

Overview photo of the NTT Book B15- front view



No.	Name	Function
1	Webcam	Often for taking self-portraits as well as for video conferencing.
2	Webcam LED indicator	It lights on when the webcam is in use.
3	Microphone	Often for collection your voice for voice recognition.
4	LCD screen	The main display of your laptop
5	Power button	Power on/off your laptop.
6	Windows key	Press this key to open the start menu
7	Touchpad	Allows you to control your system using tigure gestures.



SERVICE MANUAL for the self-replacement of components by the User for the NTT Book B15 notebook computer certified in accordance with TCO Certified

v.1

The manufacturer allows the User to replace a number of components of the computer by themselves:

- a) RAM operating memory,
- b) SSD mass storage,
- c) Battery,
- d) Display panel
- e) Keyboard
- f) Motherboard.

The replacement of c), d), e) and f) components should take place at a service center to be carried out by a qualified Employee only.

If the User decides to replace the computer components by themselves, they can carry out such an operation under the remote supervision of the manufacturer's Central Service. For this purpose, the User shall contact the NTT System S.A. Central Service. After consulting with the User, the Central Service will send the designated component as well as instructions on how to replace the component in question. Any damage resulting from improperly performed replacement of the component is not covered by the manufacturer's warranty.

Tools needed for performing repairs: PH1 and PZ1 screwdrivers which are widely available in good hardware stores.

Caution

Before attempting to perform any maintenance, be sure to disconnect the unit from the power supply.

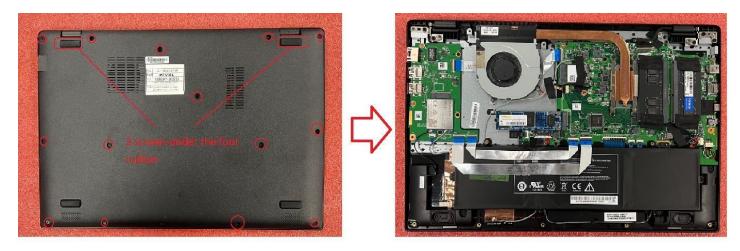
Do not boot the computer with its case covers removed. When booting the computer with the case covers removed, your hands and fingers may be exposed to moving parts such as cooling fan blades and you may suffer an electric shock.

Due to the delicate nature of the computer's internal components, it is required that all operations be carried out on a workstation that meets the ESD protection requirements.



SYSTEM DISASSEMBLY

1. Remove 2 foot rubber then remove 16 screws that secures the bottom case to the top case. Then starting with the rear edge, carefully separate the edges of the bottom enclosure from the top case.

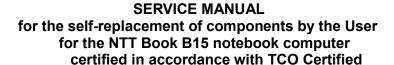


2. Disconnect the battery cable from the connector on the motherboard.



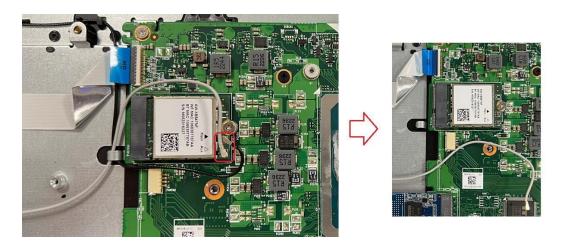
3. Disconnect the fan cable from the connector on the motherboard. Remove the 7 screws that secures the heatsink and fan module to the motherboard and top case. Then lift the thermal module off the standoffs on the motherboard.





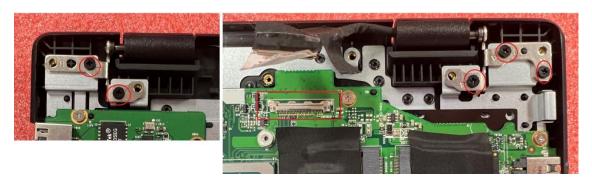


4. Disconnect wifi antennas.

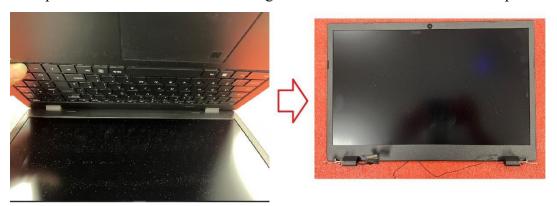


5. Disconnect the LVDS and remove the hinge screws that secures the both hinges to the top case.

Screws of right side: 2pcs, left side: 3 pcs



6. Open LCD module around 30-45 angle to move out LCD module from top case.



7. Disconnect the I/O, USB and LTE FFC then remove them from motherboard and I/O board.







for the self-replacement of components by the User for the NTT Book B15 notebook computer certified in accordance with TCO Certified

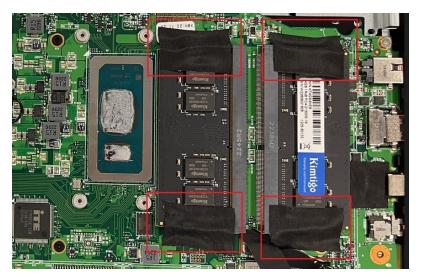
8. Remove the 4 screws that secures the battery to the top case. With both hands lift the battery off the alignment pins and remove.



9. Remove the 1 screw that secures the SSD to the top case then grasp the SSD by the edges and pull gently to remove it.

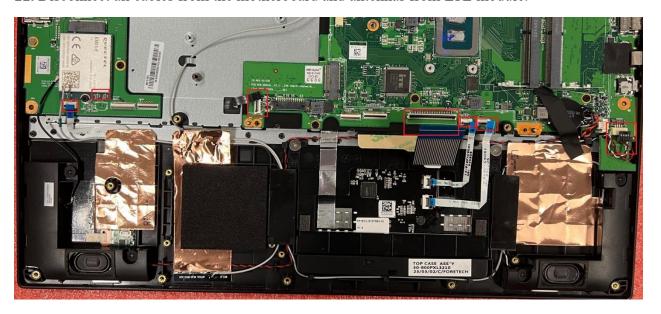


10. Peel off the acetate tape that secures the memory module then push both arms outward simultaneously to release the memory module to the spring tension position. Grasp the memory module by the edges and pull gently to remove it from the slot on the motherboard.





11. Disconnect all cables from the motherboard and antennas from LTE module.



12. Remove 1 screw that secures the wifi module to motherboard then remove it.



13. Remove 7 screws that secures the motherboard to top case then lift the motherboard off the alignment pins and remove it from top case.



14. Remove 1 screw that secures the LTE module to the I/O board then remove it from I/O board.





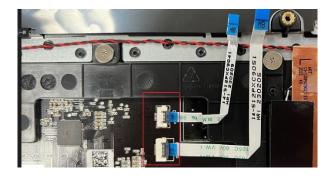
15. Remove 4 screw2 that secures the I/O board to top case then remove it.



16. Use a thin plastic sheet or tool to push up the latches that use to secure the keyboard on the top case, and then remove the keyboard.



17. Lift the locking bar up on the clickpad FFC connector and disconnect the FFC from clickpad module.



18. Remove wifi antenna from top case.









for the self-replacement of components by the User for the NTT Book B15 notebook computer certified in accordance with TCO Certified

19. Remove the speaker form top case.

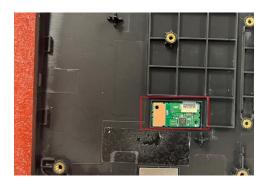


20. Remove LTE antennas from top case.

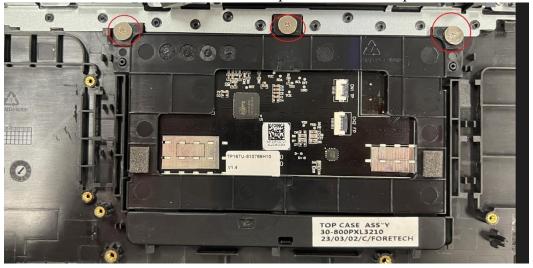




21. Disconnect the SAR board FFC and remove the SAR board from top case.



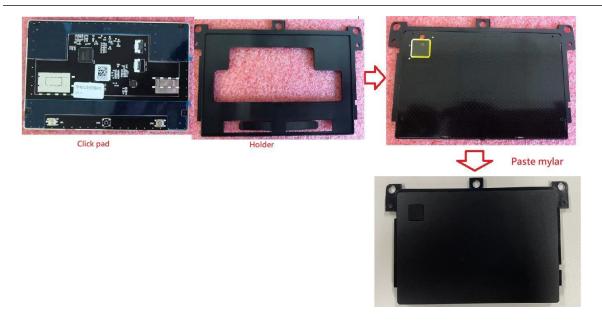
22. Remove 3 screws that secures the clickpad holder to the top case then remove it from top case.





SERVICE MANUAL for the self-replacement of components by the User for the NTT Book B15 notebook computer certified in accordance with TCO Certified

v.1

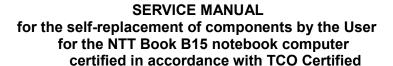


23. LCD module disassemble

Carefully separate the bottom edge of the LCD bezel from the LCD module (the edges of the LCD bezel are hold in place with double sides tape)









24. Remove the both hinges screws that secures the hinges to LCD back cover then remove it.





25. Gasp the pull-tab of one of the strips of tape and carefully wrap it around the end of a tool such as a pair of tweezers or a screwdriver.

Slowly twist the tool to release the tape. Continue twisting until the entire strip has been removed.

Note: the removed stretch-release tape is not reusable.

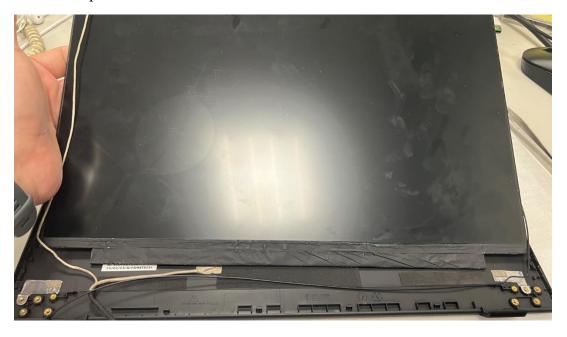




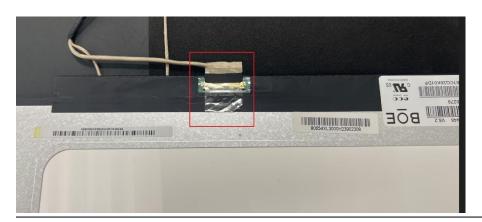
26. Another one.



27. Lift the panel off the LCD back cover and set it in front of the LCD back cover



28. Peel back the tape and disconnect the LVDS from panel.

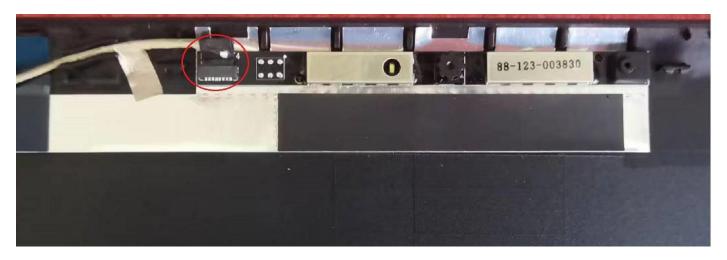




SERVICE MANUAL for the self-replacement of components by the User for the NTT Book B15 notebook computer certified in accordance with TCO Certified

v.1

29. Disconnect the LVDS from CCD module and remove the CCD module from LCD back cover.



30. Remove the antenna from LCD back cover.

