## INSTALLATION INSTRUCTIONS

## Threaded Immersion Heater Cummins ISB 3.9 & 5.9, ISC 8.3



<u>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.</u>

<u>USE A 50/50 SOLUTION</u> OF ETHYLENE GLYCOL ANTI-FREEZE AND WATER FOR OPTIMUM HEATER PERFORMANCE



<u>DO NOT</u> USE MORE THAN 65% CONCENTRATION OF ANTI-FREEZE, AS A SHORTENED HEATER LIFE WILL RESULT.

 $\underline{\mathsf{DO}\ \mathsf{NOT}}$  USE HEATER IN COOLANT SYSTEM CONTAINING ANY FORM OF STOP-LEAK ADDITIVE.

- 1. Drain engine coolant. Flush system if necessary.
- 2. Remove 3/4" pipe plug ISB 3.9 & ISB 5.9: Plug for heater is located on right side of engine, to the rear of the oil cooler housing and is nearly in line with the large core plugs. ISC 8.3: Plug for heater is located on the Right Side of engine, ahead of the oil cooler. It is the port below the coolant temperature sensor. Removing and replacing alternator may be necessary for access to port for heater.
- 3. Coat threads of heater adapter with thread sealant or teflon tape.
- 4. Install heater assembly and tighten securely.
- 5. Insert power cord connector firmly into socket, taking care to align pins with sockets of connector on cord. Tighten strain relief nut securely by hand.
- 6. Route cord to outside, securing where necessary to allow slack for engine vibration and ensure that cord does not touch engine, hot pipes, or any moving parts. **Connect only to properly grounded 120 Volt AC outlet**. If an extension cord is used, it must the three-wire grounded type.
- 7. Refill cooling system with good grade permanent antifreeze solution. See CAUTION note above.



**CAUTION**: Before applying power to heater, remove all trapped air by operating engine for 5-10 minutes after thermostat opens (normal operating temperature).