

Animation Worksheet: Thermostat, Electric Assist

Name: _____ Date: _____

1. An electric assist thermostat is designed to provide more _____ temperature control than a standard mechanical thermostat.
2. This system combines the basic mechanical function of a conventional thermostat with an _____ controlled actuator.
3. When the engine is first started and begins to warm up, the thermostat remains in its _____ position.
4. By limiting coolant flow during warm-up, the engine is able to reach its _____ operating temperature more quickly.
5. The _____ (ECU) is the "brain" that monitors various engine sensors to manage the thermostat.
6. One of the primary sensors the ECU monitors is the engine _____ temperature (ECT) sensor.
7. The ECU also monitors the temperature at the _____ to determine how much cooling is needed.
8. Under normal driving conditions, the thermostat gradually opens to maintain a _____ temperature.
9. When the ECU detects a _____ demand on the engine, it can trigger the electric actuator to open the thermostat further.
10. Factors like engine _____ and manifold absolute pressure (MAP) are used by the ECU to calculate the best thermostat position.