



H021P Hood

**Uniform
Procedures For
Collision Repair
UPCR**

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v.4.0



1. Description

This procedure describes the repair, replacement, and inspection of a plastic hood. Adhesive repairs are included for all types of thermoset plastics.



2. Purpose

The purpose of this procedure is to provide industry-accepted requirements for performing high-quality repair of plastic hoods. This procedure is intended for use by professionals who are qualified through training and experience.



3. Referenced Documents

The following documents are considered part of this procedure by reference.

3.1 Procedures

- HO01 Hinge, Bolted-On
- HO11 Hinge, Welded-On
- PR11 Plastic Repair, Adhesive
- PS01 Personnel Safety
- RF01P Surface Preparation
- RF41 Finish Application

3.2 Other Information

- Product-specific information
- Recycled parts information
- Vehicle-specific repair information



4. Equipment And Material Requirements

4.1 Plastic Adhesive Materials

Use plastic adhesive materials as described in **PR11**.



5. Damage Analysis

5.1 General Damage

Inspect a plastic hood for these conditions:

- visible damage
- misalignment with adjacent panels
- damaged finish
- improper previous repairs
- damage to the underside
- reinforcements that have separated from the hood panel
- damaged or missing trim, labels, insulators, seals, etc.
- missing or damaged anti-flutter materials

Determine if the hood is repairable.



6. Personnel Safety

6.1 General Safety

General safety information is in **PS01**.

6.2 Plastic Repair Safety

Plastic repair safety information is in **PR11**.

6.3 Hood Repair Safety

Make sure a raised hood is properly supported to prevent accidental closure. Use special caution when working on spring-loaded hood hinges.



7. Environmental Safety

Does not apply.



8. Vehicle Protection

8.1 Hood And Adjacent Parts

To protect the vehicle when working with a plastic hood:

- Protect the hood to prevent further damage during the repair.
- Protect adjacent panels and glass from damage.



9. Repair Procedure

9.1 Repair Method Selection

Several factors affect the selection of a repair method:

- the type and location of the damage
- access to the underside of the part
- normal service stress

Adhesive repairs can be made to most types of plastics with these types of damage:

- cuts
- cracks
- tears
- broken tabs
- gouges
- holes
- separation

Select the repair method and perform the repairs.

Note: Before proceeding, decide whether plastic repairs can be made more easily with the hood installed on the vehicle. For removal see **9.2**. For installation see **9.3**.

9.2 Hood Removal

To remove a plastic hood:

1. Raise and support the hood. Avoid damaging the windshield, cowl, or fenders.
2. Disconnect the support rods, electrical connectors, windshield washer hoses, and the insulator as necessary.
3. Mark the hinge positions on the hood and body side before removal.
4. Unbolt the hood from the hinges. Note the location of any shims.
5. Carefully lift the hood from the vehicle.

9.3 Hood Installation

To install a plastic hood:

1. If installing a replacement hood, refinish the underside and edges of the hood before installation.
2. Protect the windshield and cowl.
3. Support the hood on the hinges, and loosely install the fasteners. Reinstall any removed shims.
4. Lower the hood slowly. Make sure it does not contact the cowl or fenders. It may be helpful to remove the latch.

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9. Repair Procedure (cont'd)

- 5. Check the horizontal alignment with the cowl and fenders. Adjust the position at the hinges as needed.
- 6. Adjust the height at the hinges as needed. Adjust the height at the front, using the adjustable stops.
- 7. Raise the hood and install the support rods. Torque all fasteners to the vehicle maker's recommendations.
- 8. Close the hood and recheck the alignment.
- 9. Reinstall the latch.
- 10. Test for proper latching. Lower the hood slowly to see if the striker squarely enters the latch assembly without forcing the hood out of alignment. Align the latch assembly or the striker as needed.
- 11. Reconnect any hoses and electrical connectors.
- 12. Replace any anti-flutter material between the frame and skin, if damaged or removed during repair.
- 13. Install the hood insulator.
- 14. Spot-paint the fasteners as necessary.
- 15. Refinish the hood, as required.
- 16. Install trim, labels, insulators, weatherstripping, seals, etc., as necessary.



10. Use Of Recycled (Salvage) Parts

10.1 Condition Of Salvage Parts

Do not install a salvage plastic hood having any of these defects:

- unrepairable damage
- damaged collapse zones or mounting locations
- damage caused by fire
- improper previous repairs
- reinforcements that have separated from the hood panel
- excessive filler or paint thickness
- damaged safety stops or catches

Plan to replace any damaged or missing trim, labels, insulators, seals, latches, safety catches, etc. Confirm that labels or information decals match the original; replace as necessary.

(cont'd)



10. Use Of Recycled (Salvage) Parts (cont'd)

10.2 Preparation Of Salvage Parts

To prepare a salvage plastic hood for installation:

- Remove any trim that is to be reused or replaced.
- Make any necessary repairs.
- Clean the part to remove dirt, wax, grease, etc.
- Remove excessive paint film thickness.
- Remove or install trim-mounting studs, and drill or fill trim-attachment holes, as required.
- Refinish panel edges or underside before installation to restore appearance.



11. Inspection And Testing

11.1 Inspection Of A Repaired Or Replaced Plastic Hood

After installation or repair, inspect a plastic hood for these conditions:

- proper alignment with adjacent panels
- proper latching and release, including the safety catch
- proper finish appearance and film thickness
- proper installation of all trim, labels, and fasteners
- proper operation of the support rods
- proper installation of hoses, electrical connectors, and insulators
- proper application of anti-flutter material
- proper operation and aiming of the windshield washer nozzles
- proper operation of the security system, if applicable
- proper alignment of hood safety stops
- proper operation of the hood release
- proper lubrication of the hinges and latch

Correct any defects.