



Easy Breathing

C&L OPENS UP THE AIRWAYS ON THE S197 GT

Text and photography by Ricardo Topete

The dynamic new 2005 Mustang is prowling the streets of America in large numbers—better than ever and ready to challenge a new generation of sports cars for supremacy. Yet our beloved Mustang faces stiff competition. Domestic musclecars such as the new Corvette and GTO, and even the pocket-sized Dodge Neon SRT-4, all want to be America's king of the street. It is our duty to keep you informed on how to make the quickest Mustang GT in history even better.

With a powerful 300 hp engine, sophisticated suspension and timeless styling, it is no mystery why there is a shortage across the land. With an excellent foundation like this, it is obvious why the new GT responds incredibly well to the basic bolt-on modifications. If there is one complaint about the GT, it is with its computer processor. Specifically, due to the nature of the factory computer, it is sensitive to changes in airflow (i.e. hot-rodding tricks). This makes it mandatory to re-tune the factory computer with almost ANY improvement to the air intake assembly, even for a simple high-flow air filter.

C&L Performance has been providing Mustang speed freaks with dyno-proven air induction and mass air meter upgrades for years. When we got word that C&L had introduced a complete air intake system for the new Mustang, we were eager to test it. The C&L TrueFlow Intake Assembly for the GT is available in two flavors: with or without a specially calibrated DiabloSport Predator hand-

held programmer. Knowing that any sort of upgrade to the intake requires a computer re-tune, we suspect most customers will opt for the kit with the Predator. Should you elect the C&L kit with the specifically tuned Predator, remember that it has all the useful features of a normal DiabloSport Predator, thereby allowing you to continue to tune your Mustang as you add more modifications. For those individuals that already have some sort of a programmer, they can request the basic TrueFlow Intake kit, which leaves out the Predator.

The C&L kit replaces everything from the throttlebody forward—featuring a handsome cast-aluminum intake pipe, new mass-airflow housing, generously sized high-flow air filter and a black plastic heat shield. Furthermore, C&L also offers all of the above components a-la-carte, should you want to piece together the kit or combine it with a similar product from another company. The finished product looks right at home under the hood, making that reason enough to ditch the

factory air intake system. In stock form, the ghastly rubber inlet pipe and clumsy air box leaves a great deal to be desired in the aesthetics department. Naturally, being Mustang enthusiasts, we don't do modifications for looks only. We want performance gains first and foremost...if it happens to look cool, that is certainly welcome.

C&L reported consistent gains of around 26-30 rwhp with their TrueFlow intake kit and the specially tuned Predator. Sounding too good to be true, we decided to try one out for ourselves. The experts at GTR High Performance in Rancho Cucamonga, California, volunteered to assist us with this story and managed to round up a customer with a brand new '05 GT. GTR sweet-talked Pedro Talavera into letting us have our way with his Mustang for the sake of knowledge and the pursuit of horsepower. Pedro's virgin five-speed Mustang was only equipped with a pair of Flowmaster mufflers to give the pony a more authoritative voice...all else was pure stock. This made for a nice candidate for testing purposes. We solicited the help from the friendly staff at J&D Performance (Ontario, CA) for dyno-testing. J&D is equipped with a Mustang chassis dyno, which measures rear wheel horsepower and torque—perfect for analyzing modifications and their net worth.

Before we continue with the test results, let's clarify something about chassis dynos. Not all dynos will read the same.

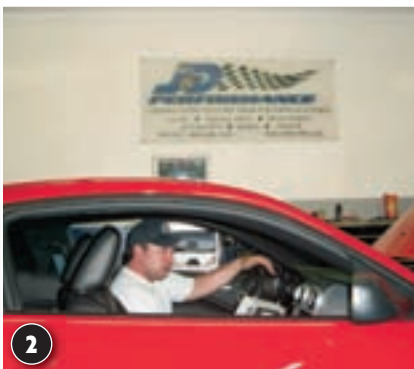
Fact is, many chassis dynos are designed to interpret data different, and as a result the output readings will vary. Other factors such as temperature, humidity, elevation, etc. will also affect the data collected. In short, just because you see a certain gain achieved in this or any other story, which does not guarantee that you will see the exact results in your vehicle. It does, however, prove that a certain modification does or does not improve performance

and by how much. In order to ensure consistency and accuracy, it is always best to test on the same chassis dyno. Otherwise, you may actually increase horsepower and torque overall, but a different chassis dyno may not show the same results.

To establish a baseline, Dave Lukason of J&D Performance strapped Pedro's GT onto the rollers. Lukason ran two baseline tests, and both proved consistent within

one hp of each other. Baseline results: 269.1 hp at 5,900 rpm and 278.8 lb-ft torque at 4,400 rpm. While still on the dyno, Chris Balster, one of GTR High Performance's technicians, installed the C&L TrueFlow intake system. In a matter of minutes Chris had the stock intake out and the C&L kit in place. Next, the Diablo Sport Predator was used to re-flash the stock computer.

Lukason put the '05 through its paces



1 The C&L kit replaces everything from the throttlebody forward—featuring a handsome cast-aluminum intake pipe, new mass-airflow housing, generously sized high-flow air filter and a black plastic heat shield. Add the DiabloSport Predator to maximize the C&L upgrade, and continue to tune your Mustang as you add more modifications.



2 Dave Lukason of J&D Performance prepares to run the GT on the dyno to establish baselines.

3 Chris Balster of GTR High Performance removes the retaining bolt for the stock air box and lifts the air box out of the engine compartment

4a 4b How are we supposed to make any power breathing through this stuff?



5 Using the C&L supplied T-20 torx bit, remove the two screws that secure the factory mass air meter to the air box assembly and carefully lift out the sensor.

6 Transfer the air sensor to the C&L mass air housing using the factory screws.

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on the dyno and the results were nothing short of impressive: 289.2 hp at 6,150 rpm and 289.5 lb-ft torque at 4,400 rpm. A back-up test was conducted and revealed nearly identical numbers. A 20.1 hp and 10.7 lb-ft torque gain. Not shabby at all considering the basic nature of this effective modification. Once off the dyno, a test drive by Pedro confirmed the findings. Simply put, the '05 GT buzzed to redline effortlessly and pulled with newfound authority. Impressive, as it is uncommon to see such large gains with such minimal work invested.

Following the test, C&L Performance commented to us that it is normal to see even larger performance gains if the engine is allowed to rev higher. That is where they have typically seen the advertised 26-30 rwhp gains over stock.

With our test car, however, we elected to cut off the testing at 6,150 rpm, as Pedro's Mustang only had 3,800 miles on the ticker. A Mustang with slightly more miles that could be revved higher would surely show bigger gains since the horsepower curve was still climbing when we stopped the test.

If you are lucky enough to have gotten your hands on a 2005 Mustang GT and are considering ways to improve its performance, your search should end here. C&L has proven that significant power gains are possible with their TrueFlow induction kit. The fit and finish is great and the installation basic, requiring only normal hand tools. Purchasing C&L's TrueFlow intake kit should be easy, as it can be ordered direct from C&L or any of their authorized dealers, like GTR High



Performance. Considering the GTR retail prices of \$719.99 for the TrueFlow intake kit with the DiabloSport Predator and \$374.99 for just the TrueFlow intake kit, we are sure you and your Mustang will be just as pleased and pleasantly surprised as we were with the results.



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7 Here the air sensor is installed in the C&L housing.

8 Disconnect the vacuum hose and TPS sensor from the stock air tube, loosen the hose clamps and remove the stock air tube.

9 Slide the C&L aluminum intake tube, along with supplied silicone connectors and hose clamps, onto the throttlebody.

10 Place the C&L mass air meter housing onto the C&L intake tube.

11 Slip the C&L air box around the mass air meter housing.

12 Attach the air filter onto the mass air meter housing and tighten the clamp.

13 Adjust the air box and C&L air tube as necessary, tighten all clamps and reconnect the vacuum lines and sensors.

14 Here you see the finished installation. The fit and finish is fantastic.

15 Re-programming the computer with the DiabloSport Predator is the final step, and it takes only a few minutes. ■

SOURCES

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