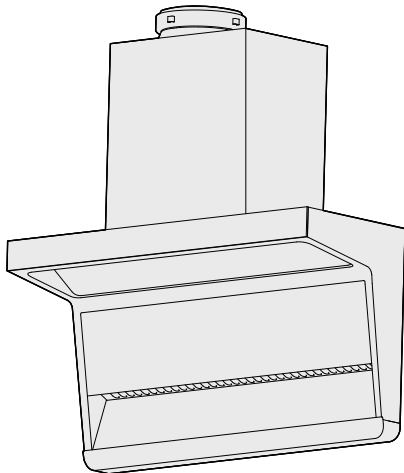


Operation/Installation Instructions

Household use Range Hood

Model No. FV-KTB2SD1HK



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Thank you for choosing Panasonic products.

- Please read Operation/Installation Instructions carefully before installing, operating and maintaining Panasonic products.

Especially, pay attention to "**Safety precautions**" (pages 2 ~ 4). Failure to follow the instructions in this manual may result in personal injury or property damage.


- After installation, please explain to the user how to operate and maintain Panasonic products, and give this manual to the customer for safekeeping.
- Please keep the manual properly for future reference. (Kept for future use)
- This unit contains reusable materials, so please assist in proper disposal or recycling when discarding them to protect the environment.
- The right of final interpretation of this manual belongs to Panasonic Corporation.
- The shapes and colors of the illustrations in this manual are subject to actual products.


Safety precautions

Please make sure to follow these instructions !


To avoid harm to you and others, be sure to observe the following safety precautions herein, and refer to the meaning of various signs below.


■ The following two results may occur if such signs are ignored or misunderstood.

 **WARNING** Indicates a potential hazard such as death or serious injury may occur if not avoided.

 **CAUTION** Indicates a potential hazard such as minor or moderate injury may occur if not avoided.

■ The symbols are classified and explained as follows.

 This symbol indicates the "prohibited" content that it is not allowed.

 This symbol indicates the "mandatory" content that it must be implemented.



WARNING



- **Do not bake this product directly on the stove.**
(Accessible parts may become hot when used with cooking appliances.)
- **Do not use this product in humid places.**
(So as not to cause fires or malfunction.)
- **Do not touch the power plug with wet hands.**
(So as not to cause electric shocks.)
- **Do not insert sharp metal into any gaps in the unit.**
(So as not to touch the inside of the unit and cause electric shocks.)
- **Do not install, remove, disassemble, modify or reinstall this product by yourself.**
(So as not to cause malfunctions, fires, electric shocks or other accidents.)
- **Do not spray water or detergent directly on the motor and plug.**
(So as not to cause electric shocks.)
- **Do not use steam cleaner to clean this product.**
(So as not to cause malfunctions or electric shocks.)
- **Do not use this product on the gas range when gas leakage may occur.**
(So as not to cause gas explosion.)
- **Do not install this product on the wall of flammable materials (such as wooden wall, etc.).**
(So as not to cause fires.)
- **Do not install it in a humid place.**
(So as not to cause electric shocks.)
- **The air must not be discharged into a flue that is used for exhausting fumes from appliances burning gas or other fuels.**
(So as not to cause fires.)

WARNING



- **Be sure to use a 10 A, 220 V AC power socket separately.**
(So as not to cause fires.)
- **Be sure to remove the power plug before cleaning the product.**
(So as not to cause electric shocks.)
- **There is a fire risk if cleaning is not carried out in accordance with the instructions, the details concerning the method and frequency of cleaning, please see the instructions.**
(If the range hood is not cleaned and maintained according to the instructions specified in the manual, it may catch fire.)
- **When inserting or removing the power, hold the power plug itself instead of pulling the supply cord as you like.**
(So as not to cause fires or electric shocks.)
- **There shall be adequate ventilation of the room when the range hood is used at the same time as appliances burning gas or other fuels.**
(So as not to cause intoxication.)
- **Stop using this product immediately when oil catches fire during cooking.**
(So as not to cause fires.)
- **Stop using this product, and turn off the power switch or remove the power plug in case of any anomaly/malfunction.**
(So as not to cause fires or electric shocks.)
Examples of abnormal failures:
 - Abnormal noise or heat.
 - An unusual smell/smoke emitted.
 - Burning.
- **If the supply cord is damaged, it must be replaced by the manufacturer, its service agent similarly qualified persons.**
(So as not to cause electric shocks or hazard.)
- **This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.**
(So as not to cause burns, injuries or electric shocks.)
- **This product shall be installed by professionals, and it shall be installed firmly and horizontally.**
(So as not to cause injury due to falling of the product.)
- **Be careful when removing the unit to prevent it from dropping or falling accidentally.**
(So as not to cause injury due to falling of the product.)
- **It shall be grounded. Connect the power plug to a power socket with a grounding continuity terminal.**
(So as not to cause electric shocks in case of malfunction or leakage.)
- **Be sure to install this product on the wall, and make sure that the metal parts and mounting screws do not touch any metalwork in the wall, such as metal slats, cable slats and metal plates.**
(So as not to cause electric shocks.)

Safety precautions (continued)

Please make sure to follow these instructions !



CAUTION



- **Do not put any objects on this product.**
(So as not to cause a malfunction or injury.)

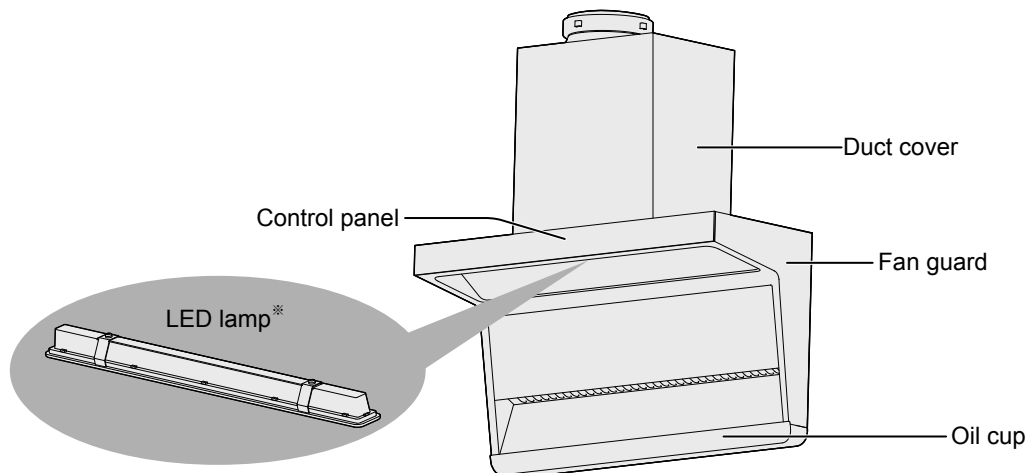


- **Wear gloves when cleaning.**
(So as not to cause hand injury by the edge of the product.)
- **If the interior needs cleaning, entrust a professional to do so.**
- **The minimum distance shall be at least 650 mm between the supporting surface for the cooking vessels on the hob and the lowest part of the product.**
(So as not to cause malfunctions or burns due to high temperature of the unit.)
- **The product shall be installed on a wall that is strong enough. If installation strength cannot be ensured, reinforcement measures are a must. The wall used to support the installation of this product shall be able to bear the weight 5 times of the product.**
(So as not to cause injury due to falling of the unit.)
- **Range hood is only intended to be installed over a hob with no more than four hob elements.**
(CAUTION: Accessible parts may become hot when used with cooking appliances.)

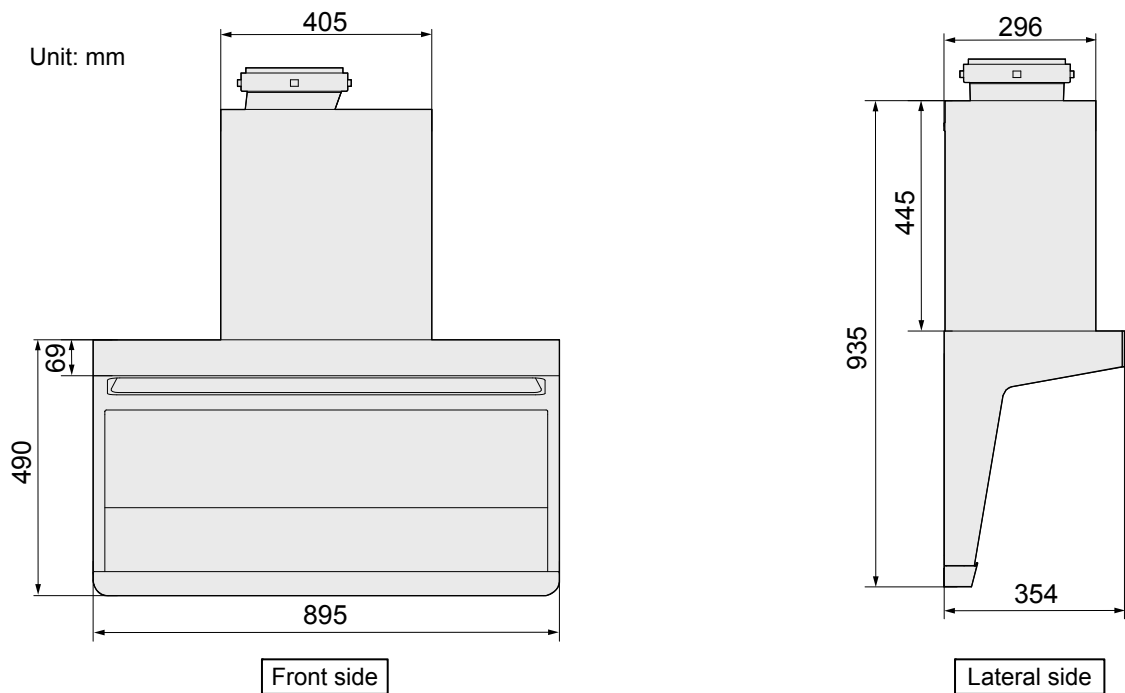
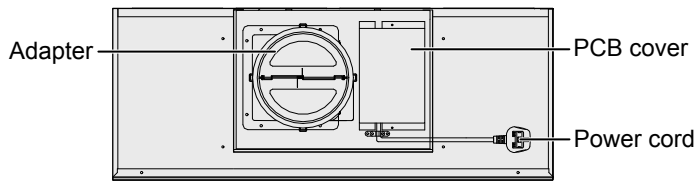
Precautions for use

- Do not use gasoline, benzene, thinner or any other similar chemicals for cleaning.
- When using a gas range, it is suggested turning on this product.
- When using with cooking utensils at the same time, the accessible parts may become hot.
- When using steam to clean the range hood, the steam may hit the electronic components, causing damage to the components or leading to a short circuit.

Part names and sizes

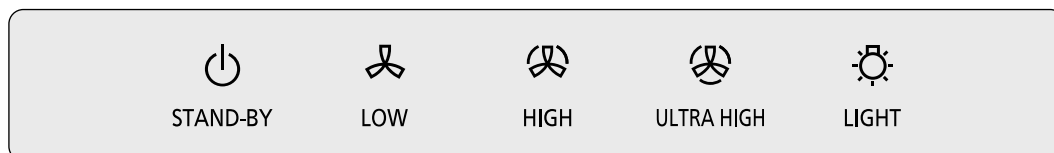


※Dimensions (L × W) : 300.8 mm × 24.2 mm
 Max. input power : 3.0 W
 Voltage input : DC 12 V









How to use

Control Panel







Insert the plug into the power socket. With a beep, all the buttons on the control panel light up and last for about 1 seconds, and then go out.

• Power on/off



Touch the  button, all the buttons light up with a beep (the  button turns white, the fan speed buttons   turn white lowlight, and the LIGHT button  turns white lowlight) and the unit enters power-on state. Touch the  button in power-on state, all the buttons go out with a beep, and the unit enters the power-off state.

• Fan speed setting

In power-on state, touch the    button to set the fan speed with a beep. (the  button turns white, the fan speed button being touched turns white highlight, and the fan speed buttons not being touched turns white lowlight). The fan speed can be switched between "LOW", "HIGH" and "ULTRA HIGH" by touching fan speed buttons.

When touching the fan speed button showing white highlight in the working state of the fan, the fan will stop running with a beep.



• Ultra high speed

In standby state, touch the  button, the backlight of the button flashes with a beep. After the fan has been running for 3 minutes in ULTRA HIGH mode, the fan enters a running state of HIGH mode with a beep; touch the  button again within 3 minutes, the fan stops working with a beep.

• Light on/off

Touch the  button in power-on/off state, the LIGHT turns on/off with a beep.


• Latency switch function

Touch the  button when the fan is on, the backlight of the  button flashes with a beep, and the range hood starts to perform the "Power-off latency" function. The fan will stop running automatically after running at low speed for 3 minutes.

And the LIGHT turns off at the same time.

→ If you change the fan speed during the latency, the fan will work at the speed you set, and the current latency function will be canceled.

In this case, the LIGHT remains unchanged.

→ If you touch the  button during the latency, the current latency function will be canceled and the unit will enter the power-off state.

In this case, the LIGHT remains unchanged.

Cleaning and maintenance

Daily cleaning

To achieve the best operating performance and longer service life, this product must be cleaned and maintained frequently. Turn off the power before cleaning and maintenance. It is suggested that all surfaces be cleaned with a damp cloth (neutral detergent is applicable) to keep this product clean and tidy.

Tips

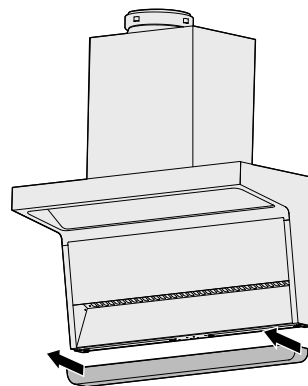
- Usually just wipe the surface and edges of the range hood.
- It is suggested that it be wiped after each use.
- Do not use abrasive powder, metal brushes, nylon brushes (containing abrasives) or scouring pads, etc. to clean or scrub the machine (including the oil cup), so as not to damage the coating on the product surface.
- Do not use strong alkaline detergent to clean the machine (including the oil cup).

Oil cup cleaning

- ① Remove the oil cup with reference to the figure on the right (the direction to remove oil cup).
- ② Pour out the oil collected, and soak the oil cup in warm water with diluted neutral detergent at a temperature of 40 °C to 50 °C , wait for 5 to 10 minutes and clean the oil cup.
- ③ Put back the oil cup in place (refer to removal of the oil cup).

Tips

- Check the oil cup regularly. It is suggested that the oil cup be cleaned when the oil collected reaches about 80% of capacity of the oil cup.
- Grasp the oil cup with both hands when removing the oil cup, otherwise oil in the oil cup may shake and overflow.



The direction to remove oil cup

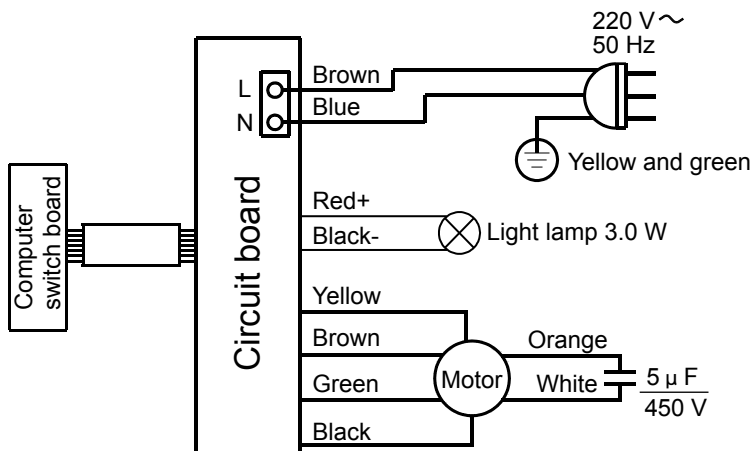
Troubleshooting of common faults



In case that any fault occurs, check it according to the table below. If the problem still exists, contact the Customer Consulting Service Center.

Symptom	Possible causes	Solutions
The LED lamp is not lit and the motor does not work	1.The power plug is not inserted into the power socket. 2.The product wire fails.	1.Insert it into the power socket. 2.Contact the Customer Consulting Service Center.
The motor does not work	The motor or capacitor fails.	Contact the Customer Consulting Service Center.
The LED lamp is not lit	1.The LED lamp wire or connection fails. 2.The LED lamp circuit board fails. 3.The LED lamp fails.	Contact the Customer Consulting Service Center.
Abnormal noise	The smoke duct is loose or excessively bent, causing poor air flow.	Contact the Customer Consulting Service Center for reinstalling of the smoke duct.
Oil fume absorption is not effective	1.The smoke duct is loose or excessively bent, causing poor air flow. 2.The range hood is not set at the highest fan speed. 3.Oil fume is blown off or blown away due to high air volume in the kitchen. 4.The distance between the cooking stove and the range hood is too far.	1.Contact the Customer Consulting Service Center for reinstalling of the smoke duct. 2.Set to the highest fan speed. 3.Keep the windows or door closed in a proper way. 4.Reinstall the range hood with reduced distance from cooking stove.
Oil leakage	1.The installation position of range hood is inclined, which makes it impossible for the oil to flow into the oil cup. 2.The oil cup is full.	1.Contact the Customer Consulting Service Center for reinstalling of it. 2.Pour out the oil and clean the oil cup.
An abnormal sound is heard when the fan rotor works	The fan rotor is loose, and the fan rotor cap is not tightened.	Contact the Customer Consulting Service Center.
Control panel do not work properly	The control switch fails.	Contact the Customer Consulting Service Center.

Electrical schematic diagram
















Specifications

Rated voltage	220 V ~
Rated frequency	50 Hz
Rated power input	298 W
Rated input power of main motor	295 W
Max. input power of LED lamp	3.0 W
Number of fans	Single fan
Air volume	18 m ³ /min
Air pressure	310 Pa
Max. static pressure	355 Pa
Airborne acoustical noise	69 dB (A)
Air volume at ultra high speed	20 m ³ /min
Air pressure at ultra high speed	330 Pa
Max. static pressure at ultra high speed	370 Pa
Noise at ultra high speed	72 dB (A)
Net weight	28.5 kg
Outer diameter of smoke duct	Φ 185 mm
Dimension L × W × H	895 mm × 354 mm × 935 mm

- The data of air volume and electrical properties are values at a static pressure of 0 Pa.
- Noise: A-weighted sound power level with a tolerance of +3 dB.
- Air volume, air pressure, max. static pressure, air volume at ultra high speed, air pressure at ultra high speed, and max. static pressure at ultra high speed: the allowable difference between the actual measured value and the indicated value shall not exceed -10% of the indicated value.
- Net weight: the weight of the body plus the weight of oil cup and adapter.
- The parameters above are subject to change without notice.

List of accessories

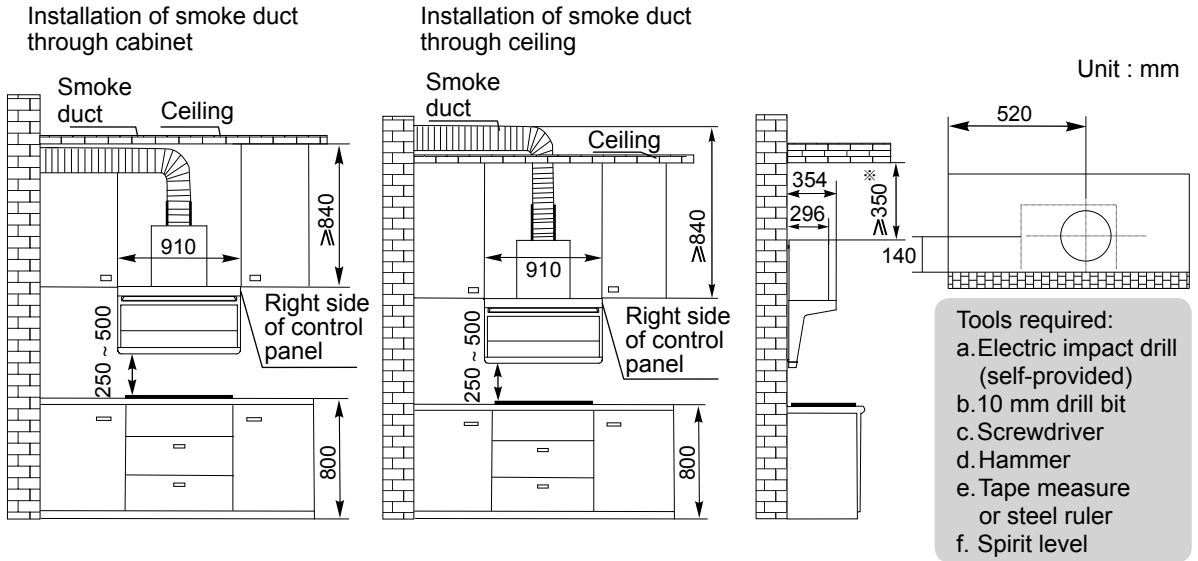
Check the following attachments after unpacking. If they are not complete, please contact the Customer Consulting Service Center

No.	Appearance	Name and usage	Quantity
①		Appliance hang board (For hanging the body)	1
②		Plastic expansion tube	5
③		Screw (Φ5 × 53)	4
④		Screw (ST5 × 19)	1
⑤		Oil cup	1
⑥		Stop block	1
⑦		Operation/Installation Instructions	1
⑧		Smoke duct (With aluminum foil tape)	1
⑨		Duct adapter	1
⑩		Short duct adapter (Fixed on smoke duct)	1
⑪		Adapter	1
⑫		Sealing pad (Fixed on appliance)	1
⑬		Adapter ring (Fixed on adapter)	1

Installation method

1. Checking before installation

Suggested installation of the range hood is as shown in the figure below:



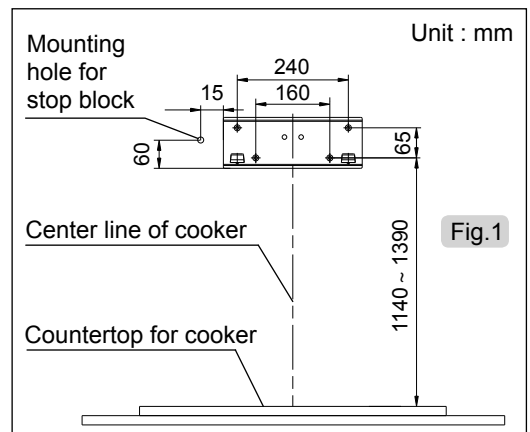
※The upper edge of the duct cover of the range hood shall be provided with a space of more than 350 mm to ensure that the smoke duct can pass smoothly.

Tips

- This product may have sharp edges. Do wear gloves when installing.
- The range hood shall be aligned with the center of cooking stove.
- Do not install it in the place exposed to direct sunlight.
- Ensure that the gas can be discharged to outside or common flue through smoke duct.
- If you need to remove the control panel, the right side of control panel should be left more than 25 mm space.

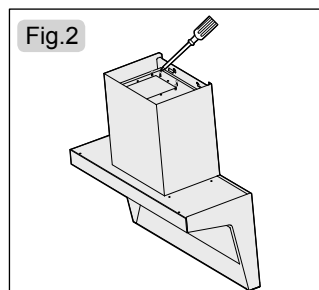
2. Installing the unit

- ① According to Fig.1 (Drilling diagram for installation), use an electric impact drill to make 5 holes with a diameter of 10 mm and a depth of 53 mm at the corresponding positions on the wall where the range hood is installed, embed the plastic expansion tubes, and use 4 screws ($\Phi 5 \times 53$) to fix appliance hang board to the wall.



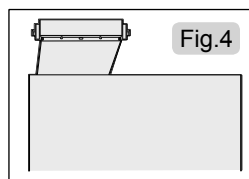
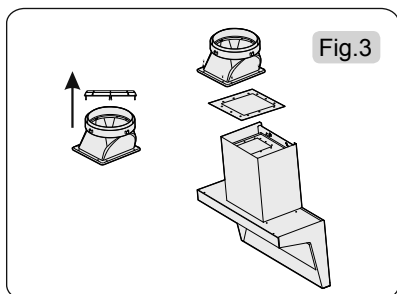
Installation method (continued)

- ② According to Fig.2, use a Phillips screwdriver to remove 8 self-tapping screws at the adapter and take out the sealing pad.

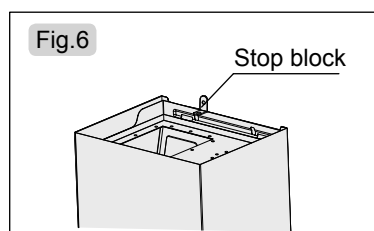
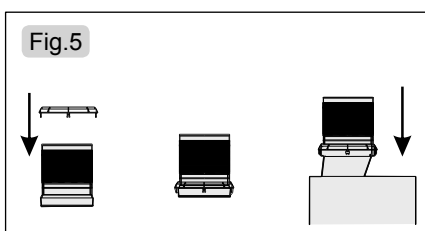


- ③ According to Fig.3, align with the screw holes and place the sealing pad and the adapter on the outlet in sequence after removing the adapter ring from the adapter. After aligning with the screw holes, use 8 self-tapping screws removed in step ② to fix the sealing pad and the adapter to the unit.

Note: 1. Be sure to remove the adapter ring. Otherwise, it is impossible to install the smoke duct.
2. The direction of adapter after installation shall be the same with that shown in Fig.4.

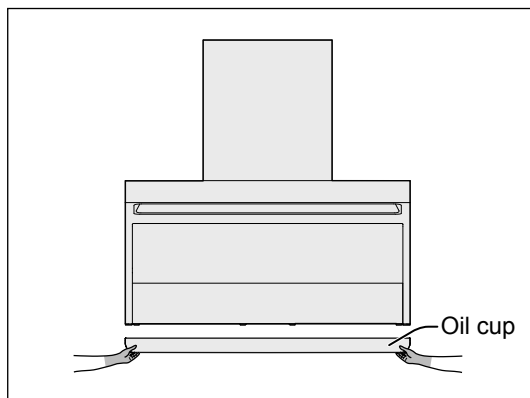


- ④ According to Fig.5, take out the smoke duct and the short duct adapter (both have been fixed with aluminum foil tape), and keep the smoke duct in a compressed state. Pass the adapter ring from top to bottom through the smoke duct and the short duct adapter in sequence to the limit for use, and secure the above components using the four clips of the adapter ring to interlock them with the outlet seat. Connect the power supply, start the motor, and check if the two metal pieces are turned up. Turn off the range hood, and make sure that the two metal pieces drop down naturally.
- ⑤ Securely attach the unit to the appliance hang board with the unit inclined 1° or 2° to the wall, so that the hooks of the appliance hang board are fully inserted, so that the hooks of the appliance hang board are fully inserted. After installation, make sure that the range hood is not shaking or detached, and try to ensure that it is in a horizontal state. Stretch the smoke duct, extend it into the wall opening or connect it to the common flue securely, and adjust the smoke duct to ensure that it is not bulging or compressed, and it bends freely. If the smoke duct is extended directly into the common flue, it shall not go too deep into the common flue, so as not to affect exhaust effect; if oil fume is exhausted directly to the outside, it is suggested that a shutter (available in hardware stores) be attached at the end of the outdoor smoke duct.
- ⑥ Insert the power plug into the socket securely. The power socket shall be a special one with a reliable grounding wire. Do not change the plug without permission.
- ⑦ As shown in Fig.6, use a screw (ST5 \times 19) to fix the stop block on the wall through a plastic expansion tube to prevent the range hood from falling off vertically in case of an external force.



3. Installing the oil cup

Install the oil cup at the bottom of the unit.



After installation, tear off the protective film from the duct cover.

Test operation

After installation, turn on the power, press each function button on the control panel, and check the following items:

- Do the fan blades rotate properly?
- Is there any abnormal vibration or noise?
- Is each function button on the control panel working properly?

