

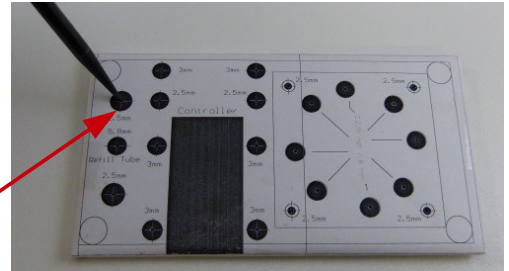
Building instruction for Benedini Oilsmoke II

**Building this smoker needs mechanical and solder skills!
A bench drill is highly recommended!**

Construction steps:

1. Cut the drilling jig out of the last page of this manual and tape it on **top** of the smoke box (lid).

If the **LARGE** smoker housing is used, the jig can be placed in the center of the lid. Pictures below show the **small** box as an example.



2. Mark ALL wholes through the paper by a needle or centre punch.

3. Drill all holes you need. **Watch the labeled diameters**
NEVER use a normal spiral drill for the large smoke outlet holes !!!

→ **High danger of getting injured during drilling**

Use a “hole cutter” as shown in the picture on the right →

Always use a **parallel vice** during drilling.

Never hold the housing by **hand** during drilling.



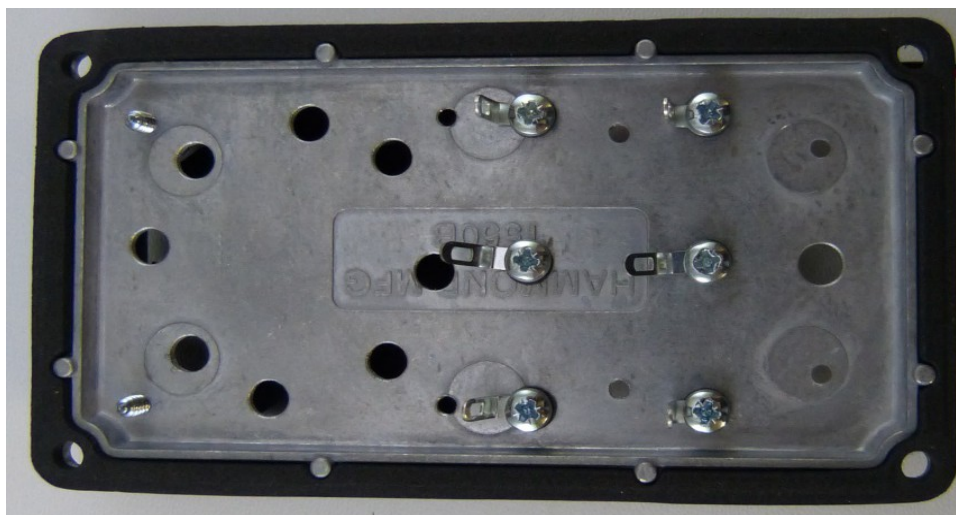
Hole cutter

4. Mount solder lugs by the M3 x 6mm screws + nuts + top & bottom isolation
This is the most critical part. The screws must be electrically isolated to the lid.
Plug the black plastic nipples from inside the lid into the solder lug holes.

Lay the lug on it and put the screw through.

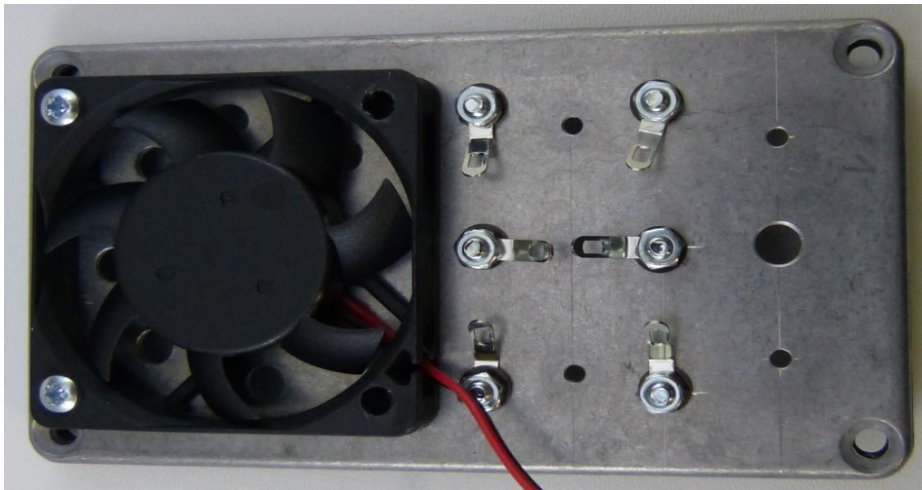
Turn the lid put the brown isolation washer on the screw, put the outside solder lug on the screw and fix all by applying the nut.

A conductance check by measuring the resistance between screws and lid by a multimeter is highly recommended. → All must look like the pictures below show !



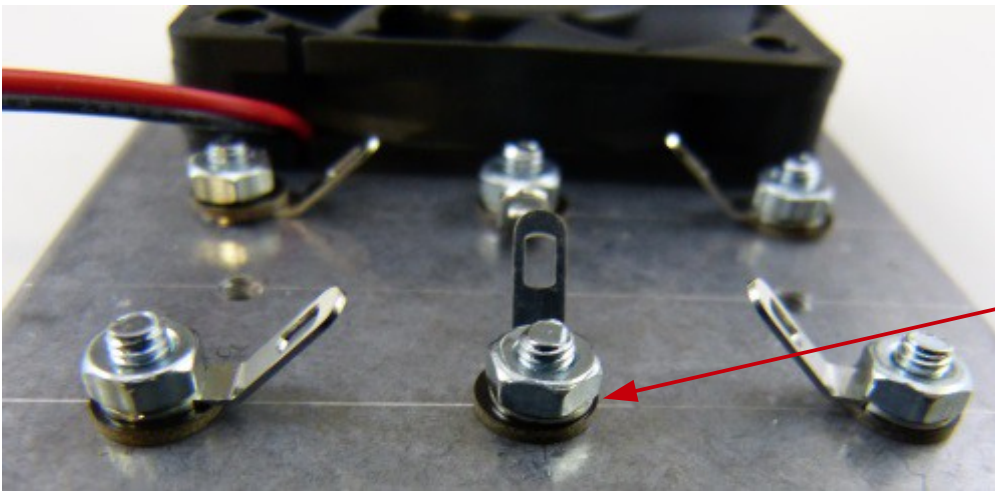
Lid inside view.
Watch solder lug orientations

(small smoke box)



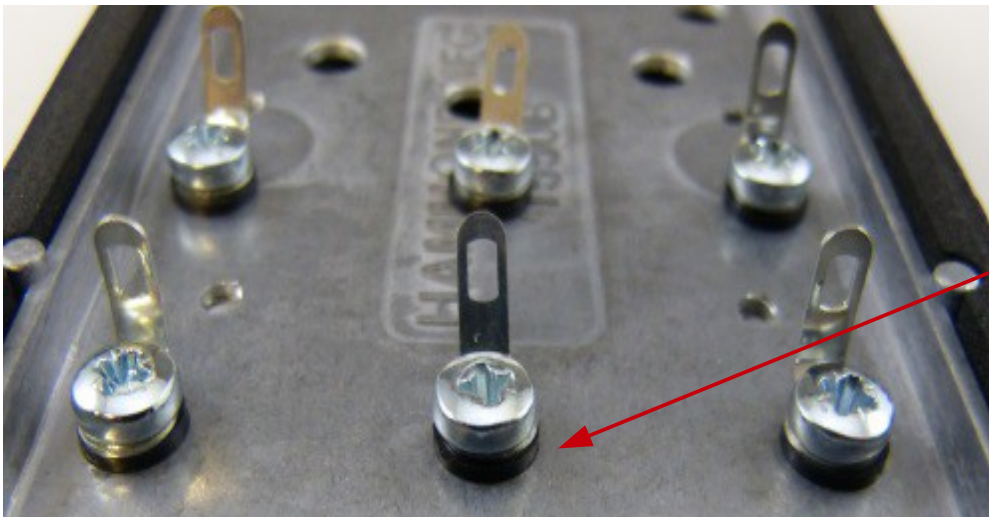
Outside view of the lid.
 Watch solder lug orientations.
 Shown: 12V version

24V version does NOT need solder lugs at the centre contacts !



Outside view of the lid.

Watch isolation washers under the solder lugs.



Inside view of the lid.

Watch isolation nipples under the solder lugs.
 The shroud must be inside lid.

Isolation nipple.
 Watch shroud !

Shroud must be
 INSIDE the lid !



Isolation washer

5. Install the fan by 2.9 x 19mm self tapping screws
6. Solder all wires as shown at the end of this manual according to the desired **operation voltage** !!!

7. Install cover by using two of the fan screws and two additional ones below, supported by 10mm plastic sleeves between box and cover.

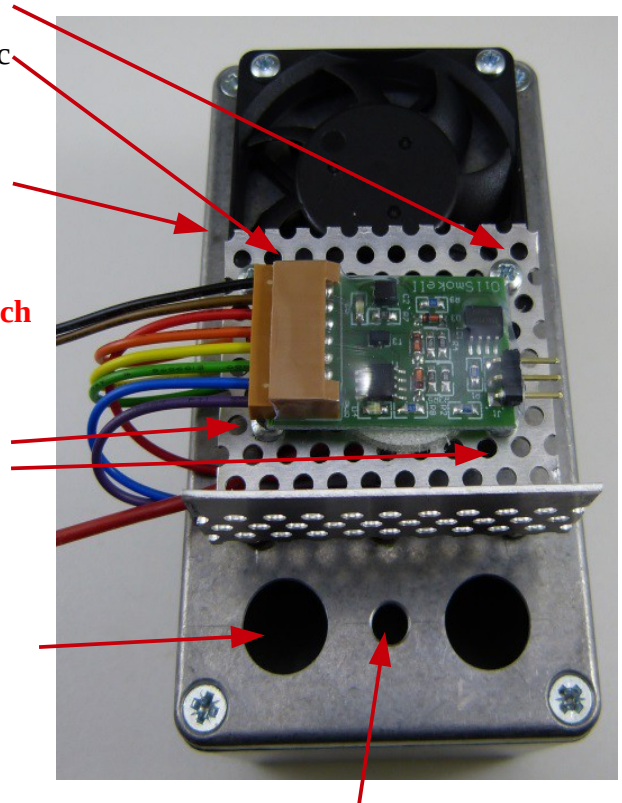
Bend the edge covering the fan slightly to top.
This ensures a **free running** fan.
!!! No guarantee on damaged fans !!!

Make ABSOLUTELY sure the cover does NOT touch any electric contacts below !!!

Cover screws are supported by 10mm plastic sleeves between box and cover.

2 vertical smoke outlets are shown on this picture.

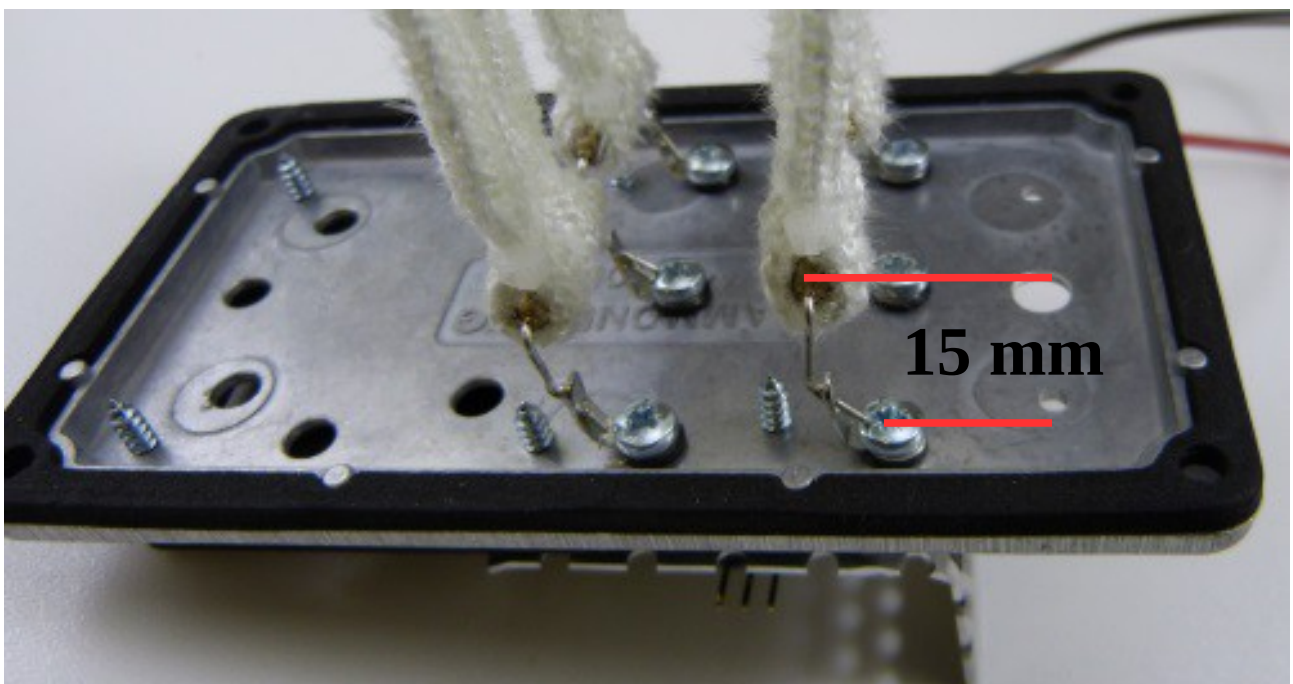
The smoke controller is fixed by a “velcro” pad on the cover.



Insert refilling tube here.
→ see instruction below !!!

9. Solder the heating elements to the solder lugs **inside** the box. 2x two heaters in series, as shown on the picture below. The **distance** to the lid should be around **15mm**

!!! Make sure the wires connect ONLY the solder lugs !!!
They must NOT touch the led or any other parts

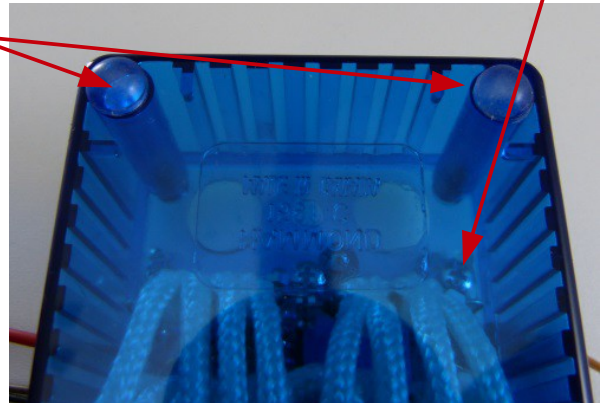


10. Install the lid on the box. Bend the wicks **CAREFULLY** to the side of the **FAN** to ensure laying **PARALLEL** on the bottom of the housing.

The proper installation can be seen on the picture below. Shown at a transparent plastic housing.

11. Tape two rubber feet on the **EXIT** side of the housing.

The exit side should be raised slightly to keep the smoke oil more in the opposite edge.



12. Insert the filling tube.

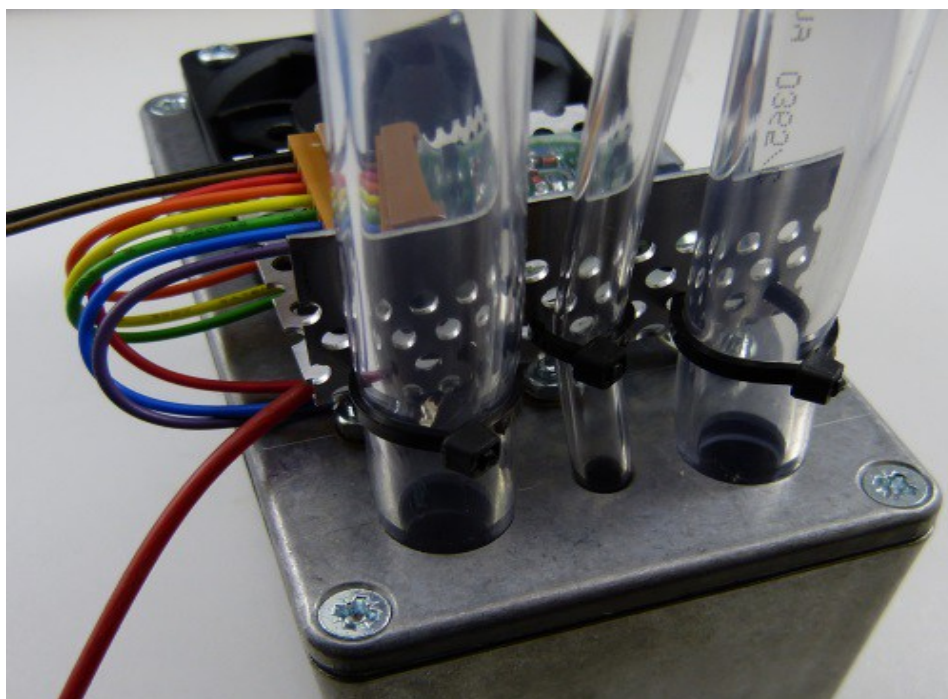
Make sure it last about **5mm until bottom**

End of filling tube

2x Elevation feet on filling tube side **ONLY**



Final installation with fixed outlet and refill tubes, using three cable ties.



Hints:

1. If accidentally drilled holes are **not** necessary, close it simply by inserting a screw.
2. **Horizontal** smoke exit:
Drill holes as **high** as possible!
Otherwise the max. filling volume of smoke oil is reduced! Oil may flow into the exit tubes.
3. Install tubes continuously rising to the exhaust. This allows condensed smoke flowing back into the container.
4. See **operation manual** for installation and operating advice for the smoker !!!

It is recommended downloading this manual from www.benedini.de for having coloured pictures.

Technical changes reserved

Not suitable for kids under 14 years



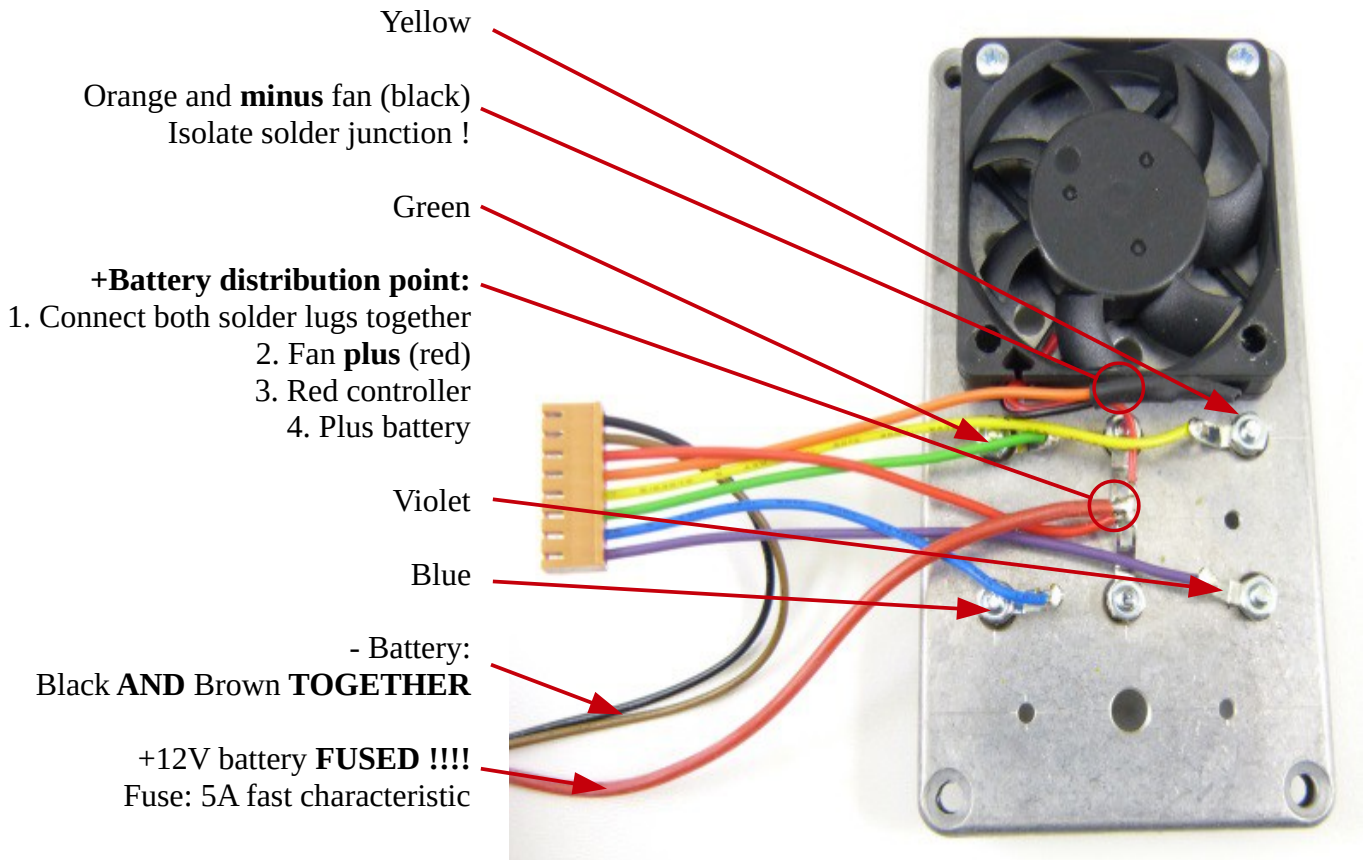
Benedini Modellbauelektronik
Müllergasse 15, 52159 Roetgen
Web: www.benedini.de
Mail: Thomas@Benedini.de



12V wiring

Important: This setup is **ONLY** compatible with the TBS Mini V1 and V2

!!! Contact us for applications with the TBS5 sound unit !!!

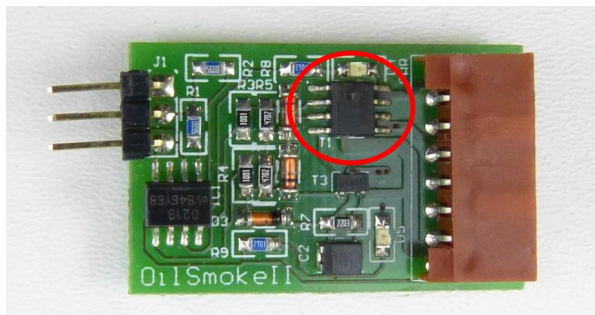


VERY IMPORTANT:

The +12V battery cable **MUST** be fused ! Fuse holder and fuse are included in the kit.

Type of fuse: 5A fast characteristic

Any damages in the smoke controller area shown below are definitely out of any warranty !!!



Such damage results from damages on the heating elements caused by overheating. Watch oil level !

Make also sure the right smoker type is selected in the smoke controlling sound unit configuration. This is very important if the smoker is operated on the **TBS5** sound unit !!!

24V wiring

Important: This setup is **ONLY** compatible with the TBS Mini V1 and V2

!!! Contact us for applications with the TBS5 sound unit !!!

Controller Orange to Minus Fan
Isolate solder junction

Controller Green **AND** Yellow

Plus Fan to resistor

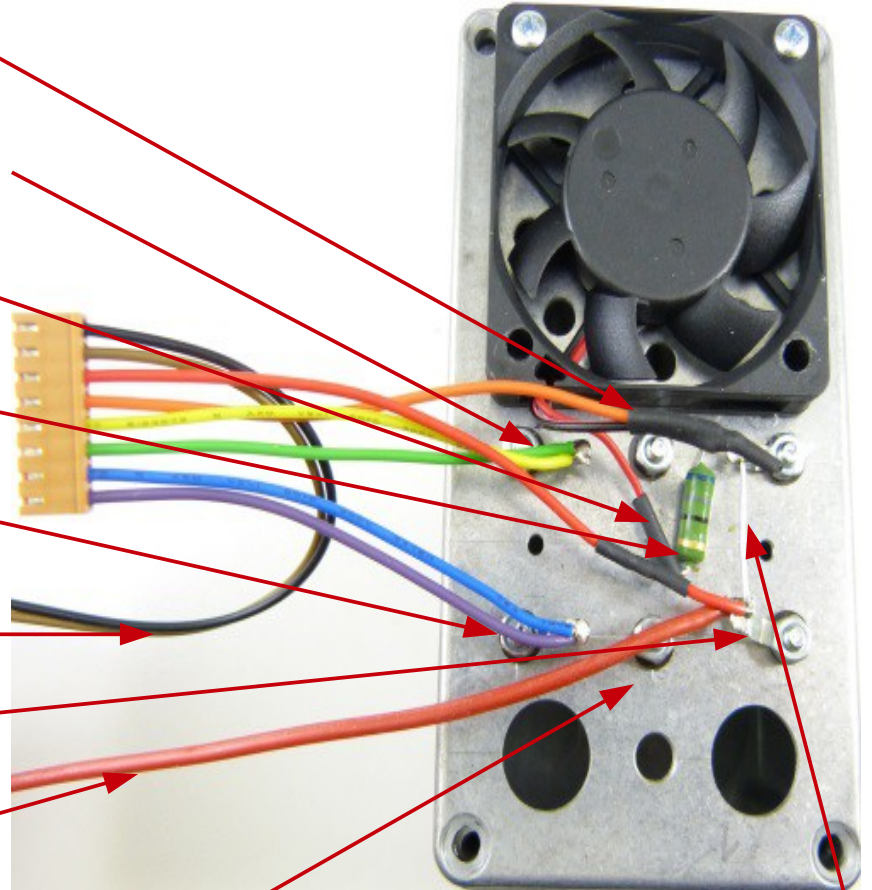
Fan Resistor

Controller Blue **AND** Violet

Controller Black **AND** Brown
to **Minus** Battery

Controller Red

+24V Battery **FUSED !!!**
Fuse rating: 5A fast



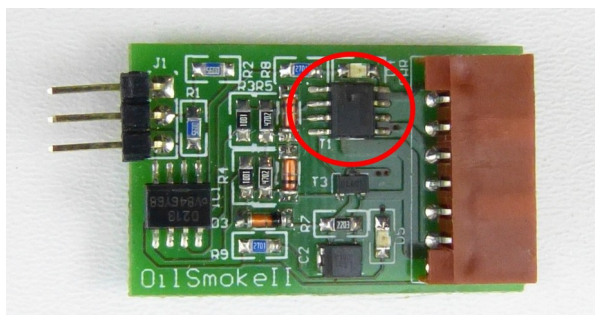
Nothing connected at center nuts
but they are **under voltage !**
! NO solder lugs necessary !

Right solder lugs are connected together.
Resistor wire can be used.

IMPORTANT:

The +24V battery cable **MUST** be fused ! Fuse holder and fuse are included in the kit.
Type of fuse: 5A fast characteristic

Any damages in the smoke controller area shown below are definitely out of any warranty !!!



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Make also sure the right smoker type is selected in the smoke controlling sound unit configuration.
This is very important if the smoker is operated on the **TBS5** sound unit !!!