

Your Ultimate Source for OEM Repair Manuals

FactoryManuals.net is a great resource for anyone who wants to save money on repairs by doing their own work. The manuals provide detailed instructions and diagrams that make it easy to understand how to fix a vehicle.

1993 JEEP Wagoneer OEM Service and Repair Workshop Manual

[Go to manual page](#)

mesh (drywall tape). Perform the following operation if required:

1. Cover waxed paper or plastic with adhesive backed nylon mesh (drywall tape) larger than the patch required.
2. Tape waxed paper or plastic sheet with mesh to a surface that has a compatible contour to the repair area.
3. Apply a liberal coat of adhesive over the reinforcement mesh. If necessary apply a second or third coat of adhesive and mesh after first coat has cured. The thickness of the patch should be the same as the repair area.
4. After patch has cured, peel waxed paper or plastic from the back of the patch.
5. If desired, a thin film coat of adhesive can be applied to the back of the patch to cover mesh for added strength.

PANEL PATCH INSTALLATION

1. Make a paper or cardboard pattern the size and shape of the cutout hole in the panel.
2. Trim 3 mm (0.125 in.) from edges of pattern so patch will have a gap between connecting surfaces.
3. Using the pattern as a guide, cut the patch to size.
4. Cut scrap pieces of patch material into 50 mm (2.0 in.) squares to use as patch supports to sustain the patch in the cutout.
5. Drill 4 mm (0.160 in.) holes 13 mm (0.5 in.) in from edge of cutout hole.
6. Drill 4 mm (0.160 in.) holes 13 mm (0.5 in.) away from edge of patch across from holes drilled around cutout.
7. Drill 3 mm (0.125 in.) holes in the support squares 13 mm (0.5 in.) from the edge in the center of one side.
8. Scuff the backside of the body panel around the cutout hole with a scuff pad or sandpaper.
9. Mix enough adhesive to cover one side of all support squares.
10. Apply adhesive to cover one side of all support squares.
11. Using number 8 sheet metal screws, secure support squares to back side of body panel with adhesive sandwiched between the panel and squares.
12. Position patch in cutout against support squares and adjust patch until the gap is equal along all sides.
13. Drill 3 mm (0.125 in.) holes in the support squares through the pre-drilled holes in the patch.

Liftgate Glass

LIFTGATE GLASS

REMOVAL

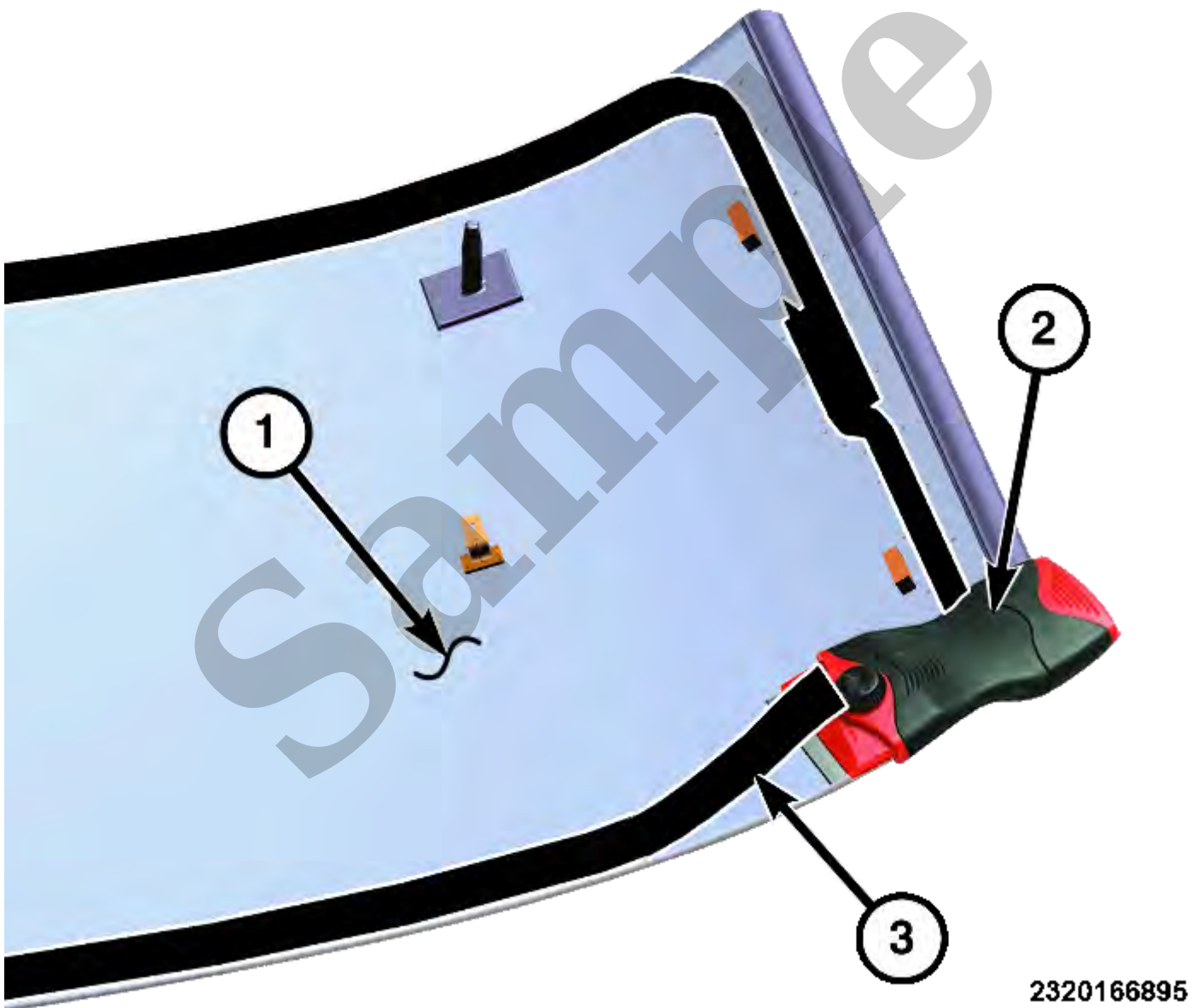
1. Before proceeding with the following repair procedure, review all warnings and cautions ([Refer to Body/Stationary Glass - Warning](#)).
2. Remove liftgate trim panels ([Refer to Body/Decklid/Hatch/Liftgate/Tailgate/PANEL, Trim, Liftgate/Removal and Installation](#)).
3. Remove the lamp bar ([Refer to Body/Decklid/Hatch/Liftgate/Tailgate/LAMP BAR, Exterior Handle/Removal and Installation](#)).
4. Remove the spoiler ([Refer to Body/Decklid/Hatch/Liftgate/Tailgate/SPOILER/Removal and Installation](#)).
5. Remove rear window wiper arm, if equipped ([Refer to 08 - Electrical/8R - Wipers/Washers/ARM, Wiper/Removal and Installation](#)).

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.

Follow the removal procedure in reverse for general reassembly of the components on the vehicle. The steps listed below are calling out specific procedures that should be followed during installation.



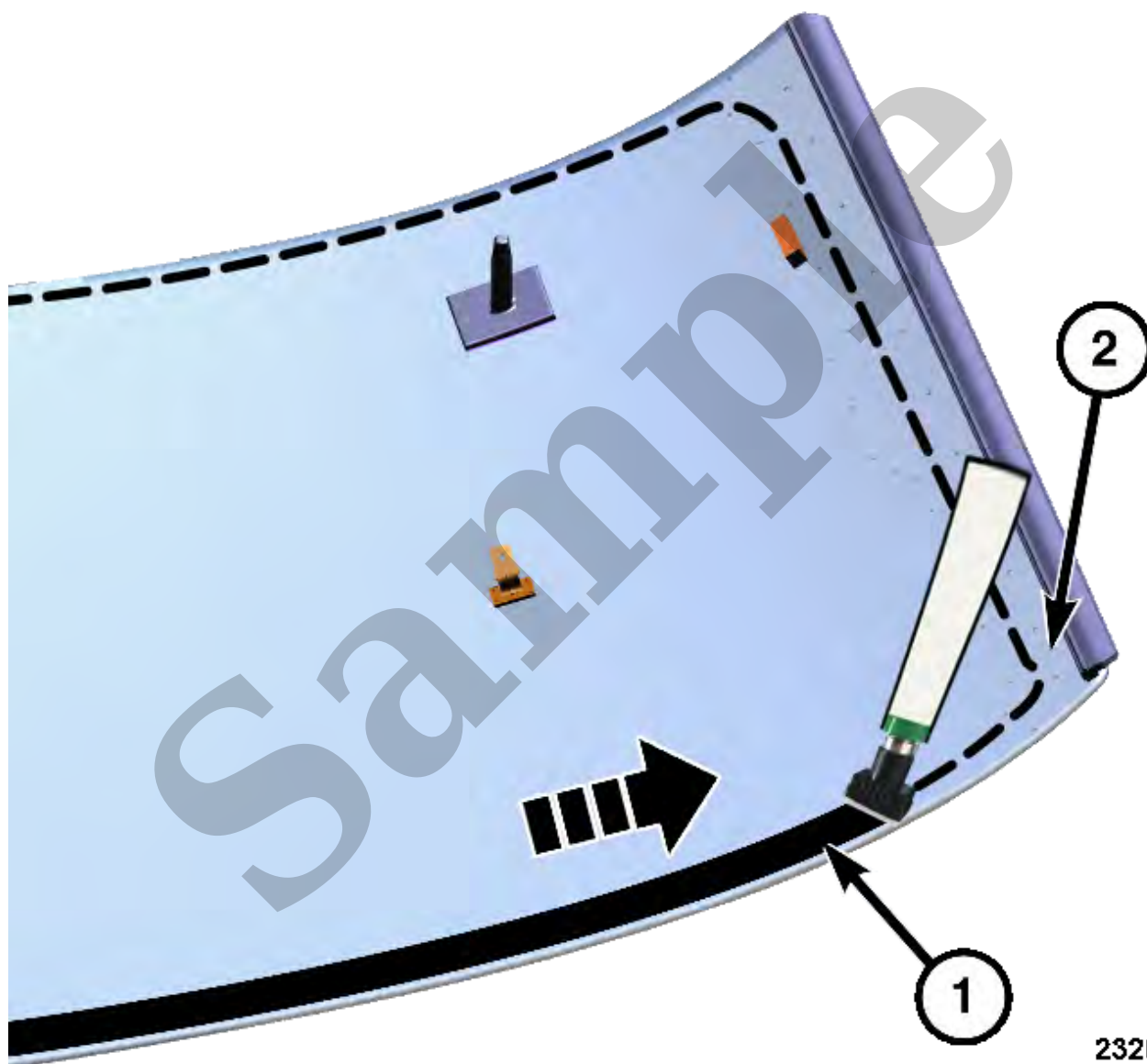
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1 - Liftgate Glass

2 - Razor Knife

2 - Wiper Shaft

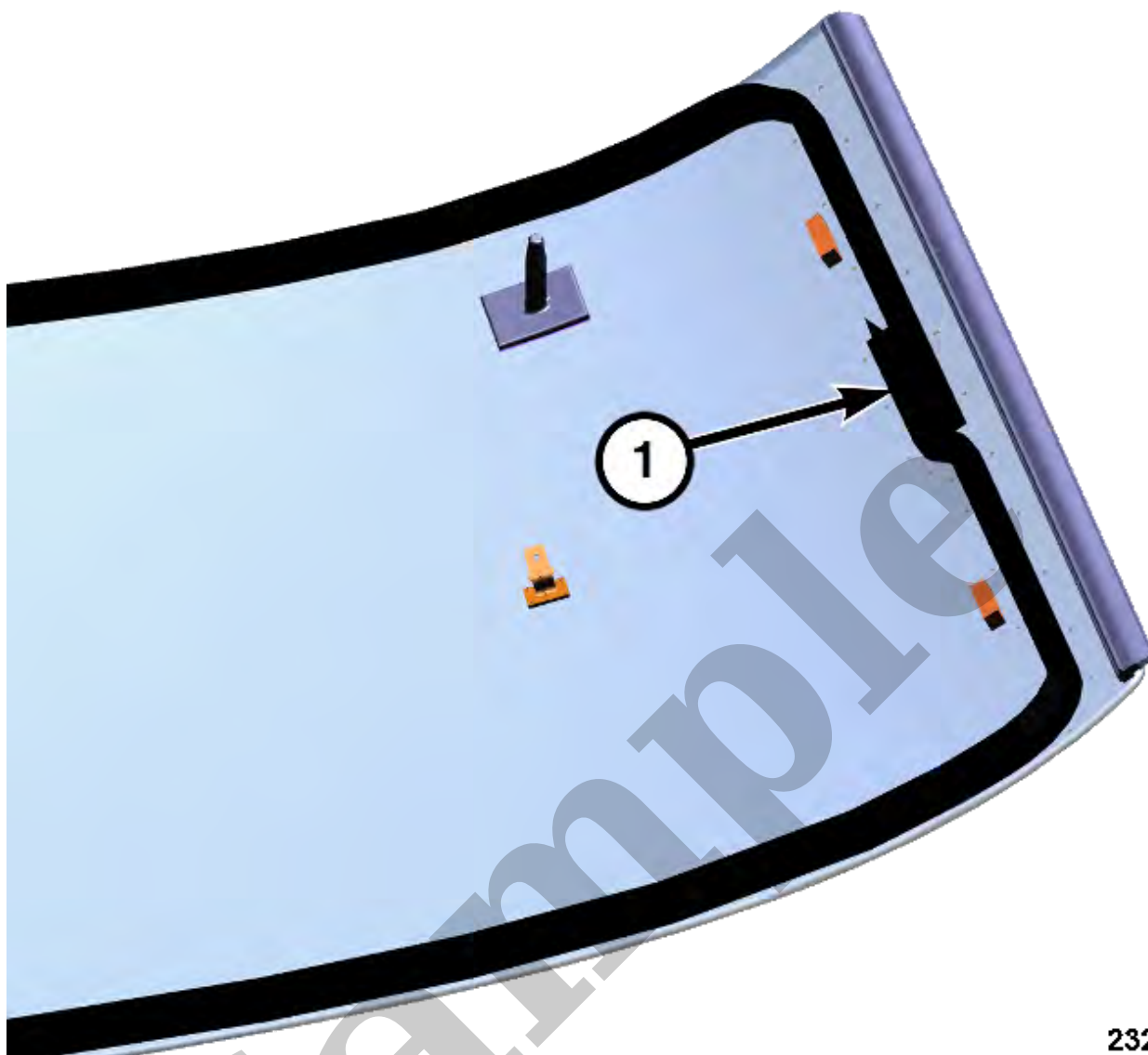
- Position the liftgate glass over the wiper shaft and on the liftgate.
- Position liftgate glass in the center of the liftgate opening and resting partially on the retention pins.
- Mark the liftgate glass and the liftgate glass fence with masking tape to use as a reference for installation.
- Using an assistant, remove the liftgate glass from the liftgate glass opening and place it on a suitable padded work surface.



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1 - Adhesion Promotor

2 - Liftgate Glass



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1 - Adhesive Bead

- Run the end of the adhesive bead on the liftgate glass parallel to the start of the bead and smooth the ends flush.

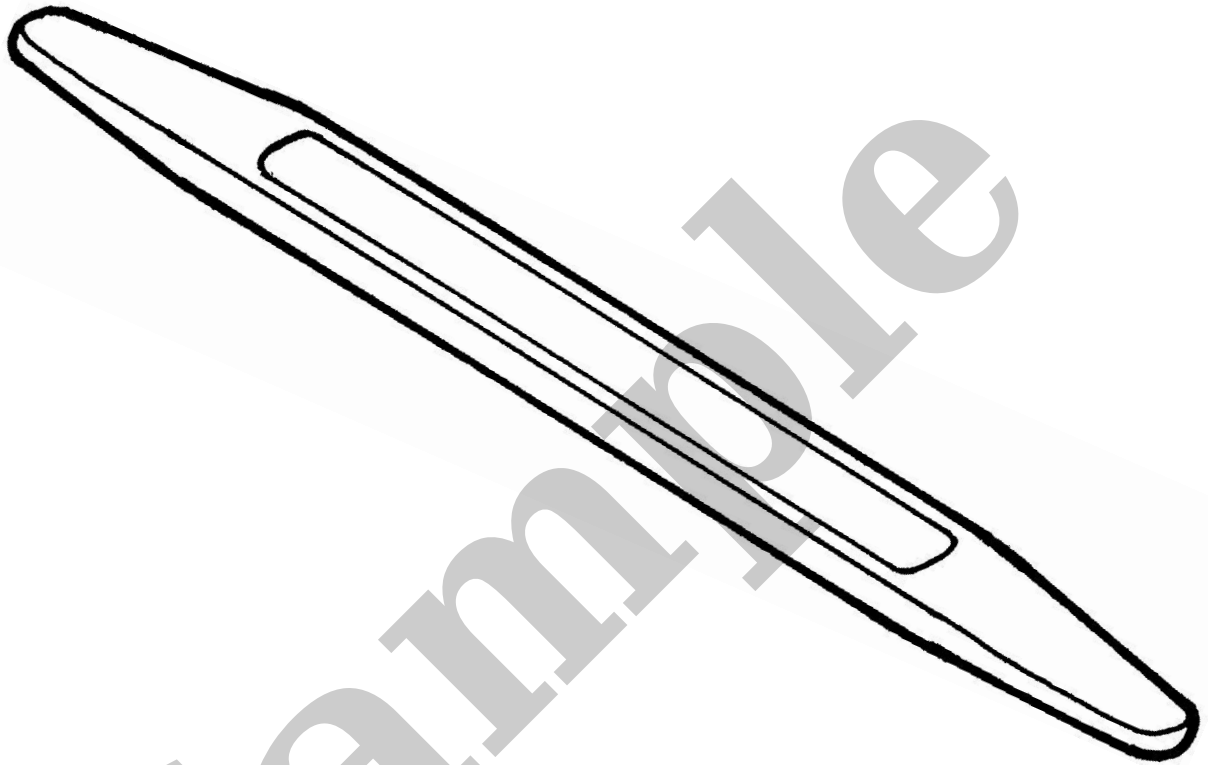
NOTE

Make sure there are no gaps present in the adhesive bead and ends.

1 - Window Opening
2 - Window Trim Molding

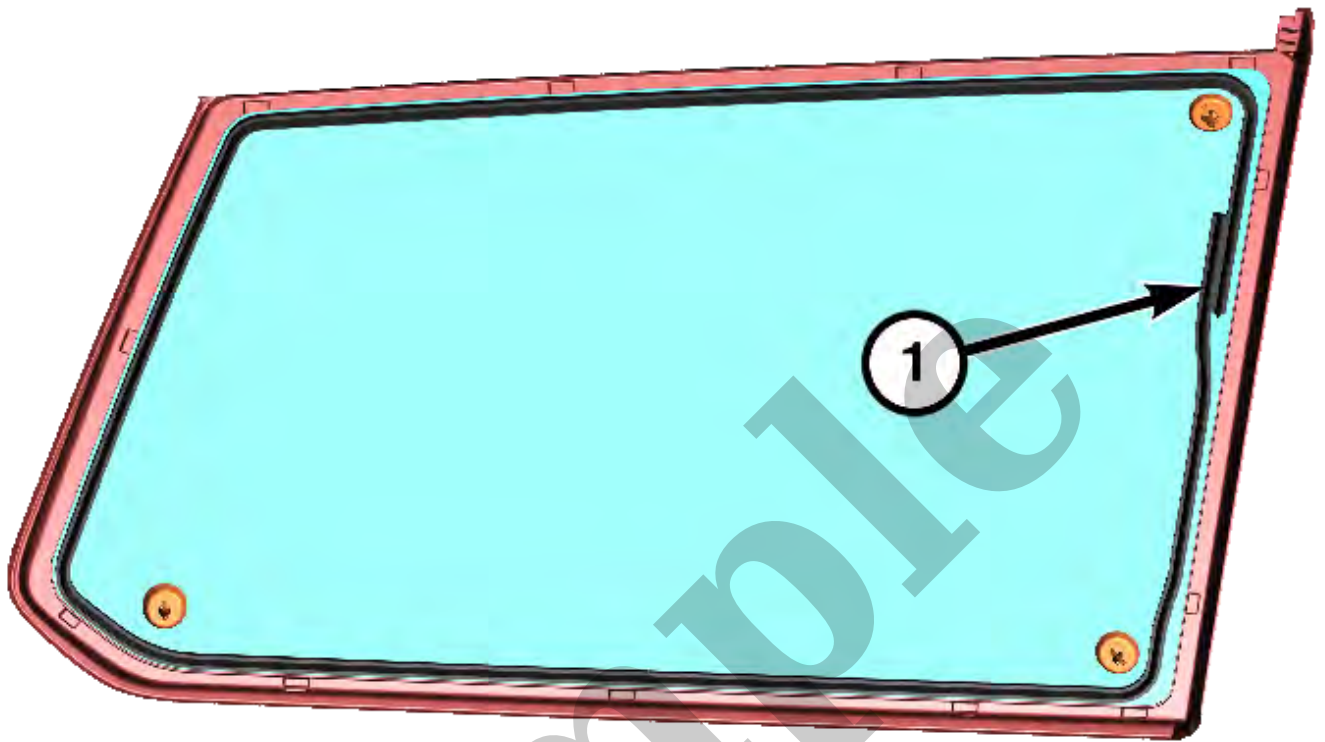
3. Using trim stick

Trim Stick



or equivalent, release the molding clips.

4. Remove the window trim molding.



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1 - Urethane Adhesive

CAUTION

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

- Apply approximately a 7 mm (0.3 in.) wide and 13 mm (0.5 in.) tall bead of adhesive with a triangular nozzle approximately 6 mm (0.230 in.) from the edge of the glass seal starting at the bottom center of the quarter glass.
- Run the end of the adhesive bead on the quarter glass parallel to the start of the bead and smooth the ends flush.

YOUR CURRENT VEHICLE

Glass Removal Tools

GLASS REMOVAL TOOLS

Common Glass Tools Needed to Remove Stationary Glass



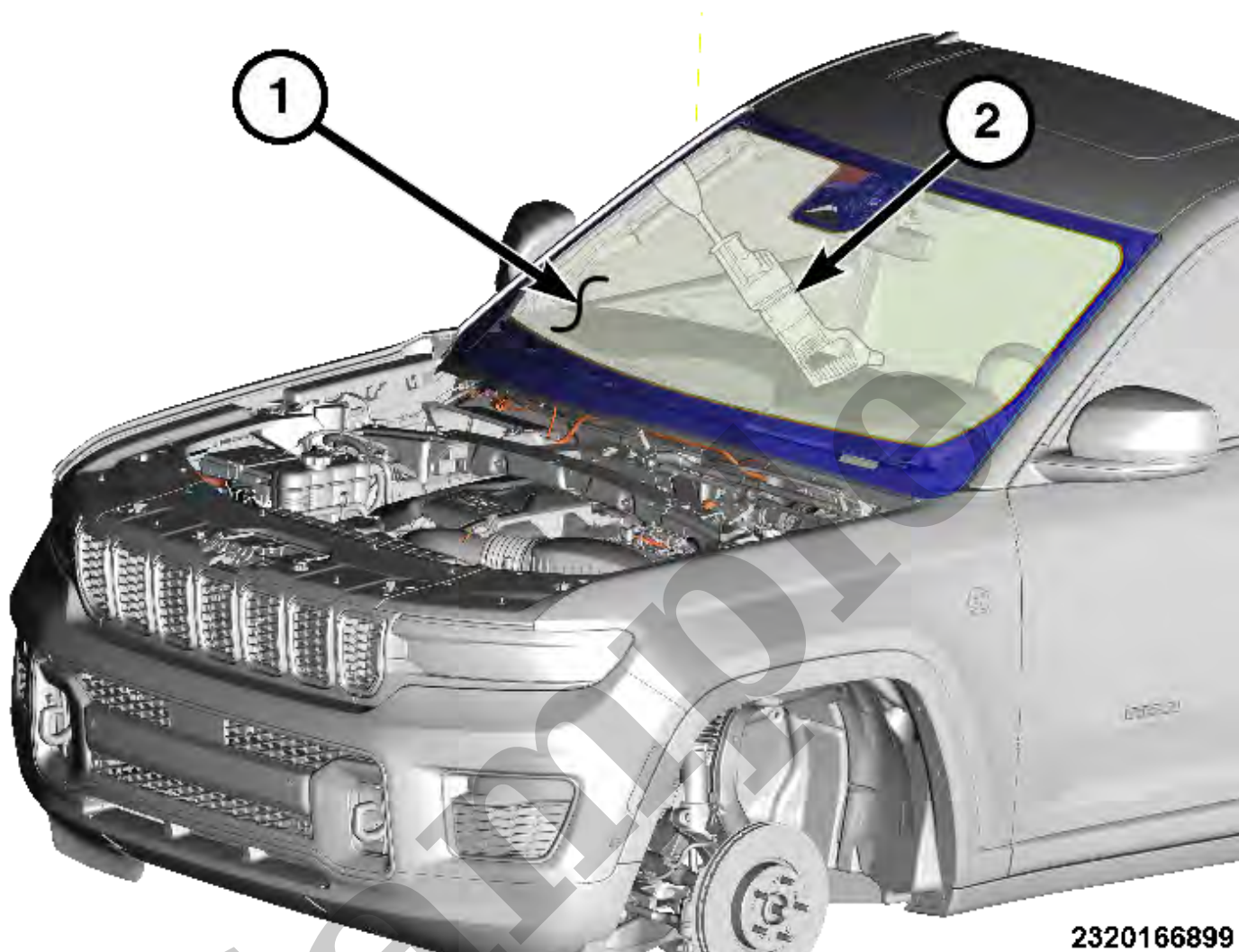
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1 - Extractor® Express™ or equivalent, equipped with flat blade

2 - Rotating Wire Removal System

3 - Two handled wire type cut-out tool

4 - Cold knife equipped with a 25 mm (1.0 in.) blade or a 38 mm (1.5 in.) blade



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1 - Windshield

2 - Windshield Cut-Out Tool

7. Using an assistant and a windshield cut-out tool, cut and separate the urethane adhesive securing the windshield to the windshield fence.