

Car & Home Air Conditioner Diagnostic Kit

Pressure Check Gauge measures AC Low Side Pressure to determine the level of Refrigerant in your system. Avoids over or under charging of your AC System for maximum cooling and to protect damage to AC compressor.

Test Thermometer will diagnose AC performance.

INSTRUCTIONS:

PRESSURE CHECK GAUGE Apply this Pressure Check Gauge to the low pressure (suction) valve only. **Never** attempt to add refrigerant to the high pressure (discharge side) of any air conditioning system.

- How to find the low-pressure (suction) service valve**
The low-pressure side of the system is the part of the system with the larger diameter hose connecting the compressor and the evaporator. With the engine off, beginning at the compressor (you may find the word suction) trace the larger diameter hose to the firewall. You will find the low-pressure service valve (similar to a tire valve) on the compressor, in the line or other component part of the low-pressure part of the system.

The high-pressure (discharge) side of the system may also have a service valve on the compressor or in the part of the system with the smaller diameter hose. **Never** add refrigerant to the high-pressure side of the system.
- Apply pressure check gauge to low-pressure service valve**
 - Set air conditioning controls for maximum cooling and allow to run for 5 minutes (Auto engine at fast idle).
 - Check to see that compressor clutch is engaged and compressor is operating during pressure checks.
 - Having previously located low-pressure service valve, press head of gauge to valve and take reading.
 - Compare reading to chart below.

CHECK GAUGE PRESSURE CHART

Automotive Home

Y E L L O W	DANGER	65-200	100-200
R E D	ALERT	44-64	85-99
B L U E	FILLED	24-43	54-84
G R E E N	LOW	0-23	0-53

Yellow
You may have attached gauge to the high pressure (discharge) service valve. If, after rechecking (see instructions) you are certain you are checking the low-pressure valve, your system has a problem other than low refrigerant. Seek professional help to recover excessive refrigerant.
Do Not Add Refrigerant.

Red
Be sure you are checking low pressure side of system. System is possibly overcharged.
Do Not Add Refrigerant.

Blue
On low-pressure side of system, system has proper amount of refrigerant.

Green
On low-pressure side of system, system may require additional refrigerant.

- Pressure readings shown are typical for an ambient temperature of 75-85 degrees Fahrenheit. Pressure readings may be higher at higher temperatures or lower at lower temperatures.
- **IMPORTANT:** When adding refrigerant, pressure check system after adding one can. If pressure has not changed, do not add more refrigerant. Seek professional help.

Pressures listed in chart are averages. A few degrees difference are not significant for analysis of pressure chart.

TEST THERMOMETER

INSTRUCTIONS / AUTO AIR CONDITIONERS:

- Park car in shade when checking temperature.
- Start engine and allow to run at a fast idle.
- Turn air conditioner to maximum cool.
- Insert probe, full length, in center outlet duct or right hand outlet duct.
- Allow approximately 5 minutes for accurate reading.
- Readings of 45° to 60° indicate a properly charged system. In-car ambient temperature of 75° to 85° should produce duct temperatures of approximately 45°. Higher in-car temperatures should increase duct temperatures to no higher than 60°.

INSTRUCTIONS / HOME AIR CONDITIONERS:

- Turn air conditioner to maximum cool.
- For window units, insert probe, full length, in center outlet. To check central air conditioners, insert probe into cool air register nearest the evaporator (the indoor portion of your system).
- Allow approximately 5 minutes for accurate reading.
- Readings of 45° to 60° indicate a properly charged system. In-house ambient temperature of 75° to 85° should produce duct temperatures of approximately 45°. Higher in-house temperatures should increase duct temperatures to no higher than 60°.