

Uniform Procedures For Collision Repair

CS11P—Radiator Core Support, Bolted-On

© Copyright 1998 Inter-Industry Conference On Auto Collision Repair

v.2.3



1. Description

This procedure describes the repair and replacement of a plastic radiator core support. **Adhesive** repair information is included for all types of commonly used plastics. 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 radiator core supports. 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

EM01 Emission Label
HM01 Hazardous Materials
ME01 Three-Dimensional Measuring
PR11 Plastic Repair, Adhesive
PS01 Personnel Safety
RF01P Surface Preparation
RF41 Finish Application
ST11 Structural Straightening

3.2 Other Information

Vehicle-specific dimension specifications
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 radiator core support and adjacent parts for these types of damage:

- visible damage
- dimensional misalignment
- improper previous repairs
- damaged finish



Core support removal may be required to properly assess underside damage.

Note: Only portions of some radiator core supports, such as the upper tie bar, are made of plastic.

5.2 Inspection Of Mounting Locations

Inspect for damage at mounting locations, such as these:

- airbag impact sensors
- energy absorbers
- air conditioning condenser
- radiator
- headlamps
- hood latch

Determine whether the radiator core support should be repaired or replaced. Verify the availability of replacement parts.

Note: Some vehicle makers allow only minor repairs to plastic radiator core supports, such as repair of mounting tabs, etc. Follow the vehicle maker's recommendations.



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**.



7. Environmental Safety

Hazardous material safety information is in **HM01**.



8. Vehicle Protection

8.1 Radiator Core Support And Adjacent Areas

To protect a plastic radiator core support and adjacent areas:

- Use care when removing or installing bolts or other fasteners.
- Protect the assembly from damage during storage.
- Protect adjacent panels during on-vehicle repairs.

8.2 Electronic Parts

To protect computers and other sensitive parts from damage:

- Follow the vehicle maker's recommendations for recording and resetting electronic memories.
- Ensure that the ignition switch is in the LOCK position, and the key is removed.
- Disconnect and isolate the negative battery cable, and disarm the **passive restraint system**. Follow the vehicle maker's recommendations.
- Protect modules, connectors, and wiring from dirt, heat, static electricity, and moisture.
- Loosen or remove any wiring harnesses or electrical parts that could be damaged during the repair process.



9. Repair Procedure

9.1 Radiator Core Support Repair

Select the repair method and perform the repairs.

Before proceeding, decide whether plastic repairs can be made with the core support installed on the vehicle. For removal see **9.2**. For installation see **9.3**.

To repair a plastic radiator core support:

- 1. Repair damage using plastic adhesive repair procedures.
- 2. Replace trim mounting studs or holes, if required.
- 3. Prime all interior and exterior surfaces and other areas damaged by the collision or repairs, as required to restore appearance.
- 4. Apply **seam sealers** to seal the joints and restore the appearance. Reprime if required by the product maker.
- 5. Refinish areas damaged by the collision, repairs, or anchoring to restore the appearance. Refinish **cosmetic surfaces** after all body repairs are complete.
- 6. Continue vehicle reassembly.

9.2 Removal

To remove a plastic core support:

- 1. Perform underhood and upperbody measurements and adjacent panel alignment and straightening.
- 2. Remove the core support mounting fasteners. Inspect all fasteners that will be reused. Replace one-time or damaged fasteners. Use replacement fasteners that are the same grade, size, and type as the original fasteners.
- 3. Remove the radiator core support from the vehicle.
- 4. Keep any labels that are attached to the radiator core support. Do not discard any labels until replacements are obtained.
- 5. Make the required repairs according to the type of damage. See **9.1**.

(cont'd)



9. Repair Procedure (cont'd)

9.3 Installation

To install a plastic core support:

- 1. Verify that the proper parts are being installed by checking the part construction and part number, and performing a trial fit.
- 2. Apply seam sealers to seal the joints and restore the appearance. Reprime if required by the vehicle maker.
- 3. Refinish to restore the appearance.
- 4. Install any braces or brackets that are bolted to the inside of the radiator core support. Torque all fasteners to the vehicle maker's recommendations.
- 5. Position the radiator core support on the vehicle.
- 6. Reinstall the mounting cushions and fasteners. Some vehicle makers may require the installation of new fasteners. Use shims, if required, to level the core support. Follow the vehicle maker's recommendations.
- 7. Use a **three-dimensional measuring system** to verify that the part is properly aligned.
- 8. Torque all fasteners to the vehicle maker's recommendations.
- 9. Use the three-dimensional measuring system to verify that the part is still properly aligned.
- 10. Install any required replacement labels.
- 11. Continue vehicle reassembly.



10. Use Of Recycled (Salvage) Parts

10.1 Condition Of **Salvage Parts**

Do not install salvage parts that have any of these defects:

- unrepairable damage
- improper previous repairs
- evidence of fire damage



(cont'd)



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

10.2 Preparation Of Salvage Parts

To prepare a salvage plastic radiator core support for installation:

- Make any necessary repairs.
- Clean the part to remove dirt, grease, etc.
- Replace any damaged or corroded mounting hardware.



11. Inspection And Testing

11.1 Inspection Of A Repaired Or Replaced Plastic Radiator Core Support

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

- dimensional alignment
- fasteners torqued to the vehicle maker's recommendations
- proper finish appearance
- proper replacement of all labels

Correct any defects.