

////// *Tech Tips* ////

Restricted Discharge Line

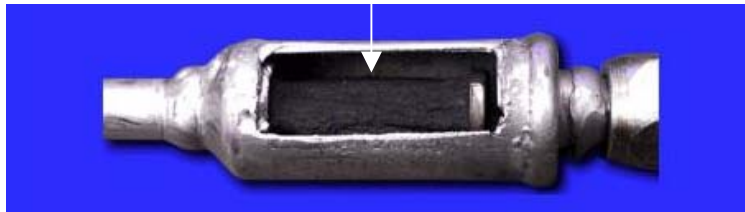
Excessive high side pressure can force a compressor to make noise, even when the gauge readings don't show a pressure problem. A common condition, often overlooked, is a restricted discharge line. The discharge line, which connects the compressor outlet to the condenser inlet, can easily become restricted. While simple designs have just two ends on a section of barrier hose, many lines contain a muffler and/or filter.

The muffler, which smoothes out compressor discharge pulses, may house baffles or filter screens or may be just an empty can. However, after a compressor failure, mufflers can trap debris. Also, a discharge line without a muffler can become restricted. The barrier hose may collapse internally, restricting flow.

As the refrigerant leaves the compressor, it is a high pressure, high temperature vapor. The discharge line should have no effect on the refrigerant; pressure and temperature should remain constant. Any loss of heat can indicate the discharge line is restricted.

To test for a restriction, use a digital pyrometer to check the temperature at both ends of the line. A temperature drop of 5° F or more indicates the line is restricted and must be replaced.

Paper Filter



GM has recently added an in-line filter (pictured above) to the discharge hose on many vehicles. The filtering material is a paper product, which looks very similar to the in-line fuel filter used on many GM carburetors. However, this filter is not serviceable.