Always Be Prepared

Making sure you have the right tools on hand no matter what the job requires.

BY JORDAN BRANDES

Some jobs are trickier than others. While new technology certainly helps the modern technician have more of an idea of what he is going into before he arrives, sometimes things do not go as planned. That is why having the right tools on hand can make every job easier. Since not every job is the same, technicians should be aware of what’s available. Below you will find a short rundown of what’s available on the HVACR market today to fit your needs. Whether you are servicing refrigeration systems, working on mini-splits or installing heat pumps, there is something for every job.

→ HVAC Installer’s Kit—The AIMS RTB HVAC Installer’s Kit from testo contains a testo 549i high-pressure refrigerant measuring instrument and the testo 115i clamp thermometer (two of each), along with a soft case for up to seven additional smart probes. Both the 115i and the 549i can be quickly and easily fitted directly onto the temperature measuring point or pressure connection. Circle 1 on the reader service card.

→ Multi-Tool—The JobMax 18V multi-tool from RIDGID comes with a quick connect interface that allows the user to attach and detach the right cutting head for each application. The tool is designed with four degrees of oscillation for maximum cutting power. The tool-free multi-tool head lets the user swap out accessories without using a secondary tool to do so. Circle 4 on the reader service card.

→ Digital Multimeter—The 5212 TRMS Digital Multimeter from AEMC Instruments comes with a NCV function that measures AC/DC voltage up to 600V, AC/DC current 4A/10A, resistance up to 40MΩ and capacitance to 100mF. It is capable to test continuity with beeper and perform a diode test. Low input impedance voltage measurement (VLowZ) helps eliminate ghost voltage. Circle 6 on the reader service card.

→ Differential Pressure Transmitter—The G29HLP is a low differential pressure transmitter from Dwyer Instruments that is suitable for measuring overpressure or under-pressure conditions of compatible gases and liquids. Ranges are available up to 6 bar or 90 psi, all of which are accurate up to 1% full-scale. Circle 2 on the reader service card.

→ Wireless Probes—The Job Link System wireless probes from Fieldpiece Instruments are compatible with the Fieldpiece Job Link mobile app for ease of use in testing. All measurements can be sent up to 350 ft. away directly to your mobile device and is powerful enough to transmit through walk-ins. In addition, they have a long battery life, up to 150 hours with two AAA batteries. Circle 3 on the reader service card.

→ Heat Stress Monitor—The TSI QUESTemp 32 Area Heat Stress Monitor delivers high-performance monitoring through Wet Bulb Globe Temperature (WBGT) sensing technology and the calculation of a WBGT index value. The unit’s IP 54 ingress rating helps protect unit from exposure to dirt, dust, oil and water. Circle 5 on the reader service card.
→ Leak Detector — The NML1 leak detector from NAVAC is equipped with a semiconductor sensor and a high-performance, rechargeable lithium battery. The unit is capable of working with all CFC, HCFC and HFC refrigerants and can plug into an external power supply as well. *Circle 8 on the reader service card.*

→ Rapid Evacuation Kit — The hilmar rapid evacuation kit includes a 5 CFM vacuum pump, a micron gauge coupler, two brass plugs, one quart of vacuum pump oil, a 6 ft MegaFlow black hose and a standard vacuum-rated valve core removal tool. The core tools and all of the hoses in this kit are vacuum rated and vacuum certified down to 20 microns. *Circle 10 on the reader service card.*

→ Magnetic Tool App — The Magnetic Tool app from Danfoss turns your smartphone into a precise magnetic field detector. The app serves as a more convenient alternative to the variety of tools HVACR technicians rely on to test AC or DC coils in solenoid valves. It can also indicate the rotation direction of certain types of motors and pumps. It’s available on the iTunes Store. *Circle 11 on the reader service card.*

→ Mini-Split Kit — The mini-split kit from Robinair comes with a single valve manifold gauge, dedicated specifically for mini-split installation and service applications. The kit also comes with two quick seal hoses, a metric torque wrench set, metric ball hex “L” keys, a tubing reamer, a tubing cutter and more. *Circle 9 on the reader service card.*

→ Portable Tool Box — The portable tool box from Vestil is constructed of 1/8 in. thick aluminum diamond tread plate and features a double-hinged padlock hasp to help secure tools and other items from theft. Box can accept a padlock up to 7/16 in. shackle diameter, padlock sold separately. Model comes with two handles and fork pockets at 24 in. centers to ease transport. *Circle 7 on the reader service card.*

→ Smart Temperature Kit — The HUB2 smart temperature split kit from UEI Test Instruments has a wireless distance of 150 ft depending on the environment and a temperature range of 32°F-140°F with an accuracy of ±0.5°F. The kit contains two WP1 wireless hygrometer probes which can be mounted on to the plenum for hands-free operation. *Circle 12 on the reader service card.*

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→ Ring Pliers—The external angled precision retaining ring pliers from KNIPEX Tools are forged from chrome vanadium electric steel and designed to minimize tip breakage, and offer extended tool life. The 5.2 in. pliers are ideal for rings 10-25 mm in diameter. The tool features a screw joint for high precision and optimum drive. Circle 13 on the reader service card.

→ Acid Neutralizer—The eBOOST AC/R acid neutralizer from CPS Products is a chemical tool that actively locates and neutralizes acids in AC/R systems caused by moisture, compressor burnout and lubricant/refrigerant gas breakdown. Treats up to 6-ton systems. Includes application hose for 1/4 in. and 5/16 in. flare fittings. Circle 14 on the reader service card.

→ Non-Contact Voltage Tester—The Klein Tools NCVT-4IR Non-Contact Voltage Tester with Infrared Thermometer provides a non-contact determination of AC voltage in cables, cords, circuit breakers, switches, outlets and wires. With a built in backlit LCD display is allows for a 0.1 degree resolution during operation. Circle 15 on the reader service card.

→ Filter Pusher—The filter pusher/puller from Sensible Products telescopes from 12 in.-7 ft. The hook pivots to position a powerful magnet that retrieves dropped hardware from the job site. The tool allows technicians to replace filters in both large and small systems. Circle 16 on the reader service card.

→ Core Removal Tool—The 5/16 in. valve core removal tool from JB Industries features a quarter turn ball valve shut-off fitting and O-ring seals the valve core can be completely removed and replaced without losing system charge. Speed up evacuation, recovery, or recharging time through the full flow port. Circle 17 on the reader service card.

→ Recovery Inlet Manifold—Designed specifically for salvage operations and recycling centers, the recovery inlet manifold from Century Tool & Equipment connects to the inlet of a recovery unit or manifold gauges and allows the technician to pull refrigerant from up to six appliances at a time. The unit is constructed with full flow ports and no valve cores to restrict refrigerant flow. Circle 18 on the reader service card.

→ Torque Wrench—The 1/2 in. drive torque wrench from Advanced Tool Design is a micrometer style torque wrench with a max torque of 250 ft. lbs. It clicks and/or releases when the preset torque is reached. The tool was constructed with a hardened steel body, ball bearing construction and easy-grip handles. This wrench has a positive lock torque setting right or left with a lock ring for positive setting. Circle 20 on the reader service card.

→ HVAC Strap—The HVAC strap from AmiraLin is a magnetic manifold gauge holder that allows technicians to hang a manifold gauge by its built-in hook. The strap was designed to not damage surrounding HVAC units and the magnet has been coated to prevent scratching the painted finishes of units. Circle 21 on the reader service card.

→ Calibration Kit—The REF-CLASS calibration kit from Refco is used for testing, setting and calibrating of pressure gauges and can be used anywhere calibration is needed. The kit has a pneumatic pressure generation of 950 mbar to +35 bar, and comes with a data logger function. Each unit comes with a stainless steel case for easy transportation. Circle 19 on the reader service card.