



### Sun Machine Software Update

As cars get more complex, diagnostic software must change to keep track of what is going on in the vehicles. Snap-on Diagnostic's Sun Machine is no different, and this update brings more than 24,000 different combinations of year, make and model. The latest software also includes relevant technical service bulletins for the vehicle covered, through a software connection to the Snap-on ShopKey information software.

**Snap-on**  
Circle Number 162

### Diagnostic Fuel Pressure Tester

If we depended on the official word about how to go about determining just what's wrong with an automotive system, there might be a lot of cars parked in the storage lots behind shops. Diagnosis is a science, but it's also an art, in particular the art of using unexpected ways to find answers to the right questions. A fuel pressure tester that can compare fuel pressure readings taken simulta-



neously from several positions on the circuit can tell more than a gauge that merely indicates what's in the fuel rail. Snap-on's new U-shaped tube configuration can produce a better understanding of what's going on in the system. A valve on the tester lets the technician change the position measured, helping identify problems with other engine components.

Besides those roles, this tester can also cut off fuel flow to diagnose leaking injectors, regulator or pump check valve. The tool uses quick-disconnect couplers for leak-free connections to supply and return lines. Many adapters are included to cover vehicles not covered by the standard fittings. Besides a complete instruction manual, the kit includes full fuel system specifications for nearly every vehicle in North America.

**Snap-on**  
Circle Number 163

### Multi-Oil Heater



Shenandoah's Horizon 315 Multi-Oil fired heater can run on any kind of used oil to generate warmth in the workplace. Using old crankcase or transmission oil for heating, of course, is not only economical but also environmentally responsible since the oil had to go somewhere if not used as a heating fuel. According to the company, any shop that collects used oil in any volume would do well to investigate the economies of this form of winter heat.

**Shenandoah**  
**Manufacturing Co., Inc.**  
Circle Number 164

## Refrigerant Management Center

Mac Tools supplies their RMC series of fully automatic, microprocessor-controlled refrigerant management systems, including the AC900 dual unit for servicing both R-12 and R134A refrigerants, and the AC890/R134A unit for the latter only. Simple control panels make the systems easy to learn, the company says. A 6 cfm. vacuum pump quickly evacuates A/C systems, pulling from both high and low sides for increased speed. Then an electronic scale weighs the amount of refrigerant recovered and accurately recharges the vehicle's system by weight. A special filter-drier removes oil and contaminants from the refrigerants, and an automatic air purge removes air contamination during the vacuum/recycling process.



**Mac Tools**  
Circle Number 165

## A/C Flush Gun

Robinair's Flush Gun Kit lets you flush contaminants and scale from A/C systems without taking up much space in your shop, according to the maker. Sludge and particulates build up in the refrigerant system over time, plugging screens and capillary tubes or expansion valves. Robinair's 17585 uses shop air to pressurize the flushing solvent, so scale and corrosion are loosened and removed. The system flushes the oil out at the same time, a particularly useful feature when retrofitting older systems to the new refrigerant. Flushing after repairs is good practice to remove any filings, metal scraps or other debris.

The flushing gun uses an attached nozzle to control the flow and direction of the solvent. One quart of solvent, compatible with all common refrigerants, comes with the kit.



**Robinair, SPX Corporation**  
Circle Number 166

## A/C Air ID Tester

Air in an air conditioning system causes high pressure and low or intermittent cooling. Robinair's Air I.D., according to the manufacturer, can detect air in the system with a single connection in about a minute. It comes with an AC adapter to allow overnight operation. As the refrigerant temperature changes, the refrigerant settles, air rises and is vented without release of refrigerant. The Air I.D. tests and purges until no air is detected, and then it automatically enters a 'sleep mode' for the next hour before the next test.

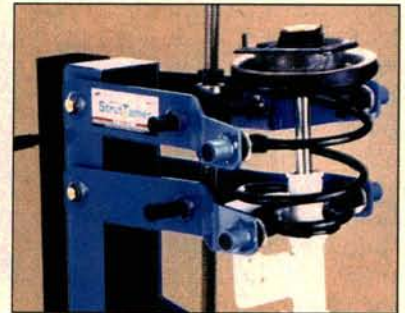
The tool has an easy-to-read display showing air content as a percent of volume by weight up to 20 percent. It comes ready to use with a test hose and a 14-mm fitting, a 1/4-inch MFL adapter, a 1/2-inch Acme adapter for R-134a tanks and the AC adapter. Four AA batteries come with it, too.



**Robinair, SPX Corporation**  
Circle Number 167

## Strut/Spring Compressor

OTC's new StrutTamer can handle any strut from 2.5 to 10 inches in diameter, including conical and offset, up to 24 inches long. Four adjustable clamping arms attach to ball joints, making it a universal tool. For safety, four-point locking jaws hold the spring in place. To keep the strut straight during compression, a double-lead center screw keeps the strut and spring aligned — no matter what shape the spring has. The double-lead screw also compresses the spring faster than any comparable model. The tool mounts easily to a workbench or the wall because there is no mounting hardware. There's also a stand with a welded steel frame and two wheels to move the entire unit around the shop as needed.



**OTC, SPX Corporation**  
Circle Number 168

## Oxygen Sensor Tester

OTC's oxygen sensor tester, No. 3818, has four indicator lights to guide the user to connect the right wire to the tester, eliminating the need to use wiring diagrams. The tester works on both zirconia and titania sensors and simulates a five-second rich or lean signal to the ECM, making it helpful with other diagnostic equipment to confirm operation of the feedback system. A 20-segment bar graph indicates rich or lean, and the tool measures the activity level of the sensor to discover 'lazy' or inert sensors. An LCD display shows crosscounts. The tool works on a 9-volt battery, eliminating the need for power leads. It shuts itself off automatically.



**OTC, SPX Corporation**  
Circle Number 169

## Four-Wheel Alignments

Accu-turn's Model 2000 is a fully computerized four-wheel alignment system to handle most of today's imported and domestic cars, light trucks, SUV's and vans. Accu-turn has long been a manufacturer of wheel service equipment including tire changers and brake lathes, and the alignment equipment is their next extension. The system uses a Windows 98 operating system software and ALLDATA Undercar software. Four CCD heads allow quick and precise measurements of caster, camber and toe angles for all four wheels. A 17-inch monitor displays operating instructions, readings and three-dimensional adjustments. The system fits in a compact cabinet mounted on casters.



**Accu Industries**  
Circle Number 170

## Runout Correction Shims

Similar to the caster/camber shims used for wheel alignment, Brake Align shims are meant to correct runout in brake rotors, according to the manufacturer. After you complete refinishing the surface on a brake rotor, you locate the high point with a dial indicator and orient the appropriate shim's notch in that configuration. What this amounts to, according to the company, is that you can now use traditional brake lathes rather than on-car lathes for front disks.



**Brake Align**  
Circle Number 171

## Evaporative Cooler

January may not be the most common time to think of it, but summer heat will return again before long. One of the most economical ways to deal with that temperature problem is with an evaporative cooler. Advanced Radiant Systems COOLSPACE portable evaporative cooler will, according to the company, reduce air temperatures as much as 26 degrees, even in high humidity conditions. Unlike a swamp cooler, they continue, their unit reduces air temperature using moist, high-efficiency evaporative cooling pads. The unit weighs only 75 pounds, allowing easy movement. The housing is corrosion-free polyethylene, and electrical connections are all in watertight enclosures. They've designed the fan specifically for an evaporative cooler. The unit requires nothing more than a 115-volt electrical supply and a water hose.



**Advanced Radiant Systems, Inc.**  
Circle Number 172

# shop tools

## Twelve-Drawer Workstation

This 12-drawer workstation can carry 2000 pounds of tools and equipment, with roller bearing slides for its drawers and heavy gauge steel construction throughout. The multiple drawer configurations provide various depths and widths, enough to hold tools from a



37-inch prybar to your smallest 1/4-inch-drive socket. Five-inch casters, two swiveling and two fixed, afford easy travel through the workshop, even over uneven surfaces. The finish is a hard powder-coat paint that resists scratches and caustic chemicals. It comes in red, blue or matte black.

**S•K Hand Tool Corporation**  
Circle Number 173

## Fuel and EGR System Cleaner

Wynn's induction system cleaning kit provides the flexibility to clean both the fuel system and the EGR passageways. The cleaning system includes color-coded EGR adapter plates for a variety of vehicles. Either shop air or engine vacuum provides the power to run the cleaner either simultaneously — both engine



**Wynn Oil Company**  
Circle Number 174

## Trans Jack Adapters

Gray Automotive now offers a new adapter (#90), a set of four designed for vehicles where the exhaust runs right next to the transmission pan and obstructs access to the bottom of the pan, thwarting



easy removal. These adapters fit over the existing ratcheting brackets of your Gray transmission jack at a 90-degree angle, ratcheting up and down. The equipment is made, the manufacturer assures us, to their highest standards.

**Gray**  
**Circle Number 175**

## Electro-Hydraulic Tire Changer

The BeissbarthUSA MS66IT tire changer provides a proprietary 'feather-touch' operation removing even very stiff low-profile tires without damaging soft alloy rims. The electro-hydraulic technology is, according to the company, exclusive to their units, translating into minimum effort on the part of the operator and thus greater productivity. As Beissbarth's top of the line tire changer this can



replace two other systems, providing flexibility to work on either the most common vehicles or the most exotic wheels. The equipment works just as well for special alloy rims,

low profile or wide tires or racing wheels.

**Beissbarth Automotive**  
**Service Equipment**  
**Circle Number 176**