

# 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 at the internet that after buying a different motor, the stock Verdier motor is sometimes classified as 'bad'. we have even read a statement like: 'throw it away'.

Why does the stock motor needs 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 Platine owners decide to replace the motor?

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

If we take a close look at the Platine Verdier 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 pictures of Platine owners who use the tread drive, put the motor some 3 feet away and put the 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 'bad'. but it is not just the tread alone. 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. by stretching it also affects the level of the platter, which must be levelled after putting tension on the tread. it is obvious that any jerking or play or 'action' is multiplied a 1000 times at the pick-up.

\* Speed measurements with 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 dirt and so a 'speed bump' occurs. in any case it is advisable to clean the pulley regularly. Any small deviation at this point greatly affects further down the line.

There is another point of concern.

it is the motor attachment inside the housing and understandably few have looked so far.



This is 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 the jerking tread drive and the spring suspended 16 kilogram mass platter, we may indeed experience speed instability.

It is the adding up of things which may cause speed instability.

**3.**

Next picture:

Now comes the good part: it will cost only a few cents 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.

Next picture:

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



5.

Next picture:



4 washers and assembly put together.

6.

Next picture:



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

7.

Next picture:

Don't forget to attach the earth wire.



Now we got this modified & problem fixed.  
we are confident that any Platine owner will be very pleased with this mod.

8.

Next picture:

DC motordrive.



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, and the dry cell Yuasa works great.  
6x 3Ah batteries sum up to 18Ah. We experienced that 18Ah works fine.  
always keep the batteries fully charged at >12,5V when playing.

9.

Next picture:

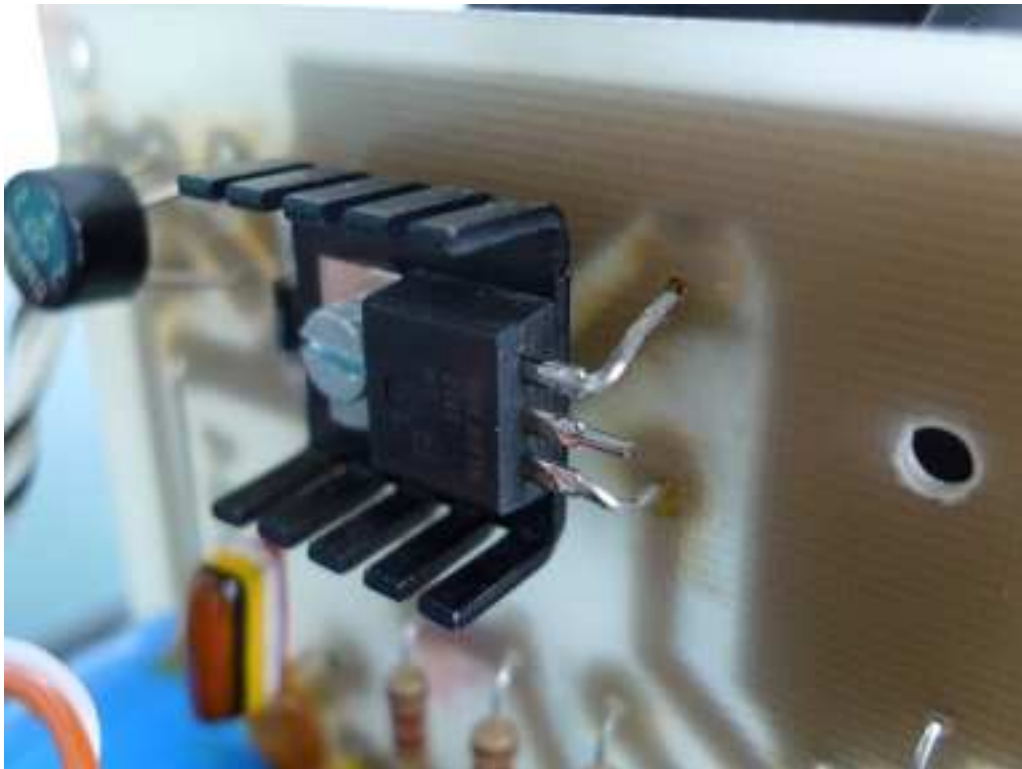
The internals. you can make one look as professional as you would like.



## 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 you will notice the speed accuracy is gone. we had this one replaced after some 8 years from new. (our Platine example is 1995 vintage )  
The cost is a few cents so order a couple and be rest assured you have a spare one when it eventually happens.



Here are links to the Paul Hynes website, with further worth wile 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 you may see the white and orange wire routed from the DC input into the circuit board. this picture is not very clear, but the DC wires must go to the same points as the stock wires. we left the stock transformer in place and disconnected and sealed the wire ends. this is a problem free modification.

We encourage any Platine owner to convert to DC. the performance gain is solid.

12.

Next picture:

The electronic parts.







Photo added: the V pully needs cleaning..

