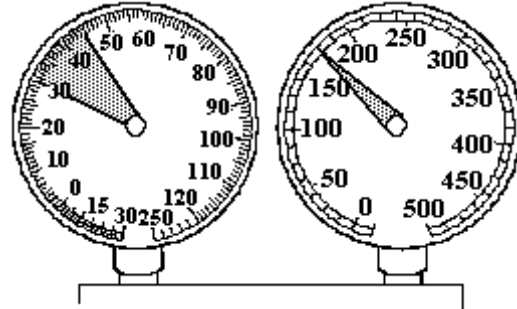


A/C System Gauge Pressures #6, Section 12.3.4

Student Name _____

KEY

As the gauge set was connected to this R-134a, TXV system, the pressures were normal. When the system was started, the pressures changed, and after 10 minutes, they stabilized to those shown. The air entering the condenser is at 85° F. The sight glass is clear. The line downstream from the TXV is cool, and the suction line has dew on it. The compressor does not cycle, and the in-car air discharge is cool but not cold.

**Complete the following:**

- Low side pressure should be 15-35.
The system pressure is High.
- High side pressure should be 170-205.
The system pressure is Normal.
- TXV outlet temperature should be Cold.
- Suction line temperature should be Cold.
- Sight glass should be Clear.
- Compressor cycle rate should be Normal & cycle.
- in-car air discharge temperature should be Cool/cold.
- This problem is probably caused by: TXV stuck open
- The procedure to correct this problem is: 1. Confirm proper TXV thermal bulb position, 2. Chill thermal bulb to see if TXV will close, 3. Recover refrigerant, 4. Remove and replace TXV, 5. Recycle refrigerant, 6. Evacuate system, 7. Charge system, 8. Check for refrigerant leaks, 9. Confirm proper operation.

Note to instructor using WS 18: This work sheet describes a typical A/C problem that technicians might encounter. As you probably realize, the pressures and other diagnostic clues are quite variable in the real world, and this work sheet merely gives the student an idea of how problems might show up. The most probable cause of this problem is a TXV stuck open and flooding the evaporator.