

**INSTALLATION
INSTRUCTIONS**

**DEERE 400 & 500 SERIES WITH
SMOOTH BORE CORE HOLE**

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 cooling system. Flush system if necessary. Remove core plug on left side of engine, near center.
2. Clean core hole surface thoroughly. Remove any burrs, compound, or paint. Burnish core hole surface with sandpaper or steel wool.
3. Apply a coating of grease to the heater O-ring and core hole surface, to ease installation and prevent O-ring damage.
4.
 - A. **400 Series Engines** (6466 etc.): Install heater into core hole with element pointing up. Position the locking channel at a 11:00/5:00 o'clock position during installation. Hook the upper end of channel into the block first, then the lower end.
 - B. **500 Series Engines** (6619 etc.): Install heater into core hole with element pointing rearward. Position the locking channel vertically during installation. Hook the lower end of channel into the block first, then the upper end.
 - C. Press the heater into the hole using even pressure and being careful not to cut the O-ring. Rotate the heater/adaptor to position the element halfway between points of contact. After the heater is installed the screw, with channel attached, it should move freely in and out about 1/2".
5. Tighten screw to 15-20 inch-pounds torque (use 7/32 hex socket). Do not overtighten. The heater does not require excessive tightening to hold it into the block.
6. Insert power cord connector into socket, being careful to align pins with sockets of connector on cord. Press plug firmly into socket. Tighten strain relief nut securely by hand.
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 running engine for 5-10 minutes after the thermostat opens (normal operating temperature).

8. Connect only to 120 VAC grounded outlet. If an extension cord is used it must be of the three-wire grounded type.

WARRANTY

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