

Composite Plastic Cosmetic Body Panel Repair Procedure using LORD Fusor® Plastic Repair Systems

Materials Needed:

- LORD Fusor 703 Plastic & Rubber Cleaner
- LORD Fusor 102 Plastic Panel Cosmetic Repair Adhesive (Fast)
- LORD Fusor 114 Plastic Finishing Adhesive (Fast)
- LORD Fusor 301 Manual Dispensing Gun

A cosmetic repair is used on nicks, gouges and other minor cosmetic damage that does not go all the way through the composite or penetrate the fiberglass reinforcement. If there has been damage to the fiberglass reinforcement or damage through the composite panel, do not use this procedure. Refer to Fusor Repair Procedure - Composite Plastic Body Panel Repair Procedure using LORD Fusor® Plastic Repair Systems.

Composite plastics include substrates such as fiberglass, SMC, carbon fiber, FRP, RTM, Metton, GTX, etc.

Surface Preparation

1. Panels to be repaired should be brought into the body shop in advance so that they are dry and at room temperature, 65-75°F (18-24°C), before anything is done to them.
2. The damaged side of the panel must be thoroughly cleaned before sanding or grinding the repair.
3. Cover the damaged area in the composite panel with masking tape. This protects the damaged area from absorbing the plastic & rubber cleaner and eliminates wicking of the cleaner through the fibers into the composite. Wicking can cause poor adhesion.
4. Use plastic & rubber cleaner to remove all waxes, silicones, dirt and road oils from the area surrounding the damaged area.

Repairing the Damaged Area

1. Remove the tape and grind down through the damaged area with an angle grinder or DA sander, or by hand using 80-grit sandpaper. Make a gradual taper in the repair area rather than a V-groove (**see Illustrations A and B**). This will prevent “bull’s-eyes” or “readthrough” in the finished repair. Blow away all dust with an air hose to ensure a clean bond surface. Be sure that the air does not have any oil or water in it.
2. Use either LORD Fusor 102 plastic panel cosmetic repair adhesive or LORD Fusor 114 plastic finishing adhesive.

If using LORD Fusor 102 adhesive, insert the cartridge into the dispensing gun. Squeeze a small amount of product from each side of the cartridge to level the plungers. Attach a mixing tip and dispense a small amount of adhesive. Dispense until the product is evenly mixed and the color is consistent.

If using LORD Fusor 114 adhesive, dispense a small amount on to a palette mixing board and mix with a plastic spreader until consistent.

Illustration A: V-groove – DO NOT USE!



Illustration B: Taper/cove – USE!



Note: These products have a short work time to help you complete your job quickly. Once you have dispensed the product as noted above, the product has a 1-3 minute open time at 70°F (21°C) before it will start to cure.

3. Immediately apply LORD Fusor 102 adhesive or LORD Fusor 114 adhesive to the tapered area. Spread adhesive over the entire repair area, working it into the sanded, undamaged area.

Note: The repair adhesive should be slightly higher than the surface to allow for sanding.

4. Allow the repair adhesive to cure for 15-20 minutes at room temperature, 70°F (21°C).
5. After the adhesive cures, use a DA sander with 80-grit sandpaper to rough-sand all excess adhesive. Contour-sand and feather the repair with 180-grit sandpaper. Finish-sand using 220- and 320-grit sandpaper. In the event that pinholes exist, apply more adhesive. Work it into the pinholes with a plastic spreader. Finish-sand again.
6. Allow the product to final cure a total of 60 minutes at 70°F (21°C). Prime and paint per manufacturer's recommendations.

Technical Tip

To repair small pits or pops in the composite plastic, start with Step #2 in the "Repairing the Damaged Area" section. You do not need to use a sander to prepare the repair. Just apply LORD Fusor 102 adhesive or LORD Fusor 114 adhesive, allow it to cure, and sand smooth.

Fusor and "Ask Us How" are trademarks of LORD Corporation or one of its subsidiaries.

LORD provides valuable expertise in adhesives and coatings, vibration and motion control, and magnetically responsive technologies. Our people work in collaboration with our customers to help them increase the value of their products. Innovative and responsive in an ever-changing marketplace, we are focused on providing solutions for our customers worldwide . . . Ask Us How.

LORD Corporation World Headquarters

111 Lord Drive
Cary, NC 27511-7923
USA

Customer Support Center

+1 877 ASK LORD (275 5673)

www.lord.com