

**INSTALLATION
INSTRUCTIONS**

**DETROIT DIESEL SERIES 50/60
WITH LOW-MOUNT TURBOCHARGER**



WARNING

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



CAUTION

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, as a shortened heater life will result.

HEATER INSTALLATION PROCEDURE

1. Drain cooling system. Flush system if necessary.
2. Remove 2nd core plug from rear on right side of engine--behind oil cooler.
3. Clean surface of hole thoroughly. Remove any burrs, compound, or paint. Burnish core hole surface with sandpaper or steel wool.
4. Apply a coating of grease to the heater O-ring and machined surface of core hole to ease installation and prevent O-ring damage.
5. Install heater into core hole with element pointing at 2 to 3 o'clock.
6. Tighten screw to 20-25 inch-pounds torque. Do not overtighten.
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 and protect cord from excessive heat and possible chafing or mechanical damage.
9. Fill cooling system with good-grade permanent antifreeze solution (see CAUTION note above).

Installation Location - Series 50



CAUTION

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

10. Connect only to 120-Volt AC grounded outlet. If an extension cord is used, it must be the three-wire grounded type.



NOTE

Heater may also be used in **front** core hole on Series 60. Position element at 9-10 o'clock.

WARRANTY

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