

**REPAIR (Continued)****Plastic Bumpers**

Cuts and cracks to the radiator grille opening panel or bumpers in non-structural areas, where substrate material has not been removed, can be repaired using the approved service material: 3M® Flexible Parts Repair Material No. 05900.

The following repair procedures can be used for either the grille opening panel or the bumper assemblies in non-structural areas.

**Repair Procedures For Non-Structural Areas**

Before proceeding with the repair, examine the damaged area carefully. If damage has penetrated the bumper material, remove the bumper from the vehicle to be able to work on both sides. The following steps apply to both inside and outside surfaces unless otherwise indicated.

1. Wash the repair area with soap and water.
2. Clean the area thoroughly with a solvent such as 3M General Purpose Cleaner or equivalent.
3. Using a 3 inch No. 36-grade disc, grind the damaged area to form a tapered V-groove.
4. On the inside, use the same disc to rough up a 2 inch area surrounding the damage. On the outside, feather edge the paint around the damaged area for at least 2 inches with No. 180-grit paper.
5. Apply 3M No. 5900 Flexible Parts Repair Material or equivalent to the roughed-up area on the inside. While it is still wet, apply fiberglass cloth over the adhesive.

6. Apply an additional coat of 3M No. 5900 over the fiberglass cloth, making sure to cover the weave of the cloth completely.
7. On the outside surface, apply 3M No. 5900 to the grooved areas only. Allow 20-30 minutes drying time at 60-80°F.
8. Sand the filled areas on the outside surface with No. 180-grit paper on an orbital sander. If necessary, fill any voids or low areas with additional No. 5900 and allow to dry.
9. Finish-sand the outside surface with No. 220-grit paper with appropriate backup (hard sanding block or hand sanding pad).

**SPECIFICATIONS****TORQUE SPECIFICATIONS**

Description	N-m	Lb-Ft
Bumper-to-Fender Screws	9-21	7-15
Isolator-to-Bumper Assy Screws	22-34	16-25
Isolator-to-Reinforcement Screws	17-27	13-19
Fender-to-Bumper Assy Nuts	4.5-6.9	40-61 (Lb-In)
Back Panel Nuts	9-14	7-10
Isolator-to-Body Screws	35-55	26-40
Bumper-to-Fender Screws	9.5-15	8-11