



Dear Customer,

Dear Customer, Thank you for purchasing the STEINEL plastic repair kit for motor vehicles. This brochure describes a new method of repairing motor vehicle plastics. From now on,

the special welding rod and specially developed vehicle repair nozzle will make it easier and save time welding a whole host of plastic components.

What's different about this system?

The special welding rod can be used on all thermoplastics. As a result, the painstaking process of finding out the type of plastic you want to work on now belongs to the past.

bonds well with all thermoplastics. Thermoplastics can be worked and re-worked over long periods.

Important: the Multi-Thermoflexx welding rod must always be used in conjunction with the stainless steel wire mesh. It is highly flexible, extremely resistant to stress cracking and

Best results can only be achieved with the Multiflexx welding rod by using the vehicle repair nozzle (see "This is how it's done").

Contents

- | | |
|---|---|
| (A) Reduction nozzle, 9mm | (E) Stainless steel wire mesh, Prod. No. 076566 |
| (B) Vehicle repair nozzle | (F) HG 2310 LCD |
| (C) Temperature guard | |
| (D) Multi-Thermoflexx welding rod, Prod. No. 076467 | |

⚠ Additional safety notification

Not suitable for repairing:

- rubber parts
- pipes
- load-bearing parts
- film, foil or sheeting

Please note that when working on the motor vehicle, its fuel may increase the risk of explosion.

Always observe the safety warnings in the operating instructions provided with the HG 2310 LCD.

Caution:

Unfamiliar plastics present a risk of fire and poisoning. Carry out a melting test on an inconspicuous spot to identify the thermoplastic material. Always ensure good ventilation while working. Do not inhale vapours.

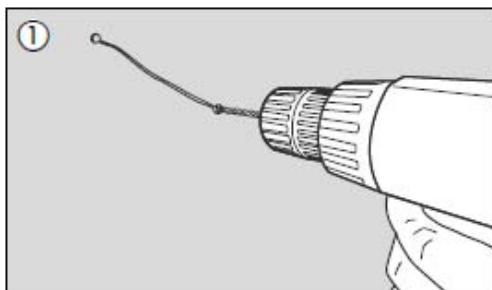
For further details on the tool and its applications, please refer to the HG 2310 LCD operating instructions.

This is how it's done:

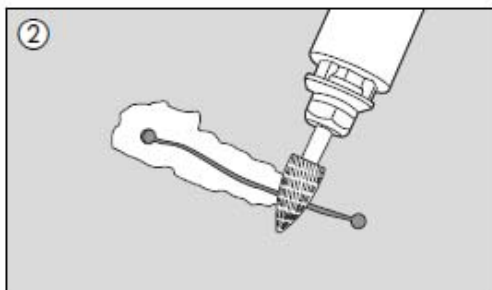
Welding bumpers

Cracks with a length of up to 10 cm can be repaired without removing the bumper. If material has broken out of the bumper,

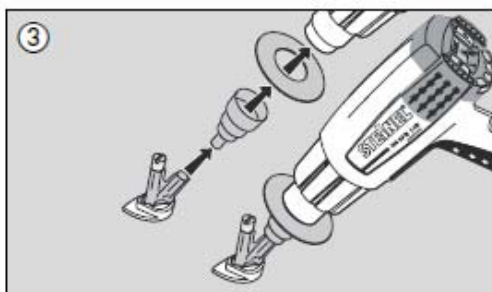
the damaged area should be repaired from both sides.



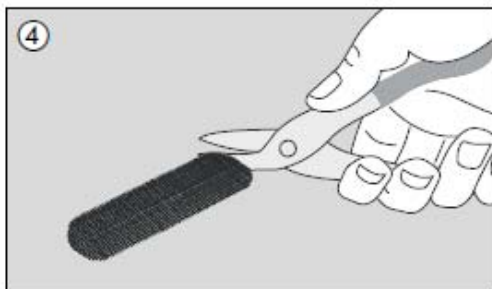
- ① Drill a hole of approx. 5 mm in diameter at both ends of the crack to visually mark the crack ends and prevent further cracking.



- ② Using an angle grinder/milling tool, remove approx. 1 mm of material over a width of approx. 20 mm on either side of the crack to insert the stainless-steel mesh later on. Using an orbital sander, now sand off the paint across a width of approx. 40 mm all the way round the crack.



- ③ Fit the heat guard, reduction nozzle and repair nozzle to the hot-air outlet nozzle. Set the hot air gun to 650 °C/air flow rate to speed 8 and save this setting to programme 4. The gun is ready for use after approx. 3 mins.



- ④ While the gun is warming up, cut the stainless-steel mesh to size. Dimension: 10 mm longer than the crack, extending by 20 mm beyond the crack on either side. Round off the corners.

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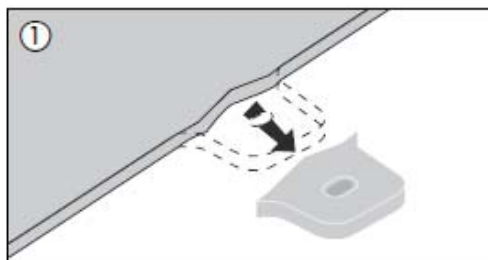
- ⑤ Using the plastic repair nozzle, fuse the stainless-steel mesh into the plastic. First fix one corner, then heat the mesh all over and fuse evenly not applying too much pressure. For this process, always work in same direction.
Note: The plastic must fully penetrate the mesh



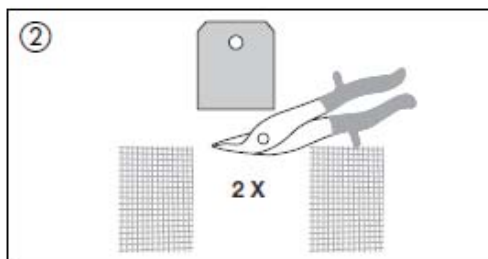
- ⑥ Now carefully apply the Multi-Thermoflex welding rod. Rod and surface must be evenly heated and completely fuse with the surface. The welding rod must turn ductile to produce a proper bond with the plastic material you are working on. Slowly and carefully smooth the material at the edges. Let the material cool down. Now create a surface for painting.

This is how it's done:

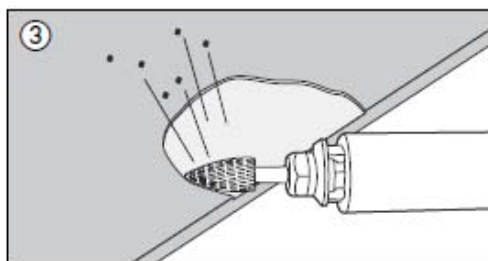
Internal and external mounting tabs



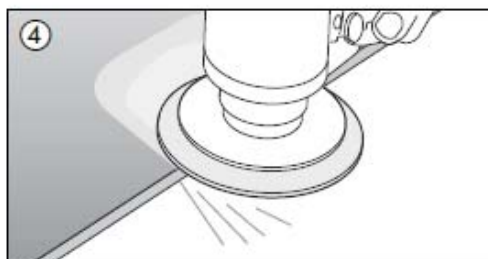
- ① Repairing a detached bumper mounting tab.



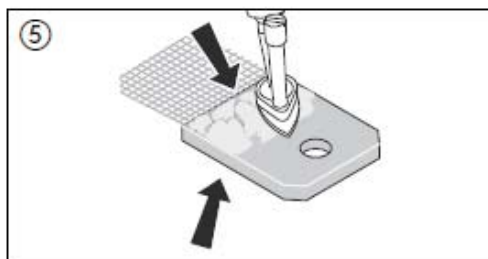
- ② Cut stainless-steel mesh to tab width for both sides of the mounting tab. 60 mm long, half-projecting.



- ③ Procedure outside:
From bumper and tab, remove approx. 1 mm of material in tab width

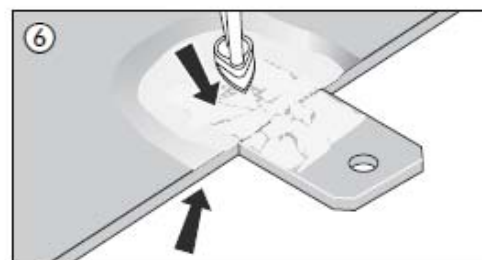


- ④ Sand off paint approx. 30 – 40 mm around the area being repaired on bumper and tab.

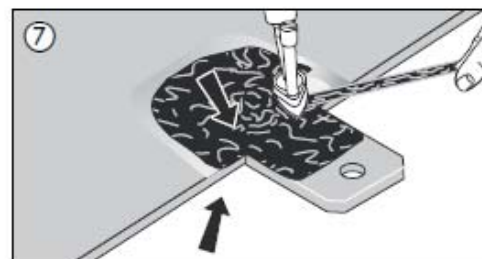


- ⑤ Using the plastic repair nozzle, fuse the stainless steel mesh into the plastic on the front side of the tab. Heat the mesh all over and fuse by applying even pressure.
Note: The plastic must fully penetrate the mesh.

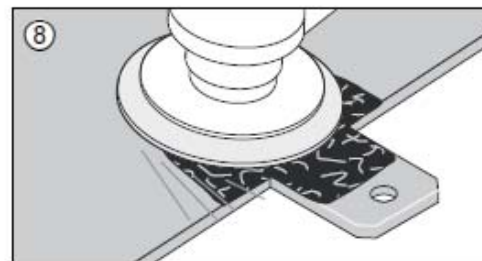
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- ⑥ Position the tab at the intended position and fuse the mesh into the bumper plastic using the vehicle repair nozzle.



- ⑦ Using the plastic repair nozzle, carefully apply the Multi-Thermoflexx welding rod. Rod and surface must be evenly heated and fully bond with the surface. Slowly smoothen the material at the edges.



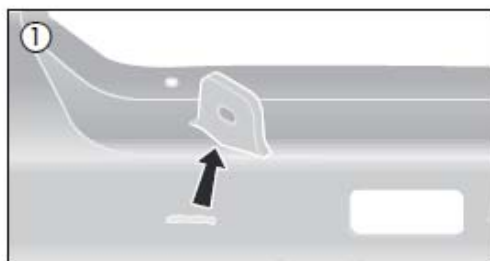
- ⑧ Sand unevenness smooth on the outside and provide a surface suitable for painting.

Procedure inside:

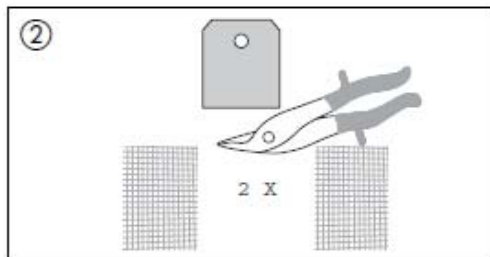
Using the vehicle repair nozzle, fuse the mesh into the plastic of bumper and tab. Apply the Multi-Thermoflexx welding rod and carefully fuse with surface.

This is how it's done:

Attaching a guide tab



① Attaching a guide tab.

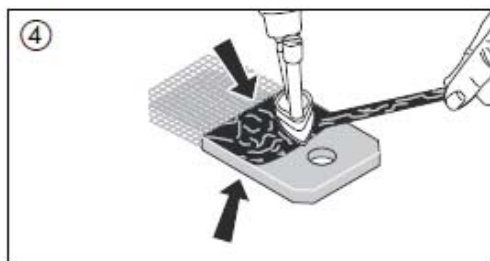


② Cut stainless-steel mesh to tab width for both sides of the tab. Length approx. 60 mm, half-projecting.

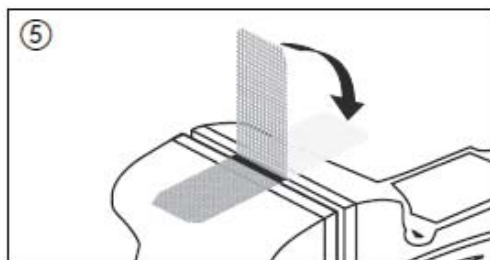


③ On one side, fuse the stainless-steel mesh into the plastic. Heat the mesh all over and fuse by applying even pressure.

Note: The plastic must fully penetrate the mesh.

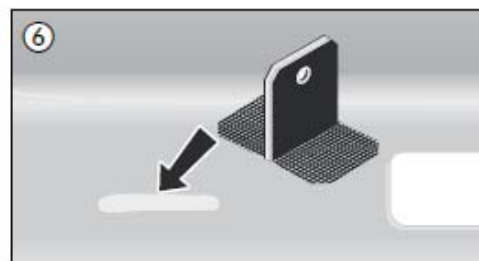


④ Using the plastic repair nozzle, carefully apply the Multi-Thermoflexx welding rod. Rod and surface must be evenly heated and completely bond with the surface. Slowly smoothen the material at the edges. Using the plastic repair nozzle, fuse the stainless steel mesh into the plastic on the rear of the tab. Now apply the Multi-Thermoflexx welding rod and carefully fuse with surface.

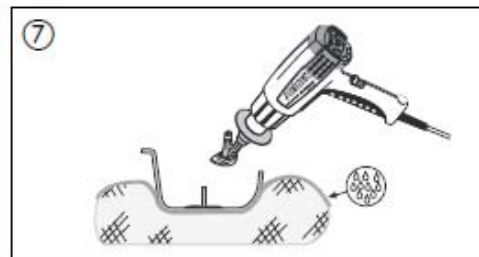


⑤ Bend apart the projecting mesh at an angle of 90°.

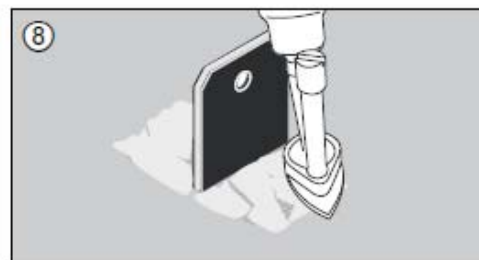
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⑥ Position the tab at the intended position and fuse both sides into the bumper plastic using the vehicle repair nozzle. For better results at the tab base, the tab can be bent slightly towards the other side.



⑦ **TIP:** With this method of tab attachment, it is recommended to place damp cloths or a cold jelly pad underneath to avoid deformation.



⑧ - ⑩ Apply the Multi-Thermoflexx welding rod and slowly and carefully smoothen the material at the edges.

