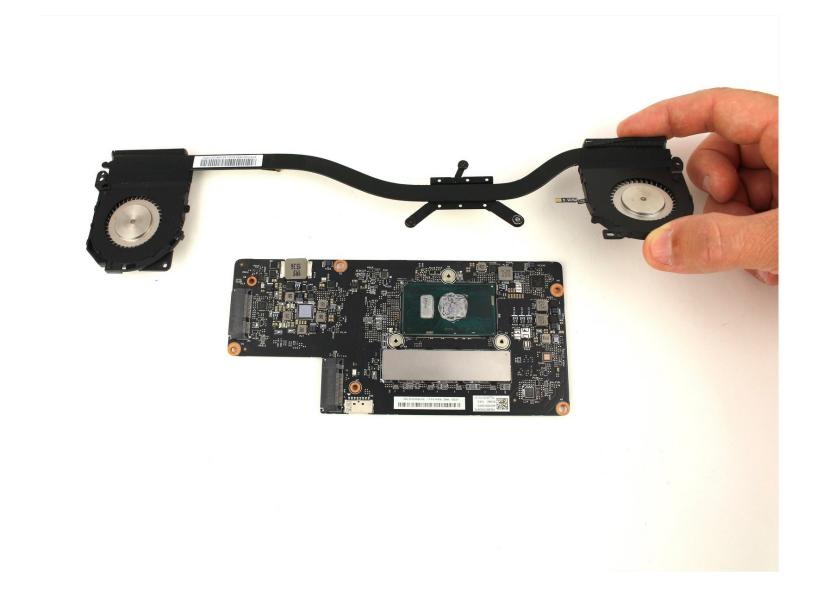


# Lenovo Yoga 900-13ISK Fan Assembly Replacement

This guide will show you how to replace the fan...

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#### INTRODUCTION

This guide will show you how to replace the fan assembly and heatsink from the motherboard of your 13" Lenovo Yoga 900 (900-13ISK). The heatsink and fans work together to dispel excess heat produced by the CPU and keep the computer from overheating. Common symptoms indicating the system is not working properly are loud noises from the fans, excessive heat emanating from the bottom case, or the computer shutting down frequently due to overheating. If you are experiencing any of these issues, replacing or servicing the fan assembly may alleviate your problems.

The heatsink relies on a layer of thermal paste between it and the CPU to effectively transmit heat up and out the fans. If this thermal paste becomes dried out, it can lose efficiency and cause the CPU to overheat. <u>Cleaning and replacing the thermal paste</u> is necessary any time the heatsink is removed from the CPU, but this simple act may help with thermal management on its own.

Also to note, the fans may collect dust over time, reducing their efficacy in dispersing heat. If you notice significant dust buildup in the fans, you may be able to restore functionality to the system by cleaning out the dust, without having to remove the heatsink from the motherboard.

Be sure to unplug and completely turn off your device before you start working.

#### TOOLS:

T5 Torx Screwdriver (1)
Spudger (1)
Phillips #00 Screwdriver (1)
ESD Safe Blunt Nose Tweezers (1)
Phillips #1 Screwdriver (1)

#### Step 1 — Back Cover



• Using a T5 Torx screwdriver, remove the ten 5.5 mm screws from the back case of the laptop.



- Use a spudger to pry open the back case at the hinges of the laptop.
  - ① There are plastic clips around the perimeter of the case holding down the back cover. These will need to be popped off as the cover is removed.
- Use your fingers to completely pop off the back cover.

#### Step 3 — Battery



• Remove the five 3.6 mm screws from the battery with a Phillips #00 screwdriver.



- Grab the bottom corners of the battery and gently pull the battery until the cable disconnects from the connector on the motherboard.
- While reassembling, use a plastic spudger to push the battery cable into the connector on the underside of the motherboard. This will be easier to do before the screws are replaced.

#### Step 5 — Solid State Drive



• Use a Phillips #00 screwdriver to remove the 2.7 mm screw that is holding down the SSD card.

# Step 6



• Pull the SSD card out of the port to the right.

#### Step 7 — Wi-Fi Card Prereq







- Pry up the gray and black coaxial cables from the Wi-Fi card using a spudger.
- Move the cables to the side.







- Using a Phillips #00 screwdriver, remove the 2.2 mm screw holding down the Wi-Fi card.
- *i* The Wi-Fi card may pop up to rest at an angle to the motherboard after the screw is removed.

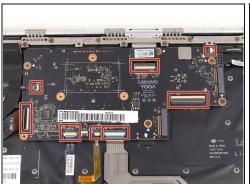






• Pull the WiFi card out from the connector on the motherboard.

#### Step 10 — Motherboard







- Using the pointed end of a spudger, flip up the hinged locking tabs of the eight **ZIF** connectors on the motherboard.
- Pull the eight cables out from their connectors using a pair of blunt nose <u>tweezers</u>.



• Use a spudger to pry up the <u>press fit connector</u> on the right side of the motherboard.

# Step 12



• Remove the five 3.6 mm screws from the motherboard using a Phillips #00 screwdriver.







- Pull back the interconnect cable on the left side of the motherboard to reveal one of the fan screws for the left fan.
- Remove the two 3.6 mm screws from the left fan with a Phillips #00 screwdriver.

#### Step 14







• Remove the two 3.6 mm screws from the right fan using a Phillips #00 screwdriver.



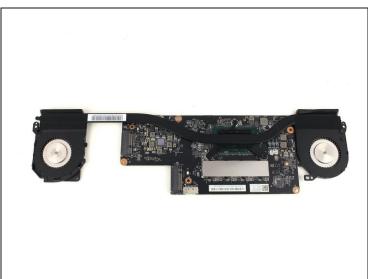
• Unwind the black and white coaxial cables from the hooks on the right fan casing.



- Lift the motherboard from the bottom edge and pull it up and out of the case.
- *i* If you need to remove the fan assembly to swap it over to your new motherboard, continue to follow along with the <a href="heatsink guide">heatsink guide</a>.

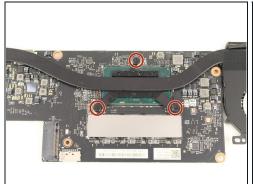
#### Step 17 — Fan Assembly





• Flip the motherboard over to access the heatsink.

#### Step 18

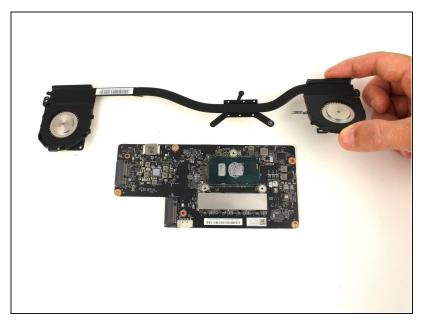






• Unscrew the three captive screws on the heatsink with a Phillips #1 screwdriver.

These screws can be very tight, so be sure to employ <u>screwdriver best practices</u> and apply a lot of downward force to avoid stripping the screws.



- Lift the heatsink and fan assembly off of the motherboard.
- i Be sure to clean off the old thermal paste and replace it with a fresh application any time the heatsink is separated from the CPU. Check out our How to Apply Thermal Paste guide if you need help!

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