

DOC'S BLOCKS
AUTOMOTIVE AIR CONDITIONING REPAIR

Question:

Is there another method to test a system for operation?

Answer:

As previously stated, pressure is a vehicle to determine temperature. When the service ports are located away from the compressor, reading temperature of the AC pipes will be necessary. If the system is not operating correctly, reading temperature is the only method that is accurate.

Because there is a direct relationship between the refrigerant and temperature, it is a known fact what the temperature is supposed to be in every part of the system.

The high side or discharge line temperature before entering the condenser should be 45 degrees above ambient temperature. Ambient temperature is the surrounding air temperature in the work area. The liquid line should be between 25 and 35 degrees less than the discharge pipe. The suction pipe should read about 40 degrees.

Although humidity, radiation, and barometric pressure will affect readings, they will still basically be the same. In most cases, these factors are stressed on too much. The interior of the AC system is considered to be an atmosphere and there is little affect by outside weather conditions..

Reading temperature of the AC pipes takes the guess out of testing. If the system is working correctly, the pipes will never read colder than they should. If there is a problem, the readings will indicate where the problem is.