

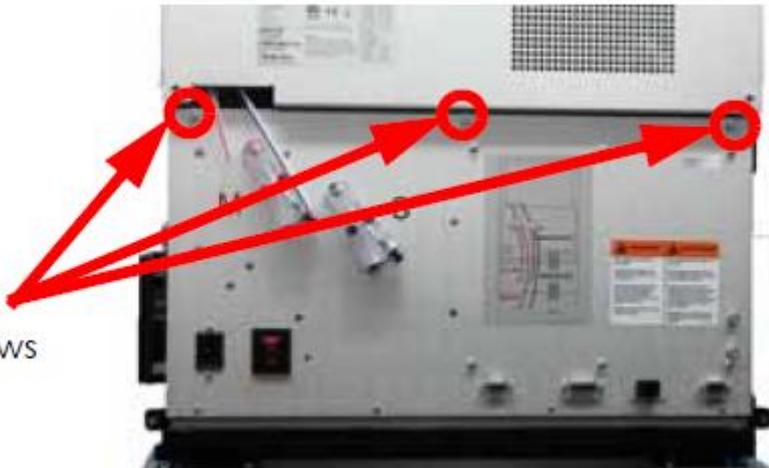
1 Needed Tools / Hardware / Software

- Knoppix LiveCD / LiveUSB (or any other Linux System)
- SATA / IDE wire
- PH screwdriver
- Serial cable (Null-Modem)
- PC with RS232 Plug (or USB to serial converter)
- Hyperterminal / Putty
- Notepad++ (or any other texteditor)

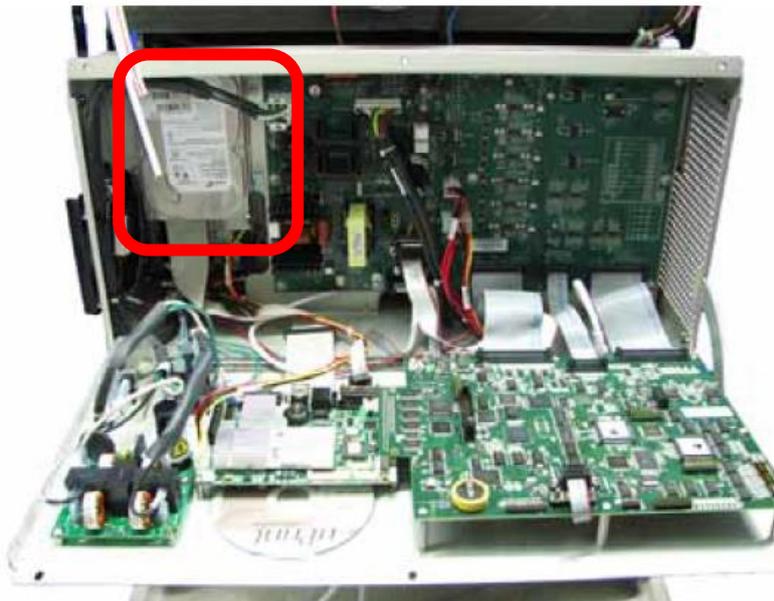
2 Disassemble hard drive

1. Unload both Material and Support
2. Pull out all cartridges
3. Shut down the printer (switch at the side)
4. Power off the printer (switch at the backside)
5. Pull out the power cable
6. Disconnect the Model and Support tubes from the Y-Connector
7. Remove the 3 mounting screws on the top of the electronics bay cover

Remove the 3
mounting screws



8. Open the electronics bay



9. Disconnect the SATA / IDE and the power cable from the hard drive
10. Remove the 4 mounting screws



11. Slide the hard drive up and out of the electronics bay

3 Backup the hard disk!

1. Connect the printers hard drive to you PC and start your OS
Do not boot from the printers drive!
2. Make a 1:1 backup of the printers hard drive using your favorite OS / Software.
3. Shut down the PC

4 Modify the printers system (to delete the known serial numbers at startup)

1. Start your PC with Knoppix LiveCD (to launch type "knoppix" without quotes)
2. Open the Knoppix file manager (cabinet icon)
3. Search all partitions (of the printers hard drive) for *system.dat* and note the path
4. Search all partitions (of the printers hard drive) for *rc.local*
5. Open the *rc.local* to edit
6. Add the lines
 - a. `rm -f /system.dat`
 - b. `rm -f */YourPathHere*/system.dat` (eg. `rm -f /mariner/config/system.dat`)
7. Save the *rc.local*
8. Done! Power down Knoppix, Power Off the System and put the harddrive back in the printer.

5 Dumping the EEPROM

1. Power on the printer
2. Go to maintenance → material
3. Insert a new (100%) filament guide with chip in the bay
4. Connect the serial wire (*Null-Modem*) to the printer and the Laptop/PC
5. Start Hyperterminal (or putty)
6. Configuration
 - a. baud rate: 38400
 - b. 8 data bits
 - c. no parity
 - d. 1 stop bits
7. Start connection
8. To read the EEPROM type in
 - a. er 0 0 0 128
for model in bay 0
 - b. er 0 1 0 128
for model in bay 1
 - c. er 1 0 0 128
for support in bay 0
 - d. er 1 1 0 128
for support in bay 1
9. The output will look something like this:

```
er 1 1 0 128
Support carrier ID (8 8-bit values)
000000: b3 bd 50 08 d0 14 10 53          ..P....S

Support carrier in bay 1: 128 bytes at address 0 (128 8-bit values)
000000: 04 31 ed f3 2c a7 ab ca 8f 8d 44 c8 a1 11 e2 16  .1.,.....D....
000016: 12 ec 53 aa a0 a3 6f ab 91 1e 22 11 d7 a9 6c 41  ..S...o..."....lA
000032: 68 d0 63 34 2d 4e 3b fc 32 e7 c7 f8 1f 13 17 4b  h.c4-N;.2.....K
000048: 32 e7 c7 f8 1f 13 17 4b 0c 39 48 18 38 78 9b 57  2.....K.9H.8x.W
000064: e8 9e 00 00 00 00 d1 15 55 aa 55 67 4b 0d 51 be  ....U.UgK.Q.
000080: cd 03 00 00 00 00 00 0c 39 48 18 38 78 9b 57  ....9H.8x.W
000096: 21 6b 32 f0 00 00 00 53 54 52 41 54 41 53 59  !k2.....STRATASY
000112: 53 ce 76 b8 bd f1 f4 31 1e e2 5e 15 5c ad 33 93  S.v....1..^.\.3.
```

Red is the CHIP-ID; Blue is the necessary information you need to copy and edit

10. Copy and edit the blue data to one line with comma separated values (e.g with MS-Editor)


```
33,52,6f,b7,17,c7,9f,c6,8f,db,af,5a,d3,ed,ec,09,54,c2,d4,98,1c,08,19,7c,cf,4c,43,b6,49,5c,5c,ae,b0,04,57,6f,c1,03,8f,9c,13,dc,29,a7,3b,0a,68,2d,13,dc,29,a7,3b,0a,68,2d,62,1d,5d,17,3b,f1,5f,d5,da,88,00,00,00,00,f8,30,55,aa,55,6f,6d,f7,4c,be,0e,eb,00,00,00,00,0,0,00,31,07,63,a1,0e,b4,1a,61,88,14,05,75,fc,a9,f1,d2,53,54,52,41,54,41,53,59,53,db,e1,82,f3,d2,1c,6e,a2,d9,76,36,a6,04,44,50
```

6 Writing back the 100% EEPROM

1. To re-write these information go back to Hyperterminal and type in
 - a. ew 0 0 0 "comma-separated-values-with-quotes"
for model in bay 0
2. Check if writing was successful
 - a. Read the dump (point 8.)
 - b. Compare it with your 100% dump

```
ew 0 0 0 "33,52,6F,B7,17,C7,9F,C6,8F,DB,AF,5A,D3,ED,EC,09,54,C2,D4,98,1C,08,19,7C,CF,4C,43,B6,49,5C,5C,AE,B0,04,57,6F,C1,03,8F,9C,13,DC,29,A7,3B,0A,68,2D,13,DC,29,A7,3B,0A,68,2D,62,1D,5D,17,3B,F1,5F,D5,DA,88,00,00,00,00,F8,30,55,AA,55,6F,6D,F7,4C,BE,0E,EB,00,00,00,00,00,62,1D,5D,17,3B,F1,5F,D5,97,06,32,F0,00,00,00,0,53,54,52,41,54,41,53,59,53,DB,E1,82,F3,D2,1C,6E,A2,D9,76,36,A6,04,44,50"
```

7 Reboot the printer – DONE ✓