

AUTOMOTIVE AIR CONDITIONING REPAIR

Question:

What causes a compressor to blow a hole in the side of it?

Answer:

Most generally, a hole in the side of a compressor would be associated with a broken rod. In some of these cases, the compressor doesn't have rods. After opening up a compressor that blew a hole in it, it's found the rods are not broken.

The hole was the results of a chlorine explosion. The combination of chlorine in the refrigerant, hydrochloric acid, excessive heat in the compressor, fluxes used in soldering in the condenser, and compression in the compressor cylinders, created the explosion. This commonly happens on aluminum compressors.

Whenever this happens, there are steps that must be taken to correct the system for operation. Compressors that fail in this manor, compressor material will be pushed up the suction hose into the evaporator or the accumulator as well as move into the condenser.

Through flushing of the entire system is necessary. Mufflers that are in the hoses may have to be replaced because they hold trapped material. Inline filters will have to be replaced and if the system doesn't have these filters, it may require installing them.

The condenser may have to be replaced if it's a parallel or serpentine design.

The accumulator or receiver dryer will need to be replaced at the same time the compressor is replaced.

Reestablish the correct oil level. Evacuate the system for at least one hour.