Sneaky C10

Larry Lilly’s ‘65 C10 Packs a Big Secret Underhood

By Tommy Lee Byrd

For decades, it’s been popular to stuff a high-horsepower engine into an unassuming package and surprise folks in the other lane. Whether it’s at the dragstrip, or a quick blast on the street, a sleeper is something that always gets the attention of gearheads. For Kentucky resident Larry Lilly, he had an idea to build a sleeper from a mostly original C10, and did just that with help from Jarrod Lucas at Lucas Performance.

The build started with a very solid ‘65 Chevy C10, which Larry found in Tennessee, but the truck had spent most of its life in Texas. He knew the small-block was worn out and ready for a replacement, so he dropped in a fresh 350 and a new transmission, so he could hit the road while he planned a more extravagant engine swap. The truck gave him two years of daily driving, and he took it apart in 2013 to give it a new attitude.

The secret weapon for this sneaky C10 is a 5.3L LS-based engine out of an ’08 Chevy truck. Lucas Performance handled the engine work, but didn’t modify the rotating assembly, aside from the addition of ARP fasteners consisting of main studs, rod bolts, and head studs. The stock cylinder heads are capable of flowing big-time numbers, so the only new parts inside the engine are the camshaft and valvesprings to prepare for boost. The camshaft is a COMP Cams hydraulic roller, with a 300/308 split on duration and 0.620-inch lift.

Atop the LS engine is a Holley Hi-Ram intake manifold, which gulps down major loads of air from a BorgWarner 88mm turbocharger, and mixes it with 93-octane pump.
gas from a series of Deka 60-pound injectors. Fuel is sourced from a CPP 18-gallon tank, and uses dual Walbro 255 electric fuel pumps to feed the boosted combination, which produces 550 hp at the rear wheels at only 9 pounds of boost on a mild street-friendly tune. Behind the force-fed LS engine is a modified 4L80E automatic transmission, fit with turbo sprags and shift enhancers, as well as an FTI torque converter that stalls to 3,000 rpm. Moving further back is a Cincinnati Driveline custom driveshaft, connected to a GM 12-bolt rearend, which is packed with an Eaton Detroit
Truetrac differential, a 3.42:1 gear set, and a pair of Moser axles. This bulletproof driveline is necessary for big-time horsepower, and you can bet that Larry uses that power whenever he finds a good excuse. He continues to drive the truck daily, and even manages to get 17 mpg, as long as he stays out of the throttle!

Although the body has some natural patina here and there, the frame and suspension has been completely rebuilt, using CPP components throughout. Larry started with getting the stance where he wanted it, which required 5 inches of drop in the front and rear. He accomplished this with coil springs and drop spindles up front, and also added a CPP 11-inch disc brake kit and a larger sway bar while the front end wasn't apart. The rear drop consists of 5-inch lowering springs and new shocks from CPP. Larry mounted a pair of 235/75R15 radial tires to 15x6 Wheel Vintiques Smoothie wheels up front and 255/70R15 radials and 15x8 Smoothies out back. White paint and dog dish caps finish off the steelie look.

According to Larry, the truck had been repainted about 20 years before he bought it, and it was in need of a few bodywork repairs, so he straightened up the panels to his liking. Then he touched up the paint to match the patina of the weathered Ivory Tan paint. While the truck was undergoing repairs, Larry also replaced the bed wood and replaced all of the glass, which freshened the truck's appearance. Inside, he kept it simple with mostly painted surfaces, aside from the stock recovered bench seat. The rubber mat adds to the utilitarian look, while a '59 Chevy Biscayne steering wheel offers a splash of old-school flavor.

Larry likes to go fast, and has given his C10 a fair share of beatings, including some quarter-mile blasts at his home track, Thornhill Dragstrip in Morning View, Kentucky. His best
Boosted Bullet

A key player in Larry's sneaky C10 is the turbocharged LS engine. While the truck would've had plenty of pep with a bone-stock LS engine pulled straight out of a late-model Silverado, the boosted combination offers quite a thrill.

Turbochargers are essentially an air pump that is driven by the engine's exhaust pressure. Unlike superchargers, there is no parasitic horsepower loss, so the overall potential for a turbocharged application is outstanding, especially with an engine that is efficient. LS engines, more specifically Vortec truck engines (4.8, 5.3, and 6.0) are boost-friendly, thanks to a lower compression ratio than some of the more powerful LS engine offerings. The 5.3L option is the most popular for turbo builds, as the stock cylinder heads are best suited for boost and the bottom end proves to be very strong, even under heavy loads of boost.

Bigger isn't always better when it comes to turbochargers, and Larry's truck is certainly on the upper end of the spectrum. The 88mm BorgWarner turbocharger features a large T6 exhaust housing, which bolts to a crossover pipe that ties the two exhaust manifolds together into one large inlet. Turbochargers of this nature are typically used in diesel applications, and it's quite obvious when you see the size of the inlets and outlets. Once the exhaust gases pass through the turbocharger, the air passes through an intercooler, which is tucked behind the original grille. From there, it enters the throttle body, where the slightly modified LS engine gulps down the blast of charged air.

The exhaust outlet is 5 inches in diameter, and runs into a Hooker muffler before exiting just before the rear end. The turbo actually acts as a muffler, so Larry's truck is extra quiet, considering that it makes 550 hp to the rear wheels on only 9 pounds of boost. Lucas Performance handled all of the turbocharger installation and tuning, ensuring Larry that it was safe and reliable on 93-octane pump gas. Taking into account the massive turbocharger, Larry could easily be looking at 700 hp to the rear wheels by simply adding more boost and a few more degrees of ignition timing, and of course, a tank full of racing gas. There is no question that turbocharging an engine is a great way to make big horsepower, but it helps to have a shop sort it out, so that you can truly enjoy the added power without hurting parts along the way.

 elapsed time so far is 12.80 at 108 mph, which isn't too shabby for a 4,000-pound truck. He plans to add more boost, change the rear gear ratio, and possibly add methanol injection to knock down his personal best. For now, Larry is happy with 550 hp at the wheels, which is plenty for a street-friendly combination that hits the open road on a regular basis. In the past year, we've spotted this truck at events in Knoxville and Nashville, Tennessee, and Bowling Green, Kentucky, so it certainly gets around. The clean and simple appearance is undoubtedly cool, but it also helps to hide a big secret that rides under the hood. ☝️