AFTERMARKET BUSINESS WORLD™
October 2017
Talk shop anytime
AUTOPRO WORKSHOP
The leading source for market trends & analysis
Vol. 126, No. 2

ADVERTISEMENT

Four Seasons Remanufactured Compressors

Four Seasons® remanufactured compressors provide shops and consumers with an affordable and environmentally friendly option that features the same great quality to that of new compressors. With in-house manufacturing processes, Four Seasons remanufactured compressors use 75 percent recycled content on average, helping to reduce the consumption of mineral resources while keeping landfills clear of unnecessary waste. The compressors are remanufactured in a facility registered under the Manufactured Again Certification program.

Four Seasons | www.4s.com | **AAPEX Booth 4226**

Raybestos Opti-Cal Brake Caliper

Raybestos® Opti-Cal™ calipers are made from new components, and unlike traditional calipers, require no core return, opening up more shelf space for inventory. Engineered to rigorous specifications and manufactured to meet or exceed OE performance, each caliper ensures safe, reliable, leak-free operation. Innovation through engineering excellence has allowed Raybestos to provide coverage for nearly 2,000 applications while continuing to increase coverage of popular domestic and import nameplate vehicles.

Raybestos | www.raybestos.com | **AAPEX Booth 3638**

Remy DR44M Alternators

Remy® DR44M alternators for GM truck applications are manufactured to meet or exceed OE specifications with improved reliability, premium quality and optimal performance. Featuring a 47 mm DE bearing, high speed 14 mm slip rings and press-fit diodes, it is one of the most durable products available in the aftermarket. With hot forged segments, special electrical lamination, and high efficiency internal fans, DR44M provides improved energy efficiency over its predecessor designs.

Remy Power Products
www.remyautoparts.com
AAPEX Booth 4661

Integrated Thermostat Housings

With coverage for over 98 percent of vehicles in operation, Stant is best to market with the premier selection of top quality integrated thermostat housings in the industry. Stant integrated thermostat housings are specifically designed to meet OE durability and functionality requirements. The Stant thermostat is integrated directly into the housing assembly, simplifying installation for the service technician, and the special valve and dual thermostat assemblies provide more accurate control in coolant temperatures.

Stant | www.stant.com | **AAPEX Booth 3816**

TrakMotive CV Axles

TrakMotive® is the aftermarket's leading manufacturer and supplier of new CV Axles, with more than 2,000 skus. TrakMotive® has the best market coverage in North America. A.I.T., the parent company for TrakMotive® brands, is also launching a complete line of window lift regulators that will include 2,500 skus of one piece window regulator assemblies as well as replacement parts. Come by and visit us at booth 6330 at AAPEX.

TrakMotive
www.trakmotive.com

AAPEX Booth 6330

AFTERMARKET BUSINESS WORLD™
The leading source for market trends & analysis
October 2017
Talk shop anytime
AUTOPRO WORKSHOP
Vol. 126, No. 2

COMMUNITY

PRODUCT SUPPLIER OPENS DETAILING FRANCHISE

Chemical Guys is expanding through Detail Garage retail franchises

PRODUCTS

FALL PRODUCT REVIEW

Some of the latest tools and resources

OPERATORS EMBRACE FLEET MANAGEMENT

TRENDING

GIVING BACK

Retired executives help bring affordable cars to Kenya

RESEARCH

CONSUMER ATTITUDE STUDY

Brand names, recommendations most influence consumer purchases

UBM

24950 Country Club Blvd., Suite 200
North Olmsted, OH 44070
Fax: (440) 891-2675
www.aftermarketbusiness.com
Aftermarket Business World

OCTOBER 2017 Vol.126, No. 2

Talk shop anytime

AUTOPRO WORKSHOP

AFTERMARKET BUSINESS WORLD™

COMMUNITY

TRENDING

RESEARCH

CONSUMER ATTITUDE STUDY

BRANDING MATTERS

CONSUMERS BUYING AUTO PARTS MOST INFLUENCED BY BRAND, RECOMMENDATIONS

16

AD INDEX

- IT'S QUICK!
- IT'S EASY!
- IT'S DIRECT !

That describes our new way of handling your inquiries about advertisements and product releases. You may go to www.motorage.com/readerservice and fill out a short form and we'll send your request immediately (electronically) and directly to the respective manufacturers who have the information you want.

You may also check the items you are interested in and fax the sheet to us at (416) 620-9790 to get more information on the products of interest. Like we said — quick, easy, direct.

ADVERTISING AND EDITORIAL PRODUCT INDEX

Connectiv
The Business Information Association, a division of SIIA

Printed in U.S.A.

To subscribe, call toll-free 877-527-7008. Outside the U.S. call 218-740-6477.

SUBMISSIONS:
AftermarketBusiness welcomes unsolicited articles manuscripts, photographs, illustrations and other materials but cannot be held responsible for their safekeeping or return.

MEMBER OF:

AASA · autocare ASSOCIATION · AIMM MEMBER · AMERICAN BUSINESS MEDIA · awda · Be Car Care Aware

SALES STAFF

Midwest & Western States
Michael Parra, Regional Sales Manager
Tel: (704) 919-1931,
mparra@ubm.com

Illinois, Eastern & Southern States
Paul A. Ropski, Regional Sales Manager
Tel: (312) 566-9885, Fax: (312) 566-9884
propski@ubm.com

Ohio, Michigan & California
Lisa Mend, Regional Sales Manager
Tel: (773) 866-1514, Fax: (773) 866-1314
lmend@ubm.com

Inside Sales/Classified Sales/ Recruitment
Keith Havemann, Sales Representative
Tel: (310) 857-7634, Fax: (310) 943-1465
khavemann@ubm.com

List Rental Sales
Tamra phillips
tphillips@ubm.com, *(440) 891-2773*

Permissions/International Licensing
Maureen Cannon
(440) 891-2742

Reprint Services
877-652-5295, ext 121
bkolb@wrightsmedia.com
Outside U.S. dial 281-419-5725 Ext. 121

Marketing
Boris Chernin,
Marketing Manager
Tel: (310) 857-7632, Fax: (310) 943-1465
bchernin@ubm.com

AD DEADLINES:
Insertion orders–1st of month preceding issue date.
Ad materials–5th of month preceding issue date.

To subscribe, call toll-free 888-527-7008. Outside the U.S. call 218-740-6477.

FOR THOSE THAT LIKE TO PUT THEIR FOOT DOWN

Sixty years ago, Raybestos® began its long racing tradition by partnering with Indy 500 drivers to sponsor the Safety in Speed award. Ever since, drivers have relied on Raybestos® for safety in speed.

NOT FOR STREET USE.
DESIGNED FOR TRACK RACING ONLY.

Raybestos® Performance Specialty Disc Pads

Designed for street performance, Raybestos® Performance Specialty Disc Pads provide a superior feel, exceptionally high torque and quiet, yet aggressive braking, leaving the competition in the dust.

Raybestos® Professional Racing Brake Pads

Formulated for high-performance track use, Raybestos® Professional Racing Brake Pads provide reliable, consistent braking for extreme stopping power and optimum safety, in all track conditions.

Raybestos®
The best in brakes®

www.raybestos.com

PRODUCT SUPPLIER EXPANDS TO DETAIL GARAGE FRANCHISOR

BY **JAMES E. GUYETTE**
NEWS CORRESPONDENT

Many trainers will tell you that it's all in the details, and this adage is especially true when learning how to detail a vehicle.

Chemical Guys, a Gardena, Calif.-based supplier in a 300,000-square-foot facility hosting its own Smart Detailing University, specializes in providing a complete educational program for professional detailers along with marketing its line of car care products.

The company is further expanding its global reach through Detail Garage retail franchises aimed at imparting detailing knowledge to a walk-in car-buffing customer base.

Established in 2008, more than a dozen Detail Garages are up and rubbing in California, Utah, Hawaii and Florida, with locations pending in Las Vegas, Houston and Charlotte, N.C.

Appearance-obsessed owners of new and used cars are patronizing the establishments to glean the latest DIY detailing techniques while purchasing the necessary materials for maintaining their prized vehicles in showroom condition.

"Detail Garage is built under the premise that when you create a destination people will come from far and near because what you have is not a brand – it's a lifestyle," explains Paul Schneider, the co-founder of Chemical Guys – and its proprietary Smartwax Torq, Hex-Logic and Detail Garage lines – along with David Knotek. Each store "brings together the perfect blend of products, tools, accessories and education combined with passionate people that show the world how to shine."

"It's a gathering place in your community where people go for expert advice," adds National Franchising Manager Chad Zani.

Additional franchisees are being actively recruited, including those who are interested in opening overseas locations.

"We already have international distributors for our products, and a lot of them are wanting to get on board with a Detail Garage," says Zani.

Echoing Schneider, Zani points out that for franchising candidates under consideration "the biggest qualification is passion – you have to be passionate about all things car care."

The company said it offers franchisees exclusive territories, marketing & advertising guidance and support, brand recognition, industry research & trend reports, comprehensive initial and ongoing product & industry training, plus sales tools & management plans originating from "our proven business model and the successful results of our product testing and research."

A $25,000 Detail Garage franchise fee includes the $4,000 tuition for two people to attend a weeklong, certification-granting Master Training Course at Smart Detailing University (SDU).

SDU's curriculum encompasses overall detailing procedures, high-speed buffing and polishing, proper use of chemicals, headlight restoration, windshield repair and sales & marketing strategies that help entrepreneurs interested in opening a detailing and reconditioning service.

"Any franchisee in the course gets a slightly altered program," says Zani, "because they're operating a business" that requires enhanced retail management expertise and customer relations skills.

No more than six students are enrolled in each class to offer individualized attention; customized courses for specific clients are available as well.

SDU/Chemical Guys also hosts 700 instructional clips on YouTube. "People can learn a lot by looking at the YouTube videos, but there's nothing like hands-on experience" to learn the finer points of professional detailing and product retailing, he notes.

Focus on the products

"You can go into any auto parts store in America and be left to fend for yourself," says Zani, emphasizing that meeting and greeting each customer and offering advice in a friendly manner are important components along with conducting in-house product demonstrations and instructional sessions amid a relaxed atmosphere.

Yet ringing up car care product sales is the overriding goal. "It's exclusively

ESTABLISHED IN 2008, MORE THAN A DOZEN DETAIL GARAGES ARE UP AND RUNNING IN CALIFORNIA, UTAH, HAWAII AND FLORIDA, WITH LOCATIONS PENDING IN LAS VEGAS, HOUSTON AND CHARLOTTE, N.C.

car care products," he says. "There are no wiper blades or engine oil."

Carrying merchandise outside of the Chemical Guys family is a possibility if the proffer meets the company's standards. "We have our own manufacturer in China that we have an exclusive agreement with, but some of the products we sell are not manufactured by us." If a product pitch seems promising, "we would test it, and if we think it looks good it would get the green light."

Averaging 2,500 square feet, with the smallest measuring 1,600 square feet, the stores are gleaming and the employees present a neat appearance. Locations are positioned in high-traffic, retail-oriented "community centers" rather than sited in industrial areas of town where rugged repair shops tend to reside.

"Part of my role in supporting the franchisees is supporting them in selecting the facilities," Zani says. "The key for us is that the building has adequate parking, and the parking lot allows us to do events." "Show 'n' Shine" and "Cars 'n' Coffee" are among the out-front activities.

One such event at Detail Garage Los Angeles in Gardena was an All-Toyota Detailing Tech Day and Car Meet. "It was an awesome turnout of Toyota and Lexus owners who came out to learn about the best tips and tricks at keeping their car looking its best. Tech Days at Detail Garage are great because not only do you get to meet with other auto enthusiasts, but you also get some tips and detailing knowledge while you attend."

Twice a month each store teaches a basic course and an advanced course to help local car owners take better care of their vehicles.

The sites need to be in well-populated communities possessing suitable economic demographics, as in people who own nice vehicles and are willing to spend some money to keep them looking that way.

"We have potential franchisees who operate body shops who want to dedicate half of their space for a Detail Garage," Zani says. Acceptance of these proposals depends on the attractiveness of the site and ownership's willingness to devote the proper amount of resources to hands-on, customer-centric car care retailing.

Existing detailing shops are less likely to be awarded a franchise. "We want franchisees to focus on the products, not detailing cars," he says. □

JOHN SHOEMAKER Business Development Manager, BASF
john.a.shoemaker@basf.com

SOLVING THE TRAINING PUZZLE

Service, collision training opportunities abound

How do we change shop owners' minds to give training the same importance as their immediate problem?

Training helps shops improve their processes, but training also takes employees away from their shop. Often people are too busy handling issues to break away to train. Training, in most cases, will help alleviate those issues, at the very least, it helps manage the stress that most collision center employees face.

So why can't we get shops to train? That is where the conundrum comes in – the training they know they need becomes secondary to the immediate problem at hand.

As I write this I know there are shops that have procrastinated on their I-CAR and OEM certifications and are trying to figure out how to get all the training they need crammed into the last quarter of the year.

So how do we change shop owners' minds to give training the same importance as their immediate problem? I would say we could help them handle those problems, but that would require training.

Generally, shop owners say that they can't afford to lose people to training. My answer is to show them the different opportunities and ways to get the training they need to improve their operation without sacrificing the time they need to spend at their shop.

I-CAR has removed obstacles and excuses for not training by adapting their training to meet not only the increasing vehicle complexity requirements but also to meet their customer's needs. Through I-CAR's hands-on, virtual and on-line education choices, you can take the courses you need when they fit your schedule.

Collision Hub's Repair University has courses available in four different categories. Refinish, Body Repair, Operations Management and Estimating. The courses provide training in short video tracks that you can watch during a lunch hour.

Collision Hub's Repair University Live is a subscription based monthly training presentation covering subjects like; Scanning vs. Calibration, OEM Repair Requirements, Understanding Estimating and the Guides and Structural Anchoring and Measuring to name a few.

The Automotive Management Institute (AMi) offers courses in Leadership, Financial Management, Operational Management, Sales and Marketing, Human Resources & Personnel Development, Risk Management and IT Management through the institute's online education program.

If you prefer instructor-led programs, AMi has courses such as Financial Management, Human Resources & Personnel Management, Risk Management, Leadership, Operational Management and Sales & Marketing available.

National conferences such as NACE Automechanika offer a large variety of service and collision repair courses under one roof that allow you to maximize the time away from your shop. In most cases, you can take four to five courses in a day in multiple disciplines.

SEMA is one of the largest automotive conventions in North America and it has five full days of training courses available through the Society of Collision Repair Specialists Repairer Driven Education series.

If NACE Automechanika and SEMA are not enough to get you out the door for training opportunities, the Alliance of Automotive Service Providers/New Jersey also has a conference that provides training. This Northeast conference has training available through a variety of providers to include I-CAR, MEA, AMi, and ASE as well as free training opportunities.

In addition to everything I have mentioned, paint manufacturers, repair product manufacturers, distribution partners, auto body associations, tool and supply vendors, and various other entities provide training throughout the year.

While training might not be convenient, it is a necessity in the evolving collision repair industry. Vehicles are becoming more complex; the repair methods are more specific and you must learn or be left behind.

I think Tom Hopkins said it best: "You are your greatest asset. Put your time, effort and money into training, grooming and encouraging your greatest asset." □

STEPHEN BARLAS Washington Correspondent
sbarlas@verizon.net

HOUSE MOVES ON AV LEGISLATION

Self-driving legislation is on the road and moving through the House. The House Energy & Commerce Committee passed a far-ranging bill on July 27. The bill is called the Safely Ensuring Lives Future Deployment and Research in Vehicle Evolution Act or the SELF DRIVE Act.

It passed the committee by a vote of 54-0 which, theoretically, means the bill will pass the full House. No companion bill has been introduced in the Senate. But the unanimous House committee vote was impressive given the enmity between Republicans and Democrats on Capitol Hill. The vote bodes well for the passage of some autonomous vehicle (AV) legislation this year.

Frederick Hill, spokesman for Sen. John Thune (R-SD), chairman of the Senate Commerce, Science and Transportation Committee, says he doesn't know whether Thune, through whose committee a companion to the SELF DRIVE Act must move, has commented on the House bill. "There is a Senate bill in the works," Hill adds.

The big issue for the aftermarket is that this bill establishes the authority for suppliers to test AV components the same way auto manufacturers do.

"The top priority for us was insuring that suppliers can test components on public roads, and the bill allows us to do that," says Tom Lehner, vice president, public policy, Motor and Equipment Manufacturers Association. The second priority was making sure there is clarification and a distinction between state and federal regulatory roles. The bill also establishes that separation.

The bill prohibits states and localities from regulating the design, construction or performance of highly autonomous vehicles, presumably levels 3-5, though the bill does not specify that. The ability for states to regulate licensing, liability and congestion management, among other areas traditionally regulated by states, is preserved.

As the House committee worked through drafting the bill, members of both parties recognized the importance of ensuring AVs tested and deployed are safe. The bill addresses that concern by requiring manufacturers to provide the National Highway Traffic Safety Administration (NHTSA) with safety assessment letters based on requirements the agency will establish.

The rule establishing the standard for what letters must include would have to be published within two years of the bill's passage. But prior to that final rule, suppliers and manufacturers would have to submit safety assessment letters based on the guidelines contained in the Federal Automated Vehicles Policy issued by NHTSA in September 2016.

The legislation appears to view safety assessment letters as a temporary requirement until NHTSA takes a more thorough rulemaking stance on AV testing and safety. Democrats on the House Energy & Commerce Committee had advocated for a requirement that NHTSA establish a federal motor vehicle safety standard (FMVSS) for autonomous vehicles. Rep. Jan Schakowsky, top Democrat on the House Digital Commerce and Consumer Protection subcommittee, noted at hearings in that subcommittee in June that none of the raft of draft bills discussed that day, prior to the SELF DRIVE Act being introduced, established a requirement for a unique, AV standard.

The language in the SELF DRIVE bill says NHTSA has to establish a priority plan for a rulemaking "as necessary to accommodate the development and deployment of highly automated vehicles and to ensure the safety and security of highly automated vehicles and motor vehicles." The use of the term "as necessary" implies NHTSA could decide an AV standard is not needed. Also, the term Federal Motor Vehicle Safety Standard is nowhere in the bill.

The vote bodes well for the passage of some autonomous vehicle legislation this year.

Another key issue will be the House bill's expansion in the number of AVs a manufacturer can test after receiving an exemption. Those exemptions are needed because FMVSSs require autos to have various equipment, such as a steering wheel, which AVs will not have. The current exemption ceiling is 2,500 autos annually. The House bill bumps that to 100,000 over four years. The National Governors Association says: "Based on the scope of development and field evaluation of a new motor vehicle safety feature, we are concerned that this 40-fold increase in the exemption threshold could be excessive or present potential safety risks to the motoring public."

It is likely that the Senate bill will attempt to clarify some of these issues. This is a technology Congress does not want the U.S. to "lose" to another country. Expect legislation boosting AV developing to pass in 2017 or 2018. □

COVERSTORY

OPERATORS EMBRACE FLEET MANAGEMENT

EFFICIENCY, NEW TECHNOLOGY, COMPLIANCE DRIVE GROWTH IN FLEET SOLUTIONS

BY **BRIAN ALBRIGHT** | CONTRIBUTING EDITOR

FLEET operations have become more challenging. Costs are rising, shippers are under increasing pressure to deliver goods faster, and there is a shortage of qualified truck drivers in the U.S. As a result, interest in fleet management solutions is growing rapidly as firms look for ways to reduce costs and provide higher levels of service with fewer resources.

According to Berg Insight's "Fleet Management in the Americas 2017" report, the number of active fleet management systems deployed in commercial fleets in North America reached 6.7 million in the fourth quarter of 2016. The market is expanding with a compound annual growth rate of 15 percent, and the total number of deployed systems will reach 13.5 million by 2021.

In Latin America, the number of active fleet management systems will increase from 2.5 million in 2016 to 4.7 million in 2021, a compound annual growth rate of 12.9 percent.

"There are several key growth drivers for fleet management telematics, including new dongle technologies that have reduced the initial cost and eliminated installation charges; government regulations in the form of requirements for [electronic logging device] ELD systems to be implemented by December 2017; and enhanced OBD communications that offer faster diagnosis and repair, significantly reducing down time," says Mike Fitzgerald, executive vice president and general manager of Innova Telematics Solutions.

Rickard Andersson, senior analyst at Berg Insight, agrees that regulatory compliance is an important driver in North America, along with advanced technology.

"The traditional market drivers such as increased efficiency, security, environmental performance and control of fleets are still very much relevant, especially for companies which have not yet adopted fleet management solutions or fleets which have previously opted for basic systems with limited functionality in terms of performance enhancements," Andersson says.

The leading fleet management vendor in the region is wireless carrier Verizon, which acquired Telogis and Fleetmatics, adding their capabilities to its own Networkfleet offering. The company's installed base outnumbers its closest competitor by a factor of three, according to the Berg report.

PHOTO: SHUTTERSTOCK.COM/MOLPIX

REGULATORY COMPLIANCE IS AN IMPORTANT DRIVER OF FLEET MANAGEMENT SYSTEMS GROWTH IN NORTH AMERICA.

Trimble, Geotab and Omnitracs have all surpassed 500,000 active fleet subscribers in the Americas.

Andersson says that all the major wireless carriers now offer their own fleet management solutions, and Verizon has provided a template for expanding that business.

"While other operators offer solutions from independent telematics partners (in many cases branded white-label solutions), and are primarily expected to continue using this partnering strategy, it is also possible that other operators may follow suit if Verizon's active participation in the fleet management industry turns out to be a successful strategy," Andersson says.

Growth in this sector also has been fueled by agreements between vehicle OEMs and solution providers to offer fleet telematics systems as a standard option in their vehicles. For example, Telogis works with Ford, Volvo Trucks, Mack, GM, Isuzu and others.

According to the report: "The OEM telematics initiatives in the Americas have intensified in recent years. Large installed bases of OEM telematics systems are now found on the North American market, not the least for systems powered by established aftermarket fleet management solution providers. The volumes are so far substantially smaller in Latin America. The adoption is however expected to take off also in this region. Solutions supplied by the OEMs are anticipated to increase in importance across both continents in the Americas in the coming years."

OEMs also have developed their own in-house telematics systems, but Andersson says that partner strategies will likely overtake those efforts.

Other types of partnerships also are developing. TMW Systems, for example, has integrated with service relationship management software provider Decisiv Inc. to offer real-time industrial asset service management. Users of TMW's fleet maintenance management software can improve visibility of external service events.

Remote diagnostics capabilities are an important part of the OEM-based solutions and those developed with fleet management partners.

"Several OEMs have extended their remote diagnostics offerings in recent years and integration with aftermarket systems has become increasingly common," Andersson says. "The market has seen an increasing number of partnerships between vehicle OEMs and established telematics providers. Such partnerships are often initially focused on the introduction of truck-centric features, such as remote diagnostics functionality for a truck brand powered by a third-party aftermarket provider's hardware or software solutions."

Technology improvements also are helping drive this growth. Hardware costs have fallen, and deployment is much easier thanks to cloud-based or web-based options. Fleet Complete, as an example, now offers a web-based platform that includes vehicle tracking, driver performance, big data analytics, and crash detection via the cloud. Managers can access fleet data from anywhere, as well as business intelligence and analytics tools.

There is, however, a growing gap between the capabilities of fleet solutions and the technology available on the vehicles themselves.

"Most [fleet solutions] still only check the powertrain computer when many vehicles have as many as 70 different computers," Fitzgerald says. "By not checking ABS, SRS, TPMS, and so on, these very limited software systems deliver an incomplete picture of the status of the vehicle. Eventually, a network test where all vehicle computers are checked for codes will become a basic requirement of fleet management telematics systems."

Andersson says that limited IT experience and undercapitalization remain barriers to adoption in this market, particularly for smaller fleets. "SaaS offerings with low or no upfront capital costs and significantly easier deployment processes – including self-install plug-and-play solutions coupled with web-based back-office access charged only by recurring fees – have become increasingly common, thus lowering the barriers to adoption for fleet customers of all sizes," Andersson says.

Fitzgerald cites new technology, cost and data management as potential barriers. "However, overcoming these stumbling blocks is not difficult with a system that provides a quick return on investment; is quick and simple to install and implement; and provides data in a clear format that is easy to understand," he says.

Fitzgerald adds that companies often underestimate the value of the data provided by these systems and focus primarily on location tracking or driver behavior.

"That is only part of the story," he says. "By reviewing the complete set of data provided allows fleet managers to have better insight into the overall management of their vehicles, including required and anticipated service information that helps reduce unexpected, costly downtime and repairs. There can be a lack of understanding on how to access and manage all the data available to implement meaningful changes to fleet and driver management, so that is why it is important to implement a system with a dashboard of data that is easy to understand."

Shift in focus in Latin America

In Latin America, asset tracking and security are far more important drivers of growth, although implementation is often slowed by the steep learning curve required there.

"As many countries in the region are continuously plagued by alarming levels of theft, the primary focus among many adopters of fleet monitoring solutions has been on risk management and security measures," Andersson says. "Basic track and trace solutions are common in the region, with special features such as panic buttons and remote immobilizers."

When it comes to more advanced systems, there tends to be a steep learning curve.

"An educational process is often needed in order to extend the perception of fleet management beyond security-related aspects," Andersson says. "The Latin American fleet market has started to evolve from the traditional emphasis on security to also focus on optimization of fleet operations through management of logistics processes and improvement of driver behavior." □

PROTECTING CONNECTED CARS

TELECOM, AUTO INDUSTRIES NEED TO COLLABORATE ON CYBERSECURITY

BY **BRIAN ALBRIGHT** | CONTRIBUTING EDITOR

As the number of connected vehicles expands, auto-related cybersecurity has received more attention from both OEMs and the federal government.

In August, the Alliance for Telecommunications Industry Solutions (ATIS) released a new report, "Improving Vehicle Cybersecurity: ICT Industry Experience & Perspectives," that outlines the top threats to connected car security, as well as recommendations on how to better protect those systems from hackers and malware.

TRENDS & MARKET ANALYSIS

Vehicles will be connected via a variety of wireless systems, including dedicated short-range communication (DSRC), Bluetooth, Wi-Fi and cellular networks. Within the vehicle, a number of different systems may communicate over these networks, including telematics, infotainment, navigation and other solutions. Some of these systems may be managed by the OEMs themselves (like GM's OnStar), while others are provided by third-party tech companies like Apple or Google.

Vehicles will increasingly also receive firmware and software upgrades over the air (OTA), creating additional access points and vulnerabilities.

Tech companies and auto companies rarely collaborated on security issues in the past, but that is changing. According to ATIS, vehicle manufacturers and information and telecommunications technology (ICT) companies are working together to proactively address these threats.

"The network reaches into new frontiers as it provides vehicle connectivity for advanced applications and data collection," says ATIS President and CEO Susan Miller. "This new report positions both the ICT industry and vehicle OEMs to work collaboratively to secure the network and block cyber attacks or malware events. ATIS believes that the connected vehicle's potential will be maximized through this industry-to-industry collaboration."

According to the paper, there are a number of top cyber threats when it comes to vehicles including:

- Privacy/Security: Data about the vehicle, its performance, or the driver could be compromised by a hacker.
- Commercial Transactions: Hackers could conduct unwanted or unauthorized transactions by accessing toll pass systems, VIN or other identification data, or mobile payment technology that is linked between the driver's phone and vehicle.
- Operational Interference (Non-Safety): Remotely accessing and controlling vehicle systems such as electric seat controls or temperature controls.
- Operational Interference (Safety): Control or compromising of critical vehicle systems, including brakes, steering etc.

While vehicle hacking has been rare, all the above types of threats have been proven feasible in tests and demonstrations.

"There haven't been a lot of malicious attacks so far," says Tom Gage, CEO and managing director of Marconi Pacific. Gage chairs the ATIS

TECHNOLOGY SOLUTIONS NEWSMAKER

Q&A

JIM BRANNEN
VP of E-commerce
BuyAutoParts.com

Q HOW DO GOOGLE ADWORDS TIE INTO YOUR E-COMMERCE STRATEGY?

A The number-one key is to understand what your customer needs and what they are thinking as best you can, and then try to react to that and serve the needs they have. You can align your advertising, titles and descriptions to what you believe your customer is thinking. They are trying to solve a problem, so you want to get in front of them and align your message and advertising with their need. That's where we really succeed. We're also a partner with ROI Revolution, and they've been helpful in implementing a lot of our advertising and marketing strategies, and working with Google AdWords.

Q: How has your inventory management technology infrastructure changed over time?
A: Initially we sold or advertised almost strictly inventory that we had on hand in our warehouse. That limited our addressable market. Over time we put in tools to know what parts we have in the warehouse, what parts we have in external but owned warehouse stock, and what parts we have available at drop-ship partners or vendor warehouses. It's been an evolution.

VEHICLES WILL INCREASINGLY RECEIVE FIRMWARE AND SOFTWARE UPGRADES OVER THE AIR, CREATING ADDITIONAL ACCESS POINTS AND VULNERABILITIES.

Connected Car Cybersecurity Ad Hoc Group. "Hacking an individual vehicle is risky, but a larger risk is to a whole class of vehicles. If all Fords or Volvos were made vulnerable because of a software deficiency, for example."

"The thing to watch is how hackers can make money from hacking cars," says Jim McEachern, senior technology consultant at ATIS. "Ransomware or some version of that could be a possibility. Most of these attacks are motivated by making money."

Cars also may be accidentally targeted. For example, connected medical devices sometimes are affected by malware because hackers are scanning for all ports looking for computers. A medical device or car that isn't secure could be infected in a way that affects operational systems.

As cars become more connected, the pathways into the vehicle systems are increasing. Those include internal paths (via connections to personal mobile devices), connected to other vehicles, external wireless networks, satellite connections and cloud access connections.

Some of these connections are managed (such as those provided by wireless carriers or OEMs), while other are unmanaged (such as a connected personal tablet to the vehicle).

Comprehensive security

Because of the large number of companies involved in providing in-vehicle technology systems – OEMs, suppliers, component manufacturers, third-party tech firms, etc. – having security established at a very high level will be important. That means wireless carriers will play an important role in securing access to vehicle systems.

"There needs to be end-to-end security, which means everything from the server that the application resides on remotely into the network, through devices, and into the vehicle," Gage says. "OEMs have a responsibility to work with their suppliers to be sure there is an integrated security solution."

"Connected vehicle security requires an ecosystem of end-to-end players to address security threats. Telecommunications carriers play a critical role. But we can't do it alone. This white paper shows how our industry and automobile manufacturers can work together to provide the most secure solutions possible for connected vehicles," adds Cameron Coursey, vice president, Internet of Things Solutions, AT&T.

This collaborative strategy will require what ATIS calls a Connected Vehicle Security Framework that takes an end-to-end approach. This would encompass the connected vehicle domain, network domain and cloud domain (back-end systems). Security models must also be able to be updated and flexible. Systems should be able to receive over the air updates to address new security threats as they emerge.

Among the approaches and best practices ATIS recommends:

- Virtual Private Networks (VPNs) that can provide secure dedicated transmission capabilities, and ensure that all traffic is encrypted end to end.
- The Universal Integrated Circuit Card (UICC), which allows for bi-directional authentication between the endpoint and the network.
- Secure boot capabilities to protect against malware corrupting the operating system.
- Firmware verification using encryption.
- Deep Packet Inspection (DPI) security to identify malicious content before it reaches the vehicle.
- Following the "rule of least privilege" to ensure that each entity only has access to the minimum information and resources needed to perform its function.
- Establishing secure vehicle app stores.
- Providing secure storage in the vehicle to protect keys, firmware updates, certificates and other information.

Because there are so many components involved in vehicle connectivity, a centralized security model could be a good approach. "All communication links would go through a central security module, whether that's a physical link through a dongle or over the air link through the mobile network," Gage says. "Everything would cycle through this one module, which would be updated constantly to identify risks."

What makes this challenging in automotive is that there a number entry points, and there may be multiple networks involved – passengers and the vehicle may be using several different wireless networks at the same time.

ATIS also outlined a proposed engagement model between automotive and telecommunications companies. Those steps would include:

- Create a sub-committee of the Automotive Information Sharing and Analysis Center (Auto-ISAC) including telecom, OEM and other supplier members to address cybersecurity and define connected vehicle use cases.
- ATIS could expand its cybersecurity working group to engage vehicle OEMs and share best practices. Those could include establishing ongoing monitoring of vehicle connectivity by carriers, providing fully managed vehicle connections, and ensure secure, guaranteed delivery of content to vehicles.
- ATIS and Auto-ISAC could reach out to other industry groups to share best practices. Such groups could include the 5G Automotive Association, European Union Agency for Network and Information Security, etc.

Gage says that the federal government can play a role by conducting more research and encouraging adoption of industry best practices. He points to NHTSA's role in working with industry to accelerate the adoption of automatic braking systems as a good example.

"If we wait for studies to be concluded and data to be certified, we run the risk that we'll wait too long," Gage says. □

PARTNERSHIPS CRUCIAL FOR AUTONOMOUS VEHICLES

OEMS, AFTERMARKET COMPANIES SAVE DEVELOPMENT TIME, RESOURCES AND MONEY

BY **JAMES E. GUYETTE** | NEWS CORRESPONDENT

Nissan is among many global automotive operations that have been displaying and exploring the latest technological innovations at the Consumer Electronics Show (CES) held each January in Las Vegas. CES 2018 is Jan. 9-12.

Some 60,000 attendees from outside the United States, representing 158 countries, regions and territories, were walking the aisles at CES 2017, absorbing and pondering the offerings of 4,015 exhibitors.

During his keynote address at the 2017 edition of the event, Nissan's Carlos Ghosn, chairman of the board and CEO, announced several new "breakthrough technologies," including SAM – Seamless Autonomous Mobility.

TRENDS & MARKET ANALYSIS

Originating with engineering developed by NASA, SAM "partners in-vehicle artificial intelligence (AI) with human support to help autonomous vehicles make decisions in unpredictable situations and build the knowledge of in-vehicle AI."

As part of Nissan Intelligent Integration initiative, SAM "could potentially enable millions of driverless cars to co-exist with human drivers in an accelerated timeline," according to Ghosn, enlisting other firms to participate in the endeavor.

"We invite others to join us," he said, "from tech partners to e-commerce companies, ride-hailing and car-sharing platforms, and social entrepreneurs who can help us to test and develop new vehicles and services, and make sure everyone has access to the latest technologies and services that bring value to their lives."

Building on Ghosn's goal of widespread autonomous vehicle adaptation, several Nissan executives explored the prospects of ongoing cooperative partnerships in a Q&A forum with Gary Shapiro, president and CEO of the Consumer Technology Association, which produces CES. Shapiro shares his insights on the forum here.

Q: Partnerships are a big part of CES. What's different about how companies partner today versus 10, 20 or even 30 years ago?

A: There's been a huge change, even compared with two or three years ago. I've had discussions with major CEOs about this. Their whole attitude has changed. It used to be that you created a company and partnering was thought to be nice but it wasn't a big deal. There were not a lot of people focused on it. Then the internet came along and partnerships became much more important.

When I'm talking with major companies, you can now find a corporate philosophy where they say, "We have to partner with small companies." No one company has all the answers anymore.

Q: You say no one company has all the answers. What brought about the change?

A: Part of it is the technology, because of the app economy, and part is that no company is good at everything anymore. Even companies like Apple, Sony and Samsung are doing partnerships because they have to.

It used to be that there was just a make-or-buy decision; you either made something yourself or you acquired it. Now there's a third choice to partner; you don't have to buy or merge. You can just learn and share. Maybe you'll have a relationship that will allow you to acquire them, but in the meantime they're giving you value that would otherwise take you years to develop.

Q: What do you see as the keys to the future development and adoption of autonomous vehicles and technology?

A: The history of technology shows consumers very often don't know what they want until they have it. If you asked consumers 120 years ago what they wanted in terms of transportation, they wanted horses that were faster and ate less. The self-driving car is a huge story. About 35,000 people die in the U.S. each year because of car accidents, and 1.25 million die worldwide – self-driving vehicles have the potential to eliminate human error, which is blamed for 94 percent of crashes.

We asked consumers whether they would want to live a safer life with protection against drunk driving and whether they would be interested in a test drive in a self-driving car. Almost three-quarters of consumers say they are excited about self-driving technology and almost two-thirds want to trade their current cars for driverless cars.

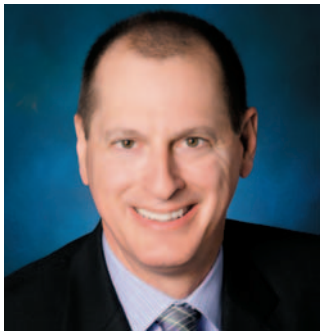
Q: What do you see as the biggest obstacle?

A: The change to self-driving technology alters so many business models for people that there will be a natural urge to try and slow it down until the system is perfect. There's a whole business world that focuses on people getting hurt and dying in car accidents, and they'll come up with

"IT USED TO BE THAT THERE WAS JUST A MAKE-OR-BUY DECISION; YOU EITHER MADE SOMETHING YOURSELF OR YOU ACQUIRED IT. NOW THERE'S A THIRD CHOICE."

-GARY SHAPIRO , CONSUMER TECHNOLOGY ASSOCIATION

ways to say that it's not perfect. My concern is that the perfect should not be the enemy of the great. Rather than have 35,000 die each year, I want to get self-driving and more advanced driver-assist technology on roads as soon as reasonably possible – including having a robust aftermarket so that cars can be retrofitted.



Gary Shapiro

Q: Can you talk about the broadening participation at CES and how different industries are coming together in many ways – given how technology has evolved in the last few years?

A: We figured out about a dozen years ago that CES wouldn't survive if we kept it constrained to the audio, video and gaming world. We saw a convergence and wanted to be the home for that convergence as it affected different industries. That was especially true for the automobile sector as people started to look at the technology that was going into cars as much as they used to care about horsepower. We have now had an auto keynote every year since 2008 – except for 2013.

And as you know we had one this year with Carlos Ghosn from Nissan. Auto companies tell us that CES is one of their most important trade shows. It's not like the auto shows, which are designed for reaching the public and showing cars that they can buy in the next year. CES is more important for the deals and partnerships companies can do and for allowing them to get a view of technology that might still be a couple of years out. We have every part of the automobile ecosystem represented here.

Q: How does a new technology reach a tipping point of ubiquity where it becomes a part of our everyday lives?

A: Innovation is important but so is timing. Sometimes the timing is wrong or the public's not there, or frankly, the technology is not ready. For example, think back to the late 1990s when the Internet began to grow in popularity and use. You had all these companies that just assumed broadband penetration would be there. It wasn't and they went under.

Acquiring a critical mass is also key. And that's why you come to CES. You get a critical mass of companies together and they're more likely to be covered by the press and more likely to have retailers confident that there's a real category there.

Q: Any esoteric technologies that you are watching now that you think may become mainstream in the near future?

A: We know that robotics will be there in the future. We also believe there will be "implantables" in humans. Drones are another thing where we see a tremendous need. A lot of us grew up watching "The Jetsons" and a lot of people will want self-driving cars or cars that will fly. These are things that people will buy if they have the opportunity to get them at good prices.

Q: What else gets you the most excited about tech nowadays?

A: I thought 3D printing would take off sooner, but I'm still excited about it and think it will evolve. Food and biologics have the potential to do amazingly well. And I'm as big as anyone on what the smartphone can do; it keeps getting better all the time. Other things include voice recognition, which is absolutely huge. I've written two books, mostly by dictation. It's getting easier and easier. I'm also excited about the potential of the Internet of Things (IoT) because it comprises so much.

Also, as we get older, there are all sorts of uses for predictive intelligence and deep data mining that will keep us healthy. I think a lot of problems that have plagued mankind around the world, that are killing people or shortening their lives, will go away. It won't solve war, but in terms of improving the human condition, we're in the midst of a phenomenal technology transition and this is just the beginning. □

GIVING BACK

RETIRED EXECS HELP BRING AFFORDABLE CARS TO KENYA

BY **JAMES E. GUYETTE** | NEWS CORRESPONDENT

Several retired American automotive industry executives are donating their engineering and design skills to create a no-frills vehicle capable of traversing East Africa's ultra-rough roads while remaining affordable for a population with limited income.

"There are so many emerging markets around the world where transportation is also emerging," says Greg Bellopatrick, a General Motors retiree serving on the advisory board of Kenya's Mobius Motors, which is in the process of ramping up production of a stripped-down, lightweight SUV-like model specifically designed to be rugged, reliable and economical.

"Mobius is re-imagining the car for Africa's mass market," reports British entrepreneur Joel Jackson, the company's founder and CEO, extolling confidence in "the social and commercial potential of our products across the continent."

TRENDS & MARKET ANALYSIS

"It was the humanitarian portion of what Joel wanted to do," says Bellopatrick when explaining his involvement with the project, "which is to bring transportation to the masses."

"Joel reached out to me and other retired executives," he notes. "There's no financial reward out of this. It's pretty much a freebie – it's a feel-good thing."

While still struggling with widespread income disparities, governmental disarray, civic unrest and other societal ills, historically impoverished East African nations such as Ethiopia, Tanzania and Kenya are seeing a rising middle class eager to get behind the wheel.

High tariffs have been a prevalent obstacle to widespread sales of new imports. A Toyota selling for a base price of $12,000 in the United States can cost $24,000 in Kenya, well beyond what most people can afford and thus pushing the populace toward previously owned models.

Kenya's car parc stands at roughly 1.3 million units among a population of 44 million. Ownership amounts to just under 30 vehicles per 1,000 people, and about 80 percent of these are used vehicles of sometimes-questionable quality and condition brought in from abroad.

And the roads are rife with ruts and potholes that further drive demand for repairs.

A proliferation of shade tree mechanic-type shops and substandard, unsafe outcomes are a consistent problem despite efforts by the 100-plus members of the Kenya Motor Repairers Association (KEMRA) and other industry and governmental organizations to implement and enforce nationwide standards of performance and professionalism. A large presence of counterfeit parts additionally aggravates compliance difficulties.

Kenya, Tanzania and Ethiopia are posting the most regional parts-purchases amid a continental marketplace that is annually expanding by 11 percent, according to Max Lewis, sales director for the upcoming May 17-19 Autoexpo Kenya 2018 at the Kenyatta International Conference Centre in Nairobi. Exhibitors from more than 30 nations displayed their wares at the 2017 edition of the event.

"There is a huge growth potential for the African automotive aftermarket," Lewis says. "With close to 25 million vehicles on the road in Africa today, there is a demand for over $8

INTERNATIONAL NEWSMAKER

Q&A

CHAD ZANI
National franchising manager, Detail Garage

Q HOW MUCH SHOULD A DETAILER CHARGE FOR A COMPLETE DETAIL?

A Prices will vary depending on the job. It is always important to explain to your customer what services are available. A wash followed by a clay and polish has a countrywide average between $140-$220 for a retail client, and $75-$105 for a wholesale detail for a high-volume used-car dealer. Be prepared to charge a lot more depending on the condition of the paint and the amount of time required. If the final steps require a sealant or a high-gloss paste wax the prices will be much higher.

Q: How often should a car be detailed?
A: We recommend that a vehicle be detailed at least three times per year due to the harsh outdoor elements. Many clients detail their car every weekend.

Q: What makes a Detail Garage franchise a viable investment? What makes it unique?
A: There are many reasons I feel our opportunity is unique, but keeping it to three simple points: 1. Our brands, such as Chemical Guys, Smartwax, Torq, Hex-Logic and other exclusive products and accessories, have a massive online following and globally growing fan base. 2. Our affordable franchise fee and retail concept are designed to generate a higher return-on-investment. 3. Our "family" based values and teamwork. Twice a month, each store will do a basic course and an advanced

HIGH TARIFFS IN KENYA HAVE BEEN A PREVALENT OBSTACLE TO WIDESPREAD SALES OF NEW IMPORTS.

course to help their local community of car owners take better care of their vehicles.

Q. What qualities do you look for when recruiting a Detail Garage franchisee?

A. Someone who is passionate about car care, and all things auto; the sort of person who admires many different makes and models, but most likely has their favorite car, motorbike and boat models. They need to be a people-person and have a strong desire to be a positive contributor to their local community. They are the kind of person who has always had the best-looking car on their street.

Q: How does a vehicle's finish become oxidized?

A: Oxidation occurs for many reasons. Airborne contaminants like tree sap, rail dust, airplane fallout, exhaust pollution, catalytic converter resin, bugs and other airborne contaminants get stuck into your paint. Simply leaving a car in a highly polluted area or driving on regular roads can greatly impact your paint.

billion worth of spares and accessories each year." He anticipates that the continent's aftermarket will reach a value of $15.3 billion by 2020.

The U.S. Commercial Service is available to assist American firms interested in selling auto parts to Kenya. The agency maintains a list of experienced Kenyan lawyers, strongly recommending that you retain such services before venturing into the country's regulatory environment and its accompanying business and cultural idiosyncrasies.

A delicate balance

Equipped with a Renault powertrain and engineered to require reduced maintenance needs, the Mobius is produced at Thika-based Kenya Vehicle Manufacturers (KVM). Established in 1976, KVM's other assembly contracts include Nissan trucks, Hino trucks and buses, Hyundai trucks and Ashok Leyland trucks along with a selection of car and big-rig truck trailers.

"There are a number of suppliers that we are purchasing parts from," says Bellopatrick, the retired GM executive taking part in designing the Mobius, named for German mathematician August Ferdinand Mobius and his exploration of complex no-boundaries algebraic theories.

"It's a very delicate balance – there's a lot of concern associated with costs. We wanted to be able to come up with a vehicle with an $8,000 price point in U.S. dollars," Bellopatrick says.

"We used existing components and incorporated them into the vehicle. We had to make revisions to the vehicle to accommodate the components' designs rather than start with a blank sheet."

Aimed to serve individuals and small-business owners traveling across vast territories throughout a severely degraded infrastructure, "It has significant road-clearance associated with it," he says.

The resulting price tag of $9,500 is about the same as buying a seven-year-old sedan that lacks the crucial off-roading ability and other aspects of importance to Kenya's motorists.

Devoid of an automatic transmission, power steering, air conditioning, interior enhancements and other comforts, a hefty load capacity anchored by a fuel-efficient 4-cylinder gasoline engine means the Mobius can carry the equivalent of nine bags of corn, six sacks of potatoes, 50 cooking-gas cylinders and several crates of beverages.

"Our design has really been focused on the body of the vehicle," says Bellopatrick, referring to the aluminum and composite construction. "The road conditions that the vehicle will be operated in are very extreme. The body has to absorb those loads."

The contingent of retired executives from GM, Ford and other OEMs contributing to the project worked mostly from their homes in cooperation with CEO Jackson and others on the ground in Kenya.

Online forums and video conferencing were employed during the engineering process. "It was being done in Kenya with support from Detroit. We've been staffing our own engineering staff," Bellopatrick says, working with "large-bucket suppliers" able to economically ship the necessary numbers of components into Kenya.

Because precise infrastructural details were difficult to obtain, "We made some assumptions and made an accelerated road test," he recounts.

"It is a very innovative solution to bringing transportation to Kenya," Bellopatrick points out. "It will provide affordable transportation to the local market there."

Promising Kenyan market

Mindful of East Africa's expanding middle class and its purchasing potential, mainstream automakers have been setting up operations in Kenya as well. GM, Toyota, Peugeot and Daimler Trucks Asia have a presence, and Volkswagen, which had produced Beetles in Kenya during the 1960s, has returned with a new plant that began making Polo Vivo models this past December.

"We are taking the successful Polo Vivo from South Africa to Kenya to leverage the enormous growth potential of the African automobile market and participate in its positive development," says Thomas Schäfer, managing director of Volkswagen South Africa.

"This compact model is the best-selling car in the Sub-Saharan region – so it is the ideal entry model for the promising Kenyan market," he adds. "With this move, we are strengthening the brand's overall position in Africa and taking an important step towards expanding our commitment in the region."

VW is implementing a training center to ensure a qualified workforce. Additional plans include educational opportunities focused on imparting generalized industrial skills to augment job opportunities for Kenya's large population of unemployed young people, according to CEO Dr. Herbert Diess.

"After over 60 years of Volkswagen vehicle production in South and North Africa, I am delighted to now have a further site in Kenya," he says. "We will systematically continue to develop our position in the fast-growing African car market." □

CONSUMER ATTITUDE STUDY

BRANDING MATTERS

CONSUMERS BUYING AUTO PARTS MOST INFLUENCED BY BRAND, RECOMMENDATIONS; NOT LOW PRICES

BY **BRUCE ADAMS** | MANAGING EDITOR

CONSUMERS who purchase auto parts and products are highly likely to compare prices of those items before buying, but they are not influenced to buy by the lowest price available, according to the *Aftermarket Business World* 2017 Consumer Attitude Study.

On average, three out of four consumers surveyed said they compared prices before buying 13 different parts and products, according to the study. Consumers said they were most likely to compare prices when buying auxiliary lighting (89 percent), turbochargers (88 percent), gaskets (87 percent) and battery chargers (85 percent).

Consumers were least likely to compare prices when purchasing motor oil, as only 33 percent said they did so before making their purchase. The other items that were not price compared as often as the average include wipers (55 percent), starters and alternators (64 percent) and batteries (73 percent). The other five items surveyed fell between a 75 percent likelihood and 83 percent likelihood of being compared by price before being purchased.

Despite this awareness and tendency to compare prices, consumers report that they are not influenced to make their purchases simply by the lowest price. In fact, low price was a distant third and several times fourth most important reason that consumers cited when they were asked for their top five reasons for purchasing a particular auto part or product.

Brand name and recommendation were the two reasons cited by most consumers for purchasing a particular auto part or product. On average, brand was cited by 28 percent of respondents as being the top reason for purchasing, while recommendation was at 27 percent.

Lowest price was a distant third cited by only 14 percent of those responding to the survey. Performance claim was fourth at 11 percent. Other categories that influenced consumers to purchase items were in-store displays and coupons/rebates.

In 12 of the 13 categories surveyed, consumers said auto parts chain stores were their primary purchase location. Auto parts chain stores came in second to dealerships as the primary purchase location for gaskets. In addition to those two locations, consumers most often cited discount stores, independent repair shops and independent auto stores as their primary purchase location.

Methodology: The survey sampling for the 2017 *Aftermarket Business World* Consumer Attitude Study consisted of a consumer-sampling panel via email. Of the 21,055 invitations sent, 1,768 responses were received for a response rate of 8.4 percent and a +/– 2.1 percent margin of error at the 95 percent confidence level. □

CONTENTS

Photo: Shutterstock.com / alexmillos

The Power of Collaboration

With thousands of locations across North America, the Automotive Parts Services Group is stronger together, sharing resources in areas that benefit all in the supply chain, such as IT and data management, electronic catalog and Co-Man warehouse. These combined efforts help The Group excel at providing all customers with high-quality service and name brand quality parts from leading manufacturers.

While Federated and Pronto members continue to focus on building their local businesses, The Group's national footprint has enabled these members to serve national accounts that were previously out of reach. Global collaboration is being developed and enhanced through Federated and Pronto agreements with 1Parts.

The Group is working on innovative technology solutions to enhance efficiency and accuracy as well as telematics systems that allow for seamless communication from consumers to repair outlets to parts providers. Integrated technology is the key to the future and The Group is leading the way, delivering so much more than parts to its customers.

That's the power of collaboration.

Federated Auto Parts Professionals

pronto® The Smart Choice For Auto Parts

1parts Global Aftermarket Services

Federated Auto Parts Professionals | pronto® The Smart Choice For Auto Parts | The GROUP™ AUTOMOTIVE PARTS SERVICES GROUP

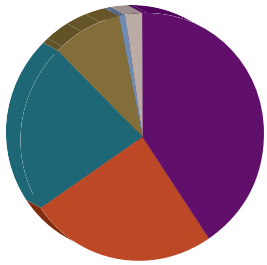
Together Strong

www.TheGroupAPSG.com

BRANDING MATTERS

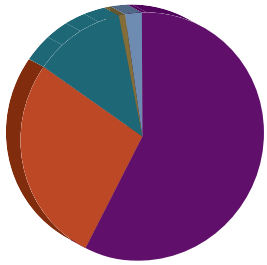
AUXILIARY LIGHTING

Customer service at purchase location:



Outstanding	41%
Great	25%
Good	22%
Poor	9%
Terrible	1%
Didn't receive	2%

Likelihood of returning to purchase location:



Highly likely	58%
Likely	27%
Somewhat likely	12%
Somewhat unlikely	1%
Not at all likely	2%

89% of consumers compared prices when shopping for this product.

35% of consumers personally installed the product they purchased.

Primary purchase intent:

Replace damaged lighting	54%
Upgrade lighting	36%
For a custom application	10%
Other	0%

The top five advertising channels:

Radio	20%
Television	46%
Newspaper	27%
Direct mail	20%
Online/Internet	41%

Primary purchase location:

Auto chain	31%
Discount/Department store	25%
Independent auto store	9%
Independent repair shop	11%
Dealership	14%

*Includes DIY and DIFM purchases

BUYING HABITS

The top five reasons for purchasing a particular type of auxiliary lighting:

Brand name	32%
Performance claim/warranty	10%
Recommendation	26%
Lowest price	11`%
In-store display/packaging	14%

Likelihood to repurchase product based on performance:

Highly likely	43%
Likely	36%
Somewhat likely	14%
Somewhat unlikely/not at all likely	8%

Vehicle age:

< 1 year	26%
2-5 years	45%
6-9 years	19%
10+ years	11%

Other work done:

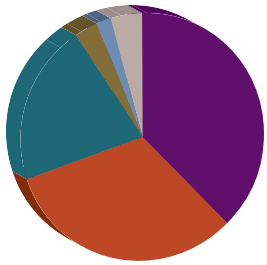
None	32%
Oil change	45%
Collision/body repair	27%
Tune up	22%
Tire rotation/replacement	14%
Other	1%

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.

BRANDING MATTERS

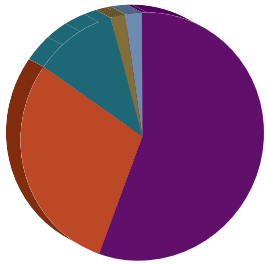
BATTERIES

Customer service at purchase location:



Outstanding	38%
Great	32%
Good	21%
Poor	3%
Terrible	2%
Didn't receive	4%

Likelihood of returning to purchase location:



Highly likely	56%
Likely	29%
Somewhat likely	11%
Somewhat unlikely	2%
Not at all likely	2%

73% of consumers compared prices when shopping for this product.

38% of consumers personally installed the product they purchased.

Primary purchase intent:

Battery was dead	53%
Weakened Performance	26%
Reached designated lifecycle	9%
Mechanic recommended	11%

The top five advertising channels:

Saw/heard no ads	46%
Television	22%
Newspaper	14%
Radio	11%
Internet/email	27%

Primary purchase location:

Auto chain	54%
Discount/Department store	17%
Independent auto store	8%
Independent repair shop	11%
Dealership	5%

*Includes DIY and DIFM purchases

BUYING HABITS

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

Brand name	23%
Performance claim	20%
Recommendation	26%
Lowest price	19%
In-store display	5%

Likelihood to repurchase product based on performance:

Highly likely	53%
Likely	33%
Somewhat likely	12%
Somewhat unlikely/not at all likely	2%

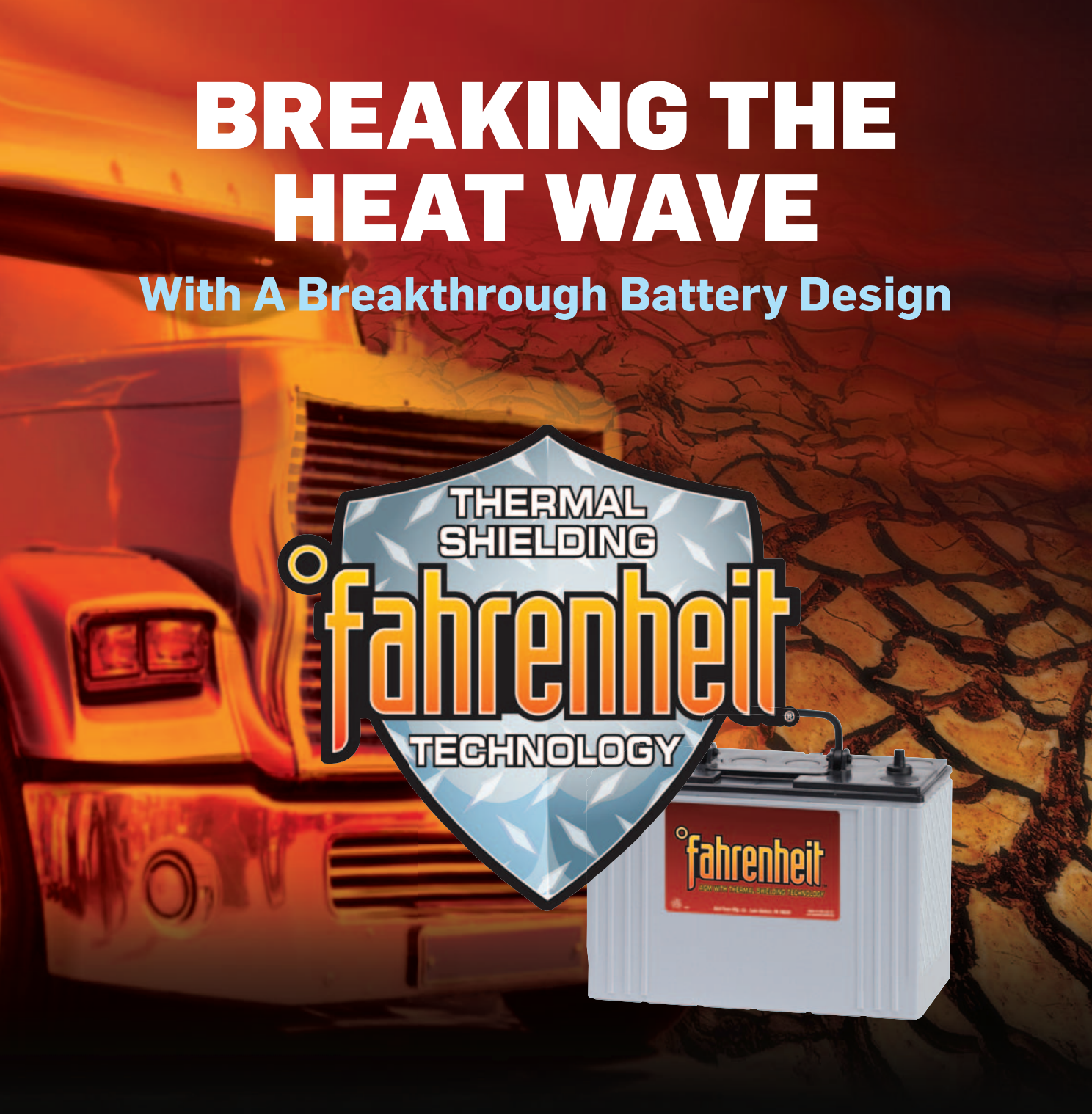
Vehicle age:

< 1 year	11%
2-5 years	22%
6-9 years	38%
10+ years	29%

Other work done:

None	30%
Oil change	53%
Checked/filled fluids	34%
Checked filters	31%
Checked tire pressure	33%
Checked belts and hoses	27%

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.



East Penn's breakthrough new Fahrenheit® Group 31 AGM battery utilizes an exclusive Thermal Shielding Technology to extend battery life under today's ever-increasing battery box temperatures.

Exclusive Fahrenheit® Thermal Shielding Technology

- Cycles 50% longer than standard AGM in extreme high heat tests
- Utilizes a Heat Reduction Catalyst that protects against thermal runaway
- Shielded by a Thermal Resistant Case that optimizes high heat AGM performance

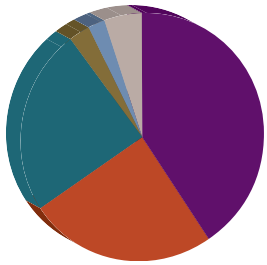
Protect your batteries. Protect your vehicle. Protect your investment.

EASTPENN www.eastpennmanufacturing.com **See us at AAPEX booth #4016**

BRANDING MATTERS

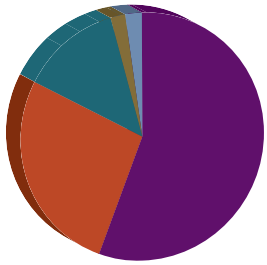
BATTERY CHARGERS

Customer service at purchase location:



Outstanding	41%
Great	25%
Good	24%
Poor	3%
Terrible	2%
Didn't receive	5%

Likelihood of returning to purchase location:



Highly likely	56%
Likely	27%
Somewhat likely	13%
Somewhat unlikely	2%
Not at all likely	2%

85% of consumers compared prices when shopping for this product.

46% of consumers personally used the product they purchased.

Primary purchase intent:

Battery was dead/no charge	39%
Battery seemed low	25%
To have in case battery runs low	19%
To improve performance	15%

The top five advertising channels:

Saw/heard no ads	25%
Television	23%
Newspaper	14%
Magazine	16%
Internet/email	25%

Primary purchase location:

Auto chain	34%
Discount store	32%
Independent auto store	8%
Online/Internet	8%
Dealership	7%

*Includes DIY and DIFM purchases

BUYING HABITS

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

Brand name	32%
Performance claim	10%
Recommendation	28%
Lowest price	14%
In-store display	10%

Likelihood to repurchase product based on performance:

Highly likely	51%
Likely	34%
Somewhat likely	12%
Somewhat unlikely/not at all likely	3%

Vehicle age:

< 1 year	15%
2-5 years	18%
6-9 years	55%
10+ years	12%

Other products/parts purchased:

None	17%
Battery test equipment	39%
Battery	43%
Jumper cable	24%
Battery terminal brush	18%
Battery cables	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.

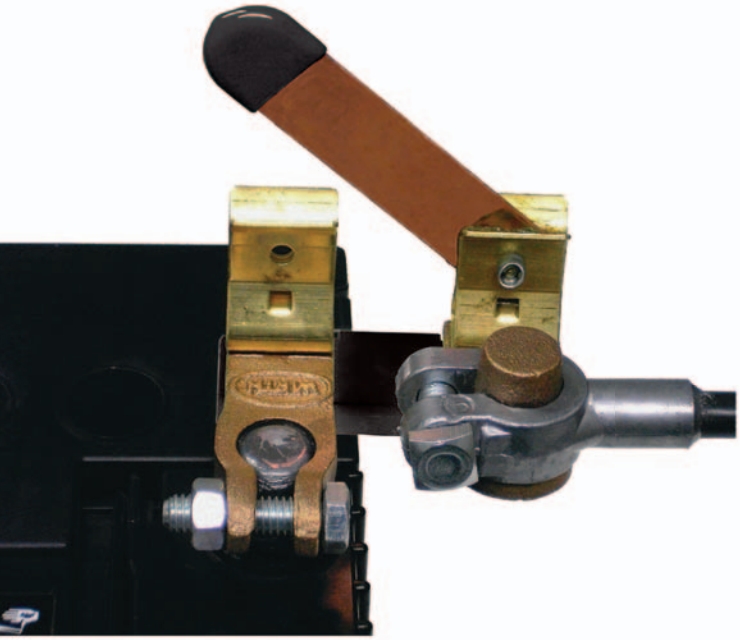
Ver. 4/2017

Battery Doctor®

Automotive Battery and Electrical Accessories

Tomorrow's Charging Technology Today

KNIFE BLADE SWITCH



FOR TOP POST BATTERIES

Switches recommended to mount on negative battery post to disconnect ground and battery. Easy to reach and operate.

- Stop Unwanted Battery Drain
- Help Prevent Theft, Tamping, and Unauthorized Use
- Improve Safety and Security of Stored Vehicles, RVs, and Seasonal Equipment

#20138

12 VOLT PRODUCTS Battery DOCTOR

www.wirthco.com

Understanding and Fulfilling Customer Needs Since 1980

952-941-9073 :: 1-800-959-0879

Empower Your Outside Sales Force

The Ultimate Sales Tool **eSales BI / CRM**

Don't wait until the end of the month to find out you lost a Customer.

eSales alerts you to take immediate action with **DATA REFRESHED DAILY.**

FEATURES:

- **Alerts & Notifications:** View Customer's Daily Activity
- **Scheduler:** Sales Appointments, Calls, Visits + GPS Maps
- **Opportunities:** Monthly Specials, Promos and Events
- **Direct Connection** to your Management System for Real Time Pricing & Stock Checks
- **View Customer Buying Habits:** M-T-D, Y-T-D and by Product Line Sales
- **Email Call Reports** - no more lengthy, handwritten call reports
- **Know your Customer** with CRM Personal and Business

Plus so much more.

"eSales BI really has been **a game changer** for our sales force..."

Matthew Schumann Corporate Finance Mgr. at Spectrum Paint

Touch 'n Talk Feature

Create Customer **Call Reports.** **Talk into your phone** or tablet. **No typing, just touch** the bar and get instant information.

To learn more, visit us at

www.autologue.com

AUTOLOGUE™
COMPUTER SYSTEMS, INC.

800.722.1113

eCMA Rewards
Customer Management Automation

Increase Sales
Launch Your Own Company APP

Outsmart the big-box guys

- Promote your business. **Create your own company APP.**
- **Use Push Notifications** to increase in-store traffic.
- **Order Online.** Pickup at the store or deliver to their business or home.
- **FAST 1-Hour Delivery** to your customer's door.

IN-STORE PROMOS

- *Encourage Counter Person to promote and even install the APP on the customer's SmartPhone now.*
- *Promptly greet customers with enthusiasm. Be helpful and show them how to order online.*
- *Providing customers with a positive shopping experience at your business, builds customer loyalty.*

Service • Service • Service

ORDERING ONLINE

MARKETING

OWN YOUR ZONE *by establishing a "15-20 mile radius" that you can service promptly.*

Promote your business by using local advertising to schools, sport events, municipalities and community organizations.

YOU KNOW THE PARTS BUSINESS.

You can do Special Orders, plus so much more for your customers AND always give that personal touch!

You are the expert!

OUTPERFORM the e-tailers in your Zone.

AUTOLOGUE™
COMPUTER SYSTEMS, INC.

SEE US AT AAPEX • BOOTH 3071
Oct 31 to Nov 2 • Sands Expo

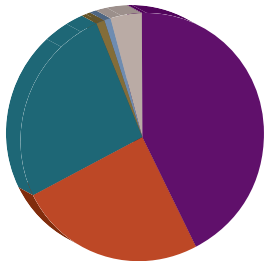
Call us to get started!

800.722.1113

BRANDING MATTERS

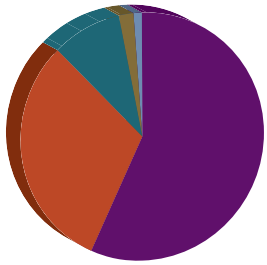
BRAKES

Customer service at purchase location:



Outstanding	43%
Great	25%
Good	26%
Poor	1%
Terrible	1%
Didn't receive	4%

Likelihood of returning to purchase location:



Highly likely	57%
Likely	31%
Somewhat likely	9%
Somewhat unlikely	2%
Not at all likely	1%

79% of consumers compared prices when shopping for this product.

32% of consumers personally installed the product they purchased.

Primary purchase intent:

Pedal pulsating/grinding	20%
Making noise	28%
Mechanic recommended	17%
Worn out brakes	28%

The top five advertising channels:

Saw/heard no ads	34%
Television	38%
Newspaper	14%
Direct mail	15%
Internet/email	34%

Primary purchase location:

Auto chain	56%
Online/Internet	4%
Independent auto store	7%
Independent repair shop	13%
Dealership	11%

*Includes DIY and DIFM purchases

BUYING HABITS

The top five reasons for purchasing a particular type of brake products:

Brand name	19%
Performance claim	22%
Recommendation	24%
Lowest price	22%
In-store display	4%

Likelihood to repurchase product based on performance:

Highly likely	57%
Likely	27%
Somewhat likely	10%
Somewhat unlikely/not at all likely	6%

Vehicle age:

< 1 year	15%
2-5 years	23%
6-9 years	39%
10+ years	23%

Other work done:

None	39%
Steering, suspension maintenance	14%
Shocks/struts	14%
Tire rotation	41%
Transmission service	12%
Other	4%

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.

THE STRONG, SILENT TYPE

We may have given Wagner® ThermoQuiet® brake pads a shorter name but they haven't lost a thing when it comes to performance. With an innovative "one-piece" design which integrates the friction, shim and backing plate for greater strength, Wagner TQ is still your go-to choice for quieter, more reliable braking. Find out more at ***wagnerbrake.com.***

#partsmatter

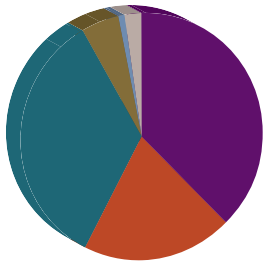
WAGNER TQ®

FEDERAL-MOGUL MOTORPARTS

BRANDING MATTERS

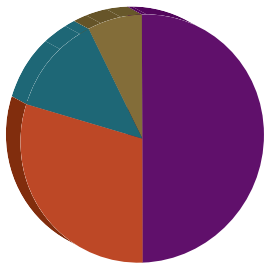
CHASSIS

Customer service at purchase location:



Outstanding	38%
Great	20%
Good	34%
Poor	5%
Terrible	1%
Didn't receive	2%

Likelihood of returning to purchase location:



Highly likely	50%
Likely	30%
Somewhat likely	13%
Somewhat unlikely	7%
Not at all likely	0%

83% of consumers compared prices when shopping for this product.

30% of consumers personally installed the product they purchased.

Primary purchase intent:

Heard noises, rattles in front	18%
To upgrade	21%
Mechanic's recommendation	16%
Damaged in accident	25%

The top five advertising channels:

Saw/heard no ads	30%
Television	30%
Newspaper	21%
Magazine	18%
Internet/email	24%

Primary purchase location:

Auto chain	31%
Discount/Department store	31%
Online/Internet	7%
Independent repair shop	12%
Dealership	8%

*Includes DIY and DIFM purchases

BUYING HABITS

The top five reasons for purchasing a particular type of chassis parts:

Brand name	20%
Performance Claim	16%
Recommendation	25%
Lowest price	16%
Coupon/rebate	7%

Likelihood to repurchase product based on performance:

Highly likely	39%
Likely	33%
Somewhat likely	23%
Somewhat unlikely/not at all likely	5%

Vehicle age:

< 1 year	16%
2-5 years	41%
6-9 years	13%
10+ years	30%

Other work done:

None	16%
Alignment	54%
Tires rotated/replaced	43%
Brake repair	25%
Steering/suspension maintenance	11%
Other	6%

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.

MOOG® ball joints outperform the competition

BY MORE THAN

5X*

Ford® F-150 Durability Testing

MOOG	KEEPS GOING 5X+
MAS	BALL STUD BROKE
Centric	BALL STUD BROKE
Mevotech Supreme	BALL STUD BROKE

Chevy® Silverado Durability Testing

MOOG	KEEPS GOING 5X+
MAS	BALL STUD BROKE
Centric	BALL STUD BROKE
Mevotech Supreme	BALL STUD BROKE

Toyota® Camry Durability Testing

MOOG	KEEPS GOING 5X+
MAS	BALL STUD BROKE
Centric	*
Mevotech Supreme	BALL STUD BROKE

*Centric part not available for testing.

Independent testing shows that MOOG ball joints outperform the competition by more than 5X. It's proof that when it comes to durability, our competitors simply don't measure up. And that won't surprise professional technicians — they prefer MOOG more than all other chassis brands combined[1]. They know that when their reputation is on the line, MOOG always goes the extra mile.

#partsmatter

MOOG®

Go the extra mile.™

*The results shown are based on independent testing conducted by B83 Testing & Engineering, Inc. on ball joints for a 2007 Toyota Camry, 2013 Ford F-150 and 2007 Chevrolet Silverado. Testing was performed on a Multi-Axial Durability Suspension Simulator to simulate ball joint service life on a vehicle.

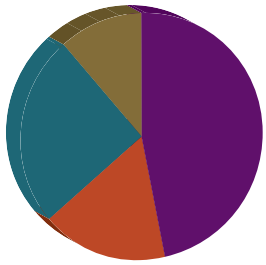
[1]IMR Research Study 2015

FEDERAL-MOGUL MOTORPARTS

BRANDING MATTERS

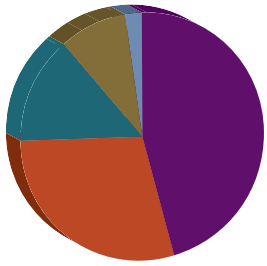
GASKETS

Customer service at purchase location:



Outstanding	47%
Great	17%
Good	25%
Poor	11%
Terrible	0%
Didn't receive	0%

Likelihood of returning to purchase location:



Highly likely	46%
Likely	29%
Somewhat likely	14%
Somewhat unlikely	9%
Not at all likely	2%

87% of consumers compared prices when shopping for this product.

35% of consumers personally installed the product they purchased.

Primary purchase intent:

Mechanic recommended	49%
Stop fluid leak	21%
Part of a larger repair	28%
Performance/custom work	2%

The top five advertising channels:

Saw/heard no ads	18%
Television	31%
Newspaper	26%
Direct mail	23%
Magazine	23%

Primary purchase location:

Auto chain	25%
Online/Internet	8%
Independent auto store	6%
Independent repair shop	14%
Dealership	28%

*Includes DIY and DIFM purchases

BUYING HABITS

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

Brand name	28%
In-store display	8%
Recommendation	31%
Lowest price	13%
Coupon/rebate	10%

Likelihood to repurchase product based on performance:

Highly likely	52%
Likely	27%
Somewhat likely	16%
Somewhat unlikely/not at all likely	5%

Vehicle age:

< 1 year	18%
2-5 years	5%
6-9 years	56%
10+ years	21%

Other work done:

None	28%
Preventative maintenance, repair	33%
Engine repair	21%
Performance/custom work	18%
Check engine light diagnostics	18%
Performance/custom work	18%

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.

“I need more than just a gasket.”

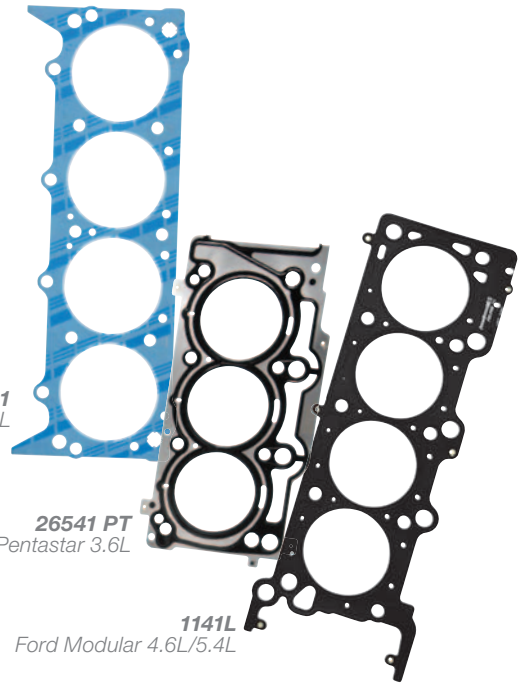
FelPro.com #PartsMatter

“ONLY FEL-PRO®

focuses strictly on the repair environment, with technologies designed to face the unique challenges each engine brings to my shop.”

Regardless of the application, Fel-Pro® gaskets are specifically engineered to solve the toughest sealing challenges in the repair environment.

FEL-PRO®
THE GASKETS PROFESSIONALS TRUST™



8266 PT-1
AMC 5.9L/6.4L/6.6L

26541 PT
Chrysler Pentastar 3.6L

1141L
Ford Modular 4.6L/5.4L

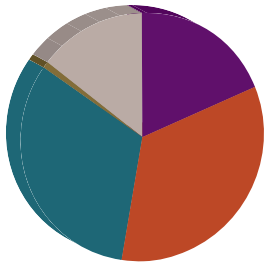
Visit **FelPro.com** to see why Tony, a veteran machinist, trusts Fel-Pro® to seal every engine he builds.

FEDERAL-MOGUL MOTORPARTS

BRANDING MATTERS

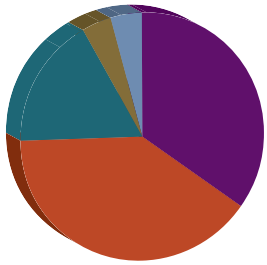
MOTOR OIL

Customer service at purchase location:



Outstanding	19%
Great	34%
Good	32%
Poor	1%
Terrible	0%
Didn't receive	14%

Likelihood of returning to purchase location:



Highly likely	35%
Likely	40%
Somewhat likely	17%
Somewhat unlikely	4%
Not at all likely	4%

33% of consumers compared prices when shopping for this product.

32% of consumers personally installed the product they purchased.

Primary purchase intent:

Regular maintenance	75%
Low level	15%
To keep on hand	8%
Oil leak	2%

The top five advertising channels:

Saw/heard no ads	69%
Television	9%
Newspaper	9%
Direct mail	9%
Internet/email	10%

Primary purchase location:

Auto chain	32%
Discount store	28%
Independent auto store	4%
Independent repair shop	11%
Dealership	18%

*Includes DIY and DIFM purchases

BUYING HABITS

The top five reasons for purchasing a particular type of motor oil:

Brand name	31%
Performance claim	12%
Recommendation	16%
Lowest price	23%
Other	12%

Likelihood to repurchase product based on performance:

Highly likely	63%
Likely	27%
Somewhat likely	7%
Somewhat unlikely/not at all likely	3%

Vehicle age:

< 1 year	7%
2-5 years	18%
6-9 years	26%
10+ years	49%

Other work done:

None	40%
Checked other fluids	41%
Checked tire pressure	42%
Checked wipers	32%
Checked filters	35%
Checked belts & hoses	30%

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.

Funnel King

Fluid Control Division

MULTI-PURPOSE FUNNEL

11″ Long Multi-Purpose Funnel: 32855

- Heavy Duty Polyethylene Construction
- Large Pour Spout Minimizes Drips
- Specifically Designed to Work on Capless Gas Tanks
- Top ID: 3½"
- Spout OD: 13/16"

#32855

FUNNEL KING®
Fluid Control Products

www.wirthco.com

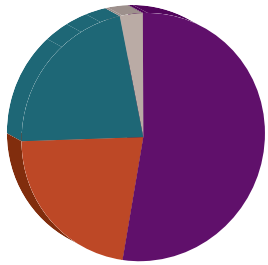
Understanding and Fulfilling Customer Needs Since 1980

952-941-9073 :: 1-800-959-0879

BRANDING MATTERS

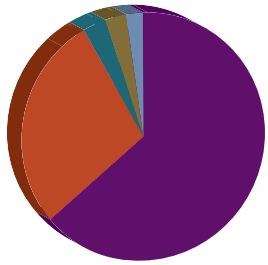
SHOCKS AND STRUTS

Customer service at purchase location:



Outstanding	53%
Great	22%
Good	22%
Poor	0%
Terrible	0%
Didn't receive	3%

Likelihood of returning to purchase location:



Highly likely	64%
Likely	28%
Somewhat likely	3%
Somewhat unlikely	3%
Not at all likely	2%

81% of consumers compared prices when shopping for this product.

31% of consumers personally installed the product they purchased.

Primary purchase intent:

Bouncy ride/worn parts	58%
Poor vehicle handling	17%
Mechanic recommended	21%
Shock/strut leak	4%

The top five advertising channels:

Saw/heard no ads	23%
Television	41%
Radio	19%
Direct mail	22%
Internet/email	25%

Primary purchase location:

Auto chain	44%
Discount store	4%
Independent auto store	9%
Independent repair shop	15%
Dealership	9%

*Includes DIY and DIFM purchases

BUYING HABITS

The top five reasons for purchasing a particular type of shock and strut:

Brand name	21%
Performance claim	10%
Recommendation	34%
Lowest price	10%
In-store display	13%

Likelihood to repurchase product based on performance:

Highly likely	54%
Likely	32%
Somewhat likely	9%
Somewhat unlikely/not at all likely	4%

Vehicle age:

< 1 year	25%
2-5 years	15%
6-9 years	38%
10+ years	22%

Other work done:

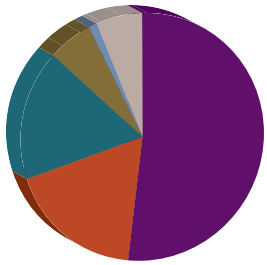
None	37%
Alignment	37%
Tire rotation/replacement	34%
Suspension/steering	21%
Brake repair	10%
Other	0%

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.

BRANDING MATTERS

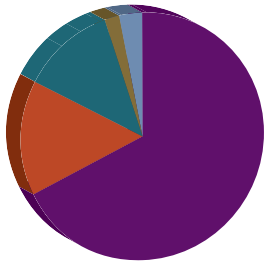
SPARK PLUGS

Customer service at purchase location:



Outstanding	52%
Great	18%
Good	17%
Poor	6%
Terrible	1%
Didn't receive	6%

Likelihood of returning to purchase location:



Highly likely	68%
Likely	15%
Somewhat likely	12%
Somewhat unlikely	2%
Not at all likely	3%

75% of consumers compared prices when shopping for this product.

39% of consumers personally installed the product they purchased.

Primary purchase intent:

Preventative maintenance	44%
Fix check engine light problem	34%
To improve fuel economy	11%
Mechanic recommended	11%

The top five advertising channels:

Saw/heard no ads	31%
Television	32%
Newspaper	24%
Direct mail	20%
Radio	20%

Primary purchase location:

Auto chain	42%
Discount store	6%
Independent auto store	12%
Mail order/catalog	13%
Dealership	10%

*Includes DIY and DIFM purchases

BUYING HABITS

The top five reasons for purchasing a particular type of spark plug:

Brand name	47%
Performance claim	6%
Recommendation	23%
Lowest price	7%
In-store display	9%

Likelihood to repurchase product based on performance:

Highly likely	64%
Likely	18%
Somewhat likely	12%
Somewhat unlikely/not at all likely	6%

Vehicle age:

< 1 year	22%
2-5 years	16%
6-9 years	44%
10+ years	18%

Other work done:

None	32%
Check engine light diagnostics	39%
Checked/filled fluids	25%
Battery check, replacement	27%
Checked tire pressure	13%
Checked belts and hoses	34%

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.

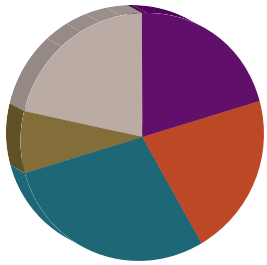
Atlanta | Baltimore | Boston | Bronx | Dallas | Detroit | Ft. Lauderdale | Houston | Rancho Dominguez | Skokie | St. Louis | Van Nuys

FEDERAL-MOGUL MOTORPARTS

BRANDING MATTERS

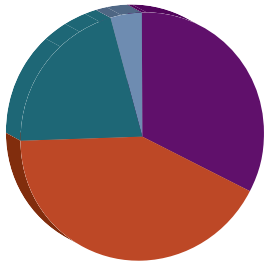
STARTERS / ALTERNATORS

Customer service at purchase location:



Outstanding	21%
Great	21%
Good	29%
Poor	8%
Terrible	0%
Didn't receive	21%

Likelihood of returning to purchase location:



Highly likely	33%
Likely	42%
Somewhat likely	21%
Somewhat unlikely	0%
Not at all likely	4%

64% of consumers compared prices when shopping for this product.

29% of consumers personally installed the product they purchased.

Primary purchase intent:

Car won't start	35%
Alternator light on	15%
Battery lost charge	19%
Low voltage	12%

The top five advertising channels:

Saw/heard no ads	50%
Magazine	14%
Newspaper	14%
Internet/email	18%
Radio	14%

Primary purchase location:

Auto chain	21%
Dealership	25%
Independent auto store	18%
Independent repair shop	14%
Online/Internet	14%

*Includes DIY and DIFM purchases

BUYING HABITS

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

Brand name	8%
Performance claim	8%
Recommendation	27%
Lowest price	15%
In-store display	7%

Likelihood to repurchase product based on performance:

Highly likely	49%
Likely	30%
Somewhat likely	8%
Somewhat unlikely/not at all likely	13%

Vehicle age:

< 1 year	18%
2-5 years	18%
6-9 years	21%
10+ years	43%

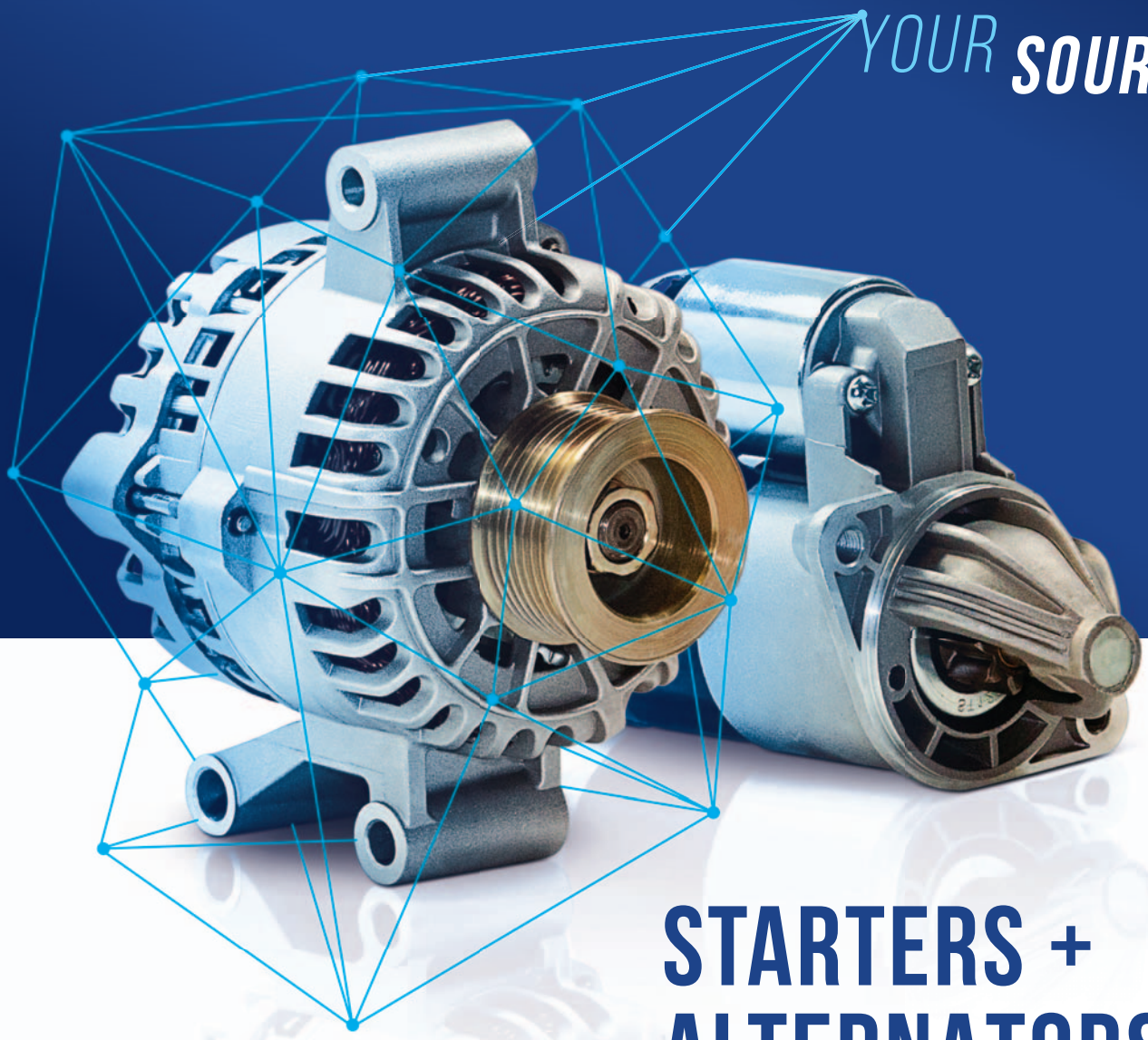
Other work done:

None	32%
Tune up	25%
Checked/filled fluids	14%
Battery check/replacement	36%
Checked tire pressure	14%
Checked belts and hoses	25%

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.

mpa

YOUR **SOURCE**



STARTERS + ALTERNATORS

As one of the largest producers of new and remanufactured Starters + Alternators, MPA provides nearly 100% coverage. All units are triple-tested, meeting or exceeding OE standards. Our nationally recognized private label services and award-winning customer service make MPA **Your Source** for Starters + Alternators.

aapex
ahead of the curve

BOOTH 4638

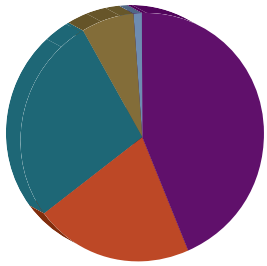
www.motorcarparts.com

ALTERNATORS | STARTERS | HUB ASSEMBLIES + BEARINGS | MASTER CYLINDERS | TURBOCHARGERS | BRAKE POWER BOOSTERS

BRANDING MATTERS

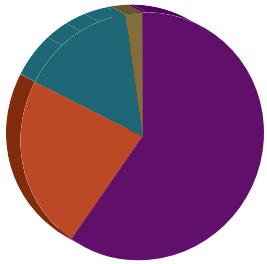
TURBOCHARGERS

Customer service at purchase location:



Outstanding	44%
Great	21%
Good	27%
Poor	7%
Terrible	1%
Didn't receive	0%

Likelihood of returning to purchase location:



Highly likely	60%
Likely	23%
Somewhat likely	15%
Somewhat unlikely	2%
Not at all likely	0%

88% of consumers compared prices when shopping for this product.

36% of consumers personally used the product they purchased.

Primary purchase intent:

Replacement for failed OE unit	52%
Replacement for failed aftrm. unit	14%
To improve vehicle performance	34%
Other	##%

The top five advertising channels:

Internet/email	44%
Television	35%
Newspaper	30%
Magazine	19%
Radio	19%

Primary purchase location:

Auto chain	45%
Online/Internet	6%
Independent auto store	7%
Independent repair shop	7%
Dealership	12%

*Includes DIY and DIFM purchases

BUYING HABITS

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

Brand name	35%
Performance claim	9%
Recommendation	33%
Lowest price	11%
In-store display	7%

Likelihood to repurchase product based on performance:

Highly likely	53%
Likely	24%
Somewhat likely	16%
Somewhat unlikely/not at all likely	7%

Vehicle age:

< 1 year	26%
2-5 years	14%
6-9 years	50%
10+ years	10%

Other work done:

None	17%
Replace induction hoses	38%
Replace intercooler	31%
Replace exhaust manifold(s)	25%
Oil/filter change	41%
Air filter replacement	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.

BIGGER, BETTER DIESEL.

NEW, NOT REMANUFACTURED
OE production fuel injectors for popular Navistar, Maxxforce, and Ford® Power Stroke® diesel engines. FJ927NX, just one of the thousands of genuine diesel parts available from Standard.

STANDARD® Diesel

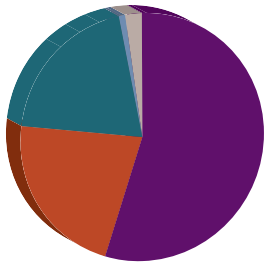
StandardDieselParts.com

Visit us at AAPEX BOOTH 4226

BRANDING MATTERS

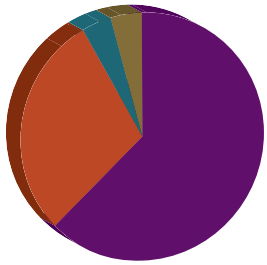
WHEEL BEARINGS

Customer service at purchase location:



Outstanding	55%
Great	22%
Good	20%
Poor	0%
Terrible	1%
Didn't receive	2%

Likelihood of returning to purchase location:



Highly likely	63%
Likely	29%
Somewhat likely	4%
Somewhat unlikely	4%
Not at all likely	0%

77% of consumers compared prices when shopping for this product.

35% of consumers personally used the product they purchased.

Primary purchase intent:

Heard rattle/performance issue	53%
Failure in related system	35%
Mechanic recommended	12%
Other	0%

The top five advertising channels:

Saw/heard no ads	25%
Television	40%
Newspaper	23%
Direct mail	19%
Magazine	19%

Primary purchase location:

Auto chain	41%
Independent repair shop	8%
Online/Internet	6%
Independent auto store	14%
Dealership	14%

*Includes DIY and DIFM purchases

BUYING HABITS

The top five reasons for purchasing a particular type of wheel bearing:

Brand name	36%
Coupon/rebate	6%
Recommendation	30%
Lowest price	6%
In-store display	10%

Likelihood to repurchase product based on performance:

Highly likely	43%
Likely	35%
Somewhat likely	18%
Somewhat unlikely/not at all likely	4%

Vehicle age:

< 1 year	21%
2-5 years	42%
6-9 years	23%
10+ years	14%

Other work done:

None	31%
Alignment	39%
Tires checked/replaced	37%
Check engine light diagnostics	31%
Battery check/replacement	14%
Checked belts and hoses	17%

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.

mpa

YOUR SOURCE

HUB ASSEMBLIES + BEARINGS

All MPA Hub Assemblies + Bearings are performance proven and backed by state of the art testing and product qualification. Rigorous EOL testing of critical components against our vast database ensures quality parts in every box. Nationally recognized private label services and award winning customer service make MPA **Your Source** for Hub Assemblies + Bearings.

aapex
ahead of the curve

BOOTH 4638

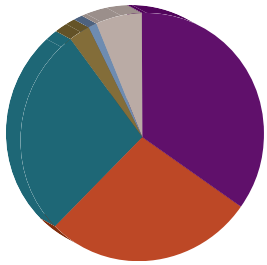
www.motorcarparts.com

ALTERNATORS | STARTERS | HUB ASSEMBLIES + BEARINGS | MASTER CYLINDERS | TURBOCHARGERS | BRAKE POWER BOOSTERS

BRANDING MATTERS

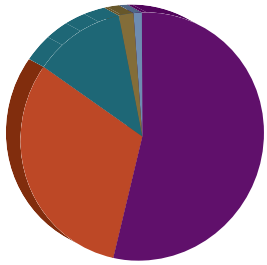
WIPERS

Customer service at purchase location:



Outstanding	35%
Great	28%
Good	27%
Poor	3%
Terrible	1%
Didn't receive	6%

Likelihood of returning to purchase location:



Highly likely	54%
Likely	31%
Somewhat likely	12%
Somewhat unlikely	2%
Not at all likely	1%

55% of consumers compared prices when shopping for this product.

45% of consumers personally installed the product they purchased.

Primary purchase intent:

Wipers performing poorly	63%
Preventive maintenance	18%
Broken wiper blades	13%
Other	6%

The top five advertising channels:

Saw/heard no ads	62%
Television	15%
Radio	9%
Direct mail	9%
Internet/email	13%

Primary purchase location:

Auto chain	39%
Discount store	22%
Independent auto store	7%
Independent repair shop	9%
Dealership	12%

*Includes DIY and DIFM purchases

BUYING HABITS

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

Brand name	27%
Performance claim	14%
Recommendation	28%
Lowest price	12%
In-store display	10%

Likelihood to repurchase product based on performance:

Highly likely	54%
Likely	33%
Somewhat likely	9%
Somewhat unlikely/not at all likely	4%

Vehicle age:

< 1 year	10%
2-5 years	22%
6-9 years	38%
10+ years	31%

Other work done:

None	51%
Oil change	37%
Checked/filled fluids	23%
Checked filters	18%
Checked tire pressure	17%
Checked belts and hoses	11%

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.

THE LATEST PRODUCTS

TECHNOLOGIES TO HELP YOU WORK SMARTER AND KEEP YOUR BUSINESS PROFITABLE

FIND THE RIGHT LIGHT BULB

The Philips Automotive Bulb Look Up is an easy to use online tool that quickly identifies the right headlight bulb or exterior/interior bulb for a specific vehicle application and tells the user where to buy it. The Bulb Look Up is compatible with both desktop and mobile devices, and uses a Make/Model/Year search format to speed the search results. It covers model years from 1958 to 2017 and includes all applicable incandescent, halogen and LED bulb types, and part numbers.

www.usa.philips.com/c-m-li/car-lights.html
Philips | AAPEX booth 2826

PHILIPS ULTINON LED LIGHTS

Philips Ultinon LED lights deliver brilliant, high-tech lighting for stop lights, turn signal lights, backup lights, tail-lights, position lights, hazard lights, trunk lights, glove compartment lights and interior floor lights. Available in a choice of cool blue, intense red, intense amber and 6000K bright white. Designed for performance and style, Philips Ultinon LEDs provide excellent light distribution, with a wide angle and proper light diffusion so drivers can see and be seen better.

www.usa.philips.com/c-m-li/car-lights.html
Philips | AAPEX booth 2826

YOUR SOURCE FOR HUBS, BEARINGS

As one of the largest producers of new Hub Assemblies + Bearings, Motorcar Parts of America is dedicated to quality.

- Rigorous EOL testing; all tolerances verified.
- ABS sensor signal strength, metallurgy and hardness tested.
- Nearly 100% coverage, with availability through major chain retailers, traditional WDs and beyond.
- Nationally recognized private label services.
- Award-winning customer service with a tech hotline for our partners and their customers.

www.motorcarparts.com
Motorcar Parts of America | AAPEX Booth 4638

YOUR SOURCE FOR STARTERS, ALTERNATORS

As one of the largest producers of new and remanufactured Starters + Alternators, Motorcar Parts of America is dedicated to quality.

- All units are triple-tested to SAE standards; meeting or exceeding OE specs.
- Nearly 100% coverage, with availability through major chain retailers, traditional WDs and beyond.
- Nationally recognized private label services.
- Award-winning customer service with a tech hotline for company partners and their customers.

www.motorcarparts.com
Motorcar Parts of America | Booth 4638

YOUR NEW STORE APP WITH ECMA REWARDS

Increase sales with walk-in, retail customers.

- Outsmart the big-box guys.
- Promote your business - launch your own store app.
- Use push notifications to increase in-store traffic.
- Order online. Pickup at the store or deliver to their home.
- Fast 1-hour delivery to your customer's door.

Learn how It works.

www.autologue.com
Autologue | AAPEX booth 3071

EMPOWER YOUR OUTSIDE SALES FORCE WITH ESALES BI/CRM

Don't wait until the end of the month to find out you lost a customer. eSalesalerts you to take immediate action with data refreshed daily. Features:

- Alerts & notifications: View customer's daily activity.
- Scheduler: Sales appts., calls, visits + GPS maps.
- Opportunities: Monthly specials, promos, events.
- Direct connection to your management system for real time pricing & stock checks.
- View customer buying habits.
- Email call reports.
- Know your customers with CRM – personal and business details.

www.autologue.com
Autologue | AAPEX booth 3071

SOUTH

SOUTH

ELEMENT3 AUTOMOTIVE BRAKE PADS

The Raybestos Element3™ line of brake pads includes EHT™ Enhanced Hybrid Technology and PG™ Professional Grade™. Together, they offer an innovative array of pads that provide outstanding braking performance, long life and less noise. EHT provides the best attributes of ceramic and semi-metallic in one pad, while PG delivers the best attributes of semi-metallic or ceramic materials comparable to OE. For a premium line of superior formulations with full coverage, look no further than Element3.

www.raybestos.com
Raybestos
AAPEX booth 3638

INTELLIGENT DIAGNOSTICS GUIDES TECHS

The new ZEUS™ platform (EEMS342) provides all the functions and repair tips that technicians need to diagnose, repair and manage any issue, fast. Snap-on says that ZEUS is the most sophisticated, intuitive diagnostic tool that it has ever created. ZEUS is designed to anticipate the technicians' next move and guide them through every step to find the solution by displaying only the information that's relevant to the specific vehicle and fault code.

http://diagnostics.snapon.com/zeus
Snap-on

NEW 2.7L KIA/HYUNDAI TIMING KIT

Gates' new timing kit for 2.7L Kia/Hyundai vehicles includes an OE-exact tensioner assembly, OE-performance idler pulley, OE-exact timing belt, and detailed instructions. The timing belt features aramid reinforced tooth fabric for longer wear and premium tensile cords for higher strength. The tensioner is designed to look, fit, and function just like the OE, featuring a patented vibration damping system for improved life.

www.gates.com
Gates Automotive

NEW ULTRA POLISHING WAX

Meguiar's introduced D166 Ultra Polishing Wax to its professional line of products. Designed to save time and money, the one-step product offers efficient removal of defects, polishing and long-lasting protection. A combination of easy wipe-off technology and Super-Micro Abrasive Technology polishing agents, which provide uniform, fast cutting, delivers defect removal and durable protection through a single application. The formula also allows for product to be applied to an entire vehicle at once, regardless of weather, without the user having to stop and remove residue as they go.

www.meguiars.com
Meguiar's

AIDO WIPER

SAFE DRIVING, AIDO PROTECTING

www.aiduo-wiper.com

NINGBO XINHAI AIDO AUTOMOBILE WIPER BLADE MANUFACTORY CO.,LTD.

Add: Industry District Luotuo Ningbo China