

TECH TIPS

605 VACUUM GAUGE

Using the 605 directly attached to a vacuum pump the reading immediately begins to go down until the blank off valve is closed then the readings go up.

This can be caused because the 605 is too close to the pump and cannot equalize in pressure. To properly perform this type of test, the 605 and vacuum pump should be connected to a small tank. For best results copper tubing or metal hoses should be used for all connections as charging hoses will leak at low vacuum.

Pulling vacuum on systems using charging hoses.

Vacuum can be pulled using charging hoses but when blanking off a system to check for leaks metal hoses or copper tubing must be used due to the permeation factor of charging hoses.

Holding vacuum

Metal hoses and copper tubing are the only ways vacuum can be held. Charging hoses permeate over time. In addition, the area where the ferrule is crimped can leak as well.

How much vacuum?

Always check with manufacturers recommendations for the system being serviced. In general pulling a vacuum of 250 to 300 microns is recommended. Pulling below 250 microns of vacuum will begin degassing of the oil in the compressor. When the oil degasses it will not suck up into the pump.

When pulling from one side of the system the 605 occasionally rises to a higher number. Why?

This can happen even when pulling from both sides of the system. There is a metering device measuring pressure and refrigerant in the system. Air and/or moisture can be trapped in one side of the system and when it lets go a higher reading on the 605 will happen. Moisture can also be trapped in the oil of the compressor and when it escapes it will show on the 605.

How do I clean the 605's sensor?

Fill the 605 sensor housing approximately half full with alcohol and screw the cap on. Gently shake the 605 to allow the alcohol to rinse the inside of the sensor area. Remove the cap and pour the alcohol out. Leave the cap off and allow the 605 sensor to dry for at least 20 to 30 minutes before installing the cap or using the instrument.