Self Cleaning decoration panel

Installation manual
Self Cleaning decoration panel

BYCQ140CGW1
10. TEST OPERATION ..................................................................10

1. SAFETY PRECAUTIONS

Please read these "SAFETY PRECAUTIONS" carefully before installing air conditioning equipment and be sure to install it correctly. After completing installation, conduct a trial operation to check for faults and explain to the customer how to operate the air conditioner and take care of it with the aid of the operation manual. Ask the customer to store the installation manual along with the operation manual for future reference.

This air conditioner comes under the term "appliances not accessible to the general public".

Meaning of WARNING and CAUTION notices.

⚠️ WARNING ⚠️ …… Failure to follow these instructions properly may result in personal injury or loss of life.

⚠️ CAUTION ⚠️ …… Failure to observe these instructions properly may result in property damage or personal injury, which may be serious depending on the circumstances.

⚠️ WARNING ⚠️

• Ask your dealer or qualified personnel to carry out installation work. Do not attempt to install the air conditioner yourself. Improper installation may result in water leakage, electric shocks or fire.

• Perform installation work in accordance with the instructions in this installation manual. Do not modify the product. Improper installation may result in water leakage, electric shocks or fire.

• Be sure to use only the specified accessories and parts for installation work. Failure to use the specified parts may result in the unit falling, water leakage, electric shocks or fire.

• Make sure that specified wires are used and that there is no strain on the terminal connections or wires. Improper connections or securing of wires may result in abnormal heat radiation or fire.

• Be sure to switch off the unit before touching any electrical parts.

• Arrange the lead wires of the provided harness so that the EL. COMPO. BOX lid of the indoor unit will not rise, and attach the lid securely. Heat radiation, electric shocks, or fire may result if the EL. COMPO. BOX lid is not attached properly.

• Tear up and dispose of the plastic bag. Children playing with the plastic bag may be suffocated.

Air conditioning equipment should be used based on the installation manual. Do not modify the product. Improper installation may result in water leakage, electric shocks, or fire. Always wait for at least 5 minutes before turning the product power off. Otherwise, water leakage and malfunctions may result.

• Do not install the air conditioner in the following locations:
  1. Where there is a high concentration of mineral oil spray or vapour (e.g. a kitchen).
  2. Where there is corrosive gas, such as sulphurous acid gas, is produced.
  3. Near machinery emitting electromagnetic radiation.
  4. Where flammable gas may leak, where there is carbon fibre or ignitable dust suspensions in the air, or where volatile flammables such as paint thinner or gasoline are handled.

[Instructions peculiar to this product]

Do not install the product in the following places.

Places with oily smoke: Restaurants, factories, etc.
Places with excessive cigarette smoke: Smoking room, etc.
Places with excessive moisture or steam: Restaurants, factories, etc.

The air conditioner is not intended for use in a potentially explosive atmosphere.

Note

• Have the customer actually operate the air conditioner while referring to the operation manual and explain the right operation of the air conditioner with useful tips given.

• Refer to the operation manual along with the installation manual provided with the indoor unit.

• Use the BRC1E51A7 remote controller.

2. ACCESSORY

Check that the following accessories provided with the air conditioner are correct in number. See the following illustration, which shows where the accessories are kept.

A set of accessories
The accessories are
on the backside of the
protective corrugated
cardboard under
the suction grille.

Suction grille
Backside of the protective
corrugated cardboard
Pay the utmost attention to the following items when conducting installation work, and recheck the items on completion of the work.

### a. Test items on completion of work

<table>
<thead>
<tr>
<th>Test Items</th>
<th>In case of failure</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the air conditioner free of wiring and connection mistakes or omissions?</td>
<td>Operation failure and wire burnout</td>
<td></td>
</tr>
<tr>
<td>Are you sure that there is no space between the ceiling and ceiling material?</td>
<td>Water leakage</td>
<td></td>
</tr>
<tr>
<td>Are the fixing knobs (in two points) of the dust box secured tightly?</td>
<td>Vibration, noise, and dust collection failure</td>
<td></td>
</tr>
<tr>
<td>Are the fixing knobs (in five points) of the air filter secured tightly?</td>
<td>Vibration, noise, and dust collection failure</td>
<td></td>
</tr>
<tr>
<td>Is the fall prevention cord for the dust box and grille hooked to the mounting bracket?</td>
<td>Fall</td>
<td></td>
</tr>
<tr>
<td>Did you attach the EL. COMPO. BOX lid, dust box, flexible hose, S-shaped pipe, suction grille, and decoration corner covers?</td>
<td>Noise and dust collection failure</td>
<td></td>
</tr>
</tbody>
</table>

* Be sure to recheck the items provided in the section “SAFETY PRECAUTIONS”.

### b. Test items before delivery

<table>
<thead>
<tr>
<th>Test Items</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Was the test operation of the air conditioner finished?</td>
<td></td>
</tr>
<tr>
<td>Did you explain the operation method of the air conditioner to the customer while showing the customer the operation manual? *</td>
<td></td>
</tr>
<tr>
<td>Did you make mode settings for filter auto cleaning (automatic control operation settings or timer operation settings with an operation time zone specified) and provide information on the set mode operation of the air conditioner to the customer?</td>
<td></td>
</tr>
<tr>
<td>Did you deliver the operation manual to the customer? (Be sure to hand the customer the operation manual as well as the installation manual.)</td>
<td></td>
</tr>
<tr>
<td>Did you hand the customer the connecting pipe and attachment and ask the customer to keep them?</td>
<td></td>
</tr>
</tbody>
</table>

* Point of operation explanation

In addition to the general usage of the air conditioner, it is necessary to explain the descriptions of the WARNING and CAUTION marked items in the operation manual and have the customer read the descriptions carefully, because these items indicate information that, if not heeded, is likely to result in loss of life, serious injury, or property damage.

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### 3. INSTALLATION SITE

This product offers selectable air outlet directions. A closure kit (an optional accessory) is required to achieve three-way flow patterns. Two-way flow patterns are not available to this product.

#### 3-1 Select the installation site that meets the following conditions with the consent of the customer.

- The surface of the ceiling is not remarkably inclined.
- Installation and service workspace is secured (see the following illustrations).
- The panel indicators are seen with ease.
- The indoor and outdoor units, power cord, transmission wiring, and remote controller wiring are at least 1m away from TV or radio sets.

(The above is for the prevention of TV and radio interference. Depending on the incoming signal strength, a distance of 1 meter may not be sufficient to eliminate noise.)

#### 3-2 Required installation space.

Install the indoor unit according to the installation manual and the following illustrations.

- A space is required for dust collection with a vacuum cleaner used.
- The asterisk-marked space will be at least 700mm with the air outlet closed.
- Do not block the exhaust opening or periphery with insulation material. Otherwise, a malfunction may result.

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**Note**
3-3 Mounting directions of suction grille.
Select one of the following mounting directions of the suction grille on the panel.

4. PREPARATIONS FOR PANEL

Note
- Perform all the required work in "4. PREPARATIONS FOR PANEL" with the panel kept in the packing material (on the bottom side).
- Do not put the panel downward or upright or leave the panel on protruding parts. Otherwise, scratch damage to the surface of the panel may result.

4-1 Removal of suction grille from panel, protective corrugated cardboard, and set of accessories.
(1) Press the knobs of the suction grille and lift up the knobs.

(2) Open the suction grille to an angle of approximately 45° and remove the suction grille from the panel.

(3) Take out the protective corrugated cardboard.
Take out the protective corrugated cardboard (on top of the panel) together with the accessories attached to the backside of the protective corrugated cardboard.

4-2 Removal of decoration corner covers.
(1) Raise and remove the decoration corner cover (with the display) in the direction of the arrow.

Note
- Do not impose force on the swing flap, brush unit, or air filter when handling the panel.

4-3 Removal of dust box.
Fixing knob of dust box and clasp
(1) Turn the two fixing knobs of the dust box.

5-1 Attaching spacer (accessory (1)).

(1) Remove the bypass hole closure material, and peel off the seal and holding tape.

(2) Peel off the release paper of the double-stick tape on the backside of the spacer (accessory (1)).

(3) Attach the spacer (accessory (1)) on the air bypass hole. Check that the air bypass hole is not blocked after the spacer is attached.

5-2 Attaching harness (accessory (4)).

(1) Remove the EL. COMPO. BOX lid from the indoor unit.

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5. PREPARATIONS FOR INDOOR UNIT

--- WARNING ---

Check that the indoor and outdoor units are turned power off before conducting wiring work. Otherwise, an electric shock may be received.

--- CAUTION ---

• Conduct the following work after installing the indoor unit.
• Install the indoor unit according to the installation manual provided with the indoor unit.
(2) Connect the harness (accessory (4)) to the connectors (X35A and X70A) and the three points of the harness on the unit side.

Note
Make sure that the connectors are securely connected, or otherwise the swing flap, brush unit, or air filter will not work.

5-3 Attaching EL. COMPO. BOX lid.
Attach the EL. COMPO. BOX lid in the order opposite to the procedure in 5-2 (1).
Note
Make sure that the wires or glass tube will not be caught by the EL. COMPO. BOX lid.

— WARNING —
Arrange the electric wires neatly and attach the EL. COMPO. BOX lid securely.
The electric wires being caught or the rising of the EL. COMPO. BOX lid may result in an electric shock or fire.

6. ATTACHING PANEL TO INDOOR UNIT
Install the indoor unit by referring to the installation manual provided with the indoor unit.
Note
Do not impose force on the swing flap, brush unit, or air filter when taking out the panel from the packing material (on the bottom side).

6-1 Checks before attaching panel.
• Check the directions of the indoor unit and the engraved marks on the panel as shown below.
  The piping block to the PIPING SIDE and the drain socket to the DRAIN SIDE.
• Stand the temporary latching bracket upright.
• Draw out the lead wires (on the panel side) from the opening.

6-2 Attaching panel.
(1) Tentatively put the two temporary latching brackets of the suction port of the panel (on the internal circumference side) to the hooks of the indoor unit.
Note
Leave your hands after confirming through the check window that the temporary latching brackets are engaged with the hooks.
(2) Draw out from the opening the harness attached in “5. PREPARATIONS FOR INDOOR UNIT”. Furthermore, pull out the lead wires disconnected from the corner decoration cover (with the display) in “4. PREPARATIONS FOR PANEL” from the corner hole carefully so that the lead wires will not be caught by the mounting bracket.
(3) Put the mounting brackets (in four points) on the corners of the panel to the hooks of the circumference of the indoor unit. (Hook the mounting bracket engraved with the PIPING SIDE first, followed by the mounting bracket on the opposite angle side.) At that time, pay attention that the harness and lead wires (on the panel side) will not be caught between the panel and indoor unit.

Note
Leave your hands after confirming that the mounting brackets are engaged with the hooks.
(4) Tighten the four hexagon head screws right under the mounting bracket for approximately 5mm. (The panel will move upward.)
(5) Turn the panel in the directions of the arrows so that the opening on the ceiling will be perfectly covered by the panel.
(6) Furthermore, tighten the screw (4) until the distance from the lower part of the hook of the indoor unit to the lower part of the panel becomes 107 to 112mm.

Note
Make sure that the wires or glass tube will not be caught by the EL. COMPO. BOX lid.

6-2 (1)
Note

- Tighten the screws securely, or otherwise a defect as shown below may result.
- Readjust the height of the indoor unit if there is a space between the ceiling and panel with the screws tightened securely.

Air leakage
Air leakage from the ceiling side.
Drew condensation or dripping
Make sure that there is no space.

6-3 Checking panel.

(1) Draw the harness and lead wires (on the panel side).

(2) Connect the connector of the lead wires and move the glass tube to cover the connector part.

(3) Tighten and secure both ends of the glass tube with the clamps on the glass tube together with provided clamps (accessories (5)). Cut the redundant portions of the clamps from their roots after the both ends are secured.

(4) Return the connected lead wires to the space between the indoor unit and panel.

Note

Accommodate the lead wires carefully so that the lead wires will not come in contact with the air filter.

6-4 Attaching dust box.

(1) Hook the fall prevention cord for the dust box to the panel clasp as shown in the illustration.

(2) Attach the dust box in the order opposite to the procedure in 4-3 under “4. PREPARATIONS FOR PANEL”.

Note

Make sure that the fall prevention cord is not caught by the exhaust opening on the dust box when attaching the dust box. Otherwise, the dust box may not function normally.
(3) Turn the fixing knobs (in two points) of the dust box and secure the dust box.

6-5 Mounting S-shaped pipe (accessory (3)).
Mount the dust box side (engraved with A) before mounting the brush side (engraved with B).
(Mount them so that the engraved characters will be in conformity.)

Make sure that the engraved characters are in conformity with each other.

7-2 Hook (A).
(1) Set the suction grille to an angle of approximately 45° and put the hooks (in three points) onto the panel.

As shown in the illustration, hook the fall prevention cords for the suction grille to the corner clasps (on two corners).

(3) Connect the flexible hose (accessory (2)) onto the panel side. (The flexible hose (accessory (2)) has no directionality constraint.)

Flexible hose junction on the panel side

Fit the claws into the hooks (in two points) securely.

Note
Check that the claws are engaged securely. Otherwise, a dust collection failure may result.

7. ATTACHING SUCTION GRILLE AND DECORATION CORNER COVERS
The suction grille can be rotated and attached in two directions, either one of which is selectable.
If a number of units are installed, adjust the directions of the suction grilles if necessary. Make directional changes as well at the request of the customer.

7-1 Attaching suction grille.
Select either the hook (A) or (B), and hook the claws of the suction grille.
Note
The suction grille may be damaged if the wrong hooking side is selected.

Note
Check that the claws are engaged securely. Otherwise, a dust collection failure may result.
(4) Press fit the flexible hose connected in (3) into the panel. (Pay attention so that the hose will not be caught by the suction grille closed.)

**Note**

Be sure not to break the flexible hose when press fitting the flexible hose.

(5) Connect the opposite end of the flexible hose connected in (3) onto the suction grille side.

* Rotate the flexible hose joint on the suction grille side according to the mounting direction of the suction grille as shown in the illustration.

**Note**

Check that the claws are engaged securely. Otherwise, a dust collection failure may result.

(6) Push up the suction grille slowly first, and while pressing the two knobs, finally fit the grille into the panel securely.

**Note**

The suction grille can catch the fall prevention cords while the suction grille is closed. Check that the fall prevention cords do not protrude from the suction grille before closing the suction grille.

7-3 Hook (B).

(1) Set the suction grille to an angle of approximately 45° and put the hooks (in three points) onto the panel.

(2) As shown in the illustration, hook the fall prevention cords for the suction grille to the corner clasps (on two corners).

(3) Connect the flexible hose (accessory (2)) onto the panel side. (The flexible hose (accessory (2)) has no directionality constraint.)

**Note**

Check that the claws are engaged securely. Otherwise, a dust collection failure may result.
(4) Press fit the flexible hose connected in (3) into the panel.
Pay attention so that the hose will not be caught by the suction grille closed.

(5) Connect the opposite end of the flexible hose connected in (3) onto the suction grille side.
* Rotate the flexible hose joint on the suction grille side according to the mounting direction of the suction grille as shown in the illustration.

(6) Push up the suction grille slowly first, and while pressing the two knobs, finally fit the grille into the panel securely.

7-4 Attaching decoration corner covers.
(1) Connect the decoration corner cover (with the display) securely to the PCB in the order opposite to the procedure in “4. PREPARATIONS FOR PANEL”.

(2) Attach the decoration corner cover (with the display) to the corner with the DRAIN SIDE engraved mark. Push the connected lead wires through the corner hole onto the backside of the ceiling.

(3) Hook each of the cords of the remaining decoration corner covers (i.e., three covers) onto the corresponding pin on the panel.

(4) Attach the decoration corner covers (i.e., the three covers) to the panel.
8. OPERATION MODE SETTINGS

Any one of the following operation modes can be selected for the filter auto cleaning of the self-clean panel.

<table>
<thead>
<tr>
<th>Operation mode</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Scheduled timer operation</td>
<td>Performs filter auto cleaning during the designated period selected from eight periods.</td>
</tr>
<tr>
<td>(2) 00:00-to-03:00 operation</td>
<td>Performs filter auto cleaning during the factory-set period of time (00:00 to 03:00).</td>
</tr>
<tr>
<td>(3) Auto control operation</td>
<td>Performs filter auto cleaning according to the control reference.</td>
</tr>
</tbody>
</table>

In consultation with the customer, set the desired operation mode by referring to the instructions on Filter Auto Cleaning and Filter Auto cleaning settings in the operation manual for the Self Cleaning decoration panel.

At the time of delivery, refer to the contents of descriptions (1) through (3) in the above table and explain the customer when filter auto cleaning will start.

9. FIELD SETTINGS

Make settings in consultation with the customer according to the installation and usage conditions of the air conditioner. The following three settings are possible.

9-1 Dust quantity settings.

Make settings according to the quantity of dust in the room.
- Standard quantity of dust (General offices)
- Large quantity of dust (Stores dealing in clothing)

9-2 Panel indicator (green) On/Off.

The panel indicator (green) can display the following operating conditions. Make indicator settings according to the request of the customer.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Operating conditions</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green</td>
<td>Air-conditioning operation</td>
<td>The indicator is turned off before shipping.</td>
</tr>
<tr>
<td>Flashing</td>
<td>Filter auto cleaning</td>
<td></td>
</tr>
</tbody>
</table>

The red lamp to inform the customer of the time of dust collection will not be turned off.

Make field settings according to the installation manual of the remote controller. (Settings in bold cells are made before shipping.)

<table>
<thead>
<tr>
<th>Setting item</th>
<th>Setting No.</th>
<th>FIRST CODE NO.</th>
<th>SECOND CODE NO.</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dust quantity settings</td>
<td>14 (24)</td>
<td>(9)</td>
<td>01</td>
<td>02</td>
</tr>
<tr>
<td>Panel indicator (green) on/off</td>
<td>14 (24)</td>
<td>(4)</td>
<td>On while in air-conditioning operation and filter cleaning operation.</td>
<td>Possible to turn on while in filter cleaning operation only.</td>
</tr>
</tbody>
</table>

10. TEST OPERATION

Perform the test operation of the Self Cleaning decoration panel after the test operation of the indoor unit is finished.

The test operation of the Self Cleaning decoration panel is not possible while the indoor unit is in operation.

Note

Perform the test operation of the product after referring to "a. Test items on completion of work".

10-1 Check that the EL. COMPO. BOX lids of the indoor unit, outdoor unit, and self-clean panel, respectively, are closed.

10-2 Turn the indoor unit power on.

The panel will go into initialization operation after the power is turned on.

10-3 Conduct the test operation of the panel two minutes after the power is turned on.

Confirm the cleaning operation of the filter with the remote controller.

Test operation method with remote controller

1. Stop the operation of the panel if the panel is in air-conditioning operation.
2. Continue pressing the Cancel button at least 4 seconds while the backlight is lit. The local setting menu will appear.
3. Select "Filter auto clean test" from the local setting menu, and press the Menu/Enter button.
4. "Auto" will appear on the basic screen. The display will disappear when the test operation is finished. The required test operation time is approximately 10 minutes (in the case of setting the standard quantity of dust). The display will be set to dust quantity and will not be turned off.

Backlight for LCD

Press any button and the backlight will be lit for approximately 30 seconds. Perform the operation of buttons while the backlight is lit (except the On/Off button).

Test items on test operation

<table>
<thead>
<tr>
<th>Test items</th>
<th>Remedy</th>
<th>Check result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the filter rotating?</td>
<td>Check the connector connections.</td>
<td></td>
</tr>
<tr>
<td>Are the flaps fixed horizontally?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is &quot;Auto&quot; displayed on the screen of the remote controller?</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>

* The remote controller will display "AH" if the self-clean panel has an error.

Note

After the test operation of the product is finished, refer to "b. Test items before delivery" in the installation manual.