An over-qualified semi-daily driver charged by an LS7
\*\*TEXT: Ro McGonegal | PHOTOS: Robert McGaffin

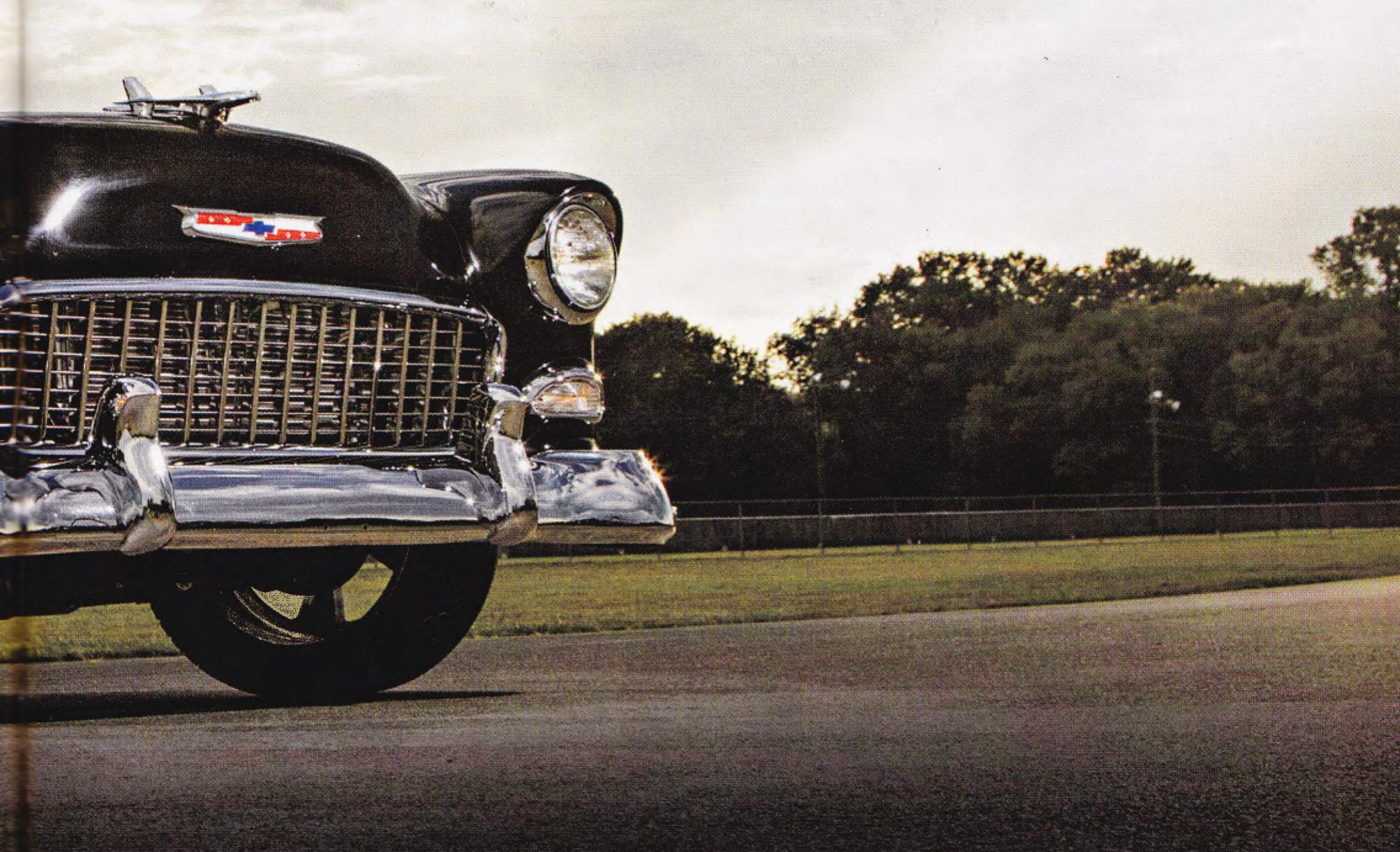


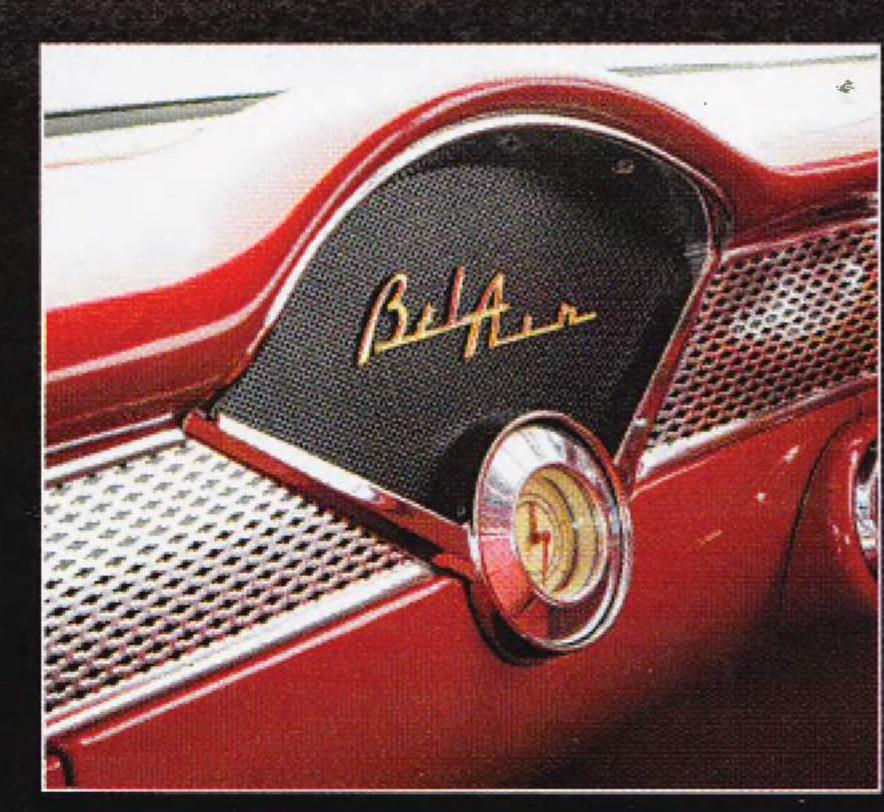
Even to those who had a '55 back in the day (we had two of 'em) have a hard time grasping its popularity more than six decades ago. Hell, we were 11 years old when that first one bipped off the assembly line. We didn't even suspect that in the slipstream of history this car would become just as coveted, just as adored as the '32 or '40 Ford coupes were to the pioneers.

It seems that many old-timers are reliving that experience now and that the Tri-Five in general has been getting a lot of play as a result. The enthusiast magazines generously accommodate the trend. The aftermarket is flipping backwards and a number of chassis builders are serving up 'rails and suspension systems that allow that big ol' box to slice corners and handle as flat and as precisely as a current Corvette. Yeah, that's very likable stuff.

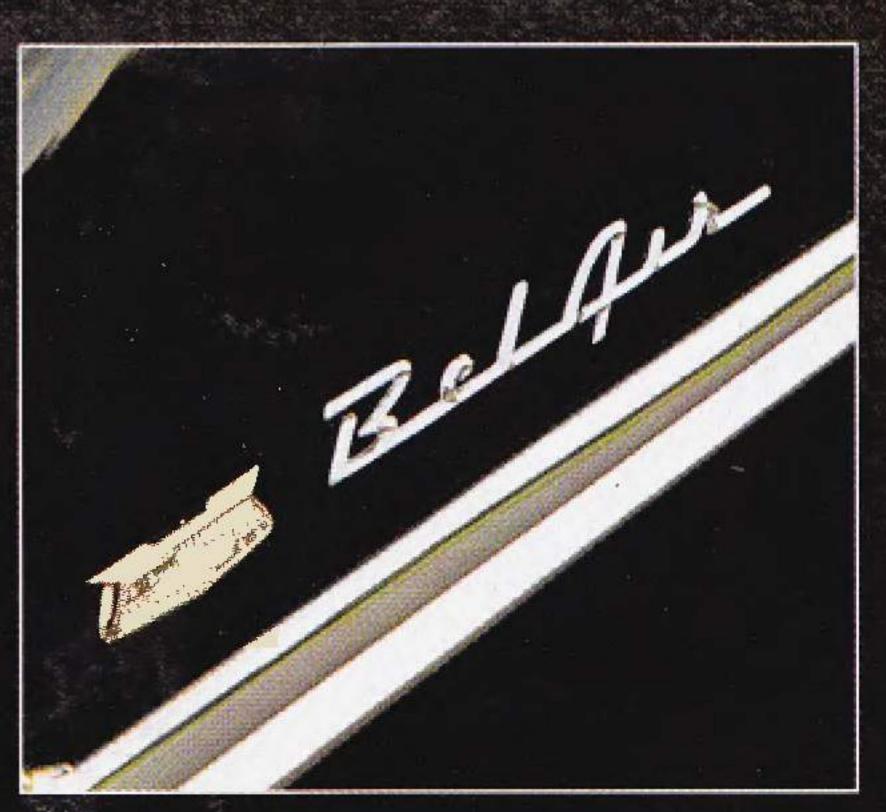


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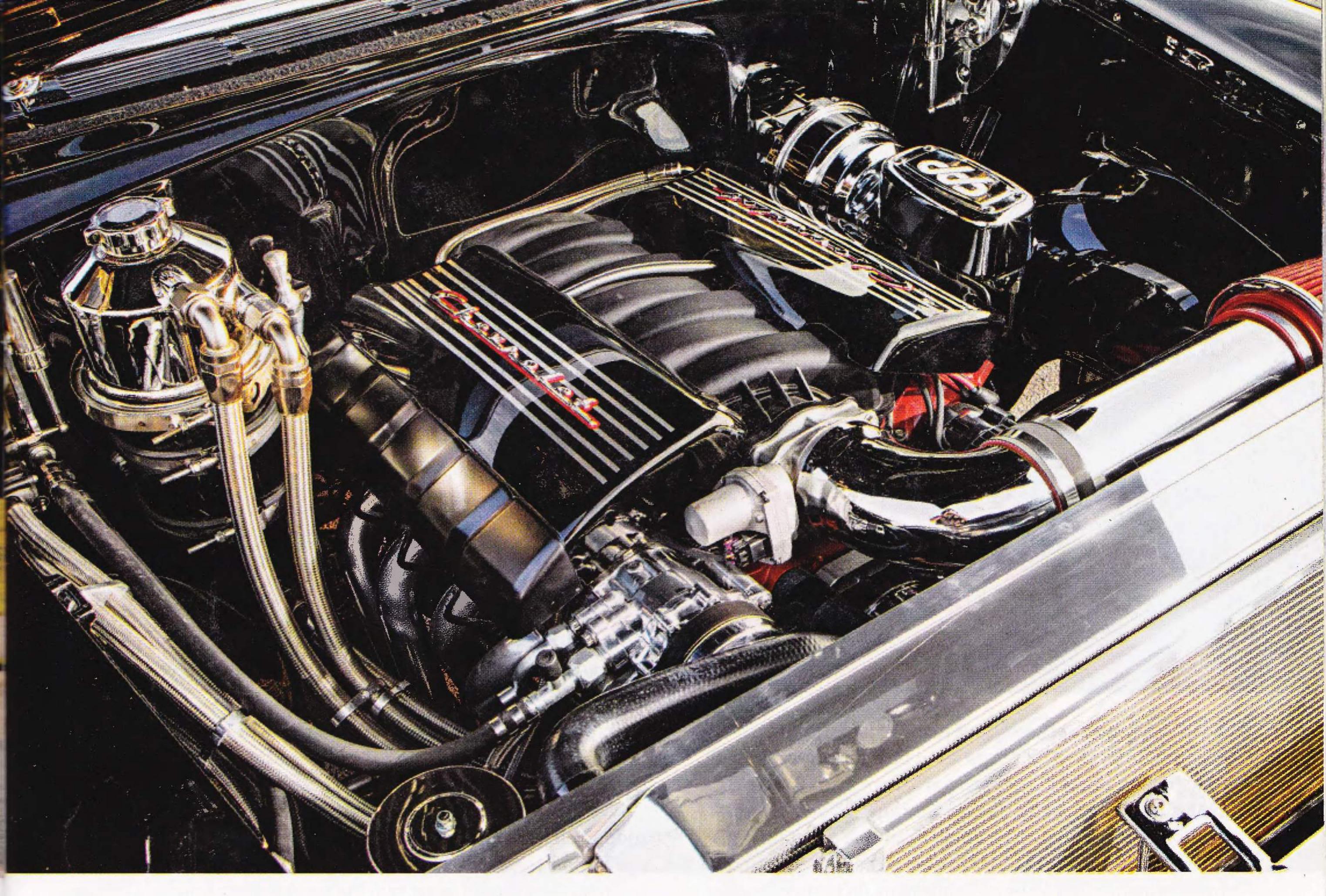
Now would this enrichment mean anything to somebody who isn't really a car guy, a guy like say humble and mild-mannered Charlie McWilliams, a pharmacist in real life who strives to glide just below the radar? Let's see.

Charlie was right up front with it. Frank, admitting that he didn't know much about cars and especially this one that came new from a dealership in Decatur, Georgia, those tens of years ago. He dragged us up to date: "I bought the car from my cousin, who'd had it for probably 35 years. Over

those years it had lounged in different sheds and barns and of course, it did not run. I am the fourth owner." Since Charlie possesses scant mechanical acumen, he knew he'd have to avail professional assistance, but in the meanwhile, he and wife, Melinda, and their kids had lots of fun poring through magazines and catalogs for some sort of inspiration.

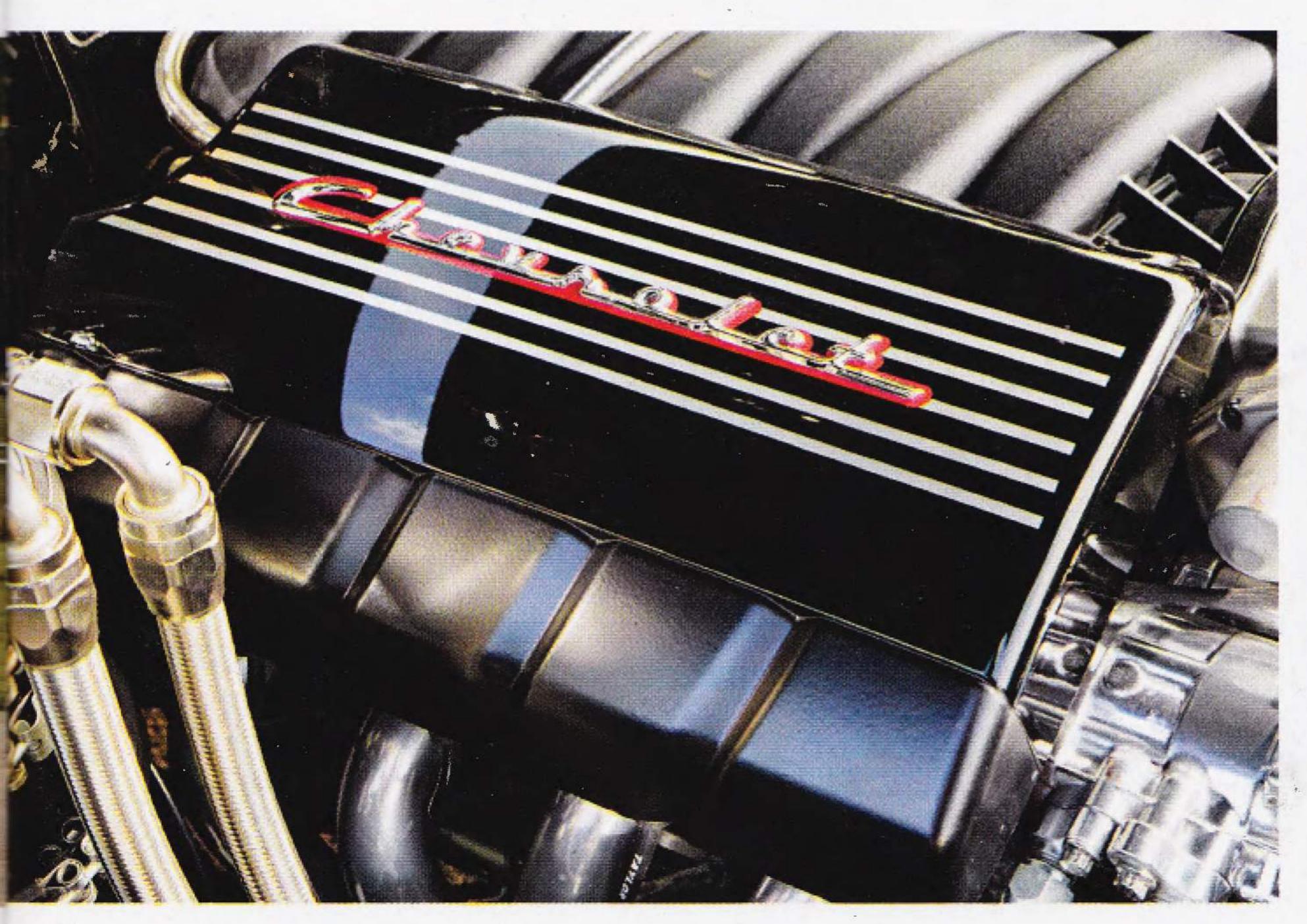
As for the control that a highly structured aftermarket chassis could afford—now there are at least a half-dozen sources—Brad Cline at Thunder Valley Customs in White,

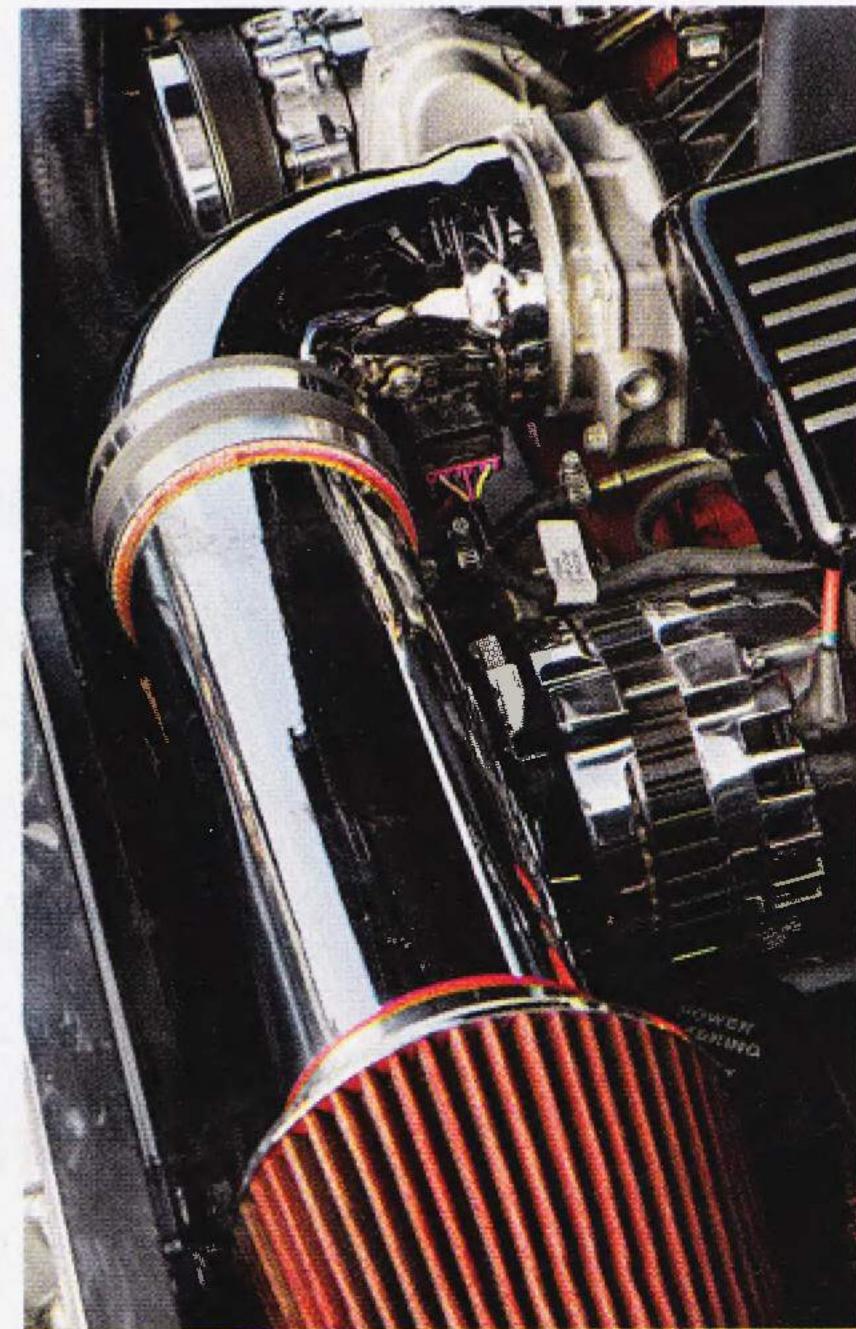




Georgia, looked no further than a Morrison GT-55 square-tube superstructure. Thunder liked it for several reasons, including gusseted framerails, a four-link rear suspension system cradling a 9-inch housing, adjustable crossmembers, new uprights, tubular upper and lower control arms, Strange Engineering coilover shocks, antisway bars, and a rack steering system. Brake choice is up to the buyer, so Brad picked some big-ass Wilwood hats and calipers and serviced them with a Wilwood master.

During the build time of approximately 12 months, Thunder Valley was able to experiment way beyond a clandestine dragstrip routine. The original combination included a six-speed 6L80E transmission (with stump-puller 4.03:1 Low gear). Without pressing the details, they could never get it to shift properly and Brad said that although it was not enjoyable during normal driving, it was impressive bumping through the gears at wide-open throttle. Ultimately, it was relieved of duty. The boys swapped it out

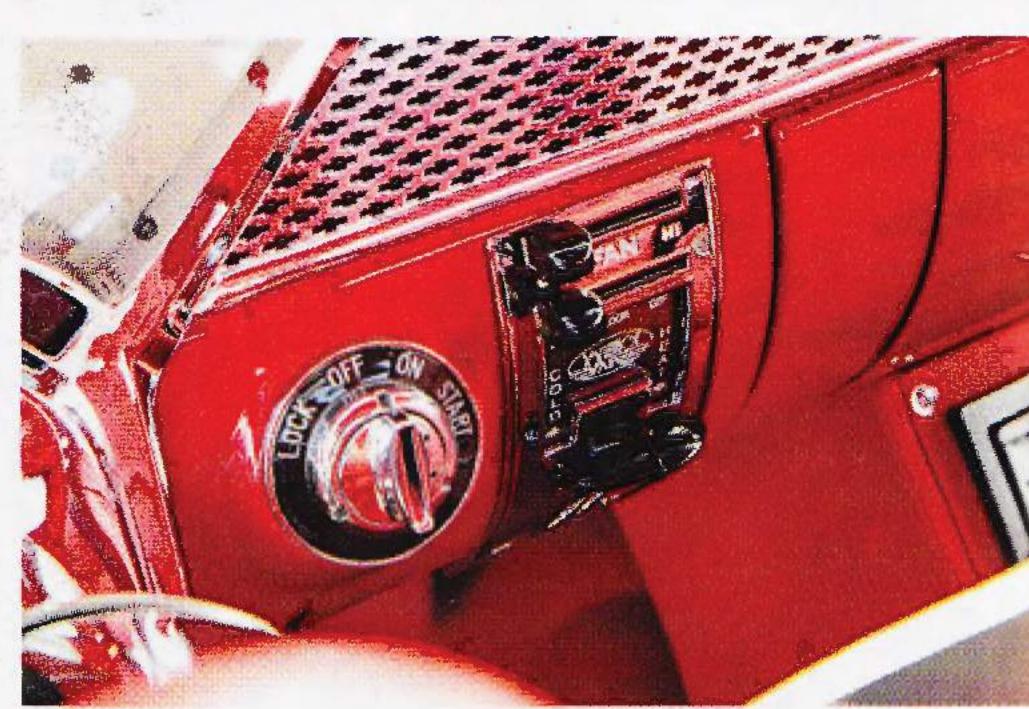




# **Charlie Horse**







for a 4L70E, which is working just as it should.

Though Charlie went for a rigid chassis, big brakes, 427 cubic inches, and a state-of-the-art suspension system, the last thing on his mind was building a Pro Touring annihilator. Charlie doesn't come from that mentality, it's not his ethos, but he wanted his car to be current in terms of performance and level of equipment. Whether he ever plans to use the Bel Air as an instrument of street terror only he can say, but we think that isn't in his make-up. We think Charlie would rather cruise than crush. One glance at the interior tells you that. There is no foreboding rollcage or safety webs that shout "racer." Despite that RED is an inflammatory, excitable color, it just doesn't come through that way in Charlie's Chevy. There's nothing edgy about it,

nothing to incite. There are few remnants of the original; it's all neat and compact and if you couldn't see the upper dashboard, you wouldn't know what the car was.

We had a chat with Thunder's Brad Cline about un-hot rodder Charlie's predilection ... and then we heard Brad's confession as well. "He didn't want me to spin his tires because they would wear out. He's never seen how fast this car is. He just drives it like a grandma car. He drives it Sundays to church and work sometimes. He doesn't know I took it down the strip in Bowling Green. That was the first time I had ever been down a real track and had ever tree'd a car. It ran a 13 at more than 102, tires spinning and me short-shifting. Not bad for a grandma, I think. Maybe [Charley] will read about it in your magazine."

## TECH CHECK

Owner: Charlie McWilliams, Lithia Springs, Georgia Vehicle: 1955 Bel Air

#### Engine

- \*Type: LS7 crate engine
- Displacement: 427 ci
- Compression Ratio: 11.0:1
- Bore: 4.125 inches
- Stroke: 4.000 inches
- Cylinder Heads: CNC-ported 12-degree castings, 70cc combustion chambers, 2.20/1.61 valves
- •Rotating Assembly: Forged crankshaft, forged titanium connecting rods,
- hypereutectic pistons
- \*Valvetrain: OE investment-cast roller trunnion rocker arms, 1.8:1 ratio; OE lifters, pushrods, and valvesprings
- •Camshaft: OE (211/230-degree duration at 0.050; 0.591/0.591-inch lift)
- \*Induction: LS7 production intake manifold, 90mm ETC throttle body
- \*Ignition: OE
- Exhaust: Custom headers, 2-inch primary pipes, stainless 2 1/2-inch system, MagnaFlow Turbo mufflers

- Ancillaries: Dry-sump oiling system, Corvette oil pan, Vintage Air Front Runner accessory drive, OE water pump, AutoRad core support and radiator, 22-gallon Rock Valley stainless fuel cell, Eddie Motorsports
- Hood Hinges
- •Machine Work/Assembly: GM Performance Build Center (Wixom, MI)
- Output (at crank): 505 hp at 6,300 rpm,
- 470 lb-ft at 4,800 rpm

### Drivetrain

- Transmission: GM 4L70E, Chevrolet Performance SuperMatic 2,500-stall converter
- \*Rear Axle: 9-inch, Truetrac differential, 4.10:1 ratio, Strange Engineering 31-spline axles, custom propshaft by Rome Driveshaft

#### Chassis

(Rome, GA)

- Front Suspension: Art Morrison Mustang II, DSE rack steering, Strange Engineering coilovers, antisway bar
- Rear Suspension: Four-link, Strange coilovers, antisway bar
- Brakes: Wilwood 14-inch rotors with six-piston calipers front, 13-inch rotors with four-piston calipers rear; Wilwood master cylinder

#### Wheels & Tires

- •Wheels: American Racing Torq-Thrust II 18x8 front, 18x10 rear
- Tires: Nitto NT555 245/40 front, 295/45 rear

## Interior

- Upholstery: Brad Cline, Thunder Valley
- Customs (White, GA)
- •Material: Leather
- Seats: Custom
- Steering: ididit tilt column, Classic Industries Comfort Grip wheel
- •Shifter: Pontiac G8
- Dash: Stock
- \*Audio: Kenwood head unit and 1,000-watt amp, satellite radio/iPod connect/navigation/ touch screen, JL Audio speakers
- Instrumentation: Classic Instruments
  Bel Era
- HVAC: Vintage Air Gen IV

#### Exterior

- Bodywork: Eric Pike, Thunder Valley Customs
- Paint by: Eric Pike
- Paint: PPG Black
- \*Hood: Stock
- •Grille: Danchuk stainless steel
- Bumpers: Stock, refurbished by Custom Metal Finish (Rockmart, GA)