<u>Tools</u>

Pliers

10mm spanner & Socket

Parts

1 x Patience

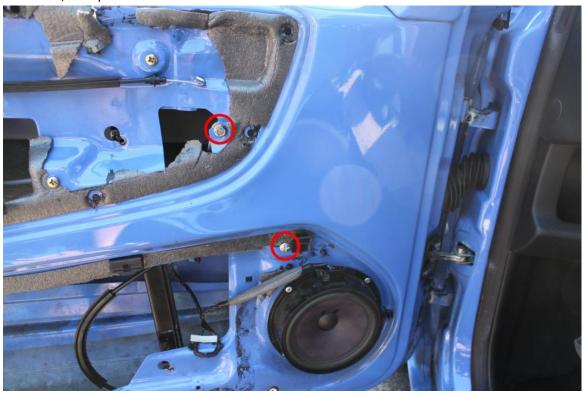
2 x Cuppa Tea

The following guide assumes that you have a faulty window regulator and you want to replace it, this guide does not entail fixing a faulty motor, just removal and a tip for replacement. I also assume that you've removed the upper and lower door cards.

1. Locate the four 10mm bolts holding the window regulator and remove



2. Locate the two 10mm bolts holding the window regulator motor and remove – Note, I lost 10mm bolt somehow, so replaced with a scew.



3. Now that the motor is loose, undo the retaining push screws holding the wiring for the motor. This will give you an extra few cm of cable to play with



4. Whilst your there, feel round the back of the motor, which should be able to move more free now and disconnect the wiring plug, this can be a bit of a pig, but you'll get there eventually. The other alternative is to remove the speaker, which would be easier to be honest, but I didn't want to.



5. You now need to push back the window regulator into the door recess and pull down gently, you should be able to pull it down a few cm without much harm. I personally slightly bent the regulator arms out, this perhaps gave me another 1cm. Don't be alarmed if the window has come down a bit, you want this!



6. Place a cloth on top of the door and strap down tape to the window. This is because it's easier getting the adhesive off your glass than it is the body work. You want this to the be strongest tape you have, as it'll soon be holding up the window.



7. Now to loosen the window regulator clamps. I always start with the left one, but it doesn't matter. If you look at the picture below you'll see the locations of the clamps. The dots roughly represent the location of the clamps.



This is what the clamp looks like – They are both 10mm bolts and best accessible using a spanner, unless you have something better. They WILL remove, however I've done this twice and used the word impossible several times, but it will loosen. You don't need to remove the bolt, just enough for it open up.

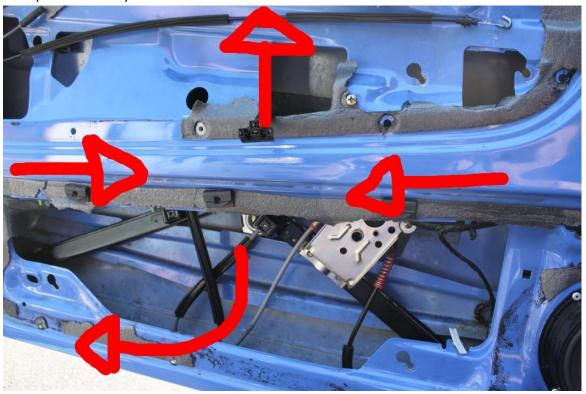


8. If you started with the left window clamp and you now have it loose, put the regulator arm to the left of the door (near the lock)



- 9. Now your most like laughing at this point, but now you have to undo the right window clamp. This has to be the most inaccessible bolt in the WORLD. You will have to undo the bolt bit by bit, but eventually it'll loosen.
- 10. Ensure the tape is still holding to the glass!

11. Once both window clamps are loose, fold them both inwards, lift up then remove from the car. It's a bit clunky but their fairly robust.



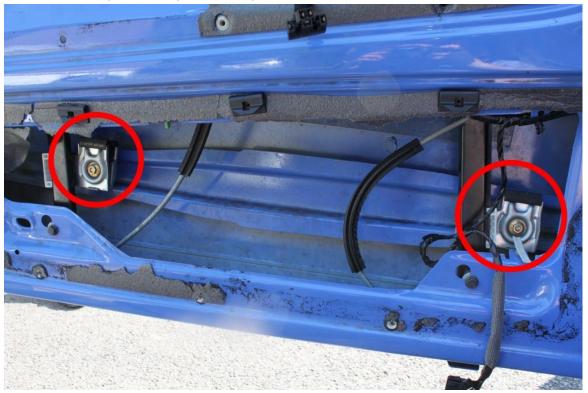
12. You now have the window regulator out of the car!



13. Honestly, give yourself a pat on the back and have a cuppa tea or just a break in general! – But don't forget to keep checking the tape.

You've successfully completed the removal of the window regulator. Re Fitting is the exact opposite, however below are a few tips I strongly recommend.

1. When the window regulator is now fitted back in place, turn on the ignition and lower the clamps to near the bottom – Only do this, if you have help from an abled friend!



- 2. Put your hand up into the door and feel the bottom of the window glass and push up. The glass has a rounded edge so you won't cut yourself
- 3. Now ask your friend to remove the tape from the glass slowly. Once all removed your friend may have to push down on the glass slowly
- 4. Once the glass is near the clamps, guide the glass into the clamps by hand. You should be able to see where the old clamps went as the glass will be clean
- 5. Once the glass is in the clamps, tighten the two 10mm bolts, but not too tightly. There may be a correct torque to set them at, but I just did them snugly plus a bit more
- 6. Operate the windows and they'll now go up and down.
- 7. If you have one touch windows and they no longer work as one touch, bring the window up and hold it in the up position for 5 seconds, do the same when the window is down, except hold the switch down.