class="messageText ugc baseHtml"

This guide will show you how to POT Tweak Your Hitachi, BenQ, Samsung, or LiteOn Xbox 360 DVD Drive POT Tweak

The Basis behind this tweak/mod:

Some times even off the factory line a optical drive can be a little bit dodgy when it comes to reading certain types of media. In this case the Xbox 360's dvd drive becomes weak over time and you get the dreaded "dirty disk" "open Tray" or "unreadable disk" error. This error can even occur on new boxes that the drive just needs a small tweak to get the dvd laser diode potentiometer to its sweet spot. All drives are different and no 2 drives will have the same base resistance on the dvd "pot". Its common for most drives to be factory set any where between 4Kohm-6.4Kohm and in this guide it is highly recommended not to lower the resistance to your DVD laser diode below 3.2Kohm, this is the lowest resistance that is safe before you risk blowing the diode out in a very very short period of time.

So what we are doing by decreasing the resistance of current flow to the laser diode, is basically increasing the lasers power. thus making it easier for the laser beam created by the diode to be focused by the laser lens and be reflected back so it can be read by the assemblies optical sensor.

Tips, Warnings and that other junk:

- ALL "Pot" adjustments will be very small, moving it a hair can make a difference in .2-.5Kohm in some cases, so use small adjustments and then read the resistance with a multimeter

- Do NOT EVER lower the resistance to your laser diode if your not having disk read issues

-DO NOT lower the resistance value of the potentiometer (pot) of the laser diode below 3.2Kohm, there are some VERY rare cases where your drive might already be factory set lower then this. If this is the case be very careful lowing your DVD "pot" resistance and i recommend lowering it by.1Kohm increments and testing.

-DO NOT EVER just crank you laser diode down to 3.2Kohm, lower it by .2-.5Kohm and then assemble and test until disks that once gave you issues no longer do. Remember we are increasing the current to the laser diode here. so the lower you go, the theoretical life span of your laser diode is decreased. so to get the maximum life from your laser diode, lower it only as far as needed to resolve your disk read issues.

-REMEMBER this is not a tweak that will fix your issues with Game/Movie Disks that you abused and have scratched beyond readable use by the drive. Although it may help with minor scuffed disks, if you have trashed the DVD-ROM then its garbage. no pot tweaking or any other song and dance besides replacement or resurfacing will fix that it.

-NEVER EVER EVER attempt this with out a multimeter to measure your adjustments. Remember the purpose of this tweak is to extend the usable life span of your DVD-ROM, not gambling blowing the laser diode in the first 15 min of using a DVD-ROM disk in it. So why bother gambling it? it would defeat the purpose of this tweak. You wouldn't repair the hard wood floor in your house with out measuring the wood cuts first would you? Don't screw around just do it right.

Note: Some of you might say "But there is youtube videos of people doing it with out a multimeter" I don't care, screw youtube, i don't know about you by my electronics repair background and certification came from a school, not bloody youtube. youtube is not the national source for repair guides and there are plenty of morons on youtube, and youtube videos are never a benchmark for the proper way to do anything... even if the proses looks correct.. and may be for some videos of things. It should not be your first and only source of education on ANY matter.

With all that said, if you have any suggestions, questions, corrections that are correct and or comments leave them here. For your DVD-Rom drive see attached pictures for a visual run down on tweaking your DVD-ROM pot. its simple to understand you should have no issues.

-Remember being uneducated in the correct proses to fix something does not make fixing it the wrong way out of sheer luck correct at all. Its still wrong, and your just ignorant to the correct proses. Again referring to youtube videos

Attached Photo Information (located at the bottom):

-Measure resistance with a multimeter between the two spots i have marked in red. Set the multimeter to 20Kohm.

- DVD-ROM Pot is always circled in red.

- Hitachi/Samsung laser pots are accessed from the bottom of the drive, you will have to remove the circuit board to tweak these.

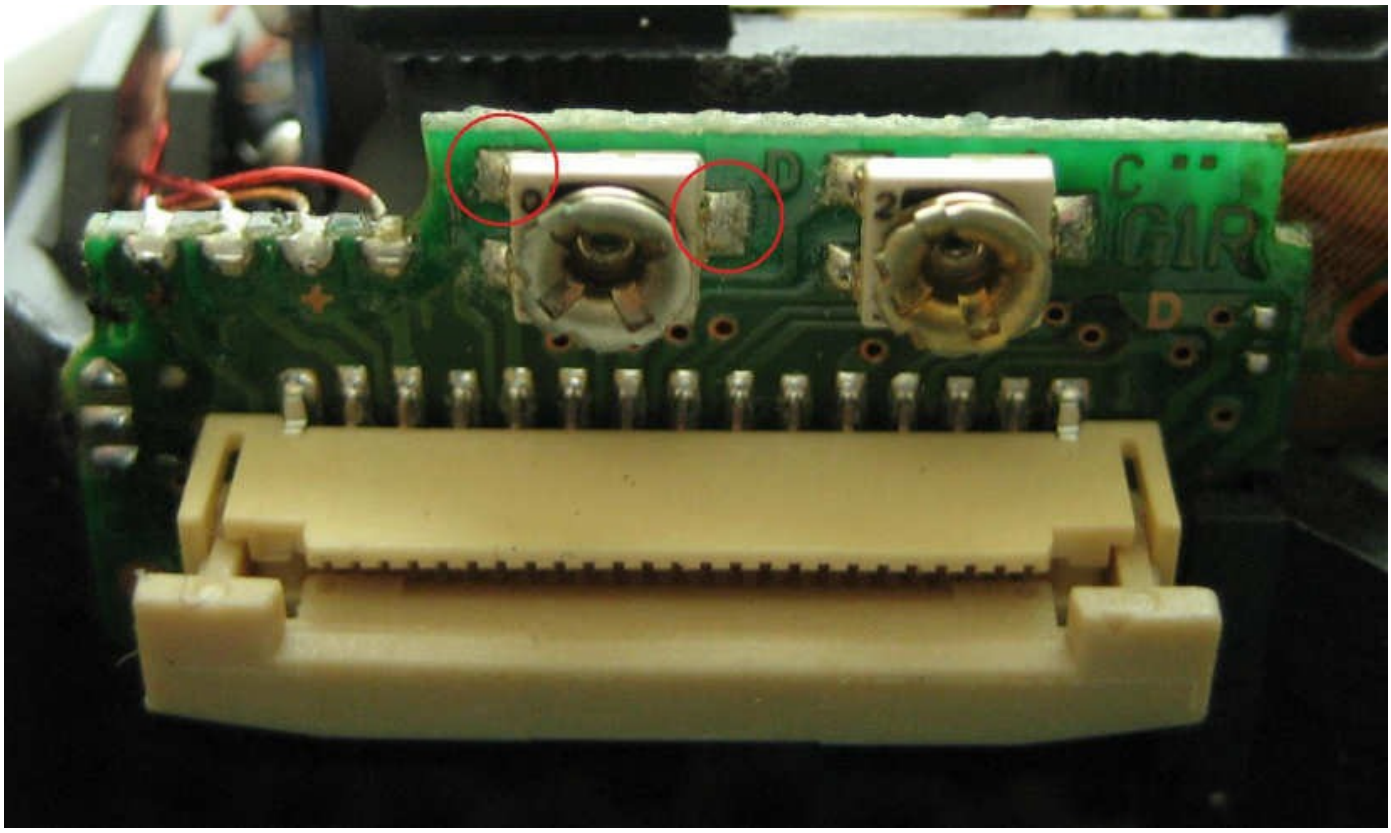
-Lite-On/Ben-Q laser Pots are accessed from the top of the drive, Ejecting the tray before tweaking will make this easier.

-All Drives dvd pots are located on the left in the pictures, and will be the same when you are physically looking at them.

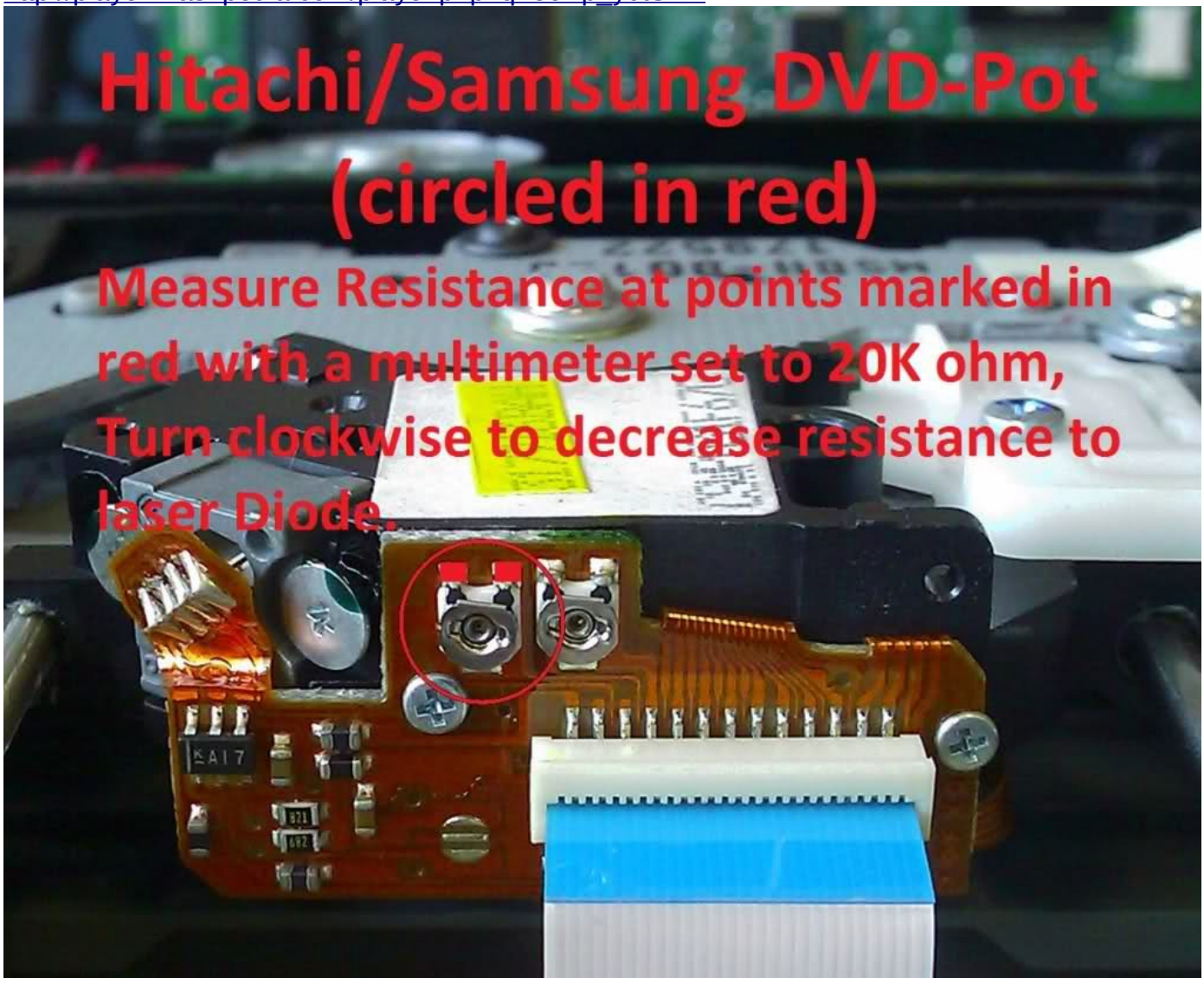
- Take note to what way i instruct to turn the pot to decrease the resistance value of the pot. it differs between Lite-On/Ben-Q and Hitachi/Samsung

Written by TJE of xbox360iso.
Carson, Oct 5, 2009
#1

For Liteon drives there so few there who had problems. I had small problems, but only with traxdata discs, lousy/cheap ones, but i did give a try.
Flashing the drive was a bit tricky, but did manage. All is working just fine with verbatim discs.
Traxdata gave some reading problems so i tried to adjust the laser.
From 5.29 to 4.72 and ill be testing some time now before i go any lower just in case.
Lite-on: I adjusted the one on the left from 4.2 to 3.8 with no joy. I finally settled on 3.2 kΩ, cleaned the lens while I was at it and I was back in business.
Image attached for the Liteon measure locations: (alimmainen seur. sivulla)



Xbox laserista:
http://player.mashpedia.com/player.php?q=5eKp_y6tSFw




Lite-on/Ben-Q DVD-Pot (circled in red)
Measure resistance at points marked in red with a multimeter set at 20Kohm, Turn counter-clockwise to decrease the resistance to the laser diode.
JEONG