

A MUFFLER FOR YOUR MOTOR CAR

By David Rose
(Western Maryland M-19, No. 329)

At the end of an enjoyable day on you motor car you are usually tired, dirty, hungry...and your ears ring! If you're like me though, you love that distinctive "putt, putt, putt" sound of the Fairmont (or Sheffield, or whatever other 2-cycle engine your car has). Nevertheless, I set out to find a way to reduce the noise, without "killing" the pleasant sound of the engine.

Obviously, a muffler is the answer. If you have a "regular" M-19, you can use the one available from Fairmont. But my car is equipped with the RK twin-cylinder engine, and Fairmont doesn't have a muffler available for that one. The answer was to design my own. The car doesn't have a whole lot of room under it for such an add on, therefore, the muffler design had to be fairly small.

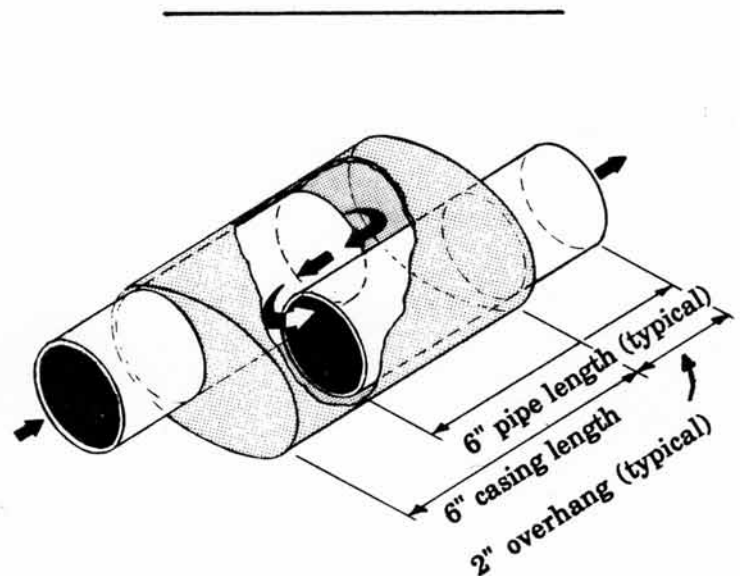
As you can see by the sketch, the design works like most other mufflers, breaking up the "waves" of sound, as the exhaust changes direction. The only difference is that my design doesn't use any baffles to kill the sound entirely, and thereby cutting horsepower, (which is sometimes very much appreciated on those occasional stiff grades).

My "twin" has two exhaust manifolds, with the pipes running out both sides of my car, thereby necessitating two of the home-made mufflers. Both mufflers are identical, and are made with 3-1/2" O.D. pipe for the body (which was "squished" slightly in a vise, to make it oval), 2" O.D. pipe for the inlet, and 2-1/8" O.D. pipe for the outlet pipe.

Both the inlet and outlet pipes were welded into 18-gauge sheetmetal template pieces that I had installed into the ends of the body. I used cotter pins to hold the flex pipe onto the mufflers, and U-clamps to hold the mufflers in the exhaust outlets. After the mufflers were installed on the car, I drilled 3/16" holes at the lowest point, to let any excess oil drain out.

All in all, I am please with the results of the muffler design...they take the sharpness out, without making the car too quiet. For your particular application you may have to design your mufflers with slightly different sized pipes.

If any of you readers would like to consult with me, or would like to have me make them mufflers, please contact me at : RD #4, Box 341B, Elmer, New Jersey, 08318.



David Rose's Muffler Design