## **Fog lights Installation**

Today's chapter of Alfa ownership is dedicated to fog lights installation. I think the looks of the 33 are surely elevated once fog lights are installed and in my opinion white ones make a nice combination. I got hold of a nearly perfect set of second-hand lights (a big thanks to Dennis) which were almost like new; all I had to do was clean the lights casing and do a simple functional test of the halogen lamp.

For the history, some very specific extra parts are need to install fog lights on your car. The lights kit consists of the two light clusters, wiring harness with a relay block connector, a fuse integrated relay and finally the fog lights switch for the interior of the car. The vehicle electrical installation already has provision for fog lights, so there is no need to worry about messing around with the electrics. Simply put, the installation is straightforward.

#### I summarize the parts:

Item	Product Code
fog lights cluster (white or yellow)	60528793/5 or 60528792/4
wiring harness	60581801
relay	60570759
fog lights switch	60538506

### **Preparation Work**





 $file: ///C // Documents \ and \ Settings / Administrator / My \ Documents / Photos / Alfa / Epis 6 co. (100 fool) / Fool / Fool / Settings / Administrator / My \ Documents / Photos / Alfa / Epis 6 co. (100 fool) / Fool / Settings / Administrator / My \ Documents / Photos / Alfa / Epis 6 co. (100 fool) / Fool / Settings / Administrator / My \ Documents / Photos / Alfa / Epis 6 co. (100 fool) / Fool / Settings / Administrator / My \ Documents / Photos / Alfa / Epis 6 co. (100 fool) / Fool / Settings / Administrator / My \ Documents / Photos / Alfa / Epis 6 co. (100 fool) / Fool / Settings / Administrator / My \ Documents / Photos / Alfa / Epis 6 co. (100 fool) / Fool / Settings / Administrator / My \ Documents / Photos / Alfa / Epis 6 co. (100 fool) / Fool / Settings / Administrator / My \ Documents / Photos / Alfa / Epis 6 co. (100 fool) / Fool / Settings / Alfa / Epis 6 co. (100 fool) / Fool / Alfa / Epi$ 





Very important elements. These clips (3 pieces per light cluster) actually keep the light cluster hooked on the bumper. Once again Alfa wants to torture her car owners by making those clips (whilst among others) a No Longer Available product. However, my trusted parts dealer has rather big amount of stockpiled parts, like the ones above!

Fog lights switch and the specific relay needed. Notice the integrated fuse on the relay



It is high time I had the lights inspected and cleaned ...

Remove the frame by carefully releasing the plastic clips



Once the frame is out of the way, you will see one screw per side. Those two screws keep the glass firmly attached to the plastic casing. Note the elongated screw at the upper corner of the cluster; this screw adjusts vertically the light beam. We will use this screw to fine tune the beam once the fog lights are installed.

For sure it doesn't look bad ... only a good cleaning and off we go to install the lights on the car!

### **Electrical System Preparation**





Remove the switches cluster and locate the fog lights wiring connector.

Brand new fog lights switch ...



It should look like that from the front ...

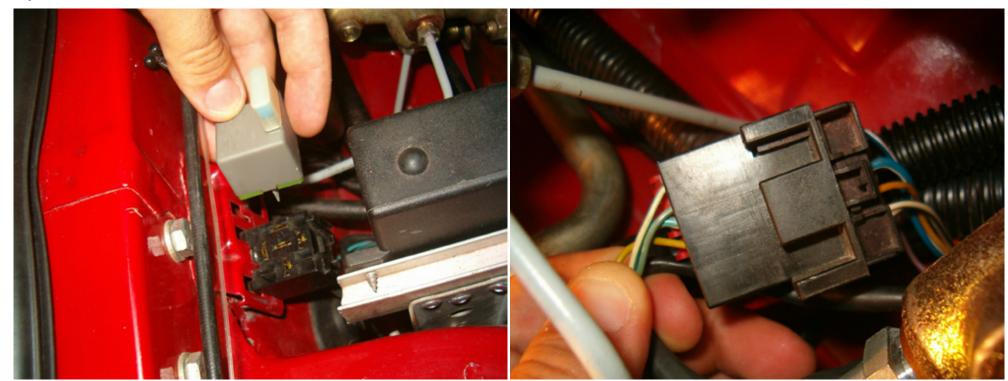
... and like that from the rear.



Slide in switches cluster back to the dashboard.

Let's now install the extra wiring harness.

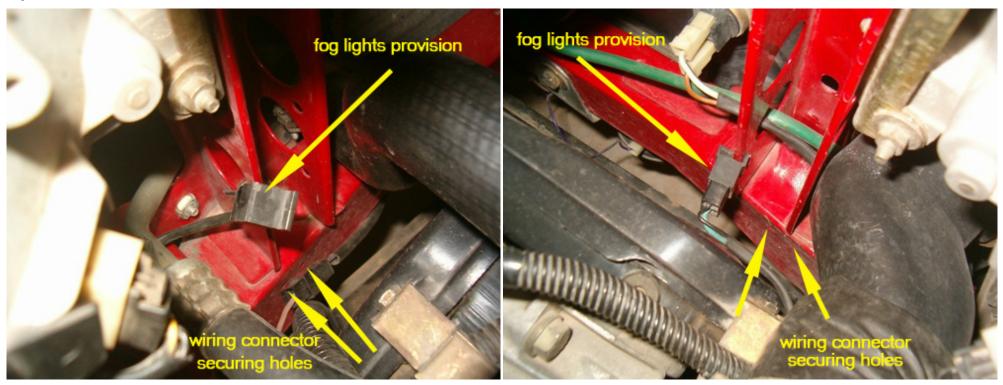
As many of you may already know, I had salvaged not a long ago a complete A/C unit from a donor car. During the removal process back then, I had removed that specific harness as I thought it was part of the A/C system. In fact this harness was intended for the fog lights and the time to use it came... In addition, as you see from the photo above, I have blanked the two wires (yellow & blue); looks like the donor car also had headlight washers as ePer designates a dual role for this specific harness (fog lights and headlight washers)



Install relay ...

... and connect the harness connector to the vehicle harness connector.

# **Lights Installation**



Remember telling you about fog lights provision? These are the connectors waiting the fog lights. Note here that there are special holes in the front cross member that the wiring connectors securely attach in order to avoid wandering around the engine bay.



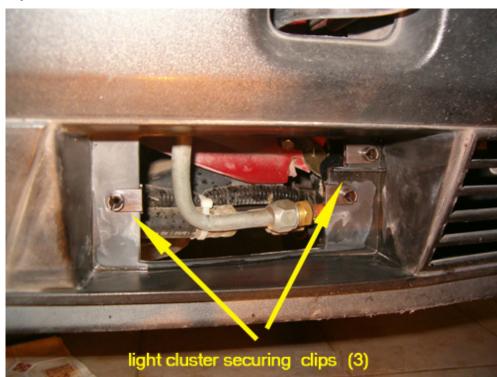
The lights are installed right next to the A/C grill. Lay under the car in order to gain access to remove the cavity covers; there are two screws on each cavity which can be easily removed.





The fit is tight however ...

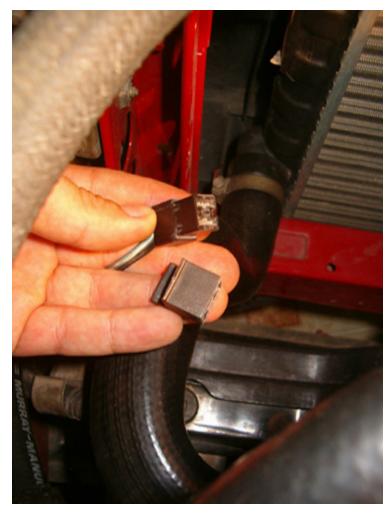
This is what you get once the covers are out. Actually, the fog lights support points are located at the slotted areas, once we have installed the relative clips.





Light clusters securing clips are installed ...

... and light cluster is finally installed for good. In order to be sure that the cluster is firmly attached, make sure that the tip of the pin barely extrudes from the securing clip at all three brackets.



Time to hook up the electrical connectors...



Once the connector is hooked up, you may push it to be firmly attached on the cross member.



Do the same for the right side ...



and Voila!

A few words about fog lights. These lights for sure look cool and give a different look to the car but keep in mind that they are designed to be used ONLY during fog or snow weather conditions. Many of us have seen approaching traffic with the fog lights switched on and the glare generated by these lights are blinding the opposing side. This thing is caused by misaligned light beam and from the fact that those lights are focusing at a wide road area surface from a low point; the glare generated is multiplied if the road is wet after rain.

Do not use these lights for showing off or having the illusion that you can "see" better the road. More lights than necessary blind not only the driver but also pedestrians since the foreground is excessively illuminated.

Finally a few words for fog lights adjustment. Since these lights are used to focus parallel on the road surface where fog is not present, attention should be paid in order to make precise calibration. The process is to have the car sitting on a flat surface and aim at a vertical surface (e.g. a wall) at a distance of around 10 m. The general rule says that the lower point of the low beam lights should be adjacent to the upper point of the fog lights. This is actually the role of fog lights; to cover the area below the low beam lights.

(c) November 2007 Thanassis Gritsopoulos

1991 Alfa 33 1.4 IE

Athens - Greece



gritsop[at]otenet[dot]gr