5. To see if the unit is operable without connecting it to a vacuum source, turn the power ON and wait one minute. All 10 "bars" should appear on the LCD. If the bars do not appear, check the batteries. If the batteries are good, then return the unit for repair. The batteries are the only field-serviceable components in the unit.

#### Thermistor Vacuum Gauge Accessory

#### 13047A Vacuum Valve Assembly

Save service time by using a vacuum valve assembly with your vacuum pump! The valve assembly connects all pieces of equipment necessary for evacuating and monitoring vacuum—vacuum pump, manifold, and thermistor vacuum gauge.

This central valve control center eliminates switching hoses and makes service time quick and easy.



For more information, call toll-free 1-800-822-5561 in the continental U.S. and Canada. In all other locations, contact your local distributor.

Design, materials, and specifications are subject to change without notice.



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# Model 14830A Thermistor Vacuum Gauge



A fast and accurate way to monitor vacuum level

109211 (3/04/03 Rev. B) © SPX Corporation



## Model 14830A Thermistor Vacuum Gauge

#### Description

The 14830A Thermistor Vacuum Gauge has been designed to use with high vacuum pumps to accurately measure vacuum level during evacuation of A/C and refrigeration systems. This unit indicates precisely when the system is free of air and water, eliminating guesswork and saving valuable service time. It can also be used to check for leaks without precharging; if the system holds a vacuum, it is leak-free.



Battery and A/C powered and self-contained in a durable carrying case, the 14830A is easy to use and transport. The sensor is built into the unit and connected to the system through a fitting on the front panel. A 24" Premium Refrigerant Charging Hose is included for connecting the thermistor and the system. The hose is stored in a recessed area of the case.

#### **Power Supply**

The 14830A can be used with an A/C power adapter or 4 "D" cell batteries. See below for A/C adapter requirements.

\*A/C adapter output: 6VDC 200mA, + outer ring and - center pin. Robinair Part No. 18712, 110V.

### LCD Range and Tolerance

The 14830A uses the micron scale, the most accurate indicator of vacuum, measuring from atmosphere to 50 microns. Micron readings are shown on a custom LCD divided into 10 segments which are shown as "bars" on the LCD. These segments are:

25,000 microns	400 microns ±50 microns   275 microns ±25 microns   200 microns ±25 microns   100 microns ±10 microns   50 microns ±5 microns
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#### **Operating Instructions**

- 1. Install four "D" batteries into the holder by removing the screw on the bottom of the battery plate holder. Lift out the plate and install the batteries into the holder following polarity indicators. Replace the battery plate into the unit panel by sliding in the top edge first and secure with the screw.
- 2. Connect the 24" hose to the flare fitting marked "Vacuum" on the front panel.
- 3. Connect the other end of the hose to the system.

CAUTION: Before attaching the hose to the system, depressurize the system. Damage to the sensor may occur if the connection is made while the system is pressurized.

- 4. Turn the power ON and allow one minute for the unit to warm up.
- 5. Check the LCD window. If all 10 "bars" appear on the screen the system is above 25,000 microns (1" Hg vacuum).
- 6. Begin evacuating according to the system manufacturer's specifications. As the system is pumped down, the "bars" on the LCD will go out one by one. At the point when the bar goes out, the system is at the vacuum level shown next to that bar.

CAUTION: When you finish the evacuation cycle and during equipment shut-down, close any valve between the gauge and the pump or open the connection at the flare fitting on the instrument panel.

#### Maintenance

- 1. The word BAT will appear on the display when the batteries need replaced. Replace the batteries as soon as possible.
- 2. If the sensor aquires an oil film, flush the interior with rubbing alcohol and allow to air dry.
- 3. If the unit is not going to be used for an extended period of time, remove the batteries to eliminate possible battery damage due to leakage.
- 4. The panel may be cleaned with a damp cloth. DO NOT use harsh solvents and/or chemicals to clean.