



**AUTOMOTIVE ART s.r.l.**  
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## **GREENFLASHER programmer modification to support RH850 programming**





Dear Customer,

during the development of solutions for reading/writing the RH850 microcontrollers it was found that the first hardware versions of the GREENFLASHER programmer did not allow the correct execution of the software.

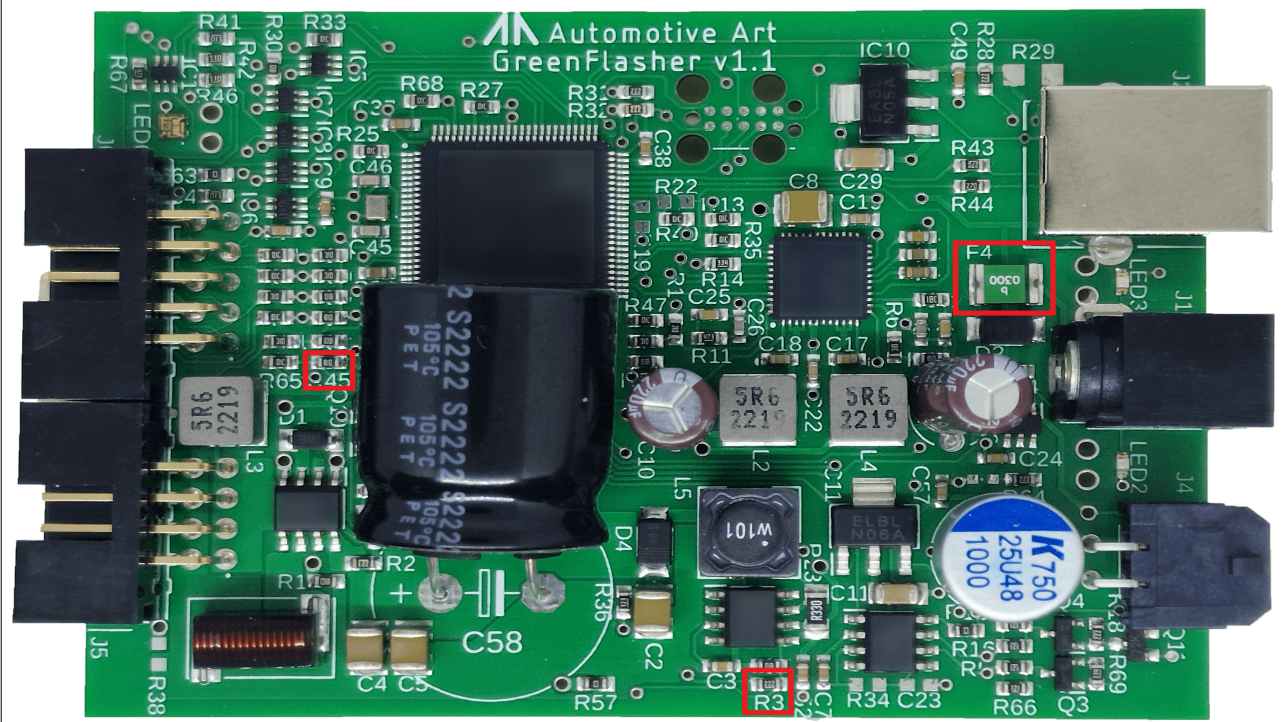
Below is a detailed guide to resolve the problem without having to send us the interface. If you do not have the appropriate equipment or skills, you can always contact the Automotive Art office for further instructions or arrange shipping to have us carry out the update.

### STEP 1 – Removing the PCB from the case

1. Locate and unscrew the two TORX screws on the cover on the cable connector side.
2. Remove the side panel.
3. Remove the circuit board from the case by sliding it on the tracks.

### STEP 2 – Desoldering the old components

1. Place the printed circuit board on your work surface.
2. Locate the two resistors **R3** and **R45** and the fuse **F4** highlighted in red in the figure below.





3. Using pliers and a soldering iron, heat both sides of the indicated components, removing them from the printed circuit, being careful not to damage the adjacent components.

**ATTENTION:** If necessary you can gently straighten the **C58** capacitor to facilitate access to the **R45** resistor.

**PLEASE NOTE!**

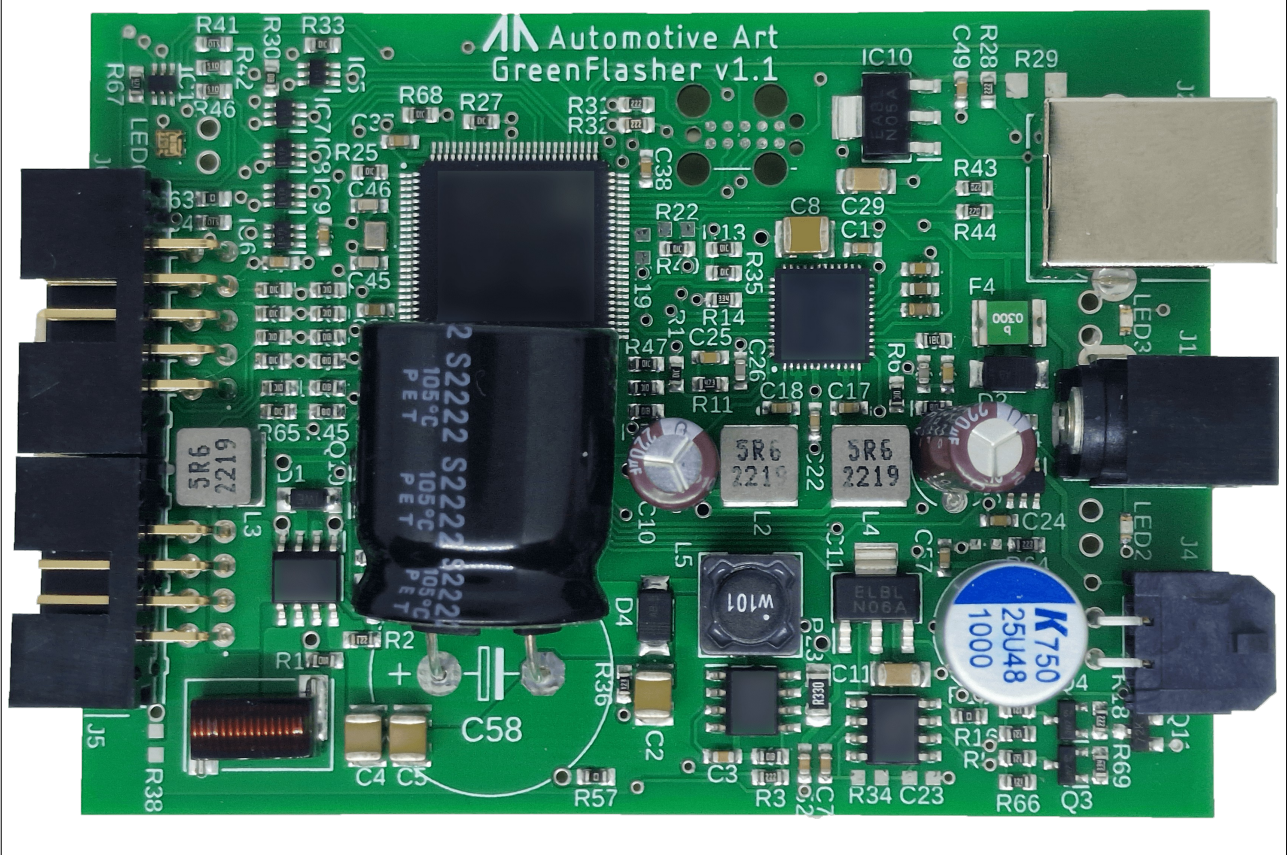
The necessary replacement components are supplied directly by Automotive Art. Absolutely **DO NOT** modify the circuit before contacting the Automotive Art technical support!

**STEP 3 – Soldering the new components on the PCB**

1. Solder the new components onto the PCB following the instructions below:

- **R3:** Resistor 2k2 Ohm 0603.
- **R45:** Resistor 1k Ohm 0603.
- **F4:** Resettable fuse 0ZCG 5 Ampere 0300.

2. If the C58 condenser has been straightened, fold it back as it was before. At the end of the procedure the circuit board must appear as in the figure below.





## **STEP 4 – Reassembly**

- 1.** Carefully photograph the printed circuit board, so that the replaced components are clearly visible. The Automotive Art technical support will request these photos to ensure that the update was completed correctly.
- 2.** Reposition the circuit board inside the case by sliding it into the tracks. Make sure that the LED guides are aligned with the holes in the case.
- 3.** Place the side cover back, making sure that the connectors and LEDs are perfectly aligned.
- 4.** Retighten the two TORX screws.