



Technical Bulletin

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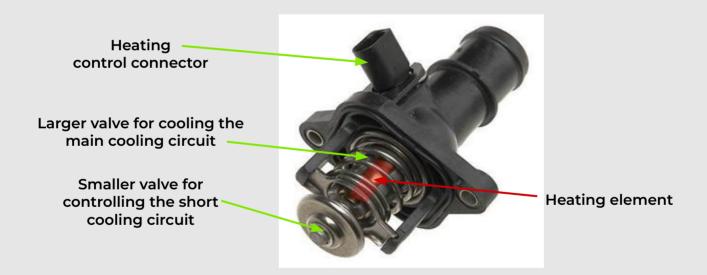
TIPS AND TRICKS

Electric Thermostat

All models

Electric thermostat

The electric thermostat is designed with a complementary heating element that electrically adapts the valve opening stroke hence the coolant flow and finally the cooling level.



The heating element is a resistor (**around 10 ohms**); it is power-controlled by a **Pulse Width** Modulated signal (PWM) according to a combination of settings (the map) that is stored in a control unit.









Electric thermostat troubleshooting

The internal heater in piloted thermostat may fail:

Symptom	Cause	Treatment
Engine overheating	Absence of electrical control; this will affect the thermostat opening stroke.	Replacing the thermostat assembly
Warm up time increased	Low coolant temperature when the thermostat is jammed open	

Also, there are some DTC related to the electric thermostat failure:

Fault Code	Fault description
P0597	Map Controlled Engine Cooling Thermostat F265 Circuit Open
P0598	Map Controlled Engine Cooling Thermostat F265 Short circuit to ground
P0599	Map Controlled Engine Cooling Thermostat F265 Short circuit to Plus
P1292	Map Controlled Engine Cooling Thermostat F265 Circuit Open
P1293	Map Controlled Engine Cooling Thermostat F265 Short circuit to Plus
P1294	Map Controlled Engine Cooling Thermostat F265 Short circuit to ground



