
Subject: Thorens TD-150 hum
Posted by [shoeihell](#) on Fri, 01 Dec 2006 03:23:08 GMT
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I've have had this turntable since '73. It was not being used much and so recently I went through and replaced the 'hair' tonearm wires with the correct gauge and color...what a crummy job. Then I replaced the RCA cables with new. All of this improved the sound quite a bit. What I have now is hum. I can turn the gain all the way up on my receiver and there is almost no hum. But....turn on the platter and there is significant hum. I don't remember this ever being a problem before and I can't really blame the cart, because it's only when the turntable motor runs. I tried to ground the motor itself but that only increased the hum. The ground I have now comes from the two cart shielded grounds and goes to the grounding lug on the receiver. I'm wondering if it's the motor itself, something to lube or some cap gone bad related to the motor? Maybe somebody had had this same problem with this series turntable?

Subject: Anybody, please?
Posted by [shoeihell](#) on Mon, 04 Dec 2006 01:36:07 GMT
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Would appreciate some feedback....

Subject: Ground or bad connection
Posted by [Wayne Parham](#) on Tue, 05 Dec 2006 15:04:28 GMT
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The symptom of hum on motor run is a pretty good clue. Sounds to me like when you re-wired, you lifted the ground connection or possibly made a bad connection to the cartridge outputs.

Subject: Re: Ground or bad connection
Posted by [shoeihell](#) on Tue, 05 Dec 2006 15:47:18 GMT
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Thanks for a reply Wayne, I was beginning to wonder if there was life out there.;-) I'm not sure I understand what you mean by "lifted the ground connection"? Everything is soldered like before....I even checked to make sure nothing it touching inappropriately. If it were the leads at the cartridge output as you suggested, wouldn't there be substantial hum when the receiver gain was turned all the way up and the motor not running? At the socket where the cart plugs in are the four

soldered connections that start their runs down the arm-each of these connections have a little plastic sleeve to cover them. The hum is very background, but noticeable and only when the motor is turned on.

Subject: Re: Ground or bad connection

Posted by [Wayne Parham](#) on Tue, 05 Dec 2006 21:00:31 GMT

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When I say, "lifted the ground connection," I mean that it was probably made open or nearly open. If the ground connection is soldered to a spade lug that is tightened to the chassis with a screw, make sure the mechanical connection between lug and chassis is clean. Something has probably made the ground connection less effective. Check also to see that your signal wires are not run near the motor or power lines.

Subject: Re: Thorens TD-150 hum

Posted by [colinhester](#) on Wed, 06 Dec 2006 00:42:47 GMT

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Does the hum get louder if the arm is moved towards the center of the platter?

Subject: Re: Thorens TD-150 hum

Posted by [shoeihell](#) on Wed, 06 Dec 2006 02:28:29 GMT

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Ever so slightly as the platter is turning-no difference with the platter off. And this is with the gain turned ALL the way up. I do get a substantial increase in noise however, when I take my hand and move it close to the cart and then less as I back my hand away.

Subject: Re: Ground or bad connection

Posted by [shoeihell](#) on Wed, 06 Dec 2006 02:36:43 GMT

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That's what I thought you meant and there is a soldered spade lug screwed to the chassis. I don't think I checked that end, but did the other as it was attached to the tonearm metal pivot bracket,

which I had to disassemble for the new tonearm leads. That's a good idea on the 'hair' wires, but I think the power mains go out the other side and so the tonearm wires are only near the RCA cable. I do have the ground going out right against the power mains on its way to the receiver-will that make any difference? The ground is also pretty small...like 20ga.

Subject: Re: Ground or bad connection
Posted by [Bill Agee](#) on Thu, 07 Dec 2006 01:30:05 GMT
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Where exactly does that ground wire connect to the tonearm? It may be that it has come loose from the arm. Try this: Remove the tonearm ground connection from the chassis where it is connected with the screw. How has the noise changed now? Use another piece of wire, just for a test, and temporarily connect it from the tonearm to the chassis. How has the noise changed now? Bill

Subject: Re: Ground or bad connection
Posted by [shoeihell](#) on Fri, 08 Dec 2006 02:52:34 GMT
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OK, there is the base of the tonearm tube...(where the tube is screwed to the part that pivots, like a 'base'). There is a spade there that is attached to the pivot base, goes into the tonearm tube and then down the vertical shaft with the tonearm wires, comes out and is screwed to the metal table base with another spade/screw. The other ground goes from the terminal board of the cart shielded leads/RCA shielded leads to the receiver lug ground, via a 20ga solid core wire-that's easy enough to change to another type of wire if deemed too small or wrong type.

Subject: Re: Ground or bad connection
Posted by [Bill Agee](#) on Fri, 08 Dec 2006 17:21:22 GMT
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It sounds like there is a ground for the chassis and a shield for cart leads, and these two are not connected together is that right? Or maybe they are connected together at the preamp ground screw? I guess what I'm getting at is that one of these ground/shields is a problem. It may be that the cart lead shield is bad or the chassis ground is bad or they are connected together when they shouldn't be, or they need to be connected together. It could also be that the lugs are not making good contact where they are screwed in. This all just a guess on my part, but hopefully it will give you some idea of what needs to be looked at. Just try different things with the grounding/shielding to see what the results are. Bill

Subject: Re: Ground or bad connection
Posted by [shoeihell](#) on Sat, 09 Dec 2006 14:21:16 GMT
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Thanks Bill....I'll try some of the ground suggestions. I was going by the various drawings that Thorens provided in their manual. If however everyone thinks it has to be the grounds, I'll go from there.

Subject: Re: Ground or bad connection
Posted by [Bill Agee](#) on Sat, 09 Dec 2006 15:00:43 GMT
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I happen to have a Thorens 150 AB (not the Mark II model) that I have not used since I aquired it. However, I am preparing to rebuild it so I will take a look at how the shielding and ground is done. If I find any additional information, I'll let you know.Bill
