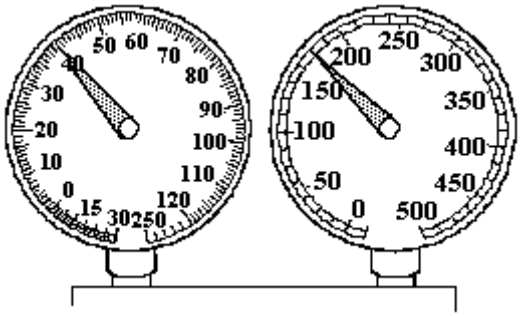
STUDENT WORK SHEET **WS 21**

A/C System Gauge Pressures #9, Section 12.3.4

Student Name _____

As the gauge set was connected to this R-12, 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 95° F. The line downstream from the TXV is cool, and the STV outlet 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 _____.
   The system pressure is _____.

2. High side pressure should be _____.
   The system pressure is _____.

3. TXV outlet temperature should be _____.

4. Suction line temperature should be _____.

5. Sight glass should be _____.

6. Compressor cycle rate should be _____.

7. In-car air discharge temperature should be _____.

8. This problem is probably caused by:

9. The procedure to correct this problem is:

Note to instructor using WS 21: 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 STV that is stuck partially closed.