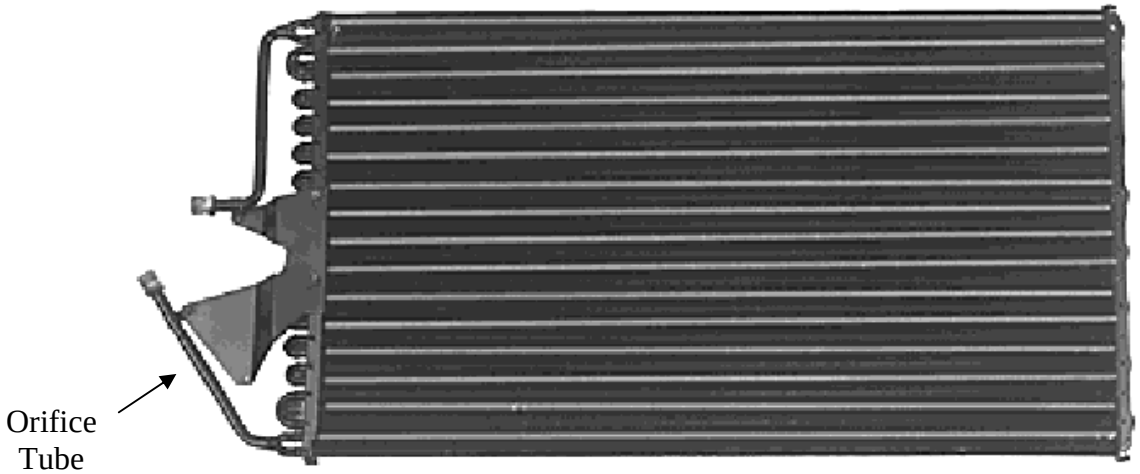
FACTORY AIR™ by 4 SEASONS

TECH TIP

GM Truck High Pressure Condition

In 1988, General Motors began installing the orifice tube on full size trucks (with single A/C units) in the condenser outlet. The orifice tube location was changed to reduce evaporator noise. Although this design works well, the system can lead a good technician on a wild goose chase when trying to diagnose an extreme high-pressure condition.

A common complaint is the head pressure soars to abnormally high readings after charging about 8 oz. of refrigerant. Generally, this complaint occurs after the condenser has been replaced or flushed. The problem is with the design of the condenser. First, both fittings have the same threads so the lines can be reversed when reconnected. Second, the condenser will actually mount upside down. In either case, the compressor discharge line would direct refrigerant straight to the orifice tube, which creates the high-pressure condition.



When diagnosing this complaint, inspect condenser mounting and hose routing. The discharge hose (from the compressor) connects to the top on the condenser (inlet). The orifice tube mounts in the bottom of the condenser (outlet to the evaporator). The outlet tube of the condenser has a 45º upward angle.

If the lines and orifice tube locations are correct, and the system still has high head pressure, the vehicle will need to be tested for a possible internal restriction or airflow problem.