

REPAIR (Continued)

Holes as large as approximately 76.2mm (3 inches in diameter) can be satisfactorily repaired. The location of the damage must, however, be such that the back-up tape will support the patch properly, and allow the repair to match the original contours of the panel.

Repair Procedure for Cuts or Cracks

1. Wash the repair area with soap and water. Then clean the repair area with solvent such as 3M General Purpose Cleaner or equivalent.
2. Apply a thin coating of Instant Adhesive E8AZ-19554-A (WSK-M2G351-A6), or equivalent to one surface of the cut or crack. Position the surfaces very carefully together in their original position. Quickly and firmly press the two surfaces together for at least one minute. Good bond strength is developed after one minute but maximum strength requires 3 to 12 hours cure time. **Note the precautions on adhesive container.**
3. If the part did not have the paint damaged and the repair was properly positioned, painting may not be required. However, if painting is necessary, proceed as follows:
 - a. Scuff-sand the repair area with a sanding block and No. 360 paper. Be careful not to sand through the color coat surface. Usually dulling the surface is sufficient. Wipe off the repair area with a clean, dry cloth or an air gun.
 - b. Wipe the sanded surface with a wax and grease remover.
 - c. Spray 0.75-1.0 ml. of flexible color coat and allow to dry for 15-20 minutes.
 - d. Spray 0.75-1.0 ml. flexible clearcoat over the color coat. Allow to dry per manufacturer instructions.

Repair Procedure for Damaged or Removed Surface

1. Wash the repair area with soap and water. Then clean the repair area with solvent such as 3M General Purpose Cleaner or equivalent.
2. Using a suitable grinder or sanding block with No. 36 Disc or Coarse Abrasive Paper, grind or abrade away sufficient substrate material around the damaged area to maximize adhesion of repair material.
3. Featheredge the paint around the repair area.
4. Wipe off repair area with a clean dry cloth or an air gun.
5. Flame treat the exposed substrate repair area to improve adhesion. A propane torch with a one inch long blue flame kept moving over the surface until the exposed substrate is a light brown color is sufficient. Minimum paint damage will result if the flame is kept moving.

6. Clean the underside of the repair with wax and grease remover. Apply 3M Auto Body Repair Tape (part no. 6930) or equivalent to the underside of the repair area.
7. Using the 3M Company Structural Adhesive Tube Kit Part No. 8101, or equivalent, mix the repair filler material. Carefully follow the instructions on the tubes and on the kit container to ensure correct mixing and application of the repair material.

NOTE: To prevent air bubbles during mixing, the components should be scraped together with downward pressure and spread thinly on the mixing board. **Adhesive should be used within two minutes after mixing.** Observe safety precautions when handling adhesive.
8. Apply mixed adhesive to area with a squeegee in two steps.
 - a. Apply a light coat over entire area and allow to dry.
 - b. Mix and apply second coat to restore the contour.
9. In restoring the contour, spread from edges toward center, filling all low areas. If voids, bubbles or low areas occur, mix more adhesive and apply to repair as needed.
10. Heat lamps or guns may be used to speed drying. However, as excessive heat may damage the substrate, do not use lamps closer than 4-5 feet to repair area or heatguns at 190°-120° for longer than 20 minutes. An inexpensive cooking thermometer can be used to monitor the temperature.

NOTE: The adhesive can be sanded after the 20 minute heat (lamp or gun) cure or after one hour at room temperature.

CAUTION: Sanding in two directions tends to lift edges and spoil the repair.

11. Grind or block sand the repair area down to correct contour. Grind with a No. 240 Disc followed by a No. 320 Paper followed by No. 400 Wet or dry paper.

CAUTION: Spot or glazing putty should not be used for soft plastic component repairs.
12. Examine the finish sanded repair and fill any bubbles, holes or low spots with additional adhesive as needed.
13. The entire panel surface must be scuff sanded (orbital type disc or block) with No. 320 disc or paper.
14. Clean repair area by blowing off with an air gun.
15. Wipe the entire area to be painted with a clean dry cloth or tack cloth to ensure cleanliness.
16. Apply two or more prime paint coats thinned in accordance with the directions on the paint can. Allow 30 minutes drying time. Finish paint the properly primed repair area in accordance with procedure for minor cuts and cracks.