Note:

The troubleshooting by pressure measurement described in the following is only possible on A/C systems with uncontrolled compressors.

This includes among others:

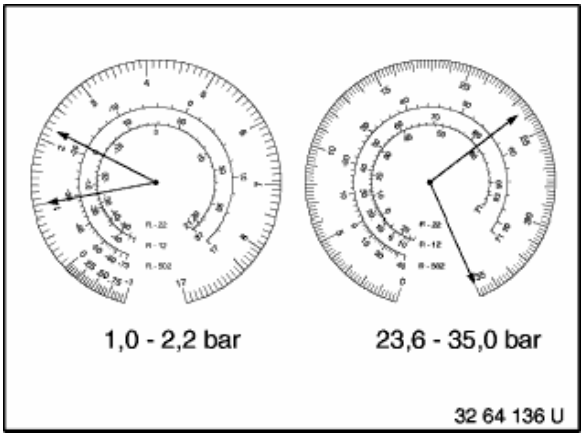
- E53
- E46M47 up to 09/2001
- E38 up to 09/1997
- E36, E36/7
- E34
- E32
- E31

Connect service station to car and open both valves on the charging hoses. Adjust A/C system at control panel as described for A/C efficiency measurement.

Note:

The following values apply as normal pressure ranges for ambient temperatures between + 20°C and + 40°C:

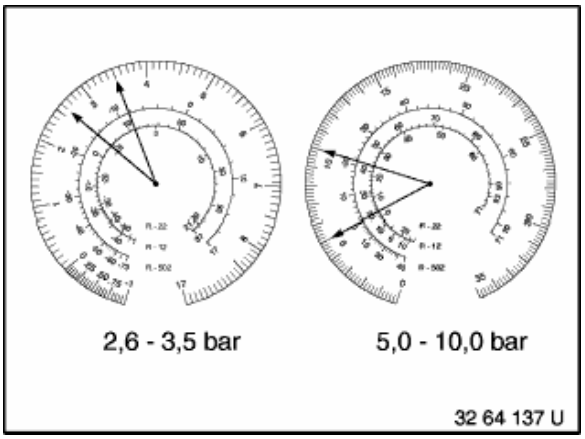
- Inlet pressure: 1.0 - 2.2 bar
- Outlet pressure: 12 - 22 bar



Normal inlet pressure and high outlet pressure indicate an overfilled system, a contaminated condenser or a faulty auxiliary fan.

Remedy:

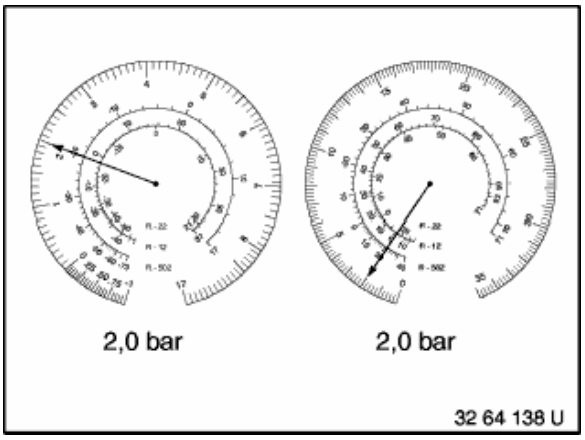
Draw off, evacuate and refill A/C system. Clean condenser from outside, check auxiliary fan, replace if necessary.



High inlet pressure and low outlet pressure indicate a faulty compressor.

Remedy:

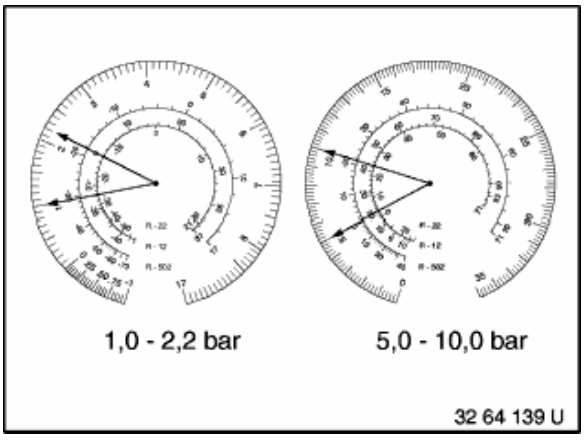
Replace compressor.



Compressor does not run with equal inlet and outlet pressures.

Remedy:

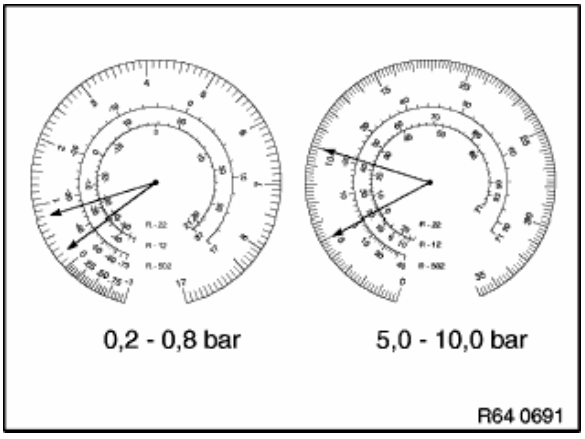
If the anti-icing facility has shut down the compressor, check evaporator sensor and power supply to clutch. Otherwise check clutch mechanically (by slipping).



Normal inlet pressure and low outlet pressure indicate an insufficient fill quantity of refrigerant.

Remedy:

1. Draw off and measure refrigerant.
2. If the amount drawn off corresponds approx. to the specified fill quantity, check expansion valve for unobstructed throughflow; replace if necessary.
3. Then evacuate and refill A/C system.



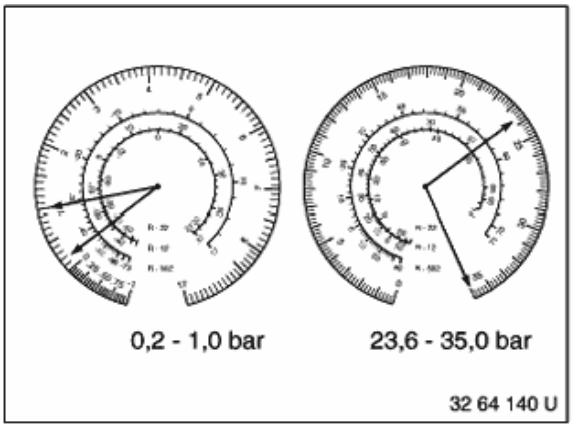
Low inlet pressure and high outlet pressure can be caused by a variety of factors:

- Icing of evaporator

  Remedy: Check evaporator sensor, replace if necessary.
- Obstruction on H.P. side after condenser or on L.P. side

  Remedy:

  Check drier, expansion valve and pipes in these areas for unobstructed throughflow; clean or replace if necessary.



Low inlet pressure and high outlet pressure indicate an obstruction in the condenser area.

Remedy:

Check condenser for unobstructed throughflow; clean or replace if necessary.