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Fleet and commercial work continues to be attractive to shops looking for a reliable, consistent customer base. See *article on page 36*. (Photo courtesy A.R.E. Accessories)



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DRIVER'S SEAT



Jef White Executive Editor www.theshopmag.com

Technology Leads the Way

hose outside the specialty aftermarket are recognizing some of the trends our industry is helping shape and refine. Look no further than Autotrader's list of the Best New Automotive Technology for 2022.

"Technology has a growing and irreversible impact on the automotive sector, with new advancements being introduced at a rapid pace," says Brian Moody, executive editor for Autotrader. "An industry once primarily driven by mechanics is now an industry largely driven by technology and virtual environments. Car shoppers now expect more and more advanced tech features, on

even low to moderately priced cars."

Here's the list and some of Autotrader's comments:

Android Automotive OS – The electric Polestar 2 is the first car to use the new Android Automotive OS. Not to be confused with Android Auto, this new OS is a system developed by Google and open to third-party developers.

Electric Pickup Trucks – Electric pickups have a few big advantages over more traditional gas-powered trucks, including the fact that electric torque results in impressive capabilities and exciting performance.

EV Crate Motors – Hot-rodders have long used crate motors to put a modern engine in a project car or race car. EV crate motors can be used in your vehicle restoration project or just about any other application you can imagine.

Ford BlueCruise – BlueCruise is Ford's rival to the GM Super Cruise system. When driving on a highway mapped by Ford, BlueCruise can take over and you can take your hands off the wheel and your feet off the pedals. However, it isn't quite fully automated—you still need to stay alert behind the wheel.

High-End Upfitting – While custom upfitting of trucks and vans is nothing new, it has been getting crazier and more high-end recently. A popular trend in the upfitting world is overlanding.

Smartphone as Digital Car Key – The concept is simple – your smartphone is all you need to gain entry, start and drive the car. You also can share your car key with someone else virtually.

Jeep Passenger Interactive Display – It's a 10.25-inch screen above the glove compartment offering the front passenger different ways to enjoy the ride. It can give the passenger GPS coordinates, control over the audio and rear entertainment systems, and even a view of the vehicle's cameras.

LED Lighting for Classic Cars – LED lighting is a great way to make a classic car a little more modern—it not only improves the look of the vehicle, but it dramatically improves visibility.

2022 Lucid Air – While naysayers once dismissed it as *vaporware*, the Lucid Air has finally reached production. This electric luxury sedan is a serious competitor to the Tesla Model S, Porsche Taycan and Audi e-Tron GT.

Nissan VC-Turbo Engines – This engine's clever engineering changes the compression ratio while you're driving, meaning performance is better when you punch it and efficiency is optimized during highway cruising.

For more information and details about the Best New Automotive Technology for 2022, visit https://www.autotrader.com/car-tech/best-new-automotive-tech-of-2022. **TS**



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Keeping Shelves Stocked

hether delivering goods, products or raw materials, or relying on deliveries and inventories of those goods to complete projects, supply chain disruptions and skyrocketing costs are impacting specialty automotive businesses as we head into 2022.

Regardless of where they sit in the supply chain, disruptions are taking a heavy toll on performance, restyling and customization shops of all sizes—many with fewer resources to absorb or push back on price increases and less leverage to pass those higher costs on to customers. A whopping 44% of small businesses recently reported temporary shortages or other supply chain problems, according to a survey of approximately 800 companies by Vistage Worldwide Inc., a coaching and advisory organization for small businesses.

Fortunately, even this far into the disruptions, there are steps shops can take to help keep business flowing. Product planning, increased supply chain management, adding potential suppliers and a focus on technology are all weapons you can use to combat today's supply chain disruptions.

Let's take a look at the current situation.



WHAT IS A SUPPLY CHAIN?

Supply chains are an essential aspect of most businesses today. In general, a supply chain moves a product or service from manufacturer or supplier to customer. The supply chain represents the steps it takes to get a product or service to the end user.

A specialty automotive shop develops supply chains so it can reduce costs and remain competitive. An efficient, optimized supply chain is extremely important in the fulfillment of customer orders.

When managed correctly, it can also result in lower costs and a more efficient sales and installation cycle.

MANAGING THE SUPPLY CHAIN

Supply chain management, or SCM, is the umbrella term that covers product development, sourcing, production, procurement, logistics and more. Without SCM, a performance, restyling or customization business runs the risk of losing customers and its competitive edge.

SCM isn't just about creating an efficient process—it's also crucial to mitigating risks and ensuring everything runs smoothly.

After all, there are many elements that make up the supply chain, from manufac-

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turing sites and warehouses to transportation, inventory management and order fulfillment, so it should come as no surprise that managing the supply chain, along with agile and efficient adoption of technologies, have led to a new way of operating.

COPING WITH A VOLATILE SUPPLY CHAIN

Without an optimized SCM process in place, the chain can fall apart from the very beginning.

Thankfully, a dynamic approach to the management of supply chains already exists and provides everything an aftermarket professional needs to integrate lessons learned and create a more robust supply chain—one that applies agile strategies toward disruptions in real time, includes powerful analytics that address and resolve root causes, and adopts management strategies that pave the way for long-term growth.

FLEXIBILITY VS. RESILIENCE

When it comes to coping with disruptions and changes, flexibility and resilience are both critical traits for success with a volatile supply chain.

A resilient supply chain can weather the storm if a supplier has to shut down production. A flexible supply chain can adapt to new market trends and conditions in the blink of an eye.

With the rate of disruptions continuing and, in many cases, increasing, change management is required. It is important to focus specifically on dealing with disruptions and, if at all possible, avoiding them (via flexibility). This will be a largely operational hurdle involving establishing strategies for particular events or changes—often with the help of digital technology.

JUST-IN-TIME

While there is no one single best way to create a winning supply chain strategy, a popular option among those with inventories—whether for goods, materials or supplies—is so-called *just-in-time* management.

Just-in-time management cuts costs for those toward the end of the supply chain and redistributes some of those costs to intermediate producers, who wind up either holding extra stock or finding other ways to cope with demand-side fluctuations.

Unfortunately, the major problem of relying too heavily on just-in-time is glar-

ingly evident in the industry credited with inventing it: Automakers have been crippled by a shortage of computer chips—vital car components produced mostly in Asia.

Without enough chips on hand, automobile plants around the world have been forced to halt assembly lines.

Today's shortages raise the question of whether businesses have been too aggressively reaping savings by slashing inventory. Despite their role in the supply chain, however, many key players say they don't want to replace just-in-time entirely, because the savings are too great.

ALTERNATIVE SUPPLIERS

Many businesses have been using alternative suppliers to combat rising inflation, supply chain disruptions and labor shortages.



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Relying on backup suppliers to battle shortages or shipping delays is rapidly becoming the new norm for many businesses.

Relying on backup suppliers to battle shortages or shipping delays is rapidly becoming the new norm for many businesses.

Shifting or adding suppliers allows a specialty automotive shop to optimize costs. An alternative supplier allows the business to quickly respond to supply chain disruptions, thereby minimizing impacts to the bottom line.

Maintaining multiple suppliers requires added planning and a greater amount of work. This is offset by increased flexibility should one supplier experience disruptions.

Unfortunately, few businesses are completely immune to supply chain disruptions and some may be forced to hike prices, if only to keep ahead of rising inflation.

SPOT BIDDING

It's no secret that supply shortages and disruptions have led to a record number of canceled contracts and the rise of *spot bidding*. When supply and capacity are strained, previously negotiated contracts and agreements are all-too-frequently thrown out the window—leaving few alternatives other than the incredibly inefficient process of spot bidding.

Spot bidding requires many of the same time-consuming, repetitive steps as the original process to reach out to potential carriers or suppliers, collect data and make new award declarations.

Far too many businesses within the specialty automotive aftermarket failed to anticipate the sheer volume of canceled contracts or the rise of spot bidding, among other economic challenges. Complicating matters today, when an outsourcing need arises, many are turning to what is familiar and ignoring the impact of new problems with old, outdated processes and technology.

Since it is often conducted outside of a formal sourcing process, spot bidding can introduce bias, where a business favors certain suppliers in the interest of speed, thereby reducing the competitive tension that might have resulted in better offers.

Understanding that in order to remain competitive and guard against disruptions, integrating new suppliers—and identifying which supply lines no longer hold value—is imperative. A specialty automotive professional who overlooks emerging suppliers to preserve incumbent relationships does so at the expense of innovation and resiliency.

According to many experts, a lack of a cohesive strategy and updated technology are the biggest hurdles to building futureready supply chains. Fortunately, many businesses are overhauling their old systems and attempting to streamline processes using optimization and automation technology for a more modernized supply chain.

OPTIMIZATION

A key way of achieving preparedness is to optimize processes wherever possible especially regarding product procurement. With optimization, it is possible to balance costs and speed objectives, give suppliers flexible bidding options and eliminate *lowest price wins* awards.

With the right solution, a business has the capability to handle everything from spot bids to large-scale RFPs with a supplier-friendly interface that improves the operation's direct materials, supplies or service award decisions. One such solution involves automation.

AUTOMATION

A computerized sourcing process can establish spot bidding and mini-tender events within minutes, managing and automating everything from inviting carriers and collecting bid data to generating award recommendations based on a set of criteria.

A computerized system goes beyond costsavings by creating more efficiency.

By reducing time-consuming, monotonous tasks, optimization and automation technology allows the operation's key personnel to do what they do best: focus on supplier relationships, achieve broader goals for the operation, and drive innovation.

A PROBLEM WITHOUT AN ANSWER?

With price hikes already common, inflation expectations are posing potential problems for our industry. Pandemic buying and supply shortages exposed flaws in many supply chains that will continue to be exploited in the months ahead.

Although many performance, restyling and customization professionals learned how to cope with on-the-fly solutions (duct tape and chewing gum?), most postponed long-term investments while grappling with more immediate issues.

Today, shops can utilize past lessons and move forward. For some, that will mean stockpiling more inventory and forging relationships with additional suppliers.

There is not one best way to create a winning supply chain strategy. However, by leveraging optimization and automation to create a future-ready supply chain, businesses can leave antiquated approaches behind and progress to modernity.

Your operation's future may depend on it. **TS**

MARK E. BATTERSBY writes on financial and tax-related topics. Learn more at thetaxscribe.com.



chains that will continue to be exploited in the months ahead.



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– Keeping Shelves Stocked

Industry Managing Supply Chain Issues So Far

Despite ongoing disruptions in the economy, 70% of specialty equipment manufacturers report sales growth over the past year, according to SEMA's new State of the Industry—Fall 2021 report.

The report highlights specialty equipment market trends including sales performance and expectations, broader economic factors that are affecting the industry, and a future outlook on the role that emerging vehicle technologies may play.

Supply chain disruptions are certainly affecting the automotive sector, and new vehicle production is expected to be 7.7 million units lower in 2021 than 2020—tempering the specialty equipment industry's optimism regarding its short-term prospects, the report notes.

However, most businesses are maintaining a positive outlook, with more than 80% expecting their sales to be stable or growing over the coming year.

The latest edition of SEMA's ongoing State of the Industry report series offers 70 pages of data on the specialty equipment industry to help companies understand how the market is performing and evolving. Key findings from the report include:

- Delays in shipping and the ongoing microchip shortage have left automakers unable to keep up with consumer demand for new vehicles, pushing dealer inventories to all-time lows and the average price of a new vehicle to an unprecedented \$45,000 in September 2021.
- While some businesses struggled during the beginning of the pandemic in 2020, especially retailers, most were able to adjust. Manufacturers in particular have done well, reporting an average of 19% sales growth over the past 12 months.
- Sales in the pickup, sports car, SUV and classic vehicle segments continue to be strong, with many businesses once again seeing double-digit sales growth in 2021.
- Supply chain disruptions are

starting to create some uncertainty. In the spring of 2021, 70% of specialty equipment manufacturers and 75% of distributors expected their sales to grow over the coming year. However, those percentages have fallen to 58% and 52% respectively.

 The temporary shifts toward online sales that were made necessary by the pandemic are continuing to reverse, with the majority of specialty equipment parts sales once again flowing through in-person retail channels.

 In the longer term, vehicle manufacturers' plans to develop and sell more electric vehicles will require the specialty equipment industry to plan for and adapt to these changes in the vehicle population.

For more data on the state of the U.S. specialty equipment market, download the SEMA State of the Industry—Fall 2021 report at sema.org/research.







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It's about standards & clear direction-not fear & screaming.

By Chad Storlie

hen I say *military-style coaching*, many people will think of R. Lee Ermey, the ferocious U.S. Marine Corps. drill sergeant in the movie *Full Metal Jacket*. Ermey's character was profane, demanding and a picture of precision in basic military activities.

He was not, however, a picture of coaching.

Fear and screaming are ways to teach basic military skills, but intimidation techniques rarely work as a path to develop higher leadership, initiative and critical skill sets among employees.

True military coaching, however, works great in any format—even over video conferencing—as a proven method to retain and develop employees.

One of my first memories of my time in the Army was sitting down with my immediate boss on a beautiful fall day in the De-Militarized Zone (DMZ) in the Republic of Korea. We discussed my background, my goals for the military unit I had to lead and his standards of performance for key tasks that my unit had to conduct. I left the meeting motivated, excited and aware of the responsibility that I had to the 35 people I was leading as I gazed out over the miles of fences, mines and barbed wire that separated North and South Korea.

After about 30 days on the job, my boss and I sat down again to discuss my per-



Military coaching consists of describing performance standards and then having frequent coaching sessions concerning on-the-job performance.



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MILITARY-STYLE COACHING



When we coach, discuss and teach to a clear, well-defined standard, it is easy to see what we need to do to improve and to be successful.

formance. The conversation began with an outline of what had happened in my first month as a leader. My boss described what I was doing well and where I needed to improve, based on the standards he had defined at our first meeting. (He clearly had checked on my performance with my team.)

Again, I left the meeting feeling motivated, inspired and clear on the next steps I needed to take to be successful.

I later realized that my boss had given me the secret to one of the greatest tools required to lead others: the military coaching session.

Military coaching consists of accurately and precisely describing the standards of performance to be successful in a position and then having frequent coaching sessions concerning on-the-job performance. The best aspect of the military coaching session is the direct comparison of job performance to a clear, distinct and well-defined standard of performance.

Military coaching is all about performance and performance improvement. When we coach, discuss and teach to a clear, well-defined standard, it is easy to see what we need to do to improve and to be successful.

Here are some steps to becoming a great military-style coach:



HAVE DEFINED, CLEAR, WRITTEN, CONSISTENT, EQUAL & ACHIEVABLE STANDARDS A great coach knows what they want from a team. More importantly, they tell the team in clear, simple and direct language what they want, and those expectations do not change.

Coaching to improve a team or an individual is about matching a person's performance to a clear standard and then telling that person how they need to take clear, specific actions to improve. Standards need to be clear and consistent to develop skills that meet the coach's requirements.



HAVE FREQUENT, QUALITY & IMMEDIATE INTERACTIONS FOCUSED ON PERFORMANCE Performance coaching is

about small, frequent and immediate meetings. Watch a sports coach in action during practice. She will be telling players how to do a play better, giving 15-30 seconds of advice to one player, pulling another teammate aside for 3-5 minutes, and then working with another smaller set of players more intensely for an hour.

The secret to being an effective coach is coaching to each person's needs in a manner that will improve their performance. Importantly, coaches provide feedback all the time—especially in recognizing when an employee has performed well.



KNOW HOW TO GIVE A COMPLIMENT

GIVE A COMPLIMENT When a leader says *excel*-

lent job or great work, it

sounds like a compli-

ment. But is it really?

What was done well? Who did it well? A compliment is a verbal or written recognition of a specific and definable event, action, date and outcome that an employee performed and that the boss wants repeated.

When you give a compliment, slow down and clearly state who did the activity well, the specific activity that was performed, the desired business outcome that was achieved, and the standard of performance that others can understand and repeat.

Giving a compliment gets attention, so use it to develop and reinforce team/ employee performance.



VARY YOUR Approach, but not Your standards

Great coaches find different ways to reach every

team member, but they do not vary in their exacting standards.

I remember when I first got to the infantry, my company commander kept me at the rifle range with some of the sniper instructors so I could become a great shot. I needed some extra work and my company commander—my coach—knew it.

He had me work to get it right. His standards did not change—what changed was the approach, which allowed me to meet the required standard.

Korea was a great first duty station for me. My lessons in leadership, training, coaching and exacting standards served me incredibly well in future years in demanding combat zones.

The secrets of military coaching were foundational to developing and leading others to even higher levels of performance. Incorporate their power into your shop by setting standards, giving specific, actionable feedback to meet those standards, and then developing improvement plans to help employees be successful. **TS**

CHAD STORLIE is a retired U.S. Army Special Forces officer, an Iraq combat veteran and has 15 years university teaching experience as an adjunct professor of marketing. He is a mid-level B2B marketing executive and a widely published author on leadership, logistics, marketing, business, analytics, decision making, military and technology topics. Learn more at combattocorporate.com.



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Stihunger Heads by the second

Innovation continues to drive the drag racing market. (Photo courtesy Holley Performance Products

The drag racing market provides optimism for speed shops & builders.

rowth was the big winner across all types of drag racing in 2021. Insiders report increased general interest, an influx of new

series and classes, and more spectators turning into racers.

Drag racing stayed strong in the midst of a worldwide pandemic and a slew of supply chain challenges. Did your shop enjoy some of the spoils?

Suppliers share their thoughts on riding the wave into 2022, unexpected benefits to look for along the way, and a few hot products to target.

DELIVERY STATUS

Supply chain issues seem to have more variants than COVID these days. So, how are they affecting the drag racing market?

"Expect longer lead times with the amount of demand and limited supplies, which are also affecting other sectors of the high-performance industry," says Iann Criscuolo, sales/tech dept. manager for Canton Racing Products in North Branford, Connecticut.

Evan Perkins, digital content manager for Holley Performance Products, Bowling Green, Kentucky, says no one has been immune, but there is reason for optimism.

"There is a light at the end of what has been a very long tunnel for manufacturers, shops, and racers alike," he predicts. "We are all hoping that winter and the offseason will allow shelves to be refilled and raw materials to be restocked, bringing the promise of an even better racing season in 2022."

Holleu

Krista Baldwin, creative director for FTI Performance, DeLand, Florida, notes her company is among those using every available resource to promptly deliver products to customers, particularly during the winter build season.

"Although supply chain issues have affected everyone, we have stayed very aggressive in making sure we have the products our customers need," she says. "We have upped our inventory levels and continue to multi-source whenever possible." Is it working market-wide? Kyle Fickler, director of sales and business development for Driven Racing Oil in Memphis, reports a fill rate of around 98%.

"Other than a couple of instances where we have been unable to secure caps for bottles or something similar, we have been increasing inventory levels despite experiencing exceptional growth this year," he says.

Hot Shot's Secret of Mt. Gilead, Ohio, reports recent supply chain issues proving a challenge when sourcing raw, high-end chemicals used in racing oil formulations, as well as bottling materials.

"Fortunately, the explosive growth in the demand for our racing oils has provided us with the purchasing power to secure these materials in order to meet the demand

mne

throughout this supply crisis," says Kyle Fischer, director of branding & promotions.

Suppliers are optimistic regarding drag racing's long-term outlook. (Photos courtesy Holley Performance Products)

The McLeod/FTI-sponsored Nitro Funny Car driven by Paul Lee. (Photo courtesy FTI Performance)

Troy Williams and his FTI ON-SITE Super Comp dragster. (Photo courtesy FTI Performance)

With some shops waiting on everything from engine bearings to chromoly tubing, Phillip VanBuskirk, national sales manager for Aeromotive Inc. in Lenexa, Kansas, reports seeing an increase in business for domestic manufacturers. While still affected by volume and labor shortages, he says, U.S. manufacturers can nevertheless bring items to market quicker than waiting on foreign shipments.

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The time delays can also mean a better overall project, he adds.

"Even though parts are coming in slower than desired, customers are willing to wait. This is an opportunity for shops to plan builds better with their customers to make sure they cover everything earlier in the process," he says. "Customers are known to change directions in the middle of a build, Racers continue to want to go faster and run parts harder. (Photo courtesy FTI Performance)

but now they know this can drastically change the timeframe. Sticking to a plan and managing expectations are the keys."

A GREAT CROWD

Drag racing customers are known for their loyalty to businesses that help them win.

"If a racer buys from a shop and the product works as it's supposed to, then you will have a customer for life," says Baldwin. "Drag racers are extremely loyal and will tell their friends if a product or the shop is worth dealing with."

VanBuskirk agrees.

"Drag racers are diehard and loyal customers. Once you have a good relationship with your customer, you will be their first call for what they need," he says. "Racers put a ton of time and money into their programs and rely on the relationships they build with their speed shops to provide the parts or labor they need to keep their program moving forward."

Drag racers also make good candidates for upsell products.

"If you are selling a racer our break-in or race engine oils, you can also introduce him to our cleaners and waxes," says Fickler. "These products enjoy a cult following from those that use them and have a reputation for being best-in-class."

Shop/customer relationships often evolve into partnerships, Fischer notes, with the opportunity for racers to test and provide feedback on certain products or lines.

Perkins adds that there's also the chance to see different parts combinations in action.

"Not only does competition breed ingenuity, but it also allows shops to gauge what works and what doesn't," he says. "Much of this information can be translated into vehicles that compete in all forms of racing. You simply can't put a price on tuning knowledge gained from real-world testing as well."





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(Photos courtesy Canton Racing Products)







New technologies are keeping the landscape of racing fresh for the next generation. (Photos courtesy Canton Racing Products)

Plus, the industry has proven staying power.

"An unexpected benefit has been that drag racers and drag racing have weathered the storm of the COVID pandemic, and many tracks have continued operations," says Criscuolo. "This has meant that shops have continued to operate and serve their customers at a time when other industries have not shown the same kind of resilience to the shutdowns."

MORE TO COME

Suppliers offer reasons for optimism when it comes to the future of the market.

"Drag racing is currently in a state of growth," says Baldwin of FTI. "With the pandemic, people returned to their shops and garages to rekindle that love for the automotive world. We continue to see that, as more racers come to the track, the more they want to go faster and run the



PERFORMANCE

Hot Drag Racing Products

■ HOT PRODUCTS: Brushless Gear Pumps ■ FEATURES & BENEFITS: Line includes 3.5, 5.0, 7.0 and 10.0 GPM Brushless Gear Pumps; optional True Variable Speed controller built into the cap reduces fuel flow during low engine demand, decreasing the already low current draw; friendly for street and track driving.

> Aeromotive Inc. Phillip VanBuskirk National Sales Manager

HOT PRODUCTS: Accusump Oil
Accumulators 24-026, 24-006 & 24-016
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Canton Racing Products Iann Criscuolo Sales/Tech Dept. Manager

HOT PRODUCT:

New GP-1 85W-140 Gear Lube **FEATURES & BENEFITS:** PN 19140 is a conventional gear oil ideally suited to race, high-performance street and heavy-duty applications; tenacious cling minimizes the centrifugal sling of the ring gear; formulated from premium Pennsylvania base oils that provide natural film strength. Driven Racing Oil Kyle Fickler

Director of Sales and Business Development

 HOT PRODUCT: New XPM Gen 3 Billet Bolt Together Torque Converter Line
FEATURES & BENEFITS: Each piece is interchangeable to make them selftunable; multiple options of various components to fit personal combinations; billet stators available for Roots blowers, screw blowers, nitrous, N/A, ProCharger and turbo combinations.

> FTI Performance Krista Baldwin Creative Director

■ HOT PRODUCTS: EFI Components ■ FEATURES & BENEFITS: Capable, prolific ECUs; user friendliness; software designed to reward everyone from novices to professionals; racer and technical support; supporting hardware including intake manifolds, injectors and fuel pumps.

Holley Performance Products Evan Perkins Digital Content Manager

 HOT PRODUCTS: Adrenaline Racing Oils
FEATURES & BENEFITS: A full line for engines, transmissions and gears; formulated with pure Group IV polyalphaolefin (PAO) base oil and high-end Group V esters; infused with a patented nano carbon technology in our FR3 Friction Reducer to provide maximum horsepower. Hot Shot's Secret

> Kyle Fischer Director of Branding & Promotions





<complex-block>



parts harder. It's a great thing to see and to be a part of."

And multiple generations are taking part, says Aeromotive's Van-Buskirk.

"Drag racing is a family affair. I always see families with kids of all ages when I am walking around the tracks. I have even seen tracks that have power wheels races for the kids that are too young for junior dragsters," he says. "Drag racing keeps evolving and the racers keep pushing the envelope more and more.



Technological innovations are helping push the drag racing market. (Photo courtesy Hot Shot's Secret)



Engine builders are

busy developing

high-horsepower,

(Photos courtesy

Driven Racing Oil)

HIGH PERFORMANCE GEAR OIL

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reliable engine combinations.

Shop/customer relationships often evolve into partnerships, with the opportunity for racers to test and provide feedback on certain products or lines. (Photo courtesy Hot Shot's Secret)



They are teaching the next generation this mentality and it will continue to grow our industry into the future. Competition drives innovation and drag racing is one of the most competitive sports out there."

Holley's Perkins explains that the market has maintained its strength over the decades.

"I don't think drag racing has ever given our industry a reason not to be optimistic," he says. "We're seeing cars on radically different fuels, with radically different engine combinations, do things that the forefathers of the sport couldn't have ever possibly imagined—and on tires smaller than on your average sportscar. It's truly a great time to be a fan of the sport and I don't think there's any reason that climate will change moving forward."

Fickler of Driven Racing Oil points to the popularity of new categories and styles of racing.

"Certainly Outlaw, Drag Week and noprep events have shown dramatic increases









Serve the drag racers in your area with quality parts and firsthand knowledge. (Photos courtesy NMCA)

in popularity, which leads to new cars being built and parts being sold," he explains. "Likewise, big-money bracket races are popping up all around the country with huge car counts. And with the cars getting quicker every year, that keeps engine builders busy developing high-horsepower, reliable engine combinations."

Fischer notes that, as a lubricant manufacturer, Hot Shot's Secret sees technological innovation helping push the market.

"As new engine, transmission and other hard part technologies advance, it has allowed us to introduce new lubricant technologies like our nano carbon-based FR3 oil additive, resulting in multiple new world records this season alone and great opportunities ahead for drag racing that were previously thought to be unachievable."

Canton Racing Products' Criscuolo says it all adds up to a strong and growing market.

"A reason to be optimistic about the drag racing market is the ability to maintain business opportunities even in the worst of times (COVID pandemic) and the emergence of new technologies that will keep the landscape of racing fresh for future generations of racers." **TS**

NMRA/NMCA Appoints New Tech Director



ProMedia Events and Publishing, parent company of the Holley NMRA Ford Nationals and NMCA Muscle Car Nationals, has announced Augustine Herrera as the new NMRA/NMCA national tech director. His duties include overseeing fair compe-

tition in both drag racing series and leading

the onsite tech staff at all national events.

"Augustine joined our team in 2019 and quickly learned the ins and outs of our categories and our competitor base. He has an extensive history in the sport, from competing in Outlaw 10.5 and handling car chief duties on an NHRA Pro Modified team to currently owning his own motorcycle race shop that specializes in drag racing," said Rollie Miller, national event director and general manager for NMRA/NMCA. "We wish Roger Conley the best in his new endeavors and we are looking forward to Augustine taking over this position."

The NMRA/NMCA seasons begin in March with events at Bradenton Motorsports Park in Florida.

"I knew pretty quickly that I wanted to take a larger role in the NMRA/NMCA when I started with this group three years ago," Herrera says. "They've built a cohesive team and have an awesome group of competitors who race hard



and have fun. This will be a new challenge and one I take seriously after spending practically all my life in this sport with drag bikes and race cars."







There's never a dull moment at PFI Speed in Colorado.

By Tara Hurlin

rent Leivestad is a builder. For starters, he built his business from the ground up.

Parts Finder International, now PFI Speed, began as a parts liaison service over 20 years ago. Leivestad scoured junkyards for rare parts to buy and sell. Today, PFI Speed in Fort Lupton, Colorado offers performance parts, fabrication, wiring, engine building, transmission builds and full dyno tuning.

"After building my first Honda CRX, PFI gained *Speed* and morphed into building cars," he recalls.

Since then, the company has introduced new parts into the auto industry, helping it grow and bringing ideas to life.

"We work on keeping it fun," he notes. PFI Speed employs four people, all of whom Leivestad considers his extended family.

"Every person is like a puzzle piece that completes the team. Our mutual passion for what we do is what got us to where we are today."

A LEVEL OF EXCITEMENT

Countless cars have come through the shop over the years, but Leivestad's favorite is *The Bully*, a 2000 Honda Civic with a custom PFI tubular chassis, a twin-turbo Honda J Series V-6 engine mated to a



Brent Leivestad has built the company over 20 years, starting as Parts Finder International, a parts liaison service. (Photo courtesy pfispeed.com)

Chevy Powerglide transmission, and a Corvette rear end.

"I spent years honing my skills while building this," he says. "I spent so much time on this one that it will always be my favorite project."

Featuring a shop layout that covers 7,800 square feet and includes 11 bays and two

dynos, it's no surprise that one of PFI Speed's specialties is tuning.

Dyno sessions include an overall health inspection before strapping the vehicle down and plugging it in. Baseline pulls on the dyno allow the team to analyze air/fuel ratios and adjust them to safe parameters, and also set the boost pressure, if applicable.

"We try to bring a level of excitement with the dyno, but we work with the clients so they understand every aspect of what they built and what they're doing," he explains. "We work to build their map in such a way that the vehicle achieves optimum power, safely."

The shop's shelves are stocked with tuning products such as wiring components, wideband O2 sensors, injectors, spark plugs, rods and pistons. High-dollar parts and custom items can be ordered on demand. Trusted parts and quality apparel can be purchased from the website, pfispeed.com.

The shop's customer demographic is widespread, reflecting Colorado's flourishing car culture. The automotive enthusiasts and racers who entrust the shop with their rides range from newly licensed high school students to families that want to get everyone involved to retirees who just want to go fast as soon as possible.

All pricing is based on the surrounding



market to stay competitive, but the team also evaluates individual projects to keep it fair for everyone.

PFI Speed supports local businesses, including automotive and machine shops, apparel outlets and, of course, eateries.

"We always strive to support our local

community with our own dyno and taco days," Leivestad says. "I also enjoy writing articles for Bandimere Speedway's newsletter, which is our local track."

SEEING IS BELIEVING

After appearing in Boosted Boiz YouTube

videos, the PFI team began making its own videos, with the goal of teaching and helping others grow. The videos feature the brands the shop has found reliable, while keeping things as budget-minded and accessible as possible.

"I enjoy teaching and connecting with



HIGH-ALTITUDE PERFORMANCE



PFI Speed in Fort Lupton, Colorado offers performance parts, fabrication, wiring, engine building, transmission builds and full dyno tuning. (Photo by Tara Hurlin)



Featuring a shop layout that covers 7,800 square feet and includes 11 bays and two dynos, it's no surprise that one of PFI Speed's specialties is tuning. (Photo by Tara Hurlin)



The shop's shelves are stocked with tuning products such as wiring components, wideband O2 sensors, injectors, spark plugs, rods and pistons. High-dollar parts and custom items can be ordered on demand. (Photo by Tara Hurlin)



The automotive enthusiasts and racers who entrust the shop with their rides range from newly licensed high school students to retirees who just want to go fast as soon as possible. (Photos by Tara Hurlin)

people all over the world," Leivestad says. "Before YouTube, we were a small-town shop supporting local automotive enthusiasts, and now the sky is the limit."

The excitement for its builds is also shared on the company's Instagram handle, @pfispeed.

Aside from the typical speed bumps that small businesses always navigate, the team's biggest challenge these days is keeping up with communication and heavy email traffic, especially international and outof-state queries.

"We've been a small-town performance shop for so long that the increase in exposure has definitely been a challenge," Leivestad admits. "We are constantly trying to work on making sure everyone is getting a response." Is all the hard work worth it?

"I love the excitement and bringing it out in others," Leivestad says enthusiastically. "Helping people succeed with their projects is what it's all about. I love seeing our customers make their first pass at the track or beat their personal best time. The sense of community we are building makes this more than just a job; it's our way of life."

Aside from managing the bustling shop, Leivestad's future plans include getting more involved in events, be they local, out of state or someday even in other countries.

"We strive to keep the community growing and bring the excitement everywhere we go while passing down our knowledge as new technology comes out." **TS**

TARA HURLIN is a freelance journalist and photographer. Learn more at turbotara.com.

In the EPA's Crosshairs

Performance Racing Industry is urging its members to contact legislators regarding Environmental Protection Agency (EPA) enforcement of the Clean Air Act and the Recognizing the Protection of Motorsports (RPM) Act, the organization announced.

Brent Leivestad, owner of PFI Speed in Colorado, is helping bring attention and support to the effort.

The EPA issued a fine against PFI Speed for selling 37 Hondata S300s over a two-year span, PRI representatives revealed in a September news release. The fine was issued after Leivestad complied with an EPA inquiry regarding details about the company's sales.

Without any other contact from the EPA, Leivestad received a letter accusing the shop of selling illegal products and imposing an \$18,000 fine that, if not paid within 30 days, could increase to as much as \$180,000.

"I was dumbfounded. I couldn't even believe it," says Leivestad. "I am a speed shop and sell race parts—I didn't know that was wrong. I didn't understand the basis of the EPA's claim, I didn't go in front of any trial or talk to anybody from the EPA, and the threat of settle and pay within 30 days or else felt like a real shakedown intended to deny my rights."

PRI is calling on the racing industry and enthusiasts to urge Congress to pass the Recognizing the Protection of Motorsports (RPM) Act. The bipartisan bill will clarify that it is legal to convert street vehicles into dedicated race cars as PFI Speed does, and that businesses can legally produce, market and install racing products.



PFI Speed's unexpected fine from the EPA is an example of the type of business clarity the Recognizing the Protection of Motorsports (RPM) Act is designed to provide. (Photo by Tara Hurlin)

"The RPM Act must be passed into law to provide the racing community with certainty and confidence in the face of EPA threats," says Dr. Jamie Meyer, PRI president. "Without the RPM Act, businesses will shut down and the entire motorsports community will be severely impacted. It's time for the motorsports community to push back and protect our racing rights."

In the meantime, Leivestad is ready to defend his business. "We have representation and they are still in arbitration on the matter," he reported in late November. "We have not paid the fine and are not planning to pay the fine—we are planning on fighting it through, for what we believe is right." Learn more at saveourracecars.com.

This article originally appeared on theshopmag.com. Visit and sign up for the daily eNewsletter.



Among the shop's top projects is *The Bully*, a 2000 Honda Civic with a custom PFI tubular chassis, a twin-turbo Honda J Series V-6 engine mated to a Chevy Powerglide transmission, and a Corvette rear end. (Photo by @mustanglarry)



"I spent years honing my skills while building this," Leivestad says of *The Bully*. "I spent so much time on this one that it will always be my favorite project." (Photo by @mustanglarry)



PERFORMANCE **Products**

Ram TRX Tuning

Superchips, Ogden, Utah, presents its Dashpaq+ tuning system that adds 38 hp and 28 pound-feet of torque to 2021 Ram TRX pickup models. Calibrations have been fine-tuned for both 91 and 93 octane to improve throttle



response, transmission shift strategies, boost curves and overall power. State-ofthe-art in-cab monitoring with an intuitive color touchscreen and Wi-Fi allows for easy updates.

GM Rear Diff Cover

PPE, Montclair, California, presents a heavy-duty cast aluminum Rear Differential Cover for GM 12-bolt AAM 9.5- and 9.76inch rear axles. Engineered to minimize friction and maximize lubrication, the covers provide increased fluid capacity and feature internal rib structures. Billet stainless steel drain/fill plugs featuring neodymium magnets attract harmful ferrous particles from the fluid.



Nova Interior Styling

TMI Products, Corona, California, presents a complete line of Interior Styling Products for 1968-'72 Chevrolet Nova models. Available products include front seats, door and quarter panels, a center console, carpet and headliner, a fiberglass molded rear seat and a trunk kit. The newly developed Super Sport pattern gives a nod to the speedcentric builders of the time with an overall look that emulates racing stripes, with dual stripes going down the middle, utilizing triangular sections on both the seat back and bottom.





Gel Epoxies

Permatex, Solon, Ohio, presents 1-Minute and 5-Minute Gel Epoxies that make epoxy use easier and guess-free. The epoxies feature a non-drip formula for easy, mess-free application and a blue dye indicator that disappears when the resin and curing agent are fully mixed and ready to use. Both epoxies can be used when bonding to metals, hard plastics, ceramics and more, and do not require clamping.



Front Brake Kits for Drag Racing Strut Spindles

Wilwood Disc Brakes, Camarillo, California, presents front Brake Kits for drag racing struts with spindlemounted wheels. The lightweight systems weigh less than 6 pounds per wheel and include a Dynalite billet aluminum single-piston caliper, 10-inch drilled rotor, hat, brackets, brake lines and hardware. The kits deliver supplemental braking on cars using rear brakes and parachutes, and are available for popular **AFCO** and **Santhuff's** drag racing struts with various wheels.



Adhesive Transfer Tape Design Engineering Inc. (DEI),

Avon Lake, Ohio, presents doublesided Adhesive Transfer Tape. The aggressive, pressure-sensitive tape is designed to bond substrates while maintaining a high tack level, and can be used to attach heat and sound barrier materials without the need for a spray adhesive. Available in single- or dual-roll packs, the tape measures 3 inches wide and comes in 32-foot lengths. Providing a highstrength, long-term bond, it can be used for scrim reinforcement and is temperature-resistant from minus-22 to 248 degrees.


Chevy Big-Block Clutches

Centerforce Clutches, Prescott, Arizona, presents an SST (Solid Street Twin) 10.4-inch Twin-Disc Clutch and Flywheel Kit that is compatible with the Chevrolet ZZ454 big-block engine that features a 1-1/8-inch, 26-spline transmission. The SST is a true twin-disc clutch, designed for vehicles producing up to 925 pound-feet of torque. Twindisc clutches spread the torque load between the two clutch discs, offering longer clutch life and smoother engagement. The SST also utilizes solid hubs to reduce the rotational weight on the input shaft for quick, clean shifts.

Subaru Fuel Pump Module

DeatschWerks, Oklahoma City, presents a new X2-Series Fuel Pump Module, now available for 2008.'21 Subaru WRX/ STI applications. The system includes accommodations for two pumps, integration of a return fuel line and retention of all the functionality of the OE module. The DW X2-Series



Subaru Module consists of a top-hat, center section and OE lower bucket.

LS Pistons

Wiseco Performance Products, Mentor, Ohio, presents a new Piston for use with aftermarket 3.900-inch-stroke crankshafts in Chevrolet LS engines. With a bore size range from 3.780 to 4.185 inches, the piston offers potential displacements from 350 to 429 cubic inches and is forged in-house from race-proven 2618 aluminum alloy. It is available with a variety of dome configurations that can provide a compression ratio from 9.1:1 up to 13.4:1, allowing use in naturally aspirated and powerboosted applications.





Tire Inflator

Lucas Oil Products,

Indianapolis. presents its Tire Inflator. The easy-to-use. non-flammable tire inflator and sealer is safe for use on all passenger vehicles. It quickly seals punctures and reinflates damaged tires. VOC-compliant in all 50 states, it is safe for use with tire sensors.



Protective Sleeves

Heatshield Products, Escondido, California, presents new Utili-Shield Sleeves, designed to protect fluid line and wiring harness junctions and couplers from heat damage. An alternative to sleeve-style thermal barriers that cannot cover T-shaped and 90-degree junctions/ couplers in electrical and fluid systems,

the sleeves handle up to 1,200 degrees of constant heat and 2,000 degrees of intermittent heat. They use the same specially formulated volcanic rock-based fibers as the company's HD Lava and Stealth sleeves.

C/K Truck Front Suspension

Detroit Speed, Mooresville, North Carolina, a **Holley Performance Products** brand, presents the SpeedMAX front suspension system for 1973-'87 GM C/K truck applications. Featuring exclusive suspension geometry for improved handling and ride quality at a lowered ride height, the 100% bolt-



on system is based on the later-model GMT800 (1999-2006) Silverado truck application. It utilizes an OE-style brake design, allowing for stock or aftermarket brake options. Versions are available with non-adjustable, single-adjustable and dual-adjustable shocks. **TS**

By Brett Solomon

When it comes to EV racing, the league most comparable to Formula 1 is the ABB Formula E FIA World Championship—Formula E, for short. (Photo courtesy Jaguar Racing)

New technologies & new collaborations begin to emerge.

Julius Bär

JUAR

s folks involved in the performance aftermarket, when we think of building a race car, we think of all the people behind the scenes that make it happen—the fabricators,

engine builders, chassis designers, suspension gurus and other specialists who come together to create a winning car.

Perhaps your shop has delved into the world of racing, working daily to help customers achieve success. Well, those same efforts and relationships are required in the new world of electric racing as well.

The engineering behind the components doesn't look much like what you'd find in a typical North Carolina NASCAR shop in the 1970s. If Smokey Yunick were alive today, he might not immediately recognize electric vehicle technology—but he would appreciate the spirit of gaining a competitive edge through experimentation, cooperation and pushing the limits of creative thinking.

FAST CATS

When it comes to EV racing, the league most comparable to Formula 1 is the ABB

Formula E FIA World Championship— Formula E, for short. While slowed a bit by COVID, its growth rate remains on a steep upward trajectory.

The worldwide series includes a stop this July in Brooklyn, and James Barclay, Jaguar Racing Team director, notes that Formula E ranks as the third most popular motorsports property globally.

"It is also the fastest-growing," he adds. "Its fandom places the series ahead of many other longstanding motorsports series and events. It is the first sport with a certified net zero carbon footprint since inception not just motorsports."

Jaguar began EV racing in 2016.

"We were the first premium manufacturer to join Formula E," Barclay says. "We chose Formula E because we wanted to return to racing, as racing is part of Jaguar's DNA. Racing has always been about proving technology on the racetrack and bringing it to our consumers."

To keep costs from skyrocketing, the chassis and battery are shared components among race teams.

"Formula E is a real-world test bed for Jaguar to make fearless progress in the

future of electrification," Barclay continues. "As an official manufacturer team in Formula E, Jaguar Racing designs its own powertrain, which includes the motor, transmission, inverter and rear suspension. To control costs, the carbon fiber chassis and battery are common components and the same for all 12 teams. This allows the focus to be on developing electric vehicle powertrains, which are efficient and lightweight and will improve the performance and range of future Jaguar Land Rover electric vehicles."

In the Formula E rulebook, there are some items that teams are allowed to modify and develop, and some items that must be left unchanged. The aerodynamics are similar among the cars, but the teams can bring the electrification technology to the next level.

"We can develop the powertrain—the electric motor, the inverter, the gearbox and all of the software and controls. They're the brains that drive that powertrain to gain maximum performance," Barclay says. "From last



season to this season, we have refined over 1,000 components. It is essentially a new race car every year, and we bring what we learn to our consumer vehicles. For example, we took the knowledge we learned last year from pushing the envelope on the racetrack and applied it to the Jaguar I-PACE. This correlated to a 20-kilometer improvement in range on the consumer vehicle."

MICRO FOCUS-ED ON RACING

Some of that Jaguar engineering was done with engineering partner Micro Focus. Vehicle electrification is changing the type of company we think of

> Formula E ranks as the third most popular motorsports property globally. (Photo courtesy Jaguar Racing)

when it comes to delivering performance. Micro Focus is a large enterprise software provider.

Since it develops software for most Fortune 100 companies, you would think creating software to make race cars go faster would be easy. But not so fast! Joining as the team's official digital transformation, business resiliency and analytics partner, Micro Focus supports Jaguar Racing's push for more points, podiums and wins at the track.

Initially, Micro Focus is looking to provide technology from its standalone business unit, Vertica, delivering high-performance advanced analytics and machine learning to ensure the Jaguar team performs at top speed for winning results.

Micro Focus also conducts cyber resilience assessments for Jaguar to help the team identify potential risks and gaps in its cybersecurity posture, and plans to deliver tools and support to help accelerate the team's software development as well.

(After all, as Yunick famously said, "There are two types of racers—cheaters and losers!")

"Micro Focus joining forces with Jaguar Racing is a natural alignment of like-



minded organizations that share a track record characterized by pragmatism, consistency and innovation," says Eric Varness, chief marketing officer, Micro Focus. "Our *high-tech, low-drama* approach to delivering results will provide a number of synergies, including speed, agility and insights that will translate to even better performance all around."

Barclay says Jaguar appreciates the partnership.

"With their specialist software knowledge, we are excited to work together and achieve great results on track."

PITCHING IN

In addition to Micro Focus, Jaguar Racing

TESLA RACING? MEET UNPLUGGED PERFORMANCE

Unplugged Performance happened to be on *THE SHOP*'s radar back in 2014 when it released a body kit for the Tesla Model S. Now, the company is becoming the tuner synonymous with Tesla electric car performance.

The company is located in the same industrial complex as Tesla's offices in California, and Unplugged Performance is proficient in tuning all Tesla models, including the Model 3.

The majority of the tuning is focused on weight reduction for street vehicles, but track vehicles can benefit from maxingout the software, battery and motor capabilities as well.

One place the company likes to race is at the Pikes Peak International Hill Climb. The company's hot shoe of *Road* & *Track* fame is Randy Pobst.

The team had high hopes for the 2020 event, but a crash during initial runs put its Tesla in the pits and jeopardized the entire week. After all, OEM parts are so difficult to come by that an additional Model 3 was purchased just to use as a parts bin.

"While many may have written both us and Randy off, we immediately assessed the damage and by working tirelessly through the next 48 hours, we managed to get the car fixed and ready to allow Randy another chance at Pikes Peak," recalls CEO Ben Schaffer. "It was done thanks to our team's efforts



Unplugged Performance used a setback at the 2020 Pikes Peak International Hill Climb to learn about its EV racing team, returning to the event last July to win the Exhibition Class.

and also because of people like Joe Brenner of Porsche Colorado Springs, who allowed us the use of his body shop."

Pobst drove the Model 3 into a rock wall on Tuesday. By Saturday night, the car was doing donuts in a parking lot, followed by full-on figure-eights at a private airport, Schaffer says.

"Finally we were ready, and Randy gave his best at the race on Sunday. While the car performed well and as intended, the crash caused some internal damage to the battery pack, even though at first everything seemed fine. As a result, we tackled Pikes Peak



at about half-power, but managed to make the summit in the end."

The team wasn't satisfied, and immediately began working toward 2021. The result last July?

Driving an Unplugged Performance Tesla Model S Plaid, Pobst won the Exhibition Class at the 2021 Pikes Peak International Hill Climb, posting a time of 6:57.220—a lesson in perseverance and staying committed to your goals. —Brett Solomon



Competitive EV racing is built on partnerships just as motorsports has always operated.

collaborated with leading materials science company Dow. After the first season working with the team, Dow joined as an official partner.

"With over 100 years of experience in automotive, Dow brings material expertise and a pioneering spirit to the Jaguar Racing team through its MobilityScience platform and its polyolefin, polyurethanes, acrylic, specialty chemical and silicone technologies," the company states.

Yet another partner is drivetrain specialist GKN.

"As Jaguar Racing's official eDrive partner, we were involved in the development of the electric powertrain for the I-TYPE 5 race car," according to GKN officials. "Our software engineers will also be integrated into Jaguar Racing's headquarters, providing extensive knowledge and preparing software developments for improved performance and functionality throughout the season."

Jaguar Racing is working with the company to develop advanced powertrain cooling technologies for both the inverter and electric motor in pursuit of enhanced system efficiencies.

"This will involve theoretical and practical evaluation of new cooling technologies to help the team make a performance step for future seasons," says GKN. "The partnership with Jaguar Racing will also feed into the development of our worldleading eDrive technologies for electrified road vehicles."

The foray into vehicle electrification and racing leads to unlikely partners developing new technologies. **TS**

BRETT SOLOMON is a freelance writer based in New York City, specializing in the mobile electronics market.

EV PERFORMANCE HITS THE PRI SHOW



A collection of electric performance and motorsports vehicles were on display in the EV Performance Zone at the PRI Trade Show in Indianapolis. (Photos courtesy PRI)

Production Tesla Model S Plaids run 9-second ETs at drag strips. Electricpowered cars routinely compete at drifting events. Electric SUVs will battle in the 2022 Race of Champions series.

Electric powertrains are proving their power, as shown by the EV Performance Zone display at the 2021 PRI Trade Show, held Dec. 9-11 in Indianapolis.

Attendees strolled through Wabash Ballrooms 1-3, viewing electric race vehicles and components, and chatting with experts from leading companies in the performance EV space.

"The PRI Show is about embracing new technologies and helping the industry stay ahead of trends," says Dr. Jamie Meyer, PRI president. "Electric vehicles are an important emerging trend in the performance and racing industries... and this is a place to learn about the rising market segment and discover how your company can take advantage of it."



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Joe Johnston p.44

Training p.50 / Polyurethane p.52

exe

A WORKABLE SOLUTION

Tips for serving commercial customers.

Fleet/commercial business is very consistent compared to retail, but you need to go find it. (Photo courtesy LTA Mfg.) I

leet and commercial work continues to be attractive to shops looking for a reliable, consistent customer base. After all, if one is good then 10 must be better.

Commercial customers are in the market for a variety of aftermarket upfit items, ranging from safety to utility to appearance products. Maybe more importantly, however, they are also seeking dependable partners who can consistently deliver quality and service, and will come through in a pinch.

If building a commercial customer base is on your resolution list this new year, suppliers have some ideas on how to get started, pitfalls to avoid and new products to target.

PRODUCTS THAT WORK

In many cases, it may be up to you and/or your sales team to spread the word on the aftermarket products and services available to fleet operators and other commercial customers, as opposed to business coming to you right away.

If that sounds like a lot of work, expect the extra effort to pay off in the form of reliable repeat sales.

"Fleet/commercial business is very consistent compared to retail," notes David McInturf, national fleet sales manager for

RANCH)

LTA Manufacturing LLC. "Dealing with one individual or department can mean a consistent flow of business throughout the year—but you need to go find it."

By Jef White

He suggests trips to municipal and police departments, as well as local contractors' headquarters, to introduce yourself, your products and your services.

Other benefits of dealing with commercial clients, he adds, are that they are often organized and educated on the types of products they're looking for and the budgets they can work within, and many have good relationships with other local public safety organizations and departments that could turn into additional customers for you.

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LTA Mfg.'s WorkForce fiberglass work truck topper is designed to match the contours of the vehicle. (Photo courtesy LTA Mfg.)

When approaching fleet sales, suppliers also say it's important to offer products that live up to their billing.

"For the work truck market, and especially those shops servicing fleets, we are committed to providing a cover system that can securely store all of your work gear," says Paul Chapman, founder & CEO of Stowe Cargo Systems. "We have sold units to different types of fleets around the country, including law enforcement and utility companies. When they are impressed with the quality and protection the systems offer, they'll recommend them to others in their field."

In some cases, cooperative efforts can serve as the product in question. LINE-X Fleet Solutions is a program that helps connect upfitters with fleet management companies on local projects.

Fleet professionals rarely find off-the-lot solutions. (Photo courtesy A.R.E. Accessories)

The needs of work truck owners and users can vary depending on their type of work, environment, materials and equipment. (Photo courtesy A.R.E. Accessories) "The big difference is that the shop doesn't have to hustle for this business it's all pre-negotiated at the corporate-tocorporate level and handed down to them," says Henry Chedraoui, LINE-X director of national fleet.

Regardless of how you connect, it's important to deliver reliable, customizable products to commercial customers.

"Shops can specialize in this segment by meeting various criteria that small-, medium- and large-sized fleets are looking for," says Jose Reyna, national fleet & com-

HOT FLEET PRODUCTS

HOT PRODUCT: A.R.E. DCU MAX Aluminum Commercial Truck Cap FEATURES & BENEFITS: Handmade in Ohio; customized for the professional work truck market; new levels of durability, quality and design; hundreds of storage, security and electronics options; heavy-duty framing; commercial-grade aluminum skin; heavy-duty full double rear door. *A.R.E.* Accessories Jose Reyna

National Fleet & Commercial Sales Director

HOT PRODUCT: LINE-X Fleet Solutions FEATURES & BENEFITS: Upfitting service directly through fleets; quick response when bidding; multiple markets covered for the same project(s); quick turnaround times; national warranty programs; measurable savings; centralized processing/billing/status reporting.

> LINE-X Fleet Solutions Henry Chedraoui Director of National Fleet

HOT PRODUCTS: StorMaster/ LoadMaster

FEATURES & BENEFITS: Drawer and slide-out combo for truck beds; customizable sizes and dimensions; LoadMaster slide-out clears the wheel wells and can be up to 57 inches wide; aluminum heavy-duty version; popular in construction, law enforcement and pest control industries.

> LTA Manufacturing LLC David McInturf National Fleet Sales Manager

HOT PRODUCT: The Stowe Cargo System: The Perfect Truck Bed Cover FEATURES & BENEFITS: Two-in-one toolbox and tonneau cover that is custom-built for specific truck models; designed to keep gear secure and dry; watertight and durable; built with automotive OEM-grade locks and seals, along with aluminum framing and composites.

> Stowe Cargo Systems Paul Chapman Founder & CEO

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mercial sales director for A.R.E. Accessories. "Work truck owners and users can have specific needs that vary depending on their type of work, environment, materials and equipment. Fleet professionals rarely find off-the-lot solutions, so our commercial partners focus and specialize in fabrication and customization while going the extra mile to design the best equipment to fit their customers' needs."

SUPPLY LINES

While we all may be sick of talking about supply chain issues, they are unfortunately here to stay—at least for a while longer.

"Supply chain challenges are commonplace for manufacturers today," says Chapman. "Planning for longer component lead times, maintaining higher inventory levels and relationship management are all keys to meeting fleet customer delivery expectations."

Cooperation is vital to keeping projects moving.

"Today's work truck supplier must have excellent long-time company support partners with a realistic *finger on the pulse* objective, thus continuing to go above and beyond to conquer these challenges, while seeking out products and focusing on their own customization and fabricating talents," Reyna says. "A.R.E. and Truck Hero will continue to keep DCU MAX aluminum truck caps ahead of these strains with aggressive strategies, relying on our own experts to help offset these current supply issues."

As businesses themselves, many fleet customers will understand and maybe even expect routine delays, if you can identify them early.

"No doubt, the recent market shortages at every level have put a damper on business growth," Chedraoui says. "This is where honest dealings come into play. Tell the fleet management companies and fleet managers exactly what it is and how long it's going to take—they'll understand and work through it and around the delays."

Some good news: strong commercial relationships can offset some supply chain issues, McInturf reveals, because much of the work can be planned ahead of time.

"It's typical of fleet work to have longer lead times," he says. "They are often purchasing their vehicles in the fall or the spring, so reach out to them and get on their schedules. Be ready and be proactive—*This is what we did last year*. Then, offer consistent service, and be there to meet their needs."

BACK FOR MORE

With commercial customers, relationships matter. Shops can rely on partnerships with suppliers to earn trust and build their brand.

"The Stowe Cargo System is a solid product for the work truck market, given its ease of installation, the automotivegrade locks and seals, the easy access it provides to the bed and toolbox, and the fact that all gear can be kept secure and



Atlis is teaming with EAVX to develop electric commercial work truck products. (Photos courtesy atlismotorvehicles.com/xp)

ATLIS, EAVX TEAM UP ON ELECTRIC WORK TRUCK EFFORTS

Atlis Motor Vehicles, a startup mobility technology company, recently announced the signing of a Strategic Collaboration Agreement with the JB Poindexter & Co. business unit EAVX to develop electric commercial work truck products that integrate EAVX bodies and accessories with the Atlis XP platform.

Atlis is developing a fully electric vehicle platform, proprietary battery cells and packs, and the necessary charging infrastructure to recharge a 500-mile range battery in less than 15 minutes, according to the company. Production on the Atlis XT pickup and XP platform will begin this year.

"We see electric commercial work trucks as a huge opportunity," says Mark Hanchett, CEO of Atlis Motor Vehicles. "Less than 1% of light-duty commercial vehicles are electric, but that number is predicted to grow to at least 30% by 2030 due to battery cost reduction, government incentives and mandates for zero-emission trucks and industry partnerships, such as this one between Atlis and EAVX." The proposed objectives of the collaboration include:

- Develop the next generation of service and utility vehicle platforms for the North American market
- Develop the next generation of commercial work truck accessories for the Atlis XP platform
- Develop the next generation of commercial dry freight, refrigerated, platform, and dump vehicle platforms for the North American market

"As our commercial fleet customers develop plans to convert their fleets to EVs, having a partner like Atlis is beneficial, due to their innovative battery technology, vehicle range and rapid charge time," says Mark Hope, EAVX chief operating officer and general manager. "Working with Atlis will enable us to offer electric work trucks and accessories that will have industryleading features and will help expedite the adoption of EVs in the commercial vehicle market."





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Commercial clients need products that deliver as advertised. (Photo courtesy Stowe Cargo Systems)



Suppliers become partners that help shops grow their fleet business. (Photo courtesy Stowe Cargo Systems) $% \left({{\left[{{{\rm{S}}_{\rm{B}}} \right]}_{\rm{A}}} \right)_{\rm{A}}} \right)$





The more you make day-to-day operations easier for fleet managers, the more business you'll get. (Photo courtesy LINE-X Fleet Solutions)

dry," says Chapman. "We're working with Keystone Automotive Operations to establish the Stowe brand at shops around the country."

Reyna notes that A.R.E. and Truck Hero have a dedicated team focused on fleet work, highlighting the companies' experience in the commercial sectors, their dedicated tools to make jobs easier for shops, and production and delivery capabilities for fleets.

"The key to establishing long-term relationships with fleets is to make sure you understand what their needs are and to make sure their fleet vehicles are out on the road as soon as they take possession of them," he says.

There are certain basics commercial customers will expect from you and your team, notes Chedraoui from LINE-X.

"Stay honest and straightforward. Let them know the way it is with time and money," he advises. "Honest dealings matter a lot to fleet managers—that's how

you build a solid long-term relationship. The more you make their dayto-day operations easier, the more you'll get business from them."

LTA's McInturf says you can find and start to build relationships with customers throughout your community.

"Most local dealerships have a commercial division, so you definitely want to get in front of those people and get to know them," he suggests. "Also, get involved with local business development clubs and organizations. There are associations out there for certain types of businesses. Check out schedules at the local convention center or anywhere business groups might meet. Your chamber of commerce can help as well." **TS**

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IOE JOHNSTON

His lessons & legacy live on at Tops and Trends in North Carolina.

By Josh Poulson & Joey Johnston

t was an unexpected day in 1982 when the management team at Hanesbrands informed Joe Johnston his engineering position was being eliminated due to corporate restructuring. After delivering the news, the managers expected Joe to be surprised and upset—especially since he and his wife, Betsy, had just recently purchased a new home.

Instead, they were shocked when Joe stood up and said, "That's great!" When asked why, he explained that now he could devote his full time and attention to his fledgling automotive business.

INTRODUCTION TO RESTYLING

Joe was born in Statesville, North Carolina, on Nov. 21, 1940, to Joe and Mary Johnston. As a boy he worked alongside his father, who was a mechanic.

He loved to build and race cars, and after graduating from Statesville High School he worked at Modern Electric as a stock boy and outboard motor mechanic.

Joe had always been mechanically inclined, with a knack for solving problems and finding opportunity. Maybe that was how he was able to draw Betsy Harris to his side. They fell in love and married on July 31, 1964.

Betsy was in the medical field and loved helping people and the excitement that filled an emergency room on any given night. Joe served honorably in the Navy during the Vietnam War. Over the years Joe spoke to the many values the Navy helped teach him including discipline, teamwork and problem solving. He often praised how the G.I. Bill afforded him the opportunity to earn his engineering degree and purchase his first home.

In 1969, shortly after he left the Navy, Joe and Betsy moved to Greensboro, North Carolina, where they worked and Joe attended college. In between jobs and school, he would find time to tinker on projects—often cars, which he had a love for.

It was this itch that introduced him to the restyling industry that ultimately became his lifelong career.

It started when he bought a 1976 Pontiac Grand Prix. Joe wanted a pop-up sunroof; however, they weren't available as a factory option. Most people would have accepted that reality, but not Joe. He researched a company in Atlanta that sold the sunroof he wanted. This was right up Joe's alley—a problem with a hands-on solution requiring mechanical aptitude! There was only one problem: to purchase the sunroof you had to be a distributor, and to be considered a distributor you had to buy 12 sunroofs.

What was an industrial engineer with a full-time job going to do with 11 extra sunroofs? Well, if you knew Joe, you knew this was not a roadblock, but an opportunity.

> Joe Johnston, who passed away last August at age 80, became a full-time restyler with his Tops and Trends business in North Carolina in 1982.

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JOE JOHNSTON



Joe handled installations while his wife Betsy made sales calls to local dealerships.

Looking back on his life, Joe was often tackling challenges like these. He loved auctions where he would buy furniture, typewriters or other items to refurbish and sell for a profit.

One time, Joe came home with a van full of clothes from a local bankruptcy auction. When Betsy asked him "What are you going to do with all of these clothes?" he simply said, "Well, sell them, of course!" And he did exactly that. He even learned to sew along the way and made a beautiful dress for Betsy as a surprise.

It was this history of finding opportunity and utilizing his mechanical abilities that made the notion of selling and installing sunroofs a seemingly easy task for a guy like Joe.

BUILDING A BUSINESS

His business plan was simple: go to local dealers and ask them if they would consider putting sunroofs in some of their cars. As Joe was still working with Hanesbrands at the time and traveling extensively, he approached Betsy for her help in contacting local dealerships.

The feedback she received was solid and they decided to move forward. Joe removed the passenger seat from his 1974 Honda Civic and drove to Atlanta Auto Accessories. He worked alongside a technician installing several sunroofs, including one in his Honda Civic. He then drove back home with the other 11, installing one in his Pontiac.

When Joe wasn't traveling, he would install sunroofs in the evenings after work

at local dealerships. His routine was simple as he pulled on a pair of coveralls over his business attire, removed his tools and products and began measuring, cutting and working his craft.

Joe and Betsy decided she would begin approaching additional car dealers to drum up more demand for their next sunroof order. Even though Betsy was no doubt very skilled in her medical field career, it became apparent her true calling was sales.

The couple kept their full-time jobs for several years while nurturing their small new venture until that fateful day in 1982.

In 1988, Tops and Trends was featured as one of *Inc.* 500 magazine's top 500 fastest-growing companies in the country.

1988 INC. 505



Creativity and quality craftsmanship helped build the business.

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JOE JOHNSTON



The business started when Joe went looking for a sunroof for his Pontiac Grand Prix and could only get one if he purchased 12.

This was the day the business, now known as Tops and Trends, began to flourish.

Shortly afterward, they moved into their second home, which Joe helped design and build. Complete with an oversized two-car garage with HVAC and upstairs storage, they now had more room for installations and inventory.

The company quickly outgrew the space, however, and in 1984 friend and local Ford dealer Paul Ciener built and leased a commercial building to the Johnstons. This allowed them additional space for growing product lines like Targa tops, T-tops, ground effects, gold packages and power sunroofs, and gave them the ability to hire their first employees.

CREATIVITY & WORKMANSHIP

The success of Tops and Trends (topsandtrends.com) was due in large part to hard work and Joe's creativity and quality workmanship. He was a perfectionist and his problem-solving abilities and napkin sketches were infamous.

He loved teaching his craft and found satisfaction in helping technicians and manufacturers overcome challenges—yet he was never one to gloat. Betsy often capitalized on this, which would sometimes lead to Joe asking, "You told them we could do *what?*"

Joe and the team worked long hours to meet customer demands. It wasn't uncommon for employees arriving for work in the morning to find Joe sleeping on the couch in his office.

He often said you could either work hard

or work smart and most probably be successful, but do both together and success was all but guaranteed.

With that said, it still came as a surprise when, in 1988, Tops and Trends was featured as one of *Inc. 500* magazine's top 500 fastest-growing companies in the country. That same year the company moved into a new building—again designed by Joe and built by Ciener. The building still serves as the headquarters for the company's threestore operation in North Carolina.

Over the years, Tops and Trends ventured into many of the new products introduced into the aftermarket including leather interiors, simulated convertible tops, graphics, electronics and truck accessories. Joe understood no product was perfect, and he told employees the mark of a true craftsman was to take a quality product that was not 100% and make it such.



Over the years, Tops and Trends ventured into many of the new products introduced into the aftermarket including leather interiors, simulated convertible tops, graphics, electronics and truck accessories.

Joe's friends, family and associates always appreciated his grounded philosophy and his ability to use humor to teach life's lessons. While Joe's passing in August left a void for many, those who knew him best find comfort recalling one of his many expressions or jokes and his love for life and the business he created. **TS**



JOSH POULSON is the principal of Auto Additions in Columbus, Ohio, which was named Restyler of the Year, 2012-'13. Auto Additions offers a complete line of product

upgrades including 12V and appearance packages with a specific focus on the dealership segment. Josh is chairman of the SEMA PRO council and was named 2015-'16 Person of the Year at the 2015 SEMA Show.



Joe was mechanically inclined, with a knack for solving problems and finding opportunity.



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Training Day

Ongoing employee education should be part of your company culture.

Twagine catching up on the local TV news when you learn that the coach of your favorite sports team has announced something unusual. "Our players have plenty of experience at their positions, so we no longer need to practice. We'll just save our energy for the games."

WHAT?? Passionate fans would have him kicked out of town faster than you could say "dumb-move." Yet, as the leader of your (business) team, isn't this exactly what happens in your own organization?

When was the last time you discussed sales techniques or ideas for improving customer service with your team? Most shops in our industry have employees who have been part of the business for varying lengths of time, with some veterans and some newbies.

Regardless of their levels of professionalism or experience, however, everyone can use a little refresher now and then regarding



Many entrepreneurs view employee training and development as more optional than essential—a viewpoint that can be costly to both short-term profits and long-term progress.

customer interactions, conducting daily operations and understanding their roles in maintaining and growing the business.

In addition, especially during these times when hiring people is so challenging, a structured training program is often an incentive for quality people to stay with an organization. People who receive training and feel they are learning and growing with a company are much more likely to not only stay, but also gain the confidence to become more engaged with customers and invested in the products and services you offer.

REGULAR OCCURRENCE

Most business owners tell me that they train new employees, but that is often the last time any sort of structured development is conducted. Training, however, should not be limited to new employees.

Every business should develop some sort of ongoing and continuous training for all staff members.

Remember, this is *your* team, and the way employees conduct themselves is a big part of how customers will perceive your brand.

What do the first impressions of working with your staff tell customers about your business? Could a basic Sales & Customer Service training program give you an advantage over local competitors? It is very uncomfortable to think that they may be investing in training people while you're not.

When was the last time you discussed sales techniques or ideas for improving customer service with your team? So, what does a training program look like? For starters, a quality training program is just that—an actual program designed to be more than just a one-time event.

Keep in mind that a new employee orientation is usually created as an introduction to the organization, the specific job and how the business operates. A training program for ongoing staff development, however, is intended for everyone in the organization. Each part of your program should focus on specific areas of the business like sales, marketing, vehicle procedures, work being conducted in the shop and techniques for customer follow-up.

Identify a few of the areas that drive you nuts as an owner and address them through training. Here are a few possibilities:

- How does your staff handle incoming customer calls?
- Is your staff skilled at showing new products to customers that could be added to the sale?
- Who answers email inquiries and how are they handled?
- Do you have procedures in place for presenting the finished vehicle to the customer?
- How is your showroom or lobby merchandised?
- How do you promote the business and your suppliers/vendors at live events and shows?
- Do you have a system for following up with customers after the work has been completed?



A structured training program is often an incentive for quality people to stay with an organization.

• What are the shop's social media guidelines?

PUTTING A PROGRAM IN PLACE

If you have never conducted regular training for your people, it may seem a little overwhelming at first. We have created very basic aftermarket industry-specific training programs for many companies, and there are a number of generic training companies that can help as well.

If you know what to look for, you can find a lot of great information online. Also, talk with others in the industry to see what type of training they've used and benefited from.

To get started, keep it simple and don't try to make it too involved. You might



Everyone can use a little refresher now and then regarding customer interactions, conducting daily operations and understanding their roles in maintaining and growing the business.

simply begin by getting your team together for a 30-minute meeting each week. Let your staff know ahead of time the topic to be discussed, and ask them to bring related information and ideas.

With each person doing a little research, you might be surprised at the amount of helpful information that is gathered. This also helps employees take ownership of the training.

Then identify the areas you would like to improve upon and have the group discuss various ways of upgrading your current situation. The entire team should then use the remainder of the week putting these specific ideas and techniques into practice.

Unfortunately, many entrepreneurs view employee training and development as more optional than essential—a viewpoint that can be costly to both short-term profits and long-term progress.

Whether you decide to conduct some ongoing staff training every week, each month or per quarter, any training is better than no training. Practice makes perfect, coach! **TS**



JHAN DOLPHIN is Vice President of Michigan-based Prefix Corporation, a supplier to the Auto and Aviation industries for advanced concept vehicles, prototypes, and contract manufacturing for

a variety of markets. Jhan has authored hundreds of articles and regularly speaks to industry groups on a wide range of businessrelated topics. He can be reached in his Chicago office, through JRobertMarketing.com.

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rom off-roaders to racers, drivers who love their vehicles truly want to *feel* the performance every time they get behind the wheel. Polyurethane suspension bushings and chassis mount kits help deliver that sensation.

Replacing OE rubber with upgraded polyurethane components provides increased control and feedback in a strong product that's built to last. For shops it's a way to quickly and easily make a real change to stock vehicles for owners seeking a little something extra.

Suppliers give updates on hot polyurethane products, unexpected benefits of retailing and installing the kits, and how the market has kept pace with the latest vehicle introductions.

Zeder USA Ontario, California *Sean Crary* Business Development Manager



Polyurethane products can get customers back on the road quicker with less pain in the wallet. (Photos courtesy Zeder USA)

Our hottest polyurethane suspension product is ...

... our dual durometer, bonded, higharticulation Giiro bushing. The applications for such a product are immense. We currently use it in our complete upper control arm products and it's being integrated into our truck and Jeep control arms quickly as well.

Its best features include ...

... high Y-axis stiffness with increased X-axis articulation. This results in an increase in drivability for lifted Jeeps and trucks with increased off-road prowess. Articulation numbers are in the 30-degree range.

How have recent supply chain issues affected the polyurethane suspension products market?

It has been a benefit to companies like Zeder. We do not suffer quite as badly as others in this segment, since we diversified our manufacturing and logistics years before the pandemic.

We do have some of the transportation pains that the world shares, but not as bad as some.

What's an unexpected benefit for shops that offer polyurethane suspension products?

The biggest benefit is that you get your customers back on the road quicker and with less pain in the wallet when compared to installing rubber products back into the vehicle.

The supply chain for OE rubber products has seen the biggest hit in the last two years. Many lead times are exceeding nine months. With polyurethane products, you can get them much quicker and provide your customer a better-performing product that will last years longer.



Offering polyurethane suspension products in the off-road genre creates an opportunity to upsell other products associated with lifting these vehicles. (Photos courtesy Synergy Manufacturing) When a customer is looking to replace and/ or upgrade a suspension component in a Jeep/truck/SUV, they are often also looking to improve the appearance of the vehicle with some type of lift system. (Photos courtesy Synergy Manufacturing)

Quite a Ride

How has the polyurethane suspension products market adapted to the latest new-vehicle models and designs?

The evolution in vehicle design fits well with the mindset of polyurethane engineering companies like Zeder. We have products developed for the most popular Tesla applications, and new products in mind for Rivian and Atlis.

Polyurethane composition lends itself well to applications where NVH (noise, vibration, harshness) becomes more of a concern. Synergy Manufacturing San Luis Obispo, California *Dave Schlossberg* President/CEO

Our hottest polyurethane suspension products are ...

... our complete lineup of suspension control arms for Jeep JK/JL/JT and Ram featuring our dual durometer polyurethane bushings, and our dual durometer suspension control arm joints.

Their best features include ...

... the control arm kits feature Synergy Dual Durometer Bushings (DDBs), which are a maintenance-free design focusing on performance, flex, longevity and ride quality. Synergy DDBs require zero grease/ maintenance and are self-centering, with 30 degrees of misalignment. The Synergy DDBs feature an outer soft durometer that acts as a bushing cushion and flex material. The inner, harder durometer polyurethane layer acts as the bearing surface that allows the free-floating inner sleeve to rotate, providing a maintenancefree, zero-bind bushing. The internal bushing ring separates inner and outer polyurethane layers to prevent inner sleeve gaping at extreme flex.

A direct replacement for many aftermarket control arms using OE Clevitestyle lower control arm bushings, the Synergy DDBs also feature Synergy Double Adjuster Sleeves Pinch Bolt Assemblies that allow for adjustment of control arm length without removing the control arm mounting bolt.

How have recent supply chain issues affected the polyurethane suspension products market?

The supply chain issues have impacted us negatively in regard to costs and lead

Polyurethane can be superior to rubber if engineered for specific applications by mitigating road noise and vibration better and being less affected by the elements. (Photos courtesy Synergy Manufacturing)



times. Due to environmental regulations and where raw materials are sourced, manufacturing these bushings domestically is extremely cost-prohibitive, so they are made overseas.

The transportation costs of moving goods across the Pacific Ocean over the last 24 months have increased 500% or more in some cases. These increased costs are amortized into the cost of goods (COGs) and passed directly on to us, the manufacturers and consumers, to absorb. The increased offloading times you have heard about at the domestic ports are real. Lead times have spun out of control. Now, stack the huge increased demand for products on top of the above-mentioned supply chain issues and you have yourself a big, big problem.

What's an unexpected benefit for shops that offer polyurethane suspension products?

The unexpected benefit of offering polyure-

thane suspension products in the off-road genre is the opportunity to upsell other products associated with lifting these vehicles. More often than not, when a customer is looking to replace and/or upgrade a suspension component in a Jeep/truck/SUV, they are also looking to improve the appearance of the vehicle. This oftentimes turns into increasing the vehicle's lift height so that a larger wheel and tire package can be installed.

This is an opportunity for the shop to upsell a customer all the things associated



Quite a Ride

with installing a larger wheel and tire combination. These upsell items and services can include performance suspension components (more than just simple replacement parts), shocks, wheels and tires, gears (differential ratio changes required with running taller tires), alignments and warranties.

How has the polyurethane suspension products market adapted to the latest new-vehicle models and designs? Synergy Manufacturing has adapted by

continuing to produce high-quality poly-

urethane suspension products for late-model Jeep and truck platforms. From what we have found, the OEMs are still continuing to use rubber-based polymers in all of their suspension components. This is likely due to the less-expensive costs compared to polyurethane, ease of manufacturing (already tooled and sourced) and a proven ability to mitigate road noise and vibration.

Polyurethane can be superior to rubber if engineered for specific applications by mitigating road noise and vibration better (through multilayered polyurethane designs) and being less affected by the elements such as heat, cold and UV light.

PROTHANE Motion Control Ontario, California *Art Niese* Marketing & Advertising

Our hottest polyurethane suspension product is ...

... our Chevy Camaro 2010-'15 Total Kit #7-2044, available in red or black polyurethane.



Quality performance urethane products are engineered to improve overall suspension performance and last longer than OE rubber. (Photo courtesy PROTHANE Motion Control)

Its best features include ...

... it uses PROTHANE's Pro-grade performance urethane and is a total chassis and suspension motion control solution. The kit not only includes all the necessary upgrade suspension bushing replacement items, but also sub-frame mounts. This gives the vehicle a complete improvement over weaker *street* rubber, to prepare it for competition.

How have recent supply chain issues

affected the polyurethane suspension products market?

For PROTHANE, the answer is not at all. All materials are made in the USA.

What's an unexpected benefit for shops that offer polyurethane suspension products?

Performance polyurethane—or *urethane*, for short—suspension products are still often misunderstood by consumers in regards to their benefits. Many consumers still need to understand that quality performance urethane products not only last longer than OE rubber, but are engineered to improve overall suspension performance.

How has the polyurethane suspension products market adapted to the latest new-vehicle models and designs?

PROTHANE products have always been a performance upgrade to the vehicle's bushing and mount longevity, alignment control and overall performance, no matter what the new-vehicle suspension design is. **TS**



🛞 RESTYLING PRODUCTS



Jeep Light Bar Brackets

Quadratec, West Chester, Pennsylvania, presents new Windshield Light Bar Brackets for 2018-'21 Jeep Wrangler JL and Gladiator JT models. Made from 10-gauge steel, the brackets easily mount up to 52-inch-wide LED bars at the top of the windshield and include optional A-pillar mounts to install additional lighting. LED light bar wiring can be run behind the

bracket for a clean, refined look. The brackets are finished with a light-textured powder coating for added durability and corrosion resistance.

Lifted Truck Spacer Kits Timbren Industries.

Toronto, presents Spacer Kits for pickups equipped with aftermarket lift kits. Spacer kits make it possible for Timbren SES kits to work effectively on lifted trucks, improving towing and hauling



performance. Each spacer kit comes with two 1-inch and two 1/2-inch spacers along with all the necessary hardware to allow customers to mix and match to achieve their desired ride height.



Jeep Performance Upgrades

Hypertech, Bartlett, Tennessee, introduces a variety of Performance Upgrades for upfitted Jeep Wrangler and Gladiator models. Available products include the Spectrum Power Programmer, In-Line Speedometer Calibrator

Module, REACT Throttle Optimizer and more, all designed to provide more power and versatility to Jeeps customized from mild to wild.

Classic Pushbutton Radio Retro Manufacturing,

Henderson, Nevada, presents its updated RetroRadio with a new pushbutton style featuring a squared-off edge for a more authentic look and feel. All of the bezels, faceplates and knob



sets fit and function as before, delivering a new look that adds another level of authenticity, giving customers a more period-correct aesthetic for their classics. The RetroRadio is compatible with all RetroSound Radio Motors, delivering all the features of a modern car stereo for classic vehicles.

Tar Remover

VP Racing Fuels, San Antonio, presents VP POWER T.A.R. Remover. Designed to remove tar, adhesives, rubber and bugs from vehicle finishes including clear coat paint, vinyl wraps, graphics, decals and Lexan windshields, the product deeply penetrates to eliminate caked-on rubber or tar without damaging the vehicle surface. Simply spray on and wipe off the biodegradable formula.





LED Series

HELLA Inc., Peachtree City, Georgia, presents its complete BLACK MAGIC LED Series of automotive lighting. Named 2021 AAPEX Best New Product in the Automotive Lighting category and a winner of a 2021 SEMA Global Media Award, the proven LED technology features a new, more powerful design in a full blackout appearance. Suitable for use in off-road applications, the product range includes 2.7- and 3.2inch Cubes, 6.2-inch Mini Light Bars, Slim Light Bars in 20-, 32-, 40- and 50-inch lengths, and a 21.5-inch Double Light Bar.



Wireless Winch Control Kit

WARN Industries, Clackamas, Oregon, presents a versatile Wireless Remote Kit for its 12V and 24V WARN Series G2 winches. The bolton solution provides users the ability to securely mount the receiver to the winch's control pack. It features easy plug-and-play installation, and lets users control the winch from up to 50 feet away. The sealed system includes a two-color LED for clear operator feedback, and a two-button activation sequence that guards against accidental power-ups. Kits include wireless transmitter, receiver, holster, bracket and hardware.



Concentrated Car Wash

Malco Products, Barberton, Ohio, presents KO Blue Car Wash, the latest in its line of professional detailing products. The versatile, concentrated car wash removes dirt, grease and grime from a vehicle's surface, leaving behind a clean, film-free finish. The foaming formula has a recommended dilution of 1:100, making it a cost-effective and versatile option for professionals and enthusiasts. It is available in 1-gallon, 5-gallon and 55-gallon sizes.

Bronco Leveling Kit

ICON Vehicle Dynamics, Riverside, California, presents a Leveling Lift Kit for 2021-up Ford Bronco applications. Offering clearance for larger tires, the kit consists of CNC-machined 6061 billet aluminum top



spacers and pre-load adjusters to yield approximately 3 inches of front suspension lift and 2 inches of rear lift to level the vehicle's stance. The result is full articulation, full steering range, and no-rub fitment for up to 35-inch tires on non-Sasquatch-equipped Broncos or up to 37-inch tires if Sasquatch-equipped.



ProMaster Spring Kits

Hellwig Products, Visalia, California, presents new Helper Spring Kits for 2014-'21 Ram ProMaster vans. The kits improve hauling of heavy loads for increased safety, stability and comfort by maintaining a level ride height. Kit design

features a single underslung leaf that is rated up to 1,500 pounds. The adjustable-rate spring with polyurethane bushings includes a powder-coat finish. Kits are available for ProMaster 1500, 2500 and 3500 models.

Safety Products

Metra Electronics, Holly Hill, Florida, introduces new Cameras and Accessories from iBEAM Vehicle Safety Systems by Metra Electronics. The new safety products include two Tailgate Handle Cameras designed to fit older-model Dodge Dakota or Chevrolet C/K pickups that provide an OE-style replacement handle with a highquality backup camera; a new Universal Micro Camera that can be used to add a side, front or rear-view camera to almost any vehicle; and a universal system for mounting iBEAM square-style cameras to rear windows.





Automotive Air Purifier

Lumileds, Farmington Hills, Michigan, introduces the new Philips GoPure GP5212 car air purifier that can quickly remove up to 100 different types of pollutants and neutralize unpleasant odors. The purifier's portable design makes it easy to use in any vehicle. The system features three-layer filter technology to quickly deliver clean, fresh air in minutes.

RESTYLING PRODUCTS



Pressure-Based Airbag Control

AccuAir Systems, Merritt Island, Florida, presents its new Pressure+ Upgrade Kit that provides pressure-based control to inflate and deflate airbags to certain pressure settings. The upgrade allows for pressurebased control within the ePlus app and uses the e+ ECU. The

system shows individual spring pressures and can be used in conjunction with a pressure sensor kit.

All-In-One Coatings Kit

KBS Coatings, Valparaiso, Indiana, presents its All-In-One Kit rust and corrosion prevention system. The userfriendly KBS Coatings 3-Step System consists of KBS Klean to clean surfaces, RustBlast to remove surface rust and RustSeal to seal metal against moisture. KBS Top Coater provides an attractive, durable, UV-stable permanent final finish that withstands dulling and fading caused by prolonged sunlight exposure.





Ceramic Trim Restorer

Meguiar's, Irvine, California, presents all-new Meguiar's Hybrid Ceramic Trim Restorer. The new formula renews, revives and protects unpainted exterior trim quickly and easily using advanced SiO2 technology. Use it to bring new life to unpainted exterior plastic, vinyl and rubber trim such as bumpers, moldings, door handles, rearview mirror housings, wheel wells and windshield cowlings.

C8 Wide-Track Package

Anderson Composites, City of Industry, California, presents its Wide-Track Package carbon fiber components for C8 Chevrolet Corvette applications. The nine-piece package fits 2020-'21 C8 Stingray and Z51 Corvette models. The package includes a wider front bumper assembly with splitter and



canards; 1-1/2-inch wider front fenders; door opening replacement frames with rocker panel splitters; 1-3/4-inch wider rear fenders; gas door; and a completely redesigned rear bumper assembly that includes a rear diffuser.



Nisan Mounting Brackets

RIGID Industries, Gilbert, Arizona, presents new LED Mounting Brackets for Nissan vehicles. The A-pillar mount kits allow for a clean installation of the company's high-output LED lighting products, including RIGID 4-inch 360-Series, D-Series or Radiance Pods. Made with stainless steel and featuring a UV- and abrasion-resistant powdercoat finish, the brackets fit 2005-'15 Xterra, 2005-'12 Pathfinder and 2005-'20 Frontier models.



Ram Front Bumper Light Bar Oracle Lighting, Metairie, Louisiana, presents the Rebel/TRX Front Bumper Flush LED Light Bar System for 2019-'22 Ram 1500 Rebel and 2021-'22 Ram 1500 TRX pickup applications. The new lighting system provides functional forward LED lighting while maintaining a factory appearance. A high-powered 100W LED light bar is fitted into a housing designed to mimic the shape of the original factory bumper and integrate into the front end. The system installs using rivet nuts, and wiring can easily connect to the factory auxiliary switches, if available.



Waterborne Basecoat System AkzoNobel Vehicle Refinishes

North America, Troy, Michigan, introduces Wandabase WB Plus, a state-of-the-art waterborne basecoat system. Designed to offer superior coverage, control and color accuracy, the system is supported by the company's cloud-based color tool MIXIT Cloud.



Recovery Kit

Voodoo Offroad, Cashmere, Washington, presents its Intermediate Recovery Kit for off-road applications. The kit includes two 42inch Traction Boards, the Mini D Pack Shovel, a 67-piece Tire Repair Kit, a Fire Starter with Paracord, a Santeria Series 2.0 3/4-inch-20-foot Kinetic Recovery Rope, and a 3-inch-by-8-foot Voodoo Tree Saver Strap.

Bronco Front Bumper

Addictive Desert Designs, Mesa, Arizona, presents the Bomber Front Bumper for Ford Bronco applications. Designed to follow the contours of the Bronco body, the bumper includes a satin black aluminum panel in the center that frames three mounting points for **Baja Designs** LP4 lights (also available with **RIGID Lighting**). The sides of the bumper have mounting points for cube lights, framed by satin



black aluminum panels. The Bomber is constructed from modern plate steel, and finished in a hammer-black powder coat.

Window Tint

Eastman Performance Films, St. Louis, presents SunTek Evolve window tint technology that helps protect the car and driver while contributing to overall vehicle efficiency. Designed to block 99%



of UV rays and reject up to 94% of heat-surging infrared rays, the window film keeps cabins cooler and reduces interior fading. Numerous tint options allow drivers to achieve their desired look.



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Gladiator Starter System

Synergy MFG, San Luis Obispo, California, presents the Jeep Gladiator JT Starter System, a coil spring 1- and 2-inch lift designed around 35- to 37-inch tires for Rubicon models and 33- to 35-inch tires for non-Rubicon models. Created to provide capable coil spring lift performance on a budget, the complete bolt-on system includes front and rear adjustable bump stop spacer kits to provide the necessary clearance required for larger tires.





Jeep Window Repair System

MasterTop, Golden, Colorado, presents its new Full View Window Repair System for 2018-'22 Jeep Wrangler JL and Gladiator models. The custom-designed quarter- and rearwindow repair system is constructed of extra-thick, 40-mil press-polished vinyl glass that has no fabric around the window, creating an expanded

viewing area on the rear of factory soft-top-equipped Jeeps. Each window is tinted to keep temperatures down, and the full-view system is interchangeable, allowing the use of undamaged factory windows.

Raptor A-Pillar Kits

KC Lights, Williams, Arizona, presents an A-Pillar Light Kit for 2015-'20 Ford F-150 and 2017-'20 Ford Raptor models. Sold in pairs, the black powder-coated steel brackets are designed to mount all KC lights. They utilize existing mounting points and factory hardware for easy installation and include a low-profile design to maintain maximum visibility from inside the cab.



HD Ford Suspension Support

Air Lift Co., Lansing, Michigan, presents the AL1000 Front Air Spring Suspension Kit with fitments for 2020-'22 Ford F-250 and F-350 4WD single-rear wheel and 2020-'22 Ford F-350 4WD dualrear wheel models. The system easily fits into the front coil springs, providing suspension support when using a front snowplow or in-bed camper. Simply add air when loaded or preparing to use a plow for a safe, comfortable experience. **TS**



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Duck Boat Restoration Makes Waves

uch of the joy associated with vintage automobiles stems from the stories behind their original development. Winslow Bent's debut of an authentic war machine that doubles as a land and water vehicle has quite a tale to tell.

Bent, host of the YouTube series *This Old Truck*, features a beautifully kept and preserved 1944 GMC Duck Boat known in the 1940s as the *DUKW*. The vehicles served the U.S. during World War II and the Korean

War and, due to their extreme versatility, are considered among the most successful amphibious and vital military vehicles of the era.

"Now, the U.S. did not have any amphibious vehicles before the Duck Boat, so this is where they first cut their teeth, and they did a remarkably nice job," Bent says. "The idea was that these were going to be used on D-Day and then later in the Pacific

Theater. Where the Duck Boat comes in is not in that first wave of attack—it comes in as a supply boat bringing ammo, medical supplies and whatever is needed. These vehicles were much more efficient than others in the past because it was all about the quick pace to unload supplies and equipment before heading back."

According to historians, the Duck Boat was created after World War I when there was a pressing need for utility vehicles that were tactical enough to conquer the beachfront while also hauling loads of special equipment that could easily and rapidly be unloaded for battle.

General Motors took on the project by attaching a boat hull to the chassis of its dependable 2-1/2-ton CCKW war truck and adding a propeller to the back.

With impressive capabilities for its time, Bent's 1944 GMC Duck Boat stretches 31 feet long and is capable of holding up to 24 passengers. It utilizes all-wheel drive and can reach land speeds of up to 35 mph, and 4-5 knots on the water.

Power is supplied by a classic GMC 270-ci



(Top) Winslow Bent of YouTube's *This Old Truck* tells the story of a 1944 GMC Duck Boat once owned by his father. (Bottom) An original Duck Boat in action.

engine capable of 91 hp, mated to a 5-speed non-synchronized transmission. The Duck Boat was also the first vehicle to offer central tire inflation, allowing drivers the convenience of automatically inflating and deflating tires based on the terrain. This type of technology was crucial for rapidly coming ashore and was later updated and improved for future military and commercial vehicles.

This particular Duck Boat holds many fond memories and much sentimental value for Bent, due to his father's original ownership of the vehicle. "France kept using this thing 20 years after the war; along comes my old man in 1973 and he sees it parked at the lend lease program and goes, 'Oh my god, I've got to have it,'" Bent says. "My old man flopped down \$2,000 of his hardearned money, had this thing put on a semi and shipped up to Chicago. This is where I spent my birthday parties as a kid, cruising around Lake Michigan, parades, etc. This thing has so many memories for me."

View the full story on the *This Old Truck* page on YouTube. **75**



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