



QT01P

Quarter Panel

**Uniform
Procedures For
Collision Repair
UPCR**

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v.4.0



1. Description

This procedure describes the repair and complete or partial replacement of a plastic quarter panel. 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 plastic quarter panels. 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

- PR11 Plastic Repair, Adhesive
- PS01 Personnel Safety
- RF01P Surface Preparation
- RF41 Finish Application
- ST31 Body Fillers

3.2 Other Information

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



4. Equipment And Material Requirements

4.1 Plastic Repair Materials

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

4.2 Adhesive Material

The use of these types of adhesive materials is included in this procedure:

- urethane
- epoxy
- acrylic



5. Damage Analysis

5.1 General Damage

Inspect plastic quarter panels for these conditions or types of damage:

- visible damage
- improper previous repairs
- misalignment with adjacent panels
- stress cracks at fastener locations, corners, and edges

Determine if the quarter panel can be repaired and the portion that must be replaced. Verify the availability of replacement parts. Quarter panel removal may be required to properly assess inner damage of the plastic panel and possible damage to the inner structural parts.



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 Adhesive Safety

To prevent injury when using adhesives:

- Do not allow the adhesive to contact eyes, skin, or clothing.
- Work in a well-ventilated area.
- Avoid inhaling the fumes.



7. Environmental Safety

Does not apply.



8. Vehicle Protection

8.1 Adjacent Areas

Protect glass, upholstery, and other adjacent cosmetic surfaces, as necessary during repairs, removal, or installation. Remove parts that cannot be protected.



9. Repair Procedure

9.1 Quarter Panel Repair

Select the repair method and perform the repairs.

Before proceeding, determine the type of plastic being repaired. Determine whether plastic repairs can be made with the quarter panel installed on the vehicle. For removal see **9.2**. For installation see **9.3**.

To repair a plastic quarter panel:

- 1. Remove or reposition any trim, hardware, etc. to provide access.
- 2. Identify the type of plastic being repaired.
- 3. Remove the backlite and quarter window, if required.
- 4. Repair damage using specific plastic adhesive repair procedures for the type of plastic being repaired.
- 5. Replace damaged mounting hardware, clips, and retainers.
- 6. Prime all interior and exterior metal surfaces, and other areas damaged by the collision or repairs.
- 7. Apply the proper adhesive bonding material to the recommended areas.
- 8. Apply seam sealers to seal the joints and restore the appearance. Reprime if required by the product maker.
- 9. Refinish areas damaged by the collision, repairs, or anchoring, to restore the appearance. Refinish cosmetic surfaces after all body repairs are complete.
- 10. Reinstall the backlite and quarter window.
- 11. Reinstall the moldings and trim.
- 12. Reinstall the interior trim panels and other parts.
- 13. Continue vehicle reassembly.

9.2 Complete Quarter Panel Removal

To remove a complete plastic quarter panel:

- 1. Protect trim, carpets, and other adjacent parts that are not being removed.
- 2. Make sure all adjacent panels are in alignment before removing the quarter panel.
- 3. Remove the backlite and quarter window, if required.
- 4. Loosen or remove the bumper and tail lamp assemblies, if required.
- 5. Loosen, remove, or support the deck lid, if required.
- 6. Reposition or remove any attached wiring or electronic parts.
- 7. Remove moldings and trim, if required.
- 8. Remove the fasteners attaching the quarter panel to the inner panel and wheelhouse, if required.
- 9. Loosen and remove the mounting fasteners. Plan to replace any damaged fasteners with the same type, grade, and size as the originals.
- 10. Remove shims, if required. Note the placement and number of shims.

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9. Repair Procedure (cont'd)

- 11. Remove the quarter panel.
- 12. Make the repairs according to the type of damage, including the inner structure and wheelhouse, if required. See 9.1.

9.3 Complete Quarter Panel Installation

To install a complete plastic quarter panel:

- 1. Ensure that all inner structures are properly repaired before installing the replacement quarter panel.
- 2. Perform a trial fit of the replacement parts.
- 3. Prepare the quarter panel for any vehicle options such as trim, etc.
- 4. Install trim mounting studs or drill holes, if required.
- 5. Prime all interior and exterior surfaces.
- 6. Apply topcoat to panel edges to restore appearance. Refinish cosmetic surfaces after all body repairs are complete.
- 7. Apply the proper adhesive, as recommended by the vehicle maker.
- 8. Position and hold the repaired or replacement quarter panel in place.
- 9. Install the proper shims.
- 10. Install the fasteners. If the fasteners are being replaced, use fasteners that are the same size, type, and strength as the original fasteners.
- 11. Adjust the quarter panel to obtain proper alignment to attached and adjacent parts.
- 12. Torque all fasteners in the proper sequence, to the vehicle maker's recommendations.
- 13. Reinstall the backlite and quarter window.
- 14. Reinstall the moldings and trim.
- 15. Reinstall or replace the interior trim panels and other parts.
- 16. Continue vehicle reassembly.

9.4 Partial Quarter Panel Removal

To remove the damaged portion of a plastic quarter panel for partial replacement:

- 1. Make sure all adjacent panels are in alignment before removing the damaged portion of the quarter panel.
- 2. Remove the backlite and quarter window, if required.
- 3. Loosen or remove the bumper and tail lamp assemblies, if required.
- 4. Loosen, remove, or support the deck lid, if required.
- 5. Reposition or remove any attached wiring or electronic parts.
- 6. Remove moldings and trim, if required.
- 7. Remove fasteners attaching the inner panel and wheelhouse to the quarter panel.
- 8. Select the cut locations based on the damage and construction of the quarter panel. Follow the vehicle maker's recommendations.
- 9. Measure and mark the cut locations.

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9. Repair Procedure (cont'd)

- 10. Cut the undamaged portion of the quarter panel slightly longer than the final cut locations.
- 11. Remove the cutout portion of the quarter panel from the vehicle.
- 12. Remove all adhesive remaining on the body mating surfaces.
- 13. Clean the mating surfaces and scuff-sand the backside. Follow the vehicle maker's recommendations.

9.5 Partial Quarter Panel Installation

To install a partial quarter panel section:

- 1. Ensure that all inner structures are properly repaired before installing the partial quarter panel.
- 2. Compare the replacement part to the original part by visual inspection and measuring. Measure across the area to be sectioned using three or more reference points, such as holes, notches, or feature lines. If no reference points exist on the replacement part, make reference marks on both parts.
- 3. Cut the replacement quarter panel to the proper length and shape for the type of joint recommended by the vehicle maker.
- 4. Prepare the joint and the mating surfaces to match the existing panel and sand or grind the mating surfaces, as required. Follow the vehicle maker's recommendations.
- 5. Use scrap material to prepare backing strips, if joint reinforcement is required.
- 6. Test-fit the partial quarter panel and clamp it in place.
- 7. Remove the partial quarter panel from the vehicle.
- 8. Apply corrosion protection to any bare metal on the vehicle.
- 9. Position the partial quarter panel on the vehicle and clamp it in place.
- 10. Verify that the partial quarter panel is properly aligned with adjacent panels.
- 11. Apply adhesive, as recommended by the vehicle maker.
- 12. Securely hold the partial quarter panel in position. Note: Ensure that the clamping pressure allows the proper thickness of adhesive to remain in the bonding area.
- 13. Use the adjacent panels to verify that the partial assembly is still properly aligned.
- 14. Apply seam sealers to seal the joints and restore the appearance. Reprime if required by the product maker.
- 15. Refinish areas damaged by the collision or repairs to restore the appearance. Refinish cosmetic surfaces after all body repairs are complete.
- 16. Reinstall the backlite and quarter window.
- 17. Reinstall the moldings and trim.
- 18. Reinstall or replace the interior trim panels and other parts.
- 19. Continue vehicle reassembly.



10. Use Of Recycled (Salvage) Parts

10.1 Condition Of Salvage Parts

Inspect a salvage plastic quarter panel for these defects:

- cracks or tears on mounting points
- surface distortion
- unrepairable damage
- damage caused by fire
- improper previous repairs

Plan to transfer or replace any required bodyside moldings, stripes, decals, emblems, or other exterior trim.

10.2 Preparation Of Salvage Parts

To prepare a plastic quarter panel for installation:

- Remove any trim or moldings that are to be reused or replaced.
- Make any necessary repairs.
- Clean the part to remove dirt, wax, grease, etc.
- Remove or install trim-mounting studs and drill or fill trim-attachment holes, as required.
- Remove excessive paint film thickness.



11. Inspection And Testing

11.1 Inspection Of A Repaired Or Replaced Plastic Quarter Panel

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

- proper alignment with adjacent parts
- proper installation of all fasteners
- proper operation of attached electrical and electronic parts
- proper installation of all trim
- proper finish appearance and film thickness

Correct any defects.