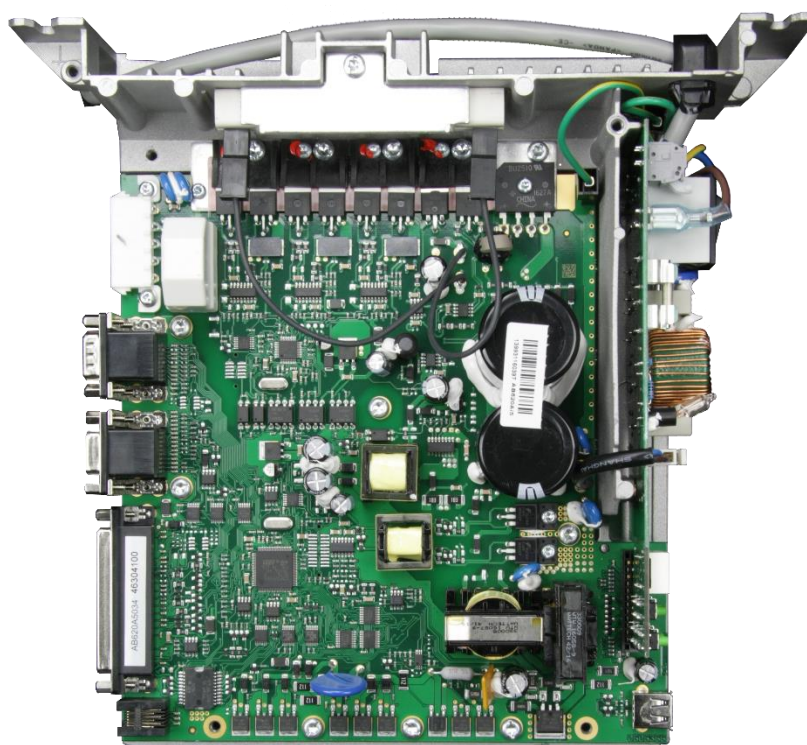




AB600A, IW600A, AB611A, AB620A, IW620A & YA620A

Instructions for changing the circuit boards



Nr.402453 english

(for german language and colored illustration use downloadlink)

[www.efka.net/Downloads/Andere/Changing circuit boards AB6xxx](http://www.efka.net/Downloads/Andere/Changing%20circuit%20boards%20AB6xxx)

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1 Important instructions



ATTENTION!

The controls must be completely disconnected from power during the entire work!



ATTENTION!

ALL work on the controls must be performed in powerless condition!
Safety instructions warn of dangers and help prevent injuries!

Warranty and liability

Warranty and liability claims for personal and property damage are excluded if they result due to one or more of the following causes:

- Improper use of the **Efka** controls
- Improper assembly and commissioning
- Not following instructions in the assembly instructions
- Independent constructional changes of the **Efka** controls
- Insufficient maintenance and repair measures

Important Notes

For current versions of the Instructions for Use and Lists of Parameters, necessary for operating EFKA drives in accordance with regulations, please refer to the EFKA web site www.efka.net, page "Downloads".

On our web site you will also find the following supplementary instructions for this control:

- ✘ General instructions for use and programming
- ✘ Use with USB Memory Stick
- ✘ Adapter cords

2 Scope of Supply

- Repair set for circuit board -AB600A & IW600A
Thermal Compound Keratherm KP97 1ml
Brake resistor
Epka-Order- Nr. 311 4051
Epka- Order- Nr. 150 5077
Epka- Order- Nr. 050 4872
- Repair set for main circuit board -AB611A
Brake resistor
Epka- Order- Nr. 311 4013
Epka- Order- Nr. 050 4872
- Repair set for main circuit board -AB620A
Brake resistor
Epka- Order- Nr. 311 4123
Epka- Order- Nr. 050 4872
- Repair set for main circuit board - IW620A5035
Brake resistor
Epka- Order- Nr. 311 4257
Epka- Order- Nr. 050 4872
- Repair set for main circuit board - YA620A5080
- Repair set for main circuit board - YA620A5081
Brake resistor
Epka- Order- Nr. 311 4145
Epka- Order- Nr. 311 4249
Epka- Order- Nr. 050 4872
- Netfilter circuit board -AB611A, AB620A,
IW620A & YA620A
Epka- Order- Nr. 311 3832
- Instructions for changing the circuit boards
Epka- Order- Nr. 020 7288

3 Changing the circuit boards AB600A & IW600A

3.1 Required tools

- 1x Torx screwdriver T 20
- 1x Torx screwdriver T 10

3.2 Removing the control housing



- Remove the 4 screws of the front housing (Torx T 20).



- Remove front housing.

Note: First tip the cover slightly to the top, then push it away to the left.



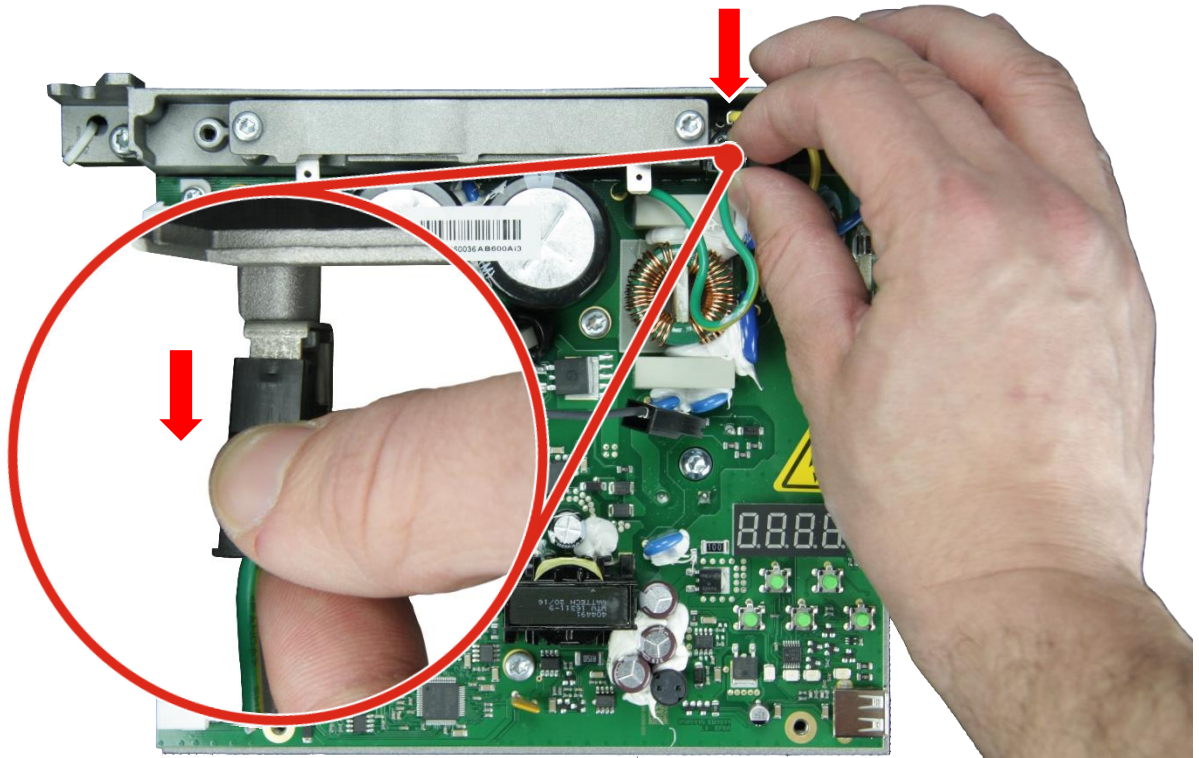


3.3 Removing the circuit board

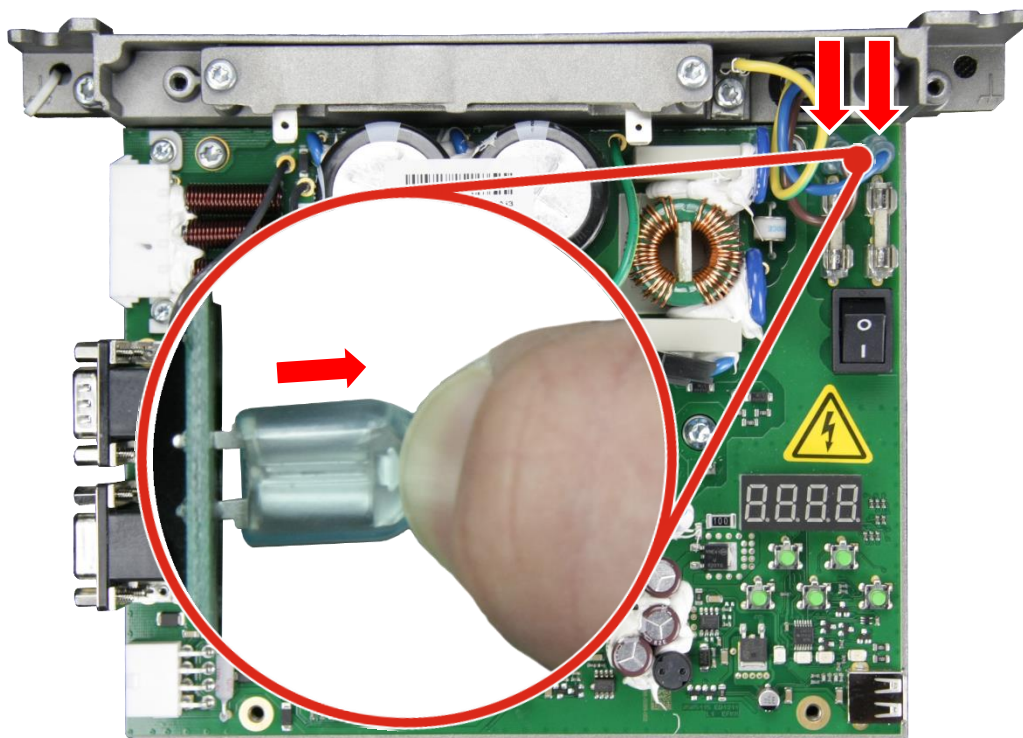
- Pull off the "Fast on" plug connector of the brake resistor.





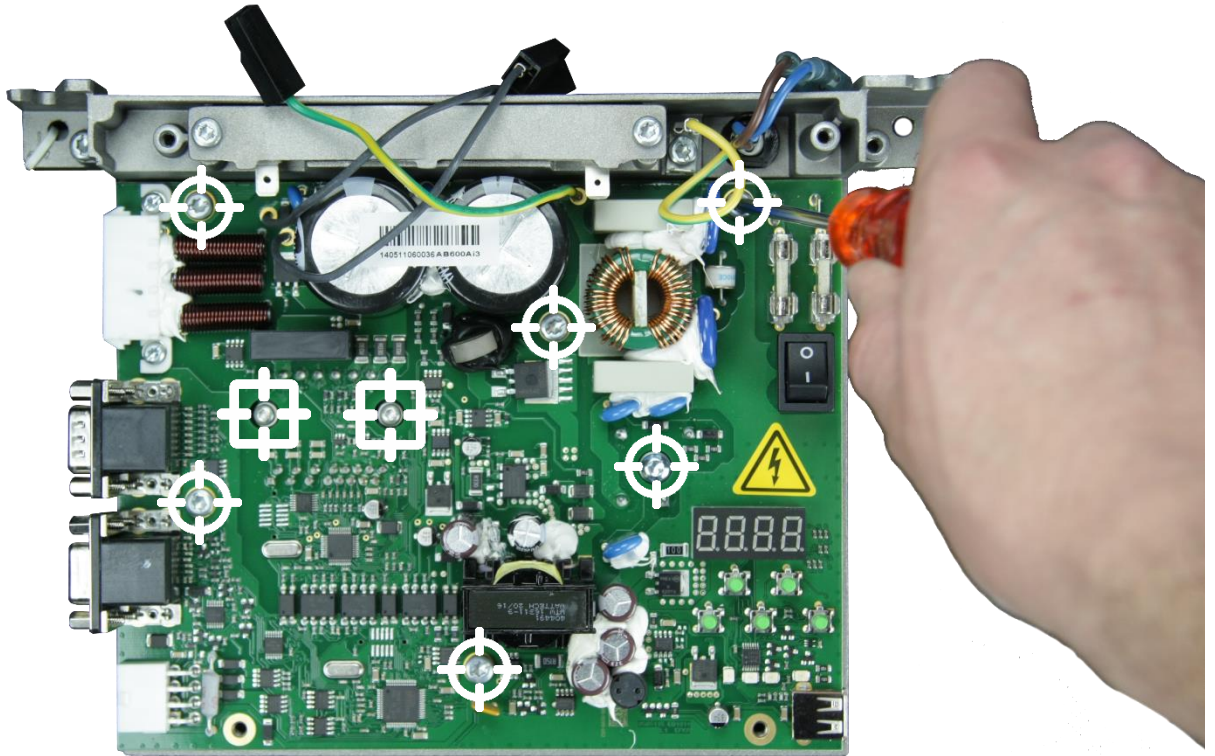
- Pull off the "Fast on" plug connector of the board ground.



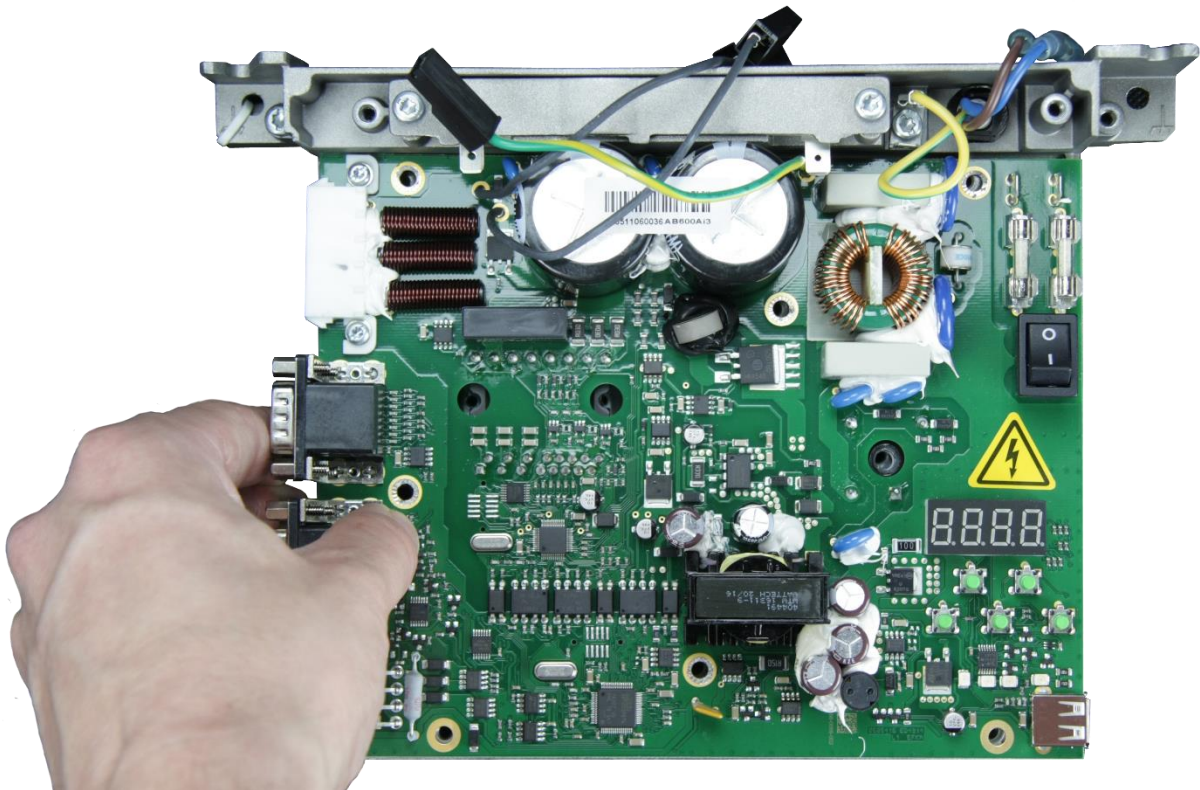
- Press the lock of the "Fast on" plug with your fingernail and pull it carefully from the circuit board.

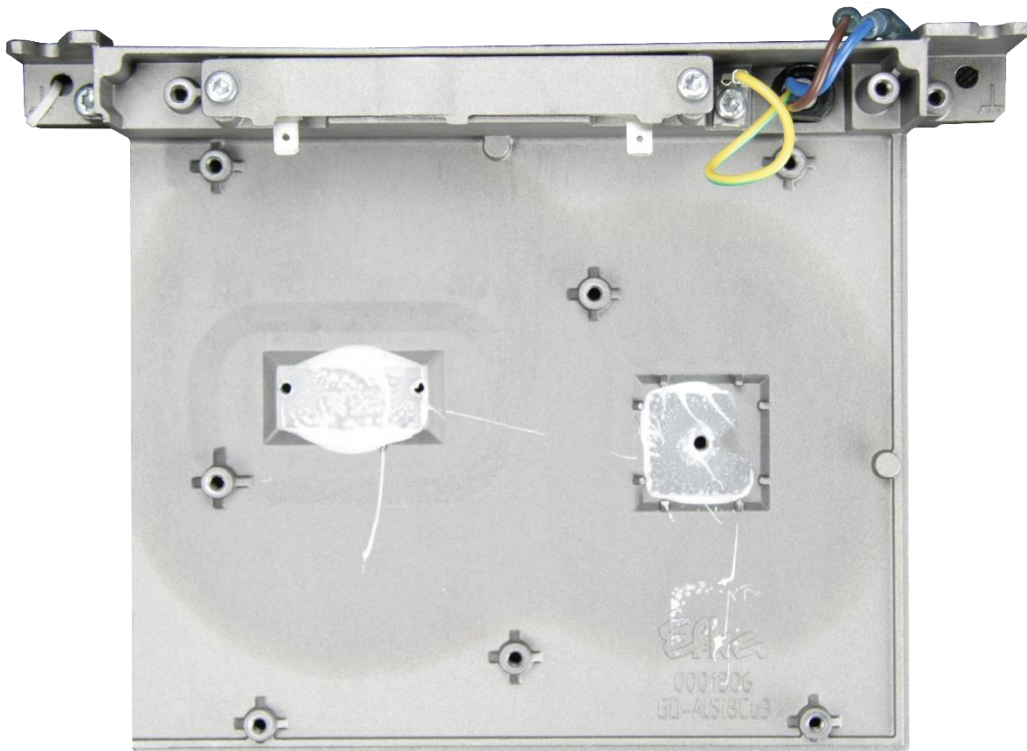


- Remove the 8 marked screws (Torx  T20 & )



- Carefully lift the circuit board.

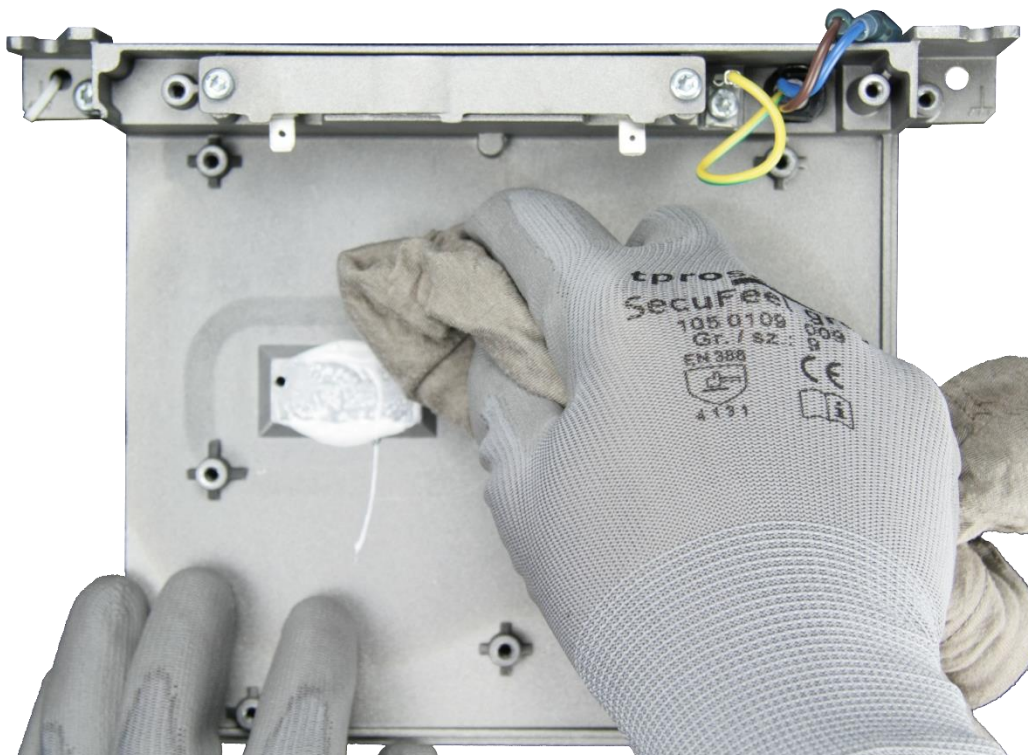




3.4 Installation of the circuit board (**Effka**-Nr. 1114051)

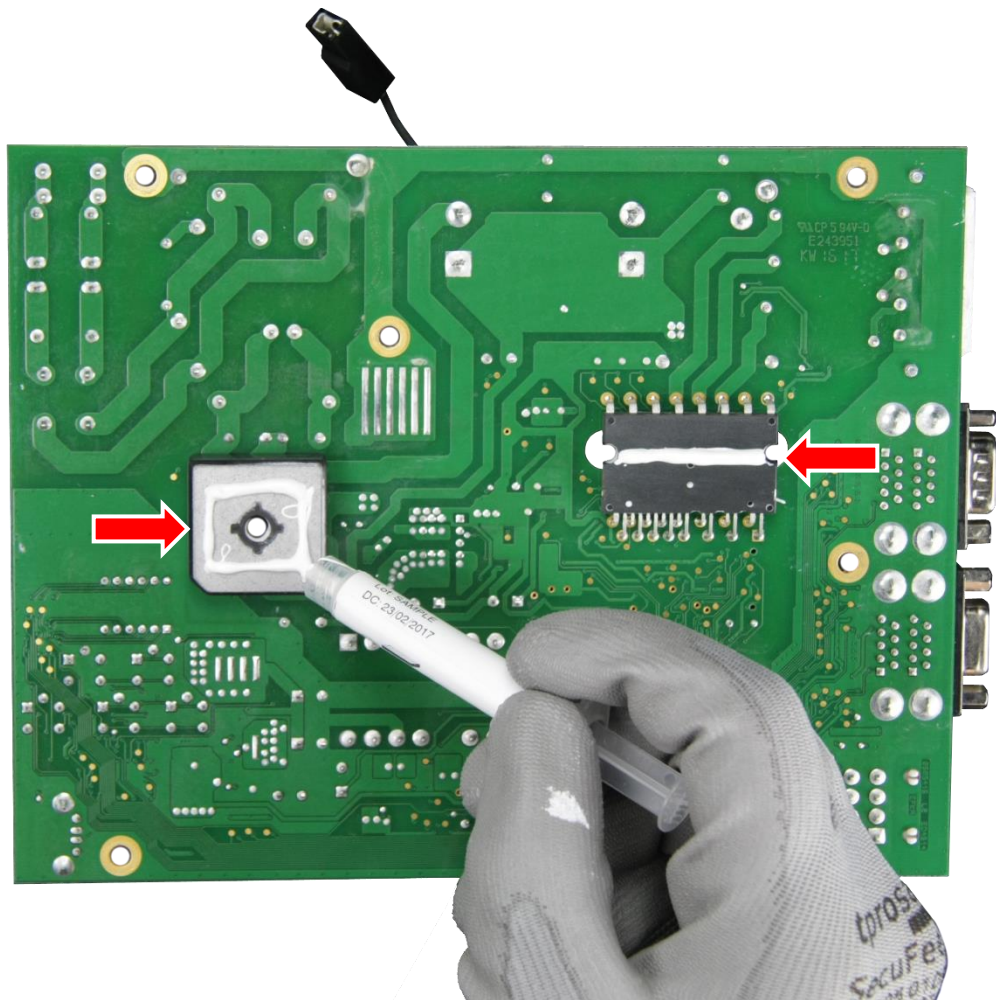
Remove the residues of the thermal compound from the housing and ensure that the contact surfaces are dust-free.

Note: Wear gloves to protect your skin!



- Apply the thermal compound from repair set (**EAKci**-Nr. 150 5077) on powermodul and rectifier on the circuit board. Follow the illustration!

Note: Wear gloves to protect your skin!



Note: Apply the thermal compound ca. \varnothing 3mm thick!

- Carefully insert the board.
- Insert the marked screws and tighten them with specified torque.

Note: make sure that the drillings are concentric over each other!



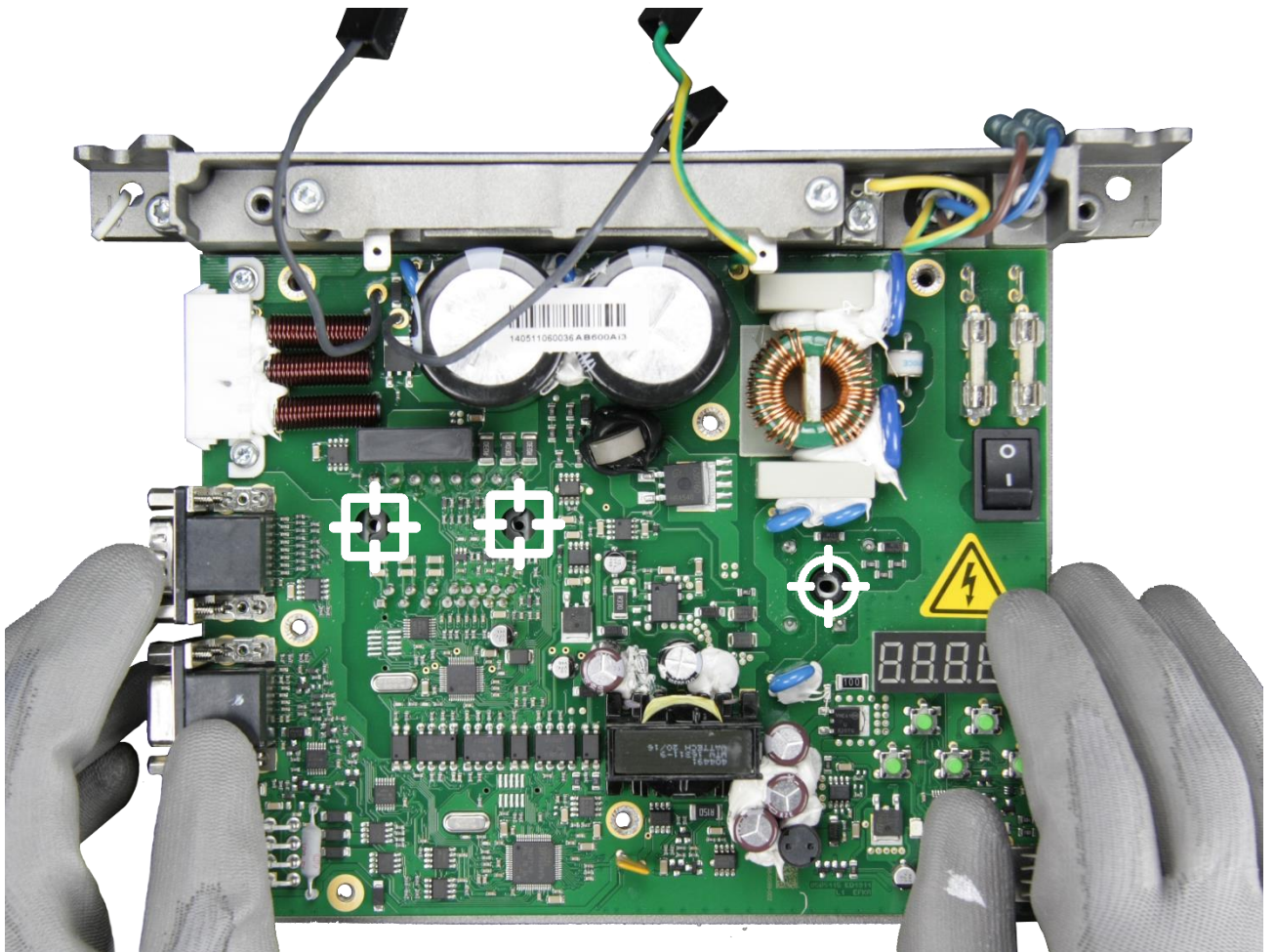
2x M3x16 (Torx **T10**) Torque: 0,8 +/-0,2 Nm

IMPORTANT! Fix the screws reciprocally! Fix the screws again after 10 minutes with 0,8 +/-0,2 Nm torque!



1x M4x16 (Torx **T20**) Torque: 2 +/-0,2 Nm

IMPORTANT! Fix the screws again after 10 minutes with 2 +/-0,2 Nm torque!

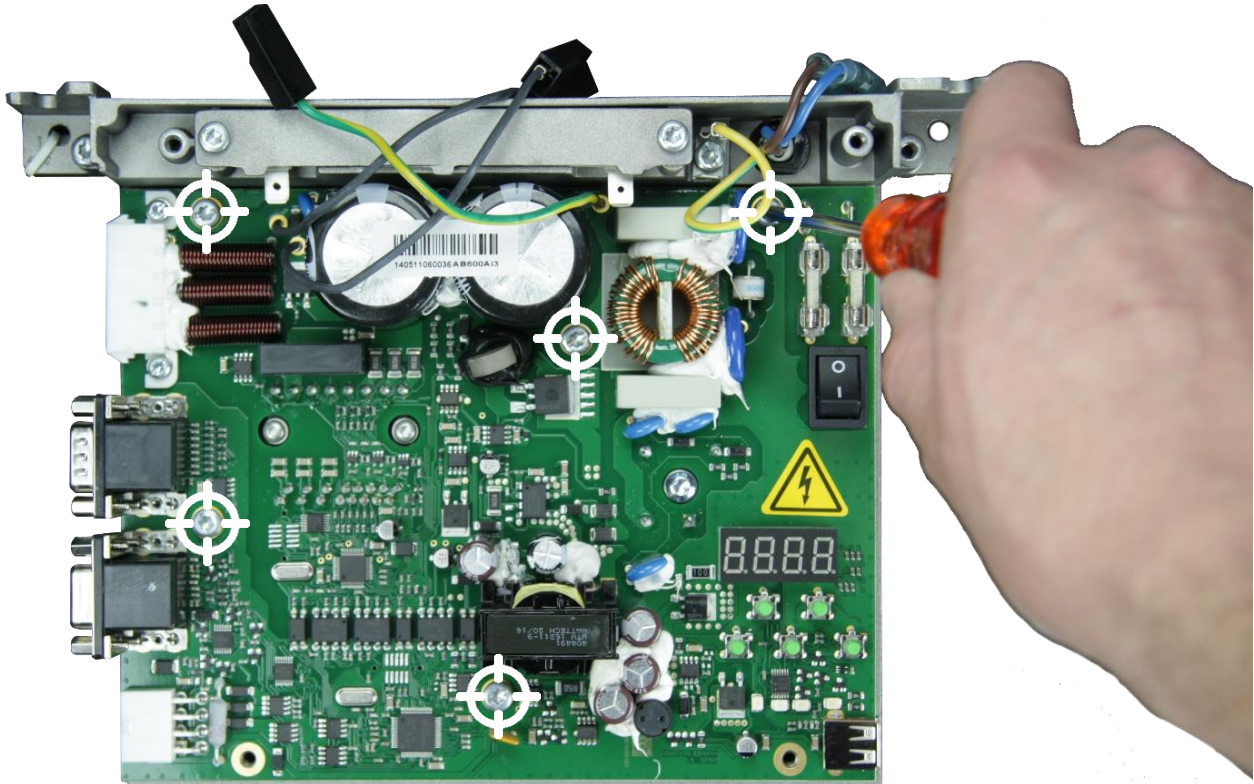


- Insert the marked screws and tighten them with specified torque.

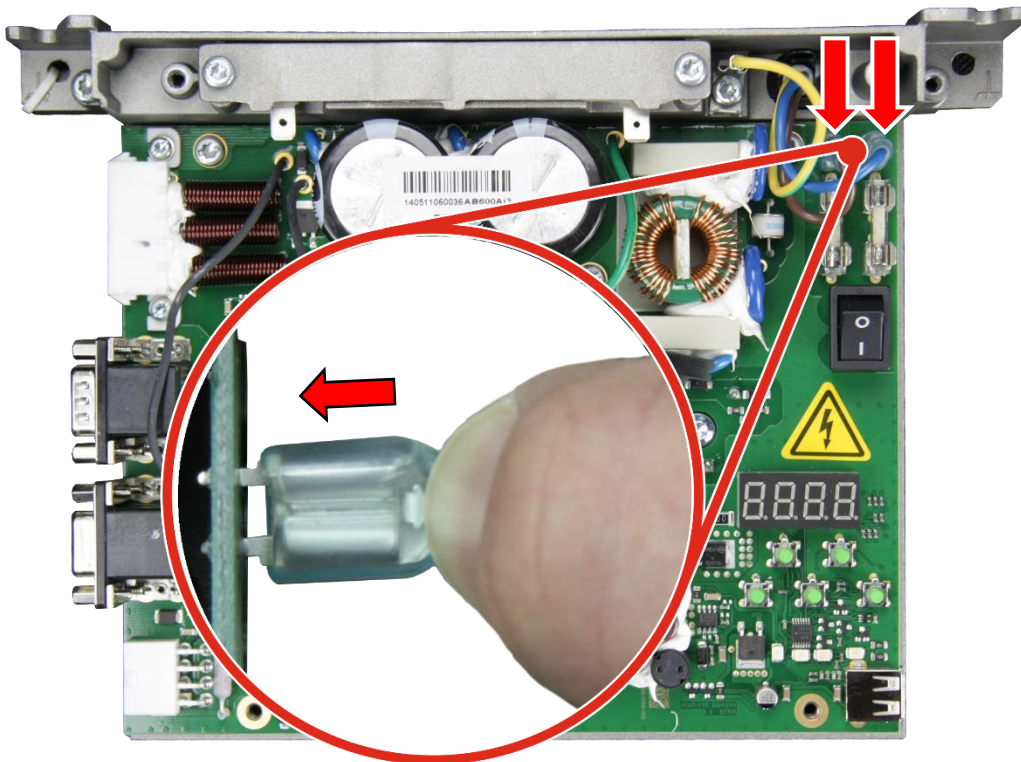


5x M4x10 (Torx T20)

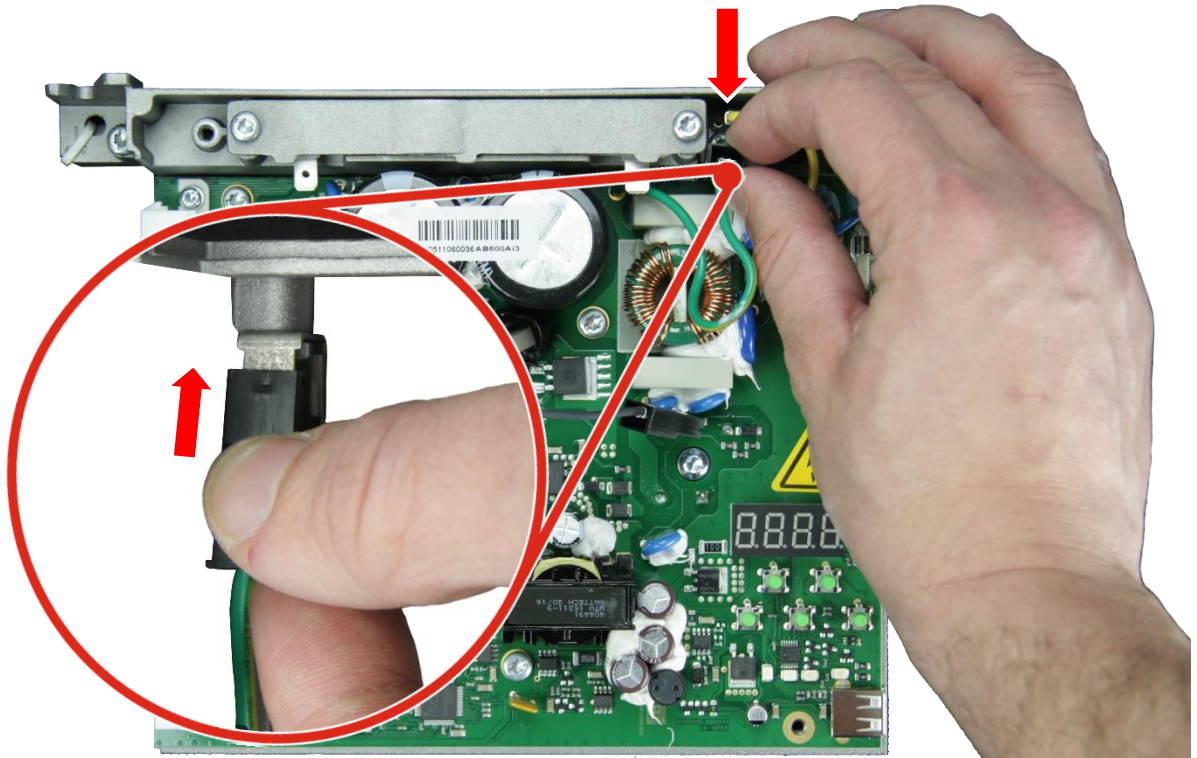
Torque: 1 +0,5 Nm



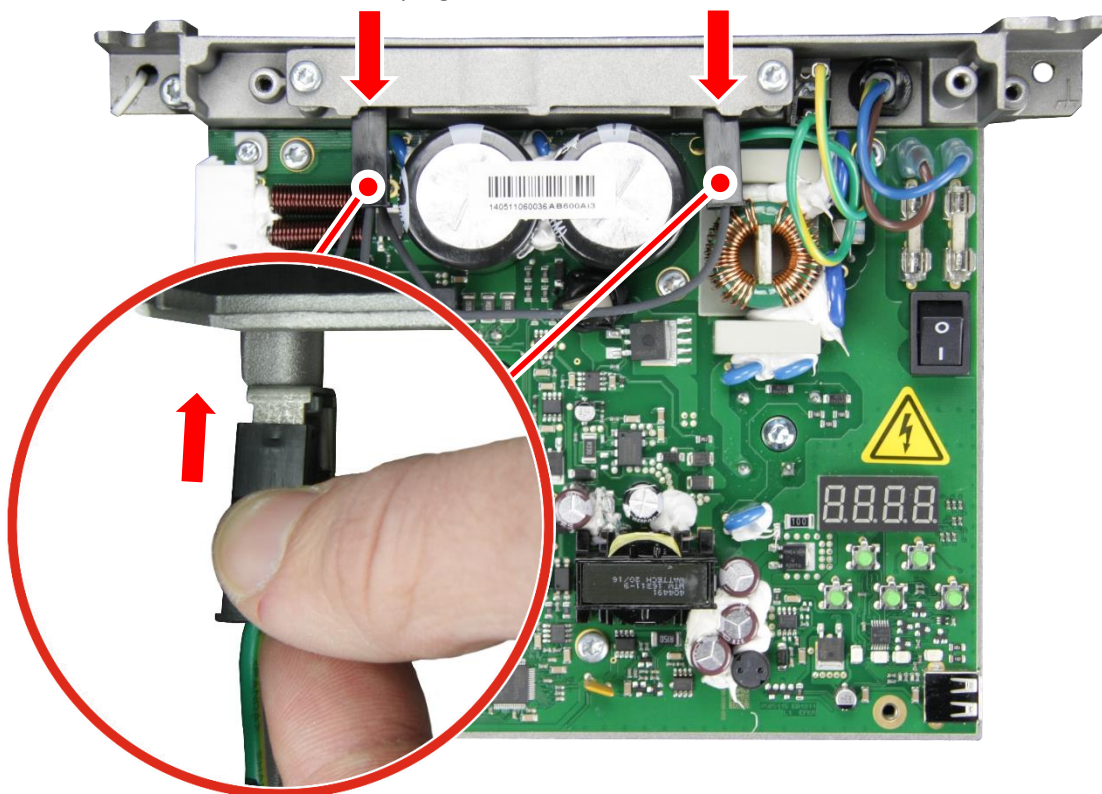
- Connect the two "Fast on" plug connectors.



- Connect the "Fast on" plug connector of the board ground.



- Connect the two "Fast on" plug connectors of the brake resistor.

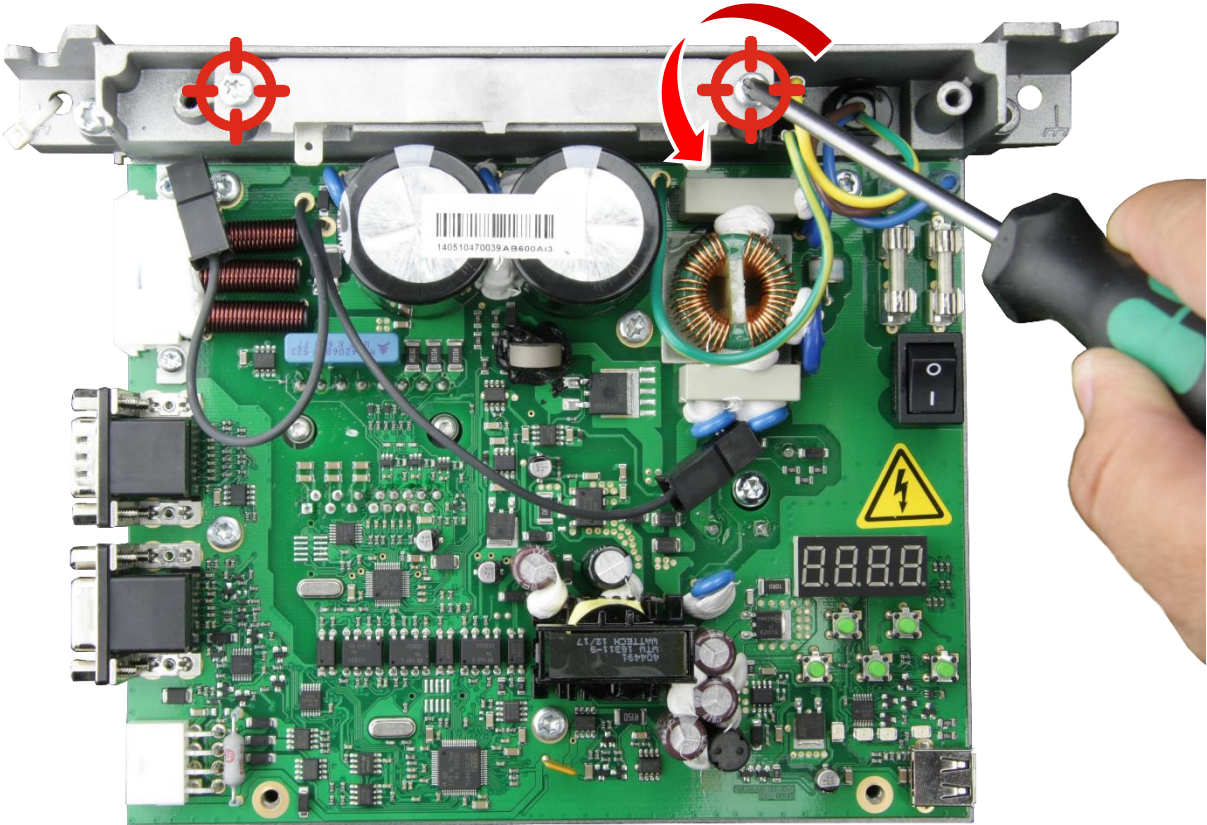


3.5 Changing the brake resistor 91R

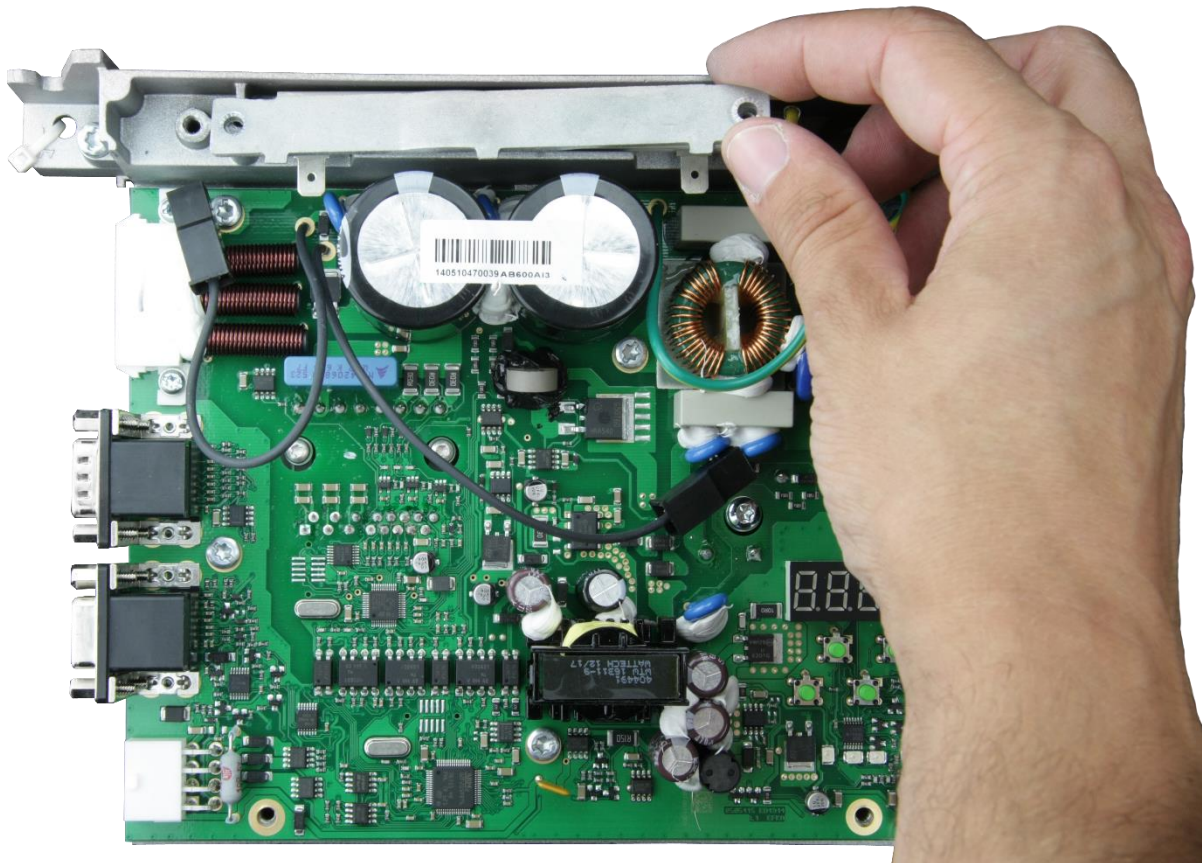
- Pull off the "Fast on" plug connectors of the brake resistor 91R.



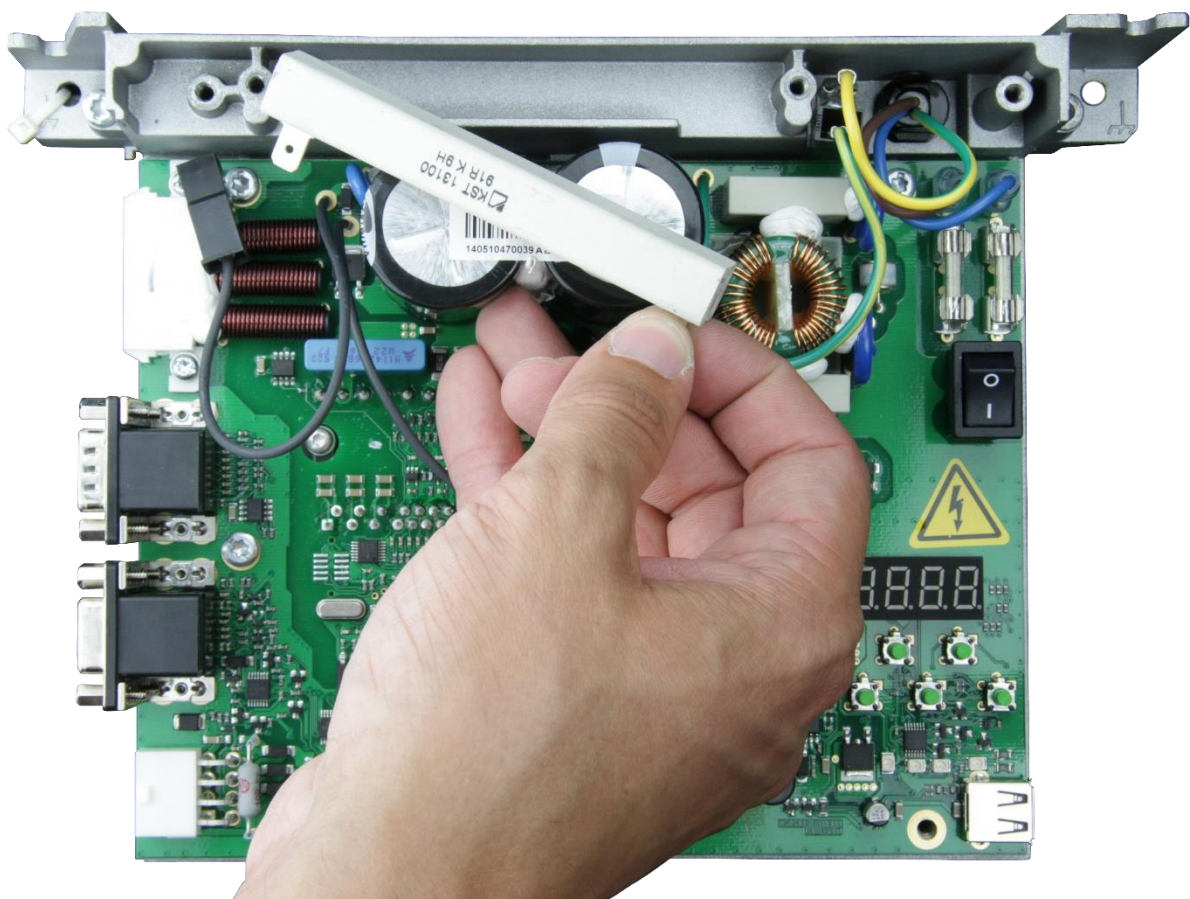
- Remove the marked screws (Torx \oplus T20).



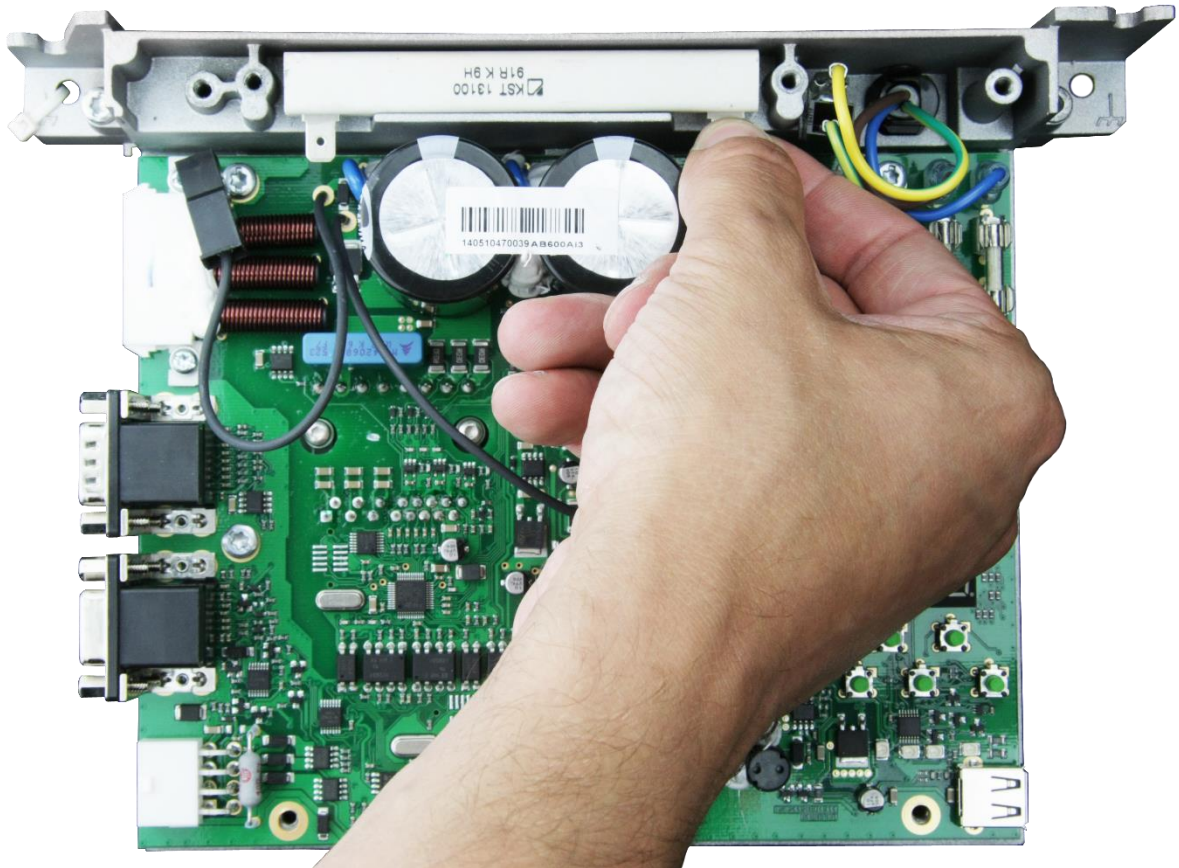
- Remove the bracket.



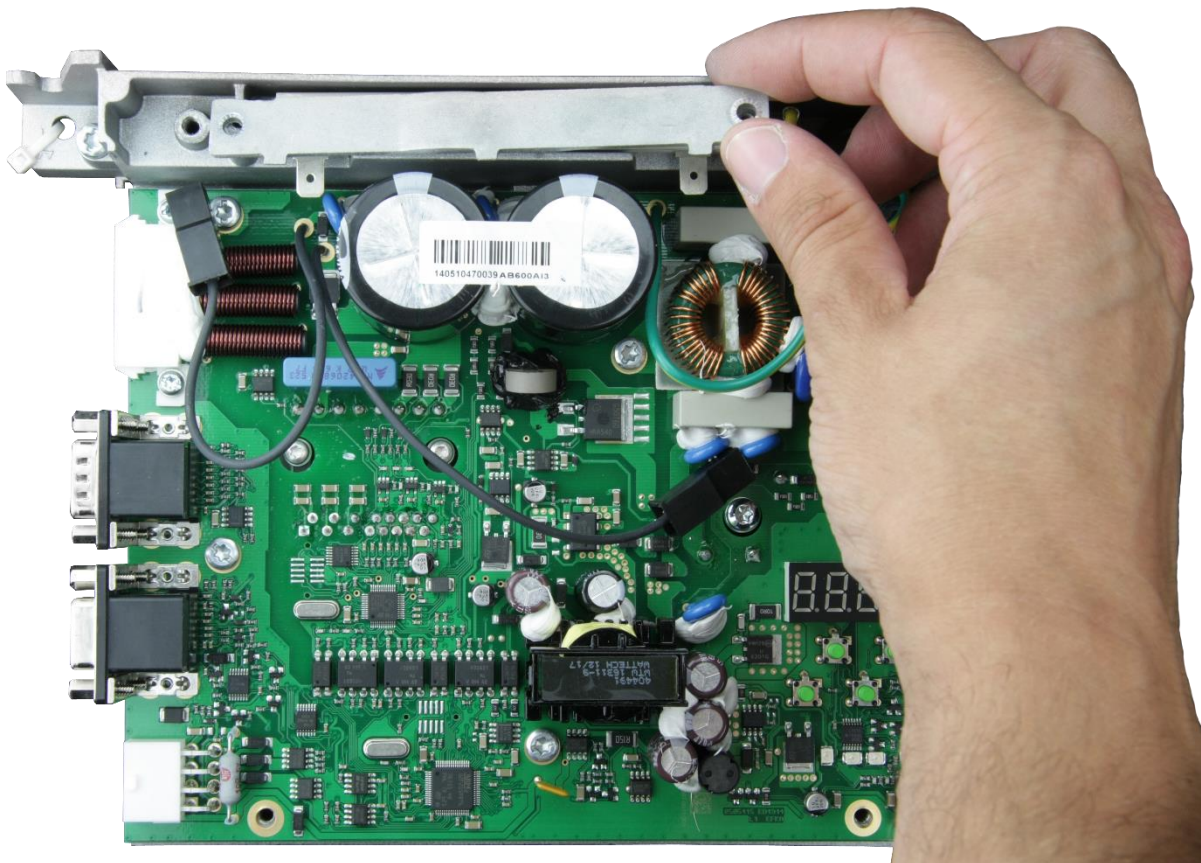
- Change brake resistor 91R (**Efka**-Nr. 0504872)



- Replace the brake resistor



- Mount the bracket

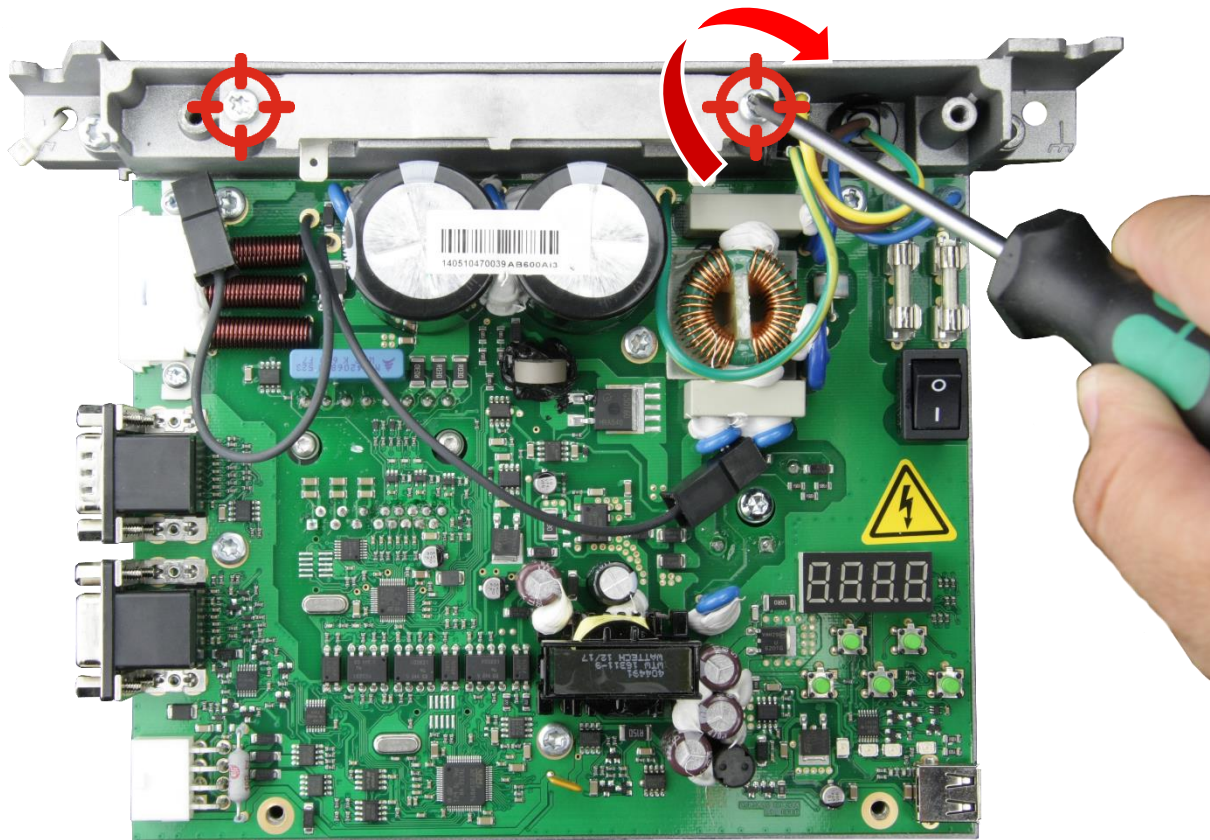


- Insert the marked screws and tighten them with specified torque.



1x M4x16 (Torx T20)

Torque: 2 +/-0,5 Nm



- Connect the "Fast on" plug connectors of the brake resistor 91R.



3.6 Installing the housing

- Slide the side housing cover carefully on the controls.



Note: Make sure that the proper seating of the housing is guaranteed.

- Tighten the 4 screws (Torx **T20**) of the side housing.



4 Changing the Circuit boards **AB611A**, **AB620A**, **IV620A** & **YA620A**

4.1 Required tools

- 1x Torx-Screw driver **T 20**

4.2 Removing the Control housing



- Remove the fastening screw (Torx **T 20**).



- Remove the 4 screws of the side housing (Torx T 20).



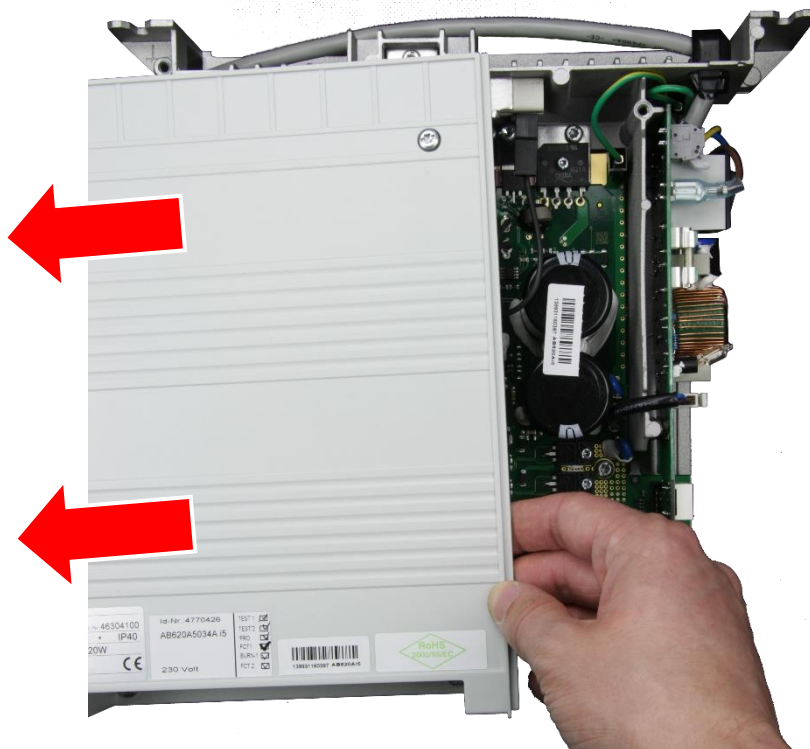
- Remove the front housing cover.

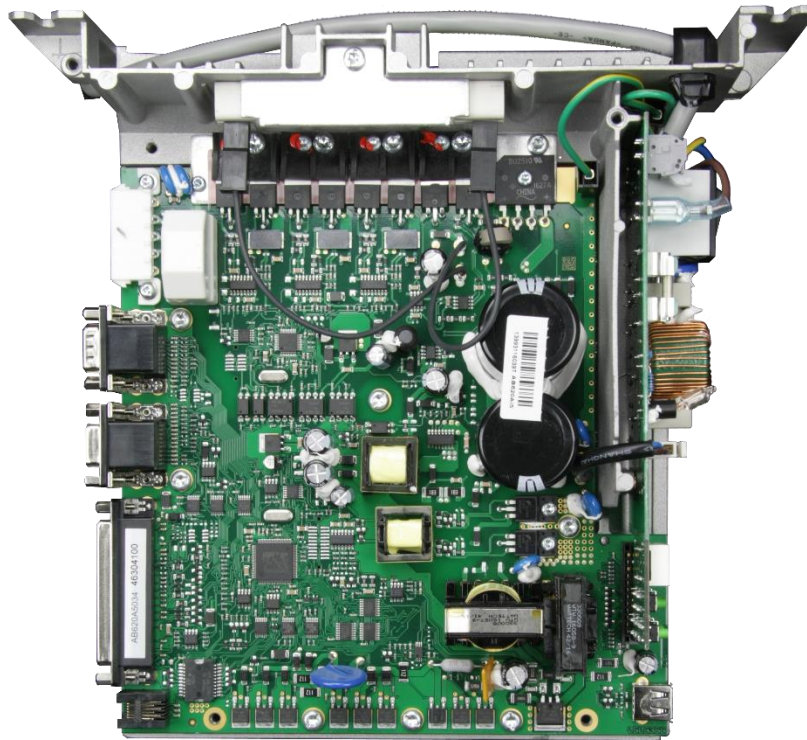
Note: First tip the cover slightly forward, then pull in away downwards.



- Remove the side housing cover.

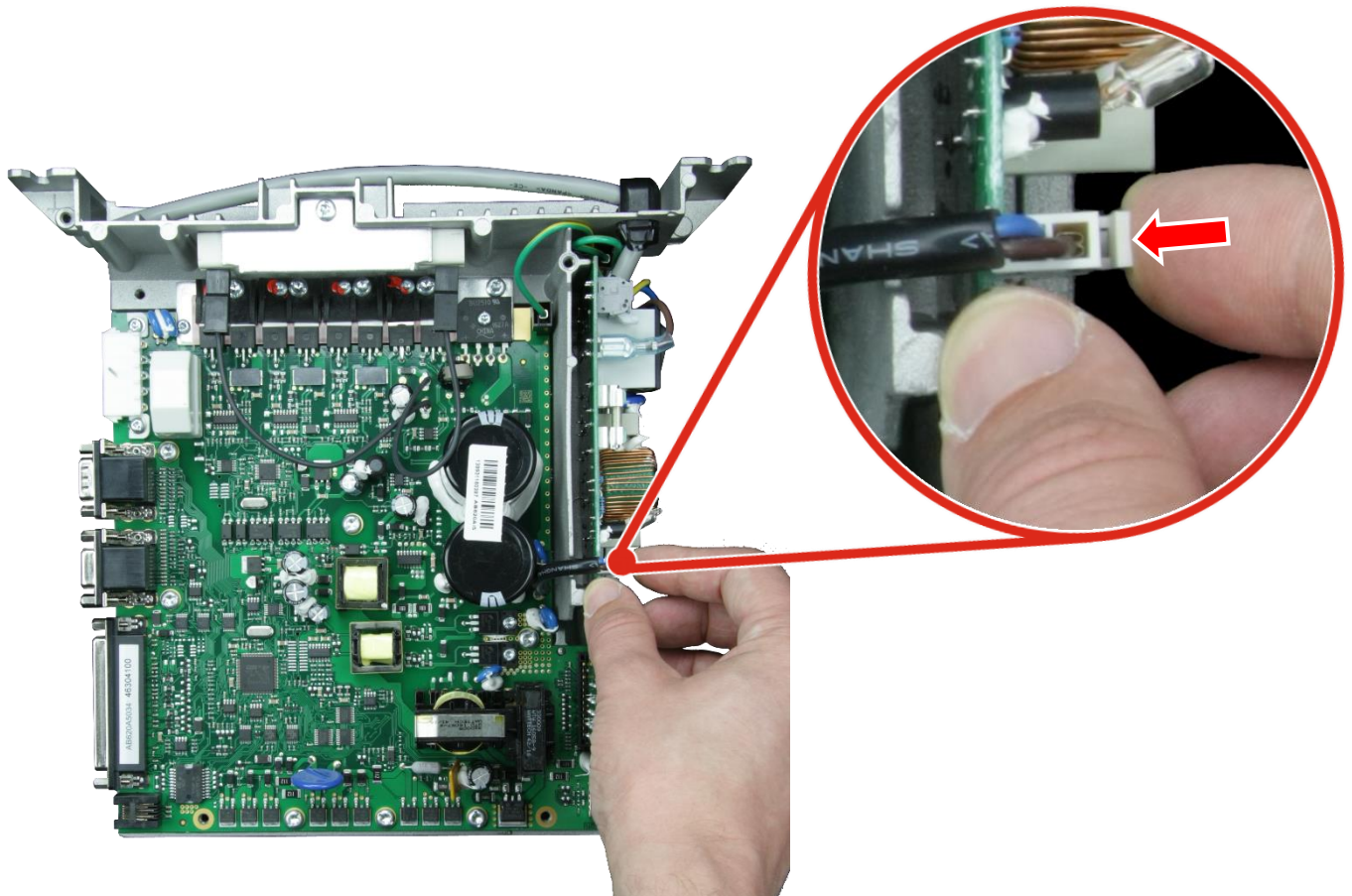
Note: First tip the cover slightly to the top, then pull it to the left.



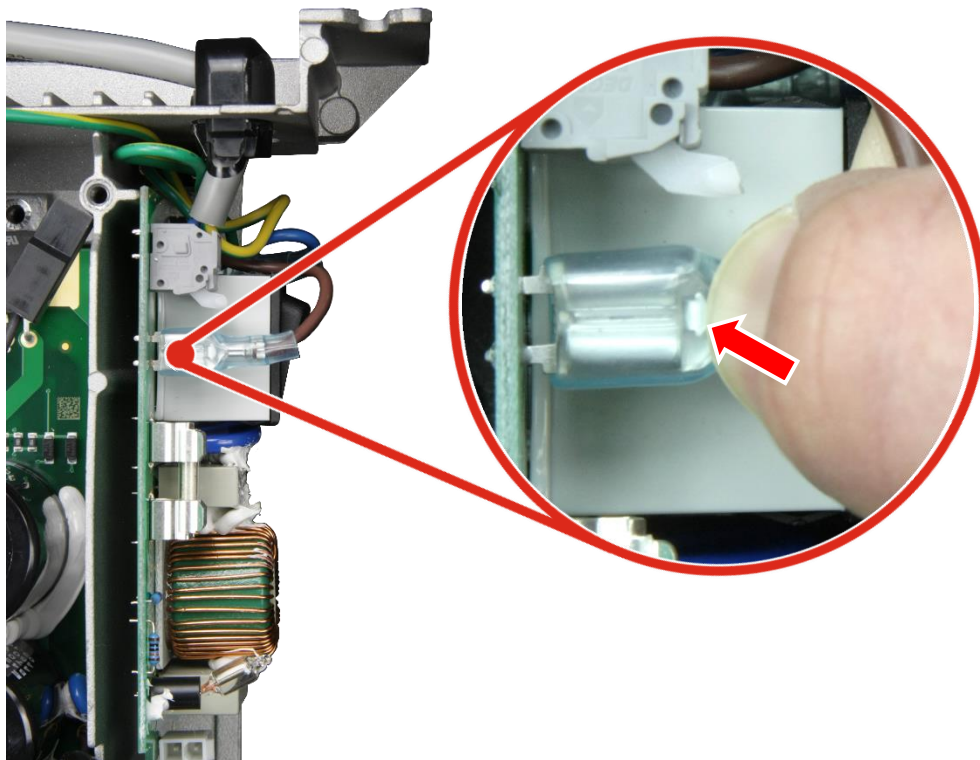
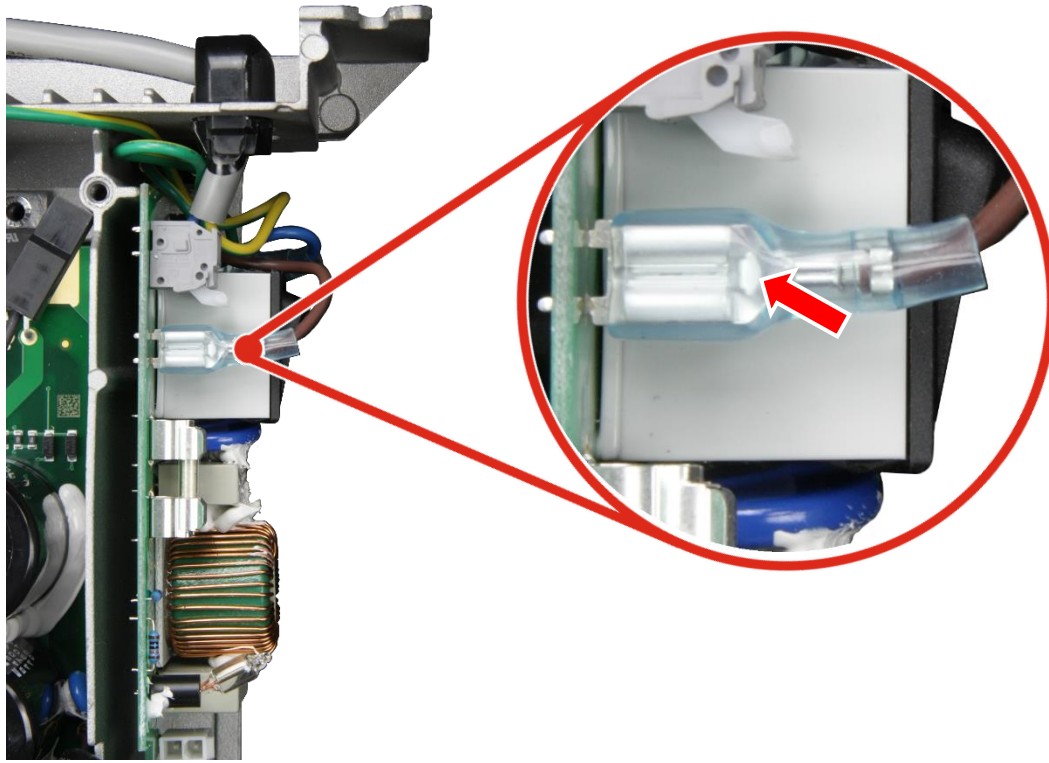


4.3 Removing the line filter circuit board (Efka-Nr. 311 3832)

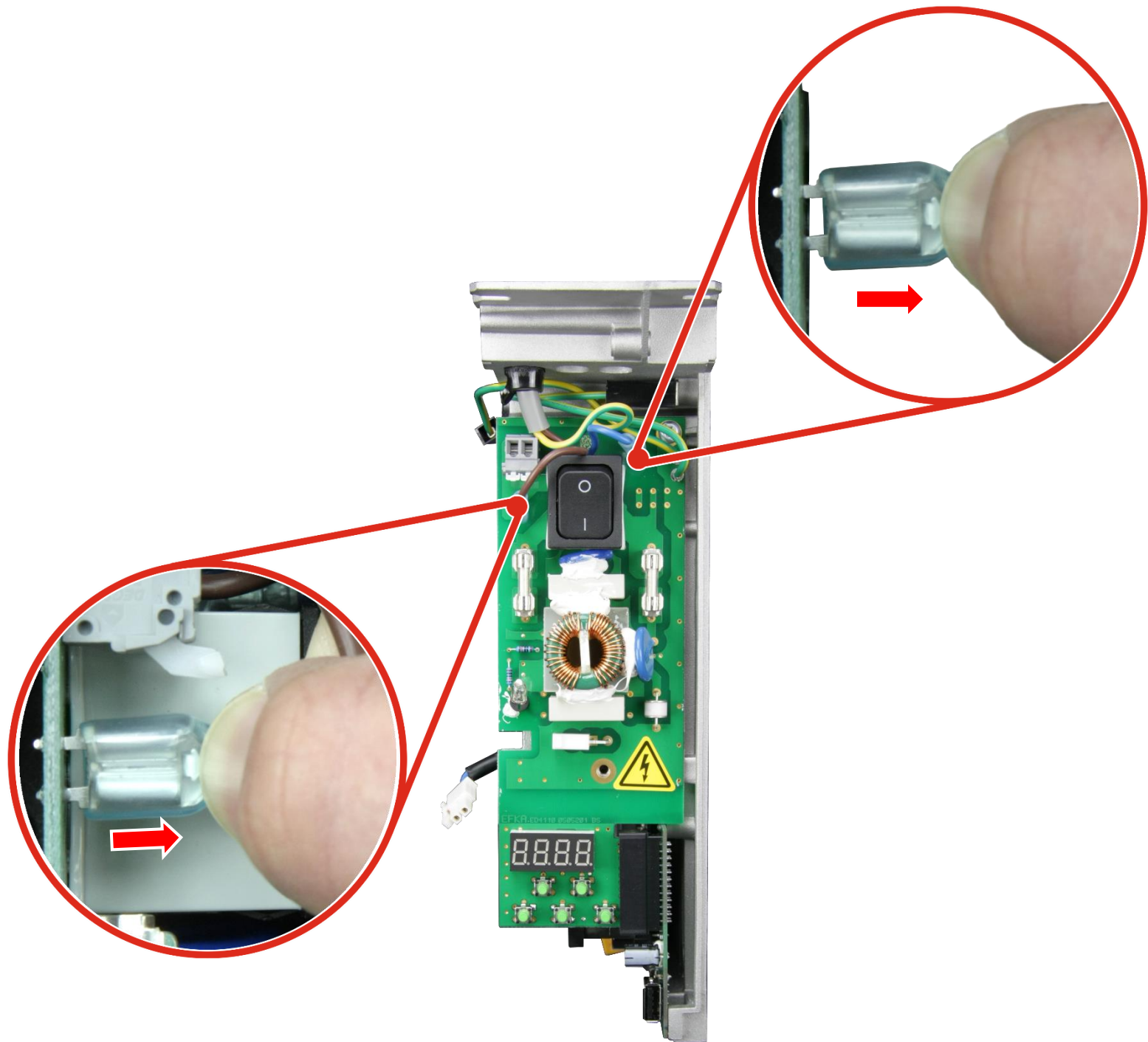
- Press the lock release of the 2-pin connecting plug and pull it carefully from the circuit board.



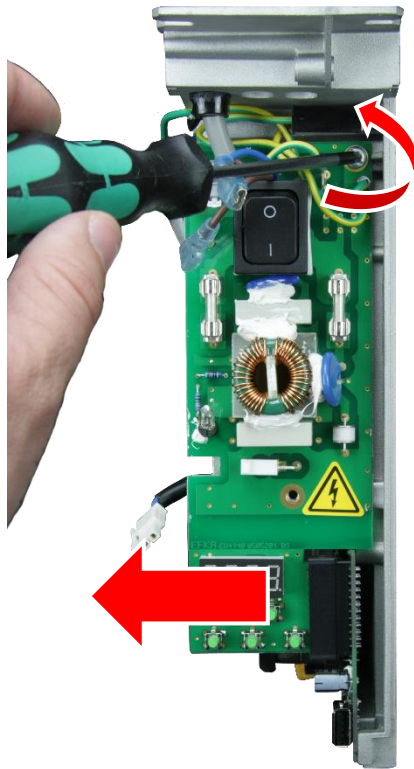
- Press the lock of the "Fast on" plug with your fingernail and pull it carefully from the circuit board.



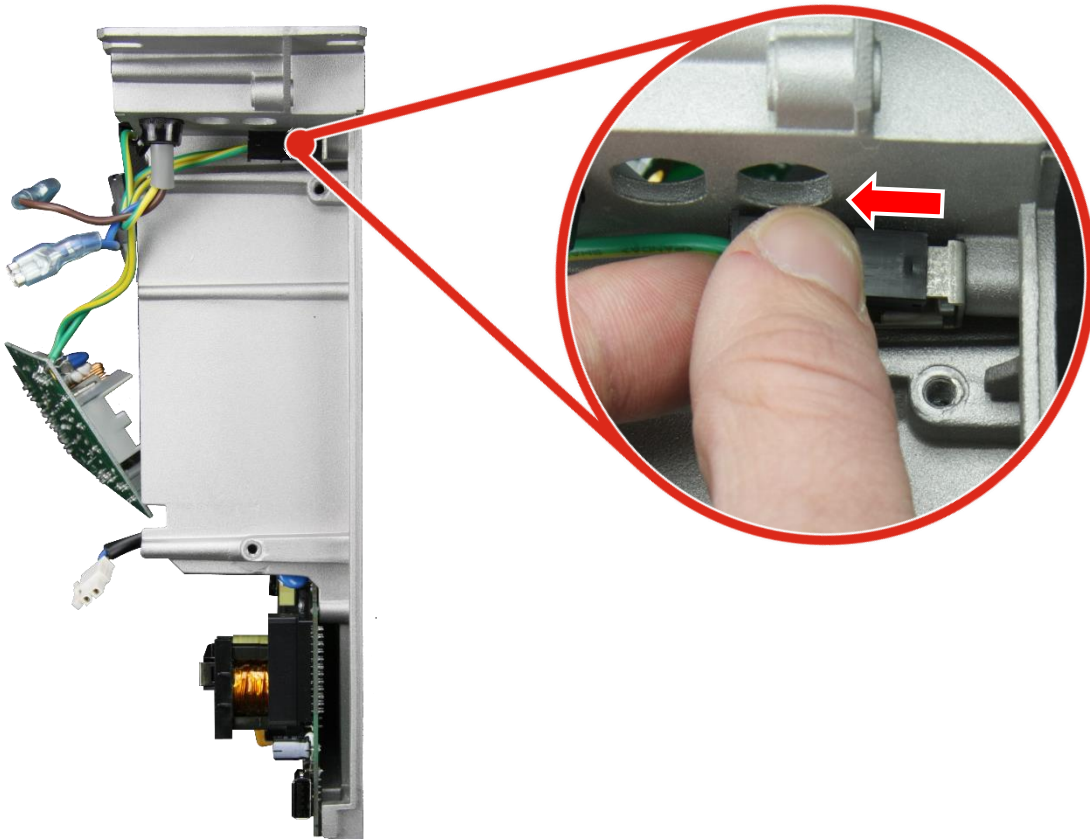
- Turn the control box and pull off both of the "Fast on" plugs.



- Remove the last screw (Torx T 20) and pull the line filter circuit board carefully out of the board slot.

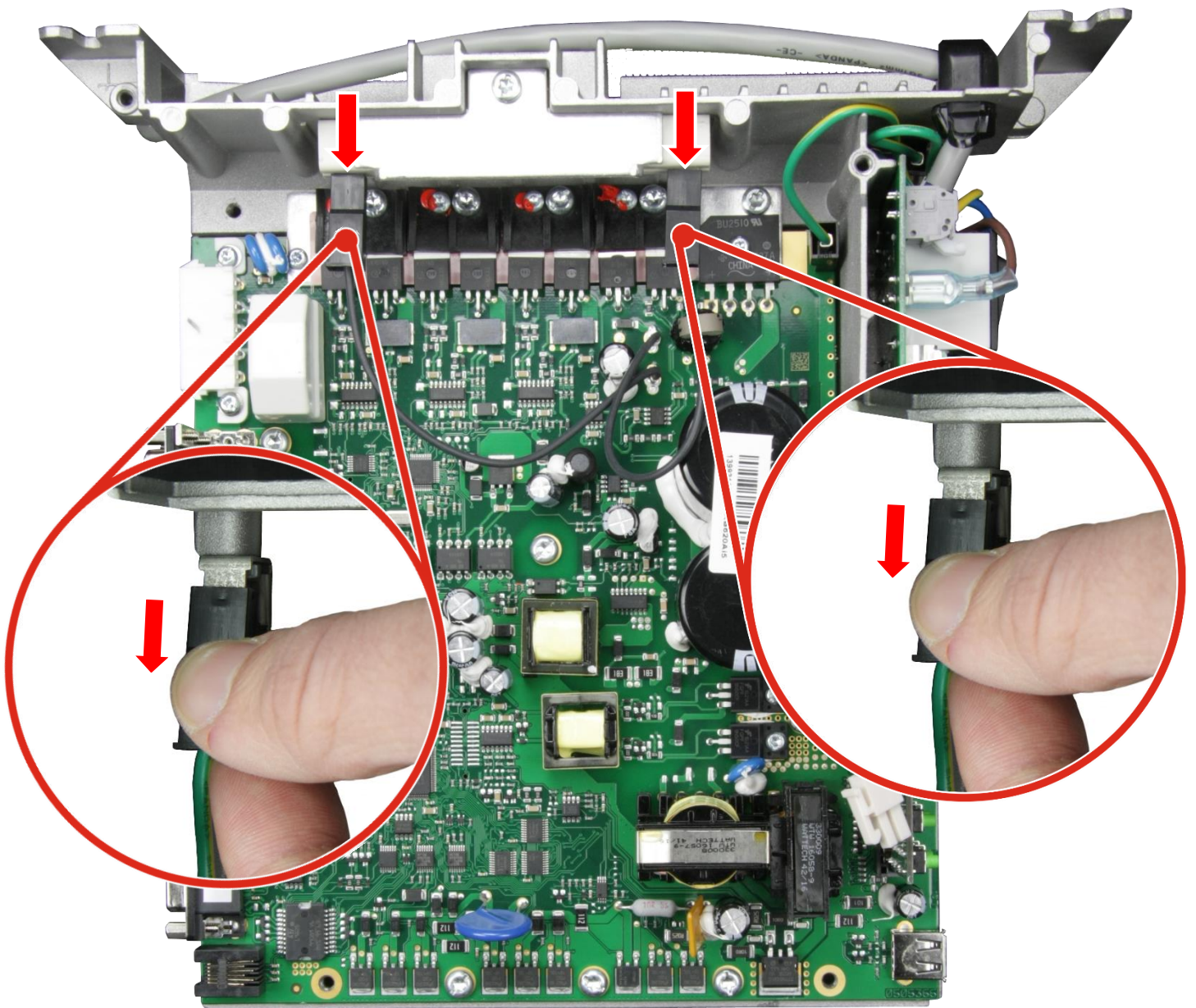


- Remove the "Fast on" plug from the cast housing of the controls.

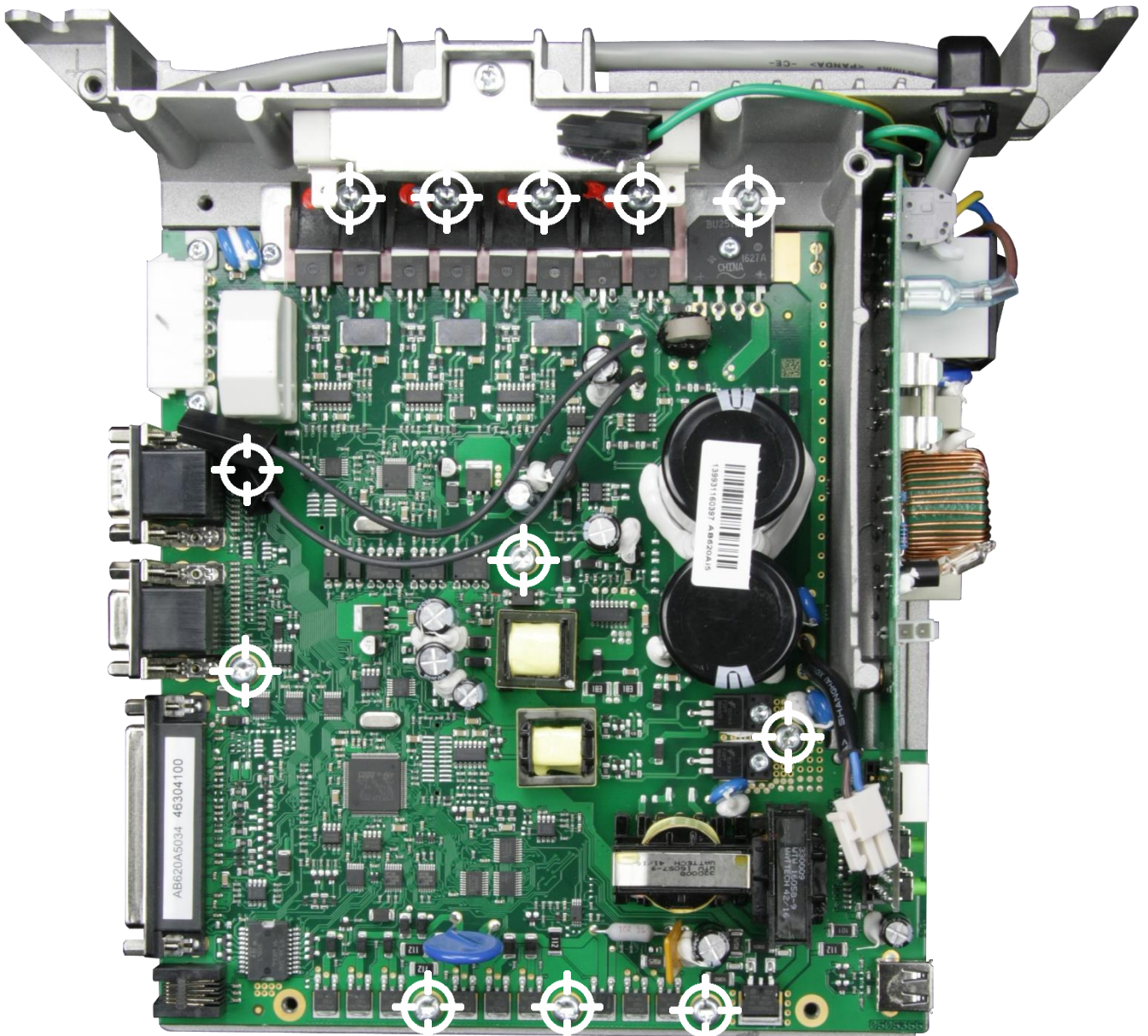


4.4 Removing the main circuit board

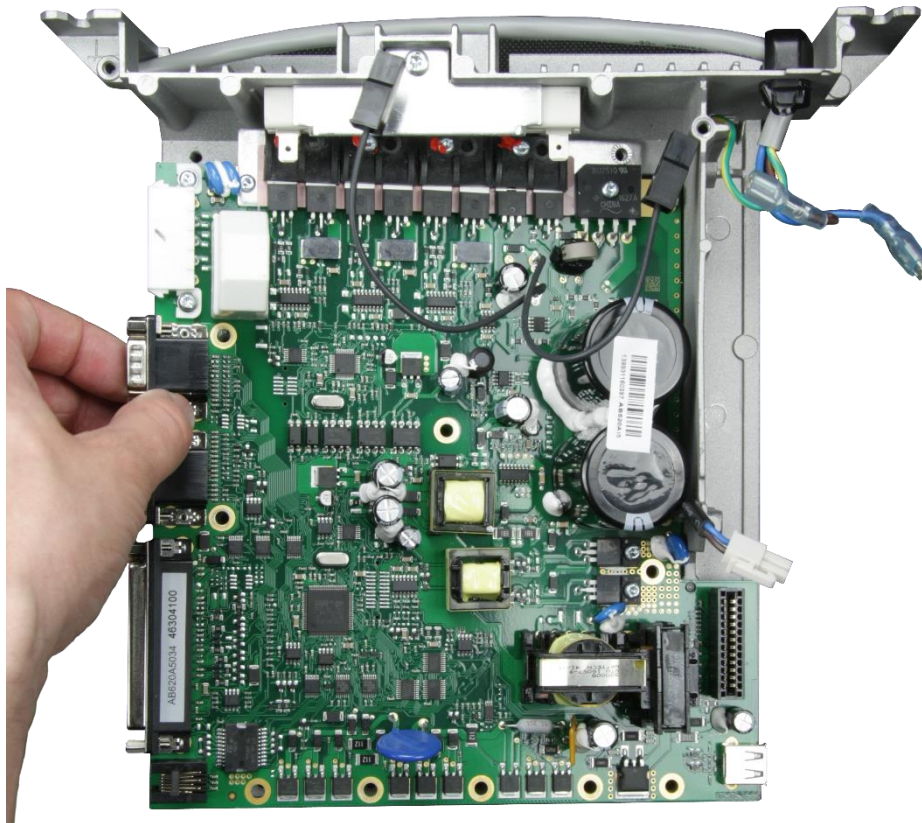
- Pull off the "Fast on" plug connector of the board ground.
- Pull off the "Fast on" plug connector of the brake resistor.



- Remove the 12 marked screws (🔩 Torx T20)



- Carefully lift the circuit board.

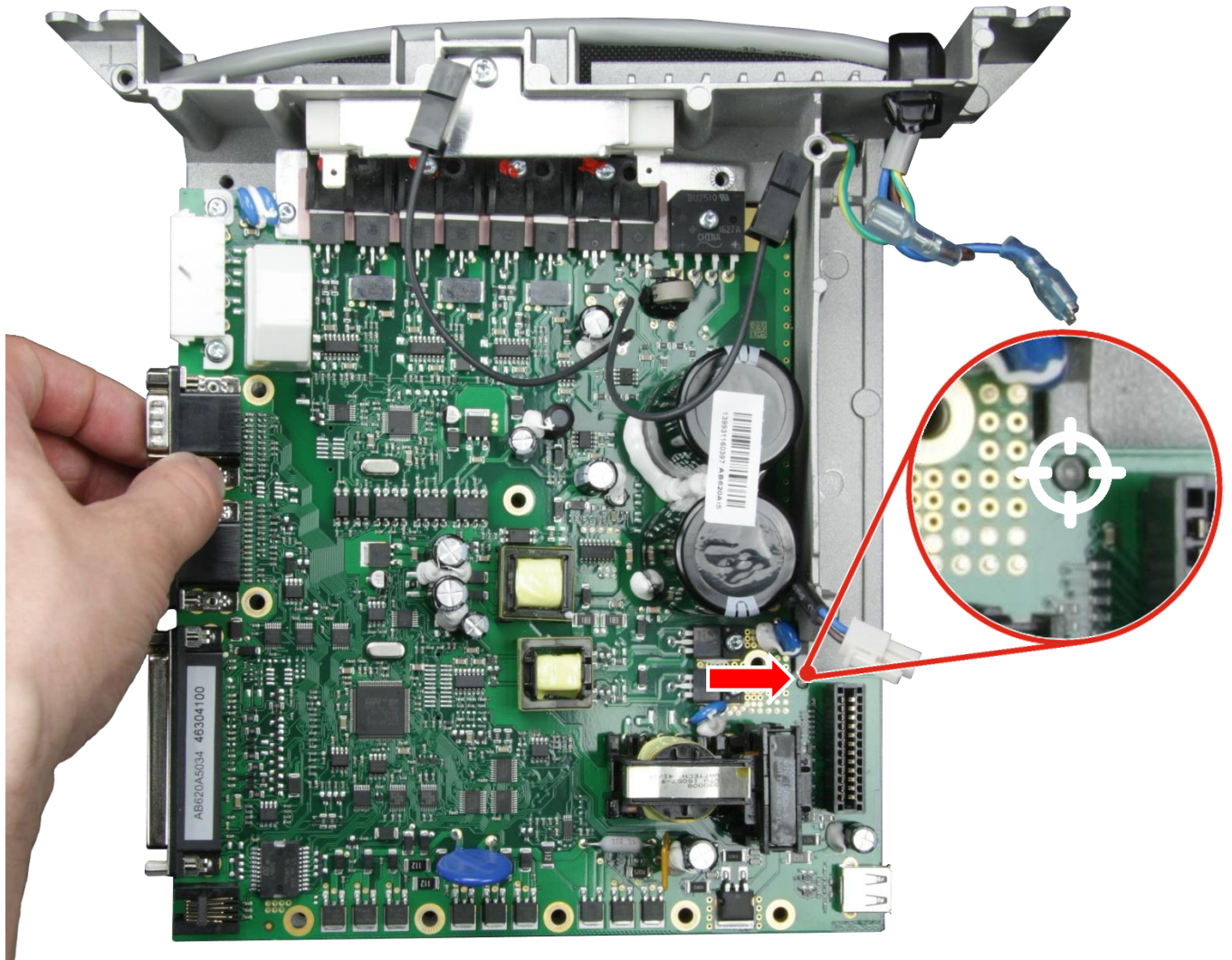


4.5 Installation of the main circuit board

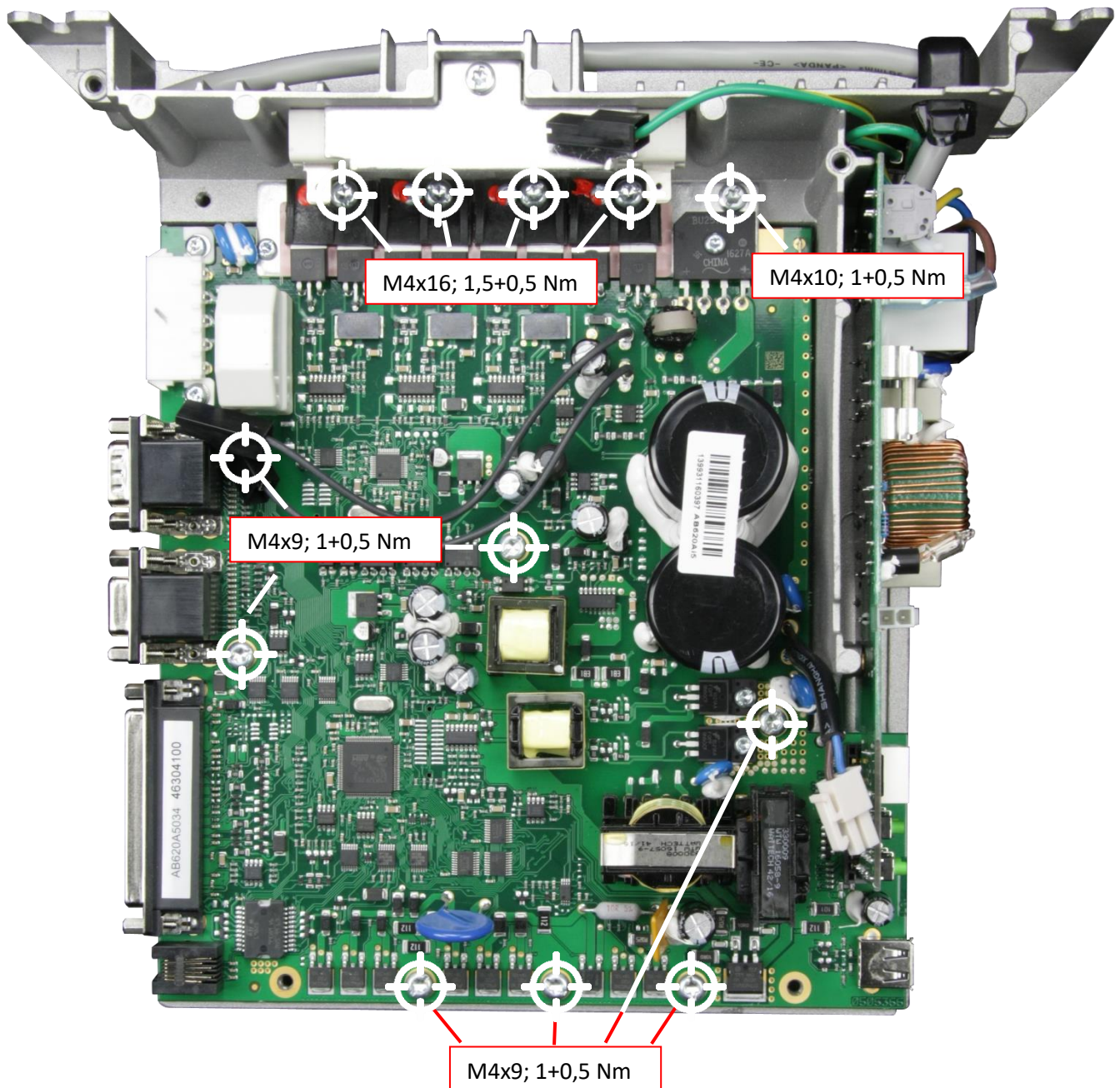


- Carefully insert the board.

Note: Make sure that the positioning pin is located in the positioning hole.

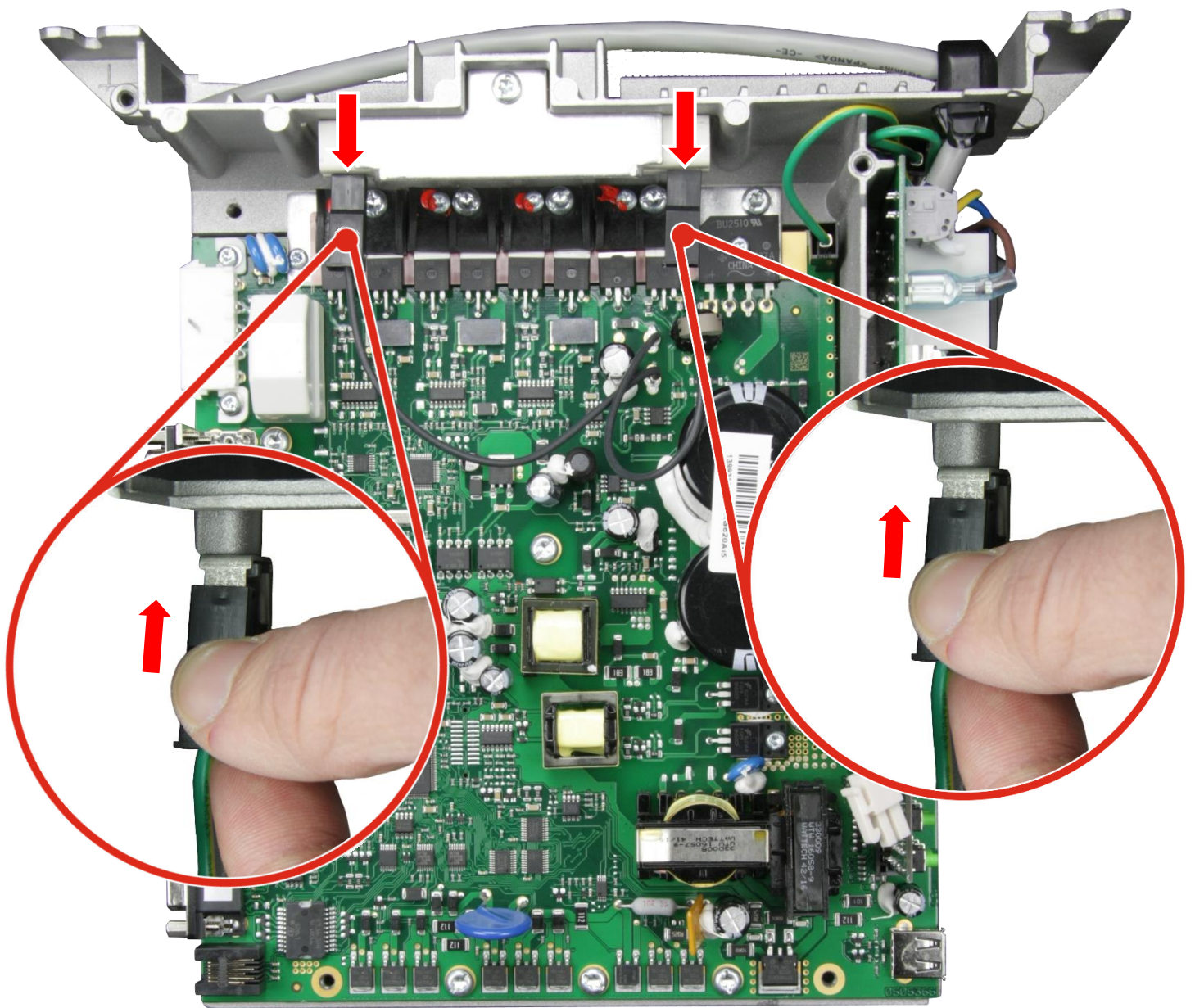


- Insert the marked fastening screws of the main circuit board and tighten them with the specified torque.

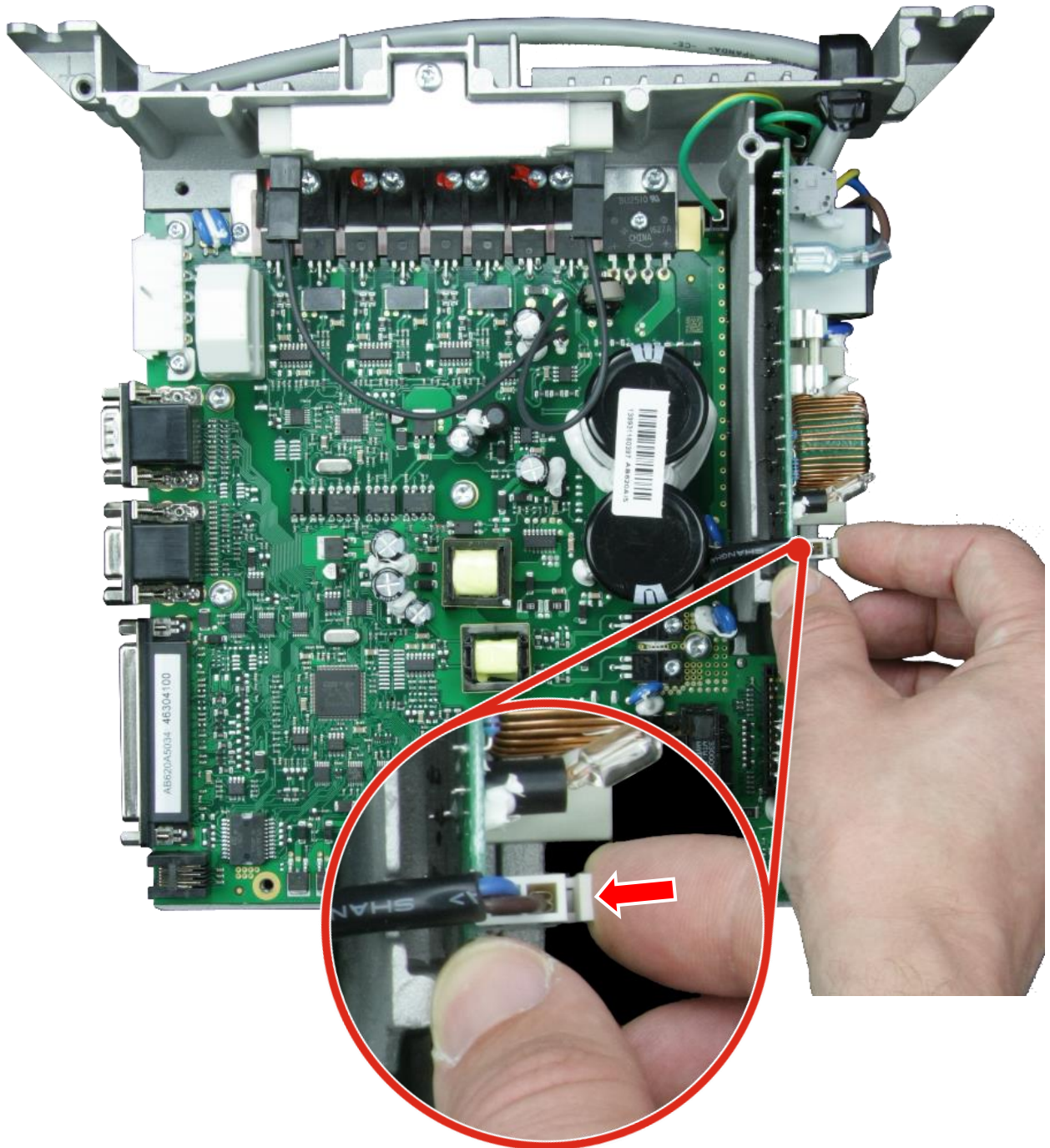


- Connect the "Fast on" plug connector of the board ground.
- Connect the "Fast on" plug connector of the brake resistor.

Note: The line filter circuit board must be installed (see chapter 4.6).

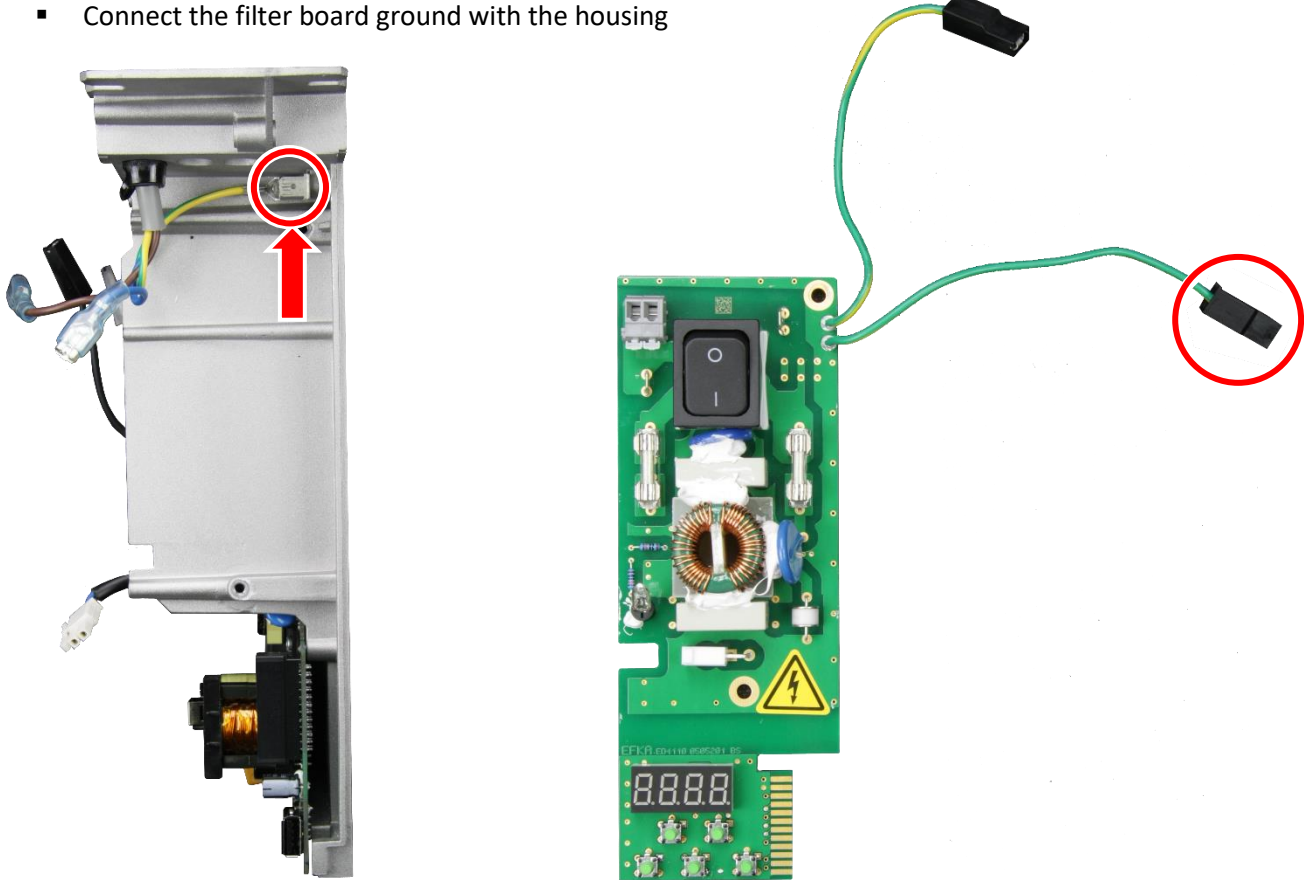


- Connect the 2-pin plug connector of the main circuit board on the line filter board.

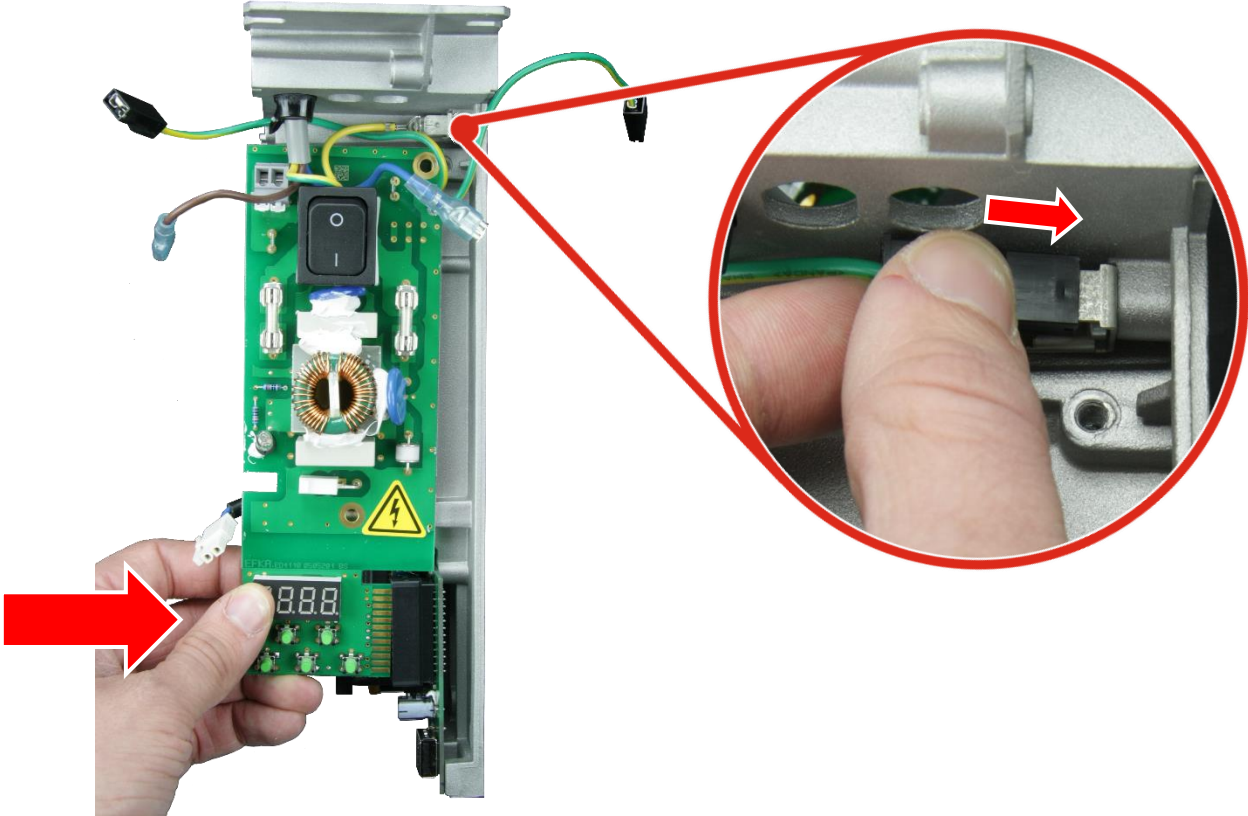


4.6 Installation of the line filter board (Eflca-Nr. 311 3832)

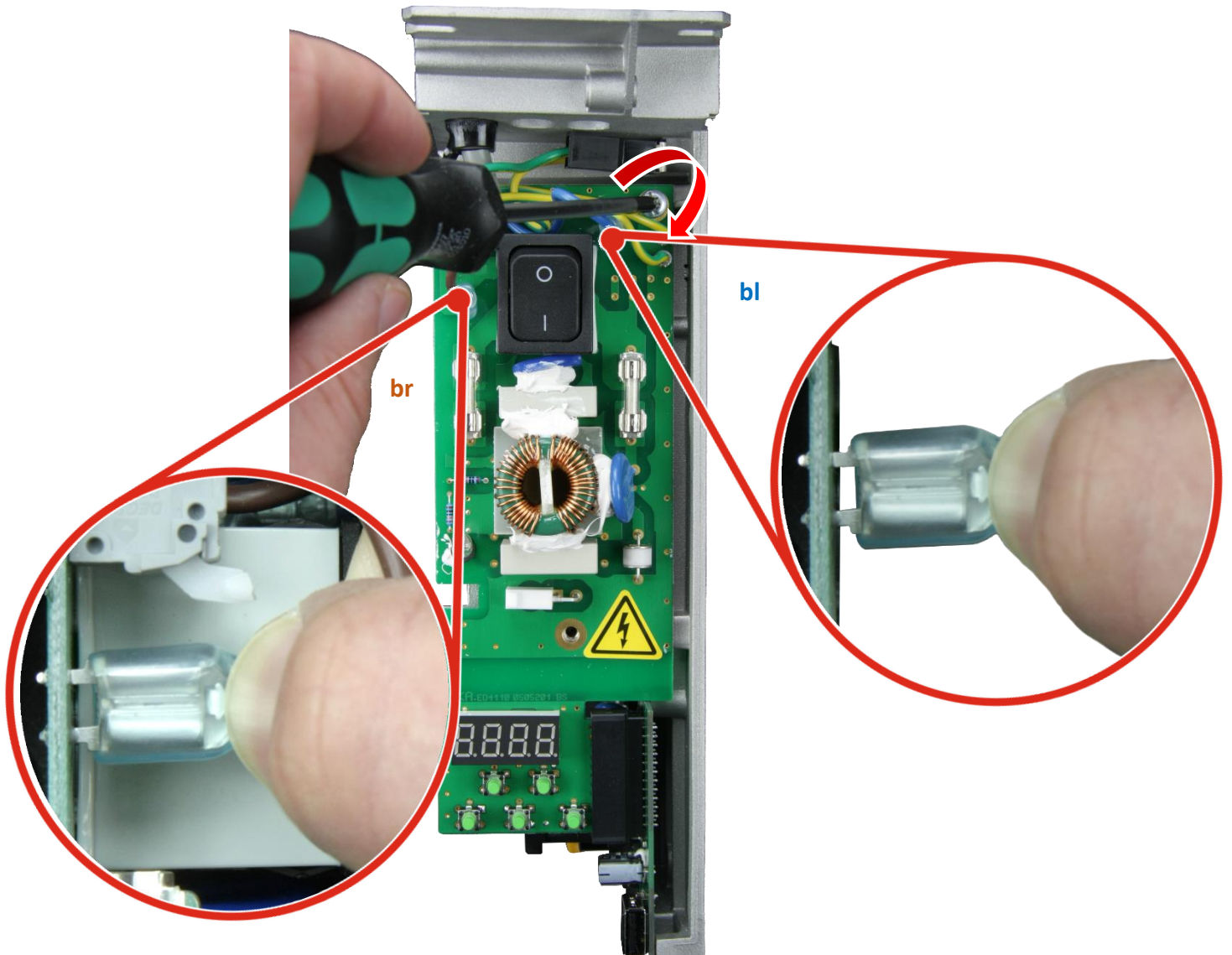
- Connect the filter board ground with the housing



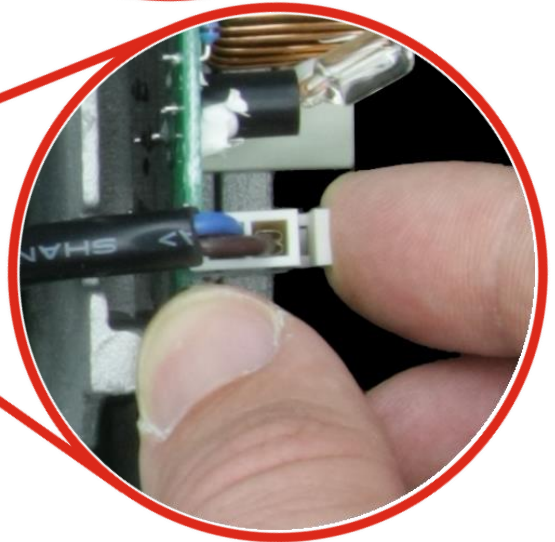
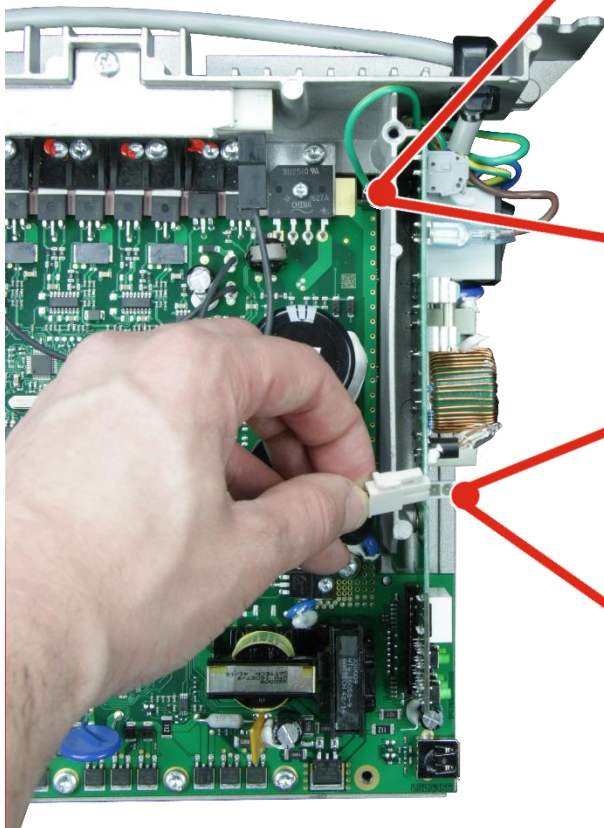
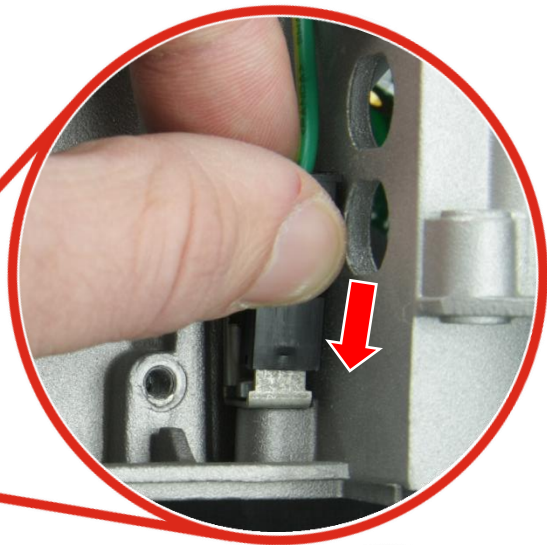
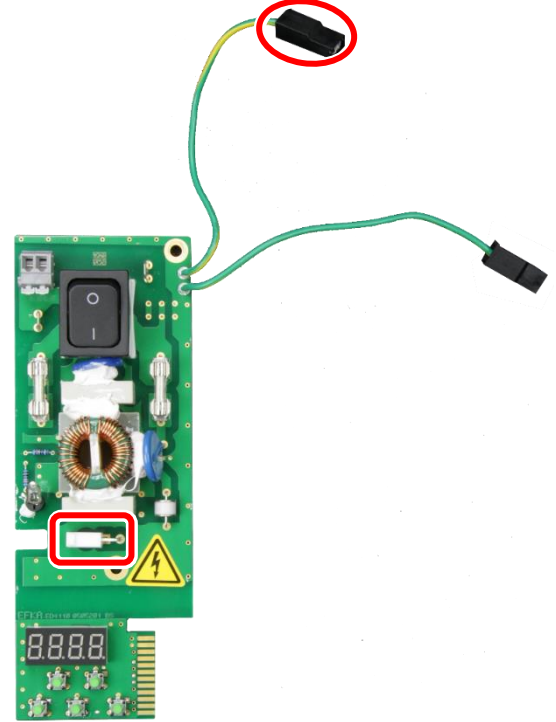
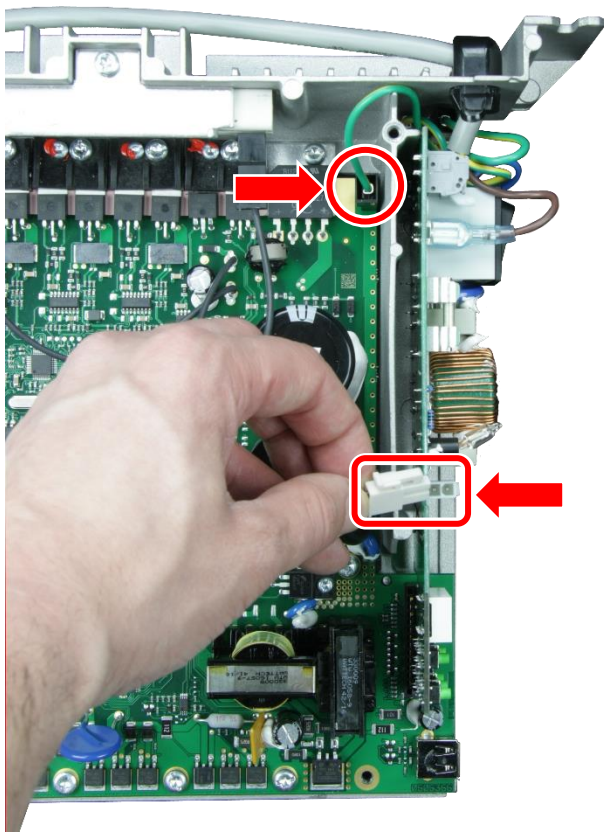
- Connect the "Fast on" plug with the cast housing of the controls.



- Fix the line filter board with a short screw (**Torx T 20, M4x9, 1+0.5 Nm**).
- Connect the "Fast on" plug connector of the power supply.

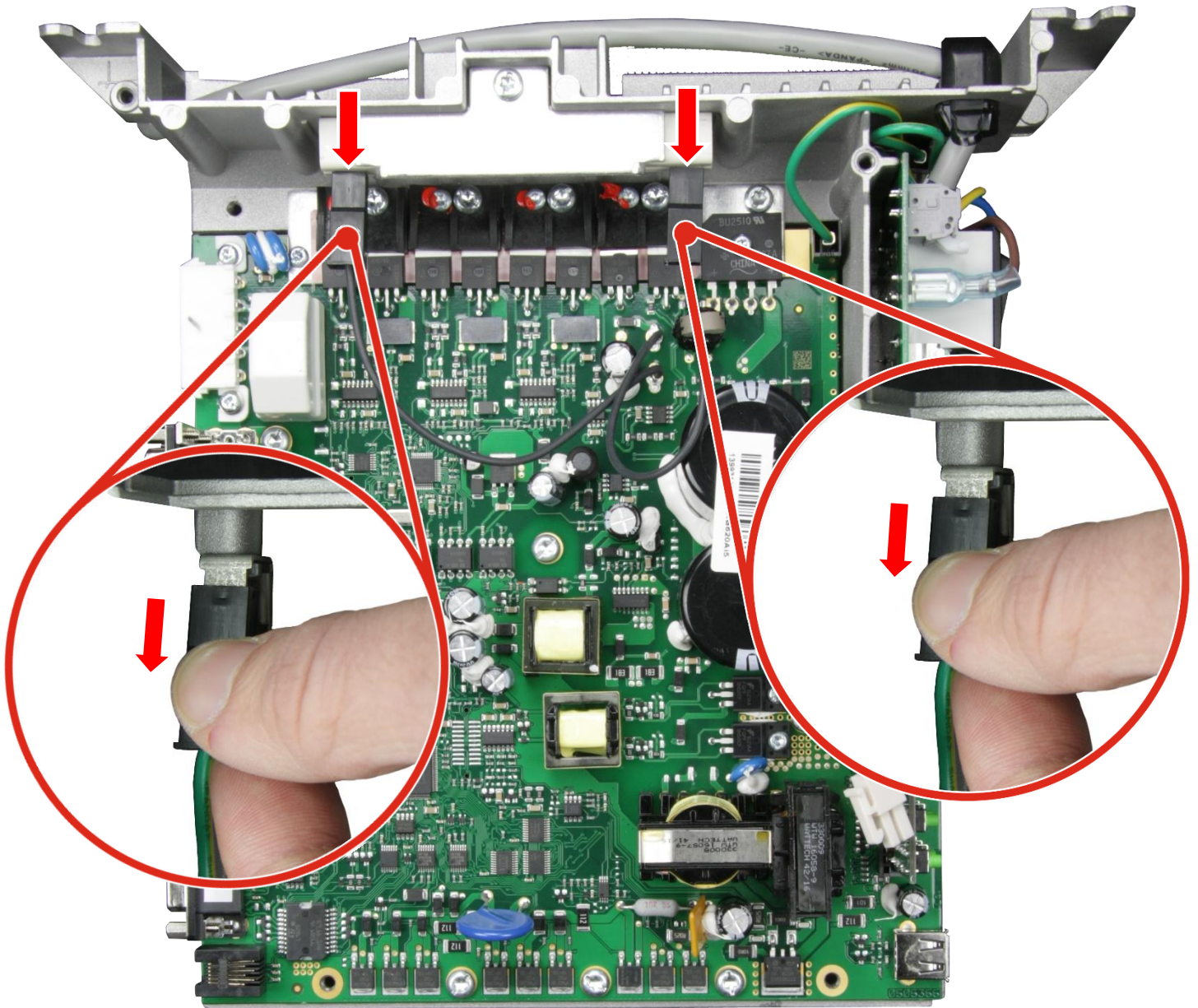



- Connect the second "Fast on" plug connector of the line filter board on the main circuit board.
- Connect the power supply of main circuit board.

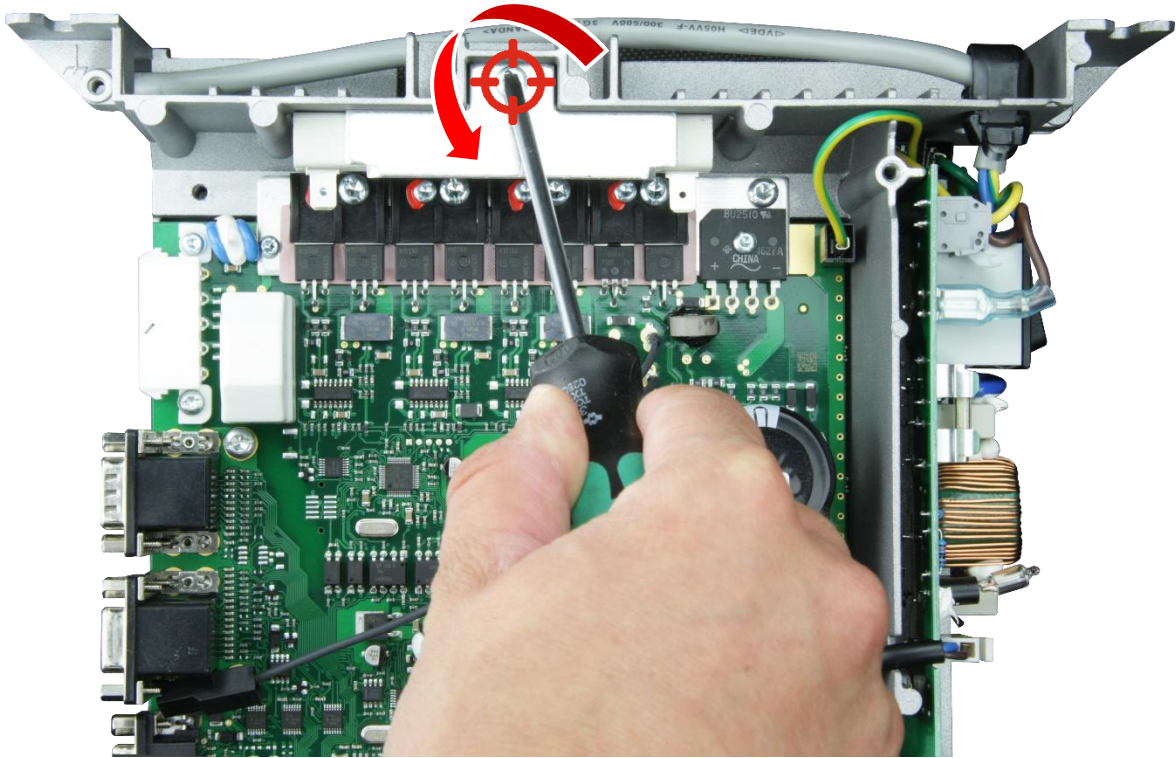


4.7 Changing the brake resistor 91R

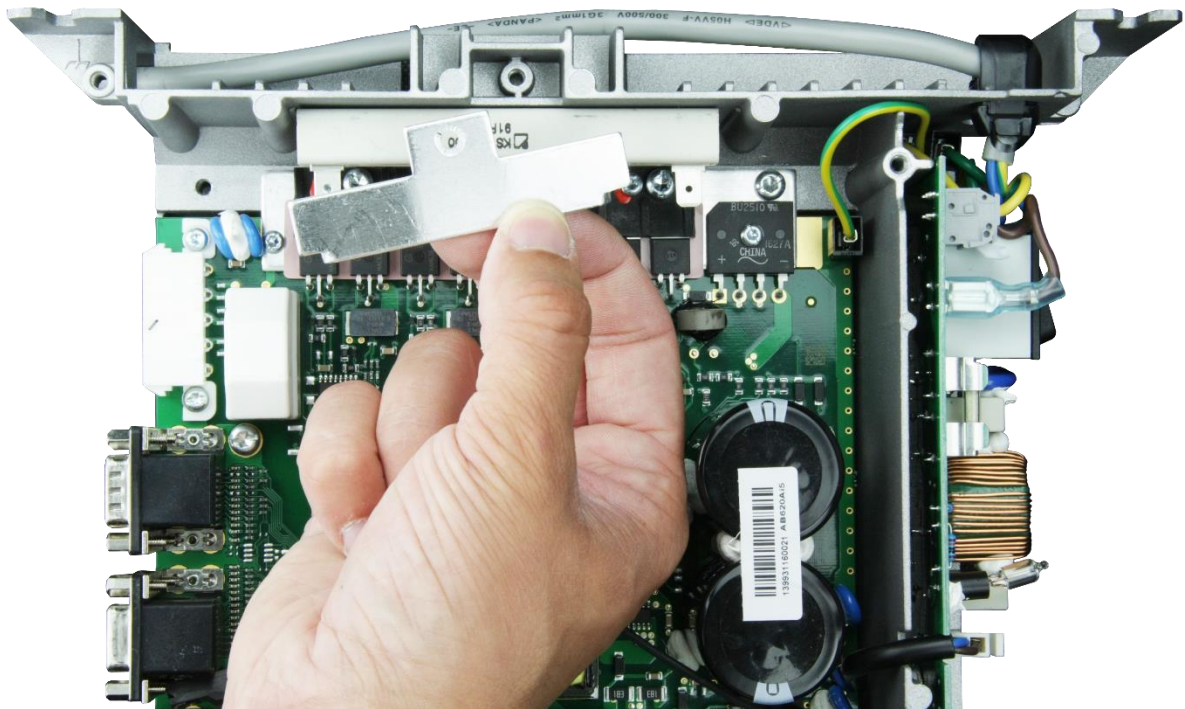
- Pull off the "Fast on" plug connectors of the brake resistor 91R.



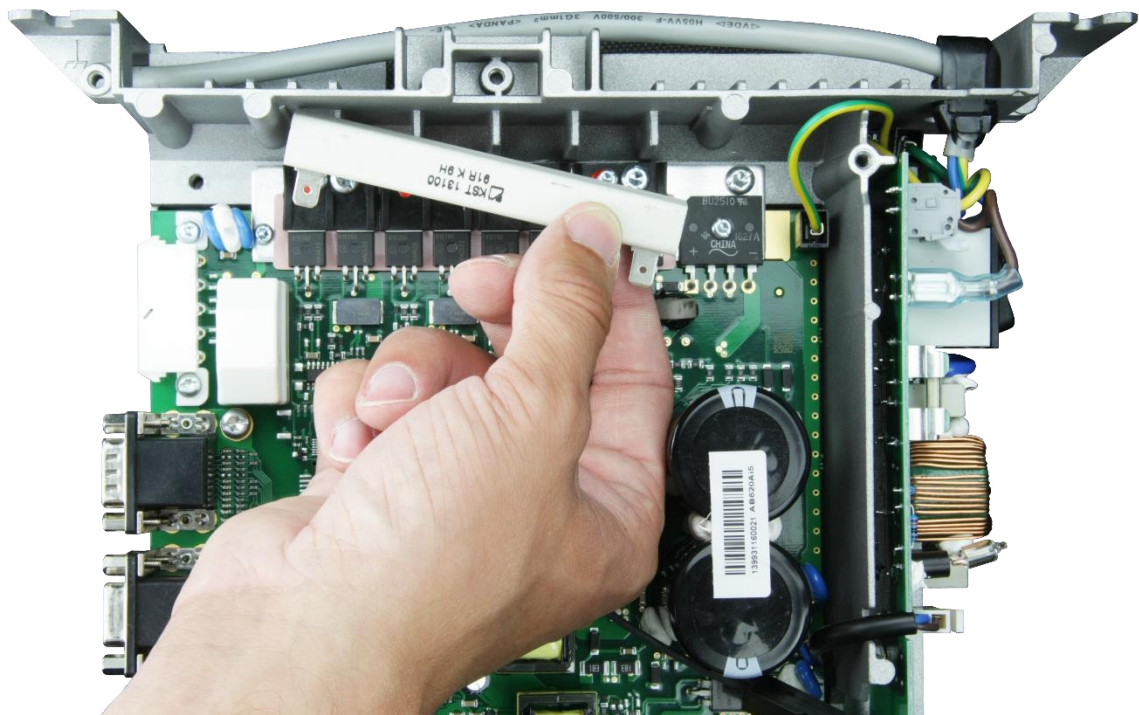
- Remove the marked screw (Torx  T20).



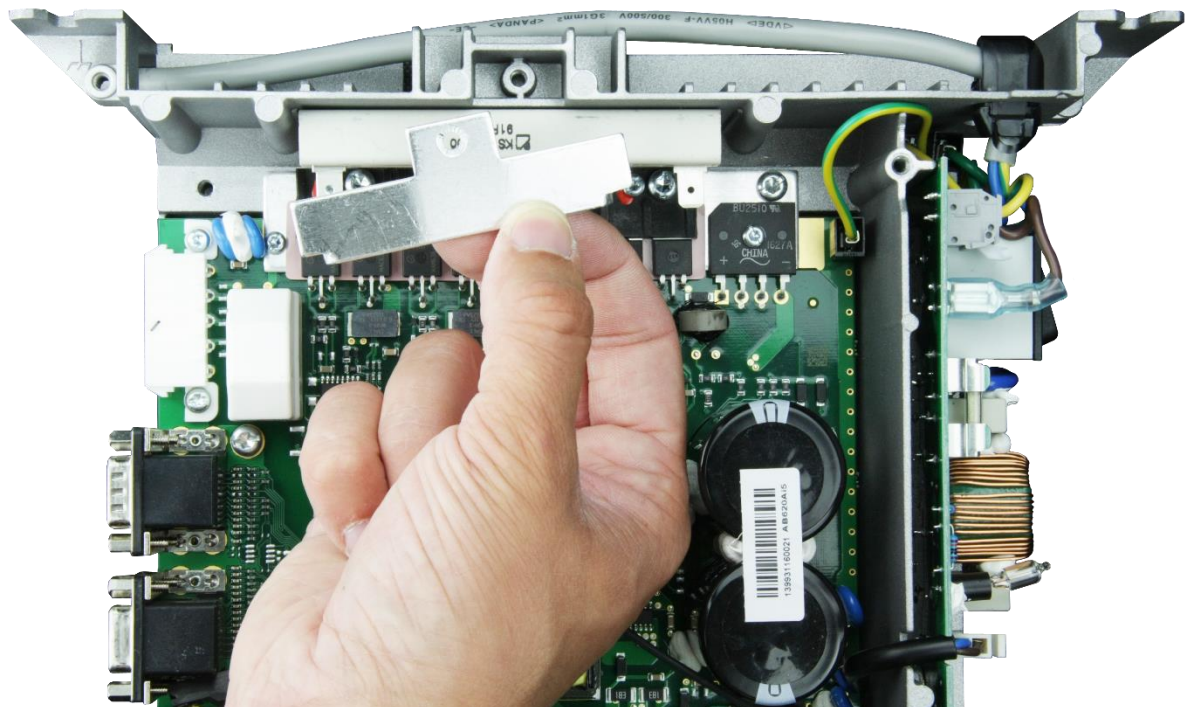
- Remove the bracket.



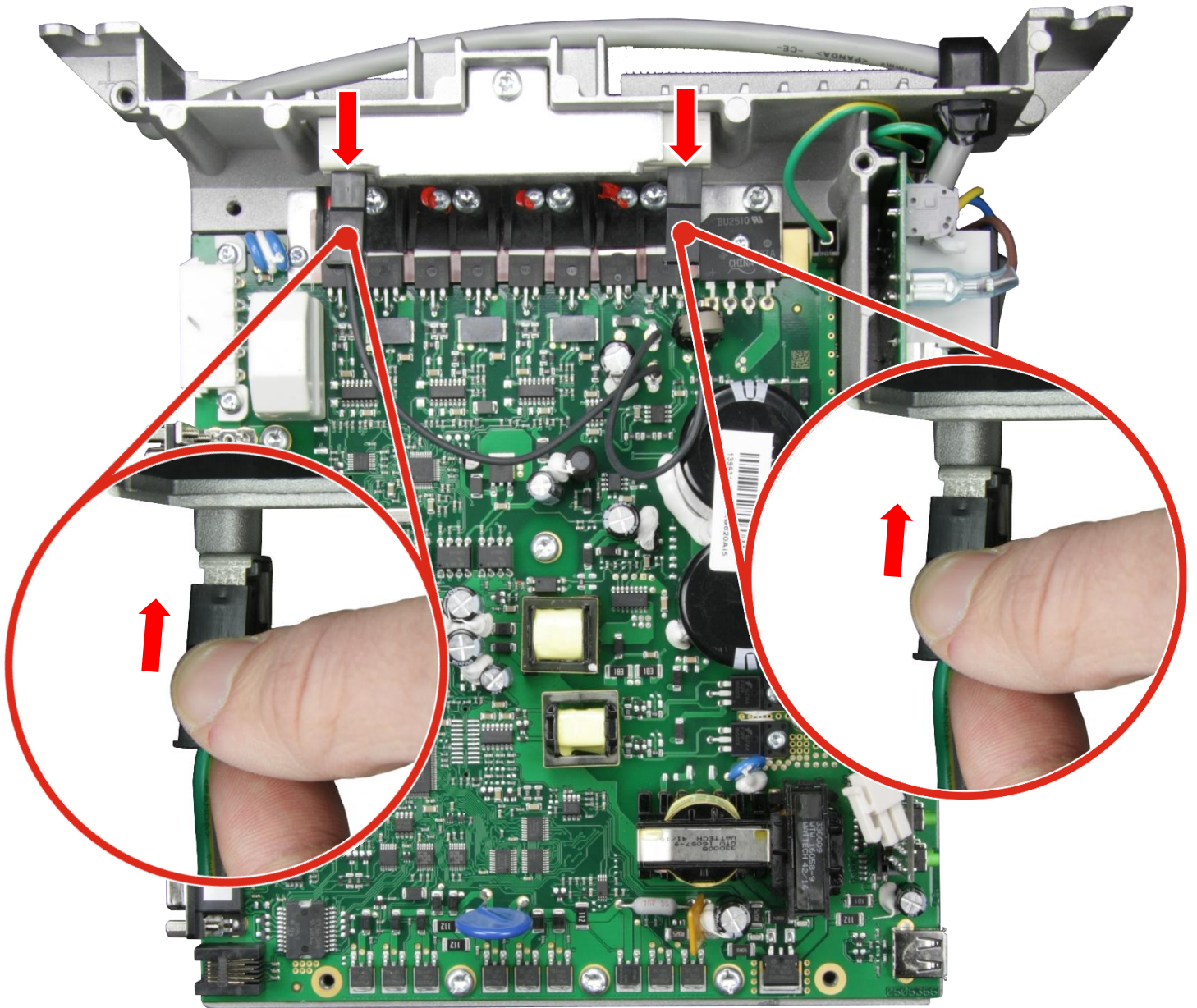
- Replace the brake resistor



- Mount the bracket



- Connect the "Fast on" plug connectors of the brake resistor 91R.

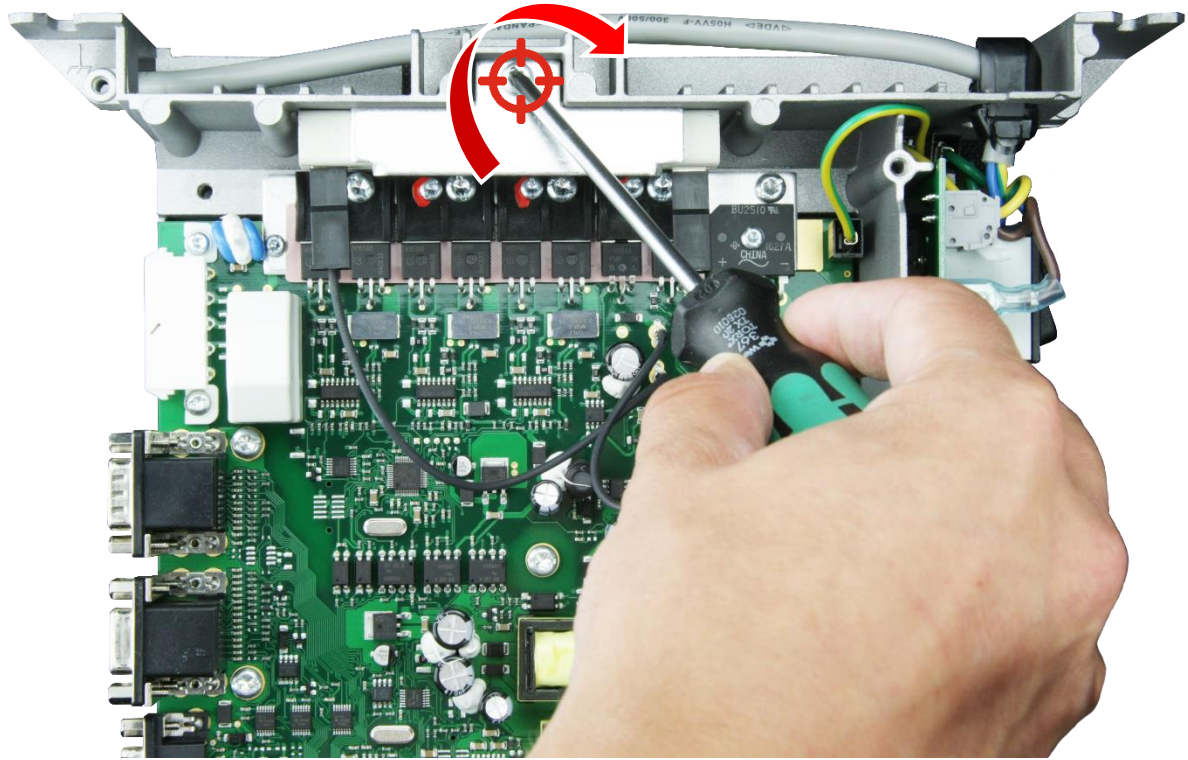


- Insert the marked screws and tighten them with specified torque.

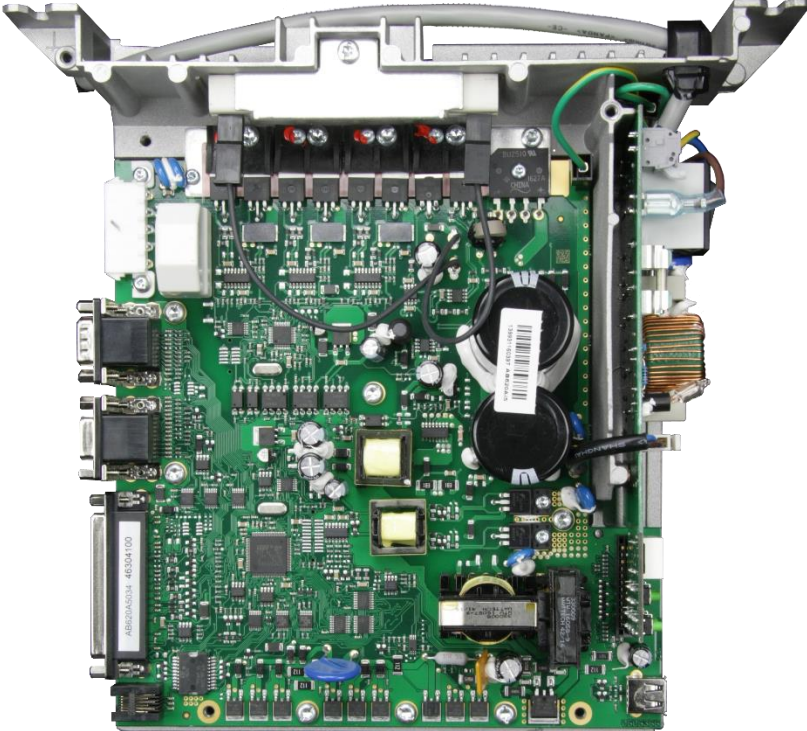


1x M4x16 (Torx **T20**)

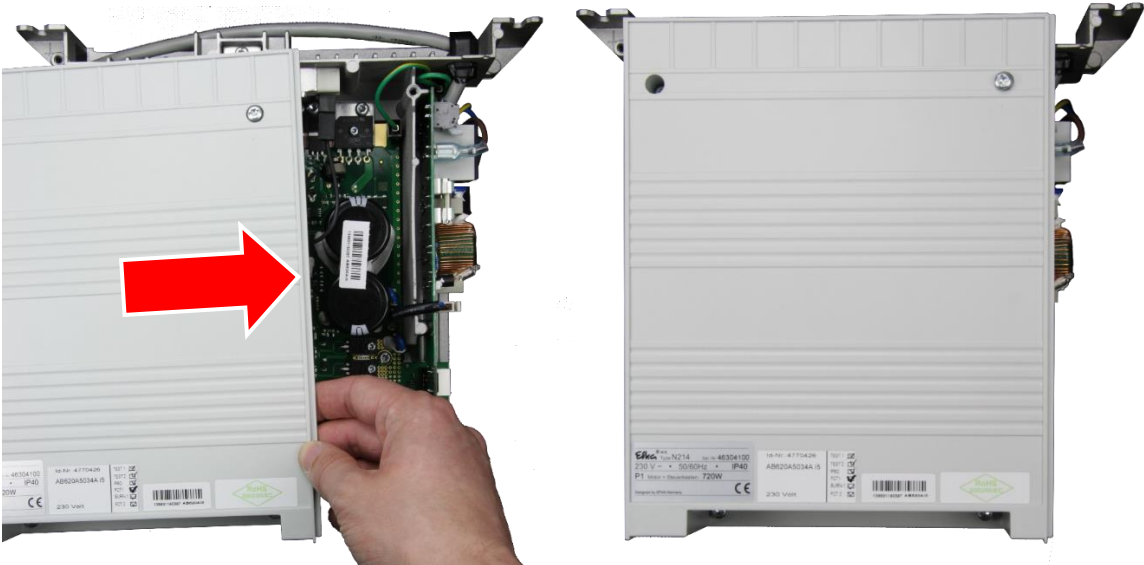
Torque: 2 +/-0,5 Nm



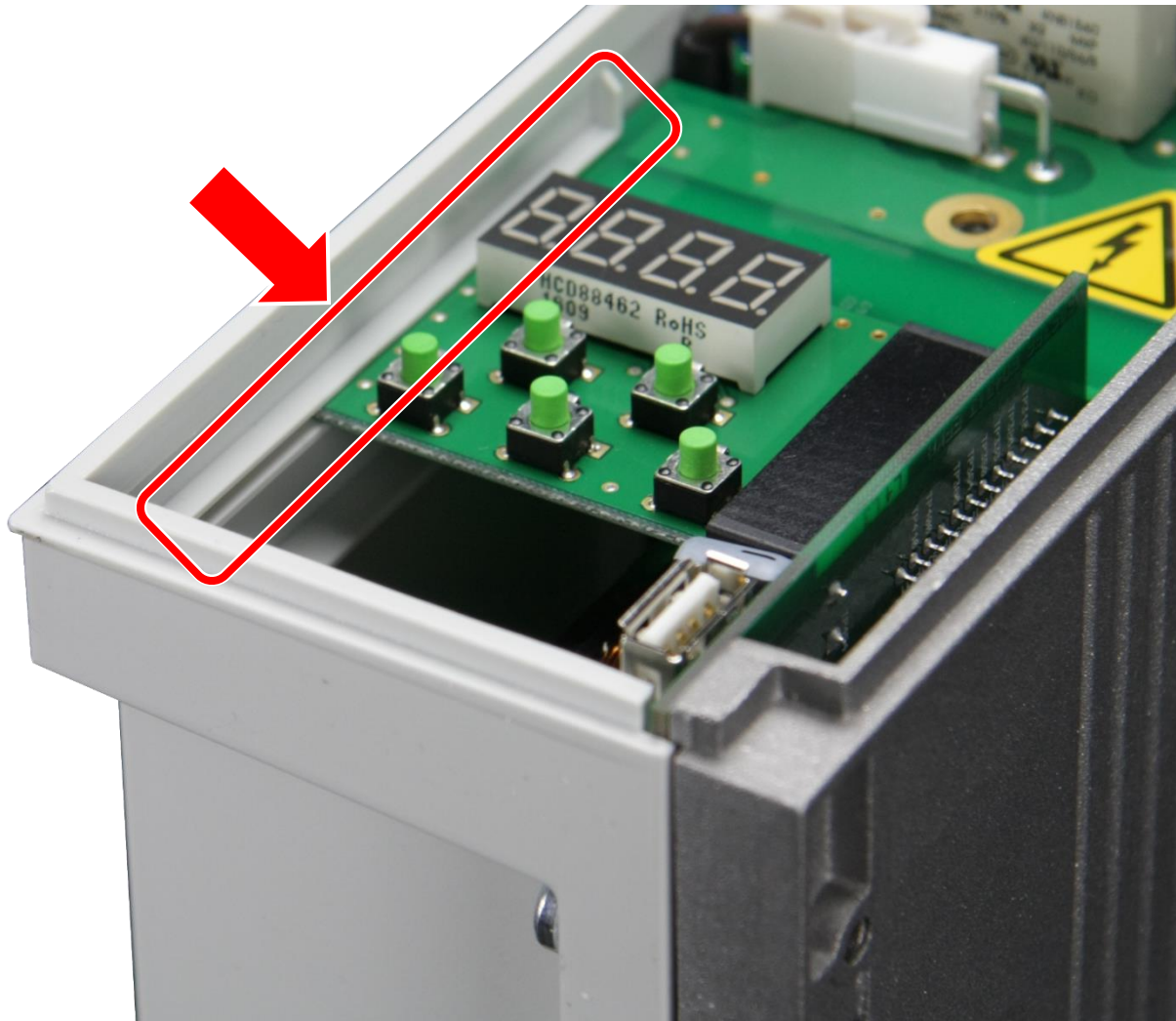
4.8 Installing the housing



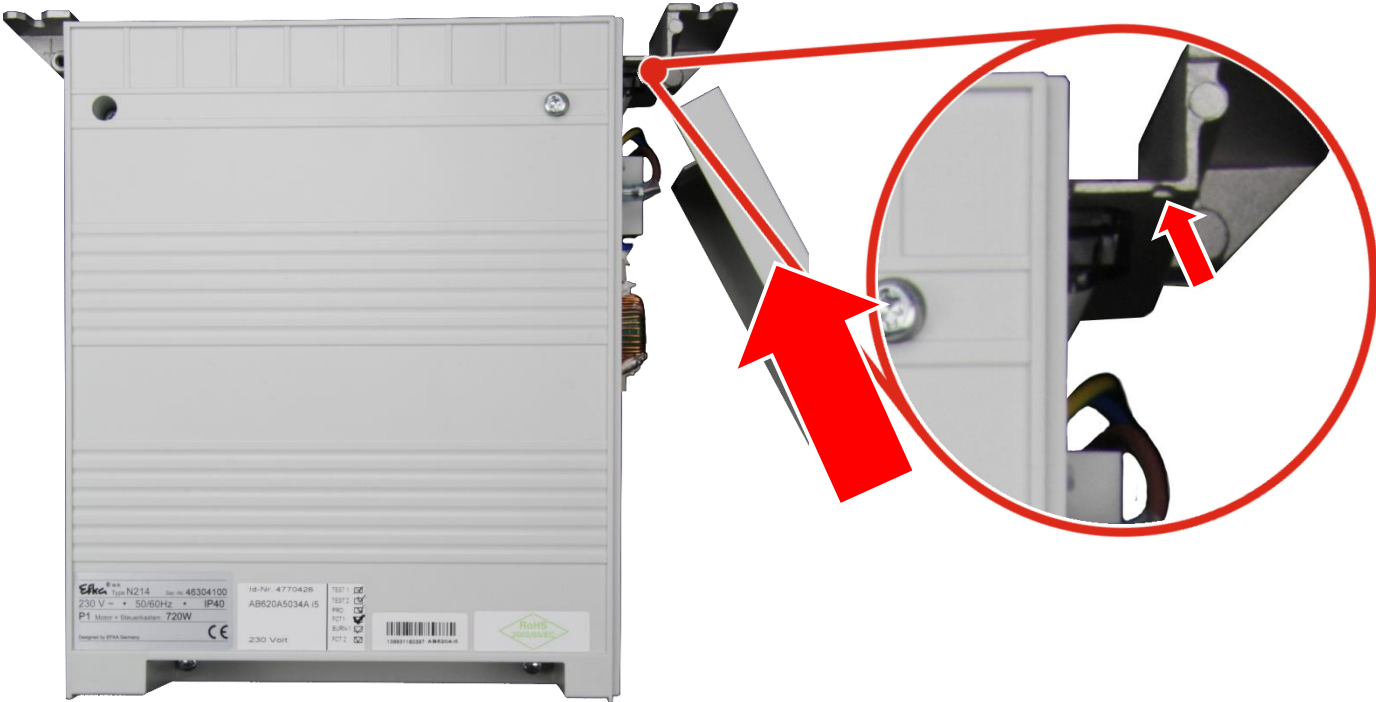
- Slide the side housing cover carefully on the controls.



Note: When installing the side cover, make sure that the power filter board is correctly sitting in the holding groove!



Note: During installation, make sure that the tabs of the cover sit in the groove provided.



- Close the control housing by snapping shut the already hooked on cover.



Note: Make sure that the proper seating of the housing is guaranteed.

- Tighten the 4 screws (Torx **T20**) of the side housing.



- Tighten the fastening screws (Torx **T20**) of the front cover.



Efka® - AB620A/AB611A/AB600A



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