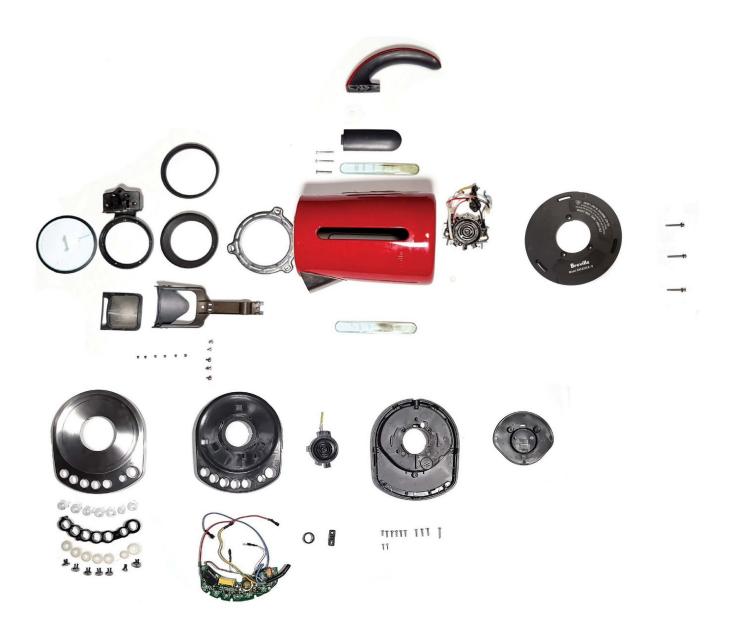


Breville Smart Kettle BKE825 Teardown

Step-by-step teardown process for Breville Smart Kettle.

Written By: Jye Brien



INTRODUCTION

Step-by-step teardown process for Breville Smart Kettle.

Contributing Members:

- Campbell Hatton-Ward
- Hamish McFarlane
- Jye Brien

TOOLS:

- Small Phillips Head Screwdriver (1)
- Triangle 3 Screwdriver (1)
- Flush Wire Cutters (1)
- Chisel (1)
- Flush Cutter (1)

Step 1 — Breville Smart Kettle Specs



• This 1.7 capacity kettle knows the ideal temperature for tea or coffee. 5 varietal settings brew at the right temperature for Black, Green, White and Oolong Tea and French press coffee.

• Product specifications:

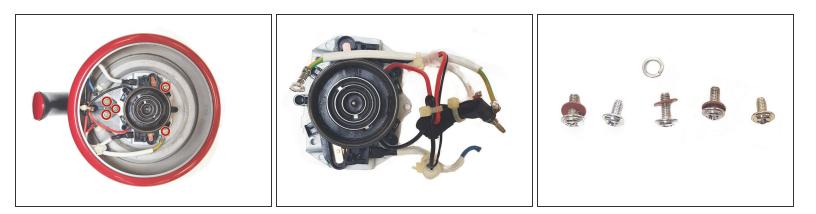
- <u>Dimensions</u>: 23.2 x 156 x 25 cm
- Construction Materials: Stainless Steel
- <u>Capacity</u>: Large 1.7 L / 7 cup capacity
- <u>Settings:</u> 5 temperature settings (Green Tea, White Tea, Oolong Tea, Black Tea, Coffee).
- The Kettle has 2 major components The electric base and the water compartment. The guide will follow individual teardowns for each compartment starting with the main water compartment.

Step 2 — Kettle bottom removal.



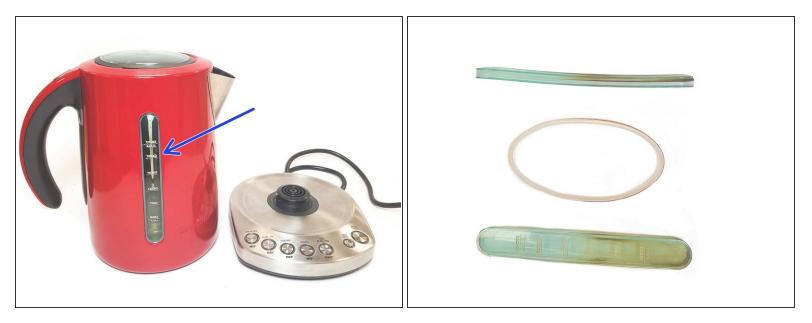
- Begin teardown by flipping the kettle upside down. You will see 3 small triangle head security screws (shown in red circles) holding a plastic casing for the base.
- Remove each screw with a small triangle head screwdriver.
- The plastic casing should then easily lift off base.

Step 3 — Heat coil Sub-Assembly



- Now we will remove the heat/steam sensor.
- Use a small phillips head screwdriver to remove 5 screws (shown in red circles).
- Use the wire cutters to cut any necessary wires holding the sensor in place.
- Once all these items are free, the sensor should be easy to remove from base.

Step 4 — Side View Ports



- The plastic view windows on the sides of the kettle can now be pushed into the kettle to remove them.
- They are only held in place with the rubber seal surrounding them and are fairly easy to push in.

Step 5 — Removing the Debris Filter



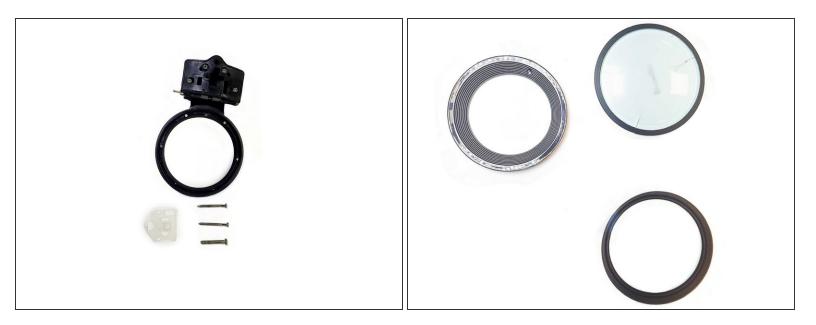
- Remove the debris filter from the kettle by lifting the tabs on the bottom and pulling the whole assembly out.
- The filter grill can also be removed from the housing by sliding it out upwards.

Step 6 — Removing the Lid



- Now we can start to disassemble the lid on. Start by opening the lid and removing the rubber gasket around it
- The whole lid and hinge assembly can now be removed with these 3 screws.

Step 7 — Lid Components



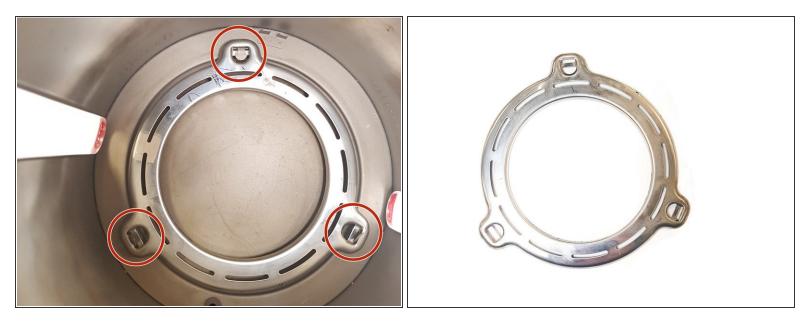
- The lid can now be disassembled further by pressing the clear piece up and out of the lid body.
- All of these lid components require no tools as they are press-fit or held together with adhesive.

Step 8 — Removing the Handle



- Once the 3 screws from the hinge are removed, the handle assembly can be pulled off easily.
- The smaller black piece of plastic that is below the handle can now be pried off with a screwdriver or a chisel.
- This small piece is only there for aesthetics and is glued on with adhesive.

Step 9 — Removing the Heat Disperser



- Removing the ring on the inside of the kettle is done by bending back the three tabs holding it down with a screwdriver or long needle nose pliers.
- The ring can then be lifted out.

Step 10



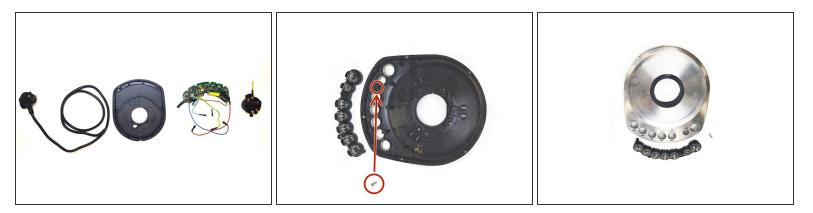
- To start the tear down for the electrical kettle base component, turn it upside down and locate the 3 triangle head screws (circled in red).
- Remove these 3 screws with a small triangle screwdriver and lift off the plastic casing.



- Next, remove the 2 lower phillips head screws (circled in red) with the small phillips head screwdriver.
- Lift off the base plastic casing for the heating element. You will notice that the power cord is still threaded through the lid.
- Cut the cord with the wire cutters and remove it from casing.



- Unscrew and remove the 6 phillips head screws (displayed in the red circles). 2 of the screws will be apart of a bracket fixture. Once removed, also remove the small plastic bracket.
- To remove the PCB (Printed Circuit Board) you will need to use 2 long, thin tools to press a latch we used 2 screw drivers. Apply inward pressure at the inserts shown on image (red arrows) and pull PCB plug outwards at the same time. With some applied force, the PCB should eventually release.
- With the wire cutters, cut any necessary wires that connect the heating component to the plastic casing.
- Once all these fixtures are removed, the heating element should seperate from the plastic base.



- To remove the button component you must unscrew 1 x phillips head screw from the plastic base (shown in red circle).
- The button subassembly should separate from base of kettle for further teardown.

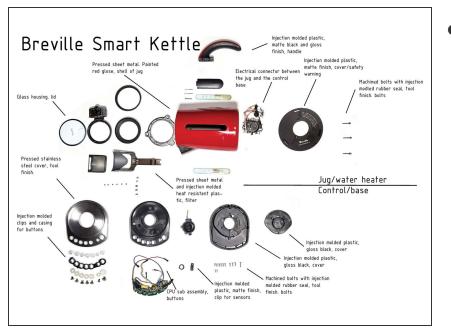
Step 14



- Next step is to remove the Stainless steel frame from the plastic mould
- As part of the steel frame, there are 9 extended thin tabs (red circles) that wrap around the plastic mould to hold it in place.
- Lift these tabs vertically and then separate the metal from plastic.
- You will find thin rubber protection between the layers in areas where required. Separate them also.



- Next, we will disassemble the button assembly by putting each component apart.
- Begin by removing the metal button rivets.
- Afterwards the plastic padding should be easily pulled off.
- The clear plastic female rivets should twist out of place and also be removed easily.
- This completes the teardown for the kettle base.



Step 16 — Breville Smart kettle - all components

 Final layout once teardown is complete showing all components