



Ductless Service

Introduction

Overview

- Consult Service Manual
- General system problems
- Errors indicated at indoor & outdoor units
- Error codes – displayed on remote controllers



General System Problems

Troubleshooting chart

- Service manual should have a symptom/check chart for general problems

1. General Problem Symptoms and Check Items

Symptom	Check Item	Details	Reference Page
The unit does not operate.	Check the power supply.	Check if the rated voltage is supplied.	—
	Check the type of the indoor unit.	Check if the indoor unit type is compatible with the outdoor unit.	—
	Check the outdoor temperature.	Heating operation cannot be used when the outdoor temperature is 18°CWB (64.4°FWB) or higher, and cooling operation cannot be used when the outdoor temperature is below 10°CDB (50°FDB).	—
	Diagnose with remote controller indication.	—	60
	Check the remote controller addresses.	Check if address settings for the remote controller and indoor unit are correct.	106
Operation sometimes stops.	Check the power supply.	A power failure of 2 to 10 cycles stops air conditioner operation. (Operation lamp OFF)	—
	Check the outdoor temperature.	Heating operation cannot be used when the outdoor temperature is 18°CWB (64.4°FWB) or higher, and cooling operation cannot be used when the outdoor temperature is below 10°CDB (50°FDB).	—
	Diagnose with remote controller indication.	—	60
The unit operates but does not cool, or does not heat.	Check for wiring and piping errors in the connection between the indoor unit and outdoor unit.	—	—
	Check for thermistor detection errors.	Check if the thermistor is mounted securely.	—
	Check for faulty operation of the electronic expansion valve.	Set the unit to cooling operation, and check the temperature of the liquid pipe to see if the electronic expansion valve works.	—
	Diagnose with remote controller indication.	—	60
	Diagnose by service port pressure and operating current.	Check for refrigerant shortage.	—
Large operating noise and vibrations	Check the output voltage of the power module.	—	100
	Check the power module.	—	—
	Check the installation condition.	Check if the required spaces for installation (specified in the installation manual) are provided.	—

General System Problems

System does not run

Some possible causes:

- Power supply is off
- Improper power supply voltage
- Improper wire connection
- Mismatched indoor unit and outdoor unit
- Low or dead battery in remote controller
- Invalid address setting
- Transmission error between indoor unit and outdoor unit (defective PCB on outdoor unit)

General System Problems

System runs but does not cool or heat

Some possible causes:

- Incorrect temperature setting
- Mismatched indoor and outdoor units
- Blocked air filter
- Insufficient power
- Refrigerant piping is too long
- Thermistor detection errors
- Faulty operation of EEV
- Refrigerant shortage and/or refrigerant leak*

**In case of leakage into a room, ventilate the room immediately*

General System Problems

When operation starts, safety breaker trips

Some possible causes:

- Insufficient capacity of safety breaker
- Ground leakage breaker is too sensitive
- Supply voltage is not within rated voltage
- Size of connecting wire is too small (indoor power supply unit)
- Air is mixed with refrigerant (over filling)
- Damaged outdoor unit PCB

General System Problems

Indoor unit makes a loud noise and vibrates

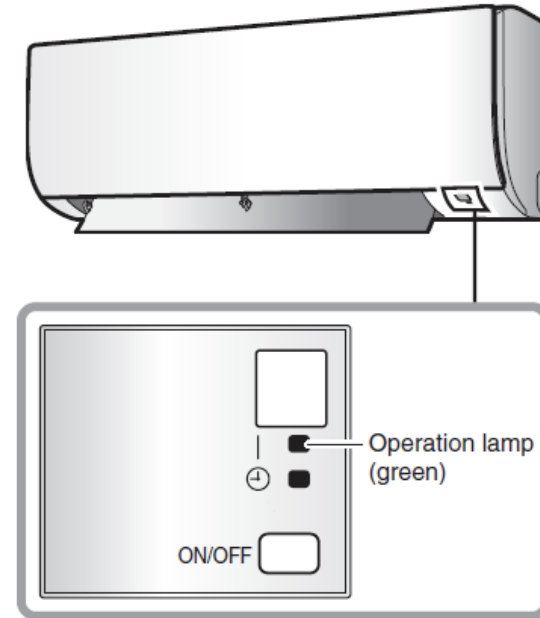
Some possible causes:

- Piping length is too short
- Mounting wall is too thin
- Deformation of the unit
- Improper quantity of refrigerant
- Incorrect output voltage of power module

Indoor Unit Indicator

LED lamp or display

- Most Daikin indoor units have an LED lamp that will blink if one of several specific errors are detected; consult service manual
- Some manufacturers' indoor units have LED displays that will indicate error codes related to the indoor unit.



The operation lamp blinks when any of the following errors is detected.

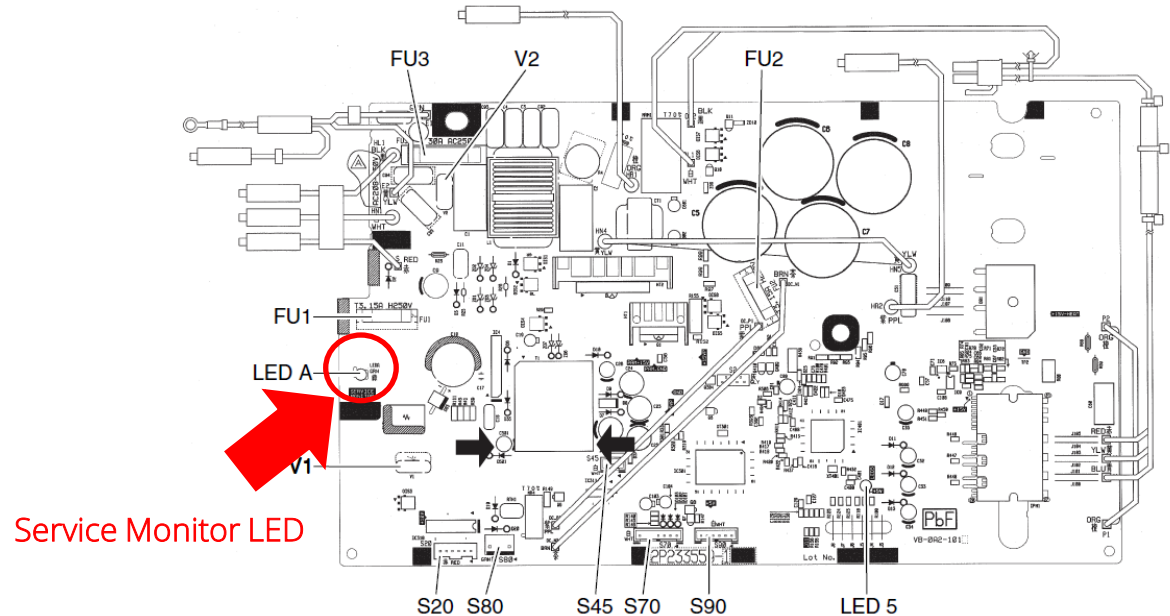
1. When a protection device of the indoor or outdoor unit is activated, or when the thermistor malfunctions.
 2. When a signal transmission error occurs between the indoor and outdoor units.
- In either case, conduct the diagnostic procedure described in the following pages.

Example Indoor LED Lamp

Outdoor Unit Indicator

LED lamp or display

- Most Daikin outdoor units have an LED on the PCB that indicates whether the unit is operating correctly
- Some manufacturers' outdoor units have LED displays that will indicate error codes related to the outdoor unit.



Example - Outdoor PCB Service Monitor LED

Error Codes

Error codes displayed on remote controller

- SSSSSSSSSSS

Error Codes

Error Code U4 (Daikin systems)

- Communication error between outdoor unit and indoor unit(s)
- Data sent from outdoor unit is not received by indoor unit without error, or disabled status of signal transmission continues for 15 seconds and status repeats 3 times

Some possible causes:

- Defective outdoor unit PCB
- Defective indoor unit PCB
- Signal transmission error between indoor and outdoor unit due to improper wiring
- Signal transmission error due to breaking of relay wire (transmission wire)

Troubleshooting flow chart provided in service manual

Error Codes

Error Code U4 – cont.

Troubleshooting flow chart provided in service manual

