



Suggested Service Truck Start Up & Diagnostic Tool List

This list contains the minimum tools a service technician should have in order to properly start or troubleshoot a system. Properly diagnosing any system requires well maintained, trusted tools. Take note that the specific brand of tool may vary by branch. Please don't hesitate to contact your local Virginia Air branch should you have any questions or if you wish to purchase any of these items.

G5 Twin

The G5 Twin's crankcase is completely isolated from the refrigerant flow. As a result, the main drive of the unit will last much longer too. Liquid slugging is now a thing of the past. The G5 Twin pumps vapor or liquid refrigerant without throttling. No clog prone orifices or other liquid flashing gimmicks to cause maintenance problems down the road. Just as the V8 allows automobiles to purr along, the G5's twin cylinders even out the loads while delivering greater pumping speeds for both liquid and vapor. The case is designed for maximum durability yet with a soft gripping rubber ergonomic handle. Once you experience the greater performance of the G5 Twin, single cylinder machines will be obsolete.



G5 - Twin Features

High Recovery Rates
Maximum Airflow
Twin Cylinder for Rapid Recovery
Twin Condenser for Maximum Cooling
Handles Most All Refrigerant including R410a
Lightweight - Just 24lbs.
550psi Shut Off Switch
Rugged Case with Soft Gripping Handle

Eliminator Series Vacuum Pump



DV6E Built for the Air Conditioning Serviceman who wants a high quality, dependable vacuum pump, the Eliminator Series offers many high end features without the higher end price. American made, 100% tested to JB's stringent quality standards, and backed by an unparalleled 24-month warranty, the Eliminator is the best value vacuum pump in the industry.

Features Include:

- Break resistant steel handle with cushioned cool grip
- Check valve prevents oil backflow during power failure
- 2-Stage Direct Drive achieves a deeper vacuum
- Heavy duty wide stance four point base to prevent overturning
- Brass fittings make for superior quality * Completely field repairable

Ritchie
ENGINEERING COMPANY INC.

Model: #42004

This field-proven manifold line has been expanded to include larger, easier to read color-coded gauges in rugged steel cases with polycarbonate crystals. Most importantly, these gauges feature 1% accuracy for an exact reading in critical charge systems.



Wide choice of refrigerant combinations including:

- R-22, R-134a, R-404A
- R-12, R-22, R-134a
- R-22, R-404A, R-410A
- Color-coded scales with bold, easy to read dials
- Dials with 1% accuracy (Class 1) for critical charge systems
- Proven sliding double "O" ring pistons reduce wear
- Long life nylon seats
- Forged brass body for durability
- Full porting maximizes capacity and flow
- Some models include color-coded, 60" PLUS II™ hoses with standard 1/4" flare fittings
- Hose assemblies UL recognized for 4000 psi (275 bar) burst and 800 psi (55 bar) working pressure.

The G2 Phoenix Clamp Meter

The DL389 Pro+ offers the highest combination of functions, features, and safety offered in a meter today. Combined with The "Hook" CH3 extended clamp head, no contractor will have to compromise their safety, efficiency, or comfort.



- True RMS • Detachable clamp head
- 750V AC / 1000V DC
- 400A AC
- 2000 μ A AC / DC
- 40M Ω Resistance / Continuity
- 4000 μ F Capacitance
- -40 ~ 752°F Temperature (K type)
- Frequency / Duty Cycle
- μ A for Flame Safeguard
- Non-Contact Voltage
- Diode
- MIN / MAX display
- Worklight
- Magnetic mount
- Dual display with backlight
- Test lead storage
- Test lead holder on clamp head
- Data hold
- Meter displays both **APMS** and **VOLTS** on the same screen
- Three year limited warranty



DT302

- Dual Thermocouple inputs
- Temp range -346°F to +2192°F (J)
- Temp range -328°F to +2498°F (K)
- Data logging
- 9,999 Memory positions
- USB interface (software included)
- Thermocouple temperature offset
- MIN, MAX, AVG & Hold
- Differential T1-T2
- Probe Storage
- 5 year limited warranty



The EM200 provides a simple, time-saving alternative to U-tube pressure measurements. Use the UEi EM200 to measure gas supply. The EM200 differential mode provides a convenient method to measure pressure drops.

- Dual input differential measurement to ± 60 wg or 150 mBar
- MIN/MAX value capture
- Data hold
- Backlit display
- Ruggedized, including rubber boot with integral magnet
- Auto power-off
- One year limited warranty



The DTH31 Digital Psychrometer is an advanced handheld humidity and temperature meter. Its triple display shows three parameter readings simultaneously. It has everything you need to charge an air-conditioning system and determine heating, cooling, and ventilation needs. It gives you incredibly fast and accurate wet bulb, dry bulb, and dew point measurements.

Features

- Ambient temperature (T1)
- External temperature w/probe (T2)
- RH humidity
- Dew point
- Wet bulb
- T1 - T2
- T2 - Dew point (check difference of dew point to surface)
- Display resolution 0.1 °C / °F
- Protective sensor cap

Condensation will not affect accuracy

- Hold
- MIN/MAX
- °C or °F switchable
- Low battery indicator
- Self-calibration
- Pocket size design
- Reset
- Auto off with selectable delay
- Auto off by-pass
- One year limited warranty



Wey-TEK Refrigerant Charging Scale



The **Wey-TEK Refrigerant Charging Scale** continues to set new standards in affordability and accuracy for refrigerant scales, enabling you to easily weigh and charge from the same large platform. Now it offers even more value, with a higher weight capacity-220 lbs., twice that of many other scales at a competitive price.

Wey-TEK is very easy to use. Its high-accuracy load cell gives the correct reading every time (no matter where the cylinder is on the weighing platform), and you can read its large LCD display at a distance, even in direct sunlight

Advanced evacuation measurement instrument providing continual digital readout of evacuation process on large 5 digit LCD. Measurement units are user selectable to read in Microns, in/hg or mBar at the touch of a key. Advanced surface mount technology automatically compensates for ambient changes in the environment ensuring accuracy and consistency in performance. Advanced field-cleanable sensor is able to withstand 400 PSI of positive pressure. Unit operates 30 hours on 9V alkaline battery with low battery indicator and auto-off feature. Includes carrying case, hanging hook, adapter fitting, 9V battery and is CE approve

Digital Vacuum Gauge



2008-2009 Price List

MODEL #	DESCRIPTION	FREEDOM/PATRIOT	LIBERTIES+/LIBERTIES	STANDARD
G5TWIN	RECOVERY MACHINE	\$596.00	\$625.00	\$648.00
DV-6E	VACUUM PUMP	\$245.00	\$257.00	\$267.00
42004	MANIFOLD W/HOSE	\$74.00	\$78.00	\$81.00
DL389	MULTI METER	\$117.00	\$122.00	\$127.00
DT302	DUAL PROBE THERMOMETER	\$173.00	\$181.00	\$188.00
EM200	DIGITAL MANOMETER	\$115.00	\$121.00	\$125.00
DTH31	DIGITAL PSYCHROMETER	\$85.00	\$89.00	\$92.00
713-202-G1	WEY-TEK SCALE	\$146.00	\$153.00	\$159.00
VG200	VACUUM GUAGE	\$115.00	\$120.00	\$124.00



Prices and availability are subject to change without notice. Please call your local Virginia Air Branch for details