

Procedure for Repairing TEO, TPO and Other Type Bumpers with LORD Fusor® Plastic Repair Systems

Materials Needed:

- LORD Fusor 703 Plastic & Rubber Cleaner
- LORD Fusor 200 Quik Stick Cyanoacrylate Kit
- LORD Fusor 602EZ Plastic Surface Modifier
- LORD Fusor 700 Bumper Reinforcing Mesh
- LORD Fusor 142/143 Extreme Bumper Repair Adhesive (Super Fast), or LORD Fusor 152/153 Extreme Bumper Repair Adhesive (Fast), or LORD Fusor 141/140 Plastic Bonding Adhesive (Super Fast)
- LORD Fusor 704 Saturation Roller
- LORD Fusor 300 or 301 Manual Dispensing Gun, or LORD Fusor 304 Pneumatic Dispensing Gun

When application instructions are carefully followed, LORD Fusor® bumper repair products will produce Class-A repairs on a regular basis.

Three adhesive systems are recommended for use with this repair procedure:

- a. LORD Fusor Extreme Bumper Repair Adhesive (Stock #142/143)
- b. LORD Fusor Extreme Bumper Repair Adhesive (Stock #152/153)
- c. LORD Fusor Plastic Bonding Adhesive* (Stock #141/140)

Choosing which adhesive to use depends on the work time and adhesive sandability time needed.

* LORD Fusor Plastic Bonding Adhesive (Stock #141/140) is only to be used for bumper tab and bonding applications.

Surface Preparation

1. Clean the repair area using plastic & rubber cleaner. For hardened tar and sap deposits, consider using a wax and grease remover.

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

2. If necessary, align the damaged area with tape, clamp or use LORD Fusor quik stick (Stock #200).
3. 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.

4. 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.
5. 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.

Illustration A: V-groove – DO NOT USE!

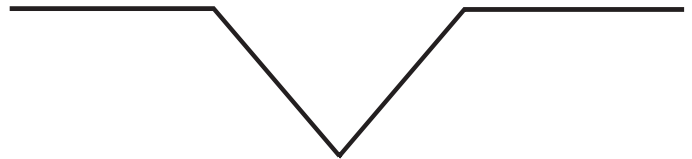


Illustration B: Taper/cove – USE!



Application Procedure

Backing Patch

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

1. Apply one light coat of LORD Fusor plastic surface modifier (Stock #602EZ). Allow to dry 10-15 minutes or longer if the temperature is below 70°F (21°C).

Note: The plastic surface modifier can be applied to the cosmetic side at the same time.

2. Cut a piece of LORD Fusor bumper reinforcing mesh (Stock #700) to cover the entire repair area.
3. Cut a section of the plastic film backing that is larger than the mesh piece. Lay the plastic film backing on a smooth, clean and flat surface, where it will be used in Step #5.
4. Insert LORD Fusor adhesive cartridge into the appropriate 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, which is about the length and width of the mixer. Dispense until the product is evenly mixed and the color is consistent.
5. Apply the 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 mesh patch.
6. Place the pre-cut mesh patch on the adhesive-coated film backing. Cover mesh patch with more adhesive and spread it evenly and completely over the mesh patch.

Note: Backing patch can be built on the bumper if the application warrants.

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. If plastic surface modifier was applied in Step #1 of the Backing Patch procedure, skip this step. If not, apply one light coat of LORD Fusor plastic surface modifier (Stock #602EZ) and allow to dry 10-15 minutes.

2. Apply LORD Fusor plastic repair adhesive in two layers. Work the first layer into the plastic with a 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.

3. Allow adhesive to cure per product recommendation.

Note: Better feather-edging is obtained by waiting this extra time.

4. 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.
5. 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 bumper reinforcing mesh (Stock #700).
4. Apply LORD Fusor adhesive to the tab repair area on the bumper, allowing excess adhesive. Wrap the pre-cut mesh patch around the tab area and squeeze together, allowing good contact with the bumper. Apply a thin coat of adhesive to the outer surface and spread smooth.
5. Allow adhesive to cure per product recommendation. After the adhesive cures, drill a mounting hole to simulate the original tab.
6. Prime and paint per manufacturer's recommendations.

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.
- To further speed repair when using LORD Fusor 152/153 extreme bumper repair adhesive, allow adhesive to sit for 10-15 minutes and then heat adhesive with heat gun for 1 minute to cure.
- 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.
- When prepping TPO, TEO and PP bumpers, always follow DA-sanding with 80-grit hand-sanding until surface has a light, fuzzy appearance.
- Do not use polyester body fillers over top of adhesives, as compatibility issues may result.
- LORD Fusor 114 plastic finishing adhesive can be used as a bumper finishing adhesive over LORD Fusor 142/143 and 152/153 adhesives to fill pin holes or minor imperfections. Refer to Fusor Repair Procedure - *Bumper Cosmetic Repair Procedure using LORD Fusor 114 Plastic Finishing Adhesive* for more information.

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LORD Corporation
World Headquarters

111 Lord Drive
Cary, NC 27511-7923
USA

Customer Support Center

+1 877 ASK LORD (275 5673)

www.lord.com