



I bought my first '125', second-hand, in 1975. It was a perfect 'MkII' with a SME 3009 arm and it was like a Lamborghini and a Jaguar rolled into one piece for my young eyes and near-empty pockets. After a while, desperately wanting a second turntable (remember when the amps had TWO phono inputs?), I bought a fourth- or fifth-hand '124' for what amounted to, I think, \$10. It was a first series, in perfect condition, with its original arm but no base, so I built one and connected it—and was shocked by its quality.

Of course, I couldn't admit to my fellow enthusiasts that I thought that a turntable that was considered just an old idler-wheel piece of junk could be as good as a neat modern '125' or one of the new fashionable direct-drive decks coming from Nipponia, but, even being no audiophile (I wouldn't dare to tell you to which piece of transistorized garbage I had hooked the Thorens at the beginning....) I was stunned by the clear sound and utter silence of that allegedly 'obsolete' turntable.

Years passed, amps and speakers and tape decks and tuners and Michells and EMTs and Voices of the Theatre came and went, but I always had two or more Thorens around. I own twelve of them now, and they never let me down. Even

the cheaper 'TDs' have their dignity, and even the more desperate wreck can be easily resuscitated, something you can say only of a few top-grade products.

These days, I listen to a EMT '950' with '929' arm and an EMT XSD-15 in my main system, to a Garrard '301' on a Shindo plinth with an SME 3012 and a Denon 103 in the second (the EMT is infinitely better....) and a special 'customized' Thorens '125' in my third sys-



My own trustworthy TD-125...

tem. Somehow, this the one I love most. I mean, the EMT is absolutely admirable in its ruthless efficiency, but it's a machine that's untouchable in its perfection, if you modify something you would very likely spoil it. Granted, the Garrard has its 'Olde Worlde' charm and all that, but it's someone else's recipe, not mine.

With the Thorens decks, I enjoy a much more personal approach. I keep most of them absolutely spotless, in mint condition for my personal delight, but the ones I bought for \$10 or \$20 during the Eighties, often half-wrecks that I rescued from the scrap heap. Those are the underdogs, the forgotten heroes that I really love. I like to restore them, rebuild all that I can, and then modify them according to what I read and/or what I think. Yes, I like to modify some of my decks.... boy, do I ever tweak them! And I've never found one that answers so positively to tweaking as the '125'.

I've worked a lot with the '124', the '301' and the '401', plus many other decks, but the '125' remains my favourite, because it is wonderfully compliant. I mean, build the '124' a wrong plinth and you risk a dire degradation of its sonic qualities. This simply is not a concern with the '125'. So let's see together what we can do to improve the sound and/or operation and appearance of our Thorens.

Before we talk about 'tweaks', however, let me utter a cry of pain. Now that vinyl is fashionable again all around the world, and that real or presumed audiophiles have discovered the qualities of turntables like the '124', the '301' or the EMT '930', there is a rush to buy those elderly decks, then, unfortunately, some of them are then heavily modified with the dubious idea of improving their performance. I cannot see how a comparatively uncultured Far East amateur can judge himself to be better than Hermann Thorens, Wilhelm Franz and their all-German-speaking engineering teams.

If the modification only involves secondary, easily replaceable parts (cables, connectors, etc) I'll let the offender go with a warning. However, I strongly object to the barbaric acts committed on decks that arrived to 1999 in a perfectly original, unspoiled condition and now have been drilled to fit a second arm, cut to make space for a quartz-controlled supply, and generally butchered to give to its owner the aura of a 'dedicated audiophile'. I think that this kind of barbarism awards its perpetrator only the label of 'culturally impaired'. Unless one is prepared to recognize the real historic value of an old classic deck, he'd better stick with cheapo CDs. What can you do with those guys? I don't know, either, though *electrocution* is one of my ideas.

Of course, this does not apply, as I said before, to an abused wreck that you rescue from the garbage can. In this case, since originality has been lost forever before you found it, you can try something new and maybe useful on it. So I'm telling you what I have done in the past and things I'm still doing, but I am asking you to refrain from modifying any original deck you might find.

WARNING: what follows might be a rude shock to some 'purists'.....

Servicing a used '124' and '125' (and any other vintage Thorens, in fact!) is easy, provided that the deck is complete and the motor or electronics have not been hopelessly burnt. Thorens always used good materials, so usually you need only to strip, clean, polish, and lubricate the machine, checking all of its parts carefully.

In the process, you will have the chance to use a whole lot of weird and potentially harmful instruments of your choice, something I always relish. Being an eye doctor, I enjoy the benefit of taking a long hard look at the idler wheels' rubber and at the stylus tips with my biomicroscope, while to pick up turntable noise there's nothing better than the old, dear stethoscope. I've used it on turntables since I was a junior medical student (that's 20 years ago). Lucio Cadeddu, the Editor of the famous on-line Hifi magazine 'TNT', one the more interesting and outspoken online audiophile magazines, has been one of the first connoisseurs to spread the word about this device and its 'audio' use.

The stethoscope is a revealing tool. Place it on the plinth of a running deck and you will hear, more often than not, all kind of noises, thumps, whirrs and hums. Not even a Tektronix can give you as much information on the condition of your deck, I am sure. Using the stethoscope 'before' and 'after' any procedure will not tell you if the modification has improved the musical quality of the turntable, but surely will help you to understand if you have solved a problem. I use a German-built stethoscope, of course, hoping that my Thorens will feel better for that. I also use an oscilloscope, but it's a simple machine that I use mainly for the tracking of the hums along the signal cables.

What you will learn, using the stethoscope, is that a high-level belt-driven deck is usually far more silent than a comparable idler-wheel job, on par with excellent DDs. (I hear purists and idler-wheel junkies frown.) The '124' is not a noisy table, but you will hear distinctly any 'flat spot' of the idler, if, unluckily, yours has one.

You will also hear bearing trouble easily, as its resulting rumbling noise is easily detected, but it's not easy to fix unless you decide to change the bearing, so, while you have the turntable stripped on your bench, it's worth checking carefully the main shaft and sleeve. This bearing wear can also occur in belt-drives, but less frequently, probably because the belt pulls less strongly on the platter and exerts less sideways

force on the main shaft than a spring-loaded idler-wheel system.

Either way, a trick worthy of a used-car salesman will help you: putting a more viscous oil in the bearing will help reduce this noise. 99% of the times a thorough cleaning and lubing will make your Thorens once again as good as new.

That's probably why I love using Castrol GTX3, a 'thick' oil, instead of other very sophisticated products. I once tried the 'factory' EMT oil, and it's good if the bearing is OK, otherwise I stick to the Castrol, which is also much, much cheaper. I'd like to try the 'Mobil D.T.E.' medium-heavy oil that EMT recommended for its '928' as well, but I can't find it in Italy. Belts and idler-wheels will have to carefully cleaned with warm water and soap, then rinsed. NEVER use turpentine, alcohol, etc, on old rubber.

Power cords and connecting (signal) cables of the decks built before 1990 are quite mediocre. They weren't very good to begin with, so now that they're old, they are usually *very* bad. If you have a stock '124' in pristine condition, let it alone with the stock cables and use it for display purposes. If the deck was found in bad condition and you have to rebuild it anyway, junk the old cables and go for new ones throughout, fitting a shielded power cord in the process.

The plinth of an original deck has to be cleaned and then polished with plenty of beeswax and elbow grease. This effort pays off handsomely in the overall appearance of the restored/refurbished machine. And this is, more or less, all I think that ought to be allowed to be done to old turntables in original condition. Let's talk tweaks now.

For the tonearms, I'm afraid that I have some strange personal opinions. To begin with, I do not like SMEs very much. The new ones must be good, but are they're awfully expensive and I do not like their style. The classic 3009/3012 series is good-looking, well-engineered, and perennially fashionable, but I do not believe that they are exceptional. Also, the fixed-headshell models will give you nightmares when it's time for cartridge changes.

Over the years, I've fitted almost every-

thing else besides SMEs on my several '125s', from a Mayware MkIV to a Dynavector '505' and Stax or a Rabco 'SL-8'. Having developed a soft spot for Grace tonearms, I've tried also the '545', '840F' (such an elegant design!), '704', '747', finally settling as of today on a '707 MkII' mounted on a special, custom-made armboard. The Dynavector '505' works wonders, but only with a 124 on a heavy plinth. Also, it's quite tricky to use (no lift, etc). I understand that the '507' is easier.

The design of the armboard itself is more important than most people would think, at least in the '125'. For a while, people designed and cut their own armboards from wood, Perspex, even glass and cheap plastics. This will give the arm a place to be bolted onto, but often nothing more than that. A good armboard is a *must*, otherwise the purpose of providing the deck with a solid 18 kilogram plinth will be negated.

This is especially true for the '125', where the armboard is supported by those three metal 'fingers', but it's not fixed around its perimeter. This can spoil its overall rigidity and cause some subtle resonance around the 'free' edges (i.e., the three sides not adjacent to the metal chassis).

I've experimented quite a bit with boards, inventing for myself a 'code' to identify at a glance the armboard I'm using: matte black is the original 'factory' board, light-grey is a reproduction in some different wood or even plastic, light green is for 'fancy' boards. My '707' is now installed on a wafer of two slices of oak sandwiching a 3 mm foil of soft Neoprene (rubber). The three layers are glued together. Ideally, this construction should help to kill the board's unwanted resonance and it appears to work quite well.

I've never tried an all-metal armboard, simply because it's complicated to arrange for someone to cut them from sheet aluminium or copper. I wouldn't use steel or iron for fear of magnetic trouble! I'm not sure that, in the end, a metal armboard wouldn't ring like a bell. I plan to experiment with a glass-plastic sandwich sometime soon.

One thing that I always do with a '125 if I'll use it for playing records in

earnest, is to remove the bottom panel. This flimsy wooden sheet is a sort of 'dust cover', but it creates a closed 'box' that I don't like, since it can introduce an undesired 'boominess'. I feel it's better to get rid of it pronto. An added benefit of removal is easy access to the knurled knobs of the suspension, making the levelling of the unit much simpler and easier.

Since the chassis/subchassis assembly of the '125' is clearly decoupled, I feel no great urge to put conical points underneath. I use rubber supports, and they work great with the stock plinth. I will report that I once tried to screw a 'bare' '125' to a very heavy wooden plinth and the sound didn't change a bit. I'd guess that the springs of the counterchassis insulate it so well that you don't really need to provide a better plinth, and the belt absorbs most of the very few vibrations produced by the tiny motor of the '125'. I've tried to put some damping material (Neoprene, sponge, even hard rubber) in the springs to dampen their floating, but the results weren't very good. At the end, this only introduced some sensitivity to acoustic feedback.

Of course, this way of thinking doesn't apply to the '124', which absolutely needs a heavy, sturdy plinth because of its powerful motor and idler-wheel drive. I like to mount a '124' on a very heavy, high-density ply base, taking care to screw the chassis firmly to the plinth from underneath, using the four support screws, the ones carrying the height-adjusting nuts as retaining bolts, for four nuts and washers. Between the chassis and the plinth I like to put only four grommets of hard rubber. Some would probably prefer a harder material, hardwood or maybe even metal (I never tried it). With a final mass of over 20 kilograms for a typical plinth, I feel that you do not need cones, but if you were to fit a good quartet of brass points, surely they wouldn't harm the sound a bit.

Some like to fit 16" arms to the '124' and special power supplies. You can, of course, but the small amount of vibration that an idler-wheel deck can produce would be amplified by such a long arm, whilst a high-grade shielded AC cord will solve 90% of the problems

related to the '124' and '125' power supply. You have to try to believe.

I stop with the power cord upgrade and use a fairly high-mass arm for the '124', like the excellent stock 'TP-14' or the reliable Audio Technica 'ATP-12', an old favourite. On the '125' I use lower-mass tonearms, like the '707 MkII' I mentioned before, but I do not despise the 'TP-16' arm, a good, medium-mass design that is easy to set up and use with almost any type of cartridge.

I also found the Mayware 'MkIV' to be well suited to the '125', at least with the Denon '103' I routinely use as a benchmark cartridge for the various decks I'm working on. As a footnote, I would like to say that whilst I always try to extract something more from my 'hot-rod' '125' and '124', I've never messed with my EMT '928'. Like its bigger brothers, it is way too well-made and engineered to risk to spoiling it with some goofy ideas and clumsy workmanship. EMTs are somewhat intimidating, probably having something to do with the astronomical prices of their spare parts!

My constantly-tweaked, first-series '125' (no clutch) is somehow the 'moral flagship' of my collection, as it's the only Thorens normally listened to. The older decks are used in turns to keep them moving, but few of them sound as good as I'd like. As for the '124', I have a 'MkII' that I'm perennially working on...waiting for a new plinth now, in fact.

I have another beautiful, completely original '124 MkII' on display. This one is towering above the other decks in the middle of my turntable collection, and I think that it deserves this commanding position, standing proud in its original battleship-grey livery amongst the other machines of my small but dedicated collection, surrounded by lesser but always worthy Thorens and surveying from a vantage position the day-to-day work of the EMTs. I'm sure that Herr Thorens and Herr Franz would be proud of this layout.

THORENS

Produktionsdaten der

Thorens-Plattenspieler

Type	Year	Type	Year
TD 104	1978-1981	TD 166 VI	1992-
TD 104 II	1980-1984	TD 180	1990-
TD 105	1978-1981	TD 184	1958-1962
TD 105 II	1981-1984	TD 224	1962-1968
TD 110	1977-1982	TD 226	1981-1986
TD 115	1977-1982	TD 230	1986-1988
TD 115 II	1982-1984	TD 230 Excl.	1988-1992
TD 124	1957-1965	TD 230 II	1988-1990
TD 124 II	1966-1968	TD 230 III	1991-1991
TD 125	1968-1971	TD 250 IV	1992-
TD 125 II	1972-1975	TD 290	1991-
TD 126	1976-1976	TD 316	1985-1988
TD 126 II	1976-1977	TD 316 II	1988-1991
TD 126 III	1977-1986	TD 316 III	1992-
TD 127	1983-1984	TD 318	1985-1988
TD 134	1959-1964	TD 318 II	1988-1991
TD 135	1961-1964	TD 318 III	1992-
TD 135 II	1965-1968	TD 320 TP 16 III	1984-1986
TD 145	1975-1976	TD 320 TP 16 IV	1986-1988
TD 145 II	1976-1978	TD 320 II	1988-1991
TD 146	1983-1986	TD 320 III	1992-
TD 146 II	1986-1987	TD 321	1985-1988
TD 146 V	1988-1991	TD 321 II	1988-1991
TD 146 VI	1992-	TD 520	1986-1989
TD 147	1982-1985	TD 520 II	1989-1992
TD 147 Jubilee	1983-1985	TD 521	1986-1992
TD 150	1965-1968	TD 524	1983-
TD 150 II	1969-1973	TD 535	1988-1991
TD 160	1972-1976	TD 2001	1989-
TD 160 II	1976-1984	TD 3001	1990-
TD 160 IV	1987-1988	Ambiance	1988-1990
TD 160 V	1988-	Concrete	1988-1992
TD 165	1972-1976	Phantasie	1986-1988
TD 166	1975-1976	Prestige	1983-
TD 166 II	1976-1987	Reference	1980-1981
TD 166 V	1988-1991		

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Friends:

I am currently looking for any data, schemes, history, production figures, i.e. almost anything about the Telefunken professional turntables, like the PS 81 idler-wheel decks I've just bought and its successor, the direct-drive PS 81 DD.

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