TrythisTV

Bosch Temperaturregler Repair (W123 Climate Regulator Box)

(Feb 2024 Revision)

For the latest most up to date version: https://trythistv.com/w123-climatebox/

This document and the videos provided free of charge

The basics after removing the climate module is to disassemble it by prying the tabs that hold the plastic connector in the aluminum case away and pulling the circuit board out of the shell.

Then we will replace the capacitors, desolder the old ones, my board had 9 capacitors, The factory ratings are:

1x 25v 470uf Axial cap (lead on each end)

1x 16v 22uf Axial cap (lead on each end)

1x 16v 100uf Radial cap (leads both on same end)

2x 16f 33uf Radial cap (leads both on same end)

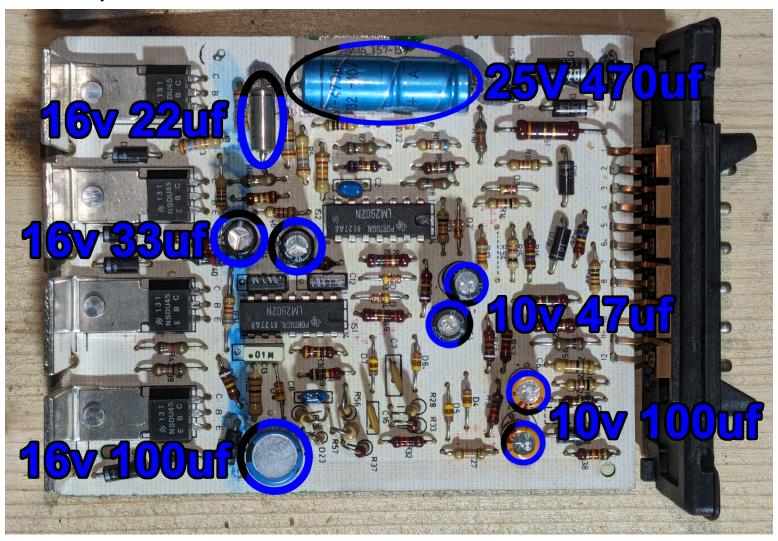
2x 10v 47uf Radial cap (leads both on same end)

2x 10v 100uf Radial cap (leads both on same end)

The important rating is the uF rating, The voltage just needs to be at minimum what the factory spec was. Pull your amp apart and confirm what style capacitors you need.

You can cheat and replace an axial capacitor with a radial style if the leads will reach, there is room, and you glue the capacitor into place so it doesn't move around and short something out.

Your board may look like this:



If it does, you'll need to either purchase a capacitor kit from our website: https://trythistv.com/w123-climatebox/

Or purchase bulk capacitors like I did:

1x 25v 470uf Axial cap (lead on each end)

use 1 of these capacitors: https://amzn.to/42FaHwM

1x 16v 22uf Axial cap (lead on each end)

use 1 of these capacitors: https://amzn.to/3uApOet

2x 16f 33uf Radial cap (leads both on same end)

use 2 of these capacitors: https://amzn.to/3OKkSL1

2x 10v 47uf Radial cap (leads both on same end):

use 2 of these capacitors: https://amzn.to/3wfT1f3

2x 10v 100uf Radial cap (leads both on same end)

1x 16v 100uf Radial cap (leads both on same end)

use 3 of these capacitors: https://amzn.to/3uAe9w7

Desolder the old capacitors and replace them with the new ones, noting polarity indicated by the black section in the circle surrounding each capicitor seen in the photos.

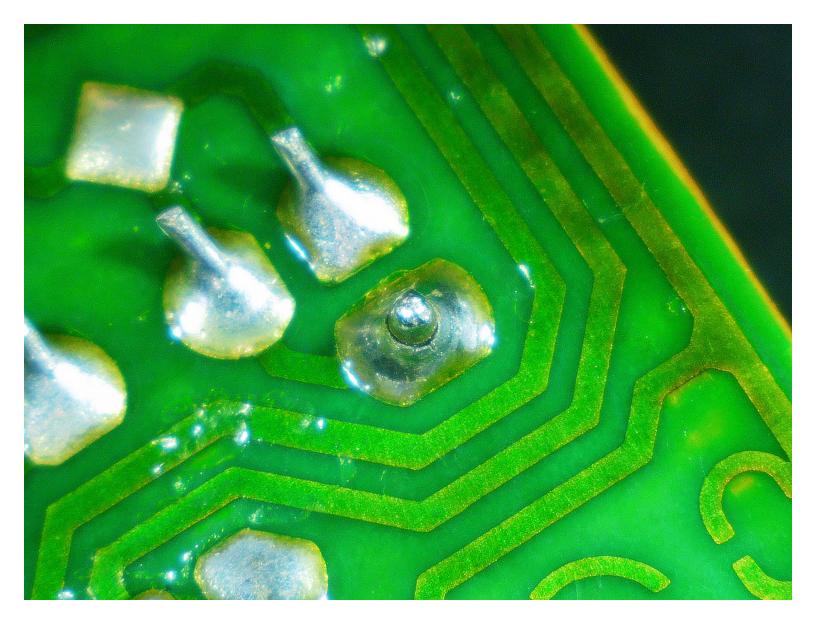
After you have soldered in new capacitors you might need to "reflow" the solder joints on the rest of the board.

This is a time consuming task, basically use your soldering iron to touch every single soldered connection on the board momentarily. Just enough to melt the solder which will clean up any connection that may have been broken.

You may need to add a small amount of solder to some pins. Try to avoid staying on one pin for too long as the components are heat sensitive to some degree.

After you feel you have reflowed the board good enough, look it over well, go over them again if you feel the need or have the time to make the solder joints all look beautiful.

We want to get rid of any broken solder joints like this:



Once you're confident in the solder joints all looking good, reinstall into the car and go for a drive and see if it is functional.

Thank you for reading and watching!
Tom