

TOTO

Wall-mounted thermostatic faucet (for use in bathroom)

TBV03427B
TBV03429B
TBV03431B



Install the product according to this Installation Manual so that the product fulfills its function. When the installation is over, fully explain how to use the single handle faucet to the customer.



1. Safety Precautions (Be sure to follow all precautions for safety sake.)





Please read these Safety Precautions before installation work in order to install the product properly.



- This manual employs various indications in order to install the product properly and to prevent harm to the customer and other people, as well as damage to their properties. The indications and meanings are as follows.




- The contents you must observe are classified into the following symbols; their meanings are explained.

 WARNING	This indication means that if the content in the column of this indication is ignored or handled wrongly, death or serious injury may occur.
 CAUTION	This indication means that if the content in the column of this indication is ignored or handled wrongly, injury or property damage may occur.

	Indicates things that you must not do as "Prohibited". The left figure indicates that "Disassembly is Prohibited".
	Indicates things that you must do without fail as "Mandatory". The left figure indicates to "Execute it without fail".

 WARNING	
	Do not connect the cold water pipe and the hot water pipe reversely. Even if you try to turn on the cold water, the hot water comes out and may scald you.
	Do not use the water hotter than 85 °C. If the water hotter than 85 °C is used, the water may scald you and the life of the faucet may shorten causing it to break and leak water that may wet household articles and cause damage to your property.
	Do not disassemble or remodel the product with other items than what are described in this manual. Otherwise, the water may scald or injure you and the product may break and leak water that may wet household articles and cause damage to your property.

 WARNING	
	Be sure to control the temperature so that water comes out at the temperature shown on the scale. Under some conditions of use, water may not come out at the temperature shown on the scale and may scald you.
	When ready to clean the filter, surely close the water shutoff valve or the main valve. Also, make sure that the left side of the main unit and hot water side mounting legs are not hot. High-temperature hot water may run and scald you and property may be damaged if water leaks.

 CAUTION	
	Do not subject the product to strong force or impact. Otherwise, the product may break and leak water that may wet household articles and cause damage to your property.
	If the product is used in a place where freezing is expected, wrap insulation material around the pipes. Otherwise, the parts may break and leak water that may wet household articles and cause damage to your property.

2. Specifications

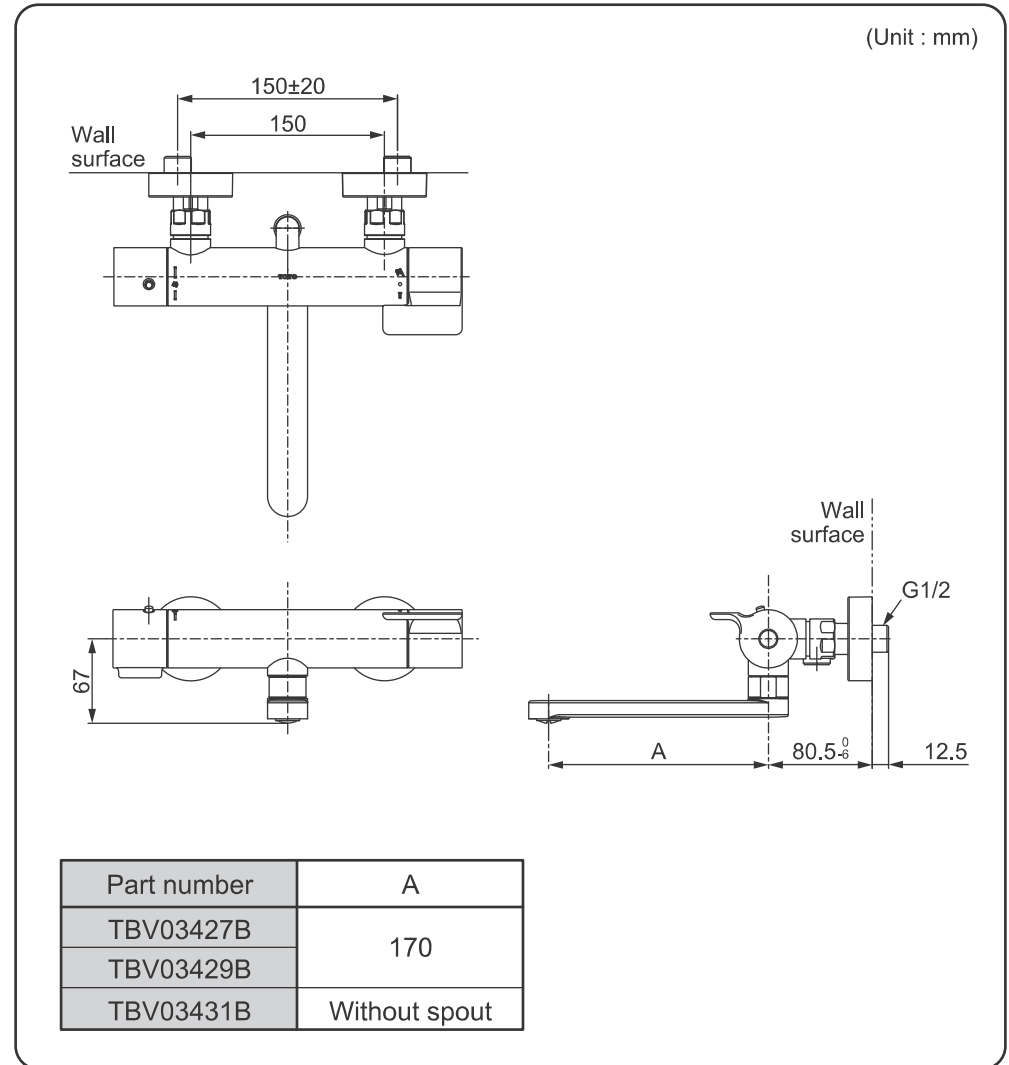
Cold / Hot water supply pressure	Minimum water pressure	0.05 MPa (Dynamic)
	Maximum water pressure	1.0 MPa (Static)
	Recommended water pressure	0.1-0.5 MPa (Dynamic)
Temperature water supply	4-90°C. Recommended hot water temperature 60°C	
Environmental temperature used	1-40°C	
Application	For bidet in general house	

3. Before anchoring the product

- In order to prevent scalding due to erroneous operation, be sure to set the cold water supply pressure higher than the hot water supply pressure or set them to the same pressure. Even when applying pressure to the hot water side, be sure to set the hot water supply pressure side lower than the cold water side.
- In order to prevent scalding, set the supplied hot water temperature of the hot water supplier to a temperature not exceeding 60 °C. In order to assure a comfortable discharged water temperature, we recommend you set it between 50 - 60 °C.
- Connect the hot-water supply pipe at a minimum length from the water heater in order to reduce resistance and be sure to wrap the water supply pipe with thermal insulation.
- Since the flow is examined before packaging the product, some water may remain in the product, but nothing is wrong with the product.

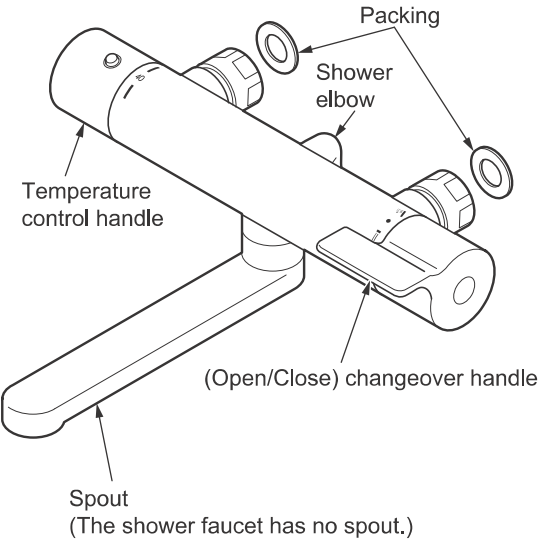
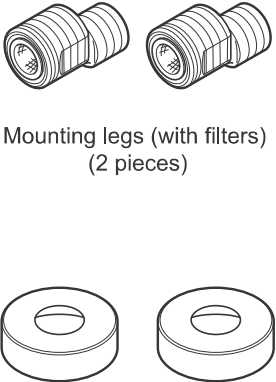


4. Completion Drawing

*There are slight differences in shape between drawings and some parts according to the part number.



5. Identification of Parts

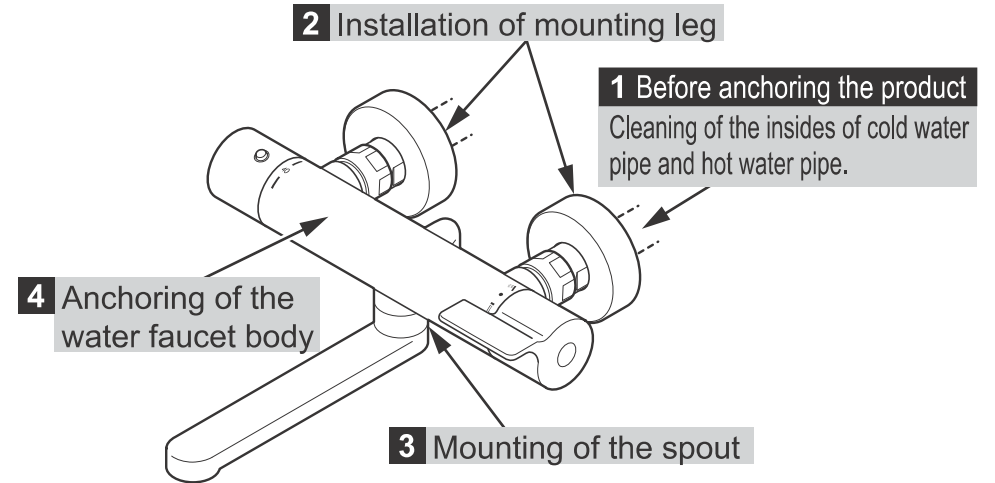
Check to see if the following parts are included

Water faucet body	Mounting leg
 <p>Packing</p> <p>Shower elbow</p> <p>Temperature control handle</p> <p>(Open/Close) changeover handle</p> <p>Spout (The shower faucet has no spout.)</p>	 <p>Mounting legs (with filters) (2 pieces)</p> <p>Flange (x2)</p>
Others	
 <p>Installation Manual</p>	<div style="border: 1px dashed black; padding: 5px; text-align: center;"> <p>Hand it over to customer.</p>  <p>Instruction Manual</p> </div>

*There are slight differences in shape between drawings and some parts according to the part number.

6-1. Installation procedures

*The descriptions of installation procedure are inserted as the representative installation procedure of shower bath water faucet.



1 Before anchoring the product Cleaning of the insides of cold water pipe and hot water pipe.

IMPORTANT

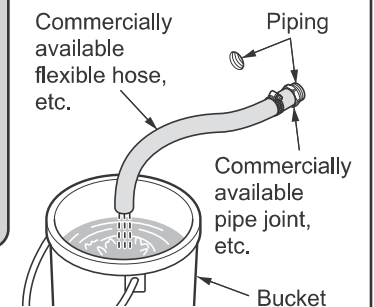
Before mounting the product, **be sure to completely flush dust and sand from the pipes of the cold/hot water supplier.**

CAUTION

If you do not clean the inside of the cold/hot water supply pipes, dust and sand inside the cold/hot water supply clog the filter and the following phenomenon occurs.

1. Discharged water volume is small.
 2. Temperature cannot be controlled well.
- Be sure to clean the insides of the cold-/hot-water supply pipes.

Prepare a flexible hose and a bucket, connect the flexible hose to the mounting legs, and open the main valve slowly to flush out the dust and sand accumulated in the cold/hot water supply pipes.

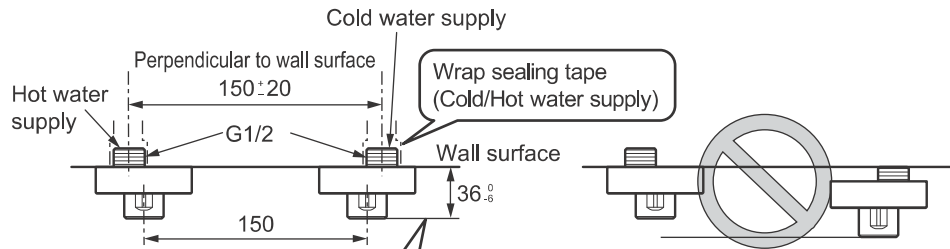


6-2.

2 Installation of mounting leg

Mount the mounting legs. (Cold water side and hot water side)

(Unit : mm)



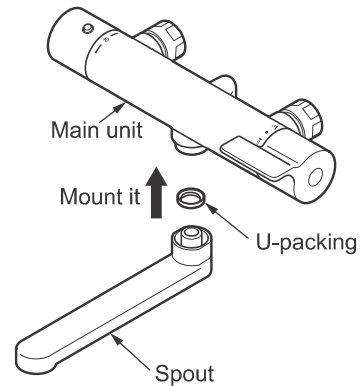
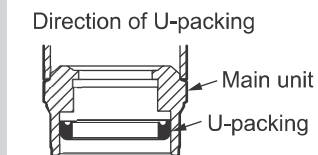
The end surfaces of the right and left mounting legs should be horizontal and flush with the wall surface.

3 Mounting of the spout

Mount the spout on the main unit body.

CAUTION

- Pay attention to the direction of the U-packing. The open side of the U-packing is the main unit body side.
- If the U-packing is removed, mount the U-packing on the main unit side.



4 Anchoring of the water faucet body

1. Mount the water faucet main body to the mounting leg.
2. Tighten the cap nuts on hot water side and cold water side alternately while holding the product horizontal.

CAUTION

- **Tighten the cap nuts securely so that they are not loose.**

If the cap nuts are not tightened securely, the main unit body may lean or water may leak.

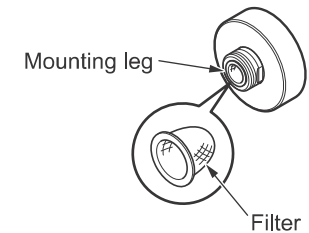
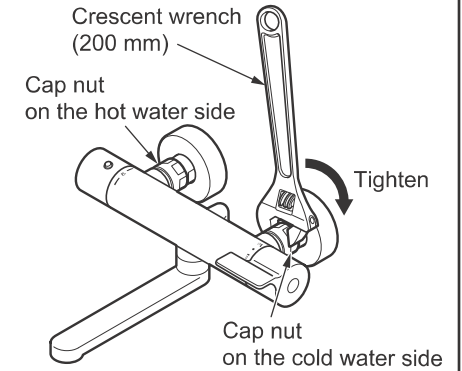
- **Do not turn the mounting leg in the direction in which it is loosened.**

The connection with the pipe may be loosen and cause water leakage.

- **Make sure the packing is mounted.**

If the packing is not mounted, water may leak.

- **Make sure that the mounting legs contain the filters.**

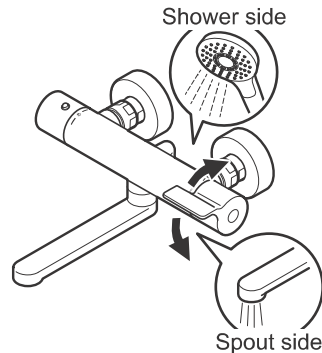


Continues to backside cover.

7-1. Adjustment after installation

1. Check of water flow

After the completion of mounting, open the main valve of the pipes and check if water comes out from the spout and the shower.



2. Clean the filter and cap of the water discharge port.

When finished mounting the product, be sure to clean the filter and the cap of the water discharge port.

If the filter and the discharged water cap are clogged, the flow rate decreases or only cold water or scalding hot water comes out. Thus, the product will not be able to exert the sufficient performance.

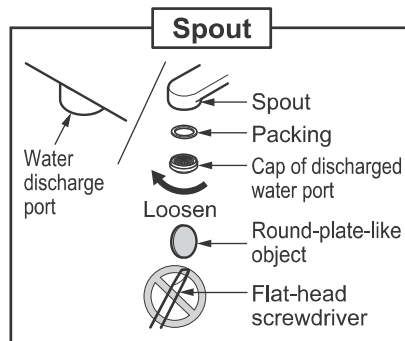
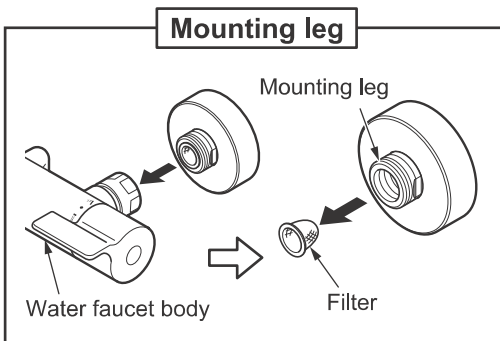
Please explain to the customer to clean the product from time to time.

*When cleaning the filter, close the main valve surely and dismantle the filter.

In addition, make sure that the left side of the main unit body and the mounting legs of the hot water side are not hot.

(For details, please refer to "Daily Care" in the instruction manual.)

*When removing the discharged water cap, do not use a thin-tipped tool such as a flat-blade screwdriver, etc.

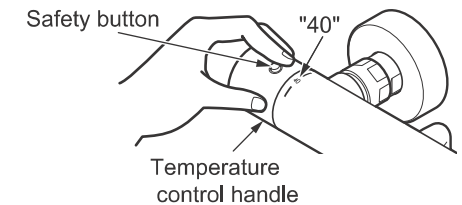


3. Check the discharged water temperature

The temperature control handle is set at the factory, but the water discharge temperature may not be as displayed due to the conditions of use (cold/hot water supply pressure and temperature).

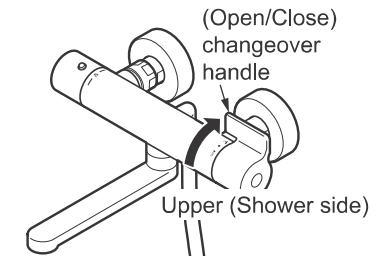
Check the temperature as follows.

1. Set the safety button of the temperature control handle to "40" on the scale of the main unit.



2. Turn the (open/close) changeover handle up to the upper limit.

Water comes out from the shower.



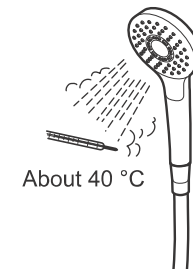
3. Check the water discharge temperature.

If the water discharge temperature is about 40 °C, use the product as it is.

If the temperature is low, raise the set temperature of the hot water supplier until 40 °C hot water comes out.

To prevent scalding, set the hot water supply temperature of the hot water supplier to a temperature not exceeding 60 °C.

Even if the temperature of the hot water supplier is higher than 50 °C, the handle setting is necessary if the temperature is low.



4. Setting of temperature control handle

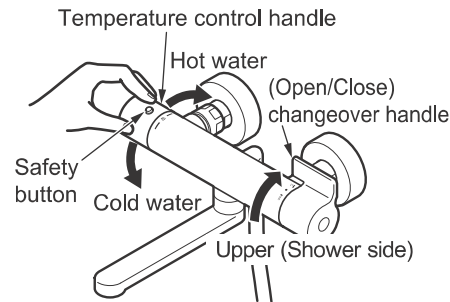
Perform this procedure if the water discharge temperature is not the same as the indication.

1. Turn the (open/close) changeover handle up to the upper limit.

Water comes out from the shower.

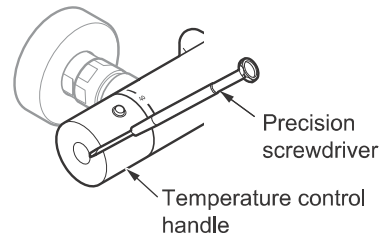
2. Turn the temperature control handle to the position where hot water of appropriate temperature (about 40 °C) comes out regardless of the number on the scale.

Since the temperature control handle locks just above "40" on the scale, turn the handle while the safety button is pressed if you want to let a hot water of the temperature higher than this come out.



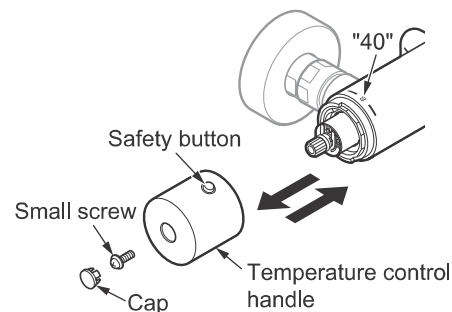
3. Remove the temperature control handle.

While paying attention so that the temperature control handle does not turn, remove the cap and small screw and pull out the handle.



4. Mount the temperature control handle.

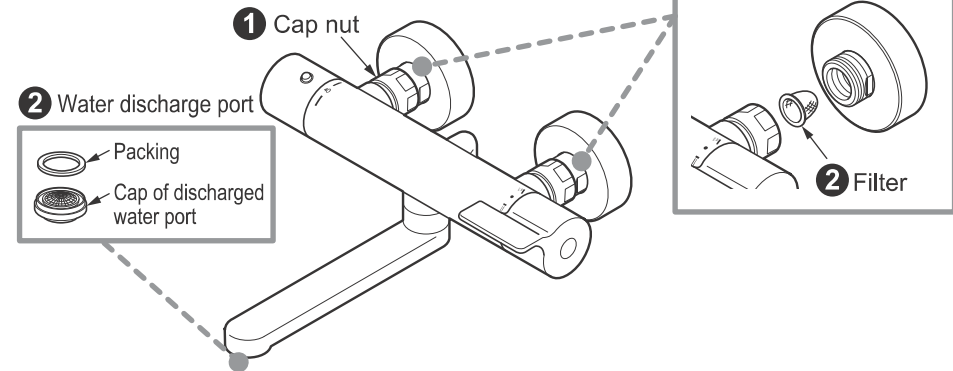
Set it to the number "40" on the scale and insert the temperature control handle, anchor it with the small screw and mount the cap.



5. After anchoring, check to see whether hot water of appropriated temperature (about 40 °C) comes out.

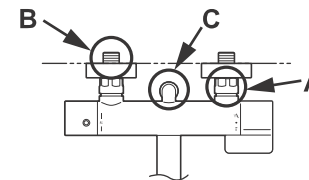
8. Checking items

After finished mounting the product, check the following points.



Checking for water leakage

Check if water leaks.



Case when water leaks from A and C

After confirming that the packing is mounted, retighten the cap nut one more time.

Case when water leaks from B

After making sure that the pipe is not corroded or cracked, wrap the sealing tape around the pipe again and remount it.

Check for looseness

Check to see if the water faucet body is loose.

1 Is the cap nut loose?

↳ 6-2 - 4 Ref. Anchoring of the water faucet body

Check of flow rate and discharged water temperature

If water flows slowly or the temperature cannot be controlled properly, check the following points.

2 Are the water discharge port and filter clogged with dust and dirt?

↳ 7-1. Ref. 2. Clean the filter and cap of the water discharge port.