

# 3M™ Duramix™

## Semi-Rigid Plastic Parts Repair

04240

### Application Guide

#### **This procedure is recommended for a cosmetic or one-sided repair:**

1. Clean the work piece with soap and water, followed by 3M™ General Purpose Adhesive Cleaner (PN 08984, 08987).\*
2. Dish out the repair area with a 3M™ Roloc™ Abrasive (Grade 50) on a pistol grip grinder set at a lower speed. It is important to create a gradual transition into the undamaged area and not to have any sharp edges.
3. Continue dishing out the repair area with a 3M™ Abrasive DA Disc (Grade 80), being careful to keep grade 80 scratches confined to the sunken area that has been dished out.
4. Finish the dish-out process with a 3M™ Abrasive DA Disc (Grade 180) and feather into the surrounding area, removing paint where adhesive will be applied.
5. Use clean, unoled, compressed air to remove any dust from the work surface.
6. Apply a light coat of 3M™ Automix™ Polyolefin Adhesion Promoter (PN 05907) to the sanded area. Allow to dry for 5 minutes.
7. Prepare the 3M™ Duramix™ cartridge by removing the collar and plug from the cartridge. Insert the cartridge into the 3M™ dispenser (PN 08571, 08117, or 09930) and extrude a small amount of adhesive, be sure that both parts of the adhesive are extruded prior to attaching the mixing nozzle. Attach PN 08193 mixing nozzle and extrude a small amount of adhesive through the nozzle.
8. If using 3M™ Duramix™ (PN 04040) prepare the cartridge by cutting the seal tip at the notch. Insert the cartridge into the Duramix™ applicator (PN 04997) and extrude a small amount of adhesive, be sure that both parts of the adhesive are extruded prior to attaching the mixing tip. Next attach the mixing tip (PN 04901/04914) and extrude a small amount of adhesive through the mixing tip.
9. Apply the adhesive to the prepared area using a thin wet coat then building up until the adhesive is higher than the surrounding area. (work quickly as the adhesive has a 50 second work time).
10. Allow adhesive to cure for 15-20 minutes at 70°F.
11. Sand adhesive only, with 3M™ Abrasive DA Disc (Grade 80), feather the adhesive and surrounding area with 3M™ Abrasive DA Disc (Grade 180), followed by 3M™ Abrasive DA Disc (Grade 320). If more top coats of adhesive are required: Blow off with clean compressed air and re-apply 3M™ Automix™ Polyolefin Adhesion Promoter (PN 05907). Follow steps 8 through 11.
12. Re-apply a light coat of 3M™ Automix™ Polyolefin Adhesion Promoter (PN 05907) to the surface after completing the repair. Follow the paint manufacturer's guidelines for painting the part.

#### **Caution: Do not apply polyester fillers or putties over this product.**

\* Consult your local, state and federal regulations before using 3M™ General Purpose Adhesive Cleaner (PN 08984, 08987) to prepare the surface.

#### **This procedure is recommended for a two-sided or structural plastic part repair:**

1. Clean the work piece with soap and water, followed by 3M™ General Purpose Adhesive Cleaner (PN 08984, 08987).\*
2. Dish into the damaged area of the back side (non-cosmetic side) of the plastic piece with the 3M™ Roloc™ Abrasive (Grade 50) on a pistol grip grinder set at a low speed.
3. Continue to sand the back side with a 3M™ Abrasive DA Disc (Grade 80) where the repair materials will be applied.
4. Use clean, unoled, compressed air to remove any dust from the work surface.
5. Apply a light coat of 3M™ Automix™ Polyolefin Adhesion Promoter (PN 05907) to the sanded area (front and back). Allow to dry for 5 minutes.
6. Use Scotch® Auto Body Repair Tape (PN 06930) on the front side of the repair piece, tenting in the

- middle to trap the adhesive on the front side of the repair forming a strong repair.
7. Cut a piece of 3M™ Duramix™ Reinforcement Patch (PN 04904) 1.5” larger than the damage, remove the liner from the mesh and place the mesh aside (to be used in the next steps).
  8. If using Duramix™ (PN 04040) prepare the cartridge by cutting the seal tip at the notch. Insert the cartridge into the Duramix™ applicator (PN 04997) and extrude a small amount of adhesive, be sure that both parts of the adhesive are extruded prior to attaching the mixing tip. Next attach the mixing tip (PN 04901/04914) and extrude a small amount of adhesive through the mixing tip.
  9. Apply a small amount of adhesive to the back side of the repair. Using a 3M Spreader with firm pressure, spread a tight coat of adhesive to insure good contact with the plastic. Position the reinforcement mesh on the damage and continue to build thin, wet coats until the repair adhesive is slightly higher than the surrounding plastic. Multiple layers of 3M™ Duramix™ Reinforcement Patch (PN 04904) may be used to increase strength.
  10. Allow the adhesive to cure for 15 minutes.
  11. Remove the Scotch® Auto Body Repair Tape (PN 06930) and proceed to steps 2 through 11 of cosmetic or one sided repair on the front side of the plastic piece.

**Caution: Do not apply polyester fillers or putties over this product.**

\* Consult your local, state and federal regulations before using 3M™ General Purpose Adhesive Cleaner (PN 08984, 08987) to prepare the surface.

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### **Precautionary Information**

Refer to the Product Label and the Material Safety Data Sheet (MSDS) for health and safety information before using the product. For environmental information, refer to the MSDS. Always wear gloves, eye protection, appropriate respiratory protection, and work in a well-ventilated area.

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### **For Additional Information**

To request additional product information or to arrange for sales assistance, call toll free 1-888-663-1394. Address correspondence to: 3M Automotive Aftermarket division, 3M Center, building 223-6N-01, St. Paul, MN 55144-1000. Our fax number is 651-733-9175.

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### **ISO 9002**

This Automotive Aftermarket division product was manufactured under a 3M quality system registered to ISO 9002 standards.

### **3M Automotive Aftermarket Division**

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