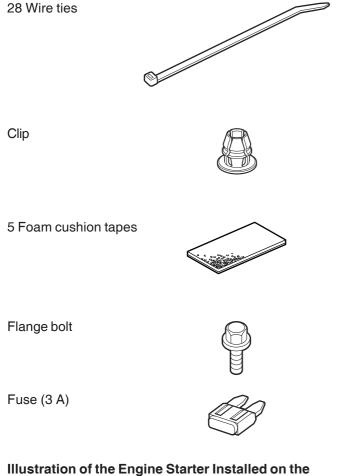
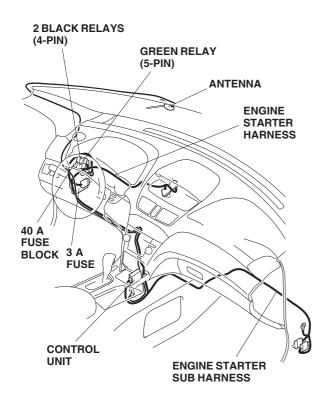
|  | Accessory<br>REMOTE CONTROL |       | Application                                    | Publications No.<br>BII 40030 |
|--|-----------------------------|-------|--|-------------------------------|
| INSTRUCTIONS   | ENGINE STARTER              |       | 2009 MDX                                       | Issue Date<br>JULY 2008       |
| PARTS LIST<br>Remote Engine Starter Unit Kit<br>P/N 08E91-E22-200B |                             | P/N   | ote Control Engine Starter /<br>08E92-STX-200A | Attachment Kit                |
| Transmitter  |                             | Engi  | ne starter harness                             |                               |
| Control unit   |                             |       |  |                               |
| Antenna  |                             | Engi  | ne starter sub harness                         |                               |
| Key ring   | $\bigcirc$                  | Cont  | trol unit bracket                              |                               |
| Protective tape  | $\diamond$                  |       |  |                               |
| Fuse label   |                             | Tem   | plate  |                               |
| Caution label  |                             |       |  |                               |
| Accessory User's Information Ma                                    |                             | 2 Bla | ack relays (4-pin, black)                      |                               |
|  | -                           | Gree  | en relay (5-pin, green)                        |                               |



# Illustration of the Engine Starter Installed on the Vehicle



# TOOLS AND SUPPLIES REQUIRED

Phillips screwdriver Flat-tip screwdriver Small flat-tip screwdriver **Ratchet** 10 mm and 14 mm Sockets Combination wrench Isopropyl alcohol Shop towel Needle nose pliers Scale Tape measure Scissors Rubber mallet HDS (Honda Diagnostic System) Masking tape Clip remover

# INSTALLATION

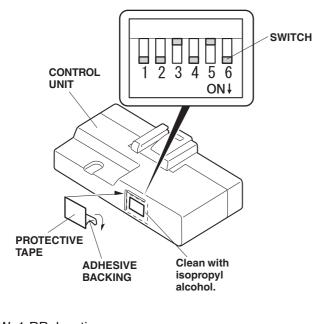
**Customer Information:** The information in this installation instruction is intended for use only by skilled technicians who have the proper tools, equipment, and training to correctly and safely add equipment to your vehicle. These procedures should not be attempted by "do-it-yourselfers."

NOTE: This antenna should only be installed if the ambient air temperature  $15^{\circ}C$  (60°F) or above.

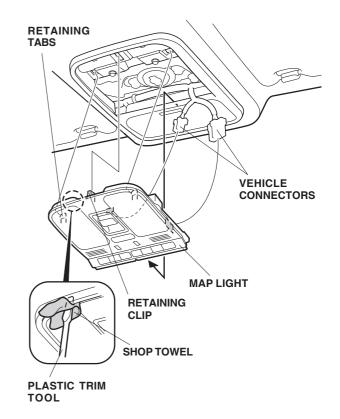
- 1. Make sure you have the anti-theft code for the radio, then write down the radio station presets.
- 2. Disconnect the negative cable from the battery.

### Setting the Control Unit

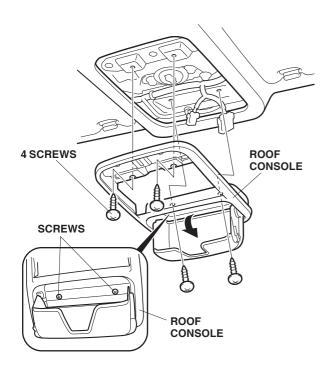
- 3. Set the control unit switches as shown. Using an isopropyl alcohol on a shop towel, clean the area where the protective tape will attach. Attach the protective tape to the control unit over the switches.
  - When the switch setting is not correct, the engine starter will not start.
  - For switch setting, first touch a metal part of the car to discharge any static electricity, and then perform the setting.



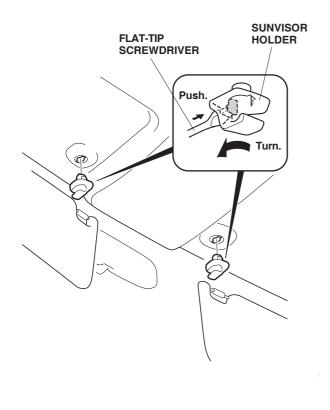
SW: 1 RR Junction SW: 2 Trunk or Tailgate SW: 3 Smart Entry SW: 4 Horn or Buzzer Answerback SW: 5 Trunk Main SW SW: 6 Reserve 4. Using a small plastic trim tool and a shop towel, remove the map light (one retaining clip, two retaining tabs, and unplug the two vehicle connectors).



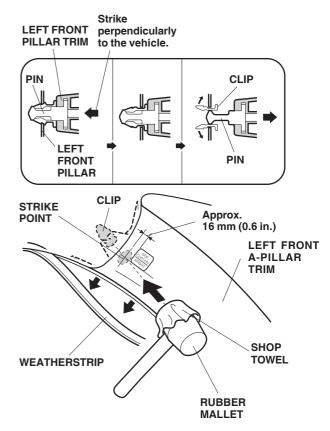
5. Remove the roof console (four screws).



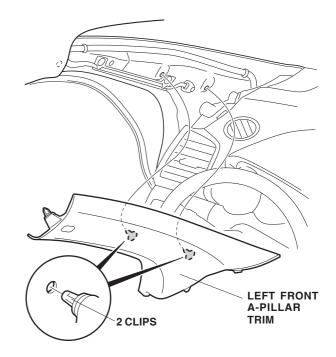
6. Remove the sunvisor holders. Using a flat-tip screwdriver, push the hook, and turn the holder 90°, then pull it out.



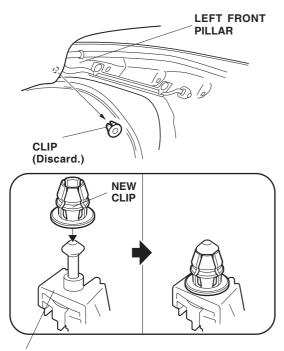
7. Pull away the weatherstrip from the left front pillar trim.



- 8. Using a rubber mallet and a shop towel, gently strike the area shown of the left front pillar trim to release the clip.
- 9. Remove the left front pillar trim (two clips).

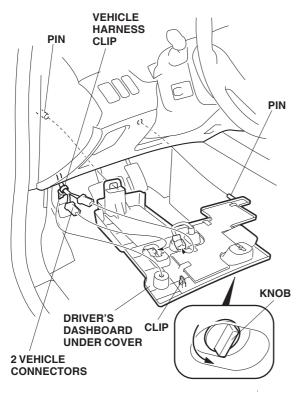


10. Remove and discard the clip from the left front A-pillar, and install a new clip on the left front A-pillar trim.

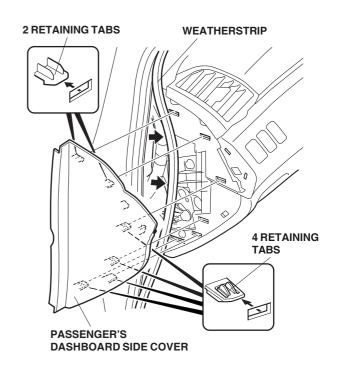


#### LEFT FRONT PILLAR TRIM

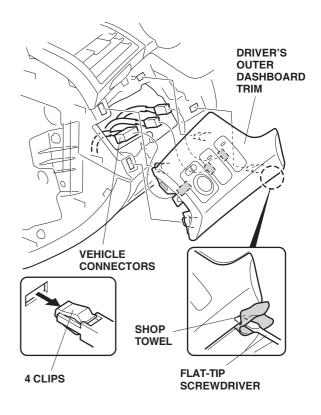
11. Turn the knob counterclockwise, then pull out the driver's dashboard under cover (one clip and two pins). Release the vehicle harness clip and unplug the two vehicle connectors to remove the driver's dashboard under cover.



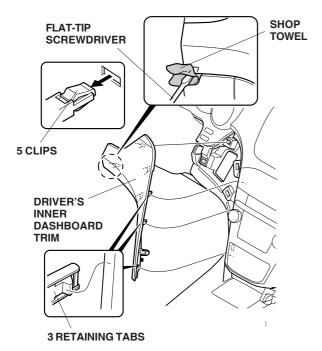
12. Pull away the weatherstrip and remove the passenger's dashboard side cover (six retaining tabs).



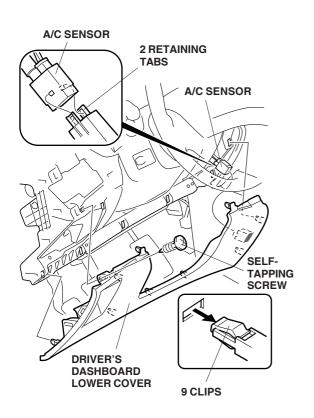
13. Using a flat-tip screwdriver and a shop towel, remove the driver's outer dashboard trim (four clips and vehicle connectors).



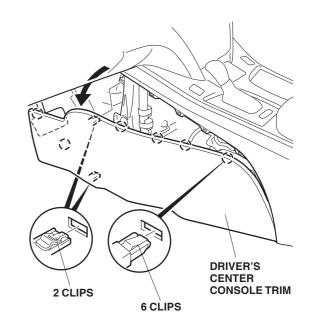
14. Using a flat-tip screwdriver and a shop towel, remove the driver's center trim (five clips and three retaining tabs).



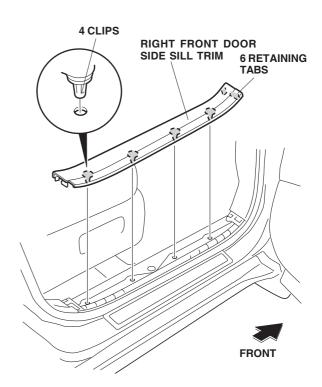
15. Remove the driver's lower dashboard cover (one self-tapping screw and nine clips). If equipped, remove the A/C sensor (two retaining tabs).



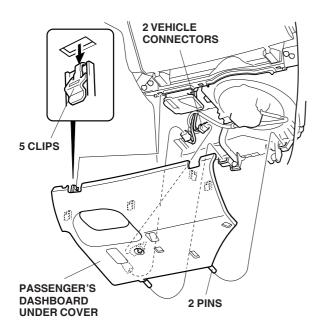
16. Release the driver's center console trim (eight clips) as shown below.



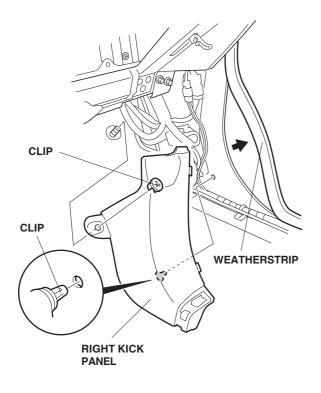
17. Remove the right front door side sill trim (four clips and six retaining tabs).



18. Remove the passenger's dashboard under cover (five clips, and release two pins and two vehicle connectors).

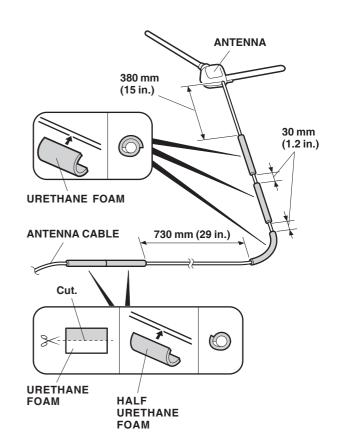


19. Pull away the weatherstrip, and remove the right kick panel (two clips).



# Installing the Antenna

20. Wrap three pieces of urethane foam around the antenna cable at the measurements shown.

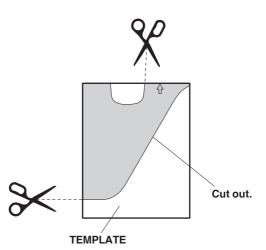


21. Using scissors, cut one urethane foam in half. Wrap the two halves of the urethane foam around the antenna cable at the measurements shown. ANTENNA 14 mm (0.6 in.) 15 mm (0.6 in.) ANTENNA PLATE 10 20 SCALE NEEDLE NOSE PLIERS

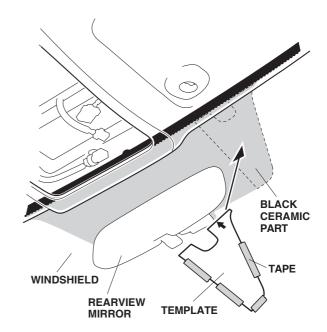
ANTENNA

PLATE

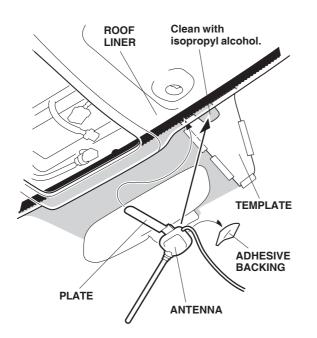
- 22. Measure and mark the antenna plate using two pairs of neddle nose pliers, bend the antenna plate to the angle shown.
- 23. Using scissors, cut out the template.



24. Secure the template to the windshield with the tape by aligning it with the edge of the black ceramic paint as shown.

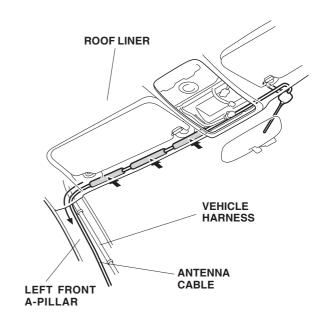


25. Using isopropyl alcohol on a shop towel, clean the area where the antenna will attach.

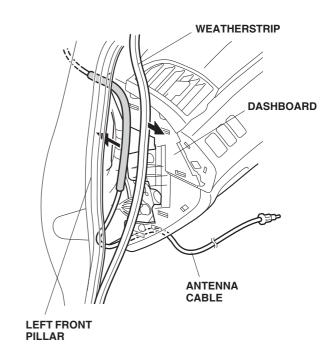


- 26. Remove the adhesive backing from the antenna. Insert the antenna plate over the roof liner, and attach the antenna to the windshield aligning it with the template.
- 27. Remove the template.

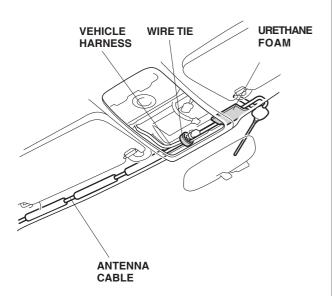
28. Gently pull down the roof lining, and tuck the antenna cable under it. Be careful not to crease the roof lining.



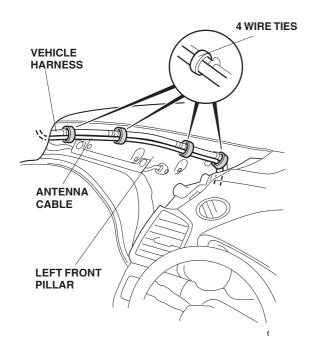
- 29. Route the antenna cable down the A-pilar along the vehicle harness.
- 30. Pull away the weatherstrip. Route the antenna cable down under the dashboard. Tuck the antenna cable between the left front A-pillar and the dashboard, and reinstall the weatherstrip.



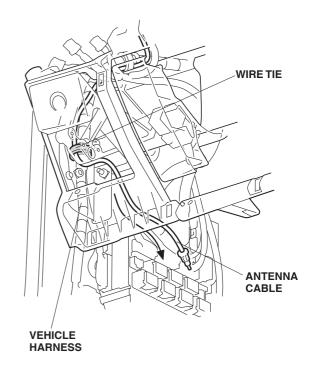
31. Using isopropyl alcohol on a shop towel, clean the roof panel where the urethane foam will attach.



- 32. Secure the antenna cable to the vehicle harness with one wire tie.
- 33. Secure the antenna cable to the roof panel with one urethane foam in the areas shown.
- 34. Along the front A-pillar, secure the antenna cable to the vehicle harness with four wire ties.

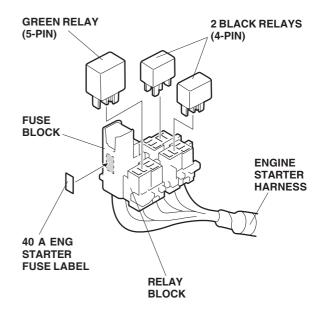


35. At the dashboard area, secure the antenna cable to the vehicle harness with one wire tie.



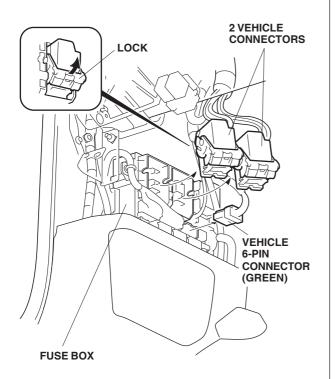
# **Routing the Engine Starter Harness**

36. Install the three relays to the engine starter harness relay blocks. Be careful to install the relays properly to avoid a malfunction.

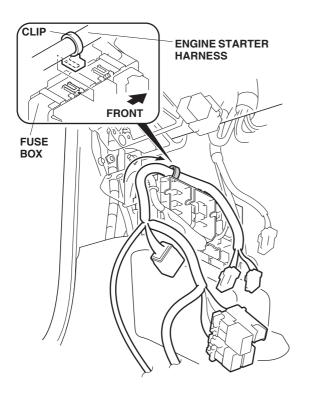


37. Attach the 40 A ENG STARTER fuse label to the engine starter harness fuse block.

38. At the fuse box, locate and unlock the two vehicle connectors and disconnect them from the fuse box.

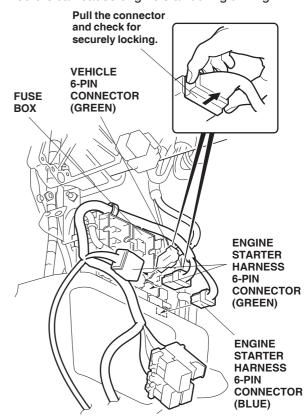


- 39. Unplug the vehicle 6-pin connector (green) from the fuse box.
- 40. Secure the clip on the engine starter harness to the fuse box as shown.



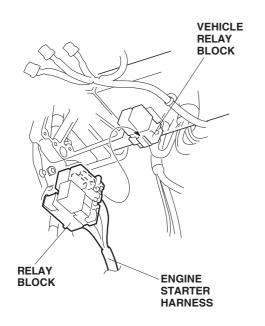
41. Plug the engine starter harness 6-pin connector (green) into the fuse box, and plug the vehicle 6-pin connector into the engine starter harness 6-pin connector (green).

**NOTICE** Check that the engine starter harness 6-pin connectors (green) are connected to the fuse box and vehicle connector, and they are locked securely. Loose connectors can cause engine stall during driving.

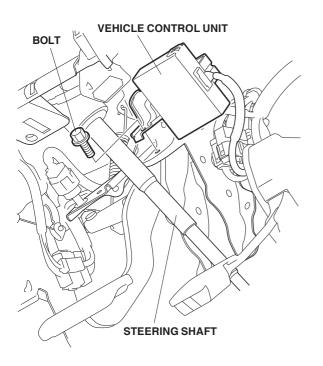


- 42. Plug the engine starter harness 6-pin connector (blue) into the fuse box.
- 43. Reconnect the two vehicle connectors unplugged in step 38.

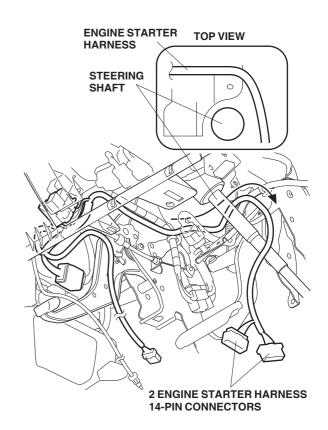
44. Attach the engine starter harness relay block to the vehicle relay block as shown.



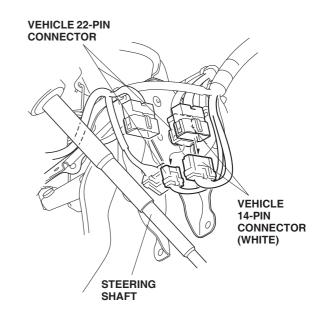
45. Remove the vehicle control unit (one bolt), and let the control unit hang.



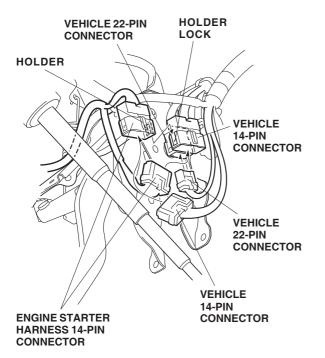
46. Route the two engine starter harness 14-pin connectors over the steering shaft.



- 47. Near the steering wheel shaft, locate and unplug the vehicle 20-pin and 14-pin connectors:
  - First unplug the inside 20-pin connector (small), then unplug the outside 14-pin connector (large).

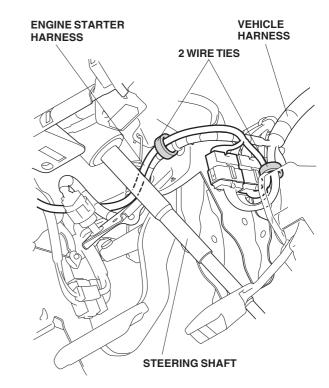


• Reconnect the 20-pin connector. This connector was unplugged to access the lock on the 14-pin connector.

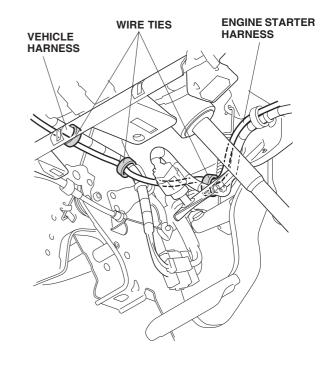


- Plug the engine starter harness 14-pin connector in between the vehicle 14-pin connectors.
- Slide the holder on the side of the engine starter harness onto the holder lock on the vehicle 14-pin connector.

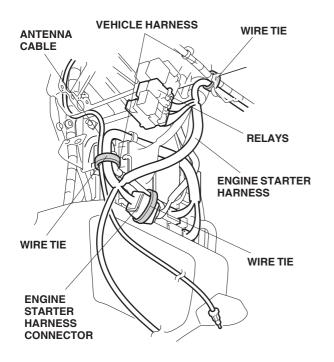
48. Secure the engine starter harness connector to the vehicle harness with two wire ties.



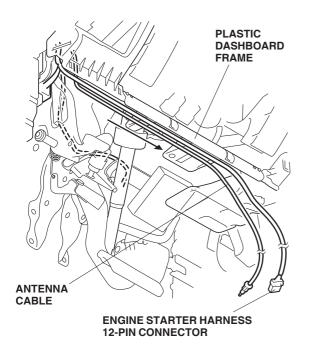
- 49. Reinstall the vehicle control unit with the bolt removed in step 45. Be sure the engine starter harness is above the control unit.
- 50. Secure the engine starter harness to the vehicle harness with three additional wire ties.



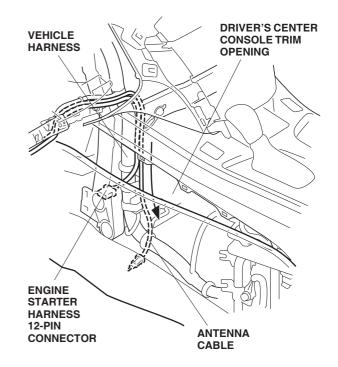
51. Secure the engine starter harness connector to the vehicle harness with one wire tie. Near the relays secure the engine starter harness to the vehicle harness with one wire tie.



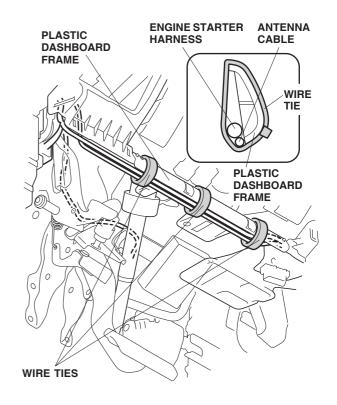
- 52. Secure the engine starter harness and antenna cable to the vehicle harness with one wire tie.
- 53. Route the engine starter harness 12-pin connector and antenna cable along the dashboard frame towards the center counsole.



54. At the center console, route the engine starter harness 12-pin connector and antenna cable down along the vehicle harness to the driver's center console trim opening.



55. Secure the engine starter harness and antenna cable to the plastic dashboard frame with three wire ties.

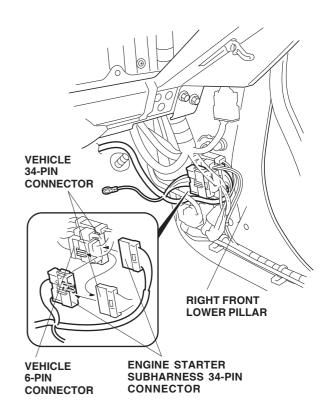


WIRE TIE WIRE TIE HARNESS

# 56. Secure the engine starter harness and antenna cable to the vehicle harness with one wire tie.

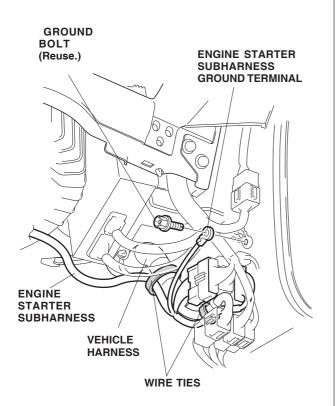
# **Routing the Engine Starter Subharness**

57. At the passenger's kick panel (removed in step 19), slide the holder on the engine starter subharness 34-pin connector onto the holder lock on the vehicle 5-pin connector.

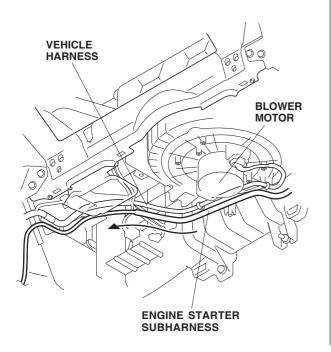


58. Unplug the vehicle 34-pin connector and plug the engine starter subharness 34-pin connectors in between.

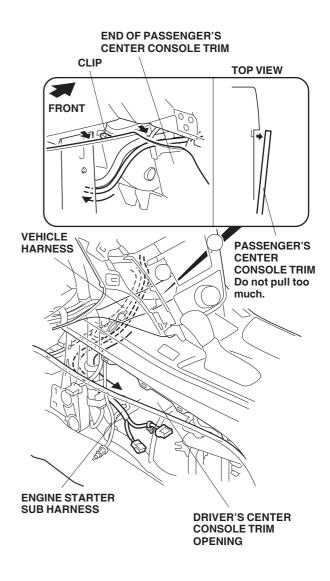
59. Remove the vehicle ground bolt. Attach the engine starter subharness ground terminal, and reinstall the ground bolt you just removed.



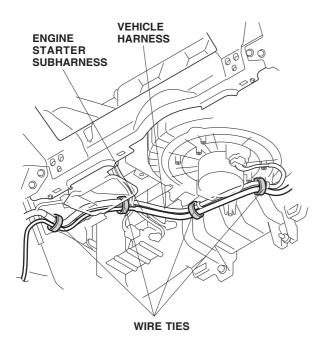
- 60. Secure the engine starter subharness to the vehicle harness with two wire ties.
- 61. Route the engine starter subharness under the blower motor, and along the vehicle harness towards the center console.



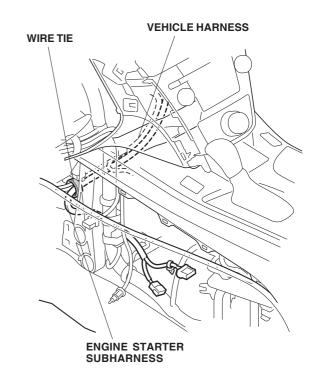
62. Pull the end of the passenger's center console trim to release the one clip shown. Route the engine starter subharness along the vehicle harness to the driver center console trim opening. NOTE: Pulling the passenger console trim too much causes damage.



63. Secure the engine starter subharness to the vehicle harness with four wire ties in the areas shown.

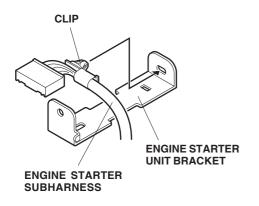


64. Behind the center console, secure the engine starter subharness to the vehicle harness with one wire tie.

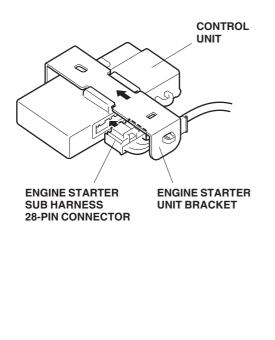


#### Installing the Control Unit

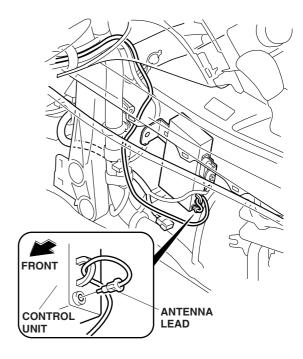
65. Install the clip of the engine starter subharness to the engine starter unit bracket as shown.



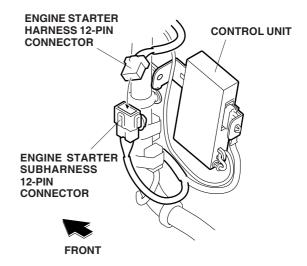
66. Install the engine starter unit bracket and plug the engine starter subharness 28-pin connector into control unit. Note the direction of the bracket.



67. Connect the antenna lead to the control unit as shown.



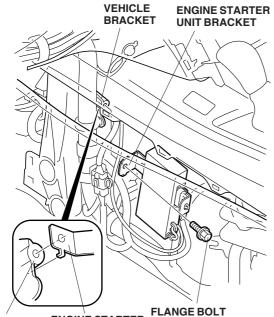
68. Plug the engine starter subharness 12-pin connector into the engine starter harness 12-pin connector.



69. Install the engine starter unit bracket to the vehicle bracket using a flange bolt.

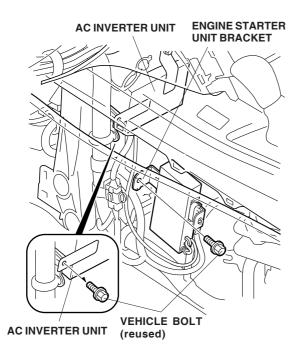
If the AC inverter unit is mounted on the vehicle bracket, install the engine starter unit and bracket to the vehicle bracket reusing the vehicle bolt fastening the AC inverter unit.

#### Without AC inverter unit

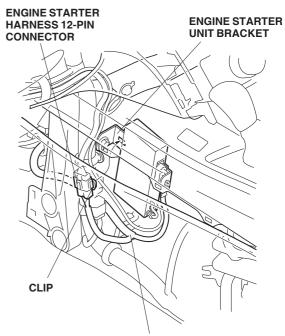


VEHICLE ENGINE STARTER BRACKET UNIT BRACKET

### With AC inverter unit

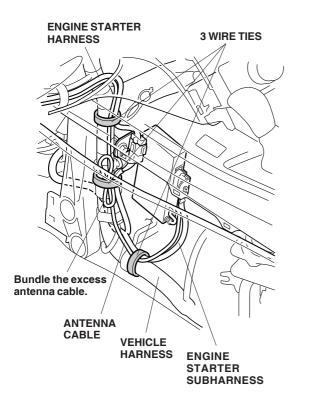


 Install the clip on the engine starter subharness, 12-pin connector to the engine starter unit bracket as shown.

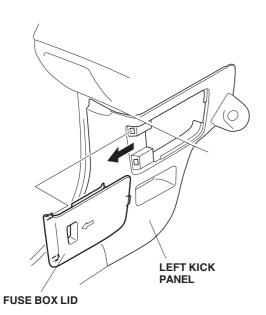


ENGINE STARTER SUBHARNESS

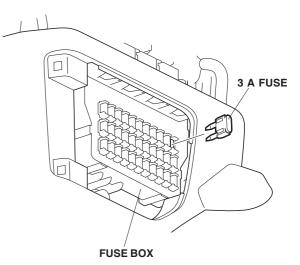
71. Secure the engine starter harness, engine starter subharness, and antenna cable to the vehicle harness with three wire ties as shown. Bundle the excess antenna cable and secure it using one wire tie as shown.



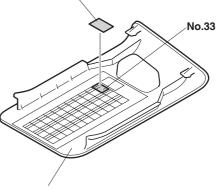
72. Remove the fuse box lid.



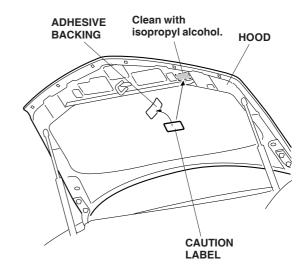
73. Install the 3 A fuse from in the kit into the No. 33 slot of the fuse box.



- 74. Attach the 3 A ENG STARTER fuse label to the No.33 slot on the inside of the fuse box lid.
  - 3 A ENG STARTER FUSE LABEL



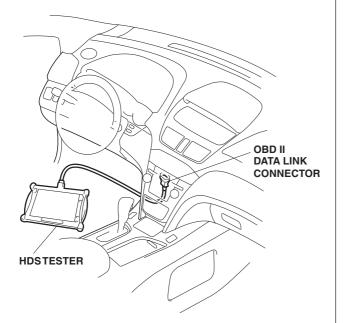
- FUSE BOX LID
- 75. Using isopropyl alcohol on a shop towel, clean the areas where the caution label will attach.



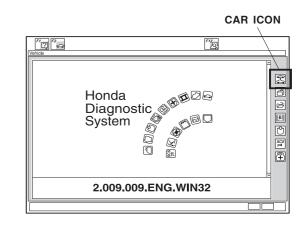
- 76. Attach the caution label to the under side of the hood.
- 77. Check that all wire harnesses and cables are routed properly and that all connectors are plugged in.
- 78. Reinstall all removed parts. Check that all clips and other fasteners are installed securely.
- 79. Reconnect the negative cable to the battery. Check that the electrical accessory and other electrical systems function properly.
- 80. Enter the client's radio anti-theft code, and reset the radio station presets.
- 81. Reset the clock.
- 82. Perform "REMOTE ENGINE STARTER REGISTRATION" and "FUNCTION CHECK"

# **REMOTE ENGINE STARTER REGISTRATION**

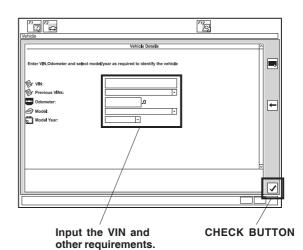
- 1. Acquire the PCM Code from the Interactive Network.
- 2. Connect the HDS tester to the OBD II data link connector, then turn the ignition switch on.



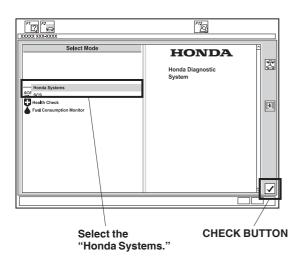
3. Start the HDS, and clis in accordance with the HDS, then click the check button.



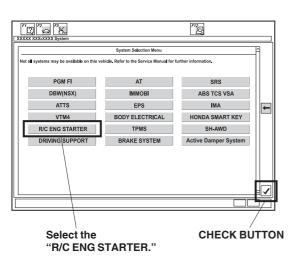
4. Start the HDS, and clis in accordance with the HDS, then click the check button.



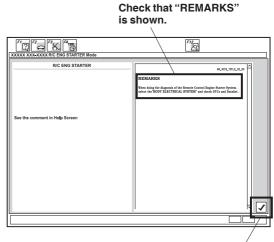
5. Select the "Honda Systems", then click the check button.



6. Select the "R/C ENG STARTER" and click the check button.

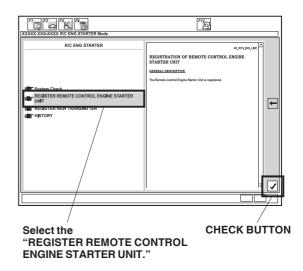


7. Check that "REMARKS" is shown, then click the check button.



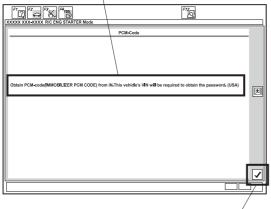
CHECK BUTTON

8. Select the "REGISTER REMOTE CONTROL ENGINE STARTER UNIT", then click the check button.



9. Check that "Obtain PCM-code (IMMOBILIZER PCM CODE) from iN. This vehicle's VIN will be required to obtain the password. (USA)" is shown, then click the check button.

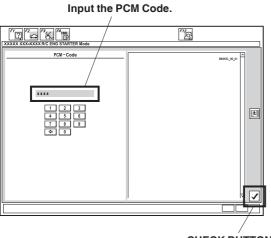
> Check that "Obtain PCM-code (IMMOBILIZER PCM CODE) from iN. This vehicle's VIN will be required to obtain the password. (USA)" is shown.



CHECK BUTTON

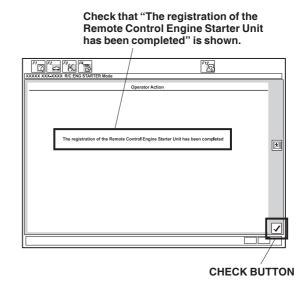
10. Input the PCM Code, then click the check button.

**NOTE**: To ensure security, the PCM code (password) is changed everyday, so it is impossible to register the remote controlled engine starter if the date of the PCM code acquisition and registration are different. The date of the HDS tester should also be the same.

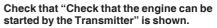


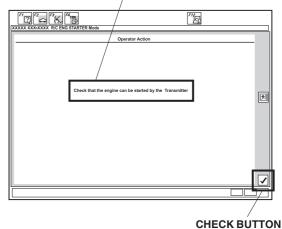
CHECK BUTTON

11. Check that "The registration of the Remote Control Engine Starter Unit has been completed" is shown, then click the check button.



12. Check that "Check that the engine can be started by the Transmitter" is shown, then click the check button.





13. Perform the function test on the next page, then remove the HDS.

#### **FUNCTION CHECK**

### **Operating Conditions**

- Hood is closed
- Shift lever in park
- The key is out of the ignition
- All doors and tailgate closed and locked

#### Inspection

1. Within 1 second, press the command button, and then the start button on the transmitter. The engine should start if all operating conditions are met.

| Does the | engine start? |
|----------|---------------|
| 0000 110 | ongino otart. |

| Bood the origine start.                         |  |
|---|--|
| Yes - Operation is normal.                      |  |
| No:   |  |
| • Make sure all "Operating Conditions" are met. |  |
|   |  |

- Check the engine starter harness connections.
- Connect the HDS and check for an indicated failure. (Refer to the appropriate service manual for details.)
- 2. Press the command button on the transmitter, and within 1 second, press the stop button. The engine should stop.

Does the engine stop?

Yes - Operation is normal. No - Check the engine starter harness connections.

3. After the engine has stopped, start the engine again, and check that the engine stops after each of the following conditions:

#### NOTE:

After each test the ignition key must be cycled, or the driver's door must be opened and closed.

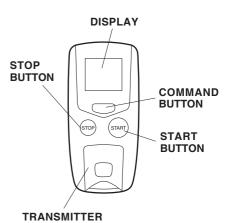
- Move the shift lever out of the P position.
- Unlock or open the doors or the tailgate.
- Open the hood.
- Insert the key in the ignition.
- Press on the brake pedal.

Does the engine stop after each of these tests?

Yes - Operation is normal.

No - Check the engine starter harness connections.

- 4. Check that the power window or the moonroof does not function and the shift lever does not move to any position but the P position when the engine is started with the transmitter.
- 5. Press the command button on the transmitter two times and check the vehicle condition on the display.
- 6. Check the operation of the transmitter when the vehicle is 100 m to 150 m (325 to 490 ft.) away, and in direct sight.



6. Check the operation of the transmitter when the vehicle is 100 m to 150 m (325 to 490 ft.) away, and in direct sight.

#### How to Program an Sdditional Transmitter

- 1. Connect the HDS to the data link connector.
- 2. Start the HDS and click on the car icon.
- 3. Input the vehicle's VIN and other required information.
- 4. Select Honda Systems.
- 5. Select **R/C Engine Starter.**
- 6. Select REGISTER NEW TRANSMITTER.
- 7. When "Ready to program the new transmitter" shows, select **ENTER.**
- 8. Press and release the Command button.
- 9. Press and release the Stop button.
- 10. Preform the function check on both transmitters. NOTE: Only 2 remotes can be stored in the system's memory.