

## Fitting Guide for Electric Folding Mirrors

We have put together this guide to help you with the installation of the Astra H Folding mirrors. You will need some trim removing tools, small screw drivers, long nose pliers and some torx bits to carry out this installation.

The first thing to do is Identify if you need to change the door looms. As a rule all cars we have seen so far have the folding door mirror looms if they have "Open Start" fitted. However its worth checking. This is how:

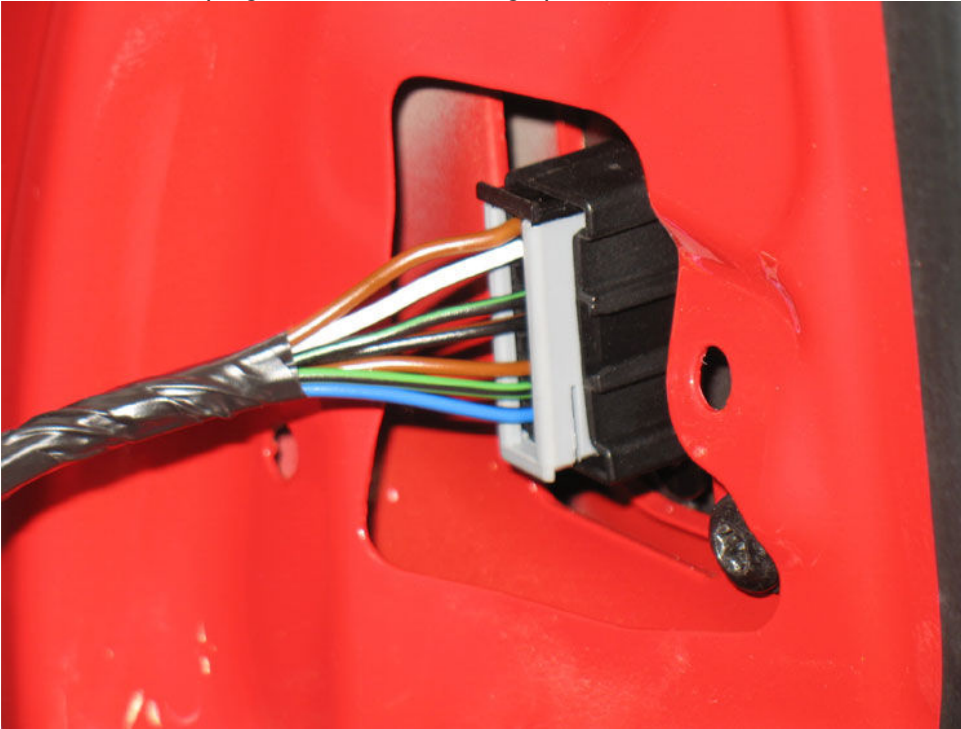
Remove the inner mirror covers. We always slide a thin piece of cloth between the mirror trim and the soft door card as seen in the picture, then simply pull these from the front to the back (if you pull the back out first i.e. from the glass end you dig the cover into the door trim and mark it).

*Picture of mirror inner cover removal:*



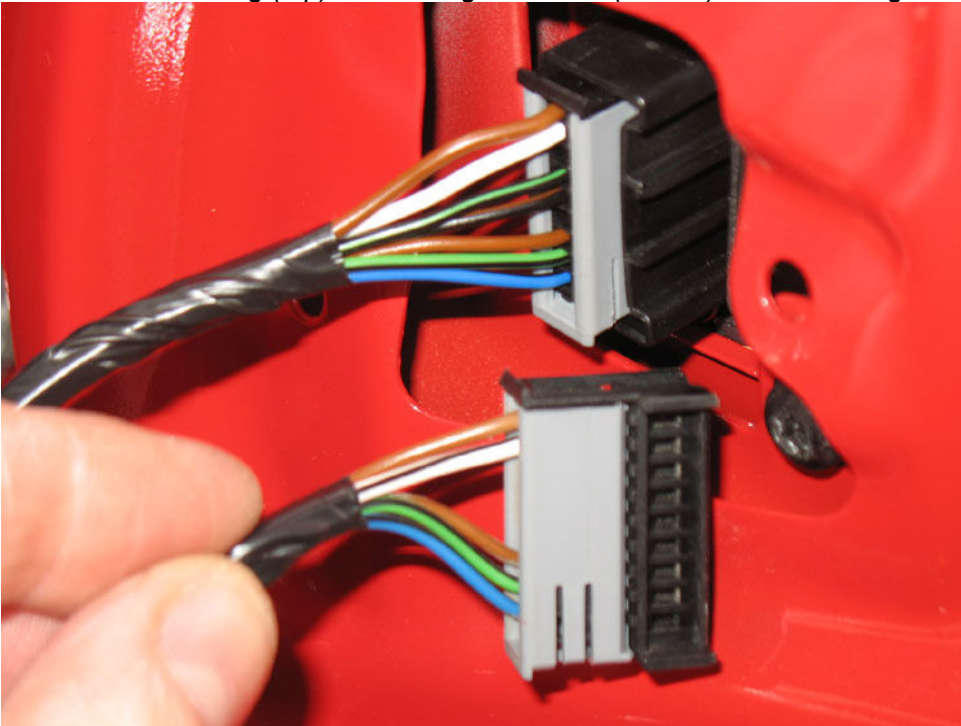
With the cover removed you can now check if your car has the looms for folding operation. On the picture shown (RH door) you are looking for the 2 wires shown near the middle of the connector. Black with the Green tracer & Black with a Brown tracer.

*Picture of mirror plug with wires for folding operation:*



The 2nd picture shows the difference between the two harnesses. The top plug has the 2 required wires and the bottom plug has not.

*Picture of mirror Plug (top) with folding wires and (bottom) without folding wires:*



The next steps still need to be performed either with or without the wires.

Remove the three torx bolts whilst holding the mirror – to stop it dropping on the floor.

Picture of Torx bolt removal:



### **Swapping the glass**

Don't be tempted to just pull the mirror glass out from the front as 9 times out of ten they will break. Here's how to do it and save yourself an expensive mistake !!

With the mirror on the bench, use some trim removing tools or small screw drivers (trim tools are better especially the plastic type as they do not mark the plastics so easily) and carefully push down on the top between the cover and the black plastic body, and you will start to separate the 2 halves

*Picture of cover removal*





*Picture of cover removal*



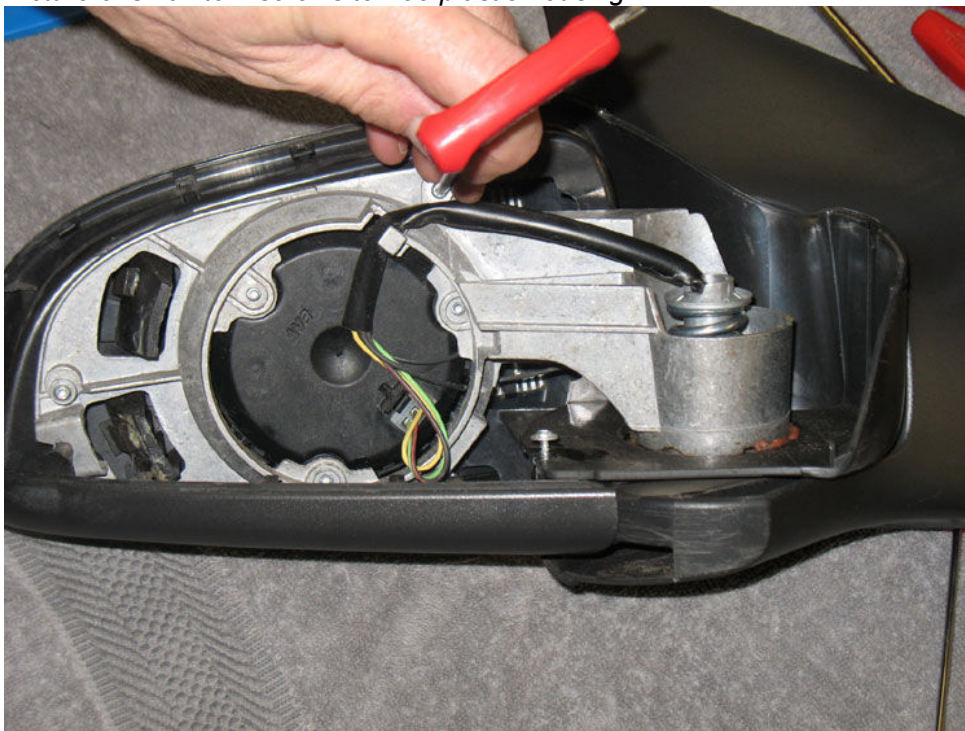
Fold the mirror back and you will see the inner clips. Separate these and the cover should then come away.

*Picture of inner clips with mirror retracted back*



With the cover removed you will see 4 small torx screws.

*Picture of small torx screws to free plastic housing*



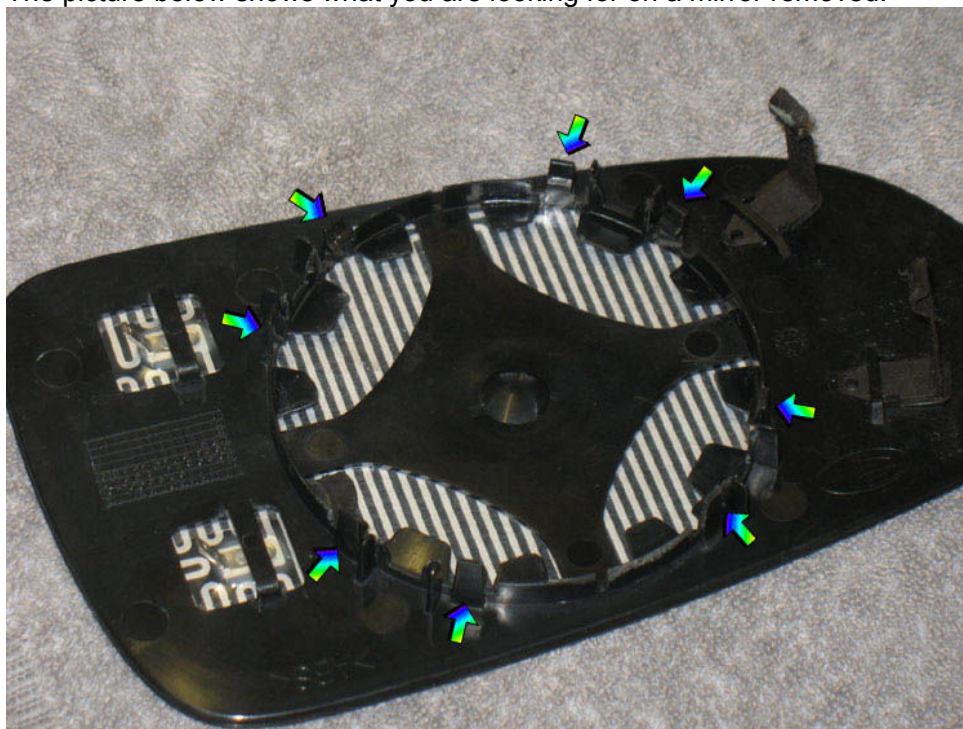
Remove these as this will then let the plastic housing move a little clear of the metal frame. This gives much better access to the mirror glass release tags.

*Picture of how to access mirror glass rear clips*





The picture below shows what you are looking for on a mirror removed:



Use a small Maglite or similar, identify the tags and with the aid of a couple of small screw drivers and a little patience you can go between the alloy frame and the loose plastic housing to spring the clips and release the mirror glass. Normally releasing 3 pairs is enough the glass will then come out, you will also find the second mirror much easier once you have developed the technique.

The glass will now be loose but held by the wires. The wires can be quite tight, so with one screw driver holding the part of the connector glued to the back of the glass push down here and pull gently or with another screw driver prise the female connector up and away. (Pushing down on the glass connector will stop you ripping the connector from the back of the mirror glass which in turn disables the heating circuit)

*Picture showing removal of wire connector:*



Take your new folding mirror assy and reconnect the wires (does not matter which way around they go)  
Clip the mirror glass back into the new mirror **pushing from the centre not the edges**. Then re -clip the cover back on.

The mirror can now be re-attached to the car.

### **Mirror Switch**

If your car requires new door looms then go to the section for changing these as its far easier to change the switch with the door card removed.

If you have the looms....

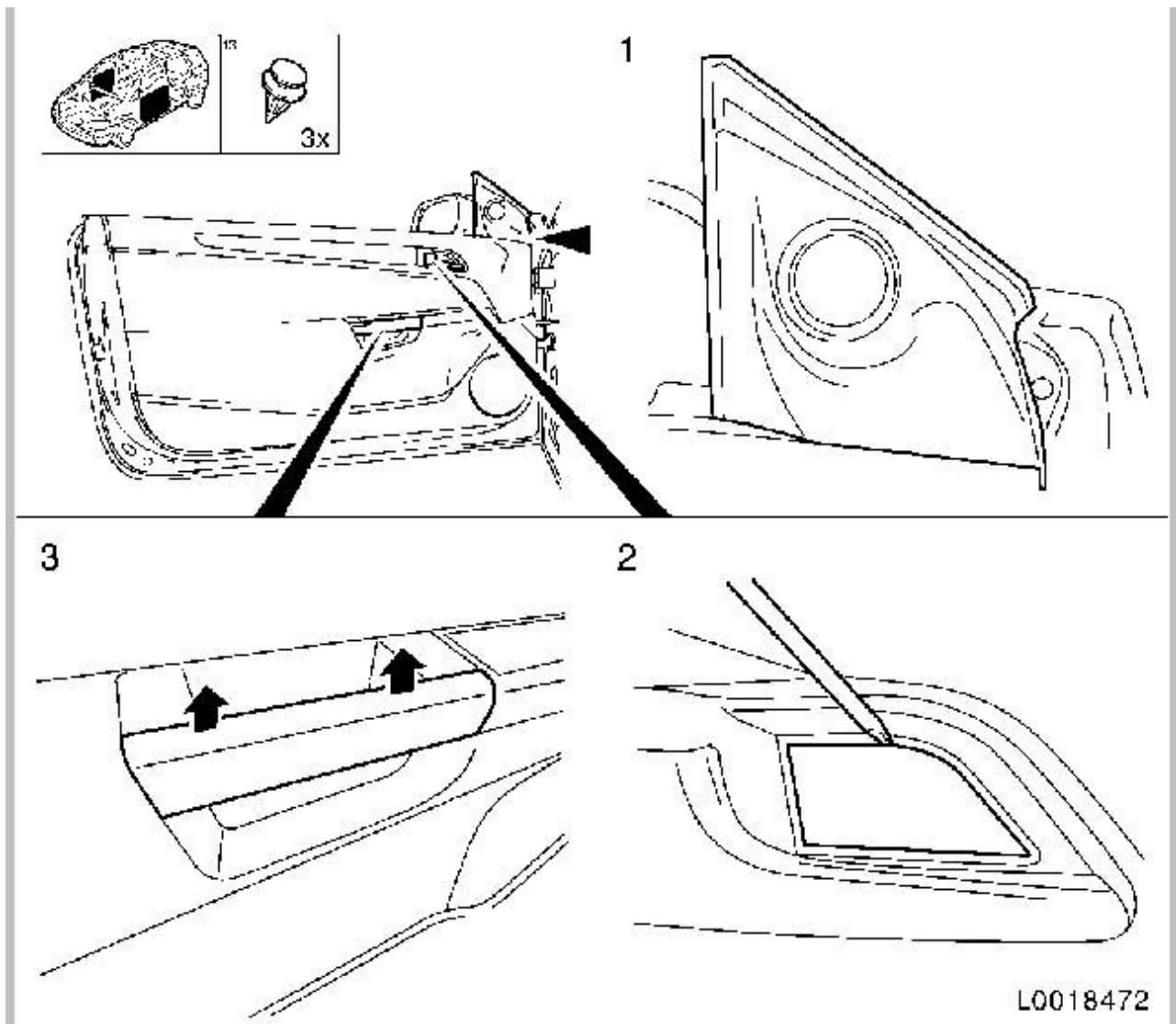
Look at the new switch you can see that the front has a tag that holds under the door trim and at the rear is a release tag. Carefully using a small thin tool i.e. feeler gauge or thin electrical screw driver you can insert this between the door trim and the switch to release this clip then hinge the switch upwards. Remove the wiring connector and install the folding mirror switch. Re fit inner trim panel covering the mirror. NB clip the rear edge in first so as not to mark the door panel.

This completes the RH mirror installation. The left had mirror is exactly the same. Once this is done you will have folding mirrors. There is no programming needed by Tech 2.

NB. The mirrors need about 3 seconds to re-set them selves between shutting and opening.

## Replacing the door looms

Firstly this nothing like as hard as it sounds as it's all plug and play.  
Remove the door trims as follows.



1. Detach external mirror inner panelling (1)
  - Unclip 3x clips
  - Separate height adjuster wiring harness plug

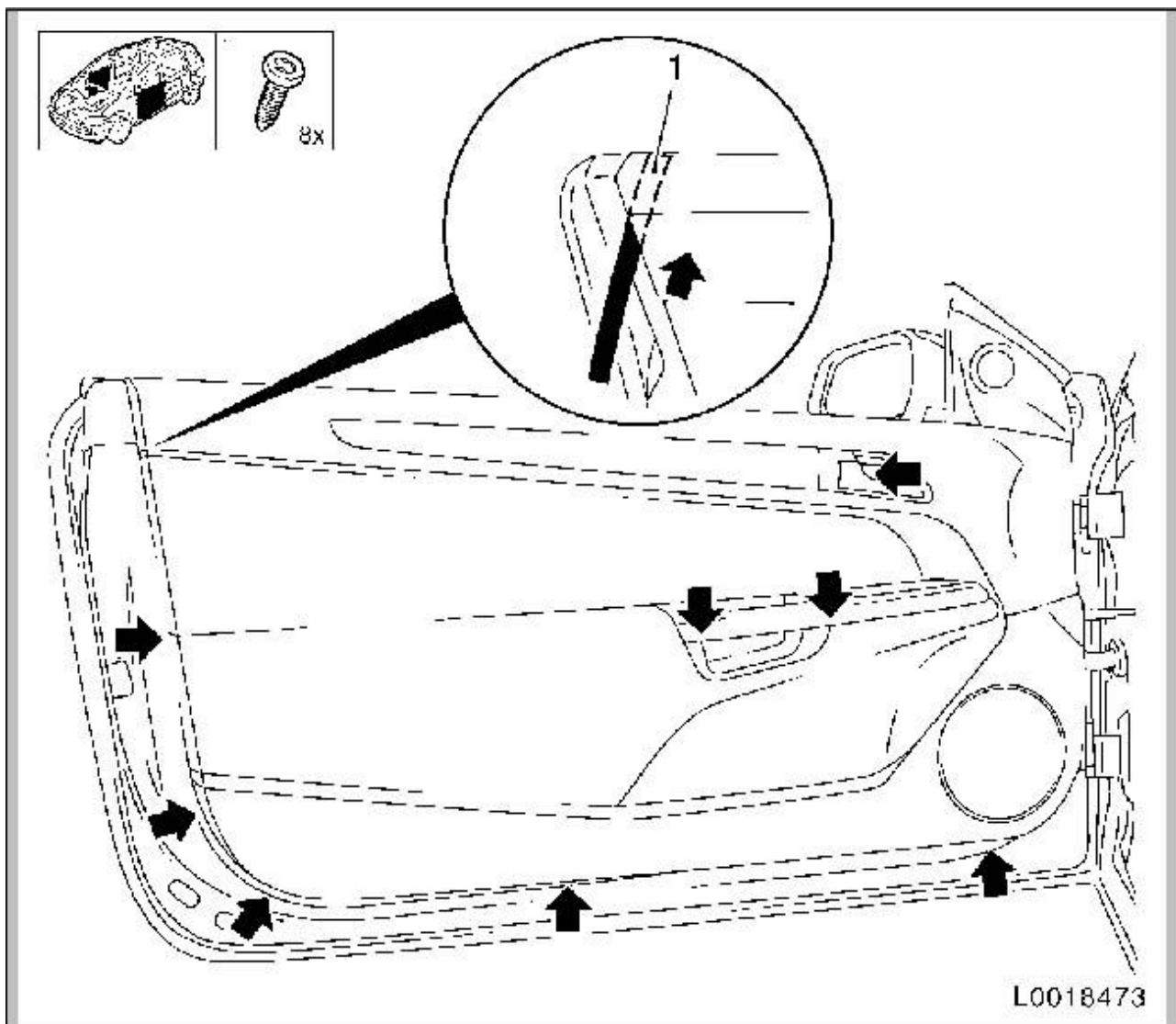
**Important:** Danger of damage! Unclip with designated tool!

2. Remove front door panel handle (3)

**Important:** Danger of damage! Unclip with designated tool!

3. Remove inside door panel actuator (2)





4. Detach front door inner panelling
  - Unscrew 8x screws (arrows)
5. Detach front door inner panelling
 

**Note:** Use a plastic wedge to remove the inner panelling (1)

  - Unclip 5x clip
  - Separate window actuation wiring harness plug switch
  - Unhook inside door actuator Bowden cable
  - Separate door handle lighting wiring harness plug

Now you are ready to change the looms. The passenger side is exactly the same other than you do not change the switch.  
 Peel back the plastic protective cover and remove the 3 screws holding the door speaker.

*Picture of plastic cover:*



The loom runs from the lock block in the rear of the door, down to the the bottom and up to the front of the door with a fly loom coming off to go to the mirror head, switch & door handle illumination etc. Have a good look at the new harness and you will see the the plugs have various release mechanisms on them, by simply studying these it is very easy to work out how to release the connectors on your fitted car loom.

Starting from the lock block work forwards to the A pillar and releasing the fly loom. The white loom holding clips can be released by squeezing the sprung legs together with some long nose pliers. Re fit the new loom using all the retaining clips and plastic brackets so as not to allow the loom to interfere with the window wider mechanism.

With the new loom installed connect the mirror / window switch, drop the glass, shut the door and check the mirror / window switch, door locking and dead locking operations etc.

If you need to reset the one touch closing wind the window all the way up and hold the switch down in till you hear the motor click.

Carefully re stick the plastic door protector seal.

Release the new switch from the wiring loom and swap this into the door trim pushing the old none folding switch up and out from the inside of the door trim.

Refit the door trims and screws. You now have folding mirrors.

### **Other notes**

Sometimes the inner mirror cover trim clips can break here is the part number for fresh ones should this happen. They are available from most VXL dealers. Part Number 90560163