

Corvette exhaust comes in a variety of options. From stock to keep your Corvette looking showroom-new to aftermarket to add more performance, exhaust can be as varied as the Corvette community. Mid America Motorworks takes a closer look at stock and aftermarket exhaust options to ensure your Corvette is running the system that's right for you.

#### Exhaust Manifolds vs. Headers

Corvette manifolds and headers are both designed to channel exhaust away from the cylinder heads and eventually out the back of the vehicle. Manifolds are made with a single piece that services all cylinders, while headers give each cylinder a dedicated pipe to eliminate back pressure.

#### **Manifold Pros:**

- Price Thanks to their utilitarian design, manifold cost is relatively low
- Sound Reduction Thick walls absorb some of the sound as exhaust gases collect inside the manifold
- Original Fitment Manifolds are stock on Corvettes and therefore are an easy bolt-on item

## **Manifold Cons:**

 Sacrificed horsepower and torque – The utilitarian design was built for cost savings, not performance

## **Header Pros:**

- Designed for ultimate flow
- · Designed for prime backflow pressure
- Control where you want your power increase (high end or low end)
- Add coatings to control heat dissipation
- Lighter weight than manifolds
- Increased horsepower and fuel efficiency

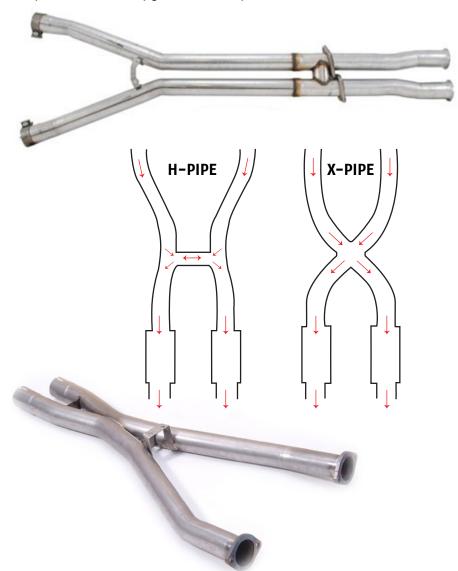


#### **Header Cons:**

- · Sound Decibel Levels Are Higher may be too loud for cruising
- Engine Compartment fitment may be tighter

### H-Pipes vs. X-Pipes

The crossover pipe is the heart of any performance exhaust system. Bolted to the center of your Corvette, it balances exhaust impulses from both sides for smooth exhaust flow and a more efficient engine. Corvettes come stock with H-Pipes and can be upgraded to X-Pipes, but what's the difference?



# **H-Pipes**

An H-Pipe is shaped like the letter H, and relies on exhaust expansion to balance the cylinder banks. A section of tubing in between the main pipes provides an area for gases to expand into during exhaust pulses. Only a small amount of exhaust flows from one stream to the other as both sides push back and forth in the center section. Gains in performance are noticed from a low RPM and give the exhaust a deeper, old American muscle car tone.

# X-Pipes

An X-Pipe is shaped like the letter X, and allows theexhaust to flow down the path of least resistance. At lower revs, turbulence is formed as exhaust gases try to shuffle past a second column of gases comingfrom the other side. While producing more power than the restrictive factory system, the potential gains are not seen until higher RPMs are reached. This is where an X-Pipe stands apart from the rest. Exhaust gas is pushed out harder as the engine spinsfaster. The X-Pipe merges the turbulence into two uniform streams, for a smooth flow to the tailpipes. Both streams keep each other up to speed, which draws even more spent exhaust out the cylinders. X-Pipes provide a boost in horsepower and a higher exotic car tone.

## **Mufflers**

When Corvette manufactures design a muffler system, cost is a big factor in determining the final style. The original system will provide great looks and function properly for years of road trips. However, there is a lot of room for improvement if you choose to put on a custom muffler system. When selecting an aftermarket exhaust system, one advantage is you can tailor the system to meet your needs. Be sure to consider the following:

• **Decibel level** – Mid America Motorworks has created an IAC Exhaust Rating Chart to help you choose the right exhaust based on tone during idle, acceleration and cruise.

- **Tone** Usually different brands have distinct tones. The tone that's right for you depends on your personal preference.
- Tip Number Corvette exhaust is available in dual or guad tips.
- **Tip Size** Personal preference is once again a factor in deciding muffler tip size. Tips can range from 2" to 4.5".
- **Tip Shapes & Color** Complement your Corvette's exterior with custom tip shapes and polished or black tips.









#### **NPP Exhaust**

GM designed the NPP Exhaust Option to allow 2008 and later C6 Corvette owners to experience louder exhaust notes at full throttle. NPP simply refers to the option code Mid America Motorworks has developed an NPP Bimodal Switch for 2008-2013 C6 Corvettes that allows drivers to enjoy the louder note across the full RPM band. A computer-controlled valve in the exhaust system opens during acceleration and closes during cruise. The NPP Exhaust switch allows you to open the valve on command with the flick of a switch.

