

Engineering Notebook

17505B

Team Number

Power Panthers

Team Name

IM Terrell Academy | Fort Worth, Texas

School

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I

Book #

of 1

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Evolution of Princess House Stove Tops



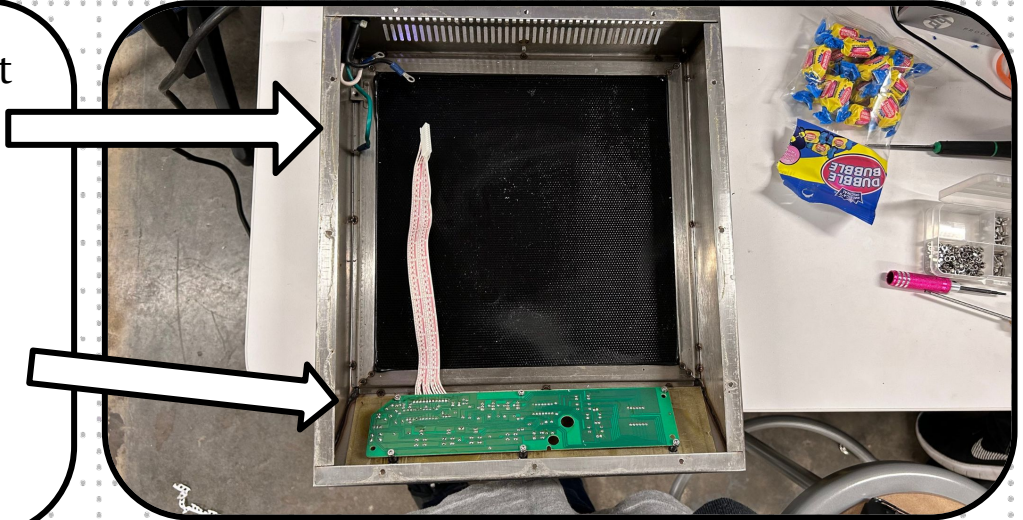
The first induction cooker was demonstrated in the mid-1950s using a newspaper to heat water. Modern versions were developed in the early 1970s by Westinghouse Electric Corporation. These developments were showcased at the 1971 National Association of Home Builders convention. Popular stove tops at the time included the CT2 and the Princess House stove top.

EVOLUTION

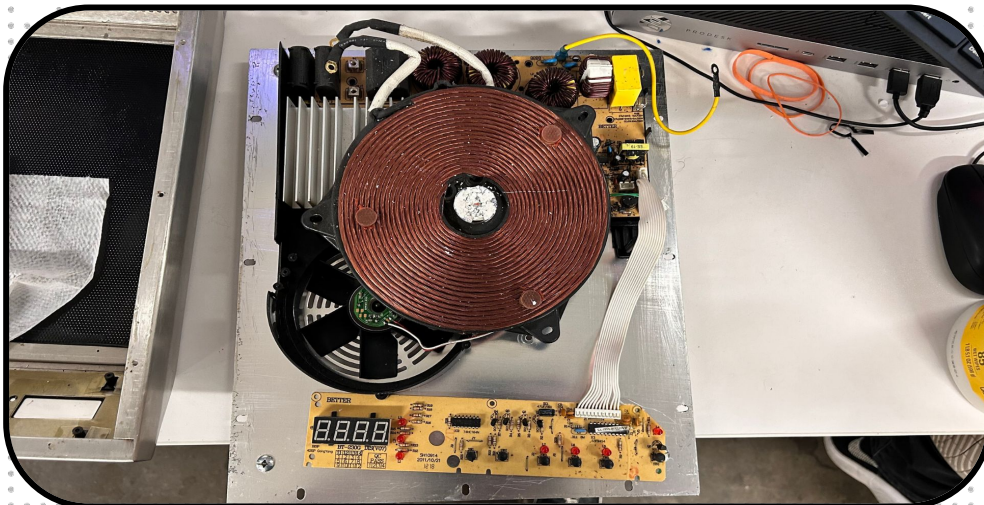


The professional-grade unit is made of 18/10 stainless steel.

Features co-controls that allow for instant heat adjustment to the exact degree.

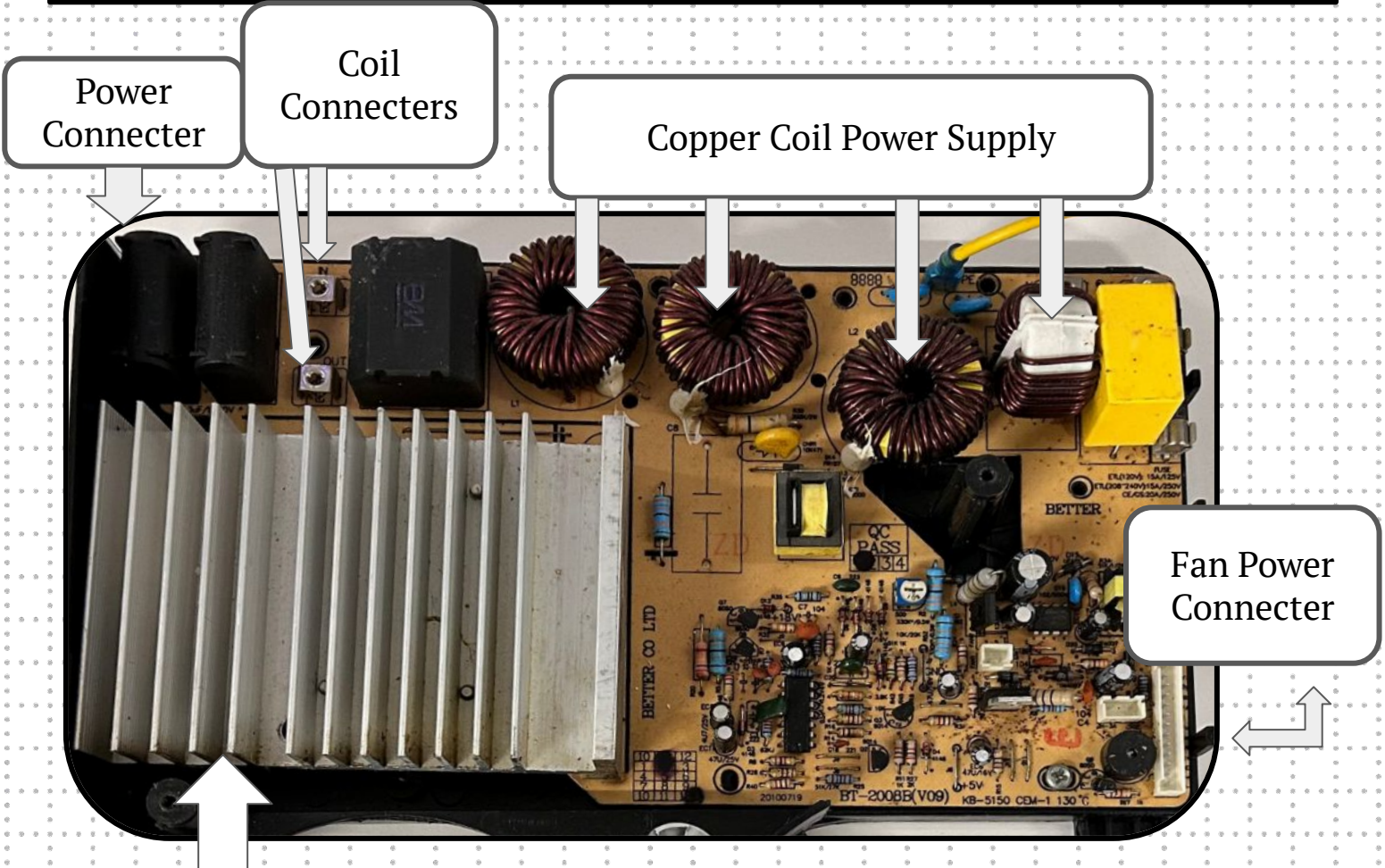


- ❖ This 13" x 13" Induction cooktop, with 1800 watts and a capacity of 50lbs.
- ❖ Uses induction technology for faster, safer, and more energy-efficient cooking.
- ❖ Features a 180-minute programmable timer, one-touch boil with simmer setting.
- ❖ Contains a 3-stage time/temperature programmable cooking feature.
- ❖ The ceramic glass surface remains cool for food safety.



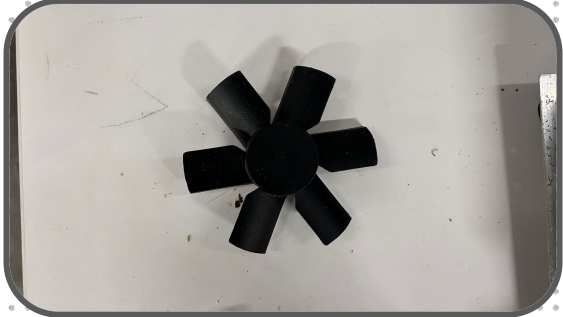
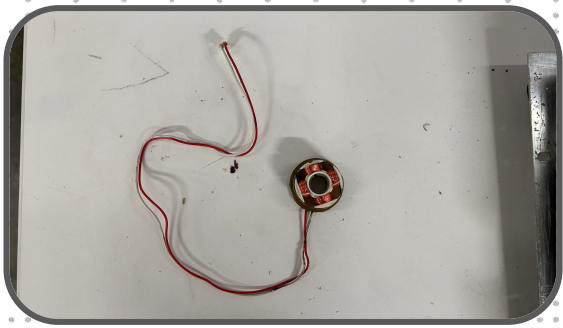
The appliance, powered by 1800 watts, efficiently cooks food using magnetic induction technology, surpassing gas or electric cookers in efficiency.

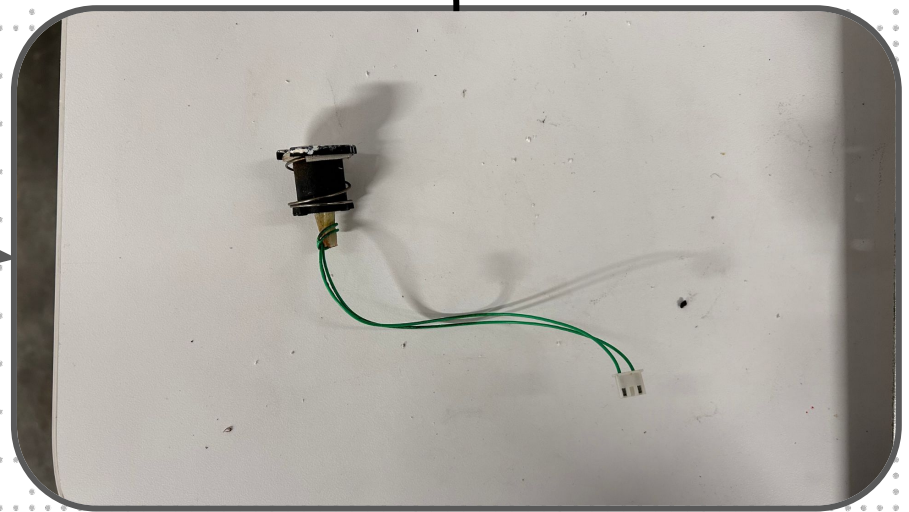
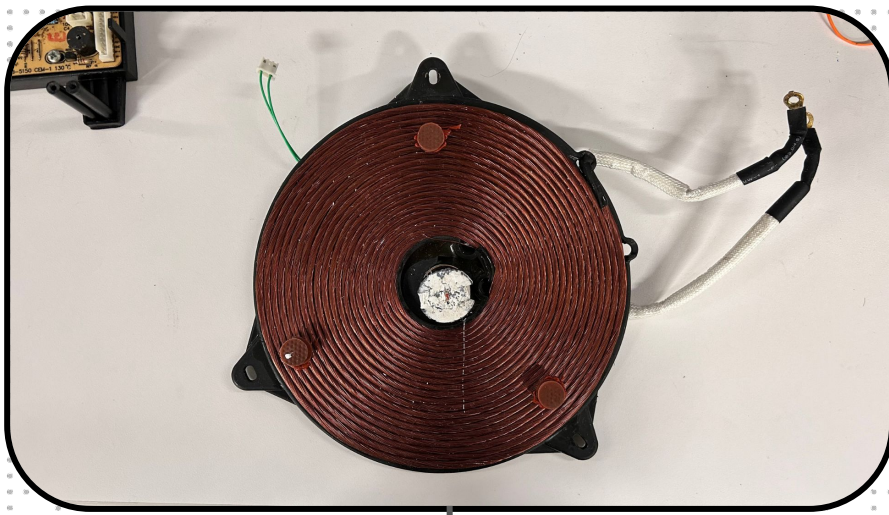
IDENTIFY COMPONENTS



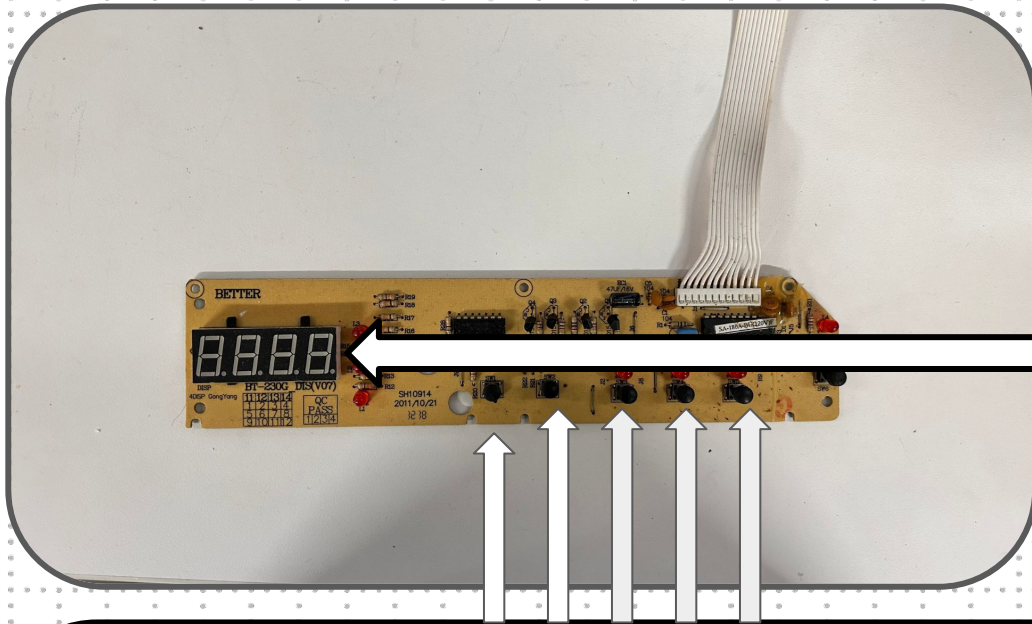
Mental Cooler for Processor

The system fan, despite its efforts, struggles to cool the system effectively. The fan motor moves the fan, which adjusts its speed based on the system's temperature. The fan blades, controlled by the motor, pull and discharge air.





- The metal plate on top of the stove is heated by copper, as shown in the top photo.
- In order to prevent melting, a large amount of thermal glue is applied to the plastic pressure plate in the bottom image.
- To achieve the optimum results, the pressure plate is positioned in the center of the copper coil.
- Capable of reaching temperatures up to 350oC, which can ignite low-boiling solvents.
- A pressure plate is added between the heater plate to detect any cookware on top, ensuring safety during the heating process.



The control board features a 4-digit LCD for temperature and time, but it only operates on a numeric system.

The photographs depict various duties and positions on a circuit board. It features:

- Five buttons with simple functions like temperature gauge
- Mode switch
- Intricate back material with power connectors and cables for functionality.

Power connector

Power Lines

