

## PART #171 EXHAUST SYSTEM KIT: Your starting point for extra power

*The most important item to remember when building your system is this; **primary pipes need not be routed in any particular way to gain the added horsepower of the 2-into-1 effect. Installing the system over the top is only one way the system can be routed. While "Over the top" installation is generally easier, a system underneath the car will achieve the same power figures.***

★ **Optimum Primary Pipe Length** - Keep the primary pipes as short as possible. Systems are designed around individual 90 and 45 degree bends, which are 12" long. Do not use more than 72" of pipe on each side. This translates into a maximum of 6 pipes per side.

Three horsepower will be lost for each additional 12" section beyond 72". These recommendations are based on dyno tests with stock and modified Corvette, Chevy II and Log manifolds.

★ **Unequal Length Primary Pipes are OK** - Now go back and read that again. Our dyno tests have concluded that variations up to 30" in primary length have no adverse effect on power **when a collector is used**. Primary pipes equal in length, or as close as possible, are preferred, but in some applications this is just not possible. So if your pipes going into the collector are not equal, don't worry. **If you are restricted to a dual pipe system, pipes must be equal in length.**

★ **Secondary Pipe Length** - After the collector run a minimum of 12" of secondary pipe. Adding more length has no effect on power. In other words, "We've run 1 to 6 feet of secondary pipe and noticed absolutely no power difference."

★ **Mufflers** - The main challenge in designing a muffler for the 2-into-1 system rides in the fact that the entire engine is exhausting out of only one pipe. Most mufflers are designed to handle only half of a V-8 engine. When passing the entire exhaust through one outlet, other mufflers become very restrictive, scrubbing off 10 - 15 horsepower.

Our muffler is able to handle the extra volume because of its physical size. Being 9" in diameter and 10" long enables it to quiet the engine while **not stealing valuable horsepower**. Horsepower with and without the muffler is the same. No other muffler can make that claim. Run a foot of secondary pipe between the collector and the muffler.

*Let's face it, putting an exhaust system on a car is not much fun. But remember to follow the above guidelines and additional horsepower is yours. **Winning is always fun.***

★ **Weld system together.** - Using clamps, screws or rivets while fitting your system on the car works fine. However, on the race track a welded system is the only way to go.

★ **Check for adequate ground clearance.** - Not having adequate exhaust pipe to ground clearance is the cause of many broken manifolds. Do not let this happen to you.

★ **Support your system.** - Hanging a system by only the exhaust manifold to flange bolts will result in damage to the flange. Supporting your system near the collector will take strain off the flange to manifold connection.