

# Musical fidelity P170 temperature tests

Scope :

*To measure the Internal heatsink , Driver transistor and Internal temperature with various cooling scenarios.*

## **Purpose:**

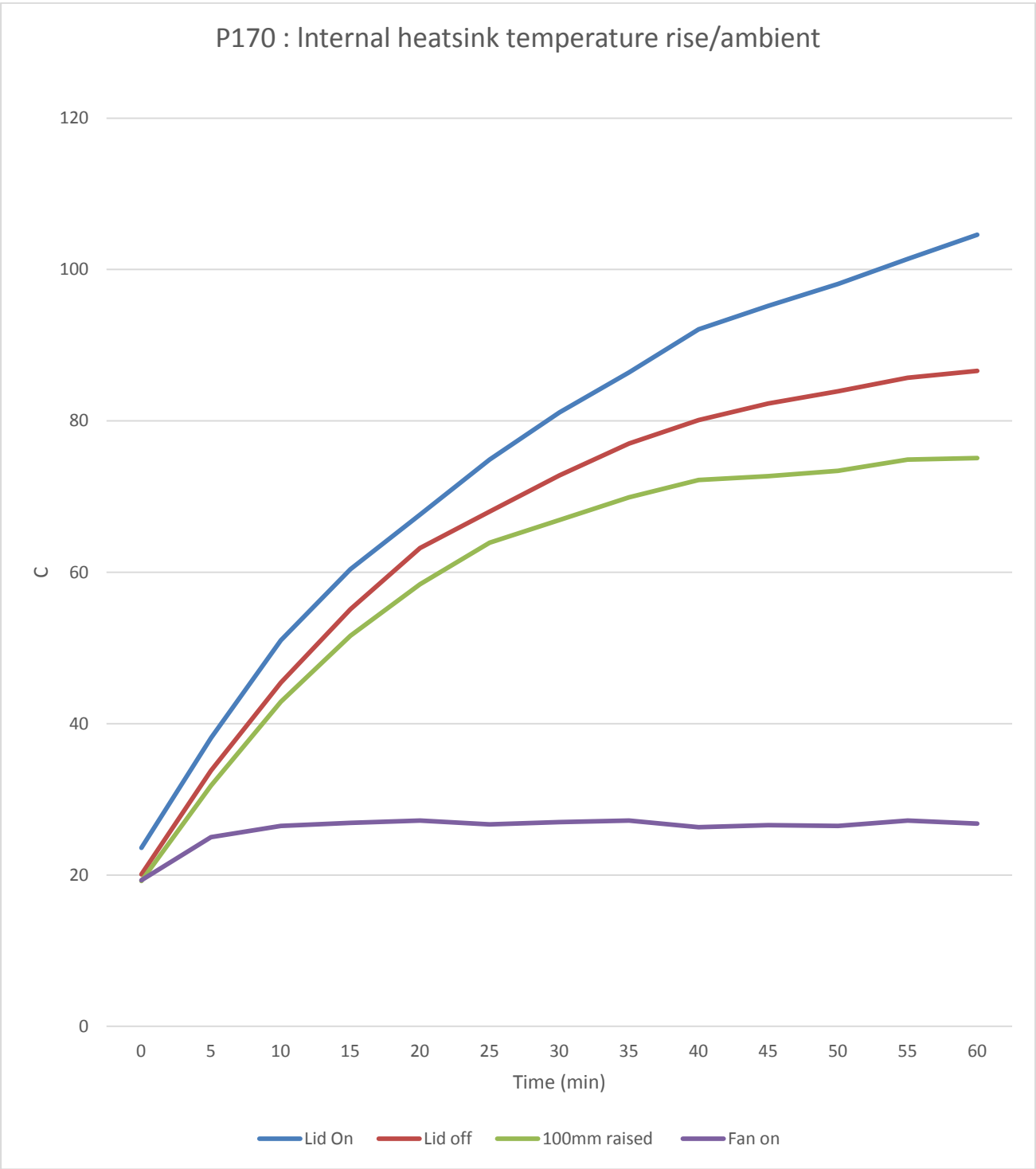
*To understand the thermal performance of the amplifier prior to refurbishment /rebuild.*

*Steve Ware*

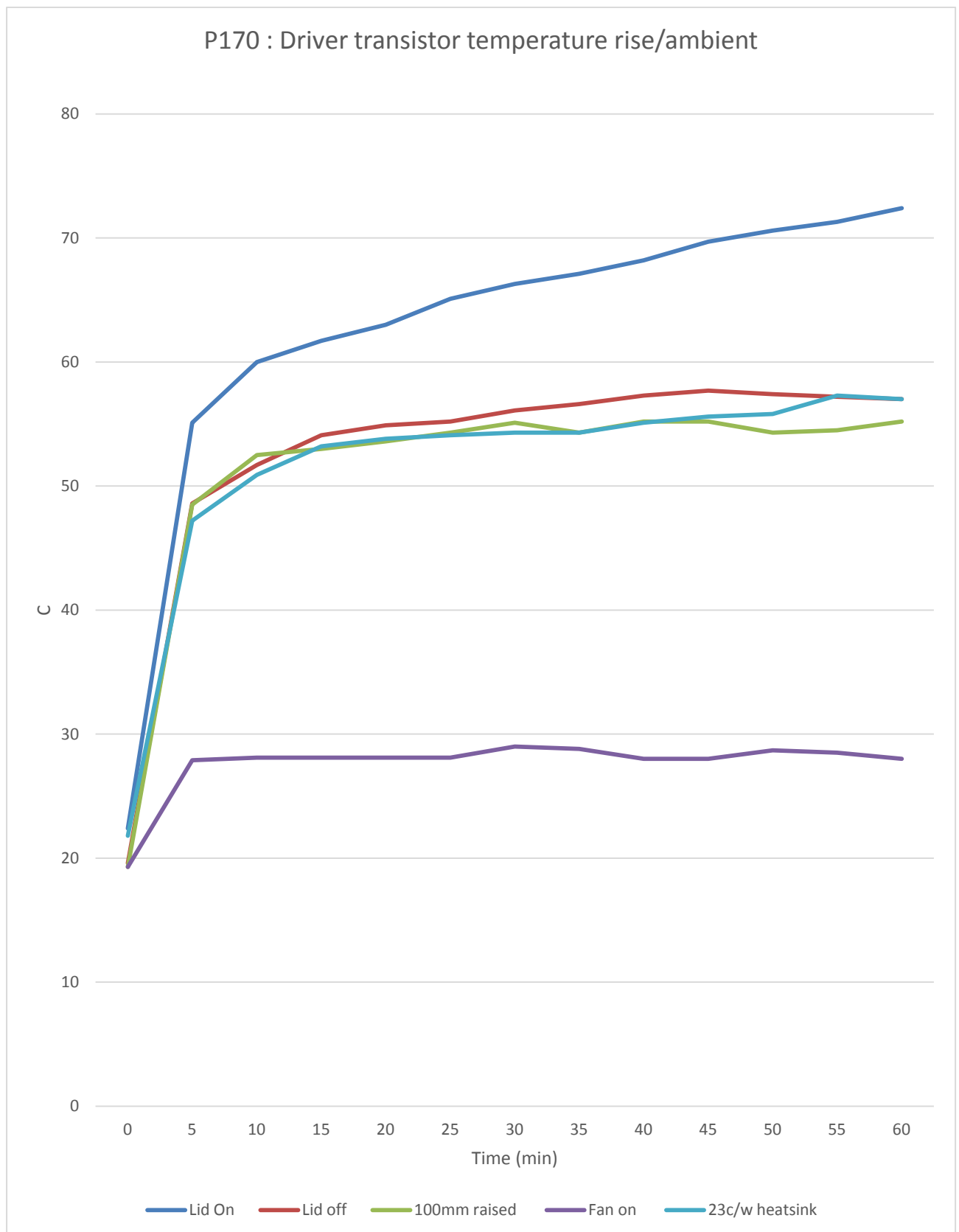
*26<sup>th</sup> April 2020*

**Results (see appendix A for more details)**

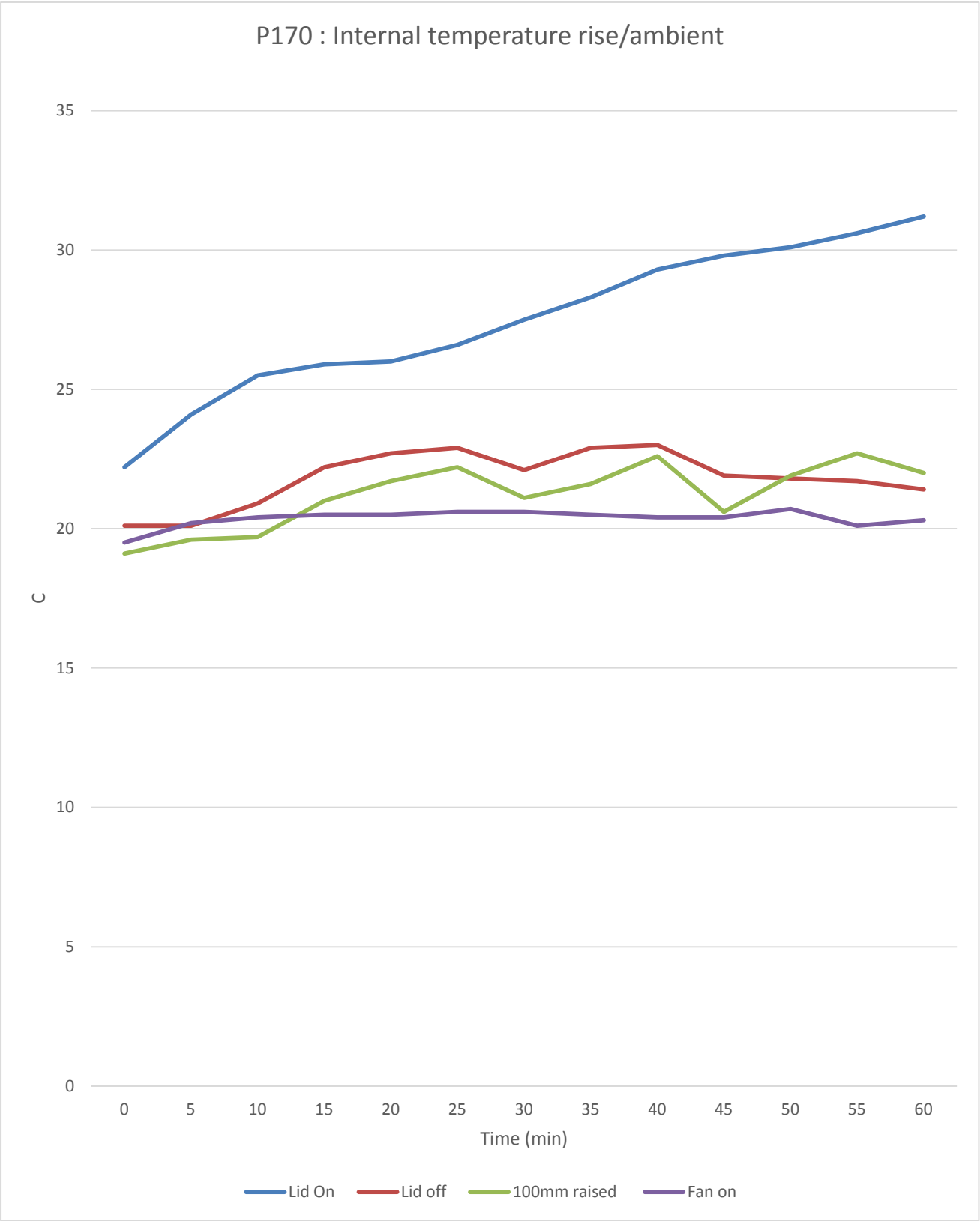
**Internal heatsink performance**



## Driver transistor Performance



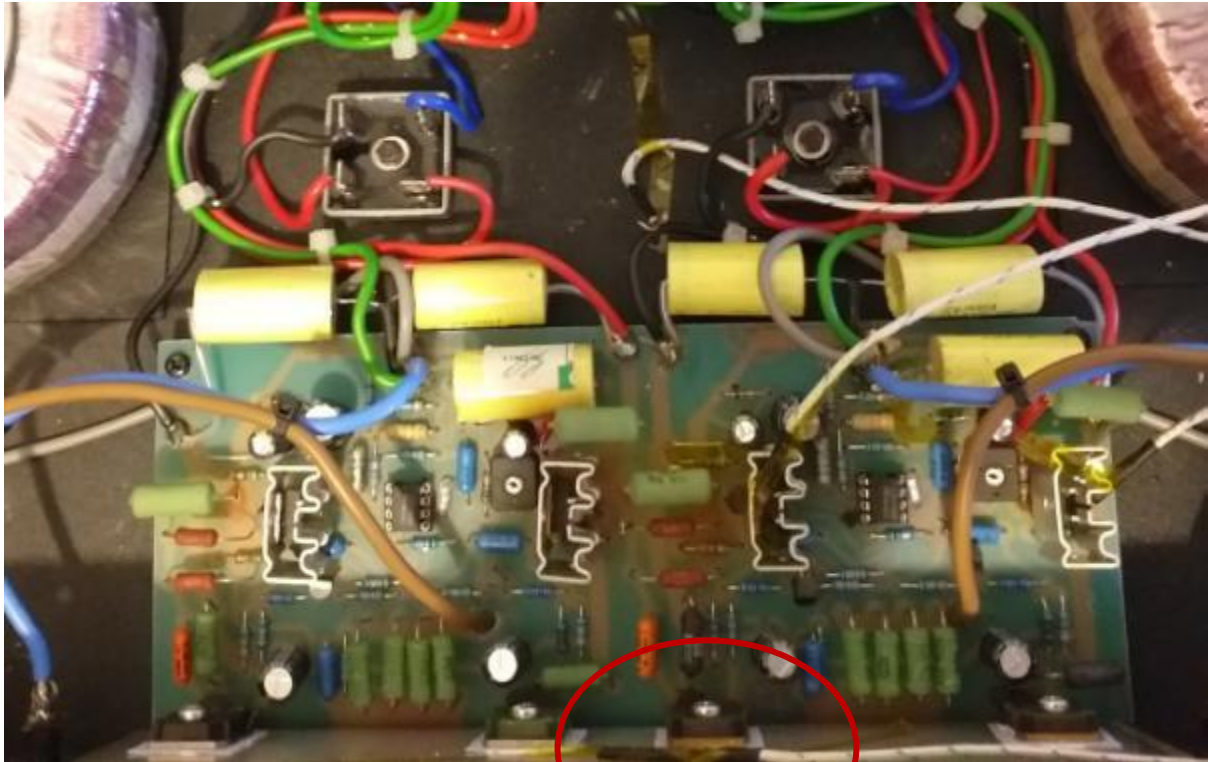
**Internal Temperature**



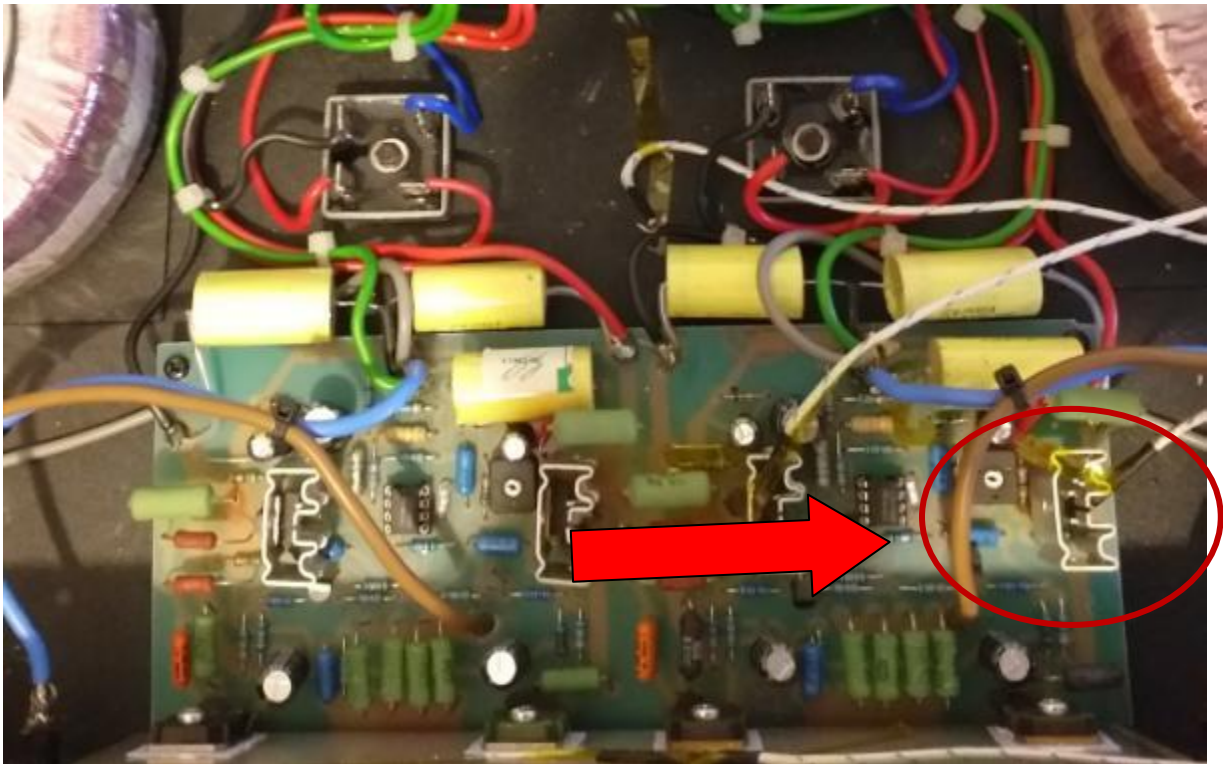
**Appendix A : Procedure :**

***A1: Measurement points***

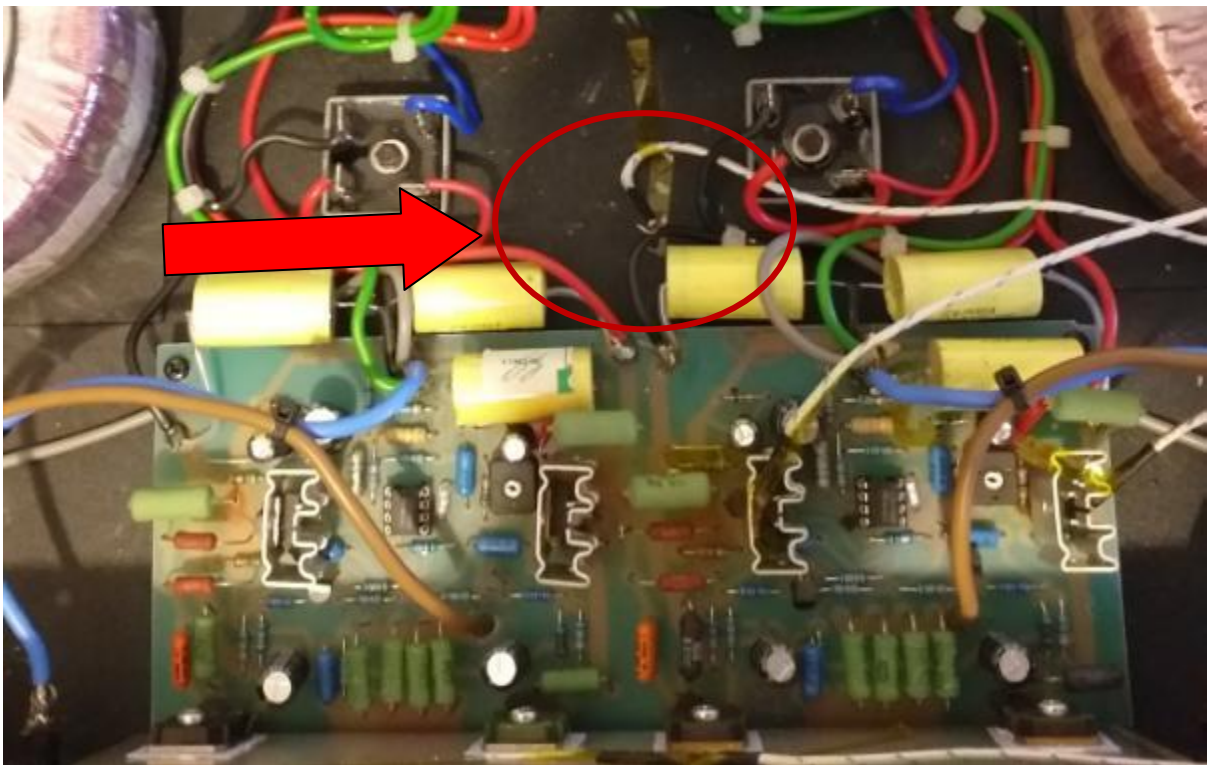
***Internal heatsink***



*Driver Transistor*



*Internal temperature.*



## **A2: Measurement probes**

K type thermocouple measurement at 5 min intervals up 60 mins .

## **A3: Cooling scenarios**

A3: 1 - Lid on .

A3: 2 - Lid off.

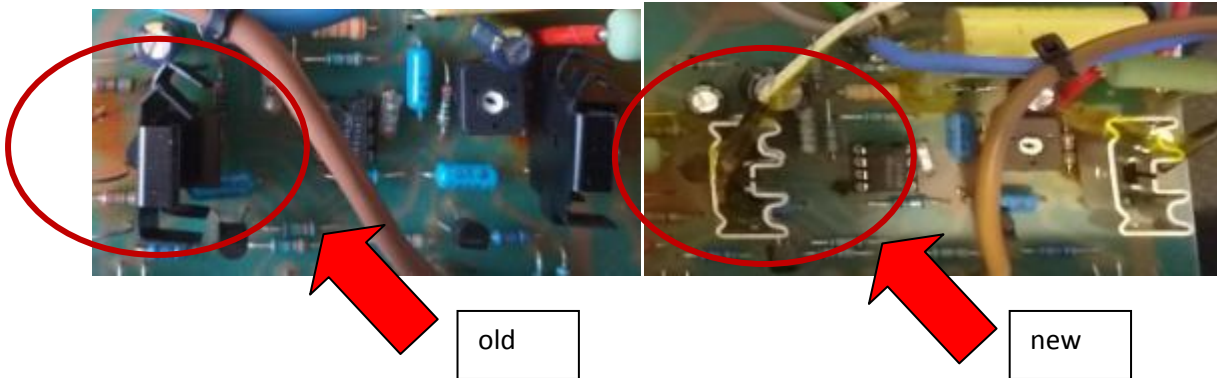
A3: 3 - 100mm raised



A3 : 4 – Fan cooling from top



A3 : 5 - ) Improved driver transistor cooling .



**A4 : Other details**

Bias : set to 61mv per channel

Signal : no input signal

Load : No load