

# Safety instructions



## SILENT SPORT® heat protection strip Order no. 10027087, 10027116

Temperatures of up to about 500°C can develop on the outside of the exhaust manifold when driving. By way of comparison, the manifold will begin to glow visibly red at 650°C. Even though, in most cases, the manifold is cooled by the wind blast, it is still sometimes necessary to provide additional insulation in order, for instance, to prevent the rider and passenger of a motorbike from being burnt by awkwardly positioned manifold pipes, or to reduce unusually high temperatures in the engine compartment of a car.

Reducing the heat radiated away from the exhaust manifold to the outside through insulation also usually has the thermodynamic effect of helping to improve the power generated by the engine: hot gases flow more quickly, so if the exhaust gases in the manifold are hotter, the suction effect will pull exhaust gases out of the combustion chambers, and this in turn will improve the influx of fresh combustible gas.

Heat protection strips from SILENT SPORT® are race-tested, and are particularly suitable for insulating the manifold pipes, since they have an extremely high temperature resistance (750°C) and are also highly flexible, which allows them to be wound around very tight radii without creasing.

### Note, however, the following:

- Chromium exhaust components can be permanently discoloured (tarnished) by the high temperatures that develop under the strip.
- It is possible that the change in the thermal behaviour and the different resonances in the exhaust may cause the carburettor to need readjusting. In extreme cases, or when other components are also involved, the jets may have to be changed. (As a rule a richer mixture needs to be set.)
- If used incorrectly (e.g. if the temperature exceeds 750°C for long periods) residues can also be left on the wrapped components, and these can be difficult to remove.
- An exhaust manifold wrapped with heat protection strip can cause the engine to come to operating temperature more quickly. Air-cooled engines can be hotter in operation than before.
- Although the insulating effect of the protection strip does lower the external temperature of the wrapped manifold pipes, and therefore protects against accidental contact

burns, the insulation is in no way total, and care is always required!

- Newly applied heat protection strip will smoke and smell a bit on the first journey – this does not impair the performance of the material, and soon fades away.

**Important note: For modern 4-stroke engines offering high output per litre (e.g. BMW) we advise against the use of an exhaust strip as, depending on the design, the permitted temperature range may be continuously exceeded. This can be recognised by the fact that the black strip turns white.**

### Installation:

**1.** It is best to apply the heat protection strip to a cold manifold that has been taken off the engine, otherwise you will have to pull the full length through the gap between the manifold and the engine or some other narrow space for every turn of the winding. The smaller the gap, the more difficult it is to fit. The manifold must be clean before installation, and rust spots must be removed. It may be wise to treat a manifold that has already been in use with a new coating to stop unnoticed rusting from going on under the protection strip.

**2.** Now cut off the unglued start of the strip with scissors (adhesive strip can burn and may leave residues). Hold it with one hand as close as possible around the manifold, and use the other hand to start winding around as tightly as you can. On those motorbikes on which the cylinder head and manifold become very hot, such as classic bikes with cast iron cylinder heads, it may be best to begin winding a few centimetres below the flange of the manifold. As far as possible, overlap the strip by about 50% with each turn (different overlaps will be inevitable at bends). Tuck the strip in once at the end, and fasten it with a hose clip or with wire.

It is not essential to fasten the upper end, and it can be left free if this is preferred for reasons of appearance, but we do recommend a permanent fastening here, at least using wire. Make sure that there is no risk of injury from the open ends of a universal hose clip or wire.

If you have any questions about the product or these instructions, for prompt assistance please contact our Technical Centre by fax on +49 (0)40-734193-58 or by e-mail at: [technikcenter@louis.de](mailto:technikcenter@louis.de) before you assemble or use the product. This is the best way to ensure that your product is assembled properly and used correctly.