2013 INNOVATION AWARD NOMINATIONS page 20

**Tech Routing List** □

**TOOL Q&A**Air conditioning service page 32

**PRODUCT SPOTLIGHT**Jacks, stands and lifts page 48

\$10.00 April 2013 Volume 24, Number 3



Standard and hybrid RRR machine



Scan codes and live data

# TOOLS EMONTH





Extendable flexhead ratchets



PROFESSIONAL TOOL & EQUIPMENT NEV

Exclusive Online Product Guide: Access information on thousands

of products now, arranged by category, by visiting www.VehicleServicePros.com/ directory







# STRENGTH STRINGBERS IN NUMBERS



On any given day, all around the world, BendPak and Ranger products safely move and support over six billion pounds of vehicles – jacks, lifts and stands backed by a warranty as strong as our brands. You stay focused on making money; leave the heavy lifting to us.







# **TECHNICIAN** SERIES WORKBENCHES



ASK ABOUT MAC TOOLS FULL SHOP STORAGE SOLUTIONS TODAY\*

## **CONTENTS**



#### **COVER STORY**

#### 12 Tool Briefing:

## Engine overheating? How to keep your cool.

The right tools and techniques will help you find bad water pumps, head gaskets and more.

#### **COVER TOOLS**

#### 30 Tools of the Month

New tools from ACDelco, Fluke, JS Products, Mastercool and Snap-on.

#### **FEATURES**

#### 18 Top 10 Tools

Independent Vehicle Service Inc. in Albuquerque, N.M. bills itself as a complete vehicle repair shop with an emphasis on Volvo, Mini and BMW repairs. The shop's capabilities have enabled the company to expand in a challenging economy, and the shop recently moved to a larger operating facility which has one alignment bay and 16 lift bays serviced by nine technicians.

#### 20 2013 Innovation Awards

First round of nominees for PTEN's annual innovation awards.

#### 52 Tool Reviews

Technicians give their takes on tools. This month:

- AIRCAT 1150 Killer Torque 1/2" Impact Wrench
- Mac Tools TaskCode code reader
- Makita 12V MAX Cordless Repair Saw

#### 54 Special Feature

Car Care Council Women's Board continues to provide comprehensive education leadership to the aftermarket industry.











#### Published by Cygnus Business Media

P.O. Box 803, 1233 Janesville Ave. Fort Atkinson, WI 53538-0803 920-563-6388 • 800-547-7377 Fax: 920-563-1699

GROUP PUBLISHER Larry M. Greenberger LMG@pten.com

**PUBLISHER** Sarah Shelstrom sarah@pten.com

**EDITOR** Elliot Maras 800-547-7377 x1693 Fax: 920-563-1699 elliot@pten.com

MANAGING EDITOR - Digital/Print, Vehicle Repair Group Erica Schulz 800-547-7377 x1630 Fax: 920-563-1699 erica@pten.com

ASSISTANT EDITOR Craig Truglia 800-547-7377 x6154 Fax: 920-563-1699 craig@pten.com

**MEDIA PRODUCTION REP** Wes Gray 800-547-7377 x1337 wes@pten.com

ART DIRECTOR Meredith Burger

FOUNDER Rudy Wolf

LIST RENTAL REP Elizabeth Jackson 847-492-1350 x18 ejackson@meritdirect.com

AUDIENCE DEVELOPMENT MANAGER Terri Petitt
SALES SERVICE REP Valerie Schmitt

#### CYGNUS BUSINESS MEDIA

John French – CEO Paul Bonaiuto – CFO Julie Nachtigal – VP, Audience Development Eric Kammerzelt – VP, Technology Ed Wood – VP Human Resources

#### CYGNUS PUBLISHING

Gloria Cosby – EVP Curt Pordes – VP, Production Operations Gerry Whitty – VP, Marketing

For reprints and licensing please contact Nick lademarco at Wright's Media 877-652-5295 ext. 102 or niademarco@wrightsmedia.com.

Professional Tool & Equipment News (USPS #012-426, ISSN #1081-4485) is published 10 times a year in February, March, April, May, June, July, August, September, October, and December by Cygnus Business Media. Periodicals postage paid at Fort Atkinson, Wisconsin, and additional mailing offices. Subscription rates, in U.S. currency only, are: one year, \$35; two years, \$65; Canada/Mexico, one year, \$50; two years, \$95; international, one year, \$75; international, two years \$145. Back issues are \$10 per copy. Send check to: PTEN, P.O. Box 2357, Northbrook, IL 60065-3257. Postmaster: Please send change of address or subscription information to Professional Tool & Fauinment News, P.O. Box 2357, Northbrook, IL 60065-3257, Call toll-free 877-382-9187 or 847-559-7598, fax 920-563-1704. Canada Post PM40063731. Return Undeliverable Canadian Addresses to: Professional Tool & Equipment News, P.O. Box 25542, London, ON, N6C 6B2.

Printed in the U.S. Vol. 24, No. 3; April 2013



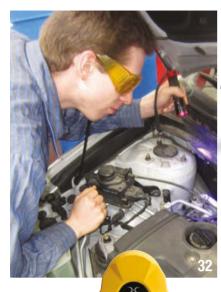
#### PERFECTLY BALANCED

The Carlyle Power 100 Series Ratchet provides equal comfort and control, without sacrificing strength. Plus it has a precise 100-tooth count to work in tight spaces and a push-button quick-release feature. It's one more way we KNOW HOW to keep heads turning. Visit your local NAPA AUTO PARTS Store today.





## **CONTENTS**







#### **DEPARTMENTS**

#### 8 Editor's Note

'Top 10 Tools?' As cars change, so do tools, training and information needs; sometimes the question bears repeating.

#### 32 Tool Q&A

How to handle the toughest air conditioning probelms.

- 34 New Products
- **48 Product Spotlight**Lifts, jacks and stands
- 56 VehicleServicePros.com Online Product Guide
- 57 Classifieds
- 58 Big-Time Boxes

# ONLINE AT VEHICLE SERVICE PROSS

#### **Tech Tips and Ask the Expert Q&As**

Throughout the month of April, we'll be featuring Tech Tips on Specialty Tools and answering questions on tire and wheel service. Go to VehicleServicePros.com/ask-the-expert to see the most recent Tech Tips and Ask the Expert Q&As.

#### **Industry Insights newscasts**

Catch up on the latest news and get sneak peeks of products before they're in the magazine on our new Industry Insights video newscast. To see recent episodes, go to VehicleServicePros.com/media-center/newscasts

#### **Tool Testing**

"Torque wrench shootout:" Who will win? Watch the video and read the blog post from Assistant Editor Craig Truglia on his latest tool testing with the Digitool Solutions Electronic Torque and Angle Wrench. To read the blog and watch the video, go to VehicleServicePros.com/10882056



Sarah Shelstrom, publisher of Professional Tool & Equipment News, discusses the fiscal cliff's impact on the automotive industry, why preventative maintenance should be top of mind for shops, and other issues pertinent to the automotive aftermarket.



DTS Electronic Torque and Angel Wrench from Digital Solutions tests well in this "shoot out."

# THE BUCK Starts HATA

the Smart-Tip! advantage!

Hot Shot®

Nobody likes to be slowed down by complicated electrical problems. Like the old saying goes: "Time is Money!" With the Hook by Power Probe, you get to take back some of YOUR valuable time! Not only do you get several testers in one tool, you also have the time saving functionality to compare readings instantly! One Tool, One Mission: "Make the mechanics job less complicated and more profitable"

# ...The Hook

Touch the Probe Tip to the circuit and it intelligently selects the Ohm Meter or the Volt Meter and Range for you...

#### ...that's the Smart Tip Advantage!

- Powers Motors & Loads
- Measures Current Draw
- Calculates Resistance...

ALL AT THE SAME TIME

**Ask Your Local Tool Dealer To Get Yours Today** 

Super Fast Circuit Testing!

part# **PPH1** 

Scan now to learn more



The Ultimate in Circuit Testing

www.powerprobe.com 800-655-3585

Enter 18 at "e-inquiry" on vehicleservicepros.com







# **Top 10 Tools?** As cars change, so do tools, training and information needs; sometimes the question bears repeating.

s automotive repair tools have become more capable, complex and oftentimes more expensive for shops, purchase considerations require more training and a deeper understanding of how they work. As we at *PTEN* learned more about the considerations shops need in buying tools and equipment, it became evident that an overhaul of our monthly shop profile feature was in order.

Last month, we introduced a new feature titled "Top 10 Tools." Long-time readers recognized this as part of our monthly "Shop Profile" feature; each shop profile listed the company's top 10 tools. In March, we replaced the monthly shop profile with an expanded version of "Top 10 Tools." We did this to help readers make better tool and equipment purchasing decisions.

#### The reason for the change

Understanding our reader needs is as important to us as knowing your customers' needs is to you. To this end, *PTEN* surveys readers regularly to determine what information shop owners and technicians need. We learn this through written questionnaires, both online and in print. We also conduct live interviews, over the phone and in person.

Reader concerns vary from year to year, but readers consistently tell us they use the magazine to make better buying decisions for tools and equipment. As vehicles change, tools change. As tools and equipment change, new information is needed. And as new formats become available for providing information, *PTEN* finds new ways to deliver the information readers need.

In other words, as your tasks evolve, ours do as well.

#### What defines a tool?

A tool might seem like a simple thing to write about, but *PTEN* readers have different



David Lang continues to invest a lot in his tools and has seen the payback in his business.

questions they want answered about tools.

What's more, not every reader defines tools the same way.

Every so often a shop owner mentions his employees as his most important tools. Some mention training as a top tool. A tool, after all, is something that helps you do a job. Employees and employee training fit this definition.

This subject was recently raised by David Lang, owner of Vehicle Service Inc. in Albuquerque, N.M., featured in this month's Top 10 Tools article on page 18. Lang was able to rattle off his top 10 tools fairly quickly. But some days afterward, he contacted me with additional thoughts about his top 10 tools. In retrospect, he noted that his most important tool is training. And the reason he didn't mention this at first is

because training, besides being his most important tool, is also a shop owner's most forgotten tool. He readily pleaded guilty to this oversight, noting it is common among many shop owners.

Lang stated his ideas about training better than I could, so I will paraphrase him on this subject:

"Training is at the base of what I do and is required for the future success of automotive repair. Tools don't fix cars, technicians do, and training is what makes good technicians. One of the reasons that I attend the trade fairs and expos is because they frequently offer training over the same time period.

"Every year I take at least 100 hours of classroom instruction by the best and brightest of our industry. It is training that allows for the effective implementation of tool use. Technical training is not a profitable endeavor for the suppliers and is a sacrifice of time and money for technicians, yet without it, the aftermarket will not reliably repair cars coming out of warranty."

Feedback from Lang and other readers has led us to develop training resources for shops and technicians. Through our website, VehicleServicePros.com, we offer training videos, "Tech Tips" and "Ask the Expert" instructional articles, as well as live training seminars. But for the purpose of our monthly Top 10 Tools article, *PTEN* defines tools in the physical sense.

#### ► VEHICLESERVICEPROS OFFICIAL WEBSITE OF PROFESSIONAL TOOL & EQUIPMENT NEWS

Do you favor mandatory technician licensing and/or government-administered certification?

- A. I favor mandatory technician licensing and government-administered certification.
- B. I favor mandatory technician licensing but not government-administered certification; private industry should administer certification.
- C. I oppose mandatory technician licensing; licensing should be voluntary.

Give *Professional Tool & Equipment News* your feedback! Text **VSP2** to **30364** now to answer this question.

Standard carrier data and message rates may apply. Text STOP to end. Text HELP for help.

# Finally, an SRS, ABS and Transmission Code Scanner that has <u>FULL European</u> coverage along with Asian & Domestic.



MSRP: \$299.95

#### The All New C-Reader Pro 123 from LAUNCH

Diagnose Process	
Engine Control System	
Transmission Control System	
Brake Control System	
SRS System	
1/4	

Datastream		
LF Outlet Valve Solenoid	Inactive	
LF Wheel Speed	22.93 mph	
LR Inlet Valve Solenoid	Inactive	
LR Outlet Valve Solenoid	Inactive	
9~12/26 ==Exit		

Auto Vehicle ID, Auto Module Search & Ultra-Fast Protocol ID . Enhanced Live Data For ABS, SRS, Transmission & Engine

Record, Replay Data & Graph OBDII Generic Includes All Functions Of The Popular Creader VI For OBDII Generic

OBDII Generic Code Settings Parameter Help . Intuitive Interface & Button Operation With Sleek, Rugged Design

Multilingual In English, Spanish & French Internet Updateable Print Via PC 3.5" TFT Color Display



The Global Leader In Diagnostics 1-877-LAUNCH9(528-6249)

www.launchtechusa.com
Enter 19 at "e-inquiry" on vehicleservicepros.com



- Record and play back Video recording with voice annotation, can reviewing images and video directly on device
- \star 4.5 mm / 8mm Camera Head Easy to inspect tough-to-reach areas
- 4GB SD Memory Holds 42,800+ images or 100+ mins of video recording on the Included 4GB SD card
- USB Output For transferring video and images to a PC

- **★** 3" Color LCD & 2.5X Digital Zoom 320 x 240 HD display resolution; 11 settings to adjust image size
- Illumination Control 4 built-in LEDs on camera probe with 5 settings of brightness to illuminate viewed object
- ★ 110° Viewing Angle & 180° Flip 2 settings to reverse viewed object
- Waterproof Flexible Cable Extra long camera cable 48" or 72" for reaching deep area and waterproof camera head resisting damages from water



#### **ARZ6055**

#### Includes:

- · 4GB SD memory card
- CIC501 4.5 mm × 48" long camera head AB642A 6V battery cartridge



#### **ARZ6058**

#### Includes:

- 4GB SD memory card
- CIC802 8 mm x 72" long camera head
  CIA001 Camera attachments
  AB642A 6V battery cartridge

#### **ARZ604**

#### **6V Alkaline-battery Inspection Camera**

- 8 mm Camera Head for inspecting tough-to -reach places.
- Video Out delivers real-time video from camera to any displays.
- 3" Color LCD Display performs 320 x 240 high resolution.
- 2.5X Digital Zoom and 4 LED lights for illuminating working area.
- 110° View Angle and 180° View Flip to reverse viewed object.















# ARS1207R Mini Polisher w/ Restoration System

- Compact size for small area polishing.
- Convenient two positioned side handle for easy operation.
- Variable speed to avoid spraying polish compound during starting up.
- Enough paste to restore 8 average headlights.
- Delivers excellent crystal clear lens in about 5 minutes avg.





## Quality & Power Pneumatic Tools

For quality and power that challenges them all, check out ACDelco pneumatic line of tools, your pocket will be impressed!



Enter 20 at "e-inquiry" on vehicleservicepros.com



Tool Briefing offers real-world tips and advice for using specific tools to accomplish specific tasks. The Customer Concern is shown below. Remember, the tool information might apply to many other vehicles too.

# **Engine overheating?** How to keep your cool

The right tools and techniques help you find bad water pumps, head gaskets and more.

#### VEHICLE APPLICATION:

■Chevrolet 2006 Equinox 3.4L

#### AVG. REPORTED MILEAGE:

■ 64.000 miles

#### **CUSTOMER CONCERN:**

The engine overheats and boils the coolant out.

#### TOOLS USED:

- Emissions analyzer
- Power Probe
- Cooling system pressure tester
- Antifreeze funnel
- Scan tool

## **STEPS**

#### TESTS/PROCEDURES:

- **Confirm the coolant fan comes on** high speed before the coolant boils.
- **Confirm good airflow through** the radiator.
- Confirm the radiator is not restricted.
- **Confirm the pressure cap holds**
- Fully bleed the cooling system.
- If the system continues to aerate, suspect a head gasket problem.

STEPS PROVIDED BY: IDENTIFIX DIRECT-HIT SHORT-CUT DIAGNOSTICS



Any pressure tester worth its salt, such as Astro Pneumatic's Radiator Pressure Tester, No. 78585, shown here, will have the right adapters to connect to vehicles that have pressurized caps on their coolant overflow reservoirs. For more information on this product, go to VehicleServicePros.com/10166850.

here are quite a few vehicles out there that have common cooling system problems. BMW 3 Series always have fan clutches and thermostats going bad. Volkswagens have bad water pumps. Late model Jeep I6s have head gasket issues. The list goes on and on.

Now a 2006 Chevy Equinox with a 3.4L comes in with the issue of overheating and the "antifreeze boils." The boiling of antifreeze indicates that something critical is defective (clogged radiator, defective thermostat, broken water pump impeller, etc.) Since 3.4Ls don't typically have this issue, what would be the wise way to begin diagnosing this car?

#### 1) CHECK ANTI-FREEZE

This step is absolutely critical, because if the antifreeze is full, we

**CONTINUED PAGE 14** 

# THIS PLUS YOU EQUALS MORE PRODUCTIVITY.

Now loaded with OEM-specific coverage for dozens of systems and more features and functionality than the previous model, new ETHOS® Plus is the perfect addition to any shop. With a 50% larger full-color display, new keyless operation and a fast boot-up, it's simpler yet more productive than ever. Which makes it the ideal solution for new and experienced users alike. And despite its many improvements, there's one thing we haven't added: cost. In fact, affordability may be its biggest plus of all.







Enter 21 at "e-inquiry" on vehicleservicepros.com

Learn more by contacting your Snap-on® Representative. Or visit **diagnostics.snapon.com/ethosplus** 



Matco recommends coupling its TP3405 leak detection dye with its RPT102 Cooling System Pressure Tester. When under pressure, dye may be left behind where a black light can be used to spot tough to find leaks. For more information, visit VehicleServicePros. com/10892027.

an emissions analyzer.

Simply turn on your emissions analyzer and check the HC levels in the shop. The number should be close to zero. Then, open the radiator cap. If you are afraid of a coolant bubble shooting out and getting into your probe, use a no-spill antifreeze funnel and half a windshield washer bottle. In the hole on the top, put your probe. When you do this, see if HC levels soar.

If they do, you have confirmed that the head gasket is bad, because HC from the combustion chamber of the engine is now getting into the antifreeze. This, in turn, confirms that antifreeze is going into the combustion chamber and out the tail pipe.

#### 3) TEST FOR ITEMS THAT **CAUSE OVERHEATING**

What if we have this problem and the antifreeze level is not low? The first component we test is the thermostat.

To test a thermostat, first make sure that the vehicle is cold and the thermostat is closed. As the vehicle warms up, feel the thermostat hose. At the same time, use a scan tool and graph the engine coolant temperature (ECT) PID. When ECT reaches the

**CONTINUED PAGE 16** 



The Snap-on SVTS262C Cooling System Tester can be used not only to do a pressure test but also to check for bad head gaskets. This can be done by attaching the pump from the SVTS262C to the cooling system using the included TAB10036 adapter. Once attached, start the engine and rev it up a bit while watching the gauge on the pump for pressure spikes that would indicate an exhaust leak into the cooling system. If there is an exhaust leak, you must have a head gasket leak. For more information on this product, go to VehicleServicePros.com/10892025.

will probably test the thermostat first and if it is low, we will pressure test the vehicle for leaks. So, to check for a leak we top the vehicle off with antifreeze and attach the pressure tester where the radiator cap is. Some vehicles don't have radiator caps, but they have pressurized overflow containers where the pressure tester connects to.

Regardless of where you connect to, you should be able to tighten the tester's adapter so that it makes a leak-proof seal and pressurizes the system to 15 psi. That system should hold at least 15 psi for five minutes. If not, look for

A portable emissions analyzer from EMS can be used to test for head gasket leaks. For more information on this product, go to VehicleServicePros.com/10097468.

#### if you don't see any leaks and you are losing pressure?

leaking should be replaced. But what

#### 2) TEST FOR **BAD HEAD GASKET**

The old fashioned way to test for a bad head gasket is to pressure test the vehicle, and if you find a leak but don't see any, check the exhaust. If it smells and looks like burned antifreeze, you have a head gasket leak on your hands.

However, for reasons we covered in our December 2012 Tool Q&A (Go to VehicleServicePros.com/10765228 to read that article), catalytic converters work too efficiently these days and only with extremely bad head gasket leaks will you catch it that way. Otherwise, the only way to be sure we are not getting any antifreeze in the oil is to use





# Helping race teams get their cars to the starting line for over 20 years.

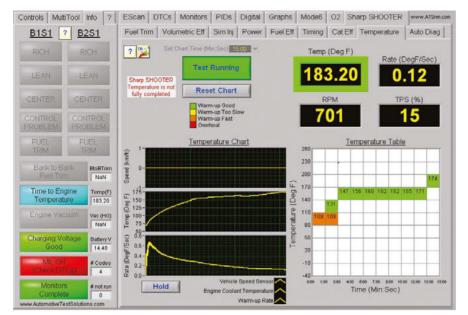




#### The #1 Glove in NASCAR®

Over two decades of racing experience has allowed us to create the ultimate performance work gloves. That's why more race mechanics use Mechanix gloves that any other brand. Our gloves protect their hands and allow them to work faster, safer and cleaner®—all while having more power and control. Mechanix Gloves. The Tool That Fits Like a Glove.® US: 800.222.4296 Canada: 604.542.7055





Here a radiator fan is jumped using the Power Probe Hook and a lead set. The tool not only allows the user to verify that the fan works, it measures the fan amperage draw simultaneously. For more information on this tool, go to VehicleServicePros. com/10727921.



range where the thermostat is rated to open, feel the thermostat hose. The hose should turn from cool to hot.

If the ECT PID goes up very slowly, for example, an increase of only 10 degrees F every few minutes, then you likely have a "sticky" thermostat. The EScan from Automotive Test Solutions is a scan tool with a thermostat testing function which automatically calculates this for you, so you don't have to touch any hoses or perform any "quesstimations."

If the thermostat is good and you notice that even when the vehicle is hot the radiator fan won't turn on, you might want to test the radiator fan. You can do this by using a bi-directional control



A scan tool's bidirectional controls are a quick way to confirm that the PCM, wiring and fan are all in good working order. For more information on this product, go to VehicleServicePros. com/10849873.

on our scan tool, or lacking that, jump the radiator fan on with a Power Probe.

Using your scan tool to do the test is easy. Simply go into the engine control module and choose bi-directional controls. "Radiator fan" should be an available choice. If the fan does not engage, your scan tool might list bidirectional control but not actually do it, or more likely, the PCM driver, fan or its wiring is defective.

The quick way to test this out is to simply whip out a Power Probe. You will need to take into account the wiring of the vehicle (i.e., is the fan grounded/ powered seperately from the PCM?). Depending upon how the fan is wired you can check to see if the fan is receiving 12V and even jump the circuit. In this way, you can prove if the fan alone is bad or if the PCM or wiring is at fault.

Most fans are grounded by the PCM, so with the Power Probe you can bypass

Using the ATS EScan Pro we can monitor how long it takes this thermostat to open. If it opens too slowly, like it is doing here, the proper repair is to replace the thermostat. For more information on this product, ao to VehicleServicePros.com/10106486.

that ground and make your own. If the fan spins, you have a problem on the ground side. Sometimes, the fans blow fuses when they have high internal resistance. You can check amperage on the fan with an amp clamp or a Power Probe Hook when performing this test. If fan amperage is too "close" to the fuse's amperage rating, the radiator fan should be replaced.

If you see a good degree of "Dex Mud" in the radiator, you might have a blockage. To diagnose a clogged radiator, the

> simple way is to pull its hoses, let whatever residual antifreeze there is drain out and then blow shop air through the radiator. If you cannot successfully flush out the radiator, replace it.

> One of the rarer problems is a defective water pump impeller. A simple way to catch this issue is to pull a hose where the water pump is and see what kind of force the pump shoots the antifreeze out at. If you are confused about which hoses are at the inlet and outlet sides. get some clear plastic hose at a

home improvement store and put those in place of the other hoses. Then, turn the car on to monitor coolant flow. This trick can be used to monitor flow in and out of the heater core as well.

Lastly, thermal imaging can assist in doing many of the preceding diagnostics. It can quickly discern the temperature of antifreeze at different points of the cooling system. The most advanced thermal imagers can look into a radiator and see where the flow of hot antifreeze stops. However, sometimes there are so many hot parts on a vehicle surrounded by other hot parts, it's not possible to get that precise. But, an array of diagnostic equipment can help the technician nail any cooling system issue.

#### **VEHICLESERVICEPROS**

For more tools used in addressing this issue, see an online version of this story at www.VehicleServicePros.com/10881931

# PRODUCTIVITY UNLEASHED



Whether you're looking for exceptional power, portability, access, or time-saving operation, the R3130 ratchet is the right tool for the job. Get the performance you need, with 54 ft-lbs of torque — the same kind of power you'd expect from an air tool. Get the same durability, too — the proven-engineered ratchet head is the one you'll find on our air-powered ratchet. But with the IQ<sup>v20</sup> battery, you'll get more portability, thanks to a patent-pending inline design for easier access to tight spots and 20 volts of hardworking power to keep going job after job. Learn more at ingersollrandproducts.com/R3130.

DO THE JOB. DO IT FAST. DO IT EVERY TIME.



# **TOOLS**

# **TOP TEN** Tools for the shop that sets itself apart

**SHOP: Independent Vehicle Service Inc.** 

**LOCATION: Albuquerque, N.M.** 

**OWNER: David Lang** 

Independent Vehicle Service, Inc. in Albuquerque, N.M. bills itself as a complete vehicle repair shop with an emphasis on Volvo, Mini and BMW repairs. Owner David Lang claims his shop can handle 7 to 9 percent of vehicles that are the most difficult to repair, ones that aren't repaired by the first three rounds of parts replacement from other shops. These are the jobs that are not the revenue producers: they are the reputation makers when properly repaired. Most revenue is produced by the brakes, suspension, service and maintenance which is the vast majority of work.

By Elliot Maras, Editor



Enter 200 at "e-inquiry" on vehicleservicepros.com

#### **EScope Pro 8-channel,** twin-time-base labscope

Lang notes the importance of being able to view electrical circuits quickly in the cars that come into his shop. The oscilloscope has ten times the computing capacity of earlier models. "You need it every time you have a 'check-engine' light." For more information, go to VehicleServicePros.com/10889178.



#### **Five Gas Analyzer,** No. EMS1000

Lang considers the EMS1000 gas analyzer critical to getting correct information. "The user must compare the scan tool data to the reality of what gas is coming out the tail pipe." For information: VehicleServicePros. com/10889167.

#### Mitchell 1 ProDemand

The software combines service repair, maintenance and management information in an integrated source. Lang uses several aftermarket repair information services, but he prefers Mitchell 1 for wiring diagrams. For information on this product go to: VehicleServicePros.com/10451541.



Enter 203 at "e-inquiry" on vehicleservicepros.com

Enter 201 at "e-inquiry" on vehicleservicepros.com

ATS Emissfire Detector

The EMI1000 identifies cam shaft timing problems through the spark plug hole and misfiring cylinders from the exhaust tail pipe. The misfire counters provide information on which cylinders misfired and counts how many times the misfire occurred.

alerting users to a bank misfire, random misfire or individual misfire. "The kit comes with additional pressure transducers. You can put the pressure transducers wherever you want. You'll know whether the cams are in time for the engine. You will be able to see non-invasively and dynamically whether the cam shafts are in time or not in time. You can tell cranking compression, idle compression, snap compression, tight valves, ring problems and more, all using the same piece. This can all be done without tearing the engine apart." For information on this product, visit: VehicleServicePros.com/10102747.

#### **Streamlight Stylus Pro LED flashlight**

"Despite all the lighting a well-lit shop provides, it's not enough when you are under a hood and you want to get to access parts such as fuel injectors," Lang said. Streamlight's Stylus Pro LED flashlight uses a 0.5watt. high-flux LED. as well as micro optical system technology to deliver twice the light output of the Stylus penlight. For information on this product, go to: VehicleServicePros.com/10100412.

Enter 210 at "e-inquiry" on vehicleservicepros.com



Dave Lang uses the Automotive Test Solutions Escope Pro 8-channel, twin-time-base labscope to quickly view electrical circuits in the cars that come into his shop.



Lang says this LED flashlight provides two to three times the output of other LEDs. It offers three microprocessor-controlled variable light intensity modes as well as a strobe function. "I can use this to look any time I need a flashlight, even if I'm looking for smoke." A multi-function, push-button tactical tail button switch allows easy, one-handed operation. For more information, go to: VehicleServicePros.com/10103273.

Enter 205 at "e-inquiry" on vehicleservicepros.com



#### PowerProbe III

The Power Probe III features an easy-to-read backlit voltmeter for reading voltage at the tip. "You don't have to drag jumper leads around and look for power outlets. It is self-lit, so it replaces old lights and it has a voltmeter"

For information on this product, go to: VehicleServicePros.com/10167639.

Enter 206 at "e-inquiry" on vehicleservicepros.com



Enter 207 at "e-inquiry" on vehicleservicepros.com

#### **Power Probe Hook**

Lang likes the fact that the Hook can connect to systems from 12V to 48V and includes an accurate inductive amp meter. "You can see how much electricity a circuit is drawing." For information on this product, go to: VehicleServicePros.com/10727921.



#### ATS E-Smoke smoke machine

This OEM EVAP-approved smoke machine locates all EVAP system leaks and vacuum leaks, according to the manufacturer. "I use it the most for locating leaks in the evaporative system and in the induction system." The machine can also find exhaust and EGR leaks, under dash leaks, throttle-body component leaks, brake-booster leaks, turbo and supercharger leaks, head-gasket leaks, vacuum-subsystem leaks, injector o-ring leaks and more. For more information on this product, go to: VehicleServicePros.com/10106086.

Enter 208 at "e-inquiry" on vehicleservicepros.com



Enter 209 at "e-inquiry" on vehicleservicepros.com

#### Fluke 233 wireless remote display digital multimeter

Lang uses the wireless remote display digital multimeter for general electrical testing. The multimeter, with removable magnetic display, allows a tech to be 30' away from the measurement point. Lang finds that it will always tell what component in a circuit is bad. "It's always good to have an accurate meter that can also measure amperage accurately." The wireless feature eliminates the juggling of leads and the meter while stretching into a tight spot. For information, go to: VehicleServicePros.com/10131041.



# 2013 **PTEN Innovation Awards Nominees**

ach year, tool and equipment manufacturers send us their newest and most innovative products introduced over the last year.

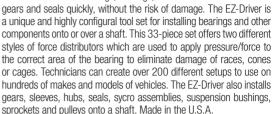
This annual competition generates plenty of excitement, because each of these tools allows technicians just like you to perform the job faster, easier and more efficiently.

In this issue, you'll find the first round of nominees. Over the next few months, PTEN's panel of judges of active repair technicians and shop owners will rate which tools and equipment stand above the rest.

Watch for the second round of nominees in the May issue, and winners to be announced in the June issue.

#### **COMPANY: MAYHEW TOOLS** PRODUCT: EZ-DRIVER

The Mayhew Tools EZ-Driver, No. 29920. allows techs to install bearings, bushings,



#### **CATEGORY: SPECIALTY TOOLS**

Enter 97 at "e-inquiry" on vehicleservicepros.com

#### **COMPANY: ASTRO** PNEUMATIC TOOL CO.

**PRODUCT: ONYX IN-LINE 3" CUT-OFF TOOL** 

Astro's innovative In-Line Cut-Off tool, No. 209. provides a significant improvement over previous models of cut-off tools on the market by providing a "line of sight" view of the surface while making the metal cut. This unique design provides increased control since the professional can now view the surface of the material to be cut. No more guessing as to the precise cutting line. This provides for better accuracy and precision of cut. The unique combination of in-line cutting and ergonomic handle provides for the best performance in the cut-off air tool category. These significant improvements do not come at the cost of safety as this tool has a positive control and lock-out throttle protection as well as an adjustable steel spark quard.

**CATEGORY: AIR TOOLS** 

Enter 98 at "e-inquiry" on vehicleservicepros.com

#### **COMPANY: SNAP-ON PRODUCT: WIRELESS DIGITAL INSPECTION SCOPE NO. BK8000**

With a larger video screen and more memory, the BK8000 Wireless Digital Inspection Scope is the latest addition to the Snap-on line to make



work easier. The BK8000 brings increased visibility to under dash, inside door panels, under hood, behind the engine block, within transmission housings, inside the engine and other work not easily accessible by the technician. The dual imager further improves the ability to diagnose problems by allowing for straight-ahead or 90-degree angle viewing. Features and benefits include:

- 4.3" diameter screen is 40 percent larger than competitive units for better viewing.
- Digital video and image capture with internal memory and SD card storage.
- Dual imager allowing technicians to see straight ahead or at a 90-degree angle.
- Wireless 802.11n provides clear image transmission.
- Touchscreen interface enables easy feature selection.
- Three-mega-pixel, rear-view camera allows the technician to document pre-service vehicle condition.

CATEGORY: INSPECTION TOOLS, LAB SCOPES Enter 96 at "e-inquiry" on vehicleservicepros.com **COMPANY: LOCK TECHNOLOGY PRODUCT: LT991 HOLLOW END LINE TAPS** 

Techs encounter the common problem of corrosion when removing high-pressure A/C, hydraulic and transmission lines. The lines and attached in-line female connectors are aluminum. Over time, the aluminum female fitting seizes to the dissimilar steel male fitting on the air compressor, power steering pump, transmission cooler, etc. When disengaging the female connector, the female internal threads are frequently damaged due to this corrosion. The line has to be removed and a new line ordered, creating costly and timely delays. The LT991 Hollow End Line Taps are centerdrilled throughout the length of the tap. This creates clearance so the tap can chase and retread the female connector without having the flared end of the aluminum line preventing the tap from bottoming out inside the female connector. Normal solid taps are blocked from entering the female connector, requiring line removal.

#### **CATEGORY: AIR CONDITIONING**

Enter 99 at "e-inquiry" on vehicleservicepros.com

#### **COMPANY: GEARWRENCH PRODUCT: 120XP RATCHET**

The GearWrench 120XP Ratchet is the only ratchet that features 120 positions for every • full rotation, allowing it to turn fasteners with a swing arc of as little as three degrees. Its unique design makes it easier than ever for automotive technicians to reach fasteners in severely limited access applications and get jobs done quicker. The 120XP has a 60-tooth gear that alternately engages its Double-Stacked Pawl Technology to produce the 120 positions and 3-degree swing arc. The ratchet's teardrop-shaped head has a low profile, which also improves access in tight spaces. The 120XP ratchet design provides all the benefits of a fine-tooth ratchet without sacrificing strength or durability. The product exceeds the ASME (American Society of Mechanical Engineers) strength requirements. The 120XP ratchet's long handle is ergonomically designed to provide comfort and a good grip for users. It has an easy-to-clean, full-polish chrome finish and comes in three drive sizes: 1/4", 3/8" and 1/2".

CATEGORY: HAND TOOLS

Enter 100 at "e-inquiry" on vehicleservicepros.com

#### **NOMINEES**

#### **COMPANY: ANGLO AMERICAN TOOLS** PRODUCT: KUKKO 2-ARM OUICK **ADJUSTING UNIVERSAL PULLERS**

The Anglo American Tools Kukko Quick Adjust 2-Arm Pullers utilize multiple unique features, which exhibit a level of ingenuity and innovation unparalleled in today's puller market. These pullers are cleverly designed and diligently crafted to provide the user with superb functionality. Kukko pullers use patented "ArmLock" technology. which quarantees maximum stability of the sliding arm and the hook during use. The geometry of the pullers' crossbar and sliding parts have also been optimized to ensure exceptionally easy movement of the extractor hooks along the crossbar, while simultaneously offering a rock-solid hold once positioned on the bolts. Another exceptional component of the puller is the "quick adjusting" feature. This specialty line of pullers includes both two-arm and three-arm models available in a variety of sizes and styles. The knurled-knob adjusters enable quick loosening, positioning and tightening of the puller arms by hand, requiring no wrench.

**CATEGORY: HAND TOOLS** 

Enter 101 at "e-inquiry" on vehicleservicepros.com

#### COMPANY: CLORE AUTOMOTIVE PRODUCT: SOLAR PRO-LOGIX PL2320 BATTERY CHARGER

The Clore Automotive SOLAR PRO-LOGIX PL2320 features fully automatic. microprocessor-controlled operation. Simply set charging parameters and press "charge." This unit properly charges all battery types, including conventional, AGM, gel cell, spiral wound, marine and deep cycle batteries. Other features include:

- Advanced multi-phase charging process charges each battery based on its needs for optimal results.
- Optimized "soft start" and "battery recondition" routines specifically address the needs of problem batteries.
- Charging status indicators alert the operator on the progress of the multi-phase charging process
- Enhanced maintenance mode provides ideal conditioning of batteries in long-term storage.
- Temperature compensation feature adjusts charging parameters based on ambient temperature.
- Thermally-activated fan control reduces noise and extends unit life.
- 7-segment LED display provides specific details on battery state-of-charge and voltage throughout the charging process.

CATEGORY: BATTERY STARTING/CHARGING

Enter 102 at "e-inquiry" on vehicleservicepros.com

#### **COMPANY: DEWALT**

#### PRODUCT: 20V MAX LITHIUM ION COMPACT IMPACT WRENCH KIT

The DEWALT compact and lightweight 20V MAX Lithium Ion Compact Impact Wrench Kit (No. DCF880L2) is ideal for automotive technicans who need to perform a wide range of fastening applications in tight spaces. The wrench delivers 150 ft/lbs of maximum torque, 0-2,300 RPM and 0-2,700 impacts per minute (IPM). The DCF880L2 includes a 1/2" detent pin anvil for users who require maximum socket retention. The wrench features a three LED light ring surrounding the anvil, with a 20-second delay to provide visibility without shadows in dark work areas. The wrench also includes DEWALT's new fuel gauge battery pack indicator lights that will allow users to check the level of charge left in the battery, and a textured anti-slip comfort grip on the handle to DEWALT provide extra comfort and control for the user. The maximum initial battery voltage (measured without a workload) is 20V. The nominal voltage is 18V.

**CATEGORY: POWER TOOLS** 

Enter 103 at "e-inquiry" on vehicleservicepros.com

#### **COMPANY: CAL-VAN TOOLS PRODUCT: 76 RELAY CIRCUIT PRO**

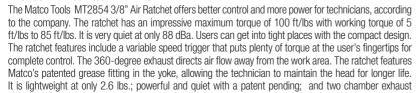
The Cal-Van Tools 76 Relay Circuit Pro takes diagnosing circuits through the relay to the next level. In a matter of seconds, the technician can identify problems with the load side, feed side or the relay itself. Users can activate the circuit and allow the user to see if the component in question is actually functioning properly. This tool cuts diagnostic time down dramatically. directing the technician to the problem that needs to be resolved. Since it can "jump" the relay, it can also be used to test fuel pumps, do A/C recharge, etc.,

all from the relay box under the hood. All of this at the touch of a button. Currently, it takes several other products to do what this one tool does. The tool comes with six different relay configurations, as well as a universal connector to fit most relays. It works on most 12V and 24V systems.

CATEGORY: ELECTRICAL SYSTEMS

Enter 105 at "e-inquiry" on vehicleservicepros.com

#### **COMPANY: MATCO TOOLS** PRODUCT: MT2854 3/8Î AIR RATCHET



system to reduce noise. **CATEGORY: AIR TOOLS** 

Enter 106 at "e-inquiry" on vehicleservicepros.com



**PRODUCT: 18V 1/2" IMPACT WRENCH** 

The ACDelco ARI2061B Li-ion 18V 1/2" Impact Wrench delivers 625 ft/lbs of maximum breakaway torque, 480 ft/ lbs of maximum reverse torque and 300 ft/lbs of maximum tightening torque. Variable speeds of 0-2,000 RPM and 0-3,000 IPM high power are designed for faster speed application. This tool allows users access to areas that no other can reach while still delivering extreme power, according to the company. This tool is over 40 percent lighter than many of its competitors and almost 40 percent more compact while still producing the same power, and still utilizing a metal gear housing. The package includes: two Li-ion 18V 2.0 Ah battery packs, one 30-min, intelligent charger, and a carrying case. Chargers utilize a patented air-forced technology which forces air through the battery to cool it while charging it, allowing for faster charging times.

**CATEGORY: POWER TOOLS** 

Enter 104 at "e-inquiry" on vehicleservicepros.com

#### **COMPANY: SNAP-ON**

PRODUCT: LONG NOSE PLIERS WITH CUTTER

The Snap-on Long Nose Pliers with Cutter brings a unique configuration to the marketplace. In addition to gripping and wire-cutting capability, multiple serrated teeth profiles provide for easy pulling of cotter pins and a powerful grip for turning fasteners. The Long Nose Pliers with Cutter is designed and manufactured to provide customers with a durable, powerful and comfortable set of pliers that can be used on a multitude of jobs. The longer contoured handle with new joint location, along with the patented Talon Grip jaws, provide more power for gripping, cutting, fastener turning and pin pulling. Features and benefits: diamond-serrated jaws provide a better grip and up to 57 percent increased pulling power; ramped tips provide stronger jaws and increased accessibility; rounded jaw edges minimize nicks to wire when making loops or bends; no. 196NCF cutters are rated to cut 0.049"(1.24mm) diameter music wire.

CATEGORY: HAND TOOLS

Enter 107 at "e-inquiry" on vehicleservicepros.com

#### **NOMINEES**





#### **COMPANY: S.U.R.& R.**

#### PRODUCT: AC80 A/C COMPRESSION BLOCK OFF KIT

Rear A/C lines can be blocked off in as little as five minutes with the AC80 A/C Compression Block Off Repair Kit now available from S.U.R.&R. Designed for use on SUVs and vans with leaking lines or failed rear A/C components, the kit provides vehicle owners with a fast, affordable solution for keeping the front A/C system working. Coverage includes 3/8",1/2", 5/8" and 3/4"-sized lines. One fitting per line size (total of four fittings) is included. Featuring advanced compression union style technology, all connections are made by hand and tightening is completed using standard wrenches. No specialty tools are required. Additional features include:

- Double Seal compression union technology.
- All aluminum fitting material.
- Pressure rated safe up to 600 psi.
- Hanger clamps and self-tapping screws (included with each

**CATEGORY: AIR CONDITIONING** 

Enter 108 at "e-inquiry" on vehicleservicepros.com

#### **COMPANY: STERTIL-KONI USA**

PRODUCT: DIAMOND LIFT



Stertil-Koni's Diamond Lift (No. Diamond 64) is a highpressure telescopic piston lift setting new standards in precision heavy duty lifting. Ideal for heavy duty, overthe-road vehicles. Diamond

Lift is available in two- or three-piston configurations with lifting capacities of 64,000 lbs and 96,000 lbs. Its unique telescopic pistons protect all critical seals from damage by debris and the piston rods are hard-chrome plated for maximum protection.

Diamond Lift utilizes biodegradable oil, and the steel containment is hot galvanized, providing corrosion resistance at floor level and proper interlock with the foundation. Containments are fully coated — safeguarding against corrosion and electrolysis — and prohibiting hazardous shop fluids from entering the environment. The mechanical locking system utilizes a hardened, nitro-carburized locking rod to provide superior resistance to corrosion and wear. Diamond Lift features intuitive controls, ultrasonic sensors providing real-time synchronization of power units, and an above-ground control console for easy access.

CATEGORY: LIFTS

Enter 109 at "e-inquiry" on vehicleservicepros.com

#### **COMPANY: DREW TECHNOLOGIES**

PRODUCT: MONGOOSEPRO GM II

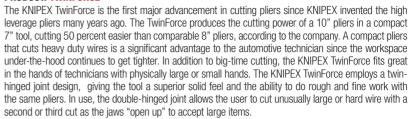
Drew Technologies is now shipping the MongoosePro GM II. This Mongoose has been tested with GM's Tech2WIN diagnostics application. Tech2WIN is a Windows-based version of the Tech2 dealership scan tool that supports most 1996 to present GM vehicles.

With Tech2WIN, a user can connect to powertrain, chassis and body systems to read trouble codes, view live streaming data, run bi-directional controls and perform diagnostic routines. GM offers Tech2WIN subscriptions at \$55 for a three-day license. This product is unique and innovative because MongoosePro GM II is the first aftermarket tool to support GM's Tech2WIN factory diagnostic software. It is also offered at a low price point, making factory diagnostics affordable to more technicians.

CATEGORY: SCAN TOOLS

Enter 110 at "e-inquiry" on vehicleservicepros.com

#### **COMPANY: KNIPEX TOOLS** PRODUCT: TWINFORCE



**CATEGORY: HAND TOOLS** 

Enter 111 at "e-inquiry" on vehicleservicepros.com

#### **COMPANY: ACDELCO**

**PRODUCT: 8V 3/8" IMPACT WRENCH** 

The ACDelco ARI810 8V 3/8" Impact Wrench delivers 113 ft/lbs of reverse torque, and 75 ft/lbs of tightening torque. This is the most powerful impact in the world in its class, according to the company, and is available in 8V or 7.2V.A variable speed of 0-2,600 RPM and 0-3.100 IPM. The package includes: two Li-ion 8V battery packs, one 30-minute fast charger with dual ports, and a carrying case. Features include a compact size for restricted access applications, rubber boots to protect tools from exterior damage, an anti-slip soft grip for comfort and good protection, and a built-in LED for convenient illumination during work.

**CATEGORY: POWER TOOLS** 

Enter 112 at "e-inquiry" on vehicleservicepros.com



#### **COMPANY: LAUNCH TECH USA PRODUCT: CRP129 CREADER PRP**

The Launch Tech CRP129 CReader Pro blurs the lines between a code scanner and a professional scan tool with features such as electronic parking brake release, steering angle reset and service reminder reset - not to mention the ability to display and graph live PID data for A/T, SRS and ABS, along with complete generic OBDII. It is the only code reader in its price point to offer these features, according to the company. The CReader Pro also has fast boot up as well as DTC read and clear functionality. As with all Launch code readers, manufacturer-

specific code definitions are built into the tool. Also included in the tool is a troubleshooter that lists top causes for DTCs, helping technicians tackle the job right the first time. Other features include the ability to print via PC and free Internet updates. Ergonomic, ultra-fast, highly intuitive and easy to use, the CReader Pro CRP129 is a must-have for today's modern technician.

**CATEGORY: SCAN TOOLS** 

Enter 113 at "e-inquiry" on vehicleservicepros.com

#### COMPANY: SNAP-ON PRODUCT: 3/8Î DRIVE COMPACT AIR RATCHET

The Snap-on 3/8" Drive Compact Air Ratchet (No. FAR7000) offers better reach and more speed than ever before. Its long neck and small head make it much easier to get to those hard-to-reach fasteners. This versatile, durable air ratchet can be used for a variety of jobs, providing customers the performance and productivity they expect from Snap-on. At 410 RPM free speed, the FAR7000 is 40 percent faster than competitive air ratchets, according to the company. Its longer, slimmer head and neck design gives its users better reach and accessibility. The lightweight design and ergonomic comfort-grip handle make the FAR7000 easy to use, minimizing full-workday fatigue. Features and benefits:

- 11.2" overall length.
- 410 RPM free speed.
- 30 ft/lbs maximum torque.
- 2 lhs • Adjustable exhaust deflector.

· Lightweight: only

**CATEGORY: AIR TOOLS** 

Enter 114 at "e-inquiry" on vehicleservicepros.com





**MAXIMUS** IS THE TOTAL PACKAGE.

# 9.7 INCHES TO BE EXACT.



# FROM CODE TO FIX, IT'S THE FASTEST, MOST COMPLETE SCAN TOOL YOU CAN BUY.

- No-hassle connectivity Maximus utilizes the fastest most stable OBDII wireless Bluetooth in the industry.
- Easy, one-click updates Continuously updated information at your fingertips download in a minute! Plus, a full year subscription is included free.
- User-friendly 9.7" touch-screen, Windows® 7 operating system, Identifix® trial and rugged durability.
- Expanded functionality Take diagnostics to the next level with optional enhancements like 4-channel Lab Scope, a Sensor Simulator, and a Battery Tester.
- Coverage for every job Complete domestic, Asian and EURO coverage included.

SCAN TO SEE MORE.
ASK YOUR DISTRIBUTOR
HOW YOU CAN GET
MAXIMUS... FAST.



SERVICE. TRUST. RESULTS. 866.289.8665 | WWW.MATCOTOOLS.COM

Enter 137 at "e-inquiry" on vehicleservicepros.com





#### **COMPANY: GUARDAIR CORP. PRODUCT: US FLAG SAFETY AIR GUN**

Featuring innovative design and function, the Guardair Long John US Flag Safety Gun is the perfect tool for cleaning inaccessible and hard-to-reach areas. "Long John" safety air guns are used for blowing floor debris, cleaning engine blocks, brake dust, shop floors and benches, as well as machinery and storage areas. An efficient venturi nozzle boosts thrust up to 200 percent over conventional air guns, vet limits static pressure to less than 30 psi should the tip become blocked. An ergonomic, Classic+, pistol grip-style handle provides maximum user comfort. The US Flag Gun is available in three different models. Features include: durable cast aluminum body with hanging hook: wide comfort trigger; rugged aluminum extension; 1/4" FNPT inlet; output thrust of 2.0 lbs; noise level of 107 dB. The unit weighs 0.8 lbs and meets OSHA standards. Part Number: 75LJ012AAUS.

CATEGORY: SAFETY EQUIPMENT

Enter 115 at "e-inquiry" on vehicleservicepros.com

#### **COMPANY: SNAP-ON**

#### PRODUCT: DIAGNOSTIC MOBILE WORKSTATION

The KRSC332PC is a fully-enclosed Diagnostic Mobile Workstation, providing mobility and organization for a diagnostic unit and information system. Custom-cut foam organizers house the diagnostic system with all its accessories, including adapters and cables, for easy accessibility while being secured in a rugged, durable unit. The cart is equipped with a mounting plate inside the lid with pre-set weld nuts to attach a monitor permanently and securely for viewing from a distance when the lid is open. The cart is easy to open and shut — the monitor or diagnostic



unit stays in position, ready-to-use. The inside of the top compartment accommodates a power strip (No. KAPS4) for easy power access in remote applications.

CATEGORY: TOOL STORAGE

Enter 116 at "e-inquiry" on vehicleservicepros.com

#### **COMPANY: ROTARY LIFT**

#### PRODUCT: MCH413 MOBILE COLUMN LIFT

The Rotary Lift MCH413 mobile column lift was designed in response to customer requests for a smaller mobile column lift that can pick up a wide range of vehicles, from cars to heavy duty trucks. Because the columns are portable, the lift is a great choice for facilities that only need a higher-capacity lift for larger vehicles at



certain times. The MCH413 is the smallest lift in Rotary's Mach family of mobile column lifts, all of which are at least 30 percent faster to set up than similar lifts, letting technicians get to work more quickly and minimizing vehicle downtime. They can completely raise a vehicle for service in just 78 seconds. The MCH413 has a rated lift capacity of 13,000 lbs per column. It has been third-party tested by ETL and is ALI-certified to meet ANI safety and performance standards.

**CATEGORY: HEAVY DUTY** 

Enter 121 at "e-inquiry" on vehicleservicepros.com

#### **COMPANY: INNOVA**

#### PRODUCT: DIGITAL COMPRESSION TESTER NO. 5612

The only handheld digital compression tester available on the market today, according to the company, Innova's handheld Digital Compression Tester features a record/playback memory feature that means no more writing down recordings for each cylinder. The professional quality features of Innova's digital compression tester help pinpoint compression readings for guick and easy diagnostics. Additional key features and benefits include:

- Graphs and measures BAR, psi, kPa measurements of pressure.
- · Real-time diagnostic testing for single/all cylinders.
- 0-300 psi, kg/cm2 and kPa operating range.
- Large digital display shows over 20 pieces of vital information at once.
- · Automatic shut-off conserves battery.
- · Intuitive hot keys and large LCD display.
- Displays results in progressive LED display: green means good compression, yellow means a potential problem, red means poor compression.

**CATEGORY: SPECIALTY TOOLS** 

Enter 118 at "e-inquiry" on vehicleservicepros.com

#### COMPANY: ACDELCO

#### PRODUCT: 18V 1/2" SUPER-TORQUE IMPACT WRENCH WITH DIGITAL CLUTCH

The ACDelco ARI2060 Li-ion 18V 1/2" Super-Torque Impact Wrench with Digital Clutch is an innovative, heavy duty impact wrench that is built with 4-pole motor technology, delivering maximum breakaway torque of 1,100 ft/lbs, maximum reverse torque of 780 ft/lbs, and maximum tightening torque of 500 ft/lbs. The Digital Clutch ensures the tool automatically stops at pre-defined (user set) settings, ensuring bolts such as lug nuts or frame bolts are not over tightened. Using a digital sensor rather than mechanical, the accuracy is maintained throughout the battery cycle. The ARI2060 has a variable

speed of 0-1.600 RPM and no load speed of 0-2.000 impact per minute (IPM). A super bright LED illuminates the working area. The package includes: two rubberized Li-ion 18V 3.0Ah battery packs, one 30-minute intelligent fast charger and a carrying case. Chargers utilize a patented air-forced technology which forces air through the battery to cool it while charging it, allowing for much faster charging times.

**CATEGORY: POWER TOOLS** 

Enter 119 at "e-inquiry" on vehicleservicepros.com

#### **COMPANY: LINK NEW TECH** PRODUCT: PXA9 TRANSMISSION FLUSH

The fully-automatic, patented Power Xtreme Quick Transmission Fluid Changer from Link New Tech is the latest technology in ATF changing machines. It is able to exchange ATF directly from the transmission fill tube without any mechanical pumps or bladders, and in under 10 minutes. The PXA9 is designed with a 10-gal capacity and special see-through tanks. It can be used on cars, trucks and SUVs. It is fast and easy to use, keeps a shop work floor clean and is environmentally safe. It has no hazardous chemicals for the technician to come in contact with. All Power Xtreme machines are under 99 lbs to save on heavy duty construction, with fiberglass tanks, and one-year warranty.



CATEGORY: FLUID EXCHANGE

Enter 120 at "e-inquiry" on vehicleservicepros.com

#### **COMPANY: KEN-TOOL** PRODUCT: RECORE TPMS SENSOR SYSTEM

A major cause of failure of TPMS sensors is the result of galvanic corrosion the tendency of mismatched metals to interact electrically in a way that causes guick corrosion and deterioration



of the valve core and stem. Ken-Tool's reCore TPMS

Sensor Saver System provides everything service technicians need to repair corroded TPMS valve cores and stems, including replacement cores, stems and caps that are nickel-plated and will not fail due to galvanic corrosion. The replacement process itself is fast and simple. Technicians work directly on the damaged valve stems, removing the corroded material, tapping new threads, and torquing in the replacement stem. There's no need to remove the tire from the vehicle, no need to rebalance the tire, and no need to reset or relearn the TPMS sensor. With a little skill and practice, a tech can easily repair and install a new reCore valve stem in just 10-15 minutes.

CATEGORY: TIRE. WHEEL SERVICE

Enter 117 at "e-inquiry" on vehicleservicepros.com





877-333-9036

www.drewtech.com/pten.html







#### **COMPANY: MIDTRONICS**

#### PRODUCT: GRX-5100 EV/HEV BATTERY SERVICE TOOL

The GRX-5100 is the industry's first high-voltage hybrid/EV vehicle battery service and de-power tool. It was designed to safely perform full battery pack service, including de-powering, balancing and charging, via fully controlled and automated processes. Simple menu prompts guide verification that the battery and communication systems are properly connected and that balancing or de-powering operations can begin. The GRX-5100 features an electrical harness between vehicle batteries and communication systems via unique adapters for each vehicle model. It also utilizes USB-based memory, which will support system updates for future vehicle battery systems without a hardware upgrade. Midtronics developed the GRX-5100 to improve the serviceability of electric and hybrid vehicle battery systems, whether that be routine repair or complete de-power for safe transport, storage or recycling.

#### CATEGORY: BATTERY STARTING/CHARGING

Enter 122 at "e-inquiry" on vehicleservicepros.com

#### COMPANY: S.U.R.& R.

#### PRODUCT: TR555 DELUXE TRANSMISSION LINE REPAIR KIT

Service professionals can stop waiting on parts and start repairing or replacing transmission lines in as little as five minutes with the S.U.R.&R. TR555 Deluxe Transmission Line Repair Kit. The all-in-one kit can be used to repair or replace damaged transmission/oil cooler lines, including those affected by leaking connectors, rust, cracks and pinholes. The kit has a complete assortment of components required to perform line repairs, including transmission line connectors, nuts, adapters, unions, hose cutters, clamp pliers and specialized rubber hoses designed specifically for transmission line replacement applications. The kit also includes commonly-used connector clips and several difficult-to-find transmission line nuts. The TR555 features a high-temperature rubber hose which is easy to route and safe for applications up to 250 psi in temperatures up to 350 degrees F. All connections are made by hand and do not require the use of a specialty tool. Coverage includes both 5/16" and 3/8" lines.

**CATEGORY: SPECIALTY TOOLS** 

Enter 123 at "e-inquiry" on vehicleservicepros.com

#### **COMPANY: SNAP-ON EQUIPMENT PRODUCT: JOHN BEAN ALIGNMENT AUDIT SYSTEM**

The John Bean Alignment Audit System significantly improves shop efficiency and increases productivity as any service technician or manager can perform fast and easy wheel alignment audits in less than 60 seconds. This system uses live, computerized 3D modeling and high-resolution cameras, coupled with an extensive database of vehicle information to provide fast

and accurate measurements under an array of working conditions. Unlike other systems. the John Bean Alignment Audit System does not require leveling, and is self-calibrating. At the completion of the wheel alignment audit, the user receives a complete color-coded report to share with his customers. The report empowers service advisors and helps them to sell required services that would normally go unnoticed. Since the John Bean Alignment Audit System does not require a lift, alignment audits can be performed outside of the alignment bay. This leaves the alignment bay free to conduct revenue generating services, increasing productivity and profits.

**CATEGORY: SHOP EQUIPMENT** 

Enter 124 at "e-inquiry" on vehicleservicepros.com

#### **COMPANY: ANSED DIAGNOSTIC SOLUTIONS PRODUCT: 4 & 5 GAS ANALYZER KITS**

The ANSED Diagnostic Kit is more than a gas analyzer simply used to sample exhaust gases. The kit includes a proprietary software program written to analyze gas readings taken by the industry-leading KANE gas analyzer. The ANSED Expert Emissions Analyzer software interprets the gas readings, providing a technician or shop owner a top-down list of

repair and/or additional diagnosis tips. The software helps the technician identify no-code drivability issues, catalytic converter issues, and other performance issues only detectable through exhaust sampling procedures.

CATEGORY: DIAGNOSTIC TEST EOUIPMENT

Enter 125 at "e-inquiry" on vehicleservicepros.com



#### **COMPANY: BAR'S PRODUCTS** PRODUCT: RISLONE DIESEL FUEL **SYSTEM TREATMENT**

Rislone Diesel Fuel System Treatment (No. 4740) is designed to increase the power, performance

and mileage of light- and medium-duty trucks, as well as diesel cars, for 5,000 miles. A single 16.9-oz bottle of Rislone Diesel Fuel System Treatment contains an equivalent amount of additives as full bottles of:

- · ULSD sulfur substitute lubricity additive.
- Injector and complete fuel system cleaner.
- UCL pump and injector lubricant.
- · Anti-gel cold flow improver.
- Fuel stabilizer and water remover.
- · Cetane booster and diesel treatment.

Rislone Diesel Fuel System Treatment is packaged in a dual-cavity bottle with a patent-pending disposable spout for easy, no-mess installation. The distinctive green spout has been designed to fit only diesel fuel systems to prevent accidental installation in a gasoline system. It is compatible with aftermarket and OEM mis-fueling prevention devices.

**CATEGORY: CHEMICALS** 

Enter 126 at "e-inquiry" on vehicleservicepros.com

#### **COMPANY: BOSCH** PRODUCT: TECH2WIN SCAN TOOL

Bosch's Mastertech VCI (M-VCI) aftermarket scan tool provides OEM-level diagnostics for General Motors (GM) vehicles by supporting the GM Tech2WIN application. This is a powerful addition to M-VCI's diagnostics capabilities which

already boast two industry-leading aftermarket diagnostics applications; ESI[tronic] 2.0 (pronounced "Easy-tronic"), which provides coverage for European and Korean vehicles, and the award-winning Shop Foreman Pro software which provides Asian and domestic coverage.

Mastertech VCI combines Bosch's broad aftermarket diagnostic software, access to OEM-level diagnostics, and ECU reprogramming, all through one common vehicle interface. Tech2WIN is authentic OE GM diagnostics software, coupled with the MDI, or multiple diagnostic interface. The MDI is an essential tool for GM dealerships worldwide. The Bosch M-VCI was developed for the aftermarket using the same base architecture as the MDI.

**CATEGORY: SCAN TOOLS** 

Enter 127 at "e-inquiry" on vehicleservicepros.com

#### **COMPANY: REDLINE DETECTION** PRODUCT: RAPID SWITCH SNAP RING PLIERS

The Redline Rapid Switch 12-pc precision internal and external circlip plier kit is ANSEcertified and manufactured from hardened steel with precision-hardened tips and oil- and chemical-resistant non-slip handles. The Rapid Switch patented technology allows users to quickly switch from internal to external snap ring pliers. The Rapid Switch is specifically for secure, strong and stable operation and tip alignment in both the internal and external positions. Simply slide the handle from the



left hand and follow the V pattern until it comes to the notch and reverse to rapidly switch from external to internal.

**CATEGORY: HAND TOOLS** 

Enter 128 at "e-inquiry" on vehicleservicepros.com





#### **VEHICLE SYMPTOM:**

#### No Crank, No Start

'05 Buick LeSabre 3.8L towed in. The engine will start and stall if the starter relay is bypassed. The power windows, power locks, radio, interior lights and Instrument Panel Cluster will not display or function. The scanner will not communicate with the vehicle.

#### CONFIRMED FIX:

#### **Failed Radio Module**

The radio is connected to the data bus circuit. When the radio crashes the data bus, none of the modules can talk to each other.

CALL 1.877.494.5229 TODAY FOR YOUR FREE 1-WEEK TEST DRIVE Sometimes the right answer isn't the most obvious one. No matter what the diagnosis – from routine to random – Identifix will help you Find and Fix Faster.

Our industry-exclusive diagnostics eliminate the frustration of time-consuming factory flowcharts with short-cut tests and confirmed fix procedures. We even list fixes from the most to least common to point you in the right direction. It's information you won't find anywhere else. And our online tool, Direct-Hit, delivers it faster than any other system.

Direct-Hit also provides genuine OEM service & repair information so you can finish the job with speed, accuracy and confidence.







#### **COMPANY: INNOVA** PRODUCT: REPAIRSOLUTIONS

Repair Solutions is Innova's complete, patented solution to Check Engine Light Diagnostics. Owners of Innova diagnostic tools can access this proprietary knowledge base created, maintained and owned by Innova. After logging in, users are provided with diagnostic data and solutions for 1981 and newer cars, light trucks and SUVs. RepairSolutions includes fixes for actual in-use vehicle/system failures. The information contained in RepairSolutions database consists of information compiled over the last 15 years by teams of skilled engineers and ASE certified technicians. Additional features include: diagnostic trouble code library; NHTSA safety recall library; scheduled maintenance reminders and vehicle warranty reminders; Tech Tip article library; how-to video library; factory technical service bulletin (TSB) library; factory recall library; and more.

**CATEGORY: COMPUTERS & SOFTWARE** 

Enter 129 at "e-inquiry" on vehicleservicepros.com

#### **COMPANY: ELECTRONIC SPECIALTIES. INC. PRODUCT: 230 SHORT BUDDY**

The Electronic Specialties Short Buddy (No. 230) is designed to help find shorts and intermittent electrical issues. This troubleshooter uses audible tones, allowing a tech to work hands-free while wiggling and pulling wires. Short Buddy connects at the fuse panel and becomes in-series with the test circuit. In the case of a dead short, Short Buddy gives users continuous re-set/ re-power capability. Short Buddy continuously monitors the



current level. If a dead short occurs, Short Buddy opens the circuit for 10 seconds, then re-applies power to the circuit. Re-powering the circuit can also be done manually. If users have a weak connection causing an intermittent failure, it's great for deploying the technique of pushing, pulling and tugging wires to find the problem. This can be particularly effective in finding faults, which frequently occur in wiring harnesses and connectors. Just wiggle and listen for the beep

CATEGORY: DIAGNOSTIC TEST EOUIPMENT Enter 130 at "e-inquiry" on vehicleservicepros.com

#### **COMPANY: SNAP-ON EQUIPMENT** PRODUCT: INTEGRITY TEST DRIVE

The Integrity Test Drive by John Bean is a unique system that performs a complete vehicle inspection in a matter of minutes, including alignment, battery, brake efficiency, brake pad thickness, and diagnostic codes, and it generates specific reports that highlight the results of each inspection. The vehicle condition report documents the inspection



and helps the service advisor communicate the needed services to the customer. The Integrity Test Drive combines several productivity-enhancing products that work together, giving technicians the ability to quickly inspect more vehicles as well as to provide customers with a complete health snapshot of their vehicle, identifying needed service and repair opportunities. The Integrity Test Drive is a "must have" for shops that want to fully optimize their repair capacity and vehicle throughput.

**CATEGORY: SHOP EQUIPMENT** 

Enter 131 at "e-inquiry" on vehicleservicepros.com

#### **COMPANY: TRAXION ENGINEERED PRODUCTS PRODUCT: PROGEAR RACING SEAT**

The TraXion ProGear Racing Seat looks cool, but is really designed for function and comfort. Carrying this unit around would be awkward if it were not for the carry handle built right into the racing seat backrest. The gear tray looks like a gear and even spins on its axis. Spin the cogs to quickly and easily locate tools or parts. Exclusive to the ProGear model, the 5' casters are the key to the Gear Seats best-in-class mobility. These premium casters



are constructed of nylon and synthetic rubber. The casters allow the technician to roll right over rough terrain and even small parts, cords and hoses. Despite the huge casters, the adjustable seat height features a drop-sleeve design, so users can get down to a low level where a number of jobs take place, most notably brake jobs.

**CATEGORY: JACKS & STANDS** 

Enter 132 at "e-inquiry" on vehicleservicepros.com

#### **NOMINEES**

#### **COMPANY: BOSCH**

#### PRODUCT: BMW ISTA DIAGNOSTIC APP FOR M-VCI SCAN TOOL

Bosch's Mastertech VCI (M-VCI) aftermarket scan tool now provides OEMlevel diagnostic and reprogramming functions for BMW and Mini vehicles by

supporting BMW's technical information system (ISTA) application for the aftermarket.

The ISTA program is BMW's aftermarket diagnostics and reprogramming software that is designed to use the J2534 API interface to provide OEM-level capabilities. The ISTA application consists of several functionally-oriented system components that communicate with each other, offering various features and functions, through an Internet-connected client/server arrangement. ISTA offers powerful BMW and Mini vehicle diagnostic (ISTA/D) and reprogramming (ISTA/P) capabilities, with various options for vehicle identification for highly specific information searches and guided troubleshooting.

#### **CATEGORY: DIAGNOSTIC TEST EQUIPMENT**

Enter 133 at "e-inquiry" on vehicleservicepros.com

#### COMPANY: LOCK TECHNOLOGY PRODUCT: LT1800 4-PC OFFSET IMPACT DRIVER SET

Frequently techs experience great difficulty removing frozen studs and bolts during strut, break hub, front end, exhaust, spring and suspension repair. The compact nature of today's automotive mechanicals prevent easy access to many of these fasteners. Tools



in the LT1800 4-Piece Offset Impact Driver Set are forged with a 15-degree angle at the drive head end. The angle can be increased up to another 30 degrees due to a machined recessed well at the head of the tool. Four machined, anti-turning slots at the base of the driver prevent the offset driver from turning during use in the impact chisel. Three sizes of well head — 0.410", 0.530" and 0.725" — reach the most inaccessible of fasteners, as well as a 0.990" straight shaft, non-turning air hammer. The hammer is much heavier than current ones on the market and also utilizes four non-turning slots machined at base of the shaft. The hammer will not walk off the fastener during operation.

#### **CATEGORY: AIR TOOLS**

Enter 134 at "e-inquiry" on vehicleservicepros.com





#### **COMPANY: REDLINE DETECTION** PRODUCT: SMOKE PRO TOTAL-TECH B-MODEL

The Redline Detection Smoke Pro Total-Tech B-Model tests

EVAP, intake, exhaust and many other systems to quickly locate leaks; contaminant-free, OEM-approved smoke-producing fluid produces the thickest smoke available at only pennies per test. The product has been entirely re-engineered, resulting in the ability to find even finer/smaller faults and leaks (down to 0.010" compared to the previous 0.020"), to meet new EVAP testing standards. The updated flow meter will locate the most sensitive leaks, and includes a new compound pressure gauge and a decay feature to verify repairs are complete. The flow control valve makes the process of locating leaks faster and more precise. The size and weight have been re-engineered so the machine is even more compact and lightweight. The B-Model is now just 11.25" tall, compared to previous models at 12.5", and weighs just 6.5 lbs, down from 7.75 lbs.

#### **CATEGORY: LEAK DETECTION**

Enter 135 at "e-inquiry" on vehicleservicepros.com





# O SERVICE A HYBRID VEHICLE'S AIR CONDITIONING

Mastercool's 69789-H A/C machine meets SAE J2788 for Standard 134A and Hybrid 134A vehicles. An automatic and programmable design allows the technician to perform a continuous recover/recycle, vacuum, vacuum leak test and recharge. It includes an installed database of thousands of vehicle refrigerant capacities for domestic and imports from 1998 to 2012. Automatic operation includes auto oil discharge, auto oil injection, auto air purge, auto vacuum leak test and auto filter alarm. This machine also incorporates an integrated system flush, printer and 6 cfm vacuum pump for quick efficient air and moisture removal.

Enter 428 at "e-inquiry" on vehicleservicepros.com

# **2** SCAN CODES AND LIVE DATA

Snap-on's ETHOS + Scan Tool provides a fast way to access codes and live data for dozens of systems on nearly 40 domestic and Asian makes, with an optional European vehicle kit. This unit offers powerful OBD II tools, including all 10 modes of OBD II. ETHOS + also reads and clears vehicle-specific codes with the definitions on-screen in plain English. Technicians can graph four live data parameters side-by-side to pin down the root cause of a vehicle's problem. It can also read service monitor data and reset service lights on many vehicles.

Enter 427 at "e-inquiry" on vehicleservicepros.com

#### O DIAGNOSE COOLING SYSTEM AND BRAKE FAILURES

Fluke's VT02 Visual IR Thermometer, a troubleshooting camera with an infrared heat map, bridges the gap between low cost IR thermometers and higher priced thermal imagers. Use the VT02 to detect blockages in heater cores and cooling systems, diagnose automotive electrical issues and determine failed bearing components quickly without the use of other less-efficient tools. The tool combines the visual insight of a thermal imager, the visual images of a digital camera, and the point-and-shoot convenience of an IR (infrared) thermometer. It can display and save images as full visual, full infrared or in three blended modes (25, 50, and 75 percent) and comes with free Smartview software.

Enter 425 at "e-inquiry" on vehicleservicepros.com

# 4 RECORD AND PLAY BACK IMAGES

ACDelco's 6V Multi-Media Inspection
Cameras, Nos. ARZ6055 and 6058, allow
the user to identify and document issues,
download the information to his computer
and allow supervisors or customers to view
the findings. These cameras feature the ability
to record and play back images and audio/
video, and include a 4GB SD memory card,
USB port for images and video output, 3" (320
x 240 pixels) LCD screen, four-setting LED for
illumination, 2.5X image zoom and 180-degree
flip view. This unit provides a battery runtime of up to five hours and a 48" long, 4.5mm
camera cable (No. ARZ6055)/72" long, 8mm
camera cable (No. ARZ6058).

Enter 424 at "e-inquiry" on vehicleservicepros.com

# **O BETTER ACCESS**TO TIGHT SPOTS

JS Products introduces its line of professional tools, including the SteelmanPro Extendable Flexhead Ratchet Set, No. 96753. This set comes with 1/4", 3/8", 1/2" drive ratchets that feature quick release and a 72-tooth ratcheting mechanism. The tools include a 180-degree flex head to help the user work in tight spots and a dual durometer handle that enhances grip.

Enter 426 at "e-inquiry" on vehicleservicepros.com



## **Answers to A/C Service Questions**

We cover how to nail the toughest A/C problems

I can't find dye anywhere even after injecting it in the system, but I don't want to condemn the evaporator too quickly. What should I do?

This is a real tough one, and there is no perfect method. Most of us rely on the process of elimination (i.e.: "It's not leaking where I can see it, so it must be leaking where I can't see it!"). See Fig. 1.

However, there are a couple strategies you can try. Try removing the cabin air filter or blower motor in order to get a black light and visually inspect the evaporator. An A/C sniffer might also help. Another method is removing the core from the Schrader valve and putting CO2 gas into the A/C system with a smoke machine. Then, stick an emissions analyzer in the vicinity of the evaporator. If CO2 levels escalate, you nailed an evaporator leak. However, CO2 might not be detected if you need real-world system pressures to force a leak. It's an imperfect method, but it's another bullet in the gun belt so to say.



Figure 1: The best way to find A/C leaks is the tried and tested method of filling the A/C system up to full capacity with dye. Be sure to use a full-spectrum dye and also a black light capable of seeing multiple dyes such as the UV Phazer Neo, No. 413025, from UView pictured here. For more information on this product, go to VehicleServicePros.com/10223204.

What special equipment do I need to deal with sealant?

First, you do not want to get your A/C machine contaminated with sealant. It will cost you too much to have your machine down in the middle of A/C season. Every single vehicle before you service it needs to be checked for sealant.

Think about it: Your parts store sells the stuff. Do-It-Yourselfers use the stuff. Shops use the stuff! There are too many people out there adding sealant to vehicles to avoid expensive A/C repairs. Because of this, you need to take a few extra minutes before every A/C job to test for sealant. (See Fig. 2.)

When you find sealant, you need to charge your customer to remove it from



Figure 2: After three minutes, if the ball falls enough, there is malicious sealant in the system. SAE 2670 sealant should not cause a failure when tested with a sealant detection kit. If so, the sealant should be properly removed from the vehicle.

the vehicle. An A/C sealant filter can separate all the harmful sealant from the R134a, but this equipment needs



Figure 3: Here is a real-world A/C setup. Pictured is an A/C machine (from Flo-Dynamics) and two "filters" that hook up to the hoses when needed. What these "filters" do is different. Both made by Airsept, one prevents PAG oil contamination in hybrids and the other filters out sealant that can damage your machine. For more information on these products check out VehicleServicePros.com/10106929 (Charge Guard) and VehicleServicePros.com/10307871 (Recycle Guard). To learn more about the A/C machine from Flo-Dynamics, go to VehicleServicePros. com/10097576.

to have its filters changed every 50 hours of use or so (See Fig. 3). Then, after removing the sealant, recharge the system with dye. Chances are that sealant was added to that system because there was a leak somewhere

in the past.

As a side note, it should be said that there are new sealants out there that meet the SAE 2670 standard that are not supposed to harm the A/C system or any service equipment.

These sealants can get pricey (about \$15 an ounce) and may pose their own benefits and issues. If using such sealant, be sure to explain to your customer the benefits and also risks involved in using a sealant.

I believe that the compressor is bad, but I cannot rule out a bad expansion valve. I can command the A/C compressor clutch on and off with my Power Probe. Is there anything I can do other than changing both?

Infrared thermal imaging technology shows some real promise in finding leaks and parasitic draws, because it can view differences of temperature and essentially "see through walls" so to say. With an understanding of A/C system pressures, accurately seeing temperature differences can really hone in our diagnosis. (See **Figs. 4, 5** and **6.**)

Let's get this straight: The refrigerant entering the compressor should be



Figure 4: A Jeep Liberty A/C compressor in "normal vision."

cool, and it should be hot leaving the unit. Refrigerant then is cooled going through the condenser, but still hot. This temperature should remain about the same until it hits the receiver dryer. A restriction should lead to a large temperature difference. The expansion valve should have a large temperature difference in normal operation, because cool refrigerant should be leavening it. When using a pressure gauge a restriction in the receiver

dryer or expansion valve should cause very high pressures on the high side, and low pressures on the low side. Sealant clogging up the condenser can also cause a restriction, with the same results as a clogged receiver dryer or expansion valve as reflected in system pressures.

Thermal imaging helps because it helps us see where the restriction is. If you have a normal operating receiver dryer, but the expansion valve shows little heat difference, pressures will tell you if the compressor is still pumping pressure into the system and all you need is the exansion valve.

You can use a temperature gun to employ this strategy on an A/C system, but you have to be careful with your aim. For example, the temperature of the cooling fins on a condenser are much different than the hot pipes beneath.

Thermal imaging or having very good aim with a temperature gun is more useful in finding partial blockages than complete blockages. A complete blockage can make it very hard to figure out whether the compressor is dead in the water or something else is rendering it useless, simply because if refrigerant flow is stopped, pressures are affected universally. That's why no job should be under warranty unless the expansion valve and receiver dryer are replaced. A shop should not take liability over things that are not testable to a degree of 100 percent accuracy. There will always be a gray area with A/C, and a customer should understand that.

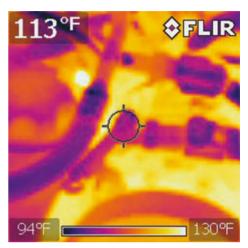


Figure 5: Using thermal imaging, here we can see that there is no observable temperature difference between the high and low side of the compressor. This compressor is inoperative.



Figure 6: The low side of the compressor is now colder and the high side is much hotter. Using thermal imaging, we can clearly see a functioning compressor. Granted, you can use your hands to do the same thing, but this technology allows us to apply the same principles to unreachable parts of the system.

Have questions? Need answers? Email **craig@pten.com** to have your questions answered in this column.

#### **VEHICLESERVICEPROS**

Find more answers on A/C service questions at VehicleServicePros.com/10772765

# PRODUCTS

#### **Remove more components**

Anglo American Tools' Kukko **Universal Puller Extensions** 

can be inserted into standard claws of Series 20 and Series 30 Quick Adjusting Universal Pullers. A vast number of extensions can be joined and inserted, depending on the depth of the part to be pulled. The pullers employ "Glide and Fix Technology," meaning the geometry of the cross bar and sliding parts has been optimized to ensure particularly easy movement of the extractor hooks along the cros bar. Made in Germany.

Enter 62 at "e-inquiry" on vehicleservicepros.com

#### Charge batteries quickly, easily Clore Automotive's CHARGE IT!. No. 4512.

comes as a 12V 12/6/2 amp smart battery

charger/maintainer. With fully automatic operation, this unit frees the technician for other tasks but still delivers the same consistent, beneficial



charge every time. It is simple to set up for each charging/maintenance application. The operator simply selects the battery type and the desired charge rate - the charger executes the automatic charging process. This unit features polarity protection, outputting current only when a proper battery connection has been made. It can be used on conventional, maintenance free, AGM, gel cell, deep cycle and marine batteries.

Enter 60 at "e-inquiry" on vehicleservicepros.com

#### Secure an engine for work

The American made, Hein-Werner 1,250lb Engine Stand, No. HW93778, combines strength and ease of operation to make it reliable for shop use. The head locks

into any position along its 360-degree rotation, and can be rotated by a long handle in the back of . the stand, making the rotation of the engine an easy task. It stands on a strong, sturdy frame built from heavy gauge welded square

steel atop an H-Frame with

tubular

two fixed wheels at the front of the stand. and two rear swivel casters for maneuverability. This tool can be used with the Hein-Werner 2-Ton Engine Crane, featured on page 50 of this issue.

Enter 61 at "e-inquiry" on vehicleservicepros.com



Enter 29 at "e-inquiry" on vehicleservicepros.com



#### ENTER TO WIN \$5,000

**Visit www.robinair.com to enter**Be 1 of 5 Robinair fans to win \$5,000! Contest dates - 3/1/2013 – 7/31/2013



#### 2013 FREE SERVICE KIT OFFER

Purchase a qualifying cart from your local distributor and receive a free Filter and Vacuum Pump Oil.

www.robinair.com



800-822-5561



#### Diagnose and service HD brakes

NEXIQ Technologies' ProLink iQ and Pocket iQ diagnostic platforms, a family of anti-lock brake system (ABS) diagnostic software applications, provide brake coverage for a wide range of heavy duty brake applications. With the introduction of the ABS Suite, the ProLink iQ can be used as a full-service brake scan tool, providing connectivity to tractors and trailers utilizing the SAE J1587 communication protocol. The Complete ABS Kit comes with a J560 PLC seven-way adapter that allows direct connection to a trailer without the tractor.

Enter 63 at "e-inquiry" on vehicleservicepros.com



# **Step-by-step Instructions**

**NEW 2013 Key and Remote Programming Manual** 

from Autodata Publications

#### 2013 It's what we know Key and Remote TECH SERIES Programming Key and Remote **Programming** System operation Programming procedures Domestic and Imported Vehicles 2003-2013

Autodata

- · Coverage includes **Domestic and imported** vehicles 2003 - 2013
- Lets you know if special tools are needed for cutting or programming before you get started
- Battery replacement instructions and illustrations for remotes
- System operation explanations

Contact your local distributor to order. Call 800-305-0338 or visit us at us.autodata-group.com

Part # 13-420





us.autodata-group.com

Get the **NEW** 2013 Edition in print today!



where all Autodata content is updated regularly

#### Enter 31 at "e-inquiry" on vehicleservicepros.com

#### **Adjustable** flext head

GearWrench's 120XP Flex Head Ratchet includes all the features of the standard 120XP Ratchet plus an adjustable flex head with six positions, giving the user additional clearance and improved access. This tool features a longer reach handle than the standard 120XP, providing unprecedented access for hard-toreach fasteners. The tool accomplishes such quick ratheting by employing a 60-tooth gear that alternately engages double-stacked pawls to produce 120 positions and three-degree swing arc. The new ratchet comes available in both full polish and cushion grip in 1/4" and 3/8" drive sizes, allowing for greater comfort and ease of use for technicians.

> Enter 64 at "e-inquiry" on vehicleservicepros.com



#### Resists corrosion

Kar Lift Solutions by Omer's Lift for Wash Bays and Corrosive Environments comes as a heavy duty platform lift with structural components that have already gone through a steel pellet blast finish preparation prior to powdercoating to improve bonding to the metal surfaces. In wash bay applications or where corrosive chemicals can be found, Omer offers all KAR lift models in a "Hot Dipped" Galvanized finish. To further add to the durability of the lift, the console, hardware, hydraulic lines and anchors come entirely composed of stainless steel. It comes with a 10- year warranty.

> Enter 66 at "e-inquiry" on vehicleservicepros.com



#### **Resist abrasion and punctures**

Mechanix Wear's Material 4X Original Glove offers superior wear, higher abrasion and greater puncture resistance when compared to leather, according to the manufacturer. Unlike leather, the durable "Material 4X" can be machine-washed, increasing the practicality of the glove. With the same fit, the 4X provides the feel and dexterity of other Mechanix Wear gloves, but with increased durability.

Enter 68 at "e-inquiry" on vehicleservicepros.com



#### Keep hands clean

The Hand-E-Glove from CAIG Laboratories acts as a hand lotion and invisible carrier that allows dirt to wash right off the user's hands. The user, before grabbing a wrench or can of oil, can smooth on Hand-E-Glove, which forms an invisible shield from lube grease, gunk, grime and oil. After performing dirty work, simply wash hands with plain soap and water and watch the grime and grease wash away. Clean hands feel soft thanks to its skin-softening, anti-static formulation. This prouduct can be used under gloves to help keep skin from drying and cracking.

Enter 67 at "e-inquiry" on vehicleservicepros.com



#### Illuminate workspaces

Larson Electronics' Magnetic Mount LED Blasting Light, No. BLWP-40LED, comes designed for high intensity and rugged use. Featuring a 200-lb grip magnetic base, 1,462 lumen output from 40 watts, and 120-277 VAC compatibility, the tool can be used for blasting applications as well as industrial manufacturing and utility work. Its design allows operators to mount the light to any surface constructed of steel, iron or any material which will accept a magnet and will stay in place even under heavy vibration and movement.

> Enter 65 at "e-inquiry" on vehicleservicepros.com

### Shop owners & mechanics: Purchase one or more of these Lincoln or Mityvac products and get your choice of gift card!



For details, contact your authorized Lincoln or Mityvac distributor or go

Purchase required of one or more of the above models between April 1 and June 30, 2013.



to LincolnPromotion.com

An SKE Group Brand



PRODUCTS

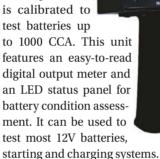
#### **Test batteries** and charging systems

Clore Automotive offers the SOLAR 125 Amp Digital Fixed Load Battery Tester, No. 1860, that benefits from being portable

and being capable of testing both battery condition and charging/starting system

SALAR

performance. The tool features an ergonomic design for comfortable use and improved safety. It delivers a true 125-amp load and



Enter 70 at "e-inquiry" on vehicleservicepros.com

### **Work in tight spots**

King Tony America's Mighty Seven 15-pc Stubby Impact Socket Set, No. MA42015M, helps technicians that need to remove tough fasteners in a tight spot. These sock-

ets come as a stubby 1-1/8" socket length, with sizes ranging



from 10mm to 24mm. The sockets sit in a custom tray that is made of chemical-, oil- and water-resistant EVA foam with clearly marked sizing. These sockets are designed to tackle any job of any size, big or small.

> Enter 71 at "e-inquiry" on vehicleservicepros.com



#### **Weld several applications**

Victor Technologies' Thermal Arc Fabricator 181i Auto-Pak includes a 3-in-1 multi-process, fully integrated portable welding system designed to take on many MIG, Stick and TIG applications. The pack includes a Thermal Arc Fabricator 181i system that delivers up to 180 amps of welding output power plus all the necessary accessories: E70S-6 Welding Wire (.023", 2 lbs), E70S-6 Welding Wire (.030", 2 lbs), welding gloves, Tweco 11-23 tips (.023", 25 quantity), Tweco 11-30 tips (.030", 25 quantity), Welper MIG pliers and an auto-darkening helmet.

> Enter 73 at "e-inquiry" on vehicleservicepros.com

#### Perform alignment, store tools

Snap-on's V3D1 X-Cel Toolbox with AC400 Touchless Alignment Wheel Clamps from John Bean combine the accuracy and ver-

satility of an alignment system with the quality and security of a self-contained professional tool storage unit. This system features high-resolution cameras that provide accurate, live



readings and diagnostic data, touchless alignment wheel clamps that offer accurate and repeatable results, lightweight yet durable design, EZ-TOE which allows the user to lock in the alignment readings and then rotate the wheels allowing the user more access. This unit comes with a toolbox, providing a shop added security for storage of specialty tools and adapters.

Enter 94 at "e-inquiry" on vehicleservicepros.com

#### Make a perfect welded **butt** ioint

Dent Fix's Butt Welding Clamps, No. DF-BC200, provide a simple and efficient way to ensure a perfectly welded butt joint. The pack of four clamps holds two panels of dissimilar thicknesses, edge to edge with almost no gap. The level adjusts between 0mm and



Enter 141 at "e-inquiry" on vehicleservicepros.com

#### Handle hoses and cords

Reelcraft's Safe-T-Reels compact, stackable reels are designed to handle hoses and cords in applications requiring the use of welding cable, welding gases, air or water



hoses and electric cords. This versatile product benefits from being a space-saver and can be installed in a variety of configurations. The rugged reel comes equipped with high-flow swivels, has a powdercoated base and boasts 30 percent glass-filled nylon reel flanges. These reels use tapered roller bearings to provide high rigidity and its lightweight construction reduces unnecessary loading typical in harsh applications and environments.

Enter 72 at "e-inquiry" on vehicleservicepros.com

#### Remove hose clamps

The Master Hose Clamp Plier Set, No. 27223 from OEM Tools comes as an all-in-one, boxed set covering most applications including Corbin (single wire) clamps, Mobia (flat band) clamps, constant tension and click clamps. They have slotted swivel jaws for positive holding or removal of plastic and/ or metal constant tension hose clamps. Both the straight and 45-degree angled pliers feature



jaws that rotate 360 degrees to grip clamps at any angle. The easyto-reach ratcheting mechanism allows the pliers to be locked in three different holding positions, making work easier and faster. It comes in a molded case for convenient storage.

Enter 74 at "e-inquiry" on vehicleservicepros.com

### DYNAMIC DUO.

COMPLETE TPMS ACTIVATION, PROGRAMMING & RELEARNING FOR ALL MAKES AND MODELS



UNRIVALED POWER.

MaxiDAS **DS708** 

UNPARALLELED DIAGNOSTIC - TPMS DIAGNOSTIC CAPABILITIES.

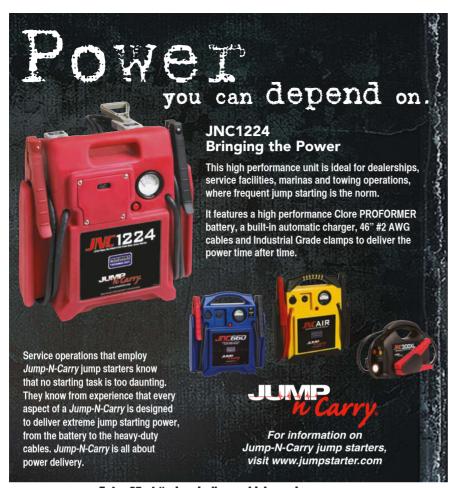
MaxiTPMS TS401

\*Now through the month of May 2013, purchase the unrivaled MaxiDAS DS708 and receive the MaxiTPMS TS401 for FREE (MSRP \$329). The MaxiTPMS TS401 from Autel is a next generation TPMS diagnostic and service tool which features unparalleled sensor coverage. Call today to order or for more information.

TOMORROW'S TECHNOLOGY, FOR TODAY'S TECHNICIAN

> www.**AUTEL**.us 1-855-288-3587

Enter 34 at "e-inquiry" on vehicleservicepros.com



Enter 35 at "e-inquiry" on vehicleservicepros.com



Enter 36 at "e-inquiry" on vehicleservicepros.com

### RODUCTS



#### **Troubleshoot vehicle** datalink adapters

The Adapter Validation Tool (AVT) from **DG Technologies** verifies vehicle network to diagnostic adapter to PC communication. This tool is intended to test and troubleshoot RP1210 Vehicle Datalink Adapters (VDAs) when preparing for a diagnostic session. This software provides technicians with a visual confirmation that a vehicle network connection has been established and can begin communication with PC-based software. This product works with any RP1210-compliant adapter, and is available in English, Spanish and French. AVT can be downloaded for free at www. dgtech.com.

> Enter 75 at "e-inquiry" on vehicleservicepros.com



#### **Clamp onto screw heads** without slipping

The Vampire Vampliers have a patented design of vertical and horizontal serrations inside the jaws with curved teeth at the nose that bite into screw heads of various shapes without slipping or damaging the surface of the mounted screw. Made of carbon-treated steel, the tool is easier to use than screw extractors or locking pliers precisely because of the way it grips around truss, round or pan head screws. Some of the product's additional features are its spring-loaded return, wire cutters, and Ergonomic Elastomer handles. The product is made in Japan.

> Enter 78 at "e-inquiry" on vehicleservicepros.com



#### Fix air conditioning leaks

The AGS Co. Swedge-Lok Repair System makes air conditioning leak repair easy by eliminating the need to wait for expensive OE replacement parts. It requires no welding or soldering and saves time by allowing most repairs right on the vehicle. The Swedge-Lok and Swedge-Lok provide universal repair of air-conditioning tube and hose connections in all makes and models of vehicles. All Swedge-Lok unions use aluminum alloy, making them corrosion-proof for a true permanent repair. The unique design and strict tolerances of each union assures that each repair is pressurerated and tested to 1,000 psi, exceeding all requirements for air conditioning systems.

Enter 76 at "e-inquiry" on vehicleservicepros.com



#### **Fuel injection service kit**

The OTC Pro Master Fuel Injection Service Kit allows users to perform fuel pressure testing, diagnose weak fuel pumps or restricted filters, test for fuel flow and perform leak-down tests. The kit includes a 0-100 psi fuel pressure gauge, 47 OTC fuel injection system adapters each with a quick-connect Schrader Valve, a 1997-2008 Fuel Injection Service Application Manual and replacement seal kit. The 7448 Fuel Injection Cleaner Canister and 7000A Fuel Injection Cleaner Solvent are sold seperately.

Enter 79 at "e-inquiry" on vehicleservicepros.com

#### Find A/C leaks

**Robinair**'s **Infrared Refrigerant Leak Detector**, No. 22791, fits naturally in the user's hand and its rugged construction stands up to abuse that most other leak detectors cannot handle, according to the company. It automatically recalibrates in highly contaminated areas to help pinpoint the



exact location of a leak and won't trigger on oil or moisture. Eight-hour battery life lets users work all day before recharging.

Enter 77 at "e-inquiry" on vehicleservicepros.com

# Get behind the wheel of your own Business!

You want opportunity? We're going to put you in a geographic territory with more potential customers than you would have in a competitor's territory.

Your potential is limited only by your ability to work hard and compete and to sell, service and collect from your customers.

What's more, we have open territories available in practically every state and every major market. So if you're pining for Peoria, longing for Louisiana or yearning for a territory out West, there's a real good chance that we can set you up!

Learn more about starting your own business at **franchise.cornwelltools.com** or call **1-800-321-8356** 

territory ers than petitor's has been a very rewarding business"

Tyler Neunschwander Medford, OR

# Cornwell Quality Tools Fact #2 We offer Geographic Territories



Enter 37 at "e-inquiry" on vehicleservicepros.com





#### THE LEADER IN HD PLATFORM LIFTS FOR OVER 30 YEARS

KAR LIFT PANTOGRAPH HD LIFT - LIFT MORE, LIFT HIGHER, LIFT FASTER

148 MODELS TO CHOOSE FROM

•6 MODELS FROM 44,000 LB. TO 99,000 LB. CAPACITY

•6 RUNWAYS LENGTHS

• ELECTRONIC OR VOLUMETRIC CONTROL SYSTEM

 Powder coated or GALVANIZED

CALL NOW FOR DETAILS 877-799-5438 WWW.KARLIFTSOLUTIONS.COM



AN THIS QR CODE WITH ANY SMART PHONE READER APP OR KARLIFTSOLUTIONS WEB SITE

Enter 38 at "e-inquiry" on vehicleservicepros.com

### OFFSET IMPACT DRIVER SET

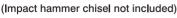
- Offset 15° angle for greater access in tight areas
- · Recessed non-turning head well prevents driver slipping off stud or fastener
- · Extra-long extra heavy non-turning straight hammer won't rotate off stud
- Great for strut work, hub work, front end, exhaust, spring and suspension repair
- · Comes packaged in a heavy duty cordura nylon roll-up storage bag

· 4 piece set includes

410 - Offset Shaft Impact Driver 530 - Offset Shaft Impact Driver 725 - Offset Shaft Impact Driver 990 - Straight Shaft Impact Driver

· Patent Pending







LT-1800



**Your Automotive** Specialty Tool Source LOCK TECHNOLOGY. INC. Toll Free 800-421-7241 www.ltitools.com Ititools@Ititools.com



Enter 39 at "e-inquiry" on vehicleservicepros.com

### PRODUCTS

#### **Hold cell phones** and equipment

The Clip-N-Clamp helps secure smartphones, GPS devices and other equipment in a specific position to help the user work more hands free. The tool features a "Flexarm," a 12" ball-and-socket arm that

can bend 360 degrees in every direction and stay in almost any position.



Designed to stay

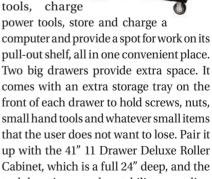
strong and not weaken over time, the clamp that's attached to the arm has 30 lbs of holding power. It comes with one Disk Clip, one Phone Clip that will secure to most smartphones using tension, and one Camera Clip. These different clips can hold everything from a meter to a flashlight.

> Enter 80 at "e-inquiry" on vehicleservicepros.com



The Extreme Tools 41" Deluxe **Portable** 

Workstation built to be versatile and portable helps organize hand



tools have improved portability, according to the company. Enter 83 at "e-inquiry" on vehicleservicepros.com

Flush A/C systems Supercool offers the Power Jet Aerosol A/C Flush Kit. a ready-touse, highpressure flush system com-

plete with 15

flushing agent,



nozzle depressor valve and hose. This flush kit applies constant pressure until the flush can is empty, without requiring shop air. The Power Iet Aerosol A/C Flush Kit features Supercool's Flash Flush, a powerful and fast evaporating flush that removes oil, debris, and other contaminants from the A/C system. Flash Flush leaves no residue, is non-corrosive and is safe for all A/C systems.

> Enter 84 at "e-inquiry" on vehicleservicepros.com



#### **Clean greases and inks**

Walter Surface Technologies' Natureboost, a derivative of natural material widely available, is both a highly efficient cleaner and ecologically sound. Derived from vegetable extracts, this unique raw material has excellent solubility of oils, greases, inks, adhesives and even paint, making it an alternative to traditional petroleum-based solvents. It is not flammable, does not emit volatile organic compounds (VOCs), is non-toxic and biorenewable.

> Enter 81 at "e-inquiry" on vehicleservicepros.com

#### **Break spot** welds, split seams

Durston/VIM Tools' stainless steel dual bevel striking scraper set, No. SSC100, can break spot welds and split seams and body panels. This tool is designed to be struck on the anvil end or side of the blade. The tools feature a 5/32" (0.155") thick blades and two component handles with a thumb stop grip and anvil striking surface. The blade is heattreated and thick for durability and comes with a rubberized handle for comfortable use.

WEAR SAFETY GOGGLES

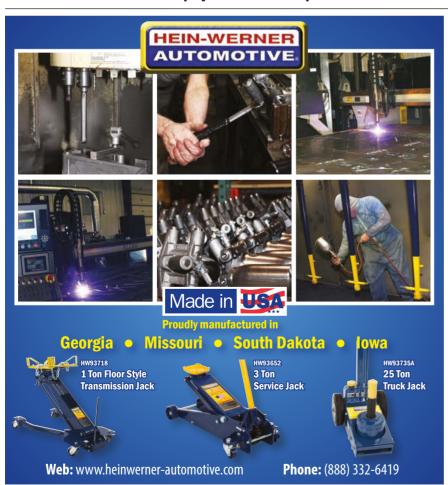
Enter 82 at "e-inquiry" on vehicleservicepros.com



Enter 40 at "e-inquiry" on vehicleservicepros.com



Enter 41 at "e-inquiry" on vehicleservicepros.com



Enter 42 at "e-inquiry" on vehicleservicepros.com

### PRODUCTS



#### Illuminate underhood area

Blue-Point's 128-LED Cordless Rechargeable Under Hood Light, No. ECUB128, capable of 180-degree light distribution, illuminates the entire engine compartment, giving service technicians the ability to perform service repairs faster and more efficiently. The tool features a long running time, diffusion tube technology that eliminates shadows, 128 high-output LEDs that create 700 lumens of light, a cordless design that prevents entanglement while providing convenience, and rechargeable, lithium-ion 4400 mAh battery that offers three hours of continuous light. This light is IP56-rated for water and dust resistance. An underhood bracket telescopes from 47" to 71" to fit most vehicles.

> Enter 85 at "e-inquiry" on vehicleservicepros.com



#### **Torque lugnuts**

California Torque Products' HQ Wheel **Torque Kit** contains five preset tire torque wrenches which are factory set and calibrated to the most popular ranges of 65, 80, 100, 120 and 140 ft/lbs, which covers 85 percent of all vehicles' lug nut torque requirements. The set is also offered with the option of adding an adjustable click style micrometer with a range of 30 to 250 ft/lbs to cover any other additional torque requirements. These tools feature a color-coding system, over-sized markings and a no-slip ergonomic rubber grip. The industrial-grade quality will meet the rugged demands of tire shop environments.

> Enter 86 at "e-inquiry" on vehicleservicepros.com



### Balance wheels quickly, more easily

Bosch's wheel balancer, No. WBE 4430, employs features and technology to make wheel balancing quicker and easier. This includes features like an LED light ring that illuminates the work area, and automatic one-touch data entry. This unit iIncludes high-performance, low-taper mounting adapters for more accurate and repeatable mounting. A simple-to-use, picture-based software interface allows for intuitive operation by the most novice users. This balancer has a self-locking weight application arm that eliminates user error and ensures the weight is placed at the proper location every time. The unit's integrated self-test software and calibration routine ensure simplified machine maintenance.

Enter 87 at "e-inquiry" on vehicleservicepros.com



#### **Cut through metal**

Campbell Hausfeld's plasma cutter, No. WK2500, comes as a 120V input, 13-amp DC output with inverter technology to produce a lot of power from a 22-lb package. The tool features a professional torch with contact striking pilot arc for distortion-proof cutting of mild steel, stainless steel, aluminum, copper and brass. For safety, it includes an error indicator light for faulty connections, thermal overload protection with automatic shut-off and a built-in regulator and gauge for in-bound compressed air.

Enter 88 at "e-inquiry" on vehicleservicepros.com



#### **Electronic parking brake tool**

**Autel's electric brake service tool**, the No. EBS301, can be used for safe and professional replacement of brake pads on an increasing number of modern vehicles with electronic parking brakes. Connecting to the vehicle's OBD ll socket, this tool automatically links up with the control module responsible for brakes. Disengaging the brake system, it increases safety with the push of a button, and eliminates the need to use expensive OE diagnostics systems to do the job on electronic systems.

Enter 89 at "e-inquiry" on vehicleservicepros.com



Enter 45 at "e-inquiry" on vehicleservicepros.com





#### Repair damaged rubber and aluminum lines

S.U.R.&R.'s A/C Line Repair 5/16" repair fittings can be used to make on-the-car repairs to damaged rubber and aluminum lines, including pinholes, cracks and kinks. These fittings include a compression block-off fitting for use on SUVs and vans with leaking lines or failed rear A/C components. The repair fittings feature advanced compression union and hose adapter technology, and all connections are made by hand and tightened with the use of a standard wrench. Other benefits include all-alluminum construction to avoid corrosion and double seal compression union technology.

Enter 92 at "e-inquiry" on vehicleservicepros.com



#### Sand more quickly, easily

Ingersoll Rand's 8000MAX Series Random Orbital Sander offers m a x i m u m power and pro-

ductivity through improved features such as more power,

lighter weight and reduced vibration for completing body prep and finishing work. This pneumatic sander can perform on a variety of surfaces, including aluminium, fiberglass, plastic and steel, and delivers smooth finishes. Designed with approximately 10 percent less vibration, ergonomic rubber grips and anti-slip hand supports to help reduce operation fatigue, this sander boasts increased tool power, with 0.27-hp motor and variable-speed regulator.

Enter 90 at "e-inquiry" on vehicleservicepros.com



CTA Manufacturing's Extraction/filling syringes, Nos. 7075 and 7077, can handle all automotive fluids, including brake fluid. This syringe disassembles for easy cleaning and comes with a spring-loaded, detachable tube. The body includes benefits such as being dual-calibrated and clear for easy viewing. The No. 7075 has a 200cc capacity and the No. 7077 has a 1500cc capacity.

> Enter 69 at "e-inquiry" on vehicleservicepros.com



#### **Create factory flares**

Cal-Van' Master Inline Flaring Set, No. 165, contains in-line flaring tools with a unique design that locks the adapters, cone and tube in a perfect line, making factory flares every time with less risk of breaking adapters. The clamp and set screws put pressure directly over the tube, greatly reducing the chance of the tube slipping from the clamp. Low-profile design of this tool allows the user to make flares on the vehicle and in tight spaces. The set includes everything needed to do the following: 3/16", 1/4", 5/16", 3/8" double and single flares, 4.75mm, 6mm, 8mm double and bubble flares.

Enter 93 at "e-inquiry" on vehicleservicepros.com

#### Quickly test any A/F sensor

Milwaukee's Milliamp Clamp

Meter, No. 2231-20, can make diagnosing air-fuel sensors easier than ever before. Capable of being accurate at the milliamps level, the user can simply clamp the tool around the wire and get the accuracy of using a multimeter in series with a load, without the hassle. Over 10X faster than measuring milliamps with a traditional multimeter, the tool can measure 0 to 99 milliamps to cover

a broad range of control signals if needed. Enhanced design features of the tool will allow technicians to troubleshoot problems with an amp clamp like never before, according to the company.

Enter 91 at "e-inquiry" on vehicleservicepros.com



#### Get a tighter grip

**Klein Tools' pump pliers** feature a curved jaw designed to grasp with multiple points of contact compared to standard straight jaw pump pliers which only have two points of contact. Multiple points of contact have the benefit of providing better gripping power and torque. The gripping surfaces of the jaw also have specially hardened teeth for positive gripping and reduced wear. These pliers come in Quick-Adjust (has a push-button, quick ratchet feature that allows the user to easily adjust the plier to any position) and Classic.

Enter 95 at "e-inquiry" on vehicleservicepros.com





#### Jack and vise pads

PROTHANE offers Shop Tools, made from PROTHANE's unique compound and molded into pads and inserts for jacks and vises. These are soft yet firm cushions, which provide protection against metal-to-metal contact. The unique qualities of PROTHANE make it impervious to grease, oil and transmission fluids. Products now available include the Jackpad 3", 5", 7-1/4", 9"; Jack Stands Pads fits heads, 1-1/2" x 4-1/2", 2-1/2" x 4-1/2", 1-1/2" x 6"; and the Vice Pad universal vise jaw fit has imbedded magnets to hold them on the jaws.

> Enter 142 at "e-inquiry" on vehicleservicepros.com



#### Increase lift ease of use

BendPak's PCL-18 portable column lift system combines heavy duty capability with ease of use that reduces operator fatigue in the placement of the lift columns. Its 6" diameter Cush-Ride front wheels feature an adjustable active leaf spring design that provides variable up-front ground clearance for smooth traveling over uneven floors, deteriorating asphalt, expansion seams and thresholds. Intuitive touchpad controls allow the user to operate, view and change operation parameters directly from each individual touch-sensitive display.

> Enter 144 at "e-inquiry" on vehicleservicepros.com



#### Portable motorcycle and vehicle lift

Garage Equipment Supply's MaxJax can be used by DIYers, enthusiasts and shop owners that want the ability of a full-size, two-post lift, but also want the convenience of a portable lift. The manufacturer intends for it to be the medium between the two. People tired of using sketchy jack stands and working on the ground will appreciate the MaxJax's ability for quick setup and clearance. Shop owners that need more room to work on their customers' vehicles will appreciate the MaxJax's ability to conveniently store away when finished.

> Enter 146 at "e-inquiry" on vehicleservicepros.com



#### Lift vehicles more quickly Mohawk's System I 10,000 lb.-

capacity clear floor lift incorporates patented hydraulic synchronization and is ideal for servicing all cars and light trucks. The System I features a low 3-1/2" arm height to allow for easy access to low-riding sports cars. It also features total clear floor design with adjustable height overhead hydraulic lines, all position mechanical and hydraulic safeties and automatic locking arms. It comes with a 25-year structural, 10-year mechanical, plus a limited lifetime hydraulic cylinder warranty.

> Enter 143 at "e-inquiry" on vehicleservicepros.com



#### Lift symmetrically or asymmetrically

Direct Lift's Two-Post Lift. No. DL9. comes as a two-post automotive lift designed to give hobbyists and small shop owners more options than ever before. The 9,000-lb capacity DL9 features asymmetric arms mounted on symmetric columns. The improved arms and carriages will give users better pickup-point access and allow them to lift either asymmetrically or symmetrically. Features include impactresistant polymer lift latch covers, internally routed hoses, and a padded switch that cuts power when a vehicle reaches maximum height.

> Enter 145 at "e-inquiry" on vehicleservicepros.com



#### **Jack vehicles** quickly, more easily

PowerStation's NOS 3 Ton High

Performance Aluminum Racing Jack features all-aluminum construction and weighs less than 60 lbs. Traditional steel jacks can weigh almost twice that. In addition to being light and easy to maneuver, this jack has nylon wheels that prevent marring of shop floors. The dual-piston power unit gets the jack up to the load in record time. The padded side handles make the jack easy to carry and the padded lift handle prevents injury to the vehicle during lifting. With a high height of 19.5" and a low height of 3.75", this jack can work on everything from low clearance sports cars to full-size trucks. It includes jack stands and service jacks in capacities from 1.5 tons to 3 tons.

> Enter 147 at "e-inquiry" on vehicleservicepros.com

#### **LIFTS, JACKS & STANDS**

# Folding stands and wall brackets

The Stertil-Koni foldable stand is available in a tall or short version. Foldable stands can support capacities of 18,000 lbs to 26,500 lbs each. With a base circumference of only 12" when folded, each stand occupies 113" of space. As a result, these innovative stands give back valuable shop space. Stertil-Koni offers a wall bracket that allows the stands to be stored on the shop wall and out of the way.

Enter 148 at "e-inquiry" on vehicleservicepros.com

### Heavy duty in-ground scissor lift

Rotary Lift's EFX60 heavy duty in-ground scissor lift incorporates patented design features to make lift setup and operation faster and easier,

resulting in more productive technicians and less vehicle downtime. The EFX60 incorporates Rotary's patented universal style lifting saddle with flip-up adapters and a wide range of lightweight, certified adapters. This

datapters. This technician-friendly design makes lift setup a breeze. The lift's infinite adapter adjustment range means technicians can precisely position adapters to properly lift vehicles weighing up to 60,000 lbs. The EFX60 was built with superior strength to provide greater service life, reduced maintenance and better overall productiv-

ity. Its centering links are 33 percent stronger than those on similar lifts. Enter 149 at "e-inquiry" on vehicleservicepros.com

### **SUV** and service truck jack

Norco's 3-1/2 ton heavy duty floor jack has been designed for a variety of automotive shop uses, including the added capacity and maximum lift height required to handle most SUV and 1-ton+ service trucks. This jack features steel hydraulic block con-

struction, a double pump piston design to quickly raise the jack to the maximum height, and a removable two-piece handle with knurled hand grip for ease of use. Other features include 4" low and 21-3/8" maximum lift heights (without saddle adapter), 7" low and 24-3/8" maximum lift heights (with saddle adapter), a safety bypass system that protects pressure cylinder, and a safety overload system that prevents the jack from being used beyond its rated capacity.

Enter 150 at "e-inquiry" on vehicleservicepros.com





### Jack vehicles on four-post lifts

WK Sales & Distribution's Heavy **Duty Air Rolling Jack for four-Post** Hoists, Nos. WK15 and WK18, come adaptable to all major four-post hoists in the market. It is designed for brake, suspension, wheel alignment and all other vehicle service work. It features 15,000-lb/18,000-lb lift capacity (between the WK15 and WK18, respectively), air bag enclosed in steel shell for added protection, three safety lock positions every 2", air control valve providing a non-spark design, stackable adapter, precision rollers that allow the jack to be positioned anywhere beneath vehicle, and telescoping side members that allow runways to be adjusted to various widths.

Enter 151 at "e-inquiry" on vehicleservicepros.com



Enter 162 at "e-inquiry" on vehicleservicepros.com



#### Low-profile floor jack

AFF's Heavy Duty Low-Profile Jack, No. 300T, comes as a 3-ton heavy duty jack that provides a super low pick up point for use with vehicles where ample clearance is necessary. It works between a height of 3-3/4" all the way to 21-1/2". Other features include universal joint technology, pinned steel saddle, a safety valve to prevent overloading and center pump plunger design. It is built to be both durable for years of use and tough in order to withstand abuse.

> Enter 152 at "e-inquiry" on vehicleservicepros.com



#### I-Base design for more flexible positioning

The TraXion ProGear TopSide Creeper has a fully padded frame with a replaceable, padded upholstery cover. The cover is secured using Velcro, so it is removable for cleaning or replacement. The upholstered cover slides over a sling instead of a hard plywood deck to improve comfort, reduce weight and make replacing the decking much easier. An I-base design allows for more flexible positioning around the vehicle.

> Enter 153 at "e-inquiry" on vehicleservicepros.com



#### Foldable engine crane

The Hein-Werner 2-ton foldable engine crane, No. HW93809, combines strength and convenience. The three-boom extension positions provide versatility in application extending to a height of 130", and a reach of 50" with a swivel handle hook for full load rotation. This engine crane includes adjustable wide-clearance legs that can be folded up for convenient storage. One of the legs has been designed with a swivel caster added for accurate placement of the base for optimum working conditions. The manual hand pump was designed for easy and controlled load lifting. It is made in U.S.A.

#### Enter 154 at "e-inquiry" on vehicleservicepros.com

In the February 2013 issue of Professional Tool & Equipment News, the description incorrectly indicated this product could hold an engine. PTEN regrets the error. Hein-Werner does offer a product to hold engines, which can be viewed on page 34 of this issue.



#### Low profile creeper

Omega Lift Equipment took the normal six-caster creeper and lowered it to a versatile 2" minimum height clearance on the Low Profile Creeper, No. 91400, for those low, hard-towork-on vehicles. This creeper allows technicians to crawl under low ground clearance rides and add six polyurethane wheels for smooth movement. Features include a heavy duty 400-lb capacity and thick steel frame for durability. This creeper is 40" in length and weighs in at only 28 lbs.

> Enter 155 at "e-inquiry" on vehicleservicepros.com



#### Heavy duty, low-profile creeper

The ATD Tools Heavy-Duty 3-in-1 Low Profile Z Creeper, No. ATD-81049, quickly and easily converts from a low-profile creeper to Z-Creeper seat to L-Seat. Perfect for the technican, paint and body or detail shop, this creeper has a 450-lb capacity, comfortable fully upholstered pad, six oil- and chemicalresistant 3" wheels, and a powdercoated steel frame. Size: 39-7/8" long by 26" wide by 4-1/2" high. The unit weighs 26 lbs.

> Enter 156 at "e-inquiry" on vehicleservicepros.com



#### Easily move an immobilized vehicle

The RCD-1500 wheel dollies from Ranger Products quickly go into place and lift vehicles. These advanced floor jacks can be compared to "GoCarts" in the way they can quickly fit around the wheel of a vehicle and easily raise it off the shop floor in a few quick foot pumps. With four wheel dollies, one person can effortlessly move up to a 6,000-lb car or truck.

> Enter 157 at "e-inquiry" on vehicleservicepros.com



#### Scissor alignment lift

The John Bean Scissor Alignment Lift from **Snap-on Equipment** is a rugged 12,000-lb capacity scissor alignment lift with an open front design that provides easy access to alignment service and calibration areas. The "Pro-Style" 24" wide runways provide easy driveon for large vehicles, while hydraulic equalization and the full support rear member deliver repeatable smooth level lifting.

> Enter 158 at "e-inquiry" on vehicleservicepros.com



#### Range of lifting capabilities

The Launch Tech TLT210-AS two-post lift, an ALI-certified lift, has a lifting capacity of 10,000 lbs, perfect for lifting the smallest economy cars to the largest SUVs. This lift has the ability to lift both symmetrically and asymmetrically, insuring maximum service bay efficiency. The TLT210-AS requires a low ceiling height at 144". Other features include an adjustable column height and width of 6", assuring ease of installation with various ceiling heights and narrow service bays.

> Enter 159 at "e-inquiry" on vehicleservicepros.com



#### Lift up to 12,000 lbs

Dannmar's Major D-12 lift comes equipped with a single hydraulic cylinder under the runway. The heavy duty industrial-grade hydraulic cylinder features single-piece contruction and pilot-fitted, machined steel piston. It is resistant to hydraulic fluid leaks, thanks to pressure-loaded U-cup piston seals, backups and wear bands. This lift is coated in a durable powdercoat finish that provides protection from most abrasives, chemicals and weather for increased durability. The D-12 can handle up to 12,000 lbs and comes with long approach ramps, anti-skid runway, bolt on tire stops, a steel slack safety lock mechanism and more

> Enter 160 at "e-inquiry" on vehicleservicepros.com



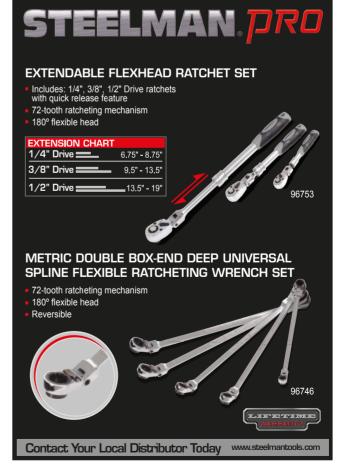
#### For quick lube stations

The MAHA TWIN IV 7700 double scissor lift provides quick lube stations, car dealers and automotive workshops with a lift capable of servicing a wider range of vehicles faster and safer than other double scissor lifts on the market, according to the manufacturer. This lift has a holding capacity of 7,700 lbs and a raining lever that allows full lifting force even in the lowest height range. The lift comes customizable to accommodate diverse automobile styles, including low clearance and narrow frame vehicles. Wheels can be easily accessed for service.

> Enter 161 at "e-inquiry" on vehicleservicepros.com







Enter 48 at "e-inquiry" on vehicleservicepros.com



### **AIRCAT 1150 Killer Torque 1/2" Impact Wrench**

High-power output, innovative exhaust and low noise differentiate this tool.

IRCAT's 1150 Killer Torque 1/2" Impact Wrench features 1,295 ft/ lbs of loosening torque, 1,400 blows per minute and a torque range of 200-950 ft/lbs. Weighing 4.5 lbs, this tool features a lightweight, all-black composite body with a patented ergonomic handle. The impact wrench's patented tuned exhaust system gives this tool a low decibel level of 86 dba, with no loss of power. The 1150 is assembled in the U.S. with a two-year parts and labor warranty.

#### The review

Lou Fort, the lead technician of K.A.R.S. Inc. in Huntingburg, IN, uses a 1/2" impact just about every day. When he received a new AIRCAT 1150 1/2", he was amused by the box, because it said "'Caution' Xtreme Power" on the front. Fort decided to find out just how extreme that power was.

The tool was tested on lugnuts, crank pulley bolts, suspension parts and other typical jobs that require a 1/2" impact. Immediately, Fort recognized the tool's brute power. "The massive amount of nut-busting power, a cool 1,295 ft/lbs," was so powerful in practice that he even

used the tool to remove lugnuts on vehicles that "were formally reserved for the big 3/4" gun."

Fort thought it's low noise level was second only to the tool's power. He also thought AIRCAT "hit a home run" by "figuring out how to send the exhaust out through the base of the handle and still keep such impressive, industry-leading power."

The tool's ease-of-use was also a plus. "AIRCAT made it easy to choose three different power levels in 'forward,'" Fort noted. "Weighing in at just a bit over four pounds doesn't hurt either."

Even though Fort was enamored with the tool, he did have suggestions on how to improve its handle for users that have larger hands.

"The one feature I don't much care for has to be the base of the handle. I like the rest of it, just not the very bottom. I have an extra-large hand and the base of the 1150's pistol grip style handle doesn't fit perfectly," he observed. "Some of the other techs in our shop, with smaller hands love the handle design. Personally, I would like the handle to be about 3/16" longer or have less of a ridge at the base."



Fort admitted he was being picky as "the handle isn't going to keep me from putting the AIRCAT 1150 on my tool cart."

Overall, Fort rated the impact a "10 out of 10."

"Even with the handle base suggestion, the power output and incredibly low sound output combination are just too impressive not to make this tool a 10. Oh, and let's not forget about the two-year warranty or the fact that is assembled in the U.S.A."

Fort was so impressed that he made it clear he anticipates purchasing AIRCAT equipment in the future. "This is the first AIRCAT tool I have ever used," he said. "If this impact survives the test of time, it won't be the last."

> Enter 429 at "e-inquiry" on vehicleservicepros.com

### MAC Tools TaskCode code reader

Code reader provides quick, initial diagnosis of vehicles.

he Mac Tools Task Series family of code readers includes the TaskCode Trilingual OBD II/EOBD and CAN Code Reader (No. ET105AN). This line of code readers works efficiently and effectively to prioritize troubleshoot, pinpoint problem components and get fast, accurate code reads. These code readers have an online database of top

repair fixes, which are linked to each code, and the online updates are free.

#### The review

Mike Steptoe, owner of Reliable Auto Repair in Fort Atkinson, WI, tried out the TaskCode code reader. He found that the unit helped with some basic, up-front diagnosis for vehicles entering his shop.

"The bigger (scan tools) take time to boot up, and then you have to enter all of the vehicle-specific information on the bigger scanners. For this one, it just goes in OBDII generically," said Steptoe. "It offers quicker code reading."

Steptoe advised he uses code readers one of two ways: for "parking lot diagnosis" to quickly read a code and determine whether the vehicle needs immediate attention or if it can be postponed; and to pinpoint which system actually failed on the vehicle.

This initial diagnosis helps Steptoe efficiently determine the next steps to fixing vehicles that come into his shop.

Steptoe used the code reader for a number of functions, including clearing codes on vehicles and resetting the "check engine" light. He found the unit easy to use, with step-by-step instructions once the unit was plugged in.

"(The unit) tells you right on the screen what to do next, if you want to

The TaskCode
Trilingual OBD
II/EOBD and
CAN Code
Reader (No.
ET105AN)

Med TaskCode

ET105AN

PO183

1/3
PUEL TEMP SEASOR

ENTER

read codes, clear codes. You just plug it into the ALDL connector and go."

For improvements, Steptoe suggested the possiblity of having the ability to read

body computer information and ABS information.

Steptoe advised there were five different functions to use from the main screen: code reading, VIN number, freeze frame, "check engine" status (on/off) and input/output monitors for emissions testing.

Overall, Steptoe rated the tool an eight out of 10 because of its speed and ease of use.

Enter 430 at "e-inquiry" on vehicleservicepros.com

### Makita 12V MAX Cordless Recipro Saw

Lightweight unit allows tech to access tight areas and cut smaller pieces of metal.

akita offers the 12V Max Lithium-Ion Cordless Recipro Saw, No. RJ01W, featuring a variable speed motor with a 1/2" length stroke for faster cutting. The saw performed faster than the leading competitor when cutting 1-1/2" PVC pipe and 1" EMT, according to the manufacturer. The "toolless" blade change system allows for faster blade installation and removal for increased productivity. The dual-position on/off switch allows for either paddle switch or trigger switch operation for increased versatility. The compact size (14" long, 2.6 lbs) is engineered for convenient one-handed operation.

#### The review

Tom Karagianis, owner and lead technician at Tarkus Automotive in Milwaukee, WI, reviewed the Makita Recipro Saw.

"I picked it up and used it the day I got it. I've been using it ever since," said Karagianis.

Of the features Karagianis liked, he listed the quick change, the unit's light weight and the ease of use to get into tighter

sm. you tim to to

This recipro saw features a variable speed motor with a 1/2" length stroke for faster cutting.

areas than a larger saw.

When discussing the dual-position, on/ off switch, he said the paddle and trigger switch operation gave him better access for undercar jobs in hard-to-reach areas.

He also appreciated the long-lasting battery life and quick charging of the lithium-ion batteries.

"Any lithium-ion (batteries), they work wonderfully," said Kargianis. "They're so much better than the old batteries. They last longer than the other chargeable batteries."

Karagianis used the tool on a number of smaller jobs, including cutting small parts.

"It's great for making small parts, when you're welding or making a bracket or cutting something apart when you don't want to use a cut-off tool."

Karagianis went on to explain other uses he found for the tool.

"It's great for getting into corners and cutting bolts off, where you can't get to with a torch or when you're near wiring. All kinds of odd jobs

around the shop."

Karagianis said the metal blade has lasted through multiple uses. "The blade seems to last a very long time, as long as you keep it oiled."

Karagianis also mentioned that he had used other blades with the unit, for more heavy-duty jobs. "I've used it with another name brand saw to cut pipe and exhaust."

When asked if he had any improvements for the tool, he said, "No."

Karagianis went on to explain, "I like it because it's short. It's easy to handle. It's lightweight. I absolutely love it. "

Enter 431 at "e-inquiry" on vehicleservicepros.com

## More at VEHICLE SERVICE PRODUCT GUIDE

#### XL Crude

Kazzkade

Enter 163 at "e-inquiry" on vehicleservicepros.com





### **Visit**

VehicleServicePros.com/ directory for more information on these products and thousands more.



#### **OTC, Bosch Automotive Service Solutions**

Genisys Touch Diagnostic System

Enter 164 at "e-inquiry" on vehicleservicepros.com



#### Silvertronic, Inc.

Hybrid and Electric Vehicle Test Kit

Enter 166 at "e-inquiry" on vehicleservicepros.com



SP-7520 3/8" Composite Drill

Enter 165 at "e-inquiry" on vehicleservicepros.com



#### **Alvin Products**

Rubber In A Can

Enter 167 at "e-inquiry" on vehicleservicepros.com









Enter 55 at "e-inquiry" on vehicleservicepros.com

### ADVERTISERS' INDEX

Advertiser	Page #
AGS COMPANY	38
AUTEL	39
AUTODATA PUBLICATIONS	36
AUTOLAND SCIENTECH USA	44
BENDPAK/RANGER PRODUCTS	02
CLORE AUTOMOTIVE	40
CORNWELL QUALITY TOOLS	41
DREW TECHNOLOGIES	25
ACDELCO/DUROFIX	10
ELECTRONIC SPECIALTIES	51
E-Z-H00K	55
GEARWRENCH/APEX TOOL GROUP	34
GENERAL TECHNOLOGIES	43
HANSON GLOBAL	49

Advertiser	Page #
HEIN-WERNER	44
HOMAK MANUFACTURING CO.	59
IATN	54
IDENTIFIX	27
INDUCTION INNOVATION INC	55
INGERSOLL RAND	17
KAR LIFT SOLUTIONS	42
LAUNCH TECH USA	09
LINCOLN INDUSTRIAL	37
LOCK TECHNOLOGY	42
MAC TOOLS	03
MASTER APPLIANCE	55
MASTERCOOL, INC.	54
MATCO TOOLS	23

Advertiser	Page #
MAYHEW TOOLS	46
MECHANIX WEAR	15
Mohawk Lifts	47
Napa	05
POWER PROBE	07
REELCRAFT INDUSTRIES	28
ROBINAIR, A BOSCH SERVICE SOLUTIONS BRAN	D 35
S K HAND TOOLS	60
SNAP-ON DIAGNOSTICS	13
SP AIR	40
STEELMAN by JS PRODUCTS	51
tiger tool international	29
TRACER PRODUCTS	45
WALTON COMPANY	55



Enter 50 at "e-inquiry" on vehicleservicepros.com



Enter 52 at "e-inquiry" on vehicleservicepros.com



Enter 51 at "e-inquiry" on vehicleservicepros.com



Enter 53 at "e-inquiry" on vehicleservicepros.com



### **Car Care Council Women's Board** continues to provide career leadership to women in the automotive aftermarket

WB has provided \$54,000 in scholarships nationwide to date.

he Car Care Council Women's Board (WB) provides career leadership to women in the automotive aftermarket. It is a non-profit organization supported by the Car Care Council, the information source for the "Be Car Care Aware" campaign. Its membership represents many areas of the automotive aftermarket, including parts distribution, marketing, advertising, financial, educational, independent service stations and others.

Since the group was founded in 1988 by female automotive industry professionals, the WB has grown to accomplish many things and continues to expand its reach to consumers and in the industry.

Each year, the WB awards scholarships to female students studying to enter the automotive aftermarket. The WB has

### **Content Licensing for Every Marketing Strategy** Marketing solutions fit for: Outdoor · Direct Mail Print Advertising Tradeshow/POP Displays Radio & Television Logo Licensing | Reprints | Eprints | Plaques sophisticated statement about your product, service, or company in your next marketing campaign $Contact Wright's \ Mediato \ findout how we can customize your acknowledgements and recognition of the property of the prope$ For more information, call Wright's Media at 877.652.5295 or visit our website at

#### Car Care Council WB at a glance

- \$54,000 in scholarships awarded
- 15 years of hosting the Women's Board Reception at AAPEX
- Inaugural Women's Business Summit in 2011
- 284 Automotive Communications Awards given since 2004
- Nine Aftermarket Woman of the Year Awards presented

awarded a total of \$54,000 in scholarships to women from all across the country.

The top scholarship recipient receives the biggest financial reward and a trip to the Automotive Aftermarket Products Expo (AAPEX), where she is honored at an annual reception.

In memory of one of the founders and because of her contributions, particularly in the WB Scholarship program, this year the WB named the top scholarship the Becky Babcox Women's Board Scholarship Award.

#### **Popular awards**

Among the WB's most popular awards are the annual Automotive Communications Awards (ACA) for companies and agencies that provide automotive information to consumers and the trade professionals who interact with them on a daily basis.

Since 2004, the WB has awarded 284 Automotive Communications Awards. The WB annually honors deserving women in the industry with the Women of the Year Awards.

Since its inception, the WB has awarded nine Aftermarket Woman of the Year Awards based on her longevity in the aftermarket, career accomplishments, leadership capabilities and dedication to the automotive aftermarket industry.

Since 2011, the WB has expanded the Women of the Year Awards program to include Female Service Shop Owner of the Year to an outstanding woman who has a proven record of excellence in the automotive service industry, and Woman of Promise to a woman who has shown potential in her aftermarket career.

The WB hosts bi-annual meetings with a day and a half of strategic planning geared toward encouraging women to enter the industry and consumer education. Meetings are open to the public.

For more information on WB, visit www.carcare.org/womensboard, or email gina.lemon@aftermarket.org.

> Reprinted in part with permission from the Automotive Aftermarket Industry Association, Aftermarket Insider vol. 79.



Toll Free: (800) 547-7377 ext. 1396

Fax: (866) 717-0902

Email: mike.braun@cygnus.com







### WE WANT YOUR HAND TOOL IDEAS!

- LTI Tools has an awards and royalty program for your new hand tool ideas.
- · We offer you international distribution.
- If you have a new product or idea, please call, write or e-mail LTI Tools.

Lock Technology, Inc. Toll Free 800-421-7241 www.ltitools.com ltitools@ltitools.com



#### ADVERTISE HERE

Contact Mike Braun for advertising information: 800-547-7377 ext. 1396 Mike@pten.com



Portable Laser Wheel Alignment for \$985<sup>oo</sup>!

www.advantagewheelalignment.com

#### TURN YOUR TOOL IDEA INTO MONEY

### LISLE CORPORATION CURRENTLY PAYS ROYALTIES TO OVER 120 INDIVIDUALS.

Lisle has been in business for over 100 years and for over 40 years have been working with individuals on an award or royalty



basis. If you have an original tool idea which others may need, we have a procedure to evaluate your idea.

### Respond now to request an idea disclosure packet.

P.O. Box 89 • Clarinda, IA 51632-0089 712-542-5101 • Fax 712-542-6591 www.lislecorp.com/about/program

Go with the manufacturer with world-wide distribution, with the name you can trust.

#### ~ FaceLube ~

Official & Exclusive Men's Skincare of Ellen DeGeneres Show, Dancing w/Stars etc. Iconic automotive theme retail packaging & display, excellent add-on sale for lube gift shops/boutiques. Reps/Distributors wanted. service@facelube.com or 323.233.6688



# PROBLEMS SOLVED!

Search your tool box, there may be a great tool idea hiding there.

We can change your tool idea into reality *and* a royalty payment.

#### Contact us for details at:

714 693-7666 or jmocilac@sptool.com 5350 E. Hunter Ave, Anaheim CA 92807



SCHLEY PRODUCTS INC.

A name you can trust for over 30 years.

#### Readers offer a proud look at their awesome tool storage systems.



Security equipment allows McGullam to watch his toolbox.



McGullam is proud of his toolbox.

**Robert McGullam Dallas European Auto** Plano, TX

echnicians have been coming up with methods to secure their tools for years; everything from simple locks to chaining the boxes to the wall or floor. However, few have seen a toolbox that has taken advantage of security cameras, courtesy of its owner, Robert McGullam.

The toolbox is a Matco Tools Quad Bay, No. MB8545, including the work station hutch, upper horizontal locker and two additional side lockers. Purchased back in 2001, this box cost about \$25,000 before financing.

Nicknamed "the school bus," due to its yellow paint job, other technicians



The "school bus, originally resided at the Mercedes dealer during the great "Toolbox War."

in the Mercedes dealership added a swinging stop sign and flashing lights to complete the look. In ode to the toolbox, McGullam earned the nickname, "Schoolbus Bob."

Using the latest technology to make a toolbox safe and secure.

This massive toolbox initially was one-of-a-kind in the shop, but the yellow behemoth initiated something of a "toolbox war." "I believe it was the envy of the shop at the time," McGullam recalls. "The dealership had 40 other techs, and one after another, (they) started buying huge toolboxes with side lockers."

Like all wars, there were no winners, only losers. "The war came to a halt when Mercedes made the dealer remodel the shop and install a modular tool storage system for a more uniform look," remembers McGullam. "Schoolbus Bob" and all his colleagues had to withdraw their forces and take their monster toolboxes home.

When McGullam took a job at an independent shop called "Autoscope," the toolbox was called back for action. The shop had security equipment everywhere. This inspired McGullam to upgrade his toolbox's arsenal.

So, he installed a CCTV camera system on his toolbox, using an eightchannel Swann Security System and ACER LED monitor standard with VGA and HDMI inputs. McGullum made camera mounts himself out of heavy duty gas pipes and with flanges, painted to match. He ran the wiring through the pipes to prevent tampering and make the set up more rugged.

Some of McGullam's most important tools are out and about on his tool cart during the day. These include his Mercedes SDS scan tool, GM Tech2, Autel Maxidas and a laptop with Internet access, all of which he uses for troubleshooting problems.

With about \$150,000 worth of tools in the box, McGullam believes the security system is well worth it: "This addition to my toolbox is my favorite part, because not only is it functional, but it shows clients that I take pride in what I do and that I extend that pride when I work on their vehicles." 🖺

Want to show off YOUR Big-Time Box? Email craig@pten.com for more information.



#### **Product Features:**



HMC High Security Tubular Locking System



Textured ABS Plastic Door Handles



1 ½"Thick Plywood Work Surface



Backsplash Panel With Pegboard Design



MODEL No.

Grated Lower Shelf For Added Storage Room





PRODUCT DESCRIPTION

### **HOMAK GARAGE SERIES**



#### **59" GARAGE SERIES 3-DOOR WORKSTATION**

- Manufactured With High Quality 1.0mm Cold Steel.
- 3.2 mil Epoxy-Polyester Powder Coat Paint Finish.
- HMC High Security Tubular Locking System.
- Plastic Handles In Overhead, 3-Door Storage Compartment.
- 1½" Thick Plywood Work Surface For Durability.
- Backsplash With Pegboard Design Offers Additional Hanging Space For Hand Tools.
- Grated Lower Shelf Stores Heavy-Duty Items.
- A Perfect Addition To Any Garage!

#### **Product Specifications:**

WORKSTATION	WIDTH	DEPTH	HEIGHT	CAPACITY	STORAGE
Overhead Compartment	52 3/4"	11 1/8"	16 1/8"	110 lbs	5.85 cu ft
- Single Door	19"	10 3/4"	16 1/8"	55 lbs	1.91 cu ft
- Double Door	33 1/2"	10 3/4"	16 1/8"	55 lbs	3.36 cu ft
Plywood Work Surface	59 1/4"	28 3/4"	1 1/2"	264 lbs	-
Grated Lower Shelf	57 3/8"	30 3/8"	25 5/8"	110 lbs	25.8 cu ft

#### **OVERALL DIMENSIONS**

WIDTH DEPTH HEIGHT PCWT CASEWT CAPACITY

**GS00659031** 59"3-Door Steel Workstation 59 ¼" 30 ¾" 68 ½" 182 lbs. 194 lbs. 550 lbs.

Phone: 1.800.874.6625

www.Homak.com

Fax: 724.535.1081

