

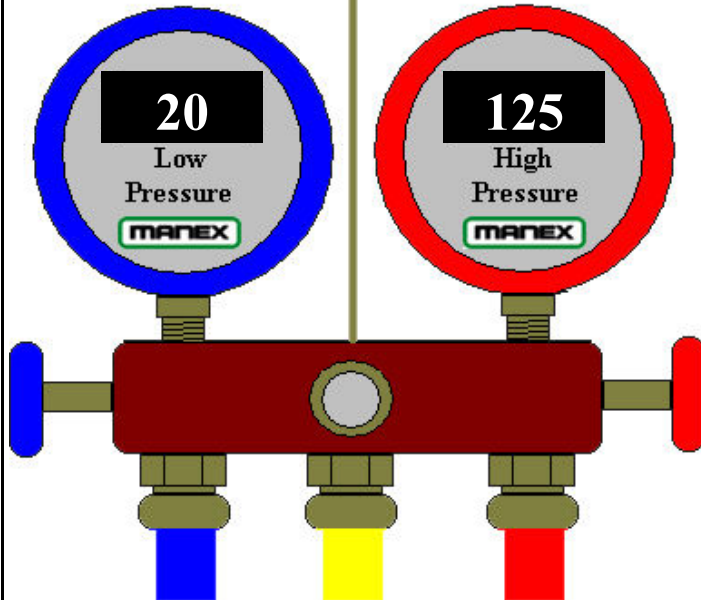
Remember... Some people promise support...



We support the promise!

It is difficult to pinpoint the problem on dual systems using only gauge readings. Always remember that since the two systems are connected on both the high and low side, a malfunction in either system will affect the gauge readings.

Low Side Reads Low  
High Side Reads Low



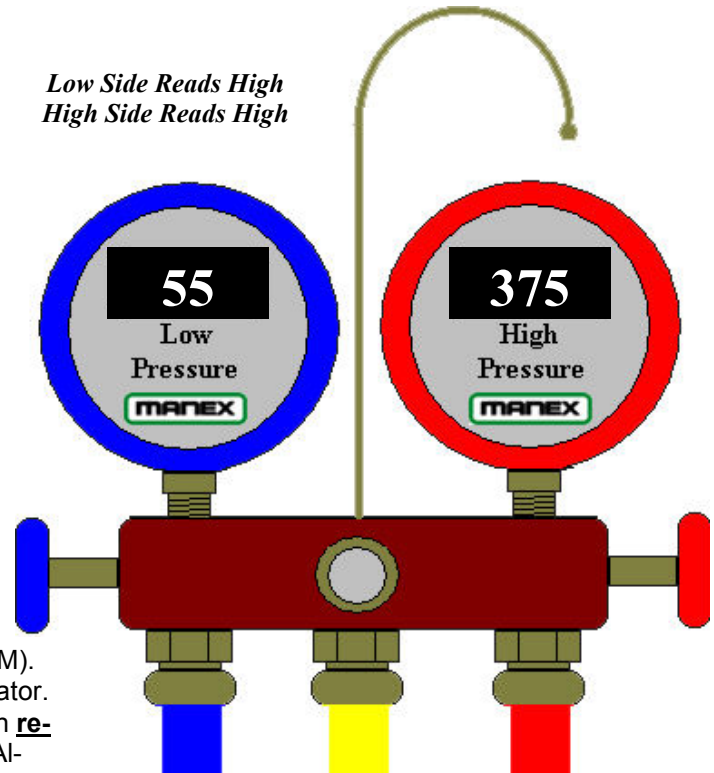
Low Side Gauge Reading	High Side Gauge Reading
Low	Low
Possible Cause	
<ul style="list-style-type: none"> <li>System low on refrigerant</li> <li>Orifice tube on front evaporator plugged</li> <li>Blockage in suction line near compressor</li> </ul>	

**MAKE SURE:** The engine is at increased idle (approx. 1200 RPM). The auxiliary condenser fan or a shop fan is on in front of the radiator. The windows and doors must be closed. Place the OEM system in **re-circulation mode**. Place **ALL** Blower motors on **HIGH SPEED**. Allow for a 10-15 minutes running time for system stabilization.

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Low Side Gauge Reading	High Side Gauge Reading
High	High
Possible Cause	
<ul style="list-style-type: none"> <li>System has inadequate condenser</li> <li>System overcharges or air in system</li> <li>Hot water entering rear evaporator heat circuit</li> <li>Condenser air flow restricted</li> <li>Auxiliary fan blowing in wrong direction</li> <li>Engine cooling fan not operating properly</li> <li>Restriction in liquid line or condenser</li> <li>Engine cooling system not operating properly</li> </ul>	

Low Side Reads High  
High Side Reads High



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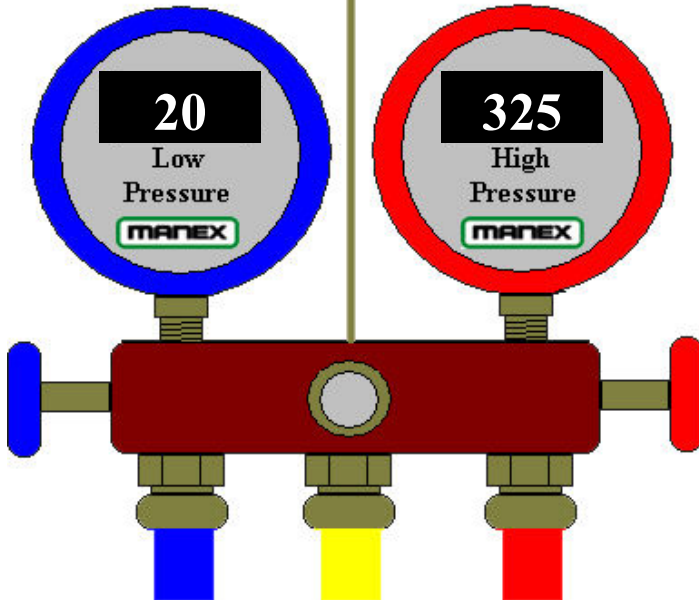
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*Low Side Reads Low  
High Side Reads High*



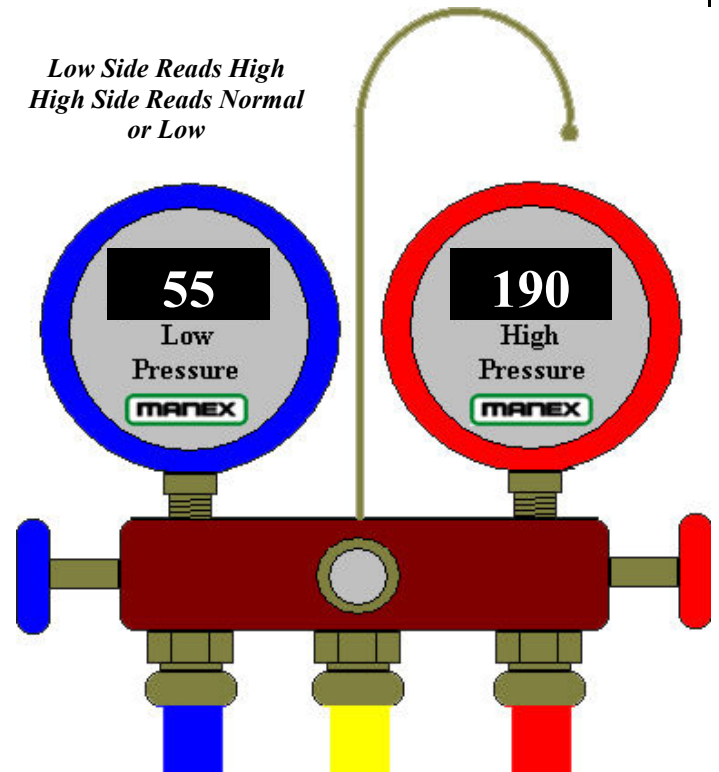
Low Side Gauge Reading	High Side Gauge Reading
Low	High
Possible Cause	
<ul style="list-style-type: none"> <li>• Restriction or blockage in condenser liquid line or liquid line drier</li> <li>• Blockage at front evaporator orifice tube</li> </ul>	

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Low Side Gauge Reading	High Side Gauge Reading
High	Normal or Low
Possible Cause	
<ul style="list-style-type: none"> <li>• Refrigerant bypassing orifice tube due to missing or broken o-ring (front evaporator)</li> <li>• Missing orifice tube (front evaporator)</li> <li>• Flooding expansion valve on rear evaporator</li> </ul>	

*Low Side Reads High  
High Side Reads Normal  
or Low*



**MAKE SURE:** The engine is at increased idle (approx. 1200 RPM). The auxiliary condenser fan or a shop fan is on in front of the radiator. The windows and doors must be closed. Place the OEM system in **re-circulation mode**. Place **ALL** Blower motors on **HIGH SPEED**. Allow for a 10-15 minutes running time for system stabilization.

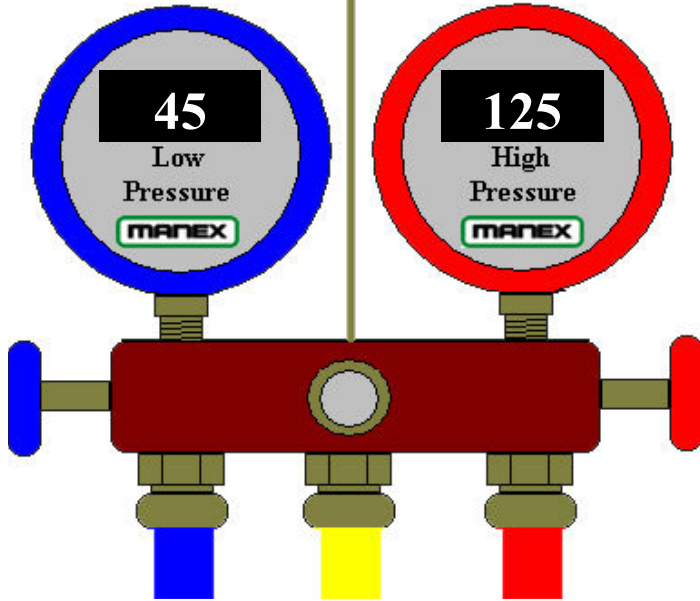
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Low Side Reads High  
High Side Reads Low



Low Side Gauge Reading	High Side Gauge Reading
High	Low
Possible Cause	
<ul style="list-style-type: none"> <li>• Restriction or blockage in accumulator or suction line</li> <li>• Compressor weak (valve plate leakage)</li> </ul>	

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**PRESSURE TEMPERATURE RELATIONSHIP**

Ambient Temp (°F) (low relative humidity)	Approximate Gauge Readings (PSI)	Approximate Gauge Readings (PSI)	Approximate Temp at Louvers	Approximate Temp at Louvers
(At Sea Level)	Low Side	High Side	Front	Rear
70°	25-30	160-180	39°-44°	40°-50°
75°	26-32	170-195	39°-44°	40°-50°
80°	27-32	190-220	40°-46°	42°-52°
85°	28-33	200-240	42°-48°	45°-55°
90°	30-36	230-250	44°-50°	48°-60°
95°	32-38	240-260	45°-52°	52°-64°
100°	35-40	250-275	48°-54°	54°-66°
105°	38-45	270-290	48°-55°	58°-68°

The pressure temperature relationship chart above was developed with R-12 refrigerant. With R-134a refrigerant, assuming the system has adequate condenser, the low side will tend to run lower (approx. 5 lbs.) and the high side will be higher (approx. 15 to 20 lbs.). At ambient temperatures above 100°F the aforementioned high side pressure will be higher with a corresponding increase in low side pressure. An increase in humidity will increase pressures and temperatures. An increase in altitude will decrease pressures and temperatures.