



# Smart UF75 Main circuit board removal

Removing the main circuit board from a Smart UF75 projector is the first step before replacing the Digital Micromirror Device (DMD) or the colour wheel.

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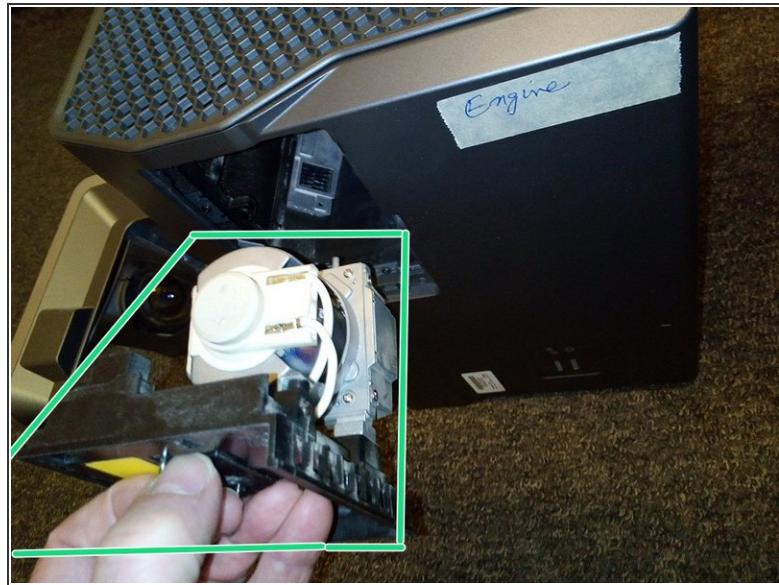
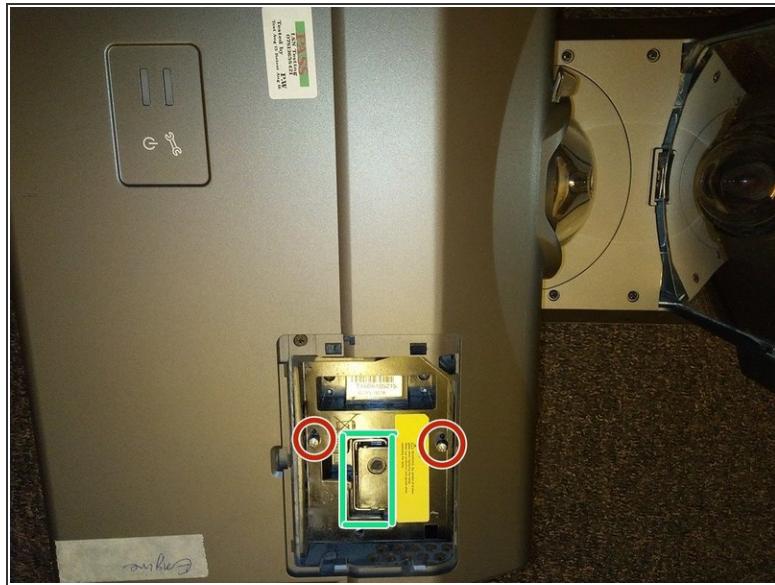
## INTRODUCTION

This guide shows the steps to remove the main circuit board from a Smart UF75 projector. This provides the access needed for many other repairs including replacing the fans, the power supplies, the Digital Micromirror Device (DMD) or the colour wheel.

### TOOLS:

- Phillips #2 Screwdriver (1)  
magnetic
- Phillips #1 Screwdriver (1)

## Step 1 — Remove the bulb module



- Use a flat screwdriver or coin to remove the flap covering the bulb module
- Loosen these 2 Philips #2 screws. These screws should stay captive within the bulb module.
- Lift this handle and pull out the bulb module.

*(i)* It is important to avoid dust getting into the optical parts. I vacuumed the bulb area with a soft brush attachment then vacuumed other dusty areas as they were exposed during the disassembly.

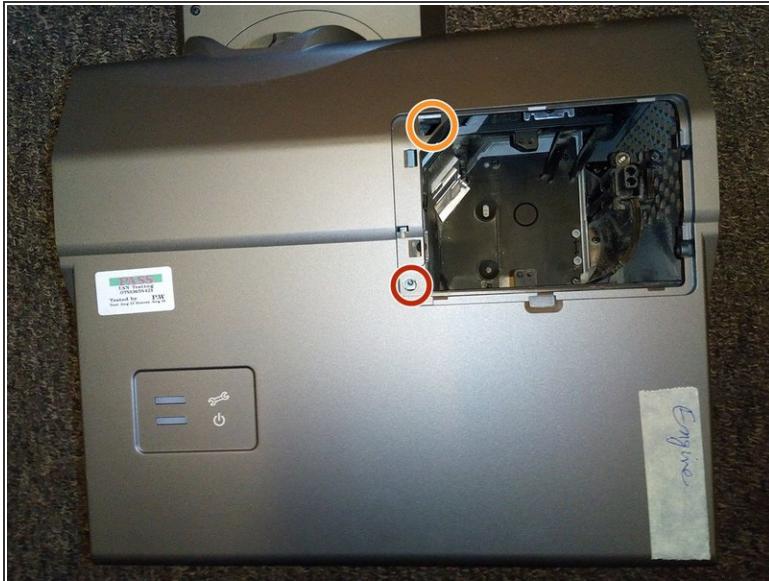
**⚠** Do not touch the mirror. The delicate front silvered mirror surface is easily scratched.

## Step 2 — Remove the lid



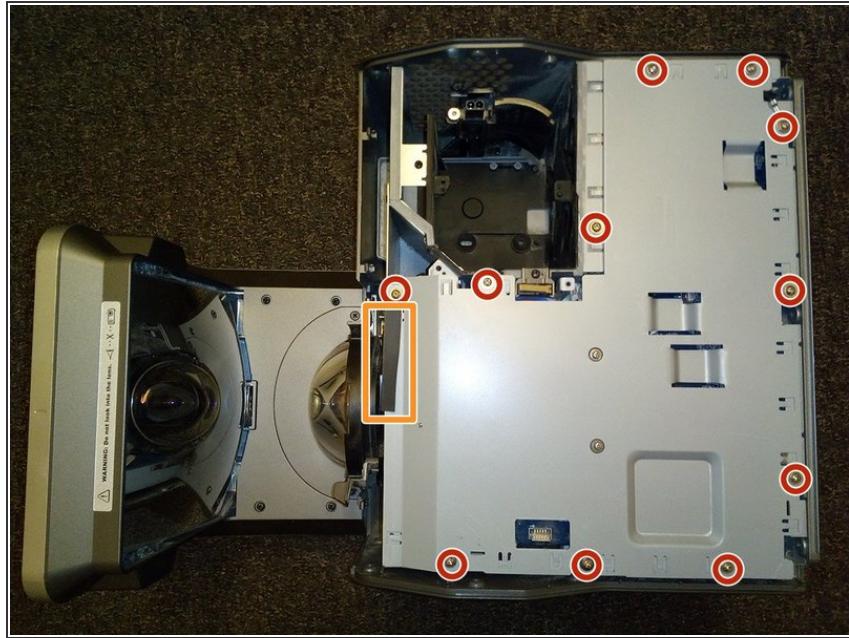
- Remove these 3 black 5mm Philips #2 screws from the right side panel.
- Remove these 4 black 5mm Philips #2 screws from the left side panel.
- Remove these 3 black 5mm Philips #2 screws from the rear panel.

## Step 3 — Remove the lid



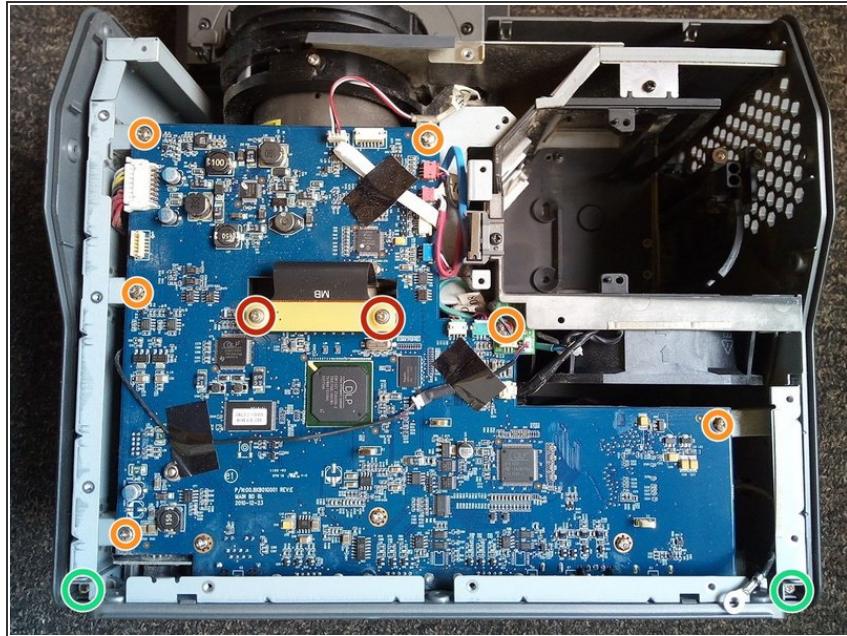
- Remove this 7mm Philips #2 screw under the bulb cover.
- Remove the 7mm Philips #2 screw deep in this hole. A magnetic screwdriver essential for removing and replacing this inaccessible screw.
- The lid can now be removed by gently prising it off starting at the hole for the bulb.
- Unplug this cable then put the projector lid to one side.

## Step 4 — Remove the metal cover



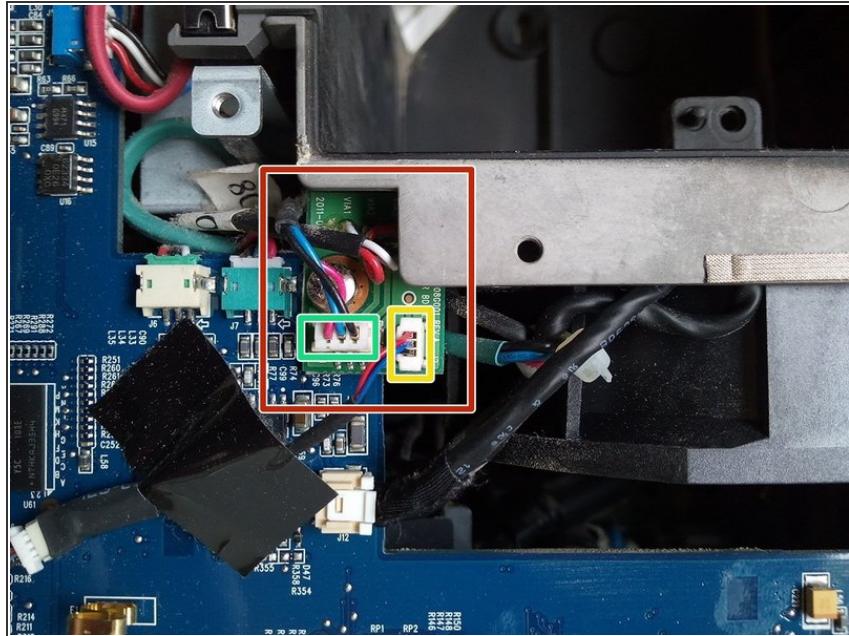
- Remove these 11 silver 5mm Philips #2 screws from the metal cover.
- Unpeel this black card that is stuck to the metal cover.
- Lift off the metal cover to reveal the main circuit board

## Step 5 — Unscrew the main circuit board



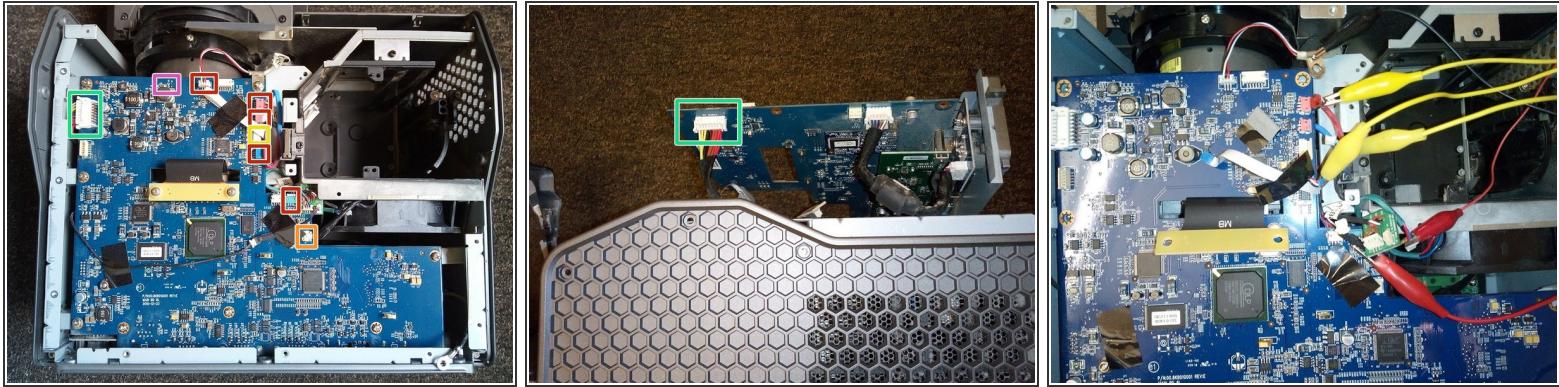
- Remove these 2 silver 8mm Philips #1 screws and their white plastic washers then unplug the ribbon cable. This plug will drop through the hole in the board when you lift off the board.
- Remove these 6 silver 8mm Philips #2 screws from the main circuit board.
- Remove these 2 silver 6mm Philips #2 screws that attach the board of plugs at the back of the projector.

## Step 6 — Release the small circuit board



- Projectors built in 2010 have a small extra circuit board here. You can skip this step if you have a newer projector without this extra circuit board.
- Unplug this wire from the small circuit board. Peel back the two pieces of tape holding down the wire, leaving one end of each piece of tape attached to the board for the later re-assembly
- Remove the other plug from this small circuit board. The small circuit board is now free to come away with the main circuit board.

## Step 7 — Unplug the main circuit board

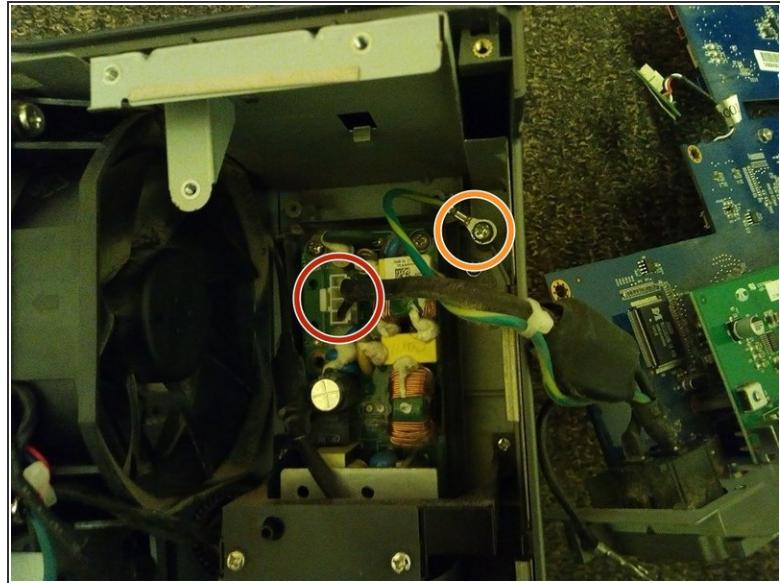
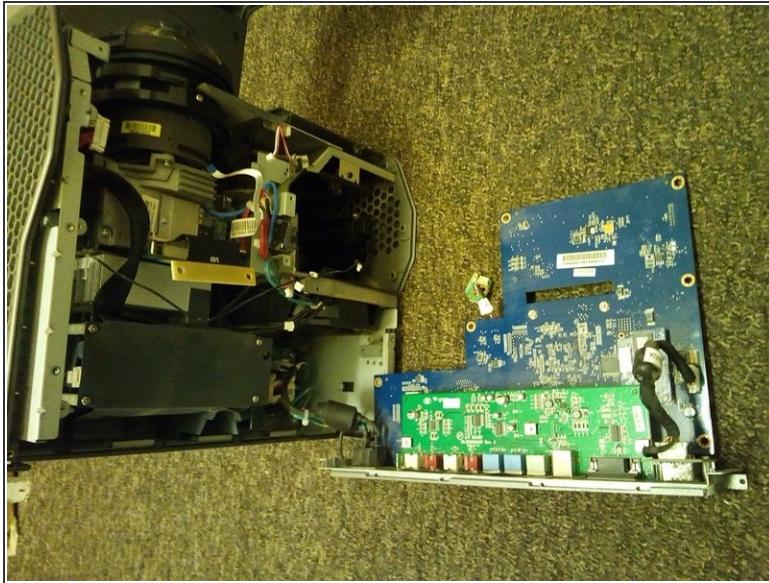


- Unplug these 5 plugs. These plugs are stiff but there are no clips or catches to release. I used a combination of pliers and miniature side cutters to grip the two edges of each plug and work it loose.
- Remove this plug by pressing down the back of the plug to release the catch
- Gently remove this thin ribbon cable by pulling back the plastic plug then pulling out the cable. Untape the ribbon cable from the board.
- Later models have an extra wire here that needs to be unplugged.
- Remove this larger plug by squeezing the two ends to release the clips. On later models, this plug is underneath the board, so you will need to release it while you are removing the circuit board

*(i)* Hint: With so many small plugs it is easy to leave a plug under the board during re-assembly. Clipping a long wire to each plug makes them more obvious.

*(i)* Hint: Take a picture showing how the small plugs are connected on the main circuit board to help re-assembly because the plug arrangements vary slightly between projectors.

## Step 8 — Remove the main circuit board



- Remove the main circuit board by lifting the board from the back end where the external plugs are attached.
- Unplug this mains plug.
- Disconnect the earth lead by unscrewing this silver 5mm Philips #2 screw with its captive serrated washer.

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