### **MACURA**

# **INSTALLATION INSTRUCTIONS**

Accessory

REMOTE CONTROL ENGINE STARTER

Application

2012 MDX

Publications No. BII 46626

Issue Date
OCT 2011

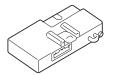
#### **PARTS LIST**

Remote Engine Starter Unit Kit P/N 08E91-E22-200B

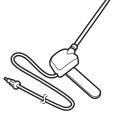
Transmitter



Control unit



Antenna



Key ring



Protective tape



Fuse label



Caution label



Accessory User's Information Manual

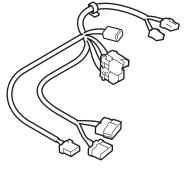


**Quick Start Guide** 

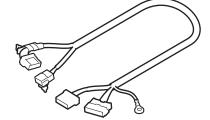


Remote Control Engine Starter Attachment Kit P/N 08E92-STX-200B

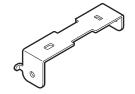
Engine starter harness



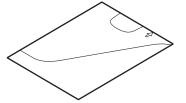
Engine starter subharness



Engine starter control unit bracket

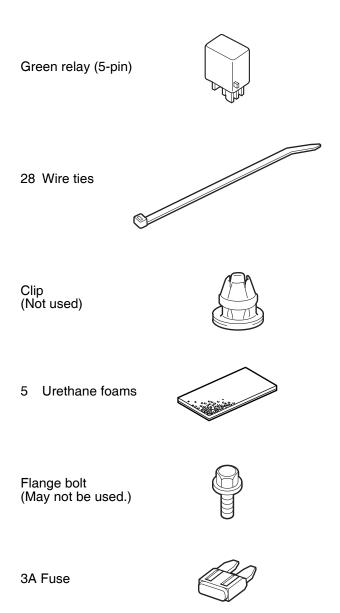


**Template** 



2 Black relays (4-pin)





#### **TOOLS AND SUPPLIES REQUIRED**

Phillips screwdriver

Flat-tip screwdriver

Small flat-tip screwdriver

Ratchet

10 mm Sockets

Combination wrench

Isopropyl alcohol

Shop towel

Needle nose pliers

Scale

Tape measure

Scissors

Clip remover

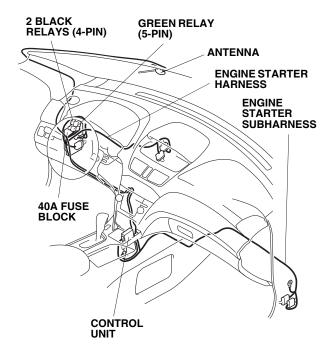
Plastic Trim Tool (T/N SILTRIMTL10)

HDS (Honda Diagnostic System)

Masking tape

Diagonal cutters

## Illustration of the Engine Starter Installed in the Vehicle



#### INSTALLATION

Client 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."

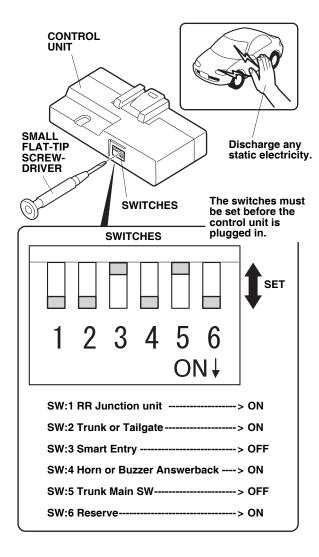
NOTE: This antenna should be installed only if the ambient air temperature is 15°C (60°F) or above.

- 1. Make sure you have the anti-theft code for the radio.
- 2. Disconnect the negative cable from the battery.

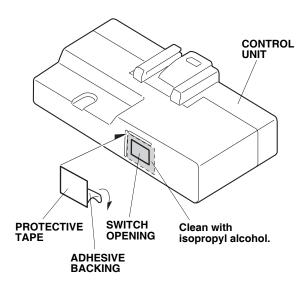
3. Using a small flat-tip screwdriver, set the switches on the control unit to the positions shown.

#### NOTE:

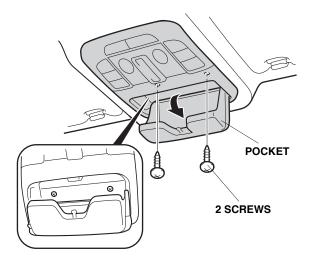
- The switches must be set before the control unit is plugged in.
- If the switch settings are not correct, the remote engine starter will not operate correctly.
- If you are setting the switches with the control unit installed in the vehicle, touch the metal part of the screwdriver to any metal part of the vehicle to discharge any static electricity.
- If you change the switch settings with the unit connected, you must disconnect the unit, then reconnect it before the unit recognizes the new settings.



 Using isopropyl alcohol on a shop towel, clean the control unit where the protective tape will attach. Remove the adhesive backing, and attach the protective tape to the control unit over the switch opening.

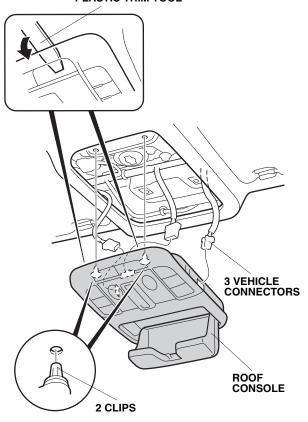


5. Open the pocket, and remove two screws.

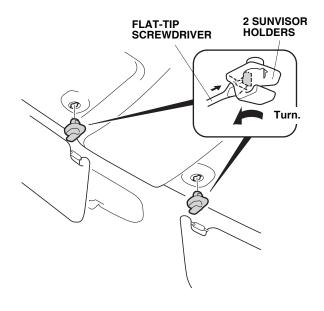


6. Using a plastic trim tool, remove the roof console (two clips and unplug three vehicle connectors).

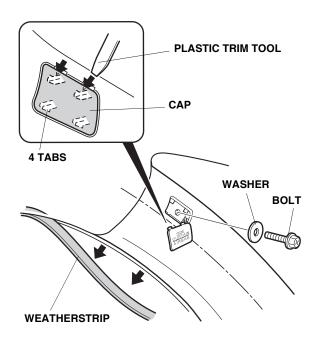




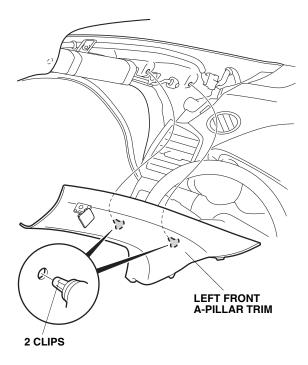
7. Remove both sunvisor holders. Using a flat-tip screwdriver, push the hook and turn the holder 90°, then pull it out.



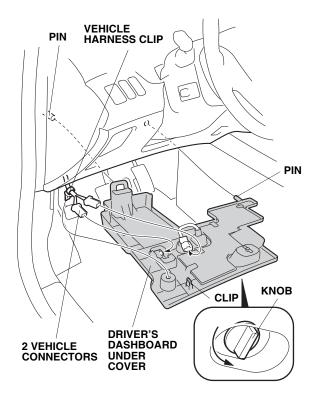
8. Using a plastic trim tool and a shop towel, remove the cap (four tabs).



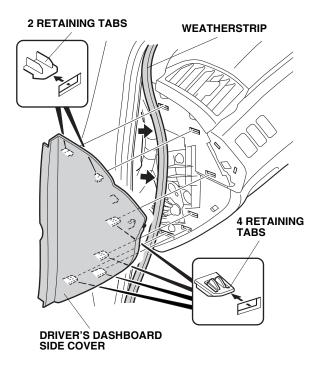
- 9. Pull away the weatherstrip. Remove the bolt and the washer.
- 10. Remove the left front A-pillar trim (two clips).



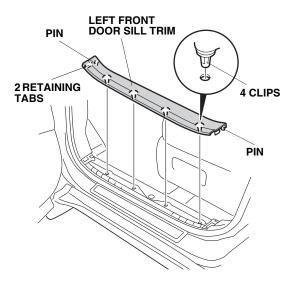
11. Turn the knob counterclockwise, then pull out the driver's dashboard under cover (one clip and two pins). Release the vehicle harness clip and unplug the two vehicle connectors to remove the driver's dashboard under cover.



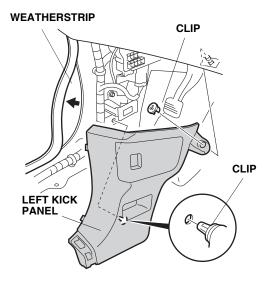
12. Pull away the weatherstrip, and then remove the driver's dashboard side cover (six retaining tabs).



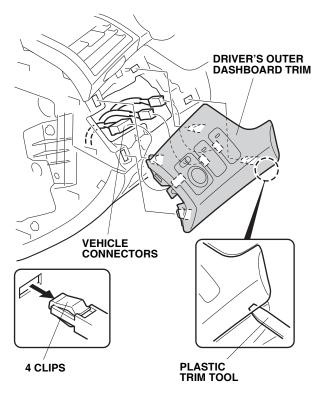
13. Remove the left front door sill trim (four clips, two retaining tabs, and two pins).



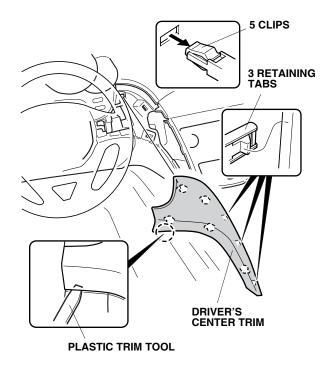
14. Pull away the weatherstrip, and remove the left kick panel (two clips).



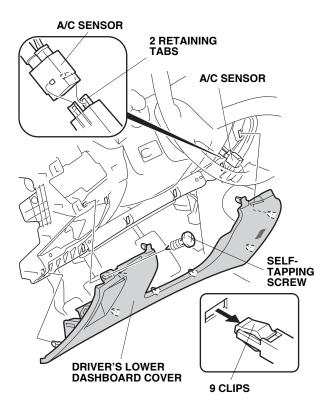
15. Using a plastic trim tool and a shop towel, remove the driver's outer dashboard trim (four clips and vehicle connectors).



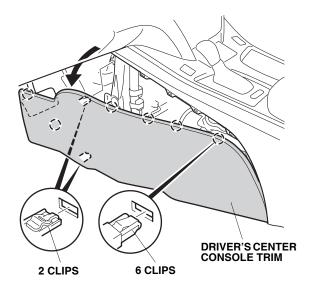
16. Using a plastic trim tool and a shop towel, remove the driver's center trim (five clips and three retaining tabs).



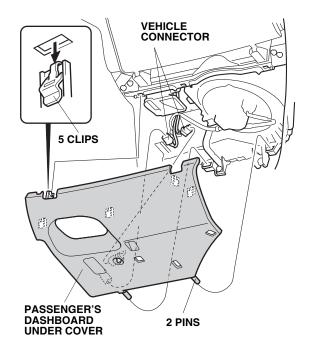
17. Remove the driver's lower dashboard cover (one self-tapping screw and nine clips). If equipped, unplug the A/C sensor (two retaining tabs).



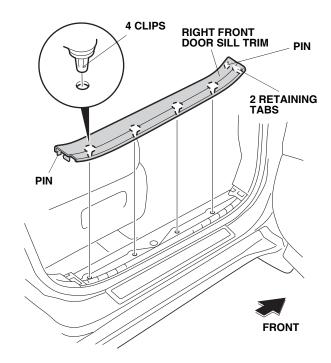
18. Release the driver's center console trim (eight clips) as shown below.



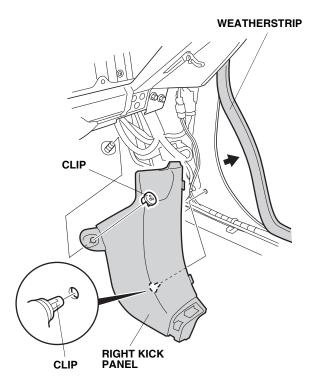
19. Remove the passenger's dashboard under cover (five clips, release two pins, and unplug two vehicle connectors).



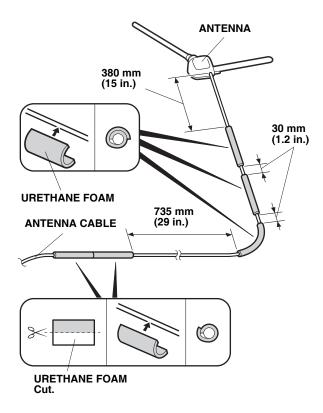
20. Remove the right front door sill trim (four clips, two retaining tabs, and two pins).



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

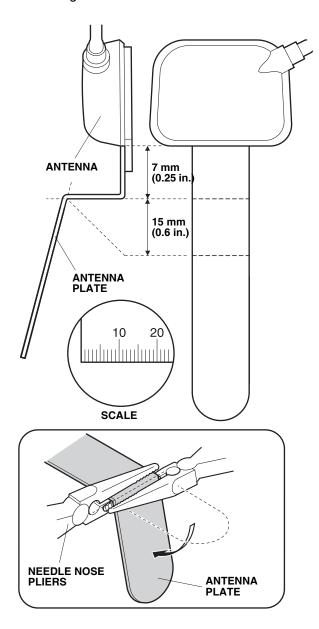


22. Wrap three pieces of urethane foam around the antenna cable at the measurements shown.

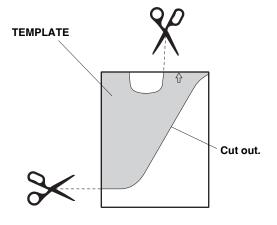


23. Using scissors, cut one urethane foam piece in half. Wrap the two halves of the urethane foam around the antenna cable at the measurements shown.

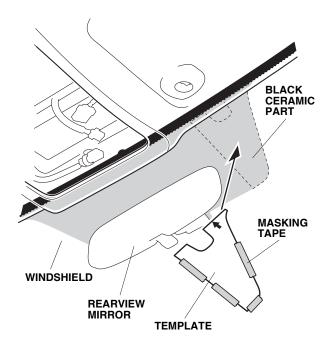
24. Measure and mark the antenna plate. Using two pairs of needle nose pliers, bend the antenna plate to the angle shown.



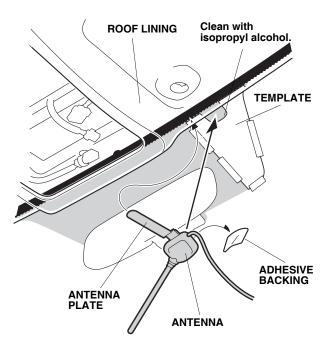
25. Using scissors, cut out the template.



26. Align the template with the black ceramic part, and secure it to the windshield with masking tape.

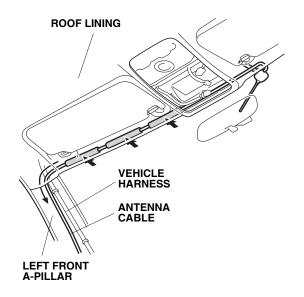


27. Using isopropyl alcohol on a shop towel, clean the area where the antenna will attach.

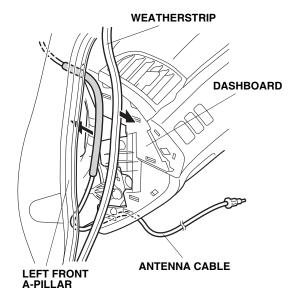


28. Remove the adhesive backing from the antenna. Insert the antenna plate behind the roof lining, align the antenna base to the template, and attach the antenna to the windshield. Apply pressure to the antenna base to make sure it sticks to the windshield.

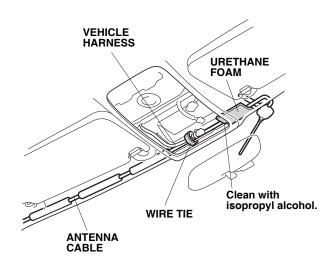
- 29. Remove the template.
- 30. Gently pull down the roof lining, and tuck the antenna cable behind it. Be careful not to crease the roof lining.



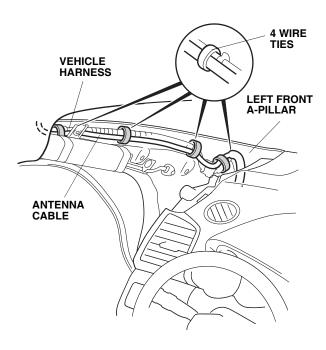
- 31. Route the antenna cable down along the left front A-pillar and the vehicle harness.
- 32. Pull away the weatherstrip. Route the antenna cable under the dashboard. Tuck the antenna cable between the left front A-pillar and the dashboard, and reinstall the weatherstrip.



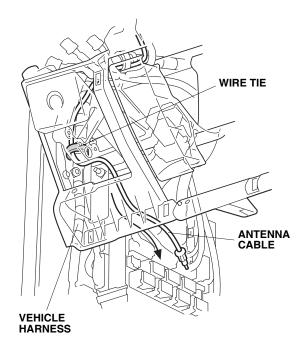
33. Using isopropyl alcohol on a shop towel, clean the roof panel where the urethane foam will attach.



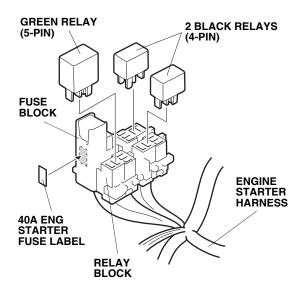
- 34. Secure the antenna cable to the vehicle harness with one wire tie.
- 35. Secure the antenna cable to the roof panel with one urethane foam in the area shown.
- 36. Along the left front A-pillar, secure the antenna cable to the vehicle harness with four wire ties.



37. Secure the antenna cable to the vehicle harness with one wire tie.

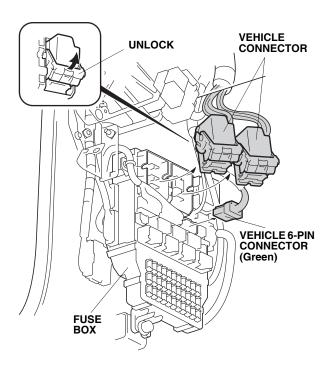


38. Install the three relays to the engine starter harness relay block. Note the proper location for each relay.



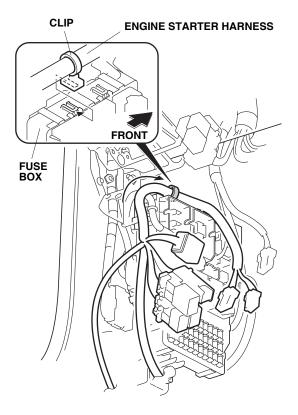
39. Using isopropyl alcohol on a shop towel, clean the fuse block where the fuse label will attach. Attach the 40A ENG STARTER fuse label to the engine starter harness fuse block.

40. Locate and unlock the two vehicle connectors, then unplug them from the fuse box.



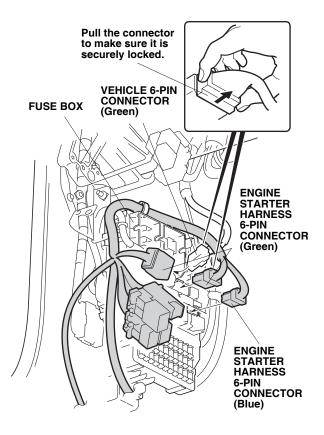
41. Unplug the vehicle 6-pin connector (green) from the fuse box.

42. Secure the clip on the engine starter harness to the fuse box as shown.



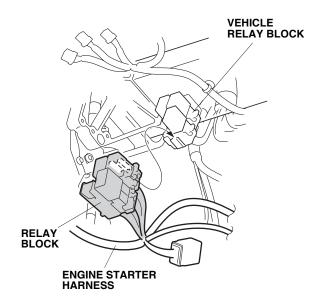
43. Plug the engine starter harness 6-pin connector (green) into the fuse box, and plug the vehicle 6-pin connector (green) into the engine starter harness 6-pin connector (green).

NOTE: Make sure the engine starter harness and vehicle 6-pin connectors (green) are plugged in securely. A loose connection can cause the engine to stall.

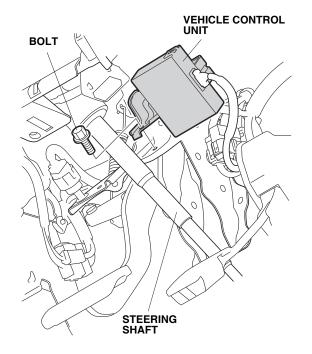


- 44. Plug the engine starter harness 6-pin connector (blue) into the fuse box.
- 45. Reconnect the two vehicle connectors unplugged in step 40.

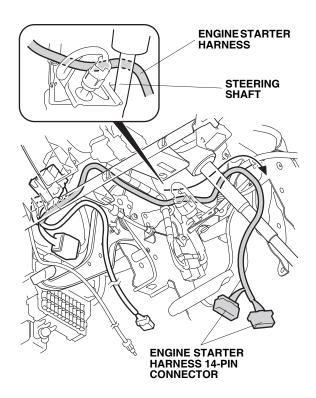
46. Attach the engine starter harness relay block to the vehicle relay block as shown.



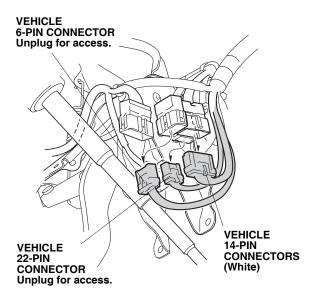
47. Remove the vehicle control unit (one bolt), and let the control unit hang.



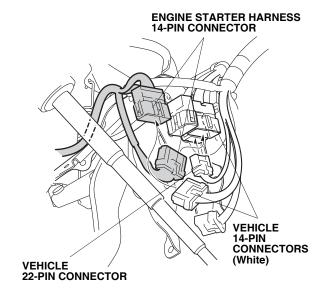
48. Route the two engine starter harness 14-pin connectors over the steering shaft.



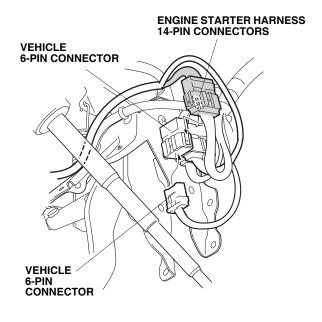
49. Directly behind the steering shaft, unplug the vehicle 22-pin connector and 6-pin connector for access, and the vehicle 14-pin connector (white).



50. Plug the engine starter harness 14-pin connector into the vehicle 14-pin connector and plug the vehicle 14-pin connector into the engine starter harness 14-pin connector.

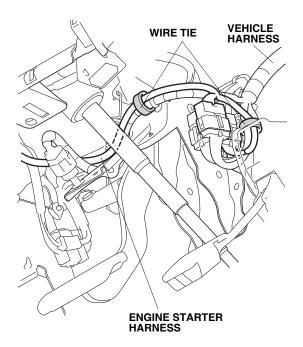


- 51. Replug the vehicle 22-pin connector.
- 52. Attach the engine starter harness 14-pin connector to the vehicle 6-pin connector.

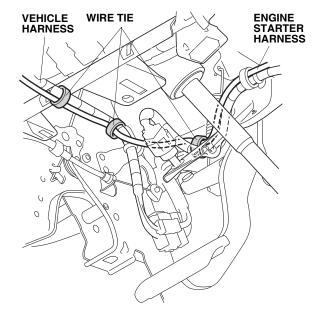


53. Reconnect the vehicle 6-pin connector.

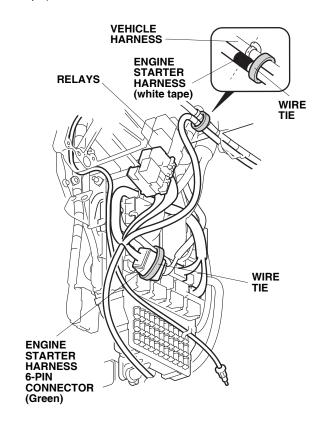
54. Secure the engine starter harness to the vehicle harness with two wire ties in the areas shown.



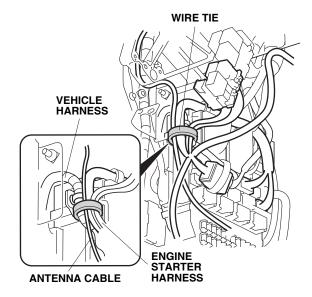
- 55. Reinstall the vehicle control unit with the bolt removed in step 47. Be sure the engine starter harness is above the control unit.
- 56. Secure the engine starter harness to the vehicle harness with three additional wire ties.



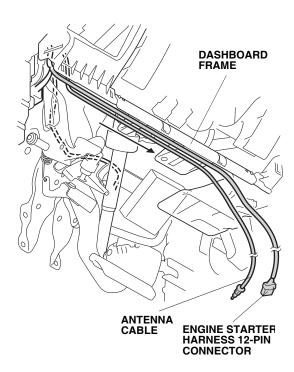
57. Secure the engine starter harness 6-pin connector (green) to the vehicle harness with one wire tie. Near the relays, secure the engine starter harness (white tape) to the vehicle harness with one wire tie.



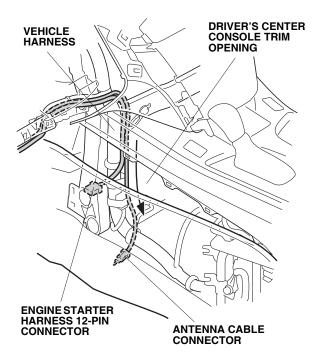
58. Secure the engine starter harness and antenna cable to the vehicle harness with one wire tie.



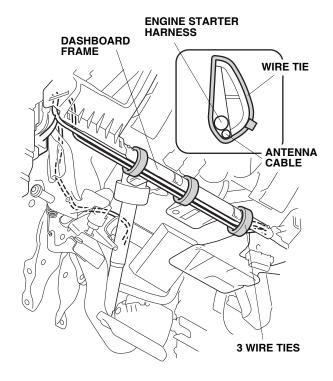
59. Route the engine starter harness 12-pin connector and antenna cable along the dashboard frame towards the center console.



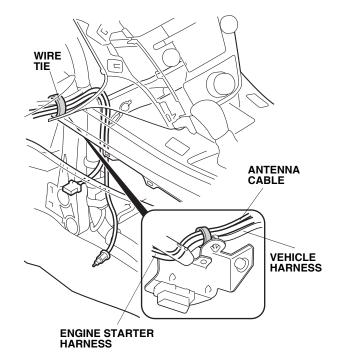
60. Route the engine starter harness 12-pin connector and antenna cable connector down along the vehicle harness to the driver's center console trim opening.



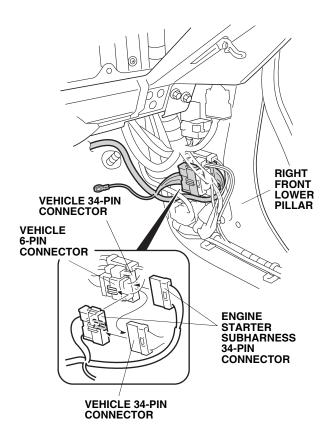
61. Secure the engine starter harness and antenna cable to the dashboard frame with three wire ties.



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

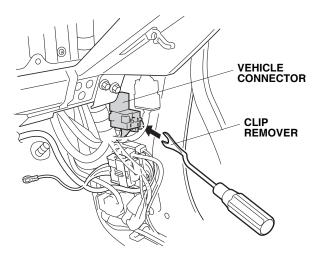


63. At the right kick panel (removed in step 21), slide the holder on the engine starter subharness 34-pin connector onto the holder lock on the vehicle 6-pin connector.

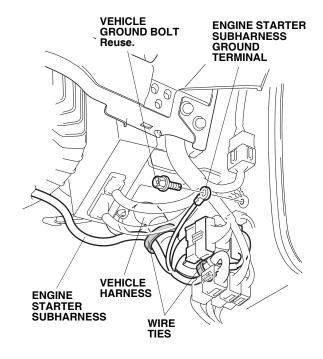


64. Unplug the vehicle 34-pin connector, and plug the engine starter subharness 34-pin connectors in between.

65. If equipped, remove the vehicle connector using a clip remover.

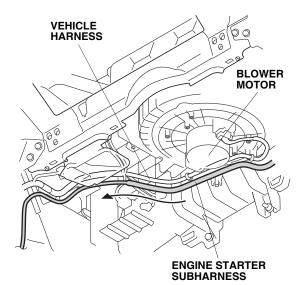


66. Remove the vehicle ground bolt. Attach the engine starter subharness ground terminal, and reinstall the vehicle ground bolt.



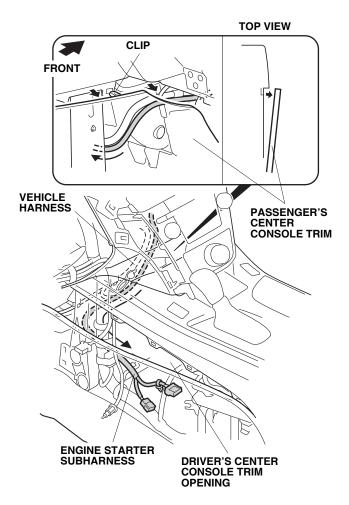
67. Secure the engine starter subharness to the vehicle harness with two wire ties.

68. Route the engine starter subharness under the blower motor, and along the vehicle harness towards the center console.

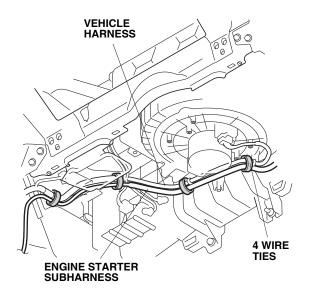


69. Pull the end of the passenger's center console trim to release the one clip shown. Route the engine starter subharness along the vehicle harness to the driver's center console trim opening.

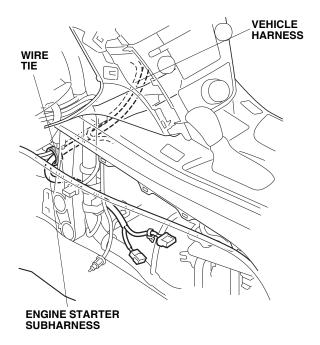
NOTE: Pull carefully on the passenger's center console trim so you do not damage it.



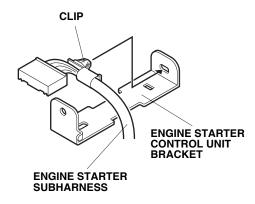
70. Secure the engine starter subharness to the vehicle harness with four wire ties in the areas shown.



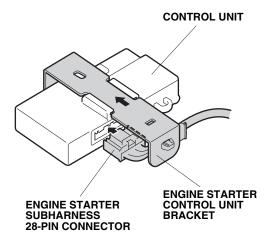
71. Behind the center console, secure the engine starter subharness to the vehicle harness with one wire tie.



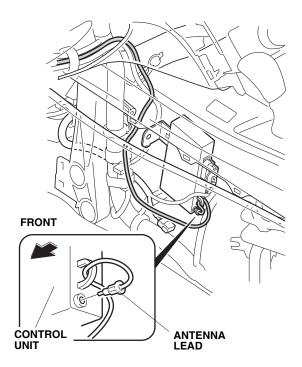
72. Install the clip on the engine starter subharness to the engine starter control unit bracket as shown.



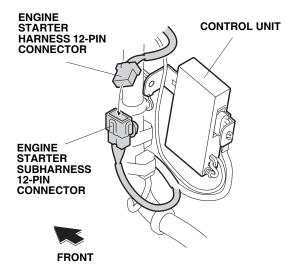
73. Plug the engine starter subharness 28-pin connector into the control unit, and install the control unit bracket. Note the direction of the bracket.



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



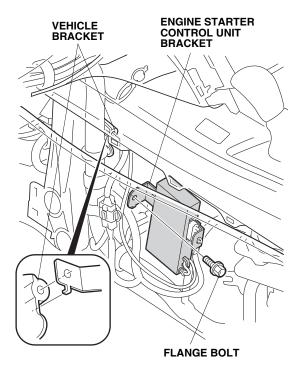
75. Plug the engine starter subharness 12-pin connector into the engine starter harness 12-pin connector.



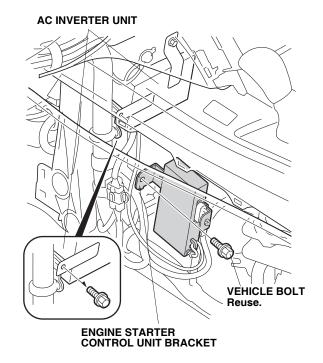
76. Install the engine starter control unit bracket to the vehicle bracket using a flange bolt.

NOTE: If the AC inverter unit is mounted on the vehicle bracket, install the engine starter unit and bracket to the vehicle bracket by reusing the AC inverter unit mounting bolt.

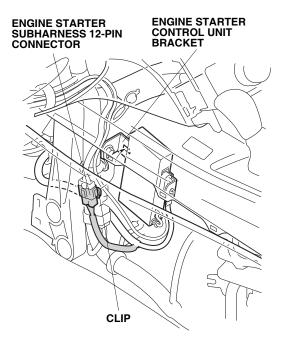
#### Without AC inverter unit



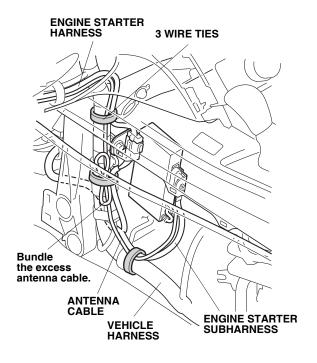
With AC inverter unit



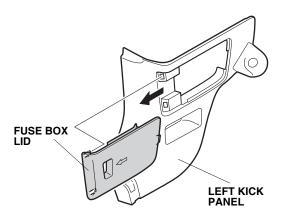
77. Install the clip on the engine starter subharness 12-pin connector to the engine starter control unit bracket as shown.



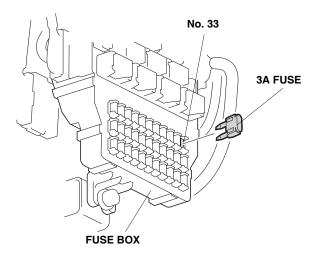
78. Secure the engine starter harness, engine starter subharness, and antenna cable to the vehicle harness with two wire ties as shown. Bundle the excess antenna cable and secure it using one wire tie as shown.



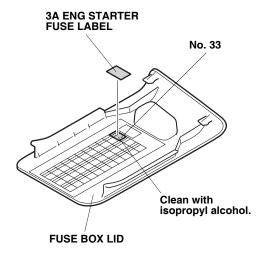
79. Remove the fuse box lid from the left kick panel.



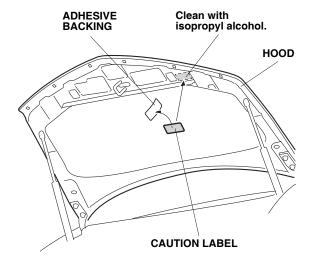
80. Install the 3A fuse included in the kit into the No. 33 slot in the fuse box.



81. Using isopropyl alcohol on a shop towel, clean the area where the fuse label will attach. Attach the 3A ENG STARTER fuse label to the No. 33 slot on the inside of the fuse box lid.



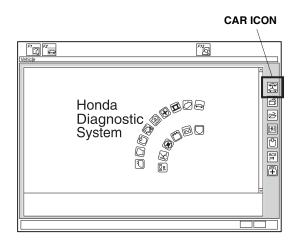
82. Using isopropyl alcohol on a shop towel, clean the area where the caution label will attach. Attach the caution label to the under side of the hood as shown.



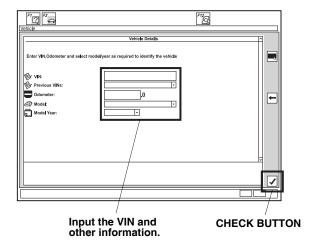
- 83. Check that all wire harnesses and cables are routed properly and that all connectors are plugged in.
- 84. Reinstall all removed parts. Check that all clips and other fasteners are installed securely.
- 85. Reconnect the negative cable to the battery. Check that the electrical accessory and other electrical systems function properly.
- 86. Enter the client's radio anti-theft code.
- 87. Reset the clock.
- 88. Perform "REMOTE ENGINE STARTER REGISTRATION" and "FUNCTION CHECK".

#### REMOTE ENGINE STARTER REGISTRATION

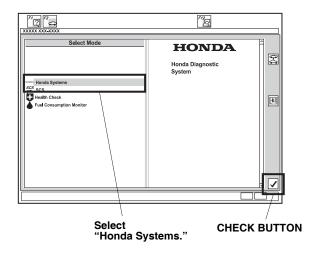
- Get the PCM Code from ISIS.
- 2. Connect the HDS tester to the OBD II data link connector, then turn the ignition switch on.
- 3. Start the HDS, and click the car icon.



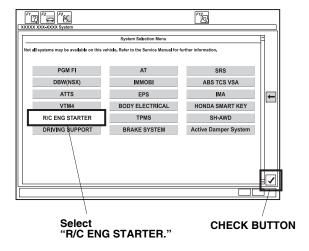
4. Input the VIN and other needed information, then click the check button.



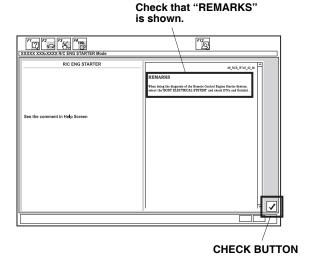
5. Select "Honda Systems", then click the check button.



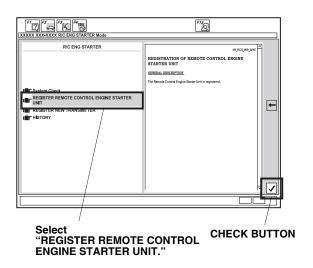
6. Select "R/C ENG STARTER" and click the check button.



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

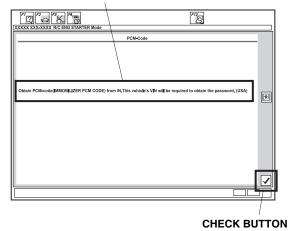


8. Select "REGISTER REMOTE CONTROL ENGINE STARTER UNIT," then click the check button.



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

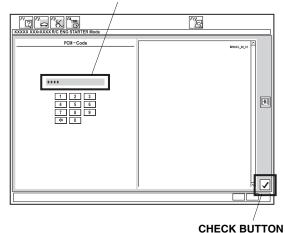
Check that "Obtain PCM-code (IMMOBILIZER PCM CODE) from iN. This vehicle's VIN will be required to obtain the password. (USA)" is shown.



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

**NOTE:** To ensure security, the PCM code (password) is changed every day, 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.

Input the PCM Code.



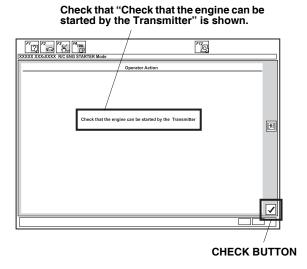
11. Check that "The registration of the Remote Control Engine Starter Unit has been completed" is shown, then click the check button.

Check that "The registration of the Remote Control Engine Starter Unit has been completed" is shown.

| The registration of the Remote Control Engine Starter Unit has been completed | The registration of the Remote Control Engine Starter Unit has been completed | The registration of the Remote Control Engine Starter Unit has been completed | The registration of the Remote Control Engine Starter Unit has been completed | The registration of the Remote Control Engine Starter Unit has been completed | The registration of the Remote Control Engine Starter Unit has been completed | The registration of the Remote Control Engine Starter Unit has been completed | The registration of the Remote Control Engine Starter Unit has been completed | The registration of the Remote Control Engine Starter Unit has been completed | The registration of the Remote Control Engine Starter Unit has been completed | The registration of the Remote Control Engine Starter Unit has been completed | The registration of the Remote Control Engine Starter Unit has been completed | The registration of the Remote Control Engine Starter Unit has been completed | The registration of the Remote Control Engine Starter Unit has been completed | The registration of the Remote Control Engine Starter Unit has been completed | The registration of the Remote Control Engine Starter Unit has been completed | The registration of the Remote Control Engine Starter Unit has been completed | The registration of the Remote Control Engine Starter Unit has been completed | The registration of the Remote Control Engine Starter Unit has been completed | The registration of the Remote Control Engine Starter Unit has been completed | The registration of the Remote Control Engine Starter Unit has been completed | The registration of the Remote Control Engine Starter Unit has been completed | The registration of the Remote Control Engine Starter Unit has been completed | The registration of the Remote Control Engine Starter Unit has been completed | The registration of th

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

**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 outside of the vehicle
- · All doors and tailgate are closed and locked

#### Inspection

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

Does the engine 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.

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 driver's door must be opened and closed.

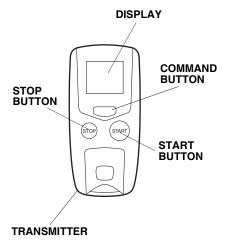
- Move the shift lever out of the P position.
- Unlock or open the doors or the tailgate.
- Open the hood.
- Insert the key in the ignition switch.
- Press the brake pedal.

Does the engine stop after each of these tests?

Yes - Operation is normal.

No - Check the engine starter harness connections.

- 4. When the engine is started with the transmitter, make sure the power windows and the moonroof do not function.
- 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 61 m (200 ft.) away and in direct sight.



#### How to Program an Additional 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 System.
- 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. Perform the function check on both transmitters.

NOTE: Only 2 remotes can be stored in the system's memory.