Wheel arches

Trunk and floor









The rear wheel arches and trunk area are the noisiest parts in vehicles. Many cars are front wheel driven so the construction of the front of the vehicle is much stronger as the rear. Manufactures pay more attention to kill the noises in the front and forget about the rear of the car. These days many cars are hatch-backs or wagons where noises in the trunk travel straight in the cabin. In the front on the floor there is also a thick carpet that stops the noise much better than the thin trunk skin. Cover all possible big metal surfaces with Silent Coat to prevent metal rattling and save the weight.

Use Silent Coat Extra for the wheel arches as the wheel arches are the areas where a lot of penetrating noises appear.

Use Silent Coat Noise Isolator directly on the wheel arches if possible.

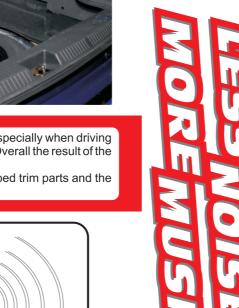
Close the tunnels from rear mudguard to the roof with Silent Coat Noise Isolator or Silent Coat Sound Absorber cushions.

















NOISE ISOLATING SOUND ABSORBING MATERIALS

Door and door trim insulating



Most of materials used for doors improve acoustics of speakers.

Even a small amount of materials installed in the door can improve the performance of speakers. Many penetrating noises from the front wheel arcs also enter the cabin through the doors. Road noises can be significantly reduced by a careful car door damping. Cover the metal panels with SilentCoat or SilentCoat Extra. Close the holes in the doors to improve Bass response of the speakers and reduce the distortion in mid-low frequencies.

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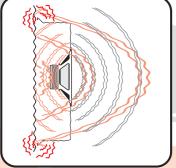


reduce distortion in mid-low frequencies. It is important to cover the inside of trim panels with SilentCoat Sound Absorber to reduce the penetrating noises as much as possible.

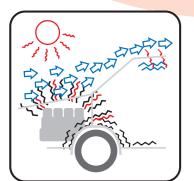


The car damped in such a manner becomes much more accoustically comfortable (quieter), especially when driving at a speed over 80 km/h. The reduction of self noises can reach up to 9 db on the noisy decks. Overall the result of the typical road tests shows a reduction of noises 5-7db.

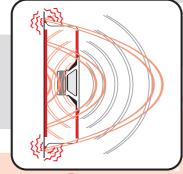
The musical performance also improves a lot. The metal parts do not resonate and the damped trim parts and the roof reduces the reflections. Increase your driving and listening pleasure!



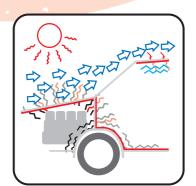




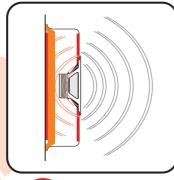




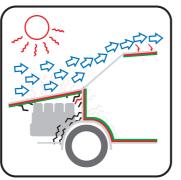






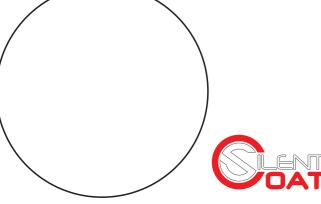


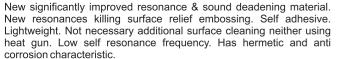






Vibration deadening materials













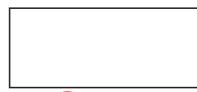
New 4 layer design. 4mm thick to be approved by db rules. Lower layer synthetic mastic kills metal resonance middle bitumen-syntetic rubber layer increase the stiffness of the system and top mastic+aluminium layer better absorbs vibrations created by speaker. Self adhesive. Approximate weight 6,15kg/m²

Noise insulation materials

Foamed polyethylene materials mainly for road-noise (penetrating) noise damping on the floors and wheel arcs where moisture resistance is critical. Specific structure or foaming technology makes it working the best under the carpets. Good thermal isolation characteristics.















Foamed butyl based high density 50kg/m³ Noise Isolation material, Hardly flammable. Moisture resistant. Specific elastomeric features make this material as great rattle preventer. Water based pressure sensitive glue on trim base prevents material from starching during installation.









Sound absorbing materials

Unique polyurethane sound absorbing material. Provide 3 times better sound absorption as other polyurethane materials. Specific elastics in the material makes it a great product to kill plastic rattling. Available in formed cuts. Starts to absorb frequencies already in low spectrum below 100Hz. Great also for thermal isolation. Can be used also in sound studious and listening rooms as absorber wave deflator.











Vehicle roof insulating



Quick steps to reduce the roof resonance:

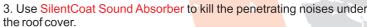
one, but it blocks the noise in the divided areas.

The roof should be damped!

Many of car manufactures do not pay attention to the sound deadening on the roof as they do not count the roof as a source of noises. However road noises travel through the car's metal parts as resonances and the huge empty roof surface starts to "sing" together with the wheels. This creates a feeling as if the road noise is coming in and it is impossible to find source of it during the ride. Even if at the beginning there isn't a feeling that the noise level is too high, still such a noise is very annoying. A human ear loses the concentration of any other sound like music, another person's talk, the music or conversation become louder and louder to overcome the road noise, and at the end of the ride the person feels tired in the head.



2. Cover the remaining big surfaces with SilentCoat. The application of SilentCoat doesn't increase the weight. Use SilentCoat Extra for more serious installs.



4. SilentCoat Sound Absorber works also as the resonance and reflection killing material improving the overall acoustics of the cabin as the original roof trim is thin and doesn't stop the mid and low-mid frequencies at all.







Interior panel insulating

To reduce the road noise level we recommend to cover the wheel arche covers and also all the plastic interior trim parts with as thick as possible SilentCoat Sound Absorber sheets. Plastic parts often are so thin that they cannot be counted as serious noise absorbents SilentCoat Sound Absorbers also are great to prevent plastics to rattle against the car body or one another.





