Versa AX Disassembly

- Required Tools
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Required Tools

All Versa AX maintenance procedures can be performed using the following tools:

- Tweezers
- Small flat-head screwdriver
- Small Philips screwdriver
- Right-angled dentist style probe

Disassembly Instructions

This document contains step-by-step disassembly instructions for the Versa AX. The instructions are clarified by images of the part that is being removed or disassembled. Furthermore, the screws that are removed are shown next to the image of the parts themselves.

When disassembling the system unit, follow these general rules.

- Do not disassemble the system into parts that are smaller than those specified in the instructions.
- Label all removed connectors. Note where the connector goes and in what position it was installed.
- Turn off the power and disconnect all power and all options. Also remove any PC-Cards that are in the PCMCIA slot.

1. Battery

Remove the battery pack of the notebook as follows:

a. Slide the latch into the unlock position as shown below and hold it.
b. Slide the battery out of the bottom base.
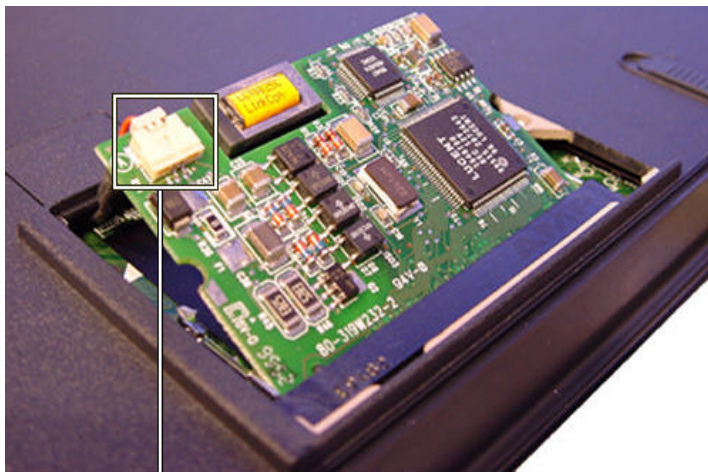
Fig. 1: Battery and modem cap removal.
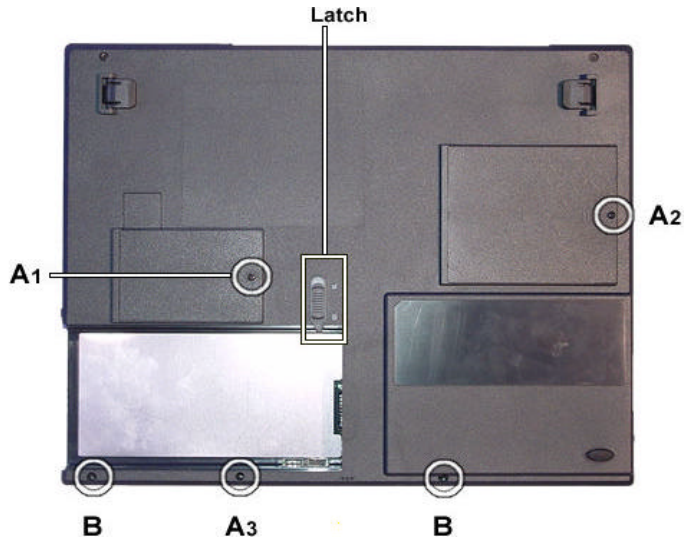
2. Modem

The following steps describe how to remove the modem:

a. Remove the screw of the modem cap (1x A1).
b. Slide open the modem cap and remove it.

Fig. 2: How to take out the modem.

c. Disconnect the modem connector cable.
d. Release the modem board like an SO-DIMM module.
e. Finally, take out the modem board.

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3. Memory

Next is described how to take out the memory module(s):

a. Remove the memory cap screw (A2) (see Fig. 1:).
b. Slide the memory cap open.
c. Release the SO-DIMM memory module.
d. Remove the module.

Fig. 3: Removing the SO-DIMM module.

A

4. Front Cover

The front cover holding the touchpad should be removed according to the next steps (also see Fig. 1:):

a. Remove the three screws (2x B, 1xA3), which can be found on the underside.
b. Lift up the front cover.
c. Disconnect the touchpad connector.
d. The front cover is now free from the notebook.

B

A

5. VersaGlide Touchpad

Disassemble the VersaGlide touchpad as follows:

a. Remove the flat cable of the touchpad buttons.
b. Disconnect the touchpad connector cable.
c. Remove the three button-board screws (3xC).
d. Remove the button board.
e. Carefully slide the touchpad frame down a little.
f. Push it upwards and take away the frame.
g. Lift up and take away the VersaGlide touchpad board

Note   Take care that when placing the touchpad, the connector on the touchpad board must face down, towards the buttons.
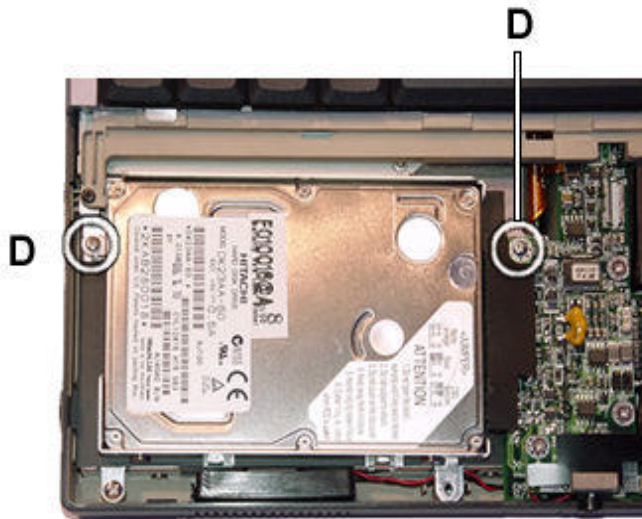
C
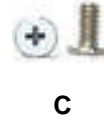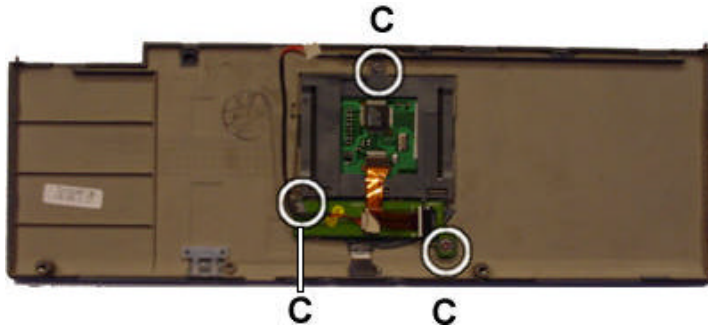
6. Hard Disk Drive

Here you can find the instructions for removing the hard disk drive:

a. Remove the two screws that hold the hard disk drive and it's connector.

Note   During assembly the 3rd screw for fixing the HDD is inserted during the assembly of the Front Cover.

b. Lift up the hard disk drive and remove it.

Fig. 5: Hard disk drive.

D

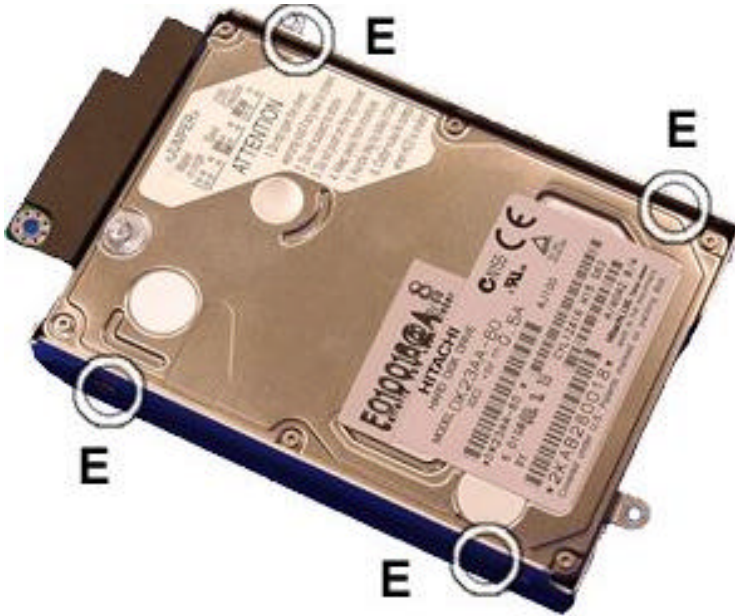# 7. HDD Bracket and Connector

These instructions explain how to remove the HDD bracket and the HDD connector.

a.   Remove the connector from the hard disk drive.
b.   Remove the four screws (4xE) from the HDD bracket.

Fig. 6: Hard disk drive bracket.

8. Keyboard

Remove the keyboard as follows:

a.   Slide the power-button cover (above the keyboard) slightly to the right to unlock it.
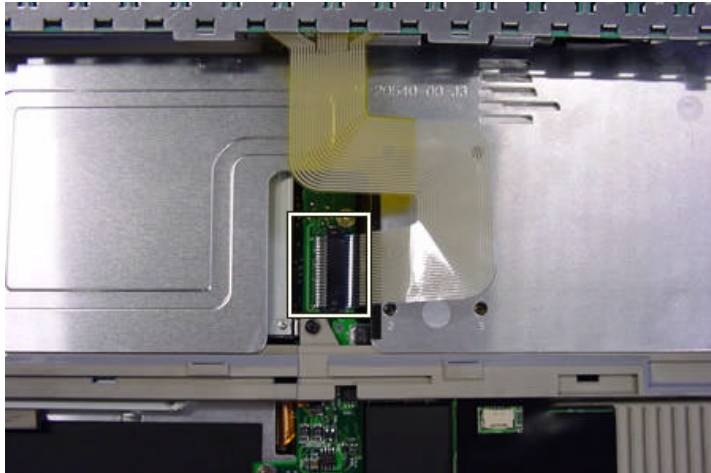b.   Take away the power-button cover.

Fig. 7: Sliding off the power button cover.

c. Lift the keyboard and disconnect the keyboard flat cable.
d. The keyboard is now free.
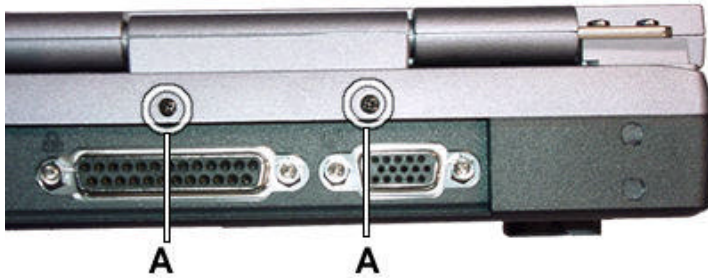
Fig. 8: Disconnecting the keyboard cable.

9. LCD Screen

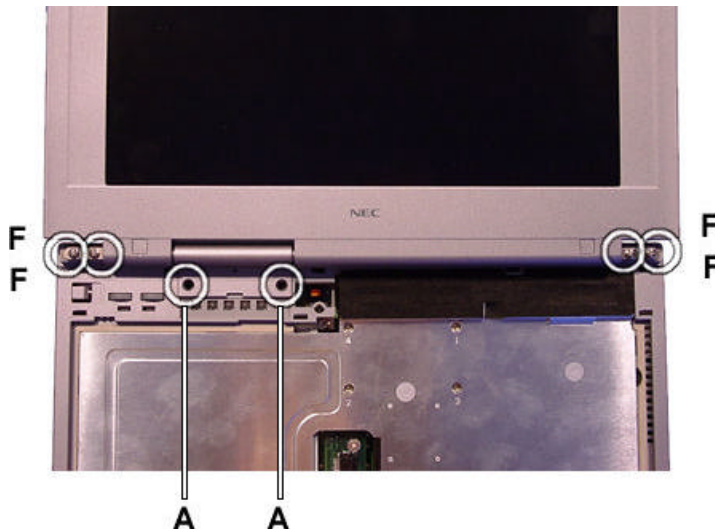Remove the LCD screen according to the following procedure:

a. Remove the two screws (2xA) on the back of the system.

Fig. 9: Removing the LCD screen (back)

b. Slide the LCD hinge covers outwards.
c. Remove the two screws (2xA) from the LCD cable box.
d. Remove the four screws on the LCD hinges (4xF).

Fig. 10:   Removing the LCD screen (front).

e. Take away the LCD screen.

10. *LCD Panel Disassembly*

Below you can find the complete set of steps required for disassembling the LCD panel and all of its subcomponents:

a. Remove the small square stickers (2xH) to clear two screws underneath.
b. Remove the two screws (2x J).
c. Remove the small rubber bumpers (2xG) at the top to clear two screws underneath.
d. Remove the two screws (2x I).
e. Take off the LCD front bezel.

Fig. 11: Taking off the front bezel.
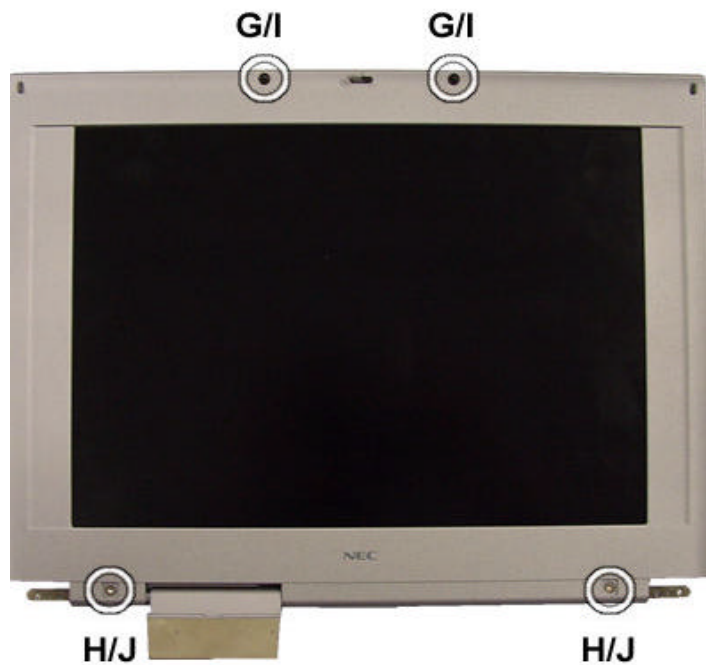
f. Remove the LCD lock and its spring.
g. Remove the single screw that holds the inverter-board (1xD).
h. Lift up the inverterboard and disconnect the two cables attached to it.
i. Remove the screw (1xD) and the placeholder (1xK) for the cable that runs to the inverterboard.
j. Remove the screw for the ground cable (1xI).
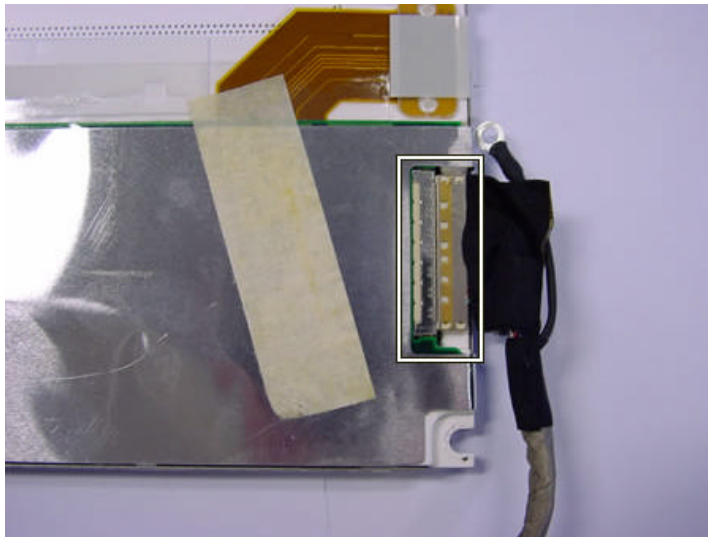k. Remove the four screws from the LCD panel (4xL).

l.   Lift up the LCD panel from the back cover.
m.   Remove the LCD cable connector from the back of the panel.

Fig. 13:   Removing the LCD cable connector.

n.   Remove the six screws holding the LCD hinges in place (6x J).
o.   Take away the hinges.

Fig. 14:   The hinges on the LCD back panel.

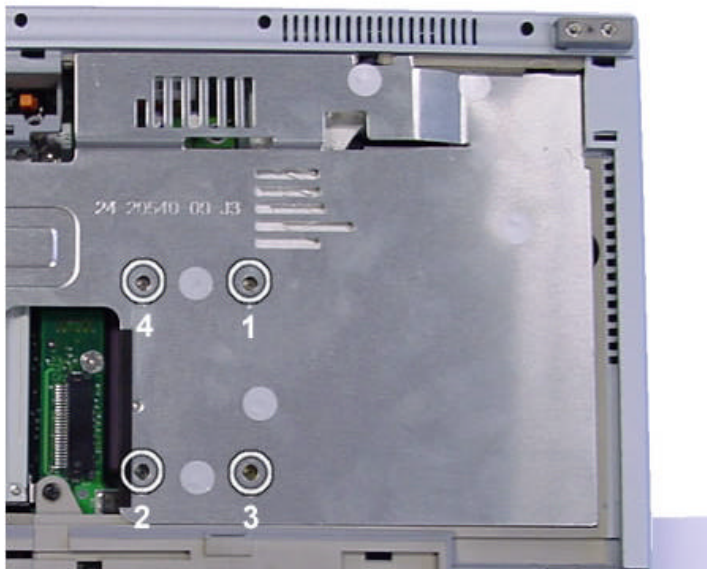**Disassembly and Reassembly - 9**

11.   Heatplate and CPU-Fan

Below you can find how to remove the heatplate:

a.   Loosen the four screws of the heatplate.

Note   The screws of the heatplate cannot be removed, as they are locked in their position. They can only be loosened.

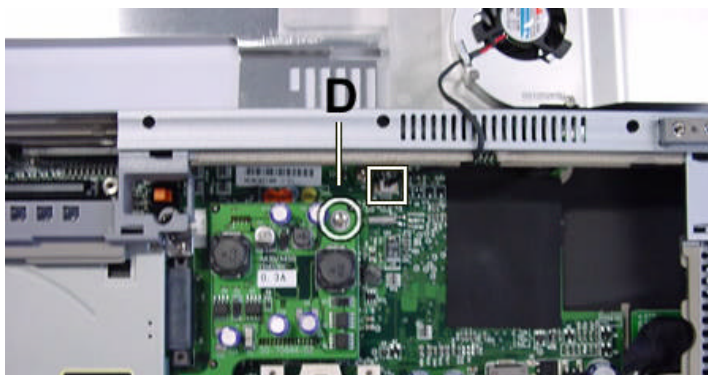b.   Take away the heatplate.

Fig. 15:   Taking away the heatplate.

Note   To securely re-seat the heatplate during (re-)assembly you should first start with screw #1 then #2 etc…

c.   Disconnect the fan power cable.

Fig. 16:   The power fan cable and the DC/DC board screw.
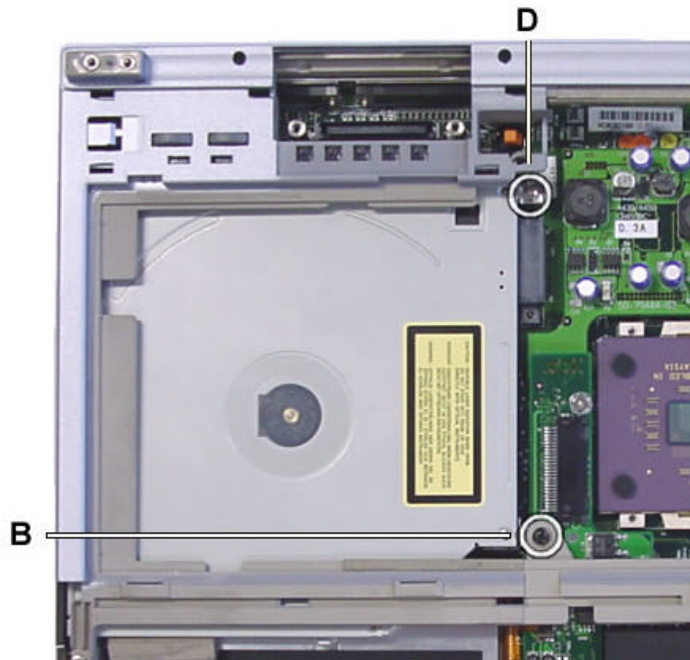

D

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12. CD-ROM Drive

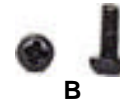Remove the CD-ROM drive as follows:

a. Remove the two CD-ROM drive screws (1xD, 1xB).
b. Slide out the CD-ROM drive.

Fig. 17:   Removing the CD-ROM drive.

c. Remove the four screws (4xQ) that hold the bracket.
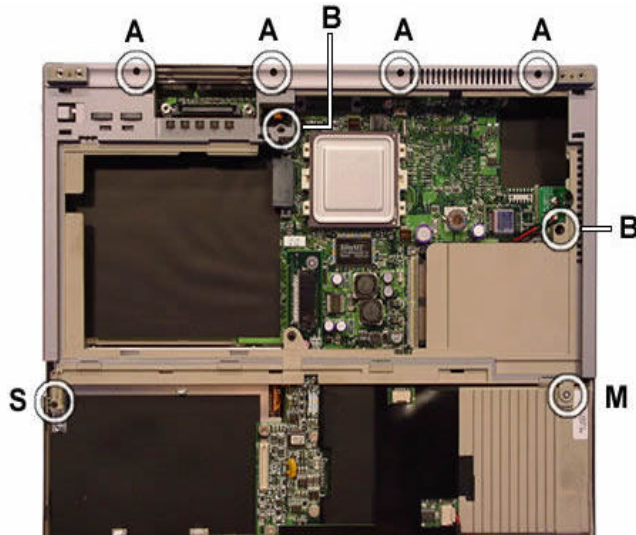d. The brackets are now free.

Fig. 18:   The CD-ROM bracket.

13. Top Cover

The procedure below describes how to remove the top cover:

a. Remove the eight screws of the top cover (4xA, 4 at top) (1xM below right) (2xB, centre right, near power switch) (1xR, at bottom left).
b. Take away the top cover

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14.   Sound board

Below you can find the procedure for removing the sound board:

a. Remove the single screw of the soundboard (1xM)
b. Lift the board and disconnect the speaker cable, the bridge
    battery cable and the microphone cable
c. Disconnect the soundboard from the mainboard.

Note   During (re-)assembly the cables should first be connected
before placing the board.
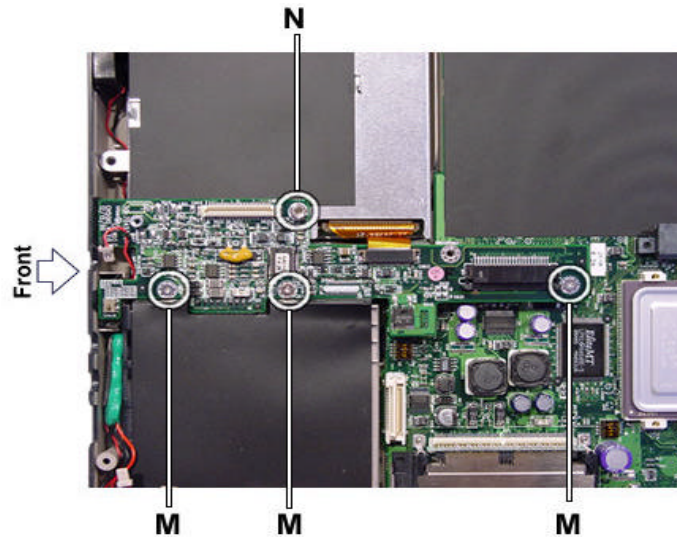
Fig. 20:   Sound board removal.
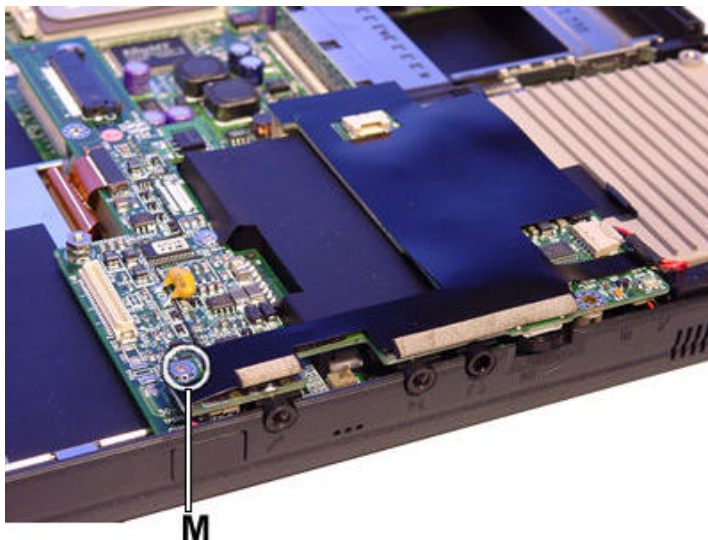
15.   I/O board

Follow the steps below to remove and disassemble the I/O board:

a.   Remove the four I/O board screws (3xM, 1xN).

Fig. 21:   Removing the I/O board.

b.   Disconnect the floppy disk drive flat cable from the I/O board.
c.   Lift and take away the I/O board.
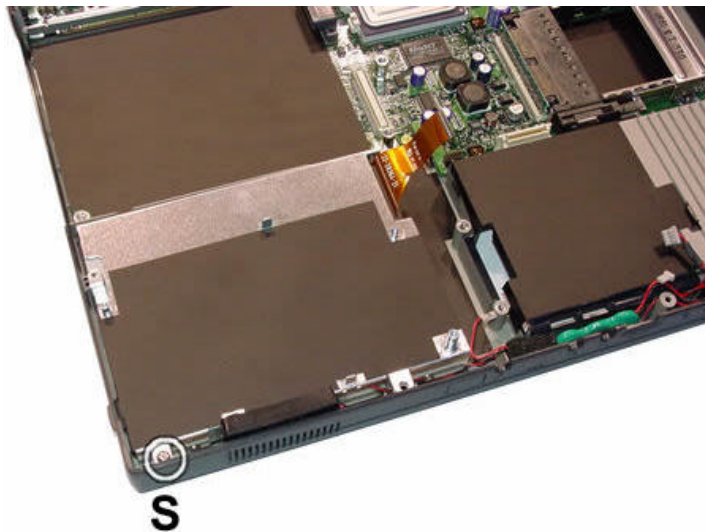d.   Disconnect the charger board from the I/O board.

16.   Floppy Disk Drive

Follow the steps below to in order to remove the floppy disk drive:
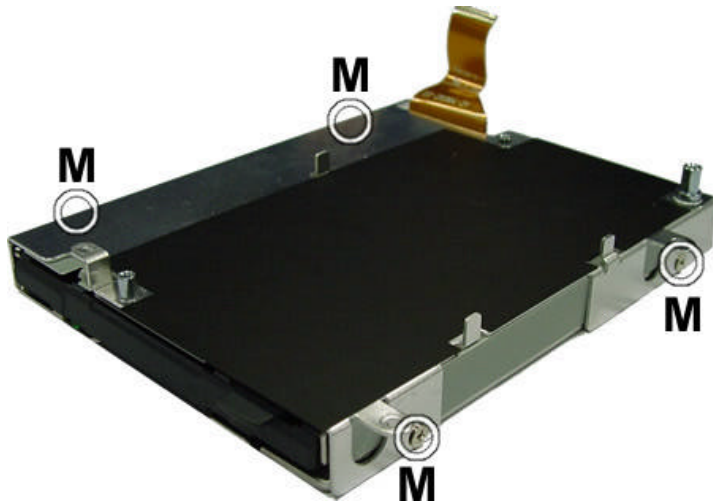
a.   Remove the floppy disk drive screw (1xS).

Fig. 22:   Removing the floppy disk drive.

b.   Remove the floppy disk drive, including the bracket.
c.   Remove the four screws (4xM) that hold the FDD bracket.
d.   Remove the FDD bracket from the floppy disk drive.
e.   Disconnect the flat cable from floppy disk drive.

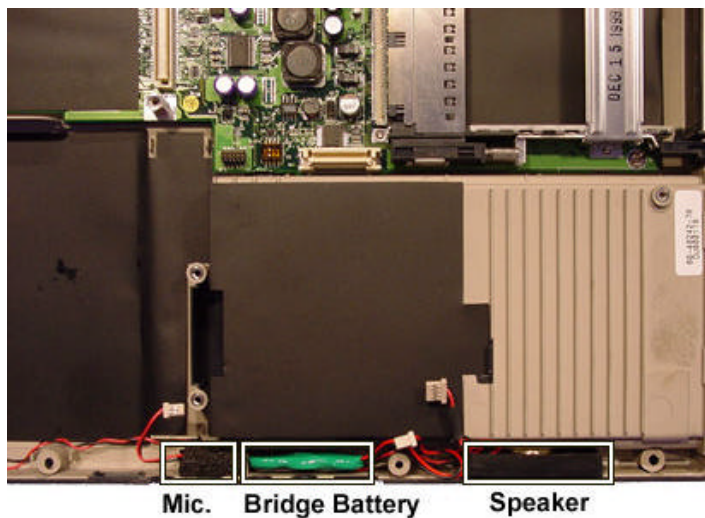*Disassembly and Reassembly - 13*

17.   Microphone, Speakers and Bridge Battery

Here you find the order in which to take out the microphone, speakers and bridge battery:

a.   Remove the microphone.
b.   Remove the bridge battery.
c.   Remove both speakers.

Note   Take care to properly work away the cables during assembly.

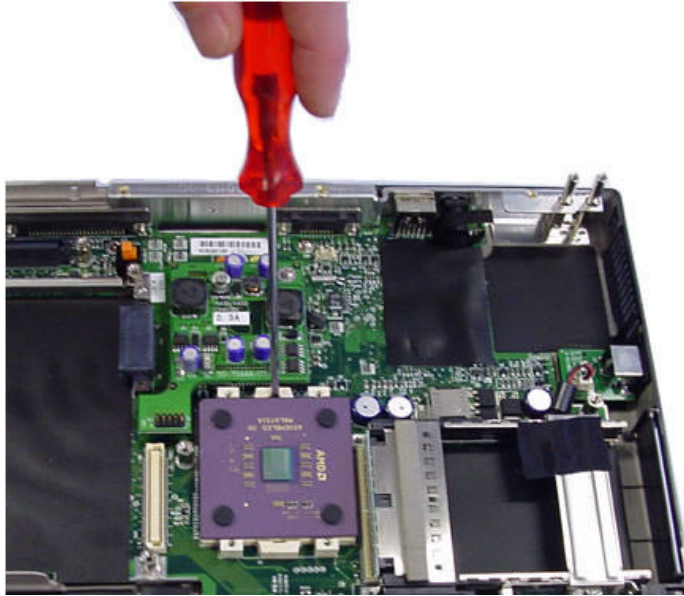*Fig. 24:   Removing the microphone, speakers and bridge battery.*

18. CPU

Below is explained how you should remove the CPU:

a.   Unlock the CPU with a flatbed screwdriver.

Fig. 25:   Unlocking the CPU.

Note   To lock the CPU, the screwdriver needs to be inserted in the other hole than the one used for unlocking the CPU.

b.   Remove the CPU from the socket

19. RJ-11 Connector

Next is described how to remove the RJ-11 connector:

a.   Turn the unit upside down.
b.   Remove the modem connector cable from the RJ-11 connector.
c.   Turn the base unit right side up.
d.   Slide out the modem cable cover.
e.   Disconnect the modem connector cable.
f.   Remove the screw (1xS) from the RJ-11 connector.
g.   Remove the connector and the modem jack board cover.

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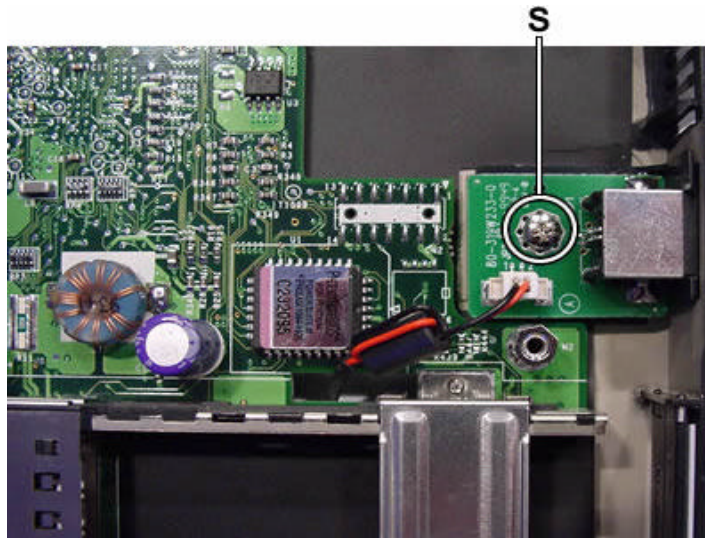
20.   Remove DC/DC Board

Below is explained how to remove the DC/DC board:

a.   Remove the screw (1xD) of the DC/DC board (see Fig. 16:).
b.   Lift the DC/DC board from the mainboard.
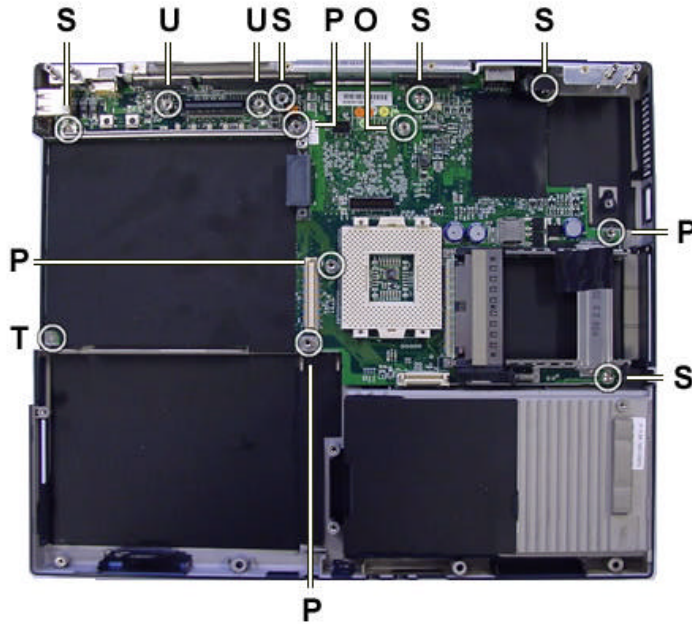
21.   Remove Mainboard from Base Assembly

The procedure below explains how to remove the mainboard from the bottom base assembly:

a.   Remove the two screws (1xS, 1xP) that hold the CD-ROM rail.
b.   Remove the single normal screw (1xT).
c.   Remove the two bus screws next to LCD connector (2xU).
d.   Remove the three bus screws from the mainboard (3xP).
e.   Remove the five screws from the mainboard (4xS).
f.   Remove one screw (1xO).

Note   Beware that slide-rails for the CD-ROM drive bay will come loose as soon as the screws holding it (1xS, 1xP) are removed.
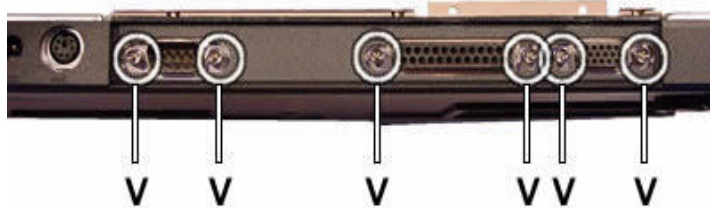
g.   Take away the rails

*Fig. 27:   Removing the screws holding the mainboard
from above.*

S   U   US P O S   S

P

T

P

S

U

P

O

T

h.   Remove the six bus screws from the rear of the unit. They are
located next to the I/O-ports (6xV).

*Fig. 28:   Removing the screws holding the mainboard
from the rear.*

V   V   V   V V V

V

i.   Remove the mainboard.

22.   I/O Bracket

Remove the I/O bracket from the bottom base as follows:

a.   Remove two screws (2xI).

Fig. 29:   Bottom of the I/O bracket.

I   I

I

b.   Remove the four stickers that hide the screws.
c.   Remove the for screws (4xI).

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     d.   Take away the I/O board.

Reassembly Instructions

Reassembly is the reverse of the disassembly process. Use care to ensure that all cables and screws are returned to their proper positions.

Small Parts Overview

Below you will find the overview of the small parts (screws, bumpers, stickers and small brackets) used during the disassembly and reassembly of the notebook.

A	**B**	**C**	**D**	**E**
G	**H**	**I**	**J**	**K**
L	**M**	**N**	**O**	**P**
Q	**S**	**T**	**U**	**V**