



OPERATING MANUAL  
BEDIENUNGSANLEITUNG  
MODE D'EMPLOI

MANUAL DE FUNCIONAMIENTO  
MANUALE DI ISTRUZIONI  
ΕΓΧΕΙΡΙΔΙΟ ΛΕΙΤΟΥΡΓΙΑΣ

使用説明書

РУКОВОДСТВО ПО ЭКСПЛУАТАЦИИ  
MANUAL DE INSTRUÇÕES

# OPERATING MANUAL

**AIR CONDITIONER**  
**CEILING WALL TYPE**

Indoor Unit

AW□7TF

AW□9TF

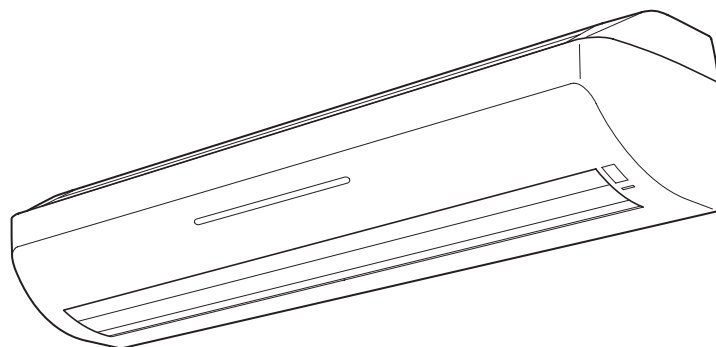
AW□12TF

AW□14TF

AW□18TF

AW□24TF

AW□30TF



English

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KEEP THIS OPERATION MANUAL  
FOR FUTURE REFERENCE

FUJITSU GENERAL LIMITED

P/N9371039015

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## SAFETY PRECAUTIONS

- Before using the appliance, read these "PRECAUTIONS" thoroughly and operate in the correct way.
- The instructions in this section all relate to safety; be sure to maintain safe operating conditions.
- "DANGER", "WARNING" and "CAUTION" have the following meanings in these instructions:

|                                                                                                  |                                                                                                                                                              |
|--------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  <b>DANGER!</b>  | This mark indicates procedures which, if improperly performed, are most likely to result in the death of or serious injury to the user or service personnel. |
|  <b>WARNING!</b> | This mark indicates procedures which, if improperly performed, might lead to the death or serious injury of the user.                                        |
|  <b>CAUTION!</b> | This mark indicates procedures which, if improperly performed, might possibly result in personal harm to the user, or damage to property.                    |

### **DANGER!**

- Do not attempt to install this air conditioner by yourself.
- This unit contains no user-serviceable parts. Always consult authorized service personnel for repairs.
- When moving, consult authorized service personnel for disconnection and installation of the unit.
- Do not become over-exposed to cold air by staying in the direct path of the airflow of the air conditioner for extended periods of time.
- Do not insert fingers or objects into the outlet port or intake grilles.
- Do not start and stop air conditioner operation by turning off the electrical breaker or disconnecting the power supply plug and so on.
- Take care not to damage the power supply cord.
- In the event of a malfunction (burning smell, etc.), immediately stop operation, turn off the electrical breaker or disconnect the power supply plug, and consult authorized service personnel.

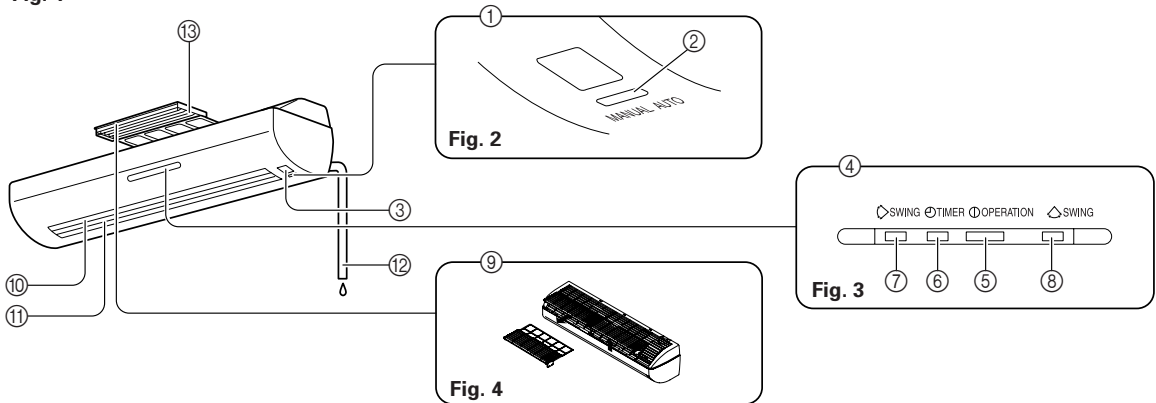
### **CAUTION!**

- Provide occasional ventilation during use.
- Do not direct air flow at fireplaces or heating apparatus.
- Do not climb on, or place objects on, the air conditioner.
- Do not hang objects from the indoor unit.
- Do not set flower vases or water containers on top of air conditioners.
- Do not expose the air conditioner directly to water.
- Do not operate the air conditioner with wet hands.
- Do not pull the power supply cord.
- Turn off power source when not using the unit for extended periods.
- Always turn off the electrical breaker whenever cleaning the air conditioner or the air filter.
- Connection valves become hot during Heating; handle with care.
- Check the condition of the installation stand for damage.
- Do not place animals or plants in the direct path of the air flow.
- When restarting after a long period of disuse in the winter, do:  
Turn the power switch on at least 12 hours before starting the unit.
- Do not drink the water drained from the air conditioner.
- Do not use in applications involving the storage of foods, plants or animals, precision equipment, or art works.
- Do not apply any heavy pressure to radiator fins.
- Operate only with air filters installed.
- Do not block or cover the intake grille and outlet port.
- Ensure that any electronic equipment is at least one metre away from either the indoor or outdoor units.
- Avoid installing the air conditioner near a fireplace or other heating apparatus.
- When installing the indoor and outdoor unit, take precautions to prevent access to infants.
- Do not use inflammable gases near the air conditioner.

# NAME OF PARTS

Instructions relating to heating (\*) are applicable to "HEAT PUMP MODEL" and "HEAT RECOVERY MODEL".  
Instructions relating to fan (\*\*) are applicable to "COOLING ONLY MODEL" and "HEAT RECOVERY MODEL".

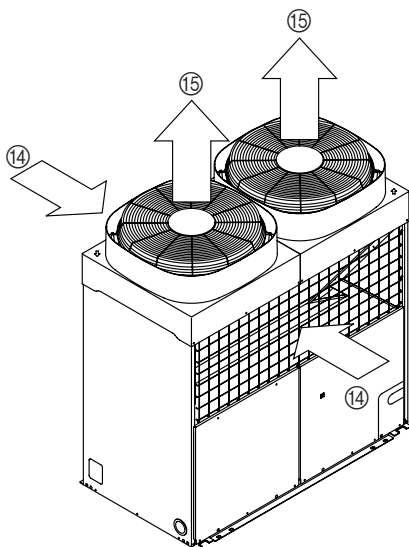
**Fig. 1**



**Fig. 1 Indoor Unit**

- |                                                                                   |                                                                            |
|-----------------------------------------------------------------------------------|----------------------------------------------------------------------------|
| ① Operating Control Panel (Fig. 2)                                                | ⑨ Intake Filter (Fig. 4)                                                   |
| ② MANUAL AUTO button                                                              | ⑩ UP/DOWN Air Direction Flaps                                              |
| ③ Remote Control Signal Receiver                                                  | ⑪ RIGHT/LEFT Air Direction Louvers<br>(behind UP/DOWN Air Direction Flaps) |
| ④ Indicator Lamps (Fig. 3)                                                        | ⑫ Drain Hose                                                               |
| ⑤ OPERATION Indicator Lamp<br>(green ..... COOL, DRY, **FAN)<br>(red ..... *HEAT) | ⑬ Air Cleaning Filter (optional)                                           |
| ⑥ TIMER Indicator Lamp (yellow)                                                   |                                                                            |
| ⑦ SWING Indicator Lamp (orange)<br>(VERTICAL SWING)                               |                                                                            |
| ⑧ SWING Indicator Lamp (orange)<br>(HORIZONTAL SWING)                             |                                                                            |

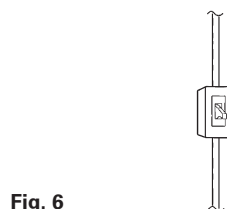
**Fig. 5**



**Fig. 5 Outdoor Unit**

- ⑭ Intake Port
- ⑮ Outlet Port

**Electrical Breaker**



**Fig. 6**

This breaker is installed during the electrical installation.

# MANUAL AUTO OPERATION

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Use the MANUAL AUTO operation in the event the remote control unit is lost or otherwise unavailable.



## CAUTION!

Do not press the MANUAL AUTO button with wet hands or pointed objects, otherwise an electric shock or malfunction may occur.

### How To Use the Main Unit Controls

#### **Press the MANUAL AUTO button on the main unit control panel.**

To stop operation, press the MANUAL AUTO button once again.

- When the air conditioner is operated with the controls on the Main unit, it will operate under the same mode as the AUTO mode selected on the remote control unit.  
However, the Heat pump model will follow the operating mode of the other indoor unit.
- The fan speed selected will be "AUTO" and the thermostat setting will be 23 °C.

# CLEANING AND CARE

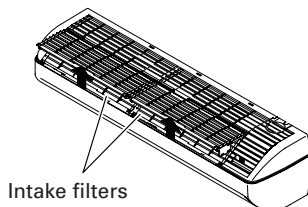
## CAUTION!

- Before cleaning the air conditioner, be sure to turn it off and disconnect the power supply.
- Turn off the electrical breaker.
- Be sure the intake filter (Fig. 1 ⑨) is installed securely.
- When removing and replacing the intake filters, be sure not to touch the heat exchanger, as personal injury may result.

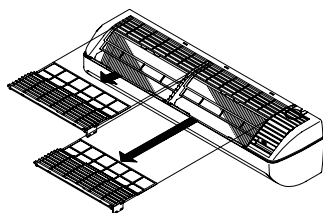
### Cleaning the Intake Filters

#### 1. Remove the intake filters.

- ① Place fingers in grids on the front of the intake filters and lift up.



- ② Hold the intake filters level and pull them out.



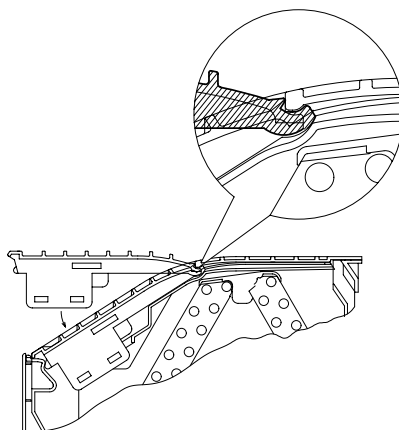
#### 2. Clean the intake filters.

Remove the dust from the intake filters by vacuuming or washing them. After washing, allow the intake filters to dry thoroughly in an area protected from sunlight.

- Dust can be cleaned from the intake filters either with a vacuum cleaner, or by washing the filters in a solution of mild detergent and warm water. If you wash the filters, be sure to allow them to dry thoroughly in a shady place before reinstalling.
- If dirt is allowed to accumulate on the intake filters, air flow will be reduced, lowering operating efficiency and increasing noise.
- During periods of normal use, the intake filters should be cleaned every five weeks.

#### 3. Install the intake filters.

Hang the edge of the intake filter on the body. Using this as a support point, push forward to secure as shown in the illustration.



### When using the optional Air Cleaning Filter

- Install the optional air cleaning filter set as instructed (installation instructions are furnished with the air cleaning filter set).
- When used for extended periods, the unit may accumulate dirt inside, reducing its performance. We recommend that the unit be inspected regularly, in addition to your own cleaning and care. For more information, consult authorized service personnel.
- When cleaning the unit's body, do not use water hotter than 40 °C, harsh abrasive cleansers, or volatile agents like benzene or thinner.
- Do not expose the unit body to liquid insecticides or hairsprays.
- When shutting down the unit for one month or more, first allow the fan mode to operate continuously for about one-half day to allow internal parts to dry thoroughly.

# TROUBLESHOOTING

Instructions relating to heating (\*) are applicable to “HEAT PUMP MODEL” and “HEAT RECOVERY MODEL”.



In the event of a malfunction (burning smell, etc.), immediately stop operation, turn off the electrical breaker, and consult authorized service personnel.

Merely turning off the unit's power switch will not completely disconnect the unit from the power source. Always be sure to turn off the electrical breaker to ensure that power is completely off.

Before requesting service, perform the following checks:

|                 | Symptom                                  | Problem                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | See Page |
|-----------------|------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| NORMAL FUNCTION | Doesn't operate immediately:             | <ul style="list-style-type: none"> <li>● If the unit is stopped and then immediately started again, the compressor will not operate for about 3 minutes, in order to prevent fuse blowouts.</li> <li>● Whenever the electrical breaker is turned off then on again, the protection circuit will operate for about 3 minutes, preventing unit operation during that period.</li> </ul>                                                                                                     | —        |
|                 | Noise is heard:                          | <ul style="list-style-type: none"> <li>● During operation and immediately after stopping the unit, the sound of water flowing in the air conditioner's piping may be heard. Also, noise may be particularly noticeable for about 2 to 3 minutes after starting operation (sound of coolant flowing).</li> <li>● During operation, a slight squeaking sound may be heard. This is the result of minute expansion and contraction of the front cover due to temperature changes.</li> </ul> | —        |
|                 |                                          | *● During Heating operation, a sizzling sound may be heard occasional. This sound is produced by the Automatic Defrosting operation.                                                                                                                                                                                                                                                                                                                                                      | 6        |
|                 | Smells:                                  | <ul style="list-style-type: none"> <li>● Some smell may be emitted from the indoor unit. This smell is the result of room smells (furniture, tobacco, etc.) which have been taken into the air conditioner.</li> </ul>                                                                                                                                                                                                                                                                    | —        |
|                 | Mist or steam are emitted:               | <ul style="list-style-type: none"> <li>● During Cooling or Dry operation, a thin mist may be seen emitted from the indoor unit. This results from the sudden Cooling of room air by the air emitted from the air conditioner, resulting in condensation and misting.</li> </ul>                                                                                                                                                                                                           | —        |
|                 |                                          | *● During Heating operation, the outdoor unit's fan may stop, and steam may be seen rising from the unit. This is due to Automatic Defrosting operation.                                                                                                                                                                                                                                                                                                                                  | 6        |
|                 | Airflow is weak or stops:                | *● When Heating operation is started, indoor unit's fan may stop, to allow internal parts to warm up.                                                                                                                                                                                                                                                                                                                                                                                     | —        |
|                 |                                          | *● During Heating operation, if the room temperature rises above the thermostat setting, the outdoor unit will stop, and the indoor unit's fan will stop. If you wish to warm the room further, set the thermostat for a higher setting.                                                                                                                                                                                                                                                  |          |
|                 |                                          | *● During Heating operation, the unit will temporarily stop operation (between 2 and 16 minutes) as the Automatic Defrosting mode operates. During Automatic Defrosting operation, the OPERATION indicator lamp will flash.                                                                                                                                                                                                                                                               | 6        |
|                 |                                          | ● The fan may operate at low speed during Dry operation or when the unit is monitoring the room's temperature.                                                                                                                                                                                                                                                                                                                                                                            | —        |
|                 |                                          | ● In the monitor AUTO operation, the fan will operate at low speed.                                                                                                                                                                                                                                                                                                                                                                                                                       | —        |
|                 | Water is produced from the outdoor unit: | *● During Heating operation, water may be produced from the outdoor unit due to Automatic Defrosting operation.                                                                                                                                                                                                                                                                                                                                                                           | 6        |

# TROUBLESHOOTING

Instructions relating to heating (\*) are applicable to “HEAT PUMP MODEL” and “HEAT RECOVERY MODEL”.

|                 | Symptom                                 | Items to check                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | See Page |
|-----------------|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| CHECK ONCE MORE | Doesn't operate at all:                 | <ul style="list-style-type: none"> <li>● Has there been a power failure?</li> <li>● Has a fuse blown out, or a circuit breaker been tripped?</li> <li>● Is the main power switch set to the OFF position?</li> </ul>                                                                                                                                                                                                                                                                                                                                   | —        |
|                 | Poor Cooling (or *Heating) performance: | <ul style="list-style-type: none"> <li>● Is the air filter dirty?</li> <li>● Are the air conditioner's intake grille or outlet port blocked?</li> <li>● Did you adjust the room temperature settings (thermostat) correctly?</li> <li>● Is there a window or door open?</li> <li>● In the case of Cooling operation, is a window allowing bright sunlight to enter? (Close the curtains.)</li> <li>● In the case of Cooling operation, are there heating apparatus and computers inside the room, or are there too many people in the room?</li> </ul> | —        |

If the problem persists after performing these checks, or if you notice burning smells, stop operation immediately, turn off the electrical breaker, and consult with authorized service personnel.

## OPERATING TIPS

Instructions relating to heating (\*) are applicable to “HEAT PUMP MODEL” and “HEAT RECOVERY MODEL”.

### Operation and Performance

#### \*Heating Performance

- This air conditioner operates on the heat-pump principle, absorbing heat from outdoor air and transferring that heat indoors. As a result, the operating performance is reduced as outdoor air temperature drops. If you feel that insufficient heating performance is being produced, we recommend you use this air conditioner in conjunction with another kind of heating appliance.
- Heat-pump air conditioners heat your entire room by recirculating air throughout the room, with the result that some time may be required after first starting the air conditioner until the room is heated.

#### \*Microcomputer-controlled Automatic Defrosting

When using the Heating mode under conditions of low outdoor air temperature high humidity, frost may form on the outdoor unit, resulting in reduced operating performance.

In order to prevent this kind of reduced performance, this unit is equipped with a Microcomputer-controlled Automatic Defrosting function. If frost forms, the air conditioner will temporarily stop, and the defrosting circuit will operate briefly (for about 2 to 16 minutes).

During Automatic Defrosting operation, the OPERATION indicator lamp (red) will flash.

#### Cooling/Heating Priority (HEAT PUMP MODEL only)

- If another indoor unit in the same refrigerant system is already operating in the cooling mode or dry mode, heating mode settings cannot be performed. (Operation in the cooling or dry mode will continue.)
- If another indoor unit in the same refrigerant system is already operating in the heating mode, cooling mode or dry mode settings cannot be performed. (Operation in the heating mode will continue.)

#### Oil Recovery Operation

Periodically, the oil recovery operation is performed in order to return compressor oil to the outdoor unit. Operation is stopped during this oil recovery operation. During oil recovery operation, the OPERATION indicator lamp will flash.

#### Low Ambient Cooling

When the outdoor temperature drops, the outdoor unit's fans may switch to Low Speed, or one of the fans may stop intermittently.

# OPERATING TIPS

Instructions relating to heating (\*) are applicable to “HEAT PUMP MODEL” and “HEAT RECOVERY MODEL”.

## Temperature and Humidity Range

|                     |                                        |       | Cooling/Dry Mode                                                                                                                                                                                         | *Heating Mode       |
|---------------------|----------------------------------------|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| Refrigerant         |                                        |       |                                                                                                                                                                                                          |                     |
| Outdoor temperature | COOLING ONLY MODEL                     | R22   | About 21 to 52 °C                                                                                                                                                                                        | —                   |
|                     |                                        | R407C | About -15 to 52 °C                                                                                                                                                                                       |                     |
|                     | HEAT PUMP MODEL<br>HEAT RECOVERY MODEL | R22   | About -15 to 52 °C                                                                                                                                                                                       | About -15 to 21 °C  |
|                     |                                        | R407C |                                                                                                                                                                                                          |                     |
| Indoor temperature  |                                        |       | About 18 to 32 °C                                                                                                                                                                                        | About 30 °C or less |
| Indoor humidity     |                                        |       | About 80 % or less<br>If the unit is used for long periods under high-humidity conditions, condensation may form on the surface of the indoor unit, and drip onto the floor or other objects underneath. | —                   |

- If the air conditioner is used under higher temperature conditioner than those listed, the built-in protection circuit may operate to prevent internal circuit damage. Also, during Cooling and Dry modes, if the unit is used under conditions of lower temperature than those listed above, the heat-exchanger may freeze, leading to water leakage and other damage.
- Do not use this unit for any purposes other than the Cooling, \*Heating, Dehumidifying, and air-circulation of rooms in ordinary dwellings.

# SPECIFICATIONS

| MODEL               |        | AW□7TF          | AW□9TF    | AW□12TF   | AW□14TF   | AW□18TF   | AW□24TF   | AW□30TF   |
|---------------------|--------|-----------------|-----------|-----------|-----------|-----------|-----------|-----------|
| POWER               |        | 220-240 V~50 Hz |           |           |           |           |           |           |
| COOLING CAPACITY    | [kW]   | 2.10-2.15       | 2.70-2.80 | 3.55-3.60 | 4.20-4.30 | 5.30-5.40 | 6.80-6.90 | 7.80-8.00 |
| HEATING CAPACITY    | [kW]   | 2.40-2.45       | 3.00-3.10 | 4.00-4.10 | 4.80-4.90 | 5.50-5.60 | 7.70-7.80 | 8.55-8.80 |
| DIMENSIONS & WEIGHT |        |                 |           |           |           |           |           |           |
|                     | HEIGHT | [mm]            | 270       |           |           |           |           |           |
|                     | WIDTH  | [mm]            | 1,150     |           |           |           |           |           |
|                     | DEPTH  | [mm]            | 285       |           |           |           |           |           |
|                     | WEIGHT | [kg]            | 16        |           |           |           |           |           |

- Acoustic Noise Information : The maximum sound pressure level is less than 70 dB (A) for both indoor unit and outdoor unit.  
According to IEC 704-1 and ISO 3744.