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# The latest in vehicle service

Tools, equipment, and tool storage to streamline shop operations.

By David Brierley, editor, Fleet Maintenance

ools and equipment are the lifeblood of any shop; without them, not much work would get done. But selecting what products are right for your operation can be a challenge. Pneumatic or cordless, scan tool or code reader, budgetpriced or high-end ... the options are seemingly endless.

The following pages are designed to keep you up-to-date by providing a selection of the latest products from a range of top brands.

Sometimes, however, product descriptions alone aren't enough to get a feel for how the tool will actu-

ally perform, so we also include product reviews. We've gathered feedback from independent echnicians who use these tools in the bay and put it into an easy-to-digest format, bringing you the most

important details to help decide if each tool is right for your shop.

We also welcome you to find more information on the products and full length tool reviews by entering the URL below each item in your internet browser.

# **Diagnostic tools**

From code readers to bidirectional scan tools, the advanced technol-

ogies on today's vehicles require equally sophisticated tools to troubleshoot and find the cause of a problem.

While emissions issues have been a major reason to use a scan tool for the past decade, OEMs are quickly adding advanced driver assistance systems (ADAS), such as adaptive cruise control and lane departure warning, to their vehicles.

Diagnosing these systems may require more advanced scan tools, so it's important to make sure your shop has the tools it needs to service the vehicles in your fleet.

### **Power tools**

Pneumatic tools have long been a staple of shops everywhere, but with new battery technologies developed in the last few years, cordless power tools are starting to share some of the spotlight.

There may not be a one-size-fitsall solution for each shop, however. Cordless tools might make more sense for smaller jobs, for example, while pneumatic tools may offer lighter and less bulky solutions for heavy duty impacting.

# Specialty and hand tools

The forebearer of power tools, hand tools have been used since the first humans smashed something with a rock, and they are just as crucial today as they were centuries ago. Over time, hand tools have been updated for ergonomics and efficiency — a wrench isn't always just a wrench.

Specialty tools help technicians perform specific, time consuming tasks more quickly. Disassembling a seized U-joint, for instance, could take hours with standard hand tools or minutes with a U-joint puller. It can be helpful to determine what tasks are slowing down vehicle service in your shop and consider whether a specialty tool could speed up the process.

# **Shop equipment**

Lifts, air hoses, battery chargers, parts washers, alignment systems — these are all pieces of shop equipment critical to most fleet operations. Consider if updated equipment could make your shop more productive.

# **Tool storage**

Tools and equipment are a sizable investment for technicians and for fleets, so it's important to take care of them and keep them in good working order. It is equally important to keep them safe and well organized so they can be found when needed without having to search.

This is where tool storage solutions come into play. From wrench organizers and screwdriver holders to tool boxes and carts, keeping tools within easy reach is crucial when it comes to shop efficiency.

### Conclusion

Vehicle uptime is directly related to the efficiency of the technicians providing service, and the tools and equipment available can help or hinder that efficiency. These products are constantly being reevaluated, redesigned, and improved, and vehicle technologies are constantly advancing. Therefore, it is imperative to remain informed of the latest tools available in order to maximize your fleet's uptime.

# **Contents**

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**30** Tool Storage

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# **Diagnostic Tool**

### PURCHASE CONSIDERATIONS

- Will the tool be used for one vehicle brand or for a range of vehicle makes?
- Method and frequency of software updates
- How detailed do you want the information to be?
- Ease of use
- **◯** Tablet, handheld, or PC-based tool
- Physical shape and size
- **◯** Touchscreen and screen size
- Onboard memory capacity
- **✓** Wireless versus cables
- ✓ Functionality/capabilities
- Expandability/upgradeability
- **Quality**
- Durability
- **Warranty**
- **✓** Training resources
- Technical support
- Brand reputation
- **✓** Budget range/price

# Heavy duty diagnostic solution

The **Bosch ESI [truck] Scan Tool** offers a solution to independent repair shops and fleets seeking a single scan tool for all their heavy

duty and medium duty trucks, covering all major heavy duty truck and medium duty truck engine, transmission, and brake system combinations with diagnostics and embedded repair information. Heavy duty diagnostics coverage includes Freightliner, International, Kenworth, Mack, Volvo, Peterbilt,



Sterling, and Western Star. Medium duty coverage includes Sprinter Van, Isuzu, GM, and Ford. Engine coverage includes Caterpillar, Cummins, Detroit Diesel-MBE, Deutz, MTU, Navistar, PACCAR, Perkins, and Volvo and includes medium and light duty software.

For more information visit VehicleServicePros.com/21080408



# Comes with OEM-approved smoke-producing fluid

The **OEMTOOLS EVAP/Smoke Diagnostic Leak Detector**, No. 24684, is designed to quickly find leaks on cars and light duty trucks. It locates EVAP leaks and cooling system leaks, identifies intake and exhaust leaks, and finds wind and water intrusion. The EVAP/ Smoke Diagnostic Leak Detector features variable flow control and an integrated regulator. In addition, it comes with OEM-approved smoke-producing fluid.

For more information visit VehicleServicePros.com/21121810

### Able to view hard-to-reach areas

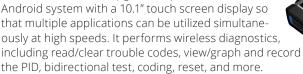
The Launch Tech USA Videoscope 800 is designed for viewing and capturing hollow spaces and hard-to-reach areas in all types of vehicles. The videoscope features a megapixel lens, 2.7" TFT display, and a lens tube of 1m in length and 5.5mm in width. It allows the user to inspect the internal components of an engine for carbon deposits, wear and tear, and to pinpoint sources of unwanted noise. It also helps identify corrosion and confirms component failure without taking apart the entire engine block.

For more information visit VehicleServicePros.com/21129410

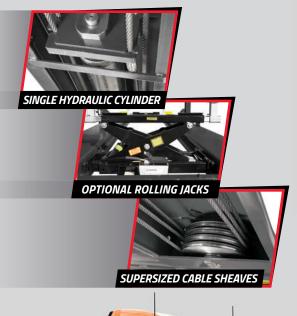
# Designed specifically for heavy duty capabilities

# The Matco Tools Maximus 3.0 HD Diagnostic Scan Tool, No.

MDMAX3HD, is designed to be the fastest, strongest, and most intuitive member of the Maximus family specifically for heavy duty capabilities. The scan tool runs on an upgraded open



# HEAVYWEIGHT LIFTING





BendPak's heavy-duty truck lifts are a whole new breed of rugged.

They're engineered to make light work out of heavy lifting.

They work better, are built to last and feature upgrades that increase safety, durability and productivity. The four-post HDS series generously provides models with 18,000 to 40,000-lb. lifting capacities. Each lift features extra-wide runways to accommodate a wide variety of vehicle configurations.



BendPak's mobile column lifts provide time-saving features that keep your work bays productive and profits soaring. No other system on the market matches these lifts for safety, flexibility and ease-of-use. With a lifting capacity up to 144,000 lbs. per set of eight columns, never before has a mobile lift series delivered so much power and versatility for both indoor and outdoor applications.



# DIAGNOSTIC TOOLS

# Offers remote services

The **DrivePro ES** from Opus | IVS is designed

to help technicians repair complex vehicles with licensed OE diagnostic software, remote programming, and calibration while being connected to live repair guidance from OE master technicians. DrivePro ES is equipped with licensed OE diagnostic software to identify the root causes of issues for all major domestic, Asian, and European vehicle brands. The built-in remote assist program offers remote assisted flash programming to eliminate the uncertainty of programming complex vehicles by oneself. According to the company, the rugged tablet is easy to use and more affordable than buying software directly from OEMs.

For more information visit VehicleServicePros.com/21123836

# On-the-spot oil sampling and analysis

The Schroeder Industries Pro Series is

designed to bring insight into the health of oil by providing real-time ISO cleanliness and water saturation readings, as well as oil condition information such as remaining oil life and/or particulate characterization. The

Pro Series comes in two versatile units: Total Fluid Health and Total Fluid Life. These units

measure and differentiate particulate contamination (Total Fluid Health only), as well as determine oil life, relative water content, and temperature, all in a user-friendly display. This realtime insight into the health of synthetic, organic, and mineral oils, as well as diesel fuel, helps users make informed decisions with regard to fluid replacement and treatment planning.

For more information visit VehicleServicePros.com/21108895

# Diagnostic and testing connections to most automotive vehicle connectors

The **Electronic Specialties** 70-pc Diagnostic Test and **Terminal Set**, No. 846, is a comprehensive test kit that features a variety of terminal adapter sets, back probes, clips, and test leads. The kit enables diagnostic and testing connections to most



automotive vehicle connectors, both foreign and domestic. There are 52 pieces of terminal/connector adapters that connect via the included 48" stacking banana plug test leads, eight pieces of connector/ sensor back probes that allow tapping of sensor signals and live readings, and 10 pieces of interchangeable test leads with probes, alligator, and crocodile clips. The kit is compatible with heavy duty, marine, equipment, off-road, and small engine applications.

For more information visit VehicleServicePros.com/21119726

# Converts a smartphone into a code scanner and DPF tool

The **CanDo LD Mobile** is designed to transform an iOS or Android



smart device into a code scanner and DPF tool for light duty trucks. The LD Mobile is a single connector with Bluetooth connectivity that offers full bidirectional controls and coverage for GM, Ford, Chrysler, Toyota, Honda, and Nissan pickup trucks. It features access to engine, transmission, ABS, SRS, and body control modules. It is also able to read and clear codes, present live data with graphing, perform DPF resets and regeneration, and more. The LD Mobile covers SAE J1850PWM and VPW, ISO 14230-4, 9141-2, 15765-4, and CAN protocols.

For more information visit VehicleServicePros.com/21116062



# Large, easy-to-read LCD display with backlight

The Lisle CAT III Digital Multimeter, No. 82600, safely and accurately tests electrical systems. The tool measures AC/DC voltage/current up to 600V and 10A, capacitance, diode, duty cycle, frequency, resistance, temperature, and transistor. It has 13 functions and an operating temperature range between -40 degrees F to 1,832 degrees F. The multimeter features manual or auto shutdown after 15 minutes of inactivity, protection against overload at all ranges, data hold, low battery indicator, and warning alarm. It also includes a LED flashlight for low light situations, a rubber outer case for protection against drops, a stand bracket to hold the meter at a viewing angle, and test probe holding clips.

# e, la liagnostics



New 20.1

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New Link V9

LIGHTER, FASTER, BETTER



# Diesel Laptops TEXA Truck Tool with Level 3 Support

The reviewer is pleased with the tool's ability to scan several different software systems.

### With each passing year, the technology

within vehicles is increasing, creating more complicated systems and issues that a wrench alone may not be able to fix. Technicians need tools on the same level as the problems they are solving, so the diagnostic tools they use must keep up with vehicle technology. Diesel Laptops' TEXA Truck Tool with Level 3 Support provides technicians with the ability to stay up-to-date.

Paul Summerlin, area maintenance manager at Red Classic Transit in Charlotte, North Carolina, is pleased with how the tool is able to save him time while working diag-



nostic jobs.

Though the software is fairly intuitive, any new tool — especially a diagnostic tool — can take some getting used to before its full potential can be reached.

"Once you get past the learning curve, it's pretty simple," Summerlin says. "I had technicians that were able to figure it out with little training."

The TEXA Truck Tool Support package did not come with a manual, but Diesel Laptops offers online training once a week as well as the video training that comes with the purchase. The video training helps users navigate through the software, Summerlin says.

His favorite part of the tool is that, "when you connect it, it scans the entire vehicle not just the engine or [transmission]," he says. "It looks at everything."

### Product description

The Diesel Laptops TEXA Truck Tool with Level 3 Support package is designed for the client that wants a complete "hands-off" approach to the entire TEXA kit, the company says. The package gives technicians complete support for everything with their TEXA system and provides a new laptop every three years. This package includes 12 months of updates for TEXA Truck Software, basic support for connection and software related issues, and 100 percent warranty coverage on your laptop and TXT hardware.

-Emily Markham

To read the full review, visit
VehicleServicePros.com/21132593

### TUUL KEVIEW

# Cojali Jaltest

Plug-and-play functionality and attention to detail elevate this diagnostic system in the reviewer's eyes.

### Heavy duty commercial vehicles are typi-

cally more complex than passenger cars. This complex nature can make diagnosing any of their many systems complicated. That's why Dax Acor, shop lead at FleetPride in Idaho Falls, Idaho, finds Cojali's Jaltest diagnostic system to be such a time saver for his shop.

"It's a plug-in-and-identify-everything kind of deal," Acor says. "[Jaltest] self-identifies every module on the truck ... it's almost easier to hook up and identify what kind of systems you have versus getting on a creeper and looking for the module."

As the Jaltest software identifies each module, Acor says it also pulls any codes from each one and condenses the information into a user-friendly page.

"It ... links to each module and then pulls



the codes ... and then it brings up one full home screen of all the modules that you have," he says.

In addition to providing fault codes, Acor says Jaltest allows him to test any number of vehicle systems as well.

If Acor is not able to figure out what is causing a problem on his own, he uses the Jaltest troubleshooting tool. It provides pinout diagrams, wire numbers, schematics — virtually anything necessary to work on the truck, he says.

Acor says that in addition to the troubleshooting tool, the Jaltest software contains training videos, frequently asked questions, and other resources to help technicians become familiar with the system's functionalities. Cojali Jaltest is an all-makes and all-systems diagnostics equipment developed to perform the most advanced vehicle diagnostics and maintenance tasks in an easy and intuitive way. Jaltest features bidirectional controls and guided troubleshooting. With Jaltest, technicians have access to a range of functionalities, including component technical data, wiring system and fuse diagrams, vehicle service data for vehicle inspections, vehicle technical data, troubleshooting by symptoms, releases and procedures with manufacturer information and range films.

-David Brierley

To read the full review, visit VehicleServicePros.com/21133249





- Light, medium and heavy-duty trucks
- · Optional software renewals with no skip penalties
- Unmatched technical support
- · Quality hardware
- · Live data stream
- Interactive bi-directionals
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- Test drive functions
- Remote forced regen (eTRUCK)
- Off-Highway coverage available



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# Nexiq USB Link 2 (Bluetooth Edition)

The reviewer is impressed with the versatility offered by this device's Bluetooth connectivity and its ability to work with most OEMs.



### Aftermarket scan tools can be helpful for

technicians who work on multiple vehicle makes, saving time by offering coverage in one device rather than having to purchase and manage software from several OEMs. A common pain point that remains, however, is the cables and cords linking the device to the vehicle. Edwin Hazzard, owner of Southeast Mobile Tech in Charleston, South Carolina, appreciates that the Nexiq USB Link 2 offers both the capability of an aftermarket scan tool and the untethered freedom of Bluetooth connectivity.

Hazzard says using the tool is fairly simple and straightforward.

"One end goes into the laptop, the other

one goes into the 9-pin Deutsch connector," he says. "I can just plug in under the dash on the truck, and then I can have my laptop outside ... so I'm not cabled to [the truck]."

Hazzard commonly uses the USB Link 2 with Allison transmissions and Cummins engines, though he says it works with "probably 90 percent" of the OEMs he services. He notes that the device can be used for diagnosis and, with some OEMs, programming.

Hazzard is pleased with the versatility and performance from the Nexiq USB Link 2 and the efficiency it brings to his operation.

"It's definitely a time saver," he says. "It's a great tool."

### Product description

The NEXIQ USB Link 2 (Bluetooth Edition) vehicle interface, No. 124032, is compatible with both iOS and Android mobile devices. It includes an Apple CoProcessor and supports the iAP2 protocol. The USB Link 2 is five times faster than its predecessor, has 16 times more RAM, and supports heavier bus loads on simultaneous channels. The Bluetooth module supports wireless communication via an enhanced data rate (500K b/s J1939). Also available with Wi-Fi (No. 124034)

-David Brierley

To read the full review, visit VehicleServicePros.com/2113340





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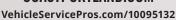
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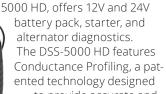






# Supports conventional lead acid, EFB, AGM, and pure lead batteries

The Midtronics Heavy Duty Battery Diagnostic Service System, No. DSS-



to provide accurate and decisive battery state of health information. Other notable features include print test results on a networked printer via built-in Wi-Fi, 3m field-replaceable heavy

duty test leads, optional amp clamp and integrated printer available, as well as a durable 3-pc design that includes a detachable controller with 5" full-color touchscreen display, tester pod, and charging dock. It also includes a multimeter cable for cable drop testing.

For more information visit VehicleServicePros.com/21126739



### Isolates sound with no unwanted noise

The JS Products Steelman EngineEAR

**Stethoscope**, No. 65001, consists of an ultra-sensitive microphone and amplifier providing a full range of sound with no missing frequencies. The professional noise-canceling headphones isolate sound with no unwanted sounds bleeding in. Using the flexible shaft with the metal probe for picking up sounds and vibrations, users are able to pinpoint noises and locate worn bearings and bushings, noisy valves and lifters, broken or worn gear teeth, faulty fuel injectors, wind or air leaks, and annoying squeaks and rattles. The stethoscope comes with one 9V battery.

For more information visit VehicleServicePros.com/21093722

# For heavy duty trucks and commercial vehicles

The Snap-on Pro-Link Edge Scan Tool, No. EEHD189090, is ideal for commercial truck shops, general repair, mobile service, and municipalities. Its diagnostic computer provides an easy and efficient way to diagnose complex commercial repair jobs and the modern interface is easy to scroll through information, review data lists, and cross-reference generic HD standard codes to OEM specific

codes. The heavy duty scan tool offers thousands of OEM tests, maintenance routines, and programmable parameters for most major systems on commercial vehicles. The base starter kit comes equipped with a carry case, three standard adapters, and support for J1708, J1939/1578, and OBD-II/EOBD. Additional OEM specific customization options are available through 10 add-on software suites as well as other accessory adapters.

For more information visit VehicleServicePros.com/21129757

# Offers flexible mounting options

### The Innovative Products of America Alpha MUTT with ABS and Rugged Tablet, No.

5705A-RT, is a service truck edition that features real-time, wireless, diagnostic-troubleshooting software that allows service professionals access and control to all aspects of trailer service and repair with a military-grade, MIL-STD-810 certified, weather-proof tablet. The 5705A-RT's versatile design offers flexible mounting options: hang from a truck, cart, or wall. Users can test lighting, ABS and air brake circuits, and perform PMI and DOT inspections while walking around, or from inside, a vehicle.

For more information visit VehicleServicePros.com/21121151



# Offers four hours of continuous use

The Autel MaxiVideo MV460 videoscope is ideal for inspecting difficult-to-reach areas with its semi-rigid flexible cable and 10-level adjustable LED light. It features a 1920 x 1080 high resolution camera, a 3.5" 640 x 480 full color LCD display, an 8.5mm camera probe, and a built-in 2600mAh battery with up to four hours of continuous use. The multipurpose videoscope is an economical solution to inspect machinery, facilities, and infrastructure in a safe, guick, and cost-effective manner, the company says.





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# **VIBROTHERM** by AIRTCAT. DRIVE

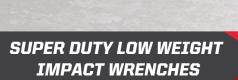
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RECAT

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Provides 2,300 ft-lb maximum torque and 2,500 ft-lb of loosening torque

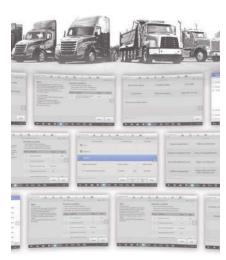




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# **DIAGNOSTIC TOOLS**

# Features a 4.5mm diameter camera probe

The Oasis Scientific Vividia D3245 USB Digital 2-Way Articulating Borescope features a 4.5mm diameter camera probe and a 1.5m-long insertion tube.

The D3245 can be bent in two directions at a maximum angle of 180 degrees. The insertion tube has metal-braided outside layers and the bending part is made with stainless steel. With a USB connection, one can connect the Vividia D3245 to a Windows PC (Windows XP, 7, 8, and 10), MacBook, or android devices. With an additional Vividia VA-B2 AirBox wireless converter, the D3245 can be used with iPhones and iPads. Users can easily take pictures and videos with the free software.

For more information visit VehicleServicePros.com/21085630

# Combines measurement and infrared capabilities

The **FLIR Thermal Camera**, No. TG275, is designed for automotive maintenance and repair technicians and is ideal for diagnosing problems in relays and switches, parasitic drain on the battery, drive train components, HVAC system (vents), and more. Featuring infrared guided measurement (IGM), the diagnostic tool combines non-contact temperature measurement and thermal imaging to help troubleshoot repairs, spot potential faults, and record images that will reassure customers that the problem has been fixed. It has a temperature range up to 1,022 degrees F, is drop-tested with an IP54 enclosure, and can hold up to 50,000 images. It also features a laser for precise measurements and a visible camera that provides additional context and clarity.

For more information visit VehicleServicePros.com/21113424

# Rates vibration severity with advanced color coding

The **Automotive Test Solutions iVA Intelligent Vibration Analyzer** uses Quad Vibration Technology (QVT). This technology can locate and identify the vibration, then rate the vibration severity with advanced color coding. The iVA can locate multiple vehicle vibrations simultaneously and connects to most vehicles in under five minutes, says the company. The kit comes with an intelligent vibration analyzer, four smart vibration sensors, two iVA microphones, two iVA microphone clamps, four iVA stereo jack cables, an iVA DLC cable, four iVA c-clamps, an iVA USB cable, an iVA USB software card, an iVA tape measure, and iVA pressure-sensitive tape.

For more information visit VehicleServicePros.com/21114168

# Uses conductance technology

The Techno Tools Heavy Duty Battery Condition & Charging System Tester, No. B400, is designed to test 12V heavy duty auto, truck, commercial, and marine batteries and 12/24/36V starter and charging systems including 42V Mild Hybrid systems. The battery size is not required to be entered into the unit; simply choose between automotive or truck battery types for testing. The

B400 eliminates tester input errors and allows the testing of batteries of unknown size. It can also test both flooded lead acid and AGM batter-

ies. The tester includes 4' heavy duty abrasion resistant cables for trucks with hard-to-reach battery compartments. The tester is made in the U.S.A.









With easy-to-use software and a massive array of technical information, technicians can perform an ultra-fast and accurate diagnosis to get the repair done right and the vehicle back in operation.

Scan the code with your smartphone camera or compatible QR reader to learn more about the 3824A Bosch ESI[truck]



# **Power Tool**

# PURCHASE CONSIDERATIONS

- Handle shape, size, length, material
- Tool style, size, and weight
- **Portability**
- Power trigger type
- **Controls and switches**
- **Ergonomics** 
  - Does the tool have features that increase worker performance and productivity while reducing discomfort, fatigue, and risk of injury?
- How much power/torque is required?
- Need for variable speed control
- Vibration and noise level
- Safety features
- Accessories/attachments
- Service recommendations
- **Durability**
- Warranty
- **Training resources**
- **Technical support**
- **Brand reputation**
- **Budget range/price**
- For cordless tools:
  - » What type of battery does the tool have? Battery type determines how long the battery provides power and how much time is required for recharging.
  - » Consider battery voltages. Eight to 12V systems are more common for ratchets, lighting, and applications requiring lower rpm. Eighteen to 20V systems are most common for impact wrenches. Over 20V is available for extended applications such as grinders.

# ✓ For pneumatic tools:

- Every air tool has an operational compressed air requirement - measured in cubic feet per minute (cfm). Every air compressor has a maximum cfm output. The air compressor's cfm output must be greater than the cfm requirement to keep all the pneumatic tools in the shop operating efficiently.
- » Compatibility with existing systems.



# **Built for rugged** performance

The **Equalizer Extractor 28V Kit** is built for rugged performance and strength. The heavy duty extractor runs on 28V Li-ion batteries that deliver both power and long run time. The kit includes two 28V Li-ion batteries rated at 3A hours each, 120V battery charger, two delta blades, safety glasses, spray bottle, and a plastic carrying case.

For more information visit VehicleServicePros.com/21094217

# Has a maximum reverse torque of 850 ft-lbs

The Mighty Seven 1/2" Drive EZ **Grease Mini Impact** 

Wrench, No. NC- 4233QHB, features the company's patented EZ grease system that is designed to extend the life and power of the tool. The design provides tool owners with a time-saving and effective method of self-maintenance. The impact wrench operates at 90 psi and can reach a maximum reverse torque of 850 ft-lbs in five seconds, the company says. The EZ grease system is backed by a three-year warranty.

For more information visit VehicleServicePros.com/21122944



# Offers 480 ft-lbs of maximum torque

The Puma 1/2" Air Impact Wrench, No. AT-5641, offers 480 ft-lbs of maximum torque and reaches 10,000 rpm of free speed. The tool features a stubby design and variable-speed trigger for compactness and speed control. The air impact wrench also offers high durability and performance in production, manufacturing, or assembly environments. It weighs 3.31 lbs.

For more information visit VehicleServicePros.com/21094502

Features a variable speed trigger and dial

The **DeWalt 20V MAX XR 5**" Variable Speed Random Orbit Polisher No. DCM848, features a brushless motor and

variable speed trigger and dial. It achieves a no-load speed range of 2,000-5,500 opm with a

15mm throw for a variety of applications including detail work on cars, headlights, windshields, and fiberglass. The tool is designed to be held either by its front-end gripping area or side handle. The battery housing is positioned away from the head of the tool and its rubber molding helps to protect the tool and the work surface as well as helps the user grip the tool.

# Lays flat for smoother surfaces with less imperfections

The Dent Fix Equipment Angled Finger Belt Sander, No. DF-FBS20, is designed to lay flat on a panel while sanding and to reach areas with limited access or maneuverability. The angled arm rotates 360-degrees to allow access into tight areas and to fold the tool in half for storing. The sander also features speed control to allow the user to adjust the rpm according to the job and a removable arm guide allows the user to sand a specified distance from edges, flanges, and corners. For convenient storage, simply disengage the



# Compact device with added safety

The Hazet 3/8" Pneumatic Impact Ratchet, No. 9021SR-1, is equipped with a non-rebound striking mechanism for low-impact work. The reaction-free behavior of the high performance twin hammer mechanism ensures maximum occupational safety. The tool is suitable for manual

> re-tightening for torques up to 191 ft-lbs and, due to its short total length of 6.2", it can be used in constricted spaces. The head is equipped with a rubber protective cover to protect from scratches and dirt. The tool also offers a cold insulated handle that makes work with

cold compressed air more comfortable. The impact ratchet works at speeds up to 500 rpm.

For more information visit VehicleServicePros.com/21093519

# Made from environmentally friendly materials

The Airboss Air Tools Twin Hammer Impact Wrench, No.

AW-140P, offers 1,253 ft-lbs of maximum torque, weighs 4.9 lbs, and is 6.54" long. The motor is designed to offer a longer life. This impact is lightweight and helps reduce the hand pressure needed during use to improve work efficiency. The tool is ergonomically designed, able to sustain high pressure, and is made from green materials that are recyclable and environmentally friendly.

For more information visit VehicleServicePros.com/21075510

# Compact size and lower weight reduce operator fatigue

The Makita 18V LXT Lithium-Ion Brushless Cordless

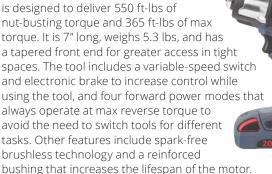
**2-pc Combo Kit**, No. XT284SX1, includes an impact driver and impact wrench as well as two batteries, a charger, and a tool bag. The 18V LXT Brushless Impact Driver (No. XDT13Z) delivers 125 ft-lbs of max torque and 0-3,400 rpm. It has a compact design at 5" long and weighs 3.3 lbs. The 18V LXT Sub-Compact Brushless 1/2" Square Drive Impact Wrench (No.

XWT13Z) delivers 155 ft-lbs of max torque and 245 ft-lbs of nut-busting torque. It is ideal for working in tight spaces and for overhead applications since the compact size and lower weight reduce operator fatigue.

For more information visit VehicleServicePros.com/21111307

# Tapered front end for greater access in tight spaces

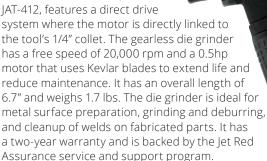
The Ingersoll Rand W5133 IQV20 Series 3/8" Compact Impact Wrench



For more information visit VehicleServicePros.com/21091758

# Powered by Kevlar rotor blades

The Jet 1/4" Industrial Gearless Die Grinder, No.



# Milwaukee Tool M12 FUEL 3/8" Stubby Impact Wrench

The reviewer enjoyed the tool's compact size and ability to reach into tight spaces

### When servicing vehicle systems, it is help-

ful for a technician to be able to reach into tight spaces without having to remove additional components to do so. This is one reason Kirk Hillman, equipment technician at the Colorado Department of Transportation in Denver, enjoys using the Milwaukee Tool M12 FUEL 3/8" Stubby Impact Wrench.

The impact wrench came packaged in a box along with two batteries, a charger, the user manual, and a carrying case. Once out of the box, it was only a matter of connecting the battery before being able to put the tool to use.

Hillman is impressed with the amount of power the impact wrench has for being such

a small size, and he also likes the grip and ability to use it with one hand.

"The grip was really comfortable, and the switch to move it from forward to reverse is easily a one-handed operation," he says.

The impact wrench saves Hillman time since he doesn't have to remove unnecessary parts and components to complete a repair. For example, with normal impact wrenches a technician would have to pull the cooling fans and possibly the radiator out to get to the timing belt, he says.

"As far as electric impacts go, it's by far the best one that I have," Hillman concludes.



# **Product description**

The Milwaukee Tool M12 FUEL 3/8" Stubby Impact Wrench is designed to allow improved access in tight spaces while delivering the power to complete demanding tasks. The and fasteners. A fourgives users the versatility to switch between modes to match the power and speed needed for the application at hand. These impact wrenches offer an auto shut off mode to prevent the over-fastening of bolts. The M12 **FUEL Stubby Impact** 

-Kayla Oschmann

To read the full review, visit VehicleServicePros.com/21132655

**TOOL REVIEW** 

# AIRCAT Pneumatic Tools VIBROTHERM DRIVE 1" Impact Wrench

A combination of high torque and low weight has made this heavy duty impact a popular tool at the reviewer's shop.

### Heavy duty vehicles tend to have heavy

duty parts and components, so heavy duty tools are required for service. Removing the lug nuts to access the wheels, for example, requires a lot of torque. That process typically involves a heavy, bulky pneumatic impact wrench that can be difficult for a technician to manage.

Eric Moore, fleet manager at Griffin Pavement Striping in Columbus, Ohio, says the AIRCAT Pneumatic Tools VIBROTHERM DRIVE 1" Impact Wrench, No. 1993-VXL, is smaller, lighter, more ergonomic, and offers more torque than any of the other 1" impacts they use.

"This one was a hit right off the rip; it just gets the job done," he says. "It definitely saves some time over the impacts that we've been using because it just has substantially more torque. It's also a lot more ergonomic than the older models that we have, as well as lighter."

In addition to its powerful, low-weight design, Moore says he and the other technicians at Griffin appreciate the fact that it has a 6" anvil, which helps them work around the hubs on dual wheels to access the lug nuts. They also like the adjustable handle which makes the tool customizable to any technician's needs.

"The handle is rotatable, so you can make it left-handed or right-handed," Moore says.

Moore and the other technicians at Griffin have been pleased using the Vibrotherm Drive 1" Impact Wrench.

Note: This product will be available June 1.

The AIRCAT Pneumatic **Tools VIBROTHERM DRIVE** 1" Impact Wrench, No. 1993-VXL, is designed to deliver high torque, low vibration, low noise, low weight, shorter length, and longer working life, as well as unmatched styling design, operating The impact wrench offers a maximum torque of lbs, and is 18.7" in length. The VIBROTHERM DRIVE 1" Impact Wrench includes a three-year warranty.

-David Brierley

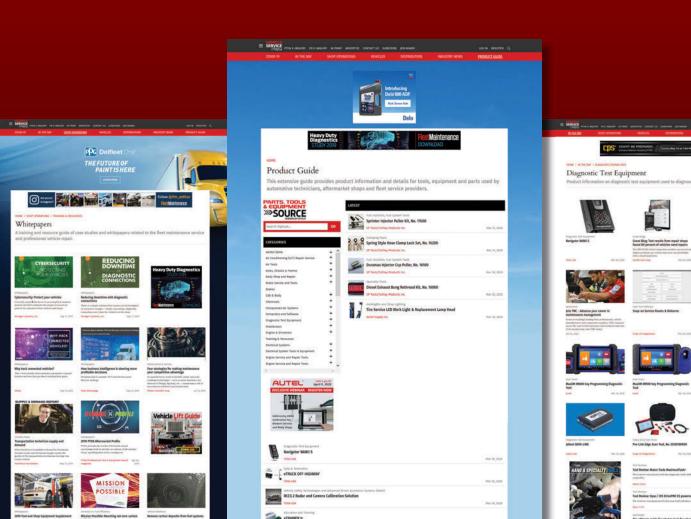
To read the full review, visit VehicleServicePros.com/21133369

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# **Hand Tool & Specialty Tool**

**PURCHASE CONSIDERATIONS** 

- Tool design: Style, size, shape, weight, etc.
- Ergonomics:
  - » How well does the tool fit the hand?
  - » Can the tool be used in a comfortable work position without causing awkward postures, harmful contact pressures, or other safety and health risks?
  - » Does the balance and the weight feel right?
  - » How easy is it to use?
- Quality.
- **Durability.**
- Warranty.
- Product support.
- Brand reputation.
- **Budget range/price**



# Torque handle +/- 6 percent accuracy

The Wiha Tools 20-pc. Insulated Master TorqueControl Set, No. 28781, features 10,000V-tested and 1,000V-rated insulated tools. The set includes 10-15 in-lbs TorqueControl handle, torque adjustment tool, PicoFinish SlimLine handle, SoftFinish SlimLine handle, SlimLine blade holder, and 15 SlimLine blades in a heavy duty canvas pouch. All tools have been individually tested for insulation integrity. The torque handle has a +/- 6 percent accuracy, is marked with a serial number, and includes a calibration certificate. There is an audible and perceptible click when the pre-set torque has been attained.

For more information visit VehicleServicePros.com/21126032

# Features a speed-fit button

The OEMTOOLS Pro Three-Piece Speed-Fit Pliers Set, No.22646,

feature a rapid adjustment mechanism to quickly resize and engage a range of fasteners and other applications. There is no need to remove the pliers from the work area to readjust, simply position the

jaws over the fastener and press the speed-fit button to adjust the jaw capacity to fit the application. The set includes three sizes (8", 10", and 12") made with a slim head to fit into hard-to-reach spaces, hardened teeth for a sure grip and wear resistance, and an electro-plated finish to resist rust and corrosion.



For more information visit VehicleServicePros.com/21109919

# Available in curved and straight blade styles

The Mayhew Tools' Dominator Pro Pry Bar Series is comprised of high quality, firm materials and has a unique tri-lobular design that provides an enhanced, ergonomic grip. The series is ideal for

any lifting or prying action and is available in both curved and straight blade styles. The Dominator Pro



Pry Bars feature a hardened and tempered alloy steel shaft that runs from the cutting edge through the handle to deliver maximum durability and prying power, patented linear ribs around the neck ensure maximum transfer of torque, patented axial ribs assure a slip-free grip, and a black oxide finish helps prevent corrosion and reinforces long-lasting durability.

For more information visit VehicleServicePros.com/21113198

# Two-piece design reduces service time

### The SP Tools Duramax Fuel Pressure Release Wrench, No.

14400, features a two-piece design to remove the fuel rail pressure release valve sensor on 2011 and later Duramax LML engines. The design provides the tool versatility needed to access the valve. The technician only needs to unbolt the AC compressor and front EGR valve to access the fuel pressure release valve, eliminating the need to remove the EGR cooler and fuel rail in the process.

# **SPECIALTY & HAND TOOLS**



clamps. The clamps come in lengths from 4" to 50" and throat depths from 2" to 7". The clamps are available in a variety of handle styles such as wood, two-component, T-handle, and self-locking. Each clamp comes with a lifetime warranty.

For more information visit VehicleServicePros.com/21111273

# Offers maximum torque of 88.5 ft-lbs

The Hazet HiPer Fine-**Tooth Reversible** Ratchet, No. 863HP, features a small operating angle of four degrees, enabling use in tight spaces. The 863HP is easy to clean and corrosion-resistant. It offers 50,000 load changes at 22.13 ft-lbs, twice the ISO specification for 1/4", the company says. It also features an engaging function of the respective shift levers to provide protection against unwanted switching and an integrated hanging option in the handle. The tool is 116mm in length, weighs 2.82 oz, and is made in Germany.

For more information visit VehicleServicePros.com/21109228

# Offers a 180-degree swivel head

The Milwaukee 1/2" Drive 15" Breaker Bar, No. 48-22-9011, features an alloy steel construction forged for strength. The ratcheting breaker bar has a 180-degree swivel head for use in multiple angles and an ergonomically designed handle for comfort. The chrome-plated finish provides durability and resistance to corrosion. The 15" Breaker Bar comes with a lifetime guarantee.

For more information visit VehicleServicePros.com/21114576



The Wurth ZEBRA Heavy **Duty Reversible Side Cutters**, No. 071401599, offer two tools in one: side cutters with a connectable lever transmission. By simply pressing the power button, the user will get twice the cutting force to cut through thick cables with precision and ease. The ZEBRA Heavy Duty Reversible Side Cutters feature a 2K plastic handle with non-slip surface and high-grade steel for a long service life. It is backed by a limited

For more information visit VehicleServicePros.com/21095342

lifetime warranty.

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### LT999 SAE THREAD CHASER SOCKET KIT

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- Allows thread reconditioning with flared tip supply line inside pressure fitting
- Ideal for gas, AC, and liquid high pressure fittings common in heavy equipment, trucking, marine and aircraft industries
- Compact design with pass through bored out center hole on each socket
- Easy hand operation with supplied handle
- · Heat treated alloy steel

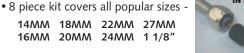




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### LT991 HOLLOW END LINE TAPS

- GET READY AC SEASON IS ALMOST HERE
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# **SPECIALTY & HAND TOOLS**



# Designed to provide protection in hazardous electrical work environments

The Cementex Double-Insulated Torque Wrenches feature two separate layers of insulation for twice the protection. The wrenches are made of materials calibrated according to ASME B107 standards (traceable to NIST) and manufactured according to ISO standards. The impact-resistant, flame-retardant insulation provides protection against flashover, shock, burns, and dropped tool shorts. Available options include standard, low profile, clockwise only, and short drive models, as well as a fixed head style. Three additional sizes have been added to the line, which now includes seven sizes.

For more information visit VehicleServicePros.com/21084681

# Features rounded tips for damage-free removal

The Lisle O-Ring Remover Tool Set, No. 31920, features rounded tips for easy, damage-free removal of seals and O-rings. The set includes two tip configurations and two blade lengths to work on most applications includ-

ing oil pump drive shaft seals, injectors, and fuel rail O-rings. They also remove inner tie rod rack boot, CV boot, heater, and vacuum hoses. The O-Ring Remover Tool Set also features dual material grip handle for comfort.

For more information visit VehicleServicePros.com/21111456



### Reduces cam-out

The Vessel Megadora 8-pc Screwdriver

**Set**, No. 9008EVA, features the company's JAWSFIT tip design mechanism on their Phillip's screwdrivers, allowing the blades to bite into the screw for easy removal. The JAWSFIT mechanism reduces cam-out of the screws, while holding them properly. It also



helps remove already damaged screws. The Megadora #2 Phillips removes weather damaged screws that are hard to get out. For the plastic screws holding in plastic panels, the Megadora bites into the plastic for easy removal. The Megadora is suitable for automotive, electric work, and electronics assembly.

For more information visit VehicleServicePros.com/21112806

# Multipurpose tool for added functionality

The Klein Tools Forged Crimper with Stripper/

Cutter, No. 2005N, combines commonly used wire

stripping sizes with a crimper and two cutters into one convenient tool. The hand tool strips 10-18 AWG stranded wire, and crimps 10-22 AWG insulated and non-insulated terminals and connectors. The 2005N is manufactured from Klein Tools' U.S.-made proprietary steel to provide durability. The handles have textured grips for enhanced dexterity and integrated hang holes.

For more information visit VehicleServicePros.com/21107135



# For high torque applications The **DD2 Dual**

**Drive Ratchet** 1/4" Square Drive from VIM **Tools** features a 2" long dual drive ratchet with removable 1/4" square drive and 1/4" offset square in handle. It is ideal for use with extensions and other tools to access hard-to-reach fasteners. It also features a thumb wheel for fingertip control in tight areas and a 60-degree fine tooth ratchet for high torque applications. It has a limited lifetime warranty. The tool is also available in 3/8" (DD3).

For more information visit VehicleServicePros.com/21110813

# **Engineered with** precise serrations

The **Snap-on** P-Series 5" **Needle Nose Holding Pliers** are

made of ball-bearing-grade steel to be tough and impact-resistant. All needle nose pliers in the series are engineered with precise serrations to ensure a confident grip. The staking of the screw threads prevents backing out during use. The holding pliers series tools come in three colors and include Round Nose Pliers, No. P90050A; Flat Nose Pliers, No. P93050A; Snipe Nose Pliers, Nos. P91045A and P91055A; Needle Nose Pliers, Nos. P913555A and P92650A; and Needle Nose Pliers, Nos. P92050A and P92055A.





# **Beta Tools 3/8" Drive Reversible Ratchet**

The rotating handle saved the reviewer time when working in tight quarters.

### When it comes to tightening or loosening

a fastener in tight spaces on a vehicle, a tool that can save time and energy is a tool worth noting. Eric Moore, fleet manager at Griffin Pavement Striping in Columbus, Ohio, reviewed the Beta Tools 3/8" Drive Reversible Ratchet, No. 910/58, and found the tool did, in fact, save time.

The Beta Tools 3/8" Drive Reversible Ratchet is unlike most other ratchets. It features a rotating handle which the technician can twist or turn to rotate the socket. This is ideal for working in confined areas where the free-spinning motion of a typical hand-held ratchet may not be able to fit due to its ratcheting mechanism.

Moore noted the ratchet was very easy to use - simply attach the correct size socket and select the direction.

"[Moore's team] mostly used the tool for removing fasteners - more specifically for changing batteries out in our fleet vehicles," Moore says. "The Beta Tools [ratchet] made it a little bit smoother ... and provides for more leverage than your fingers if the nut is still sticking on the threads due to the surface area of the socket and the ratio of the gear teeth in the ratchet head."

Moore says he looks for ratchets that offer a positive feel in the mechanism, a contoured handle for comfort (since he will "likely be using it all day, every day"), and a higher tooth count for less swing to engage the action.

Moore is satisfied with the Beta Tools 3/8" Drive Reversible Ratchet. The only suggestion he would have for the company is to offer a longer version of the handle to reach further into difficult areas. Otherwise, Moore said it met his expectations, and the rotating handle is a good fit.

### **Product description**

The Beta Tools 3/8" **Drive Reversible** Ratchet, No. 910/58, has a 360-degree twist action handle. Technicians can select the direction and rotate the handle back and forth to turn the socket. In order to change the direction, rotate the ring head. To release the ratchet, use the push-button release. The tool can be used in the traditional ratcheting style as well. The dual mold ergonomic handle provides a comfortable grip. This tool is ideal for use in tight areas where ratcheting space is limited.

-Kayla Oschmann

To read the full review, visit VehicleServicePros.com/21128012

### TOOL REVIEW

# Cal-Van Heavy Duty U-Joint Puller

The reviewer was impressed by this tool's durability.

# The purpose of a tool is to make a techni-

cian's work easier. For Phillip Huffman, manager at AAA Auto in Greensboro, North Carolina, the Cal-Van Heavy Duty U-Joint Puller, No. 199, did just that.

While he got off to a bit of a bumpy start when first using the tool, after referencing the operating instructions Huffman had no problems.

"I almost messed up the first time I used it," Huffman says. "I did not have full lubrication on it, and the tool was trying to slow down on me. But, as I read the footnote [in the operating instructions] and I found out that it does require the lubrication on there, I actually had no issue whatsoever. The tool was lightning fast."

If anything, Huffman's mishap only made him like the tool more because it showed him exactly how durable the U-Joint Puller is. The lack of initial lubrication did no damage to the tool whatsoever.

So far Huffman has only had the opportunity to test the U-Joint Puller on u-joint or driveshaft work, but he believes the tool is capable of working on other jobs such as work with ball-joints or the collar on a power steering unit when pulling the unit off.

The U-Joint Puller comes as a fully assembled unit, meaning there is no guessing at how to properly put the tool together.

Durability, ease of use, and size were features Huffman particularly liked about the tool.

"I like the size of it for its capabilities," he says. "Most pullers or presses are quite [a bit] larger than this. Most of time when you're doing u-joints, you're using a u-joint ball-joint press, which is triple the size [and] twice as heavy."



### **Product description**

The Cal-Van Heavy Duty U-Joint Puller, No. 199, is a heavy duty solution for disassembling seized, stubborn U-joints quickly on most Class 7 and 8 trucks and machinery. Engineered for use with up to a 1" impact tool, the Heavy Duty U-Joint Puller eliminates dangerous vice-and-socket or hammering removal methods. The one-piece unit — without bolts, cables, or assembly required - does not damage the driveshaft, yokes, joints, or bearing cups.

-Emily Markham

To read the full review, visit VehicleServicePros.com/21132600

# SHOP EQUIPMENT

# **Shop Equipment**

- **Physical weight**
- *✓* Capacity
- C Efficiency, versatility, productivity, etc.
- **✓** Safety features
- Ease of operation
- Ergonomics
- Accessories and options
- **Power requirements**
- **Maintenance requirements**
- **✓** Construction

- Lifecycle
- Will it fit the available work space?
- Storage considerations
- **Durability**
- Warranty
- **Training resources**
- **Product and** technical support
- **Brand reputation**
- **Budget range/price**
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VehicleServicePros.com/10094296



The AFF Viking 3.5 Ton Floor Jack,

No. 53350, features a maximum height of 21". Constructed from heavy duty steel for strength and durability, the floor jack meets 2014 PASE/ASME standards. It has a minimum height of 5-1/8", handle length of 48-1/2", and weighs 92 lbs. The floor jack has a built-in safety valve to prevent accidental overload and has powder coat paint to provide corrosion and scratch resistance. The crowned front wheels decrease surface contact on the floor for quick and easy transport, and the double pump hydraulic system maximizes speed without compromising performance. In addition, the floor jack features a 2-pc handle with a bumper pad for additional vehicle protection.

For more information visit VehicleServicePros.com/21126802

# **Designed for** 10,000-lb load capacity

The Renegade FL 9000 7048 HD **Heavy Duty** Automatic **Front Load** 



Aqueous Parts Washer is designed to clean heavy parts and equipment components from grease, oil, or lubricants in a high temperature environment with high-pressure spray manifolds. Automation features include automatic low water level shutdown, seven-day programmable wash timer, and PLC programmable wash cycle timer. The parts washer operates with a durable gear-driven 70" cabinet mounted turntable and the sump capacity is 500 gallons. It has a 10,000-lb load capacity and is designed to work with Renegade detergents for maximum cleaning without residue buildup.



# Simplifies used oil collection for recycling

The Herkules OFC1 Oil Filter Crusher is designed to crush a single oil filter up to 8" tall, reducing it in size by up to 80 percent. According to the company, the crusher extracts up to 98 percent of the

oil, so that it can be

recycled. The OFC1

is air operated,

using 90-120 psi standard shop air and requires little maintenance. It is available in both bench and stand-alone models. It is made in the U.S.A.

For more information visit VehicleServicePros.com/21115410



# Arms extend to 72" long

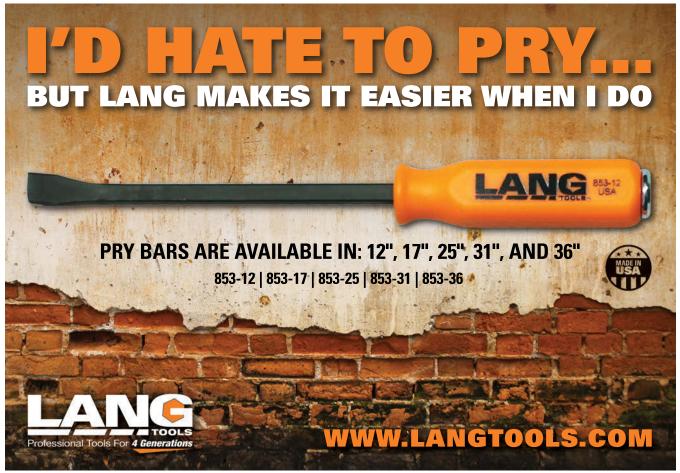
The BendPak XPR-12CL-LTA Two-Post Lift offers a stable lifting solution with its triple-telescoping arms that extend to 72" in length for servicing trucks and vans with long wheelbases. Balancing safety and worker productivity, the lift is ALI certified and includes a 16-pc adapter set.

For more information visit VehicleServicePros.com/21086671

# Lays flat and resists kinks

The Coilhose Pneumatics 25' Yellow Belly Hybrid PVC Air **Hose** is a lightweight, durable hose that lays flat even in cold weather. The hose rolls out and stores well, resists kinking under pressure, and is available in 25', 50', and 100' lengths. It features a temperature

range of -40 degrees F to 140 degrees F and a working pressure of 300 psi. The Yellow Belly line comes with field repairable fittings and crimp-on strain relief fitting kits.



# Features new high-wear resistant mouth design

The Ascot 3/8" RACR Retracta Air/Water Reels feature a Retracta Adjustable Controlled Return (RACR). The integrated handle and fully serviceable body improve

handle and fully serviceable body improve ease of access. The hose reels feature a new high-wear resistant mouth design to improve life. The hose is made out of a RetractaFLEX Hybrid Polymer which prevents

kinking and interruption of air and water flow. Internally, there is an increased capacity and an upgraded main spring, along with a safe tensioning mechanism. The hose reel case stores and protects the hose from damage or deterioration.

For more information visit VehicleServicePros.com/21121792

# Offers a splash lubrication system

The Jenny Products 60-Gallon Single Stage Air Compressor, No. G5A-60V, features a 60-gal vertical air tank and an industrial-grade 5hp motor. Designed for long-lasting, reliable performance, the compressor is ideal for use in shops. The G5A-60V provides 27.8 cfm at 125 psi through an American-made cast-iron compressor pump. The pump offers a splash lubrication system using Jenny Ultimate Blue synthetic compressor oil. An oversized flywheel and a directional air shroud further assist in pump cooling.

For more information visit VehicleServicePros.com/12142309

# Safely vacuums combustible materials

The **Guardair Corporation Machine Vac NED**, No. MV2000NED, is designed to vacuum combustible materials. Constructed from components that suppress the buildup of static charges, the unit is designed for dry applications and has a 5.5-gal static conductive container. The non-electrical discharge (NED) version features a static conductive vacuum hose.











VehicleServicePros.com/10094332

# Hunter ForceMatch Heavy Duty Wheel Balancer

Out of all the wheel balancers the reviewer has tried, he feels that Hunter's ForceMatch was the best of them all.

### When performing repairs, technicians want

the best tools they can find. Kenny Smith, technician at Don Tire in Dunn, North Carolina, feels the Hunter ForceMatch Heavy Duty Wheel Balancer is the best of the best.

Smith has used previous versions of the Hunter wheel balancer. Though he says the old version is "not much different" than this new version, the old version did not have Road Force on it or many of the attachments. Additionally, the old version couldn't set up the big wheels.

Included with the wheel balancer were some accessories.



"It came with a lift to help you lift the tires up [and] put them on the shaft," he says. "It [also] came with all the attachments that I needed."

Smith used the Hunter wheel balancer for its primary use of balancing tires.

"[It can] do about any tire I can do, from a truck tire to a passenger tire," Smith says.

The feature Smith enjoyed most about the wheel balancer was its Road Force matching. Though he liked pretty much everything about the tool, Smith says the only feature it doesn't have is the ability to top off the air pressure on the tires, and that's not a big deal because he says the shop has air compressors anyway.

### **Product description**

The **Hunter ForceMatch Heavy Duty Wheel Balancer** is a heavy duty bus and truck wheel balancer featuring full diagnostic capabilities designed to solve vibration issues. The load roller detects the high spot of the tire allowing for matching while also measuring the entire contact patch for accurate results. The wheel-lift lifts wheel assemblies up to 500 lbs and the CenteringCheck ensures proper centering. Any size wheel can be balanced, including cars and light trucks. The balancer uses standard adaptors.

-Emily Markham

To read the full review, visit
VehicleServicePros.com/21132615

# **TOOL REVIEW**

# Clore Automotive SOLAR 12V 100A Flashing Power Supply and 100/40/10A Battery Charger

The quality and performance of this device was enough for the reviewer to label it "a home run."

# Modern vehicles include computers for virtually everything the vehicle does, from

virtually everything the vehicle does, from fuel ratios to the infotainment system. Many of these modules require memory to be stored, so even when the vehicle is not running, there is some amount of drain on the battery. Many vehicle system updates and reprogramming require the vehicle's ignition to remain in the on position without any dips or spikes in power.

Eric Moore, fleet manager at Griffin Pavement Striping in Columbus, Ohio, had been dealing with all of these issues using different devic-



Clore Automotive SOLAR 12V 100A Flashing Power Supply and 100/40/10A Battery Charger, No. PL6800, and managing electrical systems became a lot more convenient.

"The Clore PL6800, that thing is rock solid," Moore says. "You can actually set the voltage where you want it to be, and it stays there the whole time. It's really nice."

In addition to using the PL6800 as a maintainer, Moore and the technicians at Griffin also use it in its other capacity: as a battery charger. Moore explains that much of their equipment sits idle during the winter months, and the cold and lack of use eventually drains the batteries of most of their charge. The PL6800 has a solution for that as well.

The recovery feature is part of the PL6800's "smart" charging capability which uses microprocessor-controlled logic to automate the battery charging process. This also allows it to charge batteries more quickly.

### **Product description**

The Clore Automotive **SOLAR 12V 100A Flashing Power Supply** and 100/40/10A Battery Charger, No. PL6800, is designed to provide stable power on-demand, up to 100A, to a vehicle electrical system to support module reprogramming. It also provides full-service battery charging capability from 10 to 100A. The PL6800 features a voltage output range of 13.1-14.9V, adjustable in 0.1V increments. It also features fast load responsiveness for quick recovery from system demand increases.

-David Brierley

To read the full review, visit VehicleServicePros.com/21133363

# **Tool Storage** Solution

### PURCHASE CONSIDERATIONS

- Required storage capacity
  - » Size, storage volume, style, configuration, etc.
- **Space efficiency**
- Number and size of compartments, trays, etc.
- Organizational options and accessories
- Ease of use
- Expandability/upgradeability
- Construction and material type
- Strength and durability
- Color, finish, fit, graphics, etc.
- ✓ Portable, wheeling, or stationary
- How well will the storage solution fit in the work space or with existing storage solutions?
- How are tools and equipment safeguarded?
  - » Built-in locks, latches designed for padlocks, electronic systems, or other secure locking mechanisms?
- Would complete systems for tool and asset monitoring and control be beneficial?
- Additional power source, for charging personal electronics and cordless tools?
- **Quality**
- ✓ Warranty
- Product support
- **Brand reputation**
- **Budget range/price**



# **Built for efficiency** and durability

The **OEMTOOLS 36" 8-Drawer** Tool Cart, No. 24565, features welded dual-wall construction with 19 gauge steel for durability. The tool cart also features heavy duty 5" by 2" casters, four corner bumpers on the edges to prevent dents or dings, and full extension ball bearing drawers to slide in and out easily. The drawers each have a 100-lb capacity, and the lock system automatically locks the drawers when the cart is in motion.

For more information visit VehicleServicePros.com/21084678



# Large, versatile option for the soft storage of tools

The Craftsman VERSASTACK 17" Tool Bag, No. CMST17622, is a large, versatile option for the soft storage of tools and accessories. The tool bag features dual ergonomic carry handles, a padded shoulder strap, 31 pockets and slots for tool organization, a full plastic bottom, and durable material that is moisture resistant. The VERSASTACK system is a modular design, enabling the tool bag to be securely stacked on other VERSASTACK units. The tool bag is 17" in length, 8.5" in width, and 13.5" in height.

For more information visit VehicleServicePros.com/21115994



# Heavy gauge steel with flange reinforced design

The KT Pro Portable 3-Drawer Tool Chest with Handle, No. B87401-3, is designed to provide superior durability. The 20" tool chest is made with heavy duty steel with a flange reinforced

design. It features drawer slides with friction runners and the cover closing surface protection locks all of the drawers. It is made to meet international standards for quality and safety.

For more information visit VehicleServicePros.com/21094935

# Twist and locking technology

The Hansen Global Magnetic Pliers

Organizer, No. 8212, is designed to hold six pliers and features a twist and locking technology to secure the pliers and hangers to the ToolHANGER board. The organizer's industrial-strength rubber coated magnets support up to 10 lbs. The board and hangers are made from

high-quality plastic and will not break or bend, says the company. The organizer comes fully assembled, is made in the U.S.A., and is backed with a lifetime guarantee against workmanship and defects.



# Seven pull-out drawer tool storage

The **Beta Tools 7 Drawer** Mobile Tool Cabinet + **76-pc Tool Set**, No. C39/7-5904VG/1M, supports over 2,000 lbs of tool weight with its aluminum frame and four-corner post construction. The cabinet features pre-assembled foam trays for tool organization. Tools included are combination wrenches (6-22, 24, 27, 30, and 32mm), diagonal nippers, combination and needle nose pliers, metric hex key set, T-handle Torx drivers (T10, T15, T20, T25, and T30), Phillips and slotted screwdrivers, circlip pliers (straight, bent, internal, and external), flat chisels (100 and 200mm), engineer hammer, soft face hammer, 1/2" drive socket set, 1/2" universal joint, 1/2" sliding T-handle, 1/2" reversible ratchet, and 19 hex-sockets (10-24, 26-27, 30, and 32mm).

For more information visit VehicleServicePros.com/21081248

# Keeps tools within reach

The Guardair Corporation QuickSelect Tool Rack is designed to organize frequently used shop tools and keep them within easy reach. Made from heavy duty aluminum, the QuickSelect features 15 slots and holes sized to accommodate popular tools including Allen wrenches, dead blow hammers, screwdrivers, and safety air guns. The tool rack also features a 1-3/4" hole lined with a plastic bushing for storing sensitive instruments such as tool holders or gauges. The QuickSelect is available in two versions, one for mounting and another with high-

For more information visit VehicleServicePros.com/21086589

strength magnets for steel surfaces.

Built with heavy duty No. 8 canvas

The **Klein Tools Deluxe Black Canvas Tool Bags** are built with heavy duty No. 8 canvas and are available in two sizes: 16" (No. 510216SPBLK) and 18" (No. 510218SPBLK). The tool bags feature 13 interior pockets for easy tool organization and a detachable shoulder strap. They also feature stitched and riveted leather handles for extra comfort and strength, along with a steel frame mouth with hinge for rugged use. The tool bags have a moisture-resistant vinyl bottom and non-scratch studs on the base to protect against wear. The black canvas tool bags can also be

For more information visit VehicleServicePros.com/21095051

personalized with customized embroidery up to 15 characters.

# Protective rubber top

The K Tool International Pro Series 54" Rolling **10-Drawer Tool Cabinets** feature single ball bearing slides for middle drawers and double ball bearing slides for two top and bottom drawers. It has an overall weight capacity of 1,200 lbs. The single slide drawers have a capacity of 100 lbs and the double slide drawers

have a capacity of 200 lbs. The tool cabinet measures 53.9" length by 24.4" width by 39.3" height and has a powder coating finish for durability. It also has a protective rubber top, EVA drawer liners, and is available in black or red.

For more information visit VehicleServicePros.com/21125293

# Heavy duty construction

The Versatility Mechanics' Double-Bank Tool Box, No. VT-55314, comes standard with 10 drawers and offers custom drawer configurations. Technicians have the flexibility to create the tool storage center that best fits their needs by adding accessories like a

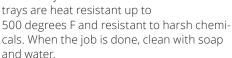


hutch or side cabinet. The 55" toolbox features single key locking and Slam Lock, which allows open drawers to be closed with the key in the locked position. Optional brushed stainless steel top creates a work surface; black vinyl worktop is standard.

For more information visit VehicleServicePros.com/21081455

# Flexible, non-slip tool trays

**Grypmat** flexible tool trays feature a grip that will keep tools from sliding off almost any surface. The

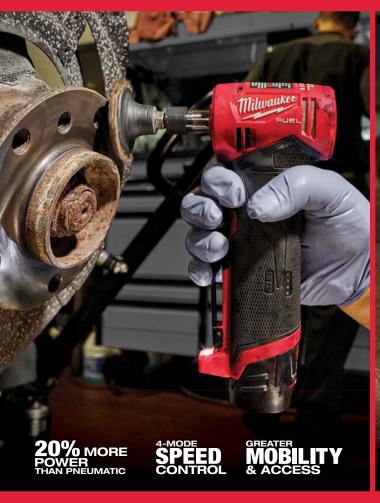




# M12 FUEL

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