1.

Platine Verdier motordrive modification, tips & tweaks

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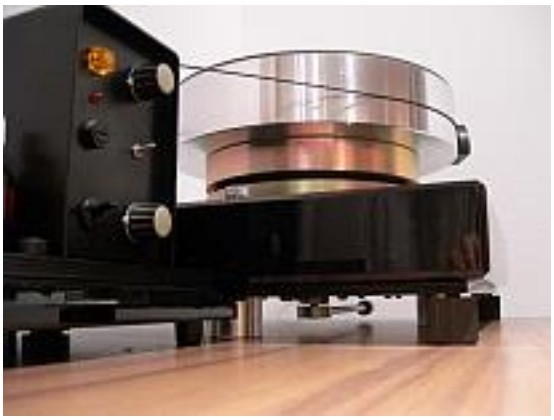


There are some alternative motor drives at the marketplace which convert to tape drive or otherwise. Some who replace the stock Verdier motor indeed report on a better performance. It is a pity to read on the internet that the stock Verdier motor is sometimes classified as ‘bad’, and we have even read a statement like: ‘throw it away’.

Why should the stock motor need replacement, and exactly what parameters causes 'bad'? We experienced (and as measured* with the Feickert Adjust+ software) that the stock motor performs *superbly well*. So why do some owners still decide to replace the motor?

There are some valid reasons why, but they have very little to do with the motor.
The lucky side: it is caused by relatively small issues which are easy to fix.
There are grossly 3 causes of speed instability and unfortunately these work together.

If we take a close look at La Platine from a mechanical / acoustical viewpoint, we may sum up the design principles.
It is spring suspended, pneumatically damped, it has a separate motor, most use tread drive, and all come into play and influence each other.
We have seen La Platine set-ups in which tread drive is used, the motor has been put some 3 feet away and with big tube amps underneath.. a sure recipe for speed problems.

The tread stretches during it’s life span, and is greatly influenced by humidity and temperature. Here is a first cause of instability. But it is not just the tread. La Platine is spring suspended, and once there is some jerking introduced, it will get into action. The tread causes uneven running by its very nature, and by stretching it also affects the level of the platter, which has to be achieved by putting tension on the tread. This doesn’t sound very solid does it? It is obvious that any jerking action is multiplied a 1000 times at the pick-up.

* Speed measurements with the Feickert Adjust+ software show a weighted 0,06% deviation.

2.

The V shaped pulley will eventually clog up (see photo example on page 15) with debris and so a speed bump occurs. In any case clean the pulley regularly. Any small deviation at this point greatly affects further down the line.
Now there is another point of concern, but presumably so after many years of use.
It is the motor attachment inside the housing and understandably few have looked so far.

The picture shows the stock assembly.
If disassembled to this point, one may feel that the rubber grommets have some play. Not a good idea at this particular point. With a jerking tread drive and the spring suspended 16 KG mass platter we may indeed experience speed instability. Things will add up quickly..

3.

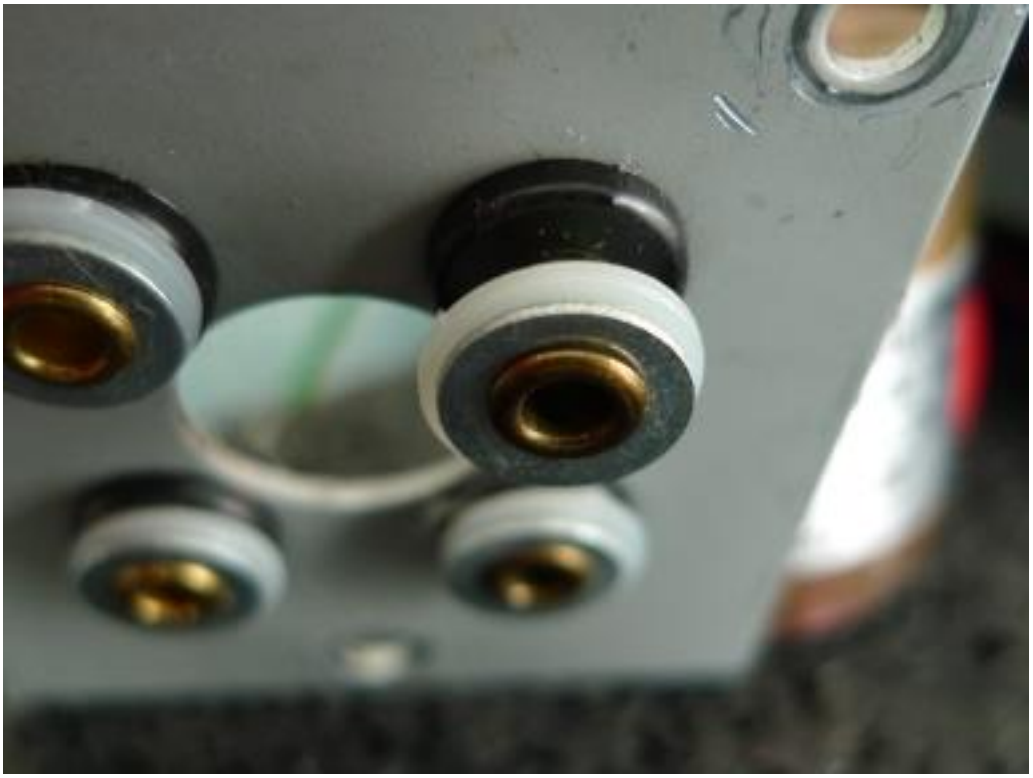
Now comes the good part: it will cost almost nothing to modify.

The stock situation. See the brass collar inside the rubber grommet. The assembly may glide up and down, and over time gets play axial and radial.

4.

Now insert a little Teflon washer from the local hardware store to fill up the play.

5.



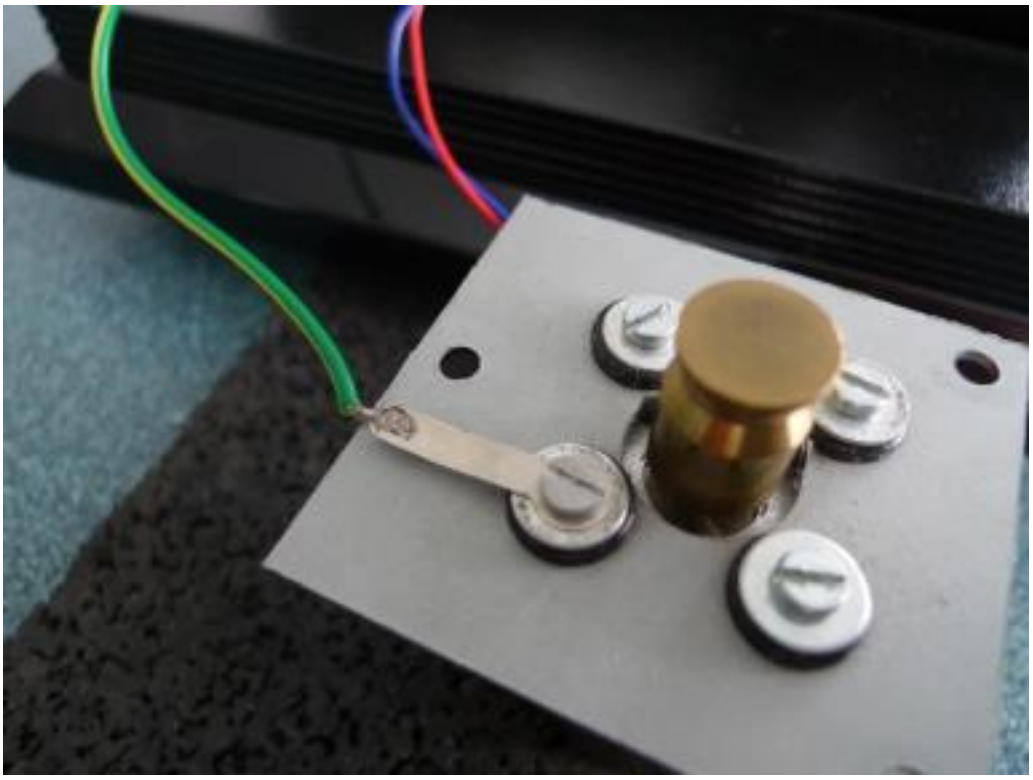
4 washers and assembly put together.

6.

Tightened up. no play, no vibration at this stage anymore.

7.

Don’t forget to attach the earth wire.



Now this is modified & problem fixed at the beginning.
We are confident that any Platine owner will be very pleased with this mod.

8.

DC feeding.

This is one of the kits we used to sell, but any experienced DIY may assemble one.
Notice the digital display, a nice and recommended option.
We tried many battery types, the dry cell Yuasa works great. Don’t go cheap here.
6x 3Ah batteries sum up to 18Ah. We experienced that 18Ah works great.
always keep the batteries fully charged at >12,5V when playing.
The Yuasa batteries serve about 10 years from our experience.

9.

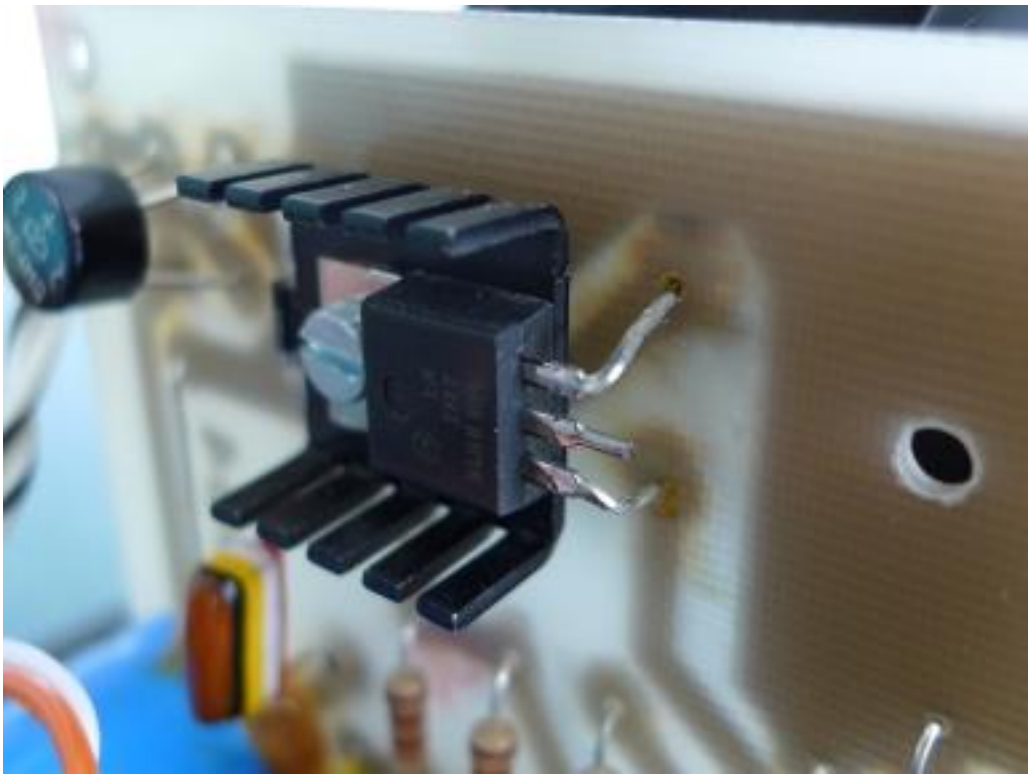
The internals.
An Italian online outlet with a nice selection on housings:

http://www.modushop.biz/ecommerce/cat069_l2.php?n=1

10.

Next topic:

the **LM317T** (part numbers may differ through the years)
Now this part will either last a lifetime or break up at a moment you don't want it to: - the audio buddy gathering, and if it fails the speed accuracy is instantly gone. We had this one replaced after some 8 years from new. (our La Platine is 1995 vintage)
The cost is a few coins so order a couple and be rest assured you have a spare one when it eventually happens.



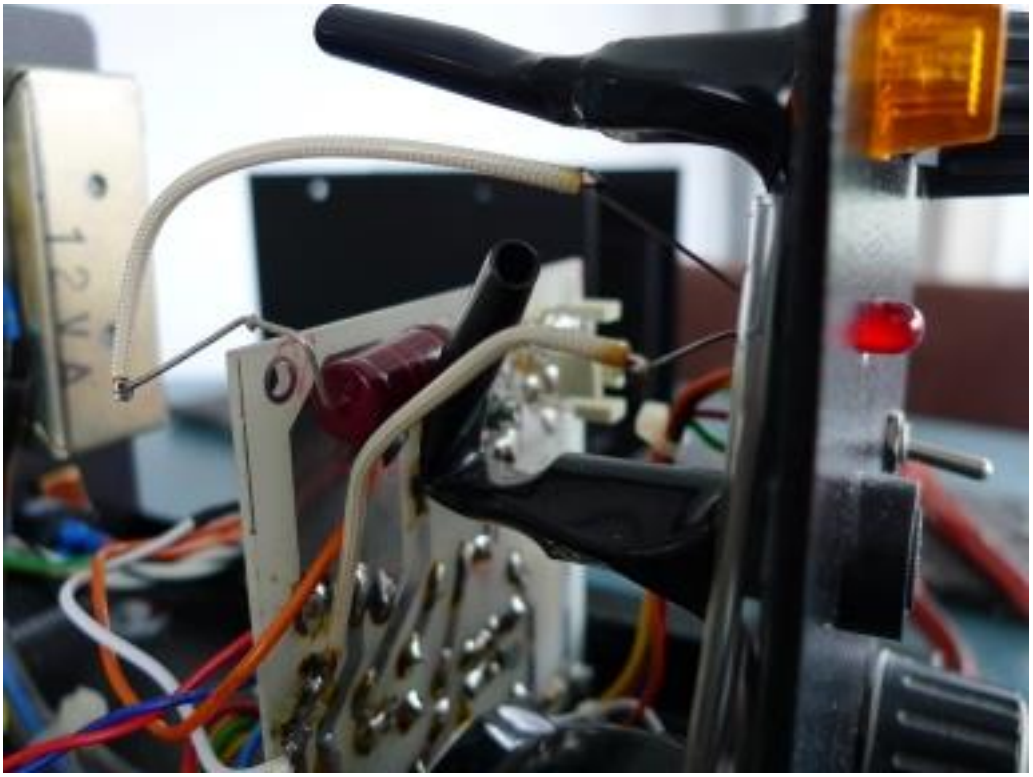
Links to the Paul Hynes website, with remarkable upgrades and solutions.

http://www.paulhynesdesign.com/page6.html
http://www.paulhynesdesign.com/page7.html

11.

Next topic:

the DC wiring conversion.



Here we see a red led put at the front to show motor running and the white and orange wire routed from the DC input into the circuit board. Though the picture is not very clear, the DC wires must, –logically be soldered to the same points as the stock wires. We have left the stock transformer in place, disconnected and isolated the wire ends.
This is indeed an easy modification.

We encourage any Platine owner to convert to DC and try it out.

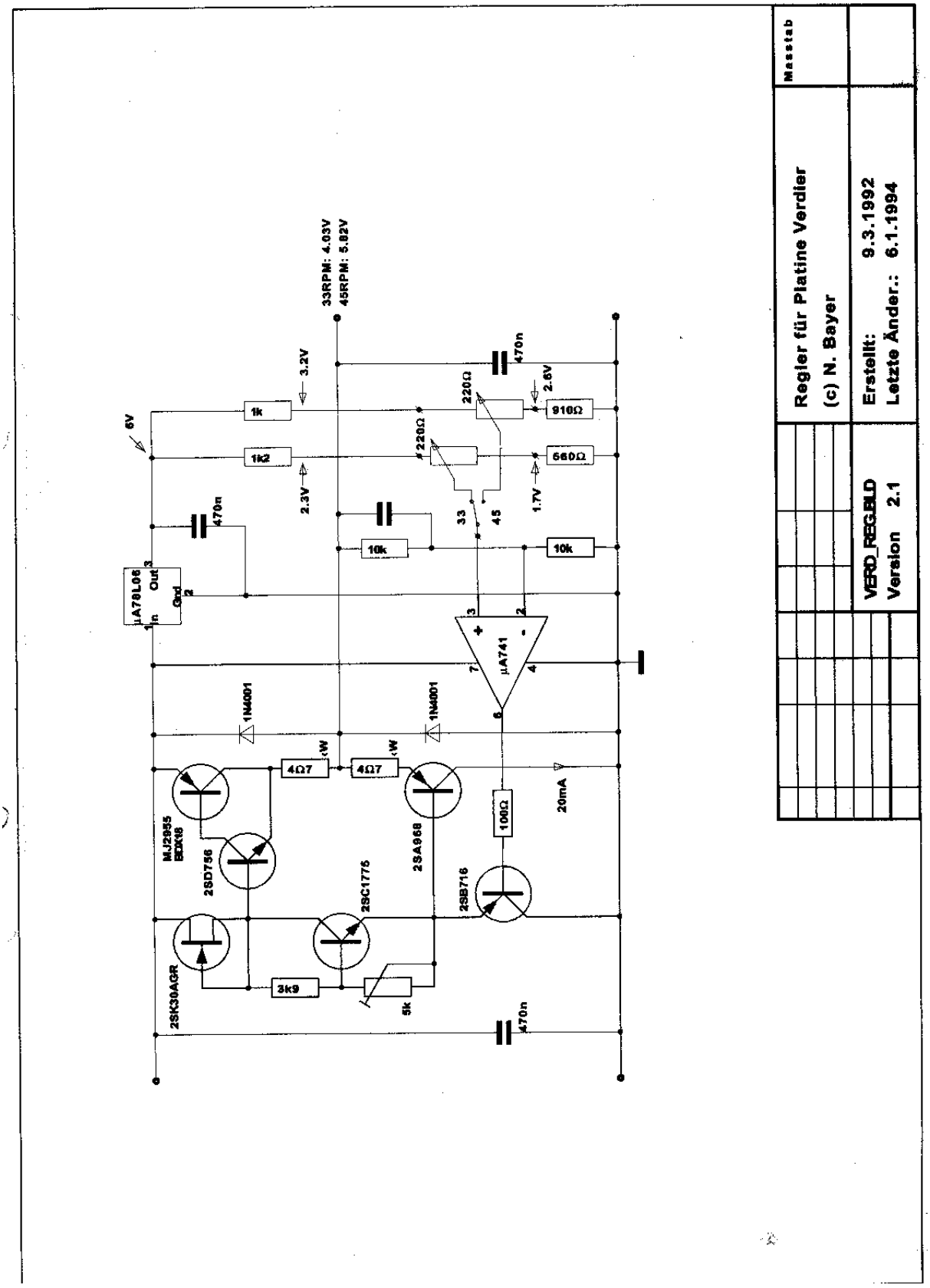
Please note that DC feeding does not solve the issues we showed earlier…

12.

Some electronic parts involved.

13.

An alternative schematic for the motor drive.



14.

We are confident that any La Platine owner may benefit from these tips & tweaks.

La Platine continues to impress, concerning the design is dated 1980..

Feel free to email if any questions left.

Monsieur J.C. Verdier

“ You do not buy my turntable, you get married to it.. “

Keep spinning.

Rudolf.R.Ploeger
www.callas-audio.nl
The Netherlands

Photo added: the pulley in close up.