

2004-07 Toyota Sequoia

By Gilbert R. Gutierrez

Vehicle information



Vehicle type: Four-door sport utility vehicle
NAGS® numbers*: Windshield part numbers FW02508GBN or FW02359GBN; front door glass FD21322-23GTY R-L; rear door glass FE21324-25GTY, YPY; vent glass FV21326-27GTN or YPN, R-L; quarter glass FQ22412-13YPY; back glass FB21331YPY; and roof panel DR10681YPY

Helpful tools or supplies: Retention tape to protect the fenders, hood and doorframe trim; a PryBaby for molding and panel removal; a leak detector

Watch for: When removing the doorframe trim, be careful not to bend the frame or scratch the paint on the door opening.

Note: Instructions for the windshield and front door glass are the same as those for the 2006 Toyota Tundra pickup.

*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 you have the right glass, and that the urethane systems are current. Windshield part numbers are FW02508GBN or FW02359GBN.

2. Remove the windshield-wiper nut covers using a hook



tool, small flat-tip screwdriver, pick or No. 2 PryBaby.

3. Remove the nuts using a wrench or socket. If the nuts are tight, loosen them with a 12-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.

Caution: Wipers can sometimes be hard to remove. Use a wiper puller to avoid stressing the post.

4. Remove the eight T-25 Torx screws from the exposed portion of the cowl using a No. 2 Phillips-tip screwdriver. There are four on the passenger's side and four on the driver's side.

5. Open the hood and remove the six plastic push-in fasteners using a clip-removal tool or door-panel remover. There are three on the passenger's side and three on the driver's side.

6. Remove the cowl by pulling it in an upward motion toward the engine compartment and disengaging it from the base of the hood and fender area. Apply molding-retention tape to the hood and fender to avoid gnarling or scratching the cowl.

7. Using an upward-outward motion, pull the weatherstrip



from the underside of the side metal windshield molding at the cowl, at the base of the windshield. Remove the four No. 1 Phillips-tip screws hidden beneath the weatherstrip before pulling the metal molding.

8. Slide the wire-harness trim cover off the headliner. Loosen the Tork screw using a T-21 Tork screwdriver. Slide the mirror off the mirror bracket in an upward motion.

9. If using a cold knife or power tool, remove the A-pillar trim panels, as the windshield fits close to the pinchweld.

10. Remove the door weatherstrip.

11. Remove the screw covers using a No. 2 PryBaby.

12. Remove the two screws hidden beneath the covers using a T-20 Tork screwdriver.

13. Remove the A-pillar trim panels using a door-panel remover or No. 2 PryBaby. **Note:** Before beginning windshield removal, verify that 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

14. Make sure cutting blades are sufficiently sharp.

15. Before cutting out the windshield, remove any type of contaminant from the glass and pinchweld to prevent contact with the urethane.

16. 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. **Note:** There are no gravity stops on this windshield.

17. If trying to save the windshield, use an Equalizer with an 8-inch blade.

18. When using an Equalizer or any power tool, lubricate the cutting area with water. Spray the top and sides; then make your cuts.

19. After cutting the sides and top, place a Pumper in the

top center of the windshield to open the cutting area on the bottom portion. **Caution:** Never use your head to push, as this could result in back and neck injuries.

20. Spray the bottom of the windshield with water 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 windshield.

21. 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.

Installation

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

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

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

25. For driver-side setting of the windshield using a Glass Handler Kit, place the kit's elbow setting pad on the driver's side of the hood area; then lift the windshield from the stand using the vacuum cups.

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

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

28. 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.

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

30. 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.

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

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

33. 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.

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

35. 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 1/6 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.

36. Lift the windshield from the windshield stand or workstation using vacuum cups. Reach over, place your elbow on the setting pad and 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.

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

38. 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.

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

40. 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 the urethane manufacturer recommends could jeopardize the structural integrity of the car and the safety of its passengers.

41. 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 FD21322-23GTY R-L.

2. To remove the door panels, pry open the trim cover on the door-handle assembly using a small flat-tip screwdriver or No. 2 hook and pick.

3. Remove the No. 1 Phillips screw behind the trim cover.

4. Remove the trim cover from the armrest-pull handle using a small flat-tip screwdriver or No. 2 hook and pick.

5. Remove the No. 1 Phillips screw beneath the trim cover.

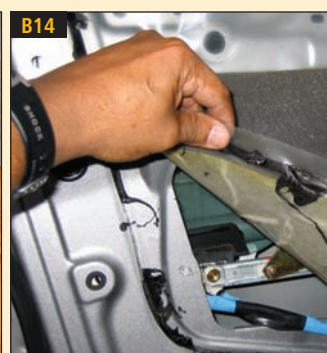
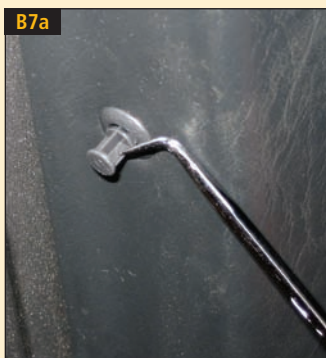
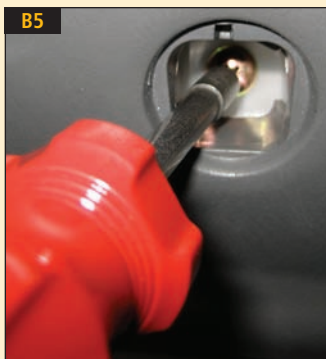
6. Pop loose and remove the door-mirror trim cover using an installation stick or No. 1 PryBaby.

7. Remove the two push-in plug fasteners from the backside of the trim panel using a No. 2 hook and pick and your fingers.

8. Disengage the door-handle assembly by pulling it back and away from the panel and slipping it off the door.

9. Remove the trim panel using a door-panel or a plastic trim-panel remover. Use a No. 2 PryBaby to disengage the eight plastic fasteners located about 12 to 14 inches from the top of the door panel.

10. Gently pull the door panel in an upward-outward motion and disengage it from the door.



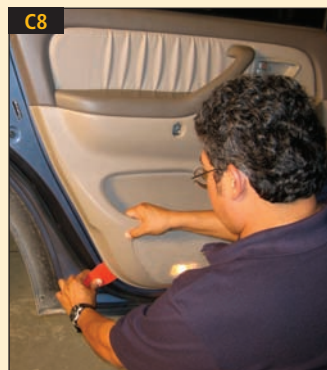
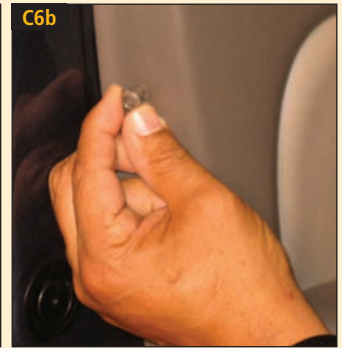
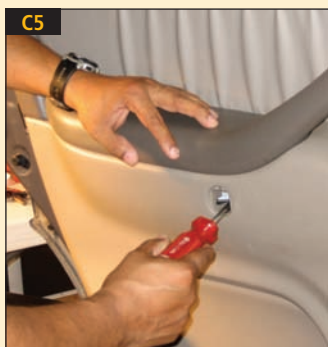
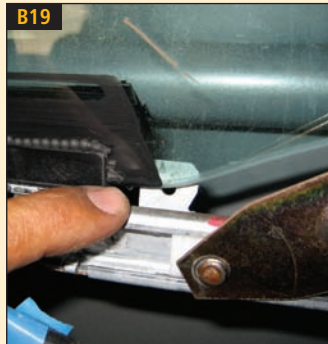
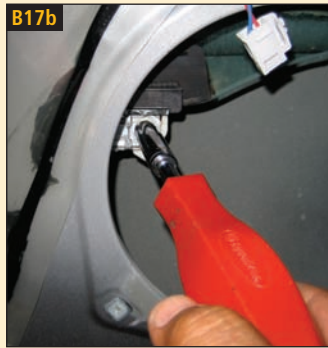
11. Turn the panel in a clockwise motion and disconnect the electrical window-switch assembly harness by pinching the tab and pulling the harness free.

12. Disconnect the light-assembly harness by pinching the tab and pulling the harness free.

13. Set the door panel in a safe place.

14. Remove the plastic sound-weather barrier.

15. Remove the three 10-millimeter bolts from the speaker. Loosen the speaker harness by pinching it; this will give you access to the front plastic glass retainer.



strip channel and not on the backside of the metal carrier. Align the carrier before bolting it to the plastic hardware on the glass.

20. Check the operation of the glass before replacing the panel to ensure proper installation.

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

22. 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 FE21324-25GTY, YPY.

2. To remove the door panels, pry open the trim cover on the door-handle assembly using a small flat-tip screwdriver or No. 2 hook and pick.

3. Remove the No. 1 Phillips screw behind the trim cover.

4. Remove the trim cover from the armrest-pull handle using a small flat-tip screwdriver or No. 2 hook and pick.

5. Remove the No. 1 Phillips screw beneath the trim cover.

6. Remove the two push-in plug fasteners from the backside of the trim panel using a hook tool or No. 2 hook and pick and your fingers.

7. Disengage the door-handle assembly by pulling it back and away from the panel and slipping it off the door.

8. Remove the trim panel using a door-panel or plastic trim-panel remover. Use a No. 2 PryBaby to disengage the eight plastic fasteners located about 12 to 14 inches from the top of the door panel.

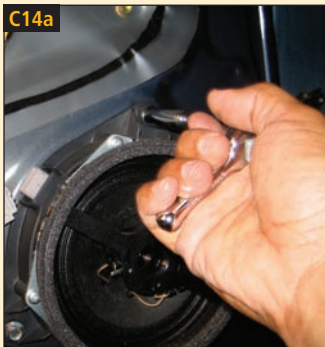
16. Lower the glass to align the mounting hardware with the opening.

17. Remove the two 10-millimeter bolts on the plastic glass retainers. There is one on the front of the door and one on the rear, on the regulator arms.

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

Installation

19. To replace the door glass, slip it back into the door in the same manner you removed it. Make sure it is fully in the weather-



9. Gently pull the door panel in an upward-outward motion and disengage it from the door.

10. Turn the panel in a clockwise motion and disconnect the electrical window-switch assembly harness by pinching the tab and pulling the harness free. Or, use an installation stick or No. 2 PryBaby to disengage the trim panel electrical window-switch assembly by pushing the spring clip at the front of the panel and prying loose.

11. Disconnect the light-assembly harness by pinching the tab and pulling the harness free.

12. Set the door panel in a safe place.

13. Remove the plastic sound-weather barrier.

14. Remove the three 10-millimeter bolts from the speaker and loosen the speaker harness by pinching it; this will give you access to the front plastic glass retainer.

15. Lower the glass to align the mounting hardware with the opening.

16. Remove the two 10-millimeter bolts on the plastic glass retainers. There is one on the front of the door and one on the rear, on the regulator arms.

17. Follow the vent glass removal steps in Section D.

18. Remove the glass by lifting the backside first to disen-



gage it from the weatherstrip channel. Slip the glass to the outer side of the doorframe.

Installation

19. To replace the door glass, slip it back into the door in the same manner you removed it. Make sure it is fully in the weatherstrip channel and not on the backside

of the metal carrier. Align the carrier before bolting it to the plastic hardware on the glass.

20. Check the operation of the glass before replacing the panel to ensure proper installation.

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

22. 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 FV21326-27GTN or YPN R-L.

2. Follow the rear door glass removal steps in Section C.

3. Remove the inner weatherstrip from the vent glass-assembly division bar and the door glass frame.

4. Remove the two 10-millimeter bolts that hold the vent glass-assembly division bar.

5. Remove the No. 1 Phillips screw that holds the vent glass-assembly division bar to the top of the door on the underside of the doorframe.





6. Use molding-retention tape to protect the vent glass-assembly division bar from paint scratches during removal.

7. Break loose the vent glass-assembly division bar from the vent glass gasket.

8. Pull the vent glass and gasket free using a downward-outward motion away from the upper doorframe.

Installation

9. When re-installing the vent glass in the gasket or door-frame, use glass cleaner to lubricate the gasket. This will allow you to slip the glass and gasket back into its original position.

10. Re-install the vent glass assembly by sliding it into the opening and firmly pulling it into the doorframe.

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

12. Follow the rear door glass replacement steps in Section C.

13. You have completed the removal and replacement of the vent glass.

E. Quarter glass

Preparation

1. Make sure you have the right glass. Quarter glass part number is FQ22412-13YPY.

2. Partially remove the tailgate interior upper trim panel using a No. 4 PryBaby or panel remover. There are four push-in fasteners on each side.

3. Remove the push-in plug fasteners from the underside of the D-pillar quarter trim panel using a hook tool or No. 2 hook and pick and your fingers.

4. Remove the two covers on the lower quarter trim panel that hide a 10-millimeter bolt located at the front of the panel closest to the rear door and one at the rear of the panel closest to the D-pillar quarter trim panel.

5. Remove the two 10-millimeter bolts.



6. Remove the 10-millimeter bolt for the cargo shade.

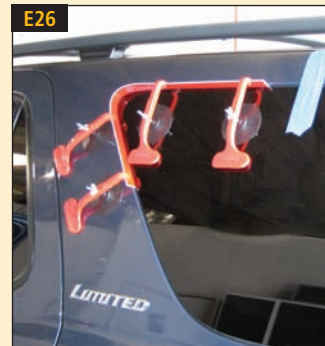
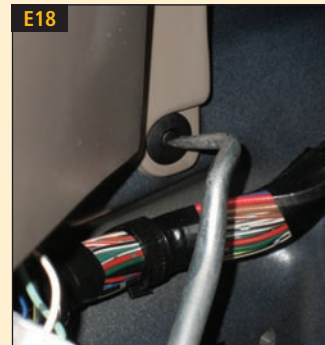
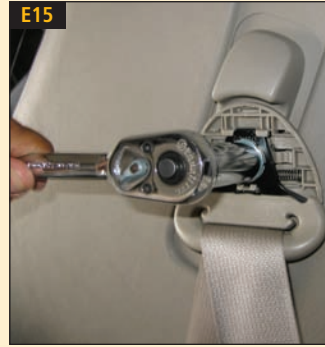
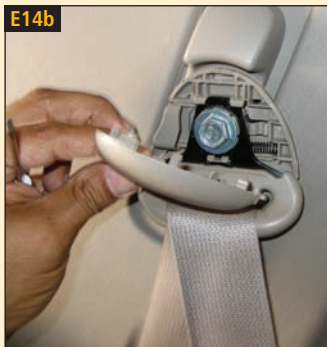
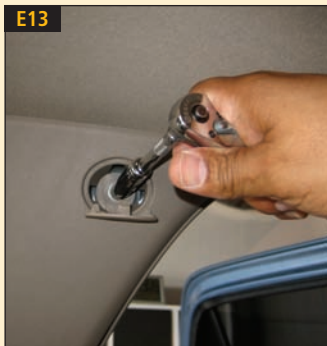
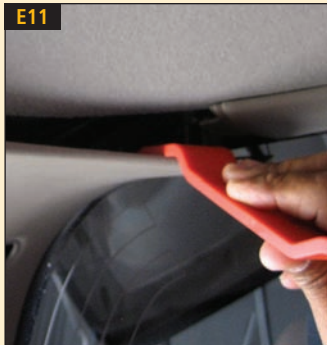
7. Pop loose the cover on the rear seatbelt post closest to the tailgate that hides a 14-millimeter bolt post.

8. Remove the 14-millimeter bolt post.

9. Remove the two, two-part cargo-net posts. First detach the outer piece using a No. 2 and No. 3 PryBaby or a pair of installation sticks. Then, pull the lock piece until the entire two-part system comes free from the quarter trim panel and body.

10. Remove the seatbelt trim cover.

11. Partially remove the D-pillar quarter trim panel using a No. 3 PryBaby or panel remover. This will loosen the upper quarter trim panel.



PryBaby or panel remover. There are six push-in fasteners on the backside at the back-seat seatbelt post and two on the upper section following the roofline.

18. Remove the push-in plug fastener from the D-pillar quarter trim panel using a hook tool or No. 2 hook and pick and your fingers.

19. Remove the D-pillar quarter trim panel using a No. 3 PryBaby or panel remover. There are two push-in fasteners on the backside and three guide pins.

20. Slide the antenna electrical connector in a downward motion and disconnect.

Removal

21. Tape off the lower trim panel with premium masking tape.

22. Make sure cutting blades are sufficiently sharp.

23. Before cutting out the quarter glass, remove contaminants from the glass and pinchweld.

24. Tape the outside of the quarter glass with molding-retention tape to avoid scratching the paint.

25. Place a pinchweld paint-protector in the pinchweld, between the glass and the painted area.

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

27. If trying to save the quarter 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, touching the painted area.

28. When using any power tool, lubricate the cutting area

12. Pop loose the "SRS," or Safety Restraint System, curtain air-bag cover.

13. Remove the 10-millimeter bolt that holds the upper quarter trim panel.

14. Pop loose the cover on the rear seatbelt post closest to the rear passenger door that hides a 14-millimeter bolt post.

15. Remove the 14-millimeter bolt post.

16. Pop loose the lower quarter-glass trim panel using a No. 4 PryBaby or panel remover. There are eight push-in fasteners on the backside.

17. Remove the quarter-glass upper trim panel using a No. 4

with water or a urethane manufacturer-recommended product. Spray the top and sides; then make your cuts.

29. Tape the top of the quarter glass on the exterior to ensure it does not fall out during the final cutting stage.

30. Spray the bottom of the quarter glass with water 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 quarter glass.

31. Take the quarter 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

32. After cutting the quarter glass out, remove contaminants such as dirt, moisture and other debris from the pinchweld.

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

34. Place your vacuum cups on the quarter glass in the appropriate location for a one-person set.

35. Using vacuum cups, lift the quarter glass from the windshield stand.

36. With the quarter glass resting in the opening, make sure it is in the right spot.

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

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

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

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

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

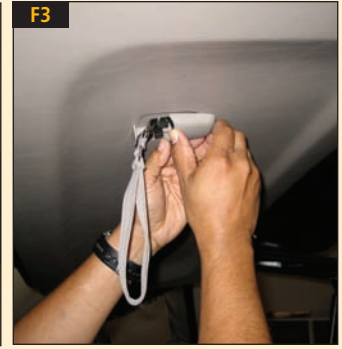
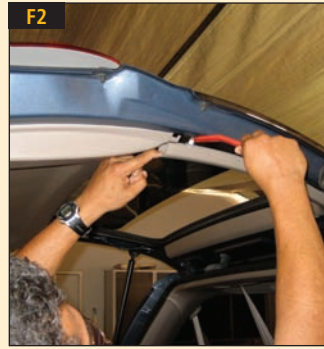
42. Using a pinchweld-preparation tool, remove as much of the original urethane as the urethane manufacturer recommends. **Note:** Before removing the old urethane, make sure there are no contaminants and do not touch the pinchweld after prepping the area.

43. Apply 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.

44. 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.

45. Lift the quarter glass from the windshield stand or workstation using vacuum cups. Set it on the urethane at the mark you made during dry fit.



46. The quarter glass is now ready to be decked. Press firmly to ensure a good seal.

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

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

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

50. You have completed the removal and replacement of the quarter glass.



F. Back glass

Removal

1. Make sure you have the right glass. Back glass part number is FB21331YPY.

2. Use a No. 2 PryBaby or panel remover to remove the side two-piece trim panels, or pull on them slightly. There are three push-in fasteners on each of the pieces.

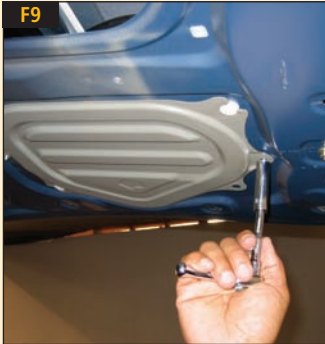
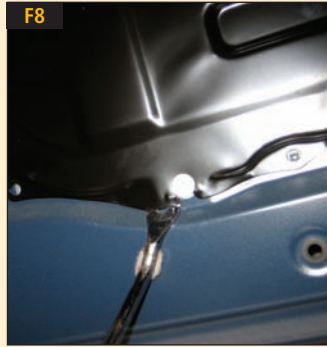
3. Slip the trim cover on the pull-handle strap off in an upward motion away from you.

4. Remove the 10-millimeter bolt.

5. Use a No. 1 PryBaby or panel remover to remove the trim panel, or pull on it slightly. There are 12 push-in fasteners around the perimeter.

6. Gently pull the trim panel in an upward-outward motion to disengage it from the tailgate.

7. Use a 10-millimeter socket to remove the six bolts



beneath the trim cover on the center metal trim plate.

8. Pop loose the four push-in fasteners using a No. 4 PryBaby or panel remover. Remove the black center metal trim plate.

9. Remove the two bolts beneath the trim cover on the gray passenger-side metal trim plate.

10. Pop loose the two push-in fasteners using a No. 4 PryBaby or panel remover. Remove the gray passenger-side metal trim plate.

11. Slide the two defroster electrical connectors on the driver's side in a downward motion and disconnect. Make sure they go back on the same way they came off.

12. Lower the glass to align the mounting hardware with the opening.

13. Remove the six 10-millimeter bolts on the metal carrier that hold the plastic glass retainers. There are two on the left side of the electric lifts, one near the center of the glass around the motor, one on the other side of the center section near the spring area and two on the right side.

14. Remove the glass by lifting the backside first to disen-

gage it from the weatherstrip channel. Slip the glass to the outer side of the back glass frame.

Installation

15. To replace the back glass, slip it back into the cab in the same manner you removed it. Make sure it is fully in the weatherstrip channel and not on the backside of the metal carrier. Align the carrier before bolting it to the plastic hardware on the glass.

16. Check the operation of the glass before replacing the panel to ensure proper installation.

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

18. You have completed the removal and replacement of the back glass.

G. Roof panel

Removal

1. Make sure you have the right glass. Roof part number is DR10681YPY.

2. Open the glass roof panel to align the mounting hardware so that the rear of the glass panel is to the outer opening of the roof, tilted up at least 3 to 5 inches.



