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> YHNNH Refrigerator Control Circuit Board PCB Instruction Manual for LG Models EBR80085803, EBR800858, EAX662466

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YHNNH Refrigerator Control Circuit Board PCB Instruction Manual

Compatible with LG Models: EBR80085803, EBR800858, EAX662466

1. INTRODUCTION

This manual provides essential information for the YHNNH Refrigerator Control Circuit Board PCB, designed as a replacement part compatible with specific LG refrigerator models. This PCB (Printed Circuit Board) serves as the 'brain' of your refrigerator, managing critical functions such as temperature regulation, compressor operation, and defrost cycles. Proper installation and understanding of its features are crucial for optimal appliance performance.



Figure 1: YHNNH Refrigerator Control Circuit Board PCB (Overall View)

2. PRODUCT FEATURES

- **Precise Temperature Control:** Features advanced fuzzy control algorithms for accurate temperature regulation,

achieving precision within $\pm 0.1^{\circ}\text{C}$. Real-time calibration minimizes temperature fluctuations, ensuring optimal food preservation.

- **Low-Noise Operation:** Incorporates variable frequency drive technology to maintain operating noise levels below 35 decibels. Vibration suppression algorithms further reduce mechanical noise, contributing to quieter operation, especially during nighttime hours.
- **Extended Service Life:** Intelligent delayed start functionality prevents frequent compressor cycling, thereby extending the lifespan of the compressor. Integrated overload protection mechanisms reduce the risk of overheating and ensure safe operation.
- **Fast Cooling Capability:** The high-frequency start mode enables rapid cooling, quickly reaching desired temperature settings and enhancing the appliance's quick-freezing capabilities.

3. COMPATIBILITY

This Refrigerator Control Circuit Board PCB is compatible with LG refrigerator models that utilize the following part numbers:

- EBR80085803
- EBR800858
- EAX662466

Always verify the part number on your existing control board to ensure proper compatibility before installation.

4. SAFETY INFORMATION

WARNING: Electrical shock hazard. Disconnect power before servicing. Only qualified technicians should attempt installation or repair of this component. Failure to follow these instructions could result in death, electrical shock, fire, or property damage.

- Always disconnect the refrigerator from the main power supply before beginning any work.
- Wear appropriate personal protective equipment, including insulated gloves.
- Handle the circuit board by its edges to avoid damaging components or introducing static electricity.
- Ensure all connections are secure and correctly oriented before restoring power.

5. SETUP AND INSTALLATION

Replacing a refrigerator control board requires technical knowledge and should ideally be performed by a certified appliance technician. The following steps are a general guide and may vary depending on your specific refrigerator model.

1. **Disconnect Power:** Unplug the refrigerator from the wall outlet or turn off the circuit breaker supplying power to the appliance.
2. **Access the Control Board:** Locate the control board compartment, typically found at the back of the refrigerator or behind the front grille. You may need to remove screws or panels to gain access.
3. **Document Connections:** Before disconnecting any wires, take clear photos or make a diagram of all wire connections to the existing board. This will be crucial for correct reassembly.
4. **Disconnect Wires:** Carefully disconnect all wire harnesses and connectors from the old control board. Note that some connectors may have locking tabs that need to be pressed or lifted.
5. **Remove Old Board:** Unscrew or unclip the old control board from its mounting brackets.

6. **Install New Board:** Position the new YHNNH control board in the same location and secure it with the original screws or clips.
7. **Reconnect Wires:** Using your photos or diagram, carefully reconnect all wire harnesses and connectors to the new board. Ensure each connection is firm and correctly seated.
8. **Reassemble:** Replace any panels or covers that were removed to access the board.
9. **Restore Power:** Plug the refrigerator back into the wall outlet or turn on the circuit breaker.
10. **Test Operation:** Monitor the refrigerator's operation to ensure it is functioning correctly, including temperature regulation and compressor cycles.

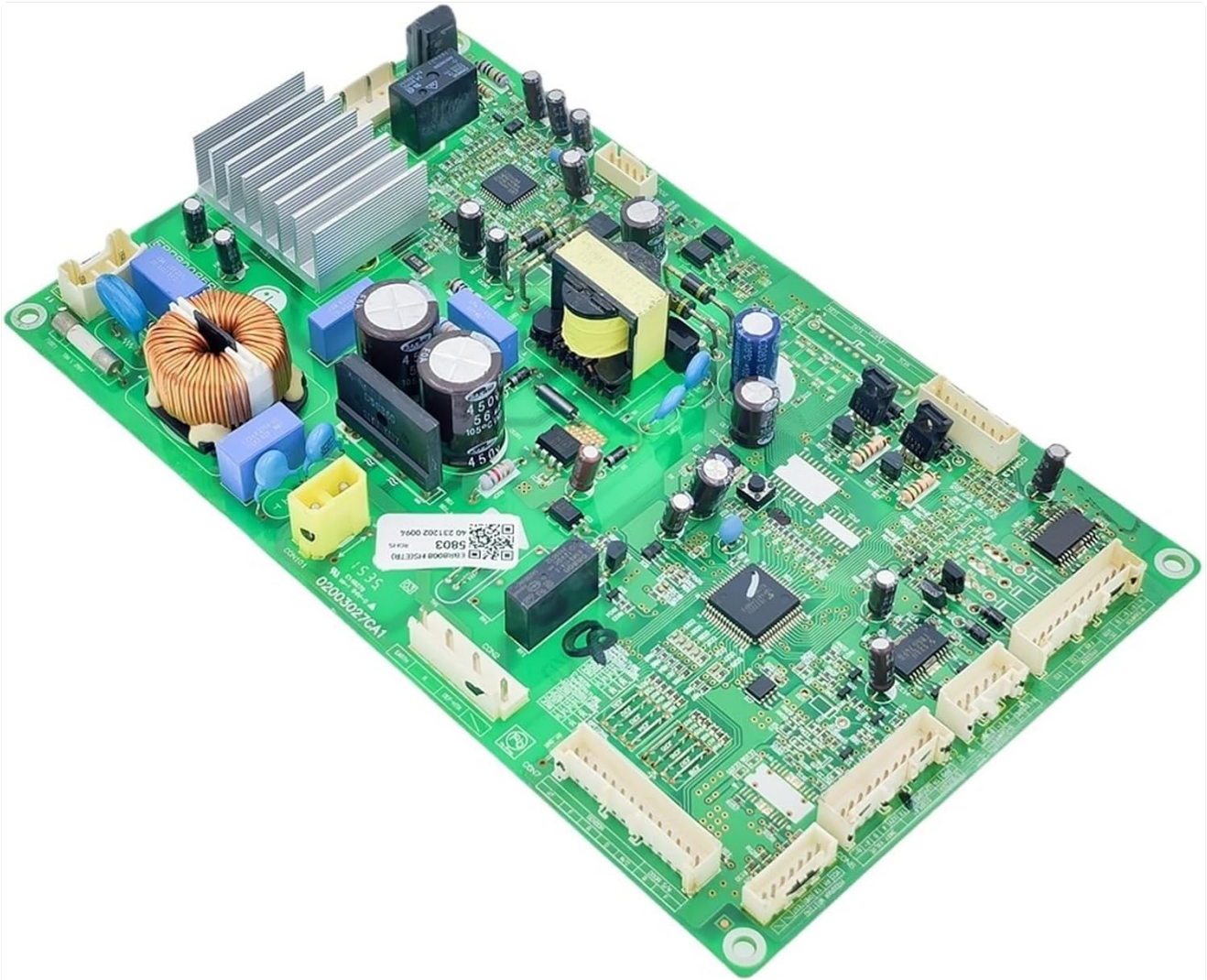


Figure 2: Control Board with various connectors

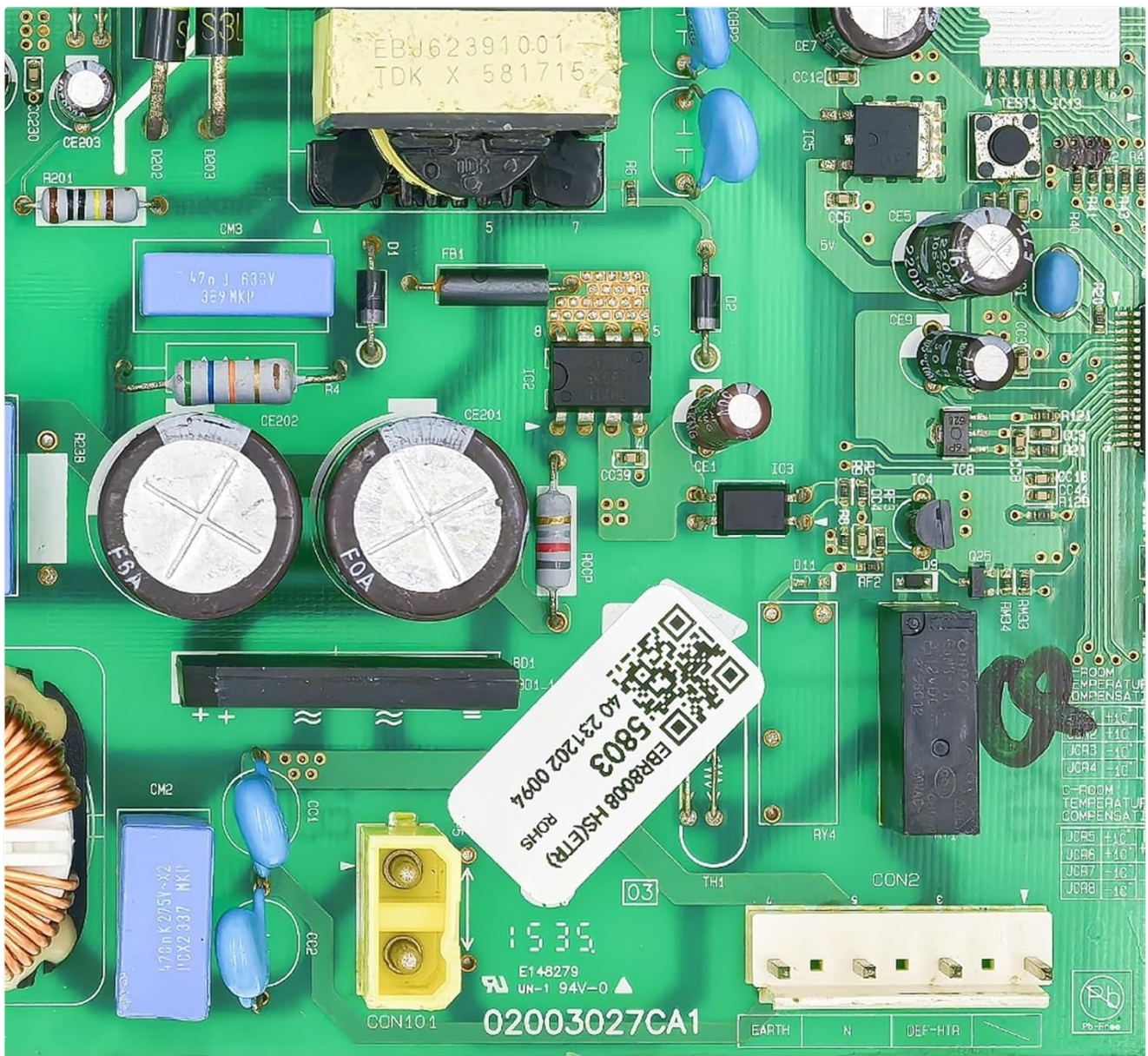


Figure 3: Detail of the control board, showing component layout

6. OPERATING INSTRUCTIONS

Once correctly installed, the YHNNH Refrigerator Control Circuit Board PCB operates automatically as part of your refrigerator's internal system. It continuously monitors temperature sensors, manages the compressor's run cycles, controls defrost operations, and regulates other essential functions to maintain the desired internal temperature and preserve food freshness. No direct user interaction with the control board itself is required after installation.

7. MAINTENANCE

The control board itself requires no routine maintenance. To ensure its longevity and proper function, consider the following general guidelines for your refrigerator:

- Ensure the refrigerator's ventilation areas are clear and unobstructed to prevent overheating of internal components.
- Keep the refrigerator's interior and exterior clean to prevent dust and debris buildup.
- Avoid exposing the refrigerator to extreme humidity or temperature fluctuations.
- If the refrigerator is to be moved or stored, ensure it is unplugged and handled carefully to prevent physical

damage to internal components.

8. TROUBLESHOOTING

If your refrigerator exhibits issues after replacing the control board, consider the following general troubleshooting steps. Always ensure power is disconnected before inspecting internal components.

- **No Power/Refrigerator Not Starting:** Double-check all wire connections to the control board. Ensure the refrigerator is properly plugged in and the circuit breaker is on.
- **Incorrect Temperature:** Verify that the refrigerator's temperature settings are correct. If temperatures are still off, ensure temperature sensors are properly connected and not damaged.
- **Compressor Not Running:** Check for any error codes displayed on the refrigerator's panel (if applicable). Ensure all compressor-related connections on the PCB are secure.
- **Frequent Cycling:** If the compressor cycles on and off too frequently, it could indicate a sensor issue or a problem with the board's logic. Re-verify connections.
- **Unusual Noises:** While the board itself is quiet, if new noises occur, it might indicate an issue with a component it controls (e.g., fan, compressor).

If problems persist after checking these points, it is recommended to consult a professional appliance repair technician.

9. SPECIFICATIONS

Specification	Detail
Part Numbers	EBR80085803, EBR800858, EAX662466
Compatibility	LG Refrigerators (verify part number)
Manufacturer	Hclover (as per product listing)
Item Weight	1.76 ounces
Package Dimensions	0.39 x 0.39 x 0.39 inches
Date First Available	August 3, 2025

10. WARRANTY AND SUPPORT

For information regarding product warranty, returns, or technical support, please refer to the seller or manufacturer's official channels. Keep your purchase receipt or order details handy when contacting support.