

Wheels: *Bruce from Florida writes by-mail: “My 1995 Cougar, 4.6 V-8 has factory dual exhausts and the system is perfect because the car only has 19,000 miles and it is a Florida car. From the catalytic converters, the exhaust goes into one resonator then after the rear wheels it splits into two again with dual mufflers and two tail pipes. Car is way too quiet for me and could use some added pep, so I am wondering is there really any added power or performance if I put a complete new dual exhaust from the converters back? I was also thinking of just replacing the resonator with straight pipe and new high-performance muffler on the rear which would cost me \$200 less. Does relieving backpressure help horsepower? Also, would the check engine light come on? Would adding a high performance air filter really help performance or is it just “for the sound” and marketing for our money? Thanks!”*

Halderman: Any engine is basically an air pump and the more air that can flow into and out of the engine, the more power it can produce. However, the stock exhaust system was designed to be quiet because most buyers do want a quiet vehicle. While installing a high-performance exhaust system will increase power, this added power will be felt mostly at high engine speeds. Of course, the exhaust sound will increase and this is mostly why many install a high-performance exhaust. If the new system is behind the catalytic converter, there should not be legal or engine performance issues regarding a check engine light.

The biggest gains in power will be achieved by installing a cold air induction (CAI) system. This system, which is offered by many manufacturers, replaces the original air filter assembly with one that draws air from the outside. This increases engine power because the cooler the air, the more dense it is and this denser air increases power about 1 percent for every 10 degrees drop in temperature. For example, on a 90 degree day, the under hood temperature may be 150 degrees. If the factory stock air cleaner assembly is drawing air from the under the hood, then there is a 60 degree difference. Installing a cold air intake system in this case can result in about a 6 percent increase in power. The disadvantage is increased engine noise during acceleration but this might be what you are wanting anyway. Another disadvantage is that water may be able to get into the engine if driven on water, which may not be blocked from entering the engine like the factory air cleaner housing is designed to handle.

