



H021S Hood

**Uniform
Procedures For
Collision Repair
UPCR**

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v.4.0



1. Description

This procedure describes the repair and replacement of a steel hood. Inspection and evaluation requirements are also included.



2. Purpose

The purpose of this procedure is to provide industry-accepted requirements for performing high-quality repair of steel 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
- PS01 Personnel Safety
- RF01S Surface Preparation
- RF41 Finish Application
- ST21S Metal Repair
- ST31 Body Fillers

3.2 Other Information

- Recycled parts information
- Vehicle-specific repair information



4. Equipment And Material Requirements

Does not apply.



5. Damage Analysis

5.1 General Damage

Inspect a steel hood for these conditions:

- visible damage
- misalignment with adjacent panels
- improper previous repairs
- corrosion
- collapsed areas in crush zones
- excessive body filler or paint thickness
- reinforcements that have separated from the hood panel
- cracks at spot welds, or damaged fasteners
- damaged or missing trim, labels, insulators, seals, etc.
- missing or damaged anti-flutter materials



6. Personnel Safety

6.1 General Safety

General safety information is in **PS01**.

6.2 Power Tool Safety

Power tool safety information is in **ST21S**.

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 Areas

When working with a steel hood:

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



9. Repair Procedure

9.1 Hood Repair

If damage to collapse zones on the underside of the hood cannot be removed during the straightening process, or if there is damage to the hinge or striker mounting areas, the hood must be replaced.

To remove minor dents from a steel hood:

- 1. Inspect the hood surface for dents and stretched areas.
- 2. Remove the hood and place it on a stand, if this will make repairs easier. See **9.2**.
- 3. Repair dents and stretched areas using metal repair and heat shrinking procedures.
- 4. Replace any anti-flutter material between the frame and skin, if damaged or removed during repair.
- 5. Refinish the underside and edges of the hood as required.
- 6. Apply corrosion protection to enclosed surfaces.
- 7. Reinstall and align the hood. See **9.3**.

9.2 Hood Removal

To remove a steel 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 steel 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.
- 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. Properly torque all fasteners to the vehicle maker's recommendations.

(cont'd)



9. Repair Procedure (cont'd)

- 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. Install the hood insulator.
- 13. Spot paint the fasteners as necessary.
- 14. Refinish the hood, as required.
- 15. Install trim, labels, insulators, weatherstripping, seals, etc.



10. Use Of Recycled (Salvage) Parts

10.1 Condition Of Salvage Parts

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

- unrepairable damage
- corrosion that has caused pitting
- non-repairable damage in collapse zones or mounting locations
- damage caused by fire
- improper previous repairs
- cracks at spot welds or fasteners
- reinforcements that have separated from the hood panel
- excessive filler or paint film thickness
- damaged safety stops

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.

10.2 Preparation Of Salvage Parts

To prepare a salvage steel hood for installation:

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



11. Inspection And Testing

11.1 Inspection Of A Repaired Or Replaced Steel Hood

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

- 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 and electrical connectors
- proper application of anti-flutter material
- proper operation 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.