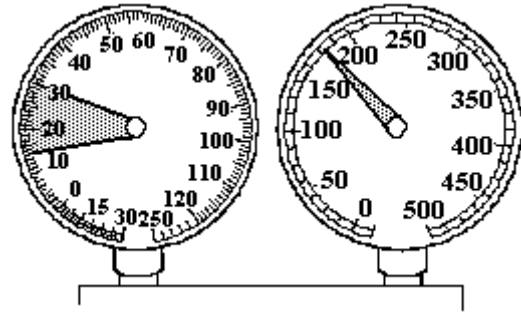


A/C System Gauge Pressures #4, Section 12.3.4

Student Name \_\_\_\_\_

**Key**

As the gauge set was connected to this R-12, CCOT system with a variable displacement compressor, 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 line downstream from the orifice tube is frosty, and the accumulator and suction line are frosty. The compressor does not cycle, and the in-car air discharge is cool but not cold.

**Complete the following:**

1. Low side pressure should be 32-50.  
This system pressure is Low.
2. High side pressure should be 150-310.  
This system pressure is Normal.
3. Expansion tube outlet temperature should be Cold, not frosty
4. Accumulator temperature should be Cold, not frosty
5. Suction line temperature should be Cold, not frosty
6. Compressor cycle rate should be not cycle
7. In-car air discharge temperature should be Cool/cold.
8. This problem is probably caused by: variable displacement compressor stuck on high output
9. The procedure to correct this problem is: 1. Recover refrigerant, 2. Remove and replace compressor control valve assembly, 3. Recycle refrigerant, 4. Evacuate system, 5. Charge system, 6. Check for refrigerant leaks, 7. Confirm proper operation.

**Note to instructor concerning WS 16:** 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 different problems might show up. The most probable fault is the variable displacement compressor is staying on high output.