

Procedure for Repairing Truck Bumpers with LORD Fusor[®] Plastic Repair Systems

Materials Needed:

- LORD Fusor 703 Adhesion Prep/Cleaner
- LORD Fusor 702 Fiberglass Cloth
- LORD Fusor 114 Plastic Finishing Adhesive (Fast), LORD Fusor 114LG Plastic Finishing Adhesive (Fast) or LORD Fusor 115 Plastic Finishing Adhesive (Medium)
- LORD Fusor 704 Saturation Roller
- LORD Fusor 141/140 Plastic Bonding Adhesive (Super Fast)
- LORD Fusor 602EZ Surface Modifier
- LORD Fusor 300 or 301 Manual Dispensing Gun, or LORD Fusor 304 Pneumatic Dispensing Gun

When application instructions are properly followed, LORD Fusor[®] bumper repair products will produce Class-A, undetectable repairs.

Surface Preparation

1. Cover the damaged area of the bumper with masking tape.
2. Clean the repair area using LORD Fusor adhesion prep/cleaner (Stock #703). For hardened tar and sap deposits, consider using a wax and grease remover.

Note: Repeat Steps #1 and #2 on the back side of the bumper if a backing patch is needed.

3. If necessary, align the damaged area with tape or clamp.
4. Use a DA sander with 80-grit sandpaper at low rpms to remove paint surrounding the damaged area. Cove out the damaged area, leaving rounded edges rather than a V-groove (**see Illustrations A and B**).

Note: Adhesive will not bond to melted plastics. To prevent bond failure, operate DA sander at low rpms during surface preparation.

5. If a backing patch is being applied, sand the back side of the bumper using a DA sander with 80-grit sandpaper at low rpms to remove paint and roughen the surface surrounding the damaged area.
6. Follow the DA-sanding with 80-grit hand-sanding to remove any melted plastic on the surface. Blow off the repair area with an air gun. Be sure that the air does not have any oil or water in it.

Note: Do not use any cleaners after the damaged area has been sanded.

Application Procedure

Backing Patch

A backing patch is required if the damage penetrates through the bumper cover.

1. Separate the LORD Fusor fiberglass cloth (Stock #702) from its plastic film backing and cut a section large enough to cover the repair area plus 1 inch (25.4 mm) around the repair.
2. Cut a section of the plastic film backing about 1 inch (25.4 mm) larger than the patch. Lay the plastic film backing on a smooth, clean and flat surface, where it will be used in Step #4.

Illustration A: V-groove – DO NOT USE!

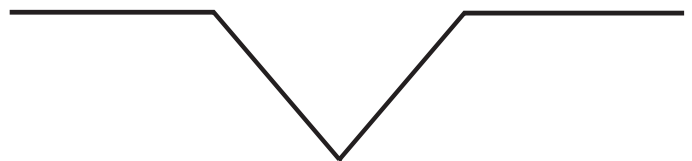


Illustration B: Taper/cove – USE!



3. If using LORD Fusor 114LG cartridge, remove the cap and nose plug from the cartridge. Insert the cartridge into the dispensing gun (Stock #301), making sure that the gun is set up for dispensing a 1:1 cartridge. (If gun is set up for a 2:1 cartridge, it will affect the mix ratio, potentially causing the product to cure or sand improperly.) Squeeze a small amount of product from each side of the cartridge to ensure that both sides are dispensing equally. Attach mixing tip and dispense the appropriate amount of material to the repair area, or dispense the material onto a mixing board and mix by hand using a plastic spreader. Keep in mind that when mixing by hand, a thorough mix is indicated by a consistent color with no marbling.
4. If using LORD Fusor 115 or Fusor 114 coaxial cartridge, insert the black plunger into the back-side of the LORD Fusor plastic finishing adhesive cartridge (Stock #114 or #115). Hand dispense at temperatures above 70°F (21°C). Use a caulking gun to dispense adhesive at temperatures below 70°F (21°C). Squeeze a small amount of product from each side of the cartridge to level the plungers. Dispense required amount of adhesive needed for the repair onto a palette mixing board and mix by hand using a plastic spreader.

Note: Fusor 114/114LG plastic finishing adhesive has a short work time to help you complete your job quickly. Once you have dispensed the product and mixed it on the palette, the product has a 1-2 minute open time at 70°F (21°C) before it will start to cure. If you need more work time for larger repairs or high temperatures, use Fusor 115 plastic finishing adhesive.

5. Immediately apply the mixed adhesive onto the film backing. Spread the adhesive evenly from the center toward the sides of the film backing. The area covered with adhesive should be about the same size as the fiberglass patch.

6. Place the pre-cut fiberglass patch on the adhesive-coated film backing. Cover patch with more adhesive and spread it evenly and completely over the fiberglass patch.

Note: Use two layers of fiberglass cloth to reinforce the bumper even more.

7. Place the prepared patch onto the repair area with the plastic film backing facing out. With a LORD Fusor saturation roller (Stock #704), smooth out the material and let it cure with the plastic film backing left on. Once cured, remove the plastic film backing.

Cosmetic Side

1. Apply LORD Fusor plastic finishing adhesive in two layers. Work the first layer into the plastic with an acid brush or spreader. Immediately apply a second, thicker coat and spread it over the entire area. Feather-edge onto the undamaged area.
- Note: The repair adhesive should be slightly higher than the bumper surface to allow for sanding. As an alternative, the adhesive can be applied in one step.**
2. Place the plastic film backing over the repair. Allow at least 20 minutes cure time before removing the plastic film backing and rough-sanding. One to two hours is preferred on the TPO and TPE bumpers before final sanding.
 3. Slowly rough-sand the repair material with a DA sander using 80-grit sandpaper. Start in the middle of your repair material and work toward the outer edges. Then, sand with 180-grit sandpaper to provide better feather-edging. For optimal results, contour with a block sander using 220- or 320-grit sandpaper.
 4. Paint per manufacturer's recommendations using a high-build primer.

Bumper Tab

Torn tabs on the bumpers can be repaired in a manner similar to that described in this repair procedure.

1. Hand-sand the area around the torn tab. Blow away any debris.
2. Apply LORD Fusor surface modifier (Stock #602EZ) and let it dry for 10-15 minutes.
3. Cut a patch of LORD Fusor fiberglass cloth (Stock #702) to use as reinforcement.
4. Apply LORD Fusor plastic bonding adhesive (Stock #141/140) to the fiberglass reinforcement. Spread the adhesive with the end of the adhesive mixer and wrap the adhesive-coated fiberglass on both sides of the tab area. Make sure that good contact with the bumper is made.
5. Hold the patch in place for about 3 minutes, or until it will stay in place by itself. After the adhesive cures, drill a mounting hole to simulate the original tab.

Technical Tips

- If a bumper was hit and appears to be dented, apply light heat to the damaged area and massage the back side of bumper to allow the plastic to come back to its natural state. If this step is omitted, the dent may result in a “bull’s-eye” in the repair area after placing it in the bake oven.
- When working in difficult areas such as corners, apply the adhesive to the repair area and lightly spread it. Then, lay a piece of plastic film backing over the repair. This will help contour the repair material to the bumper.
- Do not use polyester body fillers over top of adhesives, as compatibility issues may result.

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