

Removing and Replacing Rear Window Regulator

The following procedure was performed on a 2003 X5 3.0i.

Tools used in this procedure:

- T-20 Torx bit
- T-30 Torx bit
- Thin Screw Driver
- Painters Masking Tape
- Paint lid remover
- Flexible Bondo or paste spreader
- Wooden Paint Stir Stick

I. Removing Wood Trim

- Using the Flexible Spreader start separating the wood trim from the door panel by inserting the spreader downward towards the door pillar. Using the Wooden Paint Stir Stick place it behind the end of the wood trim as the flexible spreader has already created a gap large enough to begin prying the wood trim from the door panel.



- Once the Wood Trim has been removed you will need to remove the (3) three Torx screws using the T-20 Torx bit





II. Removing the Vertical Rear Shade

- To successfully remove the rear door panel you must remove the Vertical Rear Shade. There you will see a T-2-Torx Screw behind the Vertical Shade. Using a small thin screwdriver, insert the screwdriver in the small slot that is at the top of the vertical shade assembly as illustrated in the photograph. Once inserted you must push down to release the latch that holds the vertical shade in place.



Next remove the T-20 Torx screw from the pillar



- Using either a screw driver or in this case, Paint lid remover, insert into the notch and unplug the connector



III. Removing the Door Panel

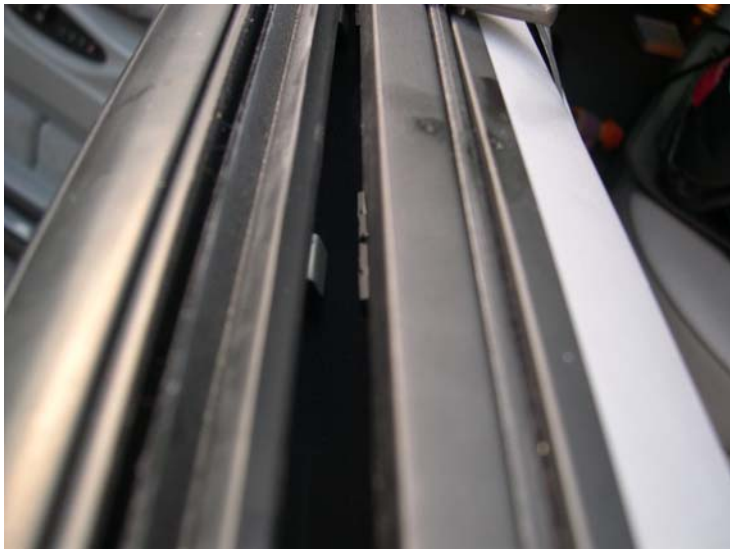
- Pry the door panel from the inner door skin by giving a good tug from the door panel. Although not efficient this seemed to do the trick. You could use a larger screwdriver to pry the door panel from the door panel buttons.



- Once all the door buttons have been separated from surrounding door panel you must separate the door panel latch from the inner door handle. This can be done by using the Wood Paint Stir Stick and pushing on the small tab as illustrated in the photograph. This will release the latching mechanism and the door panel can be removed entirely.



- Using the Wood Paint Stir Stick place it in the channel at the top of the door panel to separate the panel from the door itself. There are three (3) tabs that need to be unlatched to remove the door panel.



- Finally remove the window switch from the door panel. You will need this switch again to raise or lower the Window regulator to adjust the window in place.

NOTE: At this point you will have to also remove the speaker cable and the VERY Delicate light assembly that illuminates the door handle. This is VERY fragile so do not apply lots of force to remove the connector from the light guide assembly.



IV. Removing the Window Regulator

- First remove the outer sound material from the door panel. This material is very fragile and can tear easily. I found that if you use a long razor or cutting blade you can separate the fragile material while cutting the black adhesive from the door sound material. Once removed you need to loosen the retaining bolt from the Glass attached to the Window Regulator. Using the 8 mm socket loosen the nut just enough to set the window glass free, then push the glass up to the closed position by hand and secure the glass using the Painters Masking Tape as illustrated below:

NOTE: if the window bolt is not accessible re-attach the Window Switch to move it the correct position



- To remove the window regulator you must use a 10 mm socket to remove the three (3) nuts as illustrated:



- remove the connector from the window motor using the thin screw driver by pulling up towards the motor which releases the latch as illustrated in the photograph:



- To remove the window regulator assembly maneuver it counter-clockwise to a 45 degree angle and slide it upwards just enough for the bottom of the assembly to clear the inner door lip



V. Removing the Window Motor from Window Regulator

- Using the T-30 Torx socket remove the three (3) Torx screws from the motor on the old window regulator. Once the screws have been removed turn the motor counter-clockwise just enough to pull it from the old window regulator



To re-install you just reverse all the actions as described above. Due pay close attention to the re-positioning of the new window regulator. You will notice that the nut that holds the window regulator to the sheet metal should have left a circular impression on the sheet metal. This will allow you to place the new window regulator back in the exact same position on where the old window regulator was in the door. When tightening the window bolt to the window regulator **DO NOT OVERTIGHT** but just snug enough as you could break or shatter the glass.

Also re-installing the door handle assembly can be quite tricky when holding the door panel but the handle mechanism slips over the rear portion of the back side of the inner door handle with easy. So be patient it will click into place.