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Class of '42

driveReport:

1942 Lincoln-Zephyr V-12 convertible coupe

Cunningham Sports Cars

1953 Cunningham C-3

1961 Ford Country Squire

Driveable Dream: 1960 Imperial Custom

History of Automotive Design: J.T. Cantrell & Company

Education Profile: RPM Foundation

Classic Truck: 1946-'49 Willys CJ2-A

Restoration Profile: 1970 Oldsmobile Cutlass Supreme convertible

comparisonReport: 1960 Alfa Romeo Sprint and 1961 Alfa Romeo Spider











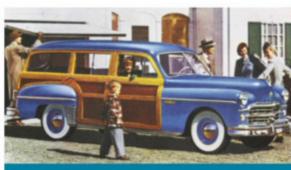


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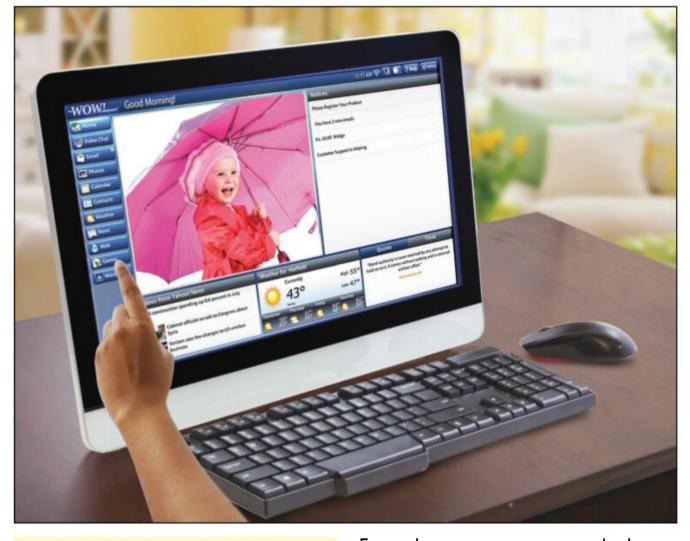


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– Janet F.

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richard**lentinello**



In fact, some

of these

changes are

downright

good for

our beloved

hobby...

Changing Demographics

othing in life remains the same. No matter how hard we try to preserve the things we love most and keep them as an intrinsic part of our life, it's inevitable that Father Time and people new to the scene will make changes that old-timers

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don't agree with, or like. The collector-car hobby is no different.

During 2019, I attended more than 20 different car shows and national conventions, was a judge at five major concours, and went to five key auctions, plus several cruise nights. I spoke to literally hundreds of enthusiasts along the way, and with my "I spy with my little eye" view during these events, the impending changes I see are quite interesting. No, there is nothing to fear, folks. All's well.

In fact, some of these changes are downright good for our beloved hobby – changes that will generate positive results. So, in case you're wondering what those changes might be, let me share some of my discoveries with you.

BRASS ERA: There is growing interest afoot for pre-1916-era automobiles. In fact, the older the cars, the more desirable they have become. However, it's not the guys in their 60s and 70s who are interested in these simple mechanical contrivances. No, it's... millennials. Yes, millennial-generation car enthusiasts have a deep interest in very early automobiles. The earlier the better, in fact. Two-cylinder or two-strokes, doesn't matter, they're simply enamored with vehicles produced at the turn of the 20th century.

FULL CLASSICS: Interest in Full Classics is starting to wane. Not that enthusiasts aren't interested in seeing Auburns, Cords, and Packards on show fields – they still are, rather, they have little interest in owning one. It isn't so much these cars' higher values that has caused this lack of attraction – rather, as enthusiasts have aged, more and more of them want to drive old cars that require little maintenance and, above all, are easier to drive. **MUSCLE:** There will always be a fairly large core audience lusting after those powerful Detroit street machines with their triple carburetion and large displacement V-8s, but due to the cars' lofty values, which, thankfully, have started to decrease of late, enthusiasts instead are now looking at later-model

"muscle cars" as alternatives. Cars such as '70s-era Novas and Dusters, and '80s-built Camaros/Firebirds, Grand Nationals, and Fox-chassis Mustangs are becoming noteworthy substitutes.

FIFTIES CARS: Bright colors and wild fins have always made cars from the 1950s the center of attention at any show where they were displayed, but younger enthusiasts are more interested in the cars they saw on the street when they were growing up rather than those cars that their grandparents drove. This new generation isn't very fond of '50s-era road manners, lumbering handling and slow steering, either. This growing trend holds true for cars of the 1960s, too, albeit on a lesser level. The younger people love looking at

them – they just don't want to own them.

EIGHTIES: The fastest growing segment of the collector-car hobby is what has been endearingly referred to as the Malaise-era cars. This signifies American cars produced from around the mid-'70s to the mid-'80s. We're talking about Pacers, SVO Mustangs, MKV Continentals, Aspens, Omnis, Hornets, and even Chrysler K-cars. And why not? They're easy to drive, comfortable, and, most importantly, highly affordable. In fact, the most popular models are the 1977-'85 GM B- and E-body cars, with the later Buick Riviera convertibles being especially desirable.

JAPANESE CARS: Along with this injection of youthfulness comes a newfound awareness and appreciation for Japanese cars. Datsuns and Toyotas, Mazdas and late-model turbocharged Subarus, there's a fast-growing cult-like following for these compactsize reliable cars. And now that early Miatas are eligible to be displayed at AACA events, you'll be seeing more, not only shown but restored in the coming years, bringing with them much-needed new blood and enthusiasm into the collector-car hobby.

Write to our executive editor at rlentinello@hemmings.com.





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BY TOM COMERRO

NEWS**REPORTS**



A's National Convention

THIS YEAR'S MODEL A FORD CLUB OF AMERICA NATIONAL CONVENTION WILL take place in Kerrville, Texas, from June 21 to 26. The regional "Alamo A's" will take the reigns and host the convention at the Y.O. Ranch Resort Hotel.



Texas Packards PACKARDS WILL CONVERGE for the 43rd Annual Texas

Packard Meet in Salado, about 50 miles north of Austin. It will take place April 3-5 and is sponsored by the Texas regions of Packards International and Packard Automobile Classics. The meet features a special driving tour, a public car display on the banks of Salado Creek, a swap meet, seminars, and an awards banquet after the 21-class judged car show. The host hotel will be the Holiday Inn Express, Salado. For a registration form and full event details, visit www.texaspackardmeet.org.

Model A concours, are also part of the festivities. Applications are now available, so be

sure to visit www.alamomodela.com for more

information about the event.

APRIL

2-4 • Greenville Swap Meet & Car Show Greenville, Texas • 903-454-8575 www.greenvilleswapmeet.com

2-5 • AACA Charlotte AutoFair Concord, North Carolina • 704-841-1990 www.charlotte-autofair.com

17-19 • Gasparilla Concours d'Elegance Tampa, Florida • 813-714-1019 www.gasparillaconcours.com

17-19 • La Jolla Concours d'Elegance La Jolla, California • 619-233-5008 www.lajollaconcours.com

18 • Cars on Kiawah Kiawah, South Carolina • 843-284-8138 www.carsonkiawah.com

22-26 • Spring Carlisle Carlisle, Pennsylvania • 717-243-7855 www.carlisleevents.com

23-25 • AACA Western Spring National Show Low, Arizona • 717-534-1910 www.aaca.org

24-26 • Malaise Daze Car Show Palm Springs, California • 559-347-8153 www.malaisemotors.com

24-26 • Spring Jefferson Swap Meet Jefferson, Wisconsin • 608-244-8416 www.madisonclassics.com

30-May 2 • Pate Swap Meet Fort Worth, Texas • 713-649-0922 www.pateswapmeet.com

Dodge Brothers Unite

THE INTERNATIONAL DODGE BROTHERS CLUB MEET will take place in Charleston, South Carolina. The four-day event runs April 26-30 with a full itinerary tied to popular points of interest in the region, including a guided tour of the North Charleston Fire Museum, a visit to the Angel Oak tree on Johns Island (reported to be the oldest living organism east of the Mississippi River), and a trip to The Hunley, a Civil War submarine.

The all-Dodge car show will be hosted at the Tanger Outlets near the host hotel, the Crowne Plaza in North Charleston. For more information, visit www.dodgebrothersclub.org.



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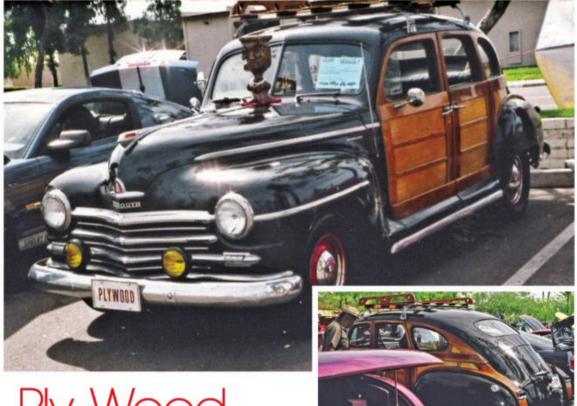
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BY DANIEL STROHL

LOST&FOUND



Ply-Wood

WHILE TAKING IN A RECENT CAR SHOW IN TEMPE, ARIZONA, READER JIM CONNAUGHTON came across an apparently unique woodie postwar Plymouth sedan.

"This car was in unrestored condition, some wear and tear, but in good presentable condition," Jim wrote. He wasn't able to track down the owner while at the show, so is left wondering what we know about it.

The answer: Not much. Plymouth did offer wood-bodied station wagons after World War II — along with its first metal-bodied station wagons — and Chrysler did famously offer its Town & Country wood-bodied sedans, but we don't see any wood-bodied Plymouth sedans in our reference books.

Without seeing the car in person, it's hard to say whether the wood here is an aftermarket applique, like what was available for Chevrolets at roughly the same time, or whether the body structure is truly made of wood. In either case, it's a look rarely seen.



ACCORDING TO MURRAY KRAMER OF PISCATAWAY, New Jersey, there's more to the story of the Carcajou (see *HCC* #183) than what we were able to discover.

"The bus in your photo is on a Type Y chassis, built from 1928 to 1930; the second, built in 1931, is on the 25-inch-longer wheelbase Type Z chassis. The Y chassis had a different windshield, radiator shell, and fenders than the Z, and its engine was the YZ-6 sleeve valve, whereas the Z had the 616-cu.in. poppet valve engine.

"We don't know what happened to the smaller bus. The larger bus went to Buick president E.T. Strong and then to Anheuser-Busch Co. (1941-1946), which renamed it the Adolphus. Restoration in 1965 was followed by its donation to the National Museum of Transportation in St. Louis."

Thanks for elaborating on the Carcajou, Murray!

FC-150000

JEEP'S FC SERIES OF TRUCKS CAME IN A NUMBER OF DIFFERENT

configurations, pretty much all based on the FC-170. But, as it appears in a recent discussion we had with reader Ray Iveson, Willys also considered a long-bed version of the Jeep FC-150.

Ray shared with us pictures of such a creature sitting on a 104-inch wheelbase — rather than the FC-150's 81-inch wheelbase — with a pickup-style box added to the back. One might



think he simply found an FC-170, but his truck has an F-head four-cylinder, a bed that's distinctively different from the production FC-170's, and a tag on the chassis stating that Midland Steel Products of Cleveland and Detroit built the truck — or some part of it — for Willys in February of 1956, nine months before Willys introduced the FC-150 (and more than a year before the company introduced the FC-170). All Ray knows about the truck

is that it came out of the Toledo area and that he has a lot of restoration work ahead of him.

Which is fine, considering he has another FC-150 and FC-170 in his garage to keep this one company.

Recently discovered a unique or noteworthy classic car? Let us know. Photographs, commentary, questions, and answers should be submitted to Lost & Found, c/o *Hemmings Classic Car,* P.O. Box 196, Bennington, Vermont 05201, or emailed to dstrohl@hemmings.com. For more Lost & Found, visit blog.hemmings.com/index.php/category/lost-and-found.

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AUCTIONNEWS

BY TOM COMERRO



Kansas City Dealings

MECUM WRAPPED UP ITS ANNUAL DECEMBER AUCTION AT THE KANSAS CITY Convention center with an impressive \$9 million in overall sales and a sell-through rate of 70 percent. Among the many eclectic cars to change hands in the "City of Fountains" was this 1939 "shark nose" Graham Series 97, one of only 3,600 produced. Finished in Egyptian Ivory with a new saddle leather interior, the prewar rarity sold for \$22,500. Other highlights included two 1950s Corvettes: a '57 model, which sold for \$94,600, and a '54, sold at \$78,100. Two solid 1947 trucks also changed hands: a Dodge Power Wagon with a period-correct winch and dump bed went for \$14,850, and a dependable Studebaker M5 sold for \$17,050. Full results are now available at www.mecum.com.

\$126,500

Palm Beach Beauties

BARRETT-JACKSON HEADS TO WEST PALM

Beach, Florida, on April 16-18 for its 18th annual auction in that location. Last year's show saw sales of over \$30.18 million and a 99-percent sell-through. When the smoke cleared, 632 vehicles went home with new owners, and this year's show expects to be bigger. Looking at unmodified American cars built between 1920 and '54, 23 examples sold last year, totaling \$925,100. Tickets for the upcoming threeday auction and additional details are available from www.barrett-jackson.com.



AUCTION PROFILE

CAR	1936 Cadillac Series 70		
Fleetv	vood convertible coupe		
AUCTIONEER	Mecum Auctions		
LOCATION	Kissimmee, Florida		
DATE	January 11, 2020		
LOT NUMBER	S121		
PREAUCTION ESTIMATE			
	\$125,000-\$150,000		
AVERAGE SEL	LING PRICE \$75,000		

CADILLAC'S V-8 MODELS WERE REDESIGNED for the 1936 model year and offered in two displacements, both with engine block and crankcase cast enbloc.

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Cadillac's top V-8, an alternative to pricier V-12s, would become a measuring stick for the brand's technology for years to come.

This Series 70 Fleetwood convertible coupe is a well-preserved restoration that was completed in 2015. The correct engine bay carries the larger 346-cu.in. V-8, fed by a Stromberg carburetor, capable



of producing 135 hp at 3,600 rpm. It is mated to a three-speed manual transmission with "triple-silent Helicalcut" gears for all forward speeds. The restoration features the correct hydraulic brakes, a first for Cadillac that year, as well as side-mount spares with optional covers and mounted mirrors. Finished in green paint, with a new top and tan leather interior, this Cadillac harkens back to the beautiful automotive styling of the 1930s.

APRIL

2-4 • Mecum Auctions Houston, Texas • 262-275-5050 www.mecum.com

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17-18 • The Branson Auction Branson, Missouri • 800-335-3063 www.bransonauction.com

17-18 • Vicari Auction Biloxi, Mississippi • 504-264-2277 www.vicariauction.com

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23-24 • **Spring Carlisle Auction** Carlisle, Pennsylvania • 717-960-6400 www.carlisleauctions.com



Vicari Double

VICARI AUCTION COMPANY ANNOUNCES

two southern U.S. sales taking place within a two-week span. The first, in conjunction with the Annual Crawfish Music Festival, is in Biloxi, Mississippi, at the Mississippi Coast Coliseum and Convention Center. Scheduled for April 17-18, this will be the first spring show for Vicari, which hopes to build upon the success of its annual fall sale in Biloxi. More than 400 cars are expected to cross the block during the upcoming weekend auction.

Its second auction will take place May 1-2 in downtown Nocona, Texas. The eighth Cruisin' Nocona Collector Car Auction will see around 200 cars up for sale, in conjunction with a cruise through the North Texas countryside. For more details, visit www.vicariauction.com.

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The venerable Czech firm of Tatra spent the last century building highly regarded automobiles with uniquely advanced characteristics. Behind the T11, T77, and more, was the brilliant Hans Ledwinka, whose work was linked to both aerodynamicist Paul Jaray and engineer Ferdinand Porsche; his fascinating cars are the primary topic of this impressive 224-page softcover book (ISBN 9781787116306). Twenty years after the first edition was printed, Veloce has re-released this title, authored by Ivan Margolius and John G. Henry. It offers a comprehensive historical overview of the Tatra company and its products, and includes helpful appendices with reprints of original literature and technical data. This is a book that the library of every serious student of automotive history should contain. *—Mark J. McCourt*

BY TOM COMERRO

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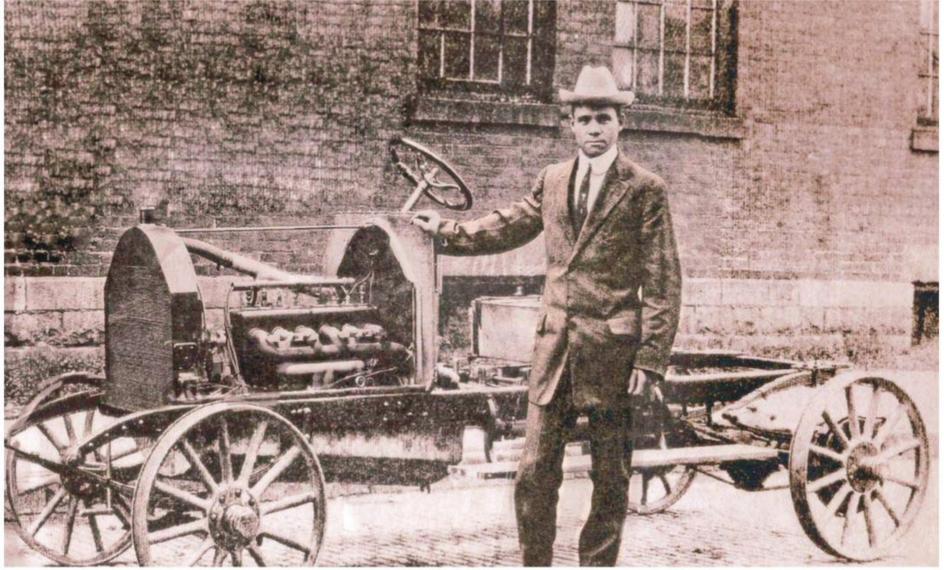
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AUTOMOTIVE PIONEERS

BY DAVID CONWILL PHOTOGRAPH COURTESY HISTORICAL SOCIETY OF GREENFIELD, OHIO

Frederick Patterson



FREDERICK PATTERSON'S FATHER

was born a slave in Virginia in 1833. He escaped in 1861 and settled in Greenfield, Ohio, the next year, where he found work as a blacksmith for a carriage builder, Dines and Simpson.

By 1870, the elder Patterson had risen to the position of shop foreman and the next year Frederick was born, the youngest of four children. Within two years of Frederick's birth, his father had partnered with another local carriage builder to open a new concern— Patterson and Lowe.

Encouraged by his parents to educate himself, Frederick graduated high school in 1888 and enrolled at The Ohio State University where he was the first African-American on the school's football team. He left school before graduation to take a job, not in his father's factory, but as a history teacher in Louisville, Kentucky. His older brother, Samuel, had joined his father in what was now called C.R. Patterson and Son. Unfortunately, Samuel died and in 1897 the family business was in trouble. Frederick resigned his teaching position and returned to Greenfield to assist. The company was renamed once again to C.R. Patterson and Sons. Frederick's attentions kept the organization successful until the death of C.R. Patterson in 1910.

Finding himself alone in charge of the family business, Frederick considered the passing of the horse as a means of vehicular propulsion. Over the next five years, he oversaw the conversion of the carriage builder to automaker. Frederick was, like his father, a natural mechanic; his automotive experiments had started as early as 1902.

The Patterson-Greenfield, as the final result was called, was an assembled car, using a Continental four-cylinder engine. It debuted in 1915 as a 1916 model at a price of \$850 (a comparable Ford Model T was priced at \$490 and would drop to \$440 for 1916). Both a touring car and a roadster were produced. The Patterson-Greenfield was built until 1919. Estimates place total manufacture between 30 and 150 cars. When it was discontinued, it was to permit the company to relocate to a new facility and refocus on commercial bodies for other automakers' chassis. Its school bus bodies in particular sold well throughout the 1920s.

Frederick's son, Frederick Jr., was the pen behind the buses as well as hearses, moving vans, ice trucks, bakery trucks, and milk trucks.

As with many firms, the Greenfield Bus Body Company (as it was renamed in 1920), struggled with the onset of the Great Depression. Frederick died in 1932 and the company followed in 1939, having changed its name once more (to Gallia Body Company) in 1938.

Frederick Patterson is best remembered today as one of the few African-American participants in the early days of the automobile and as an outstanding Ohio businessman.



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INTERNATIONAL UNDERDOGS Pontiac Parisienne

A COUPLE OF MONTHS AGO,

I talked about desirable rear-wheeldrive 1980s cars. A friend remarked that I did not mention this month's International Underdog, although I did mention the Pontiac Catalina. There were a couple reasons for that. I was saving it, and it was only sold for a few years, (and if I remember correctly) mainly in the lower 48.

The Parisienne name was familiar to Canadians since the 1950s, gracing the fenders and dashboards of some very desirable automobiles. I still lament the loss of Pontiac; from the mid-1950s through the late 1970s, it built some of the most beautiful American cars of all time. Unfortunately, as the years passed, they looked too much like upscale Chevrolets and lost some of their luster. Fortunately, the cross-brand family resemblance between Pontiac and Chevrolet wasn't as strong as it was at rival Mercury, whose cars were hardly distinguishable from Fords. The good news for both of these makes is that you can, in many cases, pick up a very nice Pontiac or Mercury for a fraction of the cost of an equivalent Chevrolet or Ford.

In 1977, GM downsized its full-size cars. While the other GM divisions prospered with their more sensibly styled and sized flagship fleet, the Pontiac Catalina and Bonneville failed to fire up the market. Sales were good but hardly spectacular, and in 1981, the Bonneville moved down to the midsize platform while the Catalina (my favorite Pontiac) was laid to rest.

But then, Americans started to swing back to larger cars due to the drop in gas prices and the improving economy. AMC, which had placed its fortunes on a complete line of compacts, felt the greatest impact from the market shift, and its Premier, eventually sold as an Eagle model by Chrysler, arrived too late to save the day.

Pontiac decided to take a different approach. The manufacturing facilities for the former rear-wheel-drive full-size Pontiacs had been switched to other models, so they went to Canada, where the B-bodies were still in production. Dealers wanted a full-size, rear-wheel-drive Pontiac, so the Parisienne was imported from



Oshawa, Ontario, and joined the U.S. Pontiac family in 1983.

"Notice that the instrument panel, like the steering wheel, glove compartment, door panels and radio-air conditioning area is trimmed with tasteful, simulated woodgrain accents," the Canadian brochure proclaimed. I always like things that are "tasteful" and "simulated."

If you think it looked like a Chevrolet Impala, you weren't the only one. The grille and taillamps were replaced to fit in more with Pontiac's traditional styling, and that's about it. A four-door sedan and Safari station wagon were available in base or more-cushy Brougham trim. The two-door sedans remained in Canada.

A lot of attention was paid to the interior, "It's one of the most luxurious seats offered in a full-size Pontiac and is in soft knit velour that gives rich meaning to the term, lap of luxury." The good news about velour is that it apparently can survive a nuclear attack, so in the end, there will be cockroaches, Cher, and velour seats from 1970s American cars.

Available engines were a Buick 3.8-liter V-6, a GM of Canada or Chevrolet 5.0-liter V-8, and an Oldsmobile 5.7-liter diesel. The automatic with overdrive was only available with the diesel, according to the brochure.

"Luxury is the word for the ride, too. Not only do you enjoy the long-striding benefits of a full-size wheelbase, but road noise and vibration are minimized through computer-selected coil springs, cushioned body mounts and special acoustical materials. Some people buy full-size Pontiacs for the ride and handling alone. One test drive and you will agree that: PONTIAC BUILDS EXCITEMENT."

They say full size a lot, too: "Full-size value? Nobody's got it like Pontiac. There are other specialties that appeal to many buyers of full-size cars. For instance, a properly-equipped Parisienne can tow up to 5,000 pounds."

Due to continued lackluster sales performance, the model was discontinued in 1986. Pontiac would have better luck with the front-wheel-drive Bonneville in its near future. I had a neighbor who owned a pristine front-wheel-drive Bonneville. I told him to hold onto it, but a couple of years ago, he traded it for a Toyota Camry because his lifelong dream was to own a Camry. I kid you not.

Can you buy a Parisienne? Definitely, and don't pay more than \$4,000 either. I found several for sale within this range, and they are in good enough shape to enjoy daily or just for cruise-ins. One guy was asking \$11,000 for his; I suspect he owes back alimony or a loan shark.

There are advantages to owning a 1980s classic, since they can do double duty. Wash and detail them, and you're ready for the show. With a Pontiac, Oldsmobile, or Mercury, you can participate in orphan car events. And best of all, most of the problems that plagued earlier classics, mainly rust-through, were addressed in the 1980s, making many of these cars great survivors.

So, in addition to the big 1980s Oldsmobiles and Mercurys I have talked about in the past, put the Pontiac Parisienne on your list. Show up in one, and I guarantee you will draw a crowd.



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make large volumes of good things at low Precie becaus

And today, under the vast destruction of war, "mass interchangeability" of parts is literally a life saver. It enables us to massproduce planes, tanks, guns, heavy and light war material without end. And that means working with tolerances so close means working with interances so close that airplane engines of the same type can be repaired from each other's parts or be repaired from each other's parts of

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"Roll 'er through to Fairbanks!" Greyhound serves America-at-War along the Alcan Military Highway

THE OUTLINE MAP below shows the

No. you coult ride a Greybused Super-Coach to Alaska over the Alcan Highway..., not roday? But, just the same, these familiar blues and white buses are rolling on that highway-doing an important job for Unde rolling the most atmaing military road of all blueory.

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Class of '42

How World War II transformed the American auto industry

BY JIM DONNELLY • PHOTOGRAPHY FROM THE HEMMINGS ARCHIVES

t was preordained, literally before the bombs even started falling: The good guys were going to win this one. A lifetime later, historians still emphasize the fundamental truth that there was no way, no conceivable possibility, that the Axis aggressors would come out of World War II victorious. The reason is that, despite all the horrific destruction and bloodletting, the Allies had one weapon in their arsenal that could never be outgunned. It was the sheer economic might of the United States, the world's most powerful industrial behemoth, and its workforce of millions. The people in the foundries, stamping plants, and on the assembly lines of America were patriots, committed to freedom, fully cognizant of the menace confronting the world. Our allies were desperately dialing 9-1-1, seeking weapons and everything associated with them.

And the American auto industry delivered the goods. In one motion, it transformed itself from an anchor of the civilian economy to a juggernaut building hugely complex war materiel that was needed right now, by everybody. Detroit produced automatic cannons, trucks, aircraft engines, whole bombers, and even cargo ships, all by proven mass production and expertise in quick-turnaround annual tooling changes. What the skeptics said could never be done, the auto industry accomplished. Through it all, however, cars continued to trickle out of the nation's auto capital, just looking different, and in far fewer numbers, than America had been used to seeing.

Production of the 1942 cars got underway in July 1941, with war clouds darkening the world. Chromium had already been designated as a strategic metal by Washington, and its availability for civilian use was strictly limited. Plymouth, which managed to build nearly 123,000 cars before civilian production stopped, had already shorted the side spears on its 1942 models to save chrome before going to entirely painted "brightwork," including the cars' new grille treatment. These cars, soon duplicated by the rest of the industry, became known as "blackout" models. At Chevrolet, 1942 car production came to a few less than 255,000 units, mainly in the Master DeLuxe and Special DeLuxe model ranges, their trim now painted in contrasting shades of blue, green, or maroon. By August 1942, the government had ordered that all unsold civilian automobiles be placed in interior storage for the duration of hostilities, with prices federally set to forestall gouging in the marketplace. Today, an authentic blackout Chevrolet from the war years is a rare and valuable find. Despite the national emergency and truncated model year, 1942 U.S. car production came to 930,855 units, led by Chevrolet. Within months, about 95 percent of Detroit's massive capacity was dedicated to wartime production.

With chrome unavailable, the domestic auto industry went to thin-gauge sheetmetal or more rarely, stainless steel, when it came to creating trim pieces during the war. At Cadillac, many of the 1942 models that had been built already had chrome trim, which, under new federal rules, had to be covered up to keep



Plymouth typified the industry's response to looming conflict with its model P14 for 1942. All brightwork is painted, not chromed. Only a limited number of body styles were offered. The prominent horizontal grille was new that year. Running boards were concealed. Pricing began at \$812. Total production was 27,645.



This rare sight shows a Chevrolet Fleetline Aerosedan, new for 1942, before most of its chrome was painted. It retailed for \$880 and 61,855 were produced. A signal-seeking radio was newly optional.



Only 4,961 examples of the Cadillac Series 62 were built, including this DeLuxe Town Sedan, which retailed for \$1,836. Fenders extending into rear doors were new that year. So were round parking lamps.

the brand from enjoying a sales advantage. Cadillac opted to paint over the brightwork in either off-white or gray.

Ford managed to build just over 160,000 cars for the 1942 model year, identified by the narrow waterfall in the center of the grille, which had a body-colored surround. Mercury, which used thin horizontal grille bars for its 1942 models, briefly offered Lincoln's Liquamatic Drive transmission, ultimately a flop, during that year. Packard's very abbreviated 1942 production included a One-Twenty Eight Clipper Custom sedan, finished in olive drab, that became the personal conveyance of General Douglas MacArthur. The car still exists. About 41,000 Hudsons rolled out of the Detroit plant for 1942; mostly with bumpers as their only chromed components.

Amazingly, premium cars were not only produced in 1942, but found buyers. One of the most prestigious American cars in 1942 came from Chrysler in the form of the "barrelback" Town & Country sedan-wagon, with its clamshell rear doors. Wood wasn't rationed but as of December 31, 1941, using chrome to brighten cars was out. Chrysler still managed to build 999 of them, most with painted trim, before production was halted. Ever the innovator, Ford made extensive use of new plastics to replace interior trim and parts previously made from castings including zinc, another strategic metal, in the 160,211 cars it built for 1942.

What's really amazing about all this is that as late as 1939, the United States didn't even have a proper wartime army. Isolationism was a significant force in U.S. politics. By 1940, the United Kingdom was being bombed nightly by the Luftwaffe. After winning a third term in the White House, President Franklin D. Roosevelt proclaimed that henceforth, the United States would be the "arsenal of democracy," and publicly guaranteed support for the embattled Britons by signing the Lend-Lease Act, a brilliant piece of legalese that allowed America to claim neutrality while still shipping weapons and other gear to England. Then came Pearl Harbor. Roosevelt had already approached General Motors president William Knudsen to take charge of the new national War Production Board. Knudsen, who'd also been a top lieutenant of Henry Ford, immediately recruited Studebaker president Harold Vance and Chrysler



In the Super DeLuxe series, Ford asked \$1,080 for a 1942 Sportsman convertible, one of 160,211 new Fords built that year. Fully concealed running boards were new, plus a revised hood and grille. Also new was (temporarily) bright metal around the windshield surround. Super DeLuxe models got a standard electric clock.

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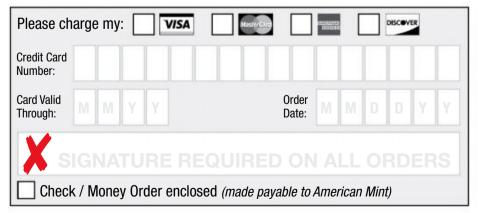
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The Twentieth Series Packards for 1942 included this One-Eighty Darrin Convertible Victoria, priced at a lofty \$4,595, the only non-Clipper built on that chassis. Just 672 copies of the One-Eighty were built, incorporating all 11 body styles. The engine was a 356-cu.in. L-head straight-eight with 165 hp.

president K.T. Keller to the effort. Conspicuously absent, for reasons we'll discuss a little later, was Ford himself.

This year will mark the passage of 75 summers since the catastrophe of global war came to end. It's still sometimes difficult to grasp the enormity of what the auto industry, and American society, accomplished during those years. When it came to driving, the American public readily embraced sacrifices it hadn't been asked to endure since the automobile arrived. First among those new realities was that in most cases, you simply couldn't buy a new car. Knudsen's office did an inventory of cars remaining in manufacturer's inventories when civilian production ended, as a Ford Tudor rolled off the line on February 2, 1942. A total of 532,000 new cars were in the industry's pipeline. They were immediately requisitioned by the government, with the cars sold individually on a strictly monitored as-needed basis to people judged essential, including physicians, police officers, firefighters, critical war workers, and even traveling salesmen. By this time, gasoline and rubber were already being strictly rationed, which meant the favored pastime of the Sunday drive was over for the duration.



The short, stainless steel grille "tower" identifies the 1942 Nash models, including this Ambassador sedan. Prices started at \$893. Total production was 5,428.



A new Studebaker Commander Custom sedan, its engine fired by Autolite ignition, cost \$1,045. Commander production totaled 17,500.

had their status diminished by the conflict. Huge, fuel-ravenous luxury cars such as Duesenbergs, Lincolns, and Cadillac V-16s were either banished to cheap used-car lots, converted for use as wreckers — new trucks were also very scarce during the war or simply given up during home-front drives for donated scrap steel. Dealers, too, had to adapt in a hurry. Chevrolet retrained its force of 8,000 to focus on providing service to existing fleets of civilian vehicles, since it had no new ones to sell. One such dealership, in Clinton, Iowa, converted its showroom into a bowling alley, but remained in business. One major GM plant, at Saginaw, Michigan, was dedicated solely to producing replacement parts, so the nation's existing fleet of GM vehicles could be kept running.

There were

other tribulations,

of course. Some of

ever built in America

the grandest cars

All told, about 1,000 factories in the United States that had produced new vehicles, or their components, changed



Hudson invested heavily in a restyling across the board for 1942. The Drive-Master vacuum-shifted transmission was a new option. Model-year production included 40,661 new cars, including this Hudson Six De Luxe Coupe. Late cars had plastic-infused metal trim.



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Mercedes-Benz



Five horizontal grille bars, painted not chromed, marked the 1942 Chryslers. There were 999 Town & Country wagons built in six- and ninepassenger configurations, in the Windsor series. They used the 250.6-cu.in. L-head straight-six and were priced from \$1,595.

over completely to military production during the war. Think about this: Between 1918 and 1933, only 35 tanks were built in this country. Between 1941 and 1945, that number zoomed to more than 88,000. Almost 275,000 aircraft, many with Detroitproduced engines, were built in the same time period. The great industrialist Henry Kaiser wasn't even in the auto industry yet, but still managed to build Liberty ships on an assemblyline basis. Henry Ford, an ardent isolationist, at first refused to build Rolls-Royce Merlin aircraft engines for England, enraging Knudsen, who'd left Ford's employ less than amicably. Ford was deeply skeptical of the war, but warmed to Roosevelt's chal-



Oldsmobile produced cars across three model ranges, including the base Special lineup, called Series 60. Just 4,173 copies of the Special Club Coupe were built in 1942, priced at \$1,035.

lenge that the auto industry could successfully build aircraft on assembly lines. Ford allowed a new plant to be built on farmland he owned outside Ypsilanti, Michigan. By war's end, Willow Run produced more than 8,600 B-24 Liberator bombers, and Ford also produced more than 281,000 copies of Willys-Overland's lightweight scout car, the immortal Jeep, built under license because of Ford's yawning production capacity.

Packard, which had been battle-tested by building the Liberty aircraft engine during the First World War, used that expertise to mass-produce the Merlin engine. Studebaker built trucks and Wright-Cyclone aircraft engines. Under Keller's tutelage, Chrysler built the first combat-ready American tanks of the war, the M3 and M4. At GM, Chevrolet and GMC kept the Army and Marines rolling with their heavy trucks, especially the CCKW "deuce and a half."

Other GM divisions, like Oldsmobile and Pontiac, focused on building specialized weapons and munitions such as antiaircraft guns and ammo for all sorts of heavy fieldpieces. Cadillac's famous V-8 found its way into the engine bays of a whole range of fighting vehicles. The Independent manufacturers were in the program, too. Nash busied itself building aircraft propellers and licensed copies of Sikorsky light helicopters. The Oerlikon 20-mm automatic cannon became a Hudson product. By the time the war ended, two of the top-three U.S. defense contractors in terms of volume were automakers. Military goods accounted for 40 percent of the U.S. gross domestic product.

No view of Detroit in 1942 would be complete without mentioning what happened after the war. Ford led the charge back to civilian production, presenting the first 1946 Ford to President Harry Truman. That foretold the industry's return to serving a public battered by the Great Depression and then, by the most savage conflict in human history. But again, Detroit was ready. The resumption of civilian auto sales touched off the great boom of the 1950s, during which Detroit helped propel the greatest expansion of the consumer economy the world had ever seen.

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LINCOLN

A war-shortened production run ensured that the elegantly restyled 1942 Zephyr V-12 convertible is a rare sight

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WORDS AND PHOTOGRAPHY BY THOMAS A. DeMAURO



Priced field, the Lincoln-Zephyr advanced the recovery of Ford's luxury automaker in the years following the Great Depression. Those attributes made upmarket buyers take notice when it was introduced for the 1936 model year to compete primarily with the Cadillac, La Salle, and Packard One-Twenty. Priced lower than the larger, stately Model K Lincolns, the new Zephyr line would successfully draw interest and higher sales volume to the division.

In the years leading up to 1942, the Zephyr had become the cornerstone of Lincoln. The higher priced and more lavishly equipped Continental and Custom series were based on it and the Model Ks, which fell out of favor, had been discontinued. Primary competitors that year were the Cadillac Series 62 and Packard One-Sixty.

Lincoln-Zephyrs for 1942 were "massively streamlined" with a "lower, longer, and wider appearance," according to the company. A more formal and curvaceous two-tier grille,

with stacked bright horizontal bars and vertical center trim commanded attention, as did the broad front fenders that housed headlamps with now prominent bezels that also contained the parking lamps and directional signals. The front tread was increased 2.5 inches, and even the revised bumper took on a more substantial presence when compared to that of the previous year.

The side view of the 7-inch-longer body revealed the reshaping and lengthening of the front and rear fenders to form a wider and more squared shoulder at their tops, and a character line was added to them. Upper body-side bright trim gradually widened toward the rear and the doors were now spring-loaded and opened via a pushbutton. The rear bumper and decklid ornament/handle/lamp assembly was revised, Instruments were placed within easy view, and the positioning of the steering wheel, pedals, and seat allowed even tall drivers to operate the Zephyr in comfort. Most major controls were grouped below the gauges, but the switches for the power-top and vacuum-powered antenna were above them. and the taillamp trim now wrapped around to the sides of the body.

Inside, the instrument panel changed from a large round pod packed with the speedometer and multiple gauges orbiting it, to a smaller round speedometer and separate rectangular gauges to its left, all trimmed with bright metal. A large clock was on the passenger side. The steering wheel, upholstery for the "chair high seats," and side panel patterns were also updated.

A unit-body design, which was fairly uncommon for automobiles at the time, had been employed for the Zephyr since its inception. Lincoln described it as, "internal bridge truss construction

with a steel floor welded integrally with the body." Convertibles were further reinforced with "double-box-section frame members." The front inner structure under the hood and the panel that houses the lower grille were also welded on, and the fenders, hood, doors, decklid, and bumper brackets bolted on.

Lincoln's H-series L-head V-12 wasn't the same engine that powered the Model Ks. Instead, its design was derived from the flathead Ford V-8. It was efficient, less expensive to build, and





easier to package in the Zephyr. Various parts interchanged between the new V-12 and the V-8, but there were design differences beyond the number of cylinders. For instance, the cylinder banks were 75 degrees apart for the V-12, instead of the V-8's 90 degrees.

The V-12 did contend with oil sludge buildup internally if recommended maintenance wasn't strictly adhered to, and there were cooling issues. It increased in power and displacement from 110 horsepower and 267 cubic inches in 1936 to 120 hp and 292-cu.in. for 1940, and finally to its largest size of 305-cu.in. and 130 hp for 1942. However, the eight-cylinder engines from competitors had larger displacements and higher horsepower ratings that year.

Its offset cylinder banks and its crankcase, exhaust passages, and flywheel housing were integrated in a single rigid cast-iron block, which was fitted with a 3.75-inch stroke cast alloy-steel crankshaft that was fully counterbalanced for smooth operation. Forged-steel side-by-side connecting rods, and cast alloy-steel pistons, each with two compression rings and one oil control ring, were employed, as were exhaust valve seat inserts and high-chromium 1.537-inch intake and exhaust valves, all also made of alloy-steel. Each valve, valve spring, and retainer could be removed as a single unit to ease servicing. A hydraulic camshaft, which was introduced for 1938, was quieter and required less servicing than the solidlifter design. The gear-type oil pump delivered full pressure to the engine bearings and lifters, and a cartridge-type filter reduced the presence of contaminants.

Though aluminum cylinder heads were used previously, cast iron was employed for the 1942 models. Under the oil-bath air cleaner assembly was a two-barrel carburetor on an aluminum intake manifold that also served as the valve chamber cover. A distributor with dual points, one set for each cylinder bank, was used, as were two coils (mounted in a single housing), and spark plug wires. The exhaust exited via log-style iron manifolds into a single system.

Even the trunk of the Lincoln-Zephyr was smartly trimmed and well-equipped. Shown is the green bumper jack in the tan storage bag and tools to change a tire. The smaller black tool kit contains various wrenches, a set of pliers, and a screwdriver for roadside repairs. Dual water pumps—one at the front of each cylinder bank—a fan mounted to the crankshaft vibration damper, and the radiator cooled the V-12 through the block's full-length water jackets. The 6-volt electrical system included a 30-amp generator.

A downside of the 305-cu.in. engine was that when the cylinder walls were bored to 2.937 inches, they became too thin in the blocks that already had pronounced core-shift. To regain durability through increased wall thickness, the bore size was dialed back to 2.875 inches partway through the 1946 model year, thus reverting to the 292-cu.in. displacement.

A three-speed manual transmission with helical silent-type gears, synchronized in second and third gear, was standard and used a 10-inch single-plate semicentrifugal clutch. A Borg-Warner overdrive was optional.

"Liquamatic Drive" was optional for a short time. According to the dealer brochure, "With Lincoln Liquamatic Drive you obtain all the advantages of three vital units working in combination, a liquid flywheel, special automatic transmission, and automatic overdrive." Smoother starts and power application via the fluid coupling, automatic shifting of the gears, and reduced engine wear due to lower revs provided by the overdrive were promised. Unfortunately, operational issues led to its recall shortly after its introduction.

The Zephyr's suspension was conventional, with an I-beam front axle and live rear axle supported by transverse multi-leaf springs (45.25 inches long in front and 49 inches long in the rear) and damped by hydraulic shocks. A "torsional stabilizer" in the front and rear reduced body-lean in the turns. Competitors, however, employed more modern independent suspension in front.

In September of 1941, in the shadow of World War II, the redesigned 1942 models were released to the public. The United States wouldn't officially enter the war until after the December 7, 1941, attack on Pearl Harbor, nevertheless, the nation was still preparing for battle. Consequently, it would be a short model year for the auto industry. The last day of production at Lincoln



was near the end of January 1942, and manufacturing facilities were then converted to aid in the war effort.

The Zephyr convertible coupe shown here, owned by John "Jack" and Monica Sweet of southwestern Pennsylvania, was built on January 9, 1942, according to research presented in an article written by their son, John Sweet IV, that was published in *The Way of the Zephyr*, the Lincoln-Zephyr Owners Club bi-monthly magazine.

It goes on to explain that the Zephyr was sent to Dearborn and then was later purchased by J. Robert Smith of Waterville, Ohio, from Bauer Harrington Lincoln-Mercury. The exact date

is unknown, but is rumored to be in 1943, possibly due to wartime restrictions imposed on automobile sales by the government. An accident in the 1940s damaged the front end, as well as the lower door hinge, door, and rear quarter panel on the driver's side. Smith had it repaired, but the door hinge still wasn't quite right, and he later had the front end updated with 1946 parts. He kept the Lincoln for the rest of his life, but much of its time was spent in storage.

Allen McWade, a longtime

member of the LZOC, later purchased the Zephyr from Smith's widow. He started to restore it, but due to other projects and the tricky door hinge repair it required, progress stalled. Thus Jack, a fellow LZOC member, became the third owner around 2009.

When Al delivered the 69,000-mile Lincoln, it was partially disassembled, accompanied by many boxes of parts, and it still had the postwar front end, but the body was essentially rust-free. It was certainly restorable, but it would be a challenge.

Jack recalls, "A lot of teamwork was required for this project, including input, parts, and labor by many members of the LZOC." All provided his expertise as well, and the "Lincoln

Zephyr Authenticity" manual he co-wrote many years before was invaluable to restorer Skip Seaton. Jack says, "Skip was the architect" of the project. Skip and Bill Vlosich also completed most of the mechanical work, restored all the stainless trim, and assembled the Zephyr at Skip's Restoration in New Salem, Pennsylvania.

Todd Swaney did the bodywork and paint at his shop in Smock, a few miles from Skip's. Among the tasks required were restoring correct 1942 front-end parts to replace the



postwar components and repairing the damage to the door and its lower hinge and the rear quarter panel. The body was chemically stripped by dipping it, and modern PPG primer, sealer, and paint products were used throughout the refinishing process.

The Zephyr was originally black, but Jack and Monica already had a black restored 1946 Continental, so they chose Sheldon Gray Metallic, which is the same 1942 color that Al had wanted to paint it. Once all the bodywork, priming, and block sanding were completed, Todd applied four color coats followed by four coats of clear. The finish was then wet sanded and compounded and polished to a high sheen using the 3M Perfect-It system.

A replacement 1946-'48 292-cu.in. engine had been sent to Lincoln V-12 expert, Ray Theriault for a rebuild and exterior detailing. He had the block bored .020-over, decked, and align-honed, along with other typical machine work. New oversized pistons were used with the refurbished rods and crankshaft. An oil pump providing 80-psi of pressure replaced the stock 50-psi unit. Ray also installed 1949-and-up valves and solid guides, because the stock split guides tended to draw oil into the cylinders, which would then burn. He says that the new guides fit right in without modifications.

After retrieving the Zephyr from the body shop and while the engine work was in process, Skip and Bill rebuilt the suspension and braking systems. Once the completed engine came back, they installed it along with the three-speed manual transmission, overdrive, and rear end that had been previously rebuilt by Al.

Skip, Bill, and Al took on the task of getting the hydro-electric window lifts and convertible top systems refurbished and operating properly, which was quite an effort because some of the parts were one-model-year-only.

A "Liquamatic" emblem had been added to the dashboard before Jack purchased the Lincoln, so it was retained when the instrument panel was restored only to pay tribute to the ill-fated transmission. The Zephyr was then sent out to be fitted with correct red leather upholstery with tan whipcord, as well as a black convertible top.

Though engine and brake parts weren't difficult to source, the 1942-only items were a significant challenge. Nevertheless, following a few unforeseen delays, the restoration was completed in 2017 and Jack was finally able to get behind the wheel.

He reports, "It took longer and cost more money than we originally thought, but it was worth every penny, as my first drive was a real jaw dropper. I've driven a lot of Lincoln-Zephyrs over the years and this one starts, drives, steers, and stops better than any of them due to the expertise of everyone who worked on it."

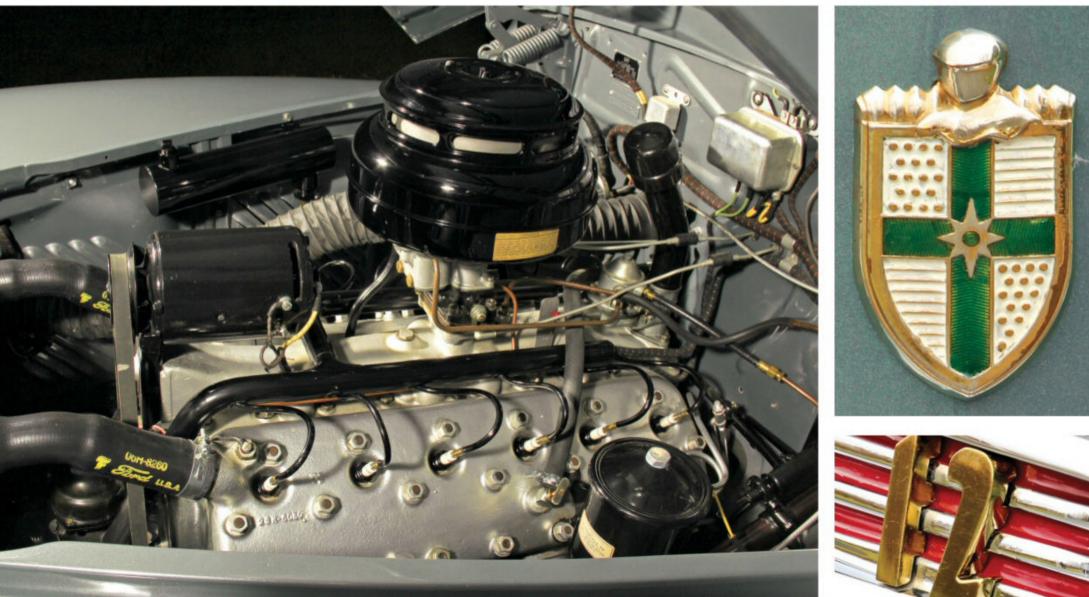
"Typically, V-12s can idle a little rough and blow a little smoke, but this engine is as smooth as silk and doesn't smoke at all. Because it was designed for a luxury car, it's not overly powerful on the road, but is quiet as a mouse at idle."

Jack continues, "Clutch effort is very light, shifting is easy, and when you put it into overdrive, there's a slight click and the red light in the speedometer turns green to let you know

it's engaged. It will cruise comfortably at 55 mph without overdrive, but it's needed at 65 mph.

"Thanks to the attention to detail in rebuilding the suspension and steering systems, the Lincoln feels like a much newer car on the highway. In the curves, the steering is smooth and the car is well balanced. Of course, by today's standards brake pedal effort is a bit firm, since there's no power assist. The designed-in aspects are enjoyable as well, with easy-to-read instruments in a stylish panel, the positive feel of the controls, comfortable seating position, and plush leather upholstery."

Skip, who also has driven the Zephyr, concurs, "It feels like a brand-new 1942 Lincoln



The Lincoln-Zephyr's V-12 increased in displacement to 305-cu.in. for 1942. Output ascended to 130 hp and iron cylinder heads replaced the aluminum ones that were used previously. Oiling system and valve guide upgrades improve durability in this over-bored 292 replacement engine.

owner's view



love the 1942 Lincolns, especially the Zephyrs, for their rarity and styling. It's an extraordinary privilege to own a car like this one. It drives and handles exceptionally well, and its V-12 engine is a hallmark of its era. Since it's one of only about seven convertibles currently known to still exist, I only take it out to show it at national events. My admiration for these cars came from my dad. He bought several of them secondhand when I was growing up. Until my retirement from the U.S. Navy in 1986, my family and I moved around a lot, but I still collected and enjoyed driving vintage Lincolns, and have continued to do so since then.

on the road—like going back in time. The car just wraps around you and away you go." Jack's son John added, "This particular Lincoln is one of the best driving examples that I have ever experienced, and it lives up to everything that the 1942 advertisements said it was going to be. Modern rebuilding techniques have also increased the reliability of the V-12 engine."

At the AACA Eastern Division National Fall Meet at Hershey in 2017, the Zephyr not only earned its first Junior, but also the AACA Lincoln-Mercury award. It received its AACA Senior in 2018 and first Grand National in 2019, and was named Best Car of the Decade at the LZOC event that year.

Jack says, "It used to be that Continentals were highly collectible, then the Zephyrs took off." Lately prices seem to be less predictable. If you crave a Zephyr of this quality and are shopping for a project to have restored, bear in mind that the cost of a high-end restoration can significantly exceed the value of the car. You'll likely benefit more by buying one that's already finished or at least much closer to it.

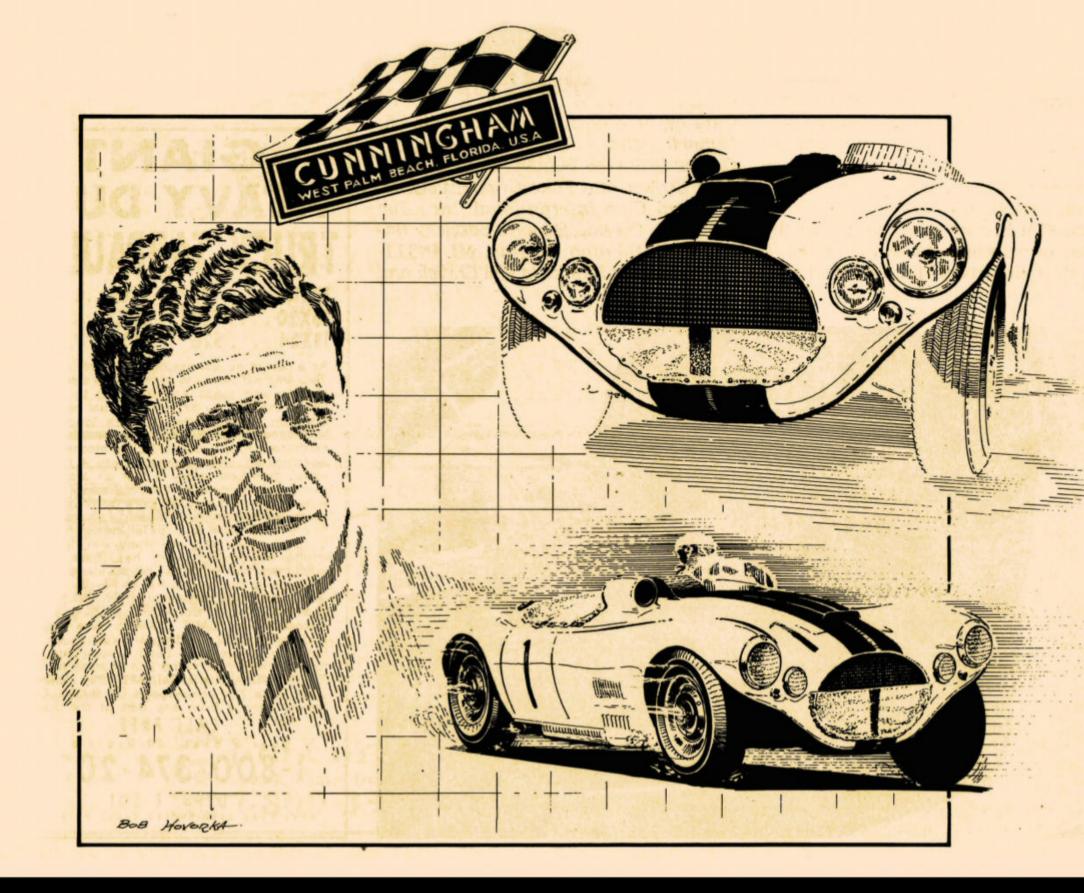
The 1942 models were the last to wear the Zephyr name-

plate, but the fundamental design would continue from 1946 through 1948. The 1942 models are desirable for their rarity as a result of the abbreviated production run and their onemodel-year-only features, which also make them more difficult to restore. Nonetheless, all Zephyrs of the era are coveted by aficionados for their V-12 engine, fine lines, and the prestige that Lincolns exude.





LLUSTRATIONS BY RUSSEI			ONVERTIBL	E COUPE
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5	9 inches		125 inches	\rightarrow
SPECIFIC	2NOITA			
				PROS & CON
PRICE		CHASSIS & BOD		 + V-12 engine + Incredibly rare
BASE PRICE	\$2,274	CONSTRUCTION	Unit-body, all steel, welded and bolt-	 Findrealby rare Strong club and parts
PRICE (AS PROFILED) OPTIONS (AS PROFILED)	N/A Radio, vacuum antenna, heater,	BODY STYLE	on body panels Two-door, convertible	vendor support
	hydraulic windows, overdrive,	LAYOUT	Front engine, rear-wheel drive	- Can have cooling issues
	whitewall tires, Custom interior	CUEDENCION	-	 Too rare to drive without concern
ENGINE		SUSPENSION FRONT	I-beam axle; transverse	 One-year-only parts
ТҮРЕ	H-series 75-degree V-12; cast-iron		multi-leaf spring, torsional	difficult to find
	block and L-heads		stabilizer, hydraulic shocks	
DISPLACEMENT BORE X STROKE	305-cu.in. (currently 296.21-cu.in.) 2.937 x 3.75 inches (currently	REAR	Live axle; transverse multi-leaf-spring, torsional stabilizer, hydraulic shocks	
	2.895 bore)			WHAT TO PAY
Compression Ratio Horsepower @ RPM	7:1 120 @ 2 800 (ourropthy N/A)	WHEELS & TIRES WHEELS	15 x 5-inch pressed steel with	LOW
TORQUE @ RPM	130 @ 3,800 (currently N/A) 226 lb-ft @1,800 (currently N/A)	WHELES	drop-center	\$12,000 - \$20,000
VALVETRAIN	Hydraulic lifters	TIRES	Reproduction 7.00-15 Firestone	AVERAGE
MAIN BEARINGS FUEL SYSTEM	Four Two-barrel downdraft carburetor,		Deluxe whitewall	\$25,000 - \$35,000
	mechanical pump	WEIGHTS & MEAS		
LUBRICATION SYSTEM	Gear-type pump	WHEELBASE OVERALL LENGTH	125 inches 217 inches	HIGH \$45,000 – \$60,000
ELECTRICAL SYSTEM EXHAUST SYSTEM	6-volt, dual-point ignition system Single	OVERALL WIDTH	75 inches	\$40,000 - \$00,000
		OVERALL HEIGHT	62 inches	
TRANSMISSION	Three-speed manual, overdrive	FRONT TRACK	59 inches 60.75 inches	
RATIOS	1st 2.33:1	SHIPPING WEIGHT	4,190 pounds (approximate)	LINCOLN-ZEPHYR OWNERS CLUB
	2nd 1.57:1	CAPACITIES		c/o Cornerstone
	3rd 1.00:1 Overdrive 0.70:1	COOLING SYSTEM	26.5 quarts	Registrations, Ltd.
		CRANKCASE	5 quarts	P.O. Box 1715 Maple Grove, Minnesota
DIFFERENTIAL	Torque-Tube, hypoid drive gears,	FUEL TANK TRANSMISSION REFILL	19.5 gallons 3.73 pints (with overdrive)	55311
	Three-quarter-floating drive axles	DIFFERENTIAL	4 pints	763-420-7829
GEAR RATIO	4.44:1	CALCULATED DA	ΤΔ	www.lzoc.org
STEERING		BHP PER CU.IN.	0.426	Dues: \$50 (annual) Membership: Nearly 1,000
	Worm-and-roller	CURB WEIGHT PER BHP	32.230 pounds	, , , , , , , , , , , , , , , , , , ,
RATIO OVERALL TURNING CIRCLE	18.4:1 N/A	CURB WEIGHT PER CU.IN	. 13.737 pounds	LINCOLN & CONTINENTAL
		PRODUCTION		P.O. Box 1715
BRAKES TYPE	Four-wheel bydraulie manual	SEDAN	4,418	Maple Grove, Minnesota
	Four-wheel, hydraulic, manual; cast-iron drums	COUPES CLUB COUPE	1,236 253	55311
FRONT/REAR	12 inches	CONVERTIBLE COUPE	191	763-420-7829
		TOTAL	6,098 (some sources indicate 6,118)	www.lcoc.org Dues: \$48 (annual)



Cunningham

Briggs Cunningham's goal was to produce American sports cars worthy of European racing. Did he succeed with the Cunningham, the American Ferrari?

BY DAVID CONWILL • PHOTOGRAPHY COURTESY OF THE REVS INSTITUTE FOR AUTOMOTIVE RESEARCH AND THE HEMMINGS ARCHIVES

orget "Ford versus Ferrari." It's hardly a compelling story when the second-largest automaker in the world decides it wants to embarrass a boutique maker of race cars. Instead, it's far better when the hero is a scrappy, upstart David against the Goliath of international sports car racing. That's the story of Cunningham cars.

Briggs Cunningham was a gentleman sportsman of the type no longer fashionable in America. Raised in wealth and privilege, he spent his days pursuing strenuous adventure. He loved cars, thanks largely to an ex-Rough Rider uncle with a Dodge Brothers touring car re-powered by a World War I-surplus Hispano-Suiza aircraft engine. His mother and first wife preferred something less dangerous for him than auto racing, so for most of his youth, he contented himself with yachting—another lifelong passion where event. The combination he made a lasting impact.

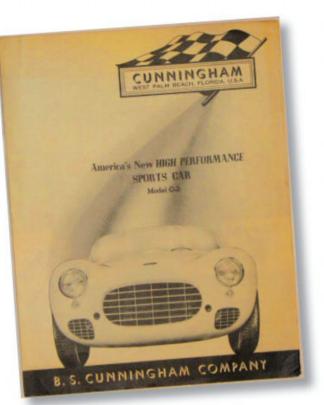
While he owned a sprint car in the 1930s that was driven by others, Cunningham's friendship with Barron Collier Jr. — and through him younger Collier brothers Sam and Miles — exposed him to road racing. The sport of road racing had been largely dormant in the United States since 1917, but the Colliers founded make an all-American run at the Automobile Racing Club of America in 1933 to provide a sanctioning body for revived amateur races using imported cars (mostly Bugattis and MGs at first) and homebuilt specials (usually Willys or Ford V-8 based).

Road racing, as practiced by ARCA, was patterned on the European road races of the 1920s. It was a gentleman's pastime that had not yet attracted the massive sponsorship dollars of nationalist governments or gigantic corporations. In short, it was a hobby perfectly suited to a man like Cunningham.

Although he had promised his mother not to drive in any races, Cunningham supported his friends in ARCA at a distance. He undoubtedly listened eagerly to Miles Collier when Miles returned from taking his streamlined MG PA/PB, Leonidas, to France ble in part by new refinery technology that produced high-octane to participate in the 1939 24 Hours of Le Mans. Then in 1940,

Cunningham loaned his hybrid Bu-Merc roadster, a 1939 Buick Century chassis with a Mercedes body, to Miles for ARCA's 1940 World's Fair Grand Prix. It was ARCA's last official of American power and European character would be prescient.

After World War II, Cunningham wanted to Le Mans. Previous American cars in the race had typically been piloted by European drivers, and previous Ameri-



can drivers, like Miles, had often chosen European equipment for their attempts. In 1949, the most recent notable achievement of an American driver in an American car in Europe had been Jimmy Murphy driving the Duesenberg prototype to first place in the 1921 French Grand Prix.

Also, in 1949, the technological fruits of wartime engineering began to ripen in American automobiles. The new overhead-valve Cadillac V-8 was heralded as a technological marvel made possigasoline. Cunningham turned to Bill Frick, a Long Island mechanic





Because they were hand-built in tiny numbers, no Cunningham is identical to its fellows, but this 1952 C-3 coupe is about as typical as the homologation cars get. All C-3s utilized Chrysler engines, and all but the prototype had bodies made in Italy.



This Hemi utilizes the four-Weber intake manifold created for a later series of Cunningham "continuation" cars. Some '50s originals used a similar unit, mounting four Zenith one-barrel carburetors.



When French racing officials rejected his initial attempt to enter Bill Frick-built "Fordillacs," Briggs Cunningham instead quickly acquired two Cadillacs to race at Le Mans in 1950.

well known for his talents at producing performance cars, for one of his Ford-Cadillac "Fordillac" hybrids and announced his intention to enter two in the 1950 24 Hours of Le Mans.

French officials were less than impressed and replied that the Fordillacs did not meet their homologation requirements. Moving quickly, Cunningham managed to acquire two 1950 Cadillac Series 61 Coupe de Ville hardtops—the smallest, lightest models produced by Cadillac.

Because the Cadillacs, at 3,829 pounds, were heavier than the Fords (2,965 pounds for an unmodified V-8 Business Coupe), Cunningham, Frick and crew stripped one car down to its chassis and enlisted employees from the nearby Grumman Aircraft facility to fabricate an aluminum body. French crowds at Le Mans dubbed this car *Le Monstre* for its monstrous appearance. Motors when he inquire Healey subsequently m create the Nash-Healey tion and came away wi Chrysler FirePower V-8. The Hemi V-8s, act

The other car remained stock in appearance but was fitted with speed parts and carefully tuned to optimize its power. Sam and Miles Collier drove the stock-bodied Cadillac to a 10th-place finish. *Le Monstre*, with Cunningham and Phil Walters sharing driving duties, finished 11th. Cunningham's appetite had only been whetted and he would come back to Le Mans with even better equipment.

To meet the homologation requirements, Cunningham incorporated the B.S. Cunningham Company in West Palm Beach, Florida. His goal was to produce good-handling, powerful cars made entirely from U.S. mechanical parts. Rather than making



The second Cadillac, which French crowds called *Le Monstre* ("The Monster") was fitted with streamlined aluminum bodywork fashioned by moonlighting workers from Grumman Aircraft. It took 11th place.

massive investments in manufacturing capability, the new Cunningham company would produce its grand tourers and racers in the style of the old "assemblers," picking and choosing the best componentry from across the industry.

Cunningham had driven a Cadillac-powered Healey Silverstone to second place at the 1950 Watkins Glen Grand Prix, and he took that car as his model. Like the Silverstone's creator, Donald Healey, he received a lukewarm response from General Motors when he inquired about bulk buys of Cadillac engines. Healey subsequently met George Mason and they teamed up to create the Nash-Healey. Cunningham went to Chrysler Corporation and came away with an agreement to purchase the new Chrysler FirePower V-8.

The Hemi V-8s, actually industrial engines, were furnished to Cunningham at a discount and the company immediately abandoned its first, Cadillac-powered C-1 roadster design in favor of creating a new car. The Cunningham C-2 was based around the Chrysler V-8. Both cars featured a frame built from 3-inch steel tubing with a central X-member. The Cunningham Co. built its own de Dion tube suspension in the rear, reducing unsprung weight and allowing finer tuning. The C-1 and C-2 rode identical 105-inch wheelbases and shared a 58-inch track.

The C-2 spawned the C-2R race car. It was appropriately speedy (Phil Walters set the fastest official lap in practice for the 1951 24 Hours of Le Mans, at 5 minutes, 3 seconds), but

undesirably heavy. Three were entered in the 1951 24 Hours of Le Mans, but none finished. Two of the cars crashed out and the third, which maintained second place for some time, was taken down by engine problems. Fuel quality caused headaches for all teams, but perhaps more of an issue were the efforts of Jaguar with its C-type racing car, not to mention the new Aston-Martin DB2. A Nash-Healey, incidentally, managed to finish sixth overall.

For its attempt at a series-produced car, sold to the general public, the Cunningham Co. created the C-3 (see our profile of a 1953 model on page 40). The C-3 was based on the C-2, but featured a coupe body, though a small number of C3 convertibles were also built later on. The first two C-3s were produced entirely in Florida, but fit and finish weren't up to the company founder's standards. He selected coachbuilder Vignale of Turin, Italy, to hammer out the coachwork for the rest.

Appropriate to its time and market, the C-3 had similar proportions to the 1953-'55 Chevrolet Corvette. They were sized, in other words, somewhere between the diminutive sports cars of Europe and the increasingly gargantuan passenger cars of America. The power and performance of a Cunningham far outstripped the early Corvette's, but so did the price tag. A 1954 Corvette roadster had a factory price of \$3,523, whereas a C-3 was priced at \$15,000. They may have been worth every penny, but even in postwar America's most prosperous years, that was a stiff price for most buyers.

Losses continued to mount for the company, which never made it to profitability. More race cars came, numbered C-4 through C-6. A C-4R marked the high point of the company's racing fortunes, taking third overall at Le Mans in 1954. By 1955, the Internal Revenue Service had determined that the company wasn't actually a viable business, but rather a tax write-off for a rich man's hobby.

The tax issues, combined with the temperamental nature of the Offenhauser-powered C-6 and the 1955 Le Mans disaster (in which no Cunningham racer was involved), spelled the end of the Cunningham operation. Key people retired entirely from racing and thus from the company too.

Today, Cunninghams, sporting handsome Italian coachwork and powerful Chrysler Hemi V-8 engines, are highly sought. They are also extremely exclusive and valued appropriately thanks to their rarity. That panache has led to at least two attempts at revival: a continuation of C-3 production, and a C-7, designed to be a modern continuation of the legendary marque.

Americans would return to Le Mans, but the age of the gentleman driver ended after the 1950s, setting the stage for the big money professionalism of the 1960s and '70s. Owning a vintage Cunningham (or a revival car) covers the driver with some of the glory of the last sporting attempts to tackle Le Mans. They are also arguably the most exotic automobiles to be designed and constructed in the U.S. in the 1950s. They were America's Ferrari.



Plans to discontinue American V-8 power in favor of a Ferrari V-12 did not work out, and the 1955 Cunningham C-6R (above), the last Cunningham built by the original company, wound up at Le Mans using Offenhauser power. Briggs Cunningham returned to Le Mans with the Corvette team in 1960 (below left). Thanks to overheating brakes, the C5-R (below right) took third at Le Mans in 1953—the marque's best showing.





Combining the best of American engineering with Italian style, the 1953 Cunningham C-3 was a star-spangled supercar

a supported into

energe

ALL SACESSING AND ALL SALES

BY DAVID CONWILL • PHOTOGRAPHY BY RICHARD LENTINELLO







The silver leather interior dates to the car's 1980 restoration and it looks excellent against the blue-andsilver color scheme chosen at that time. Interior appointments come from a variety

of sources, but Chrysler components predominate — the climate controls and pushbutton radio, for example. The Sun "football" half-sweep tachometer, centered for viewing convenience, is an aftermarket item.



merica is a melting pot, where immigrants from different societies come together and create something altogether new. Like an alloy of metals or a mongrel dog, such combinations are often more than the sum of their parts. It was that kind of philosophy that created America's first postwar supercar, the Cunningham C-3.

Although intended primarily to homologate racers for Le Mans, the road-going versions of Briggs Cunningham's eponymous automobiles were themselves adept and luxurious grand tourers. They coupled American V-8 power and rugged American independent front suspension systems to carry them with race-bred chassis developments like a De Dion tube rear suspension and handsome, handcrafted bodies from Carrozzeria Vignale. The chassis were built in Florida and the bodies in Turin, Italy.

Italy is where one of the two main competitors (philosophically, at least, if not in sales or racing success) of the Cunningham originated. The Ferrari 375 America boasted a 296-hp, 276-cu.in. SOHC V-12 in a 110.2-inch-wheelbase chassis, wrapped in Pinin Farina or Vignale coachwork. It tipped the scales at a little more than 2,500 pounds.

From Coventry, England, came another equivalent to the C-3—the Jaguar XK120. Jaguar built its own bodies in-house, placing them on a chassis with a 102-inch wheelbase. Available in Open Two-Seater, Drophead Coupe, or Fixed-Head Coupe styles, the XK120, which weighed greater than 2,900 pounds in roadster form, was powered by a 210-cu.in. DOHC straight-six, making up to 210 hp.

Stylistically, the Cunningham stacks up well against the Ferrari and Jaguar, as does its 105-inch wheelbase. The front suspension under most C-3s is based on that of a 1951 Mercury. Small parts came from a variety of sources, though sharp-eyed readers will note that Chrysler componentry predominates inside.

The C-3's bodywork was designed by Giovanni Michelotti, who also penned many memorable Ferraris along with work for Maserati, Standard Triumph, British Leyland, BMW, and others while he was employed at Vignale. Despite its Italian origins,



the muscular lines of the Cunningham seem to reflect the American character of the car's pushrod V-8 engine.

Originally, the engine in this car was a 1952 Chrysler 331-cu.in. FirePower Hemi (that's not a typo—this is an early 1953 car that used a 1952 engine), breathing through a two-barrel carburetor and rated at 180 horsepower. Some sources state that Cunningham modified the engine for 220-hp output, but the original equipment for this car is apparently undocumented. Engine output aside, what is known is that while both the Ferrari and Jaguars mentioned previously utilized four-speed manual gearboxes—Cunningham used Chrysler Fluid Drive.

For 1952, Fluid Drive came in two flavors, traditional Fluid-Matic Drive or Fluid-Torque Drive. Fluid-Matic was an overdrive transmission connected to the engine via a fluid coupling, which eliminated most of the risk of stalling. Fluid-Matic operated like an automatic transmission most of the time, but a clutch pedal was retained "to answer certain special driving needs" that Chrysler specifically spelled out as maneuvering in close quarters. An integrated kickdown permitted the driver to downshift into third gear at any speed up to 40 mph simply by flooring the accelerator.

Fluid-Torque Drive, which Chrysler described as providing "the ultimate in flashing acceleration," replaced the standard fluid coupling with a torque converter. The multiplication effect of the torque converter provided "an infinitely variable number of gear ratios" in addition to the gears in the transmission. The whole effect, Chrysler promised, provided "a new high in driving enjoyment."

Certainly the 180-hp (or 220-hp) engine and Fluid Drive were improved by leaving the confines of a 4,000-pound Saratoga for the 3,500-pound Cunningham, but on paper at Any Cunningham is rare, but only a handful of C-3 convertibles were built. This one started on the show circuit. It was displayed in Geneva, Switzerland, and New York City. The Vignale coachwork, penned by Giovanni Michelotti, features tunneled taillamps and the same pop-out door handles fitted to Alfa Romeos and Ferraris.











least, it didn't quite compare to the power-toweight ratios of the European competition. It was dramatically better than the only U.S. equivalent, though: the 2,705-pound 1953 Corvette with its 150-hp, 235-cu.in. OHV straight-six. In any case, the original engine and transmission combination didn't last long in our feature car.

The C-3 shown here is special even as Cunninghams go, thanks to its history with the company before its sale. You see, the early C-3s were all coupes, as were most (20 of 25 or 26) of the production run. The convertible arrived for the 1953 model year and the earliest examples were used on the show circuit before sale. This one, then painted two-tone green, was shown at both the Geneva, Switzerland, auto show in



March 1953, and at two shows in New York City later that month.

After its outings in New York, this car was sold to its first private owner—Gene Greenspun of New Jersey, who gained some notoriety as a Ferrari racer later in the decade. Greenspun was apparently not satisfied with the Hemi and instead had a 1955 Cadillac Eldorado V-8 fitted. Cunningham aficionados will find that choice appropriate, as it was the company's original intent to fit Cadillac engines before General Motors turned down the organization's request to purchase them in bulk. The 1955 engine was still 331-cu.in., but sported dual four-barrel carburetors and a factory horsepower rating of 270. To that already-potent combination—fitted by racer and garageman Jack Ensley of Indiana—Greenspun specified the addition of a McCulloch centrifugal supercharger.

Other changes made during Greenspun's ownership included repainting the car in white and silver, and the addition of chrome wire wheels. He sold it, via *Road & Track*, in 1957. The car went to Florida, where it still resides today, but passed through several owners in a fairly brief period of time before winding up with Dale Powers in 1960. Powers was a race fan and car enthusiast of modest means but great foresight. He knew early on that Cunninghams were future collectibles.

By the time this car wound up with Powers, it was in sorry shape: the front bumper, headlamp rings, and center caps were all gone. Powers removed the supercharged Cadillac engine and put in another Hemi, this one a 1958-vintage, 392-cu.in. V-8, topped with a four-barrel carburetor and rated at 345 hp. He backed it up with a PowerFlite two-speed automatic, which makes for a more familiar driving experience.

Powers' ministrations notwithstanding, the car continued to deteriorate throughout the 1970s, and by the time it reached owner Stu Barnette, it was missing the right inner fender, the air duct from the grille, and the entire dash. Barnette obtained a dash from another Cunningham and gained a radio in the process. He also sourced a Cunningham intake manifold, which was a log type using multiple one-barrel carburetors and was part of the aforementioned 220-hp engine, but evidently did not fit it.

Finally, in 1980, the car changed hands again. Sold to William Boardman, it got a full

restoration—including a silver leather interior and blue-andsilver paint. Boardman then donated the C3 to the current owner, The Elliott Museum in Stuart, Florida, in 1982, where it joined a collection of 100 vehicles. It was re-restored in 2015-'16 in the same colors. Because the chassis originated in nearby West Palm Beach, the Cunningham was a welcome addition to the museum, but that's not the only way it fits in. The Elliott Museum focuses on art, history, and technology. The Cunningham C-3 is a perfect fit—it's all three.

The museum shows the car quite regularly, but largely safeguards it. Nevertheless, it has been driven enough for Associate Car Curator John Giltinan to offer some impressions. "The steering and brakes are heavy," he says. "The fourwheel drum brakes have high pedal effort and do not instill confidence." In fact, he calls out the heavy steering and the thin, wood-rimmed steering wheel as perhaps the only two things not to like about the car.

> Nevertheless, John reports: "The car is very fast. The throttle must be modulated carefully, or you spin the tires when starting from a stop. Cornering is impressive and the ride is firm—some might say harsh. The twospeed Powerflite shifts smoothly and handles the engine's torque well."

Amazing torque, firm handling, and stylish bodywork make Cunninghams well-respected examples of 1950s Yankee car-building ingenuity. It's the American melting pot in action. Next time you're in Florida, you might want to look this one over.



The 1958-vintage,

392-cu.in. Chrysler

V-8 currently underhood

is the car's third engine.

Originally powered

by a 1952 Chrysler

331-cu.in. FirePower

Hemi backed up with

Fluid Drive, the car

was re-powered with a

supercharged Cadillac V-8

by its first owner.

patfoster



Studebaker began to seriously consider the idea of importing the Bellet, and later assembling

The Studebaker Bellet

'm curious what you think of the compact sedan pictured here, and I'm especially interested if you're a longtime Studebaker enthusiast. Why? Because this was almost the future of Studebaker cars worldwide. Presenting the almost 1966 Studebaker Bellet, designed by Isuzu– the car that really might have saved the company.

By 1964, Studebaker car production for the U.S. and Canada was centered in Hamilton, Ontario. In 1965, the president of Studebaker Canada, Gordon Grundy, was searching for an import car to supplement the Studebakers his dealers were selling (and, possibly, an import that could be assembled in Canada). Studebaker Canada was already involved with importing foreign cars via a deal with Volkswagen of Canada, which was paying a hefty duty on cars brought in from Germany. With the new Canada/U.S. Auto Pact agreement, Studebaker was allowed to import any foreign car, duty-free. So, Grundy

made a deal to import 31,600 VWs at a duty-free savings of \$165 per car. These were sold to VW Canada at \$150 profit per car, pocketing a net profit of \$4.74 million—while VW saved \$474,000. It was strictly a paper transaction, and all perfectly legal.

Looking for other ways to generate profits, Grundy met with Nissan in Japan to acquire the rights to sell Datsuns in North America. Some of the Datsuns would be badged as Studebakers, and eventually, even built in Canada. But, in the middle of negotiation, management instructed Grundy to break off talks with Nissan and pursue an arrangement with Toyota. The end result was that neither company wanted to do business with Studebaker. The lawyer behind this unfortunate debacle? Future U.S. president Richard Nixon.

Grundy next looked at the Prince, a Japanese auto they could offer as low as \$1,895. Also investigated was the DAF line of cars; several were brought over from Europe for testing. In the end, neither Prince nor DAF were considered viable because they wouldn't have appealed to enough Canadian drivers. But the next car investigated, the Isuzu Bellet, certainly would have.

The Bellet was larger than most of the imports Studebaker Canada had considered, and

was sturdy and well built. The Isuzu had very pleasing styling, and its 1.5-liter four-cylinder engine could easily handle North American highways. Studebaker began to seriously consider the idea of importing the Bellet, and later assembling them as well. The company brought test cars to its Hamilton headquarters and were



surprised at their comfort and roominess. A handful of Bellets were mocked up with Studebaker emblems and badges; marketing men drove the badged imports to a few dealers to get their reaction. The dealers were very pleased with the Bellet, and the plan to sell them in conjunction with Studebaker's carryover Larkbased models.

Studebaker looked carefully at introducing the Bellet for 1966 and even made plans to charter an ocean liner so they could take Studebaker's U.S. and Canadian dealers on a weekend jaunt to talk about their exciting future.

However, Studebaker Canada was also involved in negotiations to be acquired by importer and distributor Canadian Motor Industries. CMI had distribution rights for Toyota, 60 dealers, and was interested in acquiring Studebaker's network of about 1,000 dealers in the U.S. and Canada. It would make CMI a big player in the auto industry. Negotiations led to a proposed deal; CMI would purchase the assets of Studebaker's Automotive Division for about \$1 million, including all production equipment, the Hamilton factory and offices, and the parts warehouse in South Bend, Indiana. The deal was agreed upon – Studebaker's U.S. management was anxious to get rid of its Auto Division – and signing was scheduled when, unbelievably, one of CMI's principals got cold feet mere hours before the deal was to be signed. He worried it was taking on too much – he and his partners would need to raise a great deal of capital to finance ongoing operations. He convinced CMI to walk away.

Once the CMI deal fell through, the plans to introduce the Bellet for 1966 were put on hold. Then, in March 1966, Studebaker's management pulled the plug on the auto division.

And that was that. 🔊

RECAPSLETTERS

"LAST YEAR, OVER A QUARTER-

million owners of other low-priced cars were won over to Plymouth. It started a movement, a momentum, a beat. And the beat goes on," proclaimed the television ads for the 1967 Plymouth cars. Petula Clark was hired to share that "Plymouth Win You Over Beat Goes On" for the 1968 model year.

As a 28-year-old district manager for the Chrysler-Plymouth dealers in the San Francisco/San Mateo district, I was expected to assist this momentum/beat, or so it would seem.

Part of the constant barrage of stuff Ross Roy and advertising agency Young & Rubican (now Y&R) sent was a piece on how much better the Plymouth cars performed, in many categories, than Chevrolet and Ford cars could. Using one of the above comparisons, which always gave point and game to Plymouth, I had a field car, a Fury III, so I went looking for the other two contestants to preach to the sales managers and sales force what I had just memorized. I needed the other two cars so they could drive and understand the goodness of the gospel.

My test case would be the number one volume sales producer in my district, and probably the entire Northern California region as well. I borrowed a 1968 Chevrolet from a friend but was short the Ford. Hertz was happy to rent me one, so the dog and pony event was scheduled and completed. Days later, I submitted my 10-day expense report including the Hertz invoice. This resulted in a phone call with the news from the assistant regional manager that Chrysler would not pay for a rental of a Ford, and that expense was deducted from my expense check. Whatever was I was thinking?

Bloodied but not bowed, I didn't plan on any more events without factory help. Two weeks later, the regional manager shared with the nine district managers that my volume dealer had called the area manager (of several Western states) with great enthusiasm about the tear and compare meetings, with facts backed up by actual cars to drive and prove the point. "Very helpful to his sales staff," he said. "Good use of factory money for sales training." I was then directed to prepare a lesson plan so the other managers could consider replication of the scheme. Understanding that power flows downhill, I didn't say much about the background of this story,

and I complied. Did I ever get the Hertz bill covered? I don't remember because I am old and forget things, and I don't need the money now. Chrysler might. Larry Jett

Newark, California

NOW THAT I'M IN MY 85TH YEAR,

Doug Kemp's "I Was There" story in HCC #178 brought back many great memories of working at Rochester Products for 30 years. I was one of the guys responsible for the hardware and software for the "clean room" that flowed carburetors before their final settings. We used a GE 4060 computer (backed by a GE 4020) to run the 130 test stands in the clean room. It's been said that it was the largest manufacturing computer setup in that era and was capable of processing up to 25,000 carburetors in 24 hours. We also did an analysis of the process to assure each carburetor flowed to spec; the computer set the inside adjustments. Phil Warner

Polk City, Florida

I ENJOYED THE PULLMAN ARTICLE IN

HCC #184 and thought that I would shed a little more information on the Pullman automobile. The York, Pennsylvania, Heritage Trust owns the oldest Pullman, a 1906 Model C, along with a 1916 Deluxe Coupe that was designed specifically for women buyers. It was nicknamed the "Pumpkin Car" due to its looks.

Pullman built approximately 23,400 vehicles, of which 27 are known to have survived. I presently own the only known 1914 "Little Six" model 6-46A; it was shown at the AACA Nationals in Parsippany, New Jersey, this past June. The article was a good read, and while I am not an expert on Pullmans, I know those who are. Thanks for sharing the Pullman story with your readers.

Don Barlup

New Bloomfield, Pennsylvania

MY CONGRATULATIONS TO DAVID

Conwill on a fine article about a fine car, the 1948 Crosley. His mention of the even smaller prewar Crosleys brought to mind the new 1941 model my dad purchased just five months prior to the date that did, indeed, live in infamy. What a prescient choice! All during the war, with such a small car, he never ran out of rationed gasoline or tires. With the wartime speed limit of 35 mph, he was driving at the max. He claimed the Crosley would drive right around the big cars stuck in the snow drifts of Indiana as he commuted daily the 20 miles to the next town. Remember those isinglass ovals for the windows to keep them from fogging up? He used those in winter, because the car didn't have a heater. It must have been a chilly ride, but he took carpoolers with him. I once asked how he managed not to die in traffic in such a small car on that major state highway. He said rationing resulted in so few cars on the road, you could scarcely call it traffic.

Your magazine does a great job of covering Crosleys; we are always wanting more on such a fascinating car. Jean Allan Indianapolis, Indiana

MY 96-YEAR-OLD MOTHER GREATLY

enjoyed the "Cost Effective Convertible" article on the 1948 Crosley in *HCC* #185, and has asked that I relay her personal experience with one.

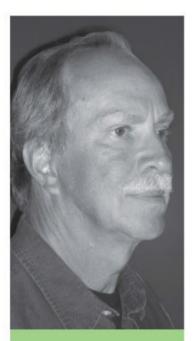
Mom says she hated the thing from the beginning, when her recently wed first husband bought a brand-new 1939 Crosley convertible without her consent. The words "for better or worse" seemed to apply aptly to the ownership of one of these odd-looking cars. She wasn't particularly thrilled with some of its more "charming" features, like the hand-operated wipers, the hood prop that doubled as an oil dipstick, and the complete absence of a gas gauge. Above all, she felt it drew way too much attention, with seemingly endless hoots and catcalls from curious onlookers. In order to avoid all of that, she chose less-populated routes, and attempted to speed to her destination at every opportunity. It wasn't too long before she was stopped for speeding by one of the local constables. After some careful reflection on the fact that the 12-hp, two-cylinder engine was only rated at 50 mph, the policeman let her go with only a warning. He further commented that he was only doing so because he knew that no one at the courthouse would believe the little Crosley would go that fast! Scott Smith Lansing, Michigan

I REALLY APPRECIATE THAT YOU'RE

featuring articles on cars from the 1980s. These vehicles represent good value

Continued on page 49

walt**gosden**



The carriage industry was especially prolific in the Northeast. **New York City** was the center

or activity...

facturers tried to cover the entire spectrum of sales opportunities by offering six body styles: three open

Open Carriage to Enclosed Coach

oachwork for motorcars carried on the style of the horse-drawn wagons that preceded them. Early automobiles saw engines placed in chassis that were inspired by the single- or multiple-horse-drawn surreys, wagons, and coaches. The majority of the horse-powered wagons were completely open, without windshields, and bench seats were standard fare. Many of these vehicles had iron- and wood-framed tops that were covered by treated canvas or cloth, with side curtains of similar material that could be mounted in place for protection from inclement weather.

Some carriages did have enclosed bodies, as did early automobiles, and most of these were more often seen in larger villages or cities, but less frequently in rural areas. Many of the bodies for early automobile companies were designed and produced by the same coachbuilders who built bodies for horse-drawn carriages.

The carriage industry was especially prolific in the Northeast. New York City was the center of activity, and saw many body companies, all within a 50-mile radius, continue to thrive by building coachwork for the new "horseless carriage." This was true for the well-respected Brewster & Co., which had several locations in Manhattan prior to its final factory in Long Island City, Queens.

By the mid-Teens, when Europe was involved in the Great War, fully enclosed coachwork with plate glass windows was becoming more popular for automobiles. Sales of the same would start to replace the open touring cars and roadster body types.

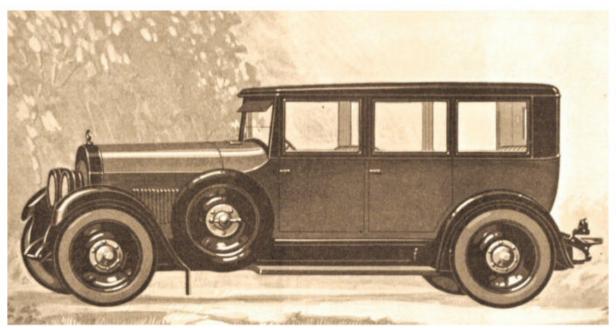
The popular motor magazines of 1917 to 1924 prove that the majority of automobile manufacturers viewed the two-door coach and four-door sedan – which both offered room for up and three enclosed. Depending upon which customers the automobile manufacturer was focused on, the enclosed bodies could all have some unique feature. Among the popular types and styles were some form of coupe (two and four passenger), sedan (five and seven passenger), berline, limousine, and less so, a town car. The open body styles were either two- or four-passenger roadsters, or touring (like a sedan, in both five- and seven-passenger capacity). Even convertibles, with roll-up windows, started to become more available in that post-World War I era. On occasion, the convertible was called a cabriolet, but certain town cars would also share that cabriolet name, depending upon the marque.

The two-door sedan, or coach, became an extremely popular enclosed body style, especially among the medium- and lowerpriced cars. For the most part, with the possible exception of cars in the price range of Ford, Essex, and Chevrolet, nearly all offered a sevenpassenger sedan model. All the enclosed body styles used thick plate glass for the windows, including windshields, into the late 1920s. Safety glass was eventually invented to prevent the horrific injuries caused by sharp pieces of broken plate glass hitting passengers in collisions.

With the armistice and end of WWI in 1918, automobile sales increased as servicemen returned home and looked for a car that would provide comfort year-round, thus rendering the coach body style very popular. Manufacturers saw the enclosed body style as the future, even though roadsters and touring cars were still popular. With the increased development of pressed steel body panels, it quickly became easier to build a sedan or coupe. Thus, the sedan became the focus of the motor car industry, taking the lead in sales of new cars. 🔊

year-round – as viable products they could sell. Just about all manufacturers listed enclosed coachwork in their advertisements. Most manu-

to five passengers, in enclosed comfort



RECAPSLETTERS

and can help younger people, as well as those whose funds may be limited, get into the collector-car hobby. Two worthy cars from this era not mentioned were the 1986-'91 Buick LeSabre and the 1985-'90 Electra/Park Avenue. These cars have lots of room, adequate power, and very good gas mileage. Another unique feature is their forward-opening hood: This makes for easier servicing as well as a conversation piece at the gas station and local car shows. Being the proud owner of a 1989 LeSabre Limited, I can personally attest to this. Also, mechanical parts are plentiful and reasonably priced.

You have a great publication and I appreciate that you recognize newer and affordable cars.

Parkis Waterbury Dalton, Wisconsin

I FOUND IT INTERESTING THAT DAVID

Conwill pointed out some differences on the 1955 Pontiac in *HCC* #185, and I would like to add some reasons why. Pontiac's reluctance to give up the under-seat heater required an additional heater core for the defroster. That device was mounted where a brake master cylinder normally would be, hence the frame-mounted master cylinder and a floor-mounted pedal. Although not confirmed, it's rumored that Pontiac believed that stamped steel control arms and ball joints would not support the extra weight of the new 287-cu.in. V-8, therefore the kingpins and different control arms with grease fittings were used. Phil Aubrey *Merlin, Oregon*

I USUALLY ENJOY AND APPRECIATE

Milton Stern's writings and opinions, but I totally disagree with his "International Underdogs" feature on the 1986 Hyundai Excel in *HCC* #184. I was a Chrysler-Plymouth salesman at the time of the Excel's arrival, and I can tell you that within a year, they were basically worthless as trade-ins. They quickly got the reputation as being a throwaway car. They were known for their poor quality and lack of reliability; almost as bad as a Yugo. Maybe Mr. Stern had a rare good one, but I can personally attest that they really were pieces of junk. Gregory Palma Nutley, New Jersey

I WAS WORKING FOR A CADILLAC

dealer in 1980, and when the new "bustleback" Seville came out, it could not be ignored. I quickly realized what an inspired design it was. The two-tone exterior color combination, with the dramatic downward arc on the quarter panel, was eye candy. The bustleback Cadillac was a tour de force, and today, nearly 40 years later, it still grabs me, but the car is more impressive looking without a vinyl roof or wire wheel covers.

Thomas Radlo Westfield, Massachusetts

To have your letter considered for Recaps, you must include your full name and the town/city and state you live in. Thank you.



milton**stern**



...built to compete Citroën DS, the Renault R16 has its <u>own following</u> today among collectors of fine French

motorcars.

Revolutionary Renault—The R16

e often bandy about the terms "innovative" and "influential" when talking about cars, but there are some cars that were so influential they had a lasting effect on the auto industry that can be felt to this day. The Renault R16 is one such car – a success for Renault with almost 1.85-million sold, mostly in Europe and the

Middle East, during its 15-year run from 1965 to 1980. Created, designed, and built to compete with the Citroën DS, the Renault R16 has its own following today among collectors of fine French motorcars.

At a time when Renault was wowing the world with its Dauphine, which would spawn the Renault 8, 10, and Caravelle, the French automaker wished to replace the Renault Frégate (1951-60) with a more modern, large family car to compete in the "Executive Class."

A few years ago, a friend and I attended a car show that promised to feature several English and French cars. It so happened that I had just watched a documentary on the development of the Renault R16, and I was hoping there would be one in attendance that day, since I had never seen one in person. While they were sold in the United States for a limited time (1969-'72), they were hardly popular.

Imagine my excitement when not one, but two, arrived simultaneously, driven by a husband and wife. One R16 was a 1969 and the other a 1974. I ran over to watch as they took their respective places on the show field, and my friend, a fan of French cars, shared in my enthusiasm.

Once the owners exited their vehicles, I bombarded them with questions. The couple thought I was a bit nuts but were happy that someone appreciated their cars so much. I requested they open the "hatchbacks" on each car. They obliged. Why, you may ask? Because the fourdoor, sedan hatchback body was just one of the innovative aspects of these cars. An equivalent would not appear on similarly sized American cars until the introduction of the 1980 Chevrolet Citation and Pontiac Phoenix. As a matter of fact, the term "hatchback" wasn't really in vogue at the time. To be clear, liftgates had appeared on estates like the Renault 4, which had influenced much of the R16's design, mainly in the drivetrain layout and suspension.

The front-wheel-drive R16's engine was mounted longitudinally behind the transmission. Torsion bars suspended the car fore and aft. In the rear, the torsion bars were mounted transversely in tandem, which necessitated a slightly longer wheelbase on the driver's side, similar to the R4 and later R5/Le Car. The difference in wheelbase was said to give these cars a smoother



ride, especially on rough terrain. Many auto testers noted how Renault had managed to design smallcar suspensions that offered as comfortable a ride as one would expect

on a larger, heavier car. Remember the Le Car commercial where a woman put on her makeup, while her husband drove through pot-holed city streets in a hurry to get them to a dinner party on time?

The aforementioned engine position between the transmission and the passenger compartment also contributed to the R16's excellent balance and handling. Shifting the fourspeed was done via a column-mounted lever, and the aluminum engine featured an electric fan, which the rest of the industry would begin to adopt in the late 1970s. The spare tire was stored under the bonnet, freeing up more space in the boot. Renault thought of everything.

The hatchback body style on a family-size sedan also allowed for a flexible interior, especially with the rear seats folded flat, and was one of the reasons the R16 was voted European Car of the Year in 1965.

An automatic transmission was developed for the 1969 R16 TA. Europeans still embraced manual gearboxes, whereas the Middle Eastern market embraced automatics.

The initial engine for the Renault R16 was a 1.5-liter four-cylinder, an aluminum engine with wet cylinder liners that was completely new. The camshaft was placed high in the block and activated parallel valves. In 1968, a new cylinder head was developed for the R16 TS, with a crossflow design that positioned the valves in a V similar to an F-head engine-intake valves above and exhaust valves on the side.

If you want one, try European websites. R16s are popular, so they are hardly cheap. And if you do buy one, send me a picture with the hatchback open. I'm weird like that.



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Sixties Icon

Ford's 1961 "wood-sided" station wagon was the embodiment of the postwar American dream

BY MATTHEW LITWIN • PHOTOGRAPHY BY RICHARD LENTINELLO

cursory glance at the collector-car hobby through today's rose-tinted glasses would have you think that the postwar domestic industry made a mint on massmarketed two-door hardtops. Artistically conceptualized ads often featured such coupes that oozed sporty, open-air excursions to the country from deep inside concrete-n-steel cities and burgeoning suburbs. Attractive as the hardtop coupe was though, four-door sedans were the biggest seller, while the real country excursion cruiser, better suited for the whole family, was the station wagon.

Without question, the biggest purveyor in the station wagon market was Ford. Although the phenomenon started with the division's Model T-based depot hacks, the first mass-produced, formally named "station wagon" was unveiled in 1929 as part of the critically acclaimed Model A line. More than 11,300 woodies were built during the A's reign, 4,954 of which emerged in this body style's first year of existence. During the early V-8 era, Ford's wagon output amassed a sales total of 77,043 units through the abbreviated 1942 model year. From 1946 through 1951, another 132,021 examples were built, including 31,412 during 1949 the Blue Oval's high-water mark to that point.

Production jumped to 49,919 wagons for 1952, a year in which Ford made the switch to an all-steel wagon design. A year

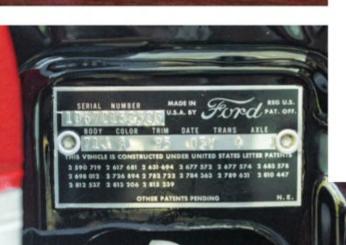
later, it skyrocketed to 115,720 units, and by the conclusion of the 1960 model year, Ford had sold another 1,584,782 wagons of all stripes to eager buyers. Concurrent with Ford's rise in station wagon dominance, the market segment jumped from just 2 percent of the U.S. industry in 1950 to a whopping 18 percent in 1959. It would keep rising through the 1961 model year thanks to Ford's 256,597-unit contribution, which included this Country Squire.

Though the name Country Squire first surfaced in Ford's 1950 wagon ads, the physical emblem didn't make its appearance until a year later. This model immediately attained the stately status as the division's top trim level wagon. As such, it was equipped with a multitude of standard equipment that was otherwise available as optional equipment on lesser models, and further set apart from its cargo-carrying brethren with the addition of faux wood paneling, harking back to its origins, but without the expensive upkeep.

That Country Squire tradition carried into the visually redesigned 1961 model year. As in years past, the wagon's features paralleled that of the upscale Galaxie series, including the elegant yet racy concave grille; crisp, slender tailfins; and revised tail panel flanked by rocket-like circular taillamps. The flanks were decorated with faux mahogany panels framed with fiberglass strips decorated with faux maple woodgrain. Plush cabins were equally Galaxiebased, although for the first time the Country Squire was offered in







Ford restyled its 1961 fullsize line of cars, save for the greenhouse, providing a dramatic new look. Country Squire buyers, as demonstrated here, could have selected the all-new 390-cu.in. V-8 engine option that added racy "390" fender emblems.





both six- and nine-passenger configurations.

Below was a 119-inch-wheelbase chassis comprised of Ford's "wide-contoured" frame, touted in factory literature as having "more flexible inner channels for less harshness and a more gentle ride." It hosted a "swept back, angle-poised ball-joint" front suspension system, complemented by a rear leaf spring suspension. Hydraulic shocks and selfadjusting drum brakes completed the ensemble, along with four-ply 8.00-14 tires mounted on 6-inch-wide wheels.

In base form, the Country Squire was powered by one of two engines, the first being the Mileage Maker Six. As the name suggests, this was a 223-cu.in. straight-six with an oversquare 3.62 x 3.60-inch bore and stroke, and a Holley one-barrel carburetor, that was rated for 135 hp at 4,000 rpm and 200 lb-ft of torque at 2,000 rpm. Its baseline counterpart was the Thunderbird 292-cu.in. V-8. A Holley two-barrel carburetor fed fuel into a 3.75-inch bore that, coupled with a 3.30-inch stroke and 8.8:1 compression ratio, produced a factory rating of 175 hp at 4,200 rpm and 279 lb-ft of torque at 2,200 rpm. The power from either engine would have been transferred through a column-shifted three-speed manual.

In typical fashion, though, Ford offered more powerful V-8 options, beginning with the Thunderbird 352 Special. Although a Holley two-barrel carburetor was bolted to the intake manifold,

This Country Squire has been restored to factorystock condition, which included power windows, air conditioning, a power front bench seat, Cruise-O-Matic automatic transmission, and an electric clock. the larger 352-cu.in. displacement, a high-lift camshaft, 4.00 x 3.50-inch bore and stroke, and 8.9:1 compression conspired to produce 220 hp and 336 lb-ft of torque. Finally, there was the newfor-'61 Thunderbird 390 Special. This was effectively a fine-tuned 352 engine enlarged to 390-cu.in. that, along with a true dual-exhaust system, higher 9.6:1 compression, and a Holley four-barrel carburetor, touted 300 hp at 4,600 rpm and 427 lb-ft of torque at 2,800 rpm.

Transmission options included a three-speed manual with overdrive; the Ford-O-Matic two-speed automatic, which was available against all but the 390; and the Cruise-O-Matic "dual range" automatic—offered only in conjunction with the V-8 engines—that was designed for higher output powerplants. Other options included power steering and brakes, air conditioning, radio, electric clock, a hood ornament, combination spotlamp/ mirror, and, on station wagons such as the Country Squire, a power tailgate window.

According to lore, this 1961 six-passenger Country Squire was a relatively unique sight in the Denver region of Colorado when new. It had been ordered with black paint, a red-and-white vinyl interior, hood ornament, roof rack, front bumper guards, the combination spotlamp/mirror, electric clock, power windows, power front bench seat, tinted glass, air conditioning, power tailgate window, and exhaust deflectors. It had also been ordered





with the 300-hp 390-cu.in. V-8 and Cruise-O-Matic transmission, the former mandating the installation of the "390" crossed-flag emblems on each front fender.

It would be easy to speculate what kind of existence it had in the "Mile High" city. Ski trips during the winter? Camping during the summer? Family vacations to far-off locations? It's what the wagon was designed for, after all. What is known is that when it appeared for sale in *Hemmings Motor News* 27 years ago, it was sitting in a tired condition next to a multi-family home in Golden, Colorado. The seller's basic print ad didn't faze Eric Ringstrom—a resident of Wallingford, Connecticut, who already had intimate knowledge of Ford's top-of-the-line wagon—prompting him to call for more details.

"I owned, or had owned, four other 1961 Country Squires from East Coast locations—they were rusty, beat-up cars—but this one sounded like it was relatively clean," Eric recalled. "The seller sent me some Polaroid photos that showed the car had been hammered and needed a full restoration, but it was complete and wasn't really rusty at all. The 390 option got my attention, so I took a leap of faith and bought it."

Eric tells us that, upon its delivery to Connecticut in 1993, he started the wagon's restoration, but not in the traditional sense. According to him, "I never disabled the Ford. I took most of the wood and chrome trim off, and replaced any bolt-on parts I could with better components from the stash of parts I had amassed from other wagon projects, and I purchased NOS parts as I found them. But like many others, I built a house and raised a family, which kept this Squire on the back burner.

"I really didn't get serious about trying to restore the car until 2000. I removed the engine and transmission, and all the glass, and ended up sending the car out to have what was supposed to be complete bodywork and paint done. That never materialized. It turned into having most of the bodywork done, but it didn't get painted. I brought it back to my house and sold it in 2005; I came to the point in my life where I said, 'You know, I'm probably never going to finish this thing.' So, I advertised it in *Hemmings*, and the car sold immediately for my asking price and it disappeared out of my life."

At least that was Eric's thought at the time. A year later, the Ford was spotted for sale on the internet by several friends, who in turn called it to his attention. Despite their inquiries about his potential interest, Eric refused to buy the wagon and it once again vanished off his radar.

"About four months later, I got a call from a gentleman in Georgia who claimed to have my car. I asked how he found me, and he said he found a box of parts inside with my name on it. We ended up talking about the Ford and he asked what



I had intended to do with it. Like me, he wanted to restore it to factory-stock condition. Even though we had never met, we became fast friends over this Ford and our common interest in station wagons. At one point, I told him if he ever decided to sell it, I'd like first right of refusal.

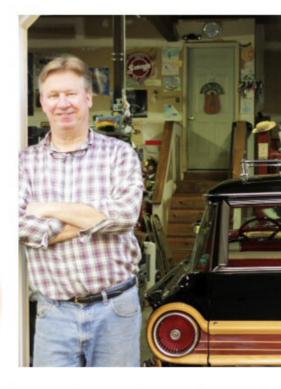
"Three years later, he called me and asked me if I wanted to buy it back. At this point it was painted, the engine and transmission and the entire front end were rebuilt; it was basically a painted shell. He threw a number at me and within 24 hours I ended up buying it. I flew to Atlanta, rented a truck and trailer, and hauled it home."

Admittedly, Eric tells us that the Ford then sat until 2017, at which point he had the time and ability to get serious about completing its long-delayed restoration. Within a two-year window, a new interior was installed, along with new tinted windows, rebuilt electronic accessories, and the requisite mahogany and maple faux woodgrain trim. It was an epic 27-year journey, and in the fall of 2019 the Country Squire was completed.

"The restoration is so 'new' the car isn't even registered yet. Even though it's winter (at the time of this writing), it's a running, driving car, and I've been able to sneak in some short shakedown drives on my property to isolate and fix the little things that need attention, so that it will truly be ready for the spring. It's been a long road and I'm anxious to get it out there and just enjoy sharing it with people."

> I'm anxious to get it out there and just enjoy sharing it

> > with people.



SPECIAL SECTION: WOODIE WAGONS



Timber Treasures The many facets of owning a wood-sided collector car

WORDS AND PHOTOGRAPHY BY RICHARD LENTINELLO

hen it comes to automobiles, you can't get any more organic than a woodie. Lathered in lively tones of cellulose fibers, they're America's longstanding symbol of fine automotive craftsmanship. Embodying a natural elegance of unsurpassed, welcoming warmth, wood-sided automobiles have long been associated with the skill and artistry of woodworking craftsmanship. And thanks to the songs of the Beach Boys and Jan and Dean, woodies have become an intrinsic part of American pop culture, too.

While wood-sided automobiles were mass-produced like their all-steel counterparts, lots of time-consuming, painstaking craftsmanship and woodworking techniques were involved in assembling the structure that made up the woodie body. Compound curves, finger-joints, bevel angles, dovetail joints, edging, veneering, and refinishing are what were required to produce wood bodies. It was the art of industrial carpentry at its finest.

It's no secret that maintaining a wood-sided automobile requires way more attention and effort than all-metal cars, with their painted exteriors. Once the wood has been restored and/ or refinished, preservation techniques come into play as Mother

Nature isn't too kind to all that exposed wood. Endless cycles of hot and cold, wet and dry, and a constant onslaught of the sun's harmful rays can quickly wreak havoc on the condition of the wood and its finish. Meticulous upkeep is the key to long-term conservation.

Restoring a woodie is, without question, the most labor-intensive type

of restoration project of them all. To help owners and restorers embark on restorations that are accurate and noteworthy, there's the National Woodie Club to assist them through the process. According to its website: "The National Woodie Club exists to promote interest in woodies; to educate owners and the public on their history, beauty, usefulness and uniqueness; and to provide an association through which woodie owners and enthusiasts may exchange information on history, building, restoration or modification techniques, and share experiences. The woodie is a special kind of car, which deserves special recognition. The National Woodie Club will work toward that goal."

For those who own Chrysler's Town & Country models, there's a Town & Country chapter of the National Woodie Club.

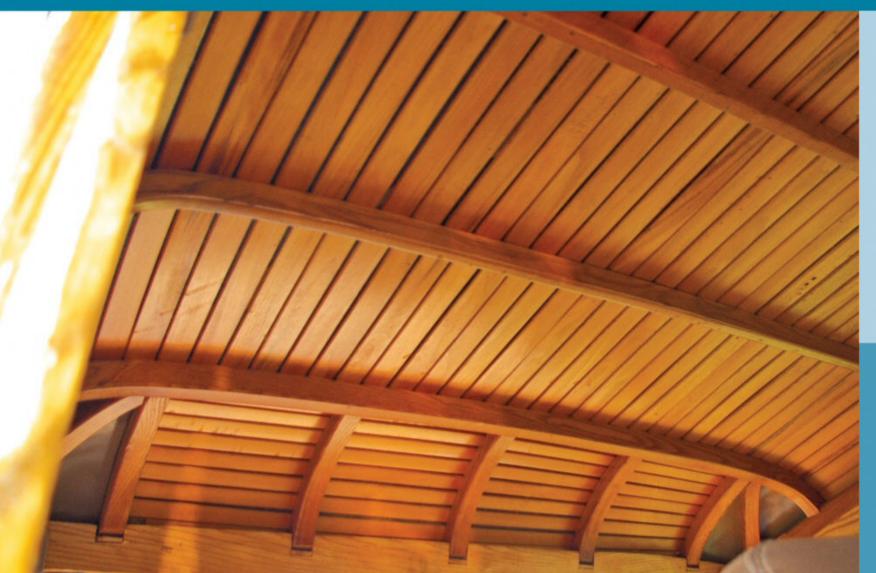
If you love the look of wood paneling down the side of an automobile, but have no interest in dealing with such laborious maintenance issues, then consider a woodie like the 1961 Ford Country Squire shown on page 52 in this issue. With their simulated wood Di-Noc vinyl appliques, postwar cars like that one have the look of a real woodie, but forgo the challenges of upkeep. They're an ideal comprise.

> To learn more about wood-sided collector cars, we suggest you visit the websites listed here, as well as the AACA forums and associated Facebook groups. But proceed with caution, because you may very well be quickly smitten with the allure of all that inviting wood and find yourself perusing the pages that follow for a woodie to call your own.



National Woodie Club www.woodies.clubexpress.com

Town & Country Chapter of NWC www.townandcountrywoodies.com





WOODEN **IT BE NICE?**

NEXT MONTH'S SPECIAL SECTION: INDEPENDENT AMERICANS







Splinter Group

Numerous wood-sided cars were produced, but from 1923 to 1951 these were the more significant models By JEFF KOCH · HEMMINGS ARCHIVES IMAGES

ood-sided automobiles started out unglamorously, usually sold by body builders based on a commercial chassis. Ford initially lumped station wagons in with its truck lines in the catalogs, in fact. Fitted with side curtains in lieu of windows and stretched-canvas tops, they were ever only meant to be functional—rough-hewn custom bodies that were a means to an end. But despite the Great Depression, automotive advancements came thick and fast; once General Motors' all-steel car bodies arrived on the scene for 1936, the days of wood seemed numbered.

Yet steel, with all of its strength, durability, and manufacturing efficiency, failed to eliminate wood altogether, at least for a while: Rather, the handworkintensive timber-bodied models were driven upmarket. Pontiac's wood-bodied station wagon was a \$1,015 proposition in 1940; a year later, a woodie was the first Ford with a base price over \$1,000.

Before the war, wood was used for a variety of reasons—lots of material and people who knew how to work it, Ford's processing plant at Iron Mountain was adjacent to a half-million-acre forest, and wooden-body cars possessed a cozy, down-home style. On the other side of World War II, the use of wood became rather more necessary. Steel remained in short supply and was doled out gingerly by a government looking to convert the wartime machine to peacetime prosperity; wood had no such shortage, and it's little wonder that the late 1940s saw a surfeit of wood-bodied passenger cars like Chrysler's Town & Country line, or the Ford Sportsman. But once the material constraints were off, and Detroit struggled to keep up with demand, wood-bodied cars fell off the map. They were too fiddly, too time-consuming, and expensive to build. The last of the real wood-bodied woodies, Fords and Mercurys, evaporated at the end of 1951. Later efforts would use real wood, but only as decoration over steel panels.

Yet the memory of the woodie, its appearance ingrained (forgive the pun) in our collective national psyche, remains. Oh, the look wavered a bit in the 1950s—car companies largely wanted their strong, steel wagons to look like steel—but starting in the mid-'50s, 3M's Di-Noc woodgrain appliqué grew more popular on the sides of

1923 Star

The short-lived margue was an assembled car—that is, various outside suppliers furnished components, and the resulting Star was built on the Durant Motors assembly line. It was meant to compete against the Ford Model T. In those days, it was customary to ship a commercial chassis to a body builder and have the company finish and sell the resulting car; instead, Durant had the bodies delivered to the factory for assembly on the line. In 1923, this made Star the first car company to offer a factory-built station wagon.

wagons (and even made it onto economy cars in the '70s, like the Chevrolet Chevette and the Plymouth Horizon). The faux-wood style lasted into the 1990s, on Chrysler Town & Country minivans—ironically, the very vehicles that sought to replace the steel-bodied American station wagon altogether. Wood, and wood paneling, has yet to return to popular culture with any sustained zeal, and remains off the table for modern car bodies.

The golden age of the factory-built, wood-bodied station wagon was a narrow slice of history—really just two decades from end to end, although we've managed to stretch it to nearly three. From manufacturing necessity to enduring legacy, woodbodied cars were special in their day, and unbelievable now—factory-made, coachbuilt, hand-fettled on an assembly line, and available on a payment plan.

1929-'31 Ford

Just five Model A's were built for 1928, making them gold-star unobtanium today. Model 150A properly launched in January of 1929, with a \$695 base price. (By 1930, it was reduced to \$640.) It boasted seating for eight, with the middle and rear seats able to be removed completely. Just 11,317 were built over three years—4,954 in 1929, 3,510 in 1930, and only 2,848 in 1931.



1939 Plymouth

After Chrysler proved the strength of the all-steel body on its Airflow models, a woodbodied wagon seemed a step back. Advertised on Plymouth's 114-inch DeLuxe chassis, the Suburban was also available with 20-inch wheels (and a 4.30:1 final drive ratio), giving nearly 10 inches of ground clearance for the nation's many unimproved prewar roads.





1933 Ford

Why choose the 1933 Ford, when the '32 model was such an update from the Model A? We'll give you eight reasons, all of them under the hood: The new flathead V-8 wasn't available in the wagon until 1933. A total of 1,654 were built, and the V-8 woodie wagon's popularity increased year-on-year from here, with 2,905 sold in 1934, 5,575 in '35, and 6,490 in '36.

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GC-013 A 1962 Buick Electra Cameo Cream with white roof GC-013 B 1962 Buick Electra Burgundy poly w/white roof GC-014 A 1958 Ford Country Squire Station Wagon Gulfstream blue GC-014 B 1958 Ford Country Squire Station Wagon Seaspray Green GC-015 A 1964 Pontiac Grand Prix Marimba Red GC-015 B 1964 Pontiac Grand Prix Aquamarine GC-017A 1961 Pontiac Catalina Twilight Mist GC-017B 1961 Pontiac Catalina Rose Metallic and more!



1940 Chevrolet

A big enough deal it got its own brochure, the 1940 Chevrolet woodie wagon was available on the buyers' choice of Special DeLuxe or Master 85 chassis. It followed a familiar pattern: wood panels around a steel skeleton, seating for eight, an external spare, a tailgate designed to extend the loading floor, etc.



1940 Oldsmobile Oldsmobile's body featured specially selected white ash frame and walnut finish birch panels with a high-varnish rub; the doors were also finished in walnut inside and outside, with white ash trim. Upholstery was "imitation leather," and only available in brown. Power was courtesy Oldsmobile's 95-horsepower Econo-Master Six.



1941 Mercury Roughly comparable to a Buick or

Roughly comparable to a Buick or Oldsmobile, the Mercury brand's first station wagon offered a body made of selected maple and birch. Interiors, available in three colors to complement the wheels and body color (ahead of the front doors), were trimmed in hand-buffed leather. The flathead V-8 power made 95 horses.



1946-'48 Buick

Other than the V-8 Ford and Mercury, Buick's Model 59 Super estate wagon was the only prewar eight-cylinder woodie wagon available, underscoring the model's quick move upmarket. The 248-cu.in. model sold 786 units in 1946 and '47, and 1,955 in 1948. (The 320-cu.in. Series 79 Roadmaster estate sold just 300 units in 1947!)



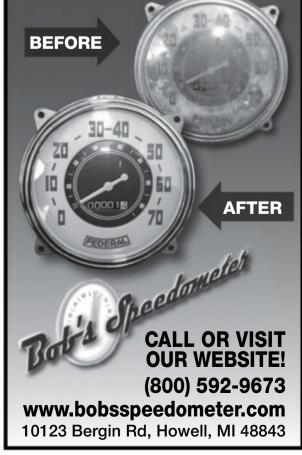




1946-'48 Chrysler The Town & Country launched in 1941, but it wasn't until the postwar era that Chrysler had the audacity to offer five separate wood-bodied styles: Custom Club Coupe, Convertible, Roadster, Brougham and four-door sedan. Each was available in six-cylinder Windsor and eight-cylinder New Yorker trim.



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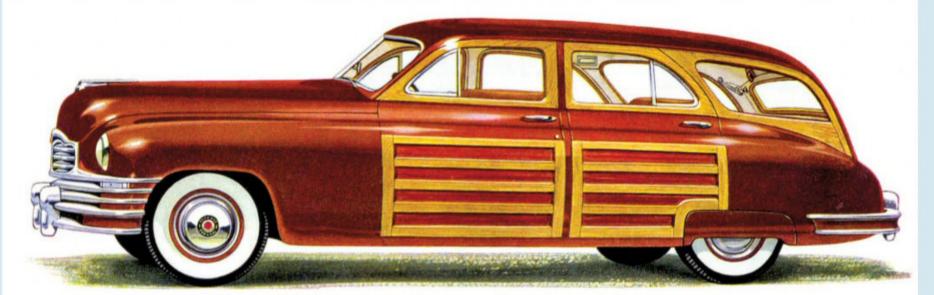
- Gears • Spline shafts
- Ring & Pinions Transmission Parts **Custom Machined Parts**



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1947 NOSh It's funny to hear Nash boast of being "years ahead of the industry" in its brochure... and then present a wood-bodied car in its lineup. Part of Nash's high-zoot 121-inch-wheelbase Ambassador line, the Suburban sedan was America's most powerful six-cylinder car in its day. Just 595 sold for 1947, and 130 for 1948.



1948 Packard The Packard Eight Station Sedan had a wooden tailgate and lift-up rear window, but wasn't considered a wagon. Only two rows of seats here—six passengers total—in "new materials that out-look and out-last natural leather." The rear seat folded, and with the tailgate down, the load platform was nearly 9-feet long.



1949 De Soto Steel door panels were framed in select white ash, and the De Soto Suburban boasted ninepassenger (3-3-3) seating, though the middle and back rows were removable. The middle row featured a fold-down jump seat to allow better rear seat access. De Soto sold 850 on the DeLuxe chassis, and just 129 on the Custom chassis. By 1951, every Mopar wagon was all steel.

1949-'50 Oldsmobile

DODGE presents three completely new cars (

the Count

A station wagon body was available on the series 88 in large part because it was available on the lower-line, six-cylinder series 76. But mix in 135 horses of Rocket V-8 power from the full-size series 98 line, and the 88 station wagon is hot enough that you question its wood construction. Panels were mahogany veneer. A total of 1,355 were built for 1949.

1949-'50 DOCGE Dodge's all-new-for-1949 Coronet received a wood-bodied wagon featuring mahogany and ash construction, as well as a warmed-

over 230-cu.in. six putting out 103 horsepower. Dodge built 800 Coronet wagons for 1949 and just 100 for 1950; starting in 1951, Dodge's wagons sported all-steel construction.



EDITOR WANTED for the National Woodie Club's *Woodie Times*

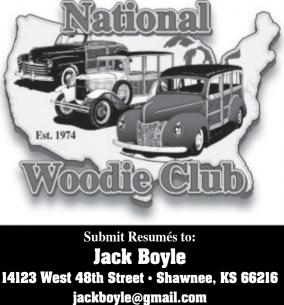
REQUIREMENTS

Experience in layout software such as InDesign
Knowledge of digital media, website upkeep

Ability to meet deadlines

Possess superior publishing and writing skills

Interest in the Collector Car Hobby





1949 Plymouth Plymouth's new Special Deluxe station wagon clocked in at an even 186 inches in length. The long-serving straight-six engine was treated to a new intake manifold and 7:1 compression ratio that helped it develop 97 horsepower. The new style for the 1949 model year allowed 37 percent more glass in the windshield, a frame that was 23 percent more rigid, and a lower center of gravity for improved handling.

Tilsee & Sunak

The Complete

TIN

PONTIAC Line for '49

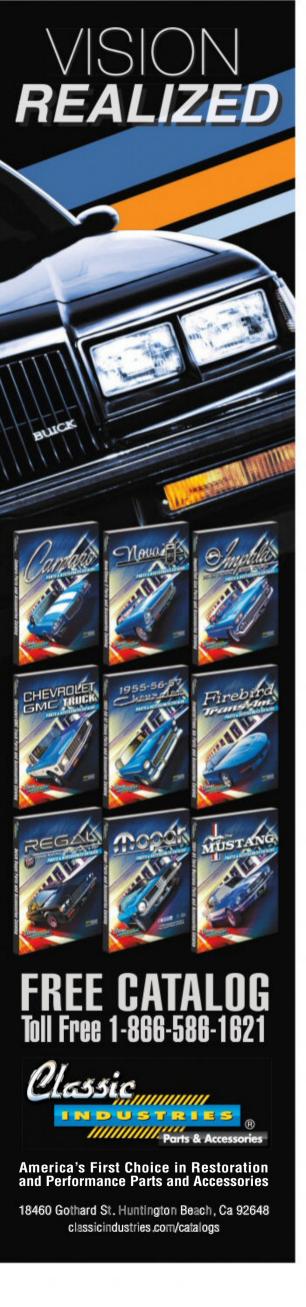
1949 Pontiac

Pontiac probably had the greatest variety of wagon variants available in its day: six passengers or eight, and a choice of DeLuxe Metal Station Wagon (new for '49) and DeLuxe Wood Station Wagon. Each combination had its own GM style number, although the \$2,543 eight-passenger model and the \$2,622 six-passenger model were priced the same, regardless of material.



1951 Ford/Mercury The wood-bodied wagon had largely seen its end by 1949, when most American car companies brought out their newly redesigned postwar models; Mopar models lingered until 1950. Only Ford (and by extension, Mercury) held fast. They were the innovators in the field, after all, and they held on to the dream of the wood-bodied wagon longer than anyone else. Ford made 29,017 Country Squires and 3,812 Mercurys for the year, perhaps to use up the last stocks of wood.





Wooden It Be Nice?

A survey of wood-bodied wagon advertising through the decades

BY JEFF KOCH • ADS FROM THE AUTHOR'S COLLECTION AND THE HEMMINGS ARCHIVES

n the beginning, it was a question of technology and recycling. A car chassis, with larger, truck-like capacity to haul people and stuff from the train station to the hotel, seemed like a good idea. These types of haulers were coachbuilt in the Teens and 1920s. Ford itself started building Model A station wagons in 1929 in low quantities—at least in part because of their hand-built nature (and the costs this added into the price). Tooling up for a steel body, when no one knew whether the concept would take off, seemed foolhardy.

But the idea caught on, and soon most American car companies offered station wagon body styles to accommodate growing families. Before the war, wood was by choice and convenience, and due to the ease of making quick design changes without incurring the high cost of fabricating body panel dies, it became the dominant body material in station wagons. More than that, wood-sided wagons possess a unique magnetic attractiveness that people are fascinated by.

After the war, for a while, it was by necessity: Materials shortages plagued manufacturers, just as American car companies were ramping up to deliver new models to a country starved of them for nearly four years. Metal was in short supply, but wood was still available in America's plentiful forests. By 1952, the last wood-bodied wagons had been built: In the age of rockets, A-bombs, and V-8 engines, the idea of door latches squirming their way open due to torsional chassis flex, and the crashability of wood at everincreasing highway speeds, was simply unacceptable. Metal replaced wood, and while wood-bodied cars never made any significant reappearance, simulated timber appliques continued to be used as trim well into the 1990s.

By the mid-1930s, most companies had a wood-bodied station wagon in their lineups, and they were advertised alongside coupe, sedan, and convertible models in due course. The idea of a woodbodied wagon was not new, or news, and so didn't bear a great deal of discussion beyond the extra headroom, cargo, and passenger capacity, and perhaps an element of style. Very little was said about the materials themselves (save for Mercury's details, designed to attach additional luxury to the upscale brand). In other words: they were just normal cars then. Woodies didn't seem special until they'd gone away.

AN AMERICAN BEAUTY THAT LOVES HARD WORK !



Turns heads on the Boulevard ...takes its turn at hard work, too!

Hun's the car that's perfectly at huma a willing work beam. A beam's for hold, a willing work beam for the whole family. In three full width warn carry nine people in meany remfort. Its faar wide dows spell "easy in, carsy out" without twisting and appiming. But to really appreciate this new body. Station Wagen, watch it swallow the biggest, bulkiest hands you have. The power of its 'Get Away' engine will theil you with flabiling accidentistics ... or the bitute form of its load bagging ability. There's the power of its load bagging ability.

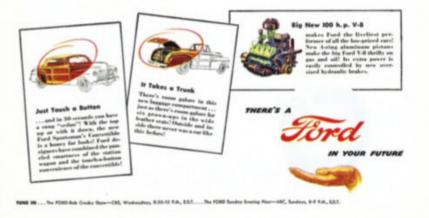
Drive and, at moderate extra cost, Ceynamatic to completely five you from shifting. Yes, your dollars will bay a far higger value in this American Beauty that loven hard work?



Dodge seems far more concerned with advertising its wood-bodied Coronet wagon's easy tailgate loading, middle-row seats that fold for easier in/out from the back, and a combination of Fluid Drive and Gyro-Matic shifting.



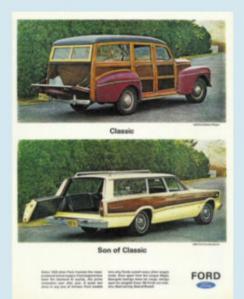
NEW 1946 FORD SPORTSMAN'S CONVERTIBLE!



With steel still in short supply postwar, Ford figured out a way to use less metal per car, thus extending its supplies and sales — use more wood! And so, the pop-top 1946 Sportsman: half wood, half steel, all showy.



Buick keyed right in to the wood-bodied Estate Wagon's upscale elegance in 1946, suggesting the hunt club, the golf course, or a trip to the country — all while extolling a limousine-like ride and Buick Fireball straight-eight power.



Ford would like to remind you that it's been making wagons forever, and that past editions, like the 1946 model shown here, were "classic" just 20 years later. The 1966 model is now also classic.



Just six short years after the Sportsman, Ford advertised the Country Squire and its "real wood trim over mahogany-finished steel panels" — technically still a woody, though the days of an all-wood body were gone.



en filte troch Roste og at skonge i er hefter som i førs i som i førs ander som i s

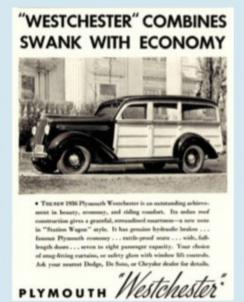
The postwar sales rush was on! The ad for this 1947 Pontiac is more indicative of Pontiac as a brand — attempting to differentiate it from any other automotive marque out there than it is about the model shown.



"Ultra smart and extra sturdy"...Pontiac presents a dichotomy in its \$1,015 wagon for 1940: It promises low price, seating for eight, and enough style to stop a fox hunt dead in its tracks. Tally ho!



Starting in 1948, Packard combined woodie wagon style with a sedan, calling it a "station sedan." The tailgate was wood, but the doors were all steel. It lasted until the 1951 models appeared.



Plymouth's salvo in the wagon wars was the Westchester, which launched in 1934. The 1936 model seen here came standard with "rattle-proof seats"; a buyer chose side curtains or "safety glass with window lift controls."



Plenty of wood-bodied-era ads give some lip service to the wood body — they make it sound special. For 1947, Chevrolet doesn't even bother to give it hype — it's all about low costs and big-car comfort.



Unlike some nameplates of the era, Mercury wrote station wagon copy to accompany the station wagon images used in its ads, including mentioning maple framing and a choice of birch or mahogany panels for the body.



The 1942 Plymouth was given a restyle at just the wrong time. The lack of running boards? That fresh new face? Immaterial with war coming; blackwall tires suggest austerity, although there's ample chrome.



he engine ticked softly, cooling down as the Imperial Custom sedan took a well-earned rest in the Hemmings Motor News parking lot on that summer afternoon. This be-finned barge, a rarely seen relic of upscale mid-century modernity, had just ferried the Douglass family without complaint from their hometown on the Canadian border of west-central New York, a drive of hundreds of miles on highways and back roads that took more than five hours. It was still relatively new and unproven to Richard and his boys, Lloyd, Zeb, and Asa, but the Mopar flagship had concretely demonstrated its comfort and reliability. Before that evening's Cruise-In was finished, it would inspire hours of questions and reminiscences, and much to its caretakers' surprise, also earn them an award.

Faded Finery

Luxury motoring needn't cost a fortune, as proven by this unrestored 1960 Imperial Custom

> BY MARK J. McCOURT PHOTOGRAPHY BY DAVID CONWILL

For an ultra-low production, handfinished prestige car whose 1960 list price of \$5,016 — the inflation-adjusted equivalent of around \$43,600, today — was akin to that of a Cadillac Sixty-Two, this Imperial wouldn't have the indulgence of being treated as a cherished collectible,

PPP 1

but nevertheless it endured the decades. When Richard found it for sale in early 2016, the timeworn post sedan registered around 82,000 miles on its odometer. It was located in Rhode Island, and advertised as being yard driveable. Because it took some months for a willing buyer to appear, he was able to negotiate the purchase for just \$4,000. "It hadn't been on the road in I-don't-know-how-many decades, but it ran," he recalls. "The seller found out, just because a car is old, that doesn't make it worth much."

A lot of bang for those few bucks is



Functional pushbutton transmission controls, electroluminescent gauges, and an elliptical wheel add to the appeal of the budget classic.

something this Imperial Custom offered in spades. Under its distinctive skin, the body-on-frame sedan was powered by one of Chrysler's stoutest engines of the day: a Carter four-barrel AFB-carbureted 413-cu.in. V-8 with a 10.1:1 compression ratio, making 350 hp at 4,600 rpm and 470 lb-ft of torque at 2,800 rpm. It sent that output to the rear wheels through a dashboard pushbutton-controlled threespeed TorqueFlite automatic. Standard power assists eased the burdens of steering and braking this 4,700-pound car. Chrysler engineers ensured the occupants' comfort within the 129-inch wheelbase, thanks to the automaker's trademark torsion bar-sprung Torsion-Aire independent front suspension and semielliptic rear leaf springs with "sea-leg"mounted Oriflow shocks.

Upon getting the car into his home shop, Richard took stock of what his hard-earned money had bought. That it was solid under the Lustre-Bond enamel paint—this Light Mint hue being one of an impressive 17 colors available for Imperial buyers at the start of the Sixties—was a key point for its newest owner. True, some rust had appeared around the extremities, and a bit of trim was missing here and there, but this car presented honestly, seemingly proud of the decades it has survived in spite of marginal care. He relates that what we see today is "pretty much original paint," apart from some touching-up on the lower sections of the doors. The interior shares that mostly factory condition. The unusual 30/70 split front bench seat, with its 6-inch-deep foam cushion seatbacks, was at some point reupholstered in green vinyl, but the rear bench and door panels still wear their crown-patterned green nylon fabric with coordinating saddlegrained vinyl bolsters.

With the Imperial up on a lift, the Douglasses could evaluate the condition of its mechanical and electrical systems, determining what would be required to recommission it to roadworthiness. Because they knew nothing of the car's maintenance history up to the point of purchase, it would be up to them to make it safe and trustworthy. "It needed some work on the exhaust. The gas tank was leaking, so I put a new one in," Richard recalls. He continues; "I replaced the front brakes, as well as all the brake lines; that's a safety item I do with every old car, because when one line goes, another one isn't far behind. I had to work with the lights, and put new tires on it. This was minor stuff. I put about \$1,500 into the car after buying it. I thought it was a great deal for the cost."

That road trip to Hemmings was among the earliest this spacious four-door had taken the family on in the four years they've owned it, and each outing has created memories — especially for Dad, behind that elliptical-shaped steering wheel. "That 413 V-8 is a very powerful engine, it accelerates surprisingly fast for the weight of the car. Of course, on the highway it loves to cruise at 70-75 mph, and it idles at that speed," Richard muses. "I get around 17 mpg, which is not bad at all... I have an Expedition that gets less mileage than that!

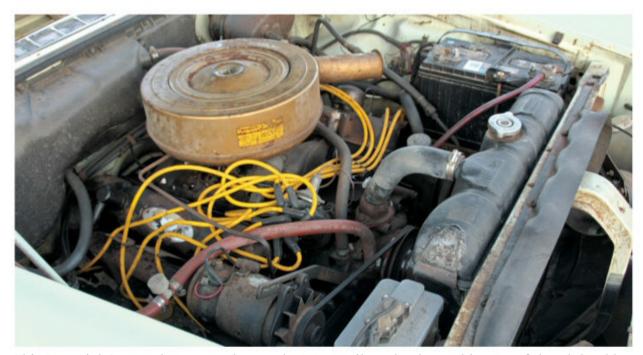


The front bench seat was reupholstered in plain green vinyl, but the rear seat and door panels still wear the stylish factory-installed, vinyl-trimmed nylon cloth.



"It floats down the road, and you feel like you're sitting on your living room couch. You hit bumps and don't feel them, but the downside is that it does handle like a boat," he tells us with a grin. "You have to slow down when you're going around corners, because it doesn't handle like a modern car at all—the Imperial leans. If the sign says it's a 40-mph turn, you'd better go 40 mph; in a modern car, you can take it at 55, maybe 60. And the drum brakes all around are not a problem, but you have to respect them, and not expect them to stop the car like fourwheel discs. People have said I should do a disc brake conversion, but that's not necessary—I'm just a bit more cautious, and don't stomp on the brakes in the last 10 feet before I have to stop."

I get around 17 mpg, which is not bad at all... I have an Expedition that gets less mileage than that!



This Imperial Custom has covered around 90,000 miles, thanks to this powerful and durable 413-cu.in. V-8; its four-barrel carb will be replaced to enhance driveability.



The Imperial Custom has brought the Douglasses to shows in Pennsylvania, Massachusetts, Canada, and beyond, accumulating more than 8,000 miles in the last four warm weather driving seasons. Like his 1965 Rambler Marlin ("Affordable Exclusivity," HCC #184), this one-of-2,335-built Mopars embodies Richard's appreciation for less common older cars that trade ready parts availability and car-show ubiquity for a low entry price and offbeat style. He tells us a new carburetor is in the big sedan's future, but a cosmetic refresh isn't: "I appreciate the beautiful craftsmanship that people put into nut-and-bolt restorations, but that's prohibitively expensive, and I would never think about trailering a car to a show. To me, they're meant for driving. We get so much enjoyment out of resurrecting these cars that have been sitting for decades, putting them on the road and taking them to shows. It's a good family adventure; fruition is getting in the car and going on a trip." a

historyofautomotive design 1915-1958



J.T. Cantrell & Company Builders of wood-sided Suburban bodies

BY WALT GOSDEN • ILLUSTRATIONS COURTESY OF THE WALT GOSDEN COLLECTION

tation wagons, also known as depot wagons or depot hacks, give an accurate depiction of the body style and function of the vehicle they represent. Horse-drawn wagons were used to deliver people to train stations and depots before the invention of the motor car. Almost immediately upon its invention, the automobile would see commercial application for businesses that needed to move products, goods, and people. Station wagons would shuttle people and their luggage primarily between hotels and train stations, but it was soon realized that they could also be useful to transport goods and larger families and their belongings much easier than a less spacious car.

One of the most prolific builders of station wagon bodies was J.T. Cantrell & Company of Huntington, Long Island, New York. As a successful iron worker, carriage maker, and boat designer and builder, Joseph T. Cantrell adapted his business and skills to become a premier designer and "maker of Suburban bodies," which we now view as the wooden-bodied station wagon. In all the company's advertising up through the early 1930s, it never referred to its coachwork as a station wagon, but always as a suburban body. But, as other manufacturers came on the scene, Cantrell started to call its offerings "station wagons" by the late 1930s.

Cantrell, the man, was born on the north shore of Long Island in 1875, one of 13 children. When he was 13 years old, he relocated 10 miles west to Huntington to attend school and learn a trade. He then worked in carriage building factories close to New York City, and one in Bridgeport, Connecticut. He used a sailboat to cross Long Island Sound to get to Connecticut, returning home to Huntington on weekends.

In 1905, when he was 30 years old, he purchased Scudder's blacksmith shop and carriage stand at 250 Main Street in Huntington; a bank building is currently located there. In 1909, Cantrell moved that carriage business to nearby 16 Wall Street. By 1913, his younger brother Albert joined the business. Two years later, the company had transitioned from manufacturing horse-drawn carriage bodies to designing and constructing coachwork for cars, which became its primary business for the next 35-plus years. It was at this point the name was established as J.T. Cantrell & Company.

Cantrell specialized in depot wagons made of wood. Truck chassis, at the time, were too large and more awkward to



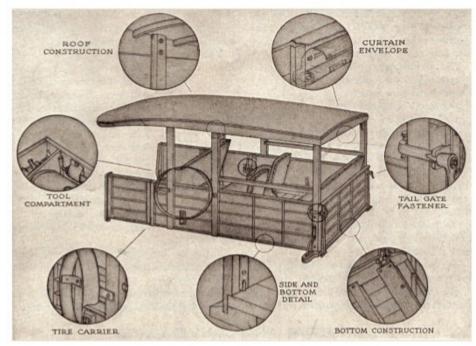
This photograph of Joseph Cantrell (left) and his brother Albert (far right) was taken outside the office at the Cantrell factory on Long Island.

The Cantrell factory in Huntington, New York, in the 1940s.

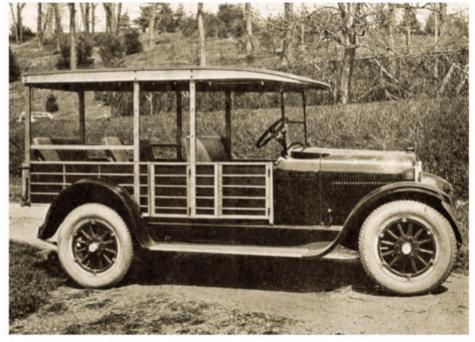
The field next to the Cantrell factory was full of rear body sections removed from Chevrolet two-door sedans. After the cars were shipped from the Chevrolet plant in Tarrytown, New York, Cantrell removed what was not needed. It was the most economical way to obtain what the manufacturer required, as well as have a driving, moveable platform.



Albert Cantrell with one of the company's earliest efforts, several decades after it was designed and built.



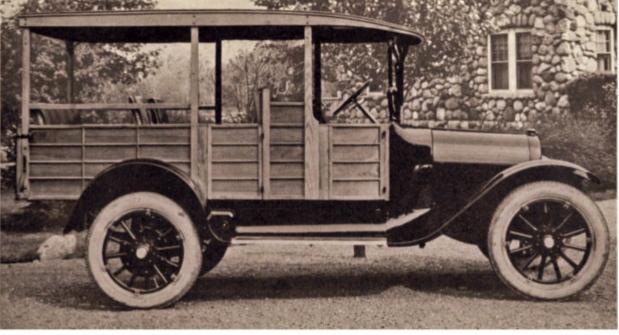
Details of the suburban bodies from the mid-1920s showing "exclusive features covered by U.S. Patents."



The Dodge Brothers chassis circa 1926 used a touring-model cowl and windshield, as well as hood and fenders.

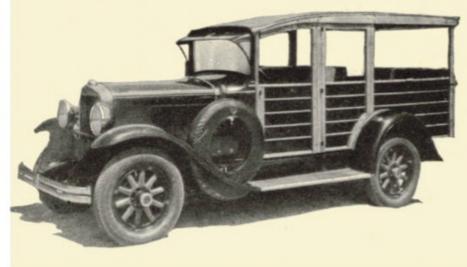


This decal was affixed to the interior door post on Cantrell bodies to identify them once they were completed.



Cantrell advertised extensively in the upscale *Country Life* magazine that was published nearby in Garden City, just 25 miles west of its factory. The early bodies featured narrow doors and a high roofline. A Dodge is shown here in 1922; also available for immediate delivery were suburbans built on Studebaker, Ford, and Essex chassis.





A Dodge Senior Six chassis received the suburban body late in 1927. The dark wood panels would be featured on most Cantrell bodies through the early 1930s, but lighter color options were offered to suit purchasers' preferences.

Graham-Paige chassis were the recipient of Cantrell suburban bodies as well, but the customer had to arrange to have it delivered. Only Dodge and Ford chassis "can be supplied anywhere" since they were readily available.

drive, thus a compromise to have a vehicle with a body to easily accommodate people was invented. Cantrell's first bodies were not station wagons, but cab and box type for the Primene Baking Powder Co.

The main production of suburban bodies that Cantrell built were mounted on Dodge, Ford, and Chevrolet chassis, as they were the most popular and easily available on Long Island. The Chevrolet chassis were driven down from Tarrytown, where the Chevrolet factory was. This was quite a trip in the early post-World War I era, as many of the bridges we have now did not exist. Ferry service across Long Island Sound was extensive, departing from numerous locations in Westchester County. Dodge chassis were shipped directly by rail from Detroit.

It would be nearly a decade later when a suburban/station wagon would find favor with wealthier clientele for use on their estates, thus more fashionable and expensive chassis would be ordered to have wood wagon bodies fitted. These automobile chassis were obtained directly from the factory or from local car dealerships. The customer would go to the local dealer, order a new car, then, upon delivery, drive the car to Cantrell.

In the shop, the new factory body would be removed aft of the front door posts, yet Cantrell would try to use most of the original body, including the cowl, windshield, and sunvisor area; this practice continued up until WWII.

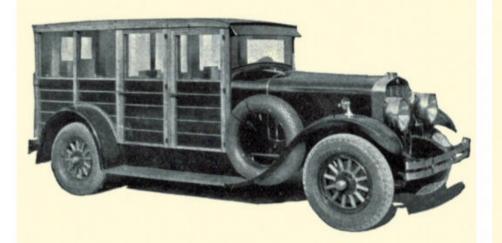
As Cantrell's business expanded, in 1925, a new plant was built and opened south of the village of Huntington on McCay Road, with the Long Island Railroad tracks along one side of the property. This was an enormous advantage to the business as the railroad siding allowed chassis, complete with cowl and fenders, to be delivered directly to the factory. By about 1930, Cantrell employed 35-40 people; in later years, the company employed nearly 150. Besides bodies, it also made all the iron brackets, braces, tire carriers, and other metal hardware required to assemble them.

When Cantrell started to receive larger orders for its suburbans, many auto manufacturers had contracted with it to supply the station wagon bodies featured in the Cantrell sales literature.

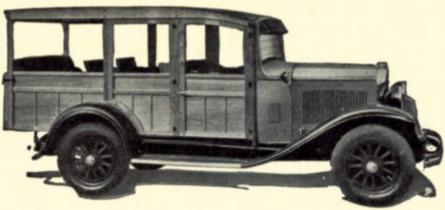
According to customer orders, by the late 1920s, larger car chassis, such as Franklin, Buick, Cadillac, and Pierce-Arrow, were being used. These requests were generated by advertisements that Cantrell placed in society periodicals, including *Country Life* and *National Sportsman*. The ads stated: "Your satisfaction is assured by the good name of CANTRELL and our 20 years experience in designing and building distinctive SUBURBANS."

By 1937, Cantrell was regularly building bodies on Chrysler, De Soto, Chevrolet, Dodge, and Willys-Overland chassis; bodies on Fargo and De Soto chassis were exported to Europe as complete cars. Each body featured a metal tag: "J.T. Cantrell & Co. Body Builders, Huntington, N.Y." Cantrell also held design patents for many of the components it created, such as Patent No. 1417140 for its cast metal spare tire holder.

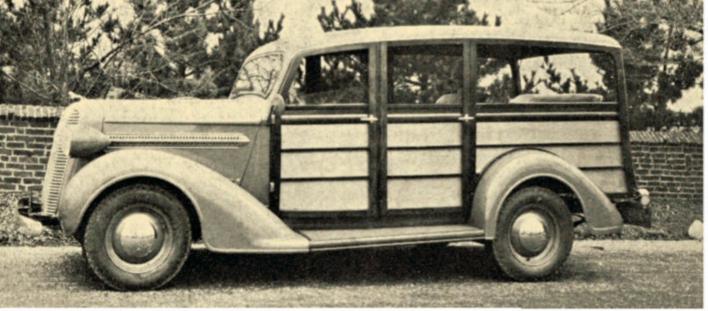
Business thrived and, during its peak production years in the 1920s, Cantrell was producing 10 station wagons per day



Starting in 1928, Franklin chassis received the Cantrell suburban bodies, but were not mentioned in any magazine advertisements. Luxury chassis from Cadillac and Pierce-Arrow were used, too, but, like Graham-Paige chassis, they would have to be ordered by the customer. There was a major Franklin dealership about a mile south of the Cantrell factory and a similar Cadillac dealer 25 miles west, so obtaining these chassis did not prove difficult.



By 1930, the Dodge Standard Six series saw all light-colored wood used in the construction of the bodies; Cantrell noted that the cars were "much more distinctive in appearance." On some station wagons, door panels incorporated vertical pieces of wood in the lower portion, thus breaking briefly away from their traditional horizontal-only design.



In 1937, the majority of bodies built by Cantrell used darker, mahogany framework with light-colored panels as seen here on this Dodge.



In 1938-'39, Packard Six (models 1600 and 1700) and Eight (models 1700 and 1701) chassis were fitted with Cantrell station wagon bodies. Promotional brochures were printed specific to that body style by Cantrell for 1938 and by Packard for 1939.

to meet demand. All bodies were built by hand with minimal or no assembly-line machinery to assist production. The body side panels were made of walnut and had a dark color in contrast to the wood used to frame the body, such as doors, tailgate (called a tail board by Cantrell), and roof. The body sills, frame, top rail, door posts, sub sills, and tail board were made of oak or ash. The tail board had special hooks to keep it in place, but many customers used chains to support the tailgate when lowered. A tool compartment was located under the front seat, "which makes it unnecessary to carry a toolbox on the running board," stated Cantrell.

Floors were covered in linoleum and seats upholstered in a dark mottled blue water-resistant material. The curtains in the rear quarter panel window area were black waterproof material, as was the curtain above the tailgate; they were made of imitation Spanish leather. The curtains rolled up inside the top rail above the rear quarter windows and were enclosed in an envelope made of the same material. When not in use, this allowed them to be fully protected from the effects of the sun. The bottoms of the side curtains were wrapped to keep out all drafts, as well as water. In the 1920s, Cantrell provided a printed account of how this was done, to its perspective customers in sales brochures. "The curtains are held securely in place no matter how rough the weather may be."

Cantrell promised that the passengers were accommodated with great care with seats made as comfortable as possible. "All seats were reinforced with springs and stuffed with real curled hair." The middle and rear seats were removable, and the rear seat could be moved to the center of the car between the rear doors to allow extra room



Five different makes of chassis were readily available with no special effort having to be made in 1938; seen here is a De Soto. Cantrell had developed a good relationship with Chrysler Corporation, so its station wagons were easily ordered through Chrysler's network of dealerships.

Telephone, Huntington 627

NEW YORK

HUNTINGTON

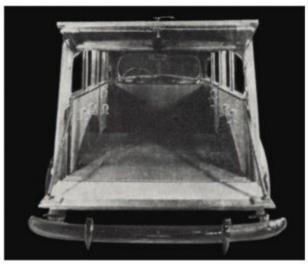
at the back for packages, but also to "carry several dogs or, on the return from camp, a large quantity of game." They also noted that "stains will not harm a suburban body."

By 1927, Cantrell was promoting its bodies mounted on Dodge Brothers chassis and issued promotional material specific to the Dodge: "The Cantrell Suburban Body for the Dodge Brothers chassis was designed not only for the work required of it, but also with an eye to its appearance."

By 1938, Packard chassis in both Six and Eight series models started to be used. Cantrell announced that white maple with mahogany trim was used for the visual effect of contrasting woods, along with extra coats of "the best long wearing varnish," which made Cantrell's work stand out from ordinary station wagons. Safety glass



Interior view of the 1938 Packard station wagon showed its ability to accommodate a sizeable amount of luggage.



With the rear and middle seats removed, the measurement from the back of the front seat to the tailgate was 108 inches.

was now being used for all windows.

The seat material was still a heavyduty leatherette, now brown in color to better harmonize with the natural color of the wood. Rear and center seats continued to be interchangeable to accommodate larger loads as needed. Rubber matting for floor covering, maroon in color, replaced the linoleum of previous builds. Covered chains to support the tailgate were now standard equipment, and the spare tire for six-cylinder Packards was mounted through the floor, while the eight-cylinder Packard's spare was in the front fender.

For the remainder of the late 1930s until World War II, Packard was promoted by Cantrell in its advertising folders, stating that the bodies had "truck space with car comfort" and that there was "no need to sacrifice smartness for utility."

The Cantrell patented design of its station wagons continued with "a mahogany structure with finest white maple panels." The front seat was now adjustable by 4 inches to provide the most comfort for the assorted heights of the drivers. Special orders for wagon bodies built to meet the individual needs of a customer were still being accepted, and a small number of custom-equipped wagons were built as well. This was especially true of local customers from the nearby large estates on Long Island's wealthy North Shore.

Just about anything could be designed to meet a customer's wishes, including special tailgates to allow hunting dogs to enter and exit and space for ammunition boxes; everything was taken into consideration and provided for by request. The personnel who worked for the estates did not have to travel any great distance to see that the specific requests were being built to precise instructions.

After WWII, Cantrell continued in business, but most of the chassis that received its station wagon bodies were on Dodge "Job-Rated" ¹/₂-ton B-108 truck chassis and Studebaker truck chassis. For those who wanted their wagon built atop a Dodge chassis, they had to place an order with the Dodge Distribution Department for the B-108 cowl-windshield chassis "in the regular manner" with instructions to ship to Cantrell; at the same time, the order for the new wood body would have to be placed with Cantrell.

The bodies, in 1948, were constructed of ash for the frame structure with panels of Marine-type mahogany plywood. Individual side panels were now being used to simplify replacement in case of damage. As with pre-WWII bodies, the exterior wood pieces exposed to the elements were joined with water-resistant glue and "every piece of wood was submerged in



Post WWII, in 1948, saw Cantrell mounting its bodies on the Dodge B-108 truck chassis.



The 1948 Dodge truck chassis with the station wagon body provided a huge amount of room; the body weight was comparably lightweight at 865 pounds.



In 1949, the Studebaker truck chassis also provided a platform to receive Cantrell station wagon bodies, which now featured an updated body design.

toxic wood primer as a precaution against dry rot, fungus and insect attack." Three double-coats of oven-baked spar varnish were used to coat the wood body.

In 1950, Joseph Cantrell retired at age 75 and turned the business over to his brother and long-term partner Albert. By 1958, the firm ceased operations. All-metal station wagons had become very popular with the many new families that appeared on the scene after WWII. Metal wagons also gained popularity, because they didn't require any maintenance, unlike what the wood-bodied wagons needed. No one wanted to sand and revarnish the wood body of their car every year if the car was in constant use all year round.

education profile

RPM Foundation

Helping encourage and fund the training of future classic car specialists



BY MARK J. MCCOURT • PHOTOGRAPHS COURTESY OF THE RPM FOUNDATION

t's the topic of our times, an ongoing discussion that involves some handwringing and gnashing of teeth: Who will care for our more than 120 years of automotive heritage, as the world of personal transportation evolves into forms we can't yet conceive? Since the turn of this century, there have been groups and individuals who have stepped up to offer solutions and support for new generations of automotive technicians and preservationists. The RPM Foundation, now in its 15th year and enjoying enhanced assistance from numerous motoring institution allies, is an organization that is at the forefront of the push to ensure a secure outlook for the old-car hobby.

RPM Foundation — its name short for "Restoration. Preservation. Mentorship."—grew out of the Collectors Foundation, a 2005 directive of the Hagerty Insurance Company. "McKeel Hagerty and his senior executives paid serious attention to a challenge and cautionary tale presented by Jay Leno, about our hobby and the next generation's stewardship of our collector cars and motorcycles," explains Jennifer Maher, the CEO of this organization. She notes that the Collectors Foundation begat the Hagerty Education Program at LeMay—America's Car Museum, and that, in turn, was superseded by the RPM Foundation.

Based in Tacoma, Washington, this learning-focused association falls under

the umbrella of America's Automotive Trust (americasautomotivetrust.org), the not-for-profit corporation determined to ensure the continuation of U.S. automotive heritage that also oversees LeMay (americascarmuseum.org), and the related Club Auto and Concours Club. The RPM Foundation bills itself as a "services-providing, resourcesharing, grant-giving and mentorship organization" that encourages individuals—people aged 18 to 25 are the primary beneficiaries, but it's open to students of all ages—to enter the automotive technical fields, with a focus on collector-car restoration and preservation.







Indy racer Lyn St. James toured Sonoma Raceway with RPM students from San Jose Technical College during an SVRA Series RPM Off To The Races program.



McPherson College student Sean Robinson has attended RPM Foundation programs since he took shop classes at Lyons Township High School in Illinois.

During Shop Hop Houston, RPM students met with Ambassador Drew Feustel, who told them he attributes his career as an astronaut to working on 1950s Jaguars in college.

RPM puts its mission into action primarily in the form of funding grants and scholarships at the high school and post-secondary levels, Jennifer tells us. "We work hard all year to raise awareness, friends, and money, and are lucky enough to attract like-minded collectors, vintage racers, shops, alumni, and car clubs to support our efforts. We have major donors in the industry, which enables us to fund exceptional programs and projects around the United States. But collectors are our key source of funding, and we must win all of their hearts to do what we do now and in the future."

The money that this 501(c)(3) organization raises is given to the educational institutions, and it's the schools that grant scholarships directly to the future technicians. Last year, the RPM Foundation assisted 1,146 students across the country, bringing its total impact to more than 25,000 individuals to date. "We find them by identifying above-and-beyond instructors at automotive shop programs at schools across the country and inviting them to make their students aware of programs in their area. All told, RPM has awarded over \$3.5 million in scholarships, gap-funding, and internships," she explains. Among those 2019 students, 350 received benefits through RPM's series of complimentary programs designed to engage young people, their parents, and teachers. Since 2016, 48 of these programs have been hosted around the

country, and the current roster includes Shop Hop, Behind The Scenes with RPM, Off to The Races with RPM, The Apprentice Program, and The Concours Experience. Jennifer adds, "These are designed to get students out into the field to meet their future customers and employers, and identify potential internship and apprenticeship sites."

An impressive 32 institutions in 17 states received monetary funding through the RPM Foundation last year. Among them were secondary education providers like Kansas' McPherson College (HCC #173) and the Pennsylvania College of Technology (HCC #183), and high schools with notable technical programs like Alhambra High School near Los Angeles, California, and the Green Bay, Wisconsin-area Freedom High School. A selection of automotive history facilities also benefited from RPM fundraising, including the Gilmore Car Museum and Indianapolis Motor Speedway Museum. "McPherson College, the only institute in the U.S. with a four-year bachelor's degree in automotive restoration, is a major funding recipient of the **RPM** Foundation. McPherson students go on to the most prestigious restoration shops in the country, including The Creative Workshop in Florida, Paul Russell and Company in Massachusetts, and Vintage Racing Motors in Washington," Jennifer says. She notes that funds have helped students of other secondary schools like Clover Park Technical College in Lakewood, Washington; East Valley Institute of Technology in Phoenix, Arizona; and Central Carolina Community College in North Carolina.

"RPM students go on to careers in all facets of the restoration industry," she continues. "They work in restoration shops, performing body repair and fabrication, paint preservation and refinishing, engine revival and rebuilding, interior recreation, and electrical rewiring. They helm concours and manage extensive collections. They curate vintage automobile, motorcycle, and marine museums across the country. And some of them even return to educational institutions to carry on our shared goal of creating a career path in restoration for the next generation of those who have a love for collector vehicles."

Numerous former RPM grant recipients are giving back to their benefactors and to the classic car, truck, motorcycle, boat, and airplane hobby through their work as RPM Ambassadors. Among the 20 men and women who have taken on this outgoing role are people actively working in auto restoration/preservation and conservation, in engineering, in education, they're collectors, and even a vintage-car enthusiast working for NASA. Two of the highest-profile volunteer Ambassadors are racer Lyn St. James and astronaut Dr. Drew Feustel; in recent years, the 1992 Indianapolis 500 "Rookie of the Year" award winner and International Space Station veteran scientist have publicized RPM Off to the Races, a program run with help from the Sportscar Vintage Racing Association that raises student awareness about breaks in the fields of vintage racing and auto restoration.

That promotion of career opportunities is a major part of RPM Foundation work, and its website maintains a page that should be a first stop for people looking to enter this field. It's filled with listings and informational links to paid internships and apprenticeships with museums and restoration shops, to summer learning programs, and to job openings with top-level firms located around the country. A search at the time of this magazine's production revealed positions available for technicians with skills in engine building/mechanical work, chassis fabrication, upholstery, detailing, and more.

Like any well-run organization with a solid foundation and thriving future plans, this one is continually evolving to better fulfill its mission. A recent development that enhances the ability of the RPM Foundation to do its work is the strategic alliance it announced with TechForce Foundation (www. techforce.org) in October 2019; broadly, this partnership offers a shared vision of promoting technical training, with TechForce focused on modern vehicles and RPM aligned with the multi-milliondollar restoration industry. Jennifer is acting as CEO of both foundations, so their teamwork is seamless.

As she explains, there's more to come: "In 2020, RPM will expand its apprenticeship program that provides students completing their post-secondary education in restoration, a chance to learn in-shop, alongside a skilled mentor, and get the valuable hands-on experience needed to work on these valuable collectibles. RPM is also developing a pilot program around high school internships this year, and will launch more storytelling around the opportunities and benefits of pursuing the restoration and preservation artisan and craftsman career path.

"Since our founding, RPM's nationwide network of mentors, ambassadors, automotive instructors, shop owners, corporate partners, and private donors has grown exponentially. With that growth comes more opportunities for collaboration and integration," Jennifer muses. Its heritage ensured, the old-car hobby's future is truly bright.

CONTACT: RPM Foundation 253-779-8490 www.rpm.foundation



Roy Klinger, a restoration instructor at the RPM Foundation-funded Pennsylvania College of Technology, works with a student on a Ford Model T.



Above, RPM Foundation scholarship recipient Michael Sagols is currently pursuing a business degree with the goal of opening his own automotive restoration shop. Below, RPM-funded students spend months working alongside seasoned professionals to gain hands-on experience in panel repair and many more skills.



classictruck

PEACE JEEP

Willys soldiered on after the war with the new 1946-'49 CJ2-A

WORDS AND PHOTOGRAPHY BY MIKE MCNESSOR

ncle Sam's War Department wasn't the only agency interested in jeeps during World War II — the Department of Agriculture had its eye on the iconic four-wheel-drive, quarter-tonner as well.



What if, officials wondered, after victory overseas, surplus jeeps could aid farmers in crop production and help meet increased demands for food? The State Department, too, had a stake in this: What if liberated countries around the world could use surplus jeeps to help increase their food production after the war?

In the spring of 1942, the Department of Agriculture procured a pair of military jeeps, one from the War Department and the other from Willys-Overland. The jeeps were turned over to the Bureau of Agricultural Chemistry and Engineering, which put them through their paces at the Farm Tillage Machinery Laboratory in Auburn, Alabama (now the National Soil Dynamics Laboratory).

The jeeps were hitched to plows, cultivators, mowing machines, harrows, and lime spreaders to test their mettle tackling common farm tasks. The verdict? Not surprisingly, the jeeps couldn't match a tractor for row-crop work: They were too low and lacked adjustable-width tracks that would allow them to maneuver over and around growing crops. The jeep also couldn't match a tractor's fuel consumption. While a tractor with a gas engine might turn 1,300 rpm under a load, the Willys' 134-cu.in. Go Devil four-cylinder engine needed to turn 2,000 or more rpm. Towing a 6-foot tandem disc harrow for 6.5 hours, the jeep used 50 percent more fuel than a comparable tractor doing the same work. The need for the jeep to spin higher rpm also raised the question about engine durability: Would the Go Devil four-cylinder need to be rebuilt more frequently than, say, the 120-cu.in. fourcylinder in Ford's 9N or 2N?

Testers concluded that the jeep could be used to transport farmhands to the fields, round up cattle, tow trailers, serve as a stationary power unit, and access



The stock 134-cu.in. L-head Willys "Go Devil" engine was given a .060 overbore and an accessory oil filter. With 6.48:1 compression and a one-barrel Carter, these engines made 63 hp at 4,000 rpm and 105 lb-ft of torque at 2,000 rpm.

work areas that conventional trucks and cars couldn't. If it were equipped with a lower gear ratio, a governor, and a threepoint hitch, it might be able to handle light fieldwork. But this could hamper its on-road performance, making it as slow as a farm tractor around town.

Another organization paying close attention to the government's jeep field tests? Willys-Overland. It was in the company's best interest to develop some peacetime purposes for the jeep, which was becoming wildly popular with GIs. So much the better, if it would help the company sell new vehicles rather than watch the market be flooded by inexpensive government surplus jeeps. Willys-Overland even offered to provide eight more jeeps to the Department of Agriculture for further testing, but the War Department intervened, wanting all available jeeps manufactured sent to U.S. troops.

Near the end of the war, Willys decided to explore the potential of building a jeep more suited to civilian farmwork, and the Civilian Jeep (with a capital "J") was born. Details about a prototype dubbed CJ-1 are scant and none exist today, but CJ-2 is now legendary. There were three forerunners to the production CJ-2, one of which the company called "AgriJeep," clearly a nod to the farming market. The production rig was ready in 1945 and Willys stamped "CJ-2A" on its ID tags, but unveiled it to the public as the "Universal Jeep" (also "Universal Peace Jeep" in some literature). It had large, flush-mounted headlamps, a tailgate for easier access to the cargo area, deeper axle and transfer case gears to allow it to travel more slowly, as well as provisions for hitches, a power take-off, and a governor.

Willys' marketing team launched a frontal assault touting the usefulness of its new Universal Jeep as the perfect fourin-one vehicle—a combination of truck, tractor, runabout, and mobile power unit. Advertisements depicted plucky little Jeeps, armed with three-point hitches and PTOs, powering post hole diggers, pulling disc harrows, hauling milk cans, and dragging logs through forests to sawmills (which, as luck would have it, could also be powered by Jeeps).

There were plenty of takers for the CJ-2A—nearly 215,000 were built before the CJ-3A was introduced as its replacement in 1949. What the Willys' folks never predicted was that civilians would flock to Jeeps, not because they could put a Farmall out to pasture (which they couldn't), but because they were just plain fun as well as being useful. The famous Enzo Ferrari quote about the Jeep being America's only true sports car was spot on. Jeeps are on their best behavior with the top and doors off, clawing for traction over uneven terrain. Bouncing along in an open Jeep truly is the spiritual equivalent of carving corners in a roadster: goodold-fashioned, leave-the-world-behind vehicular escapism. There's a reason



why Jeepers ride around waving to each other—they're happy.

Just ask Bernie Peck of Geneva, New York, owner of this month's featured 1946 CJ-2A. Bernie bought the Jeep back in 1993 from a friend as a project. Over three years, he restored the Jeep to its current condition. During the build, the original block was bored .060 over and the engine rebuilt to stock specs. The Jeep changes gears through a Borg-Warner T90 three-speed equipped with an accessory Warn overdrive attached to the Dana 18 transfer case. It was painted with PPG single-stage urethane in a color called Desert Sand. Bernie opted for body-color wheels sans pinstripes and black headlamp surrounds as custom touches.

"I always wanted one of these and it was in my budget," he said. "I thought they were cool looking, and as a lot of GIs will tell you, without jeeps, America may not have won WWII."

For almost 75 years, the civilian Jeep has been offering fun, useful service in North America and around the world. Its origins can be traced back to this simple open-air 4x4, conceived as a jack of all trades for the postwar expansion.



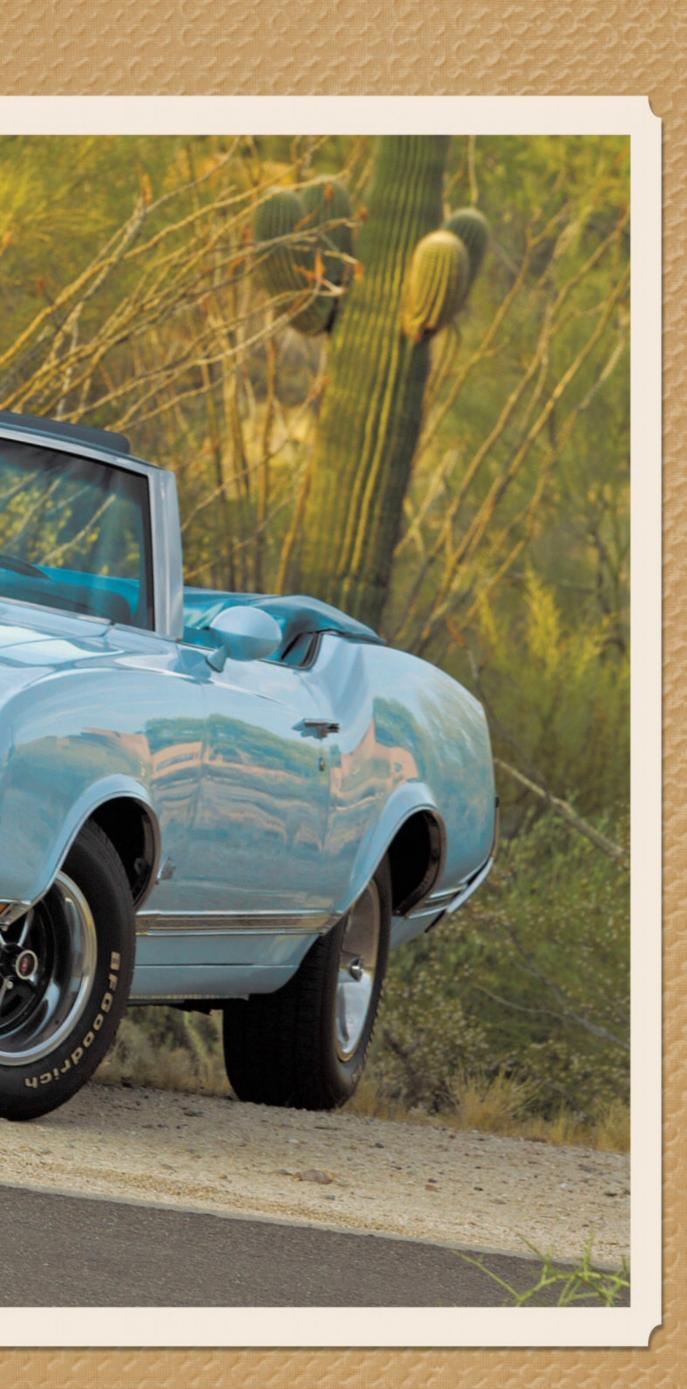
Stark interior offers center-mounted instruments and an array of sticks for the Warner T-90 three-speed, accessory overdrive, and the two-speed Spicer Model 18 transfer case. Early CJ-2s had column-mounted shifters (for the transmission), but floor shift became standard mid-production for the 1946 model year.

restoration

Azure Blue Cruiser

Restoring a 1970 Oldsmobile Cutlass Supreme convertible for on-the-road excitement once more

BY MATTHEW LITWIN • PHOTOGRAPHY BY JEFF KOCH RESTORATION PHOTOGRAPHS COURTESY OF FRED MANDRICK





et's talk Oldsmobile numbers for a moment. It's no secret that the division's A-body line was immensely popular, particularly those models that wore a Cutlass emblem. The upscale trim name appeared in 1964 and quickly attained 64,415 buyers. It proved to be the proverbial tip of the freshly calved iceberg. By the end of the 1970 model year, more than 998,000 examples had been built, including Cutlass S and Cutlass Supreme models (we're not even factoring in the base F-85, or the 4-4-2 muscle car, both of which used the same basic platform). Of those, more than 236,440 originated from the top-of-the-line Cutlass Supreme series alone, including this attractive 1970 Azure Blue convertible.

According to the car's few surviving documents, the Cutlass Supreme was sold new through the now-defunct Money Oldsmobile in Phoenix, Arizona. It was one of 4,867 built for the 1970 model year, but this one featured a blue bench seat interior and white convertible top. It had also been optioned with air conditioning, power windows, power steering, power drum brakes, electric clock, an economical 250-hp 350-cu.in. engine — versus the standard 310-hp 350-cu.in. V-8 — and Turbo Hydra-Matic 350 automatic transmission.

On paper, the Oldsmobile was ordered for the arid desert, but exactly what kind of life on the road it was ultimately subjected to is anyone's guess. Conversely, its odometer had logged more than 94,000 miles by the time it was delivered to a Phoenix body shop for a restoration. It had been partially disassembled, and the body prepared for new paint, when its then owner passed away. The convertible was then pushed into a corner while the estate was settled.



Spring 2018 and the dusty Oldsmobile Cutlass Supreme has arrived at the new owner's home in Scottsdale. A restoration had commenced years earlier, but it was put on hiatus after some bodywork had been achieved. Front trim and bumpers had gone missing.



After ensuring the 350-cu.in. V-8 functioned, the instrument panel was disassembled, exposing the original color of the dash vinyl. Note that the dash pad and face were undamaged, even though the steering wheel was cracked in several spots.



Before the fall of 2018, the instrument panel has been completely restored to stock condition, save for the 1968-'69 style radio and four-spoke Custom Sport steering wheel. Note that new vinyl has been applied to the windshield header, and restored visors.



Having tested the optional 250-hp Oldsmobile 350-cu.in. engine, its exterior was restored with correct engine paint, as well as its bolt-on equipment. The air conditioning system was rebuilt, and a new power brake booster and master cylinder installed.



After block sanding the front end of the convertible's body panels, the headlamps assemblies and grilles were installed. This allowed the owner to check tolerances while aligning the convertible's iconic, toothy hood after this photo was taken.



The owner had not painted a car in nearly two decades. To test his ability, he painted the decklid while it was removed from the car; it would be easier to correct if a mistake was made. Happy with the result, he installed its corresponding trim.



The rest of the Cutlass Supreme was given a final coat of sealer primer, which was then wet sanded smooth using the common step process. When completed, parts of the body that wouldn't need paint were masked, underway here.



Keeping a budget in mind, the owner sided with more affordable Omni paint by PPG, matched to the original hue of Azure Blue. Five coats of the acrylic urethane enamel were applied, which was then painstakingly wet sanded and polished.



The convertible's original split-back front bench seat was reupholstered in a factory-correct shade of metallic blue vinyl. The original seatbelts were cleaned and reinstalled, while the floor carpet had been saved from a 15,000-mile parts car.



Final reassembly took a leap forward in early 2019 with the installation and alignment of the decklid, as well as side trim and markers, emblems, and door handles. A new windshield has also been installed, along with restored A-pillar brightwork.



Matching the original factory build, a new white vinyl top was fitted. Hidden from view are new electrically controlled top rams. An original bumper, polished earlier, has been installed, along with new taillamp assemblies. Note the sport mirrors.



One of the last components to be installed within the convertible were new door panels and weather seals. The upscale nature of the top-of-the-line Cutlass Supreme is on full display here via the combination of carpet, vinyl, and woodgrain trim.



Oldsmobile's Cutlass Supreme cabins were plush, even in convertible trim, as demonstrated by faux wood paneling throughout, as well as two-speed wipers and a standard power top. The four-spoke Custom Sport steering wheel was added during the restoration.

It was still sitting occupying the same floor space several years later when Scottsdale resident Fred Mandrick spotted it in the spring of 2018. Even though the body wore a dust-covered coat of brown primer, he knew exactly what lay before his eyes; the cornerstone of his extensive collection is comprised of several Cutlass-based 4-4-2 models from the same, secondgeneration A-body era. What's more, the upstate New York native's first car was a 1970 Cutlass Supreme Holiday hardtop that his dad had purchased for him in the summer of 1975. It was, for all intents and purposes, the impetus for his life-long affinity for A-body Rockets. Fred, therefore, quickly inquired about its availability.

"While I was negotiating a purchase price with the estate, I learned from the shop that it had always been an Arizona car," recalled Fred. "Both the engine and transmission had been rebuilt as part of the



Oldsmobile's Rocket V-8 was a 350-cu.in. engine that made 310 hp in base form, but this convertible was built with the optional and more economical 250-hp version.

early phase of its restoration, as had much of the suspension. All the bodywork had been done, and a lot of the trim had been stored in the trunk. There were some things missing, though, such as the bumpers and their corresponding brackets, the grilles, headlamp assemblies, and a few miscellaneous pieces of trim. Having restored so many A-body Oldsmobiles over the years, I had a lot of those parts. The prospect of a budget-friendly restoration—to finish the project as an enjoyable driver—had the potential to be a relatively easy reality."

Fred took delivery of the Cutlass by the summer of 2018. Rather than jumping in to complete the restoration, he first re-evaluated the condition of the body, chassis, and engine, and compiled a list of obvious requirements. According to Fred, "Even though the engine had been rebuilt several years prior, there was just enough surface rust on select areas of the car to make me think I should look inside the V-8. I removed the rocker arm covers and intake manifold, and they were spotless inside—a lot cleaner than I would have ever thought it could be-so I put it back together with new gaskets and rebuilt the Rochester 2GC two-barrel carburetor and starter. I also installed a new fuel and water pump, radiator, and a new set of spark plugs and wires. When I tested the V-8, it was rock solid. The transmission shifted smoothly. The best part was that nothing leaked. I was really surprised by all those things. I could then detail the engine."

By September, Fred fully immersed himself in the restoration, starting with the removal of the cracked windshield and complete disassembly of the instrument panel. This helped expedite the installation of a new wiring harness on both sides of the firewall. Fred then restored the gauges,

owner's view



re-dyed the undamaged dash, cleaned the woodgrain trim, and eventually repopulated the panel. Then, he replaced the vinyl on the windshield header and installed restored visors. Two deviations from stock were the addition of a Custom Sport steering wheel, and a 1968-'69 radio, in lieu of a proper '70 unit, simply because that's what was in Fred's parts inventory. Focus then shifted to the body.

Fred went on to tell us: "I had to do a little work to smooth out the body, particularly on the right side and left quarter panel. After block sanding the old primer, I found some low spots, so I applied a few coats of high-build primer and block sanded more until the body was perfectly smooth. Before applying a final coat of primer sealer, I put the bulk of the front-end back on the car, including the headlamp assemblies and grilles. This was critical in that it helped me realign the hood; the center section must drop perfectly between the grilles. I was anxious to see what it would look like.

"After one last round of wet sand-

've restored a lot of A-body Oldsmobiles to a high standard, but I knew I could do this on a budget. I wanted to make it right and look good, but not spend any more than I had to. Take, for instance, the drum brakes. I prefer front discs, which were an option, but swapping out what was already functioning would have added cost. It was more important to me to make sure the power accessories and A/C worked, and that it would drive as nice as it looked. If you go into a project like this, it's important to remember your end goal. If it's going to be a driver, don't spend extra money to make it too perfect. I didn't go nuts adding decals under the hood. Seems small, but you'll find it's less that weighs on you mind as you drive it. A car like this was meant to be driven, so you might as well save some of your budget for fuel.

ing, the body was ready for new Azure Blue paint. I went with Omni, by PPG, because it wouldn't break the budget and would still look good after wet sanding and polishing. The problem was that I hadn't painted a car in about 20 years, so I did the decklid first, just to see if I could still lay down an even coat. It came back to me pretty fast, so I felt comfortable enough to paint the rest of the car after masking everything off."

After paint, the front and rear bench seats were recovered with new blue vinyl upholstery, followed by the installation of a new white convertible top, just like it had originally. Meanwhile, Fred reached out to a friend in Chicago, who happened to have original blue floor carpet that had been removed from a 15,000-mile parts car, while another friend had a set of original front and rear bumpers. Combined with the installation of new or polished original trim, final reassembly quickly transformed the Cutlass Supreme from a painted shell to a finished car.

"I changed only two things while

finishing the exterior," Fred admitted. "I was given a photo of the car, taken long ago, that showed it wearing more attractive 14 x 7-inch Super Stock I wheels, so that is what I installed; the steelies and hub caps just looked a little too mundane. Then, I added color-keyed sport mirrors. Convertibles have a completely different body line, and these two simple changes enhance its sporty presence on the road."

Finished in spring 2019, Fred has remained true to his original intentions with the Oldsmobile. "This is the kind of vintage car I can take to the store on a whim and not care. It's just a Cutlass. That sounds strong, but really, it's not a valuable 4-4-2 or a Hurst/Olds. Don't get me wrong—this looks great, it's smooth, efficient, and fun to drive, but it's not something I am going to fret over if anything happened to it. That's why I stuck to an affordable budget. I wanted to be able to enjoy this car without thinking how much a bumper cost, or the paint, or the upholstery. I wanted a car I could enjoy any day of the week, and that's what I have." a





1960 Alfa Romeo Sprint & 1961 Alfa Romeo Spider

BY LEN FRANK • PHOTOGRAPHY BY VINCE MANOCCHI • REPRINTED FROM SPECIAL INTEREST AUTOS #83-OCTOBER 1984

Ifa Romeo was a government-controlled auto manufacturer as were Renault and, in 1951, Volkswagen. In those dim years, Mercedes and BMW were building lackluster versions of their prewar cars. Fiat, the largest automaker in Italy, was doing likewise but was at least readying a new unit-bodied 1400. DKW, all that

remained of the prewar Auto Union combine, was building mid-priced two-strokes with baroque styling. Here in the United States, pushrod-operated overhead valve engines were proliferating, but Ford/Chevy/Plymouth were still using versions of prewar power. Ford had recently discovered independent front suspension; Nash was building America's only unit bodies. Such was the automotive world in the early fifties.

Alfa Romeo had gone back into production of the prewar 2500 — a low volume, high-priced car, but followed it with the 1900. It was Alfa's first unit-bodied car, its first moderately priced car. It had independent front suspension, a twin cam engine, and a performance level higher than any other similarly sized family sedan. It was just a hint of what was to come.

A couple of years after the 1900 planning started, Alfa started its most ambitious project until the Alfasud 20 years later. The Giulietta prototype was completed in 1953; the production Berlina and Sprint introduced in '54; the Spider in '55.

Look back at what constituted a high-volume production car in those days and compare any of them. Remember that this was

Alfa's first "people's car" in over 40 years of production. The unit body was more or less expected, but Alfa chose an engine that was jewel-like almost beyond belief for a small family sedan. A light alloy wet-sleeve block was capped by an alloy hemi head (it had been decades since Alfa had any other type of combustion chamber). Double overhead camshafts were driven by chain with a simple mechanical tensioner—nearly as reliable as the pre-war gears but at a fraction of the cost. The cams opened the valves through the medium of inverted bucket followers, with adjustment by caps on the valve stems. A five-main-bearing forged crank with full counterweighting was held in place by alloy main caps. Some cars had steel oil pans but most had alloy pans with cooling fins, swinging-gate oil baffles, and a full windage tray. The only cast iron was in the exhaust headers; the water pump, intake manifold and bellhousing were all light alloy. So were the transmission housing, differential center section, steering box (by ZF) the huge, finned brake drums, brake shoes and dozens of minor brackets. Some economy car.

Displacement was 1,290 cc—that's a cupful more than a



Frontal apperances of both cars, while similar, differ greatly in detail. Even the parking lamp lenses mount differently, with the Spider's secured horizontally while the Sprint's are screwed in vertically.



Harley-Davidson 74. Not the stuff to excite the average American, used to cast iron enclosing about 300 cubic inches. But remember when Chevrolet electrified us with one horsepower per cubic inch? Big time! Alfa, using its conservative CUNA (*Comitato Unitario Autotransportatori*) rating brought the basic Berlina in at 62 horsepower, the T.l. at 74, the Sprint and Spider (*normale*) at 80, Veloces at 90, and the SS and SZ at an even 100. Add about 15 percent to convert to SAE gross ratings like Chevy then used.

The early Veloces used alloy doors, hood and trunk, with sliding acrylic door windows in the Sprint replacing the normal roll-up glass. The SS and SZ replaced the early lightweights in 1959. The Veloce ate the contemporary Porsche 1300s for breakfast. The rarefied Carrera GTs had to be built by Porsche to get a little Zuffenhausen dignity back.

Back to the Alfa proper. Suspension on all Giuliettas, Berlina through SZ, was about the same: short and long forged steel aarms in front, supported by angled coils surrounding the shocks and bearing on the lower arm. An anti-roll bar kept lean reasonable. The solid axle in the rear was about as light as Alfa could make it, with thin steel tubes bolted onto the beautiful cast alloy center section. Vertical coil springs, again surrounding the tube shocks, mounted on top of the axle. A pair of tubular trailing arms below the axle gave fore/aft location. On top, a triangular bracket of welded steel tubes both absorbed braking torque and located the axle laterally. Brakes were drums—only the Crosley (among production cars) had disc brakes by that time — but more than generously sized, with finned aluminum muffs around the iron liners. The dual-leading-shoe fronts used helical fins, the rears, circumferential. Remember, please, again, that these underpinnings grace a prosaic little four-door, four-passenger sedan as well as the more exotic Sprints and Spiders.



Styling of the Sprint reflects the design talent of the house of Bertone, while the Spider's design came from the pens of Pinin Farina stylists.



DRIVING THE SPIDER

The red Spider shown here belongs to Dave Gooley, a photographer whose work has appeared in (and on) *Special Interest Autos*. Dave owned a Sprint in years past and managed to convince himself that Alfa ownership was the key to happiness. Hindsight has wonderful, golden coloration. He sold that first Alfa (bought used and decrepit) when he could no longer afford to keep it running.

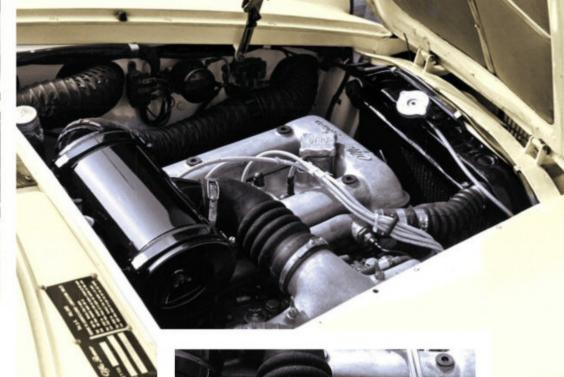
Dave's comparisonReport 1961 Spider has had its problems —a lot of neglect can stack up in 20 years to compound a slightly subnormal electrical system—but he has attacked them as they appeared. Perhaps \$5,000 has gone into the car including purchase (with a parts car), paint, body work, chrome, a valve job, water pump, brakes, generator, starter.... Not inconsiderable, but only about half the cost of a new Honda Accord. And the Alfa is appreciating.

Dave's car is the most common of all the Giuliettas imported to the United States — there were about 17,100 Spiders (including some 3,000 Veloces) out of nearly 78,000 Giuliettas of all types built from 1954 through 1962. More Sprints (over 27,000, including Veloces) were produced, but fewer brought here.

Comparison with domestic cars of the mid-Fifties through 1960 is edifying—the basic Alfa was quite reliable. Contrary to their later reputation and disregarding problems caused by service or lack thereof, Alfa Giuliettas were not overheaters or oil leakers, nor head gasket blowers. Their propensity for rust was no greater than other makes of their time. The early (750 series) cars had the greatest performance but would burn exhaust valves. Valve guides wore faster than their domestic counterparts, but engine speeds were nearly double.

Electrical systems and valve burning were improved with time (101 series) but the electrics, at least, were never up to the standards of Delco or Autolite. And since wipers and heater





The Spider uses a single downdraft Solex to feed the fuel (left). A large air cleaner on the coupe serves two sidedraft Weber carbs to give it a little extra poke (right).

motors were not up to Vermont winters, it was perhaps merciful that the rear-mounted battery and its marginal cable barely warmed the starter as it vainly tried to crank a high-compression engine with a pan full of SAE 40 oil.

Compared with British roadsters or Porsche Speedsters, the Alfas more than held their own. With their excellent tops, rollup windows, and commodious trunks, the Giuliettas made the MGAs (the little Alfa was really a contemporary of the primitive MG TF), TR-3 and Austin-Healey 100 seem positively Spartan and crude.

Dave's Spider starts easily, hot or cold. The single dualthroat Solex has the choke knob near the center of the dash next to the hand throttle, but in California it's seldom necessary. These later Giuliettas have Porsche-type synchromesh on all four



speeds (there was a factory five-speed conversion used on Veloce, SS and SZ), with characteristically weakening action on second



gear. Dave's car is no exception. Exceptional, though, is its clutch slip, the result of that aforementioned neglect and wear. The mechanically actuated clutch should be, and usually is, one of the Giulietta's nicest features. All of the Alfa's driving controls are pleasant to operate.

Once the clutch bites, the Spider moves off smartly. Alfa, not at all aware (or was it lack of interest?) of American driving conditions, chose to equip the *normale* with 4.55 rear-end gears, the Veloce with 4.11. The *normale* has good low-speed torque and — compared with the Veloce — limited high-rpm capability. The Veloce has no low-speed torque, and while Alfa didn't approve, more than one Veloce saw 8,000 rpm trying to prove cubic inches weren't everything.

A bit of care is required to avoid gnashing into second, but otherwise the Spider's gearbox is a delight, especially after fumbling with mediocre front-wheel-drive shift linkages most of our driving time. The Alfa shift linkage grows right out of the top of the gearbox.





Throttle response is excellent, and the noises that accompany throttle use are neat. Performance, using a 5,000 rpm limit out of respect for the elderly, is useful but not nearly indicative of the car's potential. Giuliettas are still highly competitive in SCCA racing, and are among the oldest production cars still running. Acceleration of Dave's car is about the same as a good modern econobox. Again and again, the *feel* of the steering, the excellent brakes, the heft and sensual movement of the shift lever make us wonder if there has been progress at all—or merely change.

Speaking of brakes, Alfa didn't begin using discs until after all of their immediate competitors (Triumph started in 1957), because they simply didn't need them. The last drum-braked Giulias—1,600 cc Giuliettas—used a three-leading-shoe design that exceeded the limits of the tires to transmit retardation for as long as the driver asked them to.

The Spider is nimble without being twitchy. Alfa believes that nosedive and body lean are acceptable tradeoffs for good ride and excellent adhesion on rough roads, and so Dave's car proves. It is very slow to lift its inside rear wheel in hard cornering, endemic in its British counterparts. Dave's Spider does want to drift right when the throttle is closed suddenly—a sure sign that the trailing arm bushings are worn.

The Spider cruises easily in traffic; Dave drives it regularly six to eight thousand miles a year. High gear performance, with the 4.55 gears, naturally is wonderful, better than remembered. It seems happy on either leaded or unleaded premium, but has run on regular when driven gently.

DRIVING THE SPRINT

There was more than a little *déjà vu* in Marilyn and Jack Early's Sprint. Mine was a '59 but identical in every important way to their '60. The major difference is that while we both bought them

new, they still have theirs, while I, of little faith, sold early.

The Earlys took delivery of their 1960 Sprint Veloce in Paris. Delivery was arranged by friend Henry N. Manney III, then a contributing editor to *Road & Track*.

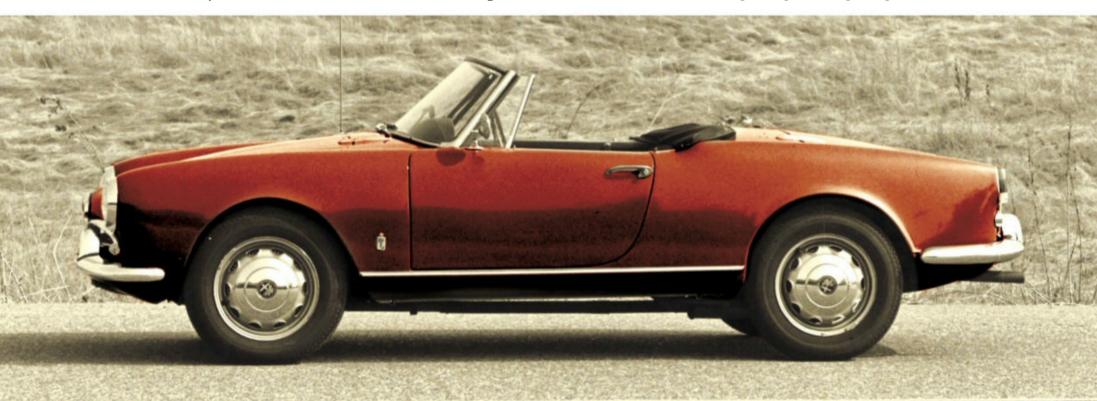
The couple has been involved with the West Coast sports car movement since near the beginning. Jack worked with Phil Hill and Ritchie Ginther (and others) at International Motors, then with Ernie McAfee in the Siata 8V days. He raced a blown MG TC, and if I don't stop now this article will run forever.

The Earlys had a marvelous time driving around Europe, including one trip to Milan to replace a defective cam follower. They still talk glowingly of the courtesy and service at the factory. Wonder if it's still like that? There has never been any drama in owning the car. Some years ago, it took time out from its daily commute to be reupholstered and painted. About five years ago it burned a valve. Three years ago, the engine and gearbox were gone through. It has about 180,000 km on its odometer.

Though they don't say, I suspect the lack of trauma is due to intelligent and understanding service over the years.

Differences in the Sprint and Spider are immediately obvious. The Veloce engine starts instantly but takes a bit of warming. Recollection tells me that cold-weather starting—if, indeed, the starter circuit is up to the job—needs no choke. A few pumps on the pedal and the dual Weber DCOE-2 carbs supply enough fuel for most contingencies. Whether or not the ignition will fire the mixture is another question. But this, after all, is Southern California, and the Early car, which has always been close to optimum, has never had this problem.

No clutch trouble on the Sprint either, and a good thing it is, too, because of that complete lack of low-speed torque the tach starts at 2,000 rpm. The higher weight of the Sprint combined with the 4.11 gearing makes getting off the line



Sprint's door trim includes handy storage pouches for maps and such, while Spider's door panel couldn't be more starkly plain (left). The instruments may look the same, but the open car's markings are in English measure, while the coupe is marked in metric measure (below).

1961 SPIDER

Inline four-cylinder, alloy block and head, wet sleeves, five mains 92 @ 6,000 SAE gross 79.6 @ 4,000 SAE gross Single dual throat Solex 35 APAIG progressive carburetor on aluminum manifold Four-speed, Porsche-type synchros on all forward speeds 12.8 seconds 100+ mph 153.6 inches 62.2 inches 49.25 inches (top down) 52.6 inches (top up) 88.6 inches 840 kilograms (1,848 pounds)

1960 SPRINT

Same

103 @ 6,500 SAE gross 96 @ 4,500 SAE gross Dual Weber 40 DCOE 2 (Dual throat side drafts) Same

11.8 seconds118 mph (factory)156.6 inches60.2 inches51.8 inches

93.7 inches 895 kilograms (1,969 pounds)



ENGINE TYPE

HORSEPOWER

TRANSMISSION

INDUCTION SYSTEM

TORQUE

0-60 MPH

TOP SPEED

LENGTH

WIDTH

HEIGHT

WHEELBASE

CURB WEIGHT

smartly a matter of 4,000+ rpm with clutch juggling. Done just right, it's the beginning of a 10-second run to 60. Done wrong, it gets expensive.

The second gear synchro is perfect—if there is a nicer gearbox, I have never found it. Sadly, the suspension on the Early car is a bit tired, so throwing it around is not a pleasurable proposition. Body roll and nosedive are greater than the Spider's and, coupled with the Sprint's longer wheelbase and higher weight, the handling is slowed. The front end is a bit loose as well, but surprisingly the trailing arm bushings seemed good. Nothing serious wrong, just some 80,000 miles of wear.



Cruising is a pleasure. Seats are comfortable but without the lateral location of better modern seats. Visibility is not up to modern standards either, nor is ventilation. For its day, however, the Bertone-designed coupe was exceptional. Rear seat space is of the "+2 what?" variety, but front seat room is excellent.

In both cars, the steering wheels beg for an arms-out position, but the pedals leave legs bent—strangely Italian, but it suits me. The Early car has excellent straight-line performance as long as revs are kept up. It's a temptation to shift up just so that you have to shift down. The gutty growl of the engine, the entire driveline, are about as good as it ever needs to get.



I WASTHERE

Larry Jordan Sterling Aluminum

Machine operator

IN 1966, AFTER HIGH SCHOOL

I landed a job at Sterling Aluminum, a subsidiary of Federal Mogul. It was operating a piston manufacturing plant on an airbase that the U.S. Air Force had abandoned after World War II. The base had been left to the City of Malden, Missouri, and some commercial companies used the airplane hangars to house their operations.

Every operation of piston making was done at that plant, although more than one building was used. We made pistons for big-block muscle cars and small "Airtemp" pistons for Chrysler air conditioner compressors. Everything started at the foundry, where melted aluminum was poured into molds, in the very rough shape of a piston. The highest paid machine operators worked in this department and they earned every penny they got. The heat was already like an oven before you consider the thick, bulky, and possibly heavy bibbed aprons and leg chaps they wore. For any heavyweights hired into that department, all got a free weight-loss program in the fringe benefits. These operators were forever begging for more fans, to little avail. According to company managers, more fans would cool the molds too quickly, making the pistons hard to eject.

I operated machines in the A-Turn department, which was the first operation after the pistons left the foundry. We loaded pistons, one at a time, onto the end of a chuck, so blades could move in to cut the sides, top, and skirts to a smooth and precise size. After a piston was laid in place with our right hand, a lever was actuated with our left hand. It routed pneumatic pressure, to cause two metal fingers to enter the wrist pinholes from the inside of the piston, to hold it in place. Once everything was locked in tight, our right hand slapped the "Start" button. A big electric motor and multiple V-belts turned the lathe. If the piston wobbled wildly, from lack of proper alignment, the operator had to hit the "Stop" button. If the machine did not stop before the blades moved in for the kill, look out! A lot of noise, broken machinery, and an



angry setup man converged on the scene almost at the same time. Downtime was always bad news. If another machine was not waiting for use, the floor got swept, but the company made no money.

A big wire basket, full of pistons, was placed by forklift at the right front of the machine. The operator stood in the middle, after an empty basket was placed at the left front of the machine. In this basket, already turned pistons were placed in equal layers, separated by cardboard dividers. This neat layout allowed the highest number of pistons to fit into each basket. It also made an easy count for the piecework pay system that had been in force before the time of my employment. Happily for me, I worked when all operators received hourly wages, because I was not exceptionally fast. But some seasoned operators preferred the old system, because they had made lots more money that way.

The neat basket layout also worked well when that full basket was moved to its next stop, which was the Groove department. Grooves were cut into the pistons to accommodate the rings that would someday be installed. The pistons went on to other operations before they were finally boxed and shipped.

As new hires, we did have to prove our efficiency during a trial period of maybe three months. We were required to turn a set number of pistons within a set time, or face possible termination. Any phase within the manufacturing process was hot work during summer's extreme weather. Shirts and underclothes looked like they needed water rung out of them. Faces, noses, and chins dripped with sweat. It was not rare to see an exhausted foundry operator being carried to the breakroom. Some of these poor souls gazed upward, in an almost unconscious stare. Nearly everyone who worked around machinery had to wear safety glasses.

It was an active place and, during the busiest seasons, it operated around the clock. The office employees and the big boys worked on the 7-3 day shift; the 3-11 evening shift paid a premium of 10 cents per hour. The 11-7 graveyard shift was the most relaxed, and it paid maybe 25 cents extra. I worked all shifts.

My tenure at Sterling Aluminum wrote an interesting chapter in my life. Although factory work was not my life's ambition, I think I am better for the experience. **N**

I Was There relates your stories from working for the carmakers, whether it was at the drawing board, on the assembly line, or anywhere in between. To submit your stories, email us at editorial@hemmings.com or write to us at I Was There, c/o *Hemmings Classic Car*, 222 Main Street, Bennington, Vermont 05201.

BILL WEISS PRESCOTT, ARIZONA

chat **EMINISCING**

Wisdom of **Our Fathers**

in the borderline poor/working class Brook- for the masses. Mopar and Ford car owners lyn, New York, neighborhoods I grew up in during the 1940s and '50s. Most families didn't own a car, either because they couldn't afford one, or they resided within easy reach of subway or buses.

My father was one of the lucky few who always had a car. I hung around him when he talked cars with the other men in the neighborhood. Working class guys of his generation always knew (or pretended to know) about cars, their most prized possession. It was unthinkable for a real man to let a mechanic fix his car. So, a whole new vehicular vocabulary entered my young consciousness: words and phrases like kingpins, bushings, throwout bearing, choke, and carbon-and-valve-job reeled off their lips—and into me—as naturally and often as baseball scores. I also learned their unshakeable automotive axioms, and the explanations behind them, which I dubbed "The Wisdom of Our Fathers."

• A big car holds the road better than a small car. It followed, don't you see, that a car with a "lot of mass," such as a Buick, Chrysler, Cadillac, or Lincoln would be "planted real solid on the road," whereas a "little" car like a Chevrolet, Ford, or Plymouth would "wander all around."

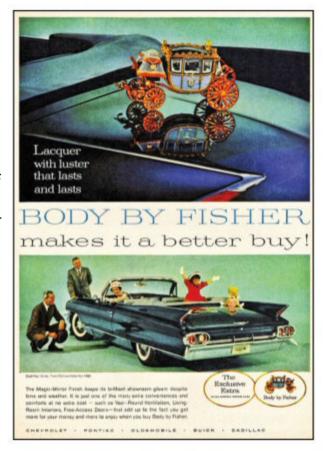
• They built a carburetor that could let a Lincoln get 40 mpg; the oil companies bought it for a million bucks. Our fathers believed with perfect faith that a secret cabal of faceless "theys" and "thems" invented fabulous gadgets, only to have all-powerful corporate "theys" and "thems" suppress the innovations in order to enrich themselves at our expense.

• If they put the same rubber from the Indy 500 tires into passenger tires, you could go around the clock and still have tread, and never get a flat. This neighborhood myth was in the same league with the 40-mpg carb, and was the source of just as much resentment. Of course, our fathers never saw pit crews changing tires because the Indy 500 wasn't televised in those days.

• Body by Fisher is the best because it never rusts. The GM owners were reverent on the subject of Body by Fisher, as if somehow, LeBaron and other custom builders of their youth had cut a deal with

CARS WEREN'T TAKEN FOR GRANTED Fisher to democratize quality coachwork had few comebacks, especially in the '50s, when rust on their cars was as common as acne on teenagers.

> • Ya hafta watch the rocker panels on Chrysler products. A corollary to the above — and it was no myth. In fact, ya hadda watch every body panel on Mopars



of the '50s because they were America's leading rust-buckets. That's why you see so few at car shows - ashes to ashes, and rust to rust.

•Oldsmobiles run great for 40,000 miles. As soon as they hit 40,001, they fall apart. This tale may have had a basis in fact, especially if the Oldsmobile-owning family had a teenager whose coming of driving age coincided with the magical 40K on the odometer.

•I know a guy, he bought a new Caddy and drove it from one end of the Jersey Turnpike to the other at a steady *110 mph*. Since none of us had ever been to exotic New Jersey or driven on a limited-access highway, the Turnpike was a great source of myth and mystery to us. The Turnpike allegedly had no speed limit when it opened in 1951, making it the Northeast equivalent of Germany's

Autobahn in neighborhood mythology. Cadillac was one of the few cars capable of besting the century mark in '51, so it followed that anyone fortunate enough to own one must have headed straight to the Jersey Turnpike to test it out.

• Ford builds the best station wagons. No one in our neighborhood owned any make of station wagon - we were all renters in tiny, prewar apartments and never had to haul anything larger than a mattress (which we tied to the car's roof with clothesline). Besides, who could afford a wagon? But that didn't stop the sages from opining that Ford made the best wagons — probably because Ford clung to the "woody" look, which suggested the genteel, far-off suburbs of Westchester and Long Island (pronounced "Lung-geyeland" in our neighborhood) that we aspired to.

• Bardahl works on GM cars, but Marvel Mystery Oil is best for Chrysler products. If cars had personality, so did the products needed to cure their ills. This was important, because, as pushrod engines got more complex in the '50s, our self-reliant fathers could no longer spend a pleasant Sunday afternoon rejuvenating the family car with a carbon-and-valvejob. Instead, they relied on a plethora of oil additives that promised to "free up sticky valves" and "seal piston rings" with a single application. My father was loyal to Rislone, which was thoughtful enough to include a coin-sized metal slug inside each can that could be used to cheat the telephone company in phone booths.

•GM paid off Eisenhower to ride in Caddies. Though no one in our neighborhood had a luxury car, resentment of those who did ran high. Poor Ike, who spent so many years bouncing around the shell-pocked roads of Europe in a Jeep, bore the brunt: We lived in a heavily Democratic stronghold, and some locals never got over his abandonment of our beloved Harry Truman's Packard limo for a succession of Series 75 Fleetwoods. If truth be told, every man in the neighborhood would cheerfully have given his left coglione to ride in a Cadillac, but it did nothing to diminish their conviction that nefarious forces were at work in the selection of the presidential ride. **a**

BY TOM COMERRO

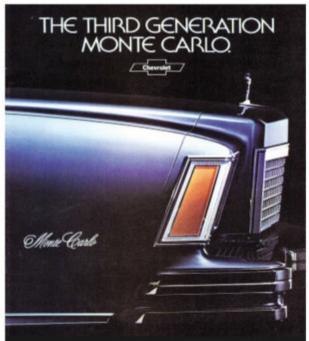
REARVIEW MIRROR 1978



FORD HAS BEEN CIRCLING THE WAGONS FOR NEARLY FIFTY YEARS, NOW OFFERING 10 options spread among the Pinto, LTD, Fairmont, and Club Wagon lines. Whether you are in the mood for work or play, versatile and spacious station wagons are available to meet your ever-changing needs. With wheelbases ranging from 94.8 inches on the Pinto to 138 inches on the family size Club Wagon, Ford has you covered for all of your activities and hauling needs. Countless interior and engine options are available, and Ford wagons start as low as \$3,794.

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CHAMPIONS

Daytona 500	Bobby Allison
	(159.73 mph)
Indy 500	Al Unser Sr.
	(161.363 mph)
Formula 1	Mario Andretti
	(64 points)

SALES RACE

(total model-year production)

1. Chevrolet	2,197,861
2. Ford	1,929,254
3. Oldsmobile	1,015,805
4. Pontiac	900,380
5. Buick	803,187
6. Mercury	635,051
7. Dodge	
8. Plymouth	
9. Cadillac	
10. Chrysler	303,019

EXPENDITURES

(per capita)	
Auto parts	\$60.65
Auto purchase\$	217.89
Auto usage\$	808.68
Gas and oil\$	225.08
Intercity transport	\$49.87
Local transport	\$21.56



THE LINCOLN VERSAILLES RETURNS IN

its second year with a switch to the smaller 302-cu.in. V-8. The luxurious four-door sedan features a new computerized Electronic Engine Control system with a Motorcraft Variable Venturi carburetor. Its smooth, quiet, and efficient performance is complemented by its comfortable cabin that includes an automatic temperature system, speed control, and power everything. Available in eight standard clearcoat finishes or three two-tone shades, the new Versailles starts at \$12,529.





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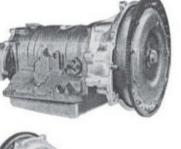
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ODDIES BUT GOODIES



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1962 Chevrolet Nova 400 Four-Door Station Wagon National Geographic Courtesy of Craig Franzen





SATURDAY, JUNE 20

START: Alamo Plaza (Alamo front), San Antonio, TX - 8 a.m. to noon LUNCH: Courthouse Square, downtown San Marcos, TX - noon OVERNIGHT: Santa Fe Plaza, Temple, TX - 4:30 p.m.

SUNDAY, JUNE 21

LUNCH: Historic Courthouse Square, Granbury, TX - 12:15 p.m. OVERNIGHT: Main Street, downtown Ardmore, OK - 5 p.m.

MONDAY, JUNE 22

LUNCH: Heart of Route 66 Auto Museum, Sapulpa, OK - 11:45 a.m. OVERNIGHT: Main Street, downtown Joplin, MO - 5:15 p.m.

TUESDAY, JUNE 23

LUNCH: Benton Square on East 5th Street, Rolla, MO - 12:15 p.m. OVERNIGHT: Main Street, downtown Cape Girardeau, MO - 5:15 p.m.

Webnesbay, JUNE 24

LUNCH: Water Street, downtown Paducah, KY - noon OVERNIGHT: Veterans Blvd., downtown Owensboro, KY - 5 p.m.

THURSDAY, JUNE 25 LUNCH: My Old Kentucky Home, Bardstown, KY - noon OVERNIGHT: Griffin Gate Marriott, Lexington, KY - 5 p.m.

FRIDAY, JUNE 26

LUNCH: Visitors Center, 11th Street, downtown Huntington, WV - noon OVERNIGHT: Word Park, Neville Street, downtown Beckley, WV - 5 p.m.

SATURDAY, JUNE 27

LUNCH: Main Street, downtown Galax, VA - noon OVERNIGHT: Main Street, downtown Mooresville, NC - 5 p.m.

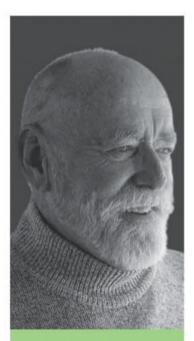
SUNDAY, JUNE 28 FINISH: Hyatt Regency, Main Street, downtown Greenville, SC - 1 p.m.

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jim**richardson**



Me? I haven't progressed since adolescence.

I still listen

to doo-wop

music and roll

around under

old Chevys on

the weekends.

Indian Summer

n 1961, I was attending the local junior college and kept myself in Smithys and teardrop knobs for my 1949 Chevrolet by working nights as a gas station pump jockey, and now and then as a gopher at an auction house. The auction owner accrued his inventory by cleaning out garages and then auctioning off his finds once a month in a big barn.

My pal Rodney and I were young and strong, so we lugged items out of the auctioneer's barn and hauled them onto the stage for him to sell. One rainy weekend, however, things didn't go well.

Only a handful of people showed up, and nobody seemed to want secondhand washing machines, wagon wheel maple furniture, or war souvenirs. Sales were so poor that Mr. Smoot, the auctioneer, didn't even try to sell the dull gray derelict Pontiac convertible sitting outside, because its top was gone, and its interior was soggy.

Because Smoot had done badly that day, he didn't have money to pay

us, so he offered us the Pontiac instead. Rodney needed a car, so we accepted. Turns out it was a 1950 Chieftain DeLuxe Eight, and it ran – sort of. Rod and I got it to his house, but it had a very insistent knock, and trailed blue smoke. A Studebaker mechanic we knew told us it had a bad rod bearing, so we borrowed a *MoToRs* manual from him and went to work on the Chieftain in Rod's driveway.

We drained the oil, pulled the pan, and loosened the rod and main bearings. Thankfully Pontiac had switched to thin-shell insert bearings by that time. We went to a nearby auto supply and picked up a new set. We didn't have a torque wrench and had no idea if the crankshaft was out of round or damaged. But upon inspection, we saw that the old bearings had worm tracks from acid in the oil, and one had disintegrated.

We put in new bearings, coated the old pan gasket with grease, and buttoned it up. We then poured in the requisite amount of reclaimed oil, and started the old flathead. It fired after a bit of grumbling and hesitation. The blue smoke was still all around us, but there was no knock. We fixed it!

After a few sunny days the interior dried out, though it still stank of mildew and engine fumes. We didn't care. We had a convertible. The top only consisted of a few vestigial cloth remnants attached to the frame bows, so we just drove it al fresco, and turned the heater on full blast to keep warm.

The paint on the old Pontiac had worn to the primer on the tops of the fenders, and the car sagged to one side due to a failing rear spring, but its 268-cu.in. inline-eight was pretty smooth, and its Hydra-Matic shifted well. Besides, our Chieftain DeLuxe had a radio, heater, whitewall tires, and a tissue dispenser. We had to put an OZ4 tube in the radio, and the tires were bald, but they never failed us. And our girlfriends

loved it because we could cruise and be seen at local drive-ins.

Summer came and the old Pontiac ran hot, so we drove with the heater on then, too. In the end, the Pontiac wound up being Rodney's because I had my 1949 Chevy to get around in. We later did a ring and valve on the old Pontiac in Rodney's driveway, but that's another story.

I learned to work

on cars from a *MoToRs* manual. I knew that if I wanted to keep my old beaters running, I had to be able to fix them. In those days, you could make do with a set of combination wrenches, Vise Grips, and a couple of screwdrivers. We washed parts in gasoline, and our hands with Lava soap.

I was lucky, because I grew up when cars were simple, as was I, and you could pick up a beater for as little as \$25. That's what I paid for my '49 Chevy – though I had to spring for a princely \$30 for a junk '39 Oldsmobile later. And I still enjoy working on old American cars.

Some men prefer golf or tennis, and I say have fun. Me? I haven't progressed since adolescence. I still listen to doo-wop music and roll around under old Chevys on the weekends. I gave up the Marlboros, but I still use bad language and throw my hat on the ground and stomp it once in a while. In the end, though, I resurrect old cars, and that makes it all worthwhile.

Besides, if I can't figure things out, I call my car buddies and they cruise by, drink my coffee, and stand around in my garage talking cars. For me, it doesn't get any better than that, even though we are now as bald as the tires on Rodney's Pontiac. We have a good time, and keep the old classics on the road.





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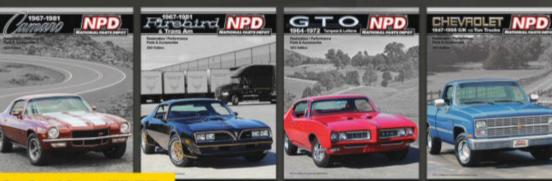












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