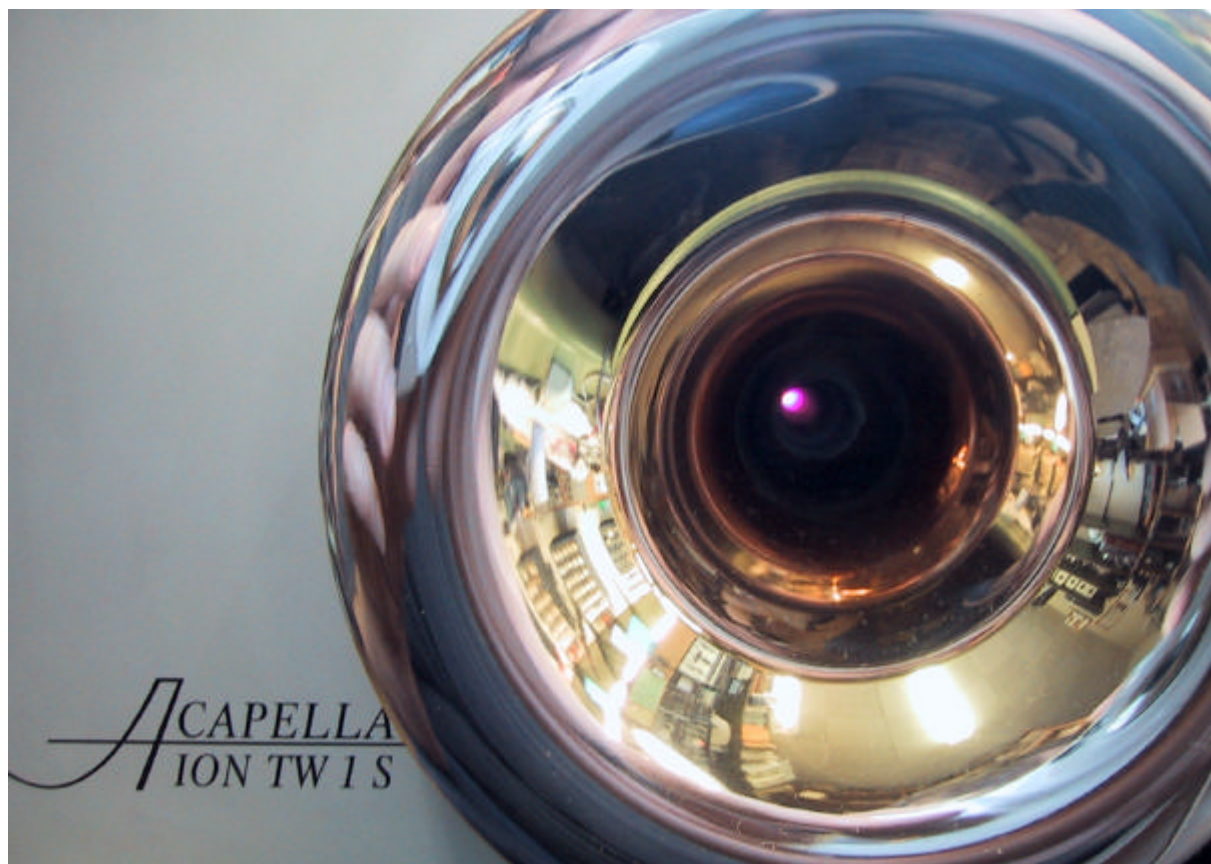


Acapella TW1 S



Service

Fuses

Nr.1 Fuse A-Driver (slow, 100mA)

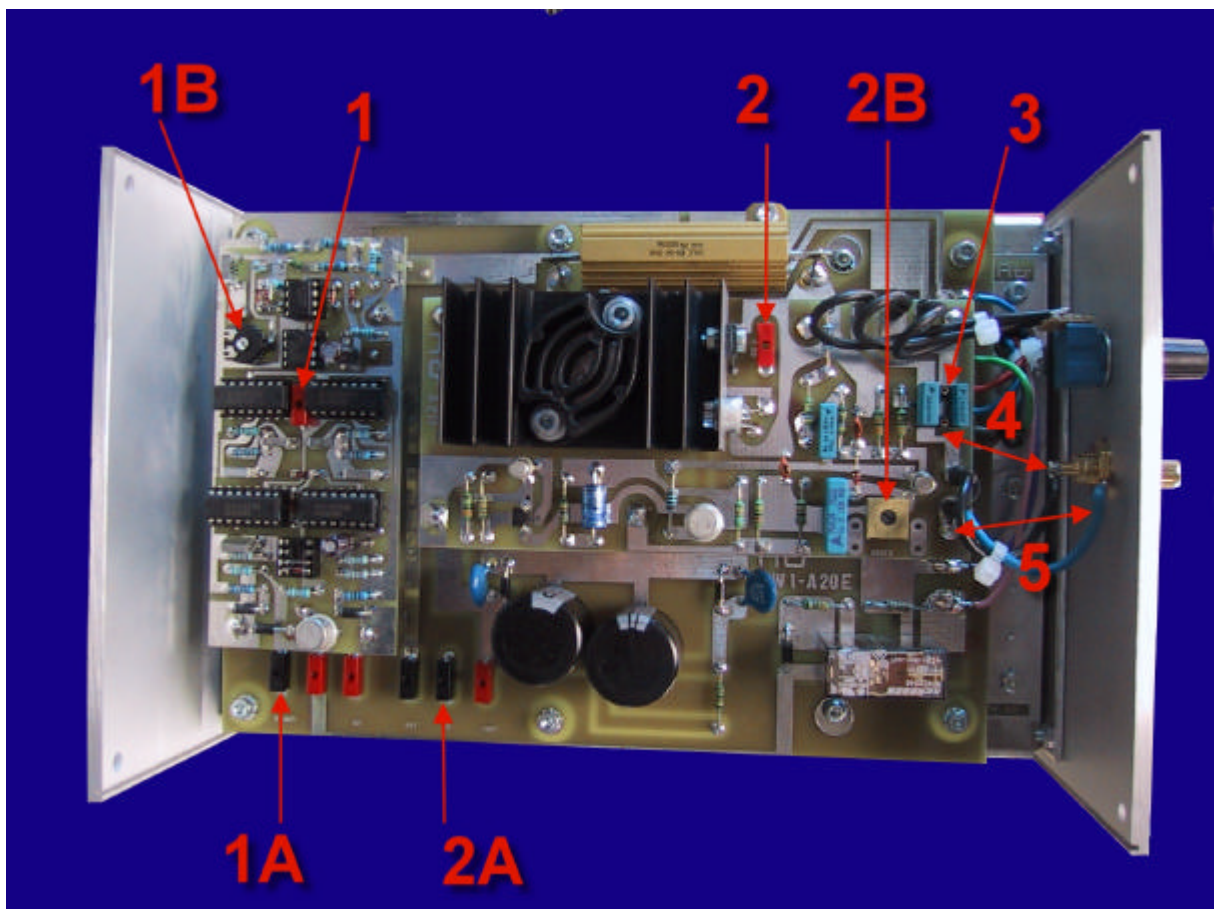
Nr.2 Fuse Main Power (slow 1,6A / 240V - 2,4A / 110 V)

Nr.3 Fuse Valve (slow 400mA)



Overview, Test Point and components

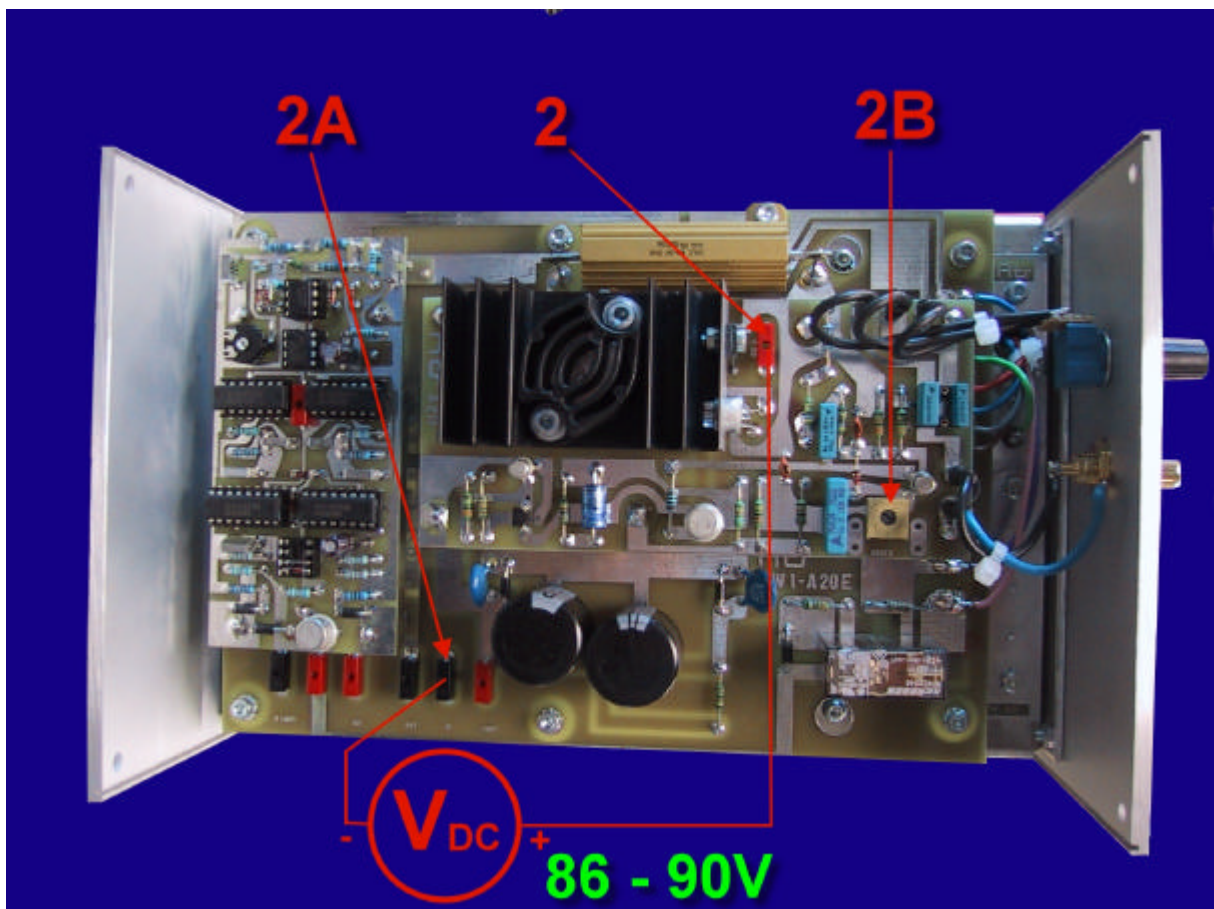
- No. 1 Test point for adjusting the turn-on level
- No. 1 A Ground point for test point Nr.1
- No. 1 B Potentiometer for adjusting the turn-on level
- No. 2 Test point, Bias
- No. 2 A Ground point, Bias
- No. 2 B Potentiometer, for adjusting the Bias
- No. 3 Condensers Crossover frequency
- No. 4 Connection, NF signal (+)
- No. 5 Connection, NF signal (Ground)



Examination and adjustment of the A driver

To check the A driver a multi-meter has to be applied to the test points 2 (+) and 2 A (Ground). To do this, attach the multi-meter with selected DC voltage measurement range (250 V). In manual switch position a reading of ca. 200V is measured in the case of a fault when starting the tweeter. The working voltage becomes as indicated under normal operation condition at these test points

Oscillator tube measured. The voltage is adjustable with the Potentiometer (2 B) The measured voltage should read (Tweeter started) between 86 and 90 volts.

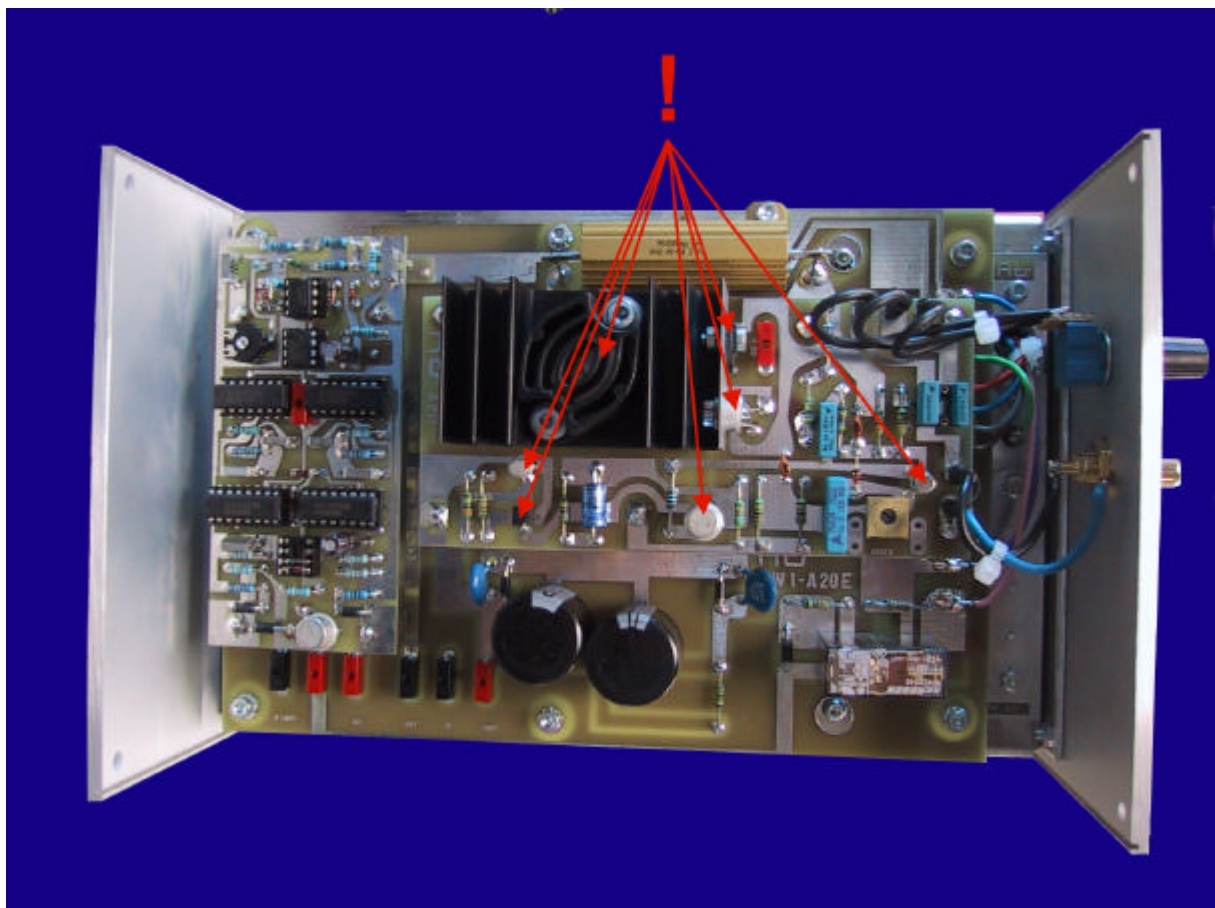


A - Driver faulty

If A driver is found to be defective after replacing a faulty oscillator tube, then all labelled transistors should be exchanged.

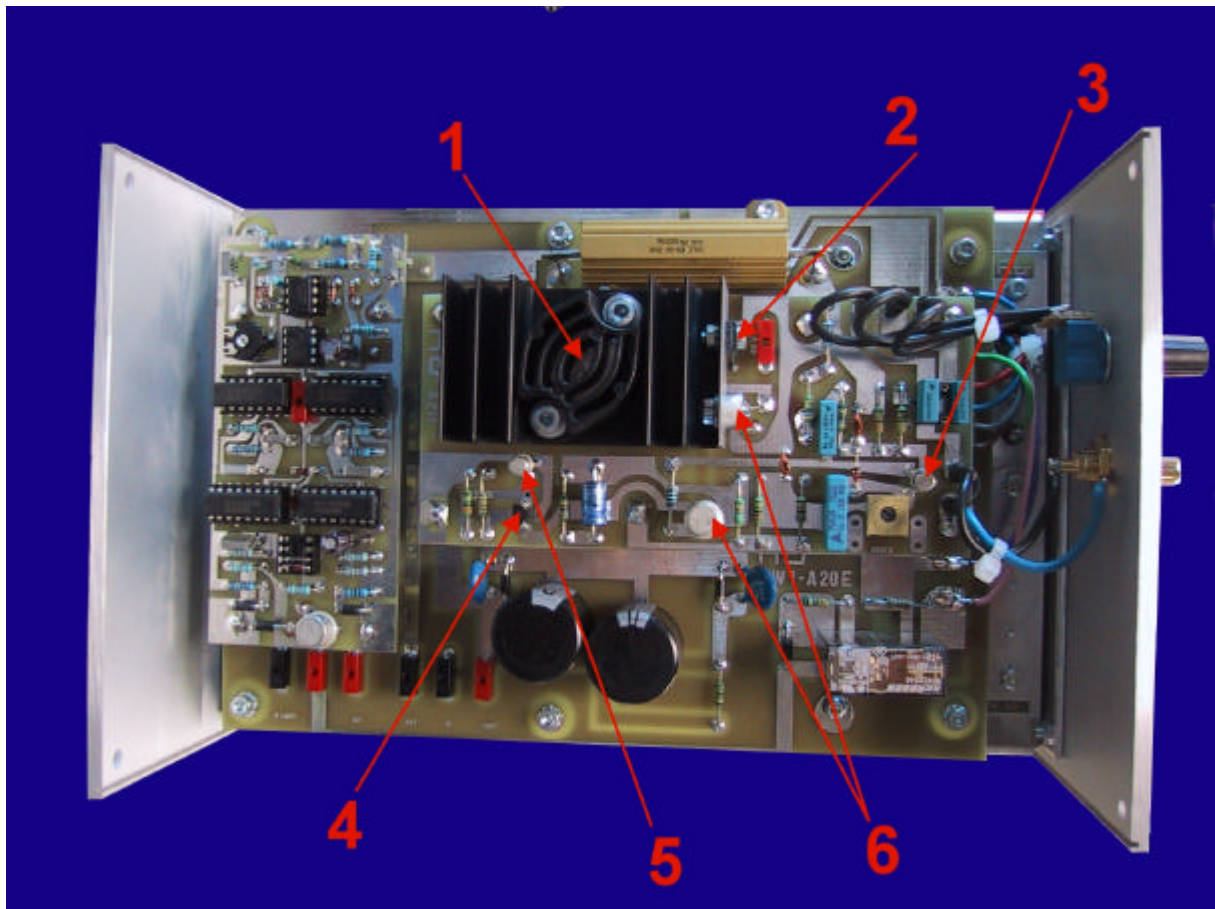
As with the oscillator tube replace the 400 mA (T) at the same time replacing the 100 mA (T) fuse.

On completion, the operating point has to be newly adjusted as described previously.



Transistors A -Driver

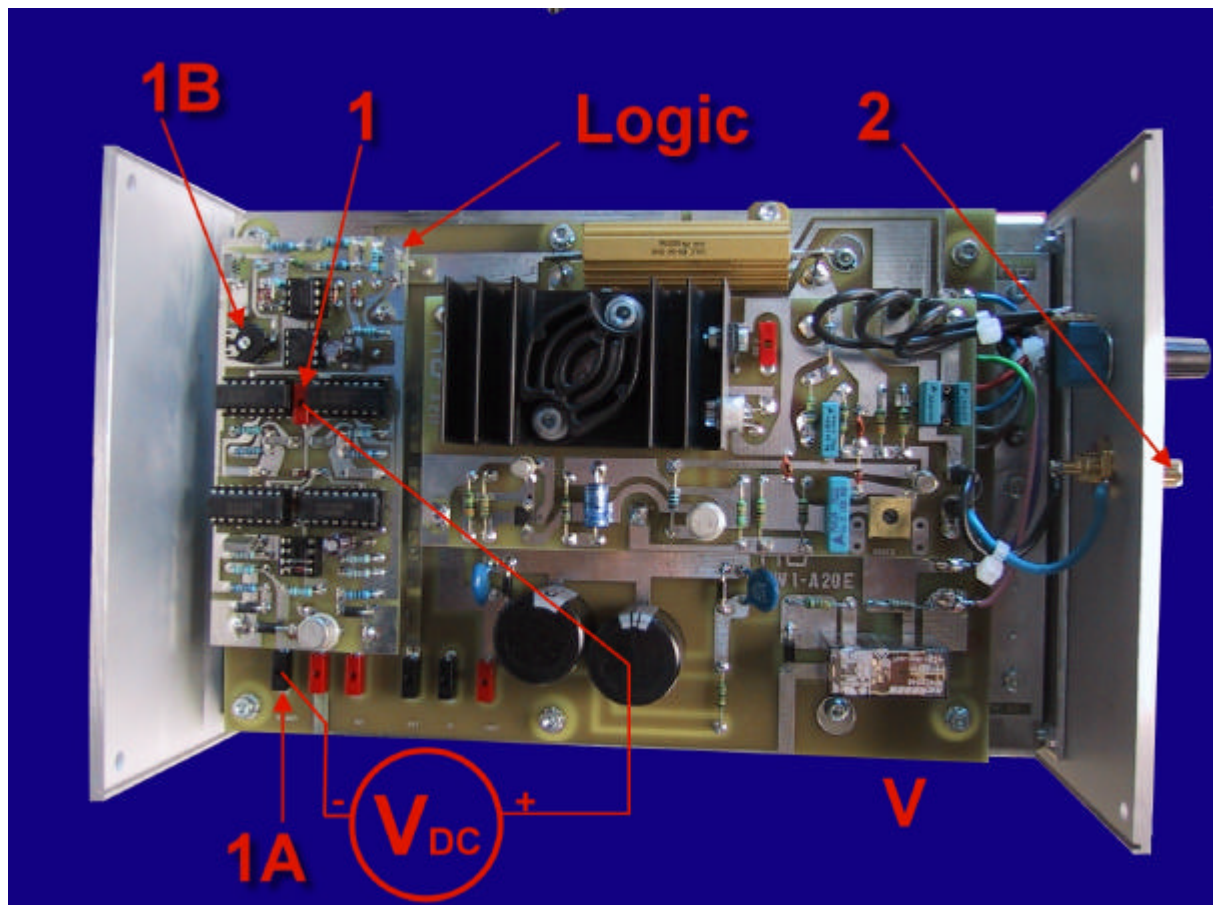
- Nr.1 BU 526
- Nr.2 BD410
- Nr.3 BC107A
- Nr.4 MPSA 92
- Nr.5 BCY89 / 8
- Nr.6 BF259



Adjustment of the switch on logic circuit

- No. 1 test point, logic circuit
- No. 1 A test point, Ground
- No. 1 B Potentiometer, switch one level adjust
- No. 2 NF input

The adjustment get the switch on logic circuit a direct voltage gauge = (+) about the test points 1 and 1 A = (Ground) to attached. The measurement range should be approx. 20 volts. Over the NF entrance becomes a sine signal (30 mV effective/1 kHz) fed in. This one already before Tweeter switched on "manually" about the function is "Automatic" switched to now. By turning the Potentiometers (1 B) clockwise up to the point, at this the tension sudden of zero on approx. 15 V rises the one switching point is adjusted.

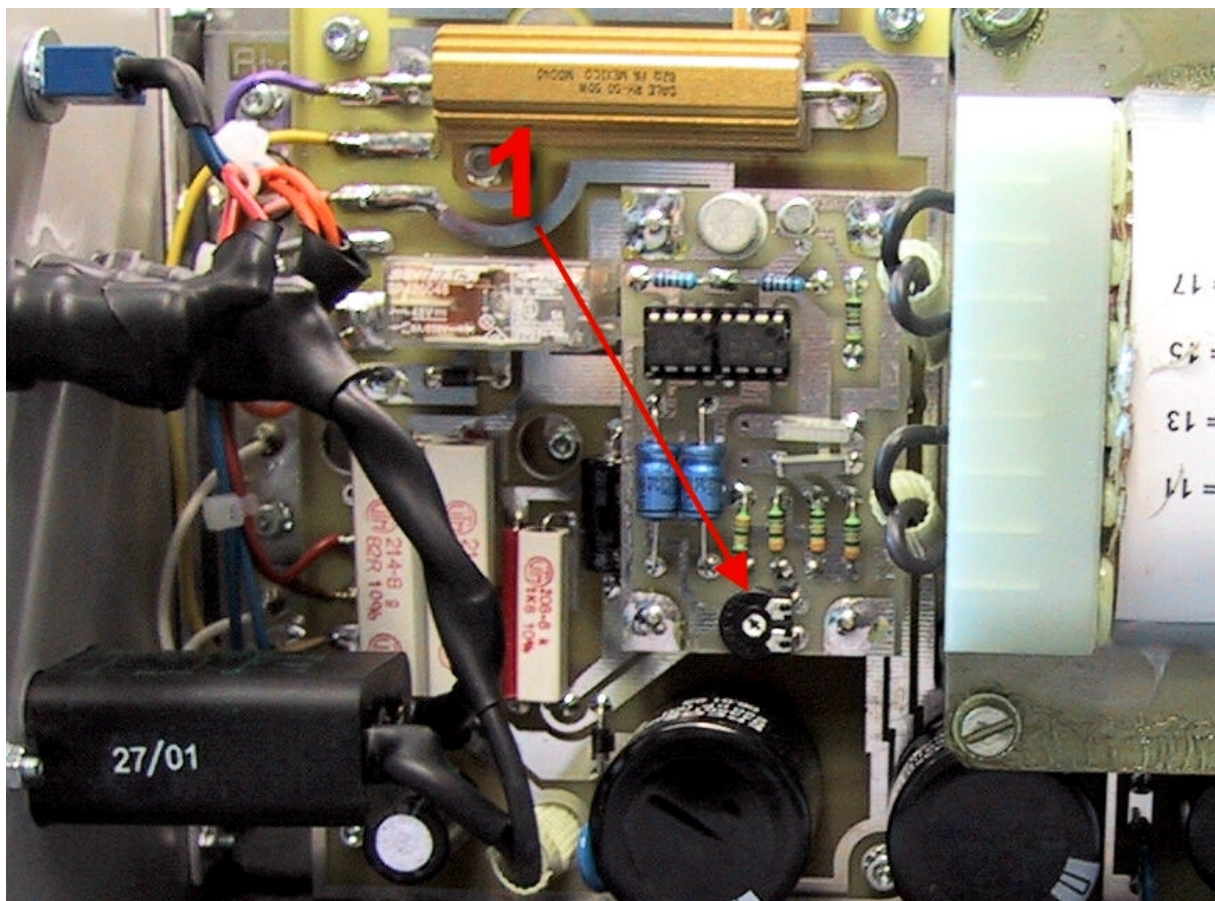


Start-up grant (fast warming of the combustion chamber)

With the help of the Potentiometers Nr.1 on the start-up grant circuit board the duration of the start-up grant is adjusted.

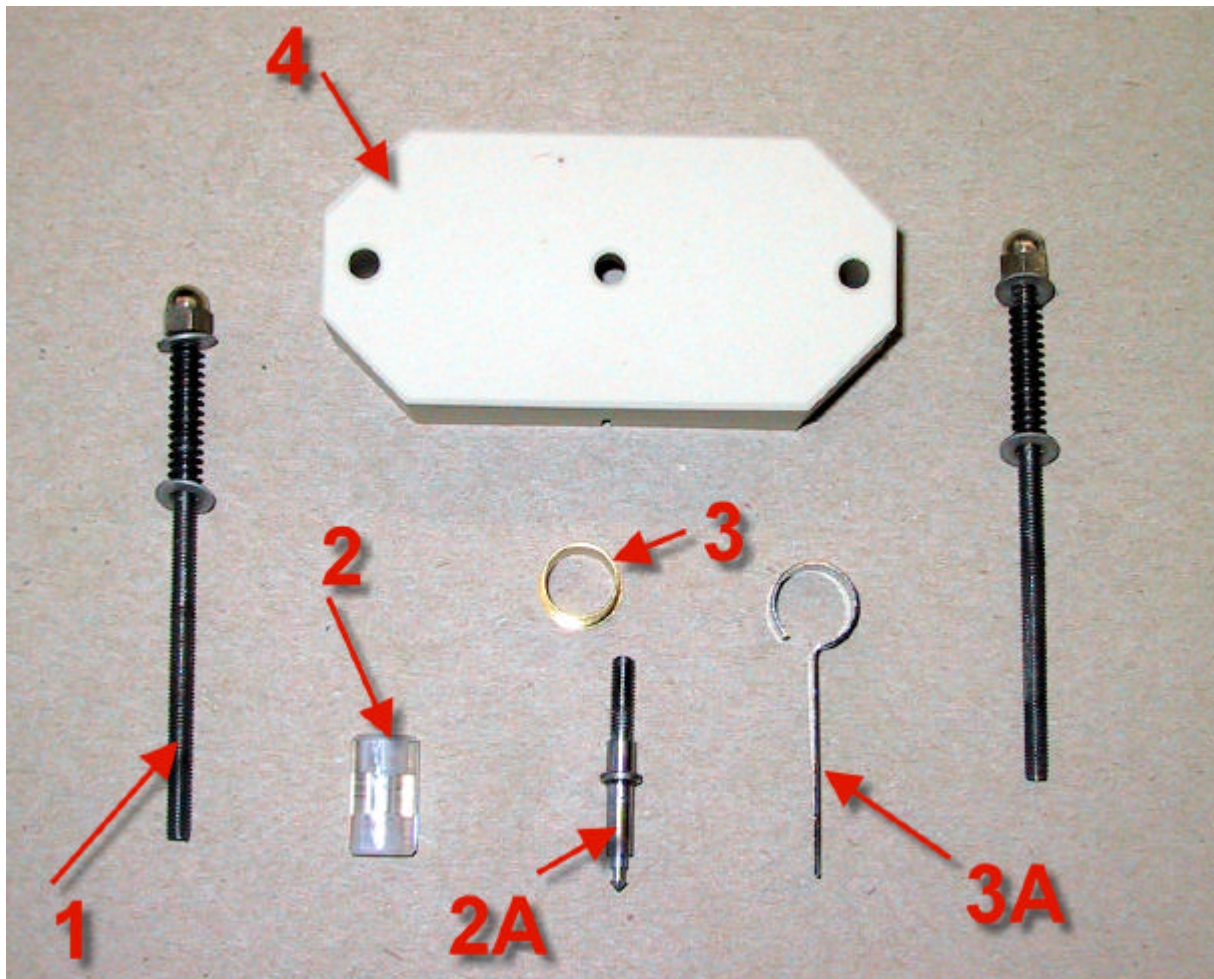
The period of time for the start-up grant should for approx. 4 to 5 seconds being adjusted. (The time varies insignificantly into dependence of the mains voltage).

By turning the grinder clockwise is shortened the start-up grant. You see a typical position of the grinder in the picture below.



Component, combustion chamber

- No. 1 Thread bar with nut, tooth lock washer, U plate, Feather, U plate
- No. 2 Combustion chamber
- No. 2 A Electrode
- No. 3 Brass hull
- No. 3 A Outer electrode
- No. 4 Ceramic block

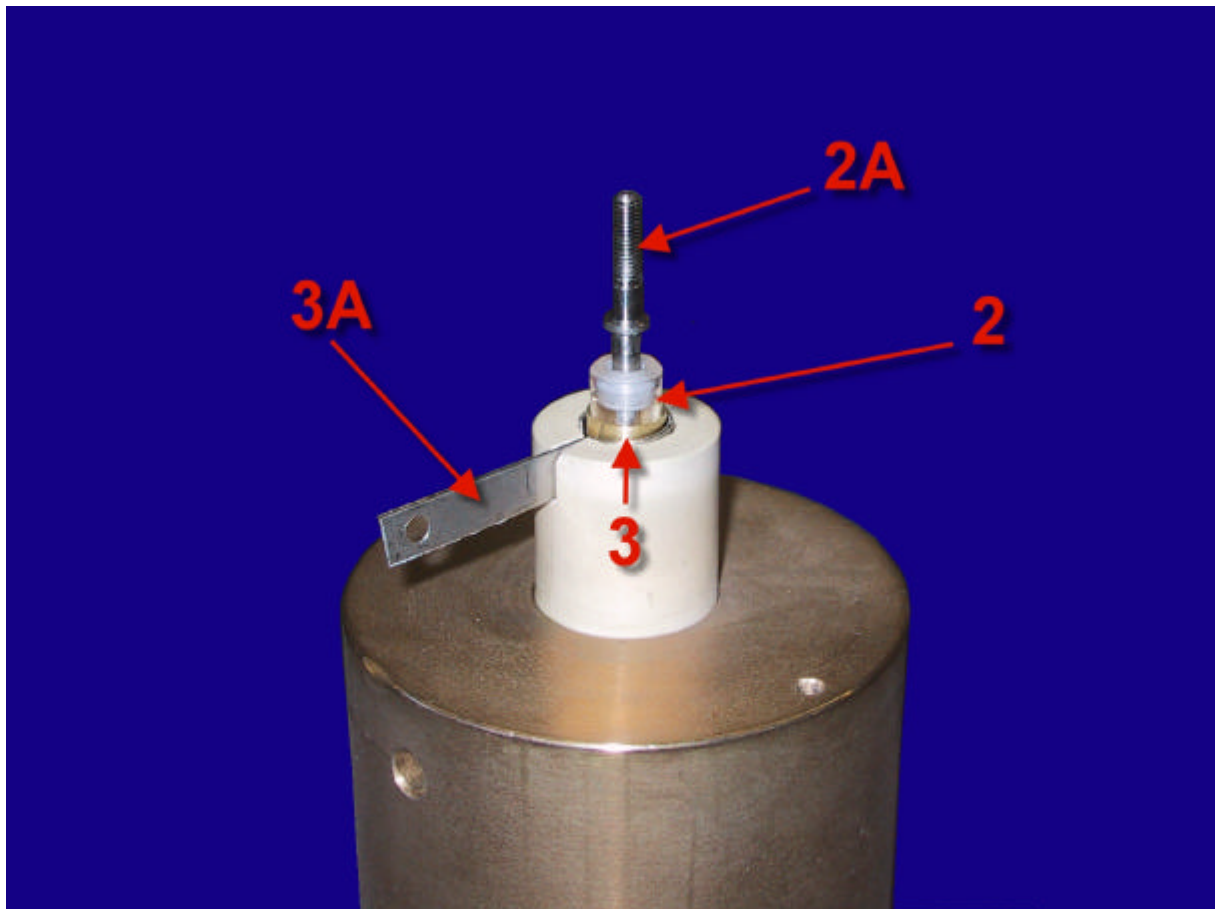


Combustion chamber assembly

For the assembly of the combustion chamber in the horn the outer electrode (no. 3 A) is squeezed together a little around one Producing bias voltage. After this becomes the brass hull (No.), 3, with the open side up into the outer electrode slid.

Become now both components in this one as represented below Ceramic put.

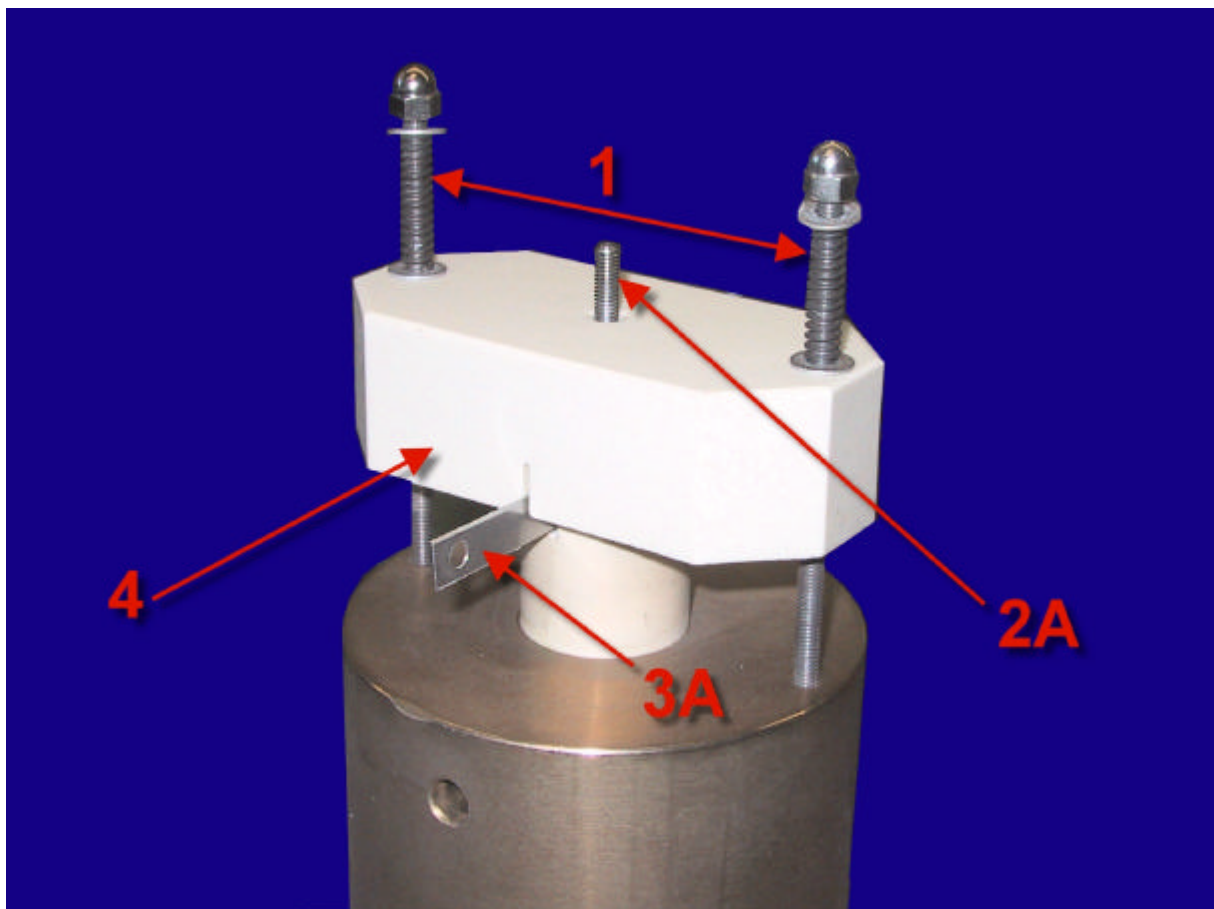
Following becomes the electrode (no. 2 A) unstressedly in these Combustion chamber (no. 2) established and until the stop into this one Brass hull pushed.



Combustion chamber assembly step 2

After the assembly of combustion chamber, outer electrode and how becomes spherical wave horn the ceramic block (no. 4) now attached pointed below.

The springing is screwed together tightly with the horn. This one is becoming now Electrode (no. 2 A) with a washer and a nut fastens the size's M3, the horn assembly is completed now.



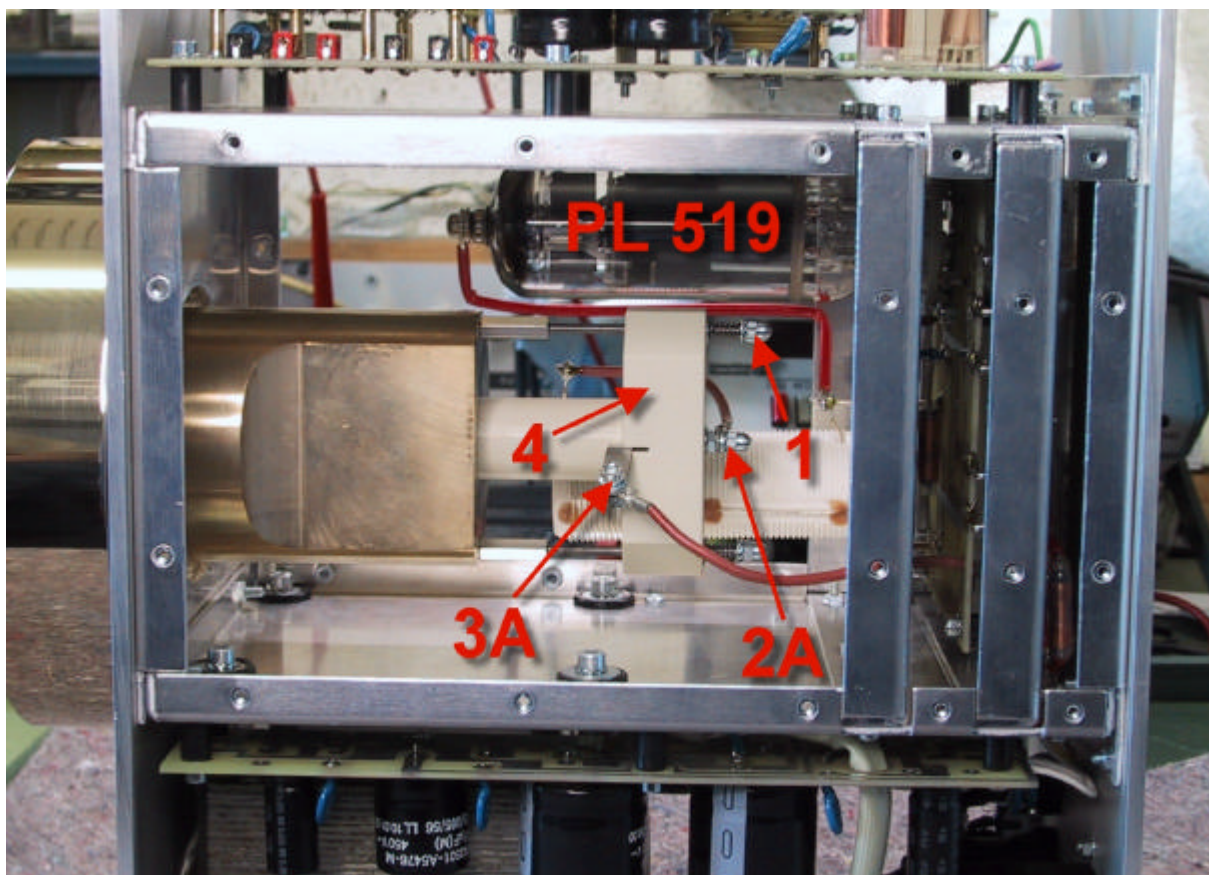
Connections, horn

Nr.1 spring

Nr.2A high voltage connection

Nr.3A base

Nr.4 ceramic block



Connections horn, figure 2

Nr.1 anode connection

Nr.2 high voltage connection

Nr.3 high voltage spool

