



Safety first!

- Ensure the vehicle is securely chocked on level ground before working underneath.
- Support the vehicle on axle stands, never work on a vehicle with just a jack!
- Be sure to wear safety glasses for eye protection.
- Make sure to double check all bolts for proper torque. 



Replacing Window Regulators

[Shirley Warren and Paul Boyer work at J. White's Automotive, Framingham, MA, a Land Rover specialty shop. Here's their step-by-step advice for repairing faulty window mechanisms -ed.]

Recommended tools:

Screwdrivers, prying tool, sharp razor blade, rivet gun (not necessary, but recommended), replacement regulator (see parts listings), Torx bits.

A malfunctioning window regulator causes problems such as windows that bind going up or down, appear to be off track or cocked off to one side, or drop quickly in the middle of the downward movement cycle. While this repair is on a 2000 Range Rover HSE, the procedures outlined below are also common to Discoverys, Range Rovers and LR3's.

The window regulator delivers the force needed to raise and lower your windows. It can malfunction for several reasons. Most commonly, improper adjustment of the glass can create stress on the regulator, causing it to crack. The teeth on regulators often become worn due to years of use and age. Damaged window tracks, obstructions in the windows or doors and compromised weather stripping can also contribute to a window regulator failure.

First, to eliminate the possibility of an electrical circuit issue or blown fuse, check to see if all of your windows work. A noise coming from the door when you try to operate closed windows that won't work means power is moving through the system and you may have an alignment issue. If the motor can't be heard when trying to move the window, you may have a bad motor. If one window is not moving up or down and you can hear the motor making noise, most likely a new regulator will be your fix. Regardless, you'll likely have to remove the door panels to access these parts, so follow the procedures outlined below.

Disassembly:

Figures 1-16
Park the Range Rover on a solid, level surface. Engage the parking brake.

Step 1: Remove the speaker inset assembly located at the corner of the door and window by gently pulling it from the top.



Fig 1 - Corner speaker assembly removal.

Step 2: Unclip the plastic speaker wire connector.



Fig 2 - Unplug speaker assembly.

Step 3: Remove the door panel screw that is located under the speaker inset assembly.

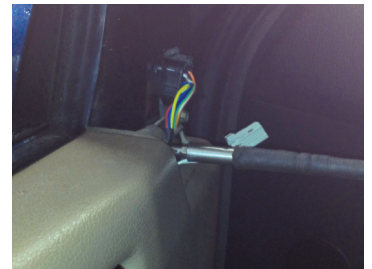


Fig 3 - Remove door panel screw.

Step 4: Remove the screw underneath the interior door latch and remove the door handle tray.



Fig 4 - Remove screw under door latch.

Step 5: Remove the two screws securing the door pull.



Fig 4A - Remove door latch.

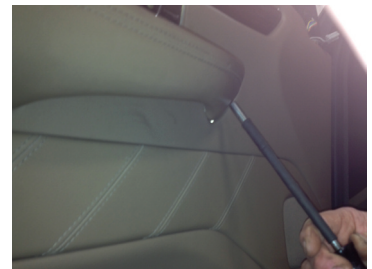


Fig 5 - Remove two door pull screws.

Step 6: Lift and remove the interior door panel.

Step 7: Using a thin blade, slowly slice thru the moisture barrier. Our model car is a good example of what it will look like under the interior panel when the barrier has not been removed properly in the past.



Fig 5A - Remove second door panel screw.

Step 8: Unscrew the door amplifier and disconnect the plastic wire connectors.



Fig 6 - Remove door panel.



Fig 8 - Unscrew door amplifier.

Step 9: Turn the ignition on and lower the window glass approximately 5 inches. Turn the ignition off.

Step 10: Remove the two clips holding the window regulator ball joints into the bottom railing.



Fig 9 - Lower glass approximately 5"



Fig 10 - Remove two clips on ball joints.



Fig 11 - Detach both ends of regulator.



Disassembly (con't):

Figures 12-16

Step 12: Manually raise the window to the top of the window frame and secure it using tape.

Step 13: Remove the four rivets that hold the window regulator to the door.

Step 14: Disconnect the plastic window motor clip.

Step 15: Remove the window regulator.

Step 16: Remove the motor from the old window regulator by removing the three torx screws that connect it. Attach and align the new regulator securing it by reinstalling the three screws.



Fig 12 - Manually raise window, secure.



Fig 13 - Remove four rivets on regulator.

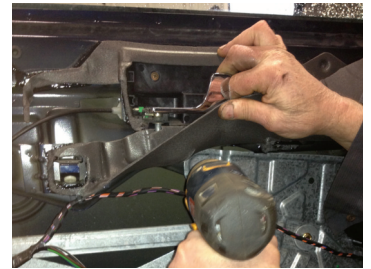


Fig 13B - Remove rivets on regulator.



Fig 14 - Disconnect window motor clip.



Fig 15 - Remove window regulator.



Fig 16 - Remove motor, attach to new window regulator.

Reassembly:

Figures 17-20A

Step 17: Install four new rivets, or four through nuts and bolts, and secure the regulator to door.

Step 18: Reconnect the motor wiring connection.

Step 19: Reattach the glass to the regulator and reinstall the two clips removed in Step 10.

Step 20: Test window operation for any binding. If necessary, adjust front to rear glass movement with the 8mm nut found on the rear of the glass channel by loosening the nut causing glass to move front or rear. Tighten the nut when window operation is smooth.

Figures 23-26

Step 21: Re-attach the moisture barrier. There should be enough glue left on it that it will easily stick without adding glue.

Step 22: Re-clip the plastic speaker wire connector, using care to leave it pulled out enough that it does not get trapped completely under the door panel in the next step.

Step 23: Re-install the door panel replacing all screws that have been removed previously.

Step 24: Re-install the door handle.

Step 25: Re-install the door handle tray.

Step 26: Place the speaker wire under the speaker inset assembly and reattach the assembly.



Fig 17 - Install new rivets.



Fig 18 - Reconnect motor wiring clip.



Fig 19 - Reattach glass and two clips.



Fig 20 - Test window operation, adjust nut.



Fig 20A - Test window operation.



Fig 23 - Re-install door panel.



Fig 24 - Re-install door pull.



Fig 25 - Re-install door handle tray.



Fig 26 - Place speaker wire underneath speaker, reattach assembly.

Range Rover P38A Suggested Parts

Window Regulator, RH Front P38A, Genuine.....RNI752	\$ 299.20
Window Regulator, RH Front P38A, ProLine.....PLI752	\$ 99.95
Window Regulator, LH Front P38A, Genuine.....RNI751	\$ 301.69
Window Regulator, LH Front P38A, ProLine.....PLI751	\$ 99.95
Window Regulator, LHR, P38A, Genuine.....RNN300	\$ 439.95
Window Regulator, RHR, P38A, Genuine.....RNN299	\$ 439.95



PLL753

Window Motor, RH Front P38A, Genuine.....RNL753	\$ 273.06
Window Motor, RH Front P38A, ProLine.....PLL753	\$ 78.99
Window Motor, LH Front P38A, Genuine.....RNL767	\$ 283.30
Window Motor, LH Front P38A, ProLine.....PLL767	\$ 78.99