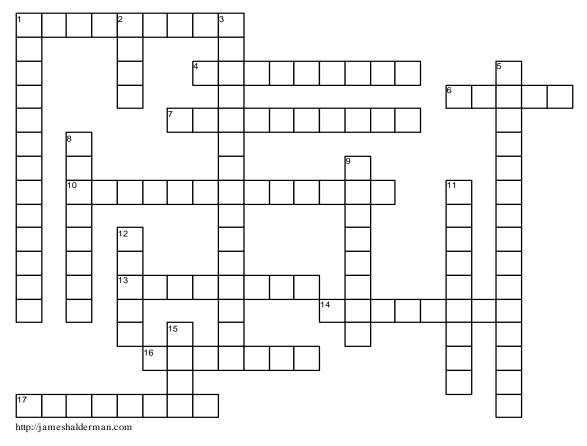
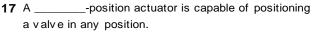
## Automatic Air-Conditioning and Heat Pump Systems





## ACROSS

- 1 \_\_\_\_\_\_\_temperature control (ATC) System is also called automatic climate control system or automatic air-conditioning system.
- **4** The \_\_\_\_\_\_ air temperature (DAT) sensor is used to measure the temperature of the air leaving the dash vents.
- **6** Temperature/\_\_\_\_\_ to adjust air temperature (of ten just called the \_\_\_\_\_\_ door or temperature door).
- 7 The \_\_\_\_\_\_ temperature (EVT) sensor is used to measure the temperature of the air leaving the evaporator.
- **10** The \_\_\_\_\_\_ temperature (ECT) sensor is a thermistor and measures the temperature of the engine coolant and is usually located near the engine thermostat.
- **13** A few vehicles use a \_\_\_\_\_ humidity (RH) sensor to determine the level of in-vehicle humidity. High RH increases the cooling load.
- **14** Most automotive thermistors are of the \_\_\_\_\_\_ temperature coefficient (NTC) type; the resistance changes in an inverse or negative relationship with temperature.
- **16** The \_\_\_\_\_ sensor (also called a solar sensor) is normally mounted on top of the instrument panel and is used to measure radiant heat load that might cause an increase of the in-v ehicle temperature.



## DOWN

- 1 The system that controls the airf low to the passenger compartment is called the \_\_\_\_\_ system or air distribution system.
- 2 Airflow through ducts are controlled by one or more \_\_\_\_\_ doors controlled by the function lever or buttons.
- **3** Automatic temperature control (ATC) System is also called automatic \_\_\_\_\_\_ system or automatic air-conditioning system.
- 5 \_\_\_\_\_/blend to adjust air temperature (often just called the blend door or \_\_\_\_\_ door).
- 8 A \_\_\_\_\_ transducer can be used in the lowand/or high-pressure refrigerant line.
- **9** \_\_\_\_\_ (IR) sensors are mounted in the control head or overhead in the headliner.
- 11 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.
- **12** A \_\_\_\_\_\_-position 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.
- 15 A \_\_\_\_\_-position actuator is able to move either open or closed.

