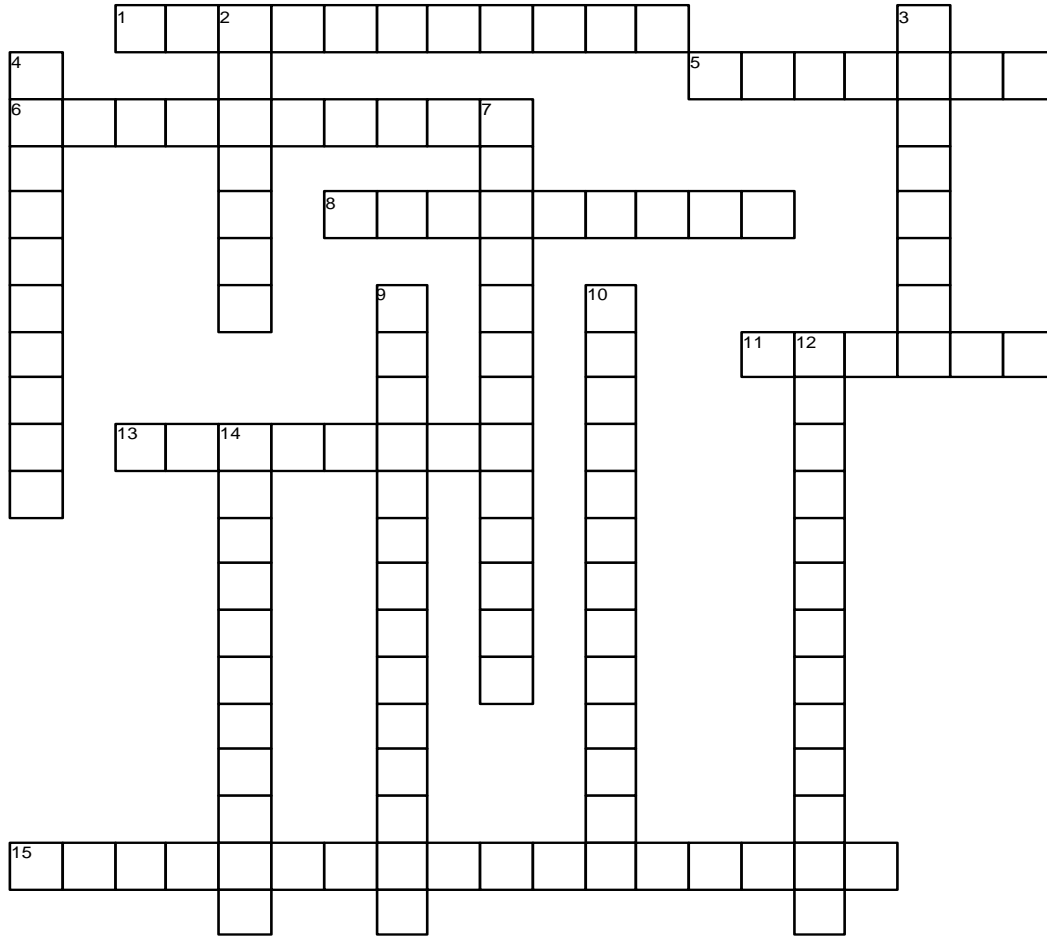


# Air-Conditioning Compressors and Service

## Chapter 4



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### ACROSS

- 1 Many recent vehicles use a clutchless \_\_\_\_\_, electronic-controlled, variable displacement compressor.
- 5 Recent compressor designs use a \_\_\_\_\_ made from Teflon that rides against a perfectly smooth portion of the driveshaft.
- 6 A piston compressor moves the pistons up and down in a cylinder to produce pumping action and controls the refrigerant flow with two sets of \_\_\_\_\_.
- 8 The upward stroke, or \_\_\_\_\_ stroke, of the piston generates pressure to force the refrigerant through the discharge reed into the discharge chamber and on to the condenser.
- 11 Most older \_\_\_\_\_ compressors use a crankshaft, similar to a gasoline engine, and a reciprocating-piston type.
- 13 \_\_\_\_\_ are installed in the discharge or suction line of some systems.
- 15 \_\_\_\_\_ require rather complex machining to achieve constant sealing between the fixed and movable scrolls.

### DOWN

- 2 The \_\_\_\_\_ scroll is mounted over an eccentric bushing and counterweight on the crankshaft.
- 3 The carbon-material sealing member is spring loaded so that its smooth face makes tight contact with the \_\_\_\_\_.
- 4 The \_\_\_\_\_ is attached to the compressor shaft.
- 7 The downward or \_\_\_\_\_ of the piston causes the refrigerant to flow from the compressor suction cavity to push the suction reed open and fill the cylinder.
- 9 \_\_\_\_\_ has vanes that contact the rotor housing at each end, and they slide to make a seal at each end as the rotor turns.
- 10 Many compressors use a rotating \_\_\_\_\_ attached to the shaft and a stationary seal seat attached to the front of the compressor housing.
- 12 \_\_\_\_\_ are available from aftermarket sources for installation in the liquid line between the condenser and the OT or TXV and are designed to filter the refrigerant to stop debris from plugging the expansion device.
- 14 The \_\_\_\_\_ is attached to the compressor housing.