



RC11P

Hatch And Liftgate

**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 hatch or liftgate. 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 hatches and liftgates. 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

- CP01S Corrosion Protection
- DO01 Hinges
- PR11 Plastic Repair, Adhesive
- PS01 Personnel Safety
- RF01P Surface Preparation
- RF41 Finish Application
- SG01 Adhesively Bonded
- SG02 Mechanically Fastened
- SG11 Gasket-Mounted
- ST31 Body Fillers

3.2 Other Information

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



4. Equipment And Material Requirements

4.1 Equipment

The use of a hinge-pin removal tool is included in this procedure.

4.2 Plastic Adhesive Repair Materials

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



5. Damage Analysis

5.1 General Damage

Inspect a plastic hatch or liftgate for these conditions:

- visible damage
- improper previous repairs
- misalignment with adjacent panels
- reinforcements that have separated from the hatch or liftgate
- separation of the skin from the inner structure
- damaged hinges, strut supports, etc.
- damaged or missing trim, labels, seals, etc.
- damaged finish or excessive film thickness
- damaged glass (see **SG01**, **SG02**, or **SG11**)

Determine whether the hatch or liftgate is to be repaired or replaced. Verify the availability of replacement parts. If there is severe damage to the hinge or striker mounting areas, the hatch or liftgate should be replaced. For hinge replacement procedures, see **DO01**.



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 Hatch Or Liftgate Repair Safety

Make sure the hatch or liftgate is properly supported, and use proper lifting techniques during removal and installation.

Remove all broken glass before starting repairs.

Spring-loaded hinges are under tension. Use special caution when working on hatches or liftgates equipped with spring-loaded hinges.



7. Environmental Safety

Does not apply.



8. Vehicle Protection

8.1 Hatch Or Liftgate And Adjacent Areas

When working with a plastic hatch or liftgate:

- Protect the hatch or liftgate from damage during removal, storage, and installation.
- Protect adjacent panels and glass from damage.
- Avoid cutting into the finish when marking hinge locations.
- Protect any hatch or liftgate glass parts during repairs. Remove the glass if it cannot be protected.
- Protect the rear defroster grid during removal, storage, and installation of the glass.



9. Repair Procedure

9.1 Hatch Or Liftgate Repairs

Select the repair method and perform the repairs.

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

To repair a plastic hatch or liftgate:

1. Remove the inner trim panel, if required for access.
2. Perform repairs using plastic adhesive repair procedures.
3. Replace trim-mounting studs or holes, if required.
4. Apply primer to all repaired surfaces.
5. Check the hatch or liftgate alignment. Adjust if required.
6. Refinish the hatch or liftgate if required to restore the appearance, including edges damaged by the collision or repairs. Refinish cosmetic surfaces after all body repairs are complete.
7. Replace or restore sound deadeners and anti-flutter materials that were damaged by the collision or repairs.
8. Install the inner trim panel.
9. Replace all trim, labels, weatherstrips, etc.
10. Continue vehicle reassembly.

(cont'd)



9. Repair Procedure (cont'd)

9.2 Hatch Or Liftgate Removal

To remove a plastic hatch or liftgate:

- 1. Raise and support the hatch or liftgate.
- 2. Protect the adjacent parts.
- 3. Remove interior trim, if required for access.
- 4. Disconnect the support struts, hoses, and electrical connectors, if required.
- 5. Remove the hinges or hinge pins, if required. Discard any damaged pins or bushings. Mark the hinge positions on the hatch or liftgate, and on the body panel if the hinges are being replaced.
- 6. Carefully remove and store the hatch or liftgate.
- 7. Remove the striker pin.

9.3 Hatch Or Liftgate Installation

To install a plastic hatch or liftgate:

- 1. If installing a replacement hatch or liftgate, refinish the underside and edges of the part before installation.
- 2. Protect the adjacent parts.
- 3. Support the hatch or liftgate on the hinges, and loosely install the fasteners. Reinstall any removed shims.
- 4. Reinstall the hinge pins and bushings.
- 5. Reroute any electrical wiring to its original location.
- 6. Lower the hatch or liftgate slowly. Make sure it does not contact the adjacent panels.
- 7. Check for proper alignment to the adjacent panels. Adjust the position at the hinges as needed.
- 8. Raise the hatch or liftgate and properly torque all fasteners to the vehicle maker's recommendations.
- 9. Close the hatch or liftgate and recheck the alignment with the adjacent panels.
- 10. Reinstall the striker pin.
- 11. Lower the hatch or liftgate slowly to see if the striker properly enters the latch assembly without forcing the hatch or liftgate out of alignment. Align the latch assembly, or the striker as needed.
- 12. Reconnect the support struts, hoses, and electrical connectors.
- 13. Spot paint the hinges and fasteners, if required.
- 14. Refinish the hatch or liftgate, if required. Refinish cosmetic surfaces after all body repairs are complete.
- 15. Transfer or install replacement parts such as handles, lock cylinders, etc.
- 16. Install all removed interior trim.
- 17. Install all exterior trim, labels, weatherstrips, seals, etc.
- 18. Lubricate the hinges and latch, if required. Follow the vehicle maker's recommendations.

(cont'd)



9. Repair Procedure (cont'd)

- 19. Test all electrical accessories for proper operation.
- 20. Perform air and water leak tests to ensure proper sealing.
- 21. Continue vehicle reassembly.



10. Use Of Recycled (Salvage) Parts

10.1 Condition Of Salvage Parts

Do not install a salvage plastic hatch or liftgate having any of these defects:

- unrepairable damage
- damage caused by fire
- improper previous repairs
- reinforcements that have separated from the hatch or liftgate

Transfer or replace missing or mis-matched glass, moldings, or other required trim. Replace any damaged or missing trim, labels, seals, latches, etc. Confirm that all labels or information decals match the original. Replace if required.



11. Inspection And Testing

11.1 Inspection Of A Repaired Or Replaced Hatch Or Liftgate

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

- proper alignment with adjacent panels
- fasteners torqued to the vehicle maker's recommendations
- proper latching and release
- proper operation of the support struts
- proper glass installation
- proper finish appearance and film thickness
- proper lubrication of hinges, latch, and lock cylinder
- proper installation of all trim, labels, and fasteners
- proper operation of the lock cylinder
- proper installation of hoses, cables, wiring, and electrical connectors
- proper operation of electrical accessories
- proper sealing against air and water leaks

Correct any defects.