SAMSUNG DRIVE REPLACEMENT TUTORIAL

By Kash
(Look for me in on EFNET as Kashsteve)

Materials you will need:

1) **Soldering Iron** (15-30 Watt switchable from Radio-shack is what I used)
2) **Copper De-soldering Braid** (or pump, but braid is my preference)
3) **SAMSUNG SD-616T or SD-616F** (Check picture to see where you can find out what kind of drive yours is.)
4) **Screwdriver**
5) **SDG-605B Bios** for flashing *(DO NOT ASK ME WHERE TO FIND THIS)*
6) **30 Gauge wire**
7) **Solder (Rosin-core and Silver-bearing solder is recommended)**
8) **PIN-HEADER for yellow cable, or OLD THOMSON (thx to evrready_ for hookin me up via U$ MAIL)**
9) **LOTS OF TAPE and some hot glue.**

Step 1: Make sure your Samsung drive is a SD-616T or F. As long as its not a SD-616Q You should be in good shape.

YES SD-616T Mine reads.

After flashing the DVD-ROM with the SDG-605 BIOS in your computer,

Pull out the drive using a paper clip and remove the tray face plate then the drive face plate:

Now pop off that tray faceplate by holding the dvd-rom upside down and pushing outward and up.
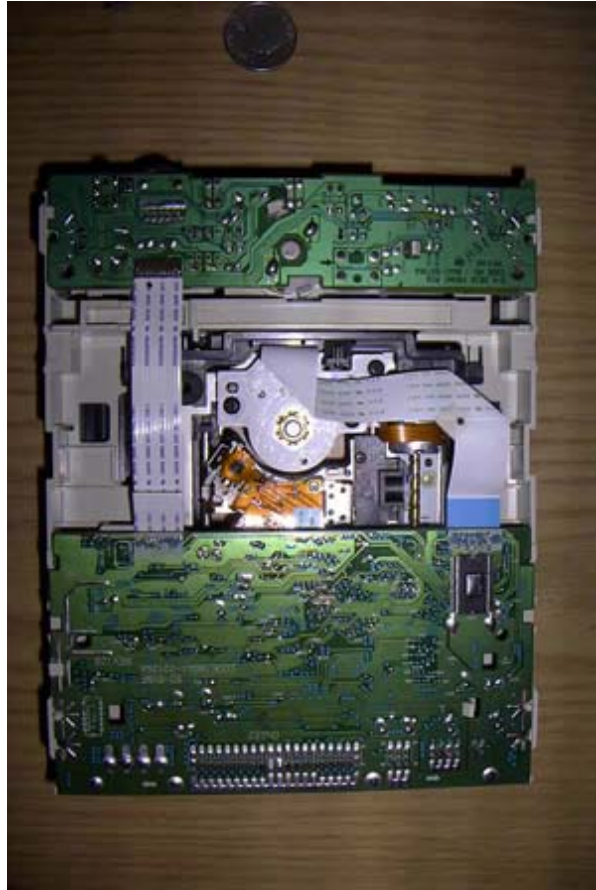
Then push in the side plastic clips of the drive and remove the faceplate:

K nubs. Easy part is over.

Step 3: Remove the metal shielding on the top and bottom:

You should get something that looks like this.

Step 4:

Now you have to remove the front PCB, first unclip the plastic clip on the right then lift the PCB slightly hard on the left, don't be afraid, you might break the plastic, but don't pull hard enough to break the PCB. Then unclip the bottom clip holding the Motor then lift upwards until you get something like this:

After that, unclip the top clip and lift the PCB off. It may take a bit of work, be gentle, don't break anything!!!!!!!!!!! After you take the PCB off, un-plug the tape cable on the bottom left from the Bottom PCB. Be gentle! Shimmy the cable from one edge then the other.

Notice the sticker on the motor is facing the audio volume dial. (we want it to face the **opposite** direction.)

Step 5:

Place the PCB between 2 books or something so it doesn't rock and De-Solder the Big Blobs holding the motor (Arrows pointing in red):
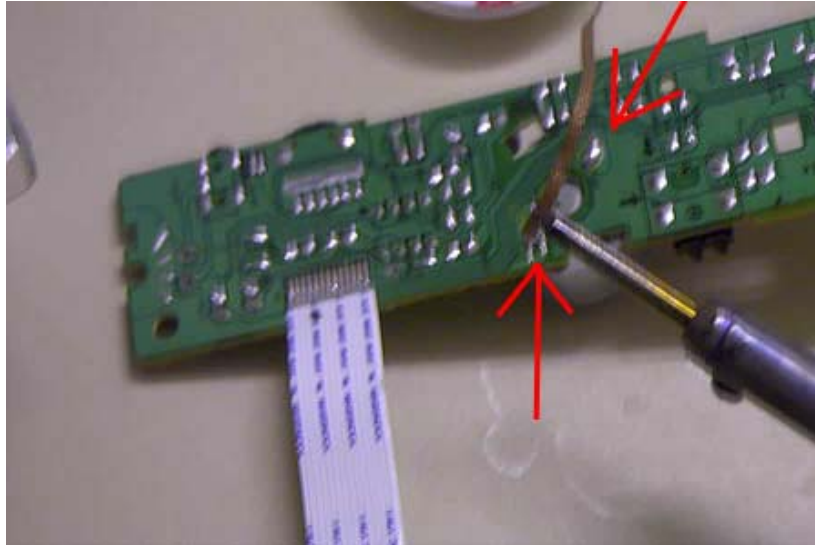
Put the copper braid over the solder, then put the soldering (set at 30 Watt) iron on the copper braid until the braid soaks up the solder. Repeat until all the solder is gone. (Use a nail clipper to cut the braid to get rid of the unwanted solder).
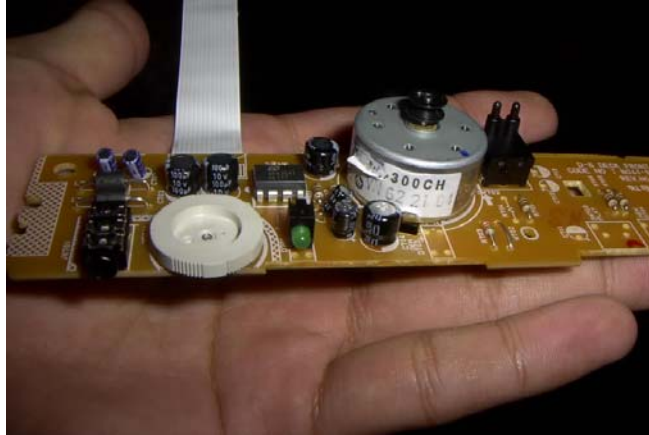
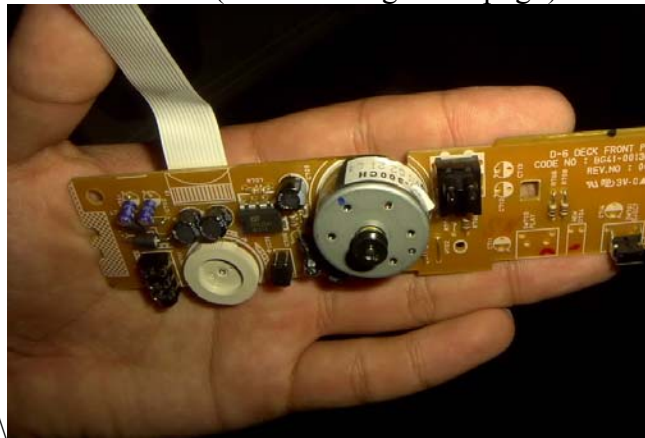The motor should fall off after you take off one of the solder blobs and heat the other:
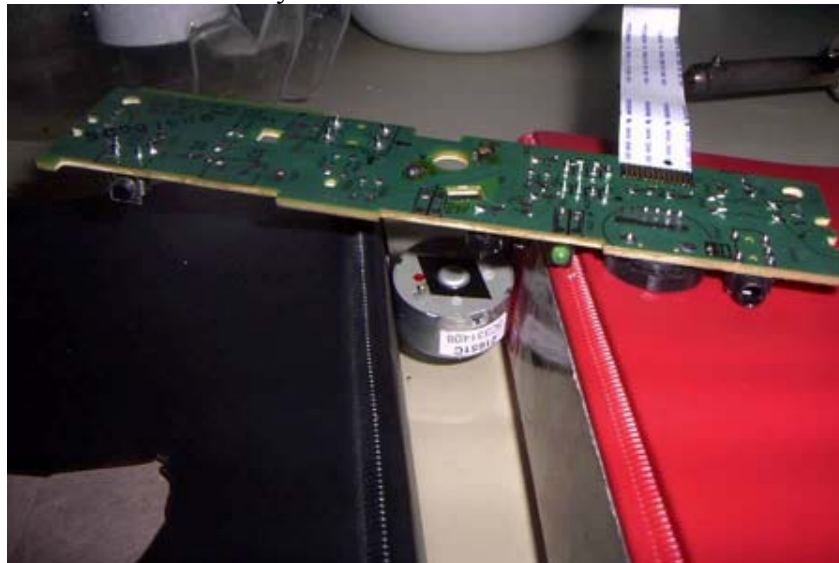
Step 6:

Rotate the motor 180 degrees so that the sticker is facing the black plastic pogo-pin type things.

BEFORE: (sticker facing white dial)

AFTER: (sticker facing black pogo)

Then put the motor back into the drive like it was and put the Rubber ring back onto the motor and onto the black round gear that controls the tray. (You can spin the black round gear and see that it moves the tray back and forth. Make sure your tray is ejected half way so you can see the black round gear.)

Now, get the other PCB (the bottom one) and unclip it from the dvd-rom:
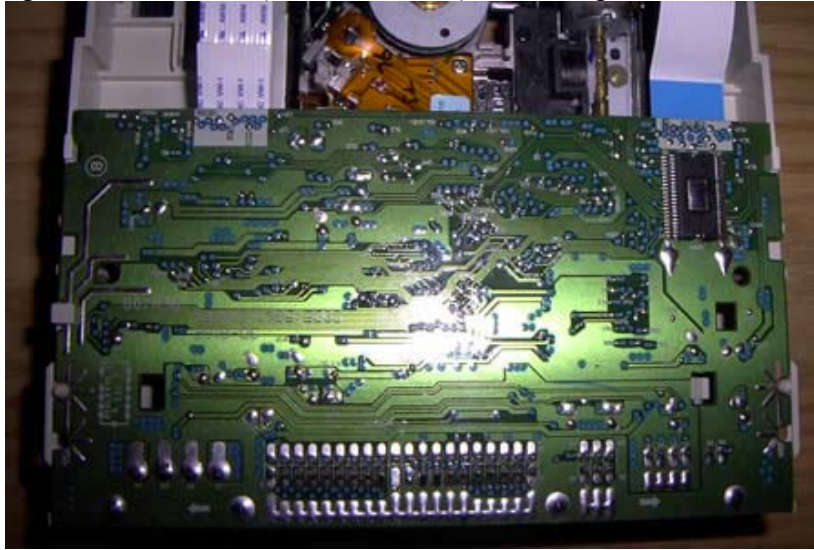
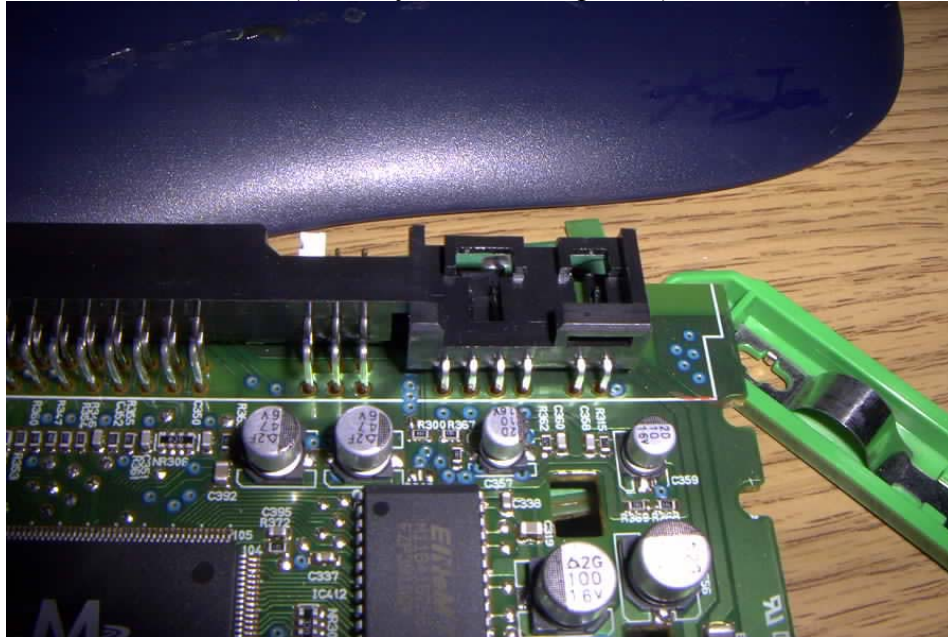Lift the right side (push in the plastic clip) then lift off the right side

Then flip it over and put it on top of the TOP PCB.

Now you gotta break some plastic!

(Before you break the plastic)


(after you break the plastic)

.

Be careful though; don't damage anything, like the capacitor right below the plastic. (Use some pliers to break it. You must de-solder and remove the metal support that holds the plastic down)

Personally, I got my pin header from my old Thomson. You may not want to do this, but I couldn't figure out any other way to get the pin header. This was really hard and I won't explain how I got it:

Now, wiring:

(THIS PIC I GOT FROM LOSTBOY)
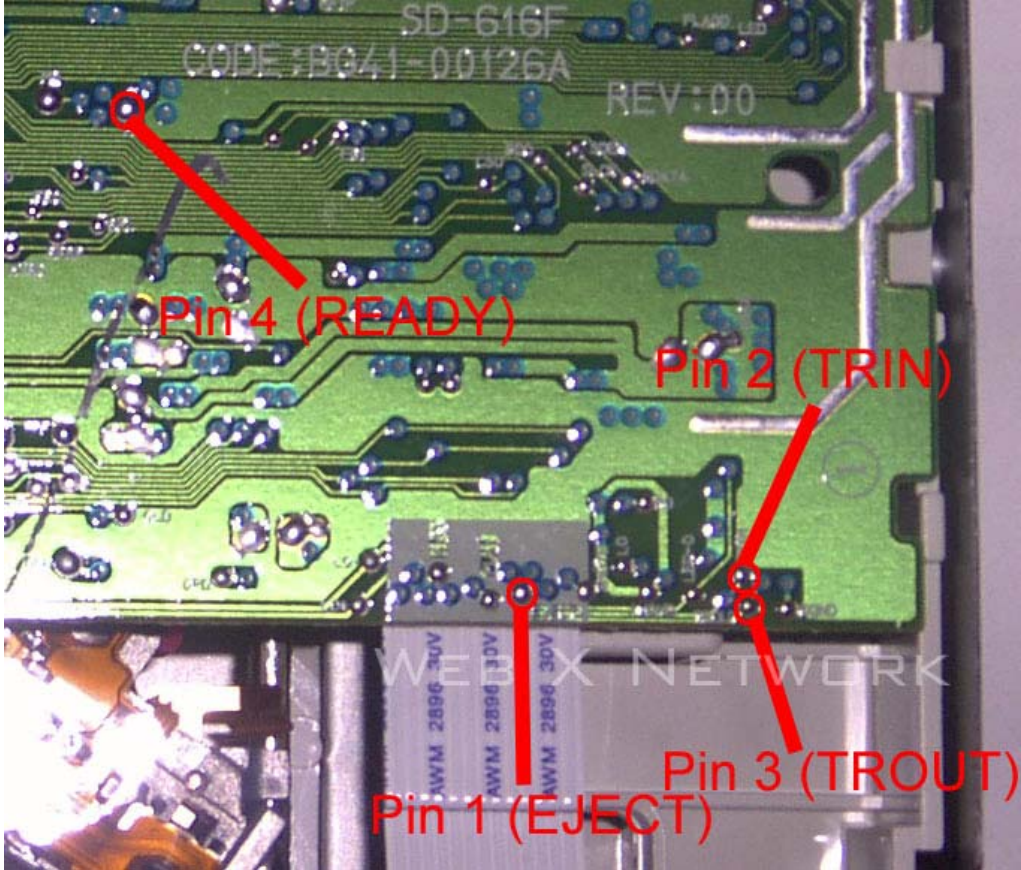
Get 4 pieces of 30 GAUGE and cut them to a size about foot long, then connect 1 end of each of the wires to each of the points indicated as Pin 1, Pin 2, etc. (by the way, flip the bottom PCB back over to its original position)

After you successfully do so, keep a mental note of which wire is Pin1, pin2 etc…

Then put the wires through the unused hole and then solder them onto the Pin-Header:
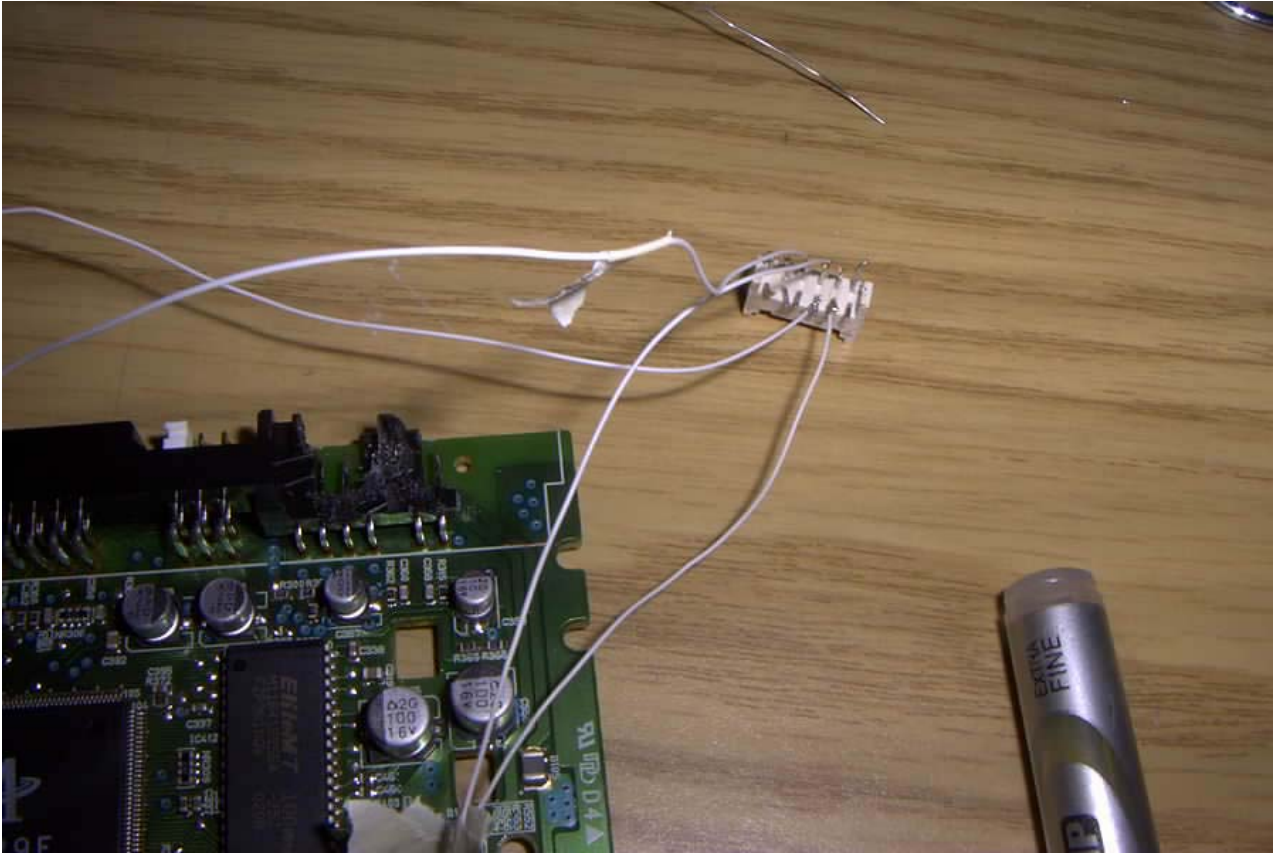
(THIS PART FROM TIROS, well everything is from TIROS)

You must solder them in this way:

-[: : : : : :]-   = |6   5   4   3 2 1| This is the back of the pin header
                                   -|12 11   10   9 8 7|-

Pin 1 connects to 8
Pin 2 connects to 3
Pin 3 connects to 4
Pin 4 connects to 9

So you get something that looks like this:

Then after that you're pretty much done!

Tape all the wires to the PCB so they do not interfere with the CD spinning.

Put some hot glue on the PCB and put the pin header on the PCB and Tape it down and then Re-assemble everything and you are DONE!
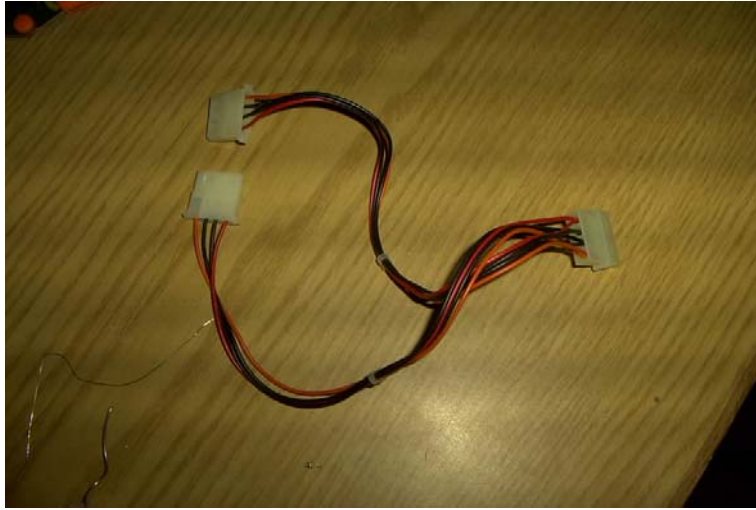

END RESULT:

MODIFIED SAMSUNG

In order for this to work, you must have a power splitter and connect the power to both the hard-drive and the dvd-rom:

Now just put in your xbox and Try out an original! Then a CD-R of course.

Once again, written by Kash, Inspired by xovationx, Lostboy and especially TIROS (really nice fellow)