

## Part 5 - Completing the installation

1. Now we need to put everything back together and complete the electrics.
2. If you haven't already got the plastic inner wheel lining in place with the air box put it in now but don't fix the air box into its rubber bushes just yet
3. Fit the shock absorber and turret in place, replacing the four nuts on the turret and the large nut on the bottom of the shock absorber, ideally with a new nut.
4. Replace the plastic shock absorber cap on the plastic inner wing and secure with the two self tappers. To get at the front one move the air box as far forward as possible, even then it's not particularly easy.
5. Push the air box into place in its rubber bushes and secure the mounting bracket with the three bolts to the inner wing.
6. Replace the mass air flow meter connector and the large air pipe and jubilee clip and secure the mass air flow meter connecting wire with a cable tie.
7. Replace the four large self tappers at the front and rear of the wing, the nut at the back and the bolt/nut at the front.
8. Check that the coolant pipes sit snugly, away from the exhaust and are not trapped.
9. Replace the air intake connecting pipe
10. Connect the horn to its connector but don't fit it in place at this stage.
11. Route the wiring loom to the indicators/headlight etc and clip in place to the outside of the plastic inner wing
12. Connect the outer wing air box loosely to the air intake pipe.
13. Replace the outer wing. I started by locating it via the slots, on its three bolts at the bulkhead first. Replace all the bolts and finally move the outer wing air box into place. You'll need the patience of a saint to get all eleven bolts in place. One tip is to start in the middle with what looks like the easiest to get to. You probably need to push the plastic wing upwards with one hand whilst securing the bolt with the other. Once the first one is in the rest are a bit easier. One particularly tricky one is next to the bracing bar you fitted. Use the ratchet spanner to ease it onto its thread. Also replacing the non-captive spire nut is fun – a bit of blue-tac on the end of a screwdriver helps.
14. Once everything is in place put the wing stay back (near the bulkhead)
15. Replace the side repeater indicator and replace the horn.
16. Replace the headlamp unit, plastic cover and sidelight and front indicator
17. Position the outer wing air box and secure with the self tappers
18. Replace the outer wing air inlet grille
19. Replace the wing top cover - you may want to leave this off until you've finished. I shortened the two outermost screws to make sure they didn't foul on the newly installed coolant pipes.

## Fixing the electrics and wiring loom.

1. Start by fixing the fuse connector block and the fan relay to the bulkhead. To do this I

removed the headlamp wiring loom connector block from its spigot on the bulkhead to make room. I fitted two 5mm rivnuts and secured the fuse block and the relay as shown in the pic.



2. I connected the brown earth wire to an existing earth point on the passenger side bulkhead.
3. The red positive wire and the loom for the 1533 timer I fed through a



hole in the rubber grommet in the bulkhead.

4. The red positive wire needed extending to reach the battery positive terminal. It's quite thick wire, I used 12AWG wire and a suitable grommet through the seat box.
5. I fitted the 1533 timer next to the steering wheel. Use the template that comes with the timer to drill the holes. To get at the back of the dash remove/loosen the centre console.



- a. Remove the two torx screw in the middle of the console
  - b. Use 'U' shaped radio removal tool and pull the radio out. If you don't have the appropriate tool you can probably buy it cheaply from Halfords.
  - c. Use a flat bladed screwdriver/similar to gently prise away the bottom left/right corners of the console.
  - d. There are two more clips about two thirds of the way up, gently pull the console away.
6. Poke the timer connector through the hole, connect to timer and secure timer using a self tapper
  7. Replace centre console
  8. Connect the wiring loom to the vehicle fan.

- a. Locate the grey connector with a brown/red wire and an orange wire that is connected to the fan motor (passenger side bulkhead) – cut the orange wire.
- b. To remove the grey connector locate the square hole in the heater housing



underneath the connector (i.e. where the grey connector goes in), Push the grey connector fully home, insert flat bladed screwdriver into slot and jiggle around, curse and swear for two minutes until grey connector magically pops out and you wonder what all the fuss was about!

- c. Connect the black wire from the Webasto loom to the orange wire at the grey plug end i.e. black going into the fan. (I'll explain why in a minute)
  - d. Connect the red wire from the Webasto loom to the other orange wire, i.e. going back into the vehicle's wiring loom.
  - e. Use proper connectors and heat shrink tubing or similar to seal.
  - f. Replace the grey connector
  - g. How does it work? The red and black wires are connected together at the relay (the one you fixed to the bulkhead with the rivnut) When the Webasto is turned off, i.e. under normal vehicle operation, these red and black wires simply form a loop which connects the two cut ends of the orange wire so the fan can operate normally. When the Webasto is switched on however the Webasto needs to provide power to the fan and switch it on. It does this by providing power to the relay which disconnects the red wire and provides 12V to the black wire. This is why you need to connect the black wire to the grey connector end to make it work and not the red (which would be more logical to my mind – but then I'm not an electrician). I've read somewhere that the fan gets switched on when the coolant temperature is above 30C however mine seems to come on as soon as the Webasto is switched on.
9. That's it – go for a drive, check it's all OK, no leaks, re-check the coolant level.
  10. The next stage for me will be to consider fitting a remote control, either a Webasto Telestart T91 or a gsm controlled unit like the danhag [www.danhag.de](http://www.danhag.de) Both should be fairly simple to fit using a Y cable – unplug the connector from the 1533 timer, plug into the Y cable and connect one end back to the 1533 timer and the other end to the T91 or danhag unit.