

Optional FE Thermostat Installation

Kit includes:

- (1) Thermostat body (male and female threaded halves)
- (2) 3" hoses
- (2) Hose clamps
- (1) Thermostat 160° with (2) 0.187" holes drilled in it
- (1) Thermostat O-ring

Assembly of the thermostat housing before installation

The thermostat body assembly will not function correctly if not assembled correctly. Refer to pictures for exact assembly. **SERIOUS OVERHEATING WILL OCCUR IF NOT FOLLOWED CORRECTLY** 



Thermostat and o-ring. \*Notice the groove on the inside surface of the o-ring. Roll the O-ring onto the edge of the thermostat mounting flange



O-ring installed

The thermostat is not a Spec Part, it is available in different temperatures. Testing proved the 160° to give the best overall results.

The thermostat must have holes in it to bypass water during the warm up period.



The thermistor bulb of the thermostat goes in the male threaded half, which provides clearance for proper coolant flow.



Thermostat placed in the Female threaded half with the thermistor showing.

Use a small amount of anti-seize to prevent thread damage.

Use a small amount of grease on the o-ring. A dry o-ring makes it difficult to screw the half's of the body together.

When the threads of the body bottom out, it will crush the o-ring about .030" to the seal assembly.

NOTE: not all Thermostat o-rings are the same thickness, use only the type provided with the kit.

## Installation of the Thermostat housing

With the thermostat housing properly assembled start with a clean car in a well ventilated area.

- 1. Drain about 1 gal of coolant from the cooling system
- 2. Use the (2) 3" sections of hose and (2) clamps provided in the kit, along with the 2 clamps already on the car to replace the straight section of hose that is between the aluminum water tube that lies under the header and the aluminum tube with a 90° bend that is connected to the drivers side Radiator. (The cross piece of rubber hose that connects those two aluminum tubes is what you will replace with the thermostat body and hoses).

3. Install the thermostat body on the car with the thermistor side of the thermostat closest to the cylinder head. Serious overheating will occur if not installed correctly.



- 4. Refill the cooling system slowly. The thermostat restricts flow and will take a little longer to fill the system.
- 5. Start the engine and let it warm up slowly...be sure to clear the remaining air from the system. You can touch the coolant tubes on each side of the car to sense when the thermostat is open and flowing coolant.
- 6. Check the coolant level one last time and replace the radiator cap.

## Final remarks

At the track, just as before, it's best to warm the engine before each session. There is no longer a need to block air to the radiators to control water temperature.

Testing proved that at ambient air temperatures of about 70° F and less, the average coolant temp will be in the low 170°'s. It will increase with air temperatures of 95°+F to be in the low 190°'s. If you experience greater than the mid 190's please remove the thermostat, at that point you are running at the cooling capacity of the system.

Benefits are: quicker warm ups, less engine wear, and, because engine management relies heavily on water temp, a much more stable air / fuel mixture and an end to the "how much tape do I use?" game of controlling Temps.

One more detail not to worry about, remember we all do this for fun...Go do it! Please remember to add fuel...

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