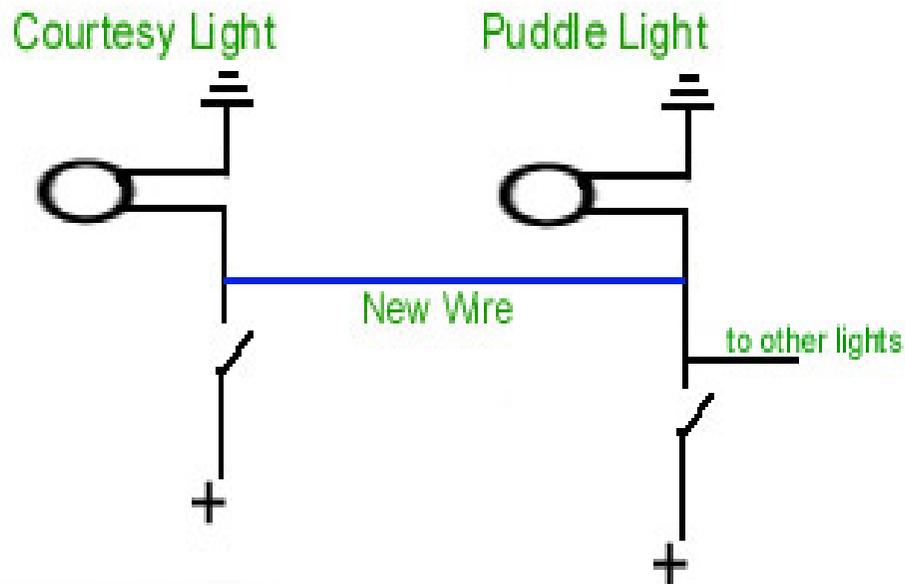


RRS - Getting the Courtesy Lights to come on when a door is opened.

This may look long but it amounts to two steps: reversing a connector, and running a wire! So don't be put off, 30 - 45 mins per side will do it.

First some **INTRO...**

- 1) The usual disclaimer: while I can see no harm being done if you are careful, you take the responsibility. There may be warranty considerations too.
- 2) If I had a wiring diagram I could probably see how to do this from under the hood or dash perhaps more easily. If anyone can copy me on that, let me know.
- 3) This modification retains the normal use of either courtesy light with its switch.
- 4) If a courtesy light switch is used, the following also come on: puddle light, ignition switch light, front footwell lights, luggage compartment light.
- 5) The centre button on the overhead console above the rear view mirror can presently be used to switch on or off the puddle lights. After this job it will also cause the courtesy lights to go on or off. So will opening or closing any door. Remember there is quite a delay involved.
- 6) The photos are pretty high resolution, if you want to see more detail, save them then use a viewer to look at them and zoom in. (Apologies for one or two that are not quite in focus)
- 7) This is what the wiring will look like when finished



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OK here we go with the left side...you can do the same for the right side..

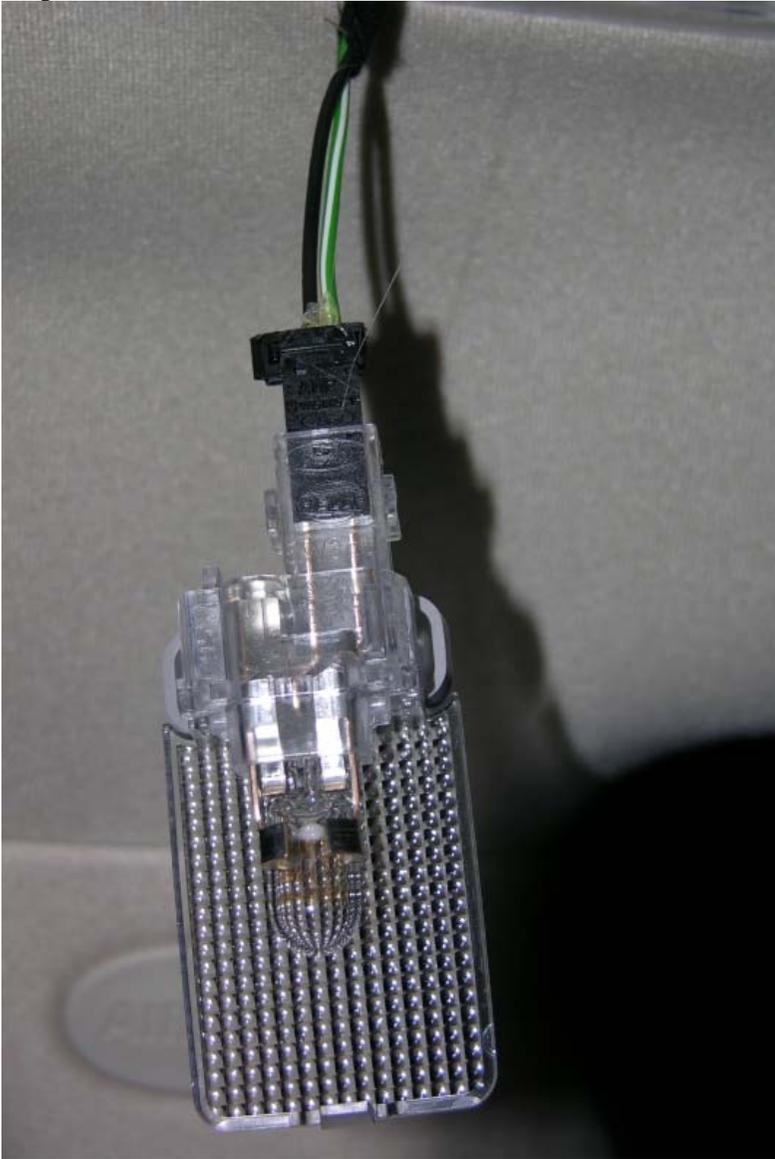
1) Prise the courtesy light out of its retaining bezel. (Use your fingernails or thin blade on the end away from the switch) Notice that with the bulb towards you, the GREEN/WHITE wire is on the RIGHT. The switch interrupts the BLACK ground (-) wire. Because the puddle light switch on the rear door interrupts the live (+) wire, **we need to have the courtesy light switch interrupt the live (+) wire** i.e. the GREEN/WHITE wire. This is easy - we can just reverse the black connector!... but note...

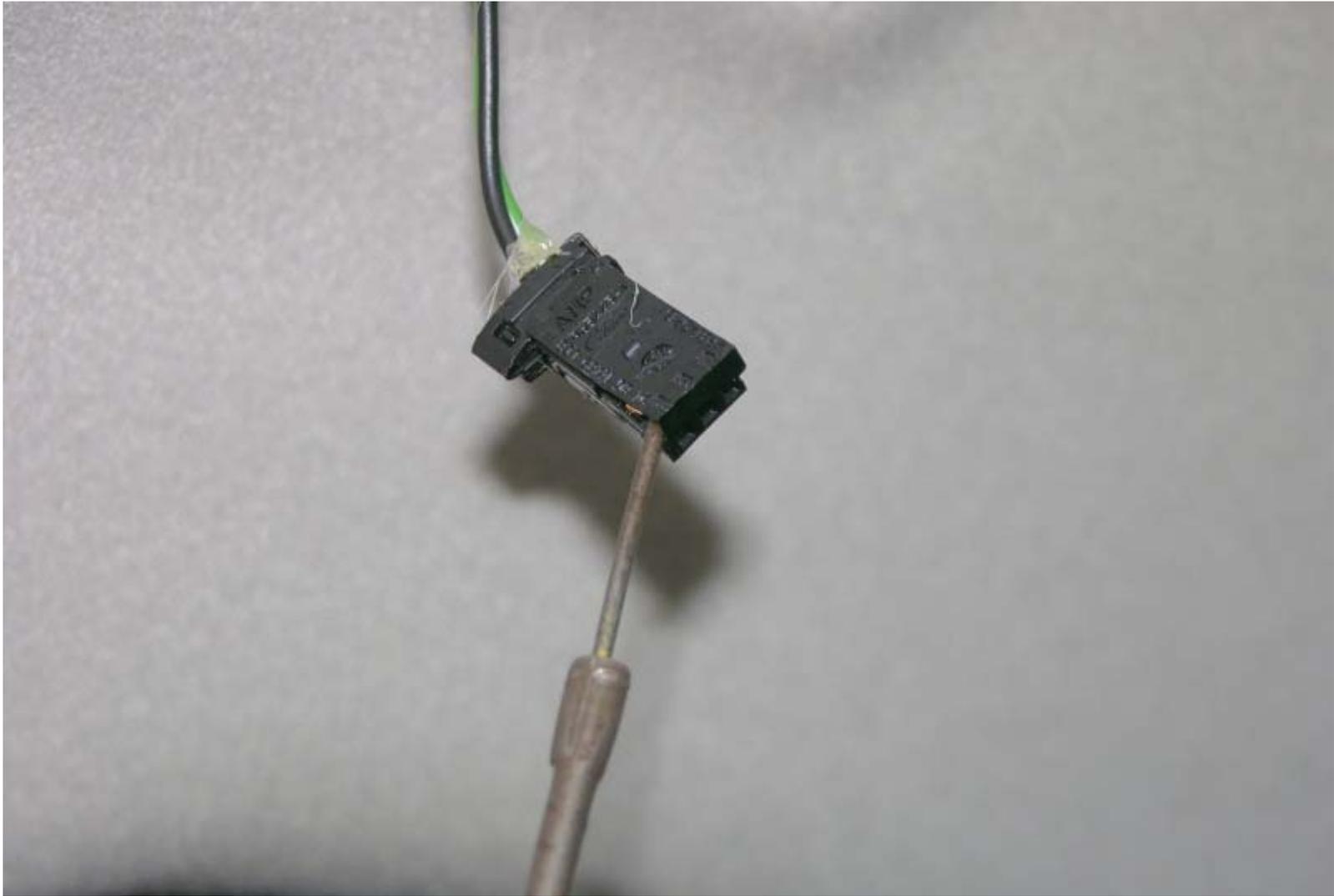
a) Look closely: there is a lug holding it in, so you need to prise with a small screwdriver on one side or the other of the black connector.

b) As you will see, the connector is asymmetrical, so you need to break off the thicker side of the connector with a small knife or screwdriver (be careful or have band-aids/plasters on hand!). It is a small layer of black plastic just clipped on and if you get the right insertion point it comes off easily.

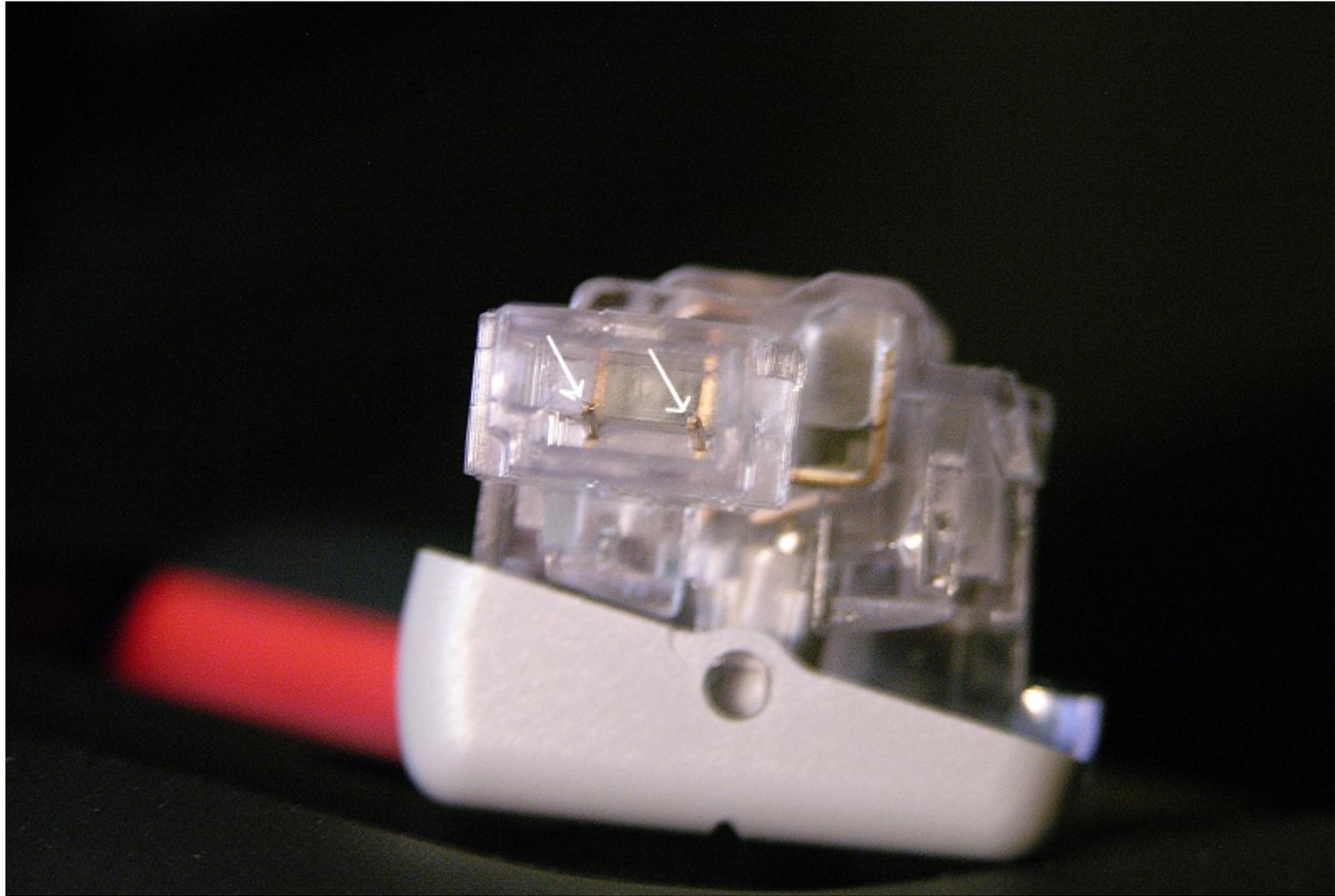
c) You may have to lever the pins inside the receptacle away from their rear side just a little in order to get the connector onto them. See arrows

on photo.









Using a little ingenuity, you will soon get the connector reversed so the GREEN/WHITE wire is on the LEFT like this:



2) Move the front seat forward put the back upright. Using a flat, blunt blade (e.g. pallet knife wrapped with masking tape) prise off the lower pillar cover. There are 4 studs like the yellow one showing here that got left in.



3) Starting from the bottom, prise off the upper pillar covering pulling it down to release the pegs at the top.



4) If you prise off the puddle light under the LEFT door, you will see that the live (+) wire on it is VIOLET. (I have a LHD car so it may be different on a RHD). At the bottom of the pillar locate the VIOLET wire (mine was visible right away). You need a length of electrical wire at least this thick and long enough to go from the courtesy light along the roof and down the pillar to this VIOLET wire, I'd say about 2.5 metres. I put a pin through the VIOLET wire and used an electrical multimeter to double check it was the the right wire. I also tried it out with a joining wire through the interior of the car first and used the centre button on the overhead console to switch the puddle lights on and off. But if this wire

is the same colour as the live (+) puddle light wire, it is sure to be right.



5) Next we have to thread the length of new wire starting at the courtesy light end. You can figure out other ways to do this perhaps but this is what I found works: You don't need to remove the Airbag plug as in the photo because it doesn't allow better access. If you put a long thin

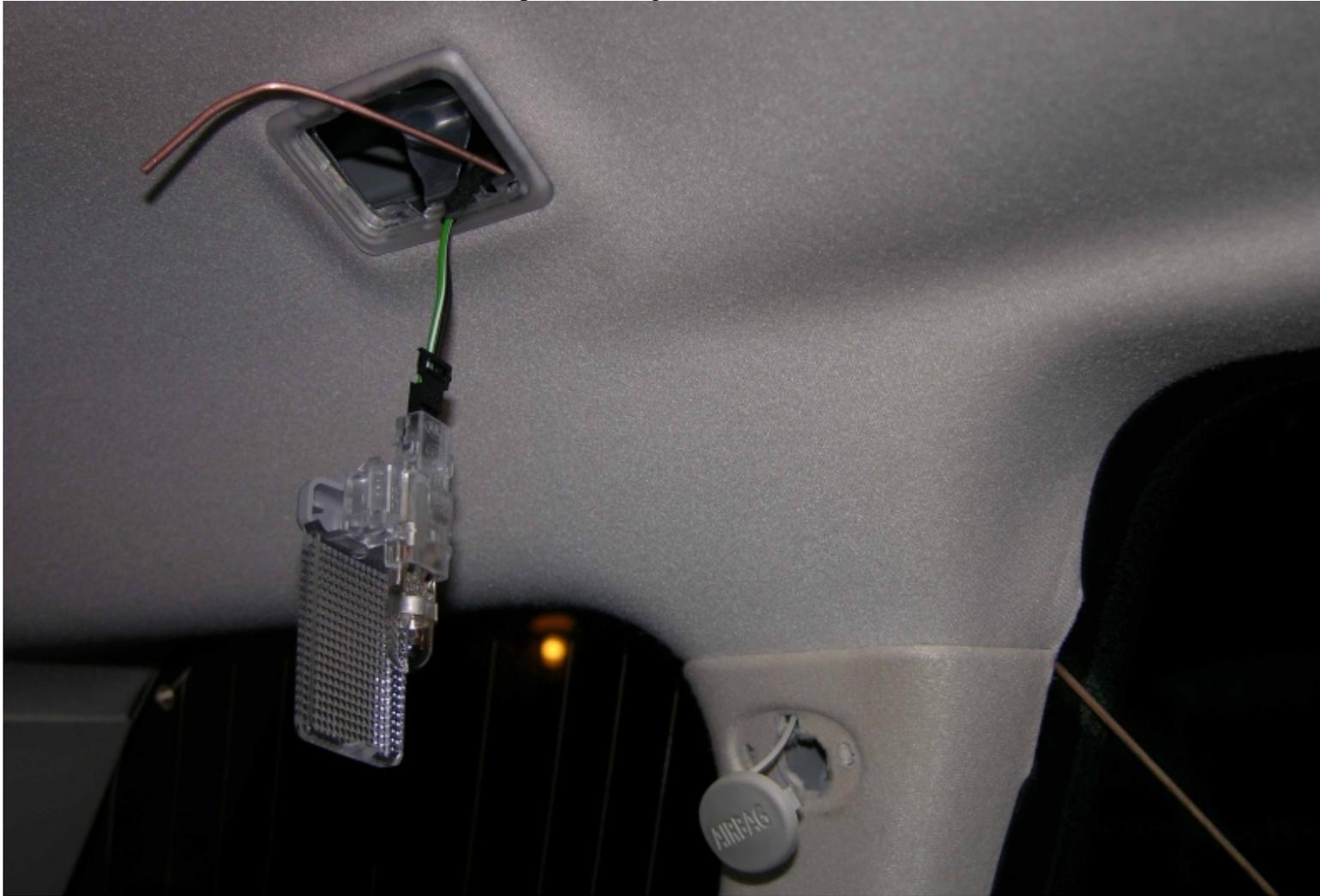
screwdriver up behind the roof headlining toward the light it will go through without any damage (hold back the rubber door seal).



6) Here is the tip of the screwdriver, but not far enough through for me to tape the wire to it!



7) So I ran a straight piece of coat-hanger wire alongside the screwdriver, then removed the screwdriver. Here I am just about to put a loop in the end of it on which to tie the electrical wire and pull it through.





8) This is the electrical wire pulled through:



9) Now, pulling away the door rubber seals a little as you go along, tuck the wire behind the roof headlining edge and across to the top of the pillar...



10) When you get it to the top of the pillar, hold tight to the light end of the wire, pull it taugt and it will pull up a few inches above the lower edge of the roof headlining, Then run it down the pillar to the VIOLET wire located earlier. Tape it along its whole length to the metal of the

pillar tucked into the slight recess - see arrows.

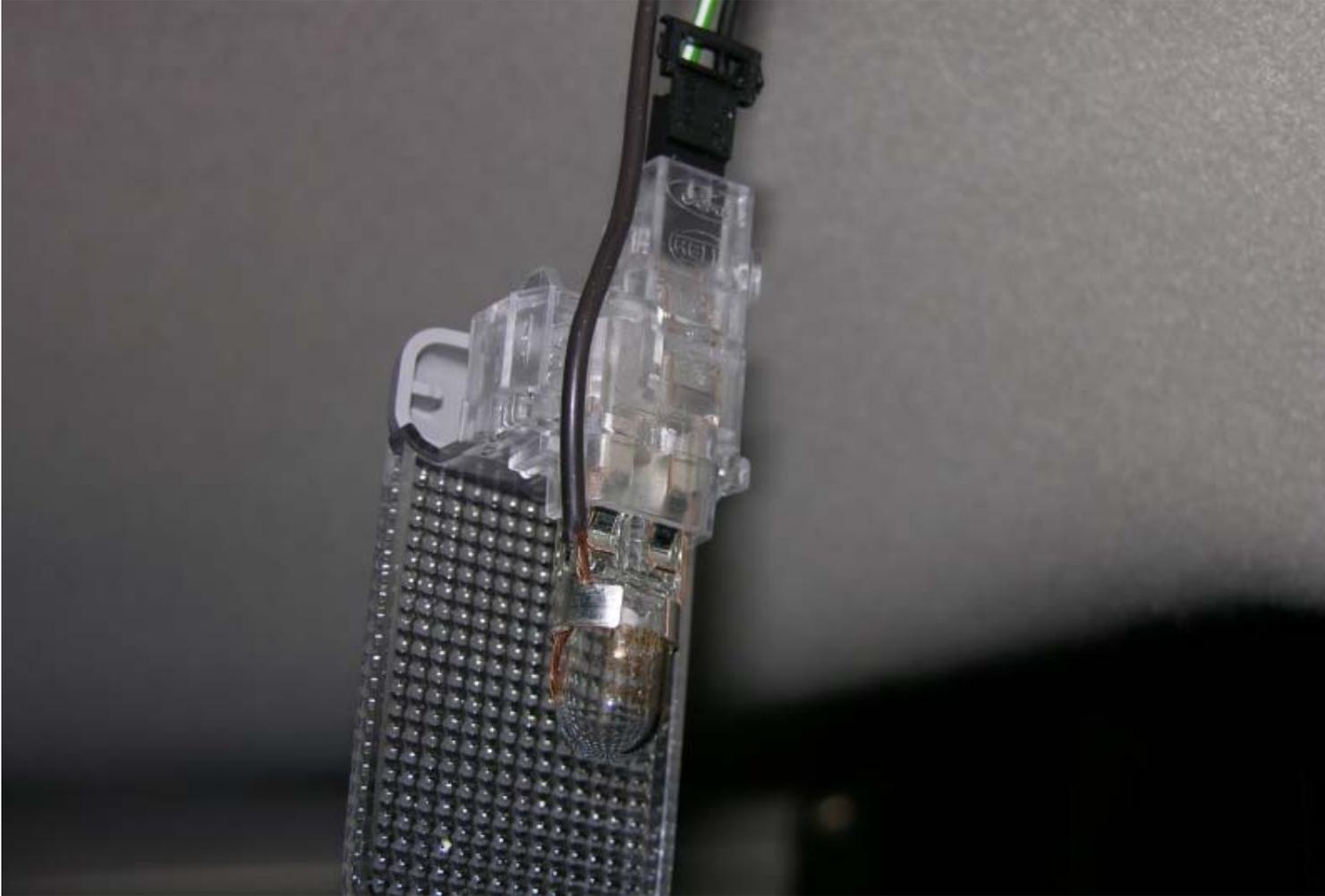


11) Cut off the wire just long enough to join it to the VIOLET wire (you don't want slack getting caught in the seatbelt mechanism). Use whatever good joining method you like; I soldered mine and taped it.



12) Back at the light, the wire now needs to be connected to the live (+) side of the bulb, but AFTER the switch - so we cannot join it to the GREEN/WHITE wire (because that is before the switch). To make life easy I just clipped the wire behind the LEFT side of the bulb holder (as

this contacts the live (+) bulb terminal). tape the new wire to the existing ones (just north of the photo)



13) Now you can test the set-up by opening and closing a door or by using the centre button on the overhead console. Check that the switch on the courtesy light behaves as normal and switches the light on and off when all the doors are closed. See also note 4) of the **INTRO**. Here is my

door open, the light switch is off, and the puddle light and courtesy light are both on. GOODY!



14) Put the top half of the door pillar cover on first mating up the seat belt height adjuster, followed by the bottom half. Make sure everything around both left doors is properly tucked behind the rubber door seals. Insert the courtesy light into its bezel. Put the tools away, have a beer, and vow to do the other side soon.

VOILA! Any questions or improvements on technique can be posted.

Afterthoughts...

1) After this mod. when one courtesy light is switched on (using its switch) the other comes on too (as well as the rest of the lights I mentioned). This is OK by me as I have black interior.

2) From Richchad and BoatMad: Using a diode in the new wire would stop the other lights coming on when a courtesy light switch is turned on...

3) And again from BoatMad: Any small amp diode would do say a IN 5404 3amps, 200V rating RS part no 348-5454 cost about 10p wire it so that cathode (bar on the case) faces the courtsey light in the wire running from the puddle lamps.

That rating should be ok up to say 20 watt bulb and I suspect the lights are 5W. See <http://www.rscomp.com.sg/electronic-components-sg/158988133-diodes-semiconductors-discretes-standard-rectifiers-1a-6a.html>