

# Rinnai Error Code 12 – Flame Failure

## What it means

The unit successfully ignited, but the flame was lost during operation. The system shut down for safety.

## Most Common Causes

- Intermittent or insufficient gas supply
- Gas pressure dropping under load
- Blocked or improper venting
- Dirty or failing flame rod
- Condensate backing up into the burner area
- Wind or negative air pressure affecting combustion
- Failing gas valve or control board

## Recommended Diagnostic Steps

- Confirm all gas shutoff valves are fully open
- Check dynamic gas pressure while unit is running
- Inspect venting for blockage, length, and termination issues
- Inspect and clean flame rod; verify proper grounding
- Check condensate drain and trap for blockage
- Evaluate installation for wind or air pressure issues
- Replace gas valve or control board if all other checks pass

## Important Notes

Error code 12 is often caused by gas pressure that appears normal at rest but drops during operation. Dynamic testing is critical.

## Customer-Friendly Explanation

Error code 12 means the heater lit but could not keep the flame going. This is usually related to gas supply, venting, or airflow issues.