# **CHILTON**LIBRARY



## **Removal & Installation**

### **REMOVAL AND INSTALLATION**

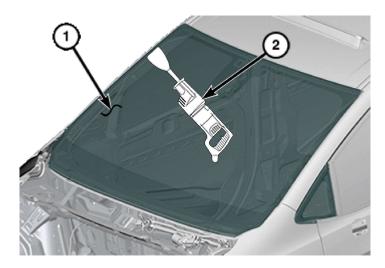
### **GLASS REMOVAL TOOLS**



### **Common glass tools needed to remove Stationary Glass**

- 1– Extractor® Express™ or equivalent, equipped with flat blade
- 2– Two handled wire type cut out tool
- 3– Cold knife equipped wit a 25 mm (1 in.) blade
- 4 Cold knife equipped with an 38 mm (1.5 in.) blade
- 5 Long knife

### **REMOVAL**



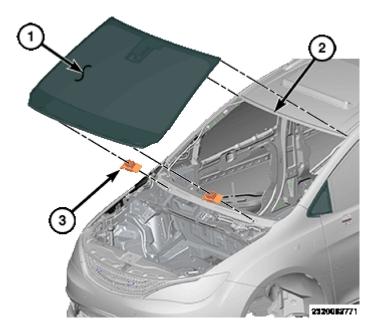
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- 1. Before proceeding with the following repair procedure, review all warnings and cautions (Refer to Body/Stationary Glass Warning).
- 2. Remove the rear view mirror, (Refer to Body/Interior/MIRROR, Rearview/Removal and Installation).
- 3. If equipped, remove the humidity sensor controls, (Refer to Heating and Air Conditioning/Controls/SENSOR, Humidity/Removal and Installation).
- 4. If equipped, remove the Forward Facing Camera (FFC), (Refer to Electrical/8E Electronic Control Modules/MODULE, Forward Facing Camera/Removal and Installation).
- 5. Remove the cowl grille, (Refer to Body/Exterior/COVER, Cowl Panel/Removal and Installation).

### **CAUTION**

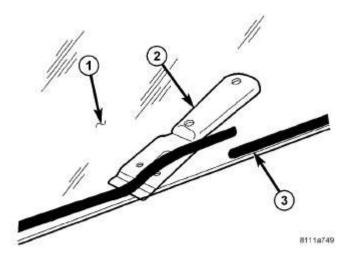
Be careful not to damage painted surfaces when removing moldings or cutting urethane around the windshield.

- 6. Remove the windshield side moldings.
- 7. Using an assistant and a windshield cut-out tool (2), cut and separate the urethane adhesive securing the windshield (1) to the windshield fence.



8. Carefully remove the windshield (1) from the vehicle.

### **INSTALLATION**



### **WARNING**

Do not operate the vehicle within 24 hours of windshield installation. It takes at least 24 hours for urethane adhesive to cure. If it is not cured, the windshield may not perform properly if the vehicle is in an accident.

#### CAUTION

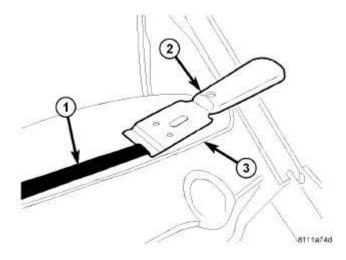
To help prevent water leaks, partially roll down the left and right door glass before installing the windshield. This avoids pressurizing the passenger compartment if a door is slammed before the

urethane is cured.

### **CAUTION**

Protect all painted and trimmed surfaces from coming in contact with urethane or primers.

1. If the windshield (1) is being reused, remove the as much original urethane (3) as possible from the glass surface using a razor knife (2).



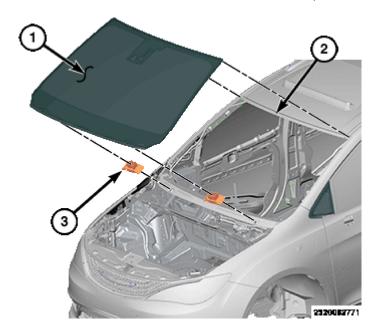
### NOTE

To prevent corrosion, do not damage paint on windshield fence when removing original urethane.

### **NOTE**

The windshield fence should be cleaned of most of its old urethane adhesive. A small amount of old urethane, approximately 1 mm in height should remain on the fence. Do not completely remove all old urethane from the fence, the paint finish and bonding strength will be adversely affected.

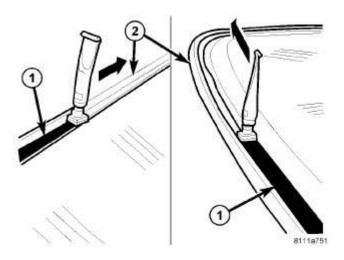
2. Using a razor knife (2), level the original bead of urethane (1) on the windshield fence (3) to a thickness of approximately 1 mm (0.04 in.) and remove the loose adhesive.



### **NOTE**

Retention clips (3) located near the cowl at the bottom of the windshield fence (2) should be replaced with new clips if any are missing or damaged.

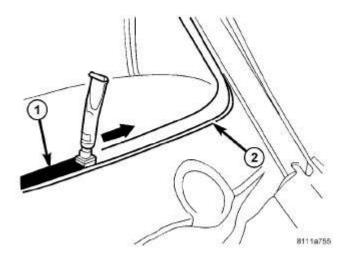
- 3. Position new retention clips (3) on the cowl top as shown.
- 4. Using an assistant, position the windshield into the windshield opening and against the windshield fence (2).
- 5. Verify the windshield lays evenly against the fence at the top, bottom and sides of the opening. If not, the fence must be formed to the shape of the windshield.
- 6. Mark the windshield and the windshield fence with a grease pencil or pieces of masking tape to use as a reference for installation.
- 7. Using an assistant, remove the windshield from the windshield opening and place it on a suitable padded work surface.



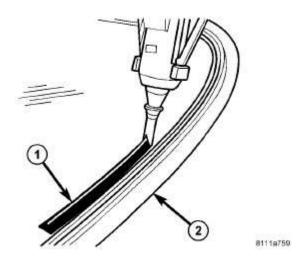
### **WARNING**

Do not use solvent based glass cleaners to clean the windshield before applying glass prep and primer or poor glass adhesion may result.

- 8. Clean the inside of the windshield with an ammonia based glass cleaner and a lint-free cloth.
- 9. Apply glass prep adhesion promoter 25 mm (1 in.) wide (1) around the perimeter of the windshield (2) and 5 mm (0.2 in.) from the edge of the glass and wipe dry with a clean lint-free cloth until no streaks are visible.
- 10. Apply glass primer 25 mm (1 in.) wide (1) around the perimeter of the windshield (2) and 5 mm (0.2 in.) from the edge of the glass. Allow at least three minutes drying time.
- 11. Using a flashlight, verify that the primer is completely and evenly installed along the perimeter of the windshield.
- 12. Re-prime any area that is not fully and evenly primed.



- 13. Clean the windshield fence with an ammonia based glass cleaner and a lint-free cloth.
- 14. Apply pinch weld primer 15 mm (0.75 in.) wide (1) around the windshield fence (2). Allow at least three minutes drying time.
- 15. Using a flashlight, verify that the primer is completely and evenly installed along the windshield fence.
- 16. Re-prime any area that is not fully and evenly primed.



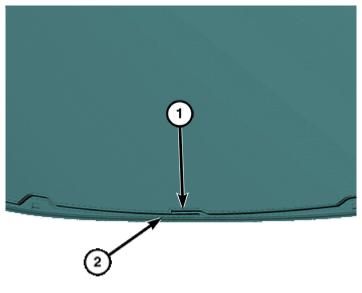
### **CAUTION**

Always apply the bead of adhesive to the windshield. Always install the windshield within 5 minutes after applying the adhesive.

### NOTE

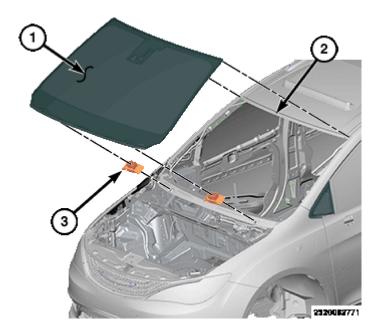
If the original urethane adhesive has been exposed for more than 12 hours, the entire adhesive area will need to be re-primed prior to installing new adhesive.

17. Apply approximately a 10 mm (0.4 in.) wide bead of adhesive (1) with a triangular nozzle approximately 6 mm (0.230 in.) from the edge of the glass (2) starting at the bottom center of the windshield.



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18. Run the end of the adhesive bead (1) on the windshield (2) parallel to the start of the bead and smooth the ends flush.



- 19. Using an assistant, position the windshield (1) over the windshield opening.
- 20. Using the grease pencil marks or tape as reference points, align the windshield to the opening.
- 21. Carefully lower the windshield onto the windshield fence. Guide the windshield into its proper location.

### **CAUTION**

It is not possible to move the windshield after installation. The windshield should never be pressed into place by more than one person, because the windshield can break if pressed simultaneously

on both sides.

- 22. Push the windshield inward until the windshield comes into contact with the retention clips located on each side of the windshield fence (3).
- 23. If equipped, install the Forward Facing Camera (FFC), (Refer to Electrical/8E Electronic Control Modules/MODULE, Forward Facing Camera/Removal and Installation).
- 24. If equipped, install the humidity sensor controls, (Refer to Heating and Air Conditioning/Controls/SENSOR, Humidity/Removal and Installation).
- 25. Install the rear view mirror, (Refer to Body/Interior/MIRROR, Rearview/Removal and Installation).
- 26. Install the cowl grille, (Refer to Body/Exterior/COVER, Cowl Panel/Removal and Installation).