

**INSTALLATION
INSTRUCTIONS**

**CUMMINS 855 CID ENGINES
SIDE PLATE ENGINE HEATER WITH 1/2" NPT BOSS**

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.

This engine heater series can be installed in the following 855 C.I.D. Cummins Engines:

ENGINE	HEATER LOCATION
Big Cam IV	Rear side plate with or without single coolant hose connection.
Big CAM III	Rear side plate.
Engines without full flow cooling	Forward or rear side plate.

HEATER INSTALLATION PROCEDURE

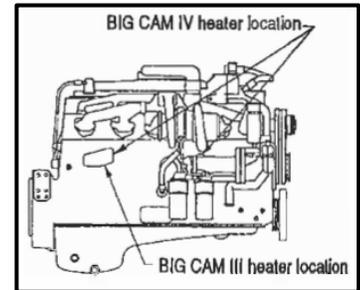
1. Drain engine coolant.
2. Remove water jacket access plate from right side of engine.



NOTE

Big Cam IV engines may have a coolant hose connection to the side plate. Disconnect hose from side plate.

3. Clean plate gasket surface.
4. Assemble heater components (depending on which style you use).
 - A. Replaceable element heater style: Assemble element, element gasket, and hex nut to plate. Do not tighten hex nut. Assemble gasket to plate.
 - B. Preassembled heater style (brazed in element): Assemble gasket to plate.
5. Mount heater assembly to engine to check for interference inside the block. For preassembled heater style, if slight contact occurs, adjust the element depth or angle slightly by hand.
6. Bolt heater assembly to engine using bolts removed from original plate. For replaceable element heater style, locate element at midpoint of free rotation. While holding element flats (to prevent the element from turning), tighten hex nut to 20-30 ft. lbs. torque.
7. Replace coolant hose connection into 1/2" NPT port (if removed) or use 1/2" NPT pipe plug. Coat threads with gasket cement.
8. Allow slack for engine vibration and protect cord from excessive heat, possible chafing, or mechanical damage.



CAUTION

Fill cooling system completely with good grade permanent antifreeze solution and operate engine until all trapped air is removed before turning heater power ON.

WARRANTY

The Phillips & Temro Industries warranty statement is located on the website at phillipsandtemro.com/terms.