POLYURETHANE & POLYPROPYLENE BUMPER FASCIA REPAIR/REFINISH

APPLIED VEHICLE(S):
- 1992 Maxima (J30)
- 1992 Stanza (U12)
- 1992 Sentra (B13)
- 1992 300ZX (Z32)
- 1992 240SX (S13)
- 1992 NX (KN13)

SERVICE INFORMATION

This bulletin provides detailed information on the identification, repair and refinishing of polyurethane and polypropylene bumper fascias on Nissan vehicles.

A polyurethane bumper fascia can be distinguished from a polypropylene fascia by using the following test:

Cut a small piece of material from the end of the bumper fascia and hold it over the flame of a match or lighter until it ignites.

- Polyurethane will burn with black smoke and have an odor.
- Polypropylene will burn with little smoke and will not have an odor.

Alternate test:

Sand an area near the damage with a 36 grit disc.

- If the material sands cleanly, the bumper is polyurethane.
- If the material melts or smears when sanded, it is polypropylene.

Refer to chart on following page for identification of 1992 model bumper fascia materials.
## Bumper Material Information

<table>
<thead>
<tr>
<th>MODEL</th>
<th>FRONT BUMPER</th>
<th>REAR BUMPER</th>
<th>CLASSIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992 Maxima</td>
<td>Polyurethane</td>
<td>Polyurethane</td>
<td>Thermosetting</td>
</tr>
<tr>
<td>1992 Stanza</td>
<td>Polypropylene</td>
<td>Polypropylene</td>
<td>Thermoplastic</td>
</tr>
<tr>
<td>1992 Sentra</td>
<td>Polypropylene</td>
<td>Polypropylene</td>
<td>Thermoplastic</td>
</tr>
<tr>
<td>1992 300ZX</td>
<td>Polyurethane</td>
<td>Polyurethane</td>
<td>Thermosetting</td>
</tr>
<tr>
<td>1992 240SX</td>
<td>Polyurethane</td>
<td>Polyurethane</td>
<td>Thermosetting</td>
</tr>
<tr>
<td>1992 NX</td>
<td>Polyurethane</td>
<td>Polypropylene</td>
<td>Thermosetting (front)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Thermoplastic (rear)</td>
</tr>
</tbody>
</table>

Note: For information on pre-1992 vehicles, refer to Technical Bulletin NTB91-037A

## Parts Information

The following 3M products (or equivalent) should be obtained from your local body shop supply.

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>3M PART NUMBER</th>
<th>APPLICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flexible Parts Repair Manual</td>
<td>05900</td>
<td>Both types</td>
</tr>
<tr>
<td>Flexible Parts Putty</td>
<td>05903</td>
<td>Polyurethane bumpers</td>
</tr>
<tr>
<td>Flexible Parts Coating</td>
<td>05905</td>
<td>Both types</td>
</tr>
<tr>
<td>Polyolefin Adhesion Promoter</td>
<td>05907</td>
<td>Polypropylene bumpers</td>
</tr>
<tr>
<td>Solvent (general purpose)</td>
<td>--</td>
<td>To remove silicones, tar or grease</td>
</tr>
<tr>
<td>Fiberglass cloth</td>
<td>--</td>
<td>To repair holes up to 3&quot; in diameter</td>
</tr>
<tr>
<td>Sanding discs for rotary sander</td>
<td>--</td>
<td>36 grit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>180 grit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>240 grit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>320 grit</td>
</tr>
</tbody>
</table>

## Painting Replacement Fascias

(See outline at the end of this Bulletin.)

Replacement fascias require solvent cleaning to remove mold release. After washing fascia with soap and water, wipe down the surface to be painted with a clean cloth and solvent. Repeat several times, using a clean cloth each time to pull more mold release out of the porous surface. Re-using a cloth will apply mold release to the surface.

NOTE: Be sure to use proper hand and eye protection when applying solvent and when performing the following welding and grinding/sanding operations.
SERVICE PROCEDURE

Bumper Fascia Repair

Plastic material damage can be repaired by heat, plastic welding, or adhesive repair, depending on the type and extent of the damage. It may be necessary to use a combination of these methods to complete a repair. Each repair method is described in the procedures below.

Heating Repair Method

An infrared stand, jet heater or dry oven can be used to heat a deformed fascia to its deformation temperature. At this temperature, the plastic becomes soft and the damaged area can be returned to its original shape. In some cases, a slight deformation may not return to its proper shape using heat.

Plastic Welding Repair (Polypropylene only)

- If the fascia is cracked or torn, use a plastic welding tool to repair the damage. With this method, the welding rod is welded into the damaged area. The welding rod must be the same material as the damaged part. Check with your local body shop supply for availability of polypropylene welding rods.
- The welding repair method can be applied to thermoplastic materials but not to thermosetting plastics.
Adhesive Repair -- Polyurethane Facia

If extensive reinforcing or patching from the back of the facia is required, use the following procedure.

1. Scuff the back side with 180 grade abrasive.

2. Cut a glass cloth patch to cover repair area.

3. Mix a quantity of Flexible Parts Repair Material. Lay the glass cloth on a clean surface. Use a squeegee to press the Flexible Parts Repair into the glass cloth.

4. Apply glass cloth patch to the back side of the repair area.

5. Apply additional Flexible Parts Repair Material over surface of the glass cloth patch.

Facia Surface Repair

1. Clean the repair area with soap and water. Remove grease and tar with solvent. Avoid solvent contact with plastic base material -- temporary swelling can occur.

2. Grind the repair surface with a 36 grit disc. Grind about 1½" around the actual damage to achieve a taper for best adhesion.

3. Featheredge the paint around the repair using an orbital sander with a 180 grit disc. Wipe with a clean, dry rag and blow off with air.
4. Mix Flexible Parts Repair Material according to the instructions and apply to the repair area with a squeegee, building it up higher than the undamaged area. Allow it to cure for 20-30 minutes at 60-80°F.

5. After curing, sand with 180 grit disc followed by a 240 grit disc.

6. Fill sand scratches and pinholes with Flexible Parts Putty. Allow at least 15 minutes to dry. Sand with a 320 grit disc.

7. Apply a double wet coat of Flexible Parts Coating. After a 10 minute flash time, apply a second double coat. Let dry for 45 minutes and lightly scuff sand the coating with 320 grit disc. Apply color coats recommended for plastic body parts.
Adhesive Repair -- Polypropylene Facia

If extensive reinforcing or patching from the back of the facia is required, use the following procedure.

1. Scuff the back side with 180 grade abrasive.  
   Apply Polyolefin Adhesion Promoter.

2. Cut a glass cloth patch to cover repair area.

3. Mix a quantity of Flexible Parts Repair Material.  Lay the glass cloth on a clean surface.  
   Use a squeegee to press the Flexible Parts Repair into the glass cloth.

4. Apply glass cloth patch to the back side of the repair area.

5. Apply additional Flexible Parts Repair Material over surface of the glass cloth patch.

Facia Surface Repair

1. Clean the repair area with soap and water.  
   Remove grease and tar with solvent.  Avoid solvent contact with plastic base material -- 
   temporary swelling can occur.

2. Grind the repair surface with a 36 grit disc.  
   Grind about 1½" around the actual damage to achieve a taper for best adhesion.

3. Featheredge the paint around the repair using an orbital sander with a 180 grit disc.  Wipe with a clean, dry rag and blow off with air.
4. Apply one wet coat of Polyolefin Adhesion Promoter over the sanded surface and allow to dry for 10 minutes.

**IMPORTANT:** You must reapply Polyolefin Adhesion Promoter after any sanding step.

5. Mix Flexible Parts Repair Material according to the instructions and apply to the repair with a squeegee, building it up higher than the undamaged area. Allow it to cure for 20-30 minutes at 60-80°F.

6. After curing, sand with a 180 grit disc followed by a 240 grit disc.

7. Reapply Polyolefin Adhesion Promoter and let dry.

8. Fill sand scratches and pinholes with a thin coat of Flexible Parts Repair Material. (Do not use Flexible Parts Putty.) After curing, sand with a 320 grit disc.

9. Reapply Polyolefin Adhesion Promoter and let dry.

10. Apply a double wet coat of Flexible Parts Coating. After a 10 minute flash time, apply a second double coat. Let dry 45 minutes and lightly scuff sand the coating with a 320 grit disc. Apply color coats recommended for plastic body parts.
Fascia Refinishing Procedure

When refinishing a repaired or replacement fascia, it is critical that the part is clean and sufficiently abraded prior to painting. Use the procedure below as a guide when refinishing polypropylene or polyurethane fascias.

<table>
<thead>
<tr>
<th>Polypropylene</th>
<th>Polyurethane</th>
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<tbody>
<tr>
<td>2. Wipe with wax &amp; grease remover.</td>
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</tr>
<tr>
<td>3. Abrade with gray Scotchbrite with an abrasive cleaner.</td>
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</tr>
<tr>
<td>4. Apply adhesion promoter specified by paint system you are using.</td>
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</tr>
<tr>
<td>5. Apply polypropylene primer or primer specified by paint system you are using.</td>
<td>5. Apply epoxy primer or primer specified by paint system you are using.</td>
</tr>
<tr>
<td>6. Apply color coat with flexible additive.</td>
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</tr>
</tbody>
</table>