

Amiga HD Floppy Drive Hack Beta V0.6.1 by Chrisfi AKA ChewChew AKA Chewie

I suggest you use a known good drive already modified to work as a DD Amiga drive or first modify one and test. Test formatting and writing in WorkBench - I have found some modified drives that otherwise work fine with ATK, XCopy, etc that do not write to DD disks in Workbench.

The picture shows a modified Sony MPF920 T/B53, but this should work with most MPF920s with either of the IC2 versions shown in the table. **Note** - I have used a socket for the GAL to make it easier to burn different configurations for testing, but this is slightly too big to fit in the case.

You will recognise the first four steps. Step 9 is only needed if the drive speed is unstable with HD disks. I suggest you use ATK to check the index pulse period and if it is not at a steady rate, follow step 9.

1. Cut the track going to pin 34 of CN1.
2. Remove the solder blob at SH1. Or cut the track going to pin 2 of CN1.
3. Solder a wire from the track cut at step 1 to the lower half of SH1 or pin 2 of CN1.
4. If the drive is to be used as DF0:, move the 0 ohm resistor from SEL1 to SELO.
5. Cut the track going to pin:
 - a. 20 if IC2 = D9848N and carefully remove a small amount of the solder mask from the track on the IC1 side of the cut.
 - b. 16 if IC2 = BA6986FS and remove a small amount of the solder mask from the track on the IC1 side of the cut.
6. Identify a convenient solder pad on the track going to the HD detect switch.
7. Identify a convenient 5V and GND solder pad.
8. Solder wires from the GAL to the FDD as per the table and don't forget the link on the GAL itself!
9. **Optional** - If the drive motor is unstable, replace R7 with a 56k-68k resistor. Note - this may not always be labelled R7. The correct resistor is part of a network of two capacitors and a resistor connected to pin:
 - a. 5 if IC2 = D9848N.
 - b. 18 if IC2 = BA6986FS.

GAL	CN1	IC2 D9848N	IC2 BA6986FS	Function
1-13	-	-	-	Clock
8	10 for SELO 12 for SEL1	-	-	SELx
9	16	-	-	MTR
16	34	-	-	RDY
4	-	Left of cut @pin 20	Left of cut @pin 16	oscin
18	-	20	16	oscot
3	-	18	14	RDYin
6	-	-	-	HD switch
20	-	-	-	+5v
10	-	-	-	GND

