

Technical Procedure

# LifeBook P1610

## System Board and Heat Sink Replacement

ESD Precautions are required when working on this LifeBook computer.

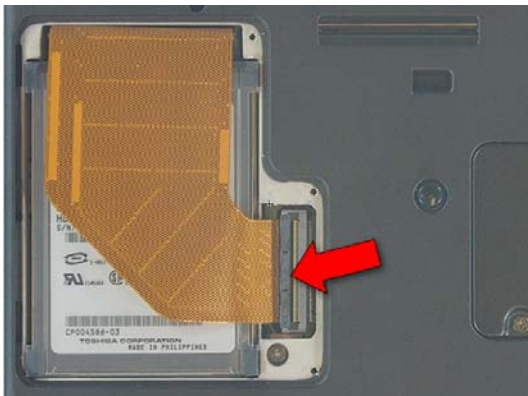
Make sure the LifeBook is turned off before beginning this procedure.



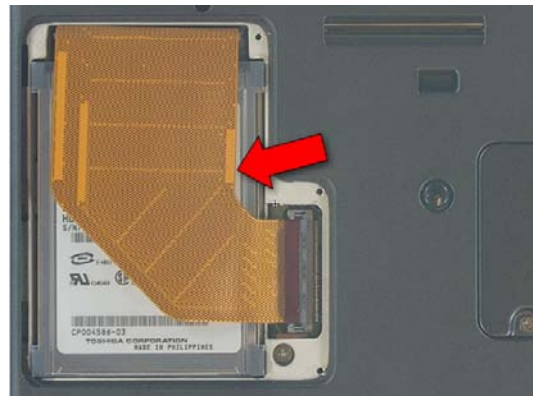
1. Turn the LifeBook over and remove the battery



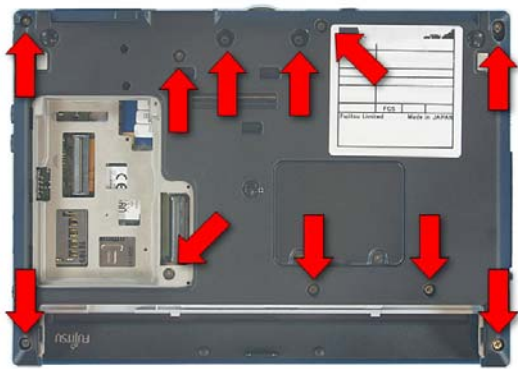
2. Extract these 3 screws from the Hard Disk Drive cover and lift it off.



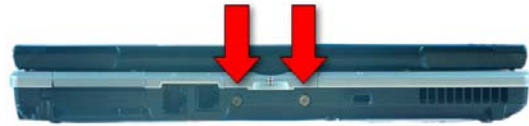
3. Release the cable by flipping the latch up.



4. Lift the Drive out.



5. Extract 11 screws from the lower case.



6. Extract 2 screws from the rear of the LifeBook.



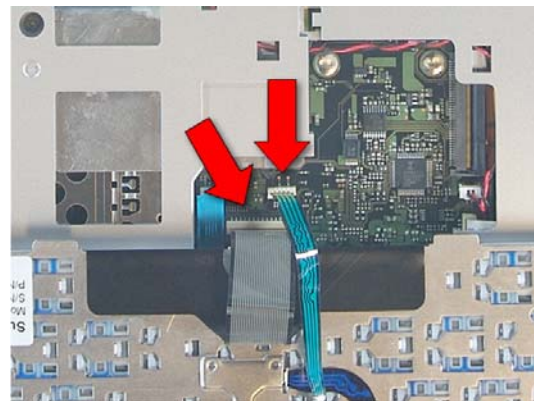
7. Open the LifeBook and lay it flat.



8. Use a plastic pry tool to remove the keyboard upper trim.



9. Lift the top edge of the keyboard up and turn it over



10. Disconnect the keyboard and ClickPoint cables from the system board by pulling them gently.



11. Tilt the Display up and rotate it ¼ turn.



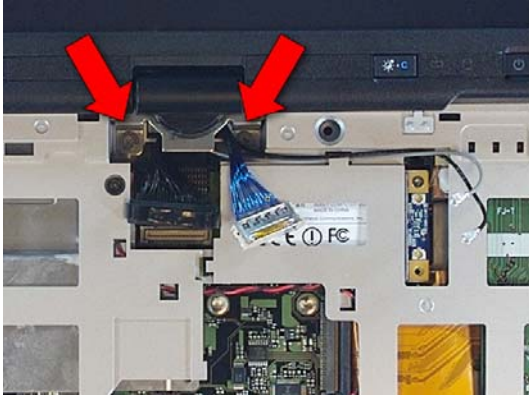
12. Slide out the lower hinge cover.



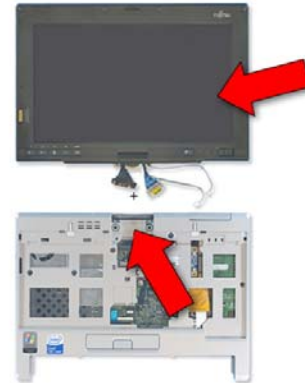
13. Turn the Display back and lay it down.



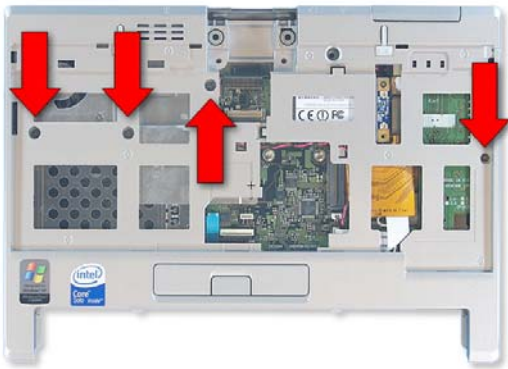
14. Disconnect 2 Display cables from the system board and the 2 antenna cables from the WLAN Card.



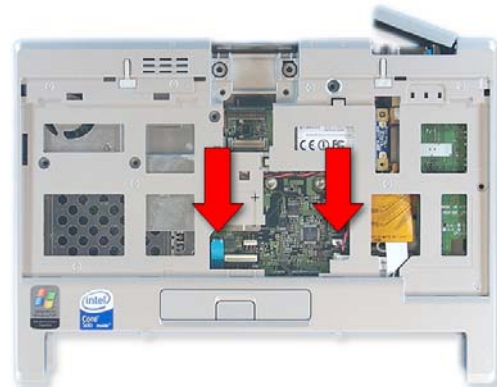
15. Extract 2 screws from the Display hinge.



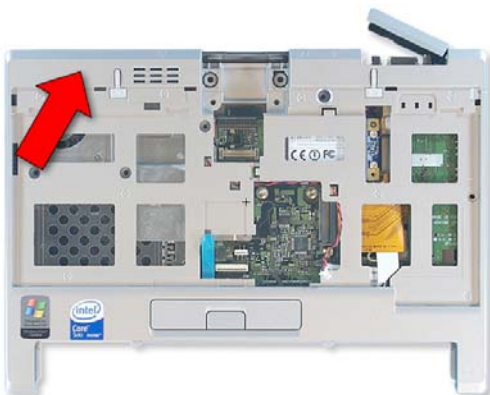
16. Lift the Display off the lower assembly.



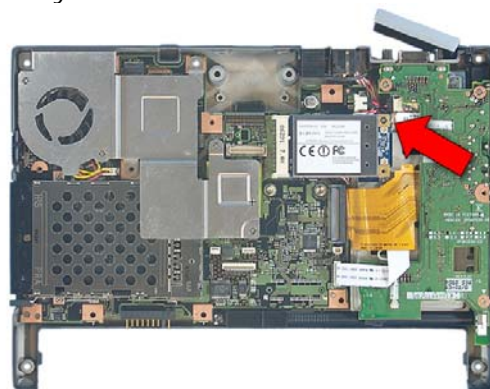
17. Extract 4 screws from the upper case and open the external VGA connector cover.



18. Disconnect the ClickPoint button cable and the speaker cable from the system board.

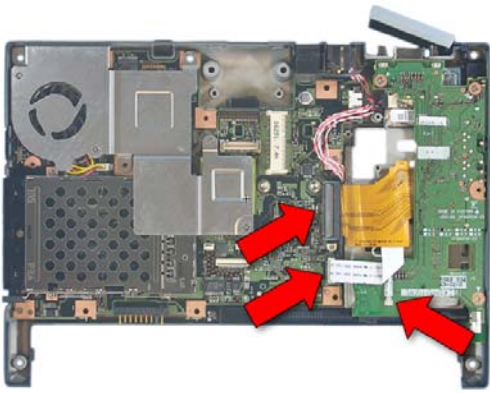


19. Lift off the upper case.

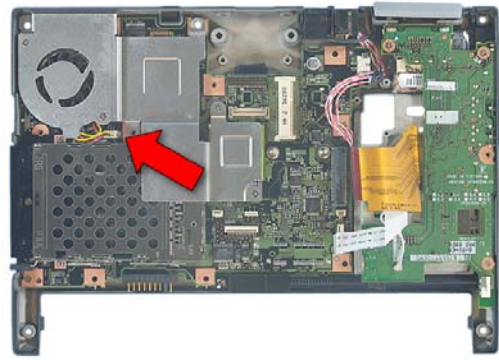


20. Extract 1 screw from the WLAN card and lift it out.

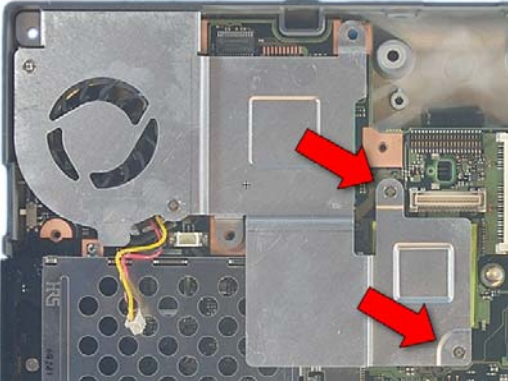




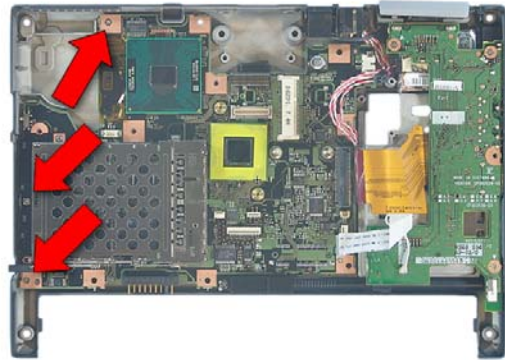
21. Disconnect the IO Board cable, the Bluetooth cable, and the DC power cable from the system board.



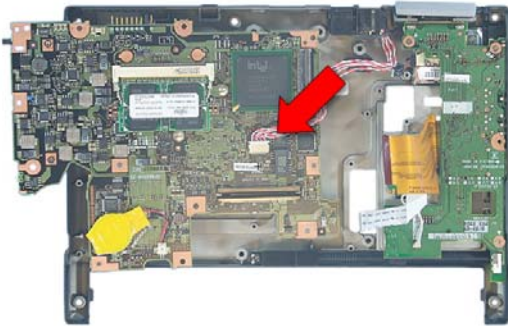
22. Disconnect the CPU fan cable from the system board.



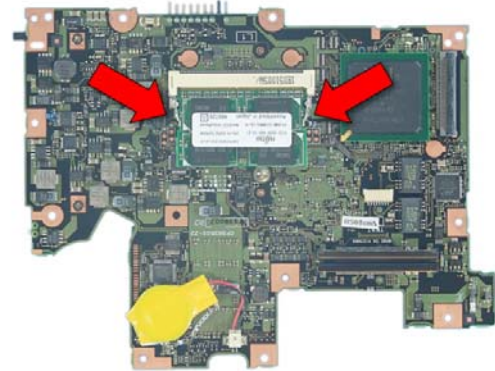
23. Extract 2 screws from the heat sink and lift it out.



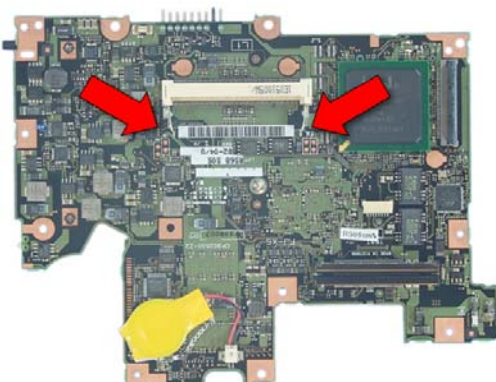
24. Extract 3 screws from the system board, lift it up and turn it over.



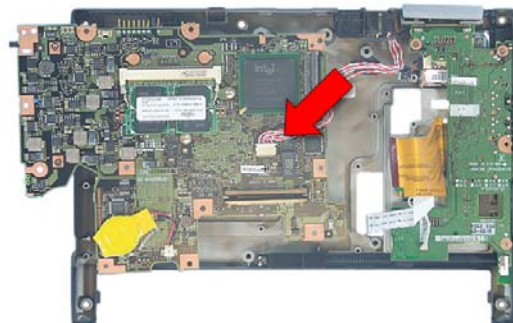
25. Disconnect the LAN cable from the system board.



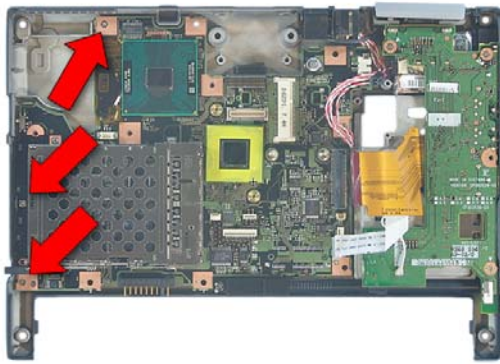
26. Press out on the locking clips to release the RAM and lift it off the system board.



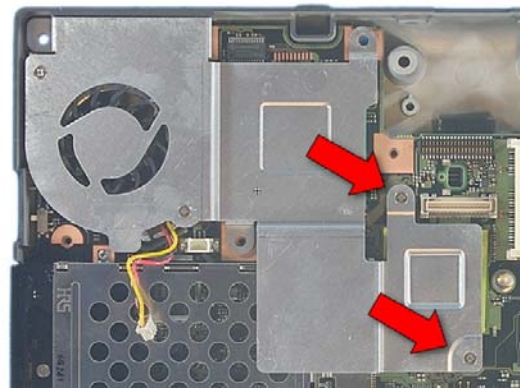
27. Press the RAM into its slot on the new system board. 2790



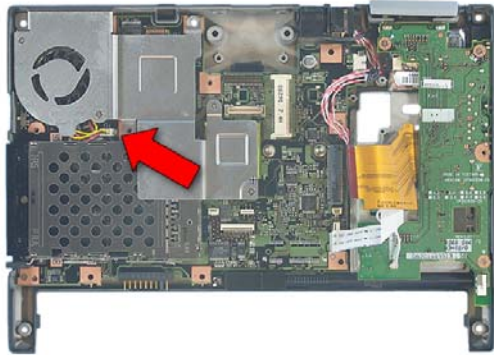
28. Set the system board onto the lower case and connect the LAN cable.



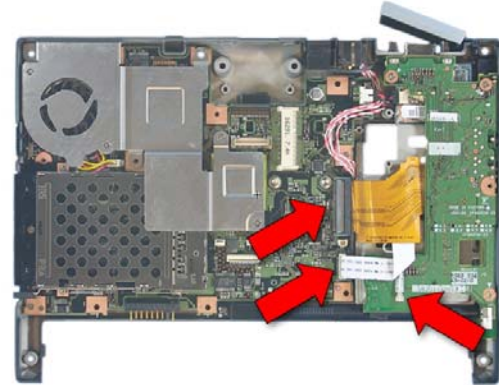
29. Turn the system board over, insert it into the lower case and secure it with 3 screws.



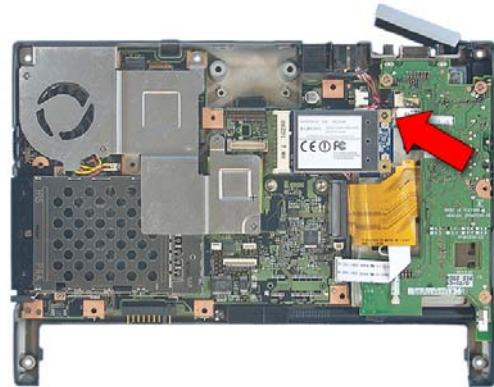
30. Place the heat sink onto the system board and secure it with 2 screws.



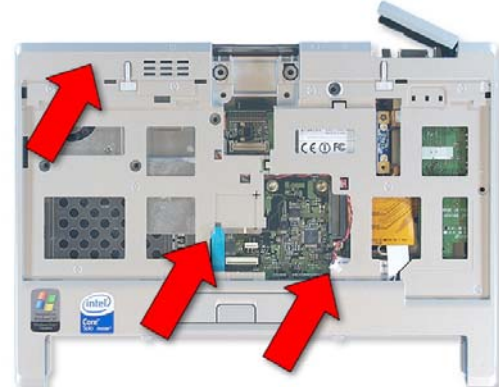
31. Connect the fan's cable to the system board.



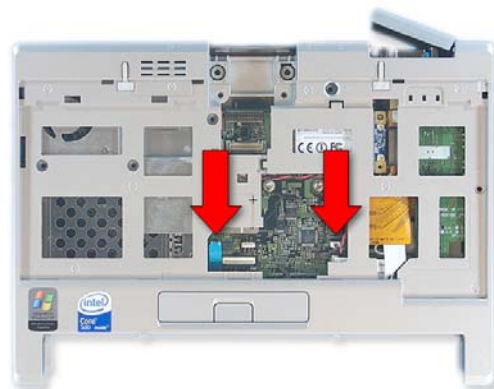
32. Connect the IO Board cable, the Bluetooth cable, and the DC power cable to the system board.



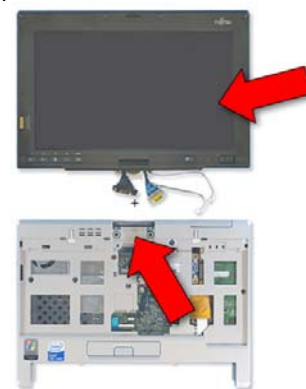
33. Insert the WLAN card and secure it with 1 screw.



34. Place the upper case and connect the ClickPoint button cable and the speaker cable.

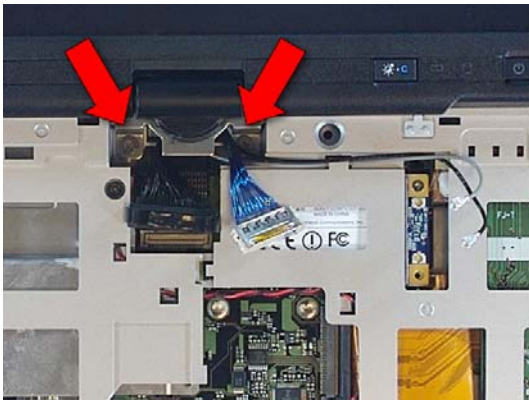


35. Close the external VGA connector cover and secure the upper case with 4 screws.

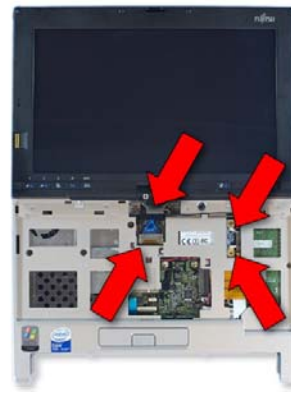


36. Extract 3 screws from the PCB.





37. Secure the display with 2 screws in the hinge.



38. Attach the 2 display cables to the system board and the 2 antenna Cables to the WLAN card.



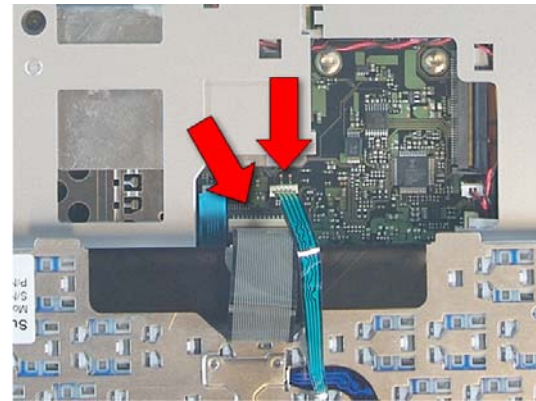
39. Tilt the display up and rotate it ¼ turn.



40. Slide the lower hinge cover into place.



41. Turn the Display back and lay it down.



42. Plug in the cables for the keyboard and ClickPoint.



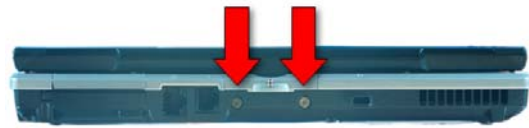
43. Turn the keyboard over and slide it into place



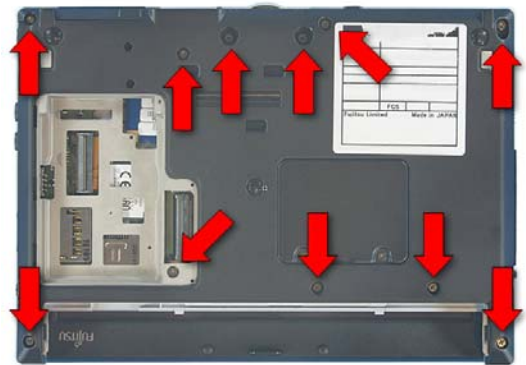
44. Press the keyboard upper trim into place.



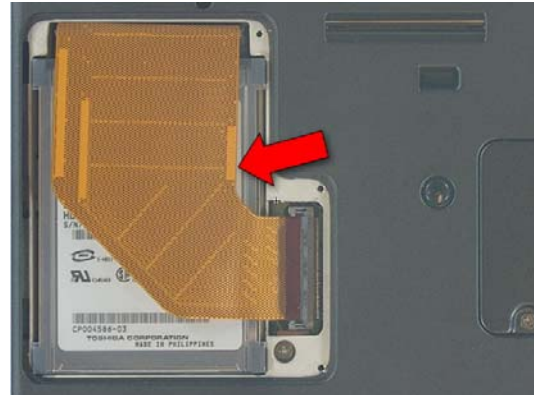
45. Close the LifeBook and turn it over.



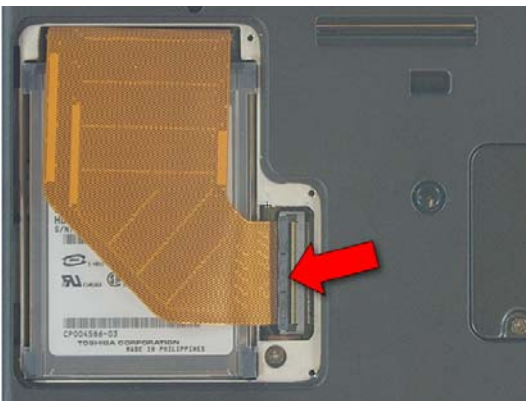
46. Insert 2 screws into the rear of the LifeBook.



47. Insert 11 screws into the lower case.



48. Insert the Hard Drive.



49. Press the latch down to lock the cable into place.



50. Replace the Drive cover and secure it with 3 screws.



51. Replace the battery.