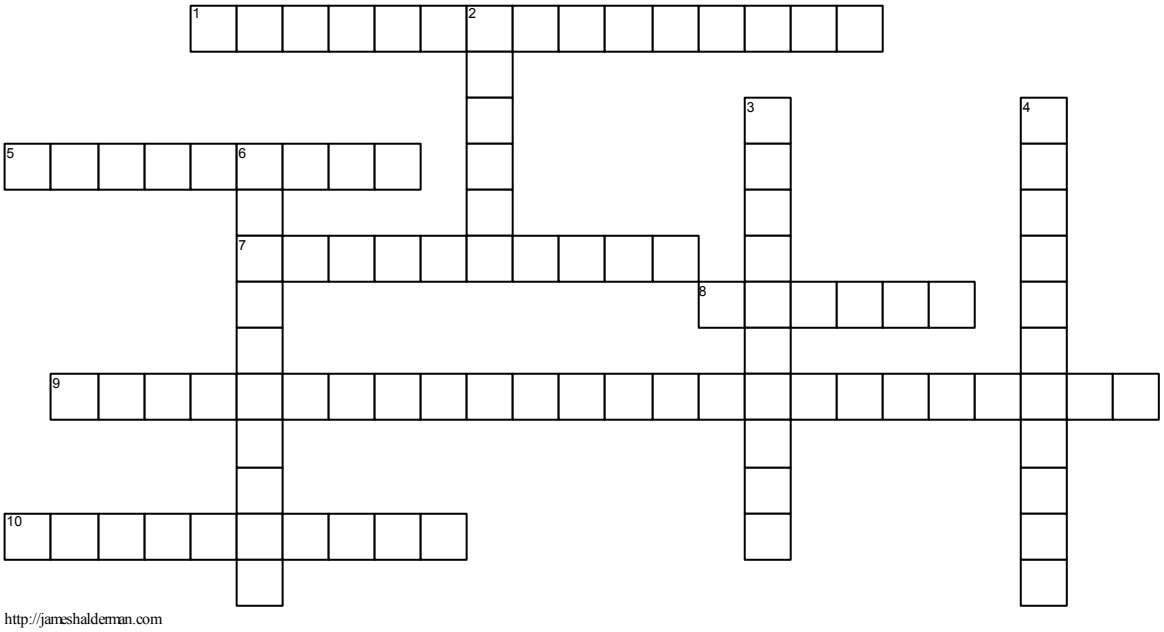
Hybrid and Electric Vehicle HVAC Systems

Chapter 13



ACROSS

1 A_____ _____ _____ is used to move coolant through the heat storage tank at times when the ICE is shut off.

5 The fundamental purpose of any air-conditioning system is to absorb heat in one location and then _____ that heat to another location.

7 Many hybrid vehicles use an electrically driven _____, which allows compressor and A/C operation with the engine at idle-stop.

8 An electric compressor operates at a voltage up to 230 volts, and these wires will have bright _____ colored insulation.

9 The second-generation Toyota Prius uses a _____ _____ _____ _____ where heated coolant is stored during normal vehicle operation and is then used to warm the engine intake ports prior to a cold start.

10 The electric _____ _____ is turned on whenever cabin heating is requested and the ICE is in idle stop mode.

DOWN

2 Some hybrid vehicles use an A/C system much like other vehicles, but run the _____ constantly when the A/C is turned on.

3 A_____ _____ is used to direct the coolant flow between the coolant storage tank, the ICE, and the vehicle's heater core.

4 In _____ _____, the A/C compressor is activated and the evaporator core is cooled to the point where any humidity in the air will condense on the evaporator and then be drained outside the vehicle.

6 Another approach used to heat the interior on a hybrid electric vehicle is to use ___ _____ built into the heater core itself.