



ONLINE

For a free PDF download of the **2007-2008 Range Rover Sport glass removal and replacement instructions**, visit GlassMagazine.com.

Vehicle information



Vehicle type: Four-door sport utility vehicle

NAGS numbers*: Windshield part numbers FW02590, solar; FW02591, solar, rain sensor; FW02592, heated, solar; and FW02593, heated, solar, rain sensor

Helpful tools or supplies: 1¼-inch cold knife; spare “mushroom” fasteners for the external A-pillar covers; top molding. Have a second trained technician on hand to help.

Watch for: When releasing the interior A-pillar moldings, take care to avoid damaging the side-curtain air bags and electrical heater leads.

*With permission from National Auto Glass Specifications. Call NAGS at 800/551-4012 or visit www.nags.com.

A. Windshield (solar, heated, rain sensor)

Preparation

1. Pre-inspect the vehicle.
2. Cover the front seats, floorboards, dash and steering wheel with a clean drop cloth or ecological equivalent.

Note: Always wear personal protection equipment. Make sure you have the right glass, moldings, clips and tools, and the urethane systems are current. Windshield part numbers are FW02590, FW02591, FW02592 and FW02593.

3. Tape up any vulnerable areas on the vehicle to protect against damage during cutout. Tape up the defroster vents to prevent debris from falling into the openings. **Note:** Designate an area to display all the items removed from the vehicle. This will help ensure proper replacement.



A2

4. Remove the rain sensor cover behind the rearview mirror. Using both hands, hold each half of the cover firmly between your thumbs and forefingers. Use your thumbs to press on the bottom edges to release. Then, use your thumbnail or a hook tool to push down the locks on the bottom corners of the sensor. Loosen the rearview mirror by holding the leg firmly and twisting it counterclockwise about 120 degrees. It is not necessary to unplug the rain sensor; you may leave it hanging from the electrical wiring, as it is strong enough to hold the weight of the mirror.



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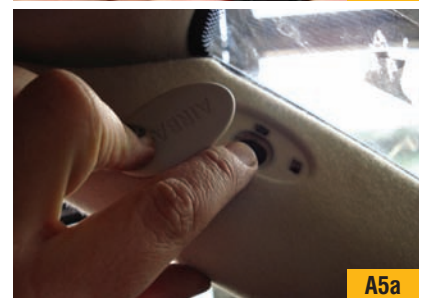


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5. Remove the two interior A-pillar screw covers. Remove the screw underneath using a Torx TX30 screwdriver. Peel down the interior rubber weatherstrip and release the interior A-pillar moldings; take care to avoid damaging the side-curtain air bags. Unplug the two electrical heater leads on each side.

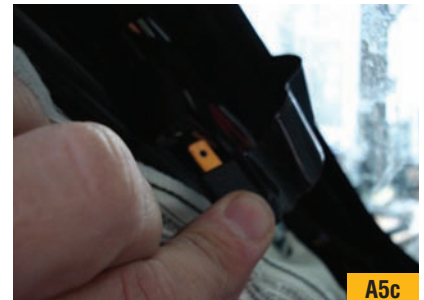


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6. Open the hood and pull out the pull-up retainer at the bottom of the exterior A-pillar; there is one on each side. Pop loose the exterior A-pillar covers, take care to avoid damaging the plastic



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Installation: 2007-2008 Range Rover Sport



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A6b



A8a



A8b



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“mushroom” fasteners. **Note:** Some of these fasteners will be damaged upon removal, so have new ones available in your toolbox.

7. Remove the windshield-wiper nut covers.

8. Remove the windshield-wiper nuts using a 13-millimeter wrench or socket. Move the wiper arm in an up-and-down motion to break it loose from the post, or use a wiper puller.

Note: Wipers can sometimes be hard to remove. Use a wiper puller to avoid stressing the post. Note the position of the blades prior to removal and mark the “right” and “left” wipers, as they are not alike.

9. Peel off the rubber weatherstrip at the bottom of the cowl panel.

10. Using an appropriate tool, pry up the fasteners holding the cowl against the bottom of the windshield. **Note:** The plastic “mushroom” fasteners generally survive this operation.

11. Remove the cowl panel by sliding it in an upward-outward motion toward the engine compartment. Put it in a safe place.

12. Using a small screwdriver, peel away the upper weatherstrip of the windshield. Lift it slightly to avoid

damaging the trim molding that goes from the front of the windshield along the vehicle roof. It is attached with plastic “mushroom” fasteners and double-sided adhesive tape. Insert spacers to keep the molding from coming in contact with the new windshield until it is in place. **Note:** Before beginning windshield removal, verify the new windshield is the

correct one and the urethanes and primers are current. Never use outdated products as this could jeopardize the structural integrity of the vehicle and the safety of its passengers. Have the appropriate replacement moldings and fasteners on hand.

Removal

13. Make sure cutting blades are sufficiently sharp.

14. Before cutting out the windshield, remove contaminants from the glass and pinchweld to prevent contact with the urethane.

15. All of the edges on this windshield are exposed; use a sharp 1¼-inch cold knife for cutout. Take care to avoid damaging the vehicle body, especially when cutting around the corners. **Note:** This windshield has four rubber gravity stops. Take care to avoid displacing or damaging them.

16. Take the windshield out of the opening using a set of vacuum cups. Lift the glass and place it on a windshield stand or suitable workstation. **Note:** You might want to transfer valid, official labels to the new glass part. **Caution:** Make sure the vacuum cups do not



A11



A12



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A15c

Installation: 2007-2008 Range Rover Sport

overlap a crack in the glass. If the windshield is severely damaged, be sure to wear thick gloves and goggles.

Installation

17. After cutting the windshield out, remove contaminants such as dirt, moisture and other debris from the pinchweld. Clean the dashboard.

18. Dry fit the new glass to the opening and mark its position with a grease pencil or molding-retention tape. Place the new glass back on the windshield stand or workstation.

19. Attach two strips of strong adhesive tape to each side of the vehicle roof, rolling up the portion that hangs free. You will use it to keep the new windshield from sliding down before the urethane cures.



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A20b

20. Attach the new top molding to the new windshield and follow the urethane manufacturer's recommendations for installation. **Note:** Make sure the four electrical connectors are secured with tape, away from the frit area of the windshield.

21. Clean the inside of the windshield with a urethane manufacturer-recommended product; follow recommend steps. **Note:** Do not touch the bonding area of

the windshield after cleaning, prepping or priming it.

22. Wear powder-free Nitrile gloves to keep off chemicals.

23. Apply the glass prep and primer, following the urethane manufacturer's recommendations.

24. Using a pinchweld-preparation tool, trim the original urethane bead, leaving 1-2 millimeters of existing urethane on the pinchweld. **Note:** Make sure there are no contaminants and do not touch the pinchweld after prepping the area.

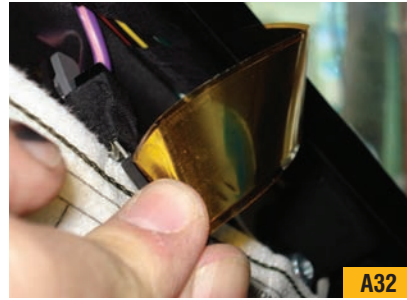
25. Apply the pinchweld primer only to the areas where needed and follow the urethane manufacturer's recommendations. Allow preps and primers to dry as recommended by the urethane manufacturer.

26. Adjust the gravity stops if they were displaced, or replace with new ones if damaged.

27. Apply a triangular bead of urethane to the same path as the freshly cut urethane on the pinchweld. Before cutting your V-notch, cut the tip off of your nozzle with a nozzle-cutter. With the cut nozzle, measure to the top of the roofline, and at 1/16-inch higher than the roofline, make a mark on the nozzle with a pen or marker. Notch the nozzle up to the marked line; this will give you the appropriate triangular bead.



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28. With the help of a second technician, lift the windshield from the windshield stand or workstation. Set the windshield on the urethane at the mark you made during dry fit. Lower the driver's side of the windshield onto the urethane and line it up with the dry-fit mark; it is now in place.

29. Attach the tape hanging from the vehicle roof to the windshield. With the help of your partner,

push the glass up to ensure the upper molding fits to the vehicle body.


30. The windshield is now ready to be decked. Press firmly to ensure a good seal.

31. Before re-installing the parts, check for leaks using an ultrasonic leak detector.

32. Re-install the removed parts in reverse order. **Caution:** Take care when connecting the electrical leads to ensure you do not sharply bend the conductive ribbons.

33. Allow the urethane to cure according to the urethane manufacturer's recommended cure time before returning the vehicle to the customer.

Warning: Disregarding the safe drive-away time your urethane manufacturer recommends can jeopardize the structural integrity of the vehicle and the safety of the passengers.

34. You have completed the removal and replacement of the windshield. 

Notes:



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