

**INSTALLATION
INSTRUCTIONS****M22 & M27 FITTING
THERMOSTATS**

WARNING: Personal injury, never operate heater if element is not immersed in coolant. Element sheath could burst and cause personal injury.

**CAUTION:**

Heater Damage: NEVER run engine while heater is in operation. Shortened heater life will result.
Heater Damage: DO NOT use stop leak additives or improper coolant mixtures, shortened heater life will result.

GENERAL INFORMATION

1. Locate M27/M22 Port. PTI recommends thermostat locations as high up in the water jacket as possible, furthest from the block heater. Although this is not always possible, a location furthest from the block heater is advisable. Most engines will have an available port in the thermostat housing (see illustration of Cummins ISX).
2. Drain engine coolant below thermostat housing level. This amount will vary depending on engine and radiator capacity.
3. Install thermostat assembly. For an M27 fitting torque to 80 N-m (60 ft-lb). For an M22 fitting torque to 47 N-m (35 ft-lb).
4. PTI thermostats require the use of a PTI Series Y-cord. Use of a straight plug is recommended. Contact PTI or your local distributor for the proper cord. Insert power cord connector firmly into socket, taking care to align pins with sockets of connector on cord (Note: the connectors are interchangeable between the heater and thermostat). Tighten strain relief nut securely by hand.
5. Route cord to block heater. Secure cord 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 a GFI protected 120-Volt AC outlet. If an extension cord is used, it must be the three-wire grounded type.
6. Refill cooling system with coolant mixture. Use a standard 50/50 mixture of coolant and water.
7. Run engine up to operating temperature and check for leaks. Let engine run for 5-10 minutes after thermostat opens to ensure all air is bled from system.

NOTE: Due to variable locations in which this thermostat can be installed, the actual heater on/off cycle times may vary.

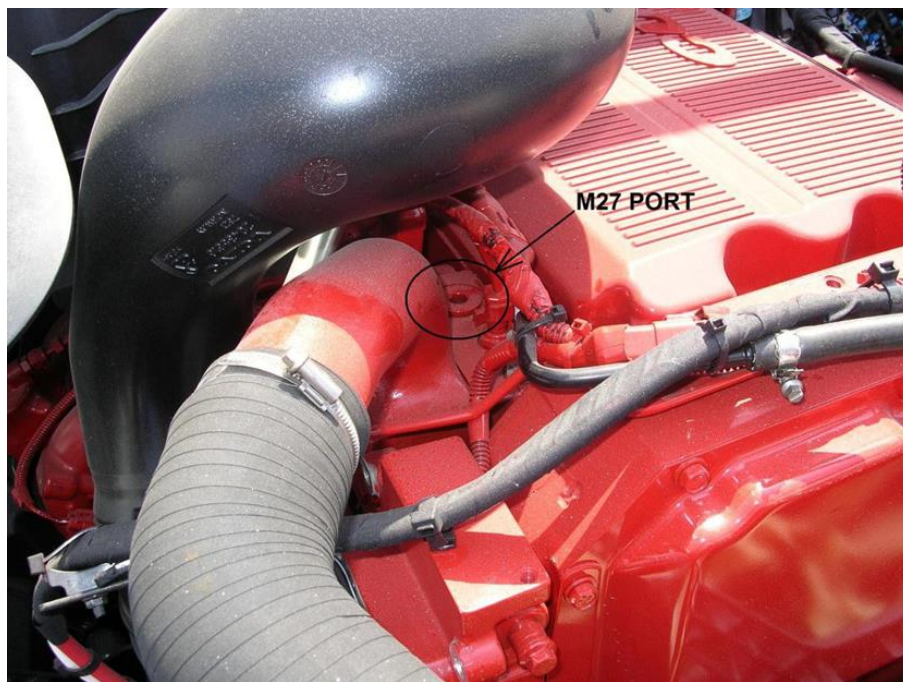
**CAUTION:**

Heater Damage: DO NOT operate heater until all air is bled from the system. Shortened heater life will result.

Thermostat Marking	Temp Range
017	100 ON 120 OFF
030	55 ON 75 OFF
032	55 ON 75 OFF
033	55 ON 75 OFF
034	40 ON 55 OFF
035	40 ON 55 OFF
036	40 ON 55 OFF
037	40 ON 55 OFF
038	40 ON 55 OFF
039	40 ON 55 OFF
040	100 ON 120 OFF
041	55 ON 75 OFF
042	100 ON 120 OFF
043	100 ON 120 OFF



example



**M27 PORT LOCATION-THERMOSTAT HOUSING
CUMMINS ISX ILLUSTRATED**

WARRANTY

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