



Doogee Mix 2 Not Charging Repair

If your phone isn't charging reliably when you...

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INTRODUCTION

If your phone isn't charging reliably when you put the plug in, and you've tried different cables and chargers including the ones that came with your phone, you may need to replace the charging board in your Doogee Mix 2.

TOOLS:

[Small Plastic Spudger](#) (1)
[Phillips #00 Screwdriver](#) (1)
[Portable Soldering Iron](#) (1)
[Lead-Free Solder](#) (1)

PARTS:

[Charge Board for Doogee Mix 2](#) (1)
[Rear cover for Doogee Mix 2](#) (1)
[Patch antenna set for Doogee Mix 2](#) (1)
[B7000 Adhesive](#) (1)
[Plastic Cards](#) (1)

Step 1 — Assemble materials



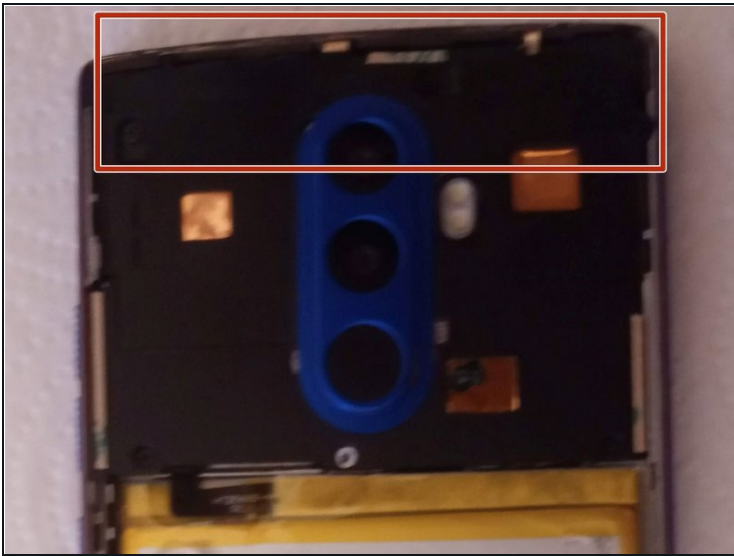
- The most stressful part of repairing this phone is removing the glued on back. Unless you are very confident buy a new back cover and a new set of patch antennas before you start. The back cover is about \$6 and the patch antennas about \$5 at the time of writing.

Step 2 — Soften the glue



- Shut down the phone.
- Heat the rear of the phone, ideally with a temperature controlled heat mat like this but you can use a heat gun or even a hair dryer around the edge of the rear cover if you are careful.

Step 3 — Remove the back cover



⚠ Put on a heatproof glove to avoid burning your fingers.

- With a very thin spudger like the one shown gently pry the back cover away from the phone about half way down the long edge of the cover on either side.

⚠ Be aware that the glass may crack. If it does take care to avoid cuts and splinters and fit a new rear cover when reassembling the phone.

- When you have enough room, insert some [plastic cards](#) (such as plastic playing cards) and use them to cut through the glue around the bottom half of the rear cover.

⚠ The battery is stuck to the rear cover with double sided tape. Separate the battery from the rear cover without lifting the battery up at the top end, or you may damage the battery flex.

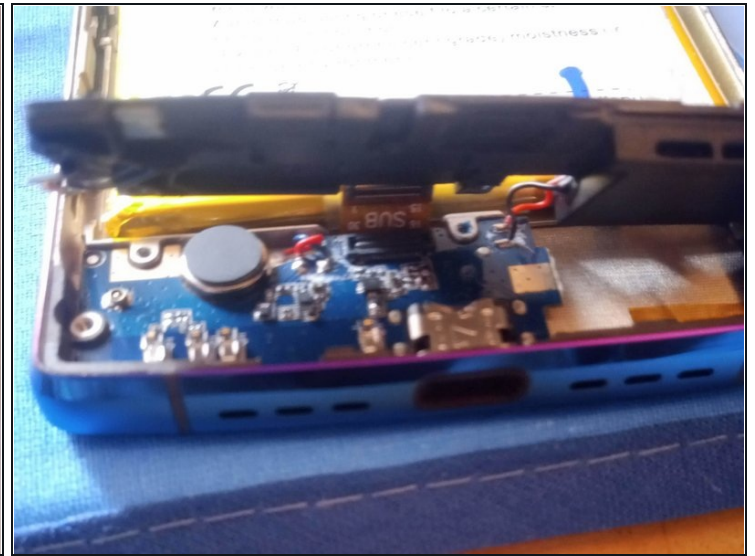
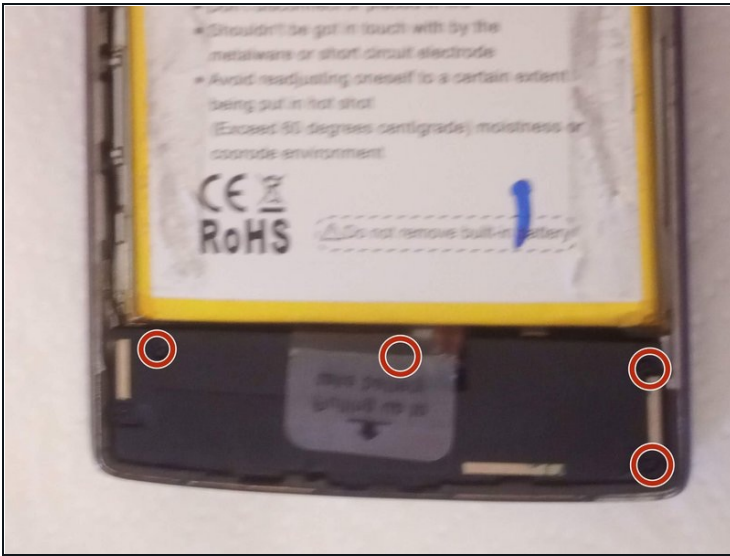
- Be careful not to pry around the top edge. If the patch antennas are damaged when the cover is removed be sure to replace them with new ones.
- Slowly lift away the back cover, detaching the top edge last.

Step 4 — Unscrew the motherboard shield



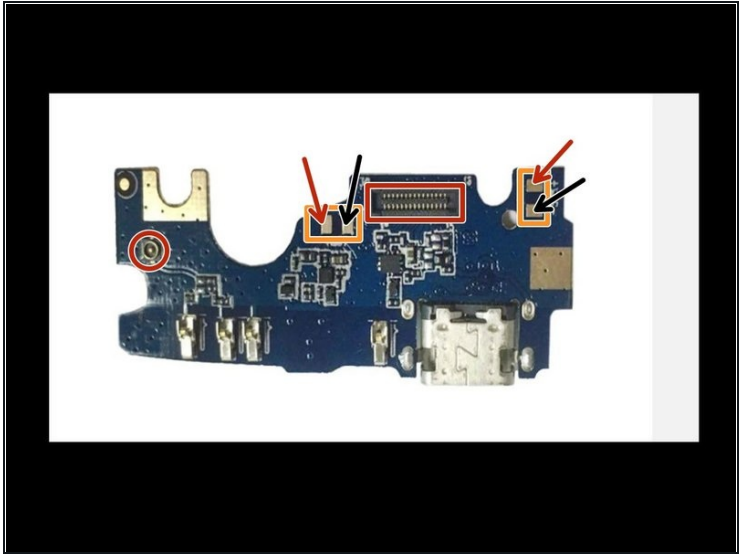
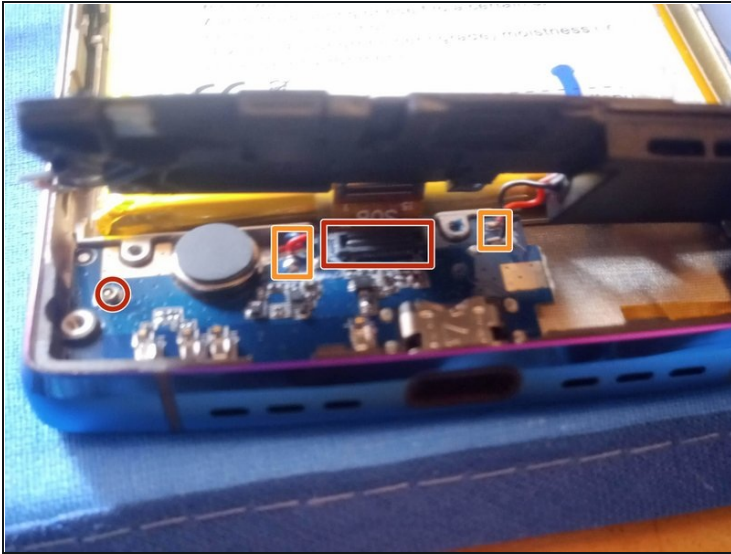
- Unscrew the motherboard shield at the top of the phone
 - Note one screw almost hidden by the camera bezel. You will need to pry the bezel to undo this screw.
- ⚠ Be sure to separate the fingerprint sensor from the bezel when lifting the shield away so that the cable does not get damaged.
- Lift away the shield and store it safely with the screws
 - Unplug the battery connector from the motherboard to avoid electrically damaging the phone.

Step 5 — Lift the speaker



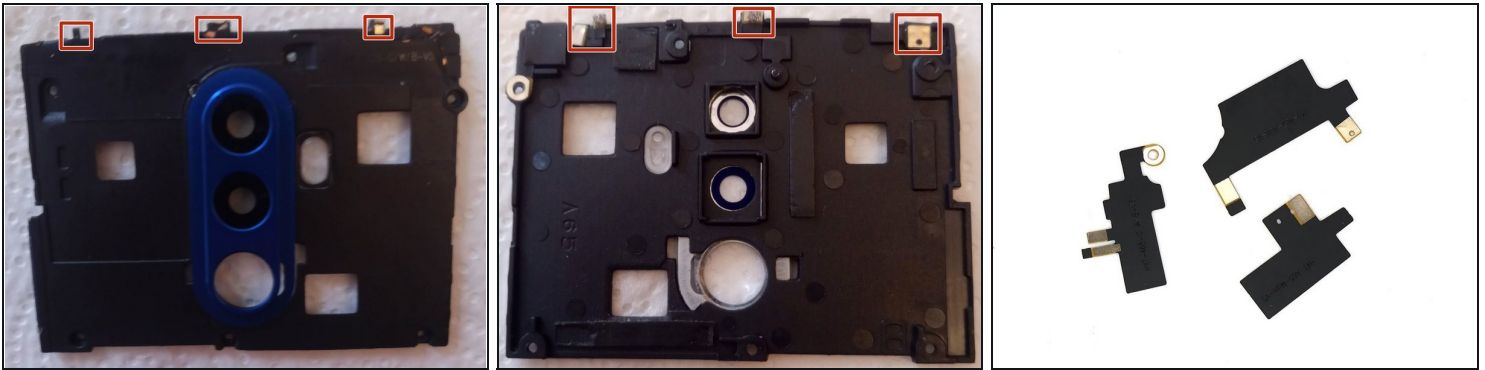
- Remove the screws at the bottom of the phone and carefully lift up the black speaker unit. Underneath is a small circuit board. Be careful not to break the metal braid joining the speaker to the phone.

Step 6 — Replace the charging board



- Unplug the antenna jack on the left and the flat cable in the middle
- Carefully unsolder the four separate wires without damaging anything with your soldering iron. You may need an assistant to hold the speaker out of the way.
- Prepare the new board by applying solder to the four square pads with the soldering iron (tinning the pads).
- Gently lift the board out before installing the replacement board
- Solder the four wires to the new board in the same positions. Make sure you match the colours of the wires shown by the arrows.
- Plug in in the antenna and flat cable.
- Screw the speaker back into place.

Step 7 — Reattach the motherboard shield



- Inspect the patch antennas on the motherboard shield for damage. If any damage is seen, photograph both sides of the shield then peel off the damaged antennas and replace them with new ones. Transfer any sticky pads to the new antennas referring to your photos for location.
- Reconnect the battery and screw the motherboard shield back into place.

Step 8 — Test phone then attach the rear cover



- ① Test the phone and make sure it works and charges before you replace the rear cover.
- To attach the back cover normally requires special glue, however small strips of double sided tape will work. Apply very sparingly and avoid the antenna area.
- Press the cover into place. If using glue, use soft plastic clamps to hold the phone together while the glue dries.

Hopefully you managed to repair your phone!