CL450 assembly guide Version B

Scope

Document History

Date	Initials	Description
25-03-2009	MC	Document created
26-05-2009	MC	Torque conversion error corrected (7,5 kgf*cm instead of 0,7 kgf*cm) under Figure 31.

Related documents

[1] Doc1

[2] Doc2

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Dirch fan connector assembly guide

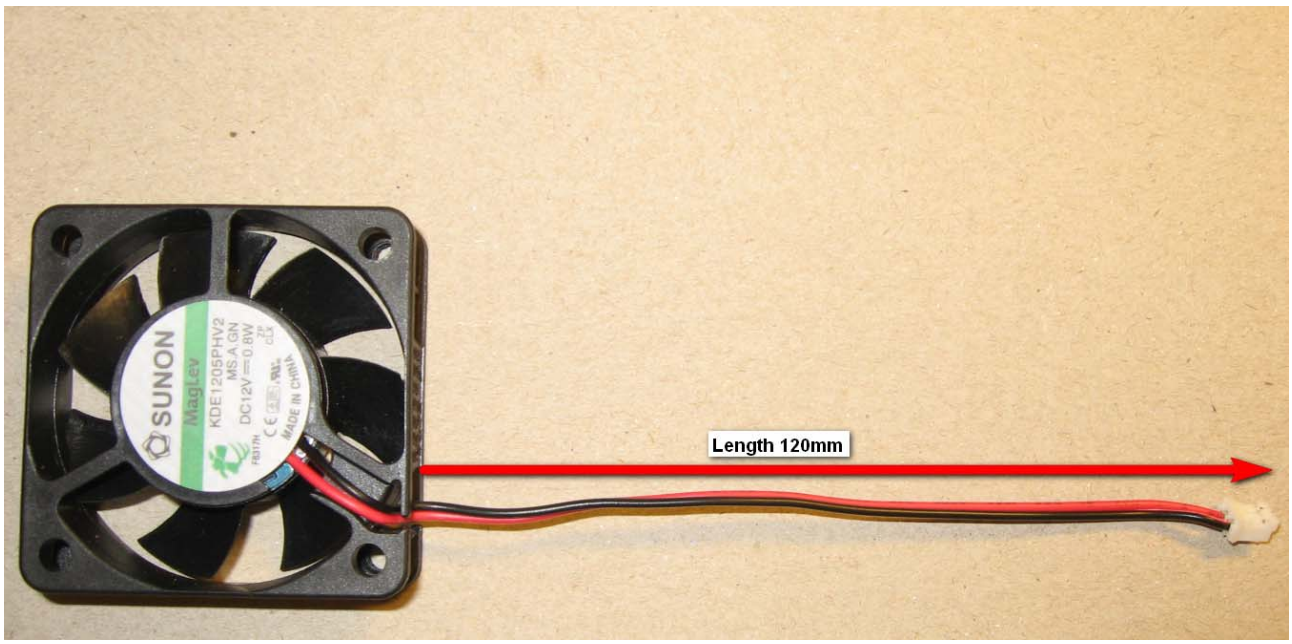

Figure 1: Use fan E59802111 Wire length is 120mm from housing of fan to bottom of connector.

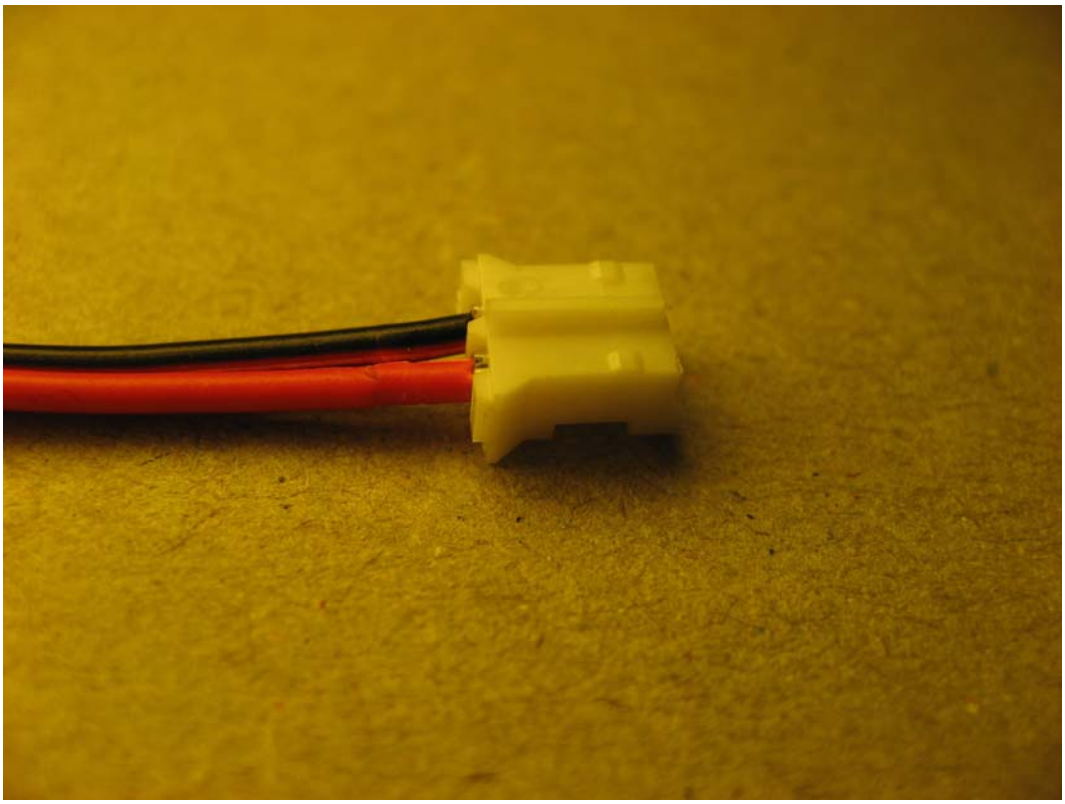

Figure 2: Polarity should be as shown in the picture. (The connector consists of 2 pcs. E52300611 and 1 pcs. E52300711)

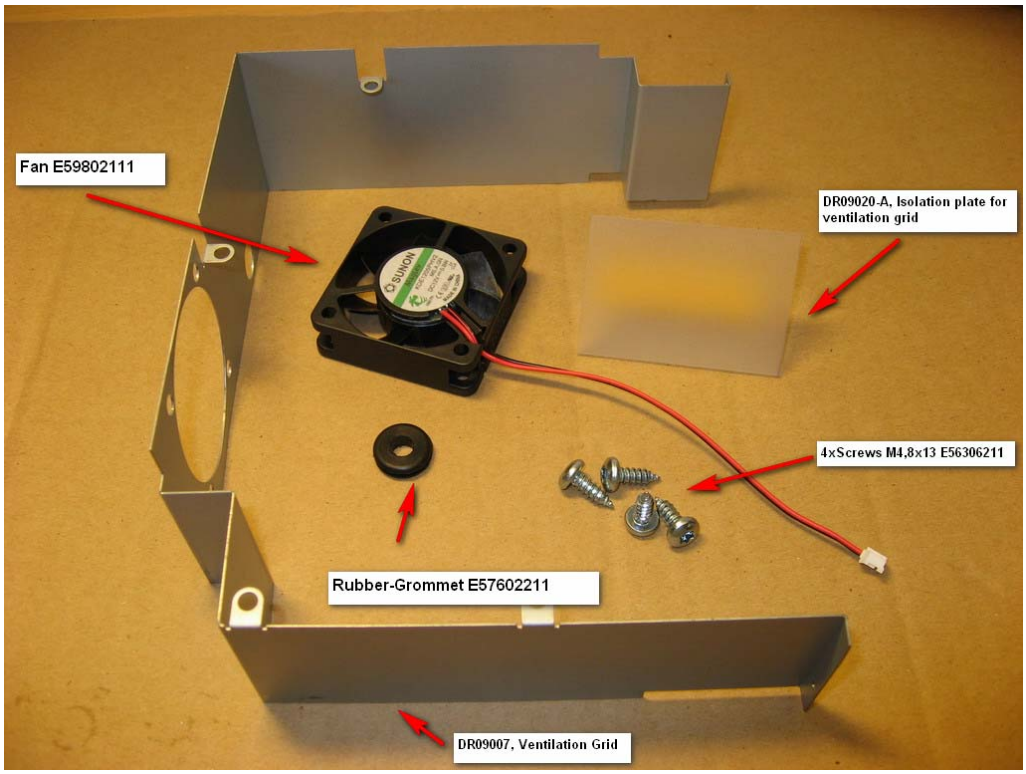

Figure 3: Total amount of components used for fan assembly.

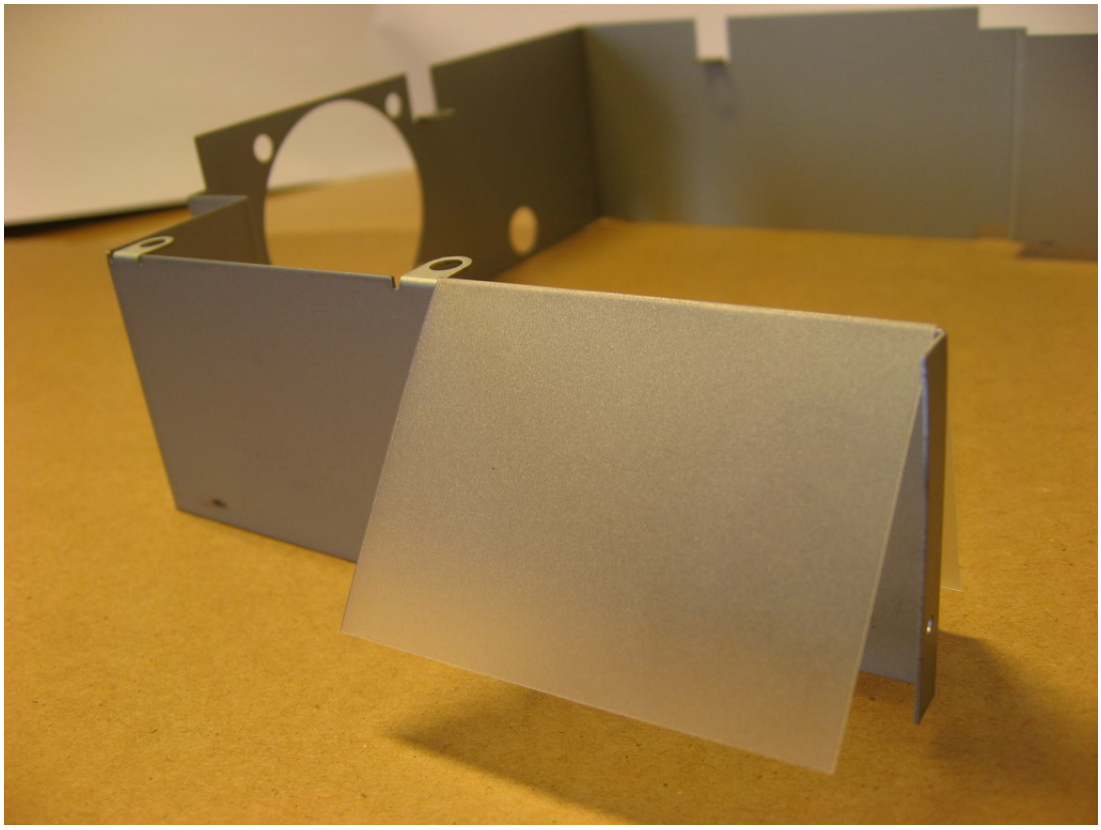

Figure 4: Mount Isolation plate for ventilation grid as shown in picture. THIS IS A SAFETY COMPONENT AND IT IS VERY IMPORTANT THAT IT IS MOUNTED AS SHOWN IN THE PICTURE. Use the adhesive tape on Isolation plate to attach it to ventilation grid.

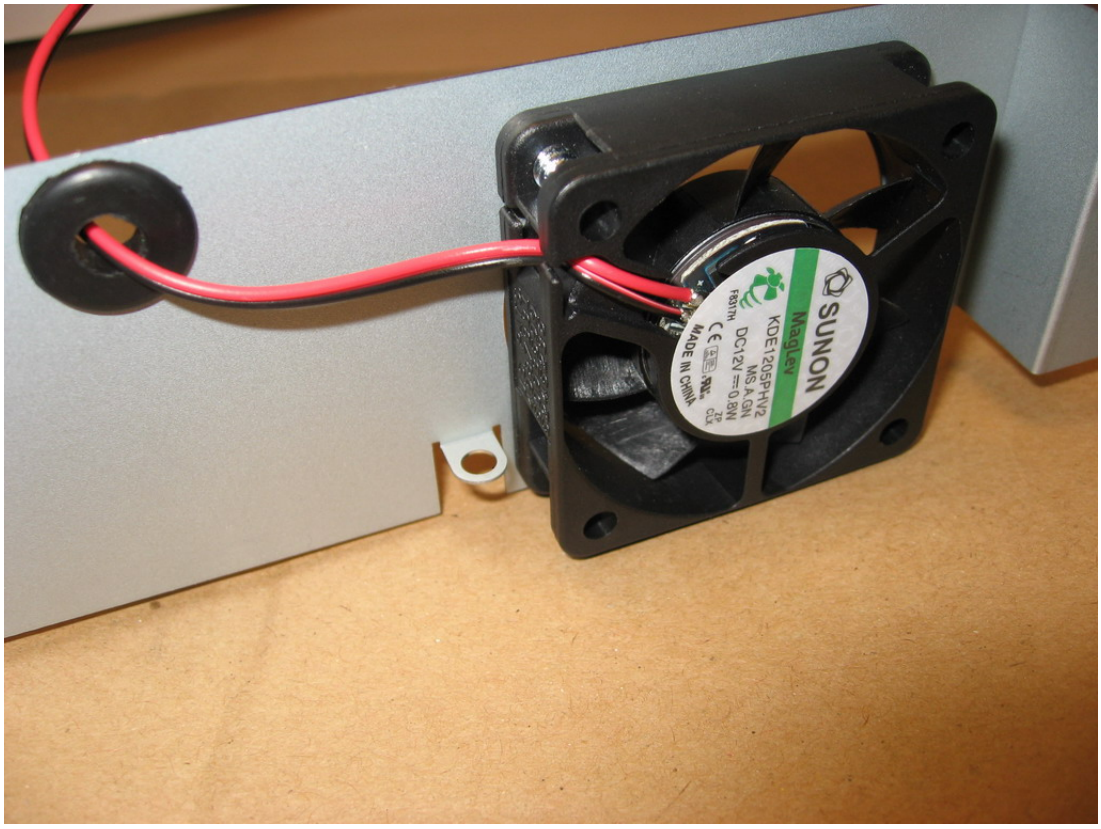

Figure 5: Mount Rubber-Grommet and Fan as shown in the picture. It is important that the fan is positioned correctly due to the direction of the air flow.

Figure 6: The fan is mounted using the 4 screws M4.8x13 E56306211.

Power board Assembly

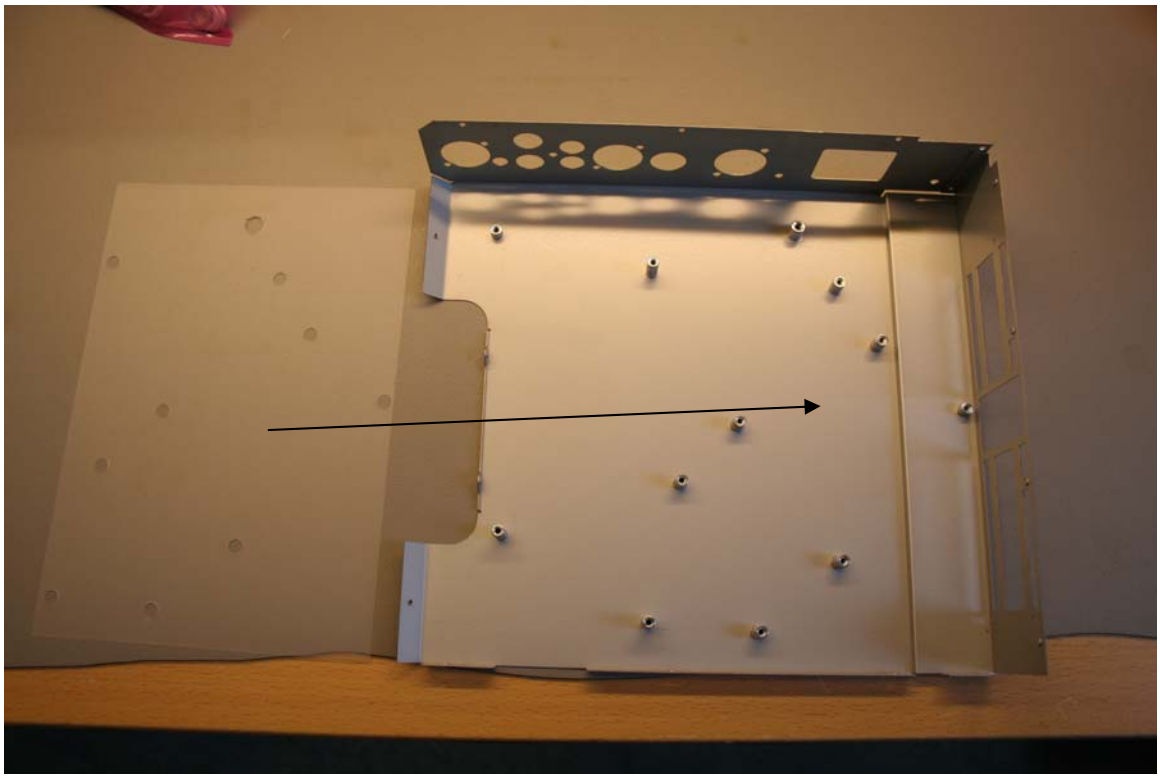

Figure 7: Use isolation plate DR09019 and Inner box Bottom DR09006-F, for this sub assembly.

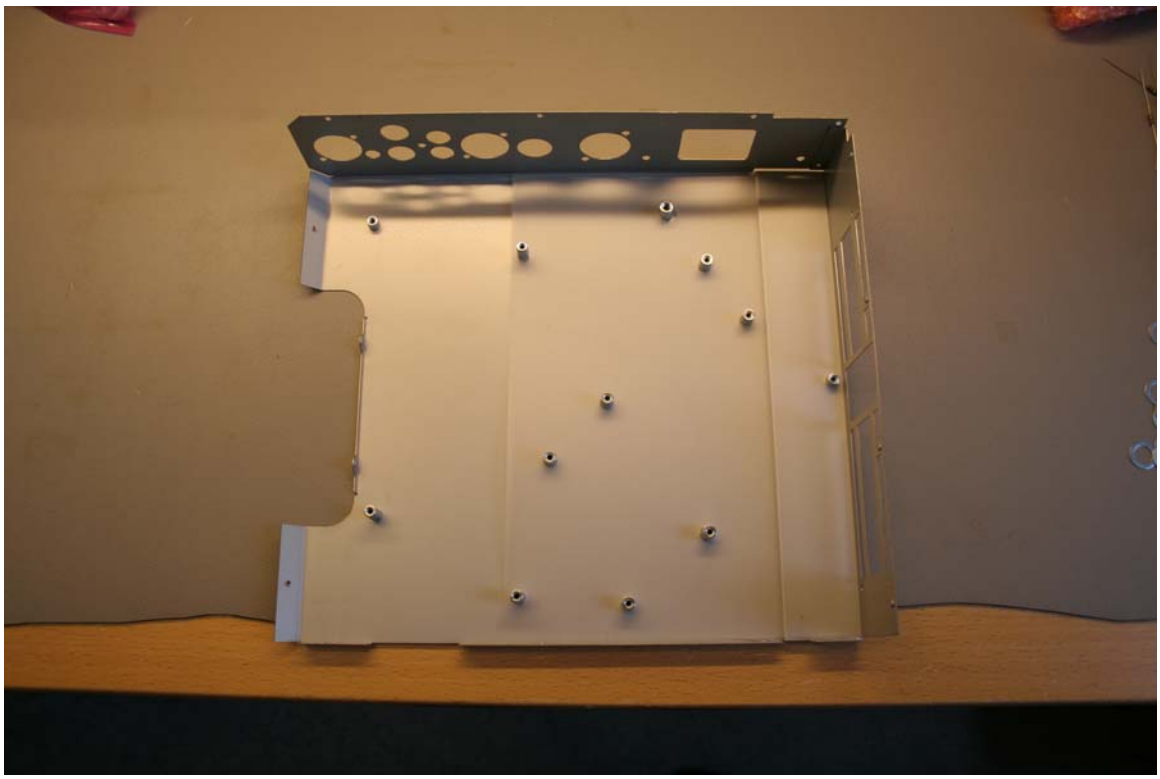

Figure 8: Mount isolation plate for 1038 Dirch Powerboard (DR09019) as shown in picture. THIS IS A SAFETY COMPONENT AND IT IS VERY IMPORTANT THAT IT IS MOUNTED AS SHOWN IN THE PICTURE.

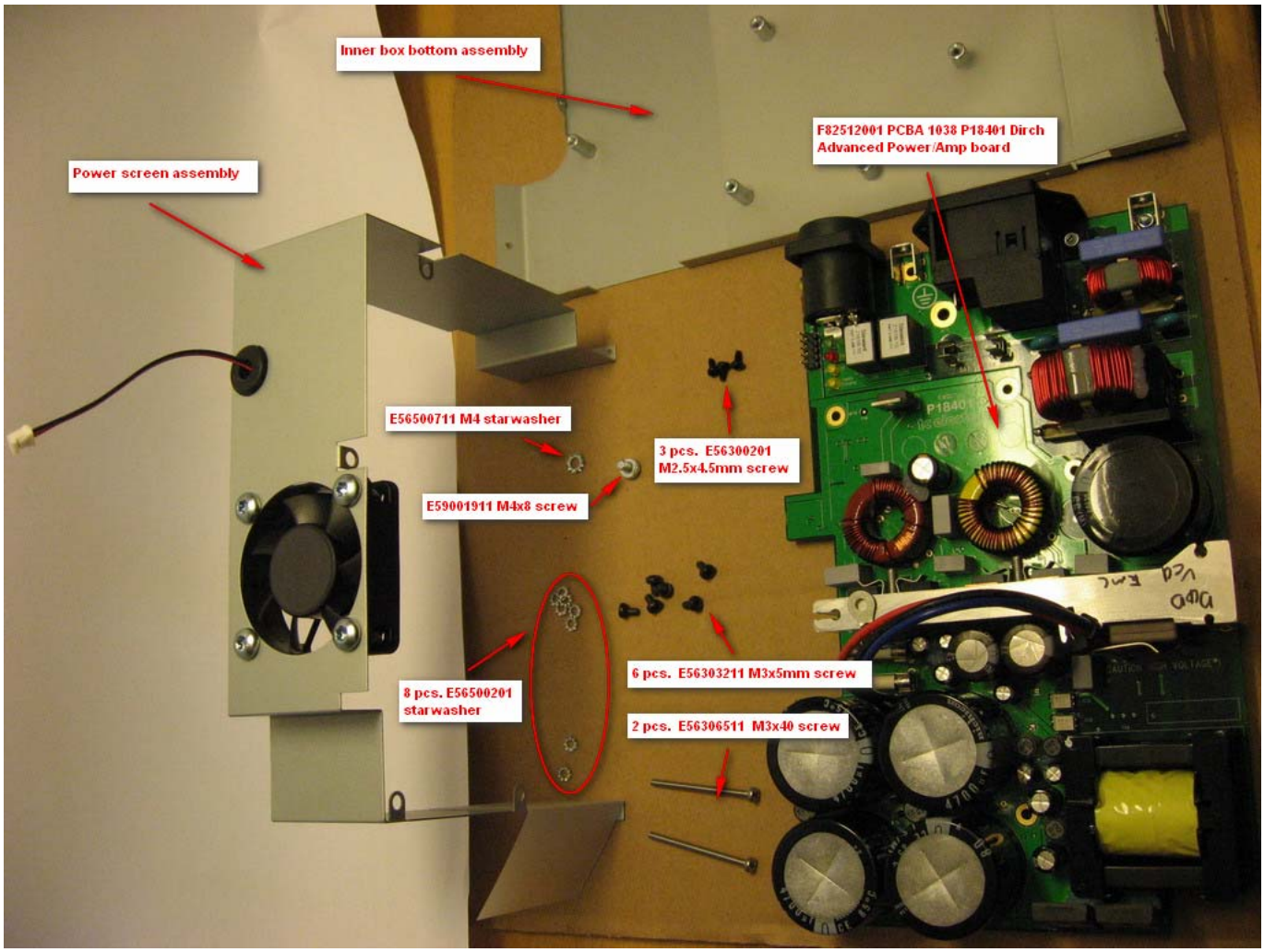

Figure 9: Components used for power board assembly.

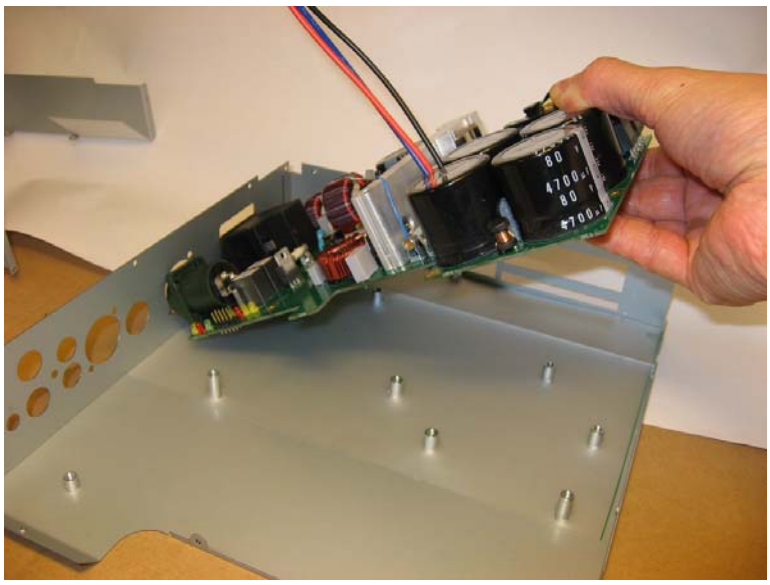

Figure 10: Mount the power board in the inner box. Be sure to put it in, in an angel so the surface mounted components on the backside of the PCB are not damaged.

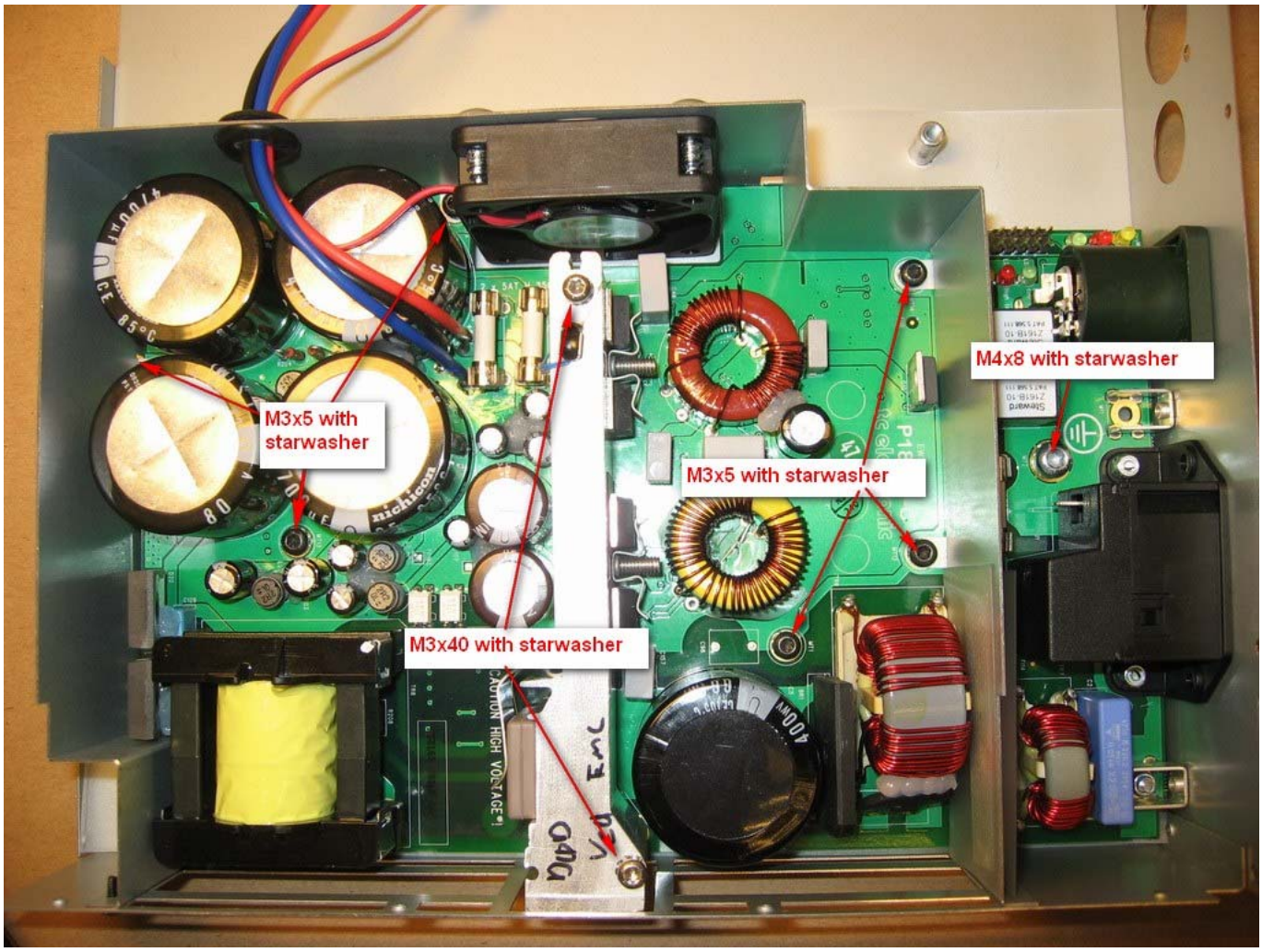

Figure 11: Mount the power board in the inner box, using the screws shown in the picture.

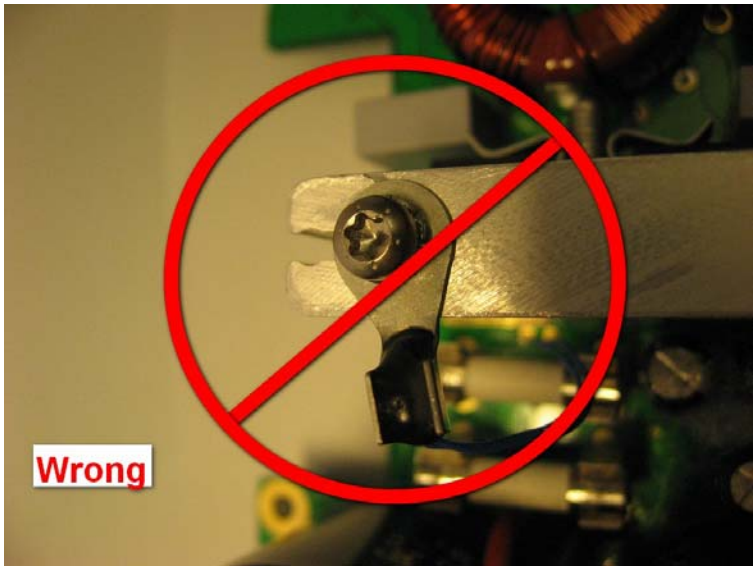

Figure 12: Be sure to mount the sensor correctly!! This is WRONG.

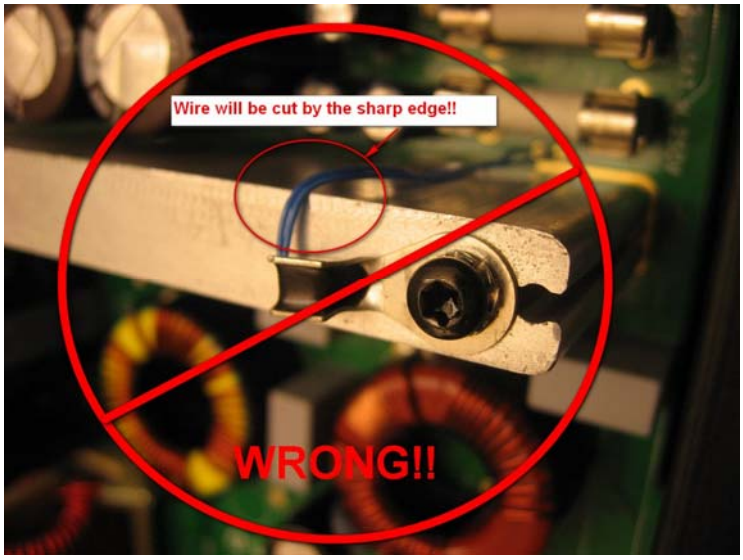

Figure 13: Be sure to mount the sensor correctly!! This is WRONG.

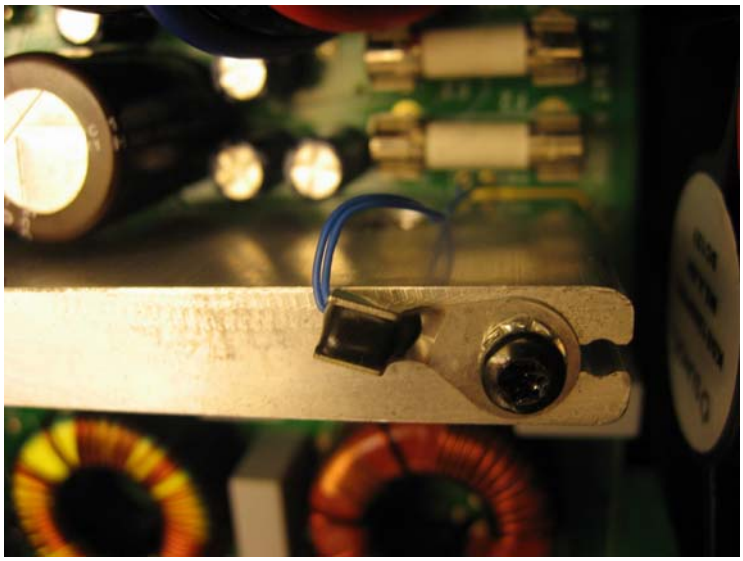

Figure 14: Be sure to mount the sensor correctly!! This is CORRECT.

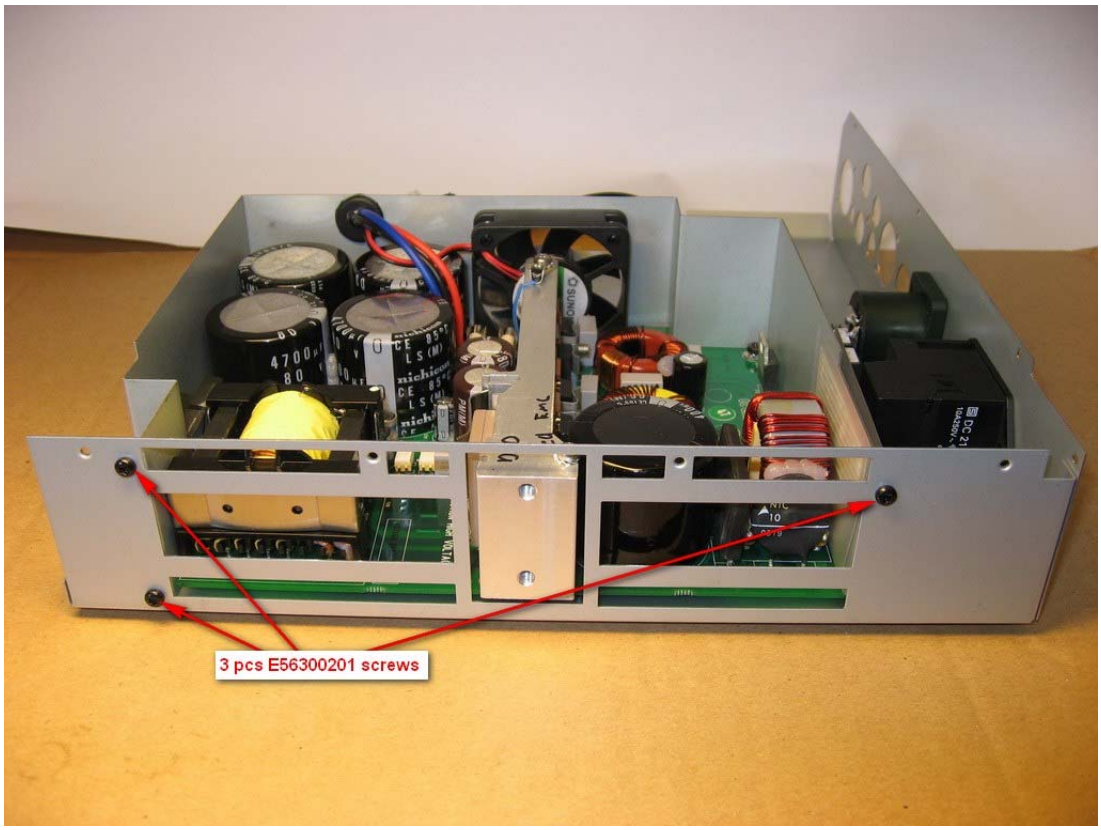

Figure 15: Use the three M2.5x4.5mm screws to mount the power screen to the inner box bottom.

Main board Assembly

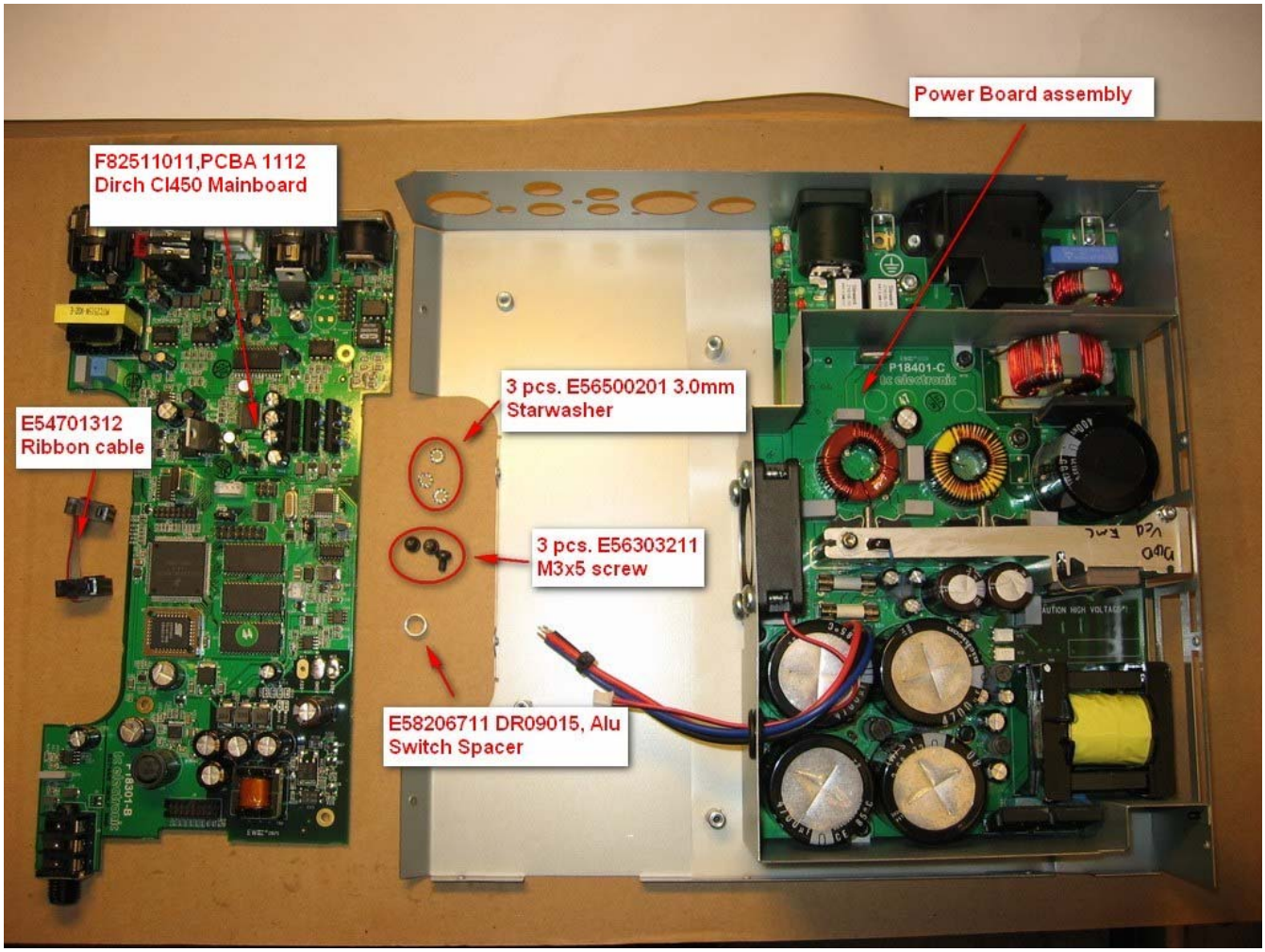

Figure 16: Components used for Main board assembly.

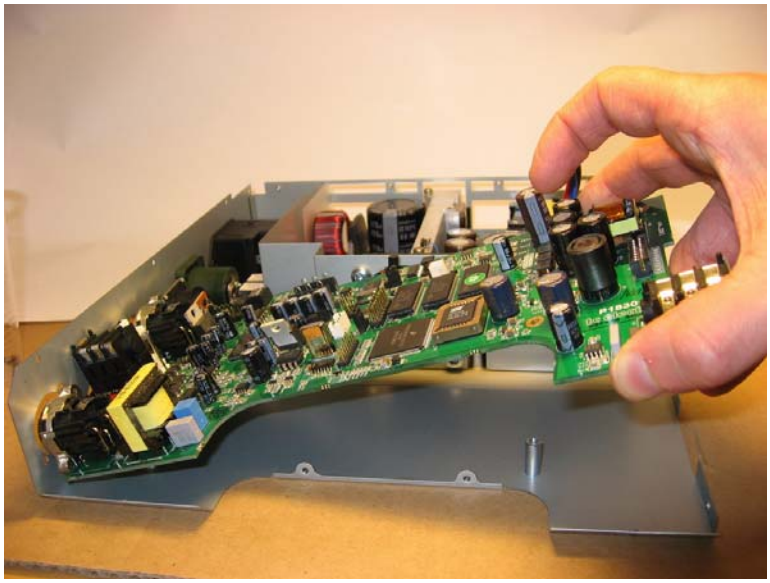

Figure 17: Mount the main board in the inner box. Be sure to put it in, in an angel so the surface mounted components on the backside of the PCB are not damaged.

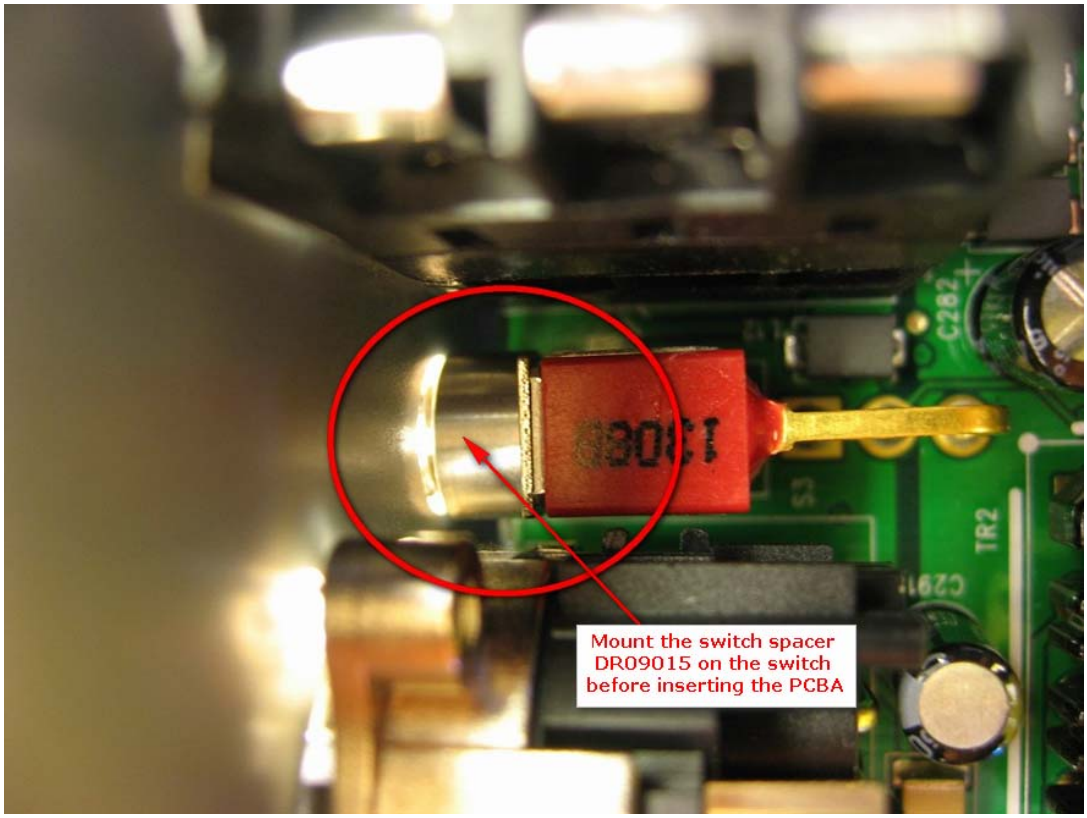

Figure 18: Remember to mount the aluminum switch spacer before the main board is inserted in the inner box.

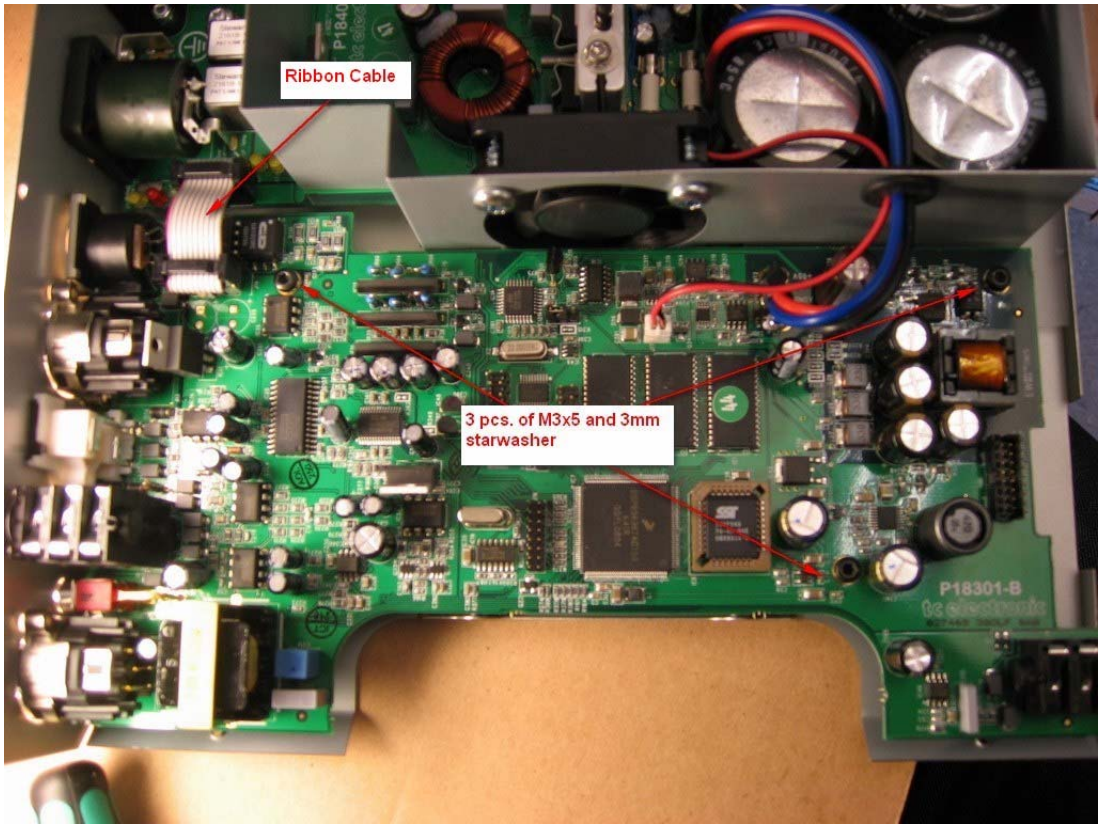

Figure 19: Secure the main board with 3mm screws and washers and mount the Ribbon cable.

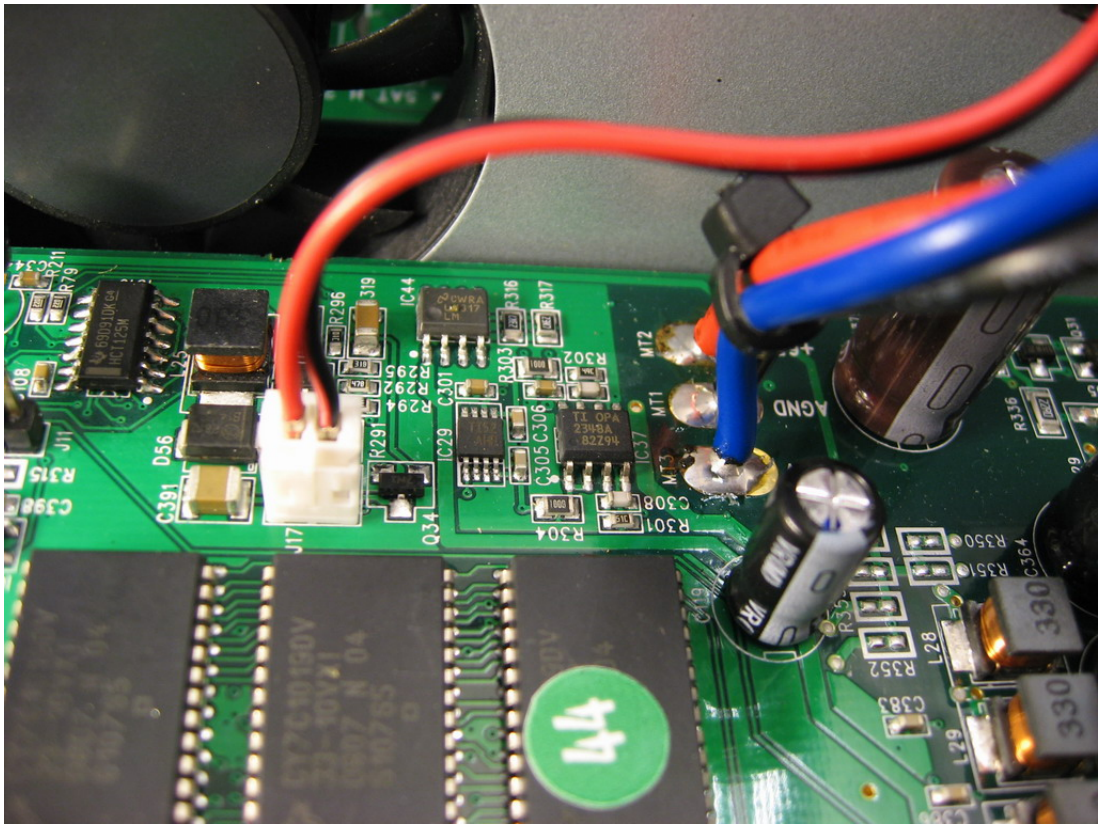

Figure 20: Mount the Fan-Cable and solder in the wires from the main board.

Securing the components with glue

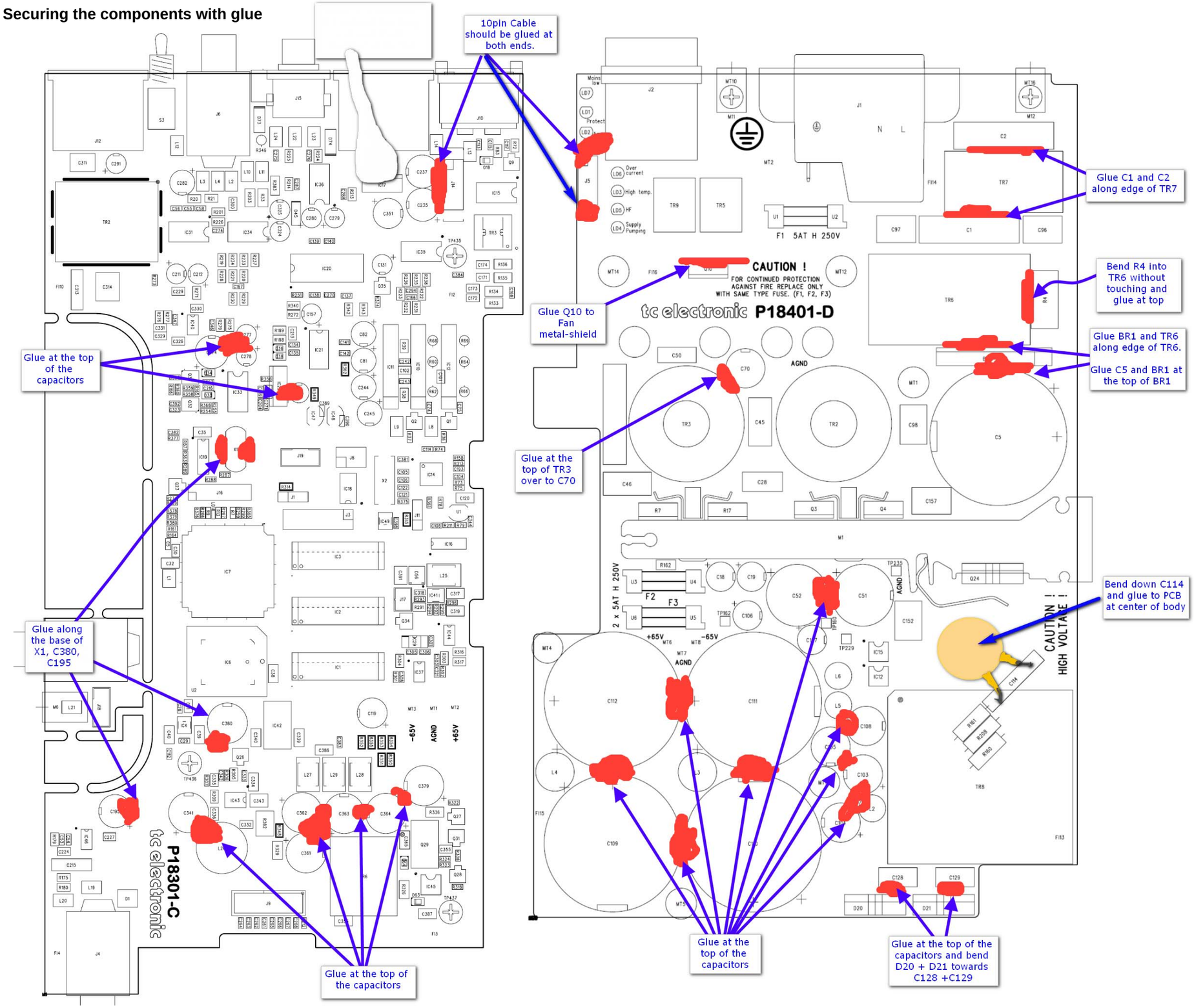

Figure 21. Glue must be Sikaflex 521-FC

Front Assembly

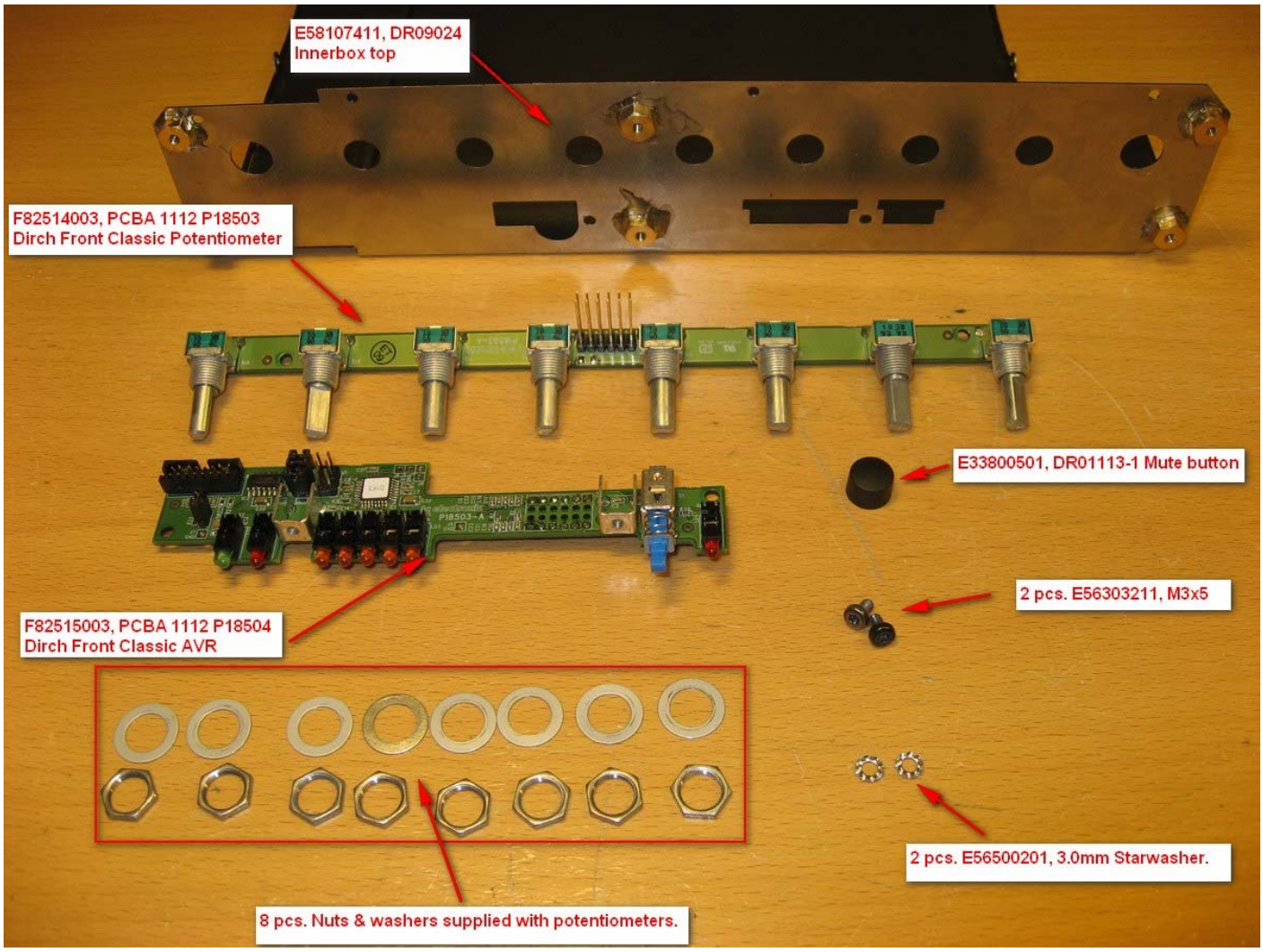

Figure 22: Components used for front assembly.

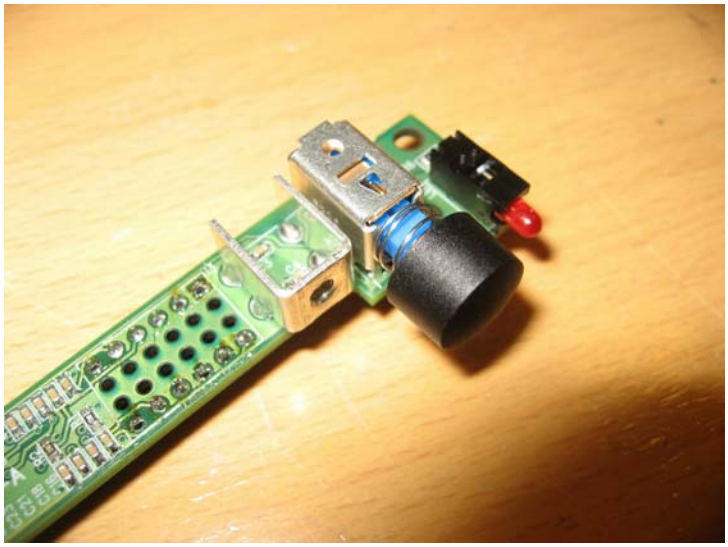

Figure 23: Mount Mute button on switch.

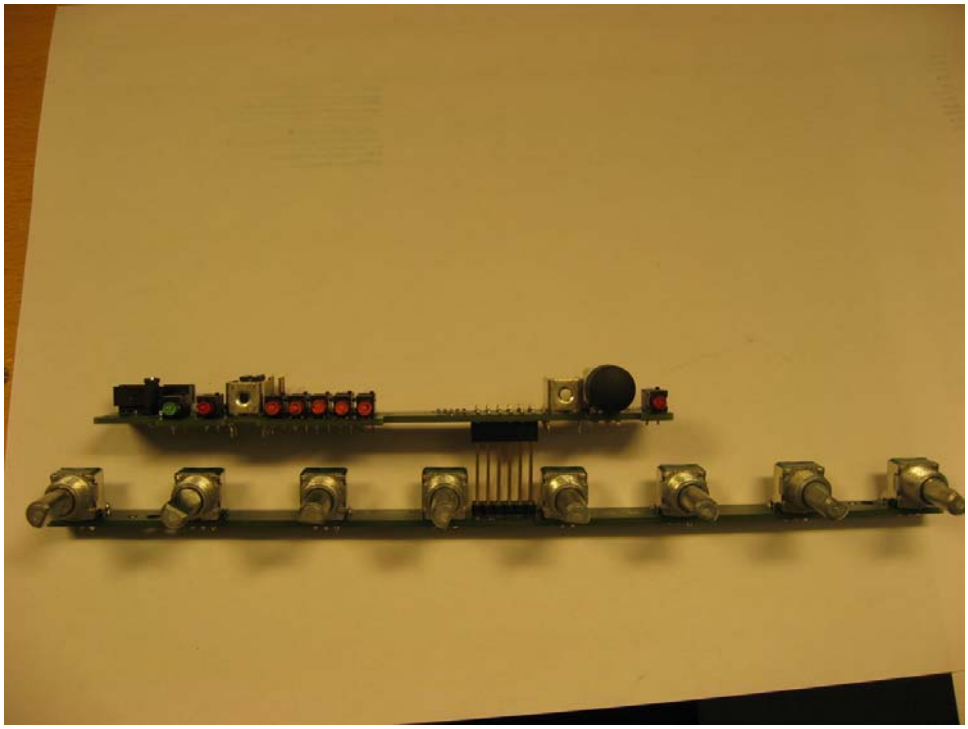

Figure 24: Mount Front PCBs together using the connector as shown in the picture.

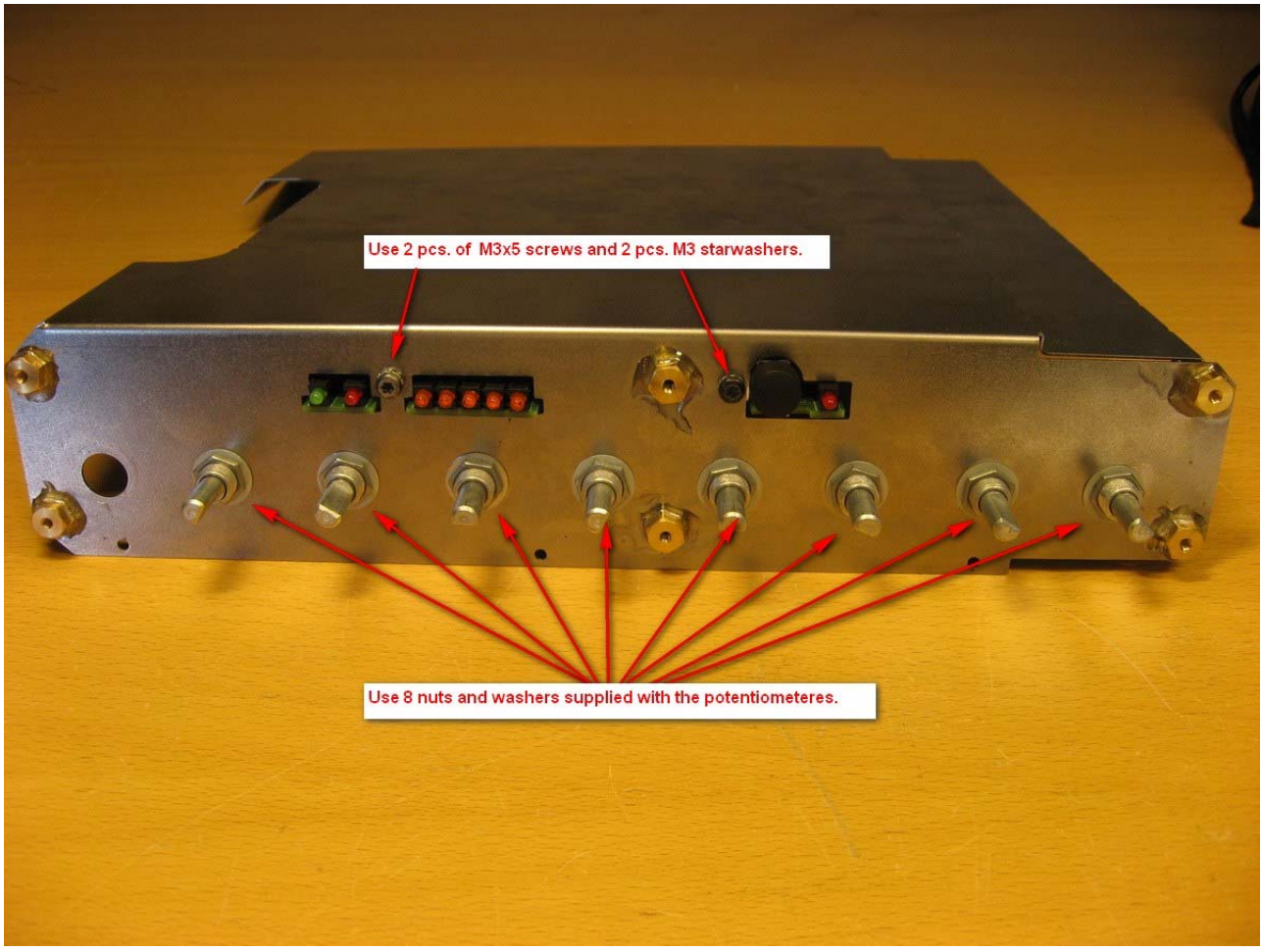

Figure 25: Mount PCBs in the inner box top using screws, washers and nuts as shown in the picture.

Inner box assembly

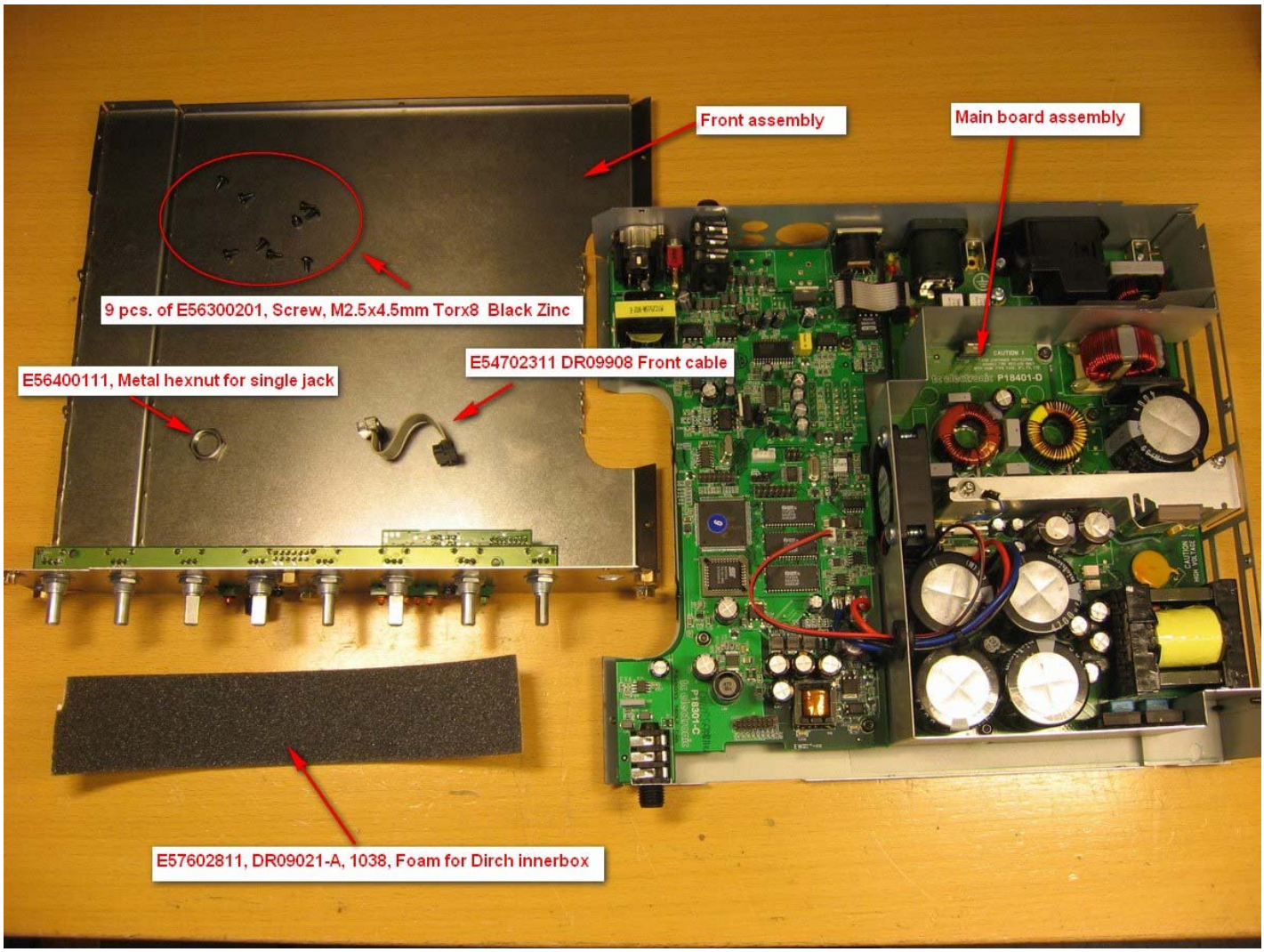

Figure 26: Components used for the inner box assembly.

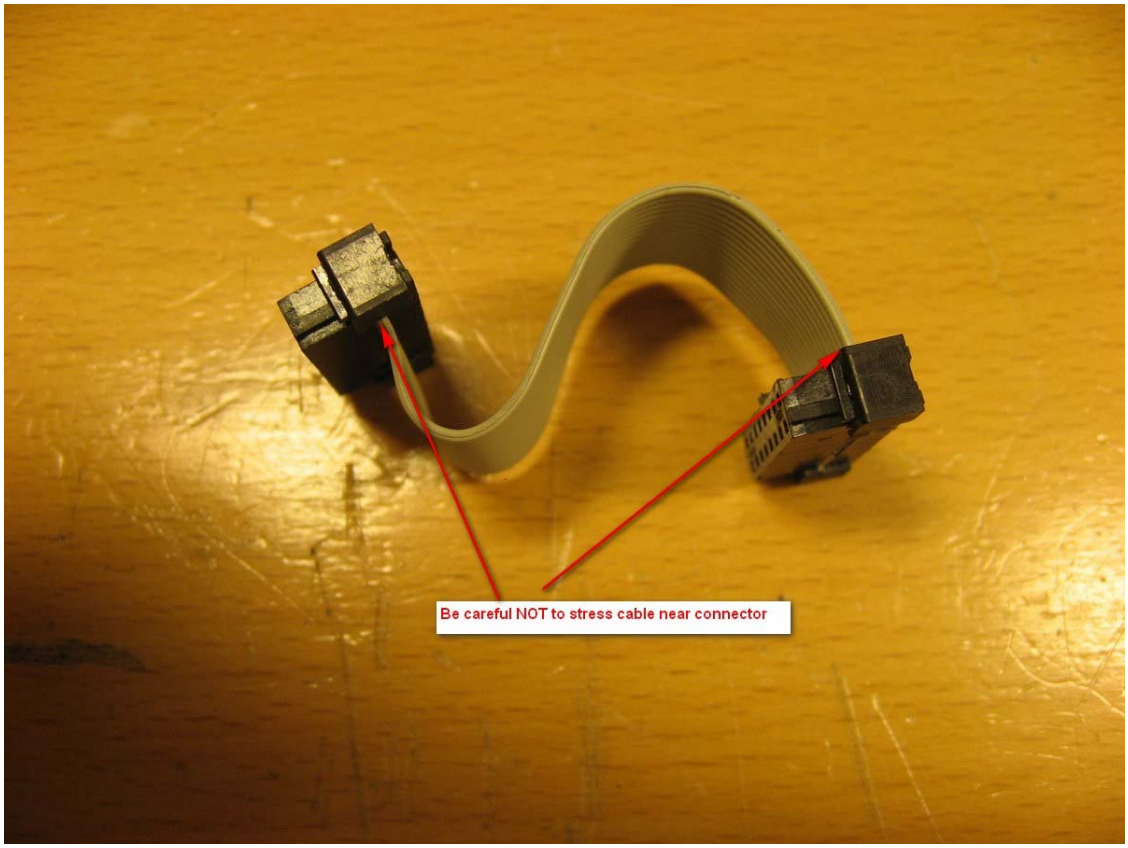

Figure 27: Bend the cable in to shape. BE VERY CAREFUL NOT TO PUT ANY STRAIN ON THE CABLE NEAR THE CONNECTORS!!!!

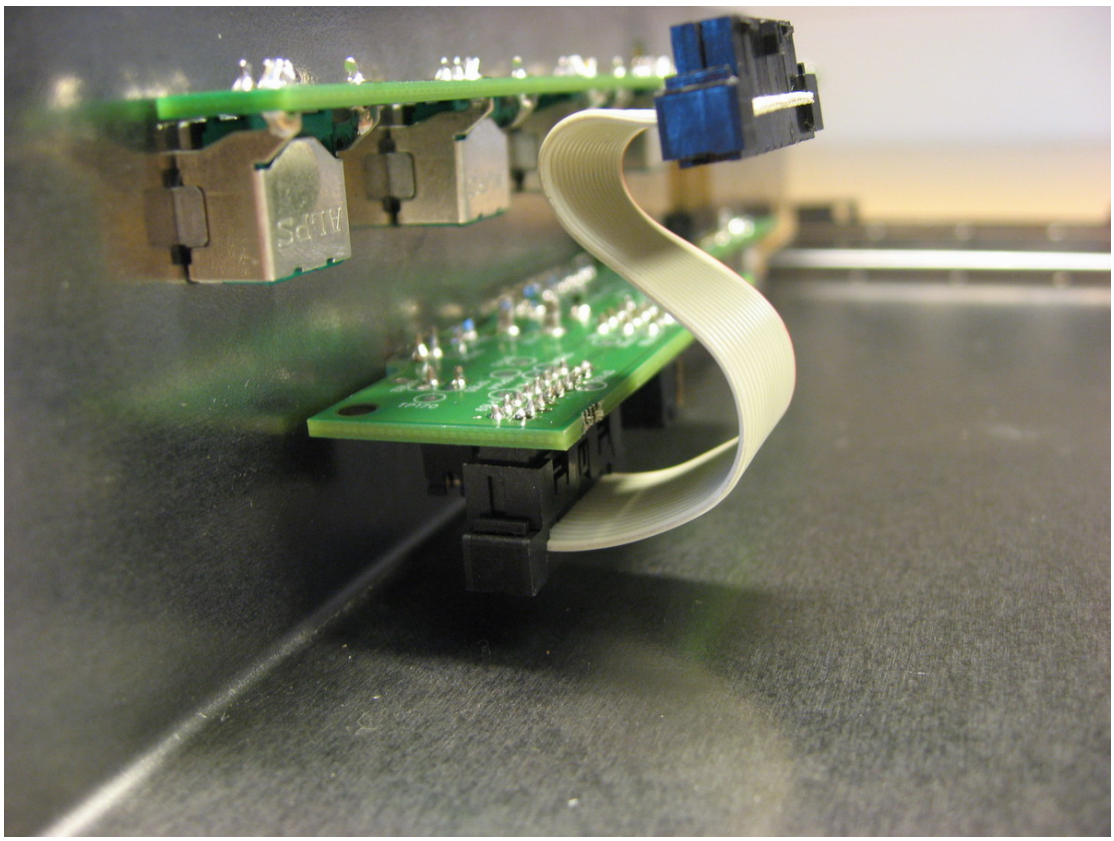

Figure 28: Mount the ribbon cable on the front board as shown in the picture.

Figure 29: Mount the foam in the “inner box top” parallel to the side.

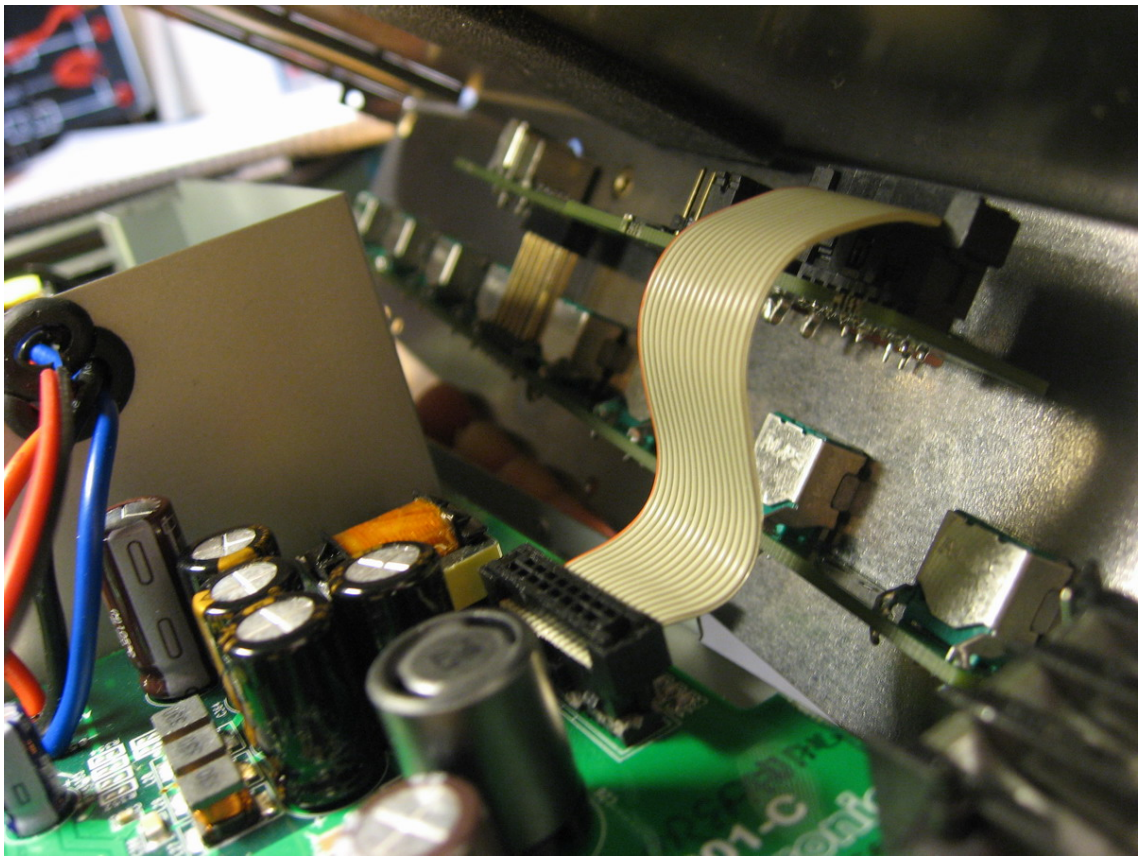

Figure 30: Mount the ribbon cable to the main board as shown in the picture.

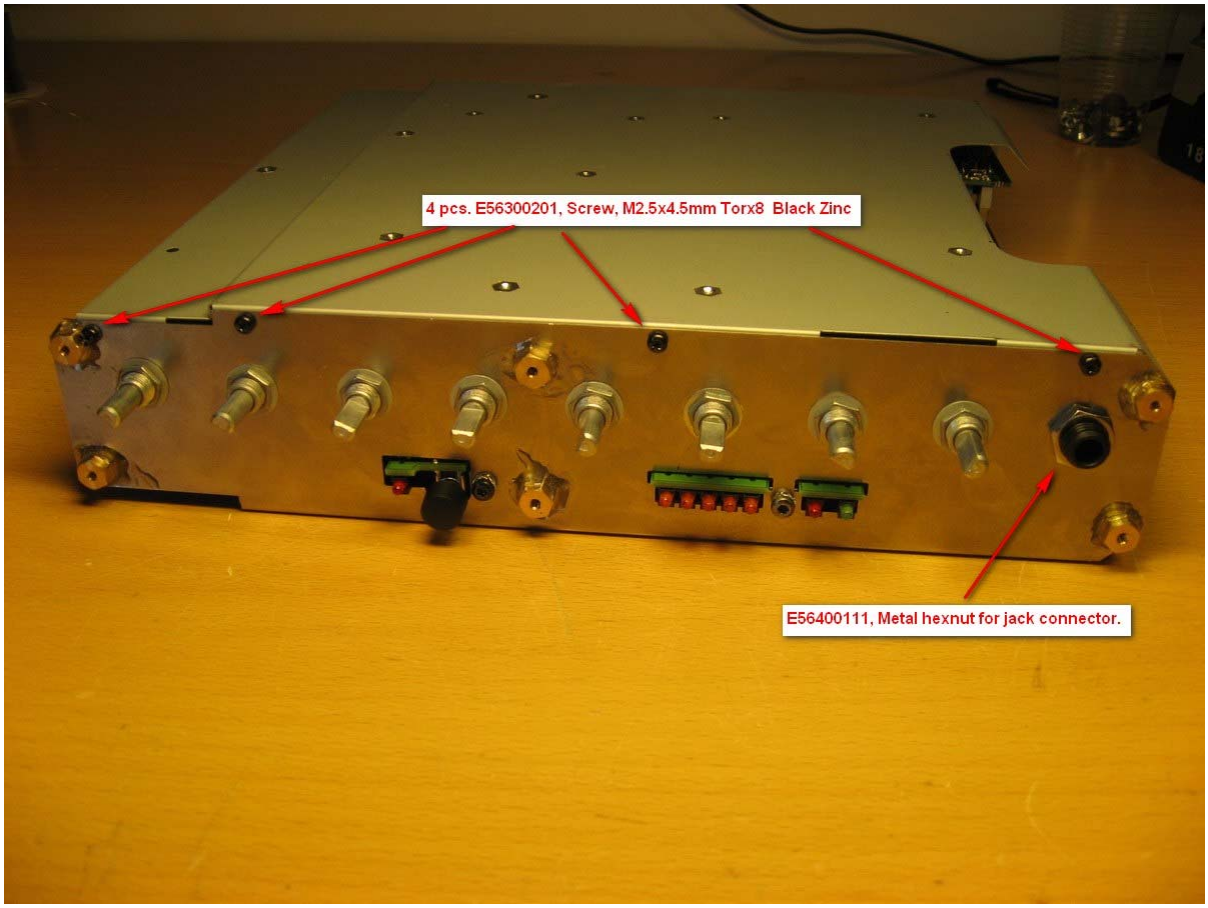

Figure 31: Mount "front assembly" to "main board assembly" using four screws and one hexnut at the front side of the product as shown in the picture.

The hex nut must be tightened using 7,5 kgf*cm (0,7 Nm) force. Thread lock must be used on hex nut.

Figure 32: Mount one M2.5x4.5 torx8 as shown in the picture.

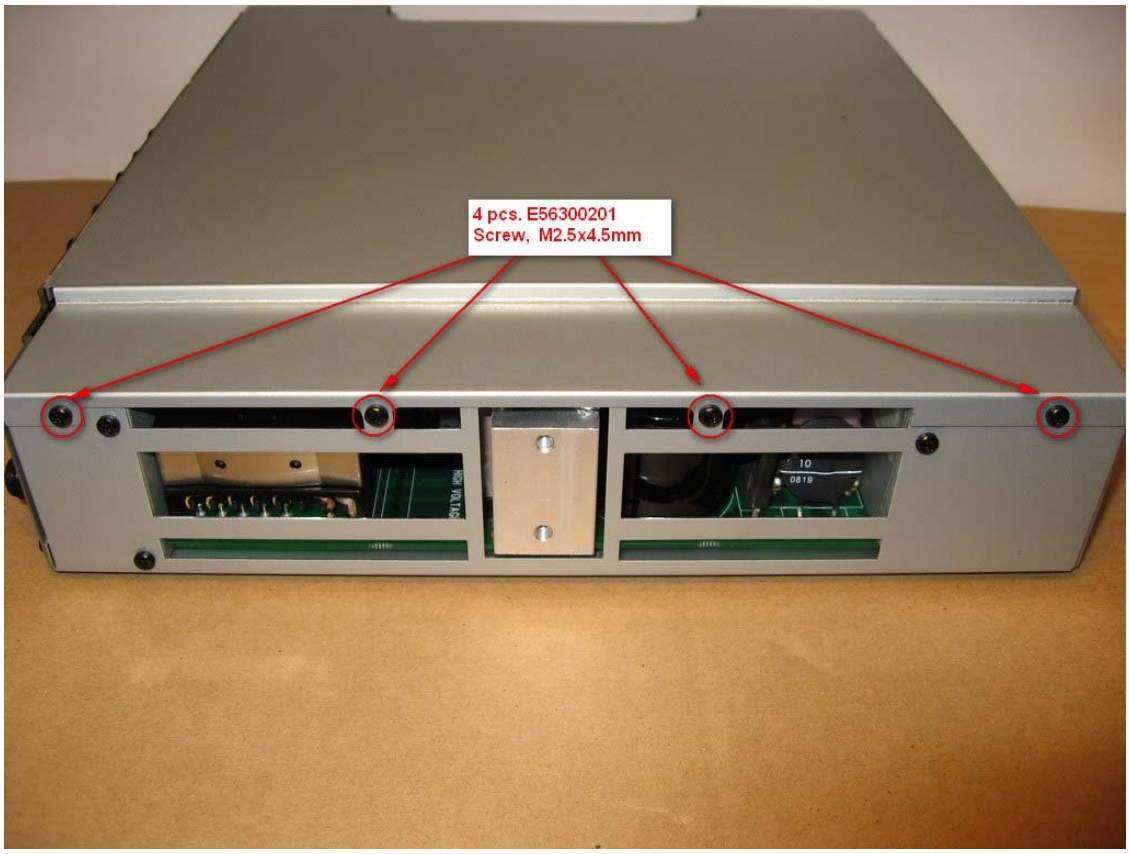

Figure 33: Mount four screws at the side of the product as shown in the picture.

Ventilation grid assembly

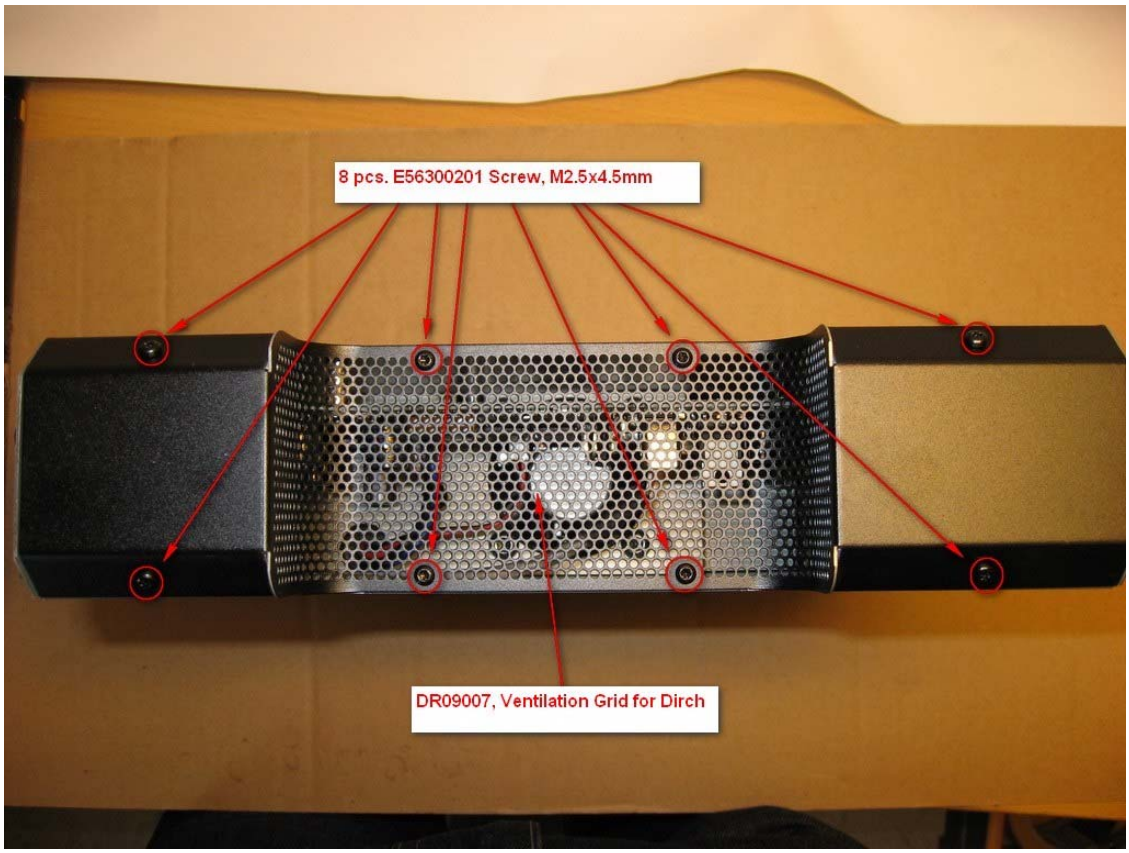

Figure 34: Mount the ventilation grid using eight screws as shown in the picture.

Back plate assembly

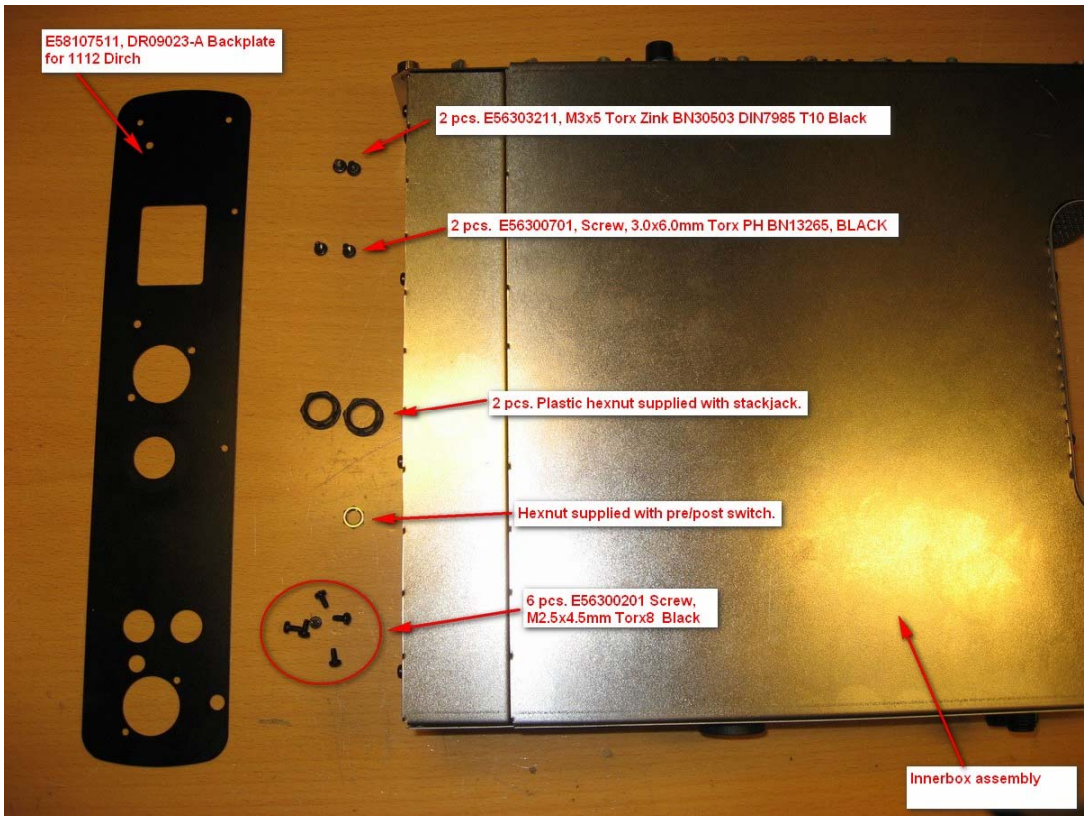

Figure 35: Components used for the back plate assembly.

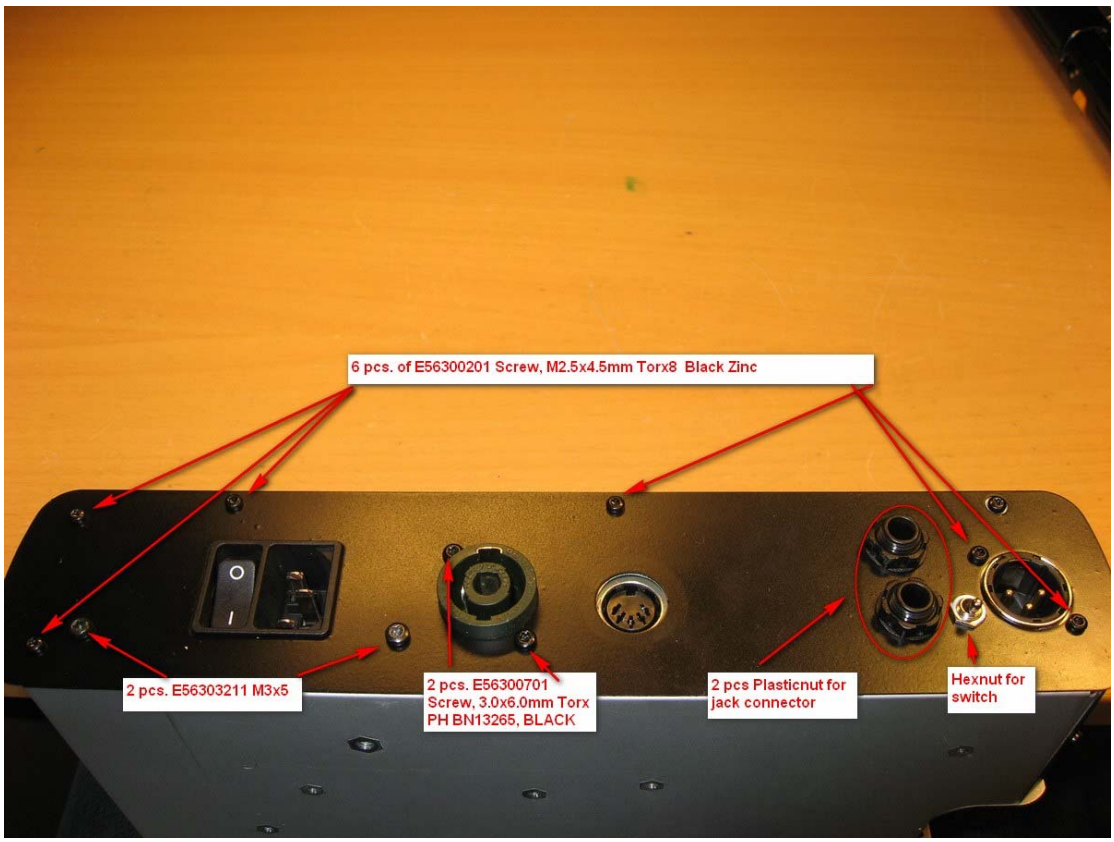

Figure 36: Mount the back plate using the screws/nuts shown in the picture.

Rubber feet assembly

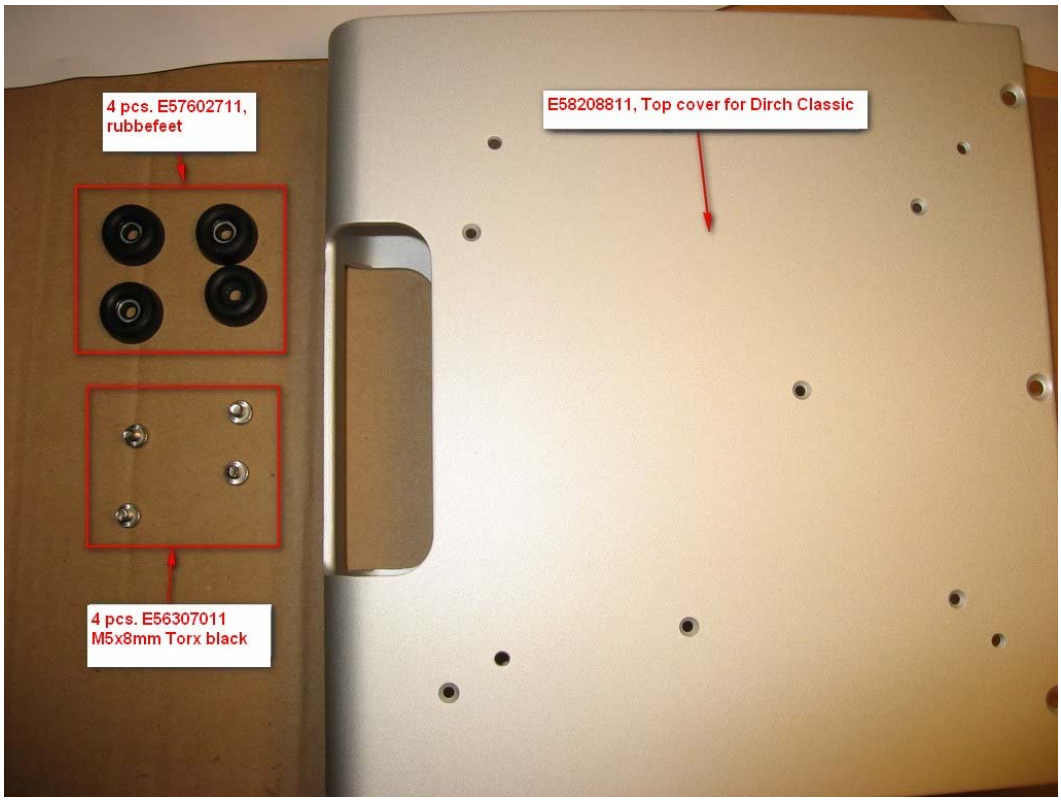

Figure 37: Components used for the rubber feet assembly.

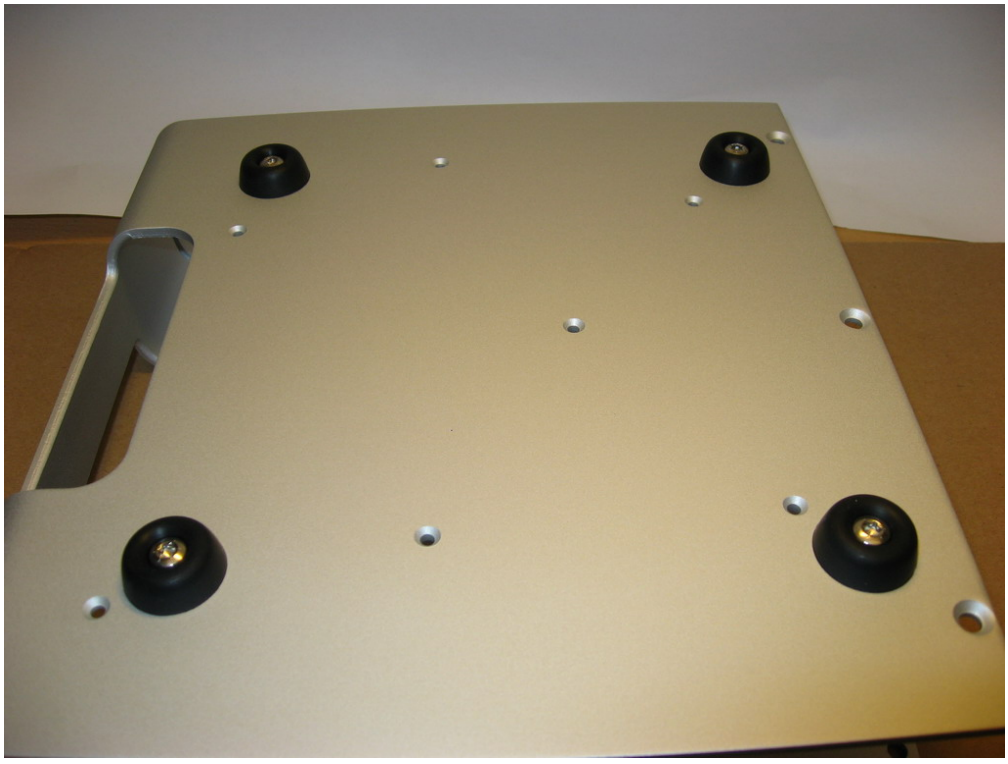

Figure 38: Mount the rubber feet's using the four screws as shown in the picture.

Top Cover assembly

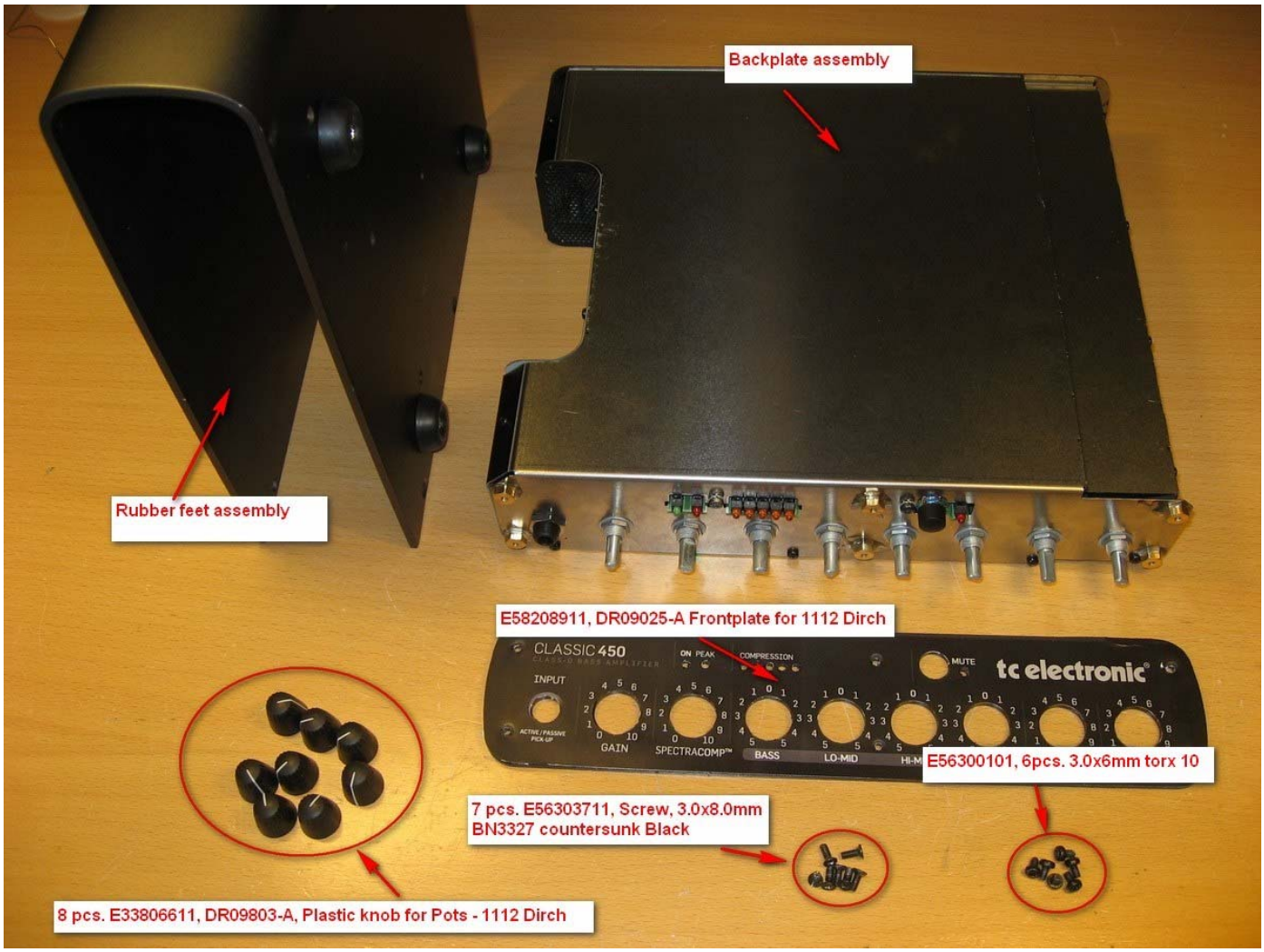

Figure 39: Components used for the Top Cover assembly.

Figure 40: Mount front plate using 6 pcs. M3x6mm screws as shown in the picture.

Figure 41: Mount 8 pcs. "DR09803, plastic knob for pots 112 Dirch" as shown in the picture.

Figure 42: Slide inner box into top cover as shown in the picture.

Figure 43: Make sure the frontplate fits into the groove all the way round the top cover as shown in the picture.

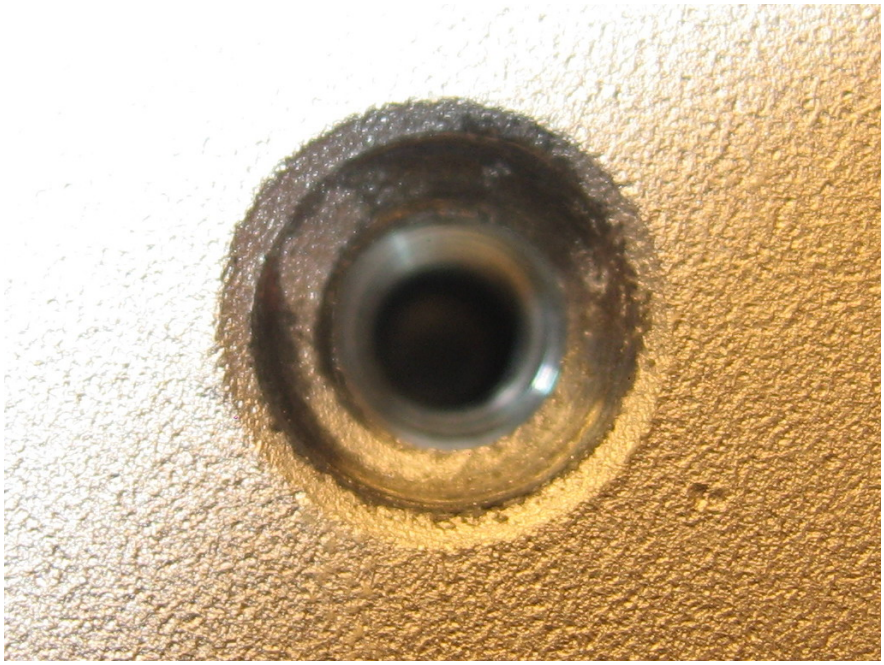

Figure 44: Align all the 3mm press nuts with the holes in the "Top Cover" as shown in the picture.

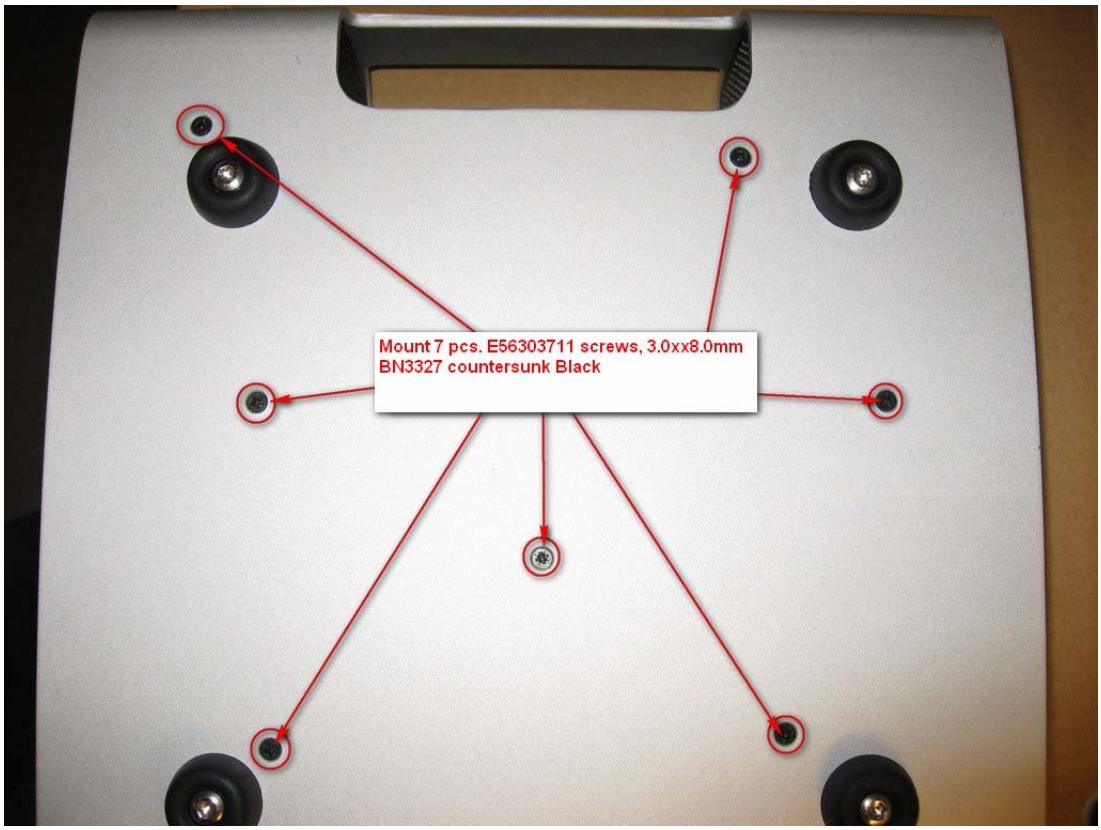

Figure 45: Mount the top cover to the inner box using seven screws as shown in the picture.

Side cover assembly

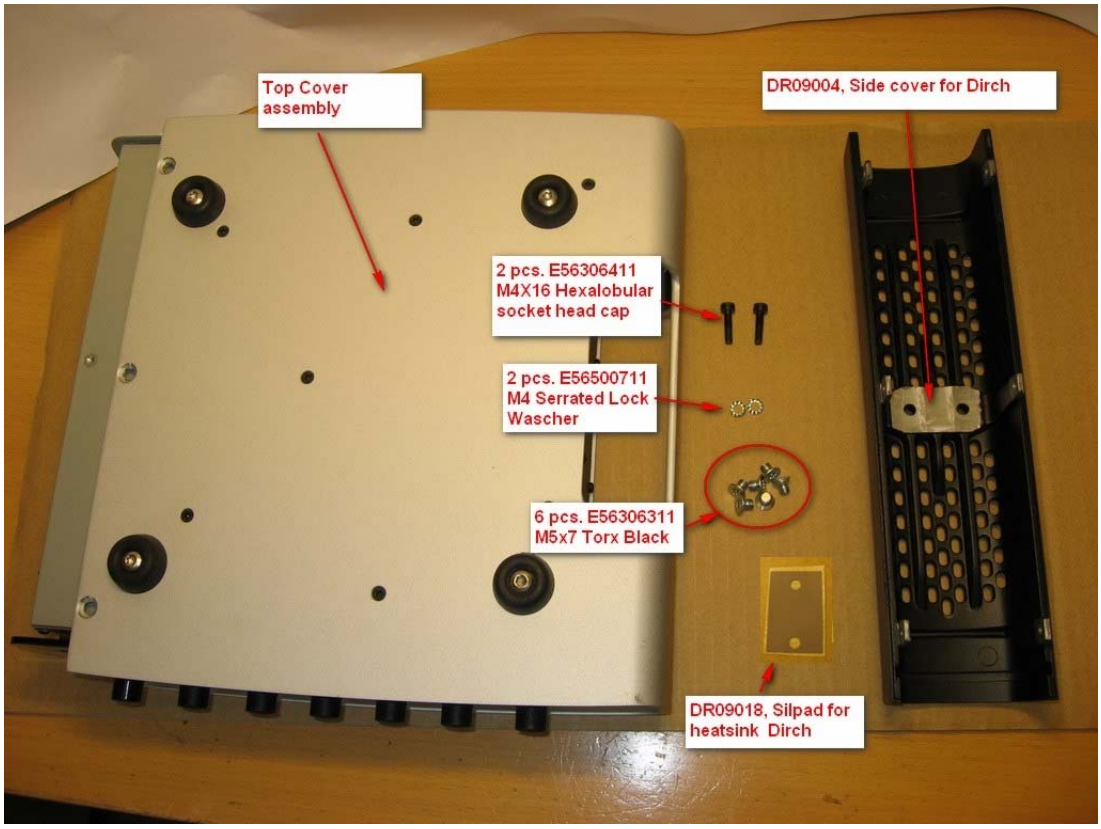

Figure 46: Components used for the side cover assembly.

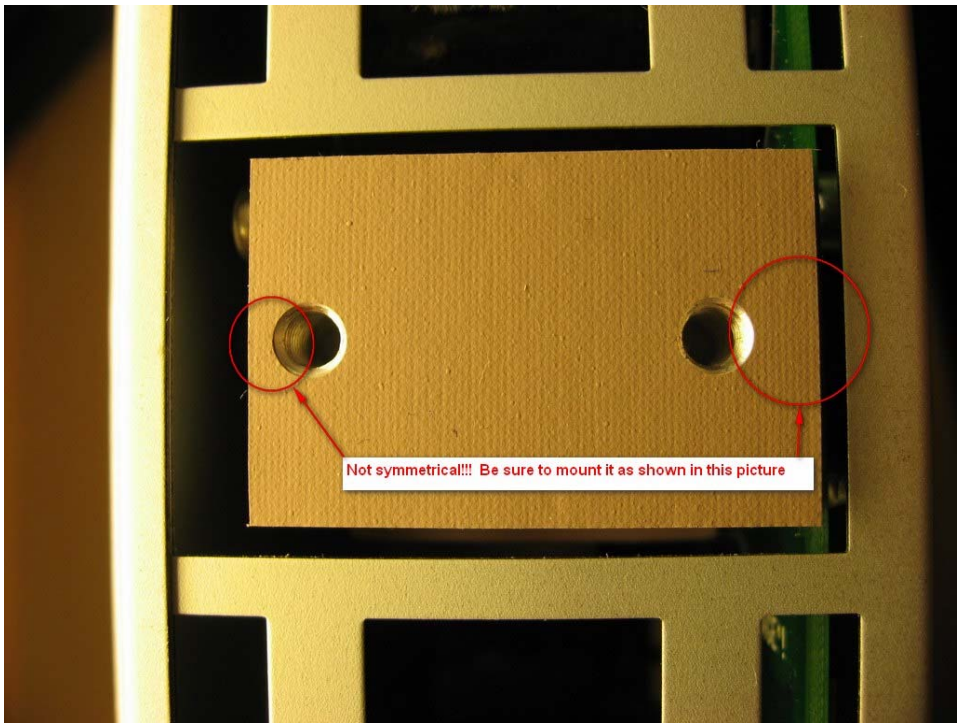

Figure 47: Mount the silpad as shown in the picture.

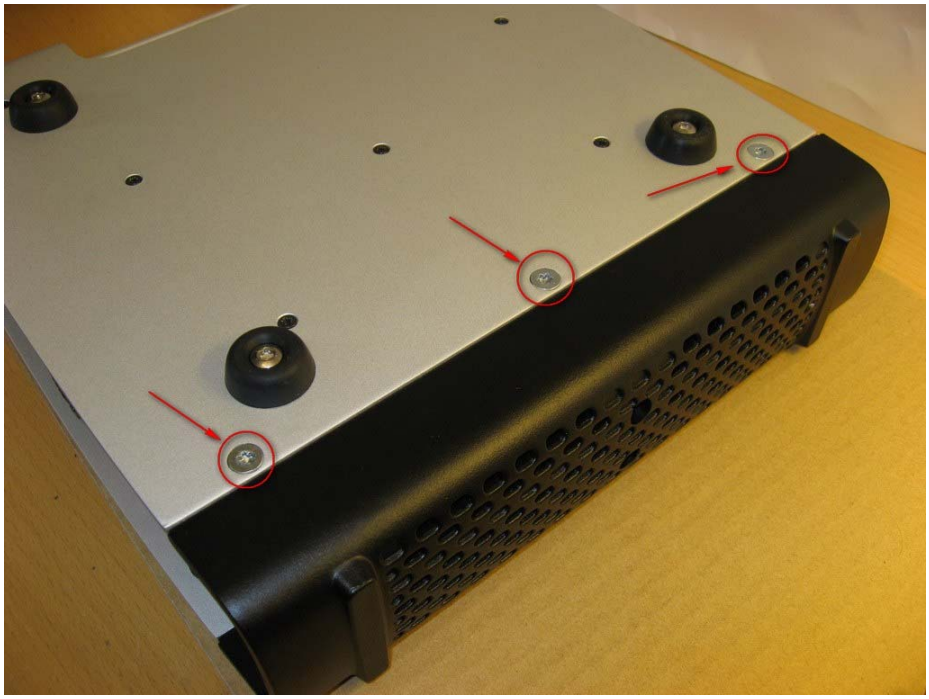

Figure 48: Mount the three screws as shown in the picture. (3 pcs. M5x7 torx black)

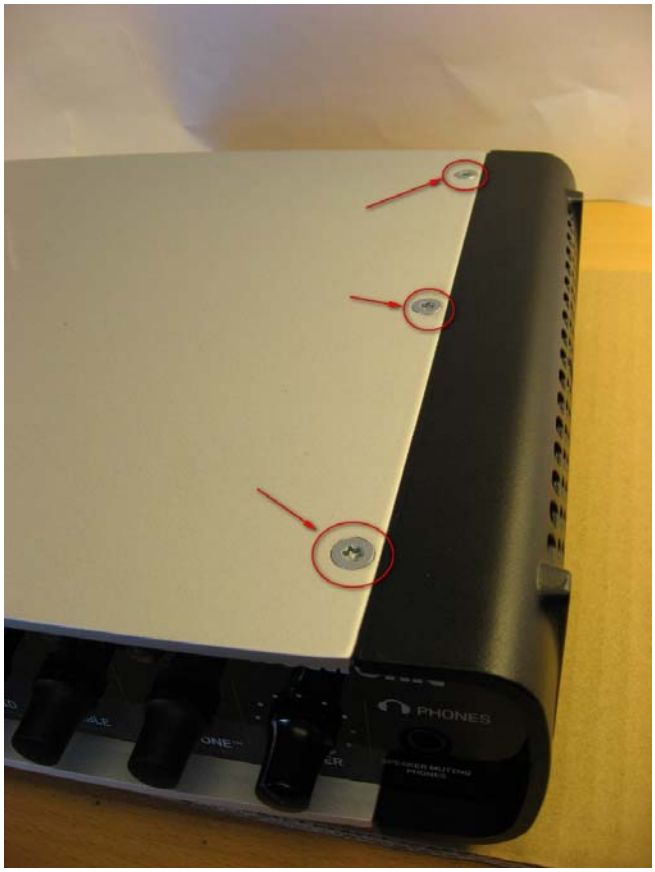

Figure 49: Mount the three screws as shown in the picture. (3 pcs. M5x7 torx black)

These six screws must be tightened using 16 kgf*cm (1.6 Nm) force.

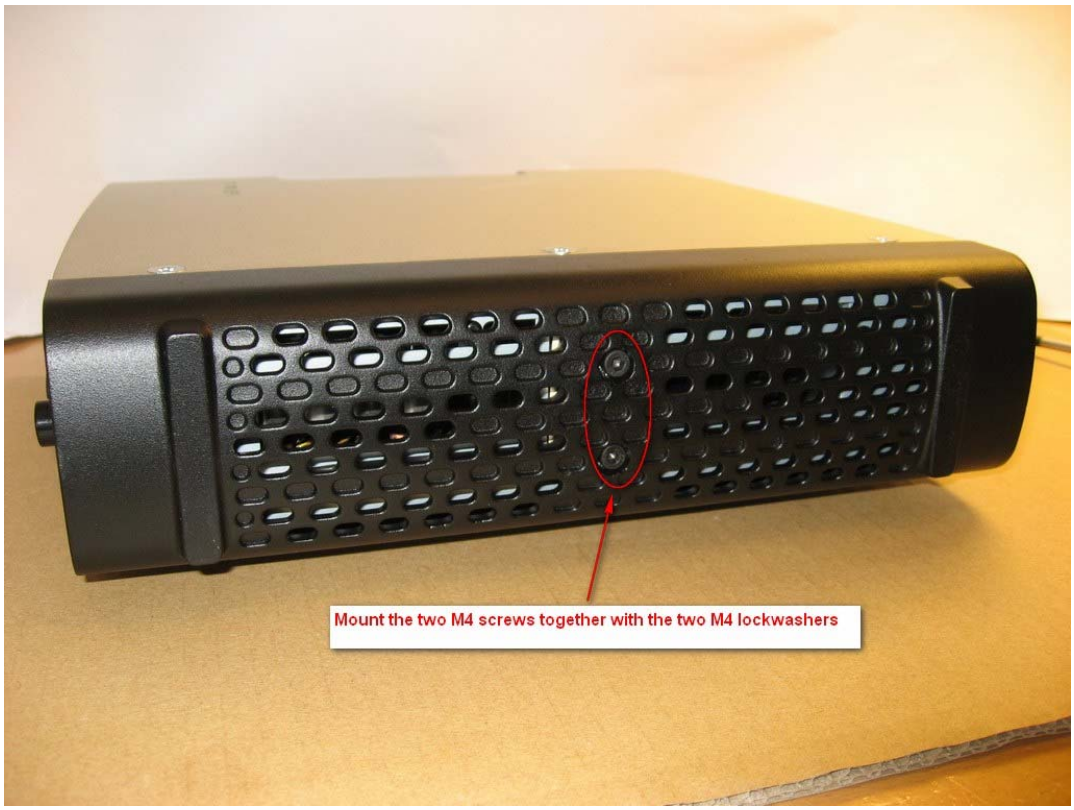

Figure 50: Mount the two screws and two lock washers as shown in the picture.

These two screws must be tightened using 16 kgf*cm (1.6 Nm) force.

Figure 51: After final test mount the E58209011 "DR09027-A, Sticker for MIDI-port, 1112 Dirch" to cover the midi port. As shown in the picture.