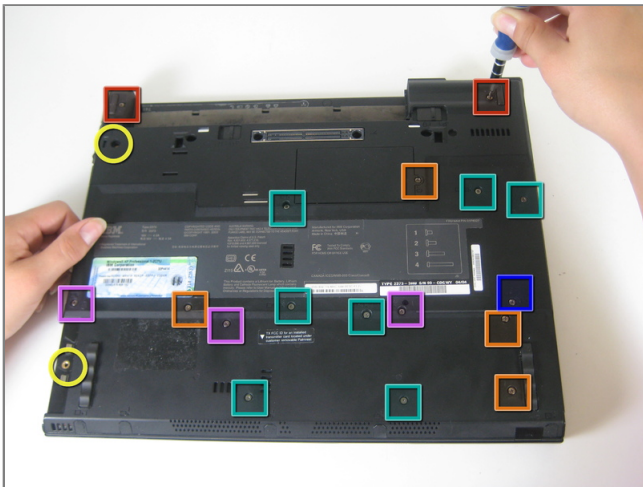




Repairing IBM ThinkPad T41 Expansion Slot

Tools used in this guide

- [Small Phillips Screw Driver](#)
- [Spudger](#)



Step 1 - Keyboard

- Close the screen and turn the closed laptop over.
- Remove all 17 screws on the bottom of the computer.
- The multiple colors (turquoise, red, blue, orange, yellow, and purple) are for organizational purposes, indicating different screws.
- Your computer may have more if it still has its optical device, HDD, or battery. The yellow markers are the location of at least two extra screws that we don't have.



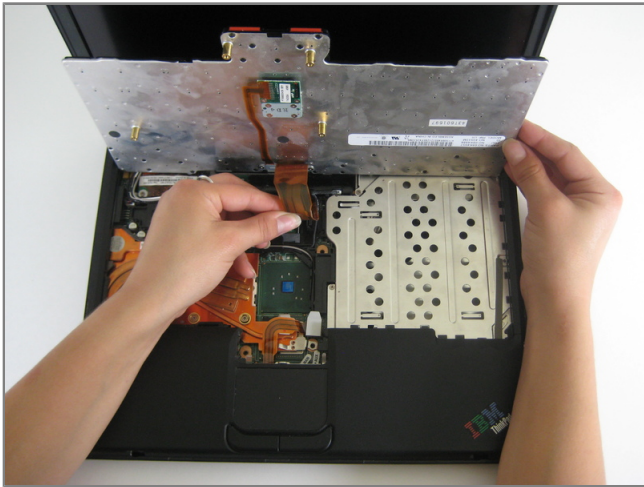
Step 2

- Remove the extra RAM cover, by lifting where the screw was and pulling out.



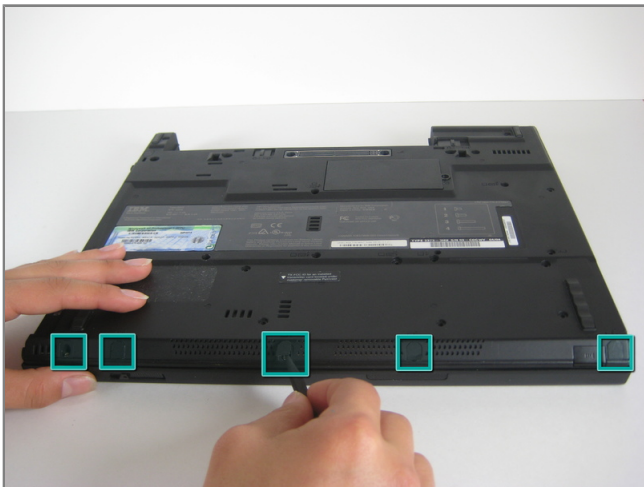
Step 3

- Turn the laptop right side up and open the screen.
- Lift the keyboard, using a spudger at the seam between the keyboard and trackpad.
- Careful of the ribbon cable underneath, which may tear if the keyboard is lifted too vigorously.



Step 4

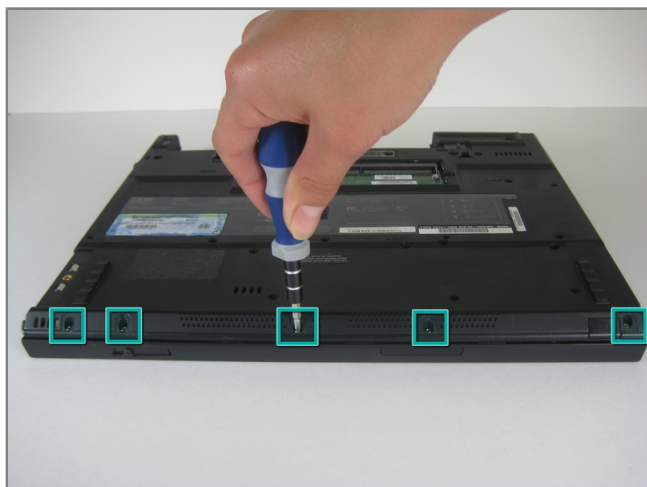
- Unplug the keyboard's ribbon cable, by lifting up the edges of the plug.



Step 5 - Trackpad

- Close the laptop and turn it over.
- Remove the five plastic stickers covering the screws on the front edge of the case.
- In order to reuse the stickers, remove them carefully.





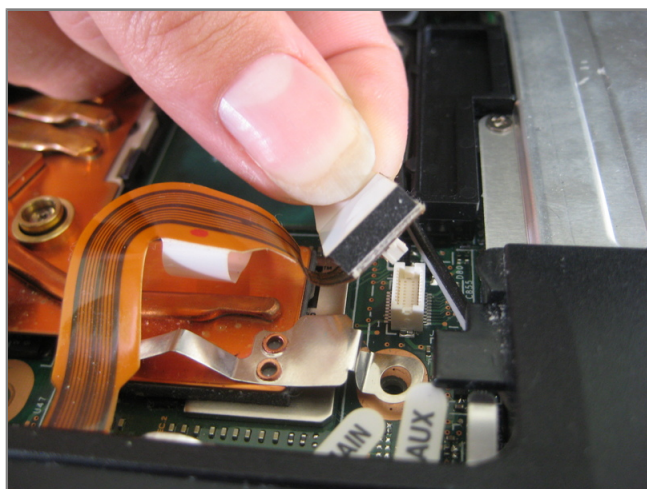
Step 6

- Unscrew the five screws that were hidden by the stickers.



Step 7

- Turn the computer right side up and open the screen.
- Lift the trackpad assembly by placing hands on both edges and then pull towards you till it is free of the case.
- Careful of the ribbon cable underneath, which may tear if trackpad is pulled too vigorously.



Step 8

- Unplug the trackpad's ribbon cable by pulling on the white plastic tab.



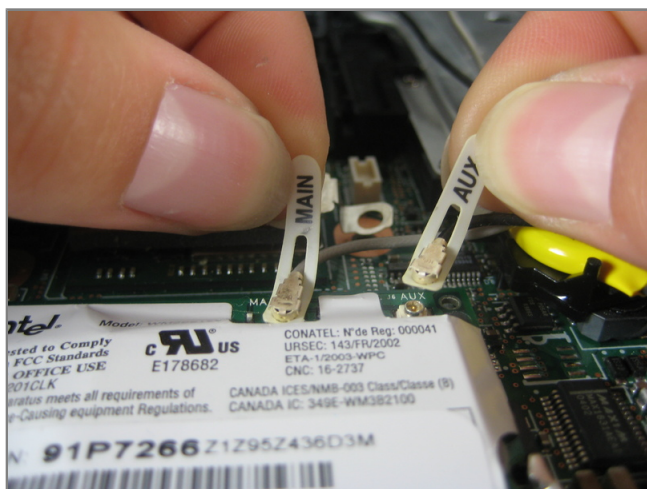
Step 9 - RAM

- Push apart the retaining clips on the RAM.
- Note: The RAM should pop up a little bit.



Step 10

- Lift out the RAM chip.



Step 11 - Wireless Network Card

- Pull off the one black and one white coaxial cables by lifting the tabs labeled main and aux (for auxiliary).



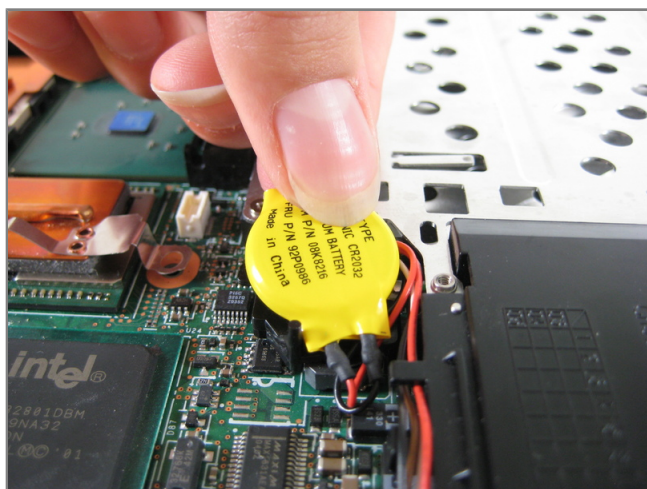
Step 12

- Push apart the retain clips.
- Note: The card should pop up a little bit.



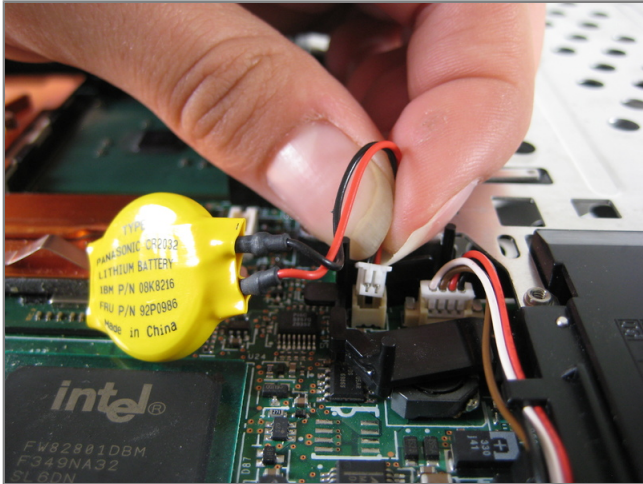
Step 13

- Pull the wireless network card out.



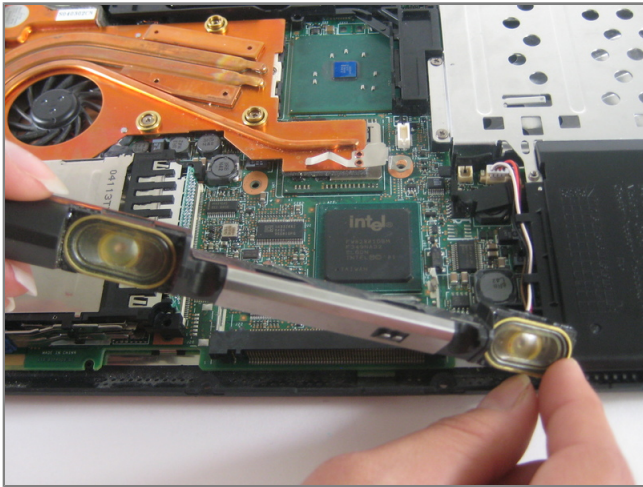
Step 14 - BIOS Battery

- Lift the yellow plastic-covered battery up.



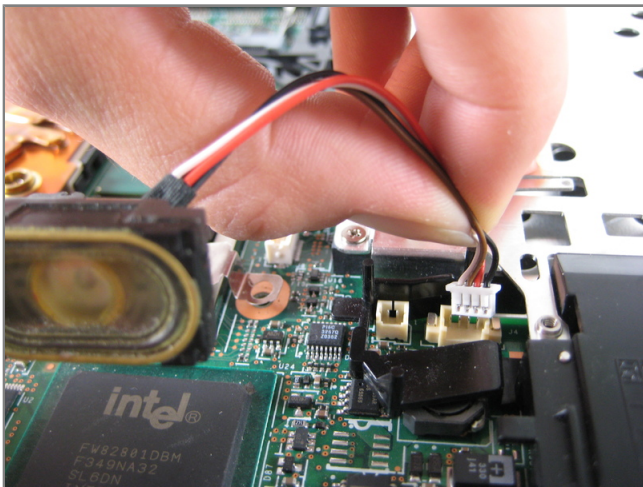
Step 15

- Unplug the battery connector.



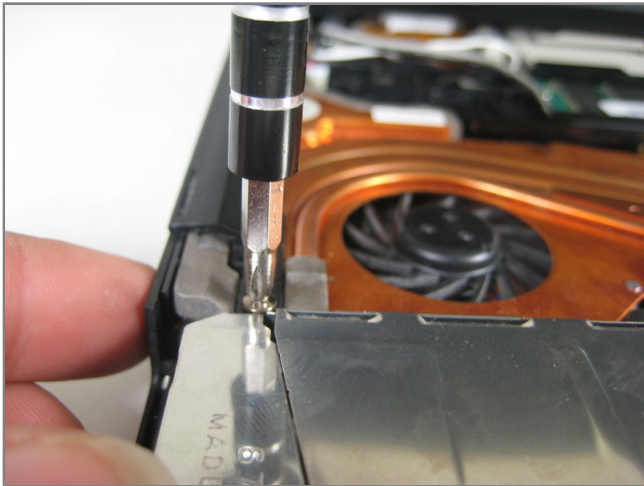
Step 16 - Speakers

- Lift the speakers out by starting with the left end and then unsnake the wires.



Step 17

- Unplug the wires from the motherboard.



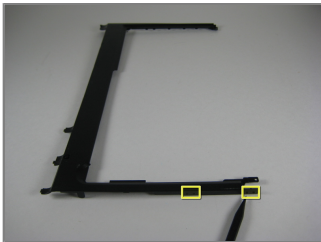
Step 18 - Expansion Slot

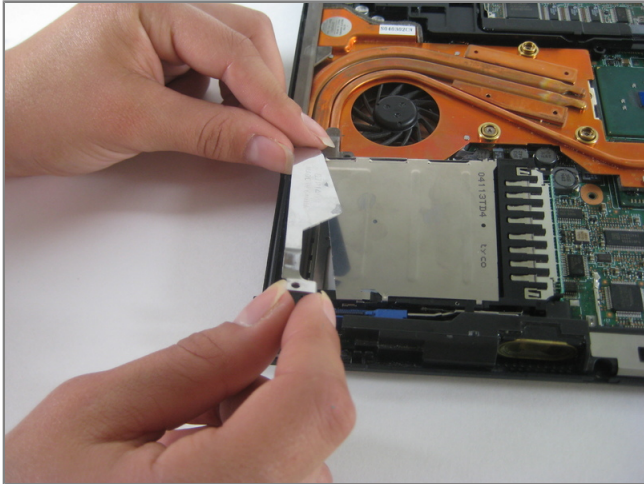
- Remove the screw on the left hand side of the case, above the expansion slot.



Step 19

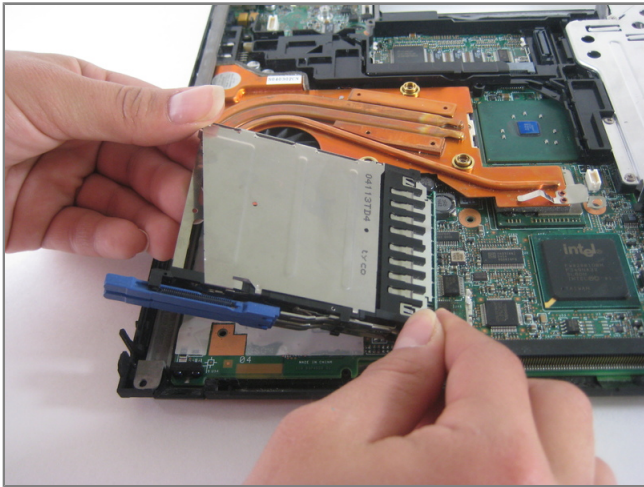
- Lift the black plastic border by lifting on either side.
- Once the sides are up, pull the border towards you and away from the screen.
- When lifting up, there are two pairs of plastic clips hooking into the fan grill. If you pull hard enough the border will come away, but it's better to push the clips with the spudger.





Step 20

- Pull the sheet metal cover away from slot.



Step 21

- Lift out the expansion slot by starting at the entrance hole and pulling upward.
- Note: Try wiggling the slot from side to side until it comes out all the way.

