



An Exclusive Brand of Chadwell Supply



# TROUBLESHOOTING GUIDE

## 5 SERIES

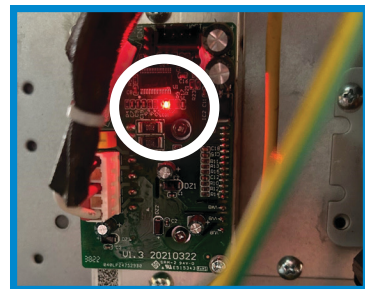
Removing the access panel reveals the unit control boards: These control boards, which have been installed in both straight cool and heat pump applications in the 14.3 SEER2 line, are **designed to protect the unit**, and, if there's a problem, **to tell you exactly what's wrong**.

### FAN CONTROL BOARD

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







IF...	THEN...
	Fan motor is running properly.
	Fan motor has an issue.

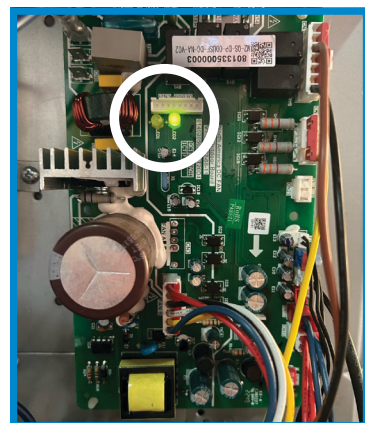
**To troubleshoot:** **1** Disconnect the power, **2** Unplug the fan motor using the quick-connect, and **3** Test the fan motor.



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



### LED DIAGNOSTIC 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
	Ambient (T4) temperature sensor error
	Compressor exhaust (T5) temperature sensor error
	Low pressure protection
	High pressure protection
	Outdoor unit coil (T3) high temperature protection
	Compressor exhaust (T5) high temperature protection
	Fan motor feedback error
	Temperature sensor error

### LOCKED SYSTEM TABLE

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

	Low pressure protection occurred 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.
	Fan motor feedback error occurred 3 times within 20 minutes.





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

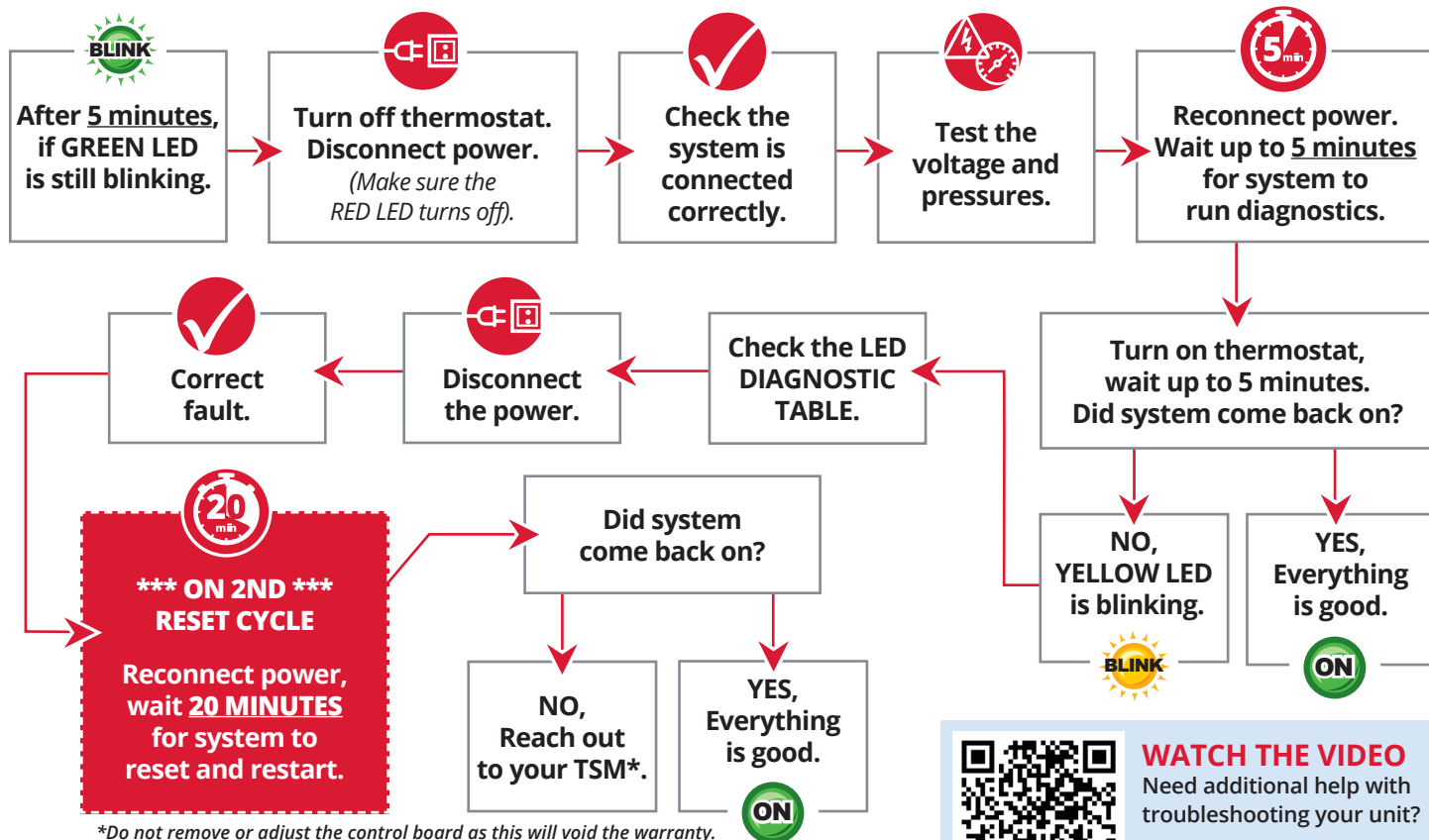
If you gave the outdoor unit 5 minutes to reset and run the self-diagnostic, and the unit is not on or did not come out of standby mode, it may be time to do a full system reset.



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:

- 1 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.**



#### WATCH THE VIDEO

Need additional help with troubleshooting your unit?

Scan this QR Code to watch the video.

ChadwellSupply.com/BrothersHelp

#### 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.

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