

March Troubleshooting Problem

QUESTIONS: First, which two components located in the furnace assembly can be eliminated from consideration as the possible source of the problem?

Second, which two components inside the condensing unit can be eliminated from consideration as the source of the problem?

Third, based on your meter readings, what do you have to do in order to get this unit operating again?

ANSWERS: The best correct answer to the first question is the transformer and the blower motor. You could also say that the fan relay or the printed circuit board that incorporates a fan relay assembly is OK too. All of these components can be eliminated as possibilities because the indoor fan motor is running.

The correct answer to the second question is that we can eliminate the contactor and the condenser fan motor. Without the contactor operating normally, the condenser fan motor wouldn't be running, nor would the compressor be attempting to start.

The final answer to our "blowing warm air" complaint is that we would have to replace the potential relay. When our meter showed infinity at the SR coil, it proved that the coil was open, which would prevent the relay from opening the SR switch. And the end result of that situation would be that the start capacitor would not be taken out of the circuit, causing excessive current draw, which would cause the compressor to kick off on its internal overload.