

## Door Hinge replacement (Front Right Door)

Let's now move on to the right side of the vehicle and try replacing the hinges of the front door. Again, rattles and knocks from worn out hinges were originating from that particular area.



Two layers of primer should be applied.

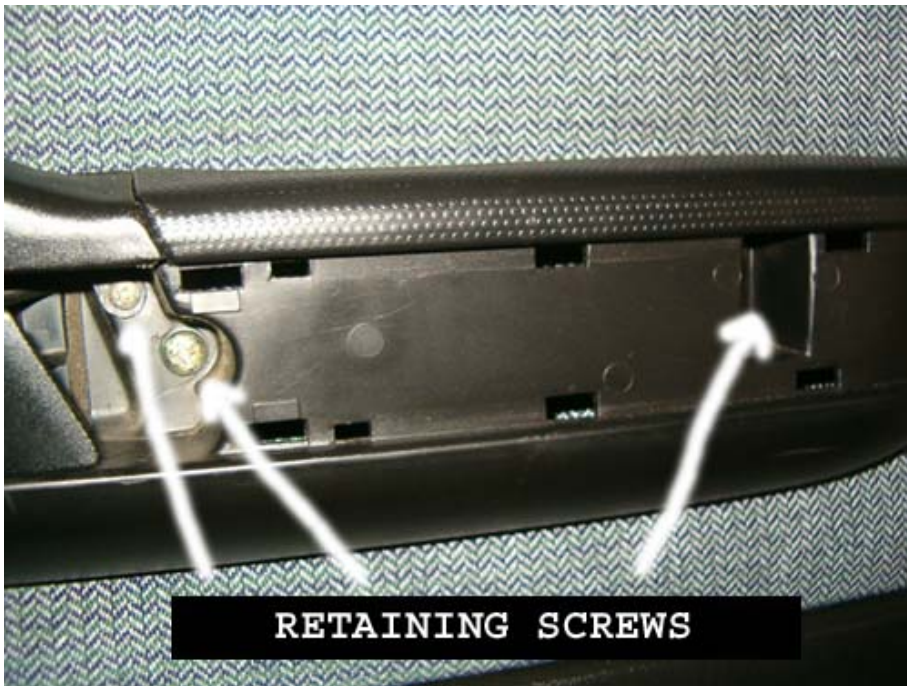


and 24 hours after the last layer of primer, apply final paint (24 hours between layers)



Remove the door handle from the screws designated



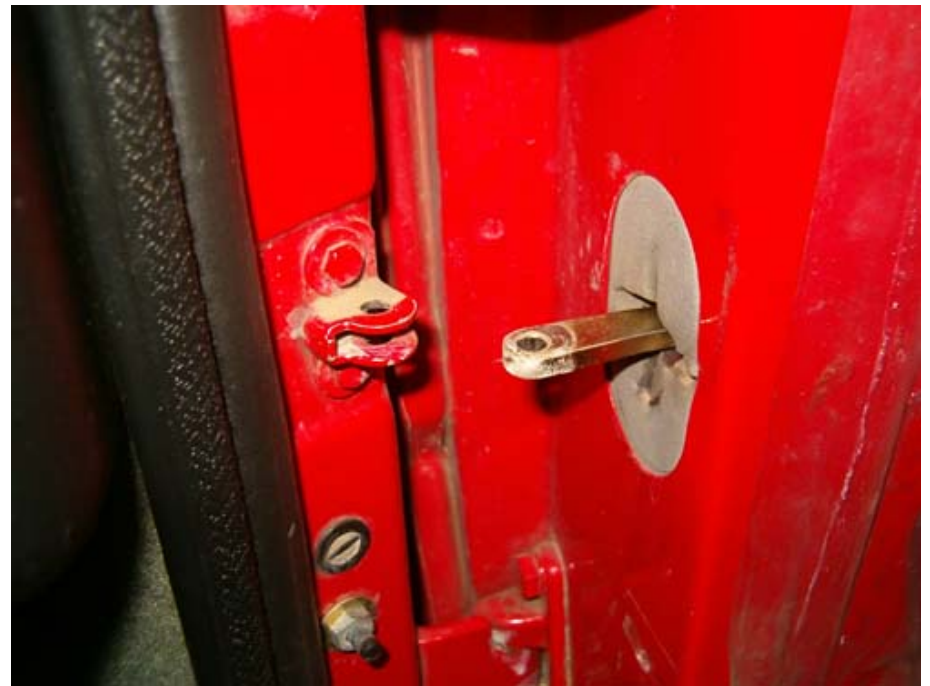




Also don't forget to remove the mirror adjustment handle decorative triangle - it is necessary for the door card to be removed.



Remove the door tie-rod pin by punching it with a hammer from the bottom.



Pin is out and tie-rod out of the way - I have decided to remove the tie-rod from the door, as it is worn out and annoying sounds are coming out of it as the door opens/closes; later on I will install a refurbished one.





Remove the decorative sponge ...



... and the two bolts keeping the tie-rod in place are revealed.



That's the old ...



... and that's the refurbished one.



Remove the wiring harness connectors - these are for the electromagnetic door locks ...



... and these for the electric windows.



Then proceed loosening the hinge bolts.

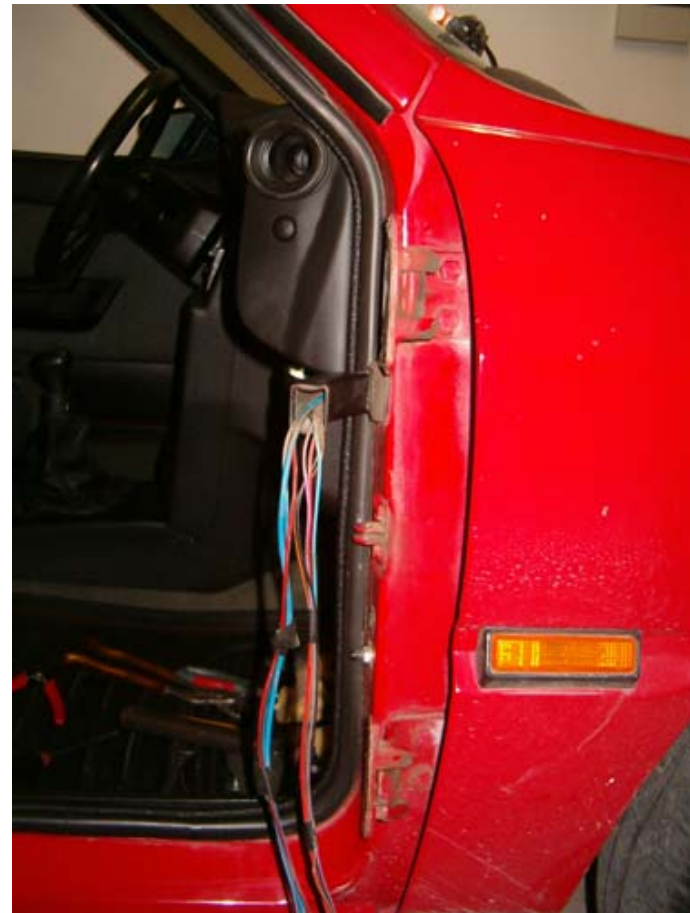


It would be wise to first remove the inner pair and afterwards the outer pair.





Got the door out !



View showing the old hinges...



... and the door sitting away.



Time to tidy up the wiring harness.

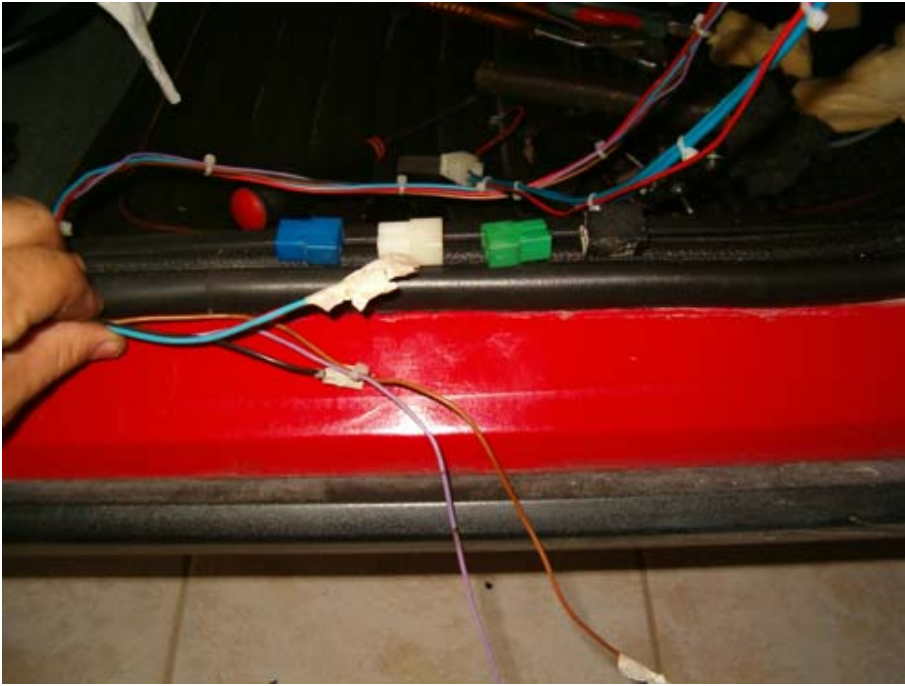


I have decided to replace the wiring snorkel with a new one.



That's the new one.





You must remove the connectors in order to replace the snorkel. Be sure to write down the wiring layout and mask each connector to avoid short-circuits!



Don't forget to mask the edge of your fender - you will avoid unpleasant scratches.





undo upper and lower hinges bolts.



Hinges are out!



These are the new ones with the spacers from the old ones installed.



Install the new ones and apply seam sealer to the overlapping surface in order to avoid water getting inside the pillar.



Do not fully tighten the bolts as we will later on adjust the door.

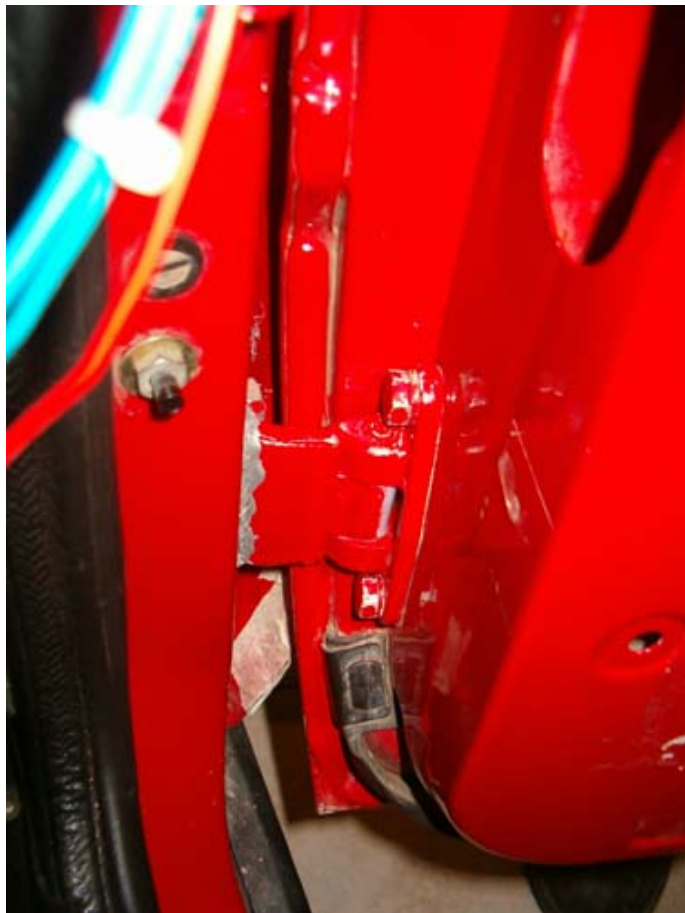




Proceed installing the door ...



... and tighten the hinges bolts to the door.



A more detailed view showing the four bolts that must be tightened.

Here comes the most important step of the process. Having the bolts of the hinges not fully tightened, we can adjust the correct height & clearance of the front door compared to the rear door. When you have done so, you must tighten as much as you can, the hinges bolts; however the space between door-fender-pillar is very narrow and difficult to torque bolts down. We will again remove the door in order to tighten all six bolts to their final torque but before doing so, we must have torqued down at least one bolt per hinge in order to avoid hinge movement which will result in door misalignment.

---



Mask the surrounding area with masking tape and newspaper sheets ...

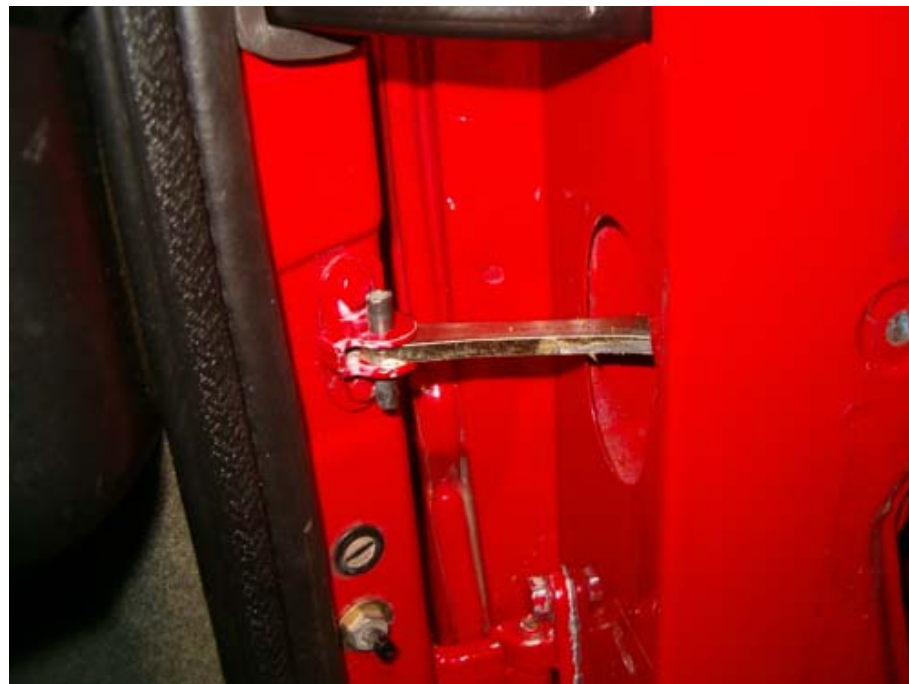


... and paint the freshly sealed areas and the area where factory paint could not reach.





Now the door has been permanently installed and all four bolts have been tightened; in addition, assemble everything that was removed - snorkel, wiring harness connectors and nylon protective sheets.



Install the door-tie rod along with its pin ...



... and finally the door card and handle.



You can now paint the grey areas between the door and the hinge using a small brush.



Here are the specific areas that need to be painted as they are exposed to sight.

---





Finally, an overview of the the door and its alignment compared to the rest of the car.

What remains for closing the hinges chapter is the rear door, which will be done in the near future.

(c) 2006 Thanassis Gritsopoulos

1991 Alfa 33 1.4 IE

Athens - Greece