

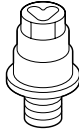


# INSTALLATION INSTRUCTIONS

Accessory	Application	Publications No.
<b>ENGINE BLOCK HEATER</b>	<b>ELEMENT</b>	<b>All 24284</b>
		Issue Date
		<b>DEC 2002</b>

## PARTS LIST

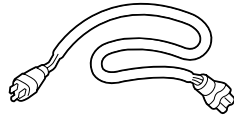
Engine block heater



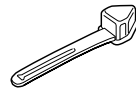
Aluminum washer



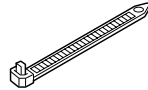
Heater harness



Protective cap



20 Long wire ties  
(8 not used)



## TOOLS AND SUPPLIES REQUIRED

Phillips screwdriver

Ratchet

24 mm Socket

Torque wrench

Diagonal cutters

Coolant (Honda All Season Antifreeze/Coolant Type 2)

8 mm and 10 mm Allen sockets

Felt-tip pen (White)

Tape measure

## NOTE

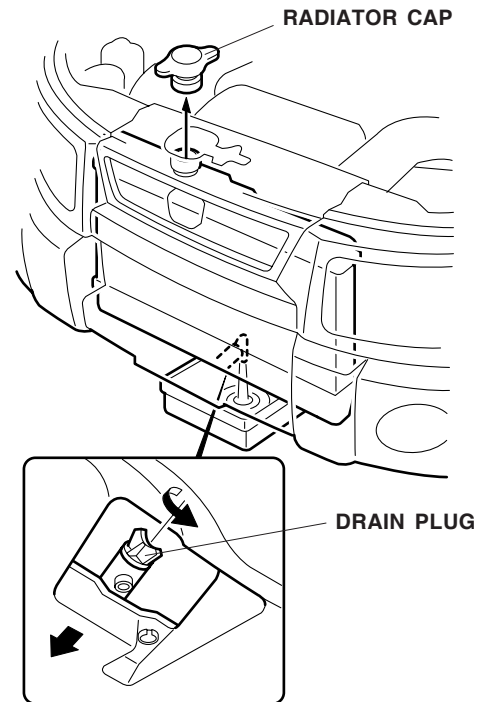
- Always use Honda Antifreeze/Coolant. Using a non-Honda coolant can result in corrosion, causing the cooling system to malfunction or fail.
- To avoid burning out the element, do not operate the engine block heater before it is installed in the vehicle and before you add coolant.

## INSTALLATION

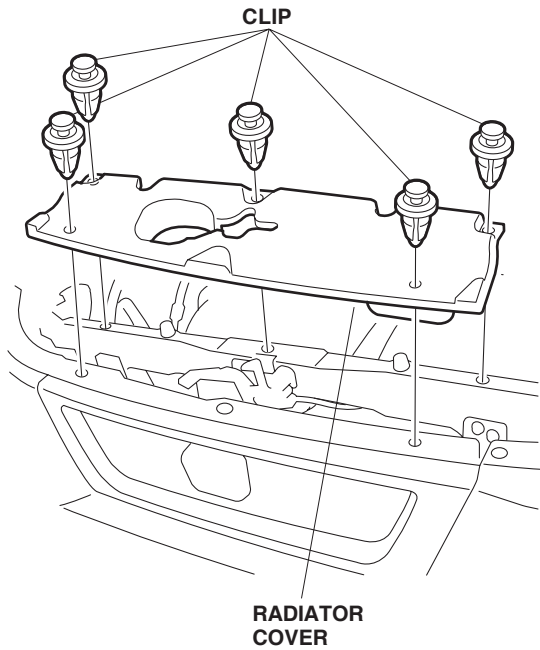
**Customer Information:** The information in this installation instruction is intended for use only by skilled technicians who have the proper tools, equipment, and training to correctly and safely add equipment to your vehicle. These procedures should not be attempted by “do-it-yourselfers.”

1. Allow the engine and all cooling system components to cool down.
2. 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.

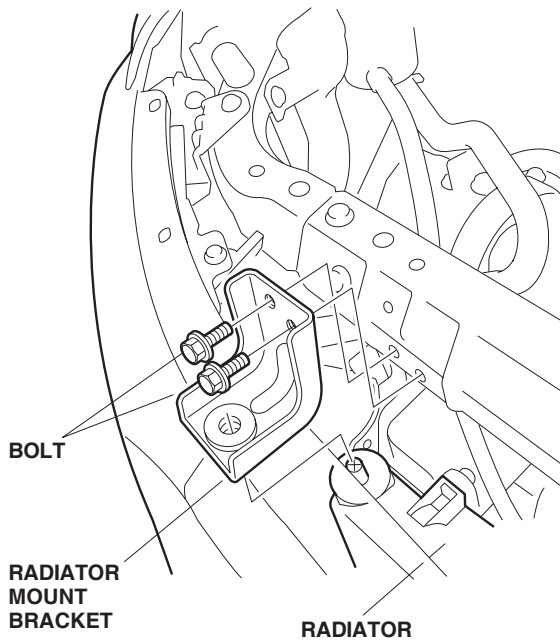
**NOTICE** Radiator coolant will damage paint. Quickly rinse any spilled coolant from painted surfaces.



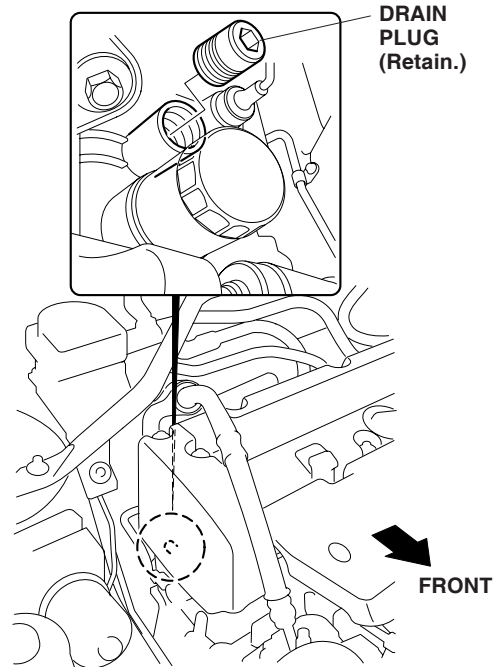
3. Open the hood and remove the radiator cover (five clips).



4. Remove the radiator mount bracket (two bolts).



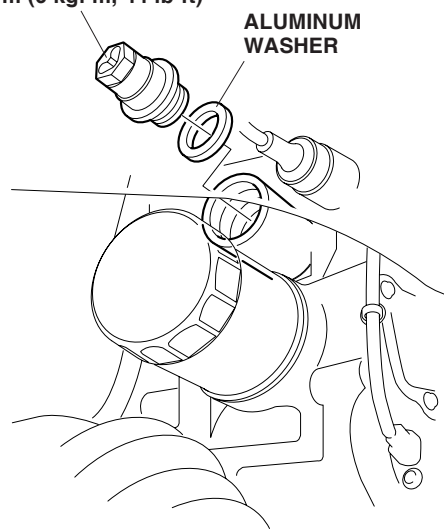
5. Remove the drain plug from the rear of the engine block near the oil filter. Coolant remaining in the engine jacket will flow out of the drain plug hole when removed. Retain the drain plug to be used if the engine block heater is removed.



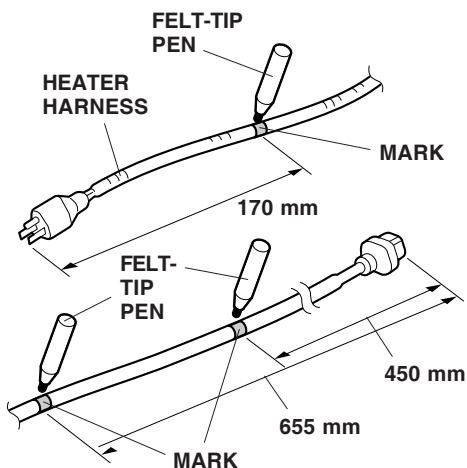
6. Install the engine block heater with the aluminum washer into the bolt hole using a 24 mm socket and a torque wrench. Torque the engine block heater to 60 N·m (44 lbf-ft).

**ENGINE BLOCK HEATER**  
60 N·m (6 kgf·m, 44 lb-ft)

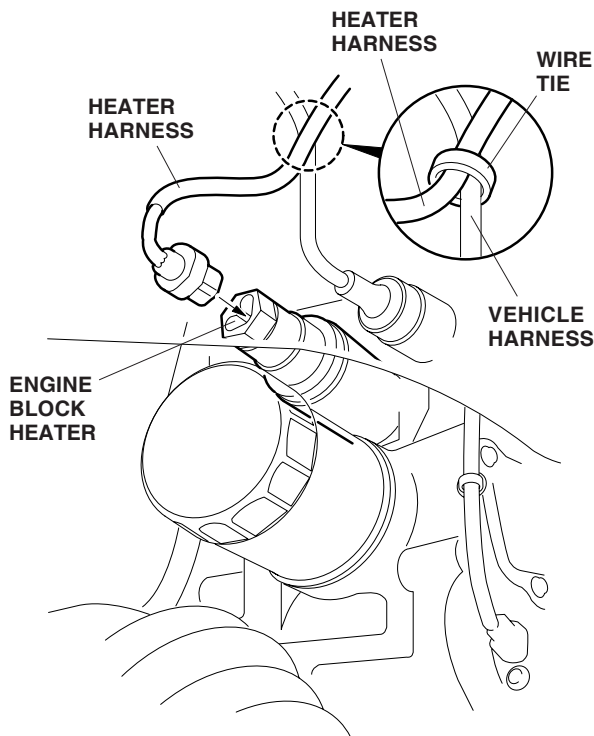
**ALUMINUM WASHER**



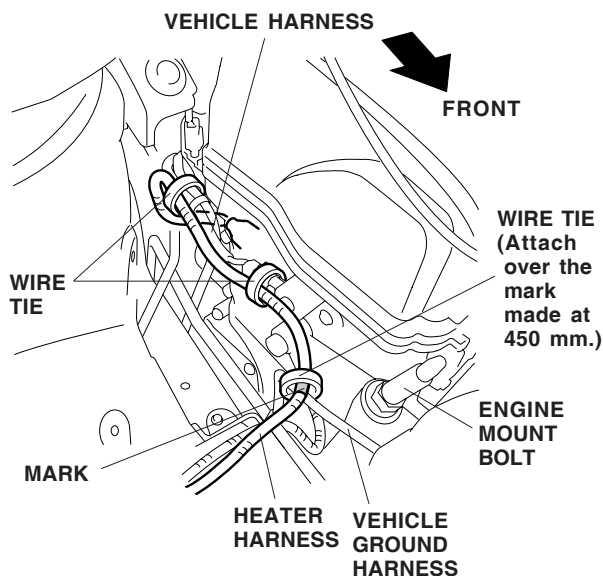
- Using a tape measure, measure and mark the heater harness at the measurements shown.



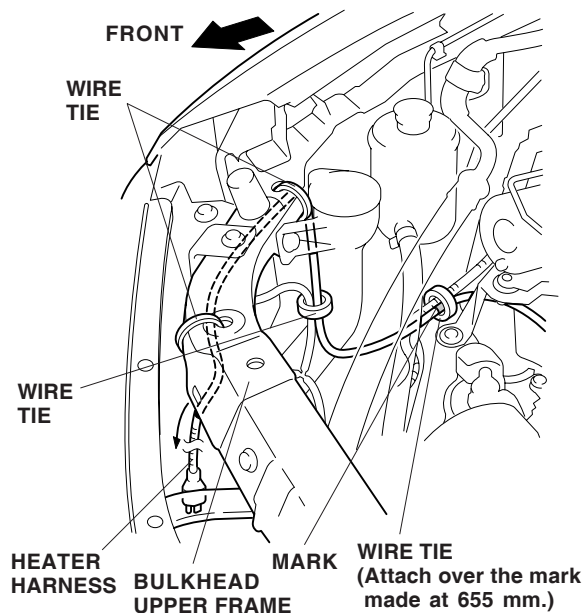
- Plug the connector of the heater harness into the engine block heater and route the heater harness over the engine. Secure the heater harness to the vehicle harness with one wire tie in the area shown.



- Route the heater harness alongside the vehicle harness and secure the heater harness to the vehicle harness with three wire ties in the areas shown.

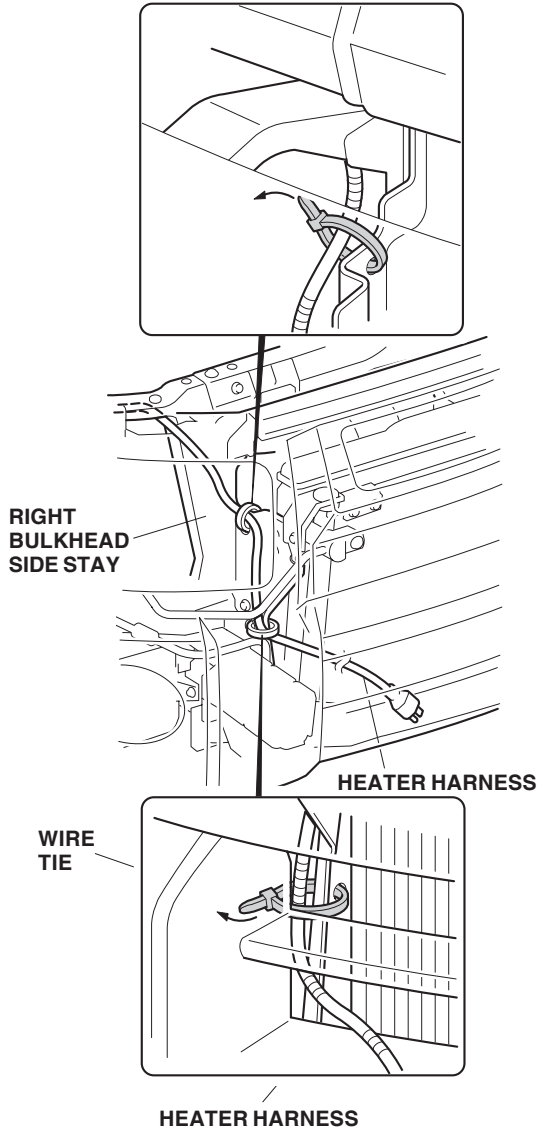


- Route the heater harness to the back of the right headlight along the vehicle harness, then secure the harnesses with two wire ties in the areas shown.

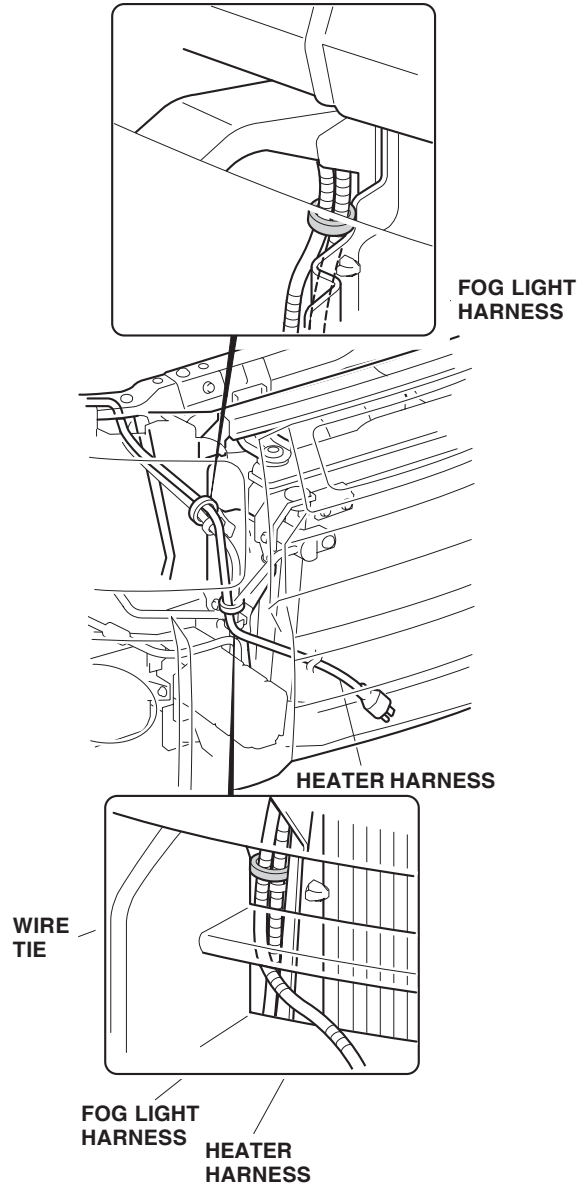


- Route the heater harness to the side of the right headlight through the back of the bulkhead upper frame, then hang it down toward the front. Secure the heater harness to the hole in the bulkhead upper frame with two wire ties in the areas shown.

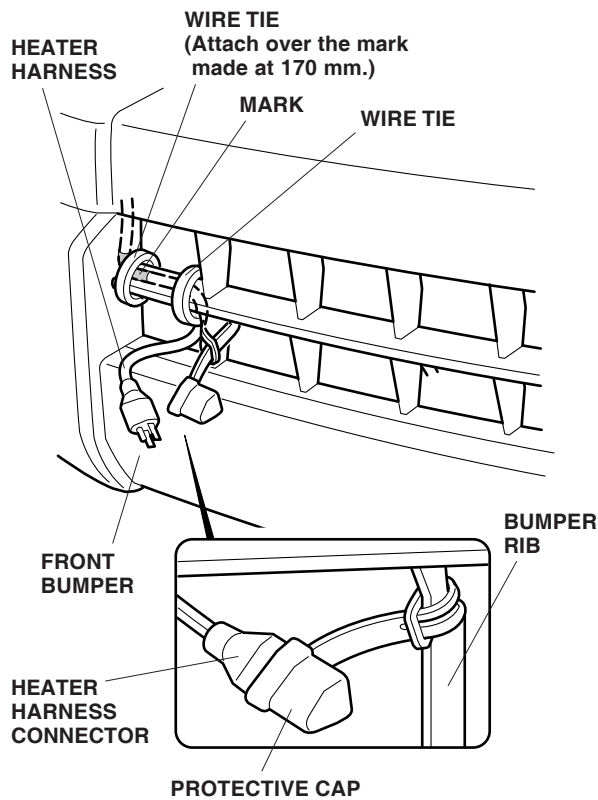
12. Further secure the heater harness to the holes in the right bulkhead side stay with two wire ties in the areas shown. If the vehicle you are working on is equipped with A/C, check that the heater harness is not interfering with the A/C pipes.



13. If you are also installing fog lights, secure the heater harness to the fog light harness with two wire ties as shown. If the vehicle you are working on is equipped with A/C, check that the heater harness is not interfering with the A/C pipes.



14. Route the heater harness out through the front bumper grille. Continue routing the heater harness through the back of the bumper ribs, then secure it to the ribs with two wire ties as shown.



15. Attach the protective cap to the bumper rib, then plug the heater harness connector into the cap.
16. Reinstall the radiator drain plug, the radiator mount bracket, and the radiator cover.
17. Fill the system with the recommended coolant. Follow the instructions described in the service manual.
18. Check the coolant reservoir for the correct level and signs of leakage. Repair as necessary.
19. Check that the heater harness is routed properly and all connectors are plugged in.
20. Put the drain plug (removed in step 5) in the glove box.