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MotoSafe Reusable Earplugs

Technical Notes

Reusable earplugs which filter out harmful noise - but still allow speech and other normal sounds to be heard

Extended and regular exposure to excessive noise damages hearing, leading to permanent noise deafness

Because noise deafness is permanent and irreversible, hearing protection is a preventive necessity. At a speed of only 60mph motorcyclists are exposed to more than 90dB of noise, even though, according to UK Health and Safety Law, at noise levels exceeding 85dB employers must make workplace hearing protection available and at levels of noise exceeding 90dB ensure employees use it compulsorily. As we know, noise increases substantially at higher speeds on a motorcycle, meaning that prolonged exposure to harmful noise levels is a virtual certainty.

Conventional disposable earplugs are a cheap and easy way of reducing this danger, but the problems associated with them mean that they are not the most suitable solution. MotoSafe offer an inexpensive and superior choice with benefits often only found in costly tailor made earplugs.

KEY FEATURES OF MOTOSAFE EARPLUGS

- **COMFORTABLE** - Because of the softening effect caused by exposure to the body's natural heat, the unique pliable but durable material automatically adapts to the shape of the auditory duct (more commonly known as your ear hole!) within a few minutes
- **SAFE** - Air pressure equalisation of the design prevents the dangerous and disorienting balance problems and/or sense of being 'cut off' often caused by conventional earplugs because they can seal the auditory duct
- **FUNCTIONAL** - By selectively filtering out only harmful noise, normal speech and other harmless sounds are still audible maintaining better contact with the user's surroundings
- **HEALTHY** - Their special design allows air access which helps avoid auditory duct sweating
- **PRACTICAL** - Supplied with very easy to use insertion tube. The earplugs are also much easier to remove compared with conventional types as the central stem remains accessible
- **HYGIENIC** - As they can easily be washed and cleaned thoroughly, they are exceptionally hygienic in use
- **CONVENIENT** - Protective pouch included to keep in a pocket or tank bag to avoid any contamination or damage
- **DURABLE** - In normal use the earplugs will last for many months
- **TAILORABLE** - Can be trimmed to size for those with smaller auditory ducts
- **ADJUSTABLE** - Supplied with two alternative exchangeable noise filtering inserts, which provide differing levels of attenuation (noise reduction). Green filters are for average use, Yellow filters offer greater attenuation

PRICING

- £15.99 inc. VAT per pair (Quantity dealer pricing available) - Price correct at time of going to press October 2002

AVAILABILITY

- Immediate. For more information or to order contact HPS on 0870 774 7740 (International +44 177 383 1122)

ABBREVIATED TECHNICAL NOTES

DECIBEL (dB) - is the unit of measurement for the 'loudness' of sound.

FREQUENCY - is the unit of measurement for the 'pitch' of a sound. In general, the higher the frequency of a sound the more damaging it potentially is for any given decibel level. A motorcyclist is exposed to a variety of frequencies, such as those produced by the engine and transmission, tyre contact with the road and wind noise.

ATTENUATION - is the technical term for noise reduction. Noise is measured at different levels (frequencies) in decibels (dB) and the chart below shows the amount of noise reduction MotoSafe earplugs offer at typical levels which can be encountered when riding a motorcycle.

Average attenuation values								
Sound level	Frequency (Hz)	125	250	500	1000	2000	4000	8000
Green filter	Noise reduction (dB)	-14.8	-15.0	-15.7	-18.7	-26.6	-24.4	-18.9
Yellow filter	Noise reduction (dB)	-18.8	-15.6	-16.0	-18.5	-27.7	-28.0	-22.0

EXTRACT FROM THE HSE'S NOISE AT WORK REGULATIONS

EAR PROTECTION AND THE NOISE AT WORK REGULATIONS 1989

The Noise at Work Regulations place a legal duty on you to:

- * provide employees who ask for it with ear protection where they are exposed to daily noise levels of more than 85 dB(A) but less than 90 dB(A);
- * make sure that they wear ear protection when they are exposed to daily noise levels which reach or are more than 90 dB(A); or to very loud impulsive noise such as from explosions or when using cartridge tools;

FURTHER INFORMATION

UK Health and Safety Executive

<http://www.hse.gov.uk/pubns/noisindx.htm>

Canadian Centre for Occupational Health and Safety

http://www.ccohs.ca/oshanswers/phys_agents/noise_measurement.html

ABOUT HPS

Specialist supplier of aftermarket motorcycle performance enhancement parts and rider equipment throughout the UK and worldwide. HPS is the UK distributor for Motosafe.
