

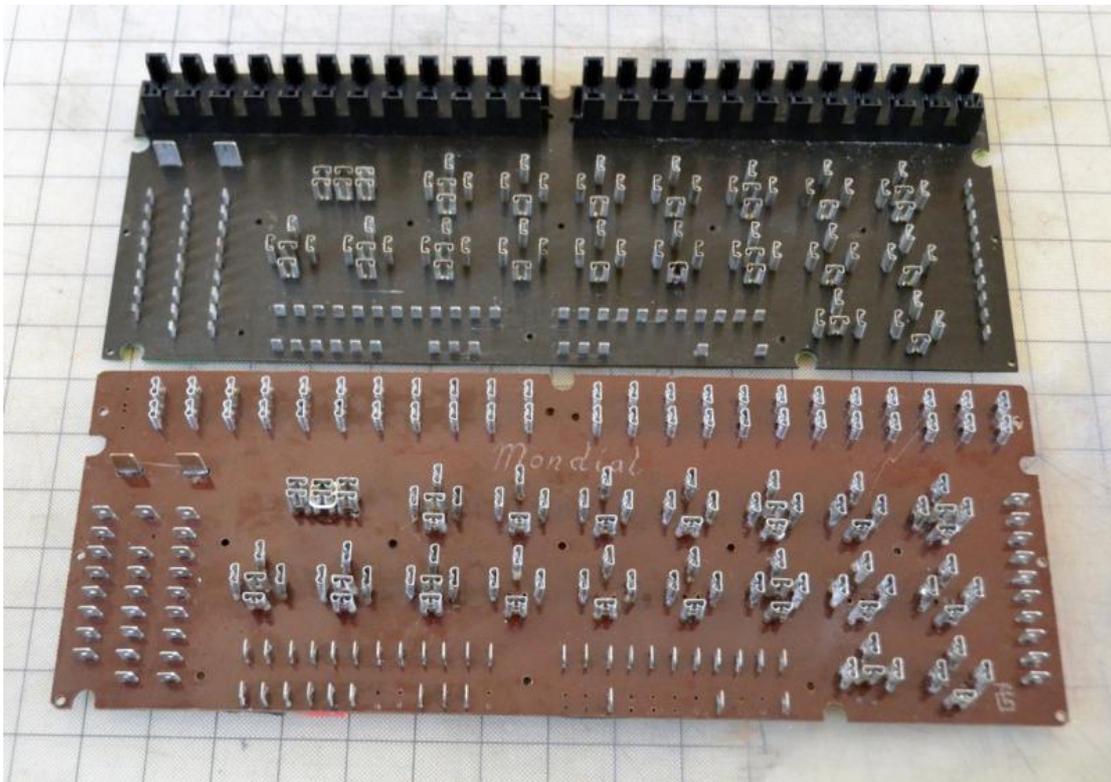


## Installation manual for the remanufactured fuse box

version 1.4

This fuse box has been made to match the specifications and dimensions of the original fuse boxes. All connections are on exactly the same place as the original one. That means that you can insert all fuses and relays once the board is installed in the car.

Below is a picture comparing an original board (top) against a remanufactured board (bottom). As you can see all the connections are on the same place, but for quality reasons a good number of flat connectors have changed orientations. This is because our connections consist of 2 pins instead of only 1.



To locate the exact location of the fuse box in the car, please read the owner's manual or look this up on the internet for your specific model.



**DISCLAIMER:** these boards have been manufactured following the standard schematics provided by the original manufacturer. In many cases, original fuse boxes have been replaced or updated with extra circuits to solve problems. These 'changes' will have to be copied over to our board. If needed, we can make the changes to the board based on the original board from the car. For this, we need to have both the new and the original boards. Please send both your boards to the address at the bottom of the page.

### **Technical specifications**

- Board has a thickness of 2 mm (DIN norm EN 60893 / DIN 7735 Phenolic sheet) instead of 1.5mm OEM
- Connectors made in Switzerland and the USA
- Wiring is VOB 2.5 mm<sup>2</sup> (VOBBL2,5R) insulated electric wire from Vinckier (Belgium) CEBC conform. Maximum throughput: 500 V X 25 A, that is 12 V until 1000 A
- All soldering done with high temperature silver/tin/lead alloy solder.

**WARNING: Before you start the installation procedure, please make sure to have disconnected all cables from the battery!**

*We advise that only people with good "do it yourself" skills who also have basic knowledge of electrics should be doing this. If you don't feel sure, please have this done by an expert or someone from a professional shop.*

**Write the colors of the cables on a piece of paper to remember where all the cables were, or take a picture of the cables before starting the installation so that you don't mix up these cables! Another possibility is to use clips, which hold the cables in the correct order.**

**If you don't have the patience to do this properly, ask assistance from someone else. DO NOT BEND CABLES OR CONNECTORS DURING INSTALLATION AND DO NOT APPLY TOO MUCH PRESSURE ON THE CONNECTORS AND BOARD IN GENERAL.**

**HANDLE WITH CARE**



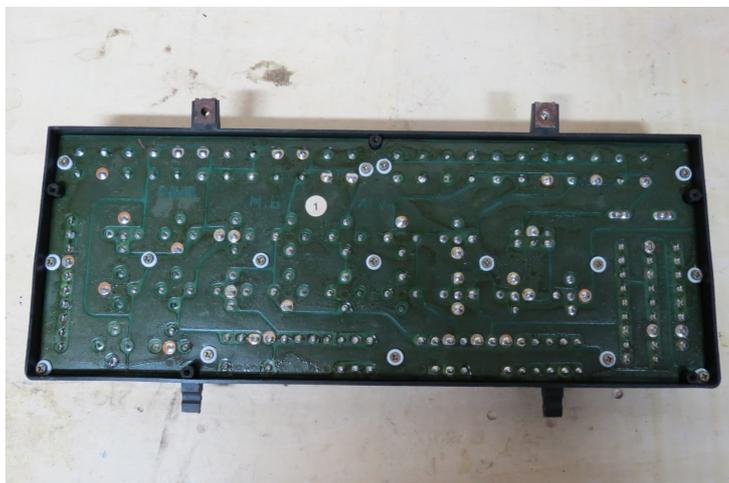
## Installation

1. Once you have disconnected the battery, locate the fuse box in the car.
2. Disconnect all connection plugs holding the electric wires so that no cables are attached to the fuse box. Usually, these are white plugs holding between 3 and 12 wires each.
3. Unscrew the screws holding the fuse box in place. This may vary depending on the car model you have.
4. Now that the fuse box is detached from the car, remove it and place it on a clean surface.
5. Write down the order of the relays and fuses on a piece of paper.
6. Remove all fuses and relays and place the box bottom up like on this picture:



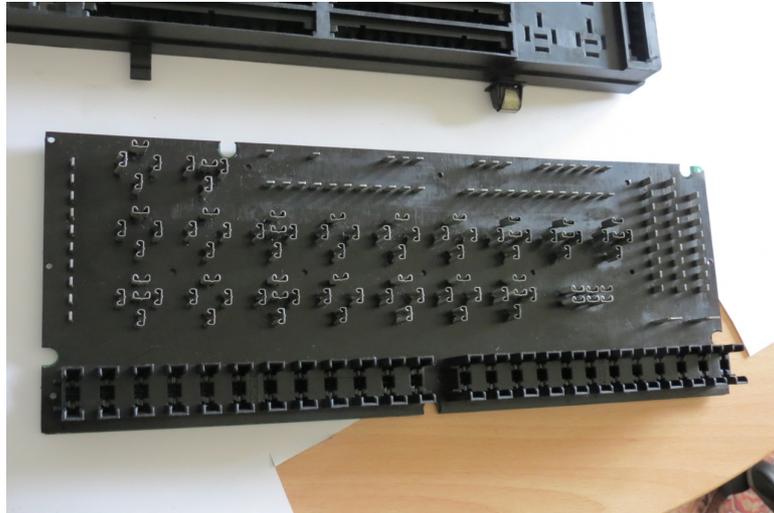
**WARNING: put the relays and fuses back on the fuse box AFTER all cables have been attached again.**

7. Unscrew all small screws at the back of the fuse box (about 6) and remove the plastic cover:

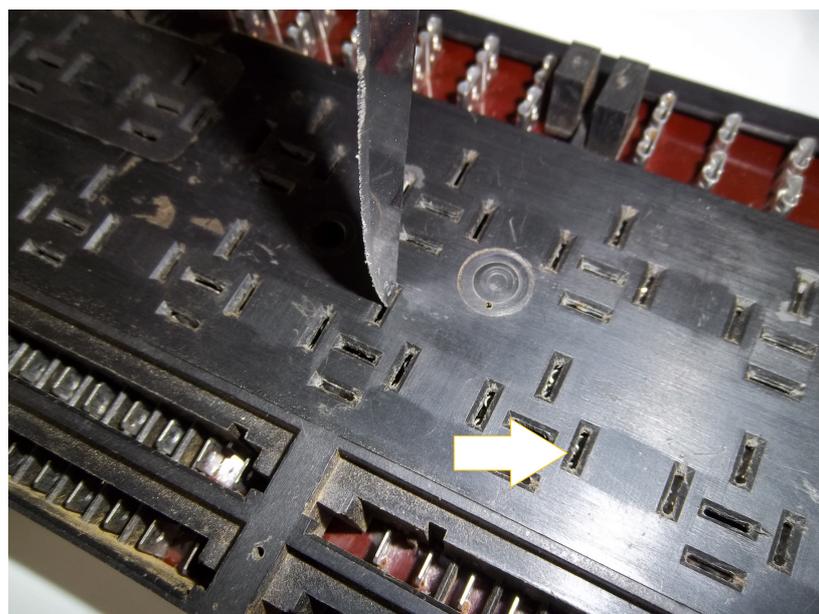




8. Remove all small screws that are holding the board in its place (about 15).
9. Remove the board from the plastic housing:



10. Remove the black plastic blocks that hold all fuses. These cannot be reused again because the new connectors are too wide.
11. Put the new board carefully in the plastic cover and verify if all metal pins are on the right position under the plastic insertion points. You can do this by using a knife or other pointy object that goes through the holes in the plastic cover. Make sure that all metal connectors are correctly lined up underneath the plastic front so the relays can easily be pushed in their place.



12. Put all the screws without the white plastic washers back in their place, attaching the board to the plastic housing.



13. Put the white washers between the back plate and the places where the screws will be attached. Now, take the black back cover and insert all the screws holding the cover.

*Now the board of the fuse box has been replaced and it's time to prepare the installation of the new fuse box back in the car.*

14. Remove the cables from the white plugs by sticking a very small screwdriver in every hole to detach the connector from the plastic plug.
15. Take a circular saw like on a Dremel to cut out the space in the white plugs. This is necessary because the orientation of the metal connectors has changed:

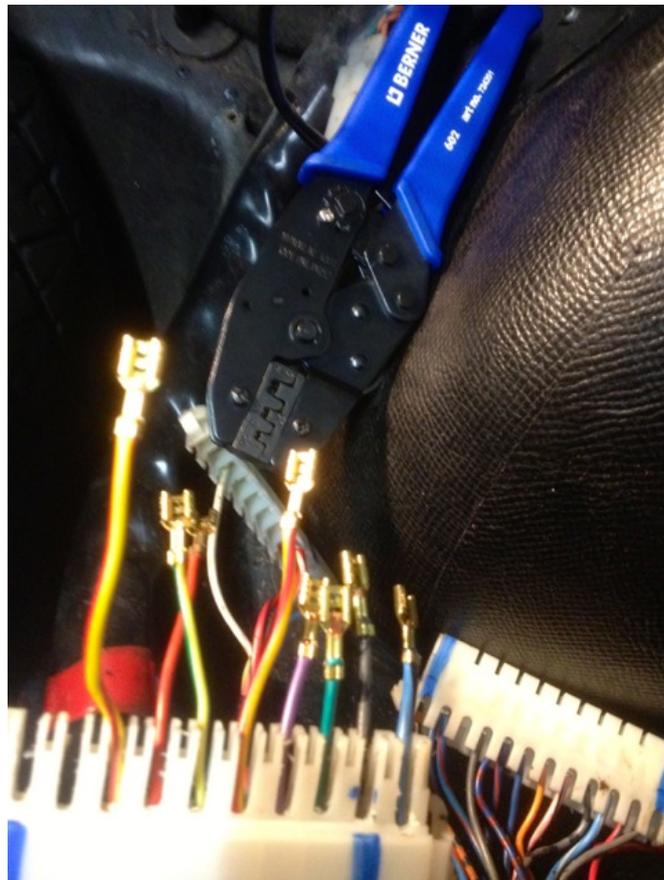


The white connectors need to be cut like this picture shows: the bottom section must be cut, **but the plastic intersections that fit between the metal connectors have to remain! These serve as insulation.**

**If you cannot reuse the white connectors, then place enough insulation tape around the metal connectors to avoid shorts!**



16. Take the white plugs and put the cables through the holes in the white plugs, in the order the cables should be connected again to the board:



**WARNING: The white plugs must be reused to make sure no connectors get bend during the installation! Bending a connector on the board = chance for broken connections!**

17. Cut the old connectors from all cables and force the new gold plated forks on the cables. These forks are included in the box you received and can be bought in a normal shop if you need more. On the picture above you can see that the forks at the end of all cables have been replaced by new ones of much better quality.



*Now the cables are ready to be attached to the fuse box, so it's time to put the new fuse box back in the car!*

18. Take the fuse box and put it back in the correct position. Attach the fuse box to the car with the screws.

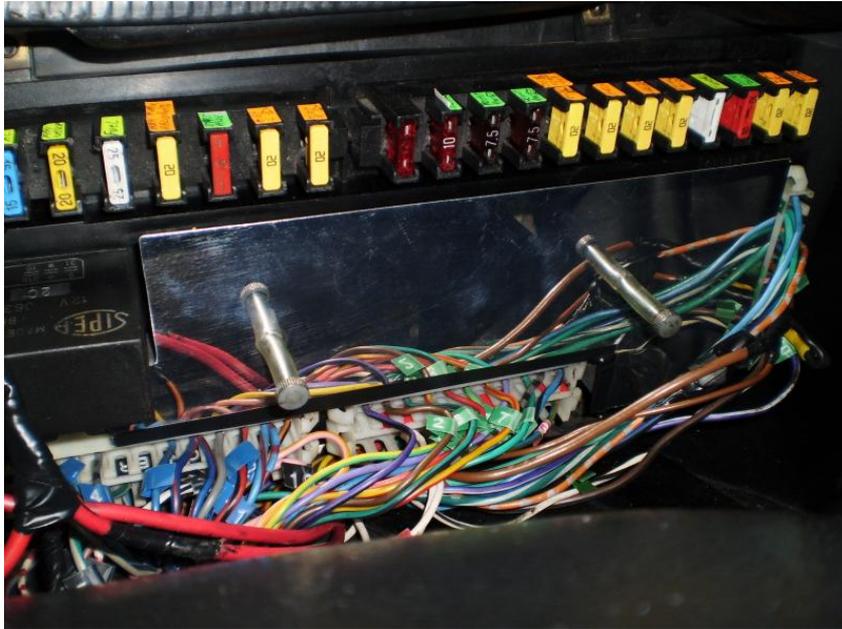


19. Take one white plug at the time and make sure the cables have been pushed through the white plug in the correct order!
20. Start connecting every female connector of each cable to the fuse box male connector again. Put these all in the same direction "c c c c c ...".
21. After you have completed one set, slide the white plug over the cables into the correct position on the fuse box cover.

**WARNING: make sure the cables don't bend under the plug while pushing the white plug over them.**

22. Put the relays and fuses back in their position in the correct order.
23. Reconnect the battery and test all electric functions.

**OPTIONAL: you can place an aluminum plate on top of the relays for optimal heat distribution like on the picture below.**



**Here is what the final result looks like**

