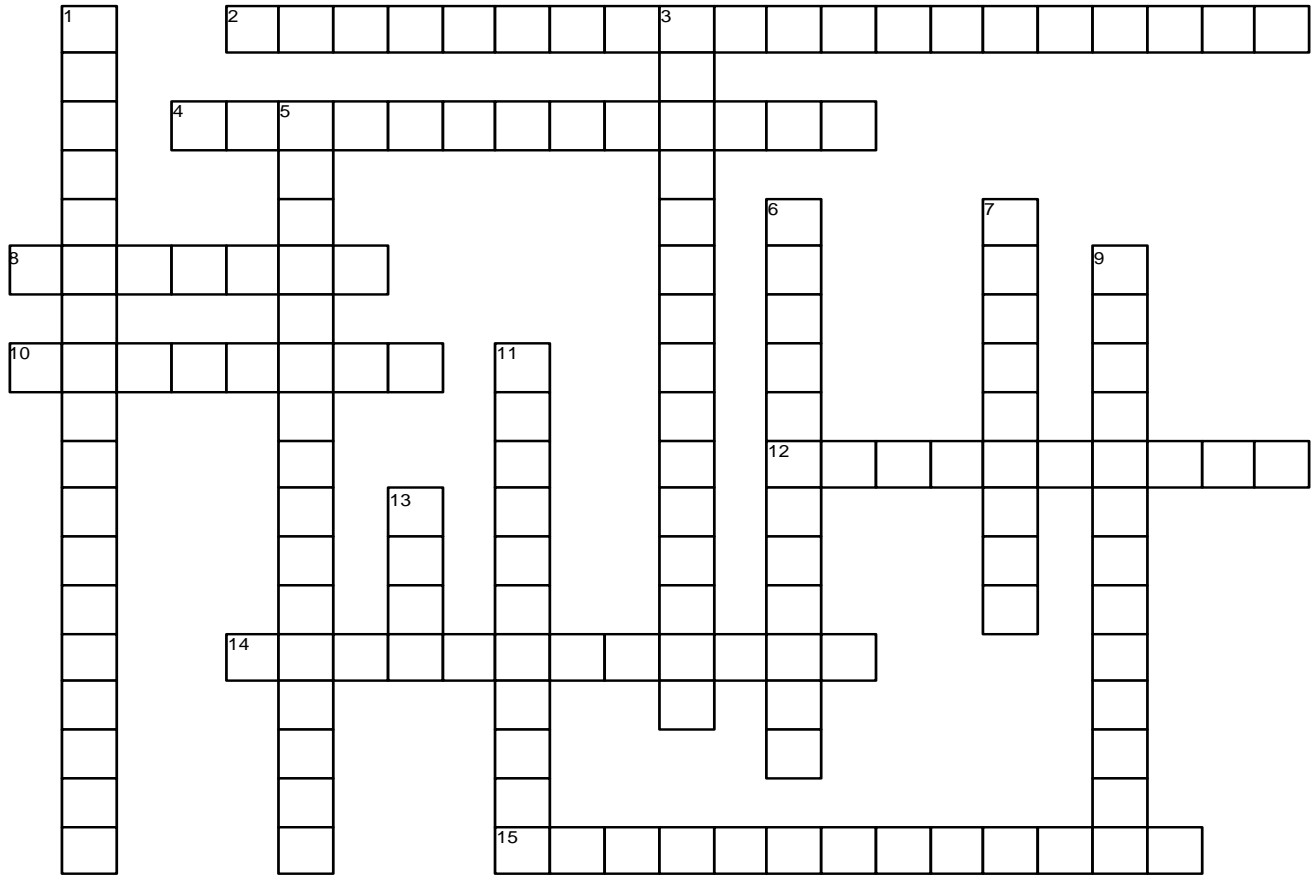


Automatic Temperature Control Systems

Chapter 12



<http://jameshalderman.com>

ACROSS

- 2 With an _____ control system, the driver can turn the automatic controls on or off and select the desired temperature.
- 4 The system that controls the airflow to the passenger compartment is called the _____ system or air distribution system.
- 8 The _____ sensor is normally mounted on top of the instrument panel and is used to measure radiant heat load that might cause an increase of in-vehicle temperature.
- 10 Most automotive thermistors are of the _____ temperature coefficient type; the resistance changes in an inverse or negative relationship with temperature.
- 12 The _____ temperature sensor measures outside air temperature and is often mounted at the radiator shroud or in the area behind the front grill.
- 14 The _____ temperature sensor is used to measure the temperature of the air leaving the dash vents.
- 15 The _____ temperature sensor is a thermistor and measures the temperature of the engine coolant and is usually located near the engine thermostat.

DOWN

- 1 A _____ can be used in the low- and/or high-pressure refrigerant line.
- 3 The air-conditioning _____ sensor is used so the ECM will know if the compressor is running, and by comparing the compressor and engine speed signals, the ECM can determine if the compressor clutch or drive belt is slipping excessively.
- 5 A few vehicles use a _____ sensor to determine the level of in vehicle humidity.
- 6 A _____ actuator is able to move either open or closed, for example the recirculation door.
- 7 The _____ temperature sensor is often mounted behind the instrument panel, and a set of holes or a small grill allows air to pass by it.
- 9 A _____ actuator is able to provide three air door positions, such as the bi-level door, which could allow defrost only, floor only, or a mixture of the two.
- 11 The _____ temperature sensor is used to measure the air temperature leaving the evaporator.
- 13 The purpose and function of the _____ system is to provide comfortable temperature and humidity levels inside the passenger compartment.