

# TROUBLESHOOTING GUIDE

An Exclusive Brand of Chadwell Supply

#### **BEHIND THE ACCESS PANEL**

Removing the access panel reveals the unit control boards: These control boards, which have been installed in both straight cool and heat pump applications in the 14.3 SEER2 line, are designed to protect the unit, and, if there's a problem, to tell you exactly what's wrong.

#### **FAN CONTROL BOARD**

The smaller of the two hoards controls the fan motor. Look for the RED LED

| me smaller  | of the two boards controls the fair motor. Look for the <b>RED LED.</b> |  |  |
|---|---|--|--|
| IF  | THEN  |  |  |
| ON  | Fan motor is running properly.  |  |  |
| BLINK   | Fan motor has an issue.   |  |  |
| To the subject to the Discourage to the manager of Hamburg the form market with a the |   |  |  |

To troubleshoot: 1 Disconnect the power, 2 Unplug the fan motor using the quick-connect, and Test the fan motor.



#### **MAIN CONTROL BOARD**

The larger board is a DC inverter. It controls the compressor and monitors voltage to the unit and the sequence at startup. The compressor comes on first, then the motor comes on.

| IF     |       | THEN   |
|--------|-------|--|
| YELLOW | GREEN |  |
| OFF    | ON    | Outdoor unit is running properly.  |
| OFF    | BLINK | Outdoor unit is in standby mode and may be running a diagnostic. Wait up to 5 minutes for this cycle to complete.        |
| BLINK  | ON    | The outdoor unit found an error. Refer to <b>LED DIAGNOSTIC TABLE.</b> System will try to restart. Wait up to 5 minutes. |
| 711    |       | If system cannot clear error, it may lock. See <b>LOCKED SYSTEM TABLE</b> to diagnose and fix the error.                 |

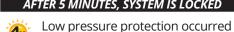


#### LED DIAGNOSTIC TABLE

| LLD D   | IAGNOSTIC TABLE                                     |  |  |
|---|---|--|--|
| IF GREEN ON AND YELLOW BLINKING SYSTEM FOUND ERROR *The number of times the light blinks every 8 seconds indicates issue below* |   |  |  |
|   | Outdoor unit coil (T3) temperature sensor error     |  |  |
| 2   | Ambient (T4) temperature sensor error               |  |  |
| <b>3</b> x  | Compressor exhaust (T5) temperature sensor error    |  |  |
| <b>4</b> x  | Low pressure protection                             |  |  |
| <b>5</b> x  | High pressure protection                            |  |  |
| <b>6</b> x  | Outdoor unit coil (T3) high temperature protection  |  |  |
| 7   | Compressor exhaust (T5) high temperature protection |  |  |
| 8x:   | Fan motor feedback error                            |  |  |

#### **LOCKED SYSTEM TABLE**

IF GREEN ON AND YELLOW BLINKING AFTER 5 MINUTES, SYSTEM IS LOCKED



6 times within 60 minutes.

High pressure protection occurred 6 times within 60 minutes.

Outdoor unit coil (T3) high temperature protection occurred 6 times within 60 minutes.

Compressor exhaust (T5) high temperature protection occurred 6 times within 60 minutes.













## TROUBLESHOOTING GUIDE

An Exclusive Brand of Chadwell Supply

# THE GREEN LIGHT IS STILL BLINKING... WHAT'S NEXT?

If you gave the outdoor unit 5 minutes to reset and run the self-diagnostic, and the unit is not on or did not come out of standby mode, it may be time to do a full system reset.



The system will **NOT** run:

- ▶ If the board finds a fault and locks the system.
- ▶ If system pressure is NOT between 80 and 500 psi.

## TO CONDUCT A SYSTEM RESET



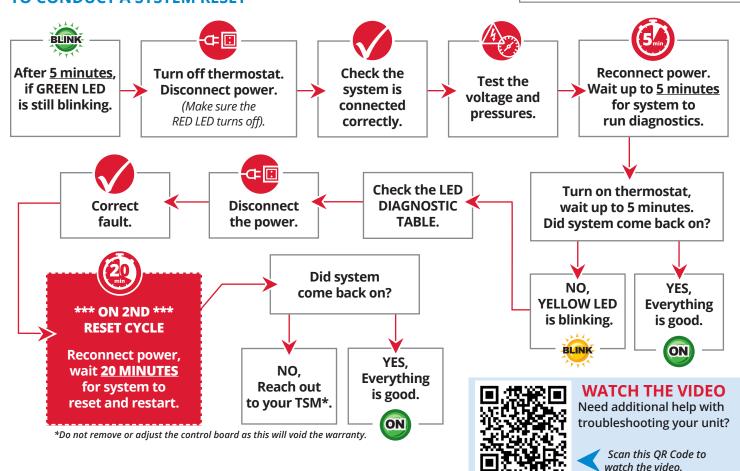


**NOTE:** While unit is in standby mode (GREEN LED blinking) the unit is:

waiting for a signal from the thermostat.

2 if you have recently changed the temperature, then it is processing.

Wait up to 5 minutes for the unit to come on (STEADY GREEN) or display a fault light (BLINKING YELLOW). Do NOT change the thermostat until the unit starts or shows a fault.



### **Brothers 14.3 SEER2 Condenser**

Smaller, tougher, stronger—with clear diagnostic lights for fast, easy troubleshooting.

New product features meet or exceed current SEER2 regulations while protecting the compressor and delivering a quieter, more efficient, and easier to maintain condenser.

- ▶ The main control board is a **DC inverter**, to achieve the 14.3 SEER2 rating.
- ▶ The boards are installed in both the **straight cool** and **heat pump** applications.
- Designed to protect against catastrophic failure.
- ▶ **High and low-pressure switches** help protect the unit.

Learn more: ChadwellSupply.com/BrothersHelp



ChadwellSupply.com/BrothersHelp

