

**INSTALLATION  
INSTRUCTIONS****CUMMINS B SERIES ENGINES 3.9L & 5.9L****CAUTION**

DO NOT plug in heater if heating element is not immersed in coolant. If not immersed, element sheath may burst and could result in personal injury.

USE a 50/50 solution of ethylene glycol antifreeze and water for optimum heater performance.

DO NOT use more than 65% concentration of antifreeze, as a shortened heater life will result.

DO NOT use heater in coolant system containing any form of stop-leak additive.

**HEATER INSTALLATION PROCEDURE**

1. Drain engine coolant.
2. Remove 2 1/4" core plug located on the right side. Any core plug can be used. The plug located nearest the center of the block is preferred. On turbocharged engines, do not use the opening that is near to the turbocharger.
3. Clean core hole surface thoroughly. Remove any burrs or sharp edges on inner edge of core hole. The hardened cup plug sealant must be removed.
4. Apply a coating of lubricant to the heater O-ring; use a non-petroleum based lubricant such as antifreeze. This will ease installation and prevent O-ring damage.
5. Install heater into core hole. Point element down. The locking channel should be threaded out to the end of the bolt. Hook the element and one leg of the channel into the hole. Hook the other side of the channel into the hole. Press heater squarely into the hole. Once installed, the locking bolt will move freely in and out.
6. Tighten the bolt to 120 inch-pounds torque.
7. Insert power cord connector into socket, taking care to align pins with sockets of connector on cord. Press plug firmly into socket. Tighten strain relief nut securely by hand.
8. Allow slack for engine vibration. Protect cord from excessive heat, possible chafing, or mechanical damage.
9. Refill cooling system with good grade permanent antifreeze solution. See CAUTION note above regarding coolant mixture.

**CAUTION**

Before applying power to heater, remove all trapped air by operating engine at governed high RPM for 5-10 minutes after thermostat opens (normal operating temperature).

**WARRANTY**

The Phillips & Temro Industries warranty statement is located on the website at [phillipsandtemro.com/terms](http://phillipsandtemro.com/terms).