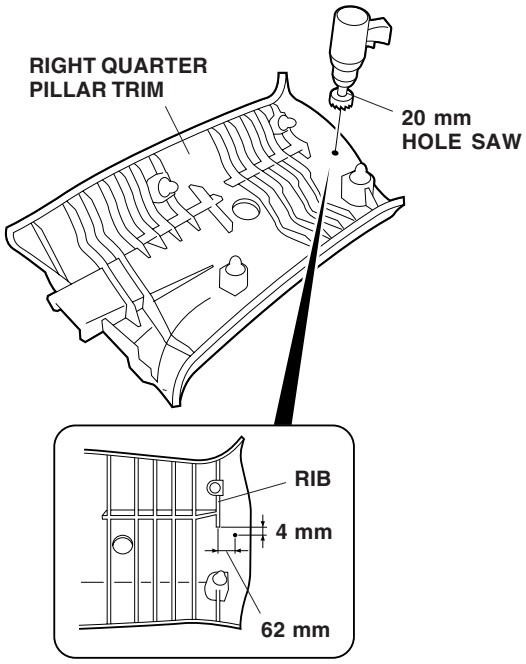
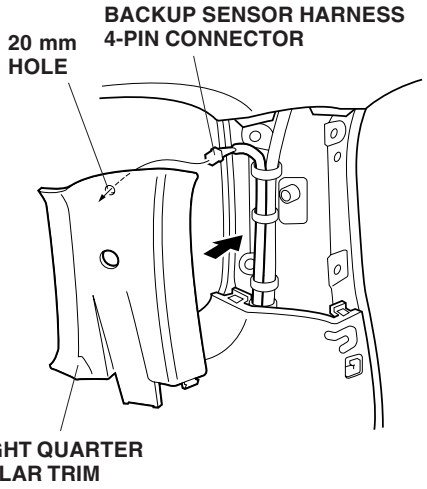
48. Secure the backup sensor harness to the vehicle harness with two wire ties as shown.



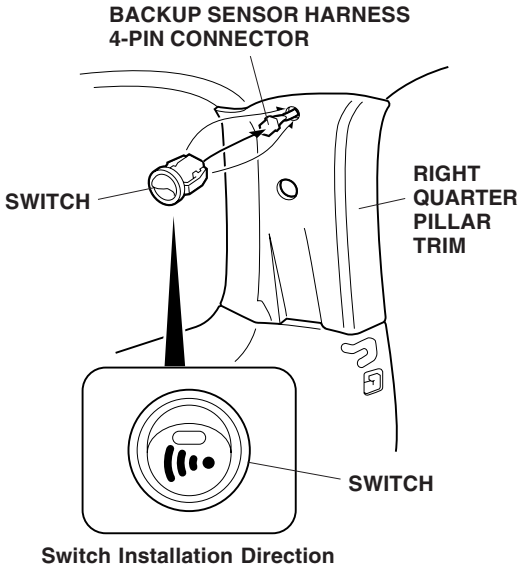
49. Secure the backup sensor harness to the rear panel with five cushion tapes in the areas shown. Using isopropyl alcohol, thoroughly clean the areas where the cushion tapes will attach to the rear panel.
50. Reinstall the rear cargo lining.
51. Reinstall the right rear side panel. Check that all clips and retaining tabs are installed securely.
52. Using a tape measure and a felt-tip pen, measure and mark the right quarter pillar trim as shown. While wearing eye protection, drill a 20 mm hole through the mark you just made. Remove any burrs.



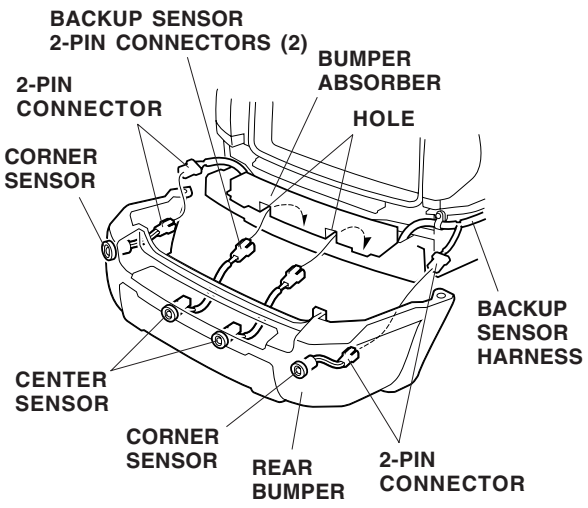
53. Pull the backup sensor harness 4-pin connector out through the 20 mm hole you made, then reinstall the right quarter pillar trim. Check that all clips and retaining tabs are installed securely.



54. 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.

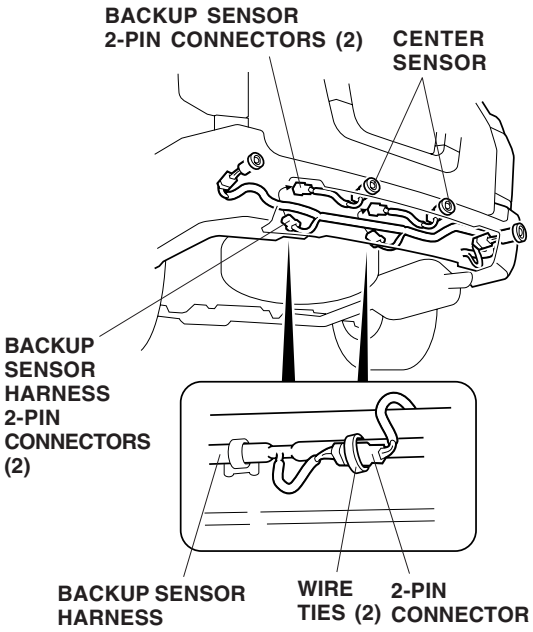


55. Reinstall the bumper absorber. While holding the rear bumper close to the vehicle, route the 2-pin connectors from the backup sensors through the holes in the bumper absorber.



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

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



58. Check that all wire harnesses and cables are routed properly and that all connectors are plugged in.

59. Reinstall the third seat, torque the seat bolts to 41 to 53 N·m (30 to 39 lb·ft).

60. Reinstall all removed parts.

61. Reconnect the negative cable to the battery.

62. Enter the customer's radio anti-theft code, and reset the radio station presets.

63. Reset the clock.

64. 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.

65. Start the engine. Push down on the driver's window switch until the window is fully open.

66. Pull up on the driver's window switch to close the window completely, then hold the switch for 2 seconds.

67. Lower and raise the window to check the operation of the driver's window AUTO function.

68. Do the PCM idle learn procedure.

    – Make sure all electrical items are turned off.

    – Start the engine. Hold the engine speed at 3,000 rpm with no load (in Park of Neutral) until the radiator fan comes on.

    – Let the engine idle for about 10 minutes with the throttle fully closed and with all electrical items off.

      NOTE: If the radiator fan comes on during this step, the time when it is operating must not be included in the 10 minutes.

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