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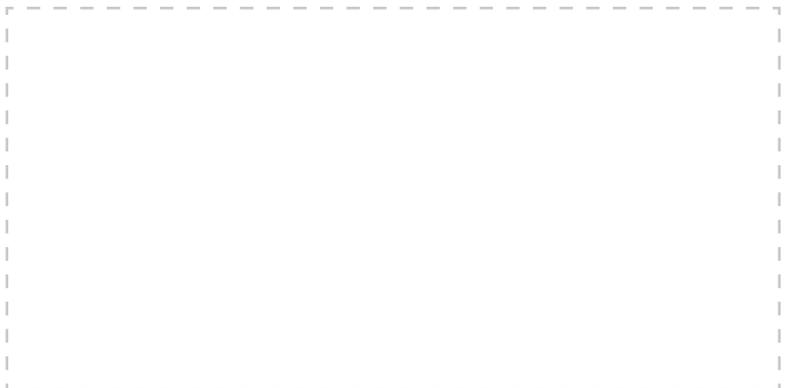
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Mass Air Flow Sensor

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Customer expectations are on the rise

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COUNTERFEIT CRACK DOWN

Auto parts counterfeiting faces industry scrutiny and government enforcement action

SAUDI MARKET SHOWING GROWTH, OPPORTUNITIES

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Consumers continue to shift toward buying, leasing new vehicles



TECHNICIAN ATTITUDE STUDY
TECHNICIANS TAKE CONTROL

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COMMUNITY

4 Future of data trends
Customer expectations are on the rise in terms of access to information about vehicle parts. An aftermarket veteran once said that in the absence of rich, graphical content that tells the story of a product and sells its advantages, price is boss. So if the customer can't tell the difference between a \$50 widget and a \$30 widget, your information needs tweaking.

6 The power of branding
Inside a concentrated marketplace dominated by a handful of larger merchants promoting nearly identical products and services, it was hard to visualize how a single store owner could distinguish their image in a galaxy of shiny personalities. Fear not. Billy Konaxis, owner of Billerica Auto Parts, has done just that.

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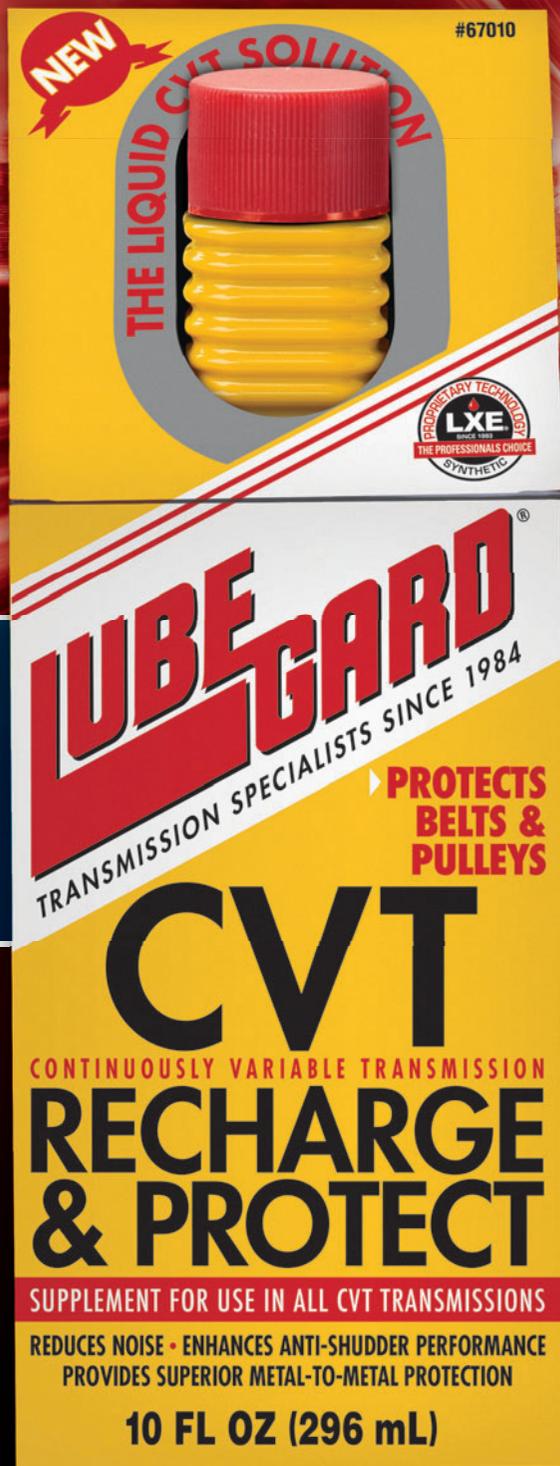
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FUTURE OF DATA TRENDS

Customer expectations are on the rise

The Customer Automotive Network (CAN), formerly known as the Performance Warehouse Association (PWA), recently held their annual gathering in Texas. A staple of the CAN Connect conference is the one-on-one meetings between distributors and their manufacturer suppliers. I was very happy to see a new element to the conference agenda introduced this year — an educational panel discussion of “Future Data Trends.”

I thought it was especially appropriate for this topic to be incorporated in the CAN Connect agenda in view of the research results from the NPD Group’s Checkout eCommerce Tracking report in August. “Accessories Captured 1/3 of all Auto Aftermarket Online Dollar Sales,” shouts the headline. And six categories account for the sales: appearance accessories; cargo management; interior and exterior accessories; towing and hitch accessories; and tire and wheel accessories. The makers of these products are exactly the companies that attend CAN and meet with their customers.

So why are the manufacturers of the fastest growing categories of aftermarket accessories devoting time at their conference to learn more about data trends? The answer lies in something I hear with increasing frequency: “data is the fuel for all commerce transactions and nothing but the highest quality will satisfy the rising demands of customers.” Just look at your own behavior in online shopping and websites. When one product photo used to suffice, now you expect multiple images. In addition, market copy that doesn’t clearly present the specific product features and benefits does nothing to help sell the product.

A wise aftermarket veteran once told an audience of eager data managers that in the absence of rich, graphical content that told the story of the product and sold its advantages, price is boss. When the customer sees two similar products on the screen and asks themselves the difference between the \$50 widget and the \$30 widget, there must be a better answer than \$20.

The manufacturers and their distribution partners came away from CAN Connect with one overarching “Future Data Trend” to steer their efforts back home. The expectations of customers are rising every day, and more variety and richness of content is needed to sell the value of the product. To help customers make an informed buying decision, the product content must serve to replace the product knowledge and industry experience of a veteran counter pro or salesperson. In the case of data fueling online transactions, more is better and you can never stop, because the bar is constantly rising.

One other topic in the data discussion was the impact of product data and inventory updates that are out of sync. It has become common for marketplaces and online retailers to require frequent inventory updates from their suppliers so they can accurately render product availability on the screen and avoid taking orders for something that cannot be filled. Product information files typically get updated monthly or when new products are announced. A best practice for inventory updates is to refresh these files every hour. However, the product records in these files rarely match, and that leaves many products that cannot be sold.

When a reseller has inventory infor-



An aftermarket veteran once said that in the absence of rich, graphical content that tells the story of a product and sells its advantages, price is boss.

mation but no product records, or product records with no corresponding inventory values, these are always either a lost sale or a disappointed customer. Because inventory levels and product content are generally the responsibility of two different departments or staff people, there is no coordination between their data files. This is a blind spot for suppliers and manufacturers and something they are surprised to learn when the gaps are pointed out to them. One recent analysis found that 15 percent of the records in the product information (or PIES) data file had no corresponding record in the inventory file. Half of these items were determined to be obsolete, yet they were all flagged as “Active” and available for sale. At the least, you’d think these are product listings that cannot be filled. That’s a disappointed customer. At its worst, this is damaging to your online marketplace scorecard and may trigger costly penalties or disqualification of the brand. □

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THE POWER OF BRANDING

Shop owner stands out among his peers

He is absolutely killing it!" crowed a former Advance Auto Parts sales executive over how Billy Konaxis transformed his auto parts store into a role model of profitability. Impressed by a remarkable turnaround within two years, a corporate manager with Advance who supervises the Carquest division for independent store owners encouraged Konaxis, the owner of Carquest Billerica Auto Parts, to write a playbook. Intrigued by his successes, I dropped in for a visit.

Inside a concentrated marketplace dominated by a handful of larger merchants promoting nearly identical products and services, it was hard to visualize how a single store owner could distinguish their image in a galaxy of shiny personalities. Fear not.

When Konaxis, a former Advance district manager himself, bought this distressed Billerica, Mass., location from Advance in 2017, commercial accounts were dissatisfied with the product coverage and upset with delivery service. He customized the category assortments to fit the area vehicle population and beefed up the fleet of delivery trucks.

He'd deploy his employees around peak maintenance schedules to meet customer needs. During snowstorms while other competitors were contemplating grounding their fleet, this store devised ways to keep their customers running.

E-commerce rivals also know well that speed wins loyalty. Beyond measure, friction-free online ordering at attractive prices is arguably a powerful incentive to boost spending. However, Billy rejects that reasoning. When a vehicle's guts lay bare on the lift, Amazon is poorly

designed to troubleshoot the unpredictability inside a car care facility. When fitment complications surface, these e-commerce sites are nearly impossible to call directly for a quick fix. When the clock is running, online chat sessions are impractical.

Over our lengthy conversation, Billy drew the e-commerce contrast by looking outwardly. He shared, "My accounts know that I'm here to support them." Even though Advance's online cataloging procurement portal supports his store, Billy believes in making it "my job to help customers turn bays."

For Billy, corporate brand matters more than branded products and services. In terms of Billy painting a face of corporate identity, he oriented his store mission around what a company stands for in the eyes of the mechanic. If that relationship requires Billy to drive 90 minutes to fetch a rotor in time to save an \$800 brake procedure, he will make sure that his team is acutely aware of the impacts of a shop full of stressful disruptions. Konaxis spoke of one installer who increased their daily vehicle intake from 12 to 15. Their willingness to pay more for this partnership with Konaxis has resulted in a spike in sales volume and rising profit margins.

Brand building is an attainable process. Businesses with a sense of their own values and purpose that match up with their shopper's pain points and frustrations have an advantage to elevate their standing in the market. So it is critical that a shopper knows in advance what they can expect. It's equally important that the selling company knows what they intend to deliver.

In February, the Harvard Business Review looked at brand identity build-



So many businesses fail to capitalize on verbalizing their DNA, the foundation of celebrating its soul with the marketplace.

ing and outlined three steps to follow. First, define your company's ideal relationship with customers and how you want to be perceived. Second, determine what sets the company apart and what it can promise. Third, use the answers to the first two steps to verbalize what the company stands for in one sentence.

What I gleaned from Billy Konaxis's walk the walk was pure straight talk. Concise words describing trust, reliability and support revealed the culture inside Billerica Auto Parts. Their team are prepared to help their commercial accounts to succeed. What I am also reminded about this encounter with Billy is how many seemingly alike businesses fail to capitalize on verbalizing their DNA, the foundation of celebrating its soul with the marketplace.

Creating a company brand may demand more time in the interest of authentic relationships and a healthy balance sheet. It may mean continual reinventions as the industry landscape evolves. Certainly though, isn't that a playbook worth writing? □



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COVER STORY

SAUDI MARKET SHOWING GROWTH, OPPORTUNITIES



PARTS SALES AND VEHICLE PARC ON THE RISE, AND NEW TRADE SHOW AIMS TO CONTINUE THE COUNTRY'S GROWTH

BY **RICHARD MEZADURIAN** | CONTRIBUTING EDITOR

PICTURE the Saudi Arabian landscapes, and it is easy to see rolling sand dunes and little else. However, the Kingdom is home to some of the greatest natural wonders of the world. Among these treasures is the Al Ahsa Oasis, where 1.5 million palm trees grow naturally on a 30,000-acre plot that's fed by aquifers. Or perhaps you'd be captivated by the verdant landscapes of Jabal Sawya, Saudi Arabia's highest peak, standing just shy of 10,000 feet. And there are few places as awe inspiring as "The Edge of World," a rocky escarpment outside Riyadh where you can see

clear to the horizon. But getting to these places could be a real challenge if your vehicle isn't properly equipped to deal with the desert sun and the arid climate. Fortunately, most motorists in the Kingdom have access to a vibrant and comprehensive auto parts aftermarket that can see to their needs.

The Saudi Arabian vehicle parc is growing rapidly. In a 2019 article, the *Arab News* estimated over 8 million passenger vehicles on the road, but that statistic likely includes light trucks that may be used for commercial purposes. It is clear, however, that Asian brands are the dominant players in this market, capturing 8 out of the top

10 spots. Chevrolet and Ford were the only non-Asian brands in the top 10. In the aggregate, Asian brands comprised 81.6 of sales in 2018, compared to 13.9 percent for American brands and 4.5 percent for Europeans brands. Toyota was once again the market leader, capturing 31.6 percent. Still holding on the second spot at 18.6 percent was Hyundai. Hyundai sales have softened slightly since peaking at 23.9 percent in 2017. There were just 411,000 cars sold in 2018, and the top sellers were the Toyota Camry (130,490 units) and the Toyota Hilux (76,375 units).

New vehicle sales are expected to increase over the next several years

Explaining The Oxygen Sensor

Due to the vital role and suggested service intervals, the oxygen sensor can be a quality maintenance repair for your customers.

What is the life expectancy of an oxygen sensor?

Shorter than what your customers think.

And that's the problem.

But it's also one of the easiest to solve problems when a customer comes in and asks for a "tune up" or preventive maintenance.

Basic maintenance is key today and checking the oxygen sensor is a great place to start.



According to Walker Products, which offers one of the industry's most robust oxygen sensor programs, an oxygen sensor's life expectancy can vary greatly depending on the condition of the vehicle and whether it is properly maintained. Generally, based on typical maintenance routines, an oxygen sensor's effective life span is between 30,000 and 50,000 miles. After that, performance begins to degrade, which will in turn affect the vehicle's overall fuel economy and performance. That can arrive quickly in the eyes of today's drivers, many of whom won't have their vehicle paid off by the time it needs replaced. However, if the engine is properly maintained in all aspects, the oxygen sensors could last much longer, up to 100,000 miles in some cases. The truth is, many vehicles on the road today would not meet the maintenance requirements to achieve that level of sensor life.



It's no surprise that oxygen sensors need to be checked regularly and replaced as needed; they perform under fierce conditions, battling harmful exhaust gases, extreme heat and high velocity particulates. And the harder someone drives his or her vehicle, the more punishment the sensors take.

The Oxygen Sensor's Impact

Remember earlier you read about the oxygen sensor? That's a key component, as faulty oxygen sensors cause a very large amount of emission inspection failures. Why? Because not all oxygen sensors are created equal.

The oxygen sensor reports to the engine management computer the air/fuel ratio in the exhaust system. While it no longer is a one-wire unheated sensor like it was in the 1970s, but rather a four- or five-wire air/fuel ratio sensor, that means it can report information more accurately, but can be damaged more easily. These sensors include heated, fast light off, ultra-fast light off, Titania, zirconia, thimble, planar and wideband sen-

sors. Staying up-to-date with these technologies is critical in diagnosing the oxygen sensor and this technology will only continue to grow as emission controls become stricter every year.

What Goes Wrong?

A few things, actually. There are two scenarios technicians need to look for when inspecting an oxygen sensor to determine the cause of failure (and thus finding the root cause of the problem). First, it can happen instantaneously when a contaminant comes into contact with the oxygen sensor's ceramic element.

Technicians who suspect this type of failure should look for evidence of certain types of silicone compounds or of an engine that is burning oil. Small amounts of tetra-ethyl lead in gasoline as well as over-the-counter fuel additives that are not "oxygen sensor safe" can kill an oxygen sensor.

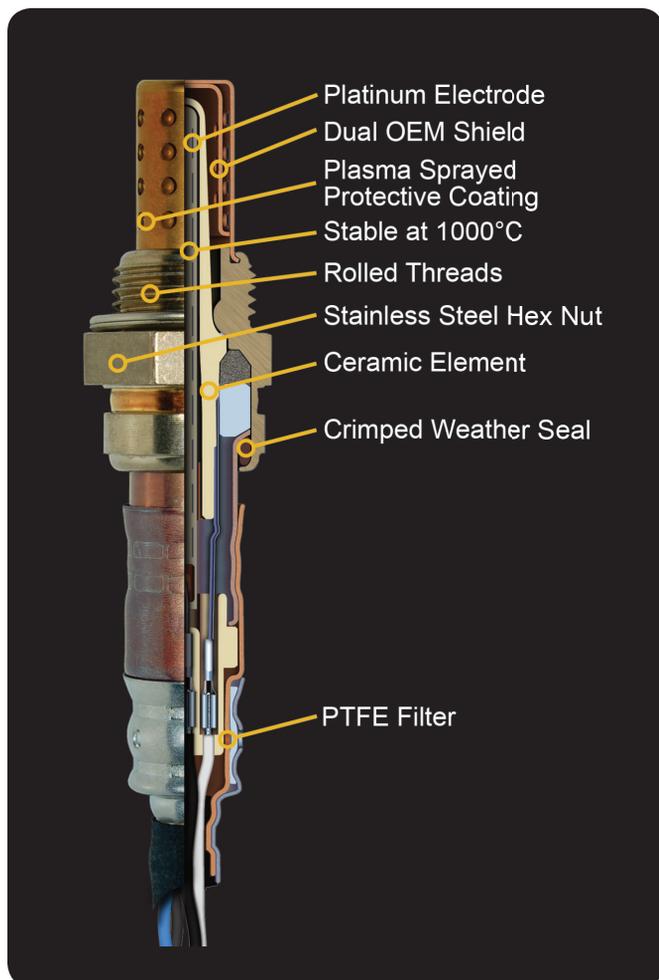
The second scenario is the gradual deterioration, resulting in a slow sensor that reacts so slowly that it causes a catalytic converter to perform less efficiently. This can lead to premature failure of the catalytic converter.

In this case, technicians will hear complaints of decreased fuel economy (approximately 10 to 15 percent in most cases), excessive exhaust emissions and overall poor drivability. Now, while a customer might notice they are covering fewer miles per fill-up, they might not be aware of other problems as they adjust to vehicle driving conditions and, in the case of emissions, simply cannot observe this. That's where technicians who perform emissions tests can assist customers by detecting these issues.

But technicians can be the hero of this story when using the proper equipment. Using a digital volt-ohmmeter (DVO), a technician can detect a dead oxygen sensors. Two other tools - a digital storage oscilloscope (DSO) or scope meter - will be able to diagnose a slow oxygen sensor.

Not All Sensors Are Alike

How do you know that you're getting a quality sensor? Walker Products' robust oxygen sensor programs features the highest quality components to ensure OE fit, form, and function guaranteed. Designed, engineered, and 100% tested in house to ensure unsurpassed quality and sensor longevity for the greatest customer satisfaction.





Walker oxygen sensors feature a ceramic body is made of stabilized zirconium dioxide and contained in a housing that protects it against mechanical effects and facilitates mounting. A gas-permeable platinum layer comprises the electrodes that coat the surface, and a porous ceramic coating applied to the side exposed to the exhaust gas prevents contamination and erosion of the electrode surfaces by combustion residue and particulates in the exhaust gases.

That means when you install Walker oxygen sensors, your customers get improved engine response and performance, lower emissions, better fuel economy and longer sensor life.



Put a little bit of money in now, and you could save big down the road. In fact, for the cost of two tanks of gas, you'll be able to stretch your fuel economy and potentially buy less gas. What a selling point!

Selling to Customers

But how do you explain that to your customers? It starts with the basics: an oxygen sensor monitors the oxygen content of the exhaust gas, which is processed by the vehicles engine computers to evaluate engine efficiency. For quick explanations, service writers can share four simple benefits customers can receive by replacing their O2 sensors:

- Improved engine response and performance
- Lower emissions
- Improved fuel economy
- Longer sensor life

Essentially, put a little bit of money in now, and you could save big down the road. In fact, for the cost of two tanks of gas, you'll be able to stretch your fuel economy and potentially buy less gas. What a selling point!

When a shop offers to check the oxygen sensors at any appropriate service interval, the customer can ward off further damage by having faulty or contaminated sensors replaced. Here is a breakdown of replacement intervals.

- 30,000 - 50,000 miles: One-wire and two-wire "unheated" type oxygen sensors. These sensors are early technology units that depend on exhaust heat to become active and are generally more sensitive to the elevated contamination of dirty or unbalanced exhaust, especially the "wide-slot" varieties found on early Chrysler, Ford and General Motors vehicles.

- 60,000 - 100,000 miles: "Heated" type sensors and air fuel ratio sensors are the latest high-tech products in this segment. Their engineering advancements and sophistication allow them to operate more efficiently by placing built-in heaters to warm the sensor up on initial startup. In addition, these sensors are generally found in newer vehicle applications that are more fuel efficient, therefore exposing the sensors to less harmful exhaust gases - all of which adds to the life expectancy of the oxygen sensors themselves.

Using these selling tips, installation information and Walker Original Equipment Oxygen Sensors, your customers get improved engine response and performance, lower emissions, better fuel economy and longer sensor life. That translates to increased trust and potential business for your shop, a win-win.

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YOUR FIRST CHOICE IN QUALITY PRODUCTS

“A FAVORABLE COMBINATION OF FACTORS MAKES SAUDI ARABIA AN IDEAL EXPORT MARKET FOR U.S. MANUFACTURERS .”

as prohibitions on women driving are being relaxed or removed completely. The vehicle parc was expected to increase by a compound annual growth rate of 4 percent between now and 2023, but allowing women to drive has changed that calculus. The updated forecast is for vehicle sales to drive growth by an 8 percent CAGR. In terms of aftermarket parts sales, the market is expecting to reach \$3.65 billion by 2020. The three segments expected to benefit most from these changes are periodic maintenance, collision and body repair, and mechanical repairs.

The Kingdom of Saudi Arabia does manufacture a small amount of parts that are used mostly for local market consumption. To encourage more manufacturing and provide jobs in the future for a growing youth population, the government established the Saudi Arabia Standards Organization (SASO). The burdens of meeting SASO's many import regulations are designed to induce foreign producers to transfer technology and skills training to the local market. An added benefit to local consumers, of course, is higher quality auto parts being sold throughout the country. The U.S. government considers the SASO requirements a significant barrier to trade, but the stepped-up inspections have also helped curb counterfeit parts proliferation and violations of intellectual property rights, which many manufacturers welcome.

While the market is large and lucrative, U.S. manufacturers have not been able to take full advantage of the market opportunity in Saudi Arabia. The figures bear this out. According to U.S. International Trade Commission figures (USITC), the U.S. showed a 3 percent rise in auto parts exports in 2018, hitting \$92 million. However, that is still well off the peak, which in 2016 was just shy of \$147 million. Automotive parts and accessories are a small part of the trading relationship we have with the Kingdom, and that trade has been declining since the 2015 peak of \$19.8 billion. In 2018, it was off 31.6 percent to \$13.6 billion. So relatively speaking, automotive parts has outperformed other areas of bilateral trade with Saudi Arabia.

As part of its focus on growing industries, the government of Saudi Arabia sanctioned a major automotive exhibition in Riyadh later this fall. The Riyadh Motor Show will take place Nov. 21-26, 2019 at the Riyadh International Exhibition Center. It will feature hundreds of vehicles on display, pavilions sponsored by carmakers and vendor booths, all of whom are hoping to capture some of the lucrative market in the Kingdom. For many exhibitors, it will be their first exposure to the Saudi market, but for some, it will mark what they hope to be a triumphant return.

Manufacturers who are seeking an edge in the Saudi market could follow in the footsteps of one exhibitor. For years T-Rex Truck Products, based in Corona, Calif., had enjoyed a favorable sales environment in the Kingdom and throughout the Middle East. That had changed over the past decade as inferior quality, lower cost goods from China flooded the Middle East. Ben Mizban, the founder and CEO of T-Rex, says that while they manufacture over 2,000 application-specific parts, it's really their innovation and ingenuity that brings the customers back. He says, "There are thousands of companies in the U.S. and the rest of the world that sell offroad LED lights, but none had addressed the mounting solutions for them. We applied high-quality engineering and design to provide specific applications for all trucks and Jeeps in the market" by integrating the LED lights into T-Rex products. Mizban feels that their Zroadz brand of products will help him reintroduce the company to the Saudi market.

Performance products are also becoming very popular in Saudi Arabia, as a younger generation adopts the "tuner" culture. COMP Cams, based in Memphis, competes in the performance powertrain segment. As part of the COMP Performance Group, which include brands like TCI Automotive, FAST (Fuel Air Spark Technology), RHS (Racing Head Service), ZEX Nitrous and Powerhouse Tools, COMP Cams is currently engaged in the Kingdom by going through distributors

in neighboring countries, most notably the UAE. Chris Douglas, the COO of COMP Cams says, "We feel it is vitally important to explore and develop new markets for the longevity of not only our company but the overall industry." He feels that participating in the Riyadh Motor Show is more than just a business opportunity. He goes on, "We are frequent participants in the SEMA business development trips and feel it is our responsibility as good stewards of the industry/hobby."

Like most markets outside the U.S., the aftermarket in Saudi Arabia is set up mostly as a three-step distribution model. Typically, parts are imported by the distributor, sold to a jobber/retailer, who in turn sells to the installer. There are no national or big-box automotive retailers in the Kingdom, as the do-it-yourself (DIY) trade is a very small segment of the market. Rather, in Saudi Arabia, do-it-for-me (DIFM) is how most consumers get their vehicle's maintenance and repairs taken care of. Most cities in the Kingdom have neighborhoods that specifically cater to the automotive trade. In these areas, you will find parts stores interspersed between repair shops and body shops.

A favorable combination of factors makes Saudi Arabia an ideal export market for U.S. manufacturers. The relative strength of U.S. vehicles in the market, combined with a growing youth automotive enthusiast movement spells opportunity. The popularity of Tafheet and Hajwalah, which are terms used to describe drifting and street racing in the Middle East, can be witnessed by their ubiquity on most social media platforms. If you're skimming Instagram to find "Sidewall Skiing" (a term for driving while balanced on two wheels), or if you're checking in on YouTube to find videos of the many 4x4 clubs frolicking about the desert, it's very clear that Saudi Arabia has a vibrant and growing car culture. Checking in on the Riyadh Motor Show might be the best way to get a firsthand look at this dynamic market. But if you do decide to visit, don't forget to bring the sunscreen! □

COUNTERFEIT CRACK DOWN

COUNTERFEITING OF AUTO PARTS FACES INDUSTRY SCRUTINY AND GOVERNMENT ENFORCEMENT ACTION

BY **JAMES E. GUYETTE** | CONTRIBUTING EDITOR

Phony components can create real problems for manufacturers, merchandisers and motorists, as counterfeit auto parts frequently fail to meet the proper fit, form and function standards. Aside from the negative economic consequences of being hoodwinked, a fraudulent product that appears to be the real deal may present a serious safety risk.

"There's some scary stuff out there," says distributor Michael Antonelli of Vantage Marketing Global Inc., based on Grand Island, N.Y. "It may look the same on the outside, but you have no idea what's on the inside; it may even work — at least for a while."

TRENDS & MARKET ANALYSIS

Just about any part of a vehicle can be copied, faked and sold to an unsuspecting buyer. "There are different levels of sophistication and scruples," according to Antonelli. "It's whatever the flavor of the day is" in terms of whatever product is popular enough to be falsely duplicated and then covertly disseminated at a profit.

"If they see a demand they'll start making it. If something is really hot, it's up everywhere," Antonelli notes.

Counterfeiters are attracted to the profits that can be generated with a minimal chance of being detected. "They figure 'this is a gravy train,'" he says, urging aftermarket business owners to resist engaging in this type of illegal conduct despite the lure of

cheaper pricing. For a given dicey part, "If I can save 20 percent, I'm only saving 10 bucks; do I want to risk that?"

Knowing your seller is a good technique for avoiding counterfeit parts, especially when making offshore purchases. "If it's got a (mainstream) manufacturer's name on it, but you're getting it from some weird source, beware," says Antonelli. "Be cautious around 'white box' as well" to mitigate the prospect of obtaining an anonymously produced sub-par part.

"If you're buying from overseas, be invested in it," he suggests. "Go over there — more than once. It takes time, but get to know them. The alternative is to work closely with a trusted N.A.-based global sourcing company that has already made that investment and developed the relationships. Don't be enticed by offshore trading companies."

A study by Frost & Sullivan estimates that automotive suppliers lost \$45 billion to counterfeiting worldwide in 2011, and the economic value of pirated products is expected to double by 2022.

"Trafficking counterfeit merchandise/products, which often have unknown ingredients or are constructed with substandard materials, pose a significant public safety and national security risk," says Jerry C. Templet Jr., deputy special agent in charge at the Homeland Security Investigations (HSI) office in San Francisco and Northern California.

"Additionally, the entry of illicit products into the commerce of the U.S. negatively impacts legitimate U.S. businesses," he says. "Consumers should

INTERNATIONAL NEWSMAKER

Q&A

TAMARA RABENOLD

CEO of Vaudra International



Q DO MOST PURCHASERS OF COUNTERFEIT PRODUCTS KNOW THAT THEY ARE BUYING COUNTERFEIT GOODS?

A This is a tough question, as you can grow cynical in this line of work. There are reputable, online retailers of aftermarket parts that may complete a wholesale purchase priced too good to be true, sell it at retail and later learn that those parts were counterfeit. It happens, but there isn't "intent" or "knowledge" of selling counterfeits.

With online access to suppliers worldwide, there is fierce competition for every purchase. It is easy enough for a counterfeiter to create a rogue website, bogus online profile or store that appears legitimate and is selling counterfeit goods to potentially fool an unwitting buyer.

As a merchant or wholesaler, it is critical to do your due diligence and purchase from authorized channels and legitimate sources. If you choose to ignore potential red flags and find a deal that seems too good to be true, you have to weigh the consequences to your business, reputation and customers if that product turns out to be counterfeit.

also know this isn't a victimless crime. There is a variety of criminal activity funded by these illicit monetary gains."

The list of auto parts seized by customs officials includes airbags, brake pads, wheels, seat belts, oil and air fil-

“TRAFFICKING COUNTERFEIT MERCHANDISE/PRODUCTS, WHICH OFTEN HAVE UNKNOWN INGREDIENTS OR ARE CONSTRUCTED WITH SUBSTANDARD MATERIALS, POSE A SIGNIFICANT PUBLIC SAFETY AND NATIONAL SECURITY RISK.”

JERRY C. TEMPLET, JR. [HOMELAND SECURITY INVESTIGATIONS]

ters, control arms, windshields, bearings, steering linkages, ignition coils, microchips, spark plugs, solenoids, clutch housings, crankshafts, diagnostic equipment, suspension parts and oil pumps, reports Chris Caris, administrator of the Automotive Anti-Counterfeiting Council.

More commonly known by its A2C2 acronym, the council “is composed of 11 of North America’s leading vehicle manufacturers that have agreed to collaborate and work together to eliminate counterfeit automotive components that could harm U.S. consumers,” according to Caris.

Forming the organization “was a significant step toward protecting the American consumer as well as our members’ respective brands,” he explains. “The member companies of A2C2 work together to identify and eliminate counterfeit auto parts that could harm U.S. consumers. We also partner with investigators, law enforcement and prosecutors to support criminal cases when warranted.”

In August, A2C2 officials joined with several other organizations, including the Automotive Aftermarket Suppliers Association (AASA) and its Intellectual Property Council (IPC) at a special Intellectual Property Forum held in Dearborn, Mich.

“Intellectual property protection in the automotive aftermarket has never been more important, yet we have never organized a cross-industry effort to combat the myriad issues surrounding IP,” observes Chris Gardner, AASA senior vice president. The event involved sharing “best practices about intellectual property protections” while working to “identify new strategies for cost-effectively fighting problems.”

Forum participants included lawyers, brand managers and marketing and business development executives from the Specialty Equipment Market Association (SEMA), the National Automotive Service Task Force (NASTF), the American Bearing

Manufacturers Association (ABMA), Battery Council International (BCI) and the National Intellectual Property Rights (IPR) Center.

Also present were representatives from online sales outlets such as Amazon, eBay and Alibaba along with an assortment of government officials plus Tamara Rabenold, a private investigator who is CEO of Vaudra International.

The U.S. Department of Commerce has launched an initiative to stem the tide of counterfeit goods, including auto parts, notes Ann Wilson, senior vice president of government affairs at the Motor & Equipment Manufacturers Association (MEMA).

“MEMA and our member companies have been developing and maintaining relationships with the major online platforms in order to address the growing presence of counterfeit parts,” says Wilson in comments submitted to the Commerce Department. “At present, consumers have no way to be certain that a product they are buying online is genuine. To help rectify that, marketplaces and brand owners must work together so that genuine products can be offered to the consumers.”

Wilson further contends that “manufacturing and trafficking of counterfeit motor vehicle parts and components are serious and growing problems. In addition to the economic impacts of counterfeit parts, their continued proliferation, importation and dissemination pose a significant risk to public health and safety. Counterfeit parts put consumers at risk when they do not perform as intended or fail, leading to brake failure, engine failure, vehicle fires or other catastrophic consequences.”

Too good to be true

The proliferation of counterfeit auto parts is increasing, according to the National Intellectual Property Rights Coordination Center (NIPRCC), which is led by HSI, an enforcement arm of ICE, U.S. Immigration and Customs Enforcement.

Working with the Department of Justice Task Force on Intellectual Property, NIPRCC uses the expertise of its 23-member agencies to share information, develop initiatives, coordinate enforcement actions and investigate related to intellectual property theft.

“Law enforcement has identified a trend of counterfeited parts that is growing at an alarming rate,” says NIPRCC’s Bruce Foucart. “At best these parts will not perform as well as authentic parts. At worst, they can fail catastrophically with potentially fatal consequences.”

Foucart points out that “it’s imperative that the public, as well as the industry, protect themselves from the possible safety hazards of these parts.” Preventive strategies include:

- Do business only with reputable repair shops or the manufacturer’s repair network.
- Stay informed about the sources of parts you are purchasing or installing.
- Beware of “too good to be true” prices that are below those of competitors.
- Use caution when purchasing auto parts on the Internet that are shipped from other countries or are sold at very low prices.

Marlon Miller, HSI Detroit special agent in charge, lauds automakers such as Ford for their close scrutiny and cooperation in apprehending counterfeiters. “When we disrupt criminal organizations who introduce inferior and potentially faulty auto parts into the marketplace, we ensure the safety of American drivers.”

Nailing fraudulent internet operations selling counterfeit parts is a particularly prime goal of enforcement efforts. “Seizing these websites that allegedly sell trademark-infringing auto parts helps to stem the flow of faulty products being introduced into the economy,” Miller emphasizes. “Homeland Security Investigations will continue to aggressively target and dismantle operations that blatantly disregard intellectual property rights.” □

LIGHTING INNOVATIONS

LIGHTING SYSTEM COMPLEXITIES COMPLIMENT TECHNOLOGICAL DEVELOPMENTS DELIVERING INCREASED DRIVER SAFETY AND COMFORT

BY **JAMES E. GUYETTE** | CONTRIBUTING EDITOR

Automotive lighting is aglow in innovations — and related installation challenges — that go well beyond basic bulb replacement as illumination components work in tandem with Advanced Driver-Assistance Systems (ADAS) and other sophisticated technologies.

“The lighting system, due to its connection to ADAS, now has additional functions,” says Valeo marketing executive Robson Costa. “They have acquired new subsystems like motion actuators, sensors and radars, so naturally they are more complex but at the same time have less issues like sealing, temperature, volume and weight. They are more complex to produce but with more added value in their function.”

TRENDS & MARKET ANALYSIS

“It can be a lot trickier to change the lighting system without causing errors, problems and failures,” according to consultant Daniel J. Stern, proprietor of Daniel Stern Lighting.

The global automotive lighting market is annually growing at 7.22 percent and is expected to reach \$29.5 billion by 2021, according to analyst Laura Wood, senior manager at the Dublin-based Research and Markets consultancy.

Increased new-vehicle output, technological advancements and more stringent governmental regulatory

requirements are among the drivers of the category’s growth, she says.

Light Emitting Diodes are the most popular form of lamp installations. “LED lights are energy efficient, lightweight and occupy less space than conventional lighting systems,” says Wood. “They are being increasingly adopted in vehicles across the globe.”

With DIY bulb replacement becoming more of a chore, repairers who inform their customers that they perform this service are seeing upticks in do-it-for-me sales.

“More space for people and cargo in recent vehicles means less space for car parts,” Stern observes. “Many vehicles have very difficult light bulb access requiring extensive vehicle disassembly. So there are opportunities, but there’s a bigger opportunity in that it’s hard to get a good headlamp aim job.”

Glare emitted by improperly aimed headlights is among the public’s top drawbacks relating to nighttime driving conditions, says Dr. John Bullough, senior research scientist at the Rensselaer Polytechnic Institute’s Transportation Lighting Alliance (TLA) and Lighting Research Center (LRC) in Troy, N.Y.

Headlight color, intensity, height, aim and the age of the lamp unit were cited as key nighttime driving negatives in an LRC survey conducted for the National Highway Traffic Safety Administration (NHTSA).

“Concerns from the public about headlamp height may have some credence,” he elaborates. “The height

VENDOR NEWSMAKER

Q&A

DANIEL J. STERN
Proprietor at Daniel Stern Lighting



Q HOW IMPORTANT AND COMPLEX ARE THE LIGHTING REGULATORY DIFFERENCES BETWEEN THE U.S., EUROPE AND OTHER NATIONS? HOW BIG OF AN IMPACT DOES THIS MEAN FOR LIGHTING MANUFACTURERS?

A The U.S. is an island with its own regulations; pretty much every other country in the world recognizes the U.N. (used to be called “European”) lighting regulations. There’s overlap in the requirements for most of the various lights on a car, so for any given car, it’s possible to make one of whatever kind of light that’s legal all over the world, but sometimes it’s not possible to do so while also meeting whatever other priorities an automaker might have. They might think their customers prefer a lamp with certain appearance or performance characteristics, and that often drives different lights for the same car in different markets.

Right now, the biggest difference, and the biggest problem, is that the U.S. doesn’t allow ADB, so American drivers can’t access its big safety advantages. Even Canada allows it, where the regs are usually kept in close alignment with the U.S. rules. But none of this really affects the aftermarket side of things. ADB has to be built into the car; it can’t be added on. The business hasn’t been steady enough for us to have as much control over the inventory as we like.

“MORE SPACE FOR PEOPLE AND CARGO IN RECENT VEHICLES MEANS LESS SPACE FOR CAR PARTS. MANY VEHICLES HAVE VERY DIFFICULT LIGHT BULB ACCESS REQUIRING EXTENSIVE VEHICLE DISASSEMBLY. IT’S REALLY HARD TO GET A GOOD HEADLAMP AIM JOB,”

DANIEL J. STERN [DANIEL STERN LIGHTING]

difference between trucks/sport utility vehicles and traditional sedans causes intense light to shine directly into the shorter vehicle’s rearview and side mirrors, creating glare conditions.”

Costa at Valeo points to the company’s MatrixBeam as a “digital solution” to glare that functions “by turning off very precise segments of the beam directed toward oncoming vehicles, which allows drivers to constantly keep their high-beams on without glaring other motorists. The Valeo Matrix Beam headlight automatically adapts the light distribution away from preceding or oncoming traffic.”

Taking aim at aim

Faulty aiming is an aberration that can be readily remedied by most repairers.

“Lamp aim is the No. 1 thing determining how effective and safe the lights are. It’s all over the news as new tests are published showing most vehicles have misaimed lamps — too high and/or too low for safety — but even many dealerships just pretend to aim lamps by shining them on a marked wall, if at all,” says Stern, who additionally serves as chief editor of *Driving Vision News* along with his manufacturer and governmental consulting capabilities.

Business owners need to be aware that vehicle lighting is subject to a range of federal safety regulations.

“There are detailed, complicated and stringent requirements — stricter than most state codes — that have to be met by every exterior lamp and light source on every vehicle,” Stern says.

A uniform platform

“In terms of trends, there continues to be much discussion surrounding Adaptive Drive Beam (ADB) headlights. We are still waiting for NHTSA approval to include them on vehicles in the U.S.,” says Sarah Carlson, senior communications manager at Osram Sylvania, noting that ADB is popular in Europe and Japan.

“Another hot product for us is a standardized LED light source for signal

and fog applications,” she says, referring to the Osram XLS.

The unit is described as “a uniform platform offering four different light sources that can cover all important signal and fog applications in vehicles including brake, tail, backup, turn indicators, daytime running lights and fog lighting.” Carlson contends that “the XLS gives vehicle and automotive lighting designers and manufacturers enormous flexibility because it requires no tooling and is fully validated.

Integrated sensors

Engineered as part of a car’s interior functions, Osram’s LEDs and IREDS (infrared LEDs) — accompanied by technology from Joyson Safety Systems — are embedded in the Cadillac CT6’s steering wheel to create a deluxe falling-asleep-at-the-wheel-avoidance apparatus called Super Cruise.

The components combine to track the driver’s head position and gaze direction to determine if he or she is fully awake with eyes fixed on the road. “If the driver looks away from the road for too long, the Super Cruise system will send a series of alerts for the driver to resume supervision of the road,” explains Kirk Morris, Joyson’s chief strategy officer. If the person at the wheel is extra tired or distracted a “controlled stop” procedure is automatically activated.

Magneti Marelli’s Smart Corner integrates a camera, radar, LiDAR and other sensors into a vehicle’s headlamps and taillights. The system provides a 360-degree view around the vehicle with redundancy. “Because the sensors are integrated into existing headlamps and tail lamps, an automaker benefits from a fully calibrated, plug-and-play solution, resulting in a simplified manufacturing process that’s lower cost and lighter-weight than alternatives,” says CEO Ermanno Ferrari.

Changing the experience

In June, Germany’s Hella announced the formation of a Light Design unit

that combines the company’s lighting and electronics divisions to develop a flexible, modular product system, says spokesman Dr. Markus Richter.

This gives customers access to the software tools ALiSiA (Advanced Lighting Simulation Architecture) and GAIN (Graphical Animation Interpreter), depending on the application.

“GAIN makes it possible for manufacturers to design the light animation themselves — starting with functions such as the wiping turn indicator, individual choreographies for headlamps, lighting for radiator grills, rear combination lamps and interior lighting, right up to animations for autonomous driving functions,” he adds. “The animations designed in this way can be transferred to the embedded product just by pushing a button. This saves both time and costs in development.”

Another innovation is a partnership formed between Hella and Faurecia to develop advanced vehicle interior lighting technologies. “Trends such as autonomous driving and individualization will completely redefine vehicle interiors,” according to Hella CEO Dr. Rolf Breidenbach.

Leveraging the sales network

General Electric’s previous Budapest-based lighting unit has been bought by former GE executive Joerg Bauer, who is re-branding the firm as Tungsram, the operation’s original name when it was founded in 1896.

“As a true Hungarian-headquartered multinational company, we are leveraging our sales network in 100 markets, and we have the opportunity to become a global player in lighting and beyond,” says Bauer, reporting a promising reception for the new entity at AAPEX.

“We had a lot of meetings with customers from the U.S., Canada and Mexico,” Bauer recounts. “They were really great meetings. It is the true American spirit that they give a chance to the new kid on the block, even if we are the old new kid on the block with our 122 years of history.” □



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CONSUMER ATTITUDE STUDY

NEWER CARS, NEWER TECHNOLOGY

CONSUMERS CONTINUE TO SHIFT TOWARD BUYING, LEASING NEW VEHICLES

BY KRISTA MCNAMARA | CONTENT CHANNEL DIRECTOR

WHILE nearly half of the respondents — 47 percent — in the *Aftermarket Business World* Consumer Attitude Study have indicated that the market conditions will likely result in them keeping their current vehicle; those respondents likely to buy a new car — 20 percent — has doubled since 2010.

While miles driven will remain flat, according to respondents, hybrid and diesel vehicles are seeing growth as the type of vehicles these consumers are looking to drive. Availability of alternative fuel — such as ethanol and biodiesel — remains the same year over year from 2018, with approximately 45 percent of respondents indicating these options are available in their area.

Women remain a strong voice in the survey results, encompassing 64 percent of respondents, and the largest age group, at 25 percent, were those 55 to 64 years old. The smallest age group was those 65 years and older. A third of respondents hailed from the Southeast, with only 6 percent of respondents reporting they are from the Northwest. The Southwest, Northeast and Midwest were almost equally represented at about 20 percent for each area.

Methodology

The 2019 *Aftermarket Business World* Consumer Attitude Study consisted of a consumer sampling panel. A series of questionnaires covering 24 products were developed by *Aftermarket Business World* staff. The questionnaires probe for answers to the who, what, why and when of replacement parts purchases by consumers. They were designed to be self-administered and to take no more than 15 minutes to complete. Questions were crafted to be straightforward in a multiple-choice format with a write-in option for an “other” response.

There are two ways to look at the responses for this project. One is based on responses to the survey instruments involved, and the other is based on the responses to each of the product categories covered by the project. Of the 22,098 invitations sent, there were 2,155 overall responses, for a response rate of 9.8 percent. However, there were 2,570 responses across all 24 product groups, which generated an 11.6 percent response rate.

The overall margin of error for this year’s study was +/-2.0 percent at a confidence level of 95 percent. □

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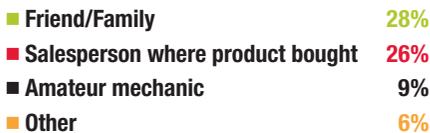
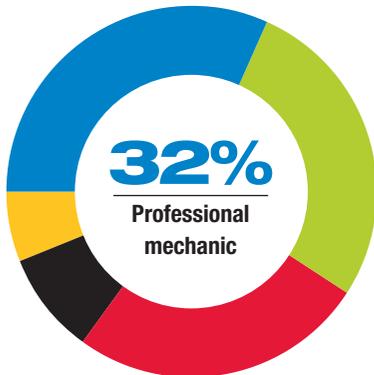


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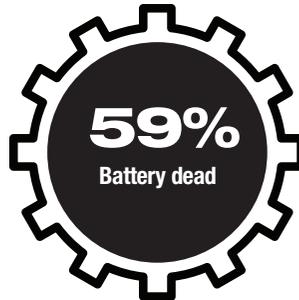
NEWER CARS,
NEWER TECHNOLOGY

BATTERIES

Who made the batteries recommendation?



PRIMARY PURCHASE INTENT



Weakened performance	18%
Reached designated lifecycle	12%
Technician recommended	7%

35%

of consumers personally installed the product they purchased

BUYING HABITS

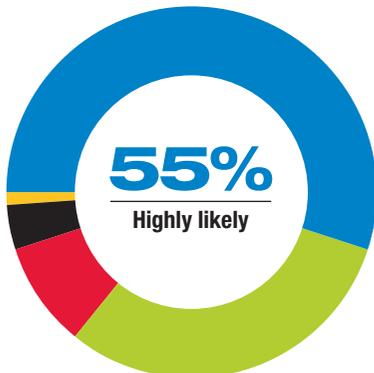
The top five reasons for purchasing a particular type of battery:

Performance claim	25%
Recommendation	22%
Lowest price	20%
Brand name	16%
In-Store display/packaging	8%

Why did you decide to buy a brand name product:

Quality of product	38%
Used in the past	23%
Reputable company	23%
Recommendation	20%

Likelihood to repurchase product based on performance:

**73%**

of consumers compared prices when shopping for this product.

TOP FIVE ADVERTISING CHANNELS:

Saw/Heard no ads	44%
Internet/Email	26%
Television	16%
Direct mail	11%
Magazine	8%

PRIMARY PURCHASE LOCATION:

Auto chain	53%
Discount store	16%
Dealership	8%
Independent auto store	7%
Independent repair shop	7%

*Includes DIY and DIFM purchases

VEHICLE AGE:

< 1 year	11%
2-5 years	33%
6-9 years	24%
10+ years	32%

OTHER WORK DONE:

Oil change	41%
No other work	35%
Checked tire pressure	30%
Checked filters	29%
Checked/filled washer fluid	26%
Checked other fluids	23%

Some chart totals exceed 100 percent as a result of respondents providing multiple answers. Others do not reach 100 percent as all answer options are not represented.

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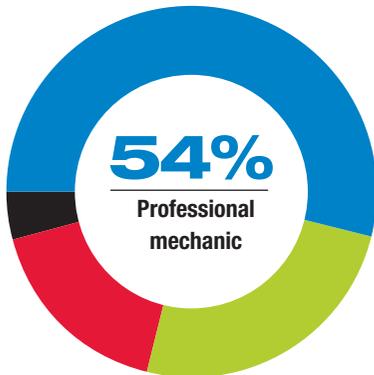


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NEWER CARS,
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FUEL PUMPS

Who made the fuel pump recommendation?



- Friend/Family 25%
- Amateur mechanic 17%
- Salesperson where product bought 4%
- Other 0%

PRIMARY PURCHASE INTENT



Fuel pump was leaking	33%
Fuel pump belt worn	23%
Fuel pump pulleys loose	4%

27%

of consumers personally installed the product they purchased

BUYING HABITS

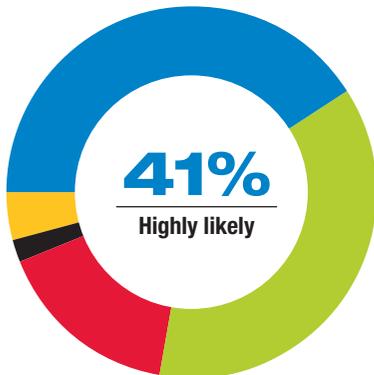
The top five reasons for purchasing a particular type of fuel pump:

Recommendation	29%
Lowest price	23%
Brand name	21%
Coupon/rebate	12%
In-store display/packaging	8%

Why did you decide to buy a brand name product:

Reputable company	34%
Quality of product	32%
Advertising/promo	30%
Used in past	26%

Likelihood to repurchase product based on performance:



- Likely 37%
- Somewhat likely 16%
- Somewhat unlikely 2%
- Not at all likely 4%

91%

of consumers compared prices when shopping for this product.

TOP FIVE ADVERTISING CHANNELS:

Internet/Email	38%
Television	34%
Saw/Heard no ads	23%
Radio	19%
Direct mail	19%

PRIMARY PURCHASE LOCATION:

Auto chain	31%
Independent repair shop	16%
Dealership	14%
Department store	14%
Discount store	12%

*Includes DIY and DIFM purchases

VEHICLE AGE:

< 1 year	25%
2-5 years	34%
6-9 years	15%
10+ years	26%

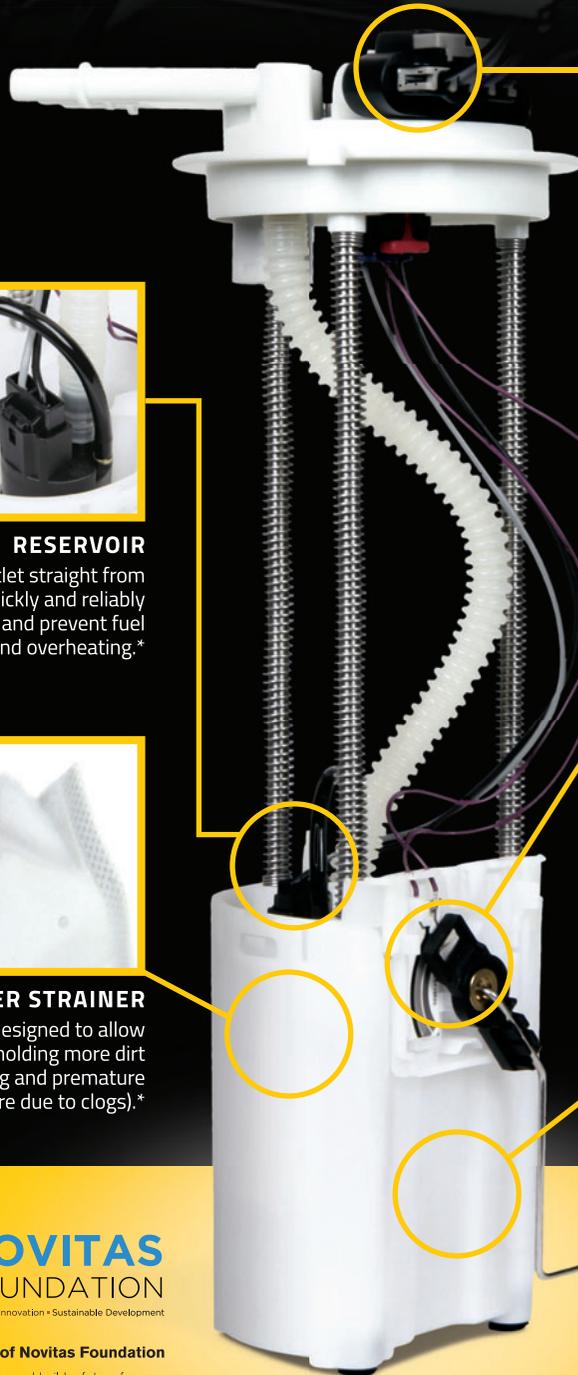
OTHER WORK DONE:

Oil change	49%
Checked/filled washer fluid	28%
Checked filters	26%
Checked/filled fluids	25%
Checked tire pressure	25%
None	23%

Some chart totals exceed 100 percent as a result of respondents providing multiple answers. Others do not reach 100 percent as all answer options are not represented.



Expect More. Expect TYC.



WIRING HARNESS

Included to replace old existing, worn out vehicle harness, for better connection and power delivery.*



RESERVOIR

Secondary fuel outlet straight from the pump to quickly and reliably fill the reservoir and prevent fuel shortage and overheating.*



SENDING UNIT

Features an enhanced "fingered" contact design for maximum contact surface regardless of dirty fuel, sharp turns, or bumpy roads.*



MULTI-LAYER STRAINER

Multi-layer strainer designed to allow fuel through while holding more dirt (prevents overheating and premature failure due to clogs).*



FUEL PUMP

Increased flow rate and efficiency from enhanced internal components.*



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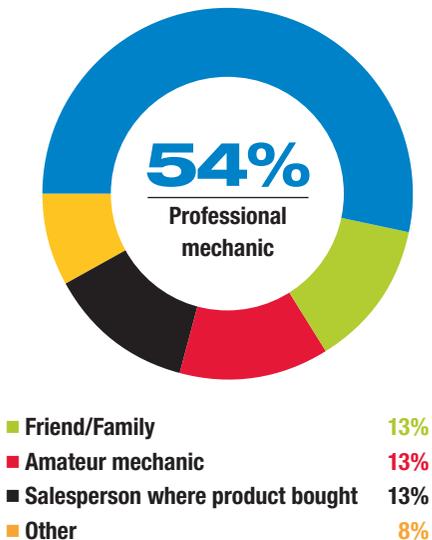
***Available for select applications**

For more information about TYC™ replacement automotive parts, consult your local TYC™ parts distributor, or look up parts online at www.TYCUSA.com

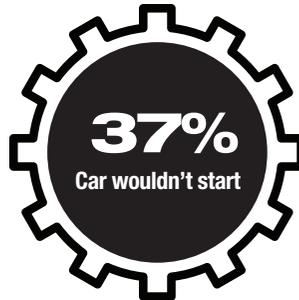
NEWER CARS,
NEWER TECHNOLOGY

STARTERS/ALTERNATORS

Who made the starter/alternator recommendation?



PRIMARY PURCHASE INTENT



Alternator light on	15%
Technician recommended	15%
Engine not firing on all cylinders	11%

36%

of consumers personally installed the product they purchased

BUYING HABITS

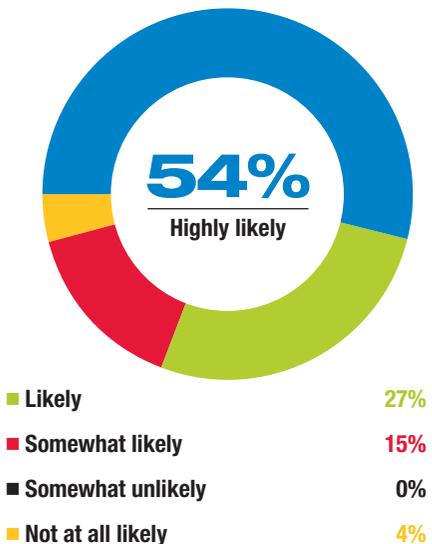
The top five reasons for purchasing a particular type of starter/alternator:

Lowest price	26%
Recommendation	22%
Performance claim	15%
Brand name	11%
Coupon/rebate	11%

Why did you decide to buy a brand name product:

Used in the past	44%
Reputable company	33%
Quality of product	30%
Recommendation	30%

Likelihood to repurchase product based on performance:

**78%**

of consumers compared prices when shopping for this product.

TOP FIVE ADVERTISING CHANNELS:

Saw/Heard no ads	44%
Internet/Email	37%
Television	30%
Magazine	26%
Newspaper	26%

PRIMARY PURCHASE LOCATION:

Auto chain	48%
Independent repair shop	33%
Online/Internet	26%
Department store	26%
Dealership	19%

*Includes DIY and DIFM purchases

VEHICLE AGE:

< 1 year	7%
2-5 years	7%
6-9 years	37%
10+ years	48%

OTHER WORK DONE:

None	52%
Battery check/replacement	37%
Checked fluids	37%
Tune-up	33%
Checked belts/hoses	33%
Checked tire pressure	15%

Some chart totals exceed 100 percent as a result of respondents providing multiple answers. Others do not reach 100 percent as all answer options are not represented.



Today's manufacturers of starters and alternators rely on our industry leading testing equipment. With multiple all-in-one testing solutions, we have something that suits your needs.

ALT-198 - Advanced End-of-Line, Alternator Testing

The ALT-198 is the next generation of the popular ALT-98. Featuring a PC for new software application controls including adjustable automated test profiles, statistics monitoring, cloud connectivity, and customized pass/fail reports. The ALT-198 is ideal for a variety of alternator testing applications from OEMs to re-manufacturers, including: end-of-line production testing, performance studies, endurance testing, and warranty evaluation.

JBT-1 - Bench-top Diagnosis, Alternator & Starter Testing

The JBT-1 starter and alternator tester is an all-in-one user friendly testing system that was designed for retail parts stores, warehouses, and distribution centers. This tester provides the end user with capabilities previously available only on OEM test systems.

BSG-198 - Belt Starter Generator Testing

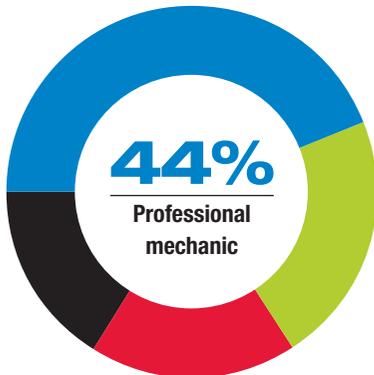
D&V has developed 12V, 48V, and higher voltage BSG testing systems for remanufacturing applications. The BSG-198 builds on the industry leading capabilities of the ALT-198 by adding BSG testing with CAN and LIN communications. It features an integrated 19" touch-screen and PC providing database management, customizable test profiles, advanced learning mode, and customizable pass/fail reports. The BSG-198 is the test system of the future for remanufacturers of belt starter generators.



NEWER CARS,
NEWER TECHNOLOGY

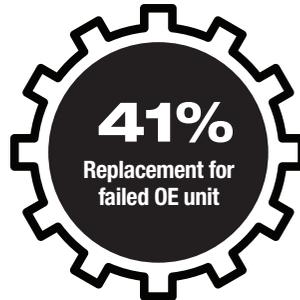
TURBO CHARGERS

Who made the turbo charger recommendation?



Friend/Family	22%
Amateur mechanic	18%
Salesperson where product bought	16%
Other	0%

PRIMARY PURCHASE INTENT



Replace failed aftermarket unit	30%
Improve vehicle performance	28%
Other	2%

32%

of consumers personally installed the product they purchased

BUYING HABITS

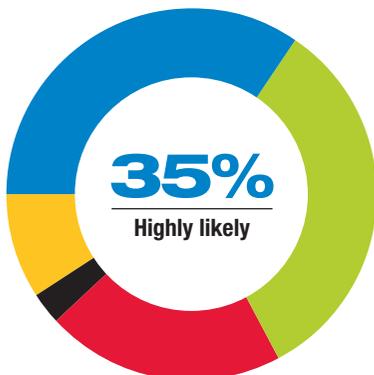
The top five reasons for purchasing a particular type of turbo charger:

Brand name	29%
Recommendation	17%
Lowest price	17%
Performance claim	11%
In-store display/packaging	11%

Why did you decide to buy a brand name product:

Quality of product	46%
Reputable company	35%
Advertising/promo	33%
Used in past	23%

Likelihood to repurchase product based on performance:



Likely	33%
Somewhat likely	21%
Somewhat unlikely	3%
Not at all likely	9%

94%

of consumers compared prices when shopping for this product.

TOP FIVE ADVERTISING CHANNELS:

Television	39%
Internet/Email	36%
Radio	29%
Direct mail	29%
Magazine	21%

PRIMARY PURCHASE LOCATION:

Auto chain	32%
Discount store	17%
Dealership	13%
Independent repair shop	10%
Department store	10%

*Includes DIY and DIFM purchases

VEHICLE AGE:

< 1 year	21%
2-5 years	21%
6-9 years	39%
10+ years	18%

OTHER WORK DONE:

Replace air filter	38%
Oil/filter change	38%
Replace exhaust manifold	32%
Replace induction hoses	30%
Replace intercooler	26%
None	20%

Some chart totals exceed 100 percent as a result of respondents providing multiple answers. Others do not reach 100 percent as all answer options are not represented.



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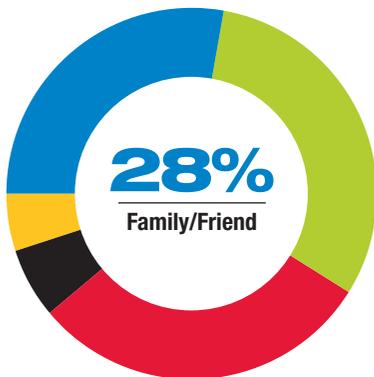
StandardTurbos.com

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NEWER CARS,
NEWER TECHNOLOGY

WIPERS

Who made the wipers recommendation?



Professional mechanic	31%
Salesperson where product bought	30%
Other	6%
Amateur mechanic	5%

PRIMARY PURCHASE INTENT



Broken wiper blades	14%
Preventive maintenance	12%
Seasonal change	7%

47%

of consumers personally installed the product they purchased

BUYING HABITS

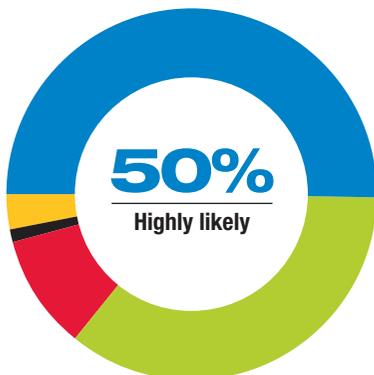
The top five reasons for purchasing a particular type of wiper:

Lowest price	22%
Recommendation	22%
Brand name	20%
Performance claim	16%
In-store display/packaging	8%

Why did you decide to buy a brand name product:

Quality of product	38%
Used in the past	30%
Reputable company	29%
Recommendation	18%

Likelihood to repurchase product based on performance:



Likely	35%
Somewhat likely	10%
Somewhat unlikely	1%
Not at all likely	3%

59%

of consumers compared prices when shopping for this product.

TOP FIVE ADVERTISING CHANNELS:

Saw/Heard no ads	66%
Internet/Email	14%
Direct mail	7%
Magazine	5%
Newspaper	5%

PRIMARY PURCHASE LOCATION:

Auto chain	49%
Discount chain store	21%
Independent repair shop	8%
Dealership	7%
Independent auto store	6%

*Includes DIY and DIFM purchases

VEHICLE AGE:

< 1 year	8%
2-5 years	23%
6-9 years	35%
10+ years	35%

OTHER WORK DONE:

None	53%
Oil change	25%
Checked/filled washer fluid	22%
Checked fluids	19%
Checked tire pressure	19%
Checked filters	16%

Some chart totals exceed 100 percent as a result of respondents providing multiple answers. Others do not reach 100 percent as all answer options are not represented.

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Metal wiper blade



Hybrid wiper blade



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TECHNICIAN ATTITUDE STUDY

TECHNICIANS TAKE CONTROL

CONSUMERS HEED THE ADVICE OF TECHNICIANS, SO HOW DO YOU GET THEIR ENDORSEMENT?

BY **KRISTA MCNAMARA** | CONTENT CHANNEL DIRECTOR

TECHS report that they “always” give a recommendation to consumers about what product category brand to buy, and most of the time, these consumers are following that advice. However, technicians don’t just give recommendations, they also follow them.

Aftermarket Business World delved into the attitudes, behaviors and thoughts of technicians through the 2019 Technician Attitude Study.

In every category surveyed, techs reported that if their primary product supplier switched to another brand of that product, they would keep the primary supplier rather than change suppliers out of loyalty to the product brand. So technicians are allowing their relationship with their supplier to dictate which brands they then recommend to consumers.

The most important thing technicians look for when searching for and staying loyal to a primary supplier? Parts availability. A good relationship and price were also factors but were far outweighed by product selection, according to survey results.

So who do technicians prefer to use as suppliers? According to survey results, across all categories surveyed,

70 percent use an auto parts retailer; 50 percent use a warehouse distributor; 45 percent use a jobber; and 44 percent use a dealership.

Of those, technicians reported across all categories that their preferred supplier would first be an auto parts retailer, followed by a warehouse distributor, jobber and then dealership.

The majority of technicians who responded to the survey work in a shop with one to three locations, an average of one to three technicians per location, and respondents were split down the middle with either one to three bays or four to six bays per location. About 53 percent of respondents operate a full-service shop, with 12 percent running a fleet business and 11 percent a specialty shop.

Methodology

The *Aftermarket Business World* 2019 Technician Attitude Study was fielded to readers of sister publication *Motor Age* via email. Study results are intended to show general industry trends reported from our readership, not statistical certainties. □



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TECHNICIANS TAKE CONTROL

AUXILIARY LIGHTING

Purchasing source

Auto parts retailer	33%
Warehouse distributor	33%
Internet	33%
Direct from manufacturer	25%
Jobber	25%

Preferred purchasing channel

Warehouse distributor	25%
Auto parts retailer	17%
Internet	17%
Direct from manufacturer	17%

Primary reason for preferred supplier

Parts availability	33%
Price	33%
Good relationship	25%
Counterperson assistance	8%

Margins

71% of technicians report they DO NOT know how much over the jobber they pay.

What techs know they pay

1-5%*	0%
6-10%*	50%
11-15%*	50%
16-25%*	0%
More than 25%	0%

What techs think they pay

1-5%*	25%
6-10%*	75%
11-15%*	0%
16-25%*	0%
More than 25%	0%

*Percent over jobber

45% of technicians sometimes give recommendations for buying a specific brand of auxiliary lights.

Amount of auxiliary lights returned monthly

None	67%	5-9%	0%
1-2%	0%	10% plus	0%
3-4%	0%	Don't know	33%

71% do not purchase auxiliary lights from dealerships.

Reasons:

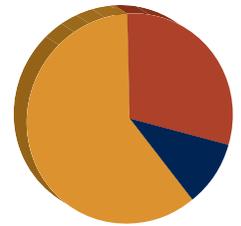
Too expensive	43%
Convenience/time	43%
Limited stock	14%

National brands vs. private label purchases

60%
National

10%
Private

30%
Both



Reason for buying particular auxiliary lights

Customer request	5%
Recommendation	5%
Brand	2%

Internet ordering frequency

0-10% of the time	86%
11-25% of the time	14%
25-50% of the time	0%
51-75% of the time	0%
76-100% of the time	0%

Frequency of supplier contact

Once a week	17%
Every two weeks	8%
Once a month	8%
Every three months	0%
Every six months	0%
Yearly	8%
No contact necessary	59%

Brand vs. supplier loyalty

If a primary supplier of auxiliary lights replaced a brand with another of like quality, a tech would:

Change suppliers to continue purchasing original brand	25%
Keep primary supplier and purchase new brand	75%

Some chart totals exceed 100 percent because respondents could provide multiple answers. Other charts do not reach 100 percent because all answer options are not represented.

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TECHNICIANS TAKE CONTROL

CHASSIS

Purchasing source

Auto parts retailer	87%
Dealership	55%
Jobber	26%
Warehouse distributor	26%
Internet	23%

Preferred purchasing channel

Auto parts retailer	56%
Warehouse distributor	22%
Jobber	16%
Internet	3%

Primary reason for preferred supplier

Parts availability	66%
Good relationship	13%
Carries specific brands	9%
Return policy	6%

Margins

81% of technicians report they DO NOT know how much over the jobber they pay.

What techs know they pay

1-5%*	50%
6-10%*	25%
11-15%*	0%
16-25%*	13%
More than 25%	12%

What techs think they pay

1-5%*	13%
6-10%*	22%
11-15%*	26%
16-25%*	35%
More than 25%	4%

*Percent over jobber

58% of technicians always give recommendations for buying a specific brand of chassis.

Amount of chassis returned monthly

None	63%	5-9%	0%
1-2%	25%	10% plus	0%
3-4%	6%	Don't know	6%

74% purchase chassis from dealerships.

Reasons:

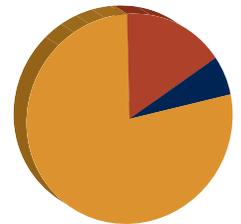
OEM form/fit/function	69%
Only place available	62%
Warranty	19%

National brands vs. private label purchases

78% National

6% Private

16% Both



Reason for buying particular chassis

Quality	72%
Brand	53%
Availability	50%

Internet ordering frequency

0-10% of the time	83%
11-25% of the time	6%
25-50% of the time	6%
51-75% of the time	3%
76-100% of the time	3%

Some chart totals exceed 100 percent because respondents could provide multiple answers. Other charts do not reach 100 percent because all answer options are not represented.

Frequency of supplier contact

Once a week	3%
Every two weeks	6%
Once a month	8%
Every three months	0%
Every six months	14%
Yearly	6%
No contact necessary	63%

Brand vs. supplier loyalty

If a primary supplier of chassis replaced a brand with another of like quality, a tech would:

Change suppliers to continue purchasing original brand	37%
Keep primary supplier and purchase new brand	63%

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TECHNICIANS TAKE CONTROL

FUEL PUMPS

Purchasing source

Auto parts retailer	54%
Dealership	54%
Warehouse distributor	51%
Jobber	40%
Internet	14%

Preferred purchasing channel

Auto parts retailer	31%
Warehouse distributor	29%
Jobber	17%
Dealership	11%

Primary reason for preferred supplier

Parts availability	40%
Price	17%
Good relationship	14%
Fast delivery	14%

Margins

79% of technicians report they DO NOT know how much over the jobber they pay.

What techs know they pay

1-5%*	50%
6-10%*	0%
11-15%*	20%
16-25%*	10%
More than 25%	20%

What techs think they pay

1-5%*	5%
6-10%*	41%
11-15%*	23%
16-25%*	18%
More than 25%	13%

*Percent over jobber

57% of technicians always give recommendations for buying a specific brand of fuel pump.

Amount of fuel pumps returned monthly

None	73%	5-9%	3%
1-2%	15%	10% plus	0%
3-4%	3%	Don't know	6%

66% purchase fuel pumps from dealerships.

Reasons:

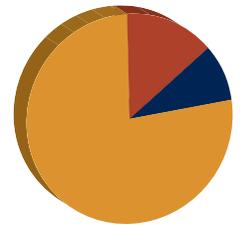
OEM form/fit/function	83%
Only place available	46%
Warranty	42%

National brands vs. private label purchases

77% National

9% Private

14% Both



Reason for buying particular fuel pumps

Warranty	49%
OEM	46%
Brand	43%

Internet ordering frequency

0-10% of the time	86%
11-25% of the time	3%
25-50% of the time	3%
51-75% of the time	0%
All the time	8%

Frequency of supplier contact

Once a week	11%
Every two weeks	0%
Once a month	14%
Every three months	3%
Every six months	6%
Yearly	0%
No contact necessary	66%

Brand vs. supplier loyalty

If a primary supplier of fuel pumps replaced a brand with another of like quality, a tech would:

Change suppliers to continue purchasing original brand	39%
Keep primary supplier and purchase new brand	61%

Some chart totals exceed 100 percent because respondents could provide multiple answers. Other charts do not reach 100 percent because all answer options are not represented.



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WIRING HARNESS

Included to replace old existing, worn out vehicle harness, for better connection and power delivery.*



SENDING UNIT

Features an enhanced "fingered" contact design for maximum contact surface regardless of dirty fuel, sharp turns, or bumpy roads.*



FUEL PUMP

Increased flow rate and efficiency from enhanced internal components.*



RESERVOIR

Secondary fuel outlet straight from the pump to quickly and reliably fill the reservoir and prevent fuel shortage and overheating.*



MULTI-LAYER STRAINER

Multi-layer strainer designed to allow fuel through while holding more dirt (prevents overheating and premature failure due to clogs).*



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For more information about TYC™ replacement automotive parts, consult your local TYC™ parts distributor, or look up parts online at www.TYCUSA.com



TECHNICIANS TAKE CONTROL

GASKETS

Purchasing source

Dealership	67%
Auto parts retailer	63%
Warehouse distributor	46%
Jobber	29%
Direct from manufacturer	21%

Preferred purchasing channel

Dealership	38%
Auto parts retailer	29%
Warehouse distributor	17%
Direct from manufacturer	8%

Primary reason for preferred supplier

Parts availability	38%
Good relationship	25%
Carries specific brands	17%
Fast delivery	13%

Margins

71% of technicians report they DO NOT know how much over the jobber they pay.

What techs know they pay

1-5%*	17%
6-10%*	50%
11-15%*	33%
16-25%*	0%
More than 25%	0%

What techs think they pay

1-5%*	29%
6-10%*	71%
11-15%*	0%
16-25%*	0%
More than 25%	0%

*Percent over jobber

33% of technicians always give recommendations for buying a specific brand of gasket.

Amount of gaskets returned monthly

None	67%	5-9%	0%
1-2%	25%	10% plus	0%
3-4%	8%	Don't know	0%

72% purchase gaskets from dealerships.

Reasons:

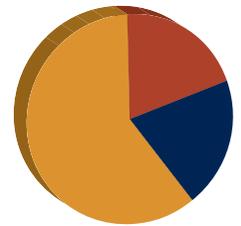
OEM form/fit/function	91%
Only place available	32%
Warranty	23%

National brands vs. private label purchases

60% National

20% Private

20% Both



Reason for buying particular gasket

Quality	69%
OEM	46%
Performance	42%

Internet ordering frequency

0-10% of the time	75%
11-25% of the time	6%
25-50% of the time	16%
51-75% of the time	3%
76-100% of the time	0%

Some chart totals exceed 100 percent because respondents could provide multiple answers. Other charts do not reach 100 percent because all answer options are not represented.

Frequency of supplier contact

Once a week	9%
Every two weeks	3%
Once a month	9%
Every three months	6%
Every six months	3%
Yearly	0%
No contact necessary	70%

Brand vs. supplier loyalty

If a primary supplier of gaskets replaced a brand with another of like quality, a tech would:

Change suppliers to continue purchasing original brand	42%
Keep primary supplier and purchase new brand	58%



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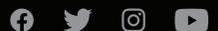
In the real-world nothing is perfect – including gasket sealing surfaces. Heat, torque and the stress of the internal combustion make perfect sealing surfaces not so perfect. That's why for over 100 years, Fel-Pro has been engineering and manufacturing sealing solutions **designed for the repair environment**. Our engineering and product development teams have created a portfolio of sealing innovations designed to help seal imperfect surfaces – including proprietary materials and application-specific technologies, like PermaTorque® MLS.

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THE GASKETS PROFESSIONALS TRUST™

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OXYGEN SENSORS

Purchasing source

Auto parts retailer	63%
Dealership	50%
Warehouse distributor	38%
Jobber	29%
Internet	17%

Preferred purchasing channel

Auto parts retailer	38%
Warehouse distributor	33%
Dealership	13%
Jobber	13%

Primary reason for preferred supplier

Parts availability	42%
Carries specific brand	25%
Good relationship	13%
Price	13%

Margins

68% of technicians report they DO NOT know how much over the jobber they pay.

What techs know they pay

1-5%*	63%
6-10%*	12%
11-15%*	12%
16-25%*	13%
More than 25%	0%

What techs think they pay

1-5%*	15%
6-10%*	0%
11-15%*	39%
16-25%*	31%
More than 25%	15%

*Percent over jobber

50% of technicians always give recommendations for buying a specific brand of oxygen sensor.

Amount of oxygen sensors returned monthly

None	64%	5-9%	0%
1-2%	18%	10% plus	0%
3-4%	9%	Don't know	9%

56% purchase oxygen sensors from dealerships.

Reasons:

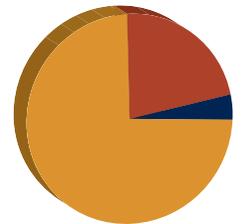
OEM form/fit/function	77%
Only place available	46%
Warranty	31%

National brands vs. private label purchases

74%
National

4%
Private

22%
Both



Reason for buying particular oxygen sensors

Quality	54%
Brand	50%
Availability	54%

Internet ordering frequency

0-10% of the time	87%
11-25% of the time	4%
25-50% of the time	0%
51-75% of the time	0%
All the time	9%

Frequency of supplier contact

Once a week	9%
Every two weeks	0%
Once a month	13%
Every three months	0%
Every six months	5%
Yearly	5%
No contact necessary	68%

Brand vs. supplier loyalty

If a primary supplier of oxygen sensors replaced a brand with another of like quality, a tech would:

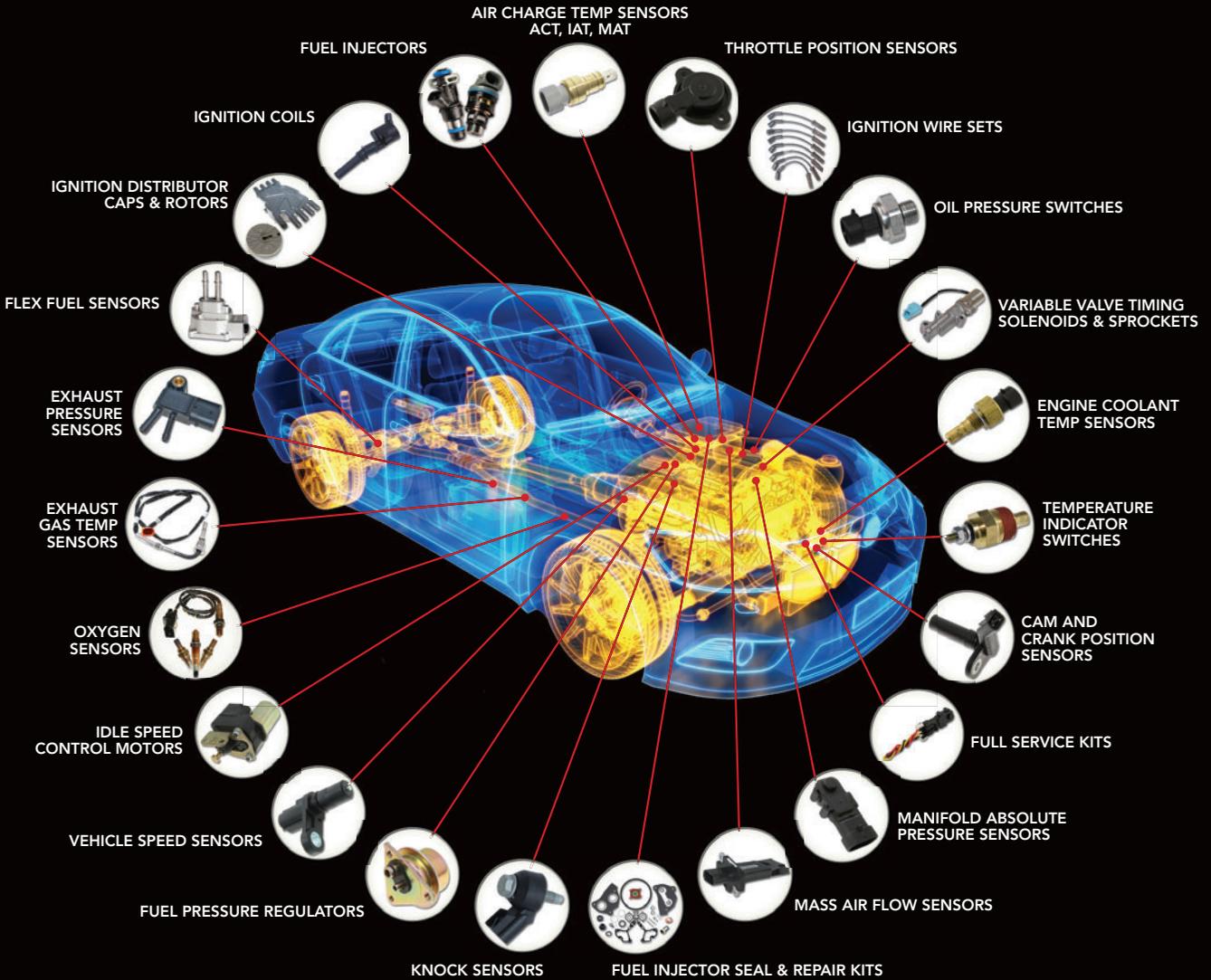
Change suppliers to continue purchasing original brand	30%
Keep primary supplier and purchase new brand	70%

Some chart totals exceed 100 percent because respondents could provide multiple answers. Other charts do not reach 100 percent because all answer options are not represented.



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TECHNICIANS TAKE CONTROL

WATER PUMPS

Purchasing source

Auto parts retailer	70%
Jobber	59%
Warehouse distributor	48%
Dealership	30%
Internet	22%

Preferred purchasing channel

Auto parts retailer	39%
Jobber	39%
Warehouse distributor	14%
Dealership	4%

Primary reason for preferred supplier

Parts availability	50%
Fast delivery	18%
Carries specific brand	14%
Price	11%

Margins

85% of technicians report they DO NOT know how much over the jobber they pay.

What techs know they pay

1-5%*	50%
6-10%*	25%
11-15%*	25%
16-25%*	0%
More than 25%	0%

What techs think they pay

1-5%*	5%
6-10%*	32%
11-15%*	32%
16-25%*	18%
More than 25%	13%

*Percent over jobber

58% of technicians always give recommendations for buying a specific brand of water pump.

Amount of water pumps returned monthly

None	64%	5-9%	0%
1-2%	36%	10% plus	0%
3-4%	0%	Don't know	0%

52% do not purchase water pumps from dealerships.

Reasons:

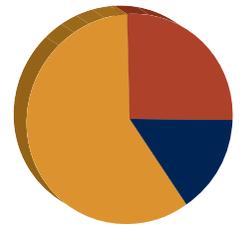
Too expensive	76%
Limited stock	38%
Aftermarket parts are better	38%

National brands vs. private label purchases

59%
National

15%
Private

26%
Both



Reason for buying particular water pumps

Quality	72%
Availability	66%
Warranty	62%

Internet ordering frequency

0-10% of the time	78%
11-25% of the time	4%
25-50% of the time	7%
51-75% of the time	0%
All the time	11%

Frequency of supplier contact

Once a week	0%
Every two weeks	0%
Once a month	11%
Every three months	7%
Every six months	4%
Yearly	14%
No contact necessary	64%

Brand vs. supplier loyalty

If a primary supplier of water pumps replaced a brand with another of like quality, a tech would:

Change suppliers to continue purchasing original brand	21%
Keep primary supplier and purchase new brand	79%

Some chart totals exceed 100 percent because respondents could provide multiple answers. Other charts do not reach 100 percent because all answer options are not represented.

DAYCO® WATER PUMPS

Total Market Coverage Now Available

Over 950+ SKUs

Improved Impeller Design

Engineered with upgraded die-cast aluminum material for better durability and increased longevity

Every pump incorporates a laser-engraved Dayco® logo

Case-Hardened Roller Bearing

Tough interior and exterior allows for flex without breaking

Each pump is 100% end of line leak tested to ensure better durability

100% New Aluminum Cast Material

Assembled using Programmable Logic Control and follows IATF16949 quality standards



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TOOLS, PARTS AND
RESOURCES FOR EVERY
SHOP EVERY DAY

THE LATEST PRODUCTS

TECHNOLOGIES TO HELP YOU WORK SMARTER
AND KEEP YOUR BUSINESS PROFITABLE

THUNDERCORE™ PRO

ThunderCore™ PRO

Walker Products is introducing a new ignition wire program and has set a debut date for this year's AWDA and AAPEX events. New and fully reconstructed, ThunderCore™ PRO will be Walker's new all-makes, all-models offering that strictly conforms to OE fit, form and function. Through dedicated research and development, Walker identified the needs of the aftermarket to that of an all-inclusive product line. ThunderCore™ PRO will contain over 650 part numbers, ensuring a true all-makes, all-models program.

www.walkerproducts.com

Walker Products | AAPEX Booth 2261

MPA PREMIUM BRAKE CALIPERS

Motorcar Parts of America's reputation as the leading supplier of aftermarket replacement electrical components expands with the addition of brake calipers. Designed to meet the demands of professional installers, and powered by MPA's legendary quality and performance, this full line of brake calipers features OE-style finishes, industry-leading application coverage and everything in the box to do the complete repair. For full program details, visit MPA at AAPEX booth #4638.

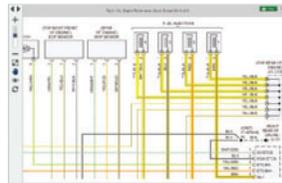


www.motorcarparts.com

Motorcar Parts of America | AAPEX Booth 4638

PRODEMAND SOFTWARE RELEASE

Mitchell 1 announces the latest release of ProDemand® repair information software includes enhanced wiring diagrams featuring intelligent navigation that takes users directly to the specific component diagram — with the related wires automatically highlighted. This makes it faster and easier than ever for technicians to find the exact wiring diagram they need for an efficient and accurate diagnosis and repair. The new "smarter wiring diagrams" contain the content that ProDemand users are familiar with and appreciate, but with enhanced navigation that improves the user experience and speeds up the search process.



www.mitchell1.com

Mitchell 1 | AAPEX Booth 2471

BATTERY CHARGER

Clore Automotive introduces Model PL6100, a new 12 Volt 100A Flashing Power Supply and 60/40/10A Battery Charger, from SOLAR. The PL6100 is designed to provide stable power, on demand up to 100 amps, to a vehicle electrical system to support module reprogramming. It also provides full-service battery charging capability from 10 to 60 amps, to service everything from small vehicle batteries to Group 31 batteries.



www.cloreautomotive.com

Clore Automotive | AAPEX Booth 850

ADS SOFTWARE UPDATE

Bosch announced the release of software version 3.8 for the ADS 325 and ADS 625 diagnostic scan tools in North America. This update adds new coverage, including codes, live data, special functions to ensure the ADS series tools offer the best comprehensive diagnostic coverage available for technicians on the market. Software version 3.8 adds new coverage to a wide variety of Asian, domestic and European manufacturers and vehicles through the 2019 model year. In addition, new ADAS dynamic camera calibrations have been added to select manufacturers, as well as pre- and post-scan coverage for numerous models.



www.boschdiagnostics.com/pro/ads

Bosch | AAPEX Booth 5042

TRICO AUTOMOTIVE APPLICATION GUIDE

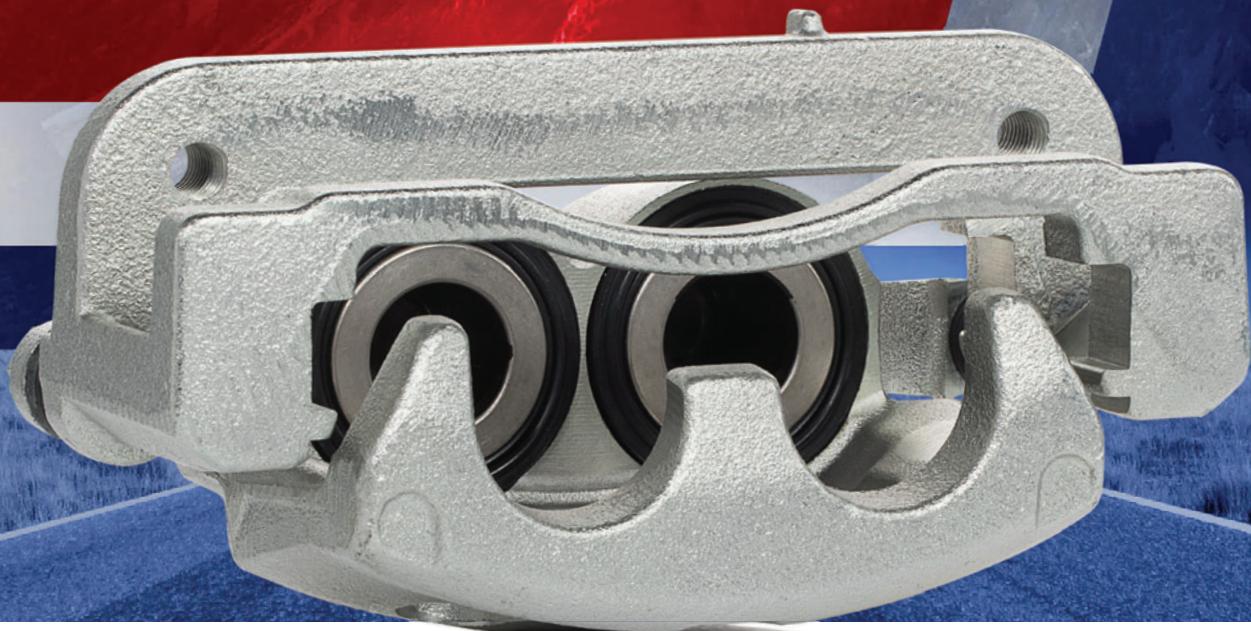
Trico Products Corporation announced that its updated 2019 U.S. Automotive Application Guide is now available. Designed for automotive technicians, counter professionals and consumers, the guide provides details on all TRICO® wiper blades and other offerings, which are listed by product line, vehicle year, make and model. The 292-page compilation provides comprehensive details on all of TRICO's products, including 31 new part numbers which will be available later this fall. These applications include 11 TRICO Rear™ universal beam blades, 14 TRICO Pro® beam blades, four TRICO Exact Fit® rear and beam blades, and two TRICO Spray™ washer pumps.



www.tricoproducts.com

TRICO Group | AAPEX Booth 3038

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BRAKE CALIPERS

Backed by over 50 years of product innovations and legendary attention to detail, MPA introduces it's full line of replacement brake calipers. MPA brake calipers provide nearly 100% coverage and are engineered and tested to meet or exceed OE specifications. OE style anti-corrosion coatings, 100% new Phenolic pistons and application-specific hardware ensures a complete repair every time. Nationally recognized private label services and award-winning customer service make MPA **Your Source** for brake calipers.



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