Subject: Re: Pioneer RT - 909
Posted by slbender on Mon, 18 May 2009 07:51:13 GMT
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The schematic of the RT-909 is one of the most complex and over indulged messes of transistors and integrated circuits I've ever encountered. My own RT-909 doesn't do anything anymore, and that is a shame, since I feel when it works its a set capable of good audio. Unfortunately, the heads wear out too fast, as the factory setting for backtension causes about 50% higher friction and stress on the tape, than most other name brand three motor machines.

Almost no 30 year old Reel to Reel that has been turned off or sitting on a shelf or in a closet for 5 years or so is gonna work. These days, since most Reel to Reel machines were no longer made after 1982/83/84 so one would have to buy at least 8 sets to be assured of getting one unit capable of proper operation at or close to factory specs - unless it had been completely upgraded and worked on by a knowledgeable technician. Even though the RT-909 is a later (circa 1980-82) machine doesn't mean much. I'll bet 95% of the RT-909's out there need repair in any given month if they were left unused for more than 6 months.

Not many people can repair this set; and they charge rather high prices, and you're lucky if they don't switch heads on you for some that are in worse condition... Hey - don't look at me, I'm as surprised as anyone that my set doesn't work either!

Several RT-909 failures I know about... include:

1) Worn heads.

2) Capstan Pinch Rollers turning to goo if exposed to 70%, 91%, or pure alcohol, or sunlight, or both...

3) The main belt rotting and falling to pieces.

4) Each of the Tension Arms has a micro-switch which fails with alarming frequency; and they aren't made anymore, both of these switches are in series and so they control the power to the capstan motor. This means a failure in either one, or both loses the ability to transport tape...

5) Various capacitors can go bad in both the IC logic, the power supply, or the audio sections - each forward / reverse direction has a separate stereo preamplifier for each playback heads pair of channels, which avoids switching the heads, but doubles the number of caps that can fail in each channel???

6) A Failure in the Motor Servo or other circuitry.

7) A failure with any of the little internal controls that set the speeds, or back-tension, reference voltages, or any of that stuff.

There are a number of factory fixes, like six or seven to fix known problems and potential failures, that were known back in the 1980's in these sets but they are now impossible to locate or find (I think I have two of the seven).

9) Any combination of #1-7 or all of them.

10) Better get a huge Wallet Transplant if you're going to get this thing repaired.

10) NO! I won't work on these %^*$& things.

-Steven L. Bender

Dear Wayne, hello and thanks for the e-mail, this happened before and later it worked again! But this time it completely stopped!! No play and no recording, NO MOVE! And when I turn it on, I smell something like burning!!!
Happy Holidays,
Minas
