

## Thermostat Assembly w/Sensor GM0712937

This modern electronic thermostat responds to both coolant temperature and control signals from the ECM, which can be confusing to technicians and DIY enthusiasts. The below operating parameters may be helpful when function testing the new thermostat after installation.

Verify that DTC P00B3, P00B4, P00B6, P00B7, P0116, P0117, P0018, P0119, P0128, P0597, P0598, P0599, or P2181 are not set.

Verify that coolant mixture and level are correct, air has been completely purged from system, the radiator and AC condenser function properly, and the engine cooling fan operates per factory specifications.



### **Normal Engine Operation / Normal Ambient Temperature**

Thermostat begins to open mechanically at coolant temperature of 217° F. When coolant temperature exceeds 221° F, the ECM directs the thermostat to also open electronically.

### **Normal Engine Operation / High Ambient Temperature**

ECM directs thermostat to maintain coolant temperature of approximately 203° F.

### **High Engine RPM / High Engine Torque**

ECM directs thermostat to maintain coolant temperature of approximately 194° F.

If the thermostat is maintaining an incorrect coolant temperature (such as 194° F during normal engine operation and ambient temperature), the thermostat may be operating correctly but a faulty temperature or transmission sensor is providing a bad signal to the ECM. Troubleshoot other cooling system components and the ECM signal to the thermostat before assuming the electronic thermostat has failed.



Installation by a professional technician is recommended. Refer to the factory repair manual for vehicle-specific service procedures for this part. Tighten all hardware to factory torque specifications and observe all repair manual cautions and warnings. Use safety stands whenever beneath a vehicle and always wear protective eyewear.