V-6 Performance Upgrades: Exhaust.

By David Kopielski

Many Fiero owners are always looking for bolt-on upgrades to increase performance and economy. With the wide range of available exhaust systems, it is hard to tell which is the better way to go. I have researched the many systems and with the assistance of Engineered Performance in Georgia and have compiled actual data from testing done on a dyno.

"Cat-Back Systems"

The most popular systems seem to be the aluminized Ocelot system from the Fiero Store and the elusive Borla stainless steel system. The Ocelot system (2.0") runs about \$260.00 and will give you about 1-2 horsepower increase and no torque increase. The Borla system (2.25") runs about \$450-\$500 and will give you about 6-8 horsepower increase and 1-2 pounds of torque. The most gains were attained using 2.5" pipe from the "Y" pipe to a Hi-Flow catalytic converter into a Camaro Flowmaster muffler and two 2.25" tailpipes. This gave a 8-10 horsepower increase and 3-4 pounds of torque. This exhaust set-up is quieter than the Ocelot or the Borla. Cost is about \$250 and all pipes need to be made at an exhaust shop. If you wanted stainless steel pipes the cost is higher. (about \$500)

"Headers"

The stock Fiero exhaust manifolds are very restrictive. The area inside is slotted rather than ported open. Having the stock manifolds "ported open" will increase horsepower by 2-3 and torque by 0-1. Cost to have a shop do it is about \$18.00. The Fiero Store and West Coast Fiero both make "Shorty" style headers. The Fiero Store calls them "Sprints". These headers are perfect for the stock 2.8L engines. They increase horsepower by 3-4 and torque by 1-2. The do not have the cracking problems associated with the stock manifolds and utilize the existing stock exhaust. Cost for these is \$500. Finally, there are the full tuned headers. These are sold by West Coast Fiero and F.O.C.O.A. These headers require some modifications to fit into the stock exhaust system. For the stock 2.8L you will have high horsepower gains upwards of 6-8. But you will lose low end torque. The headers work much better on the 3.4L upgrades where you actually gain low end torque due to the higher displacement of the engine or a modified 2.8L/3.1L. Cost of these is up in the \$700 range.

"Removing the Catalytic Converter"

The catalytic converter is a very restrictive part of the exhaust system and required by many states for emission control. It has been verified that removing the catalytic and replacing it with a straight pipe on a stock 2.8L, will increase horsepower but you will lose low end torque. It is better to replace the catalytic with a performance version such as a Catco Hi-flow unit. This will increase horsepower but you won't lose any low end torque.

At the January club meeting, I will discuss the above and have actual graphs from the dyno runs. I am also working with Travis at Engineered Performance to gather more information and comparisons with other brands and styles of exhaust systems.