CUBITRON™ II
3M Deep Dent Repair Process

PERSONAL SAFETY

- Comfort Particle Mask P2
- Hearing Protection
- Comfort Glogges
- Reusable Workwear
- Safety Gloves

1 Pre-Sanding of the damaged area

- ▶ Perform initial sanding using a handblock in order to spot high and low spots on the repair area
- ▶ Mark the deepest points in the damaged area in order to place welding points

  Tip: Don't remove the paint completely from the damaged area as this will allow you to better complete the dent pulling process and reduce the likelihood of causing holes in the substrate

3M™ Hookit™ Purple+ Abrasive Sheet Multihole 70 x 396mm

3M™ Hookit™ Purple+ Multihole Handblock, 70 x 396mm

2 Preparation

- ▶ Remove paint/coating in the low points of the repair area, in preparation for dent pulling

3M™ Scotch-Brite™ Roloc™ Disc

3M™ Body Repair Pistol Grip Disc Sander

3 Spot Application

- ▶ Spot weld onto the repair area using your preferred and recommended method and/or equipment

  Note: Always ensure that the equipment is properly calibrated depending on the materials being repaired

4 Dent Pulling

- ▶ Pull the spots of dent using preferred dent pulling method and equipment

  Tip: To avoid surface imperfections or pinholes in the substrate, aim to distribute the load across the repair area

5 Spot Removal

- ▶ Spot removal by rotating the welded spot manually

  Note: This modern method will reduce the likelihood of causing holes in the substrate and avoid the thin out of the substrate due to a coarse sanding step for the removal

6 Sanding down the job area

- ▶ Sanding down the job area to bare metal
- ▶ Switch to ROTEX motion for high abrasion first
- ▶ For fine sanding step switch to ROTEX orbital random motion, without changing the sanding disc or grit!

  Note: For aluminium substrates , always use a pneumatic sanding tool such as Festool Automotive Systems LEX 3 150/7 and follow instructions of ATEX directive 94/9/EG for Zone 22 areas

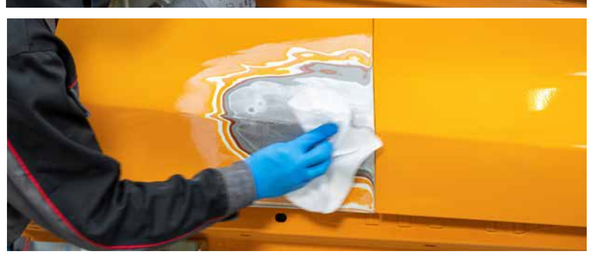
3M™ Hookit™ Cubitron™ II 80+ - 120+ - 125mm

Festool RO 125

3M™ Hookit™ Cubitron™ II 80+ - 120+ - 150mm

Festool LEX 3 150/7

7 Cleaning of the surface



- ▶ Degrease the surface

3M™ General Purpose Adhesive Cleaner

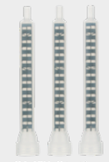
3M™ Professional Panel Wipes

8 Application

- ▶ Apply enough 3M™ FC Epoxy Metal Filler for dent filling
- ▶ Recommended settings for applicators: pneumatic max. inlet pressure 5.5 bar / battery driven 3kN, max speed 180mm/min.

  Note: A new cartridge needs to be equalised before the first application to ensure thorough mixing of the product. After the first use, no further equalisation is necessary

3M™ FC Epoxy Metal Filler



3M™ Static Mixing Nozzle

3M™ Plastic Spreader

3M™ High Power Manual Gun

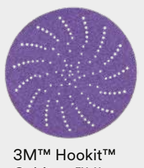
9 Drying

- ▶ The curing of 3M™ FC Epoxy Metal Filler can be accelerated using IR drying after the initial gelling period. Wait 10 minutes before using an IR dryer to heat for 10-20 minutes with a panel temperature of 70 °C
- ▶ Airdrying: sandable ~ after 4 h @ 22 °C ambient temperatures
- ▶ Tip for use: warming up the material & surface to ~30°C before material application will help to accelerate curing, particularly at cold ambient temperatures

10 Sanding of the filler area

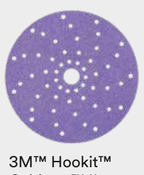
- ▶ 3M™ Cubitron™ II 80+ - 120+.
- ▶ To remove coatings more quicker, use the ROTEX motion setting
- ▶ To refine previous sanding scratches, switch to ROTEX orbital random motion, keeping the previous abrasive disc on the machine

  Tip: Pre-sanding step can also be done by using traditional body files if necessary



3M™ Hookit™ Cubitron™ II 80+ - 120+ - 125mm

Festool RO 125



3M™ Hookit™ Cubitron™ II 80+ - 120+ - 150mm

Festool LEX 3 150/7

11 Cleaning of the surface

- ▶ Thoroughly degrease the surface

3M™ General Purpose Adhesive Cleaner

3M™ Professional Panel Wipes

Optional - second layer application

- ▶ Apply a further layer of 3M™ FC Epoxy Metal Filler if necessary and repeat drying and sanding steps as recommended in the previous steps
- ▶ Maximum finished thickness should not exceed 4-6 mm, maximum layer thickness should not exceed 2-3 mm
- ▶ Follow car manufacturer and paint company recommendations for subsequent steps

3M™ FC Epoxy Metal Filler

3M™ Static Mixing Nozzle

3M™ High Power Manual Gun

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