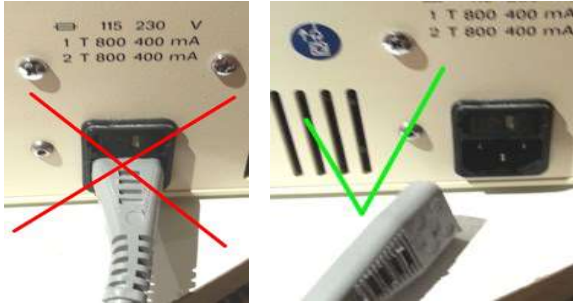


## Zeiss Axiolab LED

**Please remove the power cable from the microscope**



Replacing the lamp for the LED is just the same as replacing a broken lamp..... old one out, new one in. There is no way to do it wrong, except maybe a little adjustment.



Take the cover from the side base of the microscope, carefully pull the lampholder outwards, it stays attached to the wires. (handle)

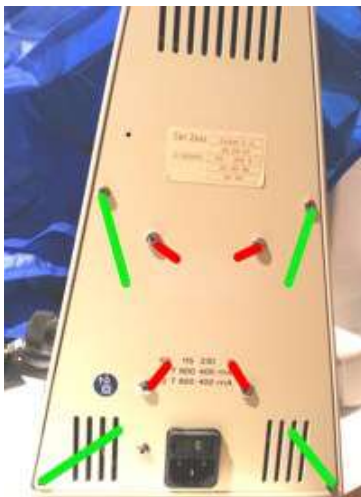


The lamp has a white wing which is between two contact layers, slide that out, to the front of the holder.

The new LED wing is green, the LED itself is mounted on top of a metal bar. Slide the wing between the contact layers until it hits the alignment pins.



The lampholder and the cover can be replaced now, mind that the wires are in the slot



The LED cannot work with the powersupply that is inside the microscope, you have to replace the board as well. To do this you have to take 4 screws from the outer corners of the backplane of the microscope. (green) ( NOT the RED ones)

Careful, the supply is mounted on the backplane, this is heavy and attached to a lot of wires.

Lay the backplane behind (partly under) the microscope and carefully look at the images and your microscope's interior.



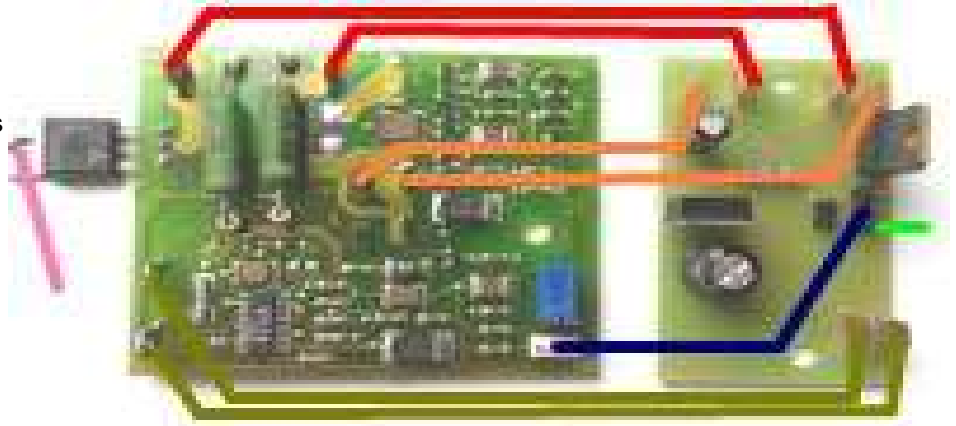
Next to the PCB is a black transistor mounted with one screw to the backplane, **take this screw out** ( there is a small washer, keep that)

The wire spaghetti is build up from 4 sets, the **brown, orange and red** wires and the potmeter **cable** with plug. The brown cables are power to the board, the red power for the lamp, (both coming from the big metal transformer) the orange are lamp wires.

Again, it looks as if it is spaghetti, but take your time and you will see that there is not much excitement to find here, especially if you straighten the wires a bit.

Now the easiest way to make no mistakes is to take the wires one at the time from the old board to the new board.

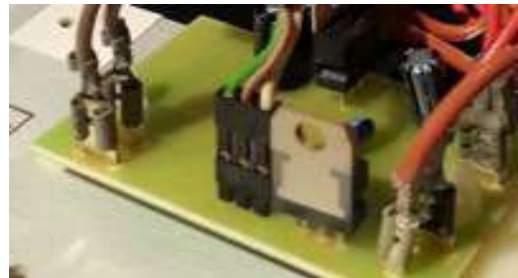
After that, we can start removing the old board, and clip on the new one.



Probably the wires will be kind of hard to remove by hand, you may use a plier, if you take care not to break any parts.

Maybe some plugs go on tight, apply a screwdriver in the front of the plug to open it “a little” so it will fit

The thick cable with the three wire plug will sit on the 3 pin connector of the new board, the green wire is indicated in the drawing. ( if you plug it the other way around, then the brightness knob will work reverse)



If all wires are from the old to the new board, take the plier and squeeze the nose of the plastic clip, while lifting the board, same at the other end..... the old board is free, now you can clip on the new board on the plastic clips.

Check at this point if all wires are firmly mounted ( and at the right place), now you can put the backplane upright and screw it to the back of the microscope again.

Put the microscope in the normal position, plug the power cord in and switch the microscope on.....  
Now you have LED light.

Check if the light is equally spread over the whole of the image, best with a low magnification.

If the brightness is not equal or if colors are visible, then you can try to align the LED to get it right, this can be done by repositioning the green PCB of the LED between the contacts.

If you have succeeded this, you can call yourself “technician”, proficiat!

High power LEDs can be harmful for your eyes,  
do not look in the beam of a high power LED