Nintendo 3DS XL 2015 Lower LCD and Touchscreen Replacement

Replacement of the lower LCD and the Touchscreen

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INTRODUCTION

This is a guide to help walk you through how to replace the lower LCD and the Touchscreen Digitizer.

PARTS:

- Nintendo 3DS XL (2015) Lower LCD (1)
- Nintendo 3DS XL (2015) Lower LCD Support and NFC Antenna (1)
Step 1 — Battery

⚠ Ensure your device is powered off before proceeding. Failure to do so may result in electrical shock or damage to the device.

- Place the 3DS upside down. Remove the game card, headphones, charging cable, stylus, or anything else that may be connected to the device.

Step 2

- Using a JIS #0 screwdriver, loosen the two black screws on the back.

ℹ The screws are held in place by captive washers and should not be completely removed.
Step 3

- Once the screws are loosened, pry open the back cover.
Step 4

- The battery is located on the left hand side of the 3DS - to remove, use the small gap located at the top-middle and pull up with a pointed tool.

Step 5 — Motherboard

- Using a JIS #000 screwdriver, remove the six 6mm screws around the edges of the secondary cover.
Step 6

- Using tweezers, carefully pop out the rubber bumpers located at the top side of the 3DS. Removing them will reveal another two 6mm screws. Remove these screws using a JIS #000 as well.

Step 7

- To separate the cover, carefully lift it up and away from the hinges (in order to clear the headphone port), then pivot it towards the hinges to expose the circuit boards.

⚠️ Don't fully remove the cover yet, or you may damage the delicate ribbon cable that still connects it to the motherboard.
Step 8

- Use a pair of tweezers to lift away the two plugs that latch the L/R/ZL/ZR button ribbons to the motherboard. You can now remove the back cover completely and set it aside.

Step 9

- Use tweezers to flip up the small, hinged locking flap in order to unlock the ZIF connector securing the circle pad ribbon.

- Slide the ribbon out of the ZIF connector.
**Step 10**

- Using a JIS #000 screwdriver, remove the two 8 mm screws securing the circle pad.

**Step 11**

- Lift the circle pad casing upward to remove it. There will be some friction, but it should not require excessive force.
Step 12

- Locate the gold terminal plug with a red cable at the top left of the motherboard. Using your fingers, carefully pull the plug straight upward to remove.

- Use a pair of tweezers to disconnect the single ribbon connector.

⚠ Don’t do what we did -- be very careful not to pull on the red cable.
Step 13

- Using tweezers, gently pull the five marked ribbons out of the ZIF connectors along the sides of the motherboard.

⚠️ These ZIF connectors are held in place by friction and do **not** have locks—lifting the flaps on these connectors will break them! Note that in some models the upper-most connector may have a lock.

- Three of the ribbon connectors have plastic clamping flaps that cover the ribbon to prevent slippage. Use the tweezers to flip them up before ribbon removal.

⚠️ When reassembling the device, be sure to flip the ZIF clamps back down.

ℹ️ While the SD card reader is shown as removed in this photo, it is optional for the removal of the motherboard.
Step 14

- Using a JIS #000 screwdriver, remove six 4mm screws along the edges of the motherboard.
Step 15

- Carefully pivot the motherboard 90 degrees toward the hinges to reveal two more ZIF connectors on the underside of the motherboard.

- Both have latches that must be flipped up. The left, longer latch is black; the right, shorter one is white. Flip up the flaps, slide the ribbons out and remove the motherboard.

ℹ Note which way the ribbons slide into their connectors carefully, as they are different.
Step 16 — Game card reader

- Using a screwdriver JIS #000, remove the three screws
- Next, remove the game card reader by lifting it up.
Step 17 — NFC Antenna Support Bracket

- The part marked in red is the support bracket for the NFC antenna. You must remove this before proceeding with the LCD/digitizer assembly.

- Release the plastic support clips of the NFC antenna using a thin tool on the top and bottom. Then, detach it.
Step 18 — LCD/digitizer assembly

- Slide a flat tool between the LCD/digitizer's black support and the console casing then lift it gently. Next, slide an opening pick underneath to hold it.

⚠️ The ribbon cable indicated by the red arrow is not really a nuisance but it's nevertheless necessary to pay attention so that you do not damage it during this step.

- Next, you can either lift the whole thing from underneath by pushing it up or continue to make your way around, declipping the whole and extracting it.

Step 19 — LCD

- Slide a thin pry tool between the LCD and the black casing of the whole display then lift it gently. The LCD comes out without forcing it.
To reassemble your device, follow these instructions in reverse order.

- Warm the edges of the touchscreen to peel it off more easily, then push it gently from underneath with your fingers to remove it.