



# MacBook Pro 17" Models A1151 A1212 A1229 and A1261 Left Thermal Sensor Replacement

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## INTRODUCTION

The left thermal sensor for Models A1151 and A1212 is the **middle thermal sensor** for the A1229. **Use this guide to replace the middle thermal sensor on a MacBook Pro 17" Model A1229.**

This detects the internal temperature of your machine for heat management.



### TOOLS:

- [Arctic Silver ArctiClean](#) (1)
- [Arctic Silver Thermal Paste](#) (1)
- [Phillips #00 Screwdriver](#) (1)
- [Spudger](#) (1)
- [T6 Torx Screwdriver](#) (1)



### PARTS:

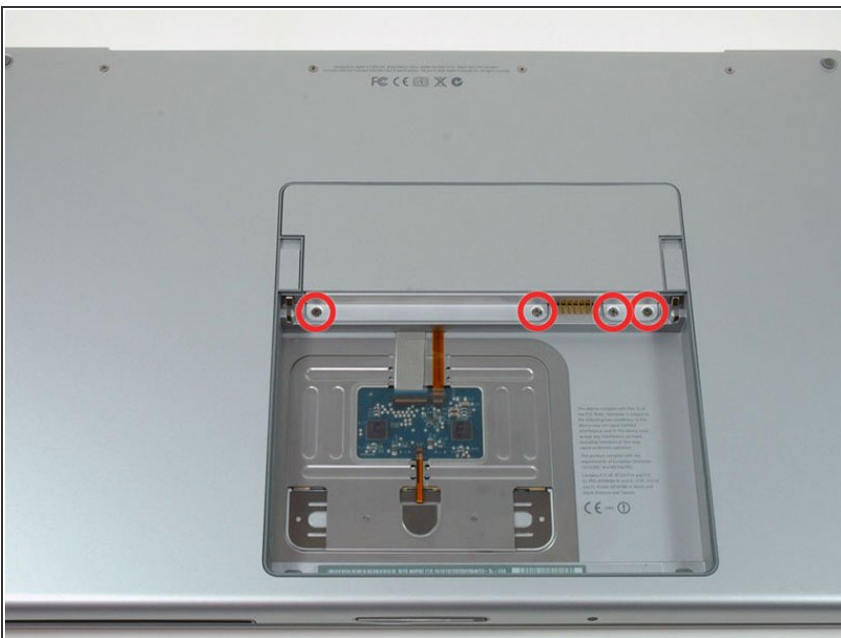
- [MacBook Pro 17" \(Model A1151\) Left Thermal Sensor](#) (1)

## Step 1 — Battery



- Use your fingers to push both battery release tabs away from the battery and lift the battery out of the computer.

## Step 2 — RAM Shield



- Remove the four identical Phillips 3.4 mm screws from the memory door. These screws have 4 mm

diameter heads rather than the 3 mm heads on the body screws.

### Step 3



- Lift the memory door up enough to get a grip on it, and slide it toward you, pulling it away from the casing.

### Step 4 — Upper Case



- Remove the three Phillips screws in the battery compartment near the latch. Apple was nice enough to tilt these screws at a slight angle to make them easier to remove. On the A1261 these screws have 4 mm diameter heads rather than the 3 mm heads on the body screws.



## Step 5



- Remove the following six screws:
  - Two 14.5 mm T6 Torx screws on either side of the RAM slot.
  - Four 3.4 mm Phillips screws along the hinge.

## Step 6



- Remove the four 3.4 mm Phillips screws on the port side of the computer.

## Step 7



- Rotate the computer 90 degrees and remove the two Phillips screws from the rear of the computer.

## Step 8



- Rotate the computer 90 degrees again and remove the four Phillips screws from the side of the computer.

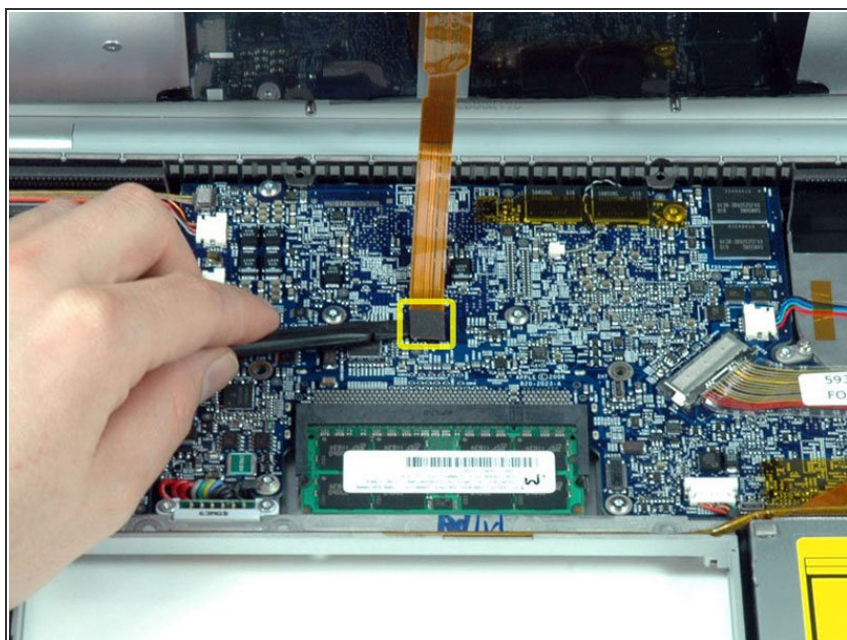
## Step 9



**⚠ Do not yank the upper case off quickly. The case is attached to the logic board via a ribbon cable.**

- Lift up the back of the case and work your fingers along the sides, freeing the case as you go. Once you have freed the sides, you may need to rock the case up and down to free the front of the upper case.

## Step 10



- Disconnect the trackpad and keyboard ribbon cable from the logic board.
- Remove the upper case.

## Step 11 — Optical Drive



- Disconnect the orange SuperDrive ribbon cable from the logic board, removing tape as necessary.

## Step 12



- Remove the following three screws:
  - Two black 4 mm T6 Torx screws on either side of the SuperDrive.
  - One 8.7 mm silver (black in some models) T6 Torx screw at the back of the drive near the speaker.

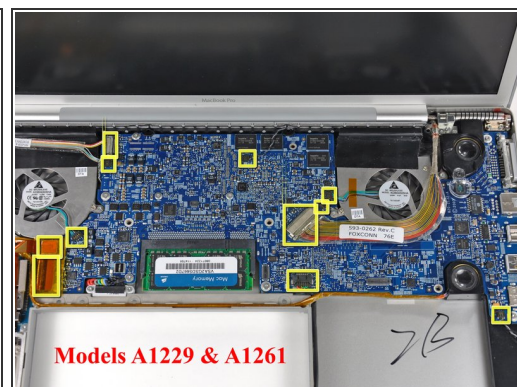
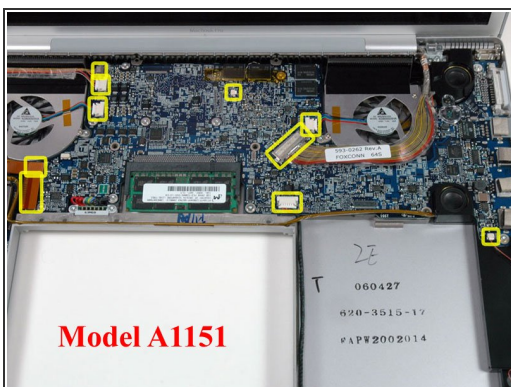


## Step 13



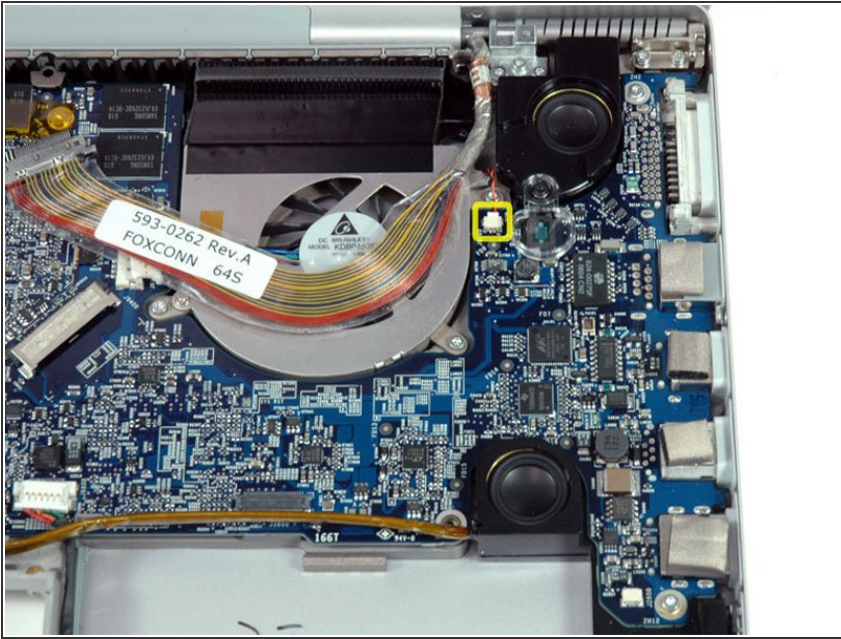
- Use one hand to pull back the speaker cable and use your other hand to lift the optical drive up and out of the computer.
- ⓘ If you have a CD or any other object jammed in your optical drive, we have an [optical drive repair guide](#).

## Step 14 — Logic Board



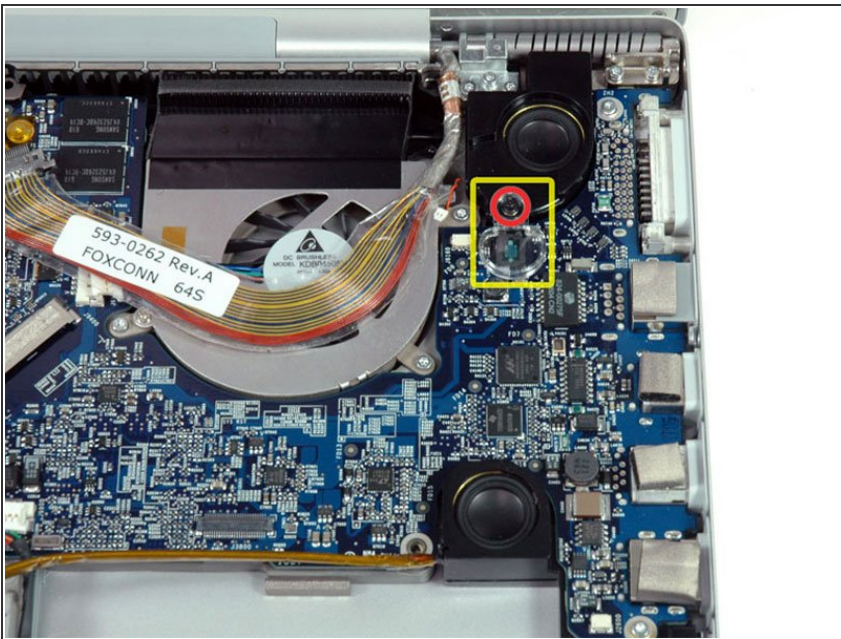
- Disconnect the ten indicated connectors from the logic board.
- ⓘ The connectors have different positions for the four MacBook Pro revisions covered by this guide, and their locations are highlighted in the three pictures on this step.

## Step 15



- Rotate the large display data cable to the left and disconnect the small right thermal sensor cable beneath.
- ❗ If you have the A1261 model, the right thermal sensor cable is located in between the right fan connector and display data cable.

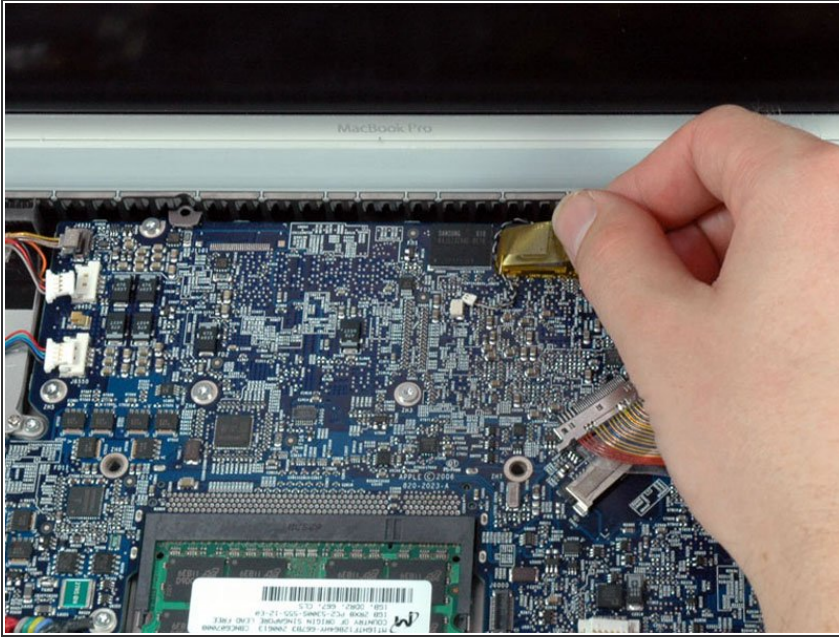
## Step 16



- Remove the single black 4 mm T6 Torx screw securing the clear plastic shield over the right ambient light sensor.
- Lift the clear plastic shield off the right ambient light sensor.

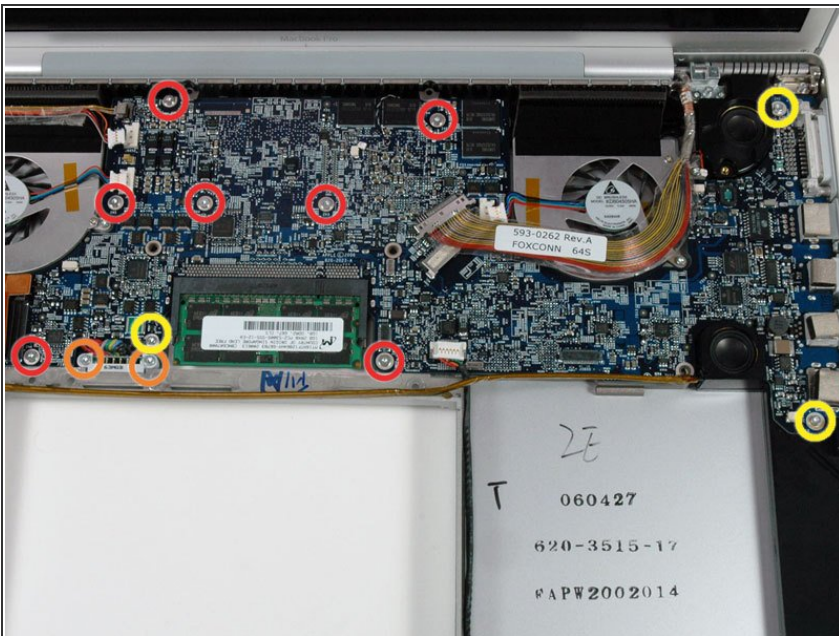


## Step 17



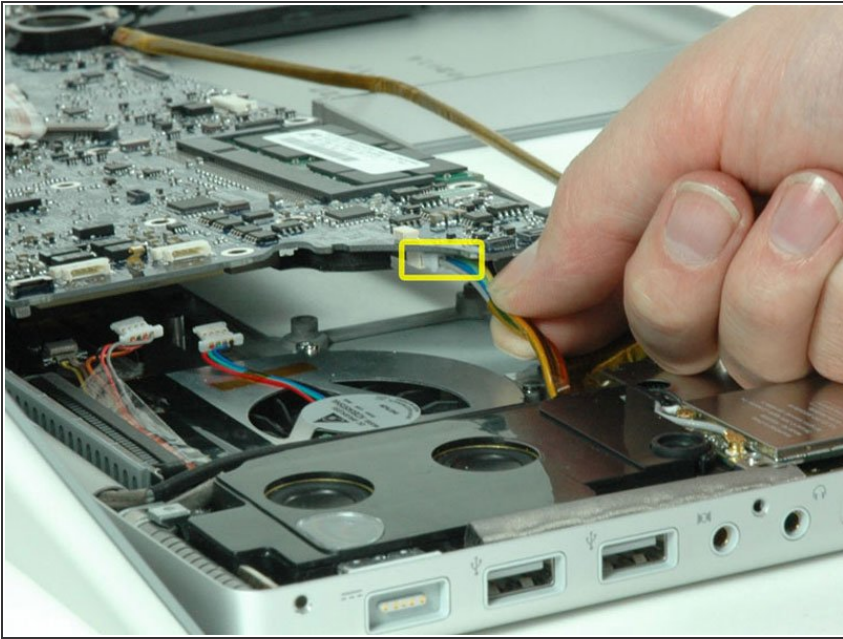
- Peel up the orange Kapton tape securing the left thermal sensor cable to the logic board.
- ❗ If you have a MacBook Pro 17" Model A1229, this is the middle thermal sensor.

## Step 18



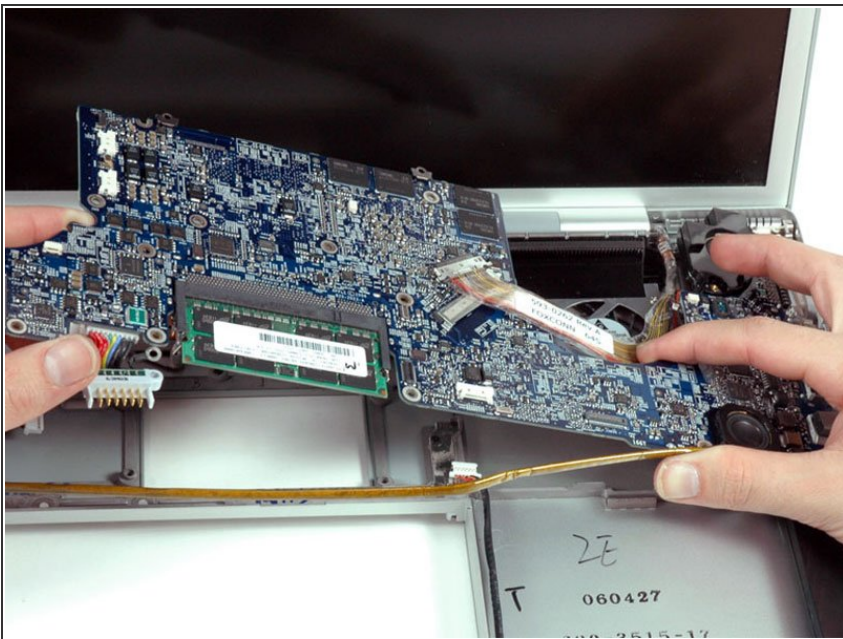
- Remove the following twelve screws:
  - Seven 6.5 mm T6 Torx screws.
  - Two shanked 7.6 mm T6 Torx screws securing the battery connector to the lower case.
  - Three 7.8 mm T6 Torx screws.

## Step 19



- Lift up the left side of the logic board and disconnect the multi-colored power connector from the bottom of the board.

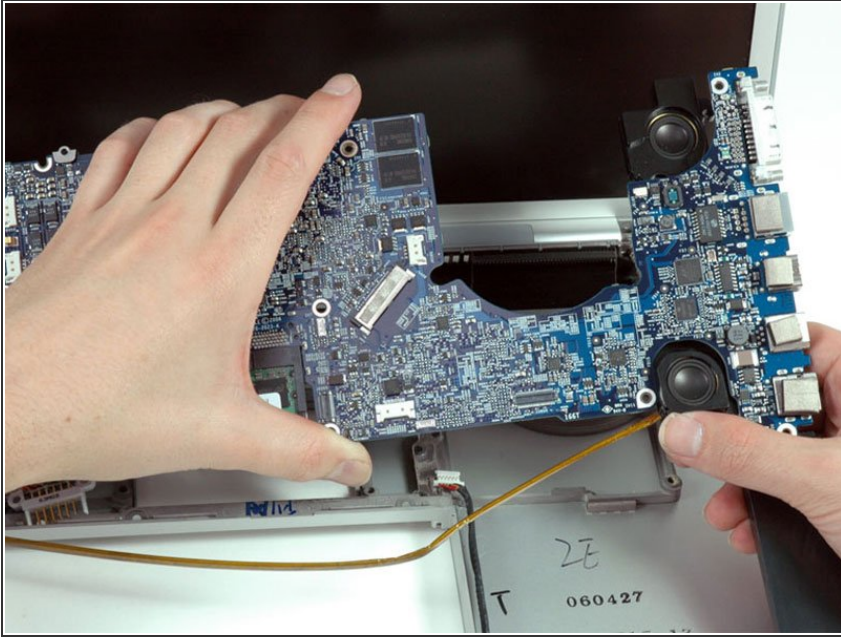
## Step 20



- Grasp the logic board at the left side and at the thin section near the right fan, and rotate the logic board out of the lower case.

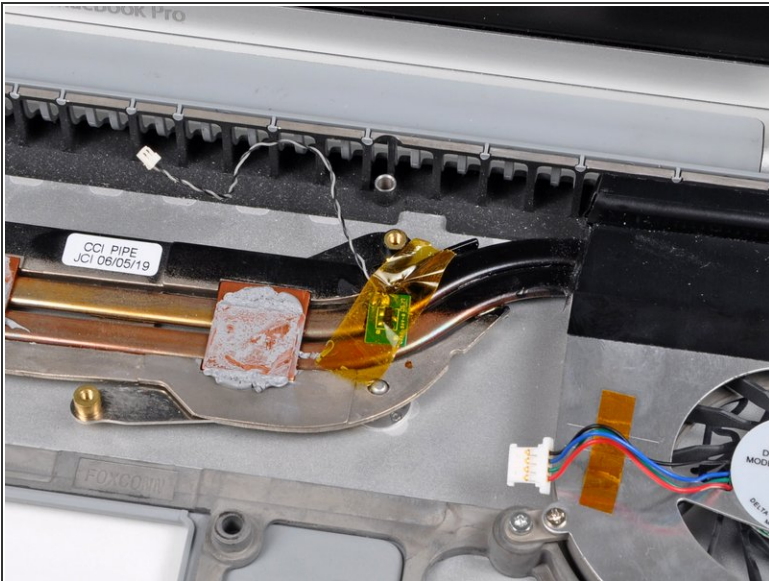


## Step 21



- If the right speaker assembly remains attached to the logic board, hold the logic board with one hand and slide the speaker up slightly to free it from the logic board.
- To properly reassemble your MacBook Pro, you'll have to clean off and replace the thermal compound from the three chips on the underside of the logic board. Use our [Applying Thermal Paste Guide](#) to prepare the processor and heat sink surfaces.

## Step 22 — Left Thermal Sensor



- Peel up the orange Kapton tape covering the left thermal sensor.
- Use a spudger to pry the left thermal sensor off from the heat sink.

To reassemble your device, follow these instructions in reverse order.