



How to Diagnose and Clear a GREE F0 Error Code

A GREE F0 error code on the indoor unit means the system has entered **refrigerant protection mode**, a lockout triggered when the indoor coil sensor doesn't see an adequate change in resistance over time. Most F0s are charge-related, but the cause can also be a faulty indoor coil sensor, expansion valve corrosion, or a strainer restriction. This guide walks through every diagnostic step in sequence. Each step either resolves the F0 or rules out a cause and points you to the next.

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What Does the GREE F0 Error Code Mean?

Refrigerant Protection Mode

F0 is a system lockout designed to protect the unit from operating under low refrigerant conditions. It is displayed on the indoor unit and will not clear until the underlying cause is resolved.

The lockout is triggered when the **indoor coil sensor does not receive an adequate change in resistance over time**.

Three Root Causes

- **Missing install charge:** Additional refrigerant required by the install's line-set length was not added at install. Charge requirements are published in per-model submittals in [GREE system documentation](#).
- **Refrigerant leak:** The system has lost charge over time through refrigerant leak.
- **Faulty indoor coil sensor:** The thermistor is out of range or has failed. Confirmed during the 10-minute hard reset in Step 2.

Occasionally, the issue is expansion valve corrosion or a strainer restriction, both addressed later in the diagnostic sequence.

Diagnostic Steps 1-5



Step 1: Gauges On, Compare to PT Chart

- Connect gauges to the service ports; confirm refrigerant is present and charge is in range.
- No refrigerant at all: skip to the leak-repair playbook.
- Refrigerant present: compare measured pressure to the outdoor temp on the PT chart. It should be close to (not equal to) the PT value for the current outdoor temp.
- Substantially lower than PT: likely undercharged. Continue to Step 2 to confirm it is not a faulty sensor.
- The only way to verify exact charge is to recover and weigh in.



Step 2: Hard Reset (10-Minute Power Cycle)

- The main power supply breaker or the units disconnect must be turned off for ten minutes, then turn back on.
- System does NOT come back on: the indoor coil sensor is likely faulty. Ohm it against the per-model values in the GREE ohm chart, replace if needed, then confirm F0 clears.
- System comes back on: the cause is likely charge-related. Continue to Step 3.



Step 3: Post-Reset Pressure (100 PSI Threshold)

- After the reset, watch how pressure behaves relative to a 100 PSI threshold.
- Drops below 100 PSI and comes back up: keep monitoring.
- Drops below 100 PSI and holds: check the indoor fan motor for operation (fan auto setting recommended).



Step 4: Expansion Valve + 4-Point Strainer Check

- If pressure readings pass but F0 still persists, inspect the expansion valve for corrosion or coil issues.
- Run a **4-point temperature check** on the strainer, comparing both sides. A temperature difference likely means the strainer has a restriction.



Step 5: Verify Charge Against Required Spec

Pull the charge, measure the install's line-set length, weigh out the recovered refrigerant, and compare to the per-model requirements in the submittal published in **GREE system documentation**. This is the definitive way to confirm whether the system was properly charged at install.

Additional Charge Not Added at Install

If the install required additional charge based on line-set length and that charge was not added, that is likely the cause of F0. Add the required charge by weight per the system documentation and confirm the F0 clears.

Recovered Weight Is Short Despite Correct Install

If the recovered weight is short of the required spec but the install adjustment was added correctly, the shortfall is likely a refrigerant leak. Proceed to the leak-repair playbook.

Leak-Repair Playbook: Steps 1-4

If the indoor coil sensor, expansion valve, and strainer all check out, and the error code isn't caused by inadequate charge based on the install's line-set length, the F0 is likely caused by a **refrigerant leak**. Work through the following steps in order.

01

Find the Leak

Use leak detection tools to locate the refrigerant leak in the system.

02

Recover the Refrigerant

If not already completed during the charge verification step (Step 5), recover the refrigerant now using proper recovery equipment.

03

Repair the Leak

Once recovery is complete, repair the leak before proceeding to pressure testing.

04

Pressure-Test With Dry Nitrogen

Pressurize the system with **500 PSI of dry nitrogen**. Hold for one hour. Ensure your nitrogen regulator can generate 500 PSI. Carefully inspect for any additional leaks during the hold period.

Leak-Repair Continued: Steps 5-6: Evacuate and Recharge

Step 5: Evacuate With a Micron Gauge

Evacuate using a micron gauge. Vacuum specs differ depending on whether you are servicing an existing system or commissioning a new install.

- **New installation:** Pull vacuum down to **500 microns**
- **Existing system:** Pull vacuum down to **250-300 microns**
- Hold the vacuum for **two hours** to confirm it holds

Step 6: Recharge the System by Weight

While under vacuum, use a charging scale to weigh in the exact required refrigerant charge for the unit and the install's line-set length. Charge requirements are published in the per-model submittals found in [**GREE system documentation**](#).

In cold weather, use a **heat blanket or halogen light** to heat the refrigerant tank so the cylinder can deliver charge to the system effectively.

Frequently Asked Questions: GREE F0 Error Code

Quick-reference answers to the most common questions about diagnosing and clearing the GREE F0 error code.

What does F0 mean on a GREE mini-split?

F0 means the system has entered refrigerant protection mode, a lockout triggered when the indoor coil sensor does not receive an adequate change in resistance over time.

Why does the PT chart matter?

Refrigerant pressure should be close to the outdoor temperature value on the PT chart. If pressure is substantially lower, the issue is likely charge-related. If in range, proceed with the 10-minute hard reset.

What pressure for nitrogen leak testing?

Pressurize with **500 PSI of dry nitrogen** and hold for one hour. Confirm your regulator can generate 500 PSI before starting.

What vacuum level for evacuation?

New system: pull to **500 microns**. Existing system: pull to **250-300 microns**. Hold for two hours to confirm the vacuum holds.

What if pressure readings pass but F0 persists?

Inspect the expansion valve for corrosion or coil issues, and perform a 4-point temperature check on the strainer. A temperature difference across both sides likely indicates a strainer restriction.

Want Additional Insights On the F0 Error Code?

Watch this instructional videos on diagnosing & clearing F0:

 [Diagnosing the F0 Error Code](#)