

**VARIATION IN THE LENGTH OF THE INTERNAL MUFFLER AND
SILINER TO NOISE**

Azamataufiq Budi Prasajo, ST.,MT. (Main Preceptor)
Ahmad Robiul Awal Udin, ST.,MT. (Personnel Preceptor)

Banu Husyairin Raga Noka
Program Study Automotive Engineering
Engineering Department

ABSTRACT

Muffler is often called a exhaust, this exhaust functions as a silence for the sound that is released from the engine to the allowable noise level. This study aims to find the best damping in the exhaust layout. The results obtained from this test show that the highest noise level at 1400 RPM is 68.5 db, and the lowest noise level at 1400 RPM is 67.5 db. Then the highest noise at 6500 RPM is 91.4 db, and the lowest noise is 90.2 db with a standard cylinder. From the exhaust test with a modified cylinder with a length of 3 cm, the highest noise at 1400 RPM is 69.5 db, and the lowest noise at 1400 RPM is 66.4 db. Then the highest noise at 6500 RPM is 90.1 db, and the lowest noise is 89.6 db. Then for the 5cm long modified cylinder, it is known that the highest noise at 1400 RPM is 66.4 db, and the lowest noise at 1400 RPM is 63.2 db. Then the highest noise at 6500 RPM is 88.5 db, and the lowest noise is 88 db.

Keywords : *internal muffler pipe, silincer, noise*