

2007 Volkswagen Jetta

By Gilbert R. Gutierrez

Vehicle information

Vehicle type: Four-door sedan

NAGS® numbers*:

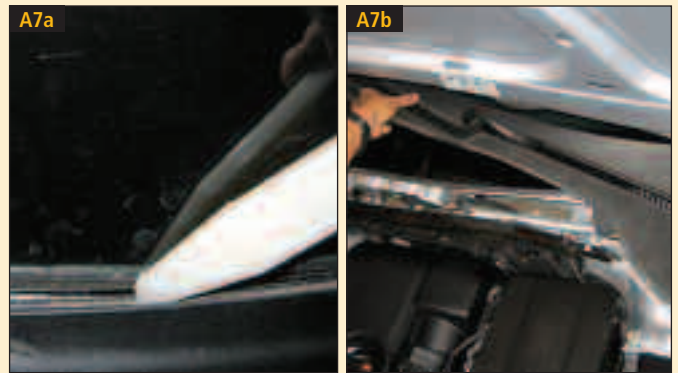
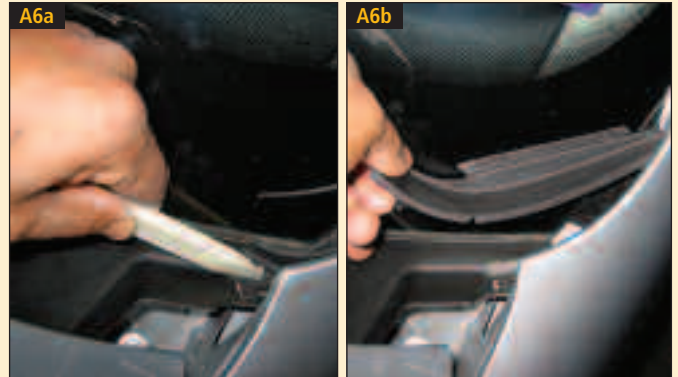
Windshield part numbers FW02526GTY, BTY, or FW02525GTY, BTY; front door glass FD22542-43GTN, BTN R-L; rear door glass

FD22544-4GTY, BTY R-L; vent glass FV22546-47GTN, BTN R-L; and back glass FB22548GTY, BTY

Helpful tools or supplies: Retention tape to protect the fender, hood, trunk lid, doorjamb and vent assembly bar; a PryBaby for molding and panel removal; a pinchweld paint-protector; a coarse self-tapping 10-inch-by-1¼-inch screw; and a coarse ¾-inch-by-7-inch lag screw to remove the pin and glass-retainer ring on the rear door glass

Watch for: When removing the vent assembly, be careful not to bend the frame or scratch the chrome on the door opening. Leave the trim panels alone if possible. If you must remove them, be careful to avoid damage. During removal of the front and rear door glass, do not try to pry loose the door-handle cover and key cylinder. It could damage the clip holder or the ridge on the cylinder, made of a soft metal alloy.

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



A. Windshield

Preparation

1. Cover the front seats, floorboards, dash and steering wheel with a clean drop cloth or disposable plastic covers. **Note:** Always wear eye and hand protection when working with glass. Make sure that you have the right glass, and that the urethane systems you are about to use are current. Windshield part numbers are FW02526GTY, BTY, or FW02525GTY, BTY.

2. Disengage the rearview mirror by twisting the base in a counterclockwise motion, detaching the mirror from the mirror bracket.



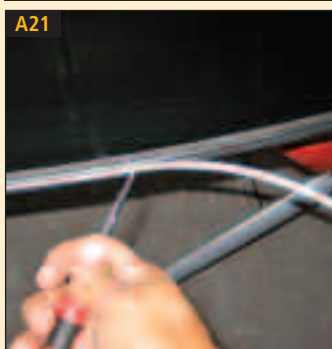
3. Remove the windshield-wiper nut covers using a hook tool, small flat-tip screwdriver, pick or No. 2 PryBaby. Mark the wipers with a piece of premium masking tape to ensure you re-install them on the correct side. **Note:** Before removing the windshield, verify the position of the wipers. This windshield has marks where the wiper blades should line up.

4. Using a wrench or socket, remove the nuts. If they are tight, loosen them using a 13-millimeter wrench and then come back with your 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.

5. Remove the cowl weatherstrip by pulling it outward.

6. Pop loose the two underside molded fasteners on the corner covers from the cowl at the base of the windshield using a No.1 PryBaby.

7. Pop loose the cowl at the base of the windshield using a No. 1 PryBaby. Remove the cowl by pulling it in an upward motion toward the windshield, and disengage it from the base



of the hood and fender area. Make sure to tape the hood and fender with premium masking tape to avoid gnarling or scratching the cowlings.

8. When using a cold knife or power tool, protect the trim with premium masking tape to ensure you do not damage the A-pillar trim panels, as the

windshield fits close to the pinchweld. The trim panels have single-use clips that are hard to remove without replacing. Leave the trim panels alone, if possible, and take your time while working on this windshield.

9. Use premium masking tape to tape off exposed areas that might come in contact with your power or hand tools. **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.

Removal

10. Make sure cutting blades are sufficiently sharp.
11. Before cutting out the windshield, remove contaminants from the glass and pinchweld.
12. If using a cold knife, use a 3/4-inch blade. Cut three sides; then use a long knife or power tool to cut the bottom of the windshield.
13. If trying to save the windshield, or if the opening does not permit the use of a cold knife due to the windshield's close tolerance to the vehicle body, use an Equalizer with an 8-inch blade.
14. When using an Equalizer or any power tool, lubricate

the cutting area with water. Spray the top and sides before making your cuts. Place the pinchweld paint-protector in the pinchweld, between the glass and the painted area.

15. Attach the suction-cup pressure arm-controller on the glass. Tighten the wing nuts to secure the pinchweld paint-protector strip.

16. To cut the windshield out, use an Equalizer with an 8-inch round-tip serrated blade, making sure the unsharpened side faces the glass. This will ensure the blade does not cut through the pinchweld paint protector and touch the paint.

17. After cutting the sides and top, place a Pumper in the top center of the windshield to open the cutting area on the bottom. **Caution:** Never use your head to push. This could result in back and neck injuries.

18. Spray the bottom of the windshield at least 4 to 5 inches above the urethane on the glass, so water flows down into the urethane while you make your final cut across the bottom of the windshield.

19. Using a set of vacuum cups, take the windshield out of the opening. Lift the glass and place it on a windshield stand or suitable workstation.

Installation

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

21. Use a small hook and pick to remove the safety plastic insert located in the cowling retainer at the bottom of the new windshield.

22. Dry fit the new glass to the opening. Mark your glass using a grease pencil or molding hold-down tape.

23. Place your vacuum cups on the windshield in the appropriate location for a one-person set.

24. For driver-side setting of the windshield using a windshield-setting kit, place the arm-protector setting pad on the driver's side of the hood area; then lift the windshield from the windshield stand using vacuum cups.

25. Reach over, place your elbow on the setting pad and set the windshield onto the old urethane.

26. With the windshield resting in the opening, make sure it is in the right spot.

27. Adjust both sides to the correct setting, marking the passenger's side, then the driver's side. Lift the glass and place it on a windshield stand or suitable workstation.

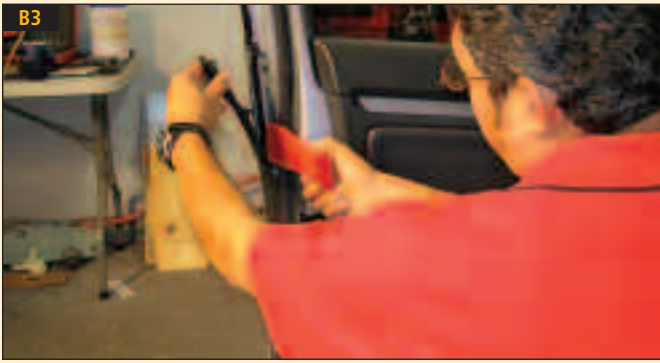
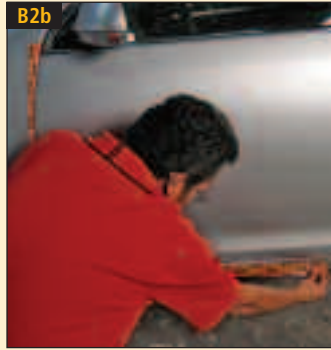
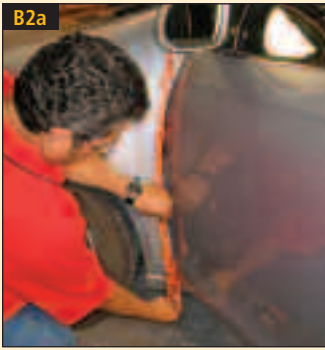
28. Follow the urethane manufacturer's recommendations for installation.

29. Clean the inside of the windshield using a urethane manufacturer-recommended product; follow recommended steps. **Note:** Do not touch the bonding area of the windshield after cleaning, prepping or priming it.

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

31. Apply the glass prep, then primer, following the urethane manufacturer's recommendations.

32. Using a pinchweld-preparation tool, remove as much of the original urethane as the urethane manufacturer recommends. **Note:** Before removing the old urethane, make sure



there are no contaminants and do not touch the pinchweld after you have prepped the area.

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

34. Apply a triangular bead of urethane to the same path as the freshly cut urethane on the pinchweld. **Note:** Before cutting your V-notch with a Top Notch tool, cut the tip off of your nozzle using a nozzle cutter. With the cut nozzle, measure to the top of the roofline and, at $\frac{1}{16}$ 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.

35. Using vacuum cups, lift the windshield from the windshield stand or workstation. Reach over, place your elbow on the setting pad on the hood area and set the windshield on the urethane at the mark you made during your 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.

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

37. Before re-installing the parts, check for leaks. Use a leak

detector to go over the perimeter of the windshield. If you find a leak, apply pressure to the spot to ensure the glass makes contact with the wet urethane.

38. Re-install the removed parts in reverse order.

39. 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 could jeopardize the structural integrity of the vehicle and the safety of its passengers.

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

B. Front door glass

Removal

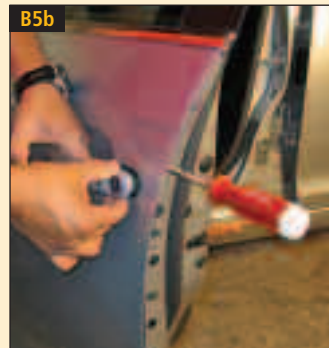
1. Make sure you have the right glass. Front door glass part numbers are FD22542-43GTN, BTN R-L.

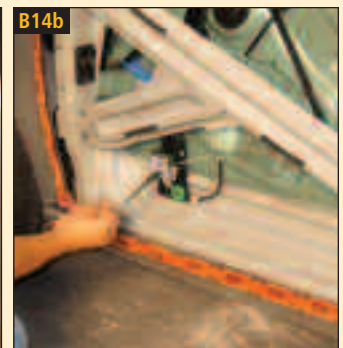
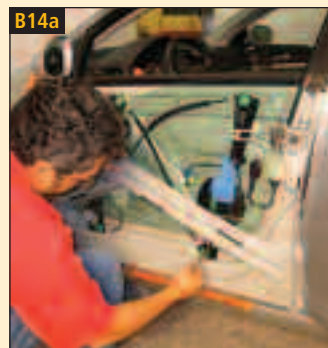
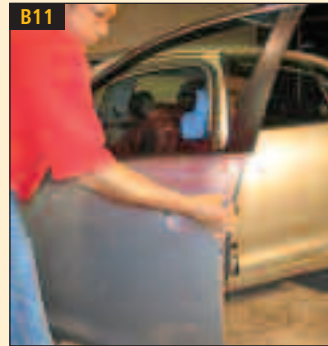
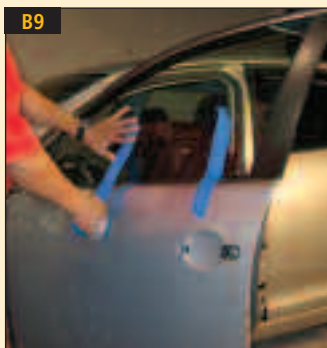
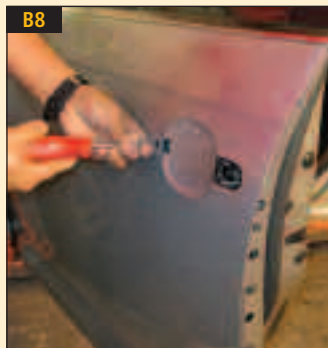
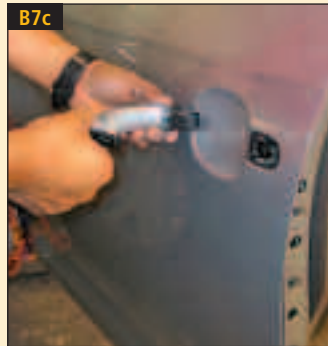
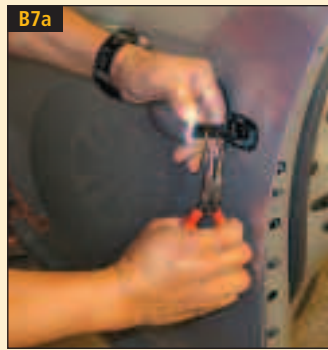
2. To remove the door skin, first open the door halfway. Tape off the fender and doorjamb to prevent scratches to the paint.

3. Remove the beauty trim cover using an installation stick or plastic trim-panel remover. Use a No. 2 PryBaby to disengage the nine plastic fasteners.

4. Remove the clear plastic screw cover.

5. There is a T-15 Torx screw that turns the locking mechanism holding the key cylinder and door-handle cover in place. Turn the screw counterclockwise so it makes about 12 to 14 revolutions. Slide the cylinder in an outward motion and disengage from the door. If the cylinder does not come loose, tighten or loosen the T-15 Torx screw pictured in B5c while simultaneously trying to slide the cylinder loose. **Warning:** Do not try to pry loose the cylinder. This could damage the clip holder or the ridge on the cylinder, made of a soft metal alloy.





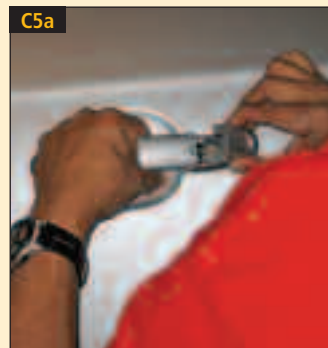
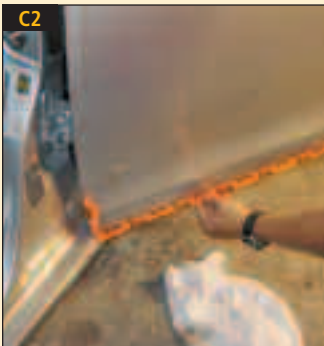
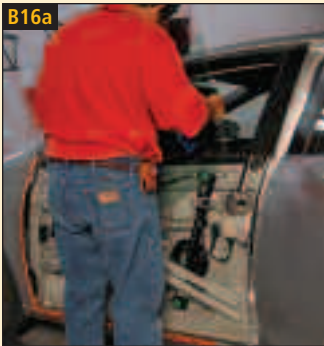
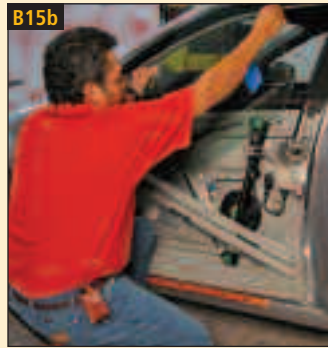
6. Disengage the door handle by pulling it away from the assembly in an outward motion.
7. Use wire grabber pliers to disengage the cable from the door-handle assembly. Slip the handle off the door-latch mechanism in an outward three-stage movement by pulling the handle toward you, out and back, and toward you again.
8. Remove the T-15 Torx screw that holds the door-latch mechanism to the door skin.
9. Tape the door skin to the glass so it does not fall off when you remove the bolts holding it to the doorframe.
10. Remove the 19 T-25 Torx screws that hold the door skin to the doorframe. Note there are two screw lengths. Make sure

to not replace the wrong screw on the wrong side. This could cause scratches to the painted area around the doorjamb. The shorter of the two screws goes on the bottom side of the door.

11. Remove the tape and slip the door skin off the doorframe in an upward, outward motion. Do not force it off.
12. Set the door skin in a safe place.
13. Lower the glass to align the mounting hardware below the crash-bar support.
14. Remove the front and back T-30 Torx screws on the door glass assembly rails.
15. Remove the glass by lifting the backside first to disengage it from the weatherstrip channel. Be careful not to scratch the glass when lifting it out of the doorframe on the crash-bar support.

Replacement

16. Slip the glass back into the door in the same manner you removed it. Make sure it is fully in the weatherstrip channel and aligned before pressing it back onto the regulator rails.
17. Check to ensure the glass is in the hardware correctly and is not in a bind to avoid potentially breaking it when you start to tighten the T-30 Torx screws.
18. Check the operation of the glass before replacing the



or plastic trim-panel remover. Use a No. 2 PryBaby to disengage the nine plastic fasteners.

4. Remove the clear plastic screw cover.

5. There is a T-15 Torx screw that turns the locking mechanism holding the door-handle cover in place. Turn the screw counterclockwise so it makes about 12 to 14 revolutions. Slide the cover in an outward motion and disengage it from the door. If the cover does not come loose, tighten or loosen the T-15 Torx screw pictured in C5b while simultaneously trying to slide the cover loose. **Warning:** Do not try to pry the cover loose. This could damage the clip holder or the ridge on the cover, made of a soft metal alloy.

6. Disengage the door handle by pulling it away from the assembly in an outward motion.

7. Use wire grabber pliers to disengage the cable from the door-handle assembly. Slip the handle off the door-latch mechanism in an outward three-stage movement by pulling the handle toward you, out and back, and toward you again.

8. Remove the T-15 Torx screw that holds the door-latch mechanism to the door skin.

9. Tape the door skin to the glass so it does not fall off when you remove the bolts holding it to the doorframe.

10. Remove the 16 T-25 Torx screws that hold the door skin to the doorframe. Note there are two screw lengths. Make sure to not replace the wrong screw on the wrong side. This could cause scratches to the painted area around the doorjamb. The shorter of the two screws goes on the bottom side of the door.

11. Remove the tape and slip the door skin off the doorframe in an upward, outward motion. Do not force it off.

12. Set the door skin in a safe place.

13. Remove the foam impact block from behind the vent glass assembly bar.

14. Lower the glass to align the mounting hardware below the vent glass assembly bar.



door skin to ensure proper installation.

19. Re-install the removed parts in reverse order.

20. You have completed the removal and replacement of the front door glass.

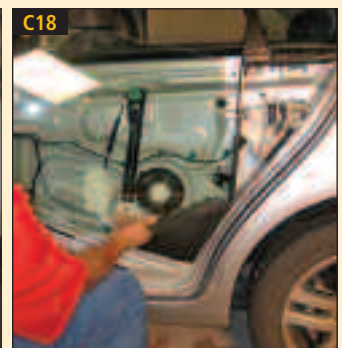
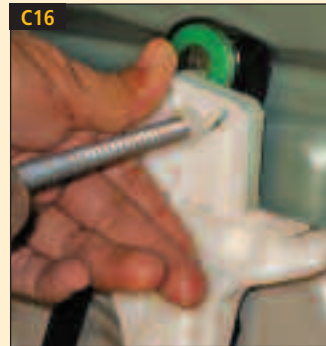
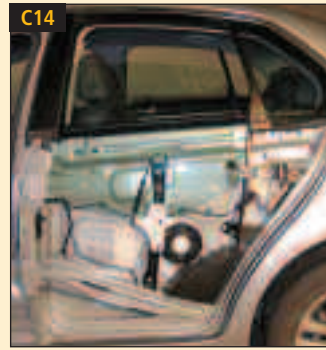
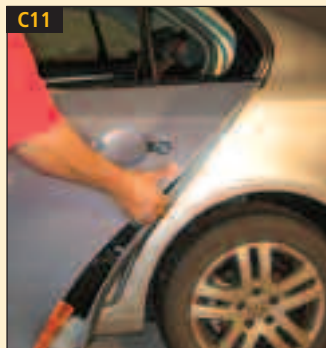
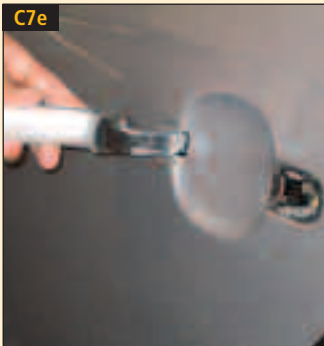
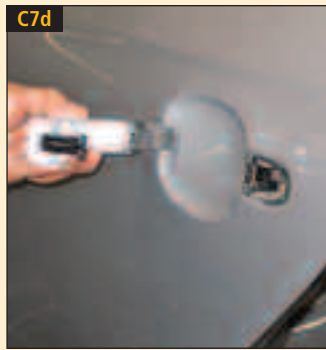
C. Rear door glass

Removal

1. Make sure you have the right glass. Rear door glass part numbers are FD22544-4GTY, BTY R-L.

2. To remove the door skin, first open the door and tape off the doorjamb and door to prevent scratches to the paint.

3. Remove the beauty trim cover using an installation stick



15. Remove the inner pin from the glass-retainer ring using a coarse self-tapping 10-inch-by-1¼-inch screw to grab the inner pin. Gently pull the pin loose.

16. Remove the glass-retainer ring using a coarse ¾-inch-by-7-inch lag screw to grab the retainer ring. Gently pull the ring loose.

17. Remove the top and bottom T-30 Torx screws on the vent glass assembly bar.

18. Remove the glass by lifting the backside first to disengage from the carriage and weatherstrip channel.

Replacement

19. Set the door glass in a safe place.

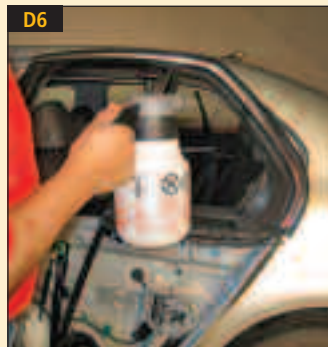
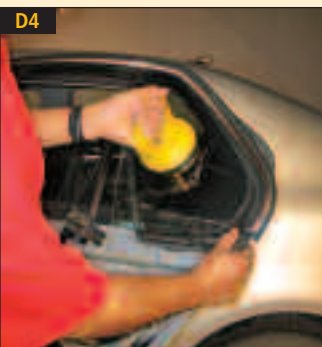
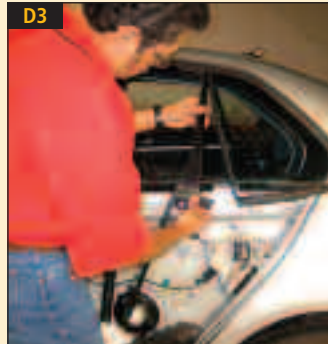
20. Set the glass-retainer ring in the glass, then press the inner pin in the glass-retainer ring with a pair of pliers.

21. Slip the glass back into the door in the same manner you removed it. Make sure it is fully in the weatherstrip channel and aligned before pressing it back onto the plastic window carriage.

22. Check the operation of the glass before replacing the door skin to ensure proper installation.

23. Re-install the removed parts in reverse order.

24. You have completed the removal and replacement of the rear door glass.



D. Vent glass

Removal

1. Make sure you have the right glass. Vent glass part numbers are FV22546-47GTN, BTN R-L.
2. Follow the rear door glass removal steps in Section C.
3. Break the vent glass assembly division bar loose from the vent glass gasket using an installation stick.
4. Using an Economy vacuum cup, pull the vent glass and gasket free from the upper doorframe in a downward-outward motion.
5. Guide the vent glass away from the gasket but leave the gasket on the doorframe.

Replacement

6. When re-installing the vent glass in the gasket or doorframe, use glass cleaner to lubricate the gasket. This will allow you to slip the glass and gasket back into their original positions.
7. Re-install the vent glass assembly by sliding it into the opening and firmly pulling it into the doorframe.
8. Re-install the removed parts in reverse order.
9. Follow the rear door glass replacement steps in Section C.
10. You have completed the removal and replacement of the vent glass.

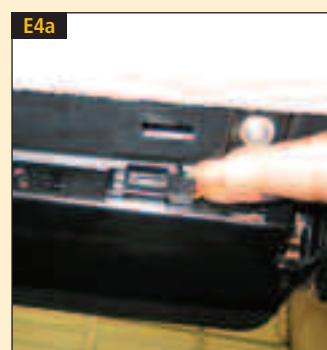
E. Back glass

Preparation

1. Make sure you have the right glass. Back glass part number is FB22548GTY, BTY.
2. When using a cold knife or power tool, protect the trim with premium masking tape to prevent damaging the trim panels, as the back glass fits close to the pinchweld. The trim panels have single-use clips that are hard to remove without replacing. Leave the trim panels alone, if possible, and take your time while working on this back glass.
3. Remove the back glass upper trim panel using a No. 4 PryBaby or panel remover. There are three push-in fasteners on each side.
4. Disconnect the two defroster electrical connectors, one on each side, by sliding the connectors in a downward motion.
5. Tape off the trim panel with premium masking tape.

Removal

6. Make sure cutting blades are sufficiently sharp.
7. Before cutting out the back glass, remove contaminants from the glass and pinchweld.



E9a



E9b



8. Place the pinchweld paint-protector in the pinchweld, between the glass and the painted area.
9. Attach the suction-cup pressure arm-controller on the glass. Tighten the wing nuts to secure the pinchweld paint-protector strip. Move and reposition the pinchweld paint-protector as needed.
10. If trying to save the back glass, use an Equalizer with an 8-inch round-tip serrated blade, making sure the unsharpened side faces the glass. This will ensure the blade does not cut through the pinchweld paint protector and touch the paint.
11. When using any power tool, lubricate the cutting area with water or a urethane manufacturer-recommended product. Spray the top and sides; then make your cuts.
12. Spray the bottom of the back glass at least 4 to 5 inches above the urethane on the glass, so the water flows down into the urethane while you make your final cut across the bottom of the back glass.
13. Take the back glass out of the opening, using a set of vacuum cups. Lift the glass and place it on a windshield stand or suitable workstation.

Installation

14. After cutting the back glass out, remove contaminants such as dirt, moisture and other debris from the pinchweld.
15. Dry fit the new glass to the opening. Mark your glass using a grease pencil or molding hold-down tape.
16. Place your vacuum cups on the back glass in the appropriate location for a one-person set.
17. Using vacuum cups, lift the back glass from the windshield stand.
18. With the back glass resting in the opening, make sure it is in the right spot.

19. Adjust both sides to the correct setting and make your mark. Lift the glass and place it on a windshield stand or suitable workstation.

20. Follow the urethane manufacturer's recommendations for installation. **Note:** It is crucial to verify the urethanes and primers are current. Never use outdated products.

21. Clean the inside of the back glass using a urethane manufacturer-recommended product; follow recommended steps. **Note:** Do not touch the bonding area of the back glass after cleaning, prepping or priming it.

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

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

24. Using a pinchweld-preparation tool, remove as much of the original urethane as the urethane manufacturer recommends. **Note:** Before removing the old urethane, make sure there are no contaminants and do not touch the pinchweld after you have prepped the area.

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

26. Apply a triangular bead of urethane to the same path as the freshly cut urethane on the pinchweld. **Note:** Before cutting your V-notch with a Top Notch tool, cut the tip off of your nozzle with a nozzle cutter. With the cut nozzle, measure to the top of the roofline, and at $\frac{1}{16}$ 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.

27. Using vacuum cups, lift the back glass from the windshield stand or workstation. Set it on the urethane at the mark you made during your dry fit.

28. The back glass is now ready to be decked. Press firmly to ensure a good seal.

29. Before re-installing the parts, check for leaks. Use a leak detector to go over the perimeter of the back glass. If you find a leak, apply pressure to the spot to ensure the glass makes contact with the wet urethane.

30. Re-install the removed parts in reverse order.

31. 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 could jeopardize the structural integrity of the vehicle and the safety of its passengers.

32. You have completed the removal and replacement of the back glass. **AG**

Removal and installation courtesy of Gilbert R. Gutierrez, vice president of sales, Equalizer Industries Inc., Round Rock, Texas. A special thanks to Kelly Quigley and Tim Matthews for providing the vehicle.

