GREE Mini-Split E6 Error Code Troubleshooting: The Complete Guide

TL;DR: The E6 error code is one of the most common GREE mini-split call and indicates a communication failure between indoor and outdoor units. GREE's single-zone service tool (GREGT2A3AD) can simulate either unit to isolate the problem. Wrong wires and wire splices are the most common cause.

What Is the E6 Error Code on a GREE Mini-Split?

The E6 error code is a **communication error** on GREE mini-split systems. It means the indoor and outdoor units are not communicating properly. According to GREE's tech team, the E6 is **one of the most common error codes** with GREE's residential products.

An E6 does **not** automatically mean you need to replace the main board on the outdoor unit.

What Is the Most Common Cause of an E6 Error Code?

Before reaching for a replacement board, always investigate the wiring path between units first.

🔌 #1 Culprit: Wrong Wire or Wire Splice

A wrong wire or wire splice causes communication failures more often than any component defect. The specified wire for GREE mini-splits is **14 ga 4 stranded 600v wire**.

🔍 Don't Just Check Terminations

When checking wiring, inspect the **entire run** between units, not just the endpoints.

How Do You Troubleshoot an E6 Error Code Step by Step with a GREE Service Tool?

In a **recent instructional video**, GREE's tech team demonstrated the following step-by-step process using the GREE single-zone testing tool (part number **GREGT2A3AD**):

01

Disconnect Power

Disconnect power to the entire unit before beginning any work.

02

Disconnect Wire #2 at Indoor Unit

Disconnect wire number 2 (the communication wire) going to the indoor unit. Wires 1 & 3 are both power. If the condensate pump is wired correctly, and leg 3 is broken, it will only shut off the indoor unit, not the pump itself.

03

Connect Service Tool to Outdoor Unit

Connect the service tool to wire number 2 at the outdoor unit.

04

Power Up & Test Outdoor Unit

Power up the outdoor unit. Select **"Replace indoor unit to detect outdoor unit"** on the tool. Wait for the compressor to come on. If it runs, the outdoor unit is working properly.

05

Move to Indoor Unit

Disconnect wire 2 from the indoor head and connect the service tool. Select **"Replace outdoor unit to detect indoor unit."**

06

Verify Indoor Unit Operation

If the indoor head comes on (fan runs,), the indoor unit is working properly.

07

Isolate the Problem

If both units work independently, the problem is likely narrowed down to a **wiring issue between them**.

When both units pass their individual tests, you have successfully isolated the fault to the wiring run, saving time and avoiding unnecessary part replacements.

Which GREE Service Tool Should You Use?

GREE offers multiple service tools for different product lines. The **single-zone tool is recommended for E6 troubleshooting** because it can both monitor data and simulate indoor or outdoor units. The multi-zone tool can only monitor.

Tool	Part Number	Simulate Indoor/Outdoor	Product Line
Single-Zone & Multi-Zone Service Tool	GREGT2A3AD	✅ Yes	Mini-Split
Multi-Zone Service Tool	MZ230VTESTER	❌ Monitor only	Mini-Split
MultiPRO Service Tool & System Control	CE42-24/F(C)	✅ Yes	MultiPRO
FLEXX R32 Service Tool	Coming soon	TBD	FLEXX R32

Can You Use the Single-Zone GREE Service Tool on a Multi-Zone System?

Single-Zone Tool (GREGT2A3AD)

- Can be used on multi-zone systems
- Shows indoor information for the specific circuit connected
- Can **simulate** indoor or outdoor unit
- ✅ Preferred for E6 troubleshooting

Multi-Zone Tool (MZ230VTESTER)

- Plugs into the mainboard on the outdoor unit
- Lets you toggle through **all** indoor unit information
- Monitor only, cannot simulate units
- ❌ Not ideal for E6 isolation

Yes, you can use the single-zone tool on a multi-zone system, but you will only see the indoor information for the specific circuit you are connected to. The MZ230VTESTER offers broader visibility across all indoor units, but its inability to simulate makes it insufficient for E6 fault isolation.

How Do You Tell If an E6 Is Caused by the Indoor or Outdoor Unit Without A Service Tool?

The timing of the E6 tells you which unit to focus on first. If the code appears right at startup, the problem is likely the indoor unit. If it takes about 3 to 4 minutes after the system is powered on, the problem is likely the outdoor unit.

E6 at Startup → Indoor Unit Focus

If the code shows up the moment the system powers on, start your diagnosis at the indoor unit.

E6 After 3-4 Minutes → Outdoor Unit Focus

If the system runs for several minutes before the code appears, focus on the outdoor unit.

Understanding this timing distinction can save valuable time and prevent unnecessary component replacements, guiding technicians directly to the most probable source of the E6 communication error.

How Do You Troubleshoot an E6 Without the GREE Service Tool?

No service tool? A multimeter works. Work through the wiring, accessories, board voltages, and communication wire in order, ruling out components before replacing the main board. You can watch the **full instructional video here**.

01

Check Wiring Connections

Confirm the 1, 2, 3, and ground connections match at both units. The cable should be a 14 ga 4 stranded 600v wire, grounded, with good crimps and no breaks or splices. Terminal 2 is communication; terminals 1 and 3 are voltage supply.

02

Inspect Connected Accessories

If a condensate pump, float switch, or disconnect is installed, confirm it's wired correctly. A miswired accessory can interrupt communication.

03

Measure Board Voltages

With everything connected, you should read AC power on terminals 1 and 3 and a fluctuating DC voltage between terminals 1 and 2. Use the service manual chart for exact values applicable to your 115V or 230V model.

04

Test Voltage at Control Boards

At the outdoor board, remove wire 2 and check for 53 to 57 volts DC from 1 to 2 and from 2 to ground. Repeat at the indoor board. A reading that isn't stable in this range points to a board fuse or component fault.

05

Ohm Out the Communication Wire

Power off, then check the communication wire. There should be no resistance between wires, and near zero when the ends are tied together. If unsure, run a temporary cable to see if the error clears.

06

Isolate a Shorted Component

If voltage is still unstable, a grounded or shorted component may be dragging down the bus. Disconnect components one at a time to find it.

07

Test Fan, Then Board

Confirm the indoor fan runs in fan mode. If not, unplug it from the board; if the E6 changes to a fan error, the motor is likely the issue. If everything else checks out, the indoor main board may need replacement. Always confirm a component is defective before replacing it.

The E6 error code will not clear or reset until the underlying problem is fully resolved. Therefore, a patient, step-by-step diagnostic approach is crucial for accurately pinpointing the cause.

Frequently Asked Questions

What does the E6 error code mean on a GREE mini-split?

The E6 is a communication error code indicating the indoor and outdoor units are not communicating. It is one of the most common error codes for GREE residential mini-splits. The issue is often caused by a wrong wire or a wire splice.

Should I replace the main board when I get an E6 error?

Not as a first step. Check the wiring first. Use the service tool to isolate which unit or wiring segment has the issue, or use the step by step process to determine the cause with a multi-meter.

For Additional Insights On the E6 Error Code:

Watch these instructional videos on troubleshooting E6, with or without a GREE service tool.

▶️ Troubleshoot E6 With a Service Tool

▶️ Troubleshoot E6 WITHOUT a Service Tool