

## \*Quieten That Generator!\*

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Updated: 16 January 2007

We have a Coleman 10HP "Power Mate" 5KW generator. It's LOUD. It has a "Spark Arrester" as a muffler. The factory has no aftermarket mufflers for it, and extensive web-searches have not turned up a suitable muffler for it. Something HAD to be done.

I got tired of screwing around with muffler shops telling me they couldn't quiet down this 10HP genset. It's got a Briggs and Stratton motor fer chrissakes, how hard could it be?

Anyway, after again being told there was nothing I could do to quieten it down, I bought a 10HP lawn mower muffler and welded it between the factory "spark arrester" and the muffler mounting flang.



Then I stuck the thing back on the generator and braced it back to the motor like it was.



The muffler has to be mounted back to the MOTOR, not the frame, so that the muffler moves as the motor does.

It's been out there running for about 40 minutes now, MUCH MUCH quieter (Mostly motor noise clinging and clanking) you can talk beside it now without yelling (Yelling didn't even help before)

I know the lawn mower muffler was designed to be stand alone and let pressure out the other end, and it's probably under more pressure feeding exhaust into the Spark Arrestor, But several mechanics have said the muffler should hold up and that adding a little more back pressure won't adversely effect the generator (Other than delimiting the power a smidgen). If there's a difference in power, I can't tell it.. it just runs MUCH quieter.

#### **UPDATE: 16 January 2007**

The Inline muffler blew out FINALLY during the Ice storm, which was an inconvenience, but luckily I had a spare factory Spark Arrestor (I keep spare "Everything's"). The little 10HP muffler had a LOT of hours on it before it gave up the ghost, and after the Ice storm I replaced it with a more expensive inline muffler which as been working fine ever since... Point being, Buy a QUALITY 10-20 HP muffler if you go the "In-line" route, and ALWAYS have spare parts for everything on your generator.. it only took about 10 minutes TOTAL to change out the broken Muffler system to the backup factory muffler, and get the generator back on.

However, After the Ice Storm, My neighbor came over and said, "I hated you through that Ice Storm"... said, "Why"??? She said "Because you had lights and heat and we didn't" (I didn't tell her the lights and such were from the Solar Alt Power System, and the generator was only to heat water for showers and run the Dryer and the Girl's hair dryers and stuff)... Point being, they heard my generator, so I wanted to make it even quieter (They have bought a genset since then, I helped them pick out a nice Honda and get it wired in to their house).

You'd think there would be a BILLION mufflers for this Coleman Genset since they are so popular, and it's a simple Briggs & Stratton Motor (Some people say their Coleman genset has a different make motor, but mine is a B & S), but there's NOT... There IS now ONE "Low Tone" Muffler for these generators, but all reports say they simply change the tone of the muffler and it's STILL LOUD.

OK.. I did this article on quietening this Genset, but many people aren't comfortable cutting on their factory Spark Arrestor to put a 10HP muffler In-line...

Anyway.. for those who want their Genset even quieter without hacking, or deeply modifying, their factory spark Arrestor, here's what I did to REALLY make that sucker QUIET.

I went to Advanced Auto and bought a generic "Thrush" muffler for \$19.95.. it's on the Isle with their muffler pipes and fittings. Then I bought a 2.5 inch adapter, and the Flex hose to fit between the adapter and the muffler... also buy a few 2-1/2 inch clamps...



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Take the Factory Spark-Arrestor/Muffler off the generator, and clean up the spark-Arrestor Exhaust outlet with a wire brush:





Weld the Adapter pipe OVER the exhaust outlet hole on the Spark-Arrestor, and then put the muffler back on the Genset... this allows you to use the factory set-up on the Genset, OR add the Car Muffler if you need the generator quieter... the adapter doesn't even stick out if you have a [wheel set](#) on your generator.







Now Go Ahead and Put the Flex hose on the muffler and clamp it down.. you can store this set-up with/near the generator.



As I said, you can use the generator with the normal factory Spark-Arrestor, OR you can clamp on the pre-assembled flex hose with the Muffler attached for MUCH quieter operation.. with this, I can put the Generator in the Shop (with a box fan blowing on it to cool it) and pipe the muffler outside.. you LITERALLY CAN NOT hear the generator running from the front of the house (with the Genset in the shop at the back of the house) when you do this.. the building blocks the motor noise, and the big Car Muffler quietens the exhaust to almost nothing.



If you do this in conjunction with the inline-10HP muffler, you can WAY outdo the exhaust noise from a Honda generator, about ALL you can hear standing beside the generator is the Clanking of the Generator engine, and the "SHHHHHHHHH" noise of the generator head (A noise I never knew it had until I added the bigger car muffler).. WITHOUT the inline Muffler, it's still quieter than a Honda Genset.

People have been asking how quite this REALLY makes the Generator, since the Coleman is among the loudest portable genset out there (among the popular brands), so I made the video Below... At first it SOUNDS LOUD, but when I start talking you see that it's actually very quiet, even standing right there over the output... I haven't even see a Honda as quiet as this is now... You can't even hear it from the sides or front of the house.. NO WAY my neighbors would hear it now, even late at night (When this video was shot).. as the video shows, just turning your back on it makes it almost non-hearable. (Real Media File.. Approx 1 meg, low quality)

[Gen-Set Noise Video](#)

The welded connection from the spark-arrestor to the muffler pipe allows me to use the genset "Stock", or "Modified" with the car muffler.

When finished using the Genset, let it cool and take the flex hose and Muffler back off and store them somewhere so they don't rust.. they really don't get hot enough to damage the metal on the exhaust stuff, this stuff was designed for CARS and TRUCKS of approx 150 Horsepower, so a little 10 HorsePower Motor is not going to stress the parts at all... and the total cost is under 40 bux.

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