1. Mechanical Preparation



Here is the latest version of the Kit1 300B Single Ended Chassis – It is made of 3mm aluminum which has been powder coated black – the chassis is ultra sturdy and aluminum isanidealmaterial for audio – If you ever need to drill the chassis – its easy to drill through!



Here you can see the underside of the chassis – and this is the position you will be working on the kit most of the time!



Grommet Installation : Install the 5 smaller grommets in the 5 holes that are 1/2" wide

Install the three larger grommets into the 3 larger holes :





8 grommets installed correctly in chassis!

Lets install the 8 pin rectifier valve base – Find the KEY between pins 1 & 8 and make sure this points to the center of chassis – Feed the valve base in from under the chassis and secure with the mounting bracket and 2 black M3 10mm countersunk screws!







Note the orientation of the KEY on the 8 pin valve base ! Well done 8 pin base installed!

Now lets install the 4 Pin valve bases in the center of the chassis – READ CAREFULLY BELOW before you start



IMPORTANT: Note that each 4 pin valve base has two small holes and 2 larger holes – the larger holes are for the FILAMENT Pins – make sure these are on the OUTSIDE !!!!!



The next step after the valve bases have been installed is to install the two 10mm hex standoffs in the center of the underside of the chassis as shown in the above pic – this is the mounting for the tag strip that we will install later for all the hardwiring! Use the 2 x M3 10mm hex standoffs and 2 M3 6mm countersunk screws that screw in from the top side of the chassis!

Filament stand offs and tag strips stand offs



Now install the 4 - 10mm hex standoffs in the position as shown above and secure with the 6mm M3 countersunk screws – from the top of the chassis !

TANG STRIPS

Next task is to install the TANG strips – these strips are used to support the Front insert plate



The two tang strips will require just 3 M3 x 10mm black countersunk screws and 3 M3 nuts to secure into position ! Position the TANG strip in the chassis as shown in the next picture and then secure one of the 3 holes from the chassis with the tang strip – see next photo(s)



Position the Insert plate in the chassis as shown with the PEMS faced up (see below)



Used Black M3 CounterSunk screws and an M3 Nut to secure – but a good tip – DO Not tighten them – keep them loose so they have some play – only tighten once the insert plate is installed later on in the build!



Tang strips installed!

Mains Transformer Installation

This section of the manual is a little tricky and requires a little patience – an extra set of hands would be useful although you can do it on your own if you follow the guidelines !! and a good idea to reafd through the next few pages a couple of times so you under stand the process!



Get the rubber strips out of Chassis Kit Bag and position on the Chassis as shown above

Below you can see the Mains transformer T-199 ready !



Now the Mains transformer – Look for the T-199 code on the bottom of the transformer and position beside chassis as shown!



Position the Transformer on its side with the small set of wires (Primary) on the LEFT !

Now put the wires through the first grommet !

Now on the secondary divide the wires up into two sets – each set being approximately 9 or 10 wires on each side – divide them equally

Wire the first set through the grommet

Position the wires in the other grommet!

Now stand up the chassis and continue pulling the wires through the chassis – Might be a good time to have a second set of hands

Patience Patience!!!

see comments below!!

Once the transformer is CLOSE to the chassis – insert the rubber strips or at least one of them back into position and see if you can get a screw into position to start securing the mains – Use the M4 Fender washer and screw on the top of the transformer and the serrated washer and nut on the bottom of the chassis - A good tip is to just get the nut on for now and later when the chassis is upside down with the Mains in position you can remove the nut and add the serrated washer – its sometime very tough with just two hands to install the serrated washer and nut while screwing from the top side!

Congratulations! Mains transformer installed.....

Choke Installation

In this section we will be installing the CHOKE transformer which is labelled CH-165 on the bottom -

Here you can see the CH-165 in the bottom right hand part of the pic above – Follow my tips for a painless install !

In the Choke hardware bag you will find M4 10mm PAN screws along with an M4 Standoff and M4 washers

We suggest you prop up the chassis as shown with some books to hold up the LEFT side of the chassis and then get a paper back book to support the CHOKE transformer in position as shown

With the choke in position feed the 2 choke wires through the grommet as shown above

Now take the M4 10mm screw and washer and insert through the top of the choke – through the chassis !

Now on the inside of the chassis in view above use the M4 standoff to screw down onto the M4 screw that is protruding through – see next pic for clearer view

Here you can see the 4 Hex standoffs are securing the CHOKE transformer to the chassis

Just to make sure that the screws are positioned correctly you can place the Power supply board over the screws temporarily to check that all is well!

Well done CHOKE is now installed!!

Output Transformers

In this last main section of the Mechanical install we will add the two output transformers – They can be identified by the OP-300 designation on the bottom

Position them beside the chassis below and note the wires – red and black facing each other

Now thread the wires through the grommets as shown above and below!

Get the M4 10mm hardware along with nuts , washers and serrated's in order to install the output transformers – Feed the 10mm pan screw with flat washer through the transformer and into the chassis and then secure with serrated washer and M4 nut on the underside of the chassis (facing you1)

Transformers installed!

This is the position that we will be working on now for the rest of the kit basically! All the transformers are installed and we can start working on the circuit boards , hardwiring of the 300B section , the filament board and the IEC rocker section – Let start with the IEC rocker section where we will use the primary windings of the Mains transformer!