



FLAT OUT IN GMPP'S FASTEST

SIX CARS, 3,000 HORSES, AND ONE LEAD FOOT

Text and photos by Rick Jensen

Is this a dream? I don't feel like I'm dreaming—two cups of coffee and a caf-blast soda will do that. But...I'm standing at the beginning of a two-mile straight-away, with a handful of stock and highly modified GM vehicles at my disposal. The unmistakable E-ROD 1955 Chevy sits ready and waiting. And as I'm offered the keys to a supercharged, 700-horsepower Camaro, a brand-new Corvette ZR1

rumbles by, ready for some high-speed runs. Can this be real?

From five until eight-thirty this morning, everything was normal. I'd managed to escape the office for a northwest Detroit hotel, at the request of our friends over at GM Performance Parts. I got up and pulled back the shades, simultaneously thanking the car gods for our sunny weather and applying the Huw Rule to make sure the rent-a-

wreck's wheels were still attached. So far, so good.

At seven, I headed out. The destination: the Milford Proving Grounds, in Milford, MI. About an hour's worth of twists and turns aside, I came upon a string of buildings signaling the beginning of the massive Milford complex. Back in 1924 when Milford was first opened it displaced about 1,100 acres; it is now 4,000 acres, with an unbelievable 110 test

tracks crammed into it. After parking, I sauntered up to the visitor's office, where GMPP's Dr. Jamie Meyer and Mike Copeland were waiting. And then, things started moving pretty fast.

DOWN THE RABBIT HOLE

As some of the most top-secret pre-production GM vehicles call Milford home, they don't allow every yahoo with a camera phone in the door. In a flash, I was dumping my camera bag and documenting every lens, memory card, and errant piece of lint for the security team. A red DO NOT REMOVE sticker was placed over the Blackberry's camera lens, and I was issued a blue VISITOR badge and my own security guard. With Meyer and Copeland leading the way, we're buzzed through the security door and down a rabbit hole of cutting-edge technology and limitless engineering potential.

Building 27 smells like oiled metal. The smattering of cubicles up front gives it an office façade, but at its heart is a labyrinth of Bridgeport drills and metal presses—including one massive, 500-ton monster—for making custom parts. You get the





idea that the corporate front office is mostly for keeping up appearances, and the same can be said for Mike Copeland, Project Manager-Concept & Vehicle Integration. His easy smile, somewhat confusing title, and corporate, button-down shirt is betrayed by a steely gaze and a fiery disposition. This is the kind of guy who gets things done. He chooses wrenching over an office chair, thrives on round-the-clock thrash sessions to finish projects, and knows the night security guys by name. My guess is that he spends more time in the back of this building than in the front. "I pretty much have free reign to use anything I want here," Mike smiles. I'm instantly jealous.

A big SUV swallows me up, and as we twist through Milford's never-ending corkscrew roads I notice a couple of Volt electric cars near Building 16, the place where these little dynamos are being worked on. A lot of guys don't care for the idea of GM building electric cars—electricity comes from coal so what is it really helping, there will never be an electric hot rod, etc.—but I think it's great. And you know that somewhere deep in Milford's bowels, one of Copeland's evil twins is jacking up the Flux Capacitor—or whatever those damn things use—to really unsafe voltages in the quest for more speed and really weird-sounding burnouts.



INSIDE THE TOYBOX

I arrive in the rear of a building, where a huge garage door opens to reveal a bay full of GM iron. They range from dead-stock-but-fast ponycars, to hi-po engineering feats that immediately blow my mind. Next to a third-gen Camaro with an LSX454 crate engine is a blue Colorado truck with a 600-horse LS swap. Next in my field of vision are a 2001 Z28 and a 1996 Impala SS—and I realize that GM's latest supercharged mills have found good homes at GMPP. The 556-horse LSA from the Cadillac CTS-V has been eased into the big Impy's engine bay, and it sits on fat, sticky drag radials that will undoubtedly need every millimeter of rubber to handle 551 lb-ft of twist. The 2001 Z is the same GMPP mule I drag tested at Milan a few years back. In those days it was rocking the 427-inch LS7, and ran 12-flat. The stakes have been raised considerably, as a modified LS9 from the ZR1 is now crammed into its tiny engine bay. I crane my neck at the rear tires, hoping to find drag radials, full-on slicks, or possibly some new type of rubber super glue to control the boosted 6.2. Nope. Not only were they street tires, but the rim clearance limited them to 285mm. Oh boy...

I continue my walk into the deepest part of the garage, and I pass a couple of projects that are so secret I'm not allowed to write about them. Very cool stuff, cool like Jake Ryan's Porsche in that chick-flick **Sixteen Candles** that every woman happily watches like **1,000** times. Finally, I





arrive at the stunning E-ROD 1955 Chevy. The E-ROD is the marriage of a timeless body style and a cutting-edge, green LS3 V-8 that puts out 430 horses and 424 lb-ft of torque. And GM is in the process of obtaining complete emissions compliance in the state of California for it.

The 1955 is perfect from every angle, the embodiment of GM design in glass, paint, and chrome. "So what do you think," asks Dr. Meyer, his eyes twinkling behind black sunglasses. "Will this work for you?"

AT THE TRACK

After I do some detail shots of

all of the vehicles, it's time to head over to the testing location. We grab sets of keys and jump into the cars, staccato exhaust notes drowning out everything else. We'll be taking the LS9 Camaro, LSA Impala SS, LSX Camaro, and the E-ROD 1955 Chevy from GMPP's toolbox. And GM has arranged a couple of brand-new performance cars for me to sample: I cruise over in one, a sharp 2010 Camaro SS automatic. I pass building after building—labs, tire shops, machine shops—before getting out into the green, hilly area where the tracks are. On one overpass I cross over the banked, 2.5-mile high-speed track that dominates any satellite image of

this place, and notice a new black Camaro with powerful bulges in all the right places. "You didn't see that," Mike smiles. We arrive at our destination.

The military straight. Around two miles of potential speed, bookended by two banked, 180-degree turnarounds. Our base of operations is at the extreme north end. Roughly in the middle of the straight is an overpass, which crosses over the top of the long patch of road. As far as GM Corporate knows, the official 85-mph speed limit would be enforced today. And from the overpass south, that is exactly how fast I'll be traveling. But to that overpass, and from it heading back north, it will be a no-holds-barred orgy of speed. The sun is shining and five ridiculously fast cars are lined up for some thrashing when a gray missile streaks into view—and a new ZR1 Corvette joins the party.

2010 CAMARO SS

6.2L L99 V-8
400 HP, 410 LB-FT
SIX-SPEED AUTO

The new Camaro is so refined, it's easy to forget that you are driving a 400-horse sports car. Its manners between the garage and the military straight were perfect: the stylish, 20-inch rims and fully independent suspension easily soaked up uneven roads and their bumps, with only muffled thumps coming



into the cabin. When it was time to lay down some rubber, I simply disengaged the traction control by hitting the button ahead of the shifter, brake torqued to around 1800, and let 'er rip. After a touch of wheelspin, I'm off on a deceptively quick ride. The SS hits triple digits quick, and it is a smooth, stable car to drive at speed. On the cooldown I note the engine's and tranny's manners: smooth shifts by the 6L80 six-speed automatic complemented the seamless L99 perfectly. I say seamless because the L99 is an Active Fuel Management engine that improves fuel economy by shutting down four cylinders during certain light-load driving conditions. You'd never know it though; this thing still pulls like a bull, and pulls down 25 mpg on the highway, too!

1996 "LSA IMPALA SS"

6.2L LSA SUPERCHARGED V-8
556 HP, 551 LB-FT
FOUR-SPEED AUTO

Ever take a running start onto an ice rink, start sliding, pedal furiously in a vain attempt to get traction, and just when it looks like all is lost, the laws of physics kick in to save your butt? Yeah, that's what it is like trying to control the ungodly wheelspin created by this boosted 6.2-liter mill, which is housed in pre-production Impala number 007's plus-size body. With its sticky drag radials, you'd think there's no way in hell that it would get so loose when the go-pedal is prodded. But this LSA V-8 is no joke: it makes torque like a freakin' GE locomotive—less like

an engine, more like a generator. Whacking the throttle results in a shrill scream from its supercharger, the twin four-lobe, 160-degree rotors ramming fresh air into the waiting cylinders. All of that twist runs through the 4L85E tranny and hits the tires like a time bomb, leaving no chance of actually attaining traction for the first hundred feet or so. "This was an easy car to build," explains Copeland. "There's a lot of room under the hood, even with the blower and intercooler. This car gets to 100 mph faster than you'd think possible." A very true statement—and it goes way past 100 easier than a big B-body should! Number 007's next job will be to test the fully emissions-compliant, 556-horse E-ROD LSA crate engine.

2001 "LS9 CAMARO"

6.2L LS9 SUPERCHARGED V-8
700 HP, 640 LB-FT (ESTIMATED)
SIX-SPEED MANUAL

I gotta tell you, I was expecting the LS9 Camaro to be completely, un-driveably brutal. On paper it's the kind of car that you really need to watch while you're doing the clutch-gas dance, especially on street radials. And the mix of earth-shaking exhaust rumble and high-pitched supercharger whine adds to its intimidation factor. But whether it was something in the big LS9's tuning, the dual-disc clutch's feel, or the big, heavy S60 rearend sucking up some of that power, this warhorse fourth-gen seemed to handle the header-fied LS9 engine quite well. Of course there was

wheelspin—if Michelin's stock price edged up this summer, you now know why. But it didn't seem like the kind of throw-you-off-the-road spin I was expecting. To bring the revs up to 2800 or so meant that even the easiest clutch engagement meant skate city. However, the LS9 Camaro hooked up very fast, a credit to its massaged suspension. Once Third was engaged and the immediate threat of wheel- and car-spin was gone, I marveled at the LS9's ability to gather speed, with the trees and signs whizzing by at an alarming rate. It may not have been brutal, but it definitely was a very fast car, and a fine-looking one at that. Credit GM Design's Dave Ross for using Corvette ZR1's visual attributes—Jetstream blue paint and massive brakes, with four front 19x10 ZR1 rims on all four corners wearing 285/30ZR19 tires—to expertly enhance the oft-griped-about 2001 F-body's looks. It worked!

2010 CORVETTE ZR1

6.2L LS9 SUPERCHARGED V-8
638 HP, 604 LB-FT
SIX-SPEED MANUAL

Speaking of brutality...

I never thought I would experience a car with so much technological wizardry and mind-blowing acceleration wrapped up in one, but the few minutes I spent riding shotgun in one of GM's engineering ZR1s were enough to forever alter my ideas about what a fast car is. Despite the GMPP crew's valiant efforts to secure a press ZR1 for me to drive, there were





none available that week. Backup strings were pulled to rope one of the Cyber Gray test mules in for a fun game of “terrify the journalist who thinks he knows fast cars.” I got in, latched in, and shook the engineer’s hand. We pulled out and straightened the bulged nose toward the far loop, two miles away. “You ready?” he asked, with a sly grin. Without taking his eyes off the road, he reached down and turned the Performance Traction Management dial to Competitive Mode to prep for a Launch Control-aided start. He then floored the gas, which kept the big LS9 spinning at the perfect rpm. Once the clutch was dropped, we were literally shot forward. The combination of that

neck-snapping start, 638 ponies yanking us forward, and the ZR1’s relatively light 3,300 or so pounds resulted in the most impressive thrill ride I’ve ever experienced. The old “couldn’t touch the dash” story might be hokey, but I’m here to tell you that my arms weren’t even close, no matter how hard I tried. There are literally no words to describe the rush that this homegrown supercar provides. When we were close to doubling that 85-mph speed limit, the ZR1’s Brembo ceramic brakes were stomped on, flattening my torso against the belt. When the carbon fiber-enhanced rocket finally came to a stop, I oozed onto the pavement a changed man.



1955 CHEVY “E-ROD”
6.2L LS3 V-8
430 HP, 424 LB-FT
FOUR-SPEED AUTO

This Chevy was a Heritage Collection car, pressed into service when GM Performance Parts wanted to showcase a classic with a modern, emissions-legal powertrain. It all started at the request of SEMA, who discussed the idea of an emissions-legal engine package with GMPP. The difficulty that California hot rodders have with 1975-95 vehicles is well documented, and roughly 100,000 of them are illegally titled. E-ROD Lead Engineer Steve Felix and his team got to work, and the solution was a 430-horse engine package that included the LS3, emissions controls, cats, manifolds, LS3 engine harness, a specially calibrated engine controller—even the accelerator pedal and air filter. It was a powerful, green answer to the difficult emissions issues that hot rodders now face.

“E-ROD represents a revolution in hot rodding by offering an unprecedented, emissions-legal engine and emissions system that carries approval from the influential California Air Resources Board (CARB),” said Dr. Jamie Meyer. “We developed this system because it’s the right thing to do, but our engineers did not sacrifice the performance that stirs

hot rodders in the first place. It is a compromise-free package that delivers great power and efficiency, with the emissions of a modern vehicle.”

During a pre-drive inspection, I marveled at just how perfect this 1955 is. The two-tone paint is flawless, and all of the right bits are brilliantly chrome plated. Inside there is a mix of old and new: actual NOS fabrics sourced from GM’s warehouses complement the restoration goodies from aftermarket companies, and the adjustable steering column and aftermarket wheel add a nice touch. To step in and sit down, you notice that the doors and windows open and close with the “thunk” of a brand-new vehicle. But it’s when the engine is cranked that I realize just how impressive the E-ROD is: the LS3 cranks, starts, and idles perfectly. There are no hiccups, just smooth operation and a subdued exhaust note. The 4L60E Supermatic goes into gear with a satisfying clunk and I’m off. I roll forward a bit, stop, and powerbrake up to two grand or so. I let go of the brake and the LS3’s big torque passes through the 12-bolt’s 4.10 ratio, lurching the 3,500-pound E-ROD forward and spinning the meats for a good distance. The one-two shift is big fun, the rear tires chirping in protest. If you let it the E-ROD will take you into velocities that original 1955 Chevys would pale at; still, at high speeds this car feels



highly stable and more than capable of handling them. During cruise it is all smooth and rumbling, the LS3 and its E67 controller working flawlessly. It dawns on me that this package would start and drive in the coldest and hottest climes, would commute with nary a problem, and would get decent gas mileage while passing the most stringent of sniffer tests. In short, it is the perfect hot rod.

LEAVING MILFORD

The sun began to drop, and suddenly it was time to leave magical Milford for a nearby restaurant for some good food and great bench racing with the GMPP staff. I’d sampled every car save for the LSX Camaro

(which suffered minor problems), and came away with the knowledge that the General still has loads of knuckle-busting hot rodders at work—at Milford and around the country. And their can-do attitudes are still busting through this tough car guy environment to build some of the fastest, baddest—and yes, even most environmentally responsible—projects on the planet. Not all of us are required to have emissions-compliant speed parts, but when that day comes, GM Performance Parts has us covered.

The author would like to extend a big thank you to GMPP’s Dr. Jamie Meyer and Mike Copeland for their generous hospitality, and their assistance with this article. CC&P



For video of the E-ROD 1955 Chevy in action, visit www.youtube.com/AutoTraderClassics