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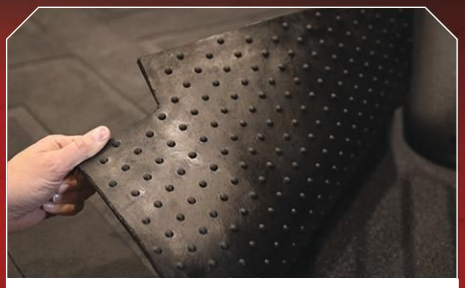
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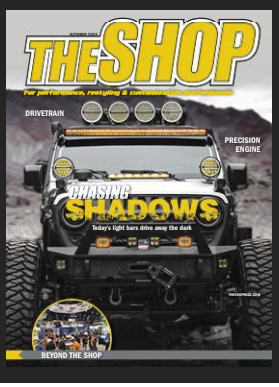
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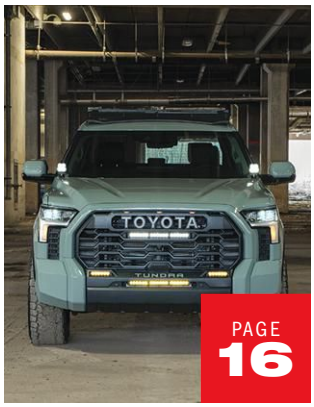
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Among the industry's most innovative product niches, light bars continue to serve as must-have add-ons for overlanders, off-roaders or anyone driving a 4x4 for work or play. *Article on page 16.* (Photo courtesy Go Rhino – XPLOR Lighting; inset photo courtesy VOXX Electronics.)





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CORRECTION
Print copies of the August 2023 issue of THE SHOP incorrectly identify "Orange Crush," ECOXGEAR's striking project cart that showcases the company's Powersports Sound Bar, 6.5-inch speakers and more. Visit soundextreme.us



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Jef White
Editor
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Cars as Credit Cards

Among the new vehicle technology trends to watch is a driver preference for the ability to make in-car payments.

Researchandmarkets.com's recent Global In-Car Payment Market and Trends 2023 report shows that, with consumers worldwide shifting to cashless payments, the demand for in-vehicle solutions has increased.

"The comfort and convenience of making purchases while sitting in the car have boosted the growth of in-car payments, enabling commuters to pay for parking fees, tolls, fuel and other services directly from their vehicles," the report states. "Thus, the direct payment option is integrated into the vehicle, and the driver authorizes the payment through various verification techniques, ranging from fingerprint authorization to iris recognition."

The rising adoption of in-car payment solutions is expected to surpass 5 billion transactions worldwide by 2026. The growth has also accelerated partnerships among various players including tech companies, original equipment manufacturers (OEMs), payment giants, fuel companies and parking lots.

"One example of an OEM offering in-car payment is Hyundai, which launched the Ioniq 5 car model, enabling car owners to find and pay for parking from their car," according to the report. "Similarly, Skoda in Europe introduced the Pay to Park system, facilitating drivers to pay for parking fees from an app or the car."

The report finds that European drivers are on the leading edge of in-car payments, using their vehicles to pay for parking, fuel, EV charging and tolls. Apcoa, a parking lot operator in Europe, offers a contactless payment option via the car's infotainment screen.

BMW has partnered with Parkopedia to allow car owners in Austria and Germany to find and pay for parking via the vehicle's navigation screen or the My BMW app. Similarly, Mercedes has partnered with Visa to enable users to pay for parking fees via in-car payments across 14 European nations.

Apart from OEMs, tech companies are also exploring the in-car payment market, with Apple CarPlay allowing users to make payments via the vehicle dashboard.

Currently, CarPlay enables users to pay via in-car payments for EV charging and ordering food at drive-throughs. Apple has plans to expand the service to allow users to find a gas station via the app, refill the car through the screen and pay for the refueling through the car's infotainment system.

With the growing adoption of in-car payment solutions, nearly half of German drivers surveyed indicated a willingness to pay directly via their car's display as of September 2022. Moreover, close to 75% of drivers would prefer using in-car solutions to pay for parking, refueling and EV charging.

Officials agree that the trend catching on in the United States can't be far behind. ***TS***

THE SHOP

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GET YOUR TIME BACK

How to automate your shop's business processes.

By Barry Alt

Are you feeling stressed about the rise of automation? There's no need to worry. The reality is that automation is not something to be feared. It can actually make your life much easier.

Imagine if you could finally say goodbye to boring manual tasks—especially those daily back-office chores you dread. Well, with automation, you can!

By letting technology handle mundane business processes, you can focus on the more exciting and important aspects of running your automotive aftermarket off-road, restyling, performance or race shop.

BUSINESS PROCESS AUTOMATION

In the fast-paced automotive aftermarket, time is precious. That's where business process automation can help.

Business process automation uses technology, tools and programs to perform annoying, repetitive tasks, giving you more time to focus on the work you enjoy.

Typically, business process automation covers many areas, such as customer relations, marketing, analytics, sales processes and employee management. Automating these areas of your company will improve efficiency, reduce errors, and save time and money.

There are countless tools on the market that can help your business automate tasks and streamline processes. From customer relationship management (CRM) systems to marketing automation software, solutions are out there.

With automation, requests can be processed in real-time, reducing wait times and improving your overall customer experience. It can also reduce errors caused by manual inputting or incorrect data entry.

With the help of business process management software, your shop can analyze vast amounts of data quickly and accurately, allowing you to make informed decisions about how to best serve your customers' needs.

Here are five key advantages of implementing business process automation software:

1 REDUCE TIME & MONEY SPENT ON PROJECTS

As a business owner, you understand that reducing the time and money spent on



Automation can help your shop thrive by allowing you to focus on growth rather than tedious tasks.

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CUSTOMER SERVICE AUTOMATION TOOLS

- ***Teamwork Desk*** – A ticketing system used by Motorhead Digital designed to easily manage customer queries.
- ***HubSpot*** – Offers a suite of tools for customer service automation, including chatbots, email automation and knowledge base management.
- ***Zendesk*** – Provides customer service automation tools such as AI chatbots, email automation and social media integration.
- ***Freshdesk*** – Offers attractive automation features such as AI chatbots, canned responses and automated ticket assignment.
- ***Salesforce Service Cloud*** – Provides automation tools such as AI chatbots, case assignment and email automation.
- ***Help Scout*** – Offers features such as canned responses, automated workflows and customer self-service options.

projects is always a priority. By implementing a business process automation system, you can save time and focus on more important tasks. This improves productivity and ultimately leads to better outcomes and increased profitability.

Pro tip: Consider investing in an all-in-one software solution that can handle multiple tasks at once.

2 FREE UP PRODUCTIVITY

Automating repetitive tasks can free up workers to spend their time where needed most. This leads to increased employee productivity and engagement and significantly reduces the time it takes to complete a task or project.

At the same time, automating these tasks reduces burnout and increases job satisfaction, creating a more motivated workforce.

Pro tip: Involve your employees in the automation process by asking them where they feel automation would be most useful for improving their workflow and overall productivity.

3 ENSURE CONSISTENT QUALITY

Consistent quality is vital for building a solid reputation and maintaining customer satisfaction. Automating tasks removes human error and ensures the same high-quality results every time.

It also allows you to monitor and catch errors early, ensuring your work consistently meets customer expectations and industry standards.

Pro tip: Implement quality control measures at each step of your automated business processes to catch any issues before they reach the customer.

4 ENHANCE COMMUNICATION

Providing excellent customer service is one of the most important aspects of running a successful business. Automating your communication will help you achieve this goal by providing fast and efficient responses to your clients.

By setting up automated email responses, you can build trust with your customers and show them you're a company they can depend on.

Pro tip: Use chatbots to provide immediate assistance to customers on your website or social media platforms.

5 MAKE CUSTOMERS HAPPY

By streamlining workflow and optimizing communication, automation will help you deliver services faster and more efficiently, leading to happier clients.



With business process automation, technology handles repetitive tasks, saving time and money while reducing errors.

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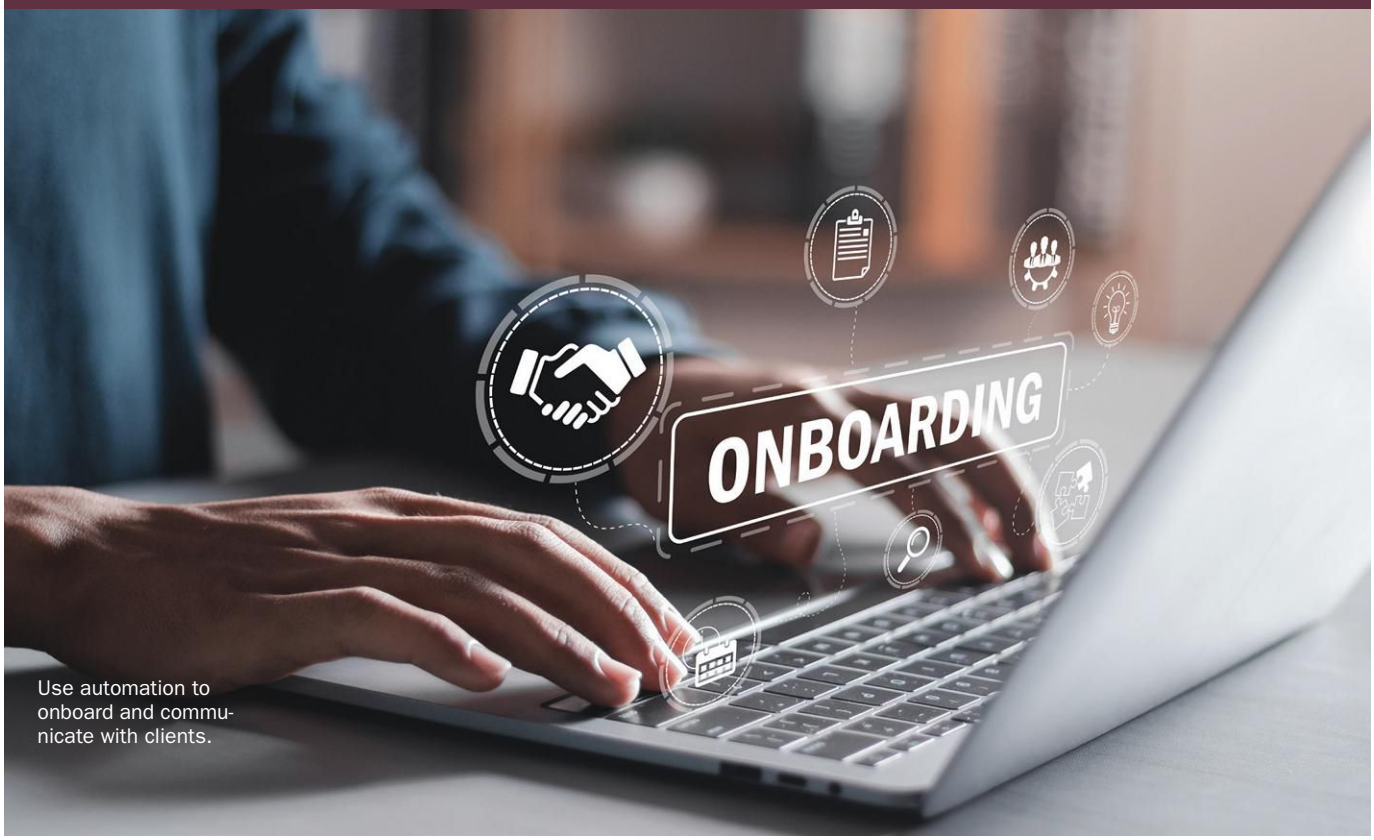
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MARKETING AUTOMATION TOOLS

- ***HighLevel*** – An all-in-one agency tool used by Motorhead Digital for internal and client support including email marketing, workflow automation, website forms, scheduling, two-way SMS texting, sales funnels and more.
- ***ContentStudio*** – An all-in-one social media tool used by Motorhead Digital.
- ***ActiveCampaign*** – Offers CRM and email marketing automation features such as automated emails, drip campaigns and targeted campaigns.
- ***HubSpot*** – Offers marketing automation tools such as lead management, email marketing and social media scheduling.
- ***Marketo*** – Provides marketing automation features such as lead nurturing, email marketing and landing page creation.
- ***Hootsuite*** – Provides social media automation tools, allowing businesses to schedule and manage social media posts across multiple platforms.
- ***Buffer*** – Offers social media automation features such as scheduling posts, social analytics and team collaboration.



Use automation to onboard and communicate with clients.

Automating order processing and inventory management can help you fulfill client requests quicker, reducing wait times and improving turnaround times. This can make a big difference for fast and reliable client service and support.

Pro tip: Using automation tools to track and analyze customer data as well as track project time allows you to tailor your services to meet your customers' needs and preferences.

STREAMLINING

What should you automate in your shop to make things more streamlined? Here are three areas to consider:

1 CUSTOMER SERVICE AUTOMATION

Automation can be used in various ways to improve your customer service. This includes using automation to onboard new clients, communicate with them and allow them to book a call or visit with you through an online calendar.

At the same time, email automation allows you to respond quickly to simple queries. Live chats and artificial intelligence (AI) chats can be implemented to further automate customer service.

Pro tip: Using automation to track customer interactions and feedback allows you to identify patterns and improve your service based on customer needs and preferences.

2 MARKETING AUTOMATION

You probably know all too well how time-consuming marketing can be. Thankfully, with AI tools your shop can manage leads and marketing strategies without having to take time away from more pressing tasks.

Automated emails can be sent to interested clients, providing all the necessary information about your shop's products and services.

Social media posts can also be written and scheduled in advance, ensuring your business maintains an active online pres-

ence without the effort of having to think of a new post every day.

Pro tip: Use automation to track and analyze marketing data and gain valuable insights into your target audience's behaviors and preferences.

3 AUTOMATING IN-HOUSE OPERATIONS

Automation can help streamline in-house operations such as employee onboarding, project management and event reporting. By automating how you manage current projects, you'll be able to enhance your capabilities and provide clients with a more organized service.

Tools like ClickUp or Teamwork allow you to stay on top of long-term projects, keeping you focused on deadlines and revealing how long each part of a project is taking.

Time-tracking tools can also be used to monitor the status of parts needed for a project, allowing technicians to record important data and create more accurate time estimates.

For shops with multiple employees, a Learning Management System (LMS) can help deliver training and onboarding materials to new hires and existing workers, ensuring everyone is up-to-date with the latest policies and procedures.

Pro tip: You can also automate your invoicing and billing processes. Using software to handle invoicing can reduce errors and improve accuracy, saving time and headaches.

IMPLEMENTATION

Follow these steps to successfully introduce business process automation into your shop:

1 IDENTIFY THE PROCESSES TO AUTOMATE

Look for repetitive, time-consuming tasks that don't require human input, such as data management, initial prospect conversation scheduling or email marketing. Ask your employees for feedback on which tasks they find repetitive and use a process audit to analyze them.

Once you've identified these tasks, evaluate automation tools and solutions to free-up valuable time for you and your employees to focus on more critical duties.

Pro tip: When implementing automation in your business, start small and test thoroughly. Don't try to automate



Email automation allows you to respond quickly to simple queries.

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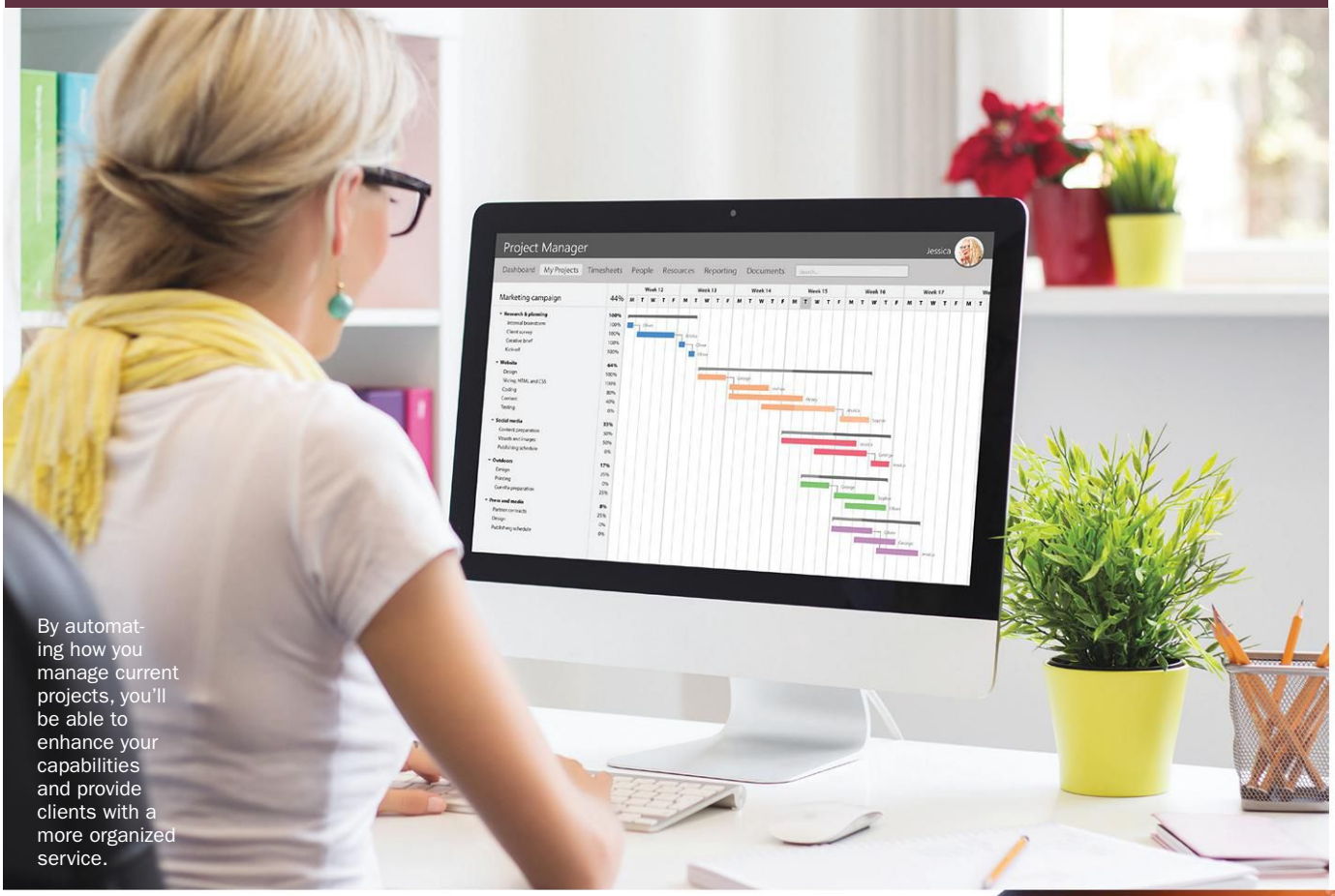
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IN-HOUSE AUTOMATION TOOLS

- ***ClickUp*** – Used by Motorhead Digital to manage team tasks, track progress and keep everyone up-to-date on current projects.
- ***Teamwork*** – Offers project management tools that allow teams to collaborate on tasks, assign responsibilities, and track progress and time.
- ***Asana*** – Provides project management tools such as task assignments, progress tracking and deadline reminders.
- ***BambooHR*** – Provides an automated onboarding process that includes electronic signatures, document collection and custom workflows.
- ***Salesforce*** – Offers a wide range of automation tools including event reporting, project management and employee onboarding.
- ***LearnUpon*** – Provides an LMS that allows businesses to create and manage online courses and training materials.



By automating how you manage current projects, you'll be able to enhance your capabilities and provide clients with a more organized service.

everything at once, as it can be overwhelming and lead to costly mistakes.

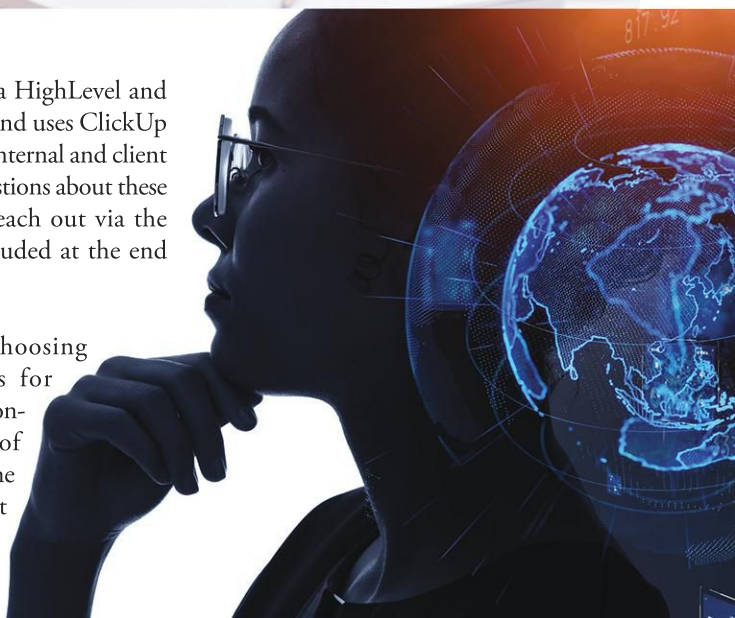
2 CHOOSE THE RIGHT TOOL FOR THE JOB

Choosing the right automation tool for your business is crucial. Research different automation solutions, try out a few, and make an informed decision based on your needs and budget.

Consider user-friendliness, integration with existing software, scalability and support. Read reviews from other businesses to gain insight into the tool's effectiveness.

(Motorhead Digital is a HighLevel and ActiveCampign partner and uses ClickUp every day to manage our internal and client work. If you have any questions about these or other tools we use, reach out via the contact information included at the end of this article.)

Pro tip: When choosing automation tools for your business, don't just consider the current state of your operation. Look to the future and think about



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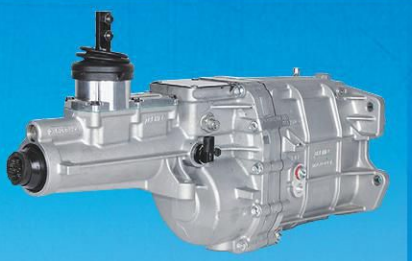
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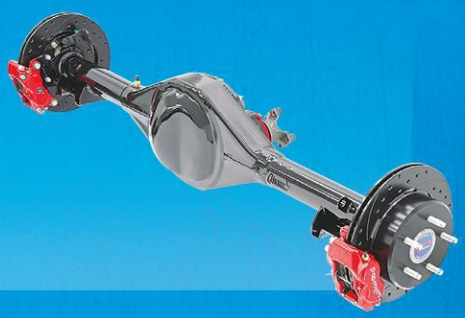












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WHSE23TS



Social media posts can be written and scheduled in advance, ensuring your business maintains an active online presence.

how your needs may change as your business evolves and grows.

3 TEST & MONITOR YOUR SHOP'S PROGRESS

Once you've integrated the automation tool(s) into your shop, regular monitoring is essential. Track metrics such as employee productivity, time saved and client satisfaction to determine the effectiveness of the new system.

This data can help identify areas for improvement and allow you to make necessary adjustments.

It's also important to communicate with your employees and get their feedback. They can provide valuable insights into how the tool impacts their work and suggest improvements to make their jobs easier and more efficient.

Pro tip: Set up a team to compare the effectiveness of automated versus nonautomated processes. This can help you determine whether your chosen automation is actually improving your operations.

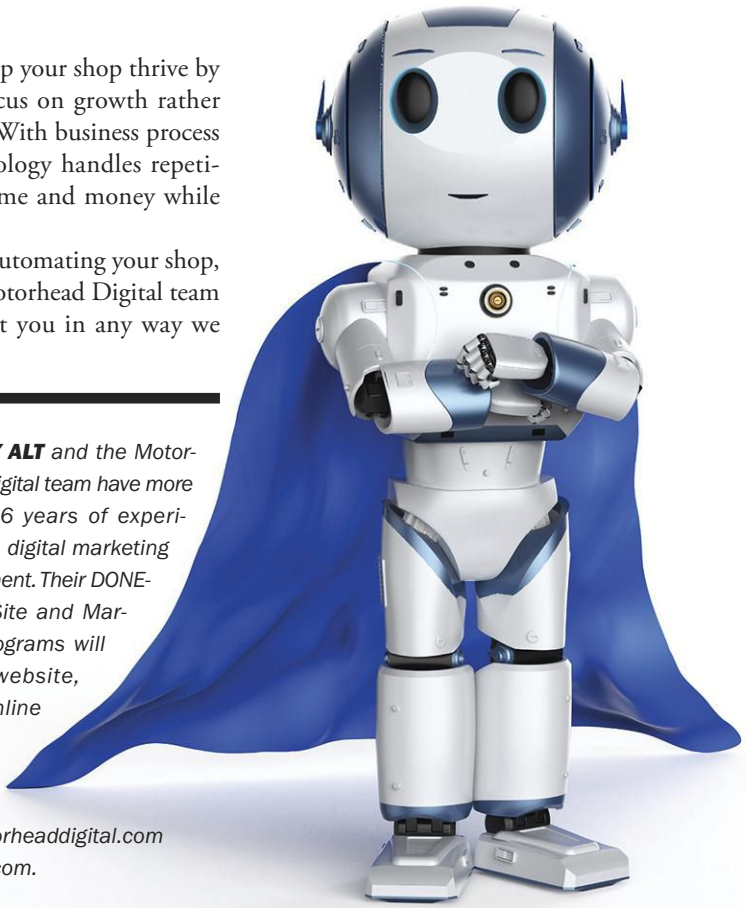
GAMECHANGERS

Automation can help your shop thrive by allowing you to focus on growth rather than tedious tasks. With business process automation, technology handles repetitive tasks, saving time and money while reducing errors.

If you need help automating your shop, let us know. The Motorhead Digital team would love to assist you in any way we can. ***TS***



BARRY ALT *and the Motorhead Digital team have more than 26 years of experience in digital marketing and website development. Their DONE-FOR-YOU Location, Site and Marketing Maximizer programs will supercharge your website, social media and online presence. Contact them at (585) 766-9785, maximizesales@motorheaddigital.com or motorheaddigital.com.*





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AFTERMARKET ACCESSORIES

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Top brands are working to connect with consumers interested in quality light bars. (Photo courtesy Baja Designs)

CHASING SHADOWS

By Jef White

Today's light bars drive away the dark.

What lies on the road—or trail—ahead? Truck and SUV owners with light bars are the first to know.

Among the industry's most innovative product niches, light bars continue to serve as must-have add-ons for overlanders, off-roaders and seemingly anyone who drives a 4x4 for work or play.

Powerful LED lights inside versatile housings mean there's a setup for any need, while advanced wiring harnesses and innovative mounting brackets allow for virtually unlimited installation applications.

There's enough technical knowledge required when pairing a vehicle with the proper light bar to prompt many consumers to seek a professional opinion. That means your shop needs to be educated and prepared when drivers come in chasing shadows.

EFFICIENT DESIGNS

If you're unsure about the staying power of aftermarket light bars, consider their main uses.



Simple, clean installations are the goal. (Photo courtesy Baja Designs)

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"It continues to get dark every night, and people need lighting when they're off-roading or when they are working late-night at jobsites," says Jack Biltmore III, master product developer for Quake LED.

It's often a matter of safety and utility.

"The increasing popularity of outdoor recreational pursuits such as off-roading, camping and overlanding has led to a higher demand for rugged and powerful lighting solutions like light bars," says Pablo Sanchez, senior marketing manager for HELLA. "Enthusiasts and professionals alike seek reliable illumination options that can withstand various challenging terrains and weather conditions."

One word that defines today's LED light bars is efficiency.

"Engineering advancements have allowed manufacturers to get more light output and greater overall efficiency while using less power," says Justin Steller, wholesale manager for Diode Dynamics.

Tim Wymore, director of product development for Go Rhino – XPLOR Lighting,



Engineering advancements have allowed manufacturers to get more light output and greater overall efficiency while using less power. (Photo courtesy Diode Dynamics)



Different optics produce different results. (Photo courtesy Diode Dynamics)

LIGHT BARS

■ **HOT PRODUCTS:**
XL Linkable Lights
■ **FEATURES & BENEFITS:**
Form and function very similar to a light bar; each light is independently adjustable and expandable for larger or smaller applications.

Baja Designs
Brennan Scully
Sales Manager

■ **HOT PRODUCTS:**
Blackout Light Bars
■ **FEATURES & BENEFITS:**
Aluminum casings and UV-resistant powder-coating that hold up to harsh weather conditions; lighting performance while capturing the stealth black look; packaged with mounting brackets and wire harness; work with the Body Armor 4x4 product line.

Body Armor 4x4
Nupesh Patel
Body Armor 4x4 Brand Manager

■ **HOT PRODUCT:**
SS6 Stage Series 6-Inch LED Light Bar
■ **FEATURES & BENEFITS:**
Compact size without compromising light output; total internal reflection (TIR) optics collect all LED light and direct it only where needed, drastically reducing glare and improving total efficiency.

Diode Dynamics
Justin Steller
Wholesale Manager

■ **HOT PRODUCT:**
Blackout Combo Series "Doubleline Combo" LED Light Bar
■ **FEATURES & BENEFITS:** Part of the XPLOR Lighting product line; high-pressure, cast aluminum housings that double as heat sinks; all-black reflectors, mounts and hardware; seamless impact- and scratch-resistant polycarbonate lenses; multi-function operation.

Go Rhino – XPLOR Lighting
Tim Wymore
Director of Product Development

■ **HOT PRODUCTS:**
HELLA Black Magic Tough Light Bars
■ **FEATURES & BENEFITS:**
Cutting-edge technology; rugged design; powerful light output; engineered to deliver brightness and clarity for enhanced visibility and safety during nighttime driving or off-road adventures.

HELLA
Pablo Sanchez
Sr. Marketing Manager

■ **HOT PRODUCTS:**
SERIES X Light Bars
■ **FEATURES & BENEFITS:**
Applications include LB.08 (8-inch) and LB.24 (24-inch) models; high power; modular design allows linking of two 24-inch bars for a 48-inch light bar, or two 8-inch and one 24-inch bar to create a 40-inch bar.

PROJECT X
Jared Chavez
Director of Brand Development

■ **HOT PRODUCT:**
Monolith Slim Accent LED Light Bar
■ **FEATURES & BENEFITS:**
Multi-function, high-powered, forward-projection LED light bar with CREE diodes, RGB accent and TXS technology; connect to the Quad-Lock Pro controller (sold separately) to create legal turn signals, hazards, brake lights, DRL and white courtesy lights.

Quake LED
Jack Biltmore III
Master Product Developer

■ **HOT PRODUCTS:**
Shocker Dual-Action Light Bar Series
■ **FEATURES & BENEFITS:**
The top half of the bar utilizes vector reflectors to produce a long-distance, rectangular beam; flip a switch to engage the bottom half, which uses an acrylic core backed by amber LEDs; system includes heavy-duty, four-bolt wing mounts.

Vision X Lighting
Brandon Nelson
Marketing Manager

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- Compatible with 12k winches
- Patented Rhino Horn shackle mounts can accommodate up to 7/8" D-rings
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- Easy installation with no drilling or cutting
- The textured black powder coat finish comes with a 5-year limited warranty



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wants shops to know that there are light bars available for any job.

"The outside factor having the greatest effect on the light bars market is the lack of application- or product-specific mounting solutions available," he says.

What's old is new again when it comes to the shapes of the lights themselves, observes Jared Chavez, director of brand development for PROJECT X.

"Round lights are making a huge comeback, especially in roof-mounted applications," he says. "That doesn't mean light bars are going anywhere, but it does change the demands on sizing. I think the days of stocking and selling 50-inch light bars all day long are going away. We are seeing more 10-, 20- and 30-inch bar applications being sold, especially for applications where rounds may be harder to use like inside of bumpers or on side-by-sides."

Today's light bars are as innovative as the trucks and SUVs they outfit.

"The new vehicle models manufacturers are coming out with offer exciting and challenging opportunities to use our products in creative ways," says Brennan Scully, sales manager for Baja Designs. "Our goal is always to make a simple and clean installation."

Updated offerings also take important regulations into account, says Nupesh Patel, brand manager, Body Armor 4x4.

"Laws are ever-changing, and the DOT/SAE requirements play a role in compliance with state and federal agencies," he says.

Light bars can be an attractive upsell on almost any project. (Photo courtesy Body Armor 4x4)

Of course, many industries' new normal includes issues with the global supply chain.

"As brands either source components overseas or import off-the-shelf light bars, disruption with freight, sourcing issues or even labor issues are still problems," says Brandon Nelson, marketing manager for Vision X Lighting. "It has forced premium brands to have to adapt to shipping delays and is forcing customers to turn to different or lower-quality brands. It has started a shift from 'Who's the best?' to 'Who has what (I want) in stock?'"

JEEP GOES 'FAROUT'

The Jeep brand is marking the end of Gladiator EcoDiesel production with the limited-edition Gladiator Rubicon FarOut.

Introduced for the 2021 model year, the Jeep Gladiator Rubicon EcoDiesel offered 442 pound-feet of torque, the TorqueFlite 8HP75 8-speed automatic transmission and more than 500 miles of driving range.

"As the Jeep brand continues its drive to electrification, we are phasing out EcoDiesel technology with the final, limited-edition Gladiator Rubicon FarOut," says Jim Morrison, senior vice president and head of Jeep brand North America. "Limited to 1,000 vehicles for the 2023 model year, the special-edition Gladiator Rubicon FarOut further builds on the industry's only open-air pickup truck infused with Trail Rated capability and best-in-class truck utility."

FarOut highlights include third-generation Dana 44 front and rear heavy-duty axles, a 3.73:1 axle ratio and Rock-Trac two-speed transfer case with a 4.0:1 low-range gear ratio, plus special equipment like:

- "Diesel 3.0L" hood graphic
- Exclusive "3.0 D" tailgate badge
- 17-inch black aluminum wheels
- 33-inch mud-terrain tires
- Steel front bumper
- Body-color fender flares



The Jeep brand is marking the end of Gladiator EcoDiesel production with the limited-edition Gladiator Rubicon FarOut.

- Satin black grille
- Mopar spray-in bedliner
- LED lighting
- Black leather seats & dash panels

Jeep will continue to offer the Gladiator with a 3.6L Pentastar V-6 engine, available with a 6-speed manual or 8-speed automatic transmission.

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JSERIES

LIGHT BARS



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J3 17" LIGHT BAR

Light Bar Only Universal #97109-1120
Light Bar Only for '18+ Wrangler JL & Gladiator JT #97109-1132
With Wiring Harness Universal #97109-1133
With Wiring Harness for +18+ Wrangler JL & Gladiator JT #97109-1134



J3 28" LIGHT BAR

Light Bar Only Universal #97109-1121
Light Bar Only for '18+ Wrangler JL & Gladiator JT #97109-1135
With Wiring Harness Universal #97109-1136
With Wiring Harness for '18+ Wrangler JL & Gladiator JT #97109-1137



J5 51" LIGHT BAR

Light Bar Only Universal #97109-1023
Light Bar Only for '18+ Wrangler JL & Gladiator JT #97109-1126
With Wiring Harness Universal #97109-1127
With Wiring Harness for '18+ Wrangler JL & Gladiator JT #97109-1128

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CHASING SHADOWS



Buying decisions can be made based on a product's look, feel and functionality. (Photo courtesy Go Rhino – XPLOR Lighting)



Light bars can be part of a total off-road package. (Photo courtesy Go Rhino – XPLOR Lighting)

QUALITY COUNTS

As with many aftermarket products, the lowest price point is not always the best deal for adventure-minded off-roaders.

"Be sure that you are offering high-quality light bars to your customers," Steller suggests. "Lower-quality light bars result in higher warranty submissions and lower customer satisfaction."

Top shops will direct consumers to the selection that makes the most sense for their specific requirements.

"Sometimes there is a drive to sell and install a (specific) brand as opposed to the look and feel of the product or its functionality," says Wymore.

Chavez agrees that customer education is key.

"It is understandably easy when a customer comes in wanting a 50-inch, roof-mounted light bar to simply sell it to them—but that same customer may end up with glare issues and the light not being usable. A smaller bar mounted lower may be a more effective lighting solution for a lot of customers," he explains.

Installation services can ensure top performance, says Scully.

"With how easy we have made our vehicle-specific kits, shops should be pushing to do the install," he says. "This can increase billable hours without too much of a headache for technicians."

Patel agrees, outlining common installation errors shops should avoid:

- Not understanding the measurements of the light bar and/or the product the light bar will be installed on
- Not reading the instructions to see if anything additional is needed for installation
- Not confirming the basic amp rating
- Not considering the length of the vehicle and where the light bar will be mounted in relation to the length of the harness
- Not knowing how to plumb the wiring into the cab

"Assessing all these factors beforehand and taking these simple steps/measurements before diving into the project can save time and multiple headaches," he says.

Sanchez reminds technicians to include quality components throughout the system.

"Shops might underestimate the power requirements of light bars and install inadequate wiring, switches, relays and fuses," he notes. "This can lead to issues like flickering lights, dim illumination or even electrical failures."

Knowledge is power when it comes to profitable installations, says Nelson.

"With light bars, mounting location and beam pattern play the biggest roles when trying to marry product with application," he notes. "For instance, putting a flood light bar above your windshield will destroy your eyes with hood glare. Neither do you want to utilize a white spot beam light bar on a bumper to use as a fog light when a yellow flood light is more suitable. So, understanding which light bar is ideal in which location, as well as what the vehicle is used for, is important for a happy customer."

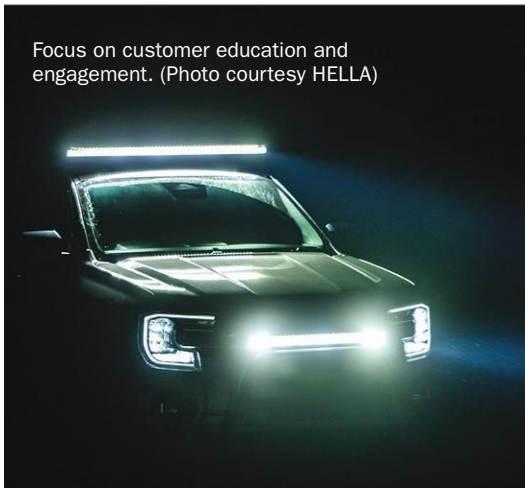
Once you've gained that experience, don't be afraid to jump into any project, Biltmore advises.

"All of our complicated light bars include a simple-but-complete wire harness that reduces installation time," he says.

SCHOOL'S IN SESSION

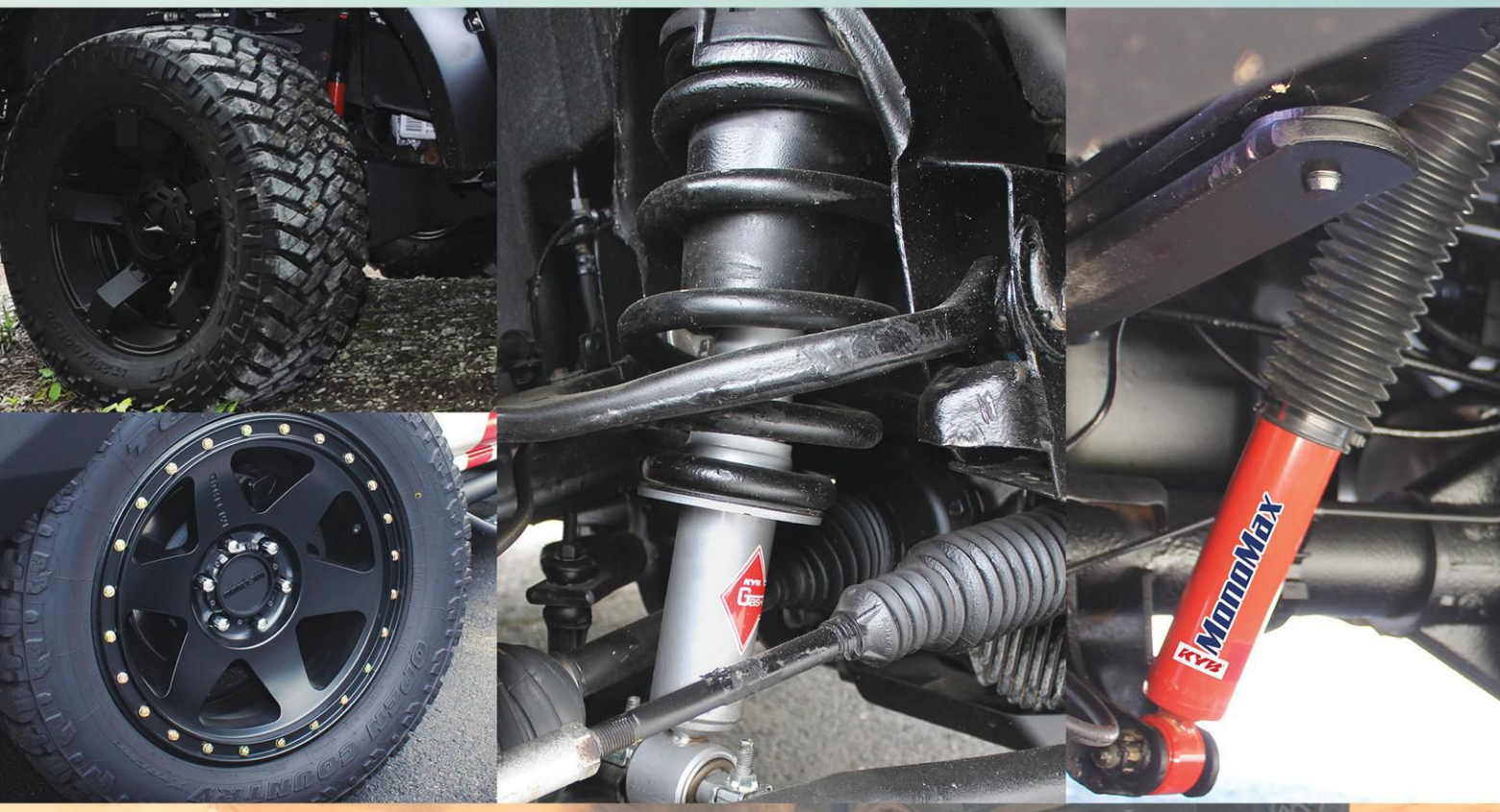
Getting drivers into the proper light bar setup for their individual needs may require some teaching on your part.

"Educate customers on the different types of optics used in light bars and how they contribute to the overall focus of the beam



Focus on customer education and engagement. (Photo courtesy HELLA)

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Versatile products allow for unique solutions. (Photos courtesy PROJECT X)



Knowing your product is a recipe for success. (Photos courtesy Quake LED)



Knowledge is power when it comes to profitable installations. (Photo courtesy Vision X Lighting)

pattern and amount of glare or wasted light that is produced," says Steller from Diode Dynamics. "Generic light bars using basic optics or reflectors lose light internally and to glare, resulting in more stray light."

He also suggests that seeing is believing.

"If you have a retail storefront, reach out to the manufacturer to see if they have a P.O.P. display that you can add to your showroom."

Knowing your product is a recipe for success, says Quake's Biltmore.

"Make sure your staff understands the basics of light bar wattage, current draw and beam patterns," he recommends. "Have a cheat sheet that lists which light bar length fits the most common trucks, Jeeps or Broncos."

Understanding the quality and quantity of light needed is an important factor, notes Nelson from Vision X.

"Most light bars today are pretty bright, but not all are created equal," he explains. "Lumen output is only a small part of the story—durability and build quality are what distinguish between a premium brand and an inexpensive one. That info is often overlooked or overshadowed by just the raw lumen output that people focus on."

With a wide variety of suppliers competing in the market, it pays for shops to work with companies they know and trust.

"Do not focus on all the noise in the industry—key brands that are working hard to gain market share should get most of your attention," says Scully from Baja Designs. "They are using their resources to build brand awareness, which is creating customer demand. Our goal is to create a brand that customers are coming in and asking for. Social media and the communities that we are part of have allowed us growth that I never could have imagined."

Once a light bar has been selected, show clients how they can package it with related items for a total off-road overhaul, says Wymore.

"Upsell as a complete package with other Go Rhino products like bumpers, roof racks, bed racks and more."

Patel from Body Armor 4x4 believes light bars can be an attractive upsell on almost any project.

"Always pitch light bars and light pods with the sale of bumpers, bed racks, roof racks, etc.," he says. "The add-on sales are a gimme."

A wider selection means more potential for sales, says Chavez from PROJECT X.

"Have options for customers—single-row and double-row in 10-, 20- and 30-inch sizes to fit their needs."

Finally, earn a reputation as the local lighting expert to attract new and repeat customers.

"Offer personalized and educational customer experiences. Engaging with customers in a knowledgeable and informative manner can help build trust and demonstrate the value of light bars, leading to higher sales," says HELLA's Sanchez. "Additional activities could include expert consultations, in-store demonstrations, educational content, package deals and bundles, installation services and collaborations and events. By focusing on customer education and engagement, and offering a seamless shopping experience, your shop can position itself as a go-to destination for quality light bars and related accessories." ***TS***



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FOR WORK & PLAY

By Maura Keller

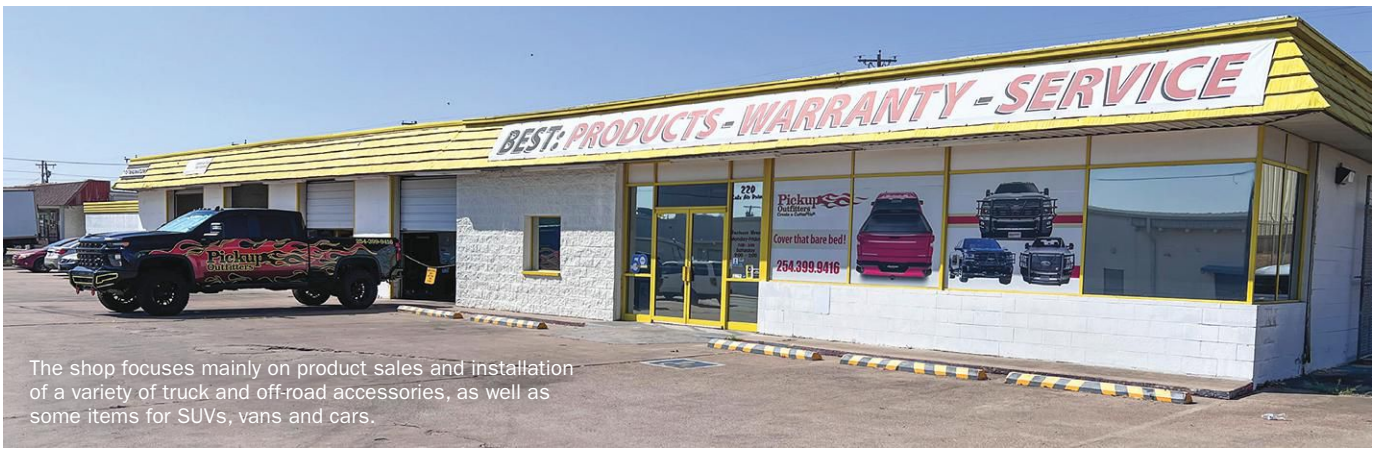
Pickup Outfitters of Waco battles against 'truck nudity.'

Pickup Outfitters of Waco, Texas, has a lot to celebrate. In addition to establishing a solid customer base over almost three decades in business, the long-standing company has started renovations to a new location that will greatly expand its capacity and accommodate an ever-growing menu of services.

As its name implies, Pickup Outfitters focuses mainly on product sales and installation of a variety of truck and off-road accessories, as well as some items for SUVs, vans and cars. Jay Ehret, president and co-owner, says the products are split into two main categories.

"These include value-add functional accessories such as tonneau covers and step bars sold to retail customers, and then work-related, functional accessories for commercial or retail customers who use their vehicles for work and to make money," he says. "These are products such as gooseneck hitches, heavy-duty toolboxes, bumpers and suspension upgrades."

Pickup Outfitters originally started as an outlet for local manufacturer The Perry



The shop focuses mainly on product sales and installation of a variety of truck and off-road accessories, as well as some items for SUVs, vans and cars.



Next up for Pickup Outfitters is a move to a new, 7,500-square-foot location in a strip center on a major road in Waco. (Image rendering courtesy Sterling & Kap Architects, Waco, Texas)

Co., which made truck bumpers and grille guards. As Ehret explains, in the beginning the company opened a small outlet shop right in front of the manufacturing facility.

"A couple of years later, in 1997, The Perry Co. purchased a building on a busy street a few miles away and opened a retail location to sell and install all lines, including their own. They called the shop Pickup Outfitters," Ehret says.

Around 2004, The Perry Co. was purchased by Jeff Weaver from the Perry family, and Pickup Outfitters was included in the purchase because it wasn't technically a separate entity.

"In 2008-09, Jeff Weaver hired me, then a marketing consultant, to do a marketing plan and a new logo for Pickup Outfitters. A couple of years later we had a brief discussion about purchasing the business, but nothing came of it," Ehret says.

In 2016, while Ehret was working as a brand manager for The Dwyer Group, now Neighborly Brands, he bumped into



Weaver at a local wine event and they again discussed the possibility of Ehret buying the company.

"About three months later we had a deal worked out," Ehret recalls. "My wife, Carol, and I purchased the business on Oct. 31, 2016, and took over Nov. 1."

TRUCKS IN TEXAS

The shop's retail base consists mainly of middle- and upper-middle-income customers who use their trucks for personal transportation and typical Texas weekend outdoor activities like fishing, hunting and camping. Many of them pull boats, trailers or RVs and are usually looking for functional or comfort upgrades.

As mentioned, the second group consists of commercial companies and individuals who use their pickups to help them make a living.

"We do heavier upgrades that enable the

FOR WORK & PLAY



Pickup Outfitters' clientele consists of retail and commercial customers looking to customize their trucks for work or play.



Jay Ehret, president and co-owner of Pickup Outfitters of Waco, works to meet the needs of Texas truck owners.

truck to perform at the worksite or carry a heavy load," Ehret says.

While the shop keeps a limited inventory on hand, it does stock some in-demand items such as bed covers and steps for current-model vehicles.

"We've found these items are ones that customers would prefer to have installed today," Ehret says.

The business focus is on efficiency and maintaining margins. Ehret says when it comes to pricing, Pickup Outfitters primarily works on a margin applied to the cost of the part and charges accordingly.

"We experiment with other pricing structures when that doesn't make sense," he continues. "For example, we have a profit-per-install-hour metric that we use on some products."

Only a few years after taking over the business, Ehret found himself facing the



"Red Rage" was the shop's dealership-inspired entry into the annual PRO Cup Challenge at the 2022 SEMA Show.

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Ehret's participation in SEMA's restyling-centric PRO Council has helped forge important business relationships. Here he's visiting Kevin Gillis, left, of Integrity Customs in Oklahoma, the current chair of the PRO Council Select Committee.

THE COMPLEXITIES OF ADAS SYSTEMS CAN CREATE ISSUES WITH INSTALLS AND EVEN MAKE SOME ACCESSORIES OBSOLETE FOR THOSE VEHICLES.

challenges of the COVID-19 pandemic, which forced him to close his showroom for four weeks and lay off staff. The company's revenues dipped 50% for two months.

After the initial decline in business, however, the shop was a very busy place for the next 18 months, thanks to pent-up demand following quarantines and the distribution of federal stimulus checks.

More recently, the shop has navigated economic uncertainty and bottlenecks in new vehicle deliveries.

The good news, Ehret says, is "supply chain issues have been minimal in the past year. We deal with them by offering alternative products."

EMPLOYEE APPRECIATION

Ehret, who's quick to credit his staff of nine employees for the shop's ongoing success, learned early on the importance of quality workers.

"When we first bought the business, my manager quit a month later and took his son, an installer, with him, leaving us with two other installers and just me to wait on every customer for the next three months," he recalls. "Now, I'm fortunate to have a capable staff, including a store manager and a business manager, that allows me to work on big-picture and long-term strategies. As they say, 'work on the business, not in the business.' Without them, I would not have had the time to work on getting our new location purchased and remodeled."

Finding new employees is always a challenge. Pickup Outfitters looks to attract quality candidates by offering a full slate of benefits including health, vision and dental insurance, a matching 401(k) plan, generous paid time off and employee discounts.

"Plus, we invest in their training and send them to trade shows," Ehret notes.

The shop recently implemented an Apprentice Installer program as well, designed to attract younger, inexperienced individuals to the industry.

"It's nearly impossible to hire experienced installers, so we are bringing them in and training them from the ground up," he explains. "Hopefully this will instill some loyalty and longevity."

Ehret and his team have used local radio station ads to effectively build the brand, and do some local TV spots, with the dual purpose of producing web videos. He is also exploring live event promotion opportunities.

"We do not use much social media," Ehret offers. "It hasn't been very effective for us."

SUPPORT SYSTEM

Ehret has built a knowledgeable network of business contacts that he can lean on when questions arise through his participation in the Specialty Equipment Market Association (SEMA), and its restyling-centric PRO Council.

"The advice and support from this network have been invaluable. We would not be the business we are today without those connections," he says.

It's also helping the company build a higher profile. Last year, Pickup Outfitters entered a truck in the annual PRO Cup Challenge held at the SEMA Show, a competition where shops are invited to showcase product packages specifically designed for dealership sales.

"We called it 'Red Rage.' It was exciting that a small shop in Waco, Texas, was able

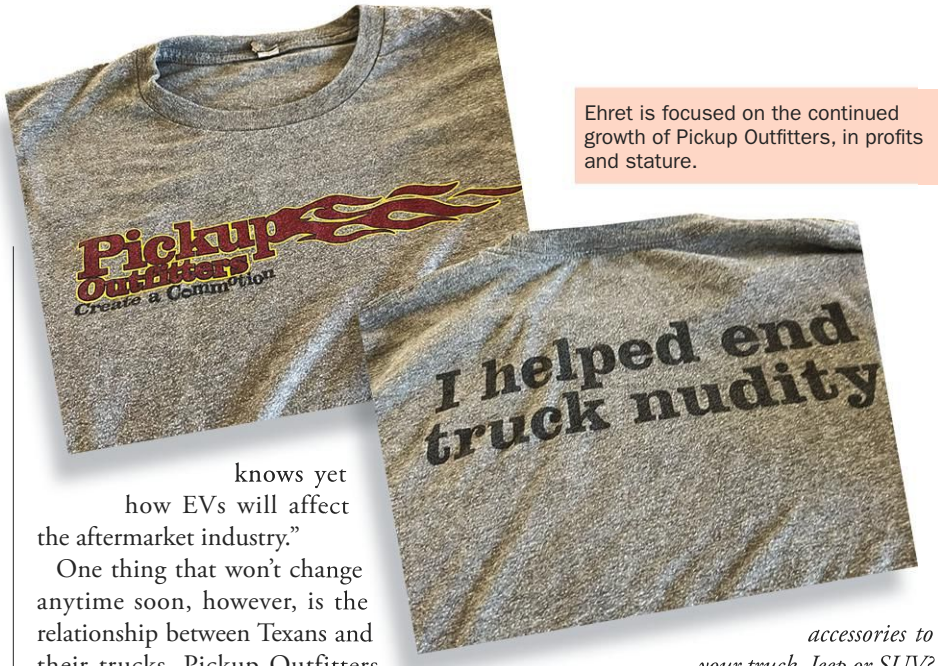
to put a truck on the floor of the SEMA Show," Ehret says.

Looking ahead, he is excited about the next "project"—namely the aforementioned purchase of a small strip center on a main road in Waco for a new shop that will increase the company's overall size from 5,500 to 7,500 square feet.

"We are currently in the remodeling stages, with plans to move to the new location in October," he reveals. "We have been leasing our current property since we purchased the business."

In addition to the big renovation and ultimate move, Ehret is also focusing on continued growth of Pickup Outfitters in profits and stature.

"We are adding some new services and capabilities, as we want to be able to pivot if necessary. There are a lot of challenges for the next several years in our industry," Ehret predicts. "The complexities of ADAS systems can create issues with installs and even make some accessories obsolete for those vehicles. And, of course, no one really knows yet how EVs will affect the aftermarket industry."



Ehret is focused on the continued growth of Pickup Outfitters, in profits and stature.

One thing that won't change anytime soon, however, is the relationship between Texans and their trucks. Pickup Outfitters has posted a message on its website (createacommotion.com) regarding the importance of customizing:

"Help Us End Truck Nudity! We're fighting hard to make our streets safe for families and children. Won't you help us by adding accessories to your truck, Jeep or SUV? Upgrade the look and functionality of your vehicle with the help of Pickup Outfitters." **TS**

MAURA KELLER *is a freelance writer based in Minnesota. She can be reached via email at maurakeller@yahoo.com.*

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Bronco Big Bend Leather Kit

Katzkin, Montebello, California, presents a Leather Kit upgrade for Ford Bronco Big Bend models. The kits feature a blue wrap with Ice Grey center, TekPerf U.S. flag insert and Bahama contrast all-stitch. The kits offer a precision fit, and USA-based manufacturing ensures fast turnaround on custom orders.



Bronco Bumpers

Body Armor 4x4, Ontario, California, presents new Odyssey Front and Rear Bumpers for 2021-23 Ford Broncos. The front bumpers offer a sturdy, rugged aesthetic while delivering well-rounded functionality. They improve approach angles, allow for light bars and can be run with or without a winch. The rear bumpers include the same black powder-coat finish as the fronts and incorporate integrated shackle recovery mounts and two LED light pods. They are OEM sensor-compatible and accommodate the OEM hitch receiver while fitting up to a 40-inch spare tire.

Go-Anywhere Beach Cart

Great Day Inc., Tallulah, Louisiana, presents the High-Sands Beach Buddy 200 Fishing/Beach Cart. The two-wheeled cart mounts to a vehicle hitch receiver and includes a 48-by-20-by-11-inch cargo basket. It can hold up to five rods and features a 15-by-9-inch removable bait cutting station. A patented lift mechanism allows a loaded cart to be easily winched onto the vehicle for safe, secure transport. Retractable front legs and beach tire assembly help it go anywhere off the beaten path.





Hard Storage Box

Dometic, Elkhart, Indiana, presents the GO Hard Storage Box, offering 50 liters of internal volume for off-road gear and supplies. Featuring vertical aluminum sides that are durable, strong and maximize internal volume, and a lid and bottom made of a high-impact-resistant polymer, the boxes are stackable for easy storage and secure transport. The robust handles include tie-down points and lock holes, while the oversized latches are designed for easy opening, even in cold or inclement weather while wearing gloves.



Wrangler Fenders

Fly OffRoad, Chandler, Arizona, offers new Replacement Fenders for 2007-18 Jeep Wrangler JK and JKU models, including Front and Rear Inner Fender Kits. The inner fenders are manufactured from aluminum for reduced weight and feature the Fly claw logo. They are available in a sandblast finish ready for custom painting or in a black textured powder-coat. The outer fenders are manufactured from 16-gauge steel plate, offering smooth lines that enhance the look of the vehicle. The fender kits are made in the USA.

Running Boards

Raptor Series, Hayward, California, presents Slide Track Series Running Boards, available for 2022-up Toyota Tundra Double Cab, 2022-up Toyota Tundra CrewMax and 1999-2016 Ford Super Duty SuperCab models. Featuring aluminum construction and Slide Track channels that allow for universal placement options, the boards have a 400-pound weight rating. Available in brushed aluminum and black textured aluminum finishes and regular, extended and crew cab lengths, they include slip-resistant pads and brackets that bolt to existing mounting points.





Fuel Tank Systems

Transfer Flow, Chico, California, presents its complete line of American-made Fuel Tank Systems. Crafted with 12- and 14-gauge high-yield U.S. aluminized steel and then powder-coated for a long-lasting finish, the durable tanks meet or exceed industry safety requirements. Several fitments and options are available.

Wrangler JL Unlimited Lift Kit

BILSTEIN, Poway, California, presents a complete Suspension System for Jeep Wrangler JL Unlimited models. The new B8 5100 kit delivers a 1.5-inch lift and includes BILSTEIN B8 5100 monotube shocks and sway bar links, long-travel cold-wound springs, and billet bump stops to allow for larger tires. The kit maintains proper suspension geometry without needing additional aftermarket components and installs easily.





Bronco Billet Rear Suspension Links

ICON Vehicle Dynamics, Riverside, California, introduces a billet aluminum Upper and Lower Rear Link system for 2021-up Ford Broncos. Designed to help free-up rear axle movement to allow for increased suspension travel and articulation, upgrading the links is essential to realizing the full benefits of ICON's Bronco long-travel coil-over suspension system. Large **FK Rod Ends** at one end and a dual-durometer, high-angle greaseless bushing at the other allow maximum travel and articulation while isolating and damping road noise and vibrations.

Wireless Controller

PROJECT X, Costa Mesa, California, presents the Ghost Box app-connected wireless accessory control ecosystem. Designed to reimagine the market standard for switch boxes by delivering a totally customizable and wirelessly controlled experience, the fully expandable system includes four two-circuit control modules that communicate with a control keypad that can be programmed via the PROJECT X app. Control a single module for an easy accessory install or create a large ecosystem across vehicles, trailers and equipment. ***TS***



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New technology is a mainstay of the annual SEMA Show. (Photo courtesy VOXX Electronics Corp.)

SPECIAL REPORT:

BEYOND THE SHOP

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INTRODUCTION:

Regardless of how much success an automotive aftermarket business enjoys, top professionals know there's more to gain beyond their shop's walls.

Industry trade shows, races and consumer events, and volunteer opportunities provide chances for shop owners to investigate new products and potential profit centers, meet customers and see their vehicles, and give back to the industry and the community.

The upcoming SEMA Show, set for Oct. 31-Nov. 3 at the Las Vegas Convention Center, and counterpart AAPEX Show, scheduled for Oct. 31-Nov. 2 at The Venetian Expo, can offer the kickstart companies need to build a better business.

"With COVID in the rearview mirror and consumers pivoting to travel and leisure, now more than ever is the time to learn about other categories that can complement what you do," says Aron Demers, senior vice president of VOXX Electronics Corp. "SEMA has always been a show to highlight new technologies, exchange ideas and network with your peers and suppliers."

VOXX has exhibited at the SEMA Show for 20 years and counting, taking advantage of the opportunity to put its product categories and technologies in front of hundreds of thousands of shop owners, installers and end users.

"We have also secured numerous partnerships with other exhibitors that allowed us to come up with new revenue streams or solve problems that don't conflict with each other's core businesses," Demers notes.

It's inspired a desire to give back as well, as VOXX is an active member of the Specialty Equipment Market Association's PRO Council, which serves the restyling industry.

"I think the most important benefits you get volunteering are to identify trends and new businesses and recognize other business cultures that can help you grow and solve problems with likeminded individuals," says Demers.

This Special Report looks at maximizing the trade show experience, opportunities available within SEMA's various councils, and why Las Vegas will be the automotive epicenter this fall. Will you be inspired to go beyond the shop? ***TS***

BE A STAR OF THE SHOW

It takes planning, execution & follow-up to make the most of attending trade expos like the SEMA Show. ///// **By Karl Stearns**



Advanced planning will ensure your trade show experience is efficient and useful.



Finding success at trade shows involves prioritizing what's best for you and for your business.

They stand there like they are just about to step into the Land of Oz. Trade show attendees at the entrance to the vendor exhibits. Thousands of people are pouring in. Lights, noise, eye candy everywhere.

And then—what? They start walking. Ambling aimlessly; looking left, looking right.

"Oh, look!" A display with shopping bags. They grab one and start trick-or-treating. Here a vendor has pens! Another one has mouse pads! Candy! Calendars, coffee mugs, junky flashlights—you name it, it all goes into the bag. Maybe even a brochure or two.

In a few hours, you see one after the other lugging not just one, but multiple bags filled with "stuff." The industrious ones bring roller carts—some with plastic milk crates strapped on. All of them are filled to the brim. You know who you are.

A serious businessperson is moved to ask, "How is this helping my business?"

When you return home from a trade show with more promotional trash than you will ever use, what did you really get out of being away from the shop? An unreliable flashlight? A balky pen? Well, maybe you can use it to write the check to pay for the expensive trip.

If I just described your trade show strategy, it's time to rethink.

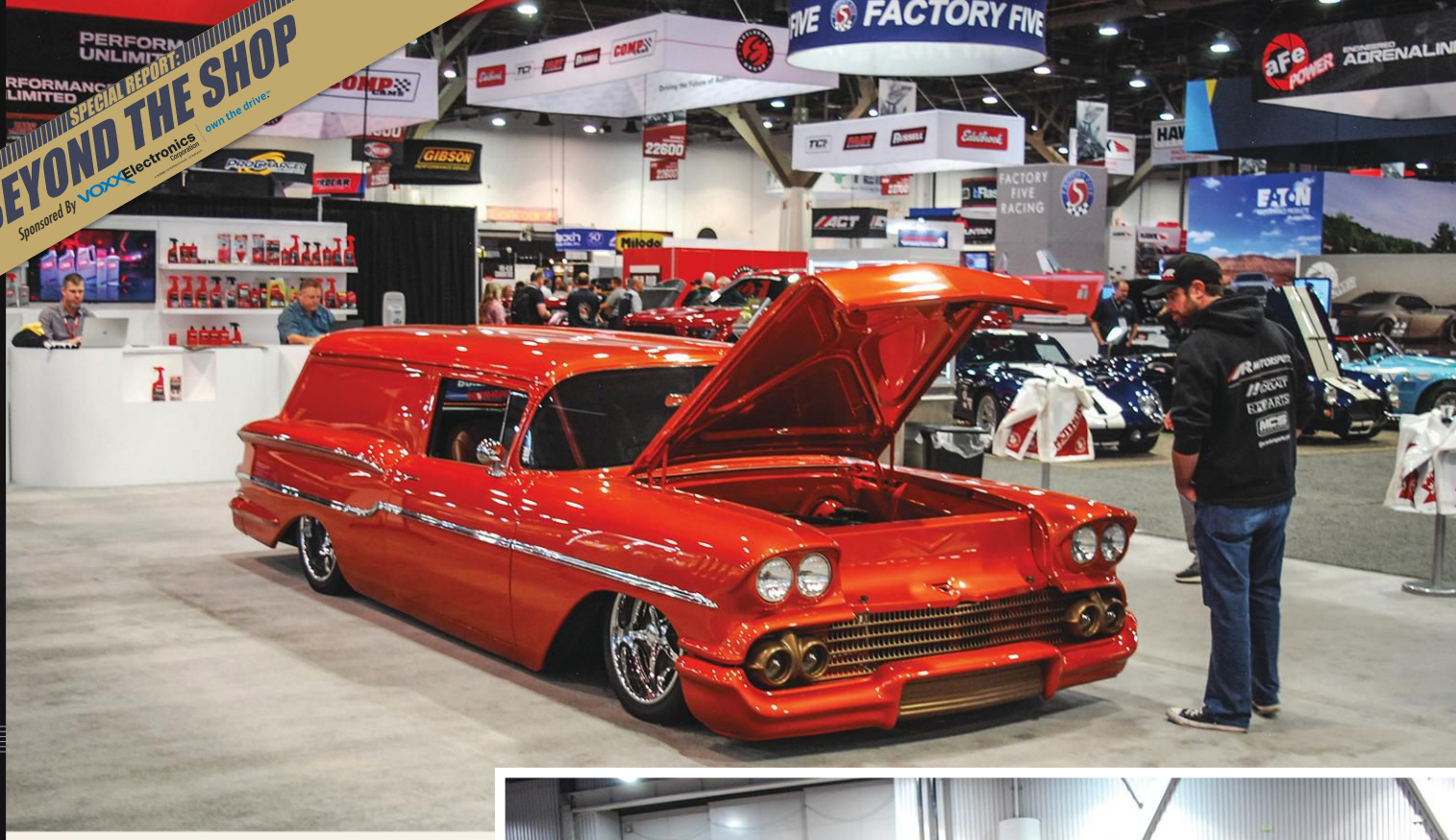
A BUSINESS INVESTMENT

The SEMA Show is almost upon us. I love the SEMA Show. As a former chairman of the SEMA PRO Council, I was part of a dedicated group of industry leaders who drove initiatives for the restyling industry.

The SEMA Show is the single biggest gathering of automotive entrepreneurs in the world. It's a must-attend event, but also a costly endeavor.

Las Vegas hotels and restaurants used to be relatively inexpensive. They aren't anymore. This is no longer just a fun trip to the Strip and a few days of wandering around the show.

As a businessperson, you're making a large investment in the performance of your business for at least a year, and perhaps more. So, how can you avoid the Krispy Kreme donut look (you know—glazed!) when you enter the exhibit hall at the



Between booth visits, look around for the next big thing.



SEMA Show—or, for that matter, any trade show you attend?

It starts well in advance of arrival. Here are some suggestions.

SET YOUR OBJECTIVES

There are several elements involved in attending a trade show, including educational programs, the vendor expo and social events. You sometimes must make tough decisions about what you will include and what you will have to miss.

The important thing is determining what is best for you and your business. So, prioritize!

Most trade shows include educational programs—often before and during the days the exhibit halls are open. All trade show organizers post their education program schedules well in advance. Take time prior to the event to access the listings and start deciding which seminars and presentations will benefit you the most.

If there are attractive programs scheduled before the show opens, make sure your plans include getting to the venue ahead of time—don't skip the days before the show. This is your time to learn, speak with subject matter experts, network and improve.

Start filling in a calendar with times and programs. Some shows, such as the SEMA Show, have apps that allow you to gather everything and keep yourself organized.

Attending the vendor expo also requires a strategy. Instead of wandering around, you need to plan very carefully to use your time wisely. More on that in just a bit.

Regarding social events: There are usually a lot of them. This is a time to get out and meet people.

It may sound old-school, but bring business cards. Make sure you exchange cards or contact info with others. You will meet some fascinating people at trade show social events who can likely play a major role in the future success of your business.

Of course, there are plenty of after-hours things to do as well. Receptions, dinners, shows, night clubs. Just remember that you're there for a purpose. You want to better your business and improve yourself as an owner/manager/technician.

Don't be "that guy" that I sometimes see in the far corridors in the upper levels of the Las Vegas Convention Center—either passed out drunk or hungover, sleeping on a bench. It's sad to see, and a terrible waste of your investment in yourself.

SEE WHO YOU NEED TO SEE

The big feature of any trade show is the



If you don't plan ahead, you'll wander around and get nothing done.

vendor expo. If you don't plan ahead, you'll wander around and get nothing done. Here are ways to make your time count.

Take some time over the summer to examine your purchases over the past year. Who have you been buying from? How much? Make a list.

Your major product sources should top your list, and you should start scheduling visits at their booths now.

I have always planned my vendor visits by keeping a spreadsheet. I set up these columns:

- Booth Number
- Vendor Name
- Vendor Contact
- Mobile Number
- Appointment Time & Place

Call or email your vendor contacts in advance and make definite appointments—then make sure you keep them! If possible, set your schedule based on booth proximity.

This is particularly important at the SEMA Show. It's a long walk (or short underground Tesla ride with lines) between halls at the LVCC, and you can waste a lot of time traveling back and forth.

If a meeting is extremely important, phone or text your contact the day of the show to verify you will be at their booth at the appointed time and that they will be there to meet you.

Schedule no more than one appointment per hour. If your meeting finishes early, it gives you time to explore the surrounding area before heading to your next appointment.

During this time, be on the lookout for new suppliers—companies that sell similar products that you are already purchasing. Meet the booth personnel. Have them scan your contact information. Get their business card (yes, I still recommend business cards). This becomes part of your follow-up strategy.

NEW PRODUCTS & BETTER DEALS

To prepare for your meetings, give some thought to needs you have identified in your market. Are there products you don't already sell that you want to investigate? Start by searching vendor listings and include their info on your spreadsheet. This way you will be sure to stop by their booths as you are making your way through the show.

Take some time to look at your list of vendors and how much you've purchased. Are there opportunities to negotiate lower prices? Plan to bring this up to current suppliers and come prepared with your numbers.

One thing I learned in my business was to be conscious of on-demand products—items that your customers purchase from you that they want right away. If you don't have them in stock, you'll often lose the sale.

My challenge involved products I sold to car dealers that were installed on stock units. If I had to order them, I risked the vehicle being sold before the product arrived.

When I started carrying an inventory of hard parts, that problem diminished drastically. It also allowed me to negotiate lower pricing and reduced or no shipping charges.

Your purchase numbers can also be useful if you are shopping for a new supplier. When they see you are a solid purchaser with numbers to prove it, they will be more likely to offer some attractive deals to get your business.

While on the show floor, be on the lookout for new trends. This is the place vendors test the waters with new products to gauge market interest. Others may be rolling out new lines.

Observe closely and you may be able to position yourself as the





Back at the shop, follow up with contacts and then get to work implementing what you learned.

shop that plants the flag and introduces the hottest new product in your marketplace.

IF YOU BRING EMPLOYEES

Many of my colleagues take key employees to trade shows, and others bring the whole team. It's a nice perk, but make sure you meet with everyone ahead of time to plan out what they will be doing.

Education and training programs, vendor exhibit visits, etc., should all be scheduled. If you leave it to chance, don't be surprised if you end up springing for an expensive trip for everyone to simply wander around.

One issue is, again, the late nights and partying. As a business owner or manager, how can you prevent this from having a negative impact? The best solution I've heard is the early morning breakfast meeting.

Employees may grumble, but it's your dime and you should set the expectations for how it's spent. The result will be that most employees will know enough to curtail the late-night playtime in order to make it to breakfast.

Use the morning as an opportunity to solicit their input on what they found interesting/exciting the day before and discuss what they plan on doing today.



If a meeting is extremely important, phone or text your contact the day of the show to confirm the time and place.

Commend everyone for their participation and cooperation. Buy some $5 Starbucks gift cards and hand them out. Your small tokens of appreciation will go a long way toward making this a great experience for everyone.

WHEN YOU GET BACK HOME

Follow up. Follow up. Follow up.

This is where everyone—vendors and attendees—seem to fall short. Reconnect with your vendor contacts and follow up on your discussions at the show. Meet with your managers and employees and reinforce the ideas, information and training they received. As the adage goes, "rinse and repeat."

Back at the shop, you will have a few months to implement what you learned. Then it will be time to start preparing for the next show.

With careful and consistent planning, execution and follow-up, attending trade shows can be a valuable part of your business success. ***TS***



KARL M. STEARNS *is a professional speaker and business advisor, often appearing at the SEMA Show as a guest speaker. With a long history in the automotive accessory industry, he was a member of the PRO Council Select Committee for 12 years, serving as PRO Council Chairman from 2009-11. He is a recipient of the prestigious PRO Council Jim Borre Lifetime Achievement Award as well as PRO Restyler of the Year.*

THE SHOP webinar

FREE Thursday,
Sept. 21, 2023
1 p.m. CT

The 7 Core Values That Turbocharge E-commerce Growth

Growing an e-commerce business seems complicated – there are hurdles to jump, no doubt. However, if you boil it down to its core, a business is simply an exchange of value. Focusing on the values that you provide to your customers is a simple way to drive rapid growth. In this presentation we will discuss the 7 primary value exchanges of an e-commerce business and how to leverage each of them to delight customers and build a community of loyal brand ambassadors.

What we'll cover:

- The 7 core values of an e-commerce business and how each value affects your business relationship with your customers
- The values that most e-commerce merchants aren't providing that can really set your business apart.
- How we built a community of over 1 million followers in less than a year by focusing on one of these values.

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Founder and CEO, TJ has uniquely positioned himself as a thought leader in the industry due to his mass appeal to a wide array of community members. eCommerceAholic delivers meaningful content for the up-and-coming small merchant, large enterprise and technical audience alike. His agency, Jamersan, has been working with e-commerce merchants to help them do more with their e-commerce store for over 20 years.

Jamersan develops highly converting e-commerce experiences for small- to mid-market merchants that have a solid vision for their businesses but are hampered by their limited internal resources or a lack of experience on how to realize that vision. The agency is focused on a limited number of long-term partnerships with merchants where its team can really get to know its customer's businesses to provide the most value possible in helping them develop a plan and then execute to achieve their goals.



THESHOPMAG.COM/WEBINARS

PARTICIPATING IN SEMA

Where do you belong within the association? ///// **By Josh Poulson**

For many years I thought the SEMA Show was just a trade show in Las Vegas that we all attended to meet with vendors or customers and have a little fun. And it is.

However, the Specialty Equipment Market Association (SEMA) is much more than just its world-class trade show we all know and (mostly) love. SEMA itself is a nonprofit organization with more than 150 employees dedicated to helping its members year-round.

SEMA works hard to protect consumers' rights to drive accessorized, customized and vintage vehicles. It keeps close tabs on legislation at the state and national levels so that we all have a future as vehicle modification professionals.

Along with serving as a watchdog and advocate, the association also offers programs and educational opportunities to help its members, all of which can be found at sema.org.



SEMA helps shops with information on the latest industry trends.

I'm sure when you attended the show for the first time you were impressed by all the exhibitors, booths, buyers and vehicles. Whether as a shop owner or manufacturer, it can be overwhelming at first trying to make the most of the event as it relates to your specific business.

Thankfully, the SEMA board of directors (volunteers within SEMA; not paid staff) created specific councils and networks many years ago that work as extensions of the board. Dividing the industry into



Last year's SBN All-Female Vehicle Build proves that getting involved isn't just worthwhile; it can be a lot of fun as well.

smaller segments and then having a leadership team take charge of each one has allowed the board to stay more informed on what is happening on all fronts. It has also enabled a conduit in which its messages can be more rapidly spread to all members.

Today there are nine SEMA councils that cover the entire specialty automotive aftermarket. And your participation is requested in the one(s) that suit you best.

COUNCIL VS. NETWORK

Before we determine where your company best fits into the overall picture, let's clarify some terminology, starting with councils and networks. What's the difference?

The simple answer is that councils are made up of member companies of a specific area of the industry, while networks are made up of individuals within those companies. Councils usually have a yearly membership fee, while networks are no-charge to individuals.

Each council has a select committee of between eight and 17 members that are voted in by their peers to serve two-year terms, up to three consecutive terms. Select committees have a leadership team made up of a chair, chair-elect and IPC (immediate past chair) that are also voted in by their peers.

The select committee takes the lead for its members as a voice for that segment of the industry. It meets virtually every month and then usually one or two times a year in person for planning and implementation, working closely with SEMA staff.

Within each select committee are multiple subcommittees and task forces that spearhead specific programs or projects, which is where shop owners and supplier representatives can initiate change and make a real difference.

If you've ever thought about getting more involved, your first step is to join one of these councils or networks. The extent of your participation is up to you.

Maybe you just want to meet-and-greet at specific receptions or parties in Las Vegas at the SEMA Show? Or maybe you want to tap into the resources these councils/networks have available to members? Or perhaps you want to be more entrenched and volunteer to be part of one of the subcommittees or task forces in your segment and then ultimately serve on one of the select committees, where your influence, expertise and voice will help direct action on important issues?

Whatever level you're interested in, there's an opportunity to be part of the process.

SEMA'S SEGMENTS

So, where exactly do you fit in? Which council or network is best suited for your business or you personally?

Well, as I list the nine different networks and councils, it should immediately become apparent that you belong in one or more of them. And, if you do meet the criteria for multiple groups, it's OK to participate in all of them.

ARMO (AUTOMOTIVE RESTORATION MARKET ORGANIZATION)

ARMO focuses on preserving and pro-





Joining SEMA allows your voice to be heard on issues important to your business.



Councils and networks host educational presentations at the SEMA Show focusing on specific industry topics.

moting the auto restoration industry. If you are a manufacturer, distributor, retailer, or restorer in the restoration segment, ARMO is where you can make a difference.
■ *sema.org/armo*

ETTN (EMERGING TRENDS & TECHNOLOGY NETWORK)

ETTN is a network of individuals from throughout the industry that come together to identify and communicate trends and technology to aftermarket professionals and provide resources and solutions. Many of the industry's engineers and similarly trained personnel join ETTN to create a community that shares and solves challenges and educates peers.
■ *sema.org/ettn*

FLN (FUTURE LEADERS NETWORK)

FLN is a network of individuals from SEMA companies that are under the age of 40 and would like to tap into career-building education—be it sales and marketing, technology, operations or executive-level training and/or information. Those new to the industry can meet others with long, bright futures ahead.
■ *sema.org/fln*

HRIA (HOT ROD INDUSTRY ALLIANCE)

HRIA addresses challenges facing the hot rod segment and works to ensure its future. It includes manufacturers, builders, fabricators, dealers, car clubs and enthusiast publications, all cooperating to develop strategies and programs.
■ *sema.org/hria*

MPMC (MOTORSPORTS PARTS MANUFACTURERS COUNCIL)

MPMC was established for companies involved in manufacturing functional performance parts used in sanctioned racing applications. Members tackle legislative, marketing, distribution and racing issues, and the council also hosts an annual Media Trade Conference.
■ *sema.org/mpmc*

PRO (PROFESSIONAL RESTYLERS ORGANIZATION)

PRO started more than 30 years ago to ensure the growth and prosperity of the restyling industry. It is made up of manufacturers, restylers and retailers that focus on aftermarket accessories and have experience working with retail and wholesale customers including car dealerships.
■ *sema.org/pro*

SBN (SEMA BUSINESSWOMEN'S NETWORK)

SBN provides networking, education and recognition opportunities for professional women within SEMA. It is open to any individual (not just women) who works for a SEMA member company.
■ *sema.org/sbn*

TORA (TRUCK & OFF-ROAD ALLIANCE)

TORA unites manufacturers, retailers and distributors of accessories for light-duty pickups, vans and SUVs. It hosts virtual and live events across the country.
■ *sema.org/tora*

WTC (WHEEL & TIRE COUNCIL)

WTC brings together manufacturers, importers, distributors, dealers and service providers to address aftermarket wheel and tire issues and challenges and pursue opportunities within the industry.
■ *sema.org/wtc*

I should also mention that SEMA owns the PRI (Performance Racing Industry) trade show held each December in Indianapolis. The popular event encompasses all aspects of motorsports and includes educational and networking opportunities for shops and manufacturers. You can visit performanceracing.com.

So, did you find where you belong? Consider joining the councils or networks that make the most sense for your company—yours could be the voice the industry has been waiting for! ***TS***



Named the 2022-23 SEMA Person of the Year, ***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.*

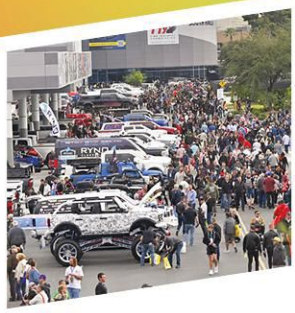
SEMA SHOW

WHERE CONNECTIONS ARE BUILT

REGISTER TO ATTEND







OCTOBER 31—NOVEMBER 3, 2023

LAS VEGAS CONVENTION CENTER • LAS VEGAS, NEVADA

SEMASHOW.COM/REGISTER

ACT NOW! REGISTER EARLY FOR THE BEST PRICE

Formula 1's return to Las Vegas just weeks after the SEMA Show is another reason to celebrate our industry.



TRULY WORLD-CLASS

F1 in Vegas is another reason to celebrate the industry. ///// **By Tony Thacker**

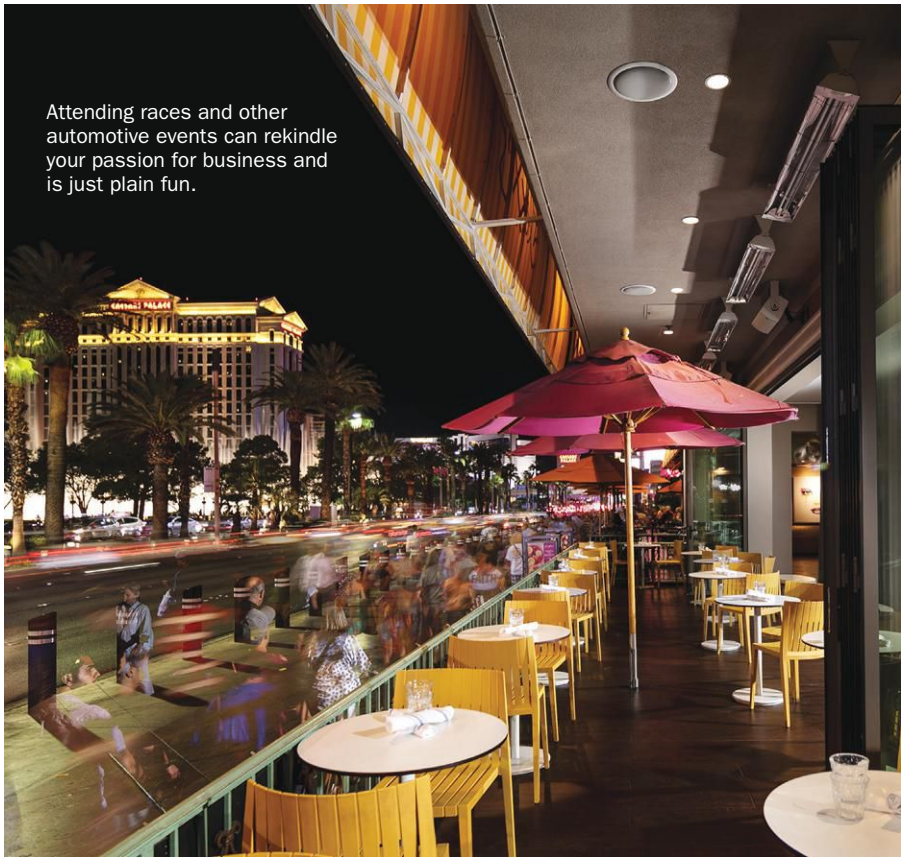
SOLD OUT! That's what comes up when you Google "General Admission F1 Las Vegas."

Of course, you can always get a ticket—if you're prepared to pay. Prices at the time of writing (early summer) were starting at $1,499, and I saw tickets for the East Harmon Zone through Virgin Hotels as high as $10,000 per person. However, that is for a four-day ticket that includes premium beverage and food service.

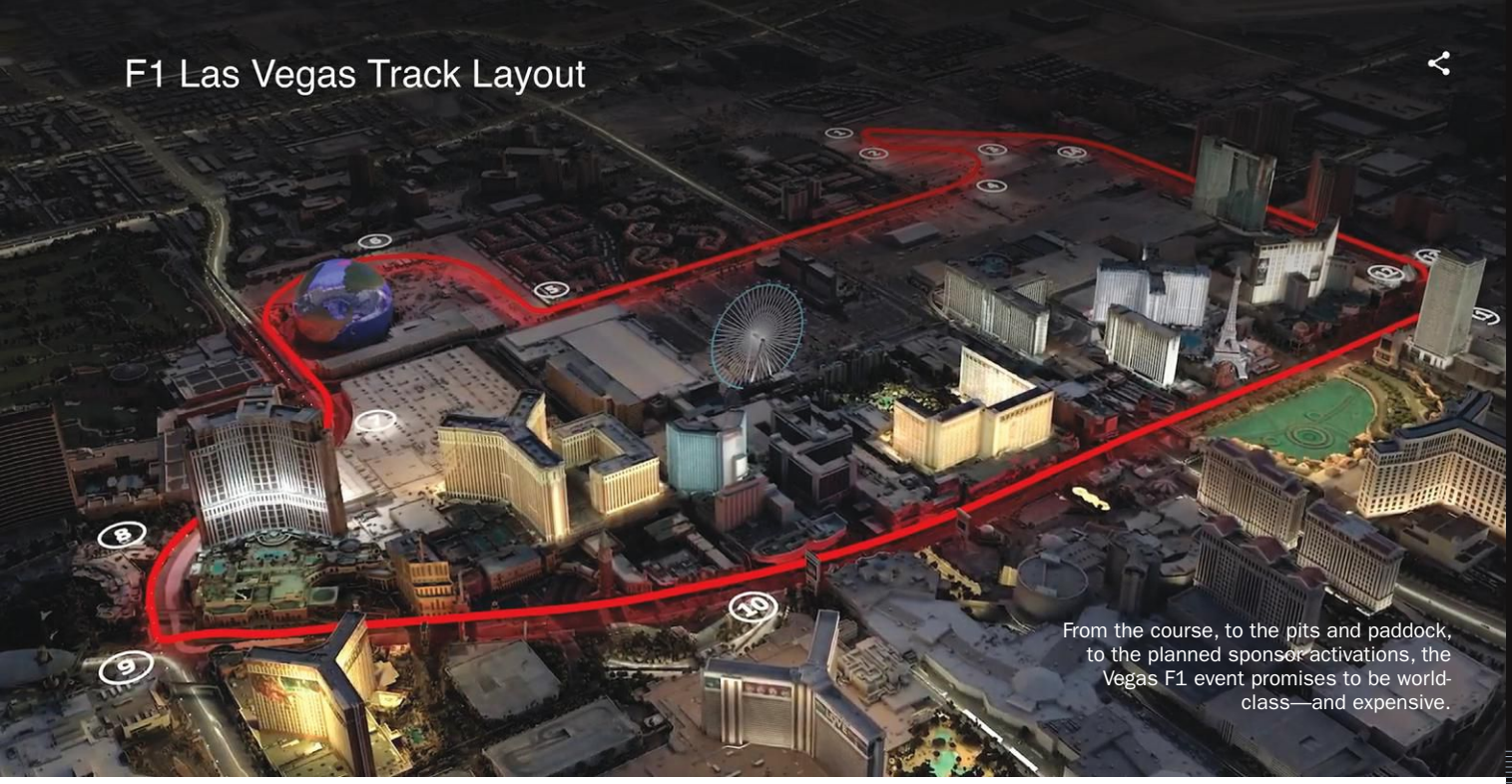
So, what is going on in the desert that's causing such a frenzy? It is, of course, the first Formula 1 competition in Las Vegas since 1981, when a race was held in the parking lot at Caesars Palace.

According to a study by casino comparison service KingCasinoBonus, the average cost for the weekend is $7,000, making it the most expensive event on this year's F1 calendar.

Driving those prices are enormous setup costs—reportedly well north of $500 million. The pits alone cover more than 300,000 square feet and the 39-acre paddock site apparently cost F1 parent



Attending races and other automotive events can rekindle your passion for business and is just plain fun.



From the course, to the pits and paddock, to the planned sponsor activations, the Vegas F1 event promises to be world-class—and expensive.

company Liberty Media $240 million. The economic impact for Vegas is said to be $1.2 billion.

The Vegas street course will be 3.8-miles long, allowing an estimated top speed of 212 mph. There will be 14 corners, three straights and two drag reduction system zones (DRS).

The DRS zones are overtaking zones where drivers are permitted to deploy the system (an adjustable part of the rear wing which, when opened, improves speed by 10-12 km/h) if they (the pursuing car) are within 1 second of the car ahead. Sounds exciting!

THE **BACK SEAT** IS NOW THE **BEST SEAT.**



LAS VEGAS EVENTS

Oct. 26-29	Nevada Nationals drag race – The Strip at Las Vegas Motor Speedway
Oct. 31-Nov 2	AAPEX Show (trade only) – Venetian Expo & Convention Center
Oct. 31-Nov 3	SEMA Show (trade only) – Las Vegas Convention Center (LVCC)
Nov. 2	Exotics Racing (open 7 days a week) – Speed Vegas
Nov. 2-5	NHRA Division 7 Lucas Oil Drag Racing Series – The Strip at Las Vegas Motor Speedway
Nov. 3	SEMA Ignited – LVCC West Hall Parking Lot
Nov. 3-4	SEMA Fest – Las Vegas Festival Grounds
Nov. 5	Vegas Car & Bike Swap – West Wind Las Vegas Drive-In
Nov. 9-11	Mecum Collector Car Auction – Las Vegas Convention Center
Nov. 11	Cars & Coffee Las Vegas – Gateway Classic Cars of Las Vegas
Nov. 11	Celebrity Cars & Coffee – Sansone Park Place
Nov 12	Espresso & Exotics – Samba Latte at Boca Park
Nov. 14	Car Show & Short Skirt Tuesday – Mr. D's Sports Bar & Grill
Nov. 15	Exquizit @ Cars In The Arts – 18bin, The Arts District
Nov. 16-18	F1 – Las Vegas Strip
Nov. 18	Cars & Coffee Las Vegas – Shelby American
Nov 19	Gears & Grinds – Baguette Café
Nov. 21	Car Show & Short Skirt Tuesday – Mr. D's Sports Bar & Grill
Nov. 25	Caffeine & Chrome – Gateway Classic Cars
Nov. 25	Celebrity Cars & Coffee – Sansone Park Place
Nov. 28	Car Show & Short Skirt Tuesday – Mr. D's Sports Bar & Grill





The Mecum Collector Car Auction is set for Nov. 9-11 in Las Vegas. Available vehicles will include this 1971 Chevrolet Camaro Z28, a 2021 Goodguys Muscle Machine of the Year and Builder's Choice Award winner. (Photo courtesy Mecum Auctions)

Of course, the F1 race is not the only automotive event happening in Las Vegas in November. A month of motorsports mayhem begins with the Nevada Nationals at The Strip at Las Vegas Motor Speedway and continues through Car Show & Short Skirt Tuesday at Mr. D's Sports Bar & Grill on Nov. 28.

Meanwhile, of course, the annual SEMA and AAPEX Shows are the reasons most of us head to Nevada each fall. SEMA Ignited and the new SEMA Fest are two ways in which SEMA is taking its show to the public.

The SEMA Show Friday Experience offers limited public access on the last day of the event, along with entry into that evening's SEMA Ignited parking lot car show and celebration.

Meanwhile, on Friday and Saturday, the brand-new SEMA Fest is described as "an exciting two-day festival celebrating car culture and all things automotive." Planned activities at the Las Vegas Festival Grounds (located just off the Strip, north of Circus Circus) will include drifting, off-road demos and music on multiple stages, plus food, art and vendors.

A separate ticket will be required to attend SEMA Fest—your regular SEMA/AAPEX Show badge won't get you in.

The SEMA Show and F1 are anchoring a month-long list of events in and around Las Vegas that range from Cars & Coffee gatherings to auctions and a swap meet. If you can't find something related to your business, I'd be shocked.

Add it all up, and this exciting month in Vegas is just another reason to celebrate our industry. ***TS***



Born in England, ***TONY THACKER*** *is an accredited automotive journalist, author and book publisher, and served as marketing director at the famed SO-CAL Speed Shop.*



PERFORMANCE

Drivetrain p. 48 | Performance Products p. 58 | James Melton p. 60



Meticulous drivetrain work will earn shops a reputation for quality. (Photo courtesy RANDYS Worldwide)

WHEN THINGS JUST MESH

Quality drivetrains can make or break performance builds.

By John Carollo

Behind every performance engine is a quality drivetrain system that effectively delivers all that power to the ground.

While consumers often don't think of them until something goes wrong, drivetrain components are nevertheless vital factors to the overall enjoyment of any vehicle build. Their relative lack of exposure and sometimes intricate compositions are just two of the reasons why a professional touch is often needed.

Suppliers are happy to answer common drivetrain questions and point shops in the right direction so that all the gears mesh smoothly.

MANY FACTORS

As in many industries these days, a lot is happening all at once in the performance drivetrain market.

"Industry trends such as post-COVID cooling, new vehicle costs and general economic concerns are creating headwinds," says Neal Hollingsworth, marketing VP at RANDYS Worldwide, when asked about outside factors affecting the market. "On the other side, the supply chain has caught back up, pricing pressures and the costs of raw materials have eased, the supply chain is hungry, and ships are making it into port. Inventory is good."

One key to success? Adaptability.

"You take the good with the bad, stay in front of your customers, provide new news and great customer service and you have a winning combination," he says.

Different companies are dealing with different issues as they work to fill the encouraging trend of increased customer demand.

"The supply chain for installation components has been facing challenges. High



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WHEN THINGS JUST MESH



Behind every performance engine is a quality drivetrain system that effectively delivers all that power to the ground. (Photo courtesy RANDYS Worldwide)

DRIVETRAIN PRODUCTS

■ **HOT PRODUCT:** TREMEC TKX 5-Speed Transmission
■ **FEATURES & BENEFITS:** Good all-around 5-speed transmission; compact design for a better fit; can take more than 600 pound-feet of torque.

American Powertrain
Matt Graves
Marketing Manager

■ **HOT PRODUCT:** Shift Restore
■ **FEATURES & BENEFITS:** Automatic transmission additive that decreases transmission fluid temperature to help extend transmission life.

Hot Shot's Secret
Josh Steinmetz
Brand Manager

■ **HOT PRODUCTS:** Adventure Series Pro Packs for Jeep JL Models
■ **FEATURES & BENEFITS:** Designed to address common JL clutch issues; quality components including a billet bearing; properly placed release; options to fit different horsepower levels and types of use.

McLeod Racing
Bob Scheid
Vice President

■ **HOT PRODUCTS:** Toyota Gear Packages
■ **FEATURES & BENEFITS:** All-inclusive, single part number gear packages for Toyota applications; components include front and rear Nitro ring & pinion sets, front and rear master install kits, and special components such as solid pinion spacers or extra shim sets as needed.

Nitro Gear & Axle
Lars Svanoe
International Sales Manager

■ **HOT PRODUCTS:** Yukon Single Part Number Re-Gear Kits
■ **FEATURES & BENEFITS:** Four-wheel drive packs include full front and rear gears, marking compound, RTV sealant, all-new ring gear bolts, crush sleeves, bearings for both pinion and carrier, axle seals and shims; rear-wheel muscle car kits also available.

RANDYS Worldwide
Neal Hollingsworth
Marketing VP







There's an art to achieving quality drivetrain upgrades. (Photos courtesy RANDYS Worldwide)

demand has led to shortages of common parts like bearings and races," says Lars Svanoe, international sales manager for Nitro Gear & Axle. "We prioritize OEM quality or better, but it's evident that the manufacturers are not fully considering the extensive aftermarket using the same components as the original builds. This shortage is affecting all sectors of the business due to insufficient production to cater to all channels."

New technology is also having an impact, says Bob Scheid, vice president of McLeod Racing, "both in positive and negative ways."

The bad news is that modern cars and trucks are becoming more complex, causing aftermarket solutions to become more complicated.

"The computers in the vehicles pull more data points than ever before," Scheid says. "As a manufacturer, we use and keep this in mind as we design user-friendly products."

The good news is that suppliers have access to friction materials and other components that help them build better products than even just a few years ago.

"This is true in our hydraulic bearings and other components," Scheid continues. "Right down to the seals we offer, technology has driven quality in a positive direction for companies like McLeod that are willing to be open to it."

Sometimes, it's not about focusing on the latest OEM models.

"With the increasing prices and low inventories of new vehicles, more consumers are opting to keep older vehicles," says Josh Steinmetz, brand manager at Hot Shot's Secret. "When repairs are

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POWER TOUR TRANSMISSION GIVEAWAY

American Powertrain, a long-time sponsor of the HOT ROD Power Tour and the world's largest TREMEC dealer, offered up a grand prize as part of the 29th annual Tour festivities that began June 12 at Atlanta Motor Speedway and ran through South Carolina and North Carolina before finishing at Bristol Motor Speedway in Tennessee.

As in years past, American Powertrain teamed up to give away a TREMEC transmission and a complete TKX 5-speed or 6-speed kit on the last day of the Tour. The contest was open to all registered participants.

The only entry requirement was for participants to stop by the American Powertrain booth and show their HRPT pass to get two tickets to enter the contest and a #savethestick koozie.

The golden ticket holder was Trace Boyd from Virginia. He plans to use the TREMEC TKX 5-speed in his 1985 GMC Sierra square body, which is equipped with a small-block Chevrolet engine.

Matt Graves, marketing manager at American Powertrain, and Chris Dillon from TREMEC presented the prize on June 16, with the assistance of HOT ROD Power Tour announcer Jeff Thisted.



Trace Boyd, second from left, was the winner of the American Powertrain/TREMEC grand prize giveaway at this year's HOT ROD Power Tour. (Photo courtesy American Powertrain)

required, consumers often opt to upgrade their vehicles with aftermarket parts; not just replace."

Matt Graves, marketing manager at American Powertrain, reminds shops not to forget one of the main reasons why the performance drivetrain market remains popular year after year.

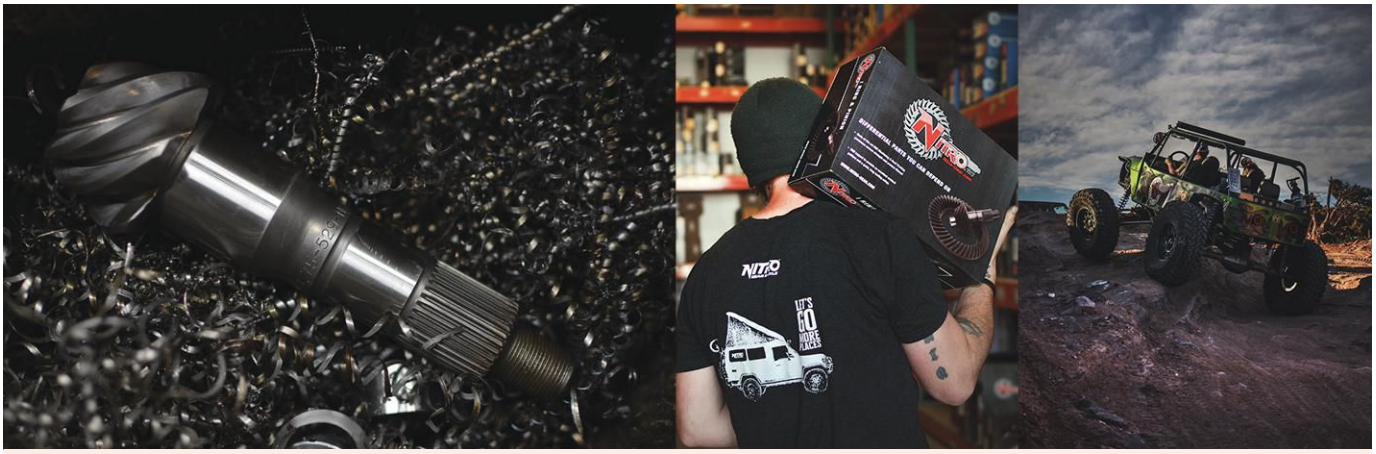
"People are wanting manual transmissions more and more these days," he observes. "Muscle cars need a stick!"

A PROFESSIONAL TOUCH

Even when selling to do-it-yourselfers, shops should never underestimate the value



Always inspect the entire drivetrain system for potential wear risks or failures. (Photo courtesy Nitro Gear)



Demonstrating a commitment to customer support reinforces a sense of reliability and service excellence. (Photos courtesy Nitro Gear)

of professional knowledge and experience when it comes to building an integrated driveline setup.

"Drivetrain is an art. Some call it voodoo," says Hollingsworth. "It's meticulous and painstakingly time-consuming when the patterns on gear installs aren't perfect. When it isn't done properly, you'll know it. At this point, the diff is screaming louder than the customer bringing it back."

Moving from OE to an aftermarket system doesn't always line up, he explains, and not every gear is the same.

"Oftentimes, an imperfect pattern is accepted as 'close enough' when one more take will get it to perfection," Hollingsworth continues, noting that since there are no ASE training modules, Yukon Gear & Axle has created a Master Installer Training program focused solely on the installation of drivetrain components that now has more than 100 graduates.

"This program is the only drivetrain training program in the country with a mission to educate and train professionals, ultimately certifying them as master installers," he says.

Meanwhile, outside factors can sometimes be compounded by internal mistakes and miscues in shops servicing this market.

"Whether it is a clutch, a transmission, a torque converter or any other drivetrain part, sell the customer the right part for their build and the way they plan to use it," says Scheid. "Too often parts are sold based on horsepower, while other factors



WHEN THINGS JUST MESH

TRACK SHIFTING FROM THE FACTORY

The return of the 2024 Nissan Z NISMO means immediate performance for racers, including a track-ready drivetrain.

The NISMO grade builds on the capabilities of the Z Sport and Performance grades, with targeted enhancements that elevate the sports car's performance with additional horsepower and torque, tuned suspension and brakes, revised aerodynamic bodywork, stiffened suspension and wider wheels with a more aggressive tire compound.

All those tweaks are felt on the track through an exclusive Z NISMO 9-speed automatic transmission that has been enhanced for faster and more dynamic shifting performance, with a particular focus on suitability for competition use.

Compared to the transmission in other Z grades, it has updated clutch packs allowing for faster shifting. Along with revised engine management software, Z NISMO's transmission reduces downshift time by almost half, compared to Z Performance. Launch control, meanwhile, delivers more aggressive standing-start acceleration.

In addition to Normal and Sport, Z NISMO adds a new Sport+ drive mode that delivers a dynamic, racetrack-tuned shift program for circuit driving, taking advantage of the powertrain's faster downshift capabilities.

The shift programming is designed to be so responsive that the driver does not need to use the shift paddles on track, though fast-responding manual shifting is always available, the company states.

Z NISMO takes the twin-turbo engine's power output to 420 hp and 384 pound-feet of torque. Peak torque is delivered from 2,000 through 5,200 rpm.



The 2024 Nissan Z NISMO features a track-ready performance drivetrain. (Photo courtesy Business Wire)



People continue to want manual transmissions in their performance and muscle cars. (Photo courtesy American Powertrain)

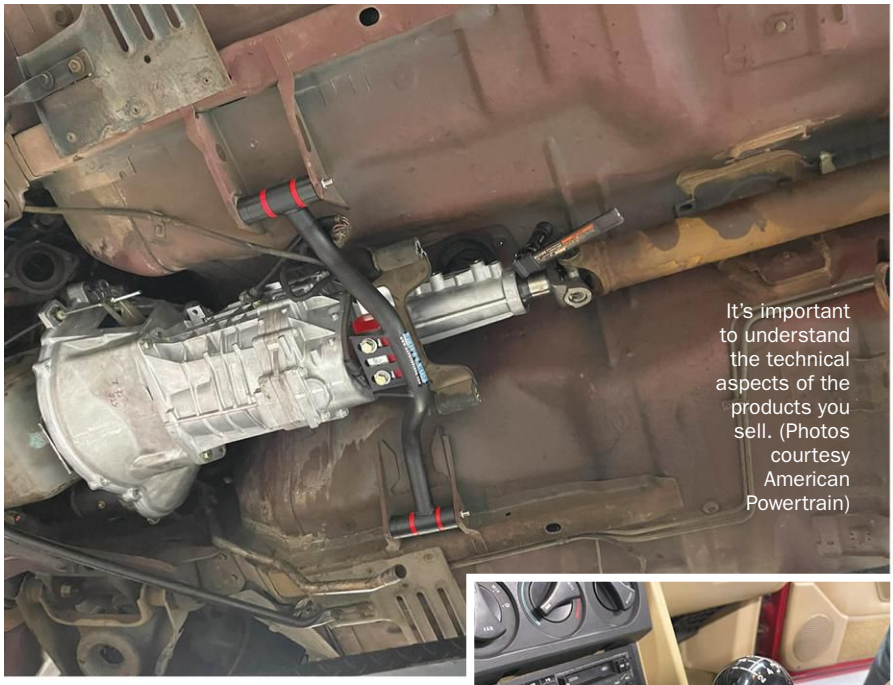
such as type of use are not considered. Don't sell a clutch made for the street that holds 800 hp to someone that is going to use the car on the track. The horsepower might be right, but the type of use isn't."

And choosing the right component is not limited to hard parts, Steinmetz adds.

"Care should be taken when selecting fluid to match the specification called for by the manufacturer," he says. "Selecting the incorrect type or viscosity of transmission fluid can affect performance and lead to excessive wear."

Considering the entire system as whole, as well as





It's important to understand the technical aspects of the products you sell. (Photos courtesy American Powertrain)



rechecking your work, can prevent future headaches.

"Neglecting a comprehensive inspection of the entire drivetrain system for other potential wear or failures is risky," warns Svanoe. "Even if a vehicle has low mileage, a single failing part could lead to significant damage during a re-gear, potentially holding the installation shop accountable for the outcome. It's crucial to ensure a



WHEN THINGS JUST MESH



Great customer service starts before a vehicle ever gets on a lift. (Photos courtesy McLeod Racing)

thorough examination to prevent such issues and mitigate liability concerns."

Add it all up, and experienced shops will come out ahead on profits and time saved.

"Poor installs are the leading thing we have to deal with," says Graves. "Things like not reading the instructions. Lot of shops need to learn how to properly dial-indicate a bellhousing and set up a hydraulic clutch system. Learning what it takes to swap out a transmission into an older car takes some time."

A STEP ABOVE

Businesses that gain that experience will enjoy name recognition and long-term success.

"For many shops fighting for dominance, it's always been about reputation,"



Build strong relationships with your drivetrain product suppliers.



Proper lubrication will extend the life of important drivetrain components. (Photo courtesy Hot Shot's Secret)

says Hollingsworth from RANDYS. "It's not a hard thing to think about, no matter how large of a business you run. But, for the city shop, making sure that the vehicle is delivered back to the customer with the utmost care put into it is the secret sauce. It's easy to believe that some social media and general advertising will work, but we see a lot of our dealers participating in the craft. That could be anything from pulling, to riding trails, to racing, to overlanding and more. Finding your niche and driving that home as a leader is a great way to stay ahead of the competition."

One approach is to learn all you can about the people you serve.

"Get to know your customers' needs and how they use their vehicles," suggests Steinmetz from Hot Shot's Secret. "You can often suggest an upgrade that will increase your sales while giving the customer a better experience."

In fact, strong partnerships are needed everywhere you turn, says Scheid.

"Build great relationships with your suppliers. At McLeod, we have an awesome tech team to help walk you through what the customer needs and to get you all the parts you will need to service that customer right the first time," he says. "A shop's customer service starts before the vehicle ever gets on the lift."

Then it's time to perfect your systems and processes.

"During a re-gear, it's essential to inspect adjacent bearings, seals and hardware. Additionally, verify the vehicle owner's needs and suggest beneficial add-ons such as air lockers and compressors, and limited-slip and helical gear traction devices," says Nitro's Svanoe. "Always advocate for high-quality lubrication and offer the necessary lubricants for post-break-in use. Demonstrating your commitment to customer support even after they leave reinforces a sense of reliability and service excellence."

In the end, drivetrain success often comes from doing what others can't or won't.

"Learn the market for overdrive conversions," says Graves from American Powertrain. "It's a lot of technical knowledge and if you can't talk the talk, you won't get the sale." ***TS***













C8 Corvette Lug-Drive Big Brake Kit

Wilwood Disc Brakes, Camarillo, California, presents an upgraded SX6R Front Big Brake Kit with Lug-Drive technology for C8 Chevrolet Corvettes. The kit includes dynamically mounted 15-inch-diameter rotors that provide increased brake torque and greater thermal capacity. Proprietary Lug-Drive, floating Spec37, long-grain iron alloy rotors are dynamically mounted to the hat for expansion without distortion through repeated heat cycles. The differential-bored, stress-flow forged aluminum Speed Xtreme SX6R six-piston front calipers have reinforced ends.



Endurance Racing Brake Pads

Hawk Performance, Medina, Ohio, presents its ER-1 Endurance Racing Brake Pads. Designed to offer a high coefficient of friction while maintaining matched or improved lifespan, the race-tested pads feature a well-rounded compound that delivers ideal modulation and pedal communication, as well as friction stability across a thermal range as high as 1,600 degrees. The pads can be used for endurance racing, HPDE, track days, time trials and sprint racing.

Dodge Charger GT Cat-Back Exhaust



BORLA Performance Industries, Johnson City, Tennessee, presents its Cat-Back Exhaust System for 2019-23 Dodge Charger GT models. Designed to improve horsepower and torque, System 140917 delivers the recognizable BORLA S-Type sound without any drone or resonance inside the vehicle. The system is made from T304 stainless steel and features all-welded construction for durability and long life. System 140918 with ATAK sound is also available.



B-Body Bolt-On Suspension Assembly

Art Morrison Enterprises, Fife, Washington, offers a complete Bolt-On Front Suspension Assembly for 1966-70 Mopar B-Body cars (Dodge Charger, Plymouth Road Runner, etc.). Designed to deliver improved handling, superior ride quality and a contemporary stance, the precision fixture-welded assembly features tall forged aluminum steering knuckles with bolt-on unit bearings, high-strength forged steering arms and TIG-welded tubular steel control arms. A custom-valved 17.5:1 ratio power steering rack provides improved responsiveness and feel.



JL Clutch & Flywheel Kits

McLeod Racing, Anaheim, presents Single Disc Clutch Kits for Jeep JL models, the latest offerings in the McLeod Adventure Series. Each kit is equipped with a max mass flywheel and billet hydraulic bearing for off-road use. The 11-inch Adventure Series clutches address and eliminate factory performance issues, and the kits are available in three stages—Trail Pro (450 pound-feet of torque), Super Trail Pro (510 pound-feet of torque) and Trail Extreme (570 pound-feet of torque). They feature ceramic-lined discs, high clamp-load pressure plates and more.

Porsche 718 Cayman GT4 RS Exhaust



Akrapovic, Horsham, Pennsylvania, offers a Slip-On Race Line Titanium Exhaust System for 2022-up Porsche 718 Cayman GT4 RS models. The performance exhaust system can be further enhanced with an optional Titanium Link Pipe Set. A pair of carbon fiber rear diffusers and optional sound kit round out the offerings for this new platform. The system is constructed from high-grade titanium and features a sandblasted finish. Two valves provide a smooth, rich tone at lower speeds that rise to a sporty sound at higher revs.



A/C Service Equipment Filtering System

AirSept, Atlanta, presents its Automatic Dual Recycle Guard (ADRG) filtering product that safely and effectively captures sealant, debris, dye, excess lubricant and other contaminants to protect expensive A/C recovery service equipment without adjustments or monitoring. The guard filters out sealant and other contaminants from the refrigerant before it enters the refrigerant recovery machine. ADRG is designed with two internal filters to provide simultaneous high- and low-side protection.

Roll Bars

Titan Motorsports, Orlando, offers Titan Roll Bars for a variety of performance and racing applications. Produced by the in-house fabrication team, applications are available for a variety of vehicles including Toyota Supra (A80-A90s), Toyota FRS/BRZ, Nissan GTR and Audi R8 models, and most Porsches.





BMW Suspension Upgrades

KW automotive, Clovis, California, introduces a variety of Suspension Enhancement Systems for second-generation BMW M2 (G87) models. Available products include four coil-over kits—the two-way adjustable KW V3, the three-way adjustable KW V4, and track-optimized KW V4 Clubsport and KW V5 Clubsport, equipped with motorsport components derived from the GT4 customer racing series. All kits allow for stepless lowering of the vehicle by up to 35mm. ***TS***





THE SINGING CAR CELEBRITY

By John Gunnell
Photos courtesy John J. O'Leary IV

James Melton was an automotive personality pioneer.

Thanks to John J. O'Leary IV for his research regarding James Melton. O'Leary is an automotive historian based in Maine who collects memorabilia from Reuter's Coach Works and James Melton. He can be reached at (860) 805-6928 or by emailing ***olearyj42@gmail.com.***

(Above) Opera singer and car lover James Melton gave this photo to Gus Reuter in 1951.

Shop owners who visited last year's SEMA Show in Las Vegas may have collected autographs from customizer Chip Foose, racer and personality Mario Andretti, pinstriper Von Hot Rod, cable TV stars Dave Kindig, Cristy Lee, Courtney Hansen and Jo Coddington, metal shaper Ron Covell or dozens of other celebrities. The list of 2022 personality appearances took up seven pages in the SEMA Exhibition Guide.

But it wasn't always like that. Who today would guess that 75 years ago the only real celebrity involved with specialty automobiles was an opera singer?

His name was James Melton, and the role he played in the collector car field was akin to the one Jay Leno holds today. Melton owned a lot of cars, and many were seen by visitors to his large antique auto collections, first in Connecticut and later in Florida.

In many ways, he was a true industry pioneer.

CAR COLLECTOR & OPERA STAR

Melton was born in Moultrie, Georgia. He became lead tenor of New York's Metropolitan Opera Association, debuting during the 1942-43 season in "The Magic Flute." He also starred in operas in Chicago, Cincinnati and St. Louis and toured many cities in the U.S. and Canada.

Melton spent several years singing on the radio before moving into concerts and operas. He was an imposing figure at 6-foot-2 and around 200 pounds.

In 1947, Melton had a "Harvest of Stars" radio program sponsored by International Harvester and promoted a booklet the carmaker published titled "Historical Facts About Early International Harvester Automotive Vehicles."

Melton owned a 1907 IHC Auto-Wagon with serial No. 171. A famous photo shows him in the car at the Savoy-Plaza hotel in New York City in 1949.

The car had the license plate JMEL



Melton in his IHC Auto-Wagon outside the Savoy-Plaza in New York City.

issued by the state of Connecticut—an early vanity plate!

Melton started collecting vehicles in 1935 when he began hunting for a White touring car similar to one his uncle had owned. He wound up with a 1910 gasoline-powered White he purchased from its original owner.



Melton's collection was displayed in Connecticut before moving to Florida.

MUSEUM EFFORTS

It wasn't long before Melton's car collection began attracting attention.

In January 1941, the State of Connecticut passed Senate Bill 944 allotting $50,000 to establish the Melton Museum, "where agricultural and manufactured products" made in the state could be displayed. The money afforded by the bill was then deferred, due to the outbreak of World War II.

In 1945, Connecticut House Bill 458 urged the state's Appropriations Committee to approve $150,000 for a museum to house Melton's old cars and related memorabilia. Melton was chairman of the Merritt Parkway Commission, and the proposed museum—to be named The James Melton State of Connecticut Museum of Pioneer Automobiles—was to be along the parkway in Stamford.

Melton never received state funds, but he found a 10,000-square-foot bowling alley in Norwalk where he could store his collection. He doubled the space and then created the James Melton Museum of Antique Automobiles.

Opened to the public in 1948, it housed 55 cars plus antique bicycles, old auto accessories, toy trains and a vintage music box collection. Admission was 60 cents.

Like Leno, Melton was well known, and his museum and car collection were written up in numerous newspapers and magazines. This prompted many people looking to sell their old vehicles to try to contact him directly.

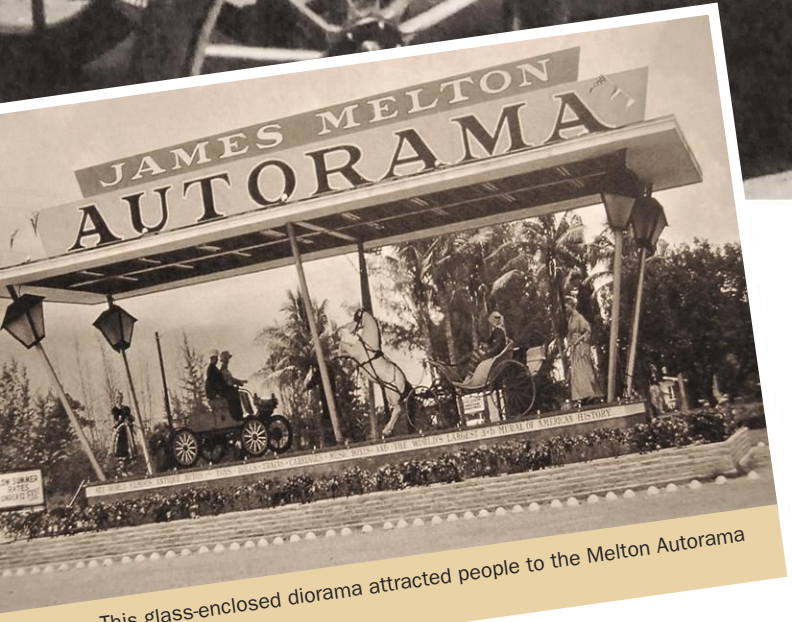
Melton acquired many rare marques and models over the years, curating probably the best collection of sporty raceabouts



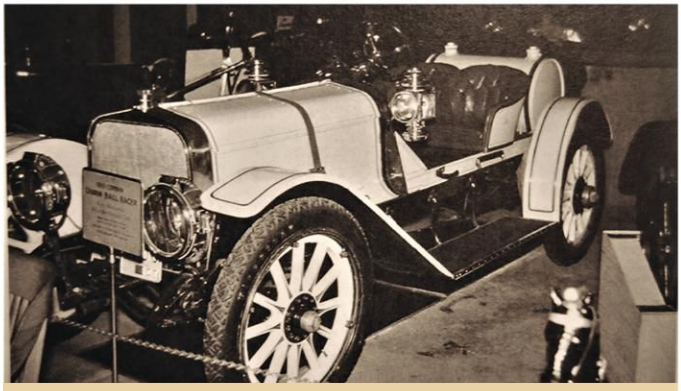
THE SINGING CAR CELEBRITY



Employee Joe Ryan wears a Melton Museum shirt and drives a Model T.



This glass-enclosed diorama attracted people to the Melton Autorama in Florida.



A 1910 Corbin Cannonball was one of Melton's many antique raceabouts.

ever amassed. He had gas cars, steamers and early electrics, with the collection reportedly growing to around 150 vehicles.

More than 100 of them were reportedly restored by Reuter's Coach Works, a shop in the Bronx, New York.

A MOVE TO FLORIDA

In 1953, Melton closed the Connecticut museum and opened the James Melton Autorama in Hypoluxo, Florida. The operation put 68 antique cars on public display. They included pre-1914 models that Melton called "antique automobiles" and 1915-25 models that he called "vintage vehicles."

Cars of later model years—including Great Gatsby-type "capital-C" Classics—were also included to show how the cars had developed over the years. Old and rare music boxes, clockwork toys, high-wheel and "boneshaker" bicycles, an old-fashioned firehouse and a collection of Belgian automotive prints were showcased as well.

The Autorama was housed in a white, mansion-like structure situated on a landscaped 11-acre tract nestled on U.S. Highway 1. The collection was advertised to be worth more than a half-million dollars in 1953.

Melton's stated reason for relocating the cars was that the harsh Connecticut winters were rough on old vehicles.

The move itself was no easy operation. Thirty-five tractor trailer loads of cars and other items were sent to Florida, and the last three antique vehicles—a Rolls-Royce, a Franklin and a 1921 Ruggles 31-pas-

senger bus—were actually driven all the way down to the Sunshine State.

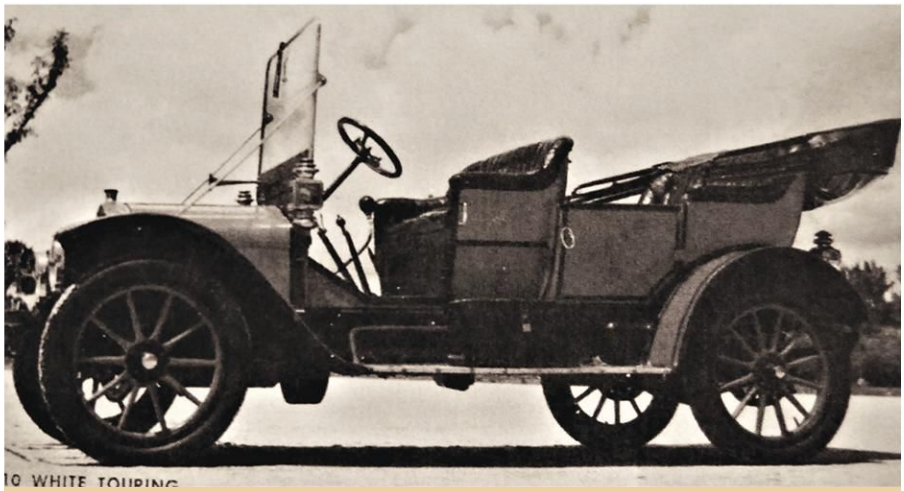
Henry Chidsey, 25, was named superintendent of exhibits at the Florida museum and was tasked with keeping all the cars in good operating condition. He was quoted as saying that Melton's rule was that all the cars had to start on the third or fourth spin of a hand crank.

Chidsey had worked for Melton for years and said he was born under an old Mack truck. Meanwhile, Henry S. Blocker was hired as museum manager.

CONTINUED COLLECTING

Being in a vacation and tourism state, the museum attracted thousands of visitors from all over the world. According to one story, "not a day goes by, but that from four to eight letters come in offering old cars to the Autorama."

Melton personally tracked down many leads to add to the collection. Those in rough shape were first shipped to Reuter's Coach Works for restoration.



Here's the 1910 White gas-powered touring car that started Melton's collection

Through interviews and public appearances, Melton introduced many people to the fun of collecting cars, paving the way for today's celebrity vehicle enthusiasts and influencers. If he was around today, there's no doubt he'd be a SEMA Show regular. ***TS***



JOHN GUNNELL *has been writing about classic cars since 1972. He is also the owner of Gunner's Great Garage in Manawa, Wisconsin. He owns 11 cars and seven motorcycles.*



Engine Build p. 64 / Engine Products p. 68

Building a Big-Block Chevy, Part II

A look at the heads, rockers, compression & more.

Build, text and photos by Mike Mavrigian

EDITOR'S NOTE: *This is the second installment of a six-part series highlighting the steps to building an old-school Chevrolet big-block performance engine. Part I appeared in the July 2023 issue of THE SHOP.*

Our solid roller lifters are from Morel—its top-of-the-line Black Mamba series. The lifters feature centered pushrod cups, a DLC coating, offset tie bar links, an O.D. of 0.842-inch and a plus-0.300-inch taller Gen VI style for BBC, required to accommodate the taller increased-support lifter bores in the Dart block.

Morel specifies lifter bore oil clearance at 0.0015- to 0.0017-inch. These high-strength, lightened lifters feature a solid roller bearing axle instead of needle bearings for added durability.

As mentioned last time, Tony Lombardi at Ross Racing Engines machined all lifter bores by an added 0.0005-inch to achieve an oil clearance of 0.0017-inch.

CYLINDER HEADS

Our head selection involved a pair of Dart's Pro 1 CNC aluminum heads, featuring 121cc chambers, 325cc intake volume, 2.250-inch intake valves and 1.880-inch exhaust valves, with raised 0.300-inch exhaust port locations, stock intake port locations, 24-degree intake valves and 15-degree exhaust valves.

Springs are 1.625 inches in diameter and 275 pounds at 2.00 inches (for 0.850-inch max lift).

Just as a verification check, I measured combustion chamber volumes at each chamber. Dart lists these CNC heads as having 121cc chambers. Using our Goodson CCB-Kit measurement kit and burette, each chamber checked out as advertised at 121cc.

To secure the heads, we used a set of ARP head studs (P/N 235-4328). This set features 12-point nuts. An alternative is 235-4118 (same kit but with 6-point nuts) or a Dart set (P/N 66120014-20).

Nuts were torqued to 70 pound-feet. Sealing involved a pair of Cometic MLS gaskets (P/N C5036-040).

ROCKERS

I opted for Harland Sharp aluminum full-roller rockers at a ratio of 1.7:1, selected



Our lifters of choice are Morel's Black Mamba 0.842-inch solid rollers. Our block's lifter bores were machined to provide oil clearance of 0.0017-inch.



Note the weight-saving design of the Black Mamba lifters, in addition to solid axle bearings.



Rather than using a conventional oil pick-up, we opted for a billet unit from Melling.

from its Diamond Series (P/N SD2001).

These full-roller forged aluminum rockers clear 1.650-inch-diameter valve springs and offer a lightweight design, eliminating as much as 100 grams from the valvetrain moving mass.

The design is also low-profile, providing added valve cover clearance for those who may be running stock-type valve covers.

PTV & COMPRESSION

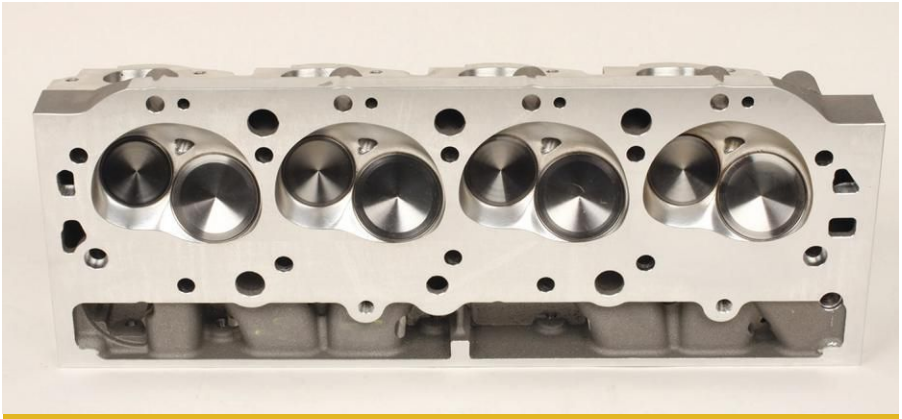
While checking combustion chamber volume, my Goodson burette provided a total volume of 100 ml (100cc). After zeroing the fluid in the burette (filled to the zero mark with the bottom of the meniscus at the mark), I carefully released 100cc into the chamber.

The meniscus is the fluid arc at the top of the column, where fluid tension tends to crawl up a bit. For indexing and mea-



Our harmonic balancer is a Fluidampr 8-inch viscous unit, featuring etched timing marks.





Our Dart Pro 1 heads feature 121cc open combustion chambers, 325cc intake volume, 2.250-inch intake and 1.880-inch exhaust valves, 0.300-inch raised exhaust ports, stock location intake ports and full CNC machining.



The COMP solid roller cam was coated with Max Tuff assembly lube and carefully inserted into the Dart coated cam bearings.



Using our Goodson burette, the Dart open-chamber cylinder head chambers were verified at a volume of 121cc.

suring, I used the bottom of the meniscus curve each time.

After refilling the burette to zero, it took another 21cc to fill the chamber. This confirms Dart's listed spec of 121cc chamber volume. I took the time to measure all four chambers in each head, with the same results.

Prior to checking volume, a spark plug was installed in each chamber, and the valves were sealed with a light coat of Vaseline, as was the clear acrylic plate-to-head-deck surface.

Once chamber volume was verified, we factored in the 4.500-inch bore, 4.250-inch stroke, 9.794-inch deck height, 0.014-inch deck clearance, minus-10cc domed pistons, 6.385-inch rods, 4.570-inch gasket bore and 0.040-inch gasket thickness to calculate static compression at approximately 9.86:1.

With the cam timed at zero and with no head gasket our piston-to-valve clearance (PTV) was approximately 0.100-inch at the intake and 0.030-inch at the exhaust. Adding the 0.040-inch gasket increased intake to 0.140-inch and exhaust to 0.070-inch.

That was too generous at the intake and too tight at the exhaust valve. By advancing the cam by 4 degrees, we tightened up the intake to about 0.120-inch and opened up the exhaust to about 0.160-inch, a decent compromise.

Radial clearance of the intake valve to the piston pocket measured 0.250-inch. Head-quench-to-piston clearance (with gasket) was 0.055-inch.

PTV clearances were checked by dial indicator and double-checked with clay. Radial clearance was checked by removing the No. 1 intake valve, painting the piston's intake valve pocket with machinist dye, bringing the No. 1 piston to top dead center (TDC) and placing the head onto the block.

Using a spare valve stem with a machined centerpunch point at the tip, we inserted the stem (tip down) through the valve guide and gently tapped the stem against the piston dome to place a witness mark at the dye.

With the head removed, and considering our 2.300-inch intake valve diameter, I set the dial caliper at half-radial distance of 1.115 inches. The radial clearance distance beyond to the valve pocket eyebrow was 0.165-inch.

Once I was satisfied with the cam position, I removed the three cam nose screws one at a time, coated the threads with medium threadlocker and torqued to 25 pound-feet.

CRANK BALANCE

Balancing was performed by Craig Haslem, owner of RPM Engine & Machine in

The ARP 235-4328 head stud kit for the Dart Pro 1 heads.



The ARP head stud kit features 7/16-inch studs at 3-, 5- and 6.112-inch lengths.



Medina, Ohio. We initially weighed reciprocating components, including pistons, pins, pin locks, rings, connecting rods and rod bearings.

Balance correction was a relatively easy task, only requiring weight to be removed from the front and rear counterweights, with no need for heavy metal.

Bobweights finalized at 2,269.40 grams

Rod total weight	797 g
Rod big end	550.40 g
Rod small end	246.60 g
Rod bearing	48.30 g
Piston	590.40 g
Piston pin	175.10 g
Pin locks	4.40 g
Piston rings	37.70 g
Support rail	9.80 g
Oil	8.00 g
Reciprocating %	50%
Rotating %	100%

HARMONIC BALANCER

Our 8-inch Fluidampr harmonic balancer (P/N 800101) features a bore diameter of 1.5990 inches, providing an interference fit of 0.001-inch to our SCAT crank snout, which features a diameter of 1.600 inches.

It registers to a single 3/16-inch key. The damper features a black zinc finish and CNC-engraved timing marks from 50 degrees before top dead center to 10 degrees after top dead center. Additional timing marks include 90, 180 and 270 degrees.

Weight was 16.3 pounds, with a rotating weight of 10.9 pounds. With anti-seize paste lightly applied to the snout and bore, the damper was drawn onto the snout using a Moroso damper installation tool.

Next time we'll tackle the intake manifold, piston ring fit, oil pump and pan, and more. **TS**



MIKE MAVRIGIAN *owns and operates Birchwood Automotive in Creston, Ohio, where he builds custom engines and street rods and performs vehicle restorations. He has written thousands of technical articles as well as nine books on automotive technology during the past 30 years.*

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Octane Booster

BOOSTane, Memphis, offers The SHOT by BOOSTane octane booster. Each 4-ounce shot is designed to effectively boost octane by 2-3 points, and the recyclable bottles come shrink-wrapped, so they can be kept in the trunk of a car or elsewhere. The octane booster is fully designed, manufactured, bottled and distributed in the USA.





Shaft Rocker Arms

PRW Industries, Perris, California, offers its Performance Quotient PQx Aluminum Shaft Rocker Arms, available for GM L92 and LS3 engines. Made from 2024 aircraft-quality aluminum alloy extrusions, the shaft rocker arm system is designed to work in aggressive race engines. Each rocker body is relieved for extra valve spring clearance and anodized for added strength. The fulcrums, shafts and material content are matched to the precision bearings to support higher operational loads. The complete kits include all components and hardware.

7.3L Ford Godzilla Piston Set

MAHLE Motorsport, Fletcher, North Carolina, presents a PowerPak Piston Set for 7.3L Godzilla engines found in Ford F-250 and F-350 Super Duty trucks. Designed to increase durability and reliability for vehicles equipped with a boosted or turbocharged Godzilla engine for track or street use, the all-aluminum forged piston set features a minus-20.5cc crown design and is manufactured with high-strength 2618 aluminum alloy for increased detonation resistance in a lightweight slipper skirt design. A 1.0, 1.0, 2.0mm file fit performance ring set is included.





LS3 Intake Manifold

Performance Design, Auburn Hills, Michigan, presents its XS Intake Manifold for Gen 4 LS3 engines. Designed to maximize available space under the hood while achieving horsepower and torque gains, the system relocates the fuel rail inside the intake manifold. The XS intake manifold fits all LS3-style cylinder head ports including L92, L99, L76, L77, LY6, LY2, L20, LMF, LC9, LH8, LH9, L9H and L94. ***TS***





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Ready for Adventure

Where overlanding meets the RV industry sits the new AEV Bliss Mobil Prospector XL.

Developed by American Expedition Vehicles (AEV) in partnership with Europe's Bliss Mobil, the rig highlights an adventure-ready line of go-anywhere off-roaders.

Designed for world-class exploration, the build features a Bliss Mobil 13-foot-high bed cabin for comfort and security. Clients can choose from five custom layout options—the Prospector XL is fitted with Bliss Mobil's High Bed Type 4 layout.

"The partnership between AEV and Bliss Mobil on this project couldn't have made more sense in that the DNA of our brands corresponds incredibly well," says Matt Feldermann of AEV. "Our companies share a very similar commitment to quality in everything from design to engineering to product versatility. The new AEV Bliss Mobile Prospector XL 550 represents one of the most capable, uniquely livable adventure vehicles currently available in the marketplace today."

The cabin unit includes a large bed above the seating area that can be electronically lowered, raised and leveled. The U-shaped couch can be converted into additional sleeping space for four.

Meanwhile, extra space in the living area is used for a fully equipped bathroom that includes a marine-grade ceramic yachting water closet and waterproof cabinets. The combined lavatory and bathroom area is closed off with a glass door.

Cabinet space in the kitchen and overall storage were top priorities. The grand cabinet in the kitchen can fit an optional washing machine or other large appliance, and the kitchen itself is fitted with a Fenix countertop and a microwave featuring an oven and grill setup.

Two induction hubs and a stove hood ensure capable cooking off-grid, while additional storage boxes can be anchored on the (sub)frame or on the back of the unit to further maximize cargo-carrying capacity.

The rugged AEV chassis is configured with an AEV front bumper, HighMark front fender flares, 2-inch front suspension lift, heavy-duty wheels and tires, splash-guards, snorkel, intercooler skid plate, speedometer recalibration, AEV branding package and AEV embroidered headrests.

Similar Bliss Mobil builds on the AEV Ram 550 platform are also available.

This article originally appeared online at theshopmag.com. Visit today and sign up for the free daily eNewsletter. **TS**



Where overlanding meets the RV industry sits the AEV Bliss Mobil Prospector XL, developed by American Expedition Vehicles (AEV) in partnership with Europe's Bliss Mobil. (Photos courtesy American Expedition Vehicles)









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