

# Re: Sony laser questions

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I received a Sega CD (old model with the motorized tray), and had some questions..

When I first got it, putting in a CD resulted in the sound of the motor spinning up, stopping, spinning up, stopping, then the Sega CD reported NO DISC.. So, I took the unit apart, and was stunned to see what I saw the thing do.. When it first spun it up, it stopped, then the disc spun in reverse, then gave up with the NO DISC message.

The laser in the unit was a Sony KSS-240A.. I then proceeded to turn the three POTs, one at a time, VERY slowly, like 1-2 degrees (maybe 3), and if it didn't help, I went the other way, and if that didn't work, i'd return it as closely as I remembered it's position, then go to the other POT...

Well, after all three POTs, non of them helped, still had the weird erratic actions... Then, I remember someone telling me the 240A has TWO lenses, one on the top, and one on the bottom.. So, I took the plastic piece off, carefully lifted up the lens, and blew into it..

After that, the machine has been reading games, and music CDs... But, at one point in a certain game, when it played a certain CD audio track, it did the weird "spin up, spin down" thing, and decided to freeze the whole game up.. I try again, at the SAME audio track it did the same thing.. So I cleaned the CD, and then it worked perfectly..

My question: Could messing with the POTs made it more sensitive to smudges on a CD? Or are the 240A's just weak lazars? My Sony boombox has the same KSS laser, and it used to do the SAME thing, until I took compressed air at it's lens..

Also, though I did put the POTs back in their original position, I fear 1, 2, or all 3, may be 1-3 degrees off from their original position.. Can this hurt the system?

## Re: Sony laser questions

KSS240A lasers are for sure not the most reliable in the world. The pots on there are factory set and sealed, and should not be adjusted. With most Sony lasers, even a modest over-drive of the laser diode can do it permanent damage, so I would not recommend anyone to attempt adjustment, unless it is a last ditch "do or die" attempt to prove that the laser is worn out. The dust that you are blowing by going down the side of the lens, is likely laying on the critical-angle mirror that's down there, and if that is the case, there is probably a similar amount of dust on the pickup diode array, which likely won't be dislodged by air-blowing. This dust will also degrade the performance of the laser, and I would think that when a small amount builds up on the mirror as well, that is enough to tip the performance over the edge, and stop it working.

Blowing the dust off the mirror, just about gets the performance back up for a couple of months to the point where the external circuitry can handle the reduced level signal output that the dust is causing. Sensitivity to marks on the disc, and failure to play with the disc spinning backwards, are both typical symptoms of a worn or faulty laser.

Personally, I would just go ahead and replace it. Although not one of the cheapest of the Sony KSS series lasers, it never-the-less is not prohibitively expensive either. The only thing that I would warn against, is using a generic 240A substitute, such as an NKS240A. Although most cheap subs for the KSS series work just fine, I have found that in many applications using the '240, only a genuine Sony original will display the performance required for reliable operation.

Arfa

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