# **MACURA** - INSTALLATION

**INSTRUCTIONS** 

Accessory

ENGINE BLOCK HEATER P/N 08T44-SJA-200A Application

2012 RL BII 46936

Issue Date
OCT 2011

Publications No.

# **PARTS LIST**

NOTE: Installation of the engine block heater requires that the vehicle be raised on a hoist and that the coolant be replaced. This installation should be done only by an authorized dealer.

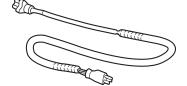
Engine block heater



Aluminum washer



Heater harness



Protective cap



12 Black wire ties



Wire ties with clips(2 Not Used)



5 White wire ties (1 Not used)



# **TOOLS AND SUPPLIES REQUIRED**

Phillips screwdriver

Flat-tip screwdriver

Ratchet

19 mm and 24 mm Sockets

Torque wrench

10 mm Combination wrench

Diagonal cutters

Drain pan

Coolant (Acura Precision Crafted Antifreeze/Coolant)

Blanket

White marker

Heavy gloves

Fender cover

Drill

3 mm and 7 mm Drill bits

Pushpin

Clip remover

5 mm Hex wrench

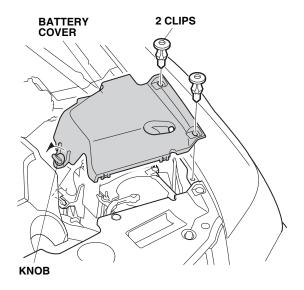
# **INSTALLATION**

### NOTE:

- Always use Acura Antifreeze/Coolant. Using a non-Acura coolant can result in corrosion, causing the cooling system to malfunction or fail.
- To avoid burning out the element, do not operate the engine block heater until it is installed in the vehicle and you have added coolant.

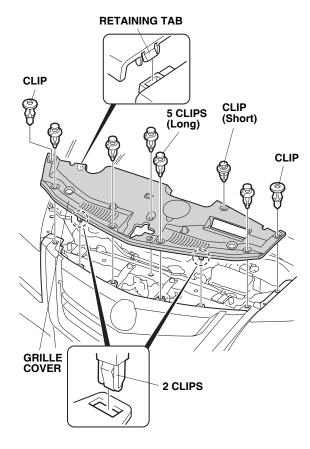
**Client Information:** The information in this installation instruction is intended for use only by skilled technicians who have the proper tools, equipment, and training to correctly and safely add equipment to your vehicle. These procedures should not be attempted by "do-it-yourselfers."

- 1. Make sure you have the anti-theft code for the radio, then write down the radio station presets.
- 2. Allow the engine and all cooling system components to cool down.
- 3. Open the hood. Remove the two clips. Turn the knob to remove the battery cover.

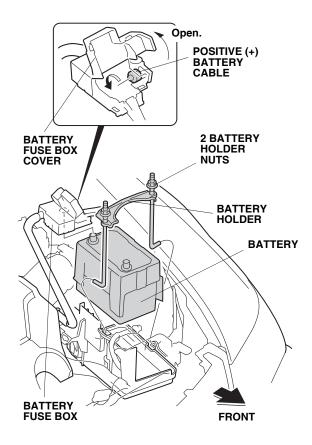


4. Disconnect the negative (-) cable from the battery.

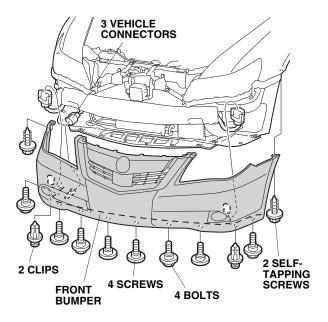
5. Remove the eight clips from the grille cover. Remove the grille cover (two clips and one retaining tab).



6. Open the battery fuse box cover and disconnect the positive (+) battery cable from the battery. Unfasten the two battery holder nuts and remove the battery holder, then remove the battery.



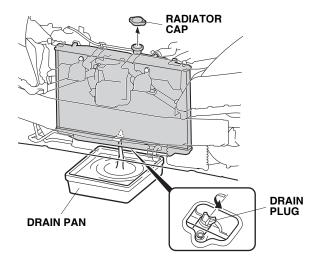
7. Remove the two self-tapping screws, four screws, four bolts, and two clips.



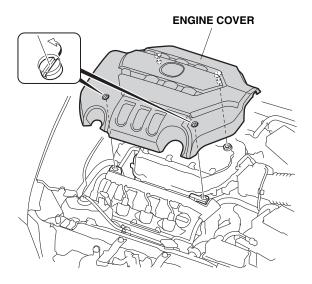
- 8. Unplug the three vehicle connectors. Remove the front bumper.
  - Have an assistant help you when removing the bumper.
  - To prevent damage to the bumper, set it on a blanket or cardboard.
- Place a clean drain pan under the radiator drain plug, then remove the drain plug from the bottom of the radiator to drain the coolant. Remove the radiator cap to increase the flow.

# NOTICE

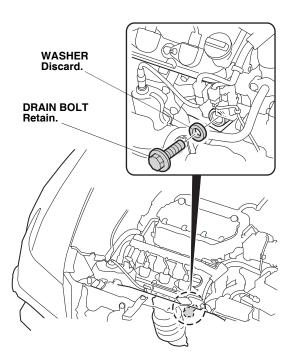
Radiator coolant will damage paint. Quickly rinse any spilled coolant from painted surfaces.



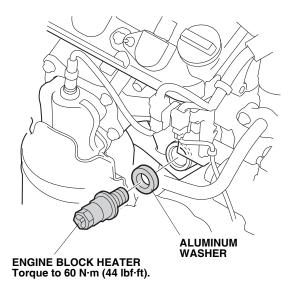
10. Remove the engine cover.



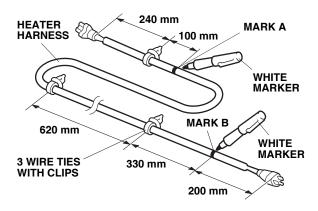
11. On the front side of the engine, locate and remove the drain bolt and washer using a 19 mm socket. Coolant remaining in the engine jackets will flow out of the bolt hole when the bolt is removed. (Retain the drain bolt in case the engine block heater is removed.)



12. Install the aluminum washer and the engine block heater into the bolt hole using a 24 mm socket and a torque wrench. Torque the engine block heater to 60 N·m (44 lbf-ft).

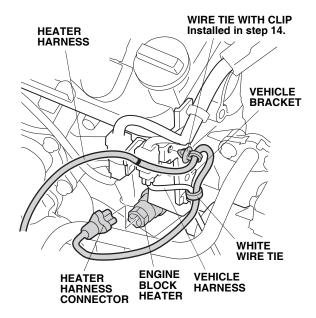


13. Measure and mark the heater harness at the measurements shown.

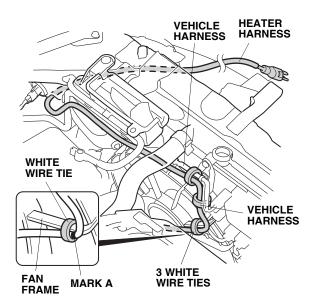


14. Install three wire ties with clips to the heater harness at the measurement points shown.

15. Plug the heater harness connector into the engine block heater. Using one wire tie with clip installed in step 14, secure the heater harness to the vehicle bracket.

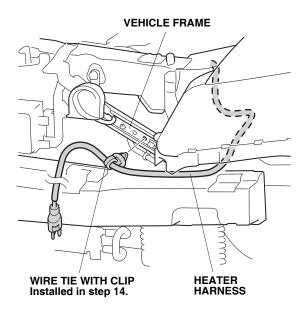


- 16. Using one white wire tie, secure the heater harness to the vehicle harness.
- 17. Route the heater harness as shown.

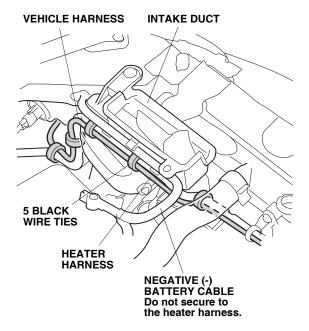


18. Using three white wire ties, secure the heater harness to the fan frame and vehicle harness as shown.

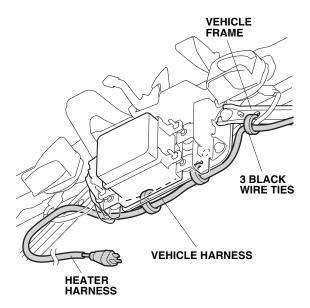
19. Using one wire tie with clip installed in step 14, secure the heater harness to the vehicle frame as shown.



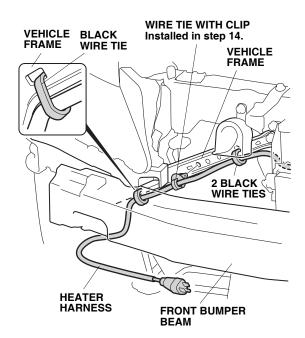
20. Secure the heater harness to the vehicle harness with five black wire ties.



21. Using three black wire ties, secure the heater harness to the vehicle frame and vehicle harness.

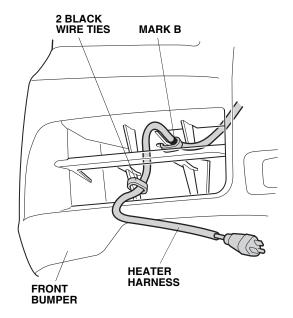


22. Using one wire tie with clip installed in step 14, secure the heater harness to the vehicle frame.

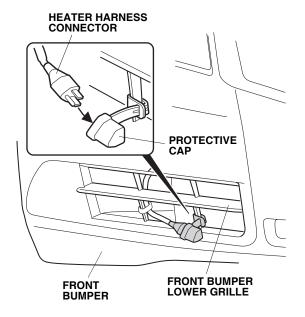


23. Using two black wire ties, secure the heater harness to the vehicle frame.

24. Using two black wire ties, secure the heater harness to the front bumper as shown.



25. Attach the protective cap to the front bumper lower grille, and plug the heater harness connector into the protective cap.



- 26. Reinstall all removed parts except for the battery, the battery cover, and the grille cover. Check that all clips and fasteners are installed securely.
- 27. Check that the radiator drain plug is installed securely.
- 28. Fill the system with the recommended coolant. Follow the instructions in the service manual to fill and bleed the cooling system.
- 29. Check the coolant reservoir for correct level and check the cooling system for signs of leakage. Repair as necessary.
- 30. Check that the heater harness is routed properly and all connectors are plugged in.
- 31. Put the drain bolt (removed in step 11) in the glove box.
- 32. Reinstall the battery and reconnect the positive and negative cables to the battery. Reinstall the grille cover and the battery cover.
- 33. Enter the client's radio anti-theft code, and reset the radio station presets.
- 34. Reset the clock.