



If your Corvette seems a little slower than it used to be – or than you would like – don't worry! There are lots of simple add-ons and tune-ups that anyone can do to put the spurs to those sleeping horses! Mid America Motorworks outlines a few do-it-yourself performance upgrades. All you need are a few simple hand tools and a weekend or two.

A Breath of Fresh Air

An often-neglected, yet critical key to overall performances is your Corvette's air filter. The stock paper-type element is easily clogged and can restrict air flow to the engine. No air equals no performance and no economy. During testing, we found that replacing the stock filter with a higher flow element would add 2-3 free horsepower! Just think of the gain when you replace your bug- and dust-clogged filter!

While you're working in this area, you might consider switching to an <u>open top air cleaner lid</u>. These cut-away lids bold on just like the stock lid, yet allow a 30-40% increase in air flow to your engine. This is especially critical for any engines that have had performance modifications or for cars with low restriction exhaust. More flow equals more horsepower!

For maximum air flow to your engine, consider a <u>Throttle Body Air Flow Booster</u>. These devices fit in the front opening of the throttle body and smooth the flow of air into your engine. Reduced turbulence allows more air flow and most owners receive a 10-12 horsepower boost. Installation is easy and only requires a screw driver!





Give Performance a Spark

Underhood heat and age will cause spark plug wires to deteriorate. They will no longer transmit a hot spark and will fail to give good ignition. Replacing the wires is an easy way to regain performance and economy. A well-insulated, high performance wire set will pass more spark energy and better withstand engine heat.

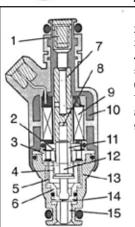
Be sure to route the wires away from hot manifolds and pipes. You may need to replace wire clips and brackets, as these become very brittle with age and are almost sure to break with you are removing or routing the wires.

Replacing the spark plugs along with the wires will improve performance even more. Many Corvette racers have discovered improved performance and durability when using premium spark plugs. You will receive a hotter and more reliable spark, and this is key to power and engine balance.

Fuel Your Performance

Clogged fuel injectors are a major cause of reduced performance. The fuel must be properly atomized and mixed with air for proper ignition. Dirty injector nozzles will not give a good spray pattern, preventing your engine from developing full power, and causing it to run rough. A good fuel injector cleaner used on a regular basis will clean up most injector fouling. This results in proper air/fuel mixtures, which is the key to any type of performance driving.





- Filter
- 2. Guide Ring
- 3. Spacer
- 4. Core Spring
- 5. Seat Spring
- 6. Seat
- 7. Pole Piece
- 8. Stop
- Solenoid Coil
 Solenoid Body
- 11. Core Ring
- 11. 0016
- 12. Core
- 13. Spray Tip Housing
- 14. Director
- 15. Spray Tip

BALL TYPE

Controls fuel flow by raising a ball off its seat. This allows fuel to flow through the seat orifice and then out through a fixed director plate with several holes. The director plate serves to direct the fuel spray pattern. This type of injector has a 10 to 15 degree included angle spray pattern. The fuel atomization of this type of injector is similar to the disc type injector. Disc and Ball type injectors by design are less susceptible to clogging.





Fuel Fresh

Today's gasolines have a number of additives that can settle out and cause deposits in the fuel injection system, as well as in the fuel tank. These can also cause clogging and poor performance. We often find this in Corvettes that are not driven on a regular basis. Including a fuel additive at each fill-up will combat this problem. Fuel additives stabilize the gasoline and its components to eliminate settling and deposits. If your Corvette has been hibernating all winter, a fuel additive will ensure that it's ready to roll at the first hint of spring.

Improve Exhaust Flow

Many Corvettes with dual tip mufflers actually have only one "live" outlet. The other is a dummy with only a tiny opening on the muffler side to blow out moisture. A simple test to determine if you have a dummy opening is to put your hand behind each tip while the engine is running. If both mufflers aren't fully functioning, you will immediately notice a difference. In order to allow your engine to develop full power, you'll need a less restrictive exhaust system.

You can choose from dozens of muffler or complete system options, depending on your budget and the type of sound you desire. Most systems will give your Corvette a 5-10% boost in power by reducing wasteful backpressure. Mid America Motorworks routinely hears from Corvette owners that their car "sounds like a Corvette" once they've upgraded their exhaust.

Mild 2 Wild Remote Exhaust Tuning System (for your C6) allows you to be in total control of your exhaust system. Your exhaust can remain whisper quiet right up to 3500 RPM, or with the touch of a button, you can have full sound & power, even at idle! 5 minute plug and play, no modification installation.

Performance at Your Fingertips

Power Programmers allow Corvette owners to tune and adjust their Corvette whenever necessary for the best possible performance. Many programmers come preloaded with tunes for gasoline or engine performance so you experience immediate performance gains. Most are available with touch screens and a variety of data variables, allowing you to focus on the stats you want to see. Programmers can be mounted to your dash, or stored in your console, to keep the data at your fingertips.

In addition to tuning, Power Programmers can also be used to diagnose problems. Monitor spark plugs, engine temperatures, wheel and tire info and much more to keep your Corvette performing at its best.

The above tips will yield "seat of the pants" performance improvements without sending your Corvette to a shop for weeks at a time. Give them a try and make driving fun again!







