

“It’s all part of the service”

with Motors' Hobart Service Manager, Greg Featherstone



How do mufflers work?

Mufflers are constructed as canisters with internal tubular passages, shaped partly by baffles, and are designed to gradually reduce the pulsating emissions of exhaust gas.

By creating a blockage, however, mufflers cause a back pressure in the exhaust system which goes all the way back to the engine itself.

This slowing down of exhaust gas from the engine reduces its performance simultaneously.

To combat this negative effect, many high performance engines increase the exhaust flow by making larger mufflers. Unfortunately, this has a side effect of increasing the noise as well.

To combat the noise problem, silencing materials are employed, so that the manufactured muffler can meet legal requirements.

Some back pressure is beneficial at low speeds, because it slows down the flow pattern of intake and exhaust gases slightly improving performance.

To further manage the problem

of performance and noise, many engines have two-stage mufflers with an internal spring-loaded valve. By having this design, the two-stage mufflers maintain a specified amount of back pressure for good low-speed performance.

Then, when higher speeds are required, these mufflers keep the higher back pressures from becoming excessive by pushing open the spring-loaded valve.

This lessens the restrictions on gas flows through the muffler. By doing this, the second process permits the engine to develop considerably greater horsepower at higher rpm.

Mufflers are connected to piping as well as having sheet metal underbody heat shields to prevent grass fires.

Clamp joints and welds holding it all together require regular inspections as well.

If you have a motoring need or query, feel free to phone me, Greg Featherstone on 6230 7100, or to call into our dealership at Barrack Street for friendly assistance.

motors

www.motors.com.au