

DOC'S BLOCKS
AUTOMOTIVE AIR CONDITIONING REPAIR

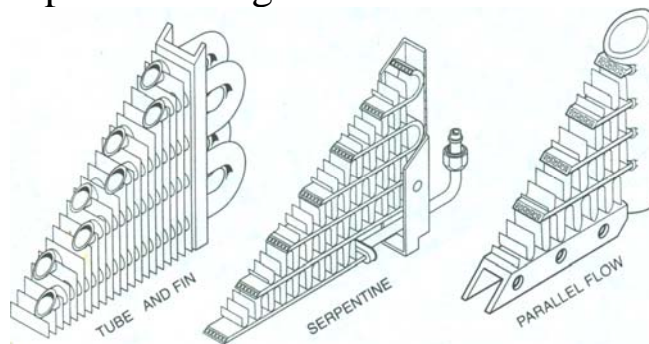
Question:

What are the signs of a restriction in the condenser?

Answer:

When a system is operating correctly, there is little chance of having a restriction. Restrictions usually result from a compressor grinding up and pumping material from the compressor out into the system. This material clogs up the system and will prevent cooling.

There are three designs of condensers. They are tube and fin, serpentine, and parallel design.



In a tube and fin condenser, the tube size is larger than the passages in other design condensers so it is easier to clean out any material that may be in it. There are times that it can't be cleaned and has to be replaced. The serpentine and the parallel condensers are almost impossible to clean out.

If a compressor on any of the systems grinds up, an attempt must be made to clean the system. It could be assumed that the condenser is okay. The least likely to get clean are the latter two designs.

The only method to prove the condenser is restricted is by reading temperatures. The first step in proving if the condenser is okay is charge the system with about sixty percent (60) of the recommended charge. Operate the system at 1500 RPM, max cold, and high blower. Read the temperature of the discharge pipe entering the condenser and the liquid line leaving the condenser. A normal temperature drop would be between twenty-five and thirty five degrees. If the drop is fifty degrees or more, the condenser is restricted. There would also be lack of cooling.