

NOISE TESTING INSTRUCTIONS
for off road machines including ATV's

You will require two people to complete noise testing of each motorcycle.

Each Motorcycling New Zealand Club has been provided with the following:



Type 2 Noise Meter



Tachometer



Measuring Template

Use your measuring template to cut out a piece of wood or sturdy material.

Before Testing a Motorcycle:

Ensure that when you are testing noise, you test in a clear open space, with no buildings around.

Ensure that surrounding sound should not exceed 90 dB/A.

In other than moderate wind, motorcycles should face forward in the wind direction ~ mechanical sound will blow forward, away from the microphone.

Testing should not take place in rain or excessively damp conditions.

To test a Motorcycle:

Place the windsock on the end of the noise meter



Windsock

End of noise meter



Set the meter to the slow setting



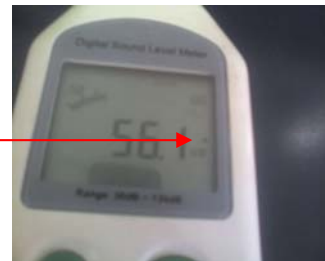
Slow setting



Ensure Noise Meter is set at "A" weighted setting



"A" weighted



Set the tachometer to the correct RPM, by turning the top of the tachometer, at the same time the needle comes out.



Turn to the correct rpm

When turning the needle will move out

| | |
|------------------------|-----------|
| Up to 85cc | 8,000 RPM |
| Over 85cc up to 125cc | 7,000 RPM |
| Over 125cc up to 250cc | 5,000 RPM |
| Over 250cc up to 500cc | 4,500 RPM |
| Over 500cc | 4,000 RPM |

Have one person holding the noise meter which must be 50cm from the exhaust pipe at an angle of 45° measured from the centre line of the exhaust end and at the height of the exhaust pipe.



Use the measuring stick or similar to set up position

Then drop the stick or similar once you have correct position



You will need to repeat this process for each motorcycle being tested

Have the second person, hold the tachometer on the casing of the motorcycle:



At the same time they must turn the throttle of the motorcycle until the needle on the tachometer oscillates



Holding tachometer & turning throttle



Needle oscillating

Once the tachometer is oscillating, that person should indicate by a nod of the head to the person holding the noise meter, at which time they will be able to record the noise.



The noise on the meter is not the actual noise recorded;

- ▣ Always round down the metre reading
- ▣ As you are using a type 2 metre deduct 2 dB/A
- ▣ The temperature also has effect, if the temperature is below 10°C deduct 1 dB/A & if below 0°C deduct 2 dB/A

Therefore using the above reading as an example – temperature being above 10°C

The actual noise reading will be 82 dB/A.