

DOC'S BLOCKS
AUTOMOTIVE AIR CONDITIONING REPAIR

Question:

Can using the bare hands check line temperatures?

Answer:

Yes, and then you compare the size of the blisters!

This method has been used for fifty years and it is a good indicator as to what is happening within the AC system.

There are two things to remember. What should the high side, discharge, line temperature be, and what should the liquid line temperature be accordingly.

In most ambient temperatures, this is quite simple. The discharge line should be one hundred-fifty degrees or less. The liquid line should be twenty-five to thirty-five degrees less than the discharge line.

How hot is this, the water coming out of a hot water heater is about one hundred-twenty-five degrees if the hands can be held in the water. If it is too hot to keep the hands in the water, it is about one hundred-forty degree.

When testing pipe temperature, don't grab the pipe so you can compare blisters. Pat the line several times and see how long the pipe can be touched. Pipes that are too hot, smell hot, and burn the skin, would indicate a problem.

The liquid line will feel hot at first but after several tries, it can be held. This indicates that the temperature is lower than the discharge line.

The suction line should be about forty degrees. It will feel cold to the touch. When the humidity is a little high, the line will sweat. When the humidity is real high, the line will form ice on it. This is what would be experienced on a system that was operating correctly on a one hundred degree day.