

Wheels: An e-mail from Gary says, “My 1993 Isuzu Trooper recently had the A/C go on the fritz. Preliminary indications are that the compressor must have a problem. I have had it checked by a couple of shops and they advise the compressor needs replaced. My questions is this: How can these shops be certain the compressor is bad when all they checked is the high and low pressure readings? I recall when I took classes on automotive A/C that the instructor said you could not properly check an A/C system just by the pressure readings. He advised that the readings could be due to a clogged accumulator/evaporator or a clogged screen in the orifice assembly. If a clog or obstruction occurred in either place the pressure readings would read low on the high side and high on the low side. He also advised that one condition you would see is that at idle (i.e.; 500-750 RPM) the A/C would not put out much cold air but as you hit 3000 RPM (around 70-75 MPH), the A/C would work much better. His point was that a clogged system might be the problem and not the compressor and proper testing required a check of the orifice assembly and accumulator. Since my A/C is showing these same characteristics, how can I be sure I really need a new A/C compressor and not just replace the accumulator and orifice assembly?”

Halderman: The A/C can be quickly checked for restriction by touching the lines and it will be cold at the point of the restriction. The only place that should be cold is at the orifice tube. If the compressor is weak, both high and low pressures will be low but as you said there are several other possible causes for this condition. Is it still an R-12 system? If so, then you may wish to have the accumulator and orifice tube replaced and retrofitted to R-134a. If this takes care of the problem you are done and if not, you have confirmed the compressor problem and the refrigerant will cost less than if the compressor were replaced and recharged with expensive R-12.

