

## Cheap Mod for Shark Fin GPS Failure on a D3

After having a GPS failure on a shark fin aerial I had a look around for a replacement aerial, with the breakers wanting £45.00 for second hand one I looked in to alternatives, this was my way of doing it for £6.49p you need one of these below

<http://www.ebay.co.uk/itm/271021648163?ssPageName=STRK:MEW NX:IT& trksid=p3984.m1439.12649>

Next you need to remove your shark fin aerial by removing both rear tailgate door pillar covers, the rear top boot panel ( D3 )and the rubber tailgate seal from the top of the car.

Then you can access the rear of the roof lining to get to the nuts and Fakra connections to remove the aerial.

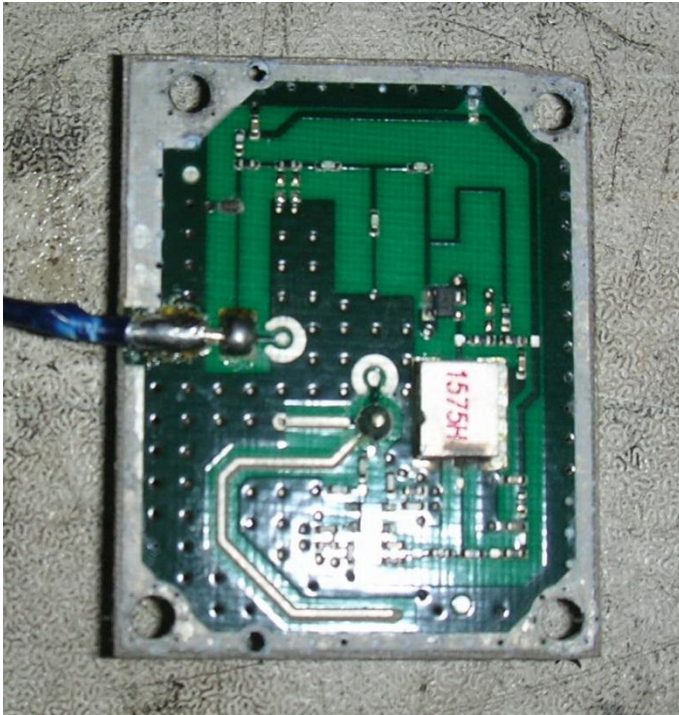
Using a 10mm socket and ratchet remove the two 10mm nuts holding the aerial to the roof. There might be one or two Fakra connections coming from the aerial one for GPS (Blue) and the other one for phone aerial (pinkish) disconnect both of these.

Then remove the metal backing plate from under the roof, you should now see a black plastic locking ring around the base of the aerial (below Picture ) there are two legs on the plastic ring that need to be squeezed inwards so it will release the aerial for removal.

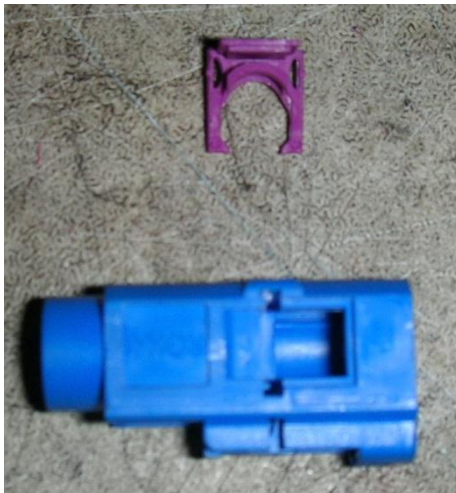
Once removed you should now be able to see on the underneath of the aerial 10 Torx No8 screws remove these screws to access the inside of the aerial.



Now you need to remove the 4 T8 screws that hold the GPS aerial to the baseplate and cut the wire see picture below



Now with your new cheap GPS aerial you need to remove the blue Fakra Plug on the end, do this by popping out the red locking ring from the plug.



Then on the other side of the Fakra connection there is a plastic leg that locks the cable in to the plug using a small screw driver gently lever the leg up whilst pulling on the cable to release the cable from the plug.

Now we move to the main part of the aerial to drill a 9 mm hole for the new cable to pass through its very soft alloy so it very easy to drill using the same hole as the original wire came through open it up to 9mm.

Now you need your new GPS aerial cable with the Fakra connector removed and pass it through the hole so that it can be mounted on to base plate



You can see that the new cable is longer; you can leave it as it is, or cut it down. Just make sure if you cut it that it's a good joint with the screening not touching the signal wire and well-sealed. I did cut mine down. Cut the wire six inches from the plug to give you enough length of wire to work with and solder the joint.

Now using a silicon sealer mount the new aerial to the base plate like below.



Let the silicon dry and just trim off any excess that's not needed, then you can fit the aerial cover back on and tighten all the 10 T8 screws.

Now you can refit your new cheap GPS aerial back to the car, when I have removed these aerial's in the past all of them have shown signs of leaking so I now I always use a thin bead of silicon around the base gasket before I refit them back to make sure they don't leak again in the future..

Once all done it looks like the original aerial still but a fraction of the cost.

