

The tools you will need to complete the repair will be a T20 Torx screwdriver and a Flat Screwdriver additionally, you could also use a pair of pliers to remove the plastic plug holding the wire nearest the speaker instead of the screwdriver method.



The repair kits look similar to this; you will get the items listed above. These will be two new window rail holders (in this picture they are already attached to my window holders). You will also get the plastic housing that holds the pulley, a new pulley and the complete wiring system. It is better to buy a pre-tensioned kit because the wire / pulley / housing are all pre-wired and tensioned up. It's then just a case of fitment and removing the tape on the tensioner plastic. This guide will show you how to do it manually if you don't have the pre-tensioned kit



You will receive some new plastic clips which hold the window rests in place, you will need to dismantle the clips from the old one to separate them, these are usually tight so may require breaking to remove them. The new ones push fit into the old rests. Double check everything when fitting and match it up to the window before fitting as they're quite hard to remove and only fit one way.



These little notches on the wire need to be placed into the applicable holes on the reels. There is one for both sides of the wire. If the wire has already been fitted, they can still be put on afterwards. It is just a bit tight.



The small tab on the metal wire needs placing into the appropriate hole on the plastic window holders



This is the toothed side of the cable reel, this holds the "long" wire that runs from the top corner furthest from the speaker hole towards the speaker hole



This is the reverse end of the plastic pulley; you thread in the "short" end of the cable into this side and wind it into it (the short end is the one closest to the speaker cable). When you thread the cables you first have to put them in at a 90 degree angle to their storage hole otherwise they won't fit. Once they're in the hole, just rotate them and wind them into the reel as normal make sure it's as tight as possible to avoid slipping on fitment (they will be tight when under tension).



If you want to cheat rather than do the repair the proper way on this just use a screwdriver to lever the metal away from the small plastic peg in the bottom corner. You can then thread the wire here. Be careful not to damage it as the wire could slip out, so once it's repaired you can lever the metal back into place so it holds the wire without snagging it. Alternatively using the screwdriver and pliers pop out this plastic peg from the other side, thread the wire and push it back into place



When you are threading the cable into the pulleys you will need to put it through the plastic cogs in the corner. You do this by threading the wire through the metal, and then putting it into the "notch" on the plastic pulley. You then turn the little wheel whilst still holding the wire in it, and this will move the cable through the gap and thread it for you inside the pulley. Make sure that for each wire that goes around the pulley system in the door panel that the small plastic stopper is on the outside of the metal and the shoulder touches the metal. These pieces are what helps to give tension on the wire because they put resistance against the metal.



After you have wrapped the wire around the wheel, you will need to put it inside the housing with the inside edge with the teeth facing outwards. You will then need to compress the springs on the plastic tabs against the housing so that everything fits. This step will be <u>HARD</u> to some degree if not using a pretensioned kit



This is a close up example picture of the cable / pulley system for one half of the door panel



Place the motor on the door panel so the holes line up to the holes for the screws in the panel. Don't worry about fitment, it will physically only fit one way on the panel itself. Once the cables are wired up, you then flip the casing over face down and push the reel onto the teeth of the motor. Once they are pushed on, use the screwdriver and attached it to the face of the motor. It may be loose at first, but will self align when you start screwing it on



This is an example of the completed repair; note the orientation of the wires and the layout of the plastic cage that holds the reel for the wire