

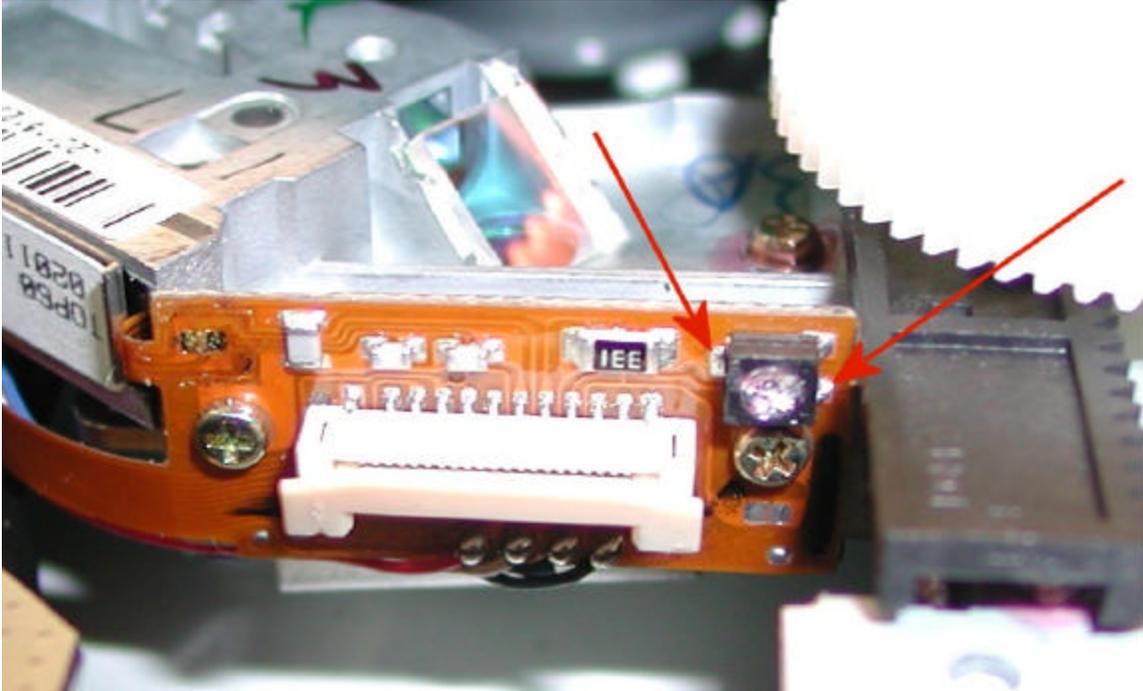
Xbox Thompson DVD drive laser adjustment procedure

Do not try this mod unless you are having problems reading media? Not all cd-r's are able to be recognized after this is done! So if your xbox can read cd-rw's and dvd-r's don't attempt this mod!!

1. Take drive out of xbox (if you installed a mod, you know how to do this)
2. unclip plastic bracket - the 2 plastic clips are to the rear of the drive.
 3. pull off metal grounding piece - just slips off
 4. remove 2 screws in the lid of the drive (there are only 2)
 5. push in plastic clips to allow the lid to come off
 6. take out the 2 torx screws at the back of the drive (T10)
7. Ease off the bottom of the drive being careful not to damage the connectors at the back.
 8. Undo the screws in the drive PCB.
9. Unclip the 2 ribbon cables, done by sliding part of the connector away from the cct board.
(It may be easier for the laser emitter end to be done.)
10. Move the circuit board out of the way, it will still be connected by 2 small wires but dont worry about that, you just need the room
11. The PCB that the pot is on would be facing you if you were staring at the BACK of the drive (where the IDE connector is). The pot is a little black box with a screw covered in red resin in the middle.
12. Easier said than done. The resin does not come off that easily, so you have to be a little rougher on it than you would think from reading the above (don't blame me if you fuck it up though).
13. If you have a Radio Shack multimeter like me, switch it to use ohms. The ohm symble looks like a miniature pair of headphones. Touch and hold one connector to the screw on the pot. Touch the other connector to the top-left metal leg that hold the black box on to the PCB.
You should get reading of over 1000.
14. You need a tiny screwdriver. I mean tiny like the ones used for eyeglasses. You cannot turn it anticlockwise, because that is a made up word. Turn it counterclockwise. You should be alright.
15. re-assemble
16. test
17. If the drive is still not perfect, decrease the ohm value in 25 ohm steps until it is. I would suggest that you do not go much further than 850 ohms as I noticed the drive becoming noisy after this.

Now reads ALL my DVD-r flawlessly and even some CD-r

NO RESPONSIBILITY IF YOU MESS UP YOUR XBOX DOING THIS!!!!



NOTE : The black thing that the arrows are pointing to, is this the pot w/ the resin scrapped off. You want to measure where the red arrow is pointing.

DO NOT LOOK INTO THE LASER BEAM FOR ANY REASON.
FAILURE TO FOLLOW INSTRUCTIONS CAN BURN YOUR \$50 PRESSES or YOUR EYES.

Use this information only if you can follow directions, and you have a digital ohm meter.

PART #2

TGM600 Model only

Find the laser module. It has the laser diode and the lense and slides forward and backward on a two pole track.

lets define:
top of module=lens side
bottom of module=opposite of top
front=the side closest to the xbox emblem on the tray
back=the side we are going to work on(has the white flex cable)

Now the easy part(I have done all the scoping and math) you just have to set the gain.

on the back of the module on the bottom right hand corner(If you are looking at it from the top side) there is a little black square box on the pcb.

see it? after you find this, peel the glue from atop it. Under the glue you will see a screw.

Now with your digital meter take a reading(One lead on the screw and one lead on the top right pin). Write this down.

Now take 1975 ohms from your reading.

The result is what you are going to set your gain control to if:

THE RESULT IS NOT UNDER 800 OHMS

Due to the purposeful design of this drive, anything below 800 will burn your discs. (YOU HAVE WARNING)

To set this turn the screw counter clockwise to go down(careful, the screw is hard to turn and a little bit goes a LONG way.), and the other way to go back up.

now test your CD-R that you made. If it tracks every track, (listen to #1 and #2 all the way through) then it is set.

If not +-100 ohms should set it for every drive

The post this information was in can be found at the following location:

<http://www.i-hacked.com/forums/viewtopic.php?p=295#295>

Thanks to Spaztic and Hevnsnt in the i-Hacked.com forums for all of the information.

Runkster