

*DOC'S BLOCKS*  
**AUTOMOTIVE AIR CONDITIONING REPAIR**

**Question:**

What causes a restriction in the TXV?

**Answer:**

The TXV is used in the type system that also includes a receiver dryer. That is the round tank, located in the liquid line, before the TXV. The receiver dryer contains a drying agent that removes moisture from the refrigerant. The desiccant can be in a bag or in a block form. The earlier dryers contained balls of desiccant held in place in a chamber in the dryer. Moisture accumulates in the system through use or bad service practices. (Allowing air into the system)

A restriction in the TXV occurs when the desiccant in the dryer breaks up and moves out to the TXV. This restricts the orifice in the valve and stops the flow of refrigerant. The valve will generally have frost on it. The low side pressure will be lower than normal. It could be in a vacuum. The high side pressure will read about 150 lb. When the valve is removed from the system, inspect the inlet port of the valve and there will be what looks like grains of sand.

A down side to a restricted TXV is the flow of oil to the compressor stops and will result in the failure of the compressor.

If replacing the compressor on a TXV system, check the removed compressor for oil. If little or no oil is found, check the TXV for a restriction and operation.

Don't try to clean the valve, just replace it. Replace the receiver/dryer.