JULY 2024

THE SHOP

For performance, restyling & customization professionals

More Than Simple Covers

Innovation, versatility & demand are advancing today's tonneau market

PRECISION ENGINE

PERFORMANCE COOLING

THESHOPMAG.COM



MADE IN THE USA PRODUCTS

DISC BRAKES
wilwood

WORK

PLAY



TX6R big brake kits provide unmatched braking capacity for high-demand towing, hauling, off-roading or highway driving.



26 COLOR OPTIONS AVAILABLE
*Additional charges may apply.

TX6R
BIG BRAKE KITS
Front and rear kits are engineered and rigorously tested to ensure repeatable performance.



LEARN MORE

wilwood.com
805.388.1188

DESIGNED · TESTED
USA
MANUFACTURED

DISC BRAKES
wilwood
POWER. CONTROL. PRECISION.

meyer® DISTRIBUTING

INNOVATIVE DESIGN

with LOADS of FUNCTIONALITY





HEX SERIES ROOF RACKS

DeeZee® The Quality Truck Accessory People

Dee Zee's innovative Hex Series design has expanded to roof racks for the Jeep Wrangler and Jeep Gladiator. Mounting is easy by installing into the existing drip rails. The crossbars can be moved forward or backward to get the perfect mounting location for light accessories, bikes, tents and more!

Meyer Distributing is a complete automotive and RV/towing wholesale distributor. With 99 locations nationwide and over 3,000,000 sq. ft. of warehouse space, Meyer Distributing has a huge inventory of parts to service your needs. Meyer Distributing has 11 locations that provide next day delivery, and a fleet of 500+ trucks that serve 48 states direct. Meyer Distributing is driven to perform – we provide the products you need when you need them.

MEYERDISTRIBUTING.COM | 800.639.3787

CONTENTS

THESHOP // July 2024 // Volume 27 Number 2

FEATURES

BUSINESS

6
WHY LOCAL POLITICS MATTER
Ways to promote business-friendly legislation in your area.
By Phillip M. Perry



PAGE 22

RESTYLING

14
MORE THAN SIMPLE COVERS
Innovation, versatility & demand are advancing today's tonneau market.
By Jef White

22
OFF-ROAD BUMPERS, PART II
Give customers the look & versatility they desire.
By Jef White

28
LEADING BY EXAMPLE
Every restyler's a winner when it comes to the annual PRO Cup Challenge.
By Josh Poulson



ON THE COVER
Already known for its choices and options, today's tonneau cover market is more versatile—and more detailed—than ever. *See article on page 14.* (Photo courtesy RealTruck)



32
A collection of parts & components manufacturers market as American-made.

PERFORMANCE

42
TIME TO CHILL
Performance cooling systems balance out horsepower's heat.
By John Carollo

PRECISION ENGINE

48
BUILDING A BIG-BLOCK CHEVY, PART V
Stud girdles, plumbing the carbs & an important choice.
By Mike Mavrigian

52
PRECISION ENGINE PRODUCTS
The latest under-hood offerings.

DEPARTMENTS

DRIVER'S SEAT 4
AFTERMARKET ALLEY 53
AD INDEX 55
ONE MORE THING 56

COMMERCIAL / FLEET ACCESSORIES

TRI-STATE ENTERPRISES, INC.



CURT LUVERNE RANCH HAND UWS

A Wide Range of Brands

Here at Tri-State, we offer a wide range of products and brands to cover all of your Commercial/Fleet needs. From auto parts and accessories to lighting and 12V, Tri-State has got you covered.

Curt, Luverne, Ranch Hand, and UWS are some of our top lines of commercial/fleet products. For more information, call or go online to ***etristate.com*** to see these brands and more!

WWW.ETRISTATE.COM (469)208-7208 @etristateinc @tri.state.enterprises HQ: 5412 S 24th St. Ft Smith, AR 72901





Jef White
Editor
www.theshopmag.com

Convenience Drives Customer Satisfaction

While not exactly apples to apples, specialty automotive aftermarket shops can nonetheless learn a thing or two from colleagues offering general aftermarket maintenance and repair services.

One big takeaway? Convenience drives customer satisfaction.

Last year was a good year for the reputations of maintenance and repair shops, according to the J.D. Power 2024 U.S. Aftermarket Service Index (ASI) study. After experiencing year-over-year slumps, overall customer satisfaction rebounded across the three segments examined in 2023: Full-service maintenance and repair saw the greatest improvement (+12 points on a 1,000-point scale), followed by tire replacement (+5) and quick oil change (+4).

Boosts in all three segments were largely driven by improved service advisor performance and courtesy, according to the study, along with enhancements in service facilities and time to complete service.

Meanwhile, with separate reports showing record-high appointment wait times at franchised dealerships, automotive customers are finding it easier than ever to do business with aftermarket service providers.

"This is a key opportunity for aftermarket providers to not only compete with franchised dealers on price, but also to add customer value with a quicker and easier service experience," says Leonard Martin, director of automotive retail at J.D. Power. "Aftermarket service providers should continue to focus on service advisor performance, courtesy and creating a welcoming environment for customers who wait at the facility. In addition, technology utilization can inspire transparency, trust and strong advocacy for the service provider."

Performance in the three segments—full-service maintenance and repair; quick oil change; and tire replacement—is based on the combined scores for seven factors that comprise the vehicle owner service experience. These factors are (in alphabetical order): ease of scheduling/getting vehicle in for service; fairness of charges; service advisor courtesy; service advisor performance; service facility; time to complete service; and quality of work.

Specialty shops can mirror many of those customer-friendly improvements to speed workflow and provide a better overall client experience.

Other key findings of the J.D. Power study include:

- ***Younger customers are harder to please.*** Gen Z customers reported lower satisfaction than Gen Y customers with tire replacement (-15 points) and full-service maintenance and repair providers (-6). Service advisors are the key to turning this around, Martin says. "Younger customers are less likely to have a service provider with whom they are familiar, and they may need more guidance from advisors in order to build a trusting relationship. This is an opportunity for aftermarket providers to create new long-time loyal customers when they have been provided with satisfying experiences."
- ***Photo/video documentation is appreciated.*** Multipoint inspections (MPI) are routine, but fewer than one-fourth (23%) of customers receive any kind of accompanying photo or video documentation. While doing so is more time-consuming for service staff, providing photo/video evidence of recommended repairs has a significant payoff, especially for tire replacement providers, Martin notes. Of the customers who receive an MPI with photo/video, 51% have the recommended work done. Without photo/video, only 24% of customers who receive an MPI have the work done. Learn more at jdpower.com. ***TS***

THE SHOP

EDITORIAL

EDITOR: Jef White
jwhite@cahabamedia.com

MANAGING EDITOR: Pat Curtin
pcurtin@cahabamedia.com

EXECUTIVE EDITOR: Jennifer King
jdking@cahabamedia.com

CONTRIBUTING WRITERS:
John Carollo, Mike Mavrigian, Phillip M. Perry, Josh Poulson

CREATIVE SERVICES

ART DIRECTOR: Elizabeth Chick

DIGITAL PROJECT MANAGER: Greg Ragsdale

WEB DEVELOPER: Greg Caudle

CIRCULATION

SUBSCRIPTION CHANGES & INQUIRIES:
theshopmag@omeda.com

ADVERTISING

SENIOR ACCOUNT EXECUTIVE WEST COAST
Krystal Franklin
kfranklin@cahabamedia.com

ACCOUNT EXECUTIVE EAST COAST
Fletcher Allen
fallen@cahabamedia.com

SALES DEVELOPMENT REPRESENTATIVE
Kaylor Hageria
khageria@cahabamedia.com

CLIENT SERVICES COORDINATOR:
Holly Strickland
hstrickland@cahabamedia.com

CAHABA MEDIA GROUP

PUBLISHER: Matthew G. Conroy

VP OF SALES: Greg Meineke

VP OF FINANCE: Brandon Whittemore

DIRECTOR OF CONTENT: Elizabeth Manning

DIRECTOR OF EVENTS: Bill Mattes

DIRECTOR OF OPERATIONS: Laurie Tisdale

DIRECTOR OF SALES: Stacy Marshall

P.O. Box 530067
Birmingham, AL 35253

PRINTED WITH SOY INK · BPA WORLDWIDE · CERTIFIED AUDIENCE · TORA TRUCK & OFF-ROAD ALLIANCE · CAN MEMBER · PRO PROFESSIONAL RECYCLERS ORGANIZATION

THE SHOP (ISSN 2380-7415) is published monthly by Cahaba Media Group, P.O. Box 530067, Birmingham, AL 35253. Periodicals postage paid at Birmingham, AL and additional mailing offices. Free to qualified recipients within the United States and U.S. Possessions. Publisher reserves the right to determine qualifications. Annual Subscription Prices: U.S. – one year, $45; two years, $80; three years, $108. Canada – one year, $76; two years, $142, three years, $201 (U.S. Funds); All other countries – one year $98, two years $186, three years, $267 (U.S. funds). Customer Service, call 800-256-2785. POSTMASTER: Please send address changes to THE SHOP, PO Box 271, Lincolnshire, IL 60069-9835. All items submitted to THE SHOP become the sole property of THE SHOP and Cahaba Media Group and cannot be reproduced without the written consent of the publisher. Advertisers and/or their agencies, jointly and severally, assume all liabilities for printed advertisements in THE SHOP. Opinions expressed in THE SHOP may not necessarily reflect the opinion of the magazine, its management or its advertisers. Letters, photographs and manuscripts welcome. VOLUME 25 ISSUE 7

AEROMOTIVE

SERIOUS FUEL SYSTEMS

PHANTOM

PHANTOM 340 STEALTH FUEL SYSTEM



AFS18688

- *700 HP EFI - Forced Induction*
- *850 HP EFI-Naturally Aspirated*
- *850 HP Carbureted-Forced Induction*
- *1000 HP Carbureted-Naturally Aspirated*
- *Modular design can be cut to height to fit almost any fuel tank*
- *Includes foam and bladder*

Motor State Distributing stocks over 675 brands, including the full line of Aeromotive products.

Dealer Application

motorstate.com 800.772.2678

DISTRIBUTED BY

Motor State DISTRIBUTING

60 Years EST. 1964



(Credit: Vlad - stock.adobe.com)

WHY LOCAL POLITICS MATTER

■ Ways to promote business-friendly legislation in your area.

By Phillip M. Perry

It's a presidential election year, and everyone's mind is on politics. What's going to happen in Washington and how will that affect the business operating environment?

While federal laws and regulations are important, experts caution against getting distracted from events closer to home. Profits, after all, are more often affected by ordinances passed in the town hall than by what comes out of the White House and the United States Capitol.

"National politics tend to get all the headlines," says Cliff Ennico, an attorney who counsels on business matters. "But the fact of the matter is that the vast majority of political decisions that affect businesses are local in nature."

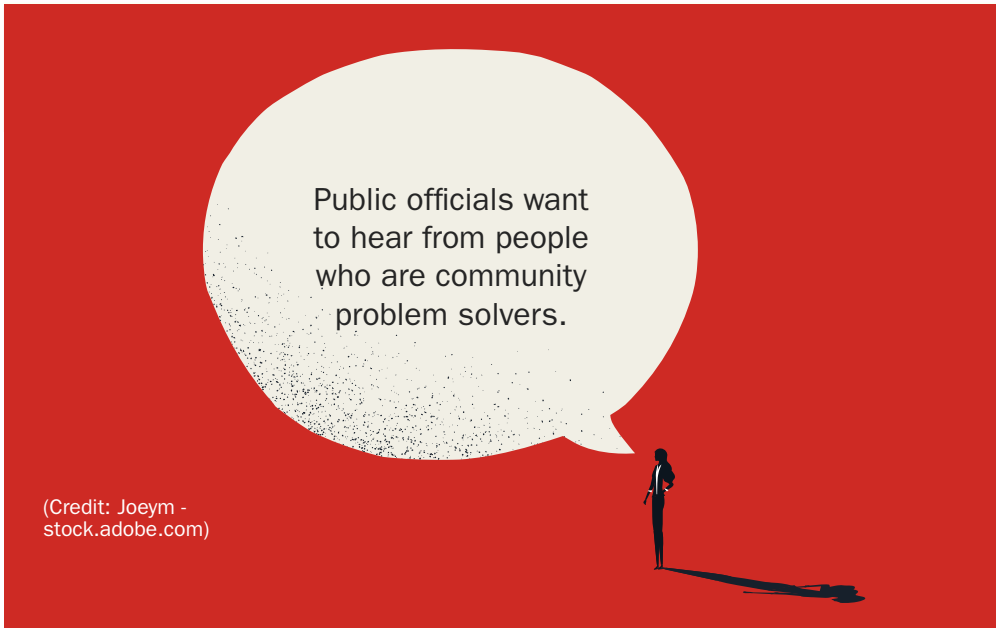
Municipal ordinances can touch business operations in a remarkable number of ways. A partial list includes taxation, business licensing, zoning laws, street and traffic patterns, parking regulations, building design and signage, environmental and health regulations, and even the installation of unsightly utility poles and cell phone towers.

And that's not all.

"Local governments have been expanding their roles into employee benefits and rights," says Marc H. Pfeiffer, assistant director at the Bloustein Local Government Research Center. "In many cases, cities are establishing minimum wages."

SPEAKING UP

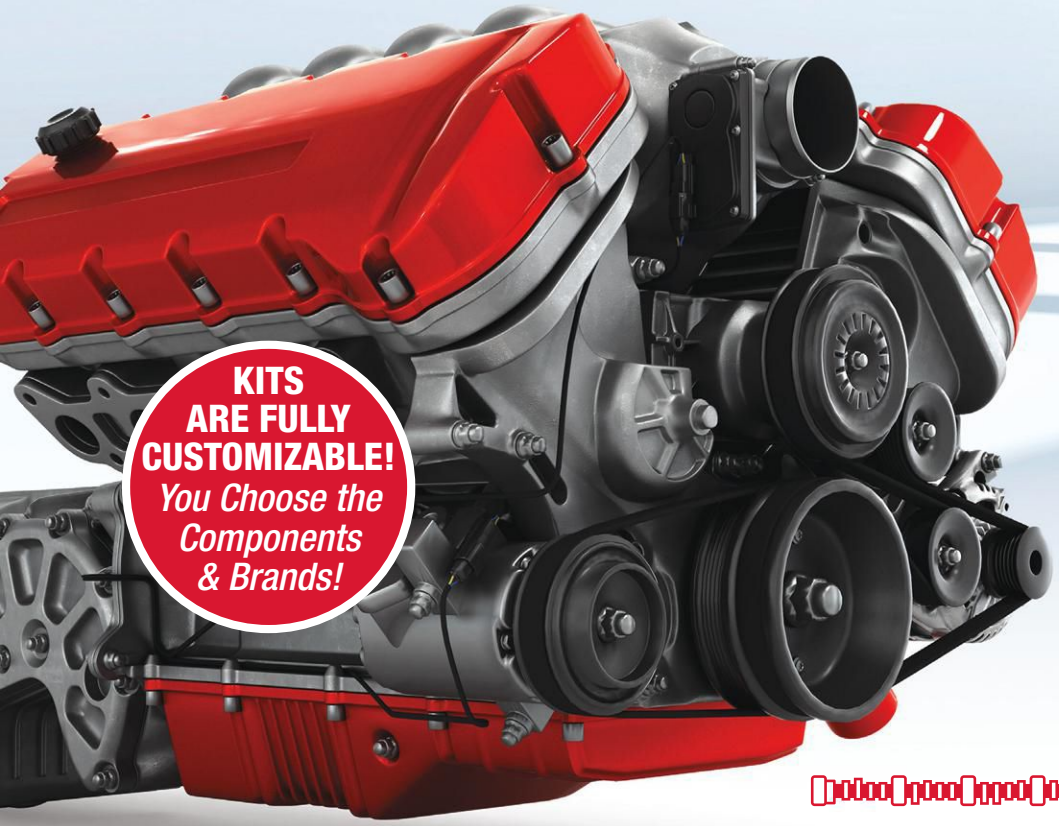
Given the stakes, it's important for businesses to promote favorable local ordi-



(Credit: Joeym - stock.adobe.com)

PREMIUM ENGINE KITS

Every NPW/EPW Premium Engine Kit is built to fit your engine specifications and includes quality name brand parts!



Each Complete Master Engine Kit includes*

- Rod & Main Bearings
- Pistons
- Piston Rings
- Gaskets
- Cam Bearings
- Oil Pump
- Freeze Plugs
- Timing Components
- Camshaft & Lifters

*Kit components may vary.

Dura-Bond Since 1947 · SILV-O-LITE Better Pistons Since 1922 · KB HYPEREUTECTIC PISTONS · SEALED POWER · SPEED PRO · HASTINGS Piston Rings · FEL-PRO · ENGINE PRO · MAHLE · CLEVITE · MELLING ENGINE PARTS · TOP LINE Automotive Engineering, Inc. · ITM · ICON FORGED PISTONS · KING ENGINE BEARING SPECIALISTS

E-Direct

E-Direct Engine Kits are also available to build using quality, lower-cost alternative private-label parts.

KIT SUGGESTIONS

Join us in expanding our Kit coverage by submitting NEW and Existing Kit suggestions to: kits@npwcompanies.com

CURRENT NPW/EPW CUSTOMERS

Scan this QR Code to build your Engine Kit or go to www.epwi.net or Call (800) 344-0368

NEW ACCOUNTS

Scan this QR Code to set up an account or go to www.npwcompanies.com/become-a-dealer/

QUIZ: HOW WELL DO YOU PROMOTE GOOD TOWN ORDINANCES?

Does your business play a leading role in the theater of local politics? To see how effective you are in promoting business-friendly town ordinances, give yourself 10 points for each "Yes" answer to the questions below. Then total your score.

- ☐ 1. Are you knowledgeable about the structure of your town government?
- ☐ 2. Do you know which public officials are responsible for decisions that affect business operations?
- ☐ 3. Have you established an "early warning system" that issues alerts about proposed ordinances?
- ☐ 4. Are you on the mailing lists of public officials, "hyperlocal" websites and civic organizations?
- ☐ 5. Have you developed a relationship with the city councilor responsible for your part of town?
- ☐ 6. Do you communicate how proposed ordinances may help or hurt the community at large as well as your business?
- ☐ 7. Do you support your positions with facts, figures and anecdotes?
- ☐ 8. Do you offer solutions to business and community problems?
- ☐ 9. Do you avoid offering gifts or doing favors such as paying for lunch?
- ☐ 10.In private meetings with public officials, do you confine your conversation to the provision of helpful information?

What's your score? Over 80: You are an effective business ambassador. Between 60 and 80: Time to fine-tune your practices. Below 60: It's a good idea to re-gear by instituting ideas from the accompanying article.

nances and protest damaging ones. Being an effective business ambassador, though, requires laying a bit of groundwork.

And that means acquiring a solid grounding in a city or town's political dynamics.

"Business owners should get to know the structure of their local government and who is responsible for making what decisions," says Dr. John P. Pelissero, director of government ethics at the Markkula Center for Applied Ethics at Santa Clara University. "Knowing what each official's duties are, and whether they have a role in regulating a certain area, will facilitate efficient interactions and the provision of useful information."

Identifying the "movers and shakers" who should get the business perspective on a proposed ordinance is one thing. Reaching them in time is another.

To get wind of proposed legislation in advance of its passage into law requires an "early warning system" that issues an alert when controversial proposals first arise.

There are many ways to create such a system. One is to get on mailing lists maintained by local and state legislators, community and trade associations, and towns themselves.

"Local communities are required by law in most states to publish their calendars of events and information on what they're doing," says Ennico. "Find your town's website, bookmark it, and make a point to check in and see what's going on at least once a week."

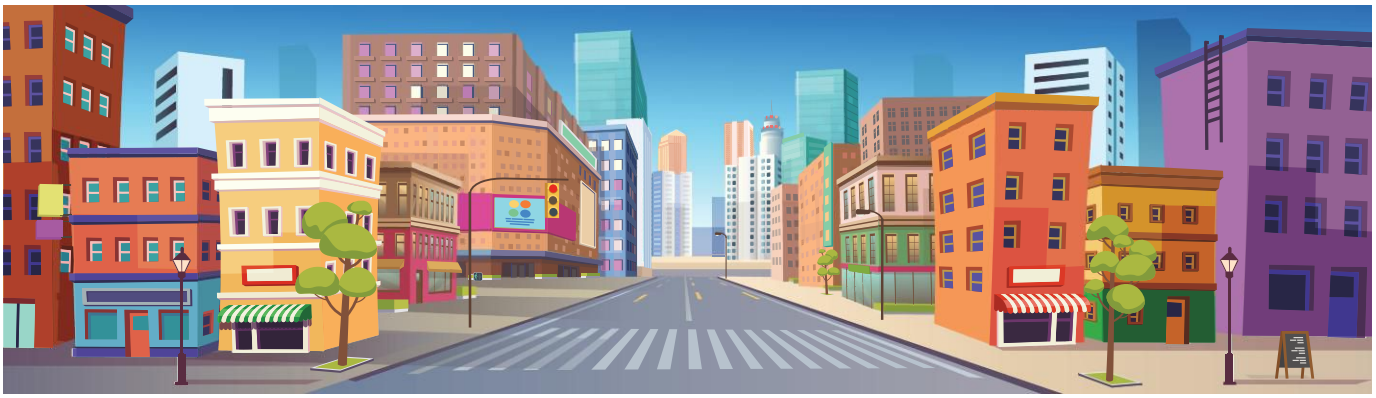
Civic associations such as the Jaycees, Rotary, Lions Club and Kiwanis can also provide conduits to news about proposed regulations.

"Local organizations are often made up of business owners and can provide a platform to discuss legislation," says Nancy Bocskor, development director of Business For America.

So-called "hyperlocal" websites, often maintained by weekly digital newspapers, also publish alerts about town proposals.

REACHING OUT

Establishing an early dialog with politicians can facilitate effective communication



Municipal ordinances can touch business operations in many ways.
(Credit: Yuca - stock.adobe.com)

30TH ANNIVERSARY
SINCE 1994
ACT
ADVANCED CLUTCH TECHNOLOGY®

ATTENTION!

JEEP WRANGLER JL AND
GLADIATOR JT OWNERS!

TIRED OF MULTIPLE CLUTCH RECALLS?
FIX IT, FORGET IT, AND ENJOY!

Introducing ACT's Ultimate Upgrade: Your Key to Performance and Peace of Mind

We understand the thrill of driving a Jeep, both on and off-road, and given the potential safety risks, we know how unsettling multiple recalls are. We've engineered a proper solution to remove the worry of the OEM Jeep clutch and improve the whole Jeep driving experience. Our cutting-edge technology ensures amazing clutch feel, increased performance, unmatched durability, and easy installation using the original operating system.

Fix it once and forget about it!



ENHANCED ADVENTURE AWAITS!

Great pedal feel, high torque capacity, heat tolerance and increased inertia beneficial for stock or highly modified Jeeps.

TRUSTED BY JEEP ENTHUSIASTS WORLDWIDE!

Join the community of satisfied Jeep owners who have made the switch to ACT's Ultimate Clutch Upgrade.

WHY CHOOSE ACT FOR YOUR JEEP?

Proven Performance!
Peace of Mind!
Seamless Integration!

WATCH OUR JEEP INSTALLATION, AND JEEP PRODUCT DEVELOPMENT VIDEOS ON OUR YOUTUBE CHANNEL @ADVANCEDCLUTCHTECHNOLOGY

206 EAST AVE K4, LANCASTER CA 93535
ADVANCEDCLUTCH.COM | 661-940-7555

sfi SFI FOUNDATION INC.



Businesses should promote favorable local ordinances and protest damaging ones. (Credit: Daniel Villeneuve - stock.adobe.com)

down the road when controversial regulatory proposals arise. The good news is that local officials are a lot easier to deal with than their federal counterparts.

"People who run for local office are very approachable, because most of them really do care about their communities," Ennico says. "For most of them, politics is not a steppingstone to higher office. Many times, they are business owners themselves, so already you share some common interests. Other times, they are attorneys looking to expand their network."



Small businesses are among the most highly trusted entities in the nation. (Credit: aria - stock.adobe.com)

One way to connect with local representatives is to speak up at town meetings, where every effort should be made to shake hands and make a personal introduction.

"Maybe it seems old-fashioned in this digital age, but in-person communication with local public officials can be a very powerful way to get things done," says Sean W. Hadley, an attorney and lecturer of public policy at Rutgers University.

Effective business ambassadors are knowledgeable about local affairs happening in their area.

"Business owners should be as knowledgeable and informed as possible about what's going on in city government," says Pelissero. "Members of the city council and county boards want to make sure the people that they're interacting with are able to demonstrate awareness of current issues in local government and how they impact both the business and broader communities."

Once a dialog is established, experts advise setting up a regular meeting with legislators or local city council members.

"You want to get to the point where the public officials view you as a trusted source of information," Hadley recommends. "They may call you for your perspective





Count on Keystone for:

Your Commercial Truck and Van Source

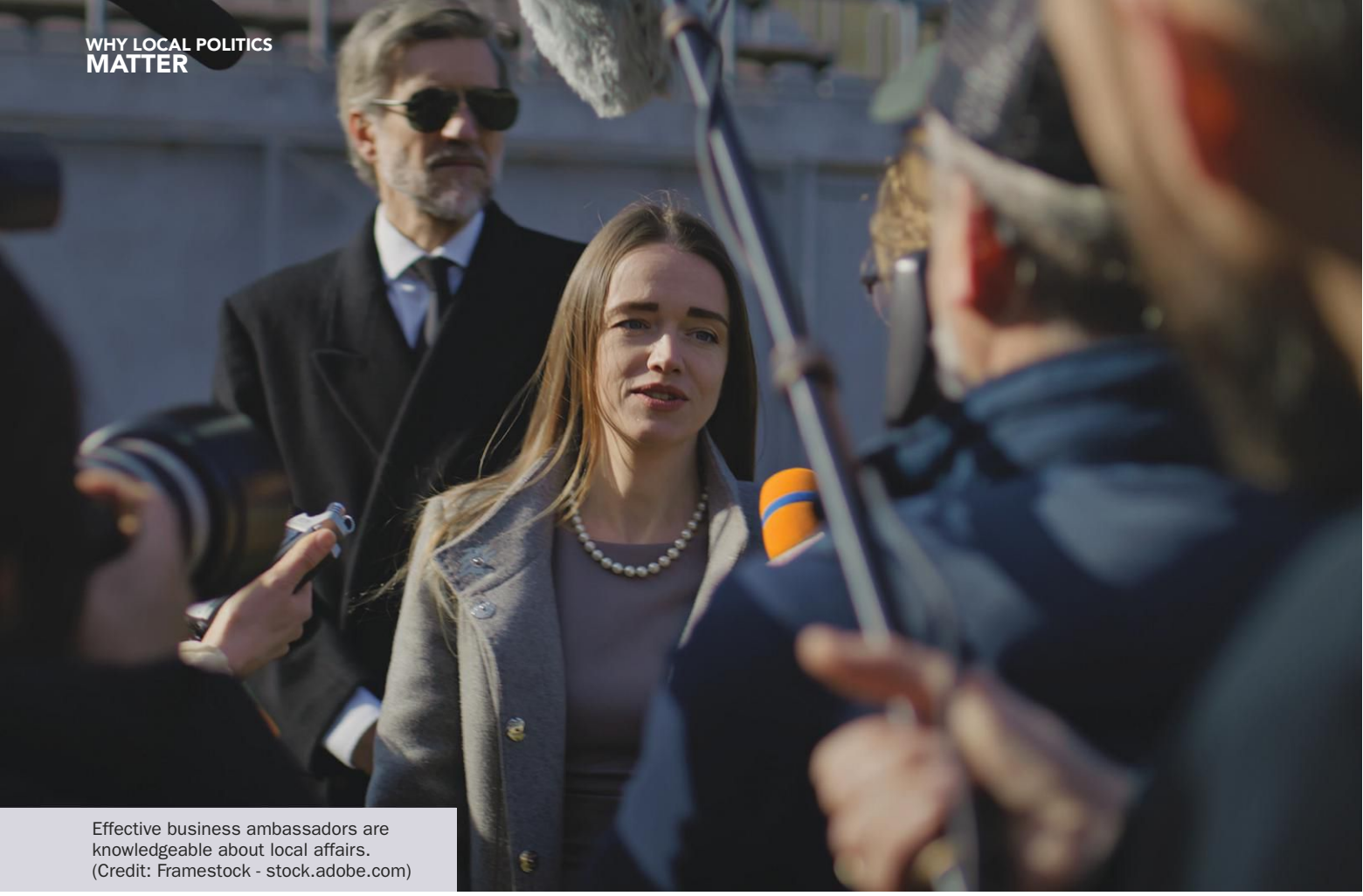
- Racks – ladder racks, headache racks, van rooftop racks
- Van products – liners, storage, locks, steps
- Toolboxes
- Transfer tanks
- Fuel pumps
- Bed slides
- Emergency / safety lighting

Become a Dealer

Keystone
Automotive Operations, Inc.

KeystoneAutomotive.com

Better • Stronger • Faster • Reliable • Dependable • Next Day Delivery



Effective business ambassadors are knowledgeable about local affairs. (Credit: Framestock - stock.adobe.com)

on proposed resolutions. Keep in mind that these local politicians are not experts on everything. To make good laws, they need people in the community to offer unique perspectives."

DRIVING HOME

You may be convinced of the wisdom of your position for or against a certain ordinance. But how can you convince the public official?

Effective business ambassadors understand and address their town's larger concerns. Maybe a certain proposal will promote trade. But how will it affect homeowners, schools and the public in general?

"Public officials need to determine what regulations are in the long-term public interest versus what may only satisfy the business community," says Pelissero. "When speaking up against a proposed zoning change, for example, it's important to show how it might negatively affect the local community as well as business profits."

An effective presentation requires the support of facts, figures and stories. Do the math. Be able to show the official how a proposed regulation will affect employment, commercial enterprise or a certain industry.

And then drive home your point with a powerful anecdote that illustrates the problem.

Is parking bad in your area? Then tell how a local citizen needed to get to your business but couldn't find a place to park.

Finally, reinforce your point by offering a solution to a perceived problem.

"A businessperson shouldn't be just a complainer," says Hadley. "Public officials want to hear from people who are community problem-solvers."

DOING RIGHT

Promoting a point of view is good. Creating the impression of bribery is bad.

"Many state and local governments have very clear codes of conduct for their public officials, which will restrict what they can and cannot do or accept from the public," says Pelissero. "These are intended to limit the opportunities for something to occur that doesn't appear to be proper. But even if there's not a legal requirement or restriction, business owners should be mindful of ethical concerns when they interact with local public officials."

It's not a good idea, for example, to offer free products or services while at the same time seeking something for your business. And avoid springing for lunch.

"In most cases, the politician can't accept payment of meals," Pelissero says. "They need to avoid doing anything that creates the appearance of a gift, for which something was expected in return."

The trick here is to avoid both the reality and the appearance of shady conduct.

"Business owners should find opportunities to speak to their representatives in ways that don't appear compromising," continues Pelissero.

Speaking up at city council meetings or public gatherings sponsored by civic organizations such as the Rotary is always acceptable. Those are good venues in which to interact with public officials and get to know them and maybe have a chance to talk with them about issues that are of concern to your business.

"If you do happen to meet privately with a public official, make sure you are there to provide useful information to help them

reach a decision," Pelissero says. "You're not there to find out what it is you can do to come to some arrangement about an issue, because that can be perceived as unethical."

Bonus tip: It's OK to send a thank-you letter to a politician who has done a business-friendly action, and who may want to post your message on their website.

KEEPING PERSPECTIVE

Becoming an effective player in local politics can go a long way toward promoting business-friendly regulations. Local politicians want to hear from businesses, just as they want to hear from other area stakeholders.

"Many small business owners think that no one will listen to them, but that's not true," says Bocskor. "Studies show that small businesses are among the most highly trusted entities in the nation."

While speaking up in support of business-friendly regulations is important, the effective business ambassador moves slowly and carefully, sending out feelers while avoiding any steps that might transcend ethical boundaries.

"Keep things in perspective," says Hadley. "This is a situation where you want to crawl before you walk. Listen to public officials and learn about their perspectives before you jump into local politics full force."

At the end of the day, achieving a favorable business operating environment boils down to effective communication. While professionals advise treading carefully, they do encourage taking action.

"Don't wait until a law is passed and then write a letter to the editor complaining about it," says Ennico. "That's an absolute waste of time. Get involved. Go to meetings. Be part of the solution." ***TS***



New York City-based journalist ***PHILLIP M. PERRY*** *publishes widely in the fields of business management and law.*



Restyling
AFTERMARKET ACCESSORIES

Off-Road Bumpers p. 22 | PRO Cup Challenge p. 28

More Than Simple Covers

Innovation, versatility & demand are advancing today's tonneau market.

By Jef White



Adding installation services to bed cover sales opens the door to satisfied repeat customers. (Photo courtesy BAK/RealTruck)

What could be simpler than providing a four-sided cover to protect items in a truck bed? Well, quite a lot of things, it turns out.

Already known for its choices and options, today's tonneau cover market is more versatile—and more detailed—than ever. Manufacturing, material and technological advancements mean a wide variety of offerings and options for truck owners, and a lot of homework for shops wanting to provide the perfect solution for any project.

Suppliers in this competitive market are working hard to stand out and deliver quality options with wide appeal. They offer tips for shops regarding market trends, product developments and sales techniques for what have become something much more than just simple covers.



Not all customers are equally educated on the types of tonneaus available. (Photo courtesy Sawtooth Tonneau)

COMPETITIVE MARKET

Suppliers agree that manufacturing advancements are helping the industry keep pace with the evolving new-truck market.

"Machine automation has helped American-made tonneaus to be not only more precision-made, but also made at a more aggressive price," says Steve Raivio, director of sales for Worksport. "The equipment in our West Seneca plant allows Worksport to manufacture tonneaus with improved quality at an aggressive price."

Improved quality includes the use of top-end construction components, says D.J. Potter, CEO of Sawtooth Tonneau.

"One way in which new technology has affected the tonneau covers market is the development of innovative materials and manufacturing techniques," he says of his

COVER UP AND CASH IN



SOFT FOLDING TONNEAU COVERS

TrailFX Soft Folding Tonneau Covers offer the versatility and affordability your customers are looking for. With three adjustable positions, durable woven snap-buckle straps and a convenient tailgate lock, they offer the features most asked for in a soft folding tonneau. Crafted from high-quality matte black vinyl, these covers are easy to install with bolt-on clamps and come backed by a lifetime warranty, ensuring your customers get both value and peace of mind. Stock up now and cash in on TrailFX's Summer Savings to offer your customers more for less.

TRAILFX®

$20 DEALER REBATE
Scan to learn more.

Exclusively distributed by Keystone Automotive Operations, Inc.

More Than Simple Covers

TONNEAU COVERS

HOT PRODUCT:
Guardian Tonneau Cover
FEATURES & BENEFITS:
Dual-panel design and exterior extrusion channel to mount accessories such as crossbars, platform racks and tents; 800-pound static weight rating; rugged textured black finish; quick-release shocks allow for the rear panel to be folded over 180 degrees.

Dee Zee
Scott Moyer
Director of Marketing

HOT PRODUCT:
Electric EGR RollTrac
FEATURES & BENEFITS:
Smooth-running electric cover comes with easy-to-access maintenance ports; unique design handles increased weight; bolt-on installation for reliability and security when driving on- and off-road, ensuring the cover and gear stay in place.

EGR Inc.
Mike Timmons
VP of Sales and Marketing

HOT PRODUCT:
Fas-Top Traveler
FEATURES & BENEFITS:
Patented two-in-one premium roll-up cover with integrated fabric topper; roll-up cover and quick deployable fabric topper can handle any season and/or wind condition in one modular system; family-owned and handmade in North Dakota.

Fas-Top
Shawn T. O'Neal
Director, Sales and Marketing

HOT PRODUCT:
TACTIK Low-Profile Hard Tri-Fold Cover for 2020-24 Jeep Gladiators
FEATURES & BENEFITS:
Sleek, low-profile design that is UV- and cold-resistant; three foldable solid core panels include buckles so they can latch for secure, fully open driving; automatically locks when fully latched; supports up to 500 pounds of evenly distributed weight.

Quadratec
Howard Fullerton
Senior Category Manager

HOT PRODUCT: BAK Revolver X4ts
FEATURES & BENEFITS:
Integrated T-slot rails expand cargo capacity and are compatible with most T-slot accessories.

RealTruck
Emily Humphrey
Marketing Manager – Truck Bed Covers

HOT PRODUCT:
Hard Tri-Fold Flip-Up Bed Cover
FEATURES & BENEFITS:
Hard cover protection and security; full bed access when fully open; track and rail mounting system makes installation easy and routes water away through included drain tubes; quick-connect ball-in-socket prop rods; one-hand squeeze latches.

Rough Country LLC
Tim Watts
VP Sales

HOT PRODUCT: Sawtooth Expandable Truck Bed Cover for Ford Maverick
FEATURES & BENEFITS:
Increases pickup truck owners' versatility and functionality; extends to cover and protect large and small cargo items; when laid flat, the expandable tonneau withstands snow loads.

Sawtooth Tonneau
D.J. Potter
CEO

HOT PRODUCT:
The American Work Cover
FEATURES & BENEFITS:
Has a full-size toolbox that fits effortlessly on top of the cover and offers ample and secure storage; accepts the American Rack System that also slides on top for added flexibility; reliably moves luggage, supplies, tools and gear.

Truck Covers USA
Nils Forssman
President

HOT PRODUCT:
AL3 Hard Folding Tonneau Cover
FEATURES & BENEFITS:
A low-profile, economically priced tonneau that allows upselling from a soft cover to a standard hard cover, minimizing the previous large price gap that was found in most American-made tonneau covers.

Worksport
Steve Raivio
Director of Sales



Bed covers are a high-demand product. (Photos courtesy Rough Country)

company's expandable covers. "In the past, tonneaus were all 'flat-only' tonneaus, but that's changed."

Some of the advancements have come thanks to high-quality metals.

"Aluminum construction all but eliminates corrosion concerns and the aluminum extruded rails and aluminum panels maintain strength and reduce weight," says Tim Watts, VP of sales, Rough Country LLC.

As truck sales continue to outpace cars, the tonneau cover market has attracted a wide variety of suppliers.

"Jobbers and installers are becoming increasingly aware that several tonneau cover manufacturers are owned by their competitors. As a result, they feel trapped and are seeking alternative options," says Mike Timmons, VP of sales and marketing for EGR Inc. "Fortunately, there are many excellent small bedcover (companies) in the market that are growing and willing to assist these retailers."

A VARIETY OF FEATURES

Whether hard or soft, hand-controlled or

EGR ROLLTRAC



SMART TONNEAU COVERS

EGRUSA.COM | (800) 757-7075

More Than Simple Covers



There are profits to be made in the work bay, as customers who go to retailers expect to pay for professional installation. (Photo courtesy Fas-Top)



The next frontier of technology will continue to transform the bed cover business. (Photo courtesy Truck Covers USA)

electric, today's tonneaus can include features buyers might not expect.

"The Electric EGR RollTrac has an ECU that manages all the functions. Our cover connects to your OEM central locking system and can be operated from your factory remote, the buttons on RollTrac, and even with the lock/unlock button inside the cab. Drivers have the ability to open, close, lock and unlock the cover from multiple locations," says Timmons.

And digital and Bluetooth technology haven't missed the truck bed cover market either, notes Emily Humphrey, marketing manager – truck bed covers for RealTruck.

"The Retrax EQ uses Bluetooth and your truck's power to open and close the cover with the press of a finger," she says. "Figuring out ways to use new technology is always on our mind."

Bed covers are one of those accessories that get a lot of hard use, making quality construction a priority.

"Engineered tonneau covers that do more than one thing better fit today's ever-evolving way consumers use their truck beds," says Shawn T. O'Neal, director of sales and marketing for Fas-Top, pointing to engineered fabrics, strong rails and secure clamping systems as in-demand features.

Nils Forssman, president of Truck Covers USA, has seen advancements in raw materials, manufacturing processes and more.

"Staying ahead of the game when it comes to technology has allowed us to refine not just the way we build our product but also actual features of the product—automatic locking toolboxes, LED lights that are wired into the truck and other unique features. We're really excited to see how the next frontier of technology will continue to transform our business."

No doubt, the products have come a long way. Howard Fullerton, senior category manager for Quadratec, recalls how the vinyl roll-top covers of the 1990s never seemed to quite fit if the temperature dropped.

"Now you can get vehicle-specific covers in multiple material types that use a belt-rail system for an exact fit," he says. "The material quality these days is so much better—much more secure, less expensive to make and retail—and it is way easier for the consumer to operate these tonneau covers."

Such innovations are often spurred by the changing needs of drivers.

"Customers want functionality and versatility that match their lifestyle. We designed a patent-pending hinge bracket that allows a platform to pivot on top of the cover to retain unrestricted access to the truck bed," notes Scott Moyer, director of marketing for Dee Zee.

SHOP ASSIST

As larger, bulkier items, tonneau covers are a natural for professional installation.

"Providing both a truck bed cover and installation opens the door to creating a satisfied and repeat customer," Humphrey says. "If they are happy with their initial experience, it is very likely they will come back to continue accessorizing."

That makes for an attractive repeat customer, says O'Neal.

"There's an opportunity to upsell accessory items that complement the cover and the vehicle," he says. "There are profits to be made in the installation bay, as customers who go to retailers expect to pay for installation and are seeking professional installation and operation instructions on the products they buy."

Shops can compete based on installation, service and ongoing cover maintenance, says Raivio.

"Many covers are available at discounted prices online," he notes. "The consumer needs a reason to buy from the shop instead of choosing to purchase online."

Handling jobs efficiently also scores points with buyers.

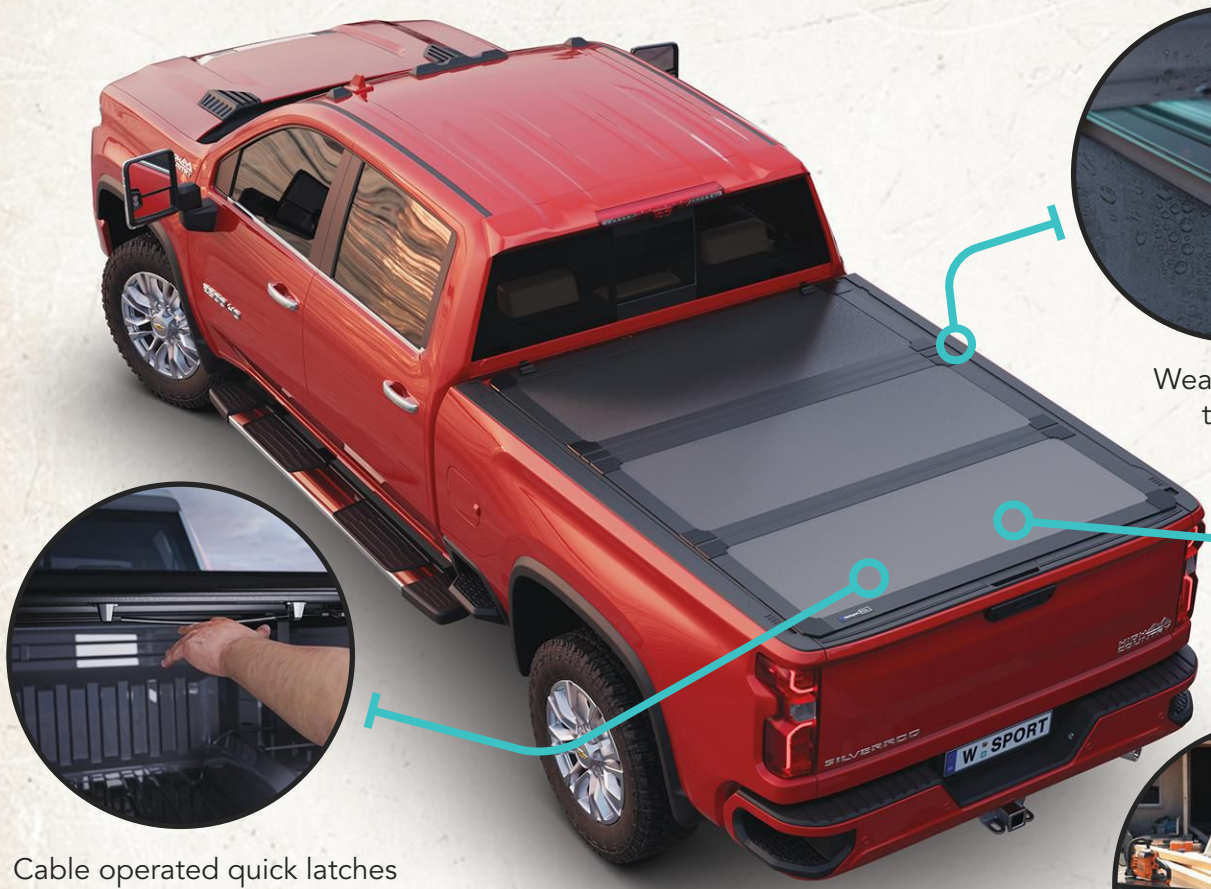
"Given the inconvenience of being without your vehicle, consolidating all the product upgrades at once benefits both the shop and the customer," Moyer says.

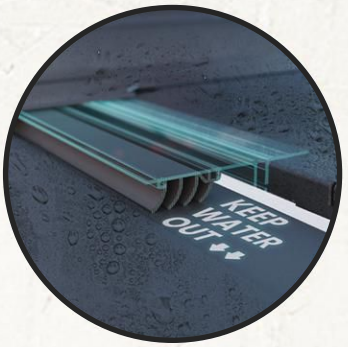


Tonneau covers represent a significant investment and often lead to additional accessory sales. (Photo courtesy Dee Zee)

AL3 PRO
HARD TONNEAU COVER

THE **ULTIMATE PROTECTION** FOR YOUR **TRUCK BED** AND **CARGO**





Weather resistant
triple fin seals

Cable operated quick latches
allow lighting fast cargo access



Extra-strong ceramic-coated aluminum
panels provide premium dent and
scratch resistance

A DIFFERENT KIND OF PARTNER:

At Worksport, we value our partnerships with dealers and distributors. That's why we prioritize accessible, quality service for our partners and their customers. Our goal is to support our network, foster mutual growth, and keep customer satisfaction at the forefront, all while building beautifully designed, tough, American-made tonneau covers.

Now available from your local distributor or call **1-888-554-8789** to learn more

Worksport

MADE IN THE USA

WORKSPORT.COM
@WORKSPORTLTD

More Than Simple Covers



Today's tonneau cover market is more versatile and more detailed than ever. (Photo courtesy EGR Inc.)

Truck owners want to place trust in the professionals they work with, Potter explains.

"A common misconception is that all customers have the same level of knowledge about these products. Some customers may be well-informed and know exactly what they want, while others may be relatively unfamiliar with tonneau covers and require more guidance and education," he says. "Shops may mistakenly assume that all customers are equally knowledgeable, which can lead to misunderstandings or dissatisfaction if the customer's expectations are not met. It's important for shops to approach each customer with patience and readiness to provide information and assistance tailored to their individual needs and level of understanding."

Manufacturers are also counting on shop personnel to understand their products.

"The shops in our network end up having a large impact on the sale and experience of our end users," says Forssman. "We rely on them to provide the proper education to the customer on our product and its features and strengths. Sometimes there may be a misconception that all tonneau covers are created equal, and it is really important to have shops that can explain the relative strengths and unique features that we offer with our group of products."

Sometimes helping customers involves explaining what the products *can't* do.

"All folding bed covers will have some small amount of water intrusion in extreme conditions," Watts notes. "'Leaking' is something different and generally an issue with manufacturing or the design itself, but it is not uncommon to see a small water spot in extremely wet conditions. Most quality covers are water-tight, but no folding cover on the market is IP68 waterproof."

Professional recommendations go a long way, so shops should offer them wisely.

"Let the consumer know there may actually be multiple applications for even just one vehicle, and educate them on material differences, fitment mechanisms and ease of operation," says Fullerton. "And then, after talking with the customer, recommend one that will best fit their needs and budget."

WELCOME TO THE AFTERMARKET

Tonneau covers can be an effective way of attracting brand-new customers.

"A lot of consumers don't even know what a truck bed cover is," says RealTruck's Humphrey. "We need to educate them on what they are and why they need one on their truck."

Even customers who have never heard of the automotive aftermarket may be in the market for a tonneau cover once they acquire a new pickup—introducing them to the wide world of personalization.

"It's all about upselling," says Timmons. "Offering accessories for accessories is a great way to increase the customer's purchase amount. At EGR, we provide racks and S-bars, which are specifically designed to work with the EGR RollTrac, resulting in more profit for the jobber and installer."

Watts from Rough Country suggests looking for incremental sales of related products.

"Bed covers are a high-demand product. Good merchandising in the store and awareness of other products offered can easily lead to add-on sales," he says. "Cargo boxes, MOLLE panel inserts, bed mats, etc., are easy recommendations when selling a tonneau cover."

The products are important purchases for drivers, says Dee Zee's Moyer, so it pays to treat them as such.

"Tonneau covers represent a significant investment and often lead to additional accessory sales," he notes.

They also provide a chance to establish a long-term relationship with happy clients, says Sawtooth's Potter.

"As a shop, one of the best things you can do for your business is to educate yourself

Shops can compete based on installation, service and ongoing cover maintenance. (Photos courtesy Worksport)









Educate customers on features such as material differences, fitment mechanisms and ease of operation.
(Photos courtesy Quadratec)

about the various new options, listen to your customers' needs and provide them with good, viable solutions. By doing so, your shop can evolve into a trusted authority and concurrently boost revenue. Effectively communicating the availability of unique and various options to consumers is paramount for a shop's ongoing prosperity. This can lead to repeat business for other automotive needs as well as word-of-mouth referrals, ultimately enhancing the shop's reputation and bottom line."

Fullerton from Quadratec notes that a successful sale can "build community engagement and enhance the shop's reputation with a loyal and vocal truck enthusiast market. By offering this type of service to that market, and doing it well with quality, dependable products, a shop can easily generate new and repeat business in the form of related sales like cargo management systems, bedliners, etc."

The market's many choices also make it easy to find the proper cover for any project.

"Shops selling covers like the AL3 allow for a product that is not in the saturated market. Worksport's AL3 is not only patent-protected, but also not available through every shop and online retailer," says Raivio. "These types of products help ensure that when you educate the customer about the benefits of the tonneau, they return to the shop that helped them."

But it does mean asking a lot of questions.

"Getting to know the customer is key—finding out what kind of cargo they want to carry, what their budget is, what weather conditions they expect to encounter and more will help shops provide educated recommendations," says Forssman from Truck Covers USA.

Meanwhile, Fas-Top's O'Neal notes that truck owners are not necessarily always looking for the same thing they bought last time, so don't be afraid to get creative.

"Warren Buffett says we need to 'wow' our customers," he reports. "Are you wowing your customers by offering them the same things year after year without looking for the next best thing?" ***TS***

ROUGH COUNTRY
BED COVERS
WORK, PLAY, OR EVERY DAY!
ROUGH COUNTRY HAS YOU COVERED.
- Complete bed cover lineup.
- Great opportunity for dealers.
- No Hassle – 5 Year Warranty




ROLL-UP
SOFT TRI-FOLD
HARD LOW-PROFILE
FLIP-UP
RETRACTABLE

Become a Rough Country Dealer Today! https://www.roughcountry.com/dealer-program
800-222-7023 | roughcountry.com



Today's off-road bumpers are designed to be as versatile as the 4x4ers who use them. (Photo courtesy ARIES)

OFF-ROAD BUMPERS PART II

Give customers the look & versatility they desire.

By Jef White

Editor's note: This is the second in a two-part series highlighting the off-road bumpers market. Part I appeared in the May 2024 issue of THE SHOP magazine.

Many customers can't get enough of today's off-road bumpers, and the same often goes for shops looking to capitalize on the market.

Offering style, performance and utility upgrades, the bumpers are a staple of today's 4x4 and overlanding markets. Opportunities have attracted a long list of suppliers, meaning there's a lot of information to sift through.

Still, patterns emerge regarding best practices and popular sales techniques that match clients with the bumper products and related accessories they desire. The following are some suggestions on how to approach off-road bumpers for the best results.

TAKE IT TO THE HILLS

With the variety of off-road bumpers available in today's market, any smart sale starts with asking customers about their expectations regarding looks and performance.

"Is it an appearance play? Is this going to be a serious off-road vehicle? What are the clearance needs for their specific type of off-roading? Do they plan on towing?" asks Jeff Perez, director of business development for automotive at ARIES.

From there, he continues, it's time to ask about features such as if the bumper can accommodate a winch, and if the customer is interested in additional accessories such as auxiliary lights, D-rings, shackles or a front Stinger.



Drivers turn to shops for knowledge and direction when selecting new bumpers. (Photo courtesy ARIES)

Artie Nuttall, CEO for Artec Industries,

continued on page 26



KEEPS MUD AND MOISTURE OUT, PROTECTION IN.

BUILT FOR LIFE. GUARANTEED.

WHEEL WELL GUARDS

Less time washin' more time muddin'.

Our durable, **impact resistant all-weather** thermoplastic material holds up to whatever the road spits at it.

Installs in a few minutes so you'll be off-roading in no time.

It's easier than ever to keep your wheel wells looking shiny and new. **Just spray 'em down and drive off.**

HUSKY® LINERS

huskyliners.com

PRODUCTS

HOT PRODUCT:
The Trail Chaser
FEATURES & BENEFITS:
Made of lightweight T6 aluminum; modular configuration based off center bumper; front- and rear-matching style and design; customizable to provide multiple configurations for the front and rear.

ARIES
Jeff Perez
Director of Business Development for Automotive

HOT PRODUCTS:
Alpha Series Aluminum Bellypans
FEATURES & BENEFITS:
Designed for underbody protection; crafted from heat-treated 6061 T6 aluminum; deliver a balance of strength, weight and durability; offer complete, smooth coverage, heavy-duty support brackets and countersunk hardware to prevent snagging.

Artec Industries
Artie Nuttall
CEO

HOT PRODUCT:
Barracuda Front Bumper
FEATURES & BENEFITS:
Configurable front bumper for Jeep Wrangler JL and JK applications; the ability to go stubby, mid-width or full-width, plus multiple options for front Stingers.

Fishbone Offroad
Michael "MB" Bernard
VP of Sales & Marketing

HOT PRODUCTS:
MOD Series Front & Rear Bumpers
FEATURES & BENEFITS:
Available for Jeep JK, JL and JT models; 100% made in the USA with heavy-duty 3/16-inch-plate construction; multistage primer powder-coat process; integrated D-ring mounts and winch plate; accept OEM and aftermarket lights; Hi-Lift Jack pockets.

Warrior Products
Eric Blackburn
Director of Sales

FOX FACTORY EDITION'S 2024 SILVERADO







The 2024 Chevrolet Silverado | Fox Factory Edition is the result of a collaboration between Fox Factory Powered Vehicle Division and off-road industry leaders. (Photos courtesy FOX)

The 2024 Chevrolet Silverado | Fox Factory Edition is a super truck with a heritage deeply rooted in off-road racing that spans more than 50 years.

The truck, a result of a collaboration between Fox Factory Powered Vehicle Division and off-road industry leaders FOX, Method Race Wheels, BFGoodrich, Baja Kits, DANA, ARB, RCV and others, features 700 hp, menacing wide-body pre-runner styling and a long-travel suspension system designed to conquer all terrains.

"Through countless hours of design, torture testing and refinement, this Silverado offers next-level aftermarket suspension technology with OE-level integration," the company states.

As part of the integration, FOX developed the next evolution of the Live Valve shock system for the high-performance Silverado platform. Leveraging the 3.2 Internal Bypass shock design, the new Live Valve suspension management system features two electronically controlled solenoid valves per shock, providing control over compression and rebound.

For the drivetrain, GM's 6.2L aluminum block V-8 is boosted with the help of a Whipple Gen V supercharger tuned to produce up to 700 hp and 640 pound-feet of torque, sent through the 10L80 10-speed transmission and selectable transfer case. The signature rumble comes from the stainless free-flow cat-back Borla exhaust system.



Outside, the pickup features authentic pre-runner styling at an OE-level fit and finish with a high-gloss back interior. Up front, the high-clearance steel bumper and skids provide additional ground clearance and protection with a menacing appearance.

Interior improvements focus on luxury performance, starting with powered running boards and moving into custom orange-stitched two-tone leather seats with Alcantara suede inserts, an accented leather-wrapped steering wheel and several matte carbon panels.

POWERGLIDE

RETRACTABLE BOARDS



- EQUIPPED WITH INTELLIGENT TECHNOLOGY THAT ADAPTS TO YOUR VEHICLE (NO MAGNETS).
- EXTENDS WHEN DOORS OPEN AND RETRACTS WHEN DOORS CLOSE.
- INTEGRATED LED LIGHTS ILLUMINATE THE BOARDS WHEN DEPLOYED.
- EASY, NO-DRILL INSTALLATION.

STEELCRAFT

CA: (888) 261-4537
GA: (888) 261-4537
TX: (888) 480-7167

OFF-ROAD BUMPERS PART II

2025 TOYOTA 4RUNNER



Toyota has introduced its all-new 2025 4Runner, with the intention of staying true to its original concept as a capable, dynamic and durable off-roader. (Photos courtesy Toyota)



Toyota has introduced its all-new 2025 4Runner, with the intention of staying true to its original concept as a capable, dynamic and durable off-roader.

The new generation introduces a new look and adds updated technology, premium materials and safety enhancements, the company states.

"This all-new 4Runner has incredible versatility and capability that nicely rounds out our truck family story," says Dave Christ, Toyota group vice president and general manager. "We've sold over 3 million in the 40 years it has been on sale, and this sixth-generation model offers a cool new look and incredible features, yet retains the rugged style and capability our customers love about this icon of adventure."

Built on Toyota's TNGA-F global truck platform that is shared with Tacoma, Land Cruiser, Tundra and Sequoia and utilizes a high-strength boxed, steel-ladder frame that features a multi-link coil rear and double wishbone front suspension, the SUV's ride comfort and on-road manners have been improved. The enhanced frame, paired with the i-FORCE MAX 2.4L powertrain, allows 4Runner to tow up to 6,000 pounds.

The Michigan-based CALTY team spearheaded the design, pulling inspiration from the past while also focusing on the future, according to the company.

In a nod to the first and second generations of 4Runners, designers brought back the legacy "wrap over" quarter glass. Meanwhile, the popular roll-down rear window remains etched into the vehicle's DNA.

"Designing the legendary 4Runner began with identifying its unique and memorable aspects linked to fun, outdoor recreation," says Kevin Hunter, CALTY president. "Inspired by Baja desert racing, the high-lift, lean-body, big-tire rugged athleticism defines the core of 4Runner's go-anywhere purpose."

Various grades are available including SR5, TRD Sport, TRD Sport Premium, TRD Off Road, TRD Off Road Premium, Limited, Platinum, TRD Pro and Trailhunter.

Consider aftermarket bumpers a gateway to more upfits and accessories. (Photos courtesy Fishbone Offroad)







suggests shops ask about the typical off-road environments the customer frequents and the level of protection they're seeking.

"Questions about past experiences with underbody damage can also guide the conversation toward the importance of specific solutions such as robust bellypan protection," he explains.

And don't forget future plans, notes Michael "MB" Bernard, VP of sales and marketing for Fishbone Offroad.

"What do they plan on using the vehicle for, and what other modifications/accessories do they plan on doing after the bumper?" he asks.

Eric Blackburn, director of sales for Warrior Products, says it pays to start with the style the customer is seeking—stubby, mid-width or full-width. From there, shops can ask if the vehicle is for off-road or street-only use.

"Also, are they installing a winch, now or in the future?" he adds.

LEADS TO MORE

Many shops have had success looking to this market as a way of introducing their products and services to local customers.





Ask customers about style preferences and what types of off-road activities they enjoy. (Photos courtesy Warrior Products)



Check with drivers regarding the level of protection they're seeking. (Photo courtesy Artec Industries)

"Some consider the bumper the gateway to more upfits and accessories," Bernard notes.

Successful installations can initiate additional vehicle accessorization, at the time of purchase and in the future.

"They lead to add-on sales, and to selling and installing complementary products," says Perez.

Nuttall highlights the enhanced reputation that comes from offering high-end, durable products that off-roaders appreciate.

"Shops will be seen as a go-to source for top-tier off-road modifications, attracting a clientele that values quality and thorough protection," he predicts.

One of today's hottest pairings, notes Blackburn, are off-road bumpers and aftermarket lighting products.

"In addition to the obvious opportunity to sell a winch, our MOD Series front bumpers come with fog light brackets and adapters that allow the OEM Jeep fog lights from the customer's factory bumper to be reinstalled. They are also compatible with aftermarket options, making this a great opportunity for upselling lights," he explains. "The top surface and brush guard also offer a wide variety of mounting options for common accessories such as lights, CB antennas and sand flags, and they are also compatible with accessories such as our MOD Box and QuickLatch kits."

SMART APPROACH

A smart approach to promoting off-road bumper sales is to display one on a truck or SUV outside of your shop featuring the latest styles and designs, say Perez from ARIES.

It's also a plus if your staff can identify and recommend specific products for specific models.

"Make sure you can speak to the customer about their Jeep, be it a CJ, TJ, YJ, JK, JL or JT," he notes.

Warrior Products' MOD Series bumpers are made in the USA, Blackburn notes, a feature customers can appreciate.

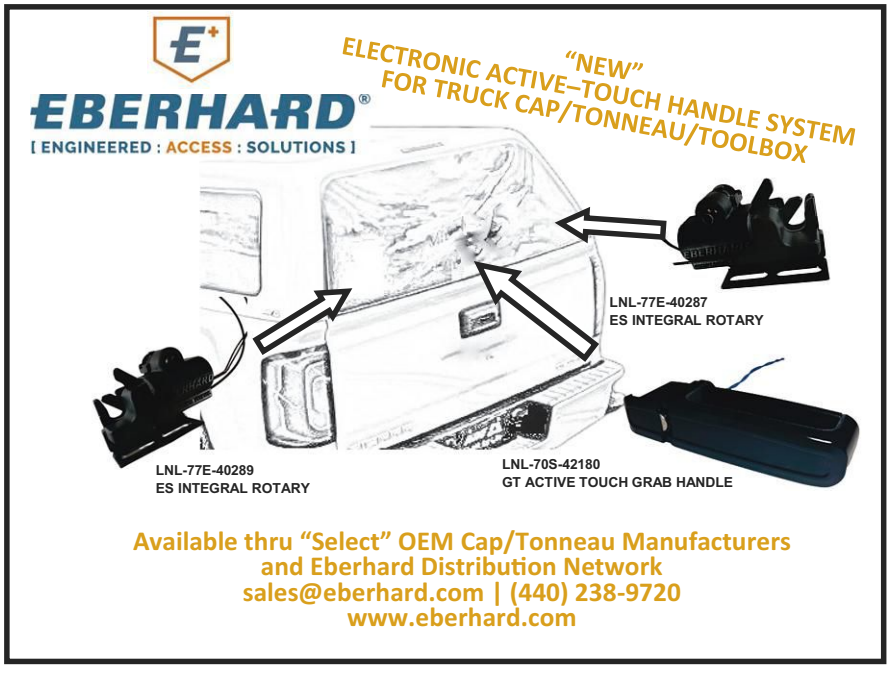
"Traditionally, U.S. products demand a higher sale price, leading to more revenue. The customer will often be happier with the final product and the shop will have built/maintained trust with that customer," he says.

Nuttall from Artec recommends emphasizing the long-term cost savings and vehicle protection provided by high-quality upgrades, including bellypans.

"Demonstrating the technical superiority and ease of installation of our products can also help in convincing customers of their value," he says. "This approach aligns product strengths with the needs of potential customers."

Keep a few on hand inside your showroom as well, says Fishbone's Bernard.

"It's always best to have some on display so the customer can touch and feel them," he suggests. "A good second option is to build a gallery of previously installed bumpers and accessories." ***TS***



LEADING BY EXAMPLE

Every restyler's a winner when it comes to the annual PRO Cup Challenge. ///// **By Josh Poulson**



Description	Supplier	Build Hours	Dealer Price	Retail Price
Custom Leather Interior	Katzkin	5	$1,700.00	$2,299.00
Champion 321 Large Power Topslider Sunroof	Champion	4	$1,100.00	$1,599.00
Hood Stripe	Avery Dennison	1	$400.00	$599.00
Rear Seat and Cargo Protection Package	4Knines	0.2	$150.00	$249.00
Paint Protection Package	Llumar	1	$325.00	$450.00
Wheel and Tire Package	LP Adventure	1	$2,100.00	$2,399.00
Emblem Package	Squatch Customs	1	$150.00	$200.00
Lift Kit 1.5 inch	LP Adventure	4	$1,300.00	$1,699.00
	TOTAL:	**17.2**	**$7,225.00**	**$9,494.00**

There are plenty of competitions that take place at the SEMA Show that draw a lot of attention.

Only one, however, is designed to show off not just the vehicle builder's skill, but also products from SEMA manufacturers and the profit potential of attractive packages.

That competition is the PRO Cup Challenge, and the goal is to give restylers examples of successful parts combinations that they can reproduce and sell in their local markets.

RESTYLING IN THE REAL WORLD

It was February 2019, and Restylers United was holding a meeting in Fort Lauderdale, Florida. RU is a group of some of the top restylers in the country who get together periodically to discuss issues and trends affecting the industry.

The biannual meetings often include a "best ideas" competition in which every member presents an idea they believe could benefit the industry or other businesses. You can imagine the great ideas that come from the 15 people at every meeting!



PRO Cup Challenge participants are looking to build attractive, repeatable restyling packages for dealerships that come in at or below $12,500 wholesale cost and require a maximum of 40 hours of labor to install.



The "Ruff Rider" Subaru Crosstrek package created by Chuck Graf of Auto Sunroof & Leather in New York won last year's PRO Cup Challenge restyling competition at the 2023 SEMA Show.

At this particular gathering, one of the restylers, John Prosser of Automotive Concepts in Minneapolis, admitted that while he enjoyed his annual trips to the SEMA Show, the event had begun to feel a bit lackluster.

He also felt that the restyling segment as a whole was getting lost in the show. There were plenty of wild SEMA builds, he explained, but none of them were really meant for regular drivers, nor were they easy to replicate.

"We need a competition that highlights what we do on an everyday basis so that fellow restylers or builders can duplicate them in their markets," he stated.

It was an eye-opening suggestion for most of us at the meeting. We agreed that, while there's plenty of value in going to SEMA to see the latest new products and meet with suppliers, the opportunity to return home with restyling package ideas for our local markets would add tremendous value.

In our industry, thoughtful packages really sell. It's great to install a leather interior or a lift kit. However, when you create a complete package with multiple items that gives customers a personalized feel, it's a home run.

For many years, restylers have pitched these creative package deals to car dealerships with excellent results. Sometimes, manufacturers whose products are included will share the ideas with other customers, but for the most part these packages go unnoticed by the rest of the industry.

BUY THEM ONCE.
LASTS A LIFETIME.



FLAT TIRES ARE THE WORST.

But just a single corroded, swollen, or cracked OEM two-piece lug nut could prevent you from removing your wheel when your lug wrench won't fit. That could leave you stranded–making it so much worse.

Replace your OEM stainless steel cap lug nuts with lug nuts from McGard before this happens! **McGard Tough Nuts®** are guaranteed not to rust, swell, or break... EVER, ensuring you will always be able to remove your lugs–and your wheels, wherever you are.

GUARANTEED FOR LIFE.

McGard®

LEARN MORE: mcgard.com

McGard® and Tough Nuts® are registered trademarks of McGard LLC. ©2023 McGard, LLC. All rights reserved.



A Toyota Rav4 package by Automotion Creations in Georgia took top honors in the 2022 PRO Cup Challenge.

So, thanks to Prosser's suggestion, the idea for the PRO Cup Challenge was born.

A 'PRO' TOUCH

It was quickly determined that the Professional Restylers Organization (PRO), a Specialty Equipment Market Association (SEMA) council, would need to work with SEMA Show officials to make the event happen. That is when fellow restyler Dino Perfetti and myself made it our mission to bring the idea to life.

Perfetti was the PRO Council chairperson at that time, and I was the chair-elect. We met with SEMA staff to discuss the idea and, to be honest, it was initially a struggle convincing them that this was a good idea for the show and for our industry.

We were ultimately successful once they understood that SEMA PRO restylers were going to build vehicles using SEMA PRO manufacturer members' products to entice shop owners from around the country to come to the SEMA Show as buyers to see the package ideas in person.

With everyone on board, the pilot competition was held at the 2019 SEMA Show.



Tom Waitzman of DPS in Chicago submitted the winning PRO Cup Challenge entry in 2021, a VW Atlas Cross Sport package.

AN ANNUAL CHALLENGE

So, five years later, where is the PRO Cup Challenge now?

Simply put, it's a yearly competition in which participants acquire a new car from a dealer and create an aftermarket package they believe has unique market appeal.

Competitors may only use SEMA PRO manufacturer products and are limited to a budget of $12,500 (wholesale cost) and 40 hours of labor time.

The packages are then judged by a professional panel at the SEMA Show on their creativity, mass appeal, ease of replication and profit potential.

The winner's name is engraved on a perpetual trophy that's kept at SEMA headquarters in Diamond Bar, California, and they also receive an individual award they can display in their shop.

A "fan favorite" selection is also part of the contest, voted on by SEMA Show attendees. Those winners are also recognized with a trophy.

Past winners include:

2019

- *Winner* – Automotive Concepts, Minneapolis, Subaru Crosstrek "Basecamp Edition"
- *Fan Favorite* – Specialty Auto Treatments, Fort Lauderdale

2020

- *SEMA Show canceled due to COVID*

2021

- *Winner* – DPS, Chicago, VW Atlas Cross Sport
- *Fan Favorite* – Automotive Concepts, Minneapolis, 2021 Ford Bronco

2022

- *Winner* – Automotion Creations, Georgia, Toyota Rav4
- *Fan Favorite* – Top Coverage LTD, Illinois, 2021 Ford F-150 Lightning

2023

- *Winner* – Auto Sunroof & Leather, New York, Subaru Crosstrek "Ruff Rider"
- *Fan Favorite* – VIP Distributing, St. Louis, 2023 GMC Yukon XL Denali

ATTENTION RESTYLERS

Sound like fun? It is!

So, whether you represent a restyling shop or a parts manufacturer, consider getting your business involved in this year's competition.

There's more news to come on the 2024 edition of the PRO Cup Challenge, but it will again offer participants, manufacturers and showgoers a chance to see creative restyling packages up-close—it's a real win/win/win!

Shops looking to participate can visit sema.org/pro for entry information. Manufacturers looking to get involved should email deniselw@sema.org. ***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. Poulson is immediate past-chairman of the SEMA PRO council.*

SPEEDING ISSUES?

Give your FLEET customers the power to limit their drivers' speed.

Introducing:

VEHICLE SPEED LIMITERS!



Call or scan the QR code to learn more.

1-800-782-3379

Rostra Accessories
A VOXX ELECTRONICS COMPANY

Ford F-150 Raptor R Mid-Section Exhaust

BORLA Performance Industries, Johnson City, Tennessee, presents its True Dual Mid-Section Exhaust System for 2023-24 Ford F-150 Raptor R models that improves horsepower and torque. System 600637 delivers the aggressive ATAK sound without any drone or resonance inside the vehicle. Mid-sections with the classic S-Type sound are also available. The system is made from T-304 stainless steel and features all-welded construction for durability and long life. The mid-section can be used with either BORLA or OE tailpipes.



Advanced Turbo Shields

Design Engineering Inc. (DEI), Avon Lake, Ohio, offers GEN-3 Titanium Turbo Shields with LR Technology. Made in the USA and featuring a silicone-coated outer layer, multiple stainless steel and silica inner layers and increased seam strength, the heat-resistant shields offer total turbo protection. Complete kits are available that include the shield, a 2-inch-by-15-foot roll of Titanium Exhaust Wrap for downpipes, two 20-inch stainless steel locking ties and 5 feet of safety wire. They are available to fit T3, T4, T6, T25/T28 and T6X turbos.





Carb Drain/Primer Bottle

Allstar Performance, Watervliet, Michigan, presents its Carb Drain/Primer Bottle that is made in the USA. The durable plastic 8-ounce squeeze bottle assists in draining and priming carburetors when making jet changes. The cap has an angled filler tube and tapered tip that fits easily into the vent tube of the carburetor fuel bowl.

GM C1500 Drum-to-Disc Rear Big Brake Kit

Wilwood, Camarillo, California, presents new Big Brake Kit options for rear drum-to-disc conversions for 1988-98 GM C1500 Silverado, Sierra and similar trucks and SUVs, based on the popular motorsports-proven AERO4R caliper and Spec 37 rotor options. Made in the USA, the complete bolt-on kits provide an upgrade to make trucks safer with improved stopping power and include an internal parking brake assembly and cable connection. The kits deliver more clamping force, better thermal capacity and improved pedal feel.



Floor Liners

RealTruck, Ann Arbor, Michigan, presents **Husky Liners** X-act Contour Floor Liners. Made in the USA, the liners combine a laser-scanned exact fit with a no-slip DuraGrip surface and a softer feel. They use the vehicle's factory retention posts and include StayPut Nibs for a no-slip, no-slide surface. The black liners resist chemicals and keep spills contained with a FormFit Edge.





HD Truck Suspension

CST Suspension, Moreno Valley, California, presents its complete line of Suspension Systems designed and manufactured in the U.S. since 1996, including new 4-inch Suspension Systems for 2020-24 GMC and Chevy HD truck models. The systems are engineered to work better and last longer than stock components while exceeding industry standards.



Put shop growth on cruise control.

Drive peak performance across all your shops with top-notch technology.

- Standardize operations and customer experiences at scale
- Track part orders & inventory across locations
- Log in to one tool to track all customer messages, invoices, payments and more
- Leverage roll-up reporting to track performance

Find out why auto repair shops choose Shopmonkey.

shopmonkey.io/multi-shop

shopmonkey

GM Bellhousing



Silver Sport Transmissions, Rockford, Tennessee, offers a GM 621 Bellhousing. Made in the USA from a titanium-aluminum alloy, it has a 50% thicker wall than the stock bellhousing and weighs 11.5 pounds. The bellhousing is precision CNC-machined with spot faced mounting holes, precision dowel pin holes and bores. It works with the stock clutch linkage or hydraulic clutch actuator, a 168-tooth flywheel and standard GM starter, and is compatible with **Muncie** 4-speeds, **Borg-Warner** Super T10s, **Saginaw** 3- and 4-speeds, and **TREMEC** TKOs and TKXs.

Upper Control Arms



ToyTec Lifts, Phoenix, part of **DPI Offroad Brands**, introduces its boxed Upper Control Arms. Engineered for strength and performance, the UCAs feature alignment optimization and boxed construction, and include high-quality Uni-Ball and ball joints. Crafted in the USA to deliver a 100% bolt-on installation, the arms boast a resilient powder-coat finish and a bold design and are ideal for vehicles with oversized tires and 0 to 4 inches of lift.

Recovery Ropes



ShurTrax, Watervliet, Michigan, presents its versatile ShurTrax Recovery Rope tow rope for off-road, marine and winter motorsports enthusiasts. Constructed with a nylon core and an outer casing made of protective ultra-high molecular weight polyethylene (UHMW-PE), the product's specialized design creates a kinetic snatch rope that can stretch, store energy and recoil, eliminating the harsh jerk of a chain or steel cable while using the stored energy to assist with pulling out stuck vehicles. The rope is offered in 20- and 30-foot lengths.

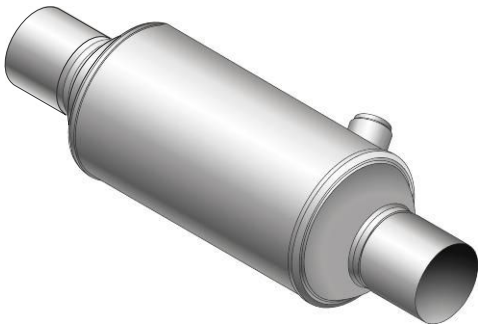


Hot Rod Cornhole Sets

Busted Knuckle Garage, Prescott, Arizona, offers hot rod-themed Cornhole Sets. Hand-constructed in the USA from cabinet-grade hardwoods, the boards include vinyl printed tops with a special coating used to prevent images from fading in the sun. Features include laser template-cut 6-inch holes; folding legs secured by carriage bolts, washers and lock nuts; and pocket holes on the frames and tops. Eight corn-filled bags are included.

Catalytic Converters

Aero Exhaust, West Jordan, Utah, and its **Street Series** brand, presents R-CAT Series 1 Catalytic Converters that meet or exceed Environmental Protection Agency (EPA) standards. Crafted in the USA, the converters feature an innovative design that optimizes exhaust gas treatment, effectively reducing harmful pollutants while enhancing engine efficiency. They include a 4-inch round body specifically developed for passenger automobiles and light-duty truck applications that houses a 400-cell ceramic substrate with rear 02 sensor port.



Sprinter Shocks & Coil-Overs

Radflo Suspension Technology, Fountain Valley, California, presents its Shock and Coil-Over Upgrade specifically designed for 2019-newer Sprinter 2500 and 3500 4x4 models. Designed to enhance comfort, control, and on- and off-road performance, the shock absorbers and coil-overs are built to withstand the most challenging conditions, ensuring longevity and dependable performance. They deliver a hassle-free installation and are available in various configurations, allowing users to fine-tune their suspension to suit specific needs.





EV Transmission Replacement

Torque Trends Inc., Wittmann, Arizona, presents the TorqueBox brand reduction gearbox 3.0 ratio. Designed to replace the transmission in any EV conversion and multiply the motor torque by three times, the single-speed TorqueBox 3.0 can be used in vehicles with over 1,000 hp and behind electric traction motors spinning over 16,000 rpm.

Accessory Mounting System

Warrior Products, Tualatin, Oregon, presents its MAXATRAX & RotopaX Mount System. Compatible with MAXTRAX MKII traction boards, traction board mounting pins and RotopaX mounts, the 100% U.S.-made mount systems are designed to provide unlimited options when mounting traction boards, fuel containers or other accessories. Designed specifically with Warrior platform racks in mind, they can also be mounted to most racks or any flat surface. They are available in multiple sizes and finish configurations to suit specific applications.





Tacoma Bed Cover

Truck Covers USA, San Diego, presents its American Roll Cover truck bed cover, now available for 2024 Toyota Tacoma models. The retractable, durable cover protects cargo and handles adverse weather conditions. Easy to install and operate, it fits seamlessly with the company's American Rack Systems, delivering security and peace of mind for work or play.



Mustang Performance Flywheels



Centerforce, Prescott, Arizona, presents Aluminum Flywheels for 1996-2017 Ford Mustang applications. The two new offerings are designed to replace the stock unit with a lightweight and low-inertia flywheel made in the USA from aircraft-grade billet aluminum for improved performance and bolt-on installation. They are designed with mechanically retained starter ring gears and replaceable steel friction surfaces that have been heat-treated for abrasion resistance and are balanced and dual-drilled for either 10.4- or 11-inch clutch pressure plates.

LS Swap Headers

Hedman Hedders, Whittier, California, offers Mid-Length Headers for 1978-80 GM A-Body and 1981-88 GM G-Body LS engine swap projects. Engineered for classic models like Monte Carlo, Regal or Cutlass, the precision-designed, made-in-the-USA headers enhance the LS engine's performance, while the A/G-Body-specific 1-3/4-inch mid-length tube design ensures easy swap integration and improved ground clearance. Choose from uncoated steel or silver/black ceramic coating.



Steel Liquid Transfer Tanks

TrailFX, Exeter, Pennsylvania, presents its Steel Liquid Transfer Tanks that offer a safe and simple solution for transporting non-combustible liquids. Available in square and L-shaped configurations with a durable, corrosion-resistant matte black or gloss white powder-coat finish, the tanks are manufactured in the USA from precision welded 14-gauge steel that is pressure-tested to ensure optimal performance. All tanks include internal baffling to prevent sloshing, reinforced filler necks and drain plugs, 1/4-inch mounting tabs and lockable vent caps.





Protective Coating

Rhino Linings, San Diego, introduces Rhino Hybrid XP protective coating. Boasting extreme strength and durability to withstand the test of time, the coating delivers improved bonding strength, enhanced UV resistance to prevent fading, and abrasion resistance. Designed for versatility across a myriad of automotive and industrial applications, its tensile strength, elongation and tear resistance provide reliable protection in even the harshest conditions.

Retrofit Steering Columns

IDIDIT, Tecumseh, Michigan, presents its application-specific Retrofit Columns that replace the OE steering column with no vehicle modifications in most cases. The USA-made columns put the steering wheel back into its original place and come in raw, paintable, black powder-coat and chrome finishes. Some columns are also offered in brushed or polished aluminum.



Camaro Direct-Fit Steering Column

Flaming River, Berea, Ohio, introduces a Direct-Fit Steering Column for 1970-81 Chevy Camaro applications, part of its expanded direct-fit column line that now covers more than 15 models. The second-generation Camaro column features a licensed GM ignition key (coded), five-position tilt, hazards and turn signal. A billet aluminum dress-up kit is included, with cruise or dimmer optional. The column is available in powder-coated GM black, mill finish stainless or polished finishes.



Rotary Latches

Eberhard, Wheeling, Illinois, presents its Rotary Latches, made in the United States for more than 45 years. Offerings include a new, heavy-duty 33-248 rotary series featuring a special electroplated zinc finish, dual-stage latching, special offset lever arm, and a snubber feature designed to prevent rattling when latched. The company's rotary latches are found on applications including specialty vehicles, truck accessories, smart lockers, medical enclosures, gaming enclosures and other enclosure door systems.





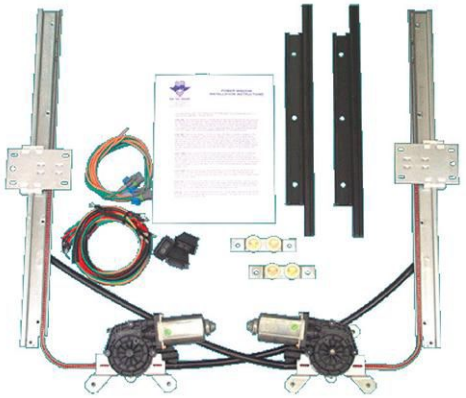
Adhesive-Backed Heat Barrier

Thermo-Tec, Greenwich, Ohio, offers its Adhesive-Backed Heat Barrier that protects virtually any surface or component from the damaging effects of radiant heat. Made in the USA of woven silica with a flexible aluminized finish, the barrier's highly reflective surface is capable of withstanding radiant temperatures up to 2,000 degrees. The adhesive side handles direct and continuous temperatures up to 300 degrees.

Jeep Ball Joints

MetalCloak, Rancho Cordova, California, presents its "Baller" Ball Joints for Jeep JK and JL Wrangler applications. The completely rebuildable load-bearing lower and upper joints include metal-on-metal tool steel races that eliminate memory steer and an induction-hardened chromoly spindle and ball that maximize bearing surface to distribute force loads. The ball joints are fully sealed, captured, adjustable and made in the USA.





Flat & Curved Glass Power Window Systems

BALL's Power Windows, Gainesville, Florida, presents Flat & Curved Glass Power Window Systems (6V/12V) featuring floating channels with Z support for hot rods and muscle cars. Made in the USA, the kits were first used in Mack trucks on an OE basis and are bench tested for more than 100,000 cycles.





Ethanol Content Sensor

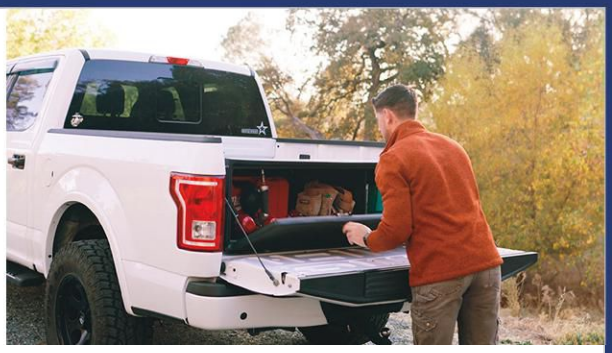
Advanced Fuel Dynamics, Troy, Texas, introduces the E-Sense Ethanol Content Sensor. Made in the USA and designed for performance and easy integration, E-Sense is a direct replacement for the GM/Continental sensor. It boasts up to -12 AN fuel flow and interchangeable modular fittings for seamless plumbing in any fuel system. Output includes ethanol percentage and fuel temperature, compatible with GM sensors. Crafted with a billet aluminum housing and OE-grade electronics, it can be used in any E85 ethanol build, from mild to wild.



Performance Cooling

Flex-A-Lite, Burlington, Washington, presents its line of Performance Cooling products, including cooling fans featuring patented Flex-Wave blade technology that maximizes airflow, providing optimal cooling for various automotive applications. Part of **Legend Brands**, the products have been made in the U.S. for 60 years. A comprehensive range of auxiliary and fully shrouded electric fan systems are also available.

Dockable Truck Cargo Box



Ecoological, Rocklin, California, introduces the AeroBox. A new approach to truck cargo storage, AeroBox mounts at the rear of the bed and offers convenient access to all cargo, docking in and out of the bed in seconds. Compatible with most tonneau covers and caps, it is made with durable, weather-resistant LLDPE.

4Runner Rear Sway Bar

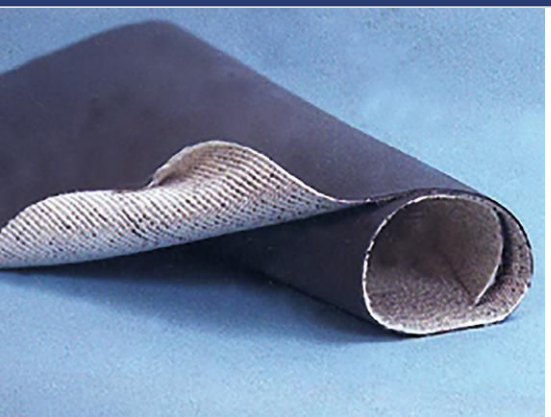
Hellwig Products, Visalia, California, introduces a Rear Sway Bar option for 2010-24 Toyota 4Runner models. With upgraded rigidity and durability, the bar is designed to offer more stability for daily driving and alleviate unwanted body roll while cornering or under load. Forged and fitted in the USA, it is particularly suited for off-road and overland enthusiasts looking to load a vehicle with heavy essentials like rooftop tents, racks, winches and extra supplies. The kit reuses factory end links and comes with polyurethane bushings.



Wireless Marker Cab Light System

Race Sport Lighting, Ringwood, Illinois, presents its new LoPro Series Wireless Solar-Powered Marker Cab Light System. Designed to add sharp, bright LED cab lights to a vehicle with no drilling, no holes and no wiring, the made-in-the-USA system allows any professional shop to install lights in less than an hour on any roof. After the initial power on, the solar-powered LEDs use light and vibration sensors to know when to illuminate and shut off. Features include a shock-resistant silicone shell and 8- to 9-hour battery backup.





Vehicle Insulation

Koolmat Insulation, Mooresville, North Carolina, presents its line of Vehicle Insulation products that stop extreme heat. Made in the USA, Koolmat protects against temperatures up to 1,200 degrees and reduces in-vehicle noise by 23 decibels. With a thickness of 0.070 inches, the material is flexible, weather-, abrasion- and mildew-resistant, and washable, and won't crack, peel, dry out, curl up, split or shrink.

Turbo Bolt Kits



Stage 8, San Rafael, California, offers Locking Bolt Kits for Turbos. Designed to alleviate the issue of bolts loosening due to heat and vibration, causing horsepower loss or gasket failure, the locking bolt kits are made in the USA with a unique, patented and trademarked functional design of just three pieces—a bolt, a locking retainer and a spring clip; or, depending on the application, a nut, a locking retainer and a spring clip. The bolts are application specific as either hex head with a 3/16 recessed Allen head or 12 point, and both come in multiple lengths.

Exterior Cam Lock



Vehicle Security Innovators Inc. (VSI), Green Bay, Wisconsin, and its **Pop & Lock** brand present a half-inch Exterior CAM Lock, made in the USA from high-quality, automotive-grade materials. Offering enhanced security, improved strength and durability, the lock can be used for exterior locking applications including toolboxes, cargo boxes, utility cabinets and more. Hundreds of key codes and custom keys are available.

Lock 'N' Roll Trailer Locks



DuraSafe, New Berlin, Wisconsin, introduces the Articulating Hitch Lock for **Lock 'N' Roll** brand hitches, the newest lock in its trailer security series. Designed to replace the factory pin in the latch plates, the lock keeps articulating hitches safe and secure. Match it with the company's Dual Propane Tank Lock, Cable Lock, Chain Wheel Lock and Spare Tire Lock for a keyed-alike set.

PRES-N-SNAP®

MADE IN USA

Since 1970

For all your upholstery fastener installation needs on Hot Rod, Convertibles & Boats

- Installs Snaps & Grommets
- Interchangeable dies for multiple applications
- Legendary tools that last a lifetime



HOOVER® Products
SAN JACINTO, CA

(951)654-4627
www.HooVerProducts.com

ALL NEW PRODUCT FROM DEI!



DEI DESIGN ENGINEERING, INC.



RFI SHIELD SLEEVE

- REDUCES RFI & EMI INTERFERRENCE FROM IGNITION SYSTEMS & HIGH VOLTAGE WIRES.
- SPLIT SLEEVE DESIGN AVAILABLE IN 2 SIZES:
  - ½" X 3FT AND 1" BY 3FT.
  - MESH WRAP AVAILABLE IN 1" X 25FT ROLL.
- 17.5" GROUNDING STRAP INCLUDED

DEI DESIGN ENGINEERING, INC.
800.264.9472
DesignEngineering.com



Color-Change Vehicle Wrapping Film

Avery Dennison, Mentor, Ohio, presents its Celestial Satins color collection, three new color additions to its Supreme Wrapping Film ColorFlow series. The new colors are Satin Solar Dawn, Satin Moonstone and Satin Frozen Ocean. Designed to enhance the ability of installers to create unique custom looks with iridescent shades of a wide range of color combinations, the films provide improved durability and conformability around a vehicle's curves and recesses. Easy Apply RS adhesive technology makes application faster and ensures long-term removability.



Touring Tire

Yokohama Tire Corp., Santa Ana, California, presents its AVID Ascend LX premium touring tire, offered in 39 T-, H- and V-rated sizes. The Ascend LX, produced at Yokohama's plant in Salem, Virginia, is designed to deliver longer tread life, improved wet traction, dependable winter traction and a quiet, smooth ride, with a 85,000-mile tread life warranty on all sizes and speed ratings. It is designed for passenger cars, minivans and crossovers in sizes ranging from 15 to 18 inches.

Bedliner Coating



KBS Coatings, Valparaiso, Indiana, presents its easy-to-apply KBS Bed Liner. Designed to protect truck beds and body panels, the made-in-the-USA polyurethane coating formulation contains 0% hazardous air pollutants and can be applied by brush, textured foam roller or spray equipment. The tough, flexible, scratch-resistant black coating resists chips, scratches and chemicals and is highly UV stable. One gallon typically coats up to 250 square feet.

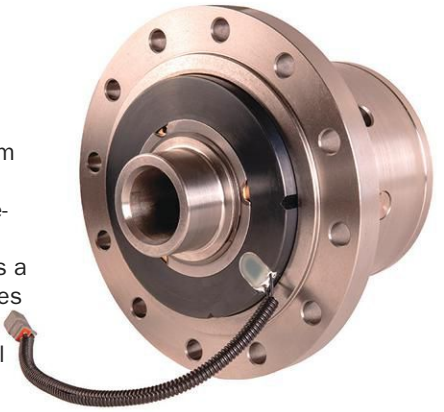




DLM Oil Tank

Peterson Fluid Systems, Longmont, Colorado, presents its new Fat Boy Oil Tank (08-9019) for Dirt Late Modified racing applications. The new, all-aluminum tank is manufactured in the USA and features a lower-profile design with all the standard features of the company's race-proven tanks. The Fat Boy is 18.62 inches tall and has a 5-gallon capacity. Mounting brackets and 10.5-inch tank straps are available.

Heavy-Duty Truck Electronic Locking Differential



Auburn Gear, Auburn, Indiana, presents its American-made Electronic Open-to-Lock Differential for 2001-19 Chevrolet, Dodge, Ram and GMC heavy-duty trucks. Made from military-grade materials and designed to handle the tough daily demands that single- and dual-wheel trucks face in construction, mining and transportation, the system uses a flip of a switch (no air compressor and hoses required) to instantly lock the rear 11.5-inch **AAM** 30-spline axles to the differential housing, ensuring 100% torque transfer.

Mustang Horse/Corral & Grille Spears Kit



California Pony Cars, Ontario, California, offers a Horse/Corral & Grille Spear Kit that is a replica of the original used on 1967 Mustangs. An official Ford Licensed product, it is made in the USA from precision die cast tooling with a triple-chrome-plated finish and painted with correct argent paint for a show-quality finish. Kits include a chrome corral, lefthand and righthand grille bar spears and mounting hardware.

Tri-5 Heat/Cool/ Defrost Systems



Vintage Air, San Antonio, introduces its newest Gen 5 SureFit systems for 1955-56 and 1957 Chevrolet passenger cars. The complete bolt-in, electronically controlled heat/cool/defrost systems feature an OEM-quality injection-molded case with separate heat and cool coils, block-type expansion valve and high-capacity blower for rapid interior cooldown. Systems include a control panel kit to convert the original controls to electronic operation, plus all components for installation.



Gladiator Bed Rack System

Adventure Rack Systems, Rancho Cordova, California, offers the ARS Jeep JT Gladiator Overcab and BakPak Bed Rack System with a modular design that supports top loads. Made in the USA, the system is designed specifically for Jeep adventures, allowing users to bring the gear they need, such as a rooftop tent, bikes, kayaks, spare tires or other accessories, and keep them secured to the vehicle in even the most adverse conditions. Multiple accessories are available. ***TS***



PERFORMANCE



TIME TO CHILL

Performance cooling systems balance out horsepower's heat.

By John Carollo

Performance cooling is the great equalizer in the automotive aftermarket. A builder can create a killer chassis and stuff a monster engine into a ride, but when it comes to keeping things cool, it must be right or else nobody will be motoring down the road—at least, not for long.

Horsepower means heat, which means the need for a proper performance cooling system for balance. There are several products involved in most cases, and often more than one solution available to target main issues.

To help bring the proper system to your project, suppliers offer insights on market trends, effective sales strategies and hot new products in the world of performance cooling.



Explain the benefits of a quality cooling system on a vehicle's overall performance. (Photos courtesy Griffin Radiator)

KEEPING PACE

As performance numbers continue to grow, the performance cooling market is working overtime to keep pace.

"The biggest change we see in the marketplace is that higher horsepower is much easier to achieve than it was 20 years ago. You can buy crate engines that make more than 500 hp and drive as docile as a new car," says Cole Quinnell, marketing manager at Flex-A-Lite. "More power means more heat, and that creates a need for electric fans that move more airflow."

Engine swaps and other modifications keep the market interesting.

"Customers are integrating late-model muscle car drivelines into vintage classic cars and trucks at a much higher rate and with much larger horsepower numbers," says Fred Militello, senior tech at Be Cool Inc.

And those vehicles aren't just headed to the corner store for a quick cruise, notes

Alan Johnson, owner of Johnson's Radiator Works.

"We are seeing older cars and trucks enjoyed for cross-country trips or daily drivers," he says. "If a vehicle is being trailered everywhere, essentially cooling performance does not matter. But for what we do, wanting that peace of mind for our customers, knowing they will not be stranded on the side of the road or overheating in traffic due to an inferior cooling system, it is very important. We are seeing vehicles equipped with 6- to 10-speed transmissions requiring larger coolers in the front, along with supercharger applications with large intercoolers constantly pushing cooling capabilities."

More projects mean more solutions, which often means more homework for performance shops.

"Warehouses no longer just carry one or two main brands—most carry all brands and let the shops determine what product they want to buy," observes Tom Longo, vice president at Derale Performance. "Shops need to depend on the products they install and know they will not only do the job, but not come back as a warranty (claim)."



Educate customers on the latest cooling system technology to help them protect their investment. (Photo courtesy Be Cool Inc.)

Innovation is also driving sales, says Alex Winter, application engineer at SPAL Automotive USA.

"The performance cooling market has witnessed a significant transformation, propelled by both technological advancements and evolving consumer demands. Looking forward, this sector is poised to embrace further innovations and trends that will redefine vehicle efficiency and performance."

Winter highlights the integration of smart cooling systems as an example, which



TIME TO CHILL

PERFORMANCE COOLING PRODUCTS

HOT PRODUCT:
Remote Fluid Coolers
FEATURES & BENEFITS:
Provide consistent fluid cooling regardless of vehicle speed or cooler location; wide variety of core styles available for different levels of cooling across all applications; universal fitment for engines, transmissions, power steering, differentials and more.

Derale Performance
Tom Longo
Vice President

HOT PRODUCT:
Flex-Wave 16-Inch Electric Fan
FEATURES & BENEFITS:
Patented blade technology provides up to 25% more airflow without any increase in amp draw or overall fan unit dimensions; alternative to brushless electric fans; price point that makes customers happy and leaves a good margin; built in the USA.

Flex-a-Lite
Cole Quinnell
Marketing Manager

HOT PRODUCTS:
C10 LS ComboUnits
FEATURES & BENEFITS:
Off-the-shelf radiator and electric fan drop-in solution for Chevy C10s; kit includes a PerformanceFit radiator, built-in automatic transmission cooler, aluminum shroud, twin SPAL fans, wiring harness, temperature sensor and radiator cap.

Griffin Radiator
Steve Beebe
Marketing Director

HOT PRODUCTS:
Z-Core Radiator Line
FEATURES & BENEFITS:
Designed to properly cool and fit today's modern engines, from Hemi-swapped Jeeps to high-horsepower, LS-powered hot rods; four-core, copper brass radiators feature more than 600,000 louvers; heavy-gauge galvanized steel brackets for secure mounting.

Johnson's Radiator Works
Alan Johnson
Owner

HOT PRODUCTS:
Smart Start Fan Series
FEATURES & BENEFITS:
Brushed fan hybrids, infusing the refined technology and performance characteristics of brushless (BLDC) fans with the hard-working attitude and hardcore cooling power of brushed (PMDC) fans at a more affordable price.

Maradyne High Performance Fans
Jim Kahl
Product Manager

HOT PRODUCT:
16-Inch Sealed Brushless (SBL) Fan
FEATURES & BENEFITS:
Features a 500W brushless motor and utilizes the same mounting footprint as standard SPAL 16-inch VA18 and VA33 brushed fans; rated at 2,433 cfm at "free air" conditions; increased power, reliability, durability and optimal performance in all conditions.

SPAL Automotive USA
Alex Winter
Application Engineer

HOT PRODUCT:
Upgraded Cooling System Modules
FEATURES & BENEFITS:
Designed for specific make, model and year applications; factory fit; available for LS swap, Coyote conversion and late-model Hemi engine projects.

Be Cool Inc.
Fred Militello
Senior Tech





Every project is different, meaning different fan sizes and airflow ratings may be required to maximize system efficiency and performance. (Photos courtesy Flex-a-Lite)

leverage advanced sensors to dynamically adjust cooling based on real-time engine performance and environmental conditions.

"This not only enhances vehicle efficiency, but also significantly reduces emissions," he says. "Moreover, the advent of electric vehicles has spurred the development of innovative cooling solutions tailored for battery packs and electric motors. These solutions aim to optimize temperature distribution, thereby extending battery life and improving overall electric vehicle range."

THE NEXT LEVEL

A product line with that much evolution is bound to create some confusion for customers. So, what should shops know?

"The biggest misconception is that all aluminum radiators are the same. FYI, they are not," says Steve Beebe, marketing director at Griffin Radiator. "It always alarms me when we get a call from a shop that's building a $200,000 car for a client and they want to install a $100 radiator from eBay. Yes, it may be aluminum, and yes, it may be a radiator, but no, it's not made well, no, it doesn't have a warranty, and no, it's not going to last. We strive to educate our customers on the value of buying quality products. This allows them to enjoy their investments as much as possible."

Jim Kahl, product manager for Maradyne High Performance Fans, has seen a recent surge in "pusher" fan options that place the fan in front of the radiator.

"A pusher fan will obstruct and deflect a



View cooling as a complete system to achieve the best results. (Photos courtesy Derale Performance)

certain amount of natural airflow known as ram air. A puller fan that sits behind the radiator and pulls air through the radiator has less effect on the natural ram airflow that assists in keeping the engine cool while the vehicle is in motion," he explains. "A puller fan is always the better option. We only recommend using a pusher fan if constrained space does not allow for the installation of a puller fan."

Longo outlines the importance of viewing cooling as a complete system to achieve top performance.

"Most shops know and understand the need for cooling on transmissions, but rarely know engine oil coolers can actually lower temperatures in the radiator, reducing temperatures of internal components as well as helping bearings live longer. When removing belt-driven fans from the engine and installing electric fans, this can save 25-30 hp," he states.

There's also the challenge of explaining what's needed to customers who may have their own ideas, Johnson adds.

"Many are not properly educated or aware of what they truly need or don't have any idea what is involved with efficiently cooling their vehicle," he reveals. "Labor





TIME TO CHILL

is not cheap and consistently replacing or repairing an inferior product is not ideal. The same outlook applies to other components in the system, such as fan choice, wiring materials and controllers. Educating the customer on the products they are purchasing and their long-term benefits can make the building process a lot smoother."

After all, Quinnell says, "a 750-hp engine is not really any good if you can't keep it cool. Plan on space for a good-sized radiator and, ideally, a fully shrouded electric fan system that will provide the airflow needed to keep that engine cool. We have fan systems that will move 6,000 cfm of airflow, but you have to plan the build in such a way that makes room for proper cooling. You'll have satisfied customers when they can drive their performance vehicles without any worries of overheating."

Militello says "the most important aspect of a performance cooling project is educating customers on the latest cooling system technology to help them protect their investment."

Winter notes that even for cooling systems, however, bigger isn't always better.

"Performance cooling is not merely about bigger radiators or more powerful fans. It's about optimizing the vehicle's cooling efficiency to match its intended use, whether it's for daily driving, towing, racing or off-roading," he says. "The essence of performance cooling lies in achieving the perfect balance between heat dissipation and the engine's operational temperature needs. An engine that runs too cool can be just as detrimental as one that overheats; both scenarios can lead to reduced efficiency and potential damage."



Educating customers on the products they are purchasing and their long-term benefits can make the building process smoother. (Photo courtesy Johnson's Radiator Works)

PROFITS? NO SWEAT

When it comes to maximizing performance cooling sales, builders can start by knowing what's available and from whom.

"Shops should educate themselves as to what is available from different manufacturers to able to put a top-notch cooling system together that works," says Johnson from Johnson's Radiator Works. "It is a lot easier for shops that specialize in different niche markets, but for places that work on a wide variety of projects, it can be a little more difficult. Shops need to sell a complete cooling system that is known to fit the application properly."

Ignoring such an approach can lead to cooling issues caused by simple problems that have nothing to do with the radiator or fan, he adds.

"From incorrect ignition timing to improperly tuned EFIs or carburetor-to-fan wiring being too small of a wire gauge, sometimes upgrading the cooling system runs deeper than just those components in the cooling system itself."

A good education can include knowing which products perform as advertised, says Flex-a-Lite's Quinnell.

"Use products that you know work," he advises. "We recently tested popular brands of 16-inch electric fans and found some huge differences between advertised and actual airflow (cfm). One actually delivered 50% of its advertised airflow. This can lead to frustration for a shop that installed the product and the customer using it."

When it comes to suggesting upgrades, Derale's Longo notes that any customer is a prime candidate for improved system performance.

"All builds can benefit from additional cooling to help critical components last longer. Cooling is one of the last things shops think of, but it is an easy sell to the consumer—it really is an additional insurance plan," he says.



The best solutions optimize the vehicle's cooling efficiency to match its intended use. (Photo courtesy SPAL Automotive USA)

For drivers who love to talk tech, it's important to understand the relationship between airflow and the static pressure requirements in automotive systems, says SPAL's Winter.

"Setting realistic expectations for customers will result in greater system success and build trust with customers. The shops and our dealers are viewed as the experts on this complex subject matter and our customers are looking for an education. Customers who understand the relationship between pressure drops, airflow restrictions and fan power consumption have a more realistic grasp of what their vehicle needs to operate properly," he explains, noting that, at times, cfm ratings have been used incorrectly to describe the performance of electric fans.

"Misunderstanding cfm ratings and ignoring the pressure requirements of the system can often lead customers to purchasing the incorrect fan for their needs. When customers get the wrong fan, it can lead to overheating issues or poor experiences with our products or other products in the cooling system. There is nothing more frustrating than purchasing a new fan and radiator system, only to find out it doesn't perform to the customers' expectations."

Once shops have a grasp on the basics, upsells can come naturally, says Beebe—like pairing radiators and fans.

"The easiest tip I can offer for selling Griffin cooling components is incredibly simple. We always ask one question: 'What are you doing for fans?' This simple

question allows our sales staff and distribution network to double their gross sale almost instantly. Our product line has been designed so that most of our part numbers can be converted from an independent radiator to a ComboUnit. Our goal when we designed this system was to take all the guesswork out of pairing fan setups with radiators."

And the bundling doesn't have to stop there, says Kahl.

"Go with a proven brand that can offer the complete package. Not only does Maradyne High Performance offer a variety of different fan sizes, strengths and configurations, we also offer a complete line of accessories including thermostats, mounting brackets and wire harnesses that allow for effective and efficient fan installation," he says.

Finally, don't forget that product manufacturers and suppliers are here to help.

"When the time arises to upgrade a customer's cooling system and/or cooling needs, contact the cooling professionals for a recommendation on any and all applications, tech information product lines and value for the client," recommends Be Cool's Militello. "Make the customer aware that investing in the correct cooling system is also protecting the large investment they have under the hood." ***TS***



Investigate fans, components and accessories to offer complete cooling solutions. (Photo courtesy Maradyne High Performance Fans)



Building a Big-Block Chevy, Part V

Stud girdles, plumbing the carbs & an important choice.

Build, text and photos by Mike Mavrigian



Dart provides longer rocker stud adjuster nuts (poly-locks) with the girdle kit in two different lengths. The longer nuts are for the intake locations and the shorter nuts are for the exhaust rockers.

EDITOR'S NOTE: *This is the fifth installment of a multi-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 magazine, Part II appeared in the October 2023 issue, Part III in the January 2024 issue and Part IV in April 2024.*

STUD GIRDLES

To reduce/eliminate rocker stud deflection (considering our hefty spring pressures), we installed a set of Dart 301-64110001 aluminum stud girdles to tie all the rocker studs together.

With the girdle assembly positioned properly (Dart logo facing you and readable upright), lay the girdle down onto the rockers. Loosely install the exhaust (shorter) poly-lock nuts. Wiggle and slightly raise the girdle for angle clearance and loosely install the intake (longer) poly-lock nuts.

Expect a tight fit on a few, but as long as you're not cross-threaded, you're OK. I can't emphasize this enough—make sure that you avoid cross-threading. If a poly-lock seems very difficult to start, wiggle/raise/lower the girdle to allow the start of proper thread engagement.

Once all poly-locks are engaged, wiggle and raise the girdle to a uniform height. It's a matter of "feel" to obtain the desired sweet spot where the girdle is placed in its most comfortable location.

Snug all poly-locks until you achieve close to zero lash, then back off a few turns. With all poly-locks close to their installed height, double-check to confirm a fairly uniform poly-lock exposed height (there will be slight differences, but they should all be in the same ballpark).

Make sure that the girdle is not sitting too low as to interfere with rocker operation.

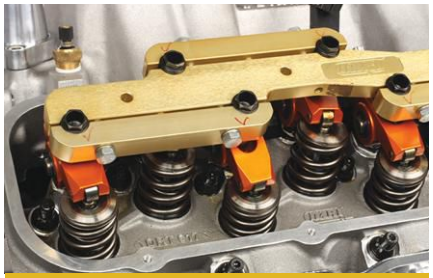
At this point, you can set valve lash and snug up the poly-lock set screws. Now you can final-tighten the girdle clamp bolts to secure the girdle clamps against the poly-locks.

Double-check lash after tightening the girdles, as this may tweak the lash a bit. If you need to readjust a valve, loosen the adjacent girdle bolt, make your adjustment, retighten the girdle bolt and recheck lash.

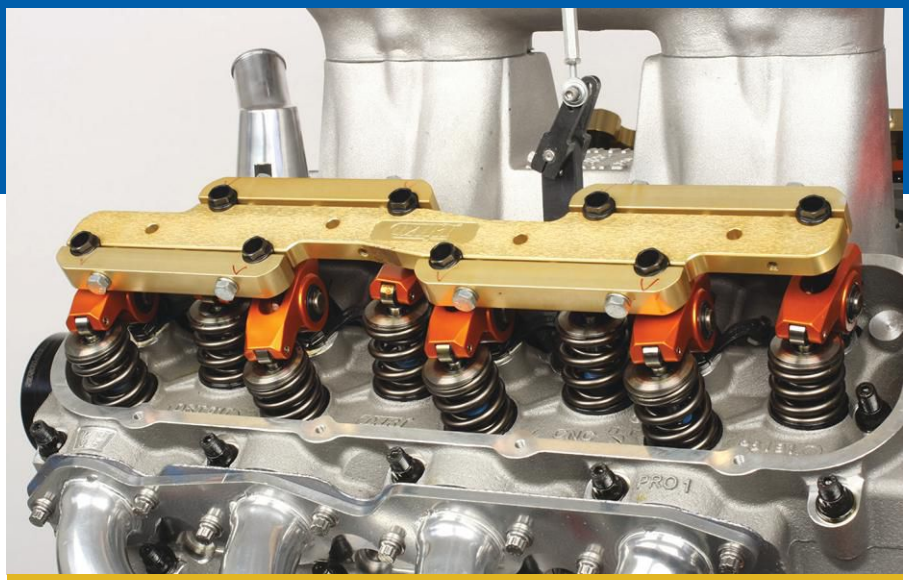
Expect to spend some time during this



A pair of Dart's rocker stud girdles may be added for increased rigidity.



Once the girdles were positioned in their "sweet spots," valve lash was set at 0.020-inch.



A mock-up of the Dart stud girdle assembly on the left bank. This girdle is now in its proper location, ready for valve lash setting.

operation. Dart invested quite a bit of design effort into these girdles to accommodate the splayed valve angles on the BBC.

The girdles will fit, but don't expect a simple "drop-on."

FYI: turning/adjusting the poly-locks requires a 9/16 box wrench to hold the nut steady and a 7/32 hex wrench to adjust the poly-lock set screw. Our COMP Cam card calls for 0.020-inch hot lash, so to compensate for component growth when hot, we set cold lash a bit tighter at 0.016-inch.

PLUMBING THE CARBS

The lightweight 4.5-pound aluminum Holley Ultra carbs feature 8-AN O-ring female bowl inlets and can be plumbed from either side of the bowls. Dual 30cc accelerator pumps provide enough fuel from idle to full throttle.

Among the many features of the Ultra are drain plugs in the front center of the bowls for easy access when emptying. The dual-pattern baseplate mounting holes allow mounting these carbs to manifolds designed for either 4150 or 4500 Dominator carbs.

Since the pair of 950-cfm carbs demands a lot of fuel, we set up the main feed to allow a -8 AN connection to the entry of the Y-block, with -6 AN feeds to each carb. The Y-block (Earl's 100181ERL) features a 3/8-inch NPT female inlet port (where we installed a 3/8-inch NPT to -8 AN male fitting) and two -6 AN male fittings to feed the carbs.

The Y-block also features a convenient 1/8-inch NPT threaded port that allowed us to directly mount an Earl's fuel pressure gauge. We elected to simplify matters (again, just for dyno) by running 3/8-inch fuel hose.



With girdles in place and each valve location's adjacent girdle bolt loosened, poly-locks were adjusted, setting valve lash on intake and exhaust valves at 0.020-inch.

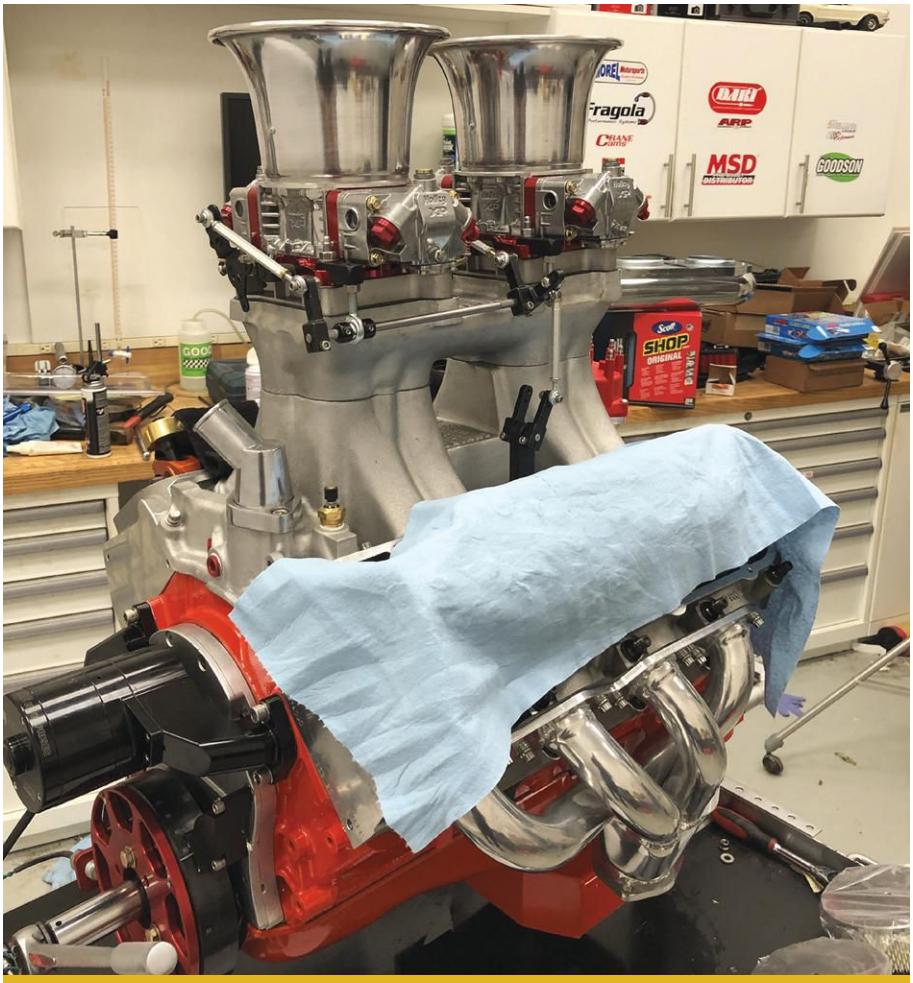
We installed female -6 AN to 3/8-inch barb nipple adapters at each of the carb fuel bowl -6 AN male fittings. At each carb, we ran the fuel hose from the rear bowl to the front bowl to a barbed T-fitting (rear bowl hose to the T, 90-degree barb to the front bowl, and the third T barb to the Y-block).

Not "high tech" by any means, but this made for a simple and functional method of fuel delivery for the dyno.

AIR SCOOP OR VEL STACKS?

In trying to decide on an air inlet that offers





Here's a view with Mr. Gasket velocity stacks on the carbs during test fitting/mockup.



Here's a view with a Hilborn-style scoop (from Holley) mock-up installed.

a "cool" factor, I waffled between using a Hilborn-style scoop with dual internal air filters or a pair of velocity stacks. While both provide a bit of nostalgia, I finally opted to go with velocity stacks.

While mocking up each setup, everyone visiting the shop was shown each, and they all voted for the stacks. Mounting them was easy.

While out of the box, the lower opening was oval shaped due to the pressure of a riveted-in crossbar (aluminum strap that provides a center hole for securing to a stud). By simply bending the crossbar slightly, the openings went back to round and fit fine.

However, the crossbar straps feature a hole for a 1/4-inch-diameter stud, while the carbs feature air cleaner stud holes for 5/16-18. By simply installing adapters (5/16-18 male to 1/4-20 female) that issue was quickly resolved (straps are not wide enough to allow oversizing the hole).

Due to the necessary bend of the strap, and to prevent the bottom of the stacks going oval shaped during tightening, aluminum tube spacers were installed over the stud adapters at a length of 1/2-inch to provide a more secure installation, providing a solid stop when tightening the retaining nuts.

To prevent debris from entering the carbs, a simple elastic-bordered slip-over pre-screen from Filter Wears was installed to the top of each stack.

THROTTLE LINKAGE

The Weiand dual-carb throttle linkage assembly was installed and adjusted to provide simultaneous throttle movement on both carbs. The linkage system features a total of five pivot arms that engage onto the two splined shafts (the horizontal shaft that runs fore/aft connecting the two carbs) and the short-splined shaft that runs through the needle bearing of the manifold-mounted stand and accommodates the radius rod end that connects the main horizontal shaft to the pivot arm.

Set-to-length adjusters that connect to each carb's throttle lever feature left and right-hand radius rod ends. While the dual carb throttle assembly features quite a few parts and may seem intimidating at first, with a little patience obtaining the desired throttle connection is not that difficult—it just takes a while to get the pivot point

connections clocked/oriented and adjusted properly.

If this is your first time dealing with this system, plan on about an hour. Patience is your friend.

INSTALLING THE DISTRIBUTOR

Since we're running an MSD crank trigger ignition system, I previously locked out the advance of our MSD Pro Billet distributor 8570. This distributor is required for use with the Weiand high-rise manifold due to clearance.

The 8570 distributor features a slim 3.800-inch head diameter, which clears the manifold. A larger-diameter distributor simply will not accommodate this manifold.

The distributor features an adjustable-height collar that allowed us to obtain ideal cam gear mesh and oil band alignment.

An inspection plug is featured on the rear of the Dart block, in-line with the distributor shaft. By viewing through this port, we can set distributor depth so that the oil groove in the shaft is open to pressurized oil.

The slip-collar distributor was installed until it bottomed out, then locked in place. We added the gasket (MSD calls for about a 0.010-inch rise from bottoming). Once this depth was confirmed, I removed the distributor and painted the distributor gear with machinist dye, reinstalled it and then rotated the crank twice.

With the distributor removed, the witness marks on the gear showed a nicely centered area of contact mesh.

The locking collar on the distributor was tightened (the collar features two tiny hex set screws, requiring a 5/64-inch hex bit). Servicing the Dart inspection plug required a 0.185-inch hex bit. The plug features straight threads with a sealing O-ring.

To verify that the distributor gear was not bottoming out, the rotor was removed and the locked-out advance plates were pulled up/down, showing about 0.010-inch of travel.

Of course, the MSD crank trigger pickup is adjustable for timing alteration. The distributor was final-installed with the gear coated with high-pressure lube and secured in place with a Stef's hold-down clamp and ARP stainless distributor stud and washer.

Because of the fairly low installed height of the distributor, the clearance between the distributor head and the top of the stud was too close to allow the use of the ARP 12-point nut, since it would not permit the use of a 12-point wrench. So, I substituted this with a stainless hex nut in order to allow use of a 9/16-inch open-end wrench. ***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.*

Mike can be reached at (330) 435-6347 or birchwdag@frontier.com. Visit Birchwood's website at birchwoodautomotive.com.



ENGINE PRODUCTS

The Latest Under-Hood Offerings



Chaser Taps

ARP, Ventura, California, presents specially designed Chaser Taps designed not to cut threads, but only to clean them. The expanded tap offerings include 22 different sizes (SAE and metric), plus combination sets that feature the most popular sizes.



Colored Spark Plug Wires

Taylor Cable Products, Lenexa, Kansas, offers the return of its Colored Spark Plug Wires for custom and performance car enthusiasts. Crafted to combine functionality with aesthetic appeal, the high-performance wires are engineered to upgrade the look of any engine bay in colors including traditional black, red and blue, and new yellow, orange, green, purple, pink and gray. The wires' 8.0mm outer silicone jackets resist temperatures up to 600 degrees, boasting a rating of up to 65,000 volts.

Headlight Air Intake

Speedway Motors, Lincoln, Nebraska, offers a Headlight Air Intake Kit that converts any 5-3/4-inch headlight into a fresh air intake opening. Made from lightweight spun aluminum, the system secures with the standard headlight retaining ring and features a 5-3/4-inch air inlet that necks down to a 4-inch outlet. The kit works with any 4-inch rubber or silicone couplers and 4-inch cold air tubing, converting from street-legal to track-ready in minutes.





SBF Top End Kits

Air Flow Research (AFR), Valencia, California, presents its new Enforcer Series Top End Kits for small-block Ford engines, particularly 347- to 393-ci applications. The packages include Enforcer Series 185cc cylinder heads and a low-profile, single plane intake manifold designed for 8.2 deck blocks, plus polished aluminum rocker covers with gaskets, intake and exhaust manifold gaskets, **Fel-Pro** head gaskets, **ARP** head bolts, intake manifold bolts and spark plugs.

Synthetic Motor Oil



AMSOIL, Superior, Wisconsin, presents its new Signature Series 0W-16 100% Synthetic Motor Oil, designed to provide next-level engine protection for a new group of drivers, primarily those with Toyota and Honda applications calling for a 0W-16 viscosity. Shown to deliver 75% more engine protection against horsepower loss and wear than required by a leading industry standard, the oil extends the life of vital components like pistons and cams. A strong fluid film keeps metal surfaces separated while robust anti-wear additives further reduce metal-to-metal contact wear.

High-Performance Water Pumps

Aeromotive Inc., Lenexa, Kansas, introduces a range of Advanced Water Pumps. Available in three fitment variations including application-specific, radiator mount and universal mount options, the lightweight billet aluminum brushless water pumps include reliable electric motors and aluminum impellers. Intended for racing use, the pumps are designed to move more fluid for high-performance cooling applications.



VEHICLE INTERIOR SEATING *SOLUTIONS*

Factory Replacement Leather Seat Upholstery

Custom Kits

Seat Heaters

Lumbar Support

LEATHER CRAFT™
ROSEN
Automotive Interior Excellence

www.leathercraft.pro

SERIOUS PERFORMANCE.
SERIOUS WHOLESALE POWER.

HIGH PERFORMANCE & RACE, TRUCK & DIESEL, JEEP & OFF-ROAD, STREET ROD & RESTORATION, PREMIUM & STOCK REPLACEMENTS, LATE MODEL

AVAILABILITY
Four Locations—Millions of Parts!

SELECTION
Access to Over 1,500 Top-Brands

CONVENIENCE
• FAST, FREE Shipping!
• We Export at Competitive Rates

SERVICE
Unbeatable Customer Service

APPLY TODAY! ATECHMOTORSPORTS.COM

ATECH MOTORSPORTS
Global Wholesale DISTRIBUTOR
Powered by SUMMIT RACING EQUIPMENT

KICKER PERFORMANCE AUDIO

LOUDER BASS? MUST BE KICKER.

#KICKERAUDIO #LIVINLOUD
@KICKERAUDIO KICKER.COM

LIQUI MOLY

One brand, all solutions

SAE 5W-40 MOTOR OIL
LEICHTLAUF HIGH TECH

Auto Bild DIE BESTEN MARKEN IN ALLEN KLASSEN
BEST BRAND 2023 auto motor sport
auto TOP MARKE 2023
auto TOP MARKE 2023

www.liqui-moly.com

akebono
BRAKE EXPERTS
AKEBONO PROACT ULTRA-PREMIUM BRAKE PADS

ProACT® Ultra-Premium Ceramic Brake Pads eliminate noise and vibration for the longest-lasting braking performance.

Motor-State DISTRIBUTING
60 YEARS EST. 1964

motorstate.com 800.772.2678

Dealer Application

HELLA PAGID
BRAKE SYSTEMS

CERAMIC SILVER BRAKE PADS NEW!

- HELLA PAGID Semi-Metallic Silver brake pads have a metal content of greater than 50%.
- Formulated with a combination of metallic fibers, organic materials (including rubber, resin, and friction modifiers) plus various fillers.
- Enhanced stopping power
- Resistance to brake fade

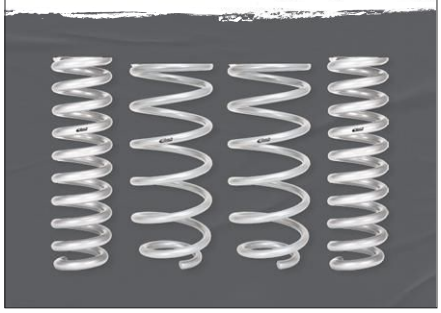
CHECK VEHICLE FITMENT

https://hella.mypartfinder.com/



PRO-LIFT-KIT
Performance Lift Springs

Now available for the 2024 Ineos Grenadier





GET A $200 VISA GIFT CARD AND 2 FREE OPTIONS
WITH THE PURCHASE OF A BRAND NEW OZARK TRUCK CAP!



DISC BRAKES
wilwood
POWER. CONTROL. PRECISION.
wilwood.com
805.388.1188

ZPA
ZUMBROTA PERFORMANCE AXLES



REMAN PERFORMANCE AXLES BY
ZUMBROTA DRIVETRAIN
1.800.658.2537
ZUMBROTADRIVETRAIN.COM



WE COVER ALL YOUR FLEET NEEDS.

TRI-STATE ENTERPRISES, INC.

Contact us TODAY for more information
(469) 208-7208





ADVERTISER INDEX

ADVERTISER	PAGE #
Advanced Clutch Technology Inc	9
aFe-Advanced FLOW Engineering Inc	37
ATECH Motorsports	53
Atlas Copco	51
Borla Performance Industries	43
Custom AutoSound Mfg Inc	47
Design Engineering Inc. (DEI)	39
Eberhard Mfg	27
EGR Inc	17
Eibach Inc	54
Firstech Inc	49
Hella Inc	53
HooVer Products	39
IDIDIT LLC	45
Keystone Automotive Operations Inc	11
Kicker/Stillwater Designs Audio	53
LIQUI MOLY USA	53
LTA Mfg	53
McGard LLC	29
Meyer Distributing	1
Motor State Distributing	4,35,53
National Performance Warehouse	7
RANDYS Worldwide	54
RealTruck	23
Rhino Linings	13
Rough Country	21
Shopmonkey	33
SPAL USA	40
Steelcraft Group	25
The Wheel Group	IBC

ADVERTISER	PAGE #
Thermo-Tec	41
Torque Trends, Inc.	10
TrailFX	15
Tri-State Enterprises Inc	3,54
Trim-Lok Inc	45
Turn 14 Distribution	BC
VOXX Intl Corp	31,53
Wilwood Disc Brakes	IFC,54
Worksport USA Operations Corp	19
MADE IN THE USA	**PAGE #**
Advanced Fuel Dynamics	38
Adventure Rack Systems	41
Aero Exhaust	34
Allstar Performance	32
Auburn Gear	41
Avery Dennison	40
BALL's Power Windows	37
BORLA Performance Industries	32
Busted Knuckle Garage	34
California Pony Cars	41
Centerforce	36
CST Suspension	32
Design Engineering Inc. (DEI)	32
DuraSafe	39
Eberhard	37
Ecoological	38
Flaming River	36
Flex-A-Lite	38
Hedman Hedders	36
Hellwig Products	38

MADE IN THE USA	PAGE #
IDIDIT	36
KBS Coatings	40
Koolmat Insulation	38
MetalCloak	37
Peterson Fluid Systems	40
Race Sport Lighting	38
Radflo Suspension Technology	34
RealTruck	32
Rhino Linings	36
ShurTrax	34
Silver Sport Transmissions	34
Stage 8	39
Thermo-Tec	37
Torque Trends Inc.	35
Toytec Lifts	34
TrailFX	36
Truck Covers USA	35
Vehicle Security Innovators Inc. (VSI)	39
Vintage Air	41
Warrior Products	35
Wilwood	32
Yokohama Tire Corp.	40
PRECISION ENGINE PRODUCTS	**PAGE #**
Aeromotive Inc	52
Air Flow Research (AFR)	52
AMSOIL	52
ARP	52
Speedway Motors	52
Taylor Cable Products	52

The Advertiser Index is intended solely as a convenience for our readers and is not a written or implied part of any advertising commitment. As such, THE SHOP assumes no liabilities for unintentional errors or omissions.

SUBSCRIBE TODAY TO OUR NEWSLETTERS & MAGAZINE

THE SHOP

THE SHOP covers the full spectrum of the automotive aftermarket, from performance and racing, to restyling and vehicle customization, to off-road and diesel. If you're in the business of making vehicles run better, look better or work better, then you'll find everything you need to stay in top gear within the pages of THE SHOP.

Join to receive the THE SHOP magazine, The Daily eNewsletter, In Gear with THE SHOP podcast, video content, and more, all for free!

theshopmag.com/subscribe

Model T Gears Up for Cross-Country Trek



The Museum of American Speed plans to make a coast-to-coast trip in June from New York to San Francisco in a 1924 Model T Ford to celebrate the 100th anniversary of the production of the ten-millionth Model T.



The ten-millionth Model T recreation on display at the museum was recently donated by the family of the late Dr. Alan Hathaway, and has already made the cross-country trek twice to celebrate the 50th and 75th anniversaries of the ten-millionth Model T.

The Museum of American Speed plans to make a coast-to-coast trip from New York to San Francisco in a 1924 Model T Ford to celebrate the 100th anniversary of the production of the ten-millionth Model T.

The car will depart June 2 from Battery Park in New York City and travel along the historical Lincoln Highway, ending in San Francisco.

In June 1924, the Ford Motor Co. drove the ten-millionth Model T from New York to San Francisco via the Lincoln Highway as a promotional effort. The ten-millionth Model T recreation on display at the Museum of American Speed was recently donated by the family of the late Dr. Alan Hathaway.

And this won't be the vehicle's first trek across the country. The Hathaway family completed the historic journey twice—once to celebrate the 50th anniversary in 1974 and again for the 75th anniversary 25 years later.

"Our team is excited to be part of a third trip in celebration of the 100th anniversary of the ten-millionth Model T Ford and for the vehicle to become part of our permanent collection for years to come," says Tim Matthews, curator of the Museum of American Speed. "This journey is more than a trip across our great country—it is a celebration of the vehicle, which gave freedom to millions of Americans. The Model T Ford changed the world's landscape and way of life forever. We are excited to take this 100-year-old car out of its museum display and prove it can make this monumental voyage once again."

The award-winning Museum of American Speed is currently home to more than 240,000 square feet of display space over three levels. It was formed to present a continuous chronology of automotive racing engine and speed equipment development and to preserve, interpret and display items significant in racing and automotive history, according to officials.

The museum's collection results from "Speedy" Bill and Joyce Smith's personal involvement in racing and hot rodding, and their family's lifelong passion for collecting and preserving racing and automotive history.

"When our father passed away, we held onto the Model T in search of the right home," says Anne McAtee. "Being on display at the Museum of American Speed will allow the vehicle and its history to be passed along and enjoyed by many others."

The museum also features other unique displays, including a large collection of vintage pedal cars, gas-powered miniature race cars, automobile-themed toys, automotive art, lunchboxes and more.

The Smiths started collecting in the 1940s, prior to founding Speedway Motors in 1952. Speedway Motors has long been the title sponsor of the Museum of American Speed.

Other companies that have signed on to support the sea-to-shining-sea trip include Coker Tire, AAA, Bosselman and AM Best.

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

AMP Tires



THE ULTIMATE OFF-ROAD TIRE

Terrain Attack R/T

DUAL SIDEWALL DESIGNS



OFF-ROAD TRACTION

Stone ejectors channel away water, mud, rocks, & other debris to maintain maximum grip and performance.



ALL-SEASON PERFORMANCE

Large, open shoulder blocks greatly improve off-road traction and enhance grip in extreme weather conditions.



LONG-LASTING DURABILITY

Staggered sidewall provides protection against punctures and abrasions in harsh environments.



WIDE CONTACT CENTER PATCH

The wide contact center patch increases surface coverage on any terrain, while providing longer tread life and a quiet and smooth ride on the road.



VARIABLE PITCH TREAD PATTERN

Innovative tread design optimizes road contact, reduces road noise, and enhances overall performance

LEARN MORE AT **AMP-TIRES.COM**

#CONTROLEVERYTERRAIN

50K MILE TREAD LIFE WARRANTY

MANUFACTURERS LIMITED LIFETIME WARRANTY



YOUR COMPETITIVE ADVANTAGE

TURN14 DISTRIBUTION x ENERGY SUSPENSION PERFORMANCE POLYURETHANE

HYPER-FLEX MASTER BUSHING SET - OFF-ROAD APPLICATIONS

Turn 14 Distribution is the premier B2B source for Energy Suspension's performance polyurethane components. As a valued dealer, we provide you with access to industry-leading customer support, real-time inventory, flat rate shipping from our strategically located distribution centers, and 100% hassle-free returns.

100% WHOLESALE | TURN14.COM