

PTEN

Professional Tool & Equipment News

The Independent Tool Authority



600LM RECHARGEABLE HANDHELD LED AUDIO LIGHT

by Advanced
Lighting Systems

Details on the
cover products
and other
new tools
Page 10



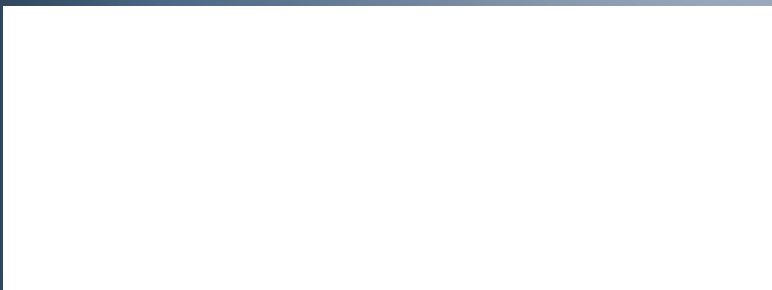
▲ Protect from
scratches and nicks



▲ Features
multi-position
guide arm



▲ Accurate at all
temperatures



Tech Routing List

New Column! Diagnostic Discourse:

Is ADAS right for your
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Considerations
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exchange systems
on hybrids
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AND
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PLIERS
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BUST ANY
NUT UP
TO 2"**



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- Autologic Diagnostics DrivePro Diagnostic Platform

49 TOOL REVIEWS

Our review panel gives feedback on the following tools:

- ACDelco 20V "Your Complete Tool Kit"
- JohnDow Tire Taxi HD
- Michigan Pneumatic 1/2" Stubby Impact Wrench



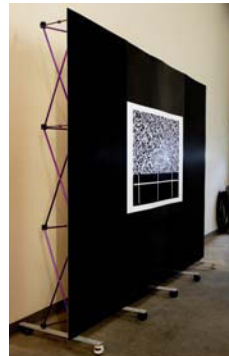
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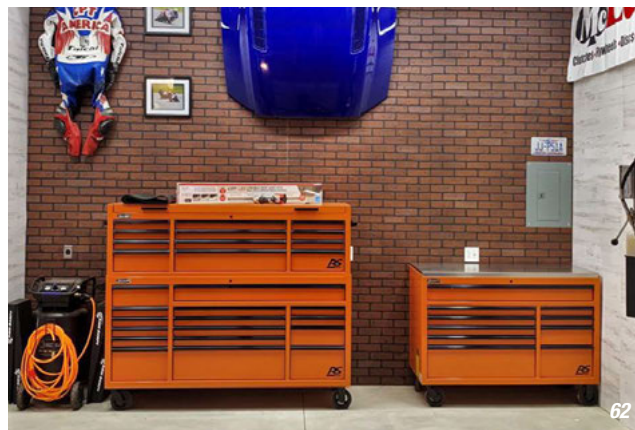
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Owner: John Wyatt
Shop: Performance Over Style Motorsports
Location: Fairview, Penn.

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The 600lm Rechargeable Handheld LED Audio Light by Advanced Lighting Systems

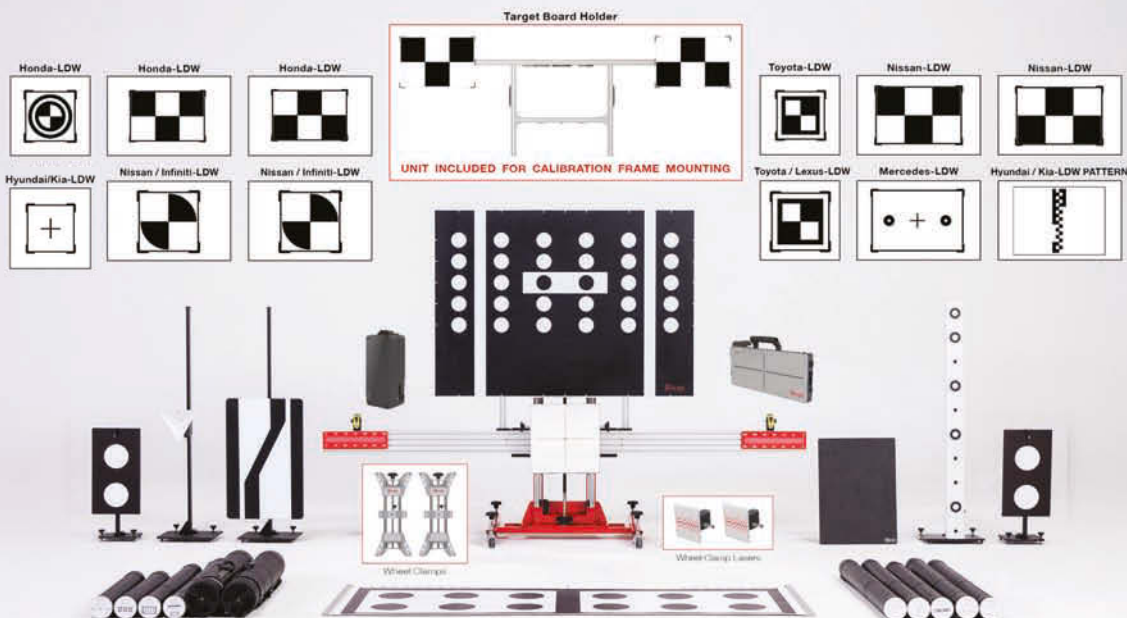


IN THE NEXT ISSUE

Check out the collection of new lifts, jacks and stands in Category Spotlight.

ADAS CALIBRATION

COMPLETE PACKAGE - Part #ADASCOMPLETE



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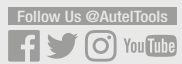
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WHY IS THERE WATER IN MY COMPRESSOR LINES IN THE WINTER?

The ambient temperature in an air compressor's environment can greatly affect the air compressor's performance.

Making sure your air compressor is properly ridding itself of excess water is crucial to keeping your machine running properly. To read more, visit: VehicleServicePros.com/21039254

GUEST BLOG



The cost of ownership is typically lower on a better-made lift. After a few short years, less expensive lifts can require more maintenance, wear out sooner and need replacing, which truly costs more than purchasing a higher quality lift to start. To read more, visit:

VehicleServicePros.com/21039891

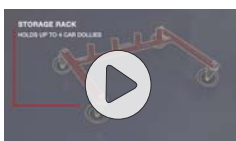
TOOL REVIEW



The Makita Impact GOLD 9-pc 3/8" Drive Socket Set comes in metric and standard sizes. The set offers a 1/4" hex to 3/8" square drive socket adapter which tilts up to 15 degrees for use in tight spaces. To read the review, visit:

VehicleServicePros.com/20975436

VIDEO



The Sunex Tools Car Dolly, No. 7708, opens up to a wide 24" and accommodates large 12.8" tires. An oversized diamond plate pedal protects technicians from stubbing their toe on the wheel. To watch the video demonstration, visit:

VehicleServicePros.com/21043812

FEATURED PRODUCTS



High Lumen Rechargeable Handheld Flashlight

Coast Products
VehicleServicePros.com/21033189



Off-Highway Diagnostic Cable and Introductory Software Package

Bosch Diagnostics
VehicleServicePros.com/21033647



Synergic Double-Pulse Inverter MIG Welder

Snap-on Equipment
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The well-stocked toolbox

Consider tomorrow's repairs when planning today's purchases.

By Sara Scullin, Editor
Sara@VehicleServicePros.com

If you had to start from scratch tomorrow, how would you go about tooling up in 2019?

That was the challenge and the goal of this month's Big-Time-Boxes shop owner, John Wyatt with Performance Over Style Motorsports in Fairview, Pennsylvania. This is quite the story: Wyatt 'gifted' his full set of tools — and additional equipment — to his friend and employer after he himself accepted a contract to serve two one-year deployments in Afghanistan. While overseas, Wyatt went about planning his next collection of tools, equipment and tool storage, with a focus on quality and U.S.-made products. Wyatt not only traded in boxes and tools, but he now works in a new shop as well.

If you ever had to or decided to 'start fresh' with the tool and equipment you own, what would that look like? Would you look to replicate your scan tool collection or research new models that more closely align with what's been rolling into the bay? Funny to think that in today's world the internet in and of itself is an important tool, as it allows technicians to access information, training and even assistance in real-time.

You might review and reevaluate market trends where you live, as this can affect buying decisions as well. For example, you might find an opportunity to provide A/C service and repair when you hadn't before, or even take on ADAS calibrations. These two services in particular carry with them the potential for ROI, especially if the shop doing so is the

only place, or one of few places in town, with the knowledge and tools to do so.

Although your new toolset purchases would (happily) include things the power tools and socket sets, today's shops aren't complete without some high(er) ticket and diagnostics tools designed to communicate with tech-centric cars.

With that in mind, this year we are featuring a new column that's all about diagnostics. ASE Master Technician Scott 'Gonzo' Weaver has been in the industry for quite some time, turning wrenches and teaching about new automotive technology. This month he discusses what shop owners would do well to consider when it comes to ADAS calibration equipment. Next month Gonzo will dive into TPMS. We hope this insight, combined with our regular Tool Briefing and new product sections, can help you navigate the ins and outs of new repair technology in the field, and even maybe spark some ideas for new purchases opportunities.

Repair techniques are getting more advanced, are it's necessary to keep up with the way cars are designed and built, and repaired. This is true from the manufacturer down to the repair pro and also the vehicle owner/operator.

We will continue to do our part by sharing with you the newest products available to the aftermarket, and shedding light on how you can best integrate these products into your business.

Thank you for joining us as we turn the page on another year. **PTEN**



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FEATURED NEW PRODUCTS

Features multi-position guide arm

The **Flexzilla Retractable Hose Reel, Open Face, Single Axle Arm, 3/8" by 50'**, No. L8611FZ, offers a metal reel designed to make using and putting away a 50' hose easy, the company says. The reel features a multi-position guide arm that allows mounting on a wall, tank or overhead, durable heavy duty steel construction, corrosion-resistant powder coating and four way direction rollers. The reel's narrow size is suitable for easy placement and storage, and self-locking fasteners stay tight even in mobile installations. There is a 5' by 1/4" MNPT by 1/4" NPSM female swivel; lead-in hose included.

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Protect from scratches and nicks

The **Ingersoll Rand Boots for Air Tools** are designed to protect surrounding surfaces from scratches and nicks. This product protects the users' tools from damage if they are dropped, and adds further protection from unwanted contaminants that can affect tool performance.

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Accurate at all temperatures

The **Thexton Disc-Type (EG) Anti-Freeze Tester**, No. 106, is a professional disc-type 16-1/4" tester that is accurate at all temperatures, the company says. This tool tests ethylene glycol-based coolants, hot or cold, including Dex-Cool. The easy-to-read discs are magnified by a convex design of clear SAN plastic barrel. The tester can read in both Celsius and Fahrenheit scales. A notable feature of this tester is the "6th disc" that shows over protection and a loss of cooling efficiency. Beyond 70 percent anti-freeze, cooling and corrosion effectiveness is reduced. This tester is a one-piece bulb with a neoprene dip tube.

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Kicking off the New Products section each month, our Featured New Products page includes brand new products showcased on the cover that are available to the automotive market.



High quality sound and wireless control

The **Advanced Lighting Systems 600lm Rechargeable Handheld LED Audio Light**, No. AUD601R, is a high efficiency COB LED Audio Light with a built-in Bluetooth speaker that provides high quality sound and wireless control for music play. Music can be enjoyed with one button, the company says. The Bluetooth speaker function pairs to the user's device in seconds. A 90-degree rotating bracket with a powerful magnet allows the light to be securely attached to any metal surface. A glow-in-the-dark fluorescent reflector makes the light easy to locate in the dark. This product is IP65 dust and water resistant.

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Long lasting edge

The **Kershaw Fraxion Knife**, designed by custom knife and tool-maker Jens Anso, is ideal for users who prefer a contemporary look and compact size. This slim, sleek design is lightweight, with a streamlined design and light but strong G10 handles with carbon fiber overlay. An inset liner lock secures the blade open during use, helps keep weight down and maintains the handle's comfortable slimness. This knife features quality blade steel for a long lasting edge, and offers easy one-handed opening with flipper. The knife weighs 1.9 oz.

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For servicing contaminated fuel systems

The **Innovative Products of America Pneumatic Fuel Tank Sweeper**, No. 9046F, is a system designed for servicing contaminated fuel oil systems. This product is specifically designed for accessing fleet and construction equipment, and removes debris, impurities and standing or emulsified water from contaminated diesel fuel, fuel oil and kerosene. The Pneumatic Tank Sweeper can be used as a preventive maintenance or service tool, and helps extend the life of the oil and fuel system components.

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Check heavy duty vehicle alignments

The **Hofmann Geoliner 920 Heavy Duty Wheel Alignment System** is designed to make checking the alignment on heavy duty vehicles faster and more accurate, according to the company. The system mounts the targets to the floor or wall, helping to offer an easier set-up time. The only devices that need to be mounted on the vehicle are the wheel clamps and measuring heads. The user-friendly interface offers realtime adjustments.

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Indicator lights show condition of battery

The **OEMTOOLS Digital Battery Analyzer**, No. 24359, is a portable battery starting and charging system analyzer designed to be easy to use. The product has indicator lights to let users know the condition of the battery. The 24359 meets SAE, DIN, EN, IEC and CA testing standards, and has a voltage output of 7 to 15 VDC.

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Tests 12V and 24V battery charging systems

The **Bosch BAT 135 Battery Tester with Integrated Printer** is designed to capture test results for customer records, such as presenting the state of health and state of charge percentage of the batteries to help ensure optimal efficiency and usage. Using a micro-load test to demonstrate authentic results, the battery tester assesses 6V and 12V batteries from 40 to 2,000 CCA, including AGM, Gel cell, flooded lead-acid, start/stop EFB and Commercial SLI batteries. It will also test 12V and 24V charging systems with a diode/ripple test. Test clamps are included and easily detachable for service or replacement.



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Offers a 50-lb tank

The **TEXA Konfort 750R** offers a 50-lb tank, a 4cfm vacuum pump and a 5.7" TFT display. This machine is designed to satisfy the needs of technicians looking for a professional, effective and fully automatic A/C service station. TEXA's first A/C machine for the American market includes a steel frame for improved strength, oversized components for use in various climates and Wi-Fi capabilities for updates. It can be remotely monitored by Android/iPhone app.

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NEW PRODUCTS

Removes seized TPMS valve stems

The Dill Air Controls TPMS Hex Nut Removal Kit, No. 5010, removes seized TPMS valve stems. The kit includes a drill bit with specialized stop feature, a custom CNC machined drill guide, 'easy-out' tools, wheel protecting O-rings and a user's guide. The Dill 5010 is designed to eliminate the need for a cut-off wheel or a hammer and chisel, and the company says removal can be done in 30 seconds with use of the kit.

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Portable laser-based system

Intercomp's AS2000 Complete Alignment System is a portable method for performing vehicle alignments. This laser-based system can perform a full alignment, including caster, camber and toe-in for two axles, on most vehicles, while occupying minimal storage space. With this system, alignments can be performed on vehicles undergoing other service while on a variety of lifts, including scissor, two- and four-post types.

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Bead seating inflation jets in clamping jaws

The ATD Tools Heavy Duty Semi-Automatic Tire Changer features a swing arm design. It can handle tires up to a 47" diameter and rim widths between 3" and 15". This tire changer features bead seating inflation jets in clamping jaws, twin clamping cylinders to hold difficult rims and a bead breaker. The tire changer has a 26" by 26" square turntable.



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NEW PRODUCTS



Lightweight and portable

The **RPG 10-gal Portable Air Tank** is a reserve air source for cleaning and inflating. This tank is lightweight and designed for portability. The air tank comes with a hose that includes an attached tire chuck, foot pads for stability, a durable steel gauge and a drain port. The maximum pressure is 125 psi with manifold.

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Install and remove threaded rods

The **KT Pro Threaded Rod Socket Series**, No. 75A1, is designed to help the user install and remove threaded rods easily. Each socket comes with an automatic locking cam to help ensure threads are not damaged, the company says. Each socket comes with a 1/4" power bit to use with any air or cordless tool. Each threaded socket is sold individually, with seven sizes ranging from 5/16" to 5/8" available.

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For use in most base metal applications

The **Weld-Aid Weld-Kleen 350** is a safe, economical water-based anti-spatter designed for use in most base metal applications. This product is effective for use in robot torch blow down systems. The non-hazardous formula is bio-based and paintable. This product is available in 32-oz, 1-gal, 5-gal and 55-gal sizes.

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Ranger

Includes 24mm and 30mm offset sockets

The **Lisle NOx and Soot Sensor Socket Set**, No. 12290, is designed for easy access on NOx and soot sensors. The set includes 24mm and 30mm offset sockets with 1/2" drive. Each set has six and 12-point options. The set works on 2014 to current Ram 3.0L EcoDiesel V6 engines found in Jeep Grand Cherokee and Dodge Ram 1500 trucks.

Circle 41 on card, or enter at "e-inquiry" on VehicleServicePros.com



Suitable for hard-to-reach screw joints

The **Hazet 1/2" 9012 A-1 Angled Impact Wrench** is designed for working on brake caliper screw connections and other hard-to-reach screw joints. This tool has a maximum loosening torque of 331 ft-lbs (450 Nm) and features a single hammer striking mechanism. The tool has an overall length of 69 mm, and the exhaust air guidance is adjustable by 360 degrees on the handle. The recommended torque is 170 ft-lbs (231 Nm), and the recommended rotation speed is 8,500 rpm.

Circle 42 on card, or enter at "e-inquiry" on VehicleServicePros.com



Pairs with smartphone to receive phone calls

The **GEARWRENCH Bluetooth Speaker/Radio**, No. 86997, offers a full, rich sound and versatile features, with a compact package designed for tough shop and worksite conditions. The radio features a built-in microphone for receiving calls when paired with a smartphone, and a single device can pair up to two speakers at once for a sound that fills the room. The speaker has a 12-hour run-time with a rechargeable Li-ion battery. Protected with a full rubber wrap, this product meets IP65 specs for dust and water resistance, and can survive a one-meter drop.

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NEW PRODUCTS



For extreme cyclical temps

The **Wurth Constant Band Hose Clamps** are suitable for use in applications where connections are under extreme cyclical temperature loads. This package comes with 200 German-made C 75 Steel clamps ranging in size from 13mm to 70mm in nominal diameter. Each package contains Hose Clamp Pliers that ratchet for optimal use in tight spaces, and are the ideal length for hard-to-reach areas, according to the company. The package also includes a nine-drawer storage cabinet with labels for organization and quick identification of clamps.

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Ideal for applications requiring oil free air

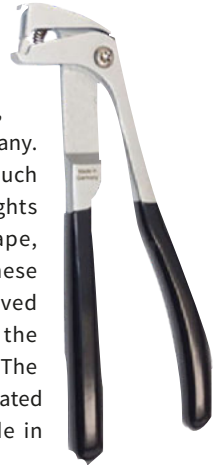
The **Sullair SRL Series Oil Free Scroll Air Compressors** are ideal for applications requiring oil free air, including pharmaceuticals, food and beverage manufacturing, automotive, paint and more. The SRL Series is certified under the ISO standard ISO 8573-1 for Class 0 oil free air, and offers models from 2 to 44 Hp at 120 to 145 psi. This series offers advanced scroll compressor technology and is designed to operate quietly, efficiently and reliably. The compressors are also maintenance friendly, offering easy accessibility for inspection and maintenance, the company says.



Circle 46 on card, or enter at "e-inquiry" on VehicleServicePros.com

Does not damage aluminum

The **Mueller-Kueps Wheel Weight Pliers**, No. 282 240, are designed to remove sticky wheel weights from aluminum rims. Thin edges grip the wheel weight without damaging the aluminum, leaving no scratches or notches in the metal, according to the company. The pliers will never touch the wheel, as the weights lean on their own tape, the company says. These weights can be removed and trashed through the spring-loaded handle. The handle has a rubber coated grip. This tool is made in Germany.



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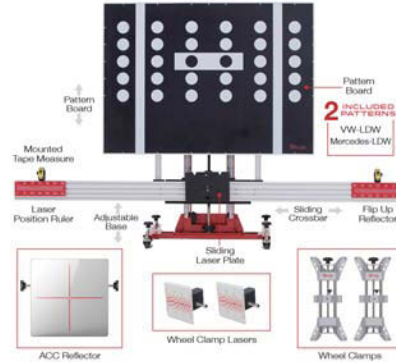
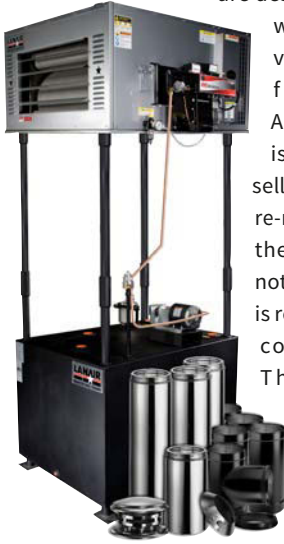


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Burn waste oil for free heat

The Lanair Waste Oil Heaters and Boilers are designed to make waste oil a valuable, free fuel source. Although there is the option of selling waste oil to re-refining haulers, they typically do not pay for what it is really worth, the company says. This product allows shops to burn their waste oil to generate free heat for the shop. These products are EPA approved and UL listed.

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Includes adaptive cruise control reflector

The Autel Standard Calibration Frame Package, No. ADASFRAMESP, includes the calibration frame and target board holder, VW and Mercedes-Benz LDW patterns and two wheel clamps with lasers. The package also includes the company's Adaptive Cruise Control Reflector and can be used with the MaxiSYS ADAS tablet or ADAS-Upgraded MaxiSYS Tablet (not included).

Circle 50 on card, or enter at "e-inquiry" on VehicleServicePros.com

Easy to maneuver in tight spaces

The KNIPEX 7-1/4" Hose Clamp Pliers, No. 85 51 180 A, are ideal for smaller engines and are designed to be easier to maneuver in tight spaces. These pliers feature the same rotating tips as the company's 10" versions, and make the tool usable from different angles. The pliers adjust by shifting directly onto the hose clamp, and offer 15 adjustment positions, with a working capacity of 2". The pliers are German chrome vanadium electric steel, and are forged and oil-hardened.

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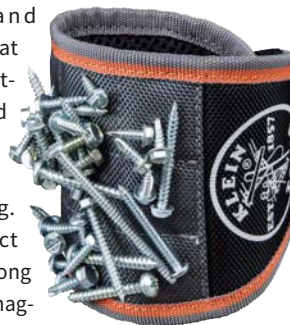
Customize parameters to shop needs

The **Snap-on Tools Advanced Battery Starting and Charging System Tester**, No. EEC5750A, is designed to deliver improved accuracy with CCA required input and patented conductance technology for rendering battery, starter and charging system status. This tool also features the ability to test Northstar AGM batteries. To save time, the tester allows technicians to set default parameters customized to individual shop needs. With a horizontal handhold position and convenient underhood hanger, this tool enables techs to determine whether batteries, starters and alternators are operating at peak performance or whether they need replacing. Test results are available in eight languages, displayed on a full color 3.5" screen and printable straight from the tool with personalized shop information.

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VehicleServicePros.com

Features strong rare earth magnets

The **Klein Tradesman Pro Magnetic Wristband**, No. 55895, helps keep small pieces and parts close at hand by fitting around the user's wrist, tool belt or bag. This product features strong rare earth magnets, breathable mesh interior and contoured shape for comfortable fit, is made of durable 1680d ballistic material and has an adjustable hook and loop closure to fit most wrist sizes.



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VehicleServicePros.com

Rotating, removable jack saddle

The **Daytona 3-Ton Low Profile Long Reach Floor Jack** offers a wide lift range and long frame. The jack's low-profile design and precision-welded steel construction can lift from 3-1/4" to 24-1/4". The jack has a rotating, removable jack saddle. A foot pedal allows for hassle-free pumping, while ball bearing pre-mium rear swivel casters provide a full range of mobility, according to the company. This jack comes in orange.



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VehicleServicePros.com



Variable speed control dial with five settings

The **Makita 5" Dual Action Random Orbit Polisher Kit**, No. PO5000CX2, includes the company's 5" Dual Action Random Orbit Polisher (No. PO5000C), three foam pads and a tool bag. The dual action control offers "random orbit with forced rotation" or "random orbit with free rotation," and the variable speed control dial has five speed settings, so users are able to set the speed and action to the application. Additional features include an electronic controller that automatically applies additional power to maintain constant speed, even under load, and also provides soft start for smoother start-ups and longer gear life.

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VehicleServicePros.com



Blades can be resharpened

The **Matco Tools 2-pc Plastic Mini Scraper Set**, No. MSS2P, features a large 8” overall scraper with a blade length of 3” and has an ergonomic handle for easy removal of tire weights, body panels and body trim. Made of high grade thermos-plastic, the one-piece design is made for durability, the company says. The ring on the scraper keeps the blade at a 45 degree angle when laid down to avoid damage to the painted surfaces. The blades can be resharpened.

Circle 58 on card, or enter at “e-inquiry” on VehicleServicePros.com



For R-1234yf, R-134a and R-12 equipped vehicles

The **Neutronics Legend Series Refrigerant Analyzer** is designed to meet the service needs of R-1234yf, R-134a and R-12 equipped vehicles. Certified to the SAE J2912 standard, this tool connects directly to SAE J2843 and J3030 A/C service machines that have an external analyzer USB port. This analyzer offers 10 built-in languages, a 5” color display, soft touch input keys and a tough ABS display window with rubber bumper corner protection. Other features include an internal lithium battery, optional printer and Bluetooth output, as well as a rugged storage case. Software can be updated by simply downloading the latest version from the company’s website and installing it using a flash drive. A one-year warranty is included on all product versions.

Circle 61 on card, or enter at “e-inquiry” on VehicleServicePros.com

Roomier fit for improved comfort

The **Dickies Short Sleeve FLEX Coveralls** are ideal for car wash protection. The full-body coverage helps keep soap and wax off the wearer, and concealed snaps help prevent any damage to a car while leaning over it during detailing.



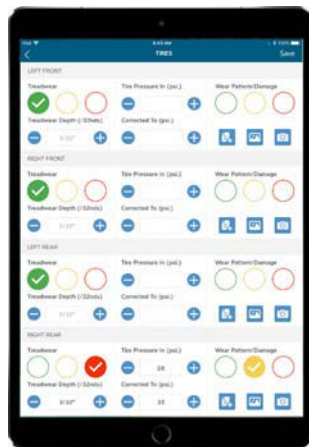
These lightweight coveralls have been redesigned for a roomier fit, with FLEX fabric for improved comfort and easier movement.

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Start vehicle intake and inspection right at the vehicle

The **Mitchell 1 SE ProSpect** is a mobile vehicle inspection and check-in application integrated with the Manager SE shop management software. It is designed to take the system beyond the walls of the auto repair shop to start the vehicle intake and inspection processes right at the vehicle. The user-friendly design makes it easy to find a customer or enter a new customer into the system, then add jobs and perform digital visual inspections with notes and photos, and have those inspections available on the Manager SE work order screen in the office.

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Available in orange or green

The **Mayhew Tools Dominator 3-pc Curved Pry Bar Set** is available with orange (No. 14071OR) or green (No. 14071GN) handles. Each set includes 12”, 17” and 25” long pry bars ideal for any lifting or prying application, such as oil pans, bearings, axles, fuel injectors and more. A hardened and tempered alloy steel shaft runs from the cutting edge through the handle for improved durability and prying power, and a capped end allows for striking without damaging the handle. The patented two composite handle is ergonomically designed for improved comfort and secure grip, and the black oxide finish prevents corrosion. This set is made in the U.S.A. and backed by a lifetime warranty, and comes packaged in a self-contained, reusable storage tray that fits in most toolboxes.

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Capture distance up to 5’ deep and 4’ wide

The **Miller Electric SWX-ZF Weld Fume Extractor with ZoneFlow** features a capture



zone that’s up to three times larger than traditional systems, the company says. An expanded capture zone helps create a cleaner facility, leading to less maintenance and cleaner air throughout the workplace. With a capture distance that’s up to 5’ deep and 4’ wide, welders can continue welding instead of having to constantly adjust the arm to be close to the source of fume extraction. ZoneFlow technology is available on the FILTAIR SWX-ZF stationary wall- or column-mounted system and is available in a disposable cleaning filter model.

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TR-75

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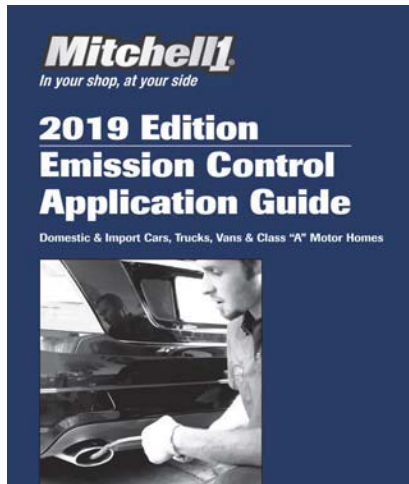


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NEW PRODUCTS



Offers coverage for domestic and import cars

The **Mitchell 1 2019 Emission Control Application Guide**, No. ECAT19, offers coverage for domestic and import cars, light trucks, vans (diesel engines) and Class A motor homes with gasoline engines, model years 1966-2019. Specific content features in the 2019 edition include: emission application tables; engine displacement conversion charts; emission control visual inspection procedures; approximately 40 years of domestic and imported basic ignition timing specifications; 1980-2018 maintenance reminder light rest procedures; I/M areas that require ignition timing and EGR function testing; and more.

Circle 82 on card, or enter at "e-inquiry" on VehicleServicePros.com

Six-year parts warranty

The **Legacy Manufacturing Flexzilla Air Compressor with Silencer, 1-Phase, 2-Stage, Vertical**, No. FXS07V080V1, is designed to operate quietly in the work space. This compressor features the company's Quiet Technology with Silencer noise suppression and operates at noise levels no louder than a normal conversation, according to the company. The compressor features a large, low rpm pump and motor, single-phase power with 7.5 HP motor, 80-gal tank, automatic tank drain, continuous run for big air jobs, Cool Flow Technology and an exclusive six-year parts warranty. This compressor has a max psi of 175.

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Connects to slide hammer for "Touch & Pull" operation

The **H&S Autoshot Dual Aluminum & Steel Dent Pull System**, UNI-9802, is a dual pulling system for aluminum and steel panels with improved output power and digital control for ease of use and quick repairs. This system operates on 115V common shop power. Insert the aluminum or steel torch, select process and set output power for the type of pull. The system comes with an aluminum CD-gun and steel torch, 4mm and 6mm AL collets and studs, spot tips for studs, tabs, rivets or wire and connects directly to a slide-hammer for "Touch & Pull" operation with exclusive weld-tips.

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Made entirely from aluminum

The **Prevest Piping System PPS1** is a compressed air network range made of compact, lightweight, impact-resistant pipes and fittings made entirely from aluminum. The PPS1 is designed to be easy to assemble. The aluminum alloy used, combined with epoxy paint on the outside and a treatment on the inside, protects the pipe against the risks of oxidation and corrosion. This system comes equipped with the “PPS Grip Concept” to ensure a good connection and no leaks. Flow rates are optimized thanks to a smooth internal pipe surface, a low friction coefficient and a large diameter.

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Remove clips without breaking them

The **Steck Manufacturing Retainer Clip Release Tool**, No. 21715, is designed to facilitate the easy removal of fender flares and rocker moldings by releasing the clips that attach the moldings from outside. This tool slides between the molding and panel, allowing the user to access the expansion ears of the clip from the outside. By sliding the tool back and forth, the user will be able to pinch the expansion ears and release the clip properly, without breaking the clip, the company says. The tool is 10” long and made out of 0.015” spring steel with a reinforced nylon handle for flexibility and strength. The wide opening allows the tool to release all types of retainer clips.



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Offers improved corrosion resistance

The **Reelcraft Heavy Duty Stainless Steel Cord Reels** are designed for applications where corrosion or sanitation are a concern. The heavy gauge 304L stainless steel provides an easy-to-clean finish and improved corrosion resistance.

A robust collector ring helps assure maximum conductivity current flow. All reels include a 4-5’ pigtail, multi-position guide arm and adjustable cord stop.



These reels are for indoor, non-weather-tight applications only.

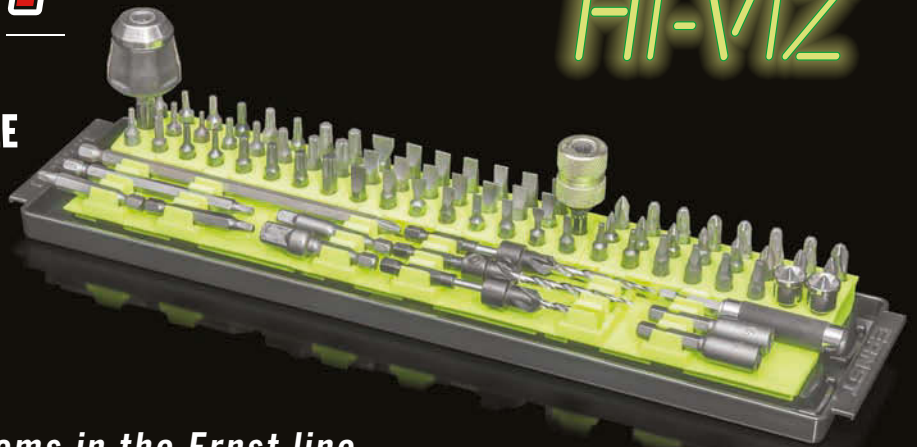
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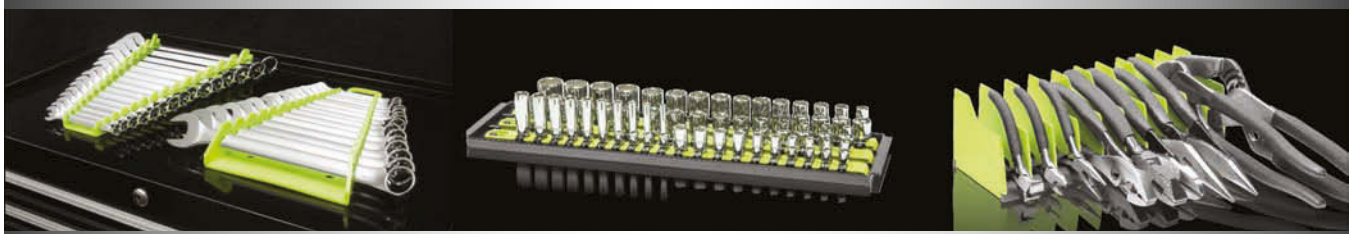
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NEW PRODUCTS

Detects punctures in tread

The **Branick Industries Model BTT-5700E Adjustable Height Electronic Tire Tester and Inspector** detects punctures, partial penetrations and metal objects still in the tread. A detected flaw stops tire rotation and the Flaw light and visible spark ensure it won't be missed, according to the company. The adjustable height platform provides an ergonomic working environment and the swivel arm operator panel allows access to the controls. This unit can function in both automatic and manual modes, and can handle tires up to 24.5" bead diameter and 18" cross section. All probe heads include the quick-change system for fast change over. A medium truck probe head is included with the unit, and other probe head sizes are available to ensure complete coverage of all tire types.



Circle 73 on card, or enter at "e-inquiry" on VehicleServicePros.com



Global OBD-II vehicle coverage

The **Zurich ZRPRO Professional OBD-II Scanner** is designed to offer sophisticated diagnostics in an easy-to-use tablet. The ZRPRO offers Bluetooth wireless connectivity to the vehicle and a fully functioning Android tablet that includes a high resolution camera. Other notable features include global OBD-II vehicle coverage for most U.S., Asian and European vehicles built after 1996; full health system reporting and live graphing; Auto VIN scan; bidirectional controls; OEM special functions including battery reset procedures, electronic brake caliper release, key fob relearns and more; and built-in DTC code search. The tool is Wi-Fi enabled, with an 8" IPS touchscreen display and web browser that allows users to download third-party apps. The scanner comes in an impact-resistant case.

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Turns on and off with the wave of a hand

The **Clore Automotive Light-N-Carry Lenexa Work Light**, No. LNC7250, is a versatile performance light with a professional level lithium battery, three operating modes, handsfree operation and a variety of mounting options. The Lenexa features three operating settings (Spot, Flood and Dual) to cater to a variety of lighting needs. It comes equipped with a dimming feature to give the user full control over each of the working modes. This light features a 180-degree rotating base and handsfree motion-activated control that allows the light to be turned on and off with a wave of a hand. The Lenexa kit includes the company's M-Lock head strap, M-Lock belt clip and M-Lock action mount for mounting action camera accessories.

Circle 75 on card, or enter at "e-inquiry" on VehicleServicePros.com

Blade deploys at push of button

The **Buck Knives 112 Auto Knife** is deployed with the push of a button, readying the 420HC blade quickly. The 112 Auto features a Macassar Ebony handle, brass bolsters and a clip point blade, and includes a leather sheath for safe carry. The blade includes a lifetime warranty and is made in the U.S.A.

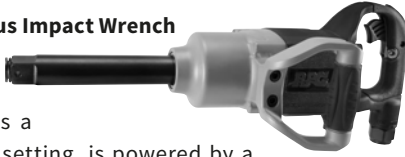


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Includes 6" extended anvil

RPG's 1" Drive Mini Plus Impact Wrench

includes a 6" extended anvil and weighs 17.86 lbs. This tool features a three-position power setting, is powered by a durable twin hammer clutch and delivers a nut-busting maximum torque of 2,600 ft-lbs and a free speed of 5,000 rpm. The impact tool is 19.2" in overall length and comes with a durable, rubber-coated side comfort grip for slip-free convenience and reduced fatigue.



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Bright LED for illuminating low-lit work areas

The DeWalt XR 1/2" Mid-Range Impact Wrench with Tool Connect System, No. DCF896,

allows for tool control through its precision wrench and precision tap control features, as well as a variety of additional customizable settings within the tool connect app. This impact wrench offers up to 2,000 rpm, 3,100 impacts per minute and a maximum torque of 330 ft-lbs in forward and 600 ft-lbs in reverse. At 6.95" in length and 3.48 lbs, it's a compact choice available in both Hog Ring and Detent Pin configurations. This wrench also features a brushless motor, variable speed trigger, convenient belt clip and bright LED for illuminating low-lit work areas.

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Test batteries, starting and charging systems

The AutoMeter Heavy Duty Truck Handheld Electrical System Analyzer, No. BCT-460,

is an electrical system diagnostic tool that can test batteries, starting and charging systems. This tool includes a preventive maintenance test menu. If the vehicle is not reporting an electrical system problem, the PM test can quickly identify if the battery bank, starter, alternator and cables are in proper working order. If no problems are found, the test can be completed in less than two minutes. If problems are found, the tool will direct the user to appropriate next steps to diagnose and locate the cause of the problem. This tool offers a ruggedized control module with 7" wide viewing angle touchscreen, and is Wi-Fi enabled for automatic data collection. The BCT-460 includes 20' external volt leads, charger for internal battery, stud mount battery adapters, starter adapters and quick start guide.



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NEW PRODUCTS



Offers high precision linear motor

The Dent Fix Equipment AluArc Aluminum Repair Station, No. DF-900ARC, is a drawn arc-welding unit developed specifically for thin aluminum car body panels. The gun is equipped with a high precision linear motor with a digital control, which provides refined synergies. According to the company, drawn arc-welding offers several advantages over capacitor discharge technology, including deep repair capabilities, reduction in post repair preparation, no impact on the reverse side of the panel and more. An intuitive, functional digital interface provides two welding modes: Synergic Mode factory pre-established programs, and manual mode, which provides personalized settings. The kit comes with a five-year warranty and includes an automatic gun with two ground electrodes, aluminum keys, consumables box and lifting rod.

Circle 65 on card, or enter at "e-inquiry" on VehicleServicePros.com



Test brake fluid and coolant

The Phoenix Systems BrakeStrip Plus is a test strip that features a brake fluid test pad on one end and coolant test pads on the opposite end. This strip is designed to offer service centers up to two times the service opportunities. The BrakeStrip Plus is protected by multiple patents and patents pending.

Circle 84 on card, or enter at "e-inquiry" on VehicleServicePros.com



For servicing electric vehicles

The Rotary Lift IG210W In-Ground Lift is designed to help technicians efficiently service electric vehicle, sports cars and exotic vehicles. This lift provides improved under-car access, thanks to low-profile arms and extra-wide piston spacing. This lift has 85" of clearance between its two plungers. This distance allows for greater drive-through clearance with no superstructure to drive over and better under-car access. Notable features include: self-contained steel cover that surrounds steel frame design; maintenance-free guides and cylinders; hardened chrome pistons designed for long lifting life; safety locking system; and standard threaded rubber adapter pads. This lift has a 10,000 lb lifting capacity and is ALI certified to meet industry safety and performance standards.

Circle 88 on card, or enter at "e-inquiry" on VehicleServicePros.com



For R-1234yf/PAG air conditioning systems

The Tracer Products TPOPUV19 UV Leak Detection Kit is suitable for R-1234yf/PAG air conditioning systems. Each kit includes three Mini-EZ dye cartridges, an EZ-Ject dye injector assembly, a R-1234yf hose/coupler and purge fitting and a two ounce bottle of GLO-AWAY Plus florescent dye cleaner. The kit also includes the TPOPUV Opti-pro UV cordless, violet light leak detection flashlight. Each Mini-EZ cartridge is filled with Fluro-Lite 5 dye formula, which is designed to fluoresce brighter, and has improved resistance to extreme temperature ranges and moisture.

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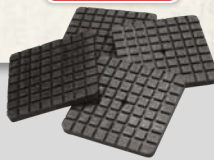
Asymmetric
Rotary-Screw



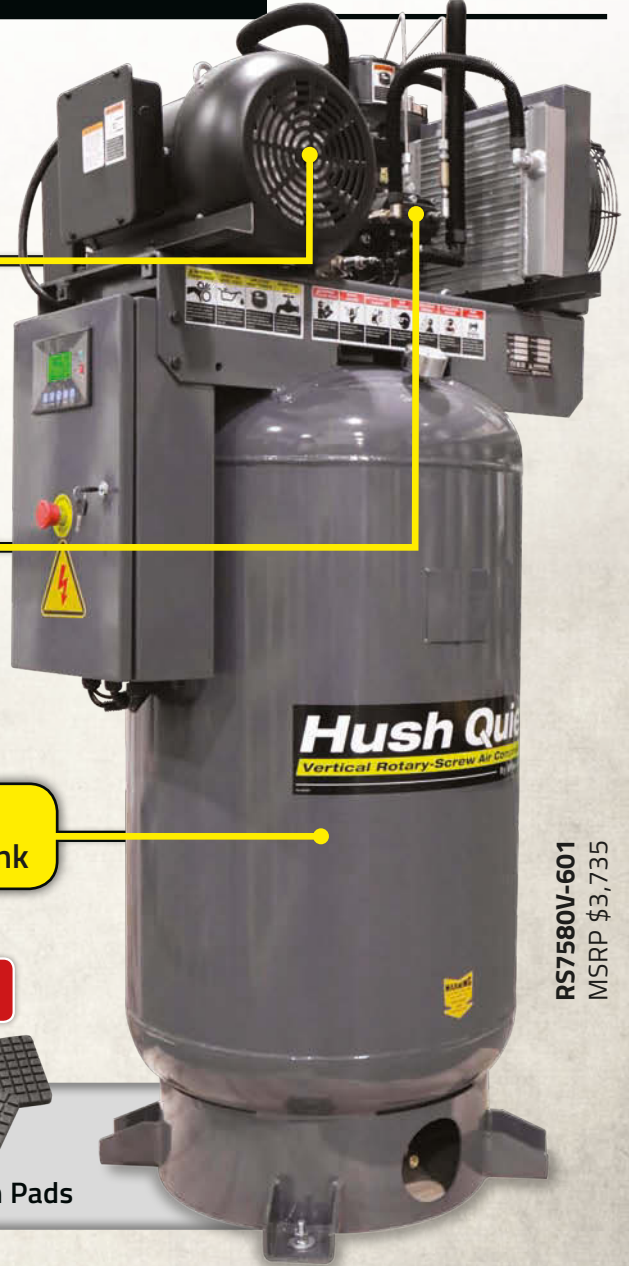
80
Gal

ASME
Certified Tank

FREE



Anti-Vibration Pads



RS7580V-601
MSRP \$3,735



Hush Quiet[™] Vertical Rotary-Screw Air Compressor

Reduce shop noise and increase airflow with the heavy-duty **Hush Quiet**[™] rotary-screw air compressor by BendPak®.

Quiet time never sounded so good.

1-800-253-2363 ■ BendPak.com/Hush

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BP BendPak

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NO SUCH THING AS "TOO TALL"



Model shown XPR-10XLS

MRP \$3,860

***FREE SHIPPING**



For technicians challenged to work under a lift all day, common injuries stem from poor working posture and improperly fitted equipment. BendPak's **NEW 10,000-lb. capacity XPR-10XLS** and **XPR-10AXLS** two-post lifts feature over **80 inches of lifting height** to absolutely tower above other lifts. Make all jobs easier and support the long-term health of taller techs. Plus, get the best warranty and after-sale support that only comes with BendPak.

1-800-253-2363 ■ bendpak.com

*Free shipping on BendPak products to the 48 contiguous states.
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BP BendPak

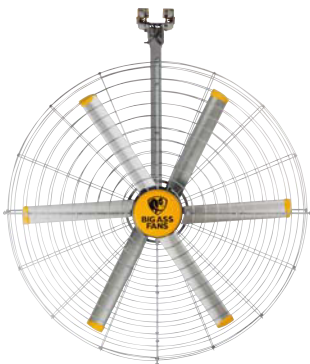
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Transports up to four tires

The **AME Easy Stacker 800** is designed to fit onto an existing forklift and was developed for safe and efficient tire handling. This tool is ideal for tire dealers, retreaders and workshops with limited space, the company says. The Easy Stacker 800 stacks and transports up to four tires with or without rims. This product has a lifting capacity of over 350 lbs and will accommodate tire sizes from 16" to 31" in diameter. The compact design enables precision maneuverability while helping reduce manual and hazardous workplace operations.

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Cool air up to 120' away

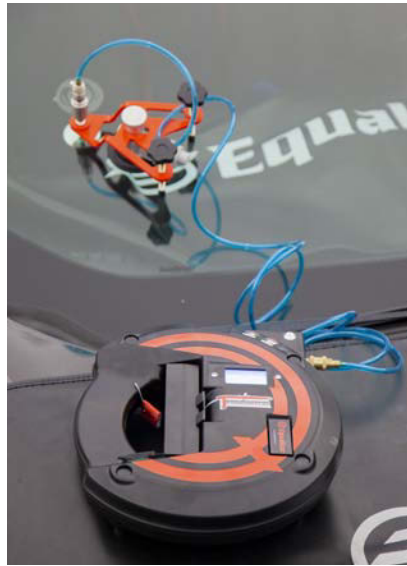
The **Big Ass Fans Pivot 2.0 Fan** is designed to bring cooling airflow to hard-to-reach work areas. Pivot 2.0's direct-drive motor offers quiet operation, and the durable steel cage keeps workers safe. This fan can cool air up to 120' away, thanks to a 6' diameter motor. Other notable features include: versatile installation with ceiling, beam and column mounting options; 73 airflow positions and variable speed controls; quiet operation with a direct-drive motor and balanced airfoils; and a three-year warranty, with lifetime warranty on hub and airfoils.

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Automatic windshield repair system

The **Equalizer Terminator** is an automatic windshield repair system. Terminator is designed to allow technicians to walk away and focus on other business while the repair is in process.

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For low-profile, high performance tires

The **Hofmann Monty 3550 Tire Changer** is designed to service a wide variety of wheel and tire assemblies, including low-profile, high performance and run-flat tires to maximize a shop's versatility. This tire changer features the company's patented smartSpeed technology to help change tires quickly and safely without damage.

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Seven self-closing drawers

The **Hazet Mobile Work Bench, No. 179 NW-7**, is designed to store tools neatly and keep them portable. The bench combines central locking and a cylinder lock to secure both the doors and drawers at the same time. The 180 degree rotation prevents the key from breaking off. Two fixed castors and two swivel casters with brakes, each with a 125 mm diameter help ensure smooth, easy movement. The seven self-closing drawers can be pulled out 100 percent along their ball-bearing telescopic rails. The six upper drawers have a loading capacity of 55 lbs, and the large lower heavy duty drawer can carry up to 88 lbs. The complete welded construction is designed for tough daily workshop use. A laptop holder and a perforated tool holder with hooks are also available as accessories.

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Traps oil, water and particulates

The **Motor Guard MHT-7100 Compressed Air Filter** is a high-volume water trap combined with a particulate and oil filter with the company's hydrophilic depth cartridge that filters to a 0.01 micron rating. The cartridge was developed to trap oil, water and particulates in between the tightly wound sheets of high-efficiency media. A drop-in replacement cartridge (No. M-710) and spin-off T-handle provide for a rapid cartridge change.

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TOOL STORAGE MADE FOR YOU

37" 6 Drawer Fully Assembled Heavy Duty Carts

- Professional grade construction - 900lb. capacity
- 6 drawers and locking top storage compartment with gas struts
- Extra deep 26" drawers with HD Slides for smooth operation
- Latching drawers and PVC drawer liners
- HD casters for smooth rolling mobility

MST3706XG - Green

MST3706XMB - Matte Black

MST3706XTG - Textured Gray



MST3706X Series	Width	Depth	Height
Outer Dimensions	37.0	26.0	43.0
Top Compartment Inner Size	36.0	24.5	7.5
4x Small Drawer Inner Size	31.5	22.8	2.8
2x Deep Drawer Inner Size	31.5	22.8	5.8

WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov



Fully Assembled



Monster 41" Tool Boxes

- Heavy duty steel construction and a high gloss powder coat finish that resists scratches, stains and chemicals
- Patented Quick Release™ self-latching drawers keep drawers closed even if you are moving and are load rated
- Secure tubular coded lock system
- PVC foam drawer liners • 5-Year Limited Warranty



Roller Cabinets

Each standard drawer can hold up to 150 lbs. and deep drawers with two sets of slides can hold up to 300 lbs. of your tools and equipment. The extra wide top drawer gives you room for long tools and the extra deep bottom drawers can hold your bulky tools.

41" x 25" 11 Drawer Roller Cabinet

A. MST412511RCMBBK-150 - Matte Black

B. MST412511RCBKGN-150 - Black/Green

WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov

Top Chests

Each drawer uses full-extension slides load rated 100 lbs. per drawer and 200 lbs. on the deep drawer. Two heavy duty gas struts hold the lid open to reveal a large open till area where large and bulky tools can be stored. It also comes with tubular, coded keys and lock.

41" x 25" 8 Drawer Top Chest

A. MST412508CHMBBK - Matte Black

B. MST412508CHBKGN - Black/Green

WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov

New Dimensions

30.9" width x 22" depth x 42.7" height

Monster 7 Drawer Fully Assembled Carts

- Professional grade construction - 500lb. capacity
- 7 drawers and locking top storage compartment with gas struts
- Extra large 15.6" locking top storage compartment
- Protective bumpers on all corners
- Latching drawers and PVC drawer liners

MST3507XG22 - Green

MST3507XMB22 - Black

MST3507XTG22 - Textured Gray

WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov



ASK YOUR MOBILE DEALER!



NEW TOOL STORAGE SOLUTIONS

MST3605SFUTG22 36" 5-DRAWER SLIDE TOP CART 22" DEEP FLIP UP TOPS

PROFESSIONAL
GRADE MATERIALS
AND CONSTRUCTION

5 FULL LENGTH DRAWERS
AND SLIDING TOP

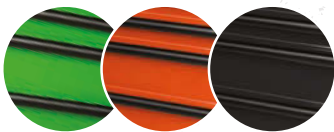
ROUNDED CORNERS
PROVIDE DENT PROTECTION

800LB
CAPACITY

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"e-inquiry" on VehicleServicePros.com

MORE COLORS

MST3605SFUG22 - Green
MST3605SFUORNG22 - Orange
MST3605SFUMB22 - Matte Black



www.monster-tools.com



TOOL
HOLDER



LATCHING
DRAWERS
AND PVC
DRAWER
LINERS



"Monster tool boxes are designed for guys like us. Heavy duty quality, dope designs & these Monsters can hold all size tools!"

- Willie B. stars in Two Guys Garage on Velocity, is the creator and host of Grudge Race on NBC Sports and is involved in Colorado Street Outlaws.

DriveCRASH Will Transform Your Collision Shop

Modern vehicles have become increasingly more complex and it's changing the landscape of the collision industry. Even when there is no obvious visual damage, electronics and system operation can still be impacted. As a result, modern collision shops need to be prepared with pre- and post-scan equipment to evaluate and repair collision damage—seen and unseen.

For over 20 years, Drew Technologies has set themselves apart from any other J2534 diagnostic and reprogramming devices available on the market—manufacturing the most tested, validated, and accepted J2534 devices around the world used by technicians, dealerships, and OEM's alike. Now we are expanding our reach to address the needs of the collision industry with our latest innovation, DriveCRASH.

Designed to deliver complete scans and comprehensive remote services, DriveCRASH supports collision shops focused on repairing intelligent vehicles. Leveraging OEM diagnostic tools and an infrastructure of more than 100 expert technicians the Drive platform features a wide array of capabilities built into a single IP-Rated, ergonomic, Windows 10 tablet with capacitive touch-screen and dual-core Intel processor.

DriveCRASH brings OEM pre/post-scanning and remote diagnostics directly to your body shop! OEM Scan, is an OEM-recommended remote scanning service that provides collision shops with the most comprehensive pre/post-scan in the industry. DriveCRASH produces a complete scan report using the built-in OEM Scan. DriveQuick, is an economical scan that can be performed at any phase of a repair. Generating a printable report, DriveQuick helps the technician accurately assess the damage caused by collision.

DriveCRASH offers additional remote services including, fully integrated SAE J2534 CarDAQ interface to support current and



future communication protocols. Our Remote Assist Program (RAP) is also built into the device allowing for ECU programming with coverage of powertrain for all OEM's and body control modules for many.

Additional key hardware features include, built-in microphone, speakers, and dual front (2MP) and rear (5MP) cameras for remote support. DriveCRASH is also equipped with Wi-Fi (802b/g/n), Bluetooth (4.0) connectivity, and an internal rechargeable battery and power adapter.

When it comes to determining damage caused by collision, Drew Technologies understands the importance of being precise. For accuracy and efficiency, DriveCRASH is the most trusted solution for collision shops! ■



drewtech.com

Drew Technologies

3915 Research Park Drive, Suite A10
Ann Arbor, MI 48108
(877) 888-2534
sales@drewtech.com

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on VehicleServicePros.com**

MAXIMIZE YOUR RIGHT-TO-REPAIR!



CarDAQ-Plus[®] 3 Offers Complete OE Application Compatibility

- Right-to-Repair (R2R)
- Emissions-related programming for all makes / models
- Full pre-R2R diagnostics and programming for numerous OEMs
- Vehicle security and key functions available for many makes
- Exclusive J2534 Toolbox application with self-guided training and assistance

Call or visit our website to learn how **CarDAQ-Plus[®] 3** can maximize your Right to Repair!



877.333.9036

DrewTech.com/PTEN

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RAP[®] 2

REMOTE ASSIST PROGRAM

RAP[®] 2

allows technicians and shops focus on the key work they know best while providing them a resource for module programming.



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What drives you?

If you are driven by a passion to succeed, BOLT ON is your fuel. Our innovative software helps increase AROs, streamlines processes, provides a greater display of professionalism, and improves repeat business by delivering full transparency to customers.

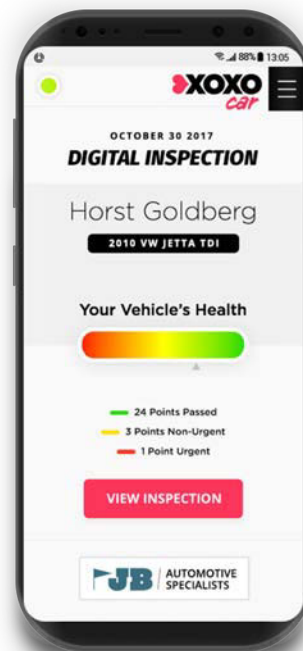
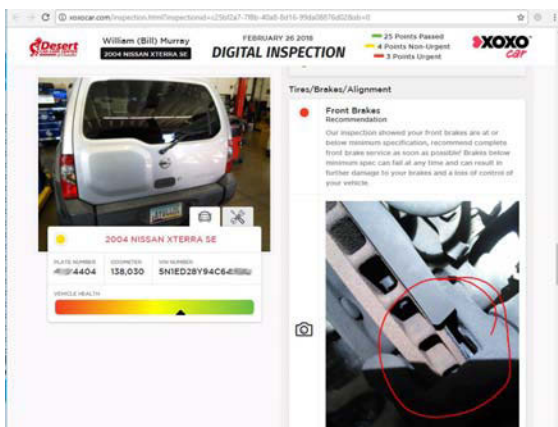
Transparency is directly connected to communication. However, communicating with customers in the automotive repair industry can be a challenge. How many times have you been unable to reach customer by phone or had a hard time explaining an issue in a way they'll understand?

With BOLT ON's powerful digital vehicle inspection software that texts pictures and videos along with color-coded ratings, you can alleviate that struggle and make an undeniable, outstanding difference in customer relations, vehicle inspections, and countless other aspects within your shop.

"The response I get back from people is unbelievable. They can see what we're seeing. A picture is worth a thousand words. Even if they're not buying everything, they can see it for themselves." – Mike Chase, Service Manager, Holt Auto Service and Machine Shop.



If you want to improve your shop and see how BOLT ON TECHNOLOGY is revolutionizing the automotive world, contact us at www.boltontechnology.com or visit us at booths 733 - 741 & 832 - 840 during the 2019 Vision Expo. ■



boltontechnology.com

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boltontechnology.com

WHAT DRIVES ME.

I'm driven by a passion to succeed.

Doesn't matter if it's my award-winning pulled pork recipe or running the best damn shop in the area, I never stop until it's right. That means creating rock-solid customer loyalty, increased car counts and higher repair orders.

That's why BOLT ON TECHNOLOGY is in my shop.

Circle 98 on card, or enter at "e-inquiry" on VehicleServicePros.com

Learn how **BOLT ON** can fuel your success, visit booths **#733-741** and **#832-840**.



Rislone Fuel System Treatments Offer All-in-One Solution

The next time one of your customers complains that their vehicle is running sluggish or isn't providing the fuel economy they expect, save them a trip to the repair shop by offering a quick, easy and affordable solution – the “tune-up” in a bottle.

Rislone Gasoline Fuel System Treatment (p/n 4700) and Rislone Diesel Fuel System Treatment (p/n 4740) improve the quality of gas by increasing its cleaning ability, adding lubrication, removing contaminants, reducing spark knock, and helping to prevent the fuel from going bad.

One 16.9 oz. bottle of Rislone Gasoline Fuel System Treatment contains the same amount of additives as a full bottle of each of the following: valve and combustion chamber cleaner, phase separation and fuel stabilizer, UCL upper cylinder lubricant, fuel

pump and injector cleaner, water remover gas dryer and octane booster and gas treatment.

Rislone Diesel Fuel System Treatment is specifically designed for light to medium-duty trucks and diesel cars. It includes the 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 and cetane booster and diesel treatment. ■



P.O. Box 187
Holly, MI 48442
1-800-345-6572

rislone.com

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CVT Transmission Fix

The most advanced Continuously Variable Transmission (CVT) fix you can buy. Engineered to stop slips, sluggishness, and hesitation - all while safely and quickly sealing any CVT leaks. After over a year in development, we're proud to introduce the finest CVT repair formula on the market, bar none.

Bar's Leaks CVT Transmission Fix starts working the minute you install and start driving the vehicle.



Part# 1414

www.barsleaks.com

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Wheel Alignment on ADAS

Advanced Driver Assistance Systems (ADAS) is changing the landscape of the automotive world. Lane departure warning, collision avoidance braking systems, auto adaptive cruise control and fully autonomous driving systems are all using ADAS derivatives. ADAS uses numerous cameras, sensors and inputs and can take over the vehicle to correct the steering, braking or accelerator to stay safe on the road.

A majority of OEMs require a thrust angle wheel alignment before or during the calibration of ADAS. In order to find out if ADAS requires a wheel alignment, every shop should have quick access to OEM repair information and also seek out automotive diagnostic reading and reset tools as part of their wheel alignment bay.

There are a lot of questions with ADAS and even more misinformation, hype and incorrect advice being passed around. The correct answers are found by seeking out OEM repair information. Every shop needs to invest in a source to get the correct answers fast in a quickly emerging ADAS landscape. ■

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cemb-usa.com

678-717-1050

Introducing the new DWA1000 ADAS Wheel Alignment System

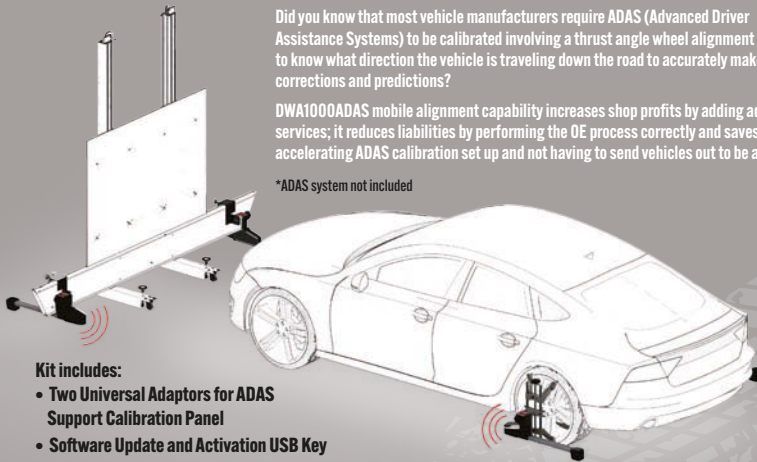
Add alignment service and time savings profitability to your ADAS capability.

ALIGNMENT & ADAS CALIBRATION

Did you know that most vehicle manufacturers require ADAS (Advanced Driver Assistance Systems) to be calibrated involving a thrust angle wheel alignment in order to know what direction the vehicle is traveling down the road to accurately make safety corrections and predictions?

DWA1000 ADAS mobile alignment capability increases shop profits by adding additional services; it reduces liabilities by performing the OE process correctly and saves time by accelerating ADAS calibration set up and not having to send vehicles out to be aligned.

*ADAS system not included



Kit includes:

- Two Universal Adaptors for ADAS Support Calibration Panel
- Software Update and Activation USB Key

Turn your 2-post lift into a profitable alignment service bay today!

Includes all items necessary to begin offering wheel alignments. (2 post lift not included)

www.cemb-usa.com
(678) 717-1050



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LT855A Texas Twister™ “Is Pulling For You”

Now you can convert your air hammer into a pneumatic slide hammer with the Texas Twister. Simply snap the Texas Twister curved air bit into the collet of your air hammer. Reverse the air hammer handle in your hand now using your thumb to push the hammer trigger. Feel the 3000 air hammer blows per minute turning into new pulling power.

- One hand operation allows you to hold parts with your other hand. Safe controlled part removal without parts and fluids crashing on the floor.
- Use the axle crow foot and pry bar sealer puller to easily remove the most stubborn axles and inner axle seals.
- Use the flat blade puller for removing frozen distributors, pulley wheels and speed sensors without damaging them.
- The J shaped hammer bit is used to hammer bolts/studs, engine, transmission mounts from the back side. Use J hammer bit to connect to chains for added pulling versatility.
- Use the double ended male 1/2-20, 5/8-18 or 3/4-16 puller connectors to connect the Texas Twister to your current pullers.
- Extend the reach of the tool by using the 20" straight extension bar.

NO MORE SLIDE HAMMERS. Now you can use 21st century air hammer pulling power to get the job done.

TEXAS TWISTER -- safe, powerful, fast, simple effective air hammer bits you will use every day. ■



Patent 7,036,211



See the Texas Twister work on YouTube.

PTEN Award Winning Tool



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ROTATING RING LUG NUT REMOVAL MADE EASY

LT4569 GERMAN VEHICLE ROTATING RING LUG NUT REMOVAL KIT

- Easily remove rotating ring lug nut locks from Audi, BMW, Mercedes Benz, Porsche, VW - **SAFE, FAST & EASY**
- Use LT4569A Silicone Welding Shield to protect wheel from heat damage while you Mig weld rotating ring to lug nut
- With rotating ring welded to lug nut, use included twist socket (LT4569B) to remove lug nut
- LT4569A consumable item with factory defect warranty only
- LT4569B has a lifetime warranty
- Patent Pending on LT4569A Silicone Welding Shield



DO YOU WORK ON GERMAN BRAKE CALIPERS?

LT4995 GERMAN VEHICLE BRAKE CALIPER SOCKET AND BIT SET

- Every German vehicle brake caliper socket/bit when you need it
- Works on all German vehicle brake caliper applications
- Audi, BMW, Mercedes Benz, Porsche, VW
- Lifetime warranty
- Patent Pending
- Includes - 3/8" Drive Bits

7mm x 24mm	1/4" Drive Bits
8mm x 24mm	9mm x 20mm
9mm x 50mm	1/2" Drive Sockets
7mm x 65mm	11.5mm x 50mm
7mm x 92mm	AS22 x 48mm
11mm x 100mm	



LOCK TECHNOLOGY, INC.
Toll Free 800-421-7241
www.lttools.com
lttools@lttools.com

GOT A FROZEN/DAMAGED LUG NUT?

LT1350 LUG RIPPER II

PATENT PENDING

- Don't torch frozen/damaged lug nuts off just drill out the lug nut/stud threads only in 11 minutes or less
- **Available from your local mobile tool dealer**
- 16mm Tungsten steel drill bit w/4 carbide cutters allow for speed and durability
- Includes locking collar clamp for safety
- Will not damage rim
- Includes 4 drill guides - 17mm - 11/16" 21mm - 13/16"
19mm - 3/4" 23mm - 7/8"



Drills out female/male threads on lug nut/stud only!

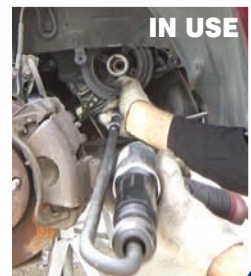


THE TEXAS TWISTER™ IS PULLING FOR YOU!

LT855A TEXAS TWISTER™ AIR HAMMER PULLING KIT

Use your air hammer to pull -

- Seals
- Diesel injectors
- Axles
- Bearings
- Pulleys
- Harmonic balancers
- Axle pinion flanges
- Old distributors
- Connect to your specialty pullers
- **NO MORE SLIDE HAMMERS**
- Patent #7,036,211



Pulling made **SAFE, FAST & EFFICIENT**



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Technician Recruitment and Retention and Shop Equipment



In today's business climate the ability to recruit and retain high quality technicians is becoming a driver of profitability, productivity and overall shop success. With numbers in technical schools dwindling, and an aging technician population, it is imperative that shop owners focus on creating a working environment that attracts technicians. In working with heavy duty truck shops throughout the United States, Gray Manufacturing has discovered a correlation to state of the art, clean shops and high retention rates of technicians. Shop owners are using technician recruitment costs to help R.O.I. shop investments.

Equipping a shop with mobile column lifts, such as the Gray WPLS, will attract technicians by providing an ergonomic environment. Lifting an entire vehicle to a work height of seventy plus inches, will make the technician's job easier, cleaner and safer. The Gray WPLS can be used to improve the quality of preventative maintenance and will make any major component work much less taxing on the technician. Gray Manufacturing Company, Inc. manufactures and holds the United States and Canadian

patents on wireless mobile column lifts. This commitment to innovation has created the most technologically advanced column in the market. Gray's WPLS lift system can be the center piece to recruitment and retention of technicians.

Providing high quality component handling equipment, such as transmission jacks, clutch jacks, and wheel dollies will help the technician safely handle heavy components. Gray's MM series transmission jack is designed to handle the largest transmissions. The MM is also designed to use many time saving and effort reducing adaptors for handling differential removal, brake work, king pin work and many other jobs. This equipment is important to the technician as they will reduce injuries while allowing shop owners to control repair processes to ensure quality. ■



1.800.821.7320 • GRAYUSA.COM

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- Clutch Jacks
- Engine Stands
- Floor Service Jacks
- Surface Mounted Lifts
- Fluid Handlers
- Fort Lift Jacks
- Mobile Column Lifts
- Oil Filter Crushers
- Shop Cranes
- Shop Presses
- and much more!



EXPERIENCE THE
GRAY DIFFERENCE

DO YOU EVEN *LIFT?*



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GRAYUSA.COM

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NEW Coast Rechargeable Headlamp

The FL85R Headlamp is the biggest and brightest headlamp in COAST's FL series. The light features their Flex Charge Dual Power system.

The Flex Charge feature allows for the rechargeable battery pack to be recharged inside or outside of the headlamp using a micro USB. The Dual Power allows for it to run on COAST's custom rechargeable lithium battery pack or standard alkaline batteries. The first button on the headlamp gives you the ability to shine an ultra wide flood beam and then quickly twist the bezel to a long reaching spot beam with transition halo. The second button on the headlamp enables the user to switch quickly to a fixed red LED light to preserve night vision. It also includes a reflective safety strap for additional safety benefits. The FL85R boasts an impressive 700 lumens and max runtime of 8 hours 30 min. on a single charge.

With Coast's commitment to quality, the FL85R Headlamp is impact resistant, weather resistant and its LED is virtually unbreakable. The FL85R Headlamp is backed by Coast's lifetime warranty against defects in materials and workmanship. Tested and rated to ANSI/FL1 standards. ■



COAST®

LIGHTS • KNIVES • MULTI-TOOLS

Coast Products

8033 NE Holman • Portland, OR 97218

1-800-426-5858

coastportland.com

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ENGINEERED FOR COPS,
UNBEATABLE FOR SHOPS.



THE COAST TX14R

RECHARGEABLE FOCUSING FLASHLIGHT

900 LUMENS BRIGHT • FLOOD & SPOT • 1381 FT RANGE • IPX4 WATERPROOF

LIFETIME WARRANTY COASTPORTLAND.COM

COAST®

TRUSTED TOUGH.

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Induction Heating and its Applications

We understand that releasing metal from corrosion and thread lock compounds can be a daunting and frustrating task. With the Mini-Ductor Series, you can now release metal from corrosion and thread lock compounds without the dangers of open flame and up to 90% faster – 3/4" nuts are turned red hot in seconds.

The Heat Without the Flame

Induction heating offers a combination of speed, consistency and control by using invisible, flameless heat that is transferred to the product via electromagnetic waves in which the part never comes into direct contact with any flame, and the coil itself does not get hot. The coil serves as the transformer primary and the part to be heated becomes a short circuit secondary. When a metal part is placed within the induction coil and enters the magnetic field circulating eddy currents are induced within the part. These eddy currents flow against the electrical resistivity of the metal, generating precise and localized heat without any direct contact between the part and the coil.

Precise. Safe. Reliable.

These products prevent damage to nearby plastics, rubber, wiring

and fuel lines – eliminating unnecessary repair and install. Both Mini-Ductor's work with all Mini-Ductor coils and attachments. All of the coils are flexible and can be bent or separated for a variety of applications. Each coil will last for a couple hundred uses or more subject to proper use.

Variety of Applications

- Decals/Graphics
- Exhaust Manifold Bolts
- Lug Nuts
- Bearings
- Seatbelt Bolts
- Fuel Tank Straps

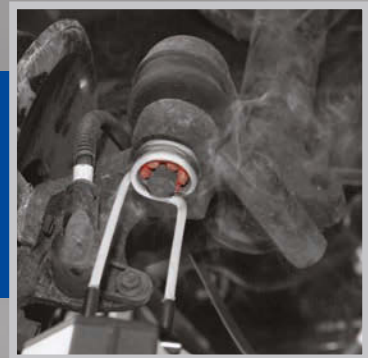
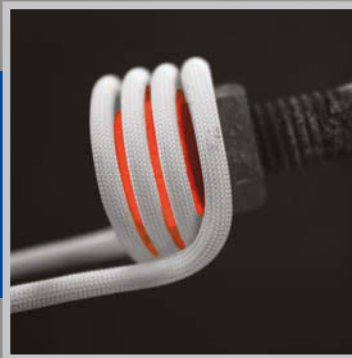
There's no longer any need to use a potentially dangerous torch to remove parts. An open flame is unreliable, time consuming and can damage the area around the part, affecting productivity and ultimately the profits you make. ■



theinductor.com
877-688-9633

Circle 109 on card, or enter at "e-inquiry" on
VehicleServicePros.com

Toss Your Torch



Switch to Induction Heat

Mini-Ductor® Venom®

The Mini-Ductor Venom uses Invisible Heat® to release metal from corrosion and thread lock compounds without the dangers of open flame and up to 90% faster - 3/4" nuts are turned red hot in seconds.

Applications:

- > Seatbelt Bolts
- > Suspension
- > Fuel Tank Straps
- > O2 Sensors
- > Brakes
- > Inline Connectors



Circle 110 on card, or enter at "e-inquiry" on VehicleServicePros.com

HVAC air temperature or flow issues

Actuator position and temperature values accessed with your scan tool are very useful when diagnosing a system that is not functioning properly.

By Barry Hoyland, Contributing Editor

With all of the electronic systems on today's vehicles it should come as no surprise that Heating Ventilation and Air Conditioning (HVAC) systems utilize electric motors controlled by a computer module (or modules) to direct and control air to various zones at the desired temperature.

Electrically controlled motors to operate blend doors, or flaps, have been around for quite some time. Some of the newer innovations with these actuators involve the presence of control modules that are able to precisely move the doors to provide comfort to individual zones, based on inputs from the driver or passenger. These systems can control air flow much better, mainly due to the incorporation of multiple temperature sensors within the system, along with actuators that provide feedback to control modules.

Temperature sensors can include sun load sensors, which allow for compensation of extreme interior temperatures, and ambient (outside) air. Many vehicles have multiple sensors in the ducts, as well as other locations within the vehicle.

Temperature sensors and flap position typically report values to the HVAC module in the vehicle. In some cases that will be the Body Control Module (BCM). The module can then send output signals to actuators that move flaps within the system. Changes in actuator position can change the temperature or direction of airflow by moving levers attached to flaps within the air box/ducting system under the dash.

▲ Use your scan tool to observe temperatures, door actual and door commanded positions. Note the difference of the actual and commanded door positions on this vehicle.

▲ Your scan tool also has the ability to display temperature values. Note any differences between commanded and actual differences.

Photos courtesy of AutoEnginuity.

In many cases, the actuator itself is used to provide feedback to the module for the flap position. Actuator position and temperature values accessed with your scan tool are extremely useful when diagnosing a system that is not functioning properly.

For the most part, actuator motors by themselves are fairly reliable, but there are times when other issues occur that cause an actuator to fail. The issues are various, and most of them are known as “pattern failures” or common issues within a particular vehicle

 **TOOLS USED:**

- Vehicle Information sources
- Scan Tool
- Thermometer
- Refrigerant Identifier
- RRR Machine
- Various Hand Tools
- AirSept A/C Blend Door Repair Tool

manufacturer's product line. Many of the problems can be avoided by performing simple maintenance procedures, which in most cases is just operating the system through all the modes. Occasionally operating the system through each mode allows the doors to move throughout all ranges of their operation and will help prevent binding. Binding is caused by dust and moisture combining to create a "sludge" which restricts door movement.

A very common issue with many vehicle manufacturers is a "clicking" or "ratcheting" noise coming from the blend doors when an actuator is moving a door. In many cases this occurs at the beginning of summer or winter months. It happens mainly because the door positions are often used within a narrow window of operation during warm or cold months when temperatures remain consistent. When the doors stay in a small range and do not receive commands to open or close to their limits, the doors can then stick once a command is given to open or close a door; the actuator gears may strip, or in extreme cases, break the lever that operates the door.

Another fairly common issue is incorrect air temperature either throughout the vehicle, or in one or more zones.

1 OBTAIN VEHICLE INFORMATION

The initial part of obtaining vehicle information is to both interview your customer to determine what their issue is, and operate the system to confirm the problem can be duplicated.



▲ When working under the dash, the Right Angle Screw Bit Adapter from Milwaukee Tools saves valuable time.

After you are able to duplicate the issue, use your information source to see if there are any TSB's or other service campaigns that match the symptoms of this vehicle. Always verify the applicability of TSB's before performing the service, especially if the TSB requires programming a module. You should also obtain the specifics of *how* the system operates and *what type* of sensors are used, along with their operating specifications. Finally, you will need to know the procedure to calibrate the system after service work is performed.

The next part of obtaining information is using your scan tool to observe temperature and blend door position(s). Depending on the vehicle, and the scan tool, the PIDS for temperature and actuator positions can typically be found in the HVAC module, or in the BCM.

Operate the system through each mode and temperature range and note temperature and actuator position changes. In most cases if the problem with the vehicle is due to a "mechanical" problem, such as a binding door or

an actuator calibration fault, the PIDS will change slightly when different commands are given. If a command to open or close a door is given and the PID does not change, it is likely caused by either an electrical issue not allowing an actuator to function, or by a door flap or actuator that is broken.

2 DIAGNOSE THE ISSUE

Using data from your scan tool combined with information from a temperature gauge will help to isolate the cause of electrical or computer command issues. Use temperature gauges to verify PIDS from the computer. Note all tests should be performed with the engine running.

Some items to look for include:

- **Is the system voltage within specifications?** With the engine running, battery (system) voltage must be within specifications in order to supply enough power to operate all electric and electronic components.
- **Is the ambient air temperature PID consistent with the outside air**

temperature? If the ambient temperature PID does not match the actual air temperature, the HVAC system cannot operate correctly.

- **Does the desired air temperature from each zone match the outlet air temperature?** If the desired temperature does not match the actual temperature, the cause is likely due to an air delivery (actuator or door) problem.
- **If there are inlet and outlet air temperature PIDS, do they match actual temperatures?** If they do not match, either an air delivery issue, or a temperature sensor, can be the cause.
- **Is the outlet temperature consistent on the left and right sides of the vehicle?** Inconsistent temperatures from side to side may be caused by air delivery, but far more likely is caused by low refrigerant. A low refrigerant charge can cause cold outlet temperatures on one side of the dash close to the evaporator, and a higher outlet temperature as air moves further from the evaporator.

Prior to using your RRR machine to verify refrigerant charge, connect a refrigerant identifier to assure there is no contaminated refrigerant in the vehicle. An identifier will also let you know if there is excess air in the system that can affect proper operation of the A/C system.

Connect your RRR machine that is compatible with the refrigerant in the vehicle. Check system pressures, and if necessary, recover and recharge the system.

3 REPAIR THE VEHICLE

Some of the most common actuator or blend door repairs involve accessing components attached to the “air box” under the dash. Follow the instructions for removal and replacement found in your vehicle repair information data base.

In some cases, it will be necessary to remove air bag components in order to access actuators. If so, follow the repair instructions closely when disconnecting or connecting air bag system



▲ Another time saving and convenient set of tools for working in tight quarters are the Flex Head Wrenches from GEARWRENCH.

components. On a side note, I personally do not like to use “battery memory savers” when I am working on air bag systems. Even though it may take a few minutes to record and restore radio station and other “memory” features, along with another few moments to reset adaptive strategies in the computer, I believe it is worth the time instead of inadvertently activating an air bag.

There are quite a few tools that can be used to make under-dash work easier. One of my favorites is using one of my Milwaukee electric drivers with their Right-Angle Attachment. This attachment allows the user to use any 1/4" drive bit and access tight areas with the speed of a power driver, saving both time and frustration.

Other good tools for tight areas are the “Stick” series of ratchets from EZ Red, and the Flex Head Ratcheting Combination Wrenches from Gear Wrench. All of these tools have been designed with high tooth count ratchet mechanisms that provide the technician the ability to access and remove/install fasteners in areas that typically do not have substantial room to move a wrench.

Some door actuator issues can be taken care of by performing a calibration.

Follow the vehicle specific instructions from your repair source. Some vehicles will require the use of a scan tool while others can be accomplished by just removing the A/C system fuse for a few moments and allowing the system to self-calibrate. If a scan tool is required, it may be necessary to access the commands for calibrating the system in the “Special Functions” menu of your scan tool. If an actuator or door is replaced, it will also be necessary to calibrate the system following vehicle specific procedures.

If a door or flap is stuck, continued operation can sometimes cause the shaft of the blend door to crack. For GM, Ford, and some Jeep vehicles the company AirSept has developed a tool to repair the shaft in about two hours, rather than in some cases ten hours or more to remove the dash or air box to replace the entire door flap. After replacement, this will also require you to calibrate the system.

All in all, HVAC actuator and door issues are relatively easy to resolve with the right tools. They can also provide a good ROI on your tool investment because most repairs are accomplished with tools that have other uses in the shop. PTEN

RELATED TOOLS FOR THIS REPAIR



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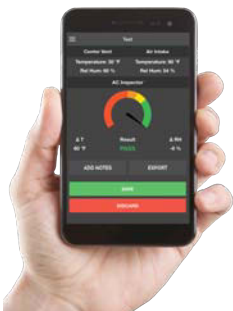
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FLIR ONE Pro Thermal Camera

A camera with the power of thermal helps technicians detect and diagnose trouble spots quickly.

by Sara Scullin, Editor

THE REVIEW:

A technician has many tools at his or her disposal to help diagnose trouble areas. One new method that is gaining popularity is the use of thermal devices, due to their ability to get a read on heat signatures quickly and provide an accurate picture of the location in question.

Brandon Steckler is the lead diagnostic technician at Lykon Automotive in Bristol, Pennsylvania. Part of his job is providing diagnostic solutions and education to fellow service techs. He recently performed tests with the FLIR ONE Pro Thermal Camera to detect voltage drop and locate battery drain; he assessed the product's speed and precision, as well as its value to techs.

Steckler notes the FLIR ONE Pro easily interfaced with his iPhone from the start.

"I have the accuracy that FLIR delivers, but in a pocket-size accessory to my phone," he says. The device coupled directly to his phone, without the hassle of cords.

Steckler uses the compatible phone app to store still pics or a live video feed from the device on his phone. He can save content directly to his phone, or even to the cloud.

"I can instantly email, text ... send Facebook messages, and share with whomever I choose, anywhere in the

world with an internet connection. This feature makes documentation a snap and serves as an aid in delivering a diagnosis to a customer," he says.

In his tests Steckler used the thermal device under a few different simulated scenarios, such as voltage-drop.

"Locating a compromised wire within a wire harness/vehicle can be a very challenging and time-consuming process. The FLIR makes quick work of it, though," he says. Steckler explains that when an electrical current flows through a wire and faces restriction due to a poor connection or severed wire strands, a buildup of resistance occurs that obstructs current flow. This results in a buildup of heat around the compromised area.

"With the FLIR [I] simply had to energize the circuit and quickly locate the heat signature in the harness. This eliminates hours — possibly days — of work and allows for a more accurate estimate to be delivered to the customer."

Steckler also used the infrared image to locate a parasitic battery drain.

"All computers use just a little bit of energy to maintain volatile memory (like radio station presets). It's very normal for a vehicle to consume about .050 amps of electrical current to support all of the computer's memory." He goes on to say when vehicles consume more

PRODUCT DESCRIPTION:

The FLIR ONE Pro helps technicians find invisible problems quickly, whether inspecting electrical panels, troubleshooting mechanical systems, looking for HVAC problems or finding water damage. This FLIR ONE Pro-Series camera offers 4x the native resolution of the FLIR ONE Pro LT, for sharper image clarity that's further enhanced by FLIR VividIR image processing. Measure temperatures more than 3x higher than any FLIR ONE model—up to 400°C (752°F)—with a sensitivity that detects temperature differences down to 70 mK. The FLIR ONE Pro is also packed with powerful measurement tools.

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than this amount of current the battery can go dead in no time. Since today's vehicles have more computers on their networks, pinpointing the source of these unwanted drains can prove difficult for technicians.

Says Steckler, "We [traditionally] begin by monitoring the systems for current flow with a meter and eliminate fuses one at a time until the drain goes away. That only tells us which branch of the vehicle's circuitry the fault is located within. We then have to work our way downstream until we pinpoint the device itself. Simply pointing the FLIR towards the fuse box, the heat signature points to the fuse and research can be done to further develop a game plan without unnecessary disassembly."

Finally, the experienced technician was impressed with how the FLIR thermal device provides a quick 'pre and post' repair comparison, which helps to verify the integrity of a repair.

Without question Steckler reports the FLIR ONE Pro is a valuable diagnostic tool in the shop, as it cuts down significantly on the time it takes to pinpoint trouble areas inside a vehicle. In addition, he found the connectivity capabilities of the device made documentation and documentation sharing a breeze. These benefits translate to increased value for both customer and shop. **PTEN**

FCAR F7SN Truck TabPro

This scan tool with software preload helps keep New York fire trucks in fine form.

by Sara Scullin, Editor

PRODUCT DESCRIPTION:

The FCAR F7SN Truck TabPro is a wireless all-in-one truck diagnostic solution, covering most light duty, medium duty and heavy duty trucks and off road equipment. Features include all software preloaded and working independently, diagnostic functions, testing functions (cylinder cutoff and DPF regeneration) and reset bidirectional functions, featuring fast scan, remote print and customized data export.

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THE REVIEW:

[Editor’s Note: For this review PTEN checked in with a fleet director of a city agency in New York. He requested we not use his name for the review. His line of work includes fixing fire trucks with Cummins engine and Allison transmission. In addition to this, he manages 17 on-the-road technicians who work on a variety of fleet equipment, including heavy duty trucks and sprinter vans.]

The reviewer has worked with FCAR’s F7SN Truck TabPro for the last eight months to help fix fire trucks with heavy duty apparatus. He says the Truck TabPro is a time-saver.

“The [technicians] are making repairs and getting trucks back in service, so I have to say it’s a useful tool in our toolbox,” he says.

The team uses the diagnostic tool frequently for check engine lights and engine diagnoses. They also use it to perform regens on smaller vehicles.

“The mechanics who work on the road work on all kinds of equipment in our fleet,” the public safety fleet manager explains. “[The Truck TabPro] works on the sprinter vans, it works on the Fords, Dodges, Chevy and it also does heavy duty trucks. It’s one tool that’s very broad, so

we can use it on all of our equipment, which is very helpful.

“All in all, our guys have been using it and having good luck,” he adds.

He says the FCAR F7SN is a good supplement to OEM software, but because it also includes lesser-used OEM subscriptions, it saves him some money, too.

Before using the Truck TabPro, this manager and his team were using OEM software to help diagnose fleet vehicles. He says where this tool really came in handy was to address some of their more “oddball stuff,” especially as OEM software can be cost prohibitive and they may not use it every day.

“For example, Detroit, International and Mack we don’t use every day, but we need it,” he says. “Why spend that type of money when we can use this and we still get the Ford and GM? For the price, it’s really a well-packaged tool.”

The fleet director purchased one tool for each location he works with to supplement their OEM tools.

After his technicians piloted the FCAR

F7SN Truck TabPro, he says everyone was on board.

“It’s intuitive, and [the technicians] find it easy to use,” he says.

If any of the technicians had a question, he’d pass along FCAR’s 1-800 number.

“The company is very receptive; we had an issue where we broke a screen and they took care of us right away,” he says. “They are reliable.”

The New York fleet director says setup for the F7SN Truck TabPro is pretty easy – connect to the internet and activate. “From there it does some updates and you’re good to go,” he says.

It arrived to his shop(s) in a nice case, with the tablet protected all the way around. It includes a manual and all adaptors.

In summary, he was pleased with this diagnostic workhorse which help keeps his big trucks in service.

“I recommended it to my guys, and those guys have recommended it to their guys because of the reliability,” he says. **PTEN**

PRODUCT DESCRIPTION:

The Autologic Diagnostics DrivePro provides customers with a multi-function diagnostic platform that combines Autologic's diagnostic software with technical support from trained master technicians. Users can expect expert guidance and symptom-driven advice in real time, as well as direct communications with software engineers capable of providing software updates. DrivePro also boasts flash programming and code functionality, which allows users to code and program new parts directly via the onboard Autologic diagnostic software or Remote Flash Programming services via EAP.

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Autologic Diagnostics DrivePro Diagnostic Platform

A must-have for shops servicing European vehicles, the reviewer says.

by Vesna Brajkovic, Associate Editor



THE REVIEW:

Diagnosing the "problem-cars" that come through the shop can be tricky and time-consuming. Throw in a scan tool with limited functionality and it becomes a roadblock.

Patrick Howard, shop owner of Fox Auto Care in Santa Ana, California, has used the Autologic Diagnostics DrivePro diagnostic platform at his shop for a month. He's found its capabilities and real-time technical support to be invaluable when diagnosing those "problem cars."

One specific example of this was when a Mercedes ML came through the shop with an issue they'd never encountered in the field before.

"[It was] kind of a strange situation because there were no codes, but it was shifting erratically," Howard explains.

The Fox Auto Care team called Autologic's DrivePro tech support in for assistance. A trained master technician from Autologic dialed into the tool and then walked a Fox Auto Care technician through the procedure to relearn the transmissions.

"With their help we were able to drive it and relearn the shift adaptations and solve the customer's problem in half a day," Howard says.

The technical support can speak to the technician through the tool, but Howard said his technicians prefer having Autologic call on a phone so they can be looking at the live data on the tool along with the technician on the other end.

"Having the tech support only a phone call away and be able to support us and help us, and walk us through any diagnostics, is amazing," Howard says.

As far as response time, Howard says in his experience the Autologic team usually reaches them within 15 minutes, with 30 minutes being their longest wait time.

Howard recommends this platform most for shops working on Volkswagen, Mercedes, BMW, Land Rover and other European vehicles.

"We do about 30 to 40 percent European stuff and it was a must-have," Howard says. "I mean, our other scan tools just didn't have the functionality that we needed to get the job done most of the time. We were doing a lot of external searching to find answers. The tech support is the huge selling feature with this tool. The guys care about solving the problems, they're always there to help. I even had them call back to find out: Did

we get it resolved? Did everything work out? They're just good people."

While the tool does have Domestic and Asian coverage, there are some limitations in comparison to its European functionality.

"What I'd really like to see is that tool being able to do OE-level diagnostic stuff, like it does with European, on the Domestic and Asian stuff," Howard explains. "Being able to program Domestic and Asian through the tool would be fantastic."

Initial setup of the tool is relatively simple, however because the tool is laid out differently than other popular tools Howard says there can be a learning curve.

"It's just a matter of learning to navigate and figure out what all the functions are," he says. "That's why the tech support is so invaluable. [They] are there for any questions we have and to walk us through and show us."

Overall, Howard's four-bay, three-technician shop which services a decent percentage of European vehicles, found the DrivePro to be a must-have.

"It's a great tool," he says. "Everyone should have one." **PTEN**

ACDelco 20V “Your Complete Tool Kit”

The reviewer appreciated the tools in this kit were powerful and offered a long battery life.

by Stefanie Von Rueden,
Assistant Editor



PRODUCT DESCRIPTION:

The ACDelco Power Tools “Your Complete Tool Kit”, No. ARZ20170-3A, is designed to be the only bag technicians need to complete the toughest jobs, the company says. The kit includes: a 20V Li-ion 1/2” Impact Wrench (No. AR20170T) that delivers up to 945 ft-lbs of max reverse torque and a nut-busting torque of 1,260 ft-lbs; a Brushless 3/8” Impact Wrench (No. ARI20138A1-3T) that offers three different torque settings for max control; one 3/8” Angle Digital Torque Wrench (No. ARM315-3A) that offers 5 to 99.5 ft-lbs of torque; two 20V Li-ion batteries; a charger; and a large ACDelco embroidered canvas bag for storage.

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THE REVIEW:

When working in the shop, having powerful, reliable cordless tools makes working on vehicles easier and more efficient. Reviewer Phil Fournier of Phil’s Auto Clinic in Hemet, California appreciated that the ACDelco tools were powerful and offered a long battery life.

“The 20V battery has an incredible life,” Fournier says. “After using it intermittently for more than two weeks, the batteries on both the 3/8” and 1/2” show no signs of losing power.”

Fournier used the impact wrenches for the removal, disassembly and replacement of a Toyota Prius hybrid battery pack.

“I’ve done so many of them that I know every socket size, so I can climb in the car with the 3/8”, a 14mm, 12mm and 8mm socket, and have the battery ready to lift out in 15 minutes or so,” Fournier says. “This is exactly the scenario where these tools shine, reducing technician fatigue and getting the job done fast.”

Fournier used the torque wrench when removing 2003 Kia Sorento V6 head gaskets.

“The head bolts are 26 ft-lbs plus 92

degrees, and the torque wrench is wonderful for this kind of specification. [Although] judicious use of impacts for assembly is possible, without an adjustable torque, you have to be careful not to overtighten the bolts.”

The tools arrived in a convenient carrying case along with a battery charging unit accessory, Fournier says. There was also a manual included, and while the impacts were self-explanatory, Fournier referred to the manual when using the torque wrench.

Fournier’s favorite feature of the torque wrench was the display that shows how much torque is being used continuously. He says he appreciates the fact that the tool warns users as they move up on the required torque reading with flashing lights and vibration. Standout features of the impacts included the power disassembly, and the lighter weight.

“I used (and still use) the old ACDelco adjustable torque wrench,” Fournier says. “I like the old one, as I can set the torque and tighten lug nuts without using a torque stick. However, these newer ones are so much nicer and more powerful

that I can’t really complain that they no longer have adjustable torque for tightening.” *Editor’s note: ACDelco clarifies that the torque wrench is fully adjustable, but the 1/2” impact included in the kit only offers forward and reverse adjustment.

The new impacts, Fournier says, offered a huge improvement over the older ACDelco impacts he’d used previously.

“The old ACDelco battery impact would not remove lug nuts,” he says. “This one will and then some. It’s far more powerful, and lighter weight as well.”

Fournier found that the direction reversal switch was mounted a little too close to the hand grip for his liking, and would like to see that distance increased a little.

“While it makes it easy to switch directions, it also is easy to switch it by accident.”

Overall, Fournier found all the ACDelco tools easy to use.

“The weight and balance of the [3/8” and 1/2” impacts] is lovely, and the super long battery life is an extra advantage,” he says. **PTEN**

JohnDow Tire Taxi HD

A must-have tool for tire/wheel specialty shops, according to the reviewer.

by David Brierley, Managing Editor



PRODUCT DESCRIPTION:

The JohnDow Tire Taxi HD, No. JDI-TT1-HD, is designed to allow technicians to transport larger wheels and tires in an efficient and safe manner. The HD Tire Taxi has a diameter of 33" and is designed with 4" industrial casters to maneuver over rough, uneven surfaces. One of the casters can be locked for safe storage. The HD Tire Taxi holds four heavy duty wheels and tires with a load capacity of 552 lbs.

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“ Throw tires/wheels on it, and push it in the direction you want to go. ”

THE REVIEW:

Moving tires and wheels around a shop can be awkward and even hazardous, especially when working with heavy duty trucks or buses. The JohnDow Tire Taxi HD is designed to alleviate this burden by allowing technicians to stack heavy duty tires and wheels and move them around without having to carry or roll them individually.

Eric Moore of DeMary Truck in Columbus, Ohio, says the Tire Taxi HD met this goal handily. While lighter duty tire and wheel carts may not have been up to the task, “the Tire Taxi [HD] seemed to be able to handle the weight of the bigger wheel/tire combinations we see for polishing,” he says.

A user’s manual is not included with this product, but Moore says one is not

needed because there is no setup necessary and use is self-explanatory.

“Throw tires/wheels on it, and push it in the direction you want to go,” he says.

Moore says DeMary Truck’s main tire technician used the Tire Taxi HD “to move wheels, tires and wheel/tire combinations through the shop to the demount/mount area, and back. He also used it to transport of loose wheels to the polishing area.”

“We didn’t feel comfortable stacking more than three at one time,” Moore says. “It could handle the weight if we had chosen to stack another one or two, but since our floors are on the rough side, not smooth, we felt it was a disaster waiting to happen if we stacked any more on.”

The technician suggested larger

wheels or pneumatic tires may have allowed the Tire Taxi HD to roll over the shop’s rough floors more easily, but Moore argued that this change could lead to a reduced weight capacity or a different center of gravity, making it less stable and more prone to tipping. He believes the current design is a good compromise between stability and the product’s ability to handle rough terrain.

Overall, Moore and the technicians at DeMary Truck found the product to be a worthwhile investment.

“The JohnDow Tire Taxi HD was a usable piece of equipment, and when moving more than one wheel/tire, it did save time by [eliminating] several trips,” Moore says. “If you’re a tire/wheel specialty shop ... you have got to get one of these.” **PTEN**

Michigan Pneumatic 1/2" Stubby Impact Wrench

The reviewer appreciated that this stubby impact was small enough to fit into tight spaces without compromising power.

by Stefanie Von Rueden, Assistant Editor

PRODUCT DESCRIPTION:

The 1/2" Stubby Impact Wrench, No. MP-7775, from Michigan Pneumatic Tool features a lightweight composite motor housing. The compact wrench allows for one-handed operation, has three speed settings and left-handed or right-handed reverse options. This tool is ideal for tight applications. The tool runs at 9,000 rpm and delivers 500 ft-lbs of torque in forward and 900 ft-lbs in reverse. The MP-7775 is a durable tool with a jumbo clutch.

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THE REVIEW:

When working in the shop, an impact is a must-have tool. But, there is often a trade-off between size and power. Matt Fanslow of Riverside Automotive in Red Wing, Minnesota, appreciated that this stubby impact was small enough to fit into tight spaces without compromising power.

"This tool allows you to fit a surprisingly powerful pistol-style impact in areas you never would have been able to before," Fanslow says. "Prior to using a tool like this, you would need a pry bar to hold a component and a breaker-bar to loosen a fastener. With this, there is no need. This thing hits hard."

Fanslow used this stubby impact for engine work, chassis work and suspension work.

"It really shines with engine work in the engine compartment," Fanslow notes. "It is small enough to get into tight spaces and [offers] excellent power compared to our other well-known impact manufacturers."



Setup for this tool was simple, Fanslow says: simply connect the appropriate fitting for the air hose, drip in a small dose of air tool lubricant and the tool is ready to go. The impact did include a manual, but Fanslow didn't use it, because he found the tool to be easy to use.

Fanslow's favorite feature was the small size.

"It is very intuitive to use and literally fits into the palm of your hand," he says. "The size allows you to palm the impact while actuating the trigger with your middle finger.

In cramped quarters, this was [our] preferred method of using the tool."

As a suggestion for improvement, Fanslow notes that he found the anvil didn't hold sockets as well as he would like.

"If allowed to free run, the socket would wobble and fly off," he says. "I would not qualify it as a big issue, because it was a rare occurrence. My fear would be that over time, sockets would not stay on while finessing the tool into position."

To remedy this issue, he would like to see the anvil redesigned for a more positive lock with sockets.

Overall, Fanslow found this tool easy to use and powerful enough to get the job done.

"It has great power, balance and size," he concludes. "It's great for working in cramped quarters." **PTEN**



ADAS – Is it the right investment for the shop?

Shops could fill a niche in their repair community.

By **Scott Weaver**, Contributing Editor
gonzosae@aol.com

As a shop owner, I always had to weigh out the advantages and pitfalls of a new technology and how it was going to impact my business bottom line. In the world of automotive repair there's always some new tool that's going to make my job quicker and easier than before. You have to ask yourself, "Will my initial investment become next year's write off? Will that piece of equipment sit in the corner of the shop gathering dust? Or, will I get a positive return on all the time and effort I've put into it?"

If you are considering an addition to the shop's ever growing skillset, try ADAS calibration. ADAS (Advanced Driver Assistance System) is one area that I believe will pay off for the right shop. Some newer ADAS equipped vehicles are capable of "in car" (Dynamic) diagnostics and self-calibration, while the majority of systems that will require an in-house (Static) camera alignment and diagnostics by a repair shop. That's where you (the shop owner) come into the picture.

Technicians may find several reasons to perform a recalibration. Some may seem a little peculiar to a customer at first, however, once they understand the importance of recalibrating the system they'll be happy to have it done.

WHEN TO CALIBRATE?

There are many reasons why a car would need to have the ADAS recalibrated. Some will be obvious, such as a broken windshield. But even repairs a technician normally wouldn't think would have anything to do with the ability of the car



▲ An ADAS target for Subaru, made by OEMTools.com, a division of CAS. Each tool manufacturer will have a minimum and maximum service area size. Shops can check this by placing a vehicle at a prescribed distance from the sensor plates, as laid out by the manufacturer's scanner specifications.

to see through its camera, can actually benefit from recalibration. These include wheel alignments, tire size changes or changed suspension angles. Even tire pressure and trunk cargo can change the camera's viewpoint.

As newer technologies are added to vehicles and existing technologies are improved, ADAS will continually gain more ground in the industry as a required feature in every vehicle. For a list of ADAS beyond adaptive cruise control, blind spot monitoring and forward collision avoidance, refer to the "What does ADAS entail?" sidebar on page 54.

So where to begin? What do I (as the shop owner/manager) need to know

before getting into ADAS calibration as part of my business portfolio?

CONSIDER YOUR SPACE

The area of the shop needs to be perfectly flat with a floor surface that is as smooth as possible. It should be free of loose flying debris such as body filler dust or brake dust. Put some thought into a safety barrier so no one walks into the testing area once a calibration has started. Be sure the lighting in the test area is adequate and not so harsh or glaring as to affect the laser light from the testing apparatus.

Each tool manufacturer will have a minimum and maximum service area

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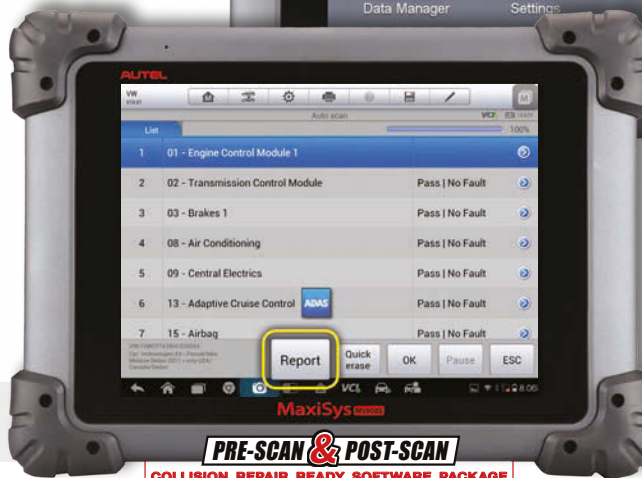


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size. Shops can check this by placing a vehicle at a prescribed distance from the sensor plates, as laid out by the manufacturer's scanner specifications. Center the tester and follow the procedures to align the axles to a 90-degree angle to the scanning device. A good reference would be to think of it as about the space needed for a front end alignment machine.

To use the company Autel's complete (meaning all around the vehicle) system, for example, shop owners will need to dedicate a 16' by 30' bay area.

"It can be done on an alignment rack as long as the rack is one without posts extending above the ramps," says Michael Flink, Autel's North America commercial sales manager and trainer. "In addition to the kit they will need an Autel scanner. They can purchase

our MSADAS unit, and if they already own an Autel MS908 or higher platform, they can purchase an ADAS application upgrade as a one-time add-on to their tool."

The company OEMTools.com, a division of CAS also offers tools for calibration.

According to CAS President John Jenkins, customers can purchase their Opti-Aim System at one of three levels: a base kit, pro kit or master kit. Here too, floor space should be considered.

"Typically the Honda series is the worst and can ask for up to 30 feet in front of the vehicle," Jenkins says. "Most vehicles need much less space. In the case of Mercedes the target is set almost directly over the hood ornament."

FIND OUT WHAT'S INCLUDED WITH THE COST

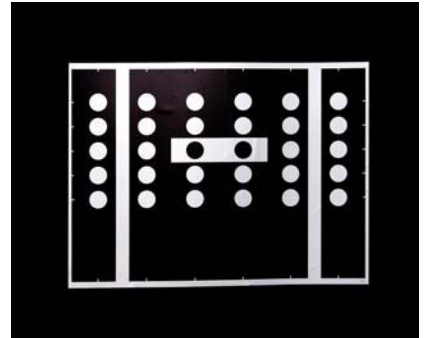
Equipment cost can vary depending on things like what scan tools are currently used, shop setup and added features. The investment might be as little as \$3,000 or \$20,000 on the high end. But, more importantly, it's what shops are getting for their investment. Tech support is an important consideration to think about. Some manufacturers offer remote viewing to help the customer run through any problems, as well as remote calibration where the technician simply sets it all up and they do the rest.

In addition to camera calibration, the Autel ADAS Calibration tool package offers technicians radar and night vision tools. Autel's Flink says durable radar based systems are ideal for more commonly impacted vehicle areas like bumpers.

Shops may find that having the most cost effective system may or may not be the perfect fit because of the retooling, or tech support side of it. Having that extra help from knowledgeable staff may save time and money in the long run, and can make an even bigger difference in the shop's next ROI.

MAKE TRAINING A PRIORITY

Training may actually turn out to be the easy part. If a shop has done any



▲ A CAS of New England Audi target. It may take technicians a few hours to learn ADAS setup.

type of front end alignment using the black and white dots mounted onto the wheels, they're more than halfway there in understanding the setup on an ADAS. Every manufacturer offers some form of training, as well.

Jenkins says the time it takes to learn CAS equipment is short, a few hours at best.

"The learning that is required is more focused on the procedure rather than the equipment," he says.

Likewise Flink says Autel's system offers technicians step by step instructions.

"If [technicians] are familiar with scan tools they could be ready in just a couple of hours or less," he says. "Usually after three to five calibrations they will be very comfortable with the process."

Generally, the whole process of calibrating a vehicle can be done in an hour or so. However, some system requirements may lengthen the process to as much as four hours. So, shops should be sure to prepare their staff and allot the amount of time necessary.

RESEARCH YOUR NEIGHBORHOOD

This is probably the one thing that can be a deal breaker. Shop location is important and has to be considered when venturing off into the world of ADAS calibration. Most of this work isn't going to be for "regular" customers, but more than likely a body shop, or a string of body shops and several glass shops. Of course, there are always city, municipal, fleet and state vehicles that will need such services, too.

This might be a good time for you as a shop owner to stretch your legs a bit

WHAT DOES ADAS ENTAIL?

ADAS can include a considerable amount of a vehicle's features and components. Consider this list:

- Adaptive cruise control
- Auto high beam
- Adaptive light control (auto curve-following headlamps)
- Navigation
- Night vision
- Blind spot monitor
- Collision avoidance
- Crosswind stabilization
- Driver drowsiness detection
- Emergency driver assistance
- Forward collision warning
- Intersection assistance
- Hill descent and hold control
- Lane departure warning
- Lane change assistance
- Pedestrian protection
- Traffic sign recognition
- Turning assistant
- Wrong-way driving warning alerts

These are just some of the systems that require the camera to be properly aligned and calibrated.

WORK SMARTER NOT HARDER

and take a little stroll around the block. Introduce yourself and your equipment to some of the body shops and windshield installation companies close by. Find out if they're doing this type of work in-house, or if they are looking for some place that does it. Pricing each job is a matter of area and availability. Too high, and the shop has cut itself out; too low and the flood gates may open up. So, pricing is important.

WHERE'S THE EQUIPMENT?

Outside of purchasing directly from the manufacturer's equipment supplier, there are several sources for calibration scanners and the equipment to handle recalibrating the ADAS and ACC (Adaptive

Cruise Control) systems, including those mentioned within this article.

ADAS are here to stay, and they're becoming more advanced with each new model release. They utilize radar, infrared, LIDAR, computer imaging and analysis, as well as sensors for motion, heat and sound, and soon car-to-car networking with stored data about every conceivable road condition, down to the millimeter and with real-time accuracy.

This is a new era of diagnostics and technology to a degree that nobody from just a few generations ago could have ever imagined. We're no longer waiting for all this 'advanced technology' to show up; it's already here. **PD**



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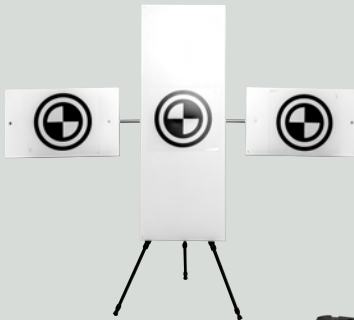
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CAS G-Scan 2 Diagnostic Tool
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CAS ADAS Calibration Targeting System
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Autel MaxiSYS ADAS Calibration Tablet, No. MSADAS
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FOR REFLASH AND COMPLEX MAINTENANCE

The **Midtronics Power Supply Charger**, No. MSP-070, is designed to provide clean, reliable power for charging and maintaining battery state-of-charge during service reflash, complex maintenance and in the showroom. This charger features selectable voltages of 13V, 13.7V and 14.2V via three-position switch for standard lead-acid, AGM and EFB battery types. This tool allows users to maintain vehicle electronic and accessory settings while completing maintenance.

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BATTERY MATCHING AND RESET CAPABILITIES

The **CanDo Diagnostics Batt R/T** is a four-in-one tool for testing 12V and 24V batteries, testing vehicle electrical systems

(alternator/ starter/ground), performing new battery replacement relearns and reading and clearing OBD-II emission related trouble codes. This tool is designed to perform battery testing on and off the vehicle and test

all vehicle electrical systems. For battery relearns, the tool covers Porsche, BMW, MINI, VW, Volvo, AUDI, Jaguar, Land Rover, Ford, Toyota, Lexus and Mazda. Updates are free.

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ENABLES CONNECTION TO MOST AUTOMOTIVE CONNECTORS

The **Electronic Specialties 54-pc Universal Test Connector Kit** is designed to enable connection to most automotive and heavy duty marine connectors, both foreign and domestic. The kit features 26 different connectors, several flat/spade types, round terminals, two Micro64 styles, three Deutsch connectors and Micro50 terminals that make connection to DMM's and scopes via the included 48" stacking banana plug test leads. The kit includes a deluxe storage case with clear window for easy viewing and selection.

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OFFERS A 6V TO 48V MULTI-VOLTAGE CAPABILITY

The **Megapulse HD648 System** is a dual pulse battery and electrical system conditioner. The HD648 offers a 6V to 48V multi-voltage capability, three activation modes and built-in battery load testing. This product has a IP67 rating and a 2,000 Ah conditioning capacity. The HD648 has a 10-year replacement warranty and is made in Australia.

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RESET A SYSTEM IN 30 SECONDS

The **Bartec USA QST200 Battery Management Reset Tool** gives technicians access to the necessary functions that were previously only available on complicated and expensive scan tools.

The QST200 completes the battery relearn step in seconds. On average, the total time required by the technician to reset a system will be 30 seconds. The QST200 covers all makes and models with a simple make, model, year selection process. Functions include the ability to reset the battery systems settings in order to cater to new battery fitment, code clearing on vehicles and other features and component tests that are relevant to the diagnosis and maintenance of the battery management system.

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NAVIGATE TO ELECTRICAL ISSUES

The **FLIR DM285** is designed to be a professional, all-in-one True RMS digital multimeter and thermal imager. The DM285 features Infrared Guided Measurement (IGM) technology powered by FLIR's built-in 160 by 120 Lepton thermal core. This tool helps visually guide users to the precise location of an electrical problem without direct contact, allowing users to pinpoint hot spots faster, safer and more efficiently, according to the company.

The DM285 also helps streamline inspections by connecting wirelessly with the company's management app, allowing users to instantly share readings with clients.

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FOR HEAVY DUTY AND COMMERCIAL VEHICLES

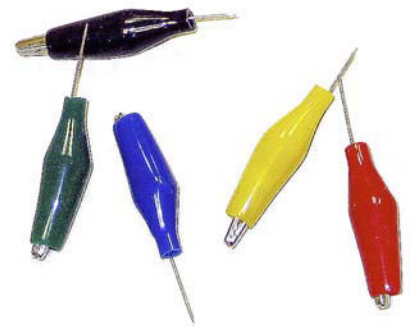
The **Allstart Heavy Duty Commercial and Truck Booster Cables**, No. 564, are extra long cables for front, side and back hookup. These 20' cables have a 2-gauge wire for use with trucks and commercial vehicles. With 800 amp clamps, these cables are designed for heavy duty truck and commercial needs. **Circle 136 on card, or enter at "e-inquiry" on VehicleServicePros.com**



BUILT-IN LED LIGHT

The **Rockford RFD6109 Jump Starter** starts gas and diesel engines up to 13L. This starter also functions as a charger for personal electronic devices. Its built-in safety features include an auto-off switch, intelligent jumper cables that help protect against overcharge and reverse polarity protection. The RFD6109 includes a battery charging cable, intelligent jumper cable, Type C to Type C data cable and a USB to Micro data cable. The unit features a built-in LED light and weighs 4 lbs.

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CONTAINS 20 PIN-TYPE BACK PROBES

The **Thexton Back Probe Kit**, No. 490, features sharp and small diameter probes that slide along the wire into the connector to back probe the circuit. There is no need to disconnect the connector and terminal. The kit contains 20 pin-type back probes in five different colors. This product is suitable for use when dealing with faulty wiring.

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CHARGES, CONDITIONS AND MAINTAINS VEHICLE BATTERIES

The wireless **Battery and Starter/Charger System Tester**, No. 3914, from **OTC Tools**, creates battery, starting and charging system health reports to help diagnose vehicle issues. Compatible with diagnostic software Bravo 2.10 and newer, the results are displayed directly on the Encore or Evolve scan tool to create a full diagnostic report. The OTC Battery and Starter/Charger System Tester works with 6V and 12V automotive batteries - regular flooded, enhanced flooded, AGM, EV and start-stop. It also conducts 12V/24V charging/starting systems tests and can test a vehicle's battery charging system to gauge alternator health and troubleshoot charging issues. The tester can store up to 2,000 records and can further assist technicians with diagnosing and reporting system issues by emailing test results to show a customer or add to a vehicle report. With battery voltage as low as 1.5V, the tester can evaluate batteries and display results through three LED indicators (blue: connected, green: power, red: trouble). The Battery and Starter/Charger System Tester is equipped with a 20" cable with durable clamps as well as replaceable test leads and clamps.

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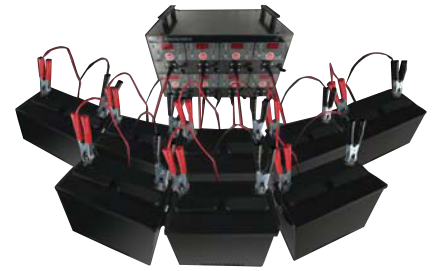
GUIDES USERS THROUGH PROCEDURES

The **Power Probe 3EZ** from **Power Probe Tek** is a digital voltmeter similar to the company's Power Probe 3S. The 3EZ offers two upgraded features: EZ Learning and EZ Diagnostics. EZ Learning is designed to teach users about all of the tool's functions; EZ Diagnostics helps guide the user through basic electrical testing procedures with embedded QR codes that provide links to videos of each test. This product is available in four colors (camo, carbon fiber, green and red) and two packaging variations (standalone, or blow molded case with accessories).
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FOR 12V AND 24V BATTERY SYSTEMS

The **NOCO Genius Boost Max Jump Starter GB500** is designed for high-displacement gas and diesel engines in commercial vehicles, construction equipment and more. This ultra-safe, compact and portable lithium-ion jump starter can handle 12V and 24V battery systems. The GB500 features patented spark-proof technology and reverse polarity protection, and is designed to be safe for engines of all sizes. This product also provides remote power for 12V devices and recharges mobile devices, such as smartphones, tablets and more.
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To watch a video demo of this product, go to: VehicleServicePros.com/21009214



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FEATURES GLOWING CHARGER INTERFACE

The **Gold Eagle Co. STA-BIL Battery Maintainer** features a glowing charger interface designed for ease of use, amp auto adjust allowing for use on 6V and 12V batteries and fully automatic multi-stage charging. These battery maintainers are ideal for cars, boats, jet skis, dirt bikes and outdoor power equipment.

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VIDEO



IPA 8040 PRO SERIES DIAMOND GRIP TERMINAL CLEANERS

IPA showcases the features of its 8040 Pro Series Diamond Grip Terminal Cleaners. The 3-pc Diamond Grip Terminal Cleaners set feature durable and abrasive coatings for cleaning small spade pin electrical connectors. Watch the video at: VEHICLESERVICEPROS.COM/21033715

TOOL REVIEW

10-WATT SOLAR PULSE SOLAR CHARGER MAINTAINER, NO. SP-10

The PulseTech Solar Charger Maintainer is designed to eliminate jump starts, increase battery power and extend battery life by returning older batteries to like-new condition. The SP-10 uses high-frequency pulse technology to charge, condition and maintain vehicle and equipment batteries by up to three times. Read the full review at: VEHICLESERVICEPROS.COM/21001618

ARTICLE

A POSITIVE APPROACH TO BATTERY ISSUES

The technology in today's vehicles is in a constant state of change, and even systems that seem somewhat stable, like battery starting and charging systems, are going through a transitional phase. With these changes, the tools required to test and repair them also require transformation. Read the full article at: VEHICLESERVICEPROS.COM/21023983

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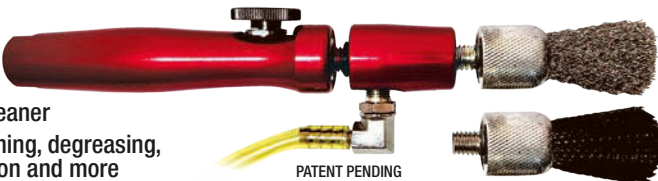
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BIG-TIME BOXES

READERS OFFER A PROUD LOOK AT THEIR AWESOME TOOL STORAGE SYSTEMS.



Room to grow

Starting from scratch and heading towards big-time.

by Vesna Brajkovic, Assistant Editor

When John Wyatt retired from the Army, he became the lead installer and sole technician at a performance-focused shop in North Carolina called **Hypermotive Performance**. At the time he had a full set of tools, with enough extras to fill a whole toolbox and then some.

That's when he accepted a contract to work in the United States Special Operations Command in Afghanistan for two one-year deployments. Not wanting to leave his friend and Hypermotive owner with no tools, Wyatt left his entire tool setup as a parting gift for leaving the job suddenly.

While in Afghanistan, knowing he had to replace everything once back in the States in order to start his own shop, Wyatt used his downtime over the last six months to research tools, tool organizers and (most importantly for you Big-Time Box readers) toolboxes.

Replacing everything was no small task, either. Wyatt was on the search for quality and affordability. That's when he came across an online video review of Homak's 72" H2Pro from 'Do It Yourself Bri' on YouTube.

Wyatt loved the box, but needed different drawer configurations. He ended up choosing the Homak 72" RS Pro Combo, which has deeper drawers and a

wider center drawer. He says he couldn't be more impressed.

"I had six months; I'm doing all the reviews, doing all the research I can," Wyatt explains. "And I just committed and I bought it. And when I went to pick it up, I was like, 'Oh my God, this is absolutely the greatest toolbox I have ever bought.'"

Wyatt's setup includes an RS Pro Combo, which looks like a roller cabinet with a top chest, and another 54" RS Pro Roller Cabinet in matching orange. The top chest has a flip top with three outlets where Wyatt stores battery chargers for electric tools, clamps and some lubricants.

He says his Homak rivals even the "big tool truck brands."

"On some other boxes, the drawer slides, even if they're double or single; they're just not really smooth when you're pulling them out," Wyatt explains. "These are absolutely incredible. You pull them out, it's nice and smooth, even with the tools in it. And they're full-pull drawers, meaning when you pull them out, the back of the drawer is even with the front of the box. There are some toolboxes when you pull them out, an inch or so is still recessed into the box ... So that's the other thing that's great about the

OWNER:

John Wyatt

Performance Over Style Motorsports
Fairview, Pennsylvania

Homak box. When you pull the drawer open, it's all the way open."

All together, his new tool setup has 37 drawers and a flip-top. He says he is happy with the purchase.

"Even though it's not American-made, where else are you going to get a quality box like this for the price?" Wyatt says.

American-made is a big factor in purchasing for Wyatt. This led him to purchasing SK Professional Tools, which he says he couldn't be happier with. He uses SK's wrench rails to organize, and he also organizes his chrome and impact sockets with U.S.-made Westling Machine socket organizers. These are made using billet aluminum and aren't magnetic, which in turn keeps debris from sticking to the organizers.

This is just the start for Wyatt, as he continues to build his tool inventory back up and get his performance-based shop, Performance Over Style Motorsports in Fairview, Pennsylvania, up and running. **PTEN**

Want to see more photos of Wyatt's box?
Visit: VehicleServicePros.com/21032562



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