PAW-1109-EU(12010)

**Installation Manual**

# LUMEN AVANT

Due proofing toilet bowl 811340400, 811340492

## Observe Safety Precautions for Safety!

These safety precautions are essential for safe installation and use of the product.
Please read the precautions thoroughly before installing the product.

### Explanation of Hazard Symbols

**WARNING** ... Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

**CAUTION** ... Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury or damage to other property.

## ⚠WARNING

Install the product correctly according to this Installation Manual.
* Electric shock, fire, or injuries may result.
* Water may leak, resulting in water flooding over the floor.

Do not allow any anyone except an authorized service technician to disassemble, repair or modify this product.
* Electric shock, fire, or injuries may result.

Do not pour water or cleanser onto the body or the power plug.
* Electric shock or fire may result.

Be sure to connect the grounding lead.
* Electric shock may result in case of malfunction of the product or leakage.

Do not install the product in a constantly humid location.
* Electric shock or fire may result.

Do not use any loose outlet or an ungrounded outlet.
* Electric shock or fire may result.

Do not nick, damage, carve, bend unduly, pull, twist or bind the power cord, place any heavy object on it, or pinch the power cord between any objects.
* The power cord may be damaged, causing electric shock or fire.

Do not connect the product to any water source other than tap water.
* The inside of the product may be corroded, causing an electric shock, fire or skin inflammation.

Do not remove or insert the power plug with wet hands.
* Electric shock may result.

- Do not use the product with any power supply other than 220 - 240 VAC.
- Do not plug any other appliances into the same power outlet.

* Fire may result.

Firmly insert the power plug into the outlet.
* Electric shock or fire may result.

## ⚠CAUTION

Flush any foreign matter and rust in the pipes completely before connecting the product.
* Damage inside the product may cause water leakage, resulting in water flooding over the floor.

- When removing the strainers, be sure to close the water shutoff valve.
- When attaching the strainers, tighten these completely so that there is no clearance.

* Water may leak, resulting in water flooding over the floor.

Be sure to adjust the water shutoff valve and check for water leakage after installation.
* Water may leak, resulting in water flooding over the floor.

If freezing weather is anticipated before handing the product to the customer, drain water and leave it.
* Damage from freezing may cause water leakage, resulting in water flooding over the floor.

## Checking Power Supply

Follow the instructions below when performing wiring and installing the outlet.
**Consign wiring work to a qualified electrician**.

- Be sure to perform grounding work.

* Consign wiring work to a qualified electrician.

- This product must be grounded. This allows the current to escape in case of a short circuit, reducing the possibility of electric shock. The power cord is equipped with a grounding lead. Do not use an adapter with the power plug of the product, or do not connect the plug via any alternative method to an inappropriately structured outlet.
- Install the outlet in a position as high above the floor as allowed by the length of the cords to avoid exposure to splashing water. The length of the power cord is 1.0 m.

* Do not insert the power plug into the outlet until installation is completed. Failure to observe this may cause malfunction of the product.

## Water Supply

**Be sure to connect the water supply parts to the household water supply line.**
Using intermediate, industrial or well water will affect the durability of electrical and mechanical parts, resulting in accidents.

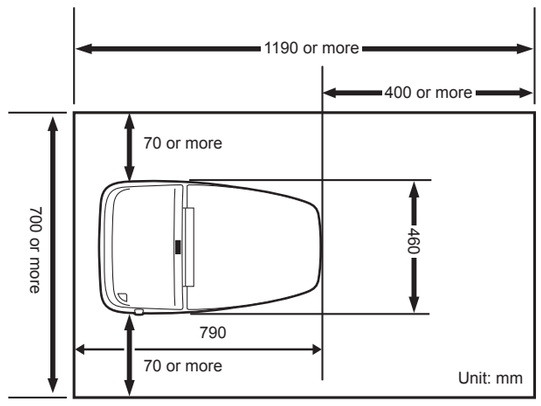
## Water Pressure

- **The minimum operation water pressure is 17 L per minute, and at least 0.1 MPa (1.0 kgf/cm²) when flowing. The maximum water pressure is 0.75 MPa (7.6 kgf/cm²).** When using other appliances simultaneously, water pressure of at least 0.1 MPa (1.0 kgf/cm²) is required. If the minimum water pressure is less than this value, the ideal washing performance may not be obtained.
- The above water pressure cannot be obtained if the pipes are 10A or less. Use pipes of 15A (13 mm) or more.

## Minimum Installation Clearance

The space required for installing the toilet is as shown in the figure below.

* Secure at least 70 mm space on both the left and right of the toilet bowl when viewed from the front.




## Secure Water Supply Pipe!

Firmly secure the **water supply pipe** to prevent any looseness.

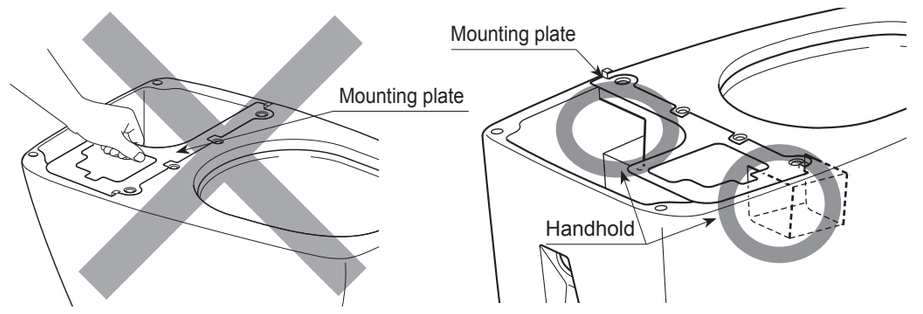
* **Abnormal noise or water leakage may result**.

## Pre-installation Precautions

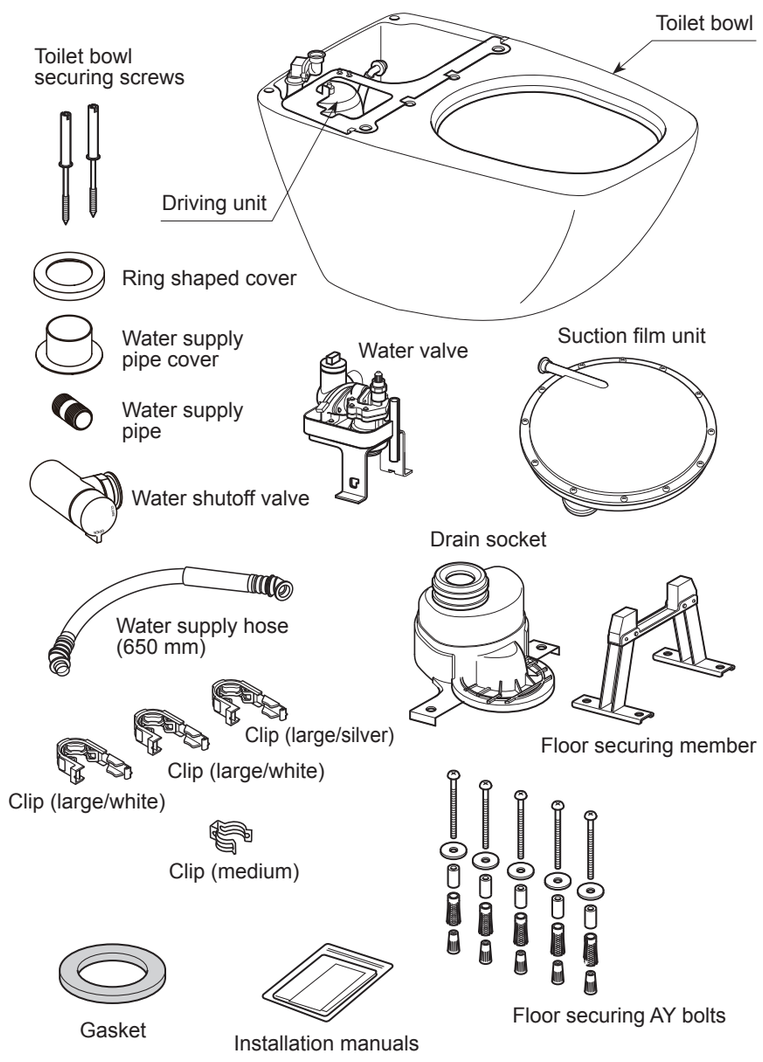
- **Do not hold the mounting plate of the toilet bowl.**

* Deformation of the mounting plate may hinder correct connection or correct flushing of the toilet, or may cause water leakage.

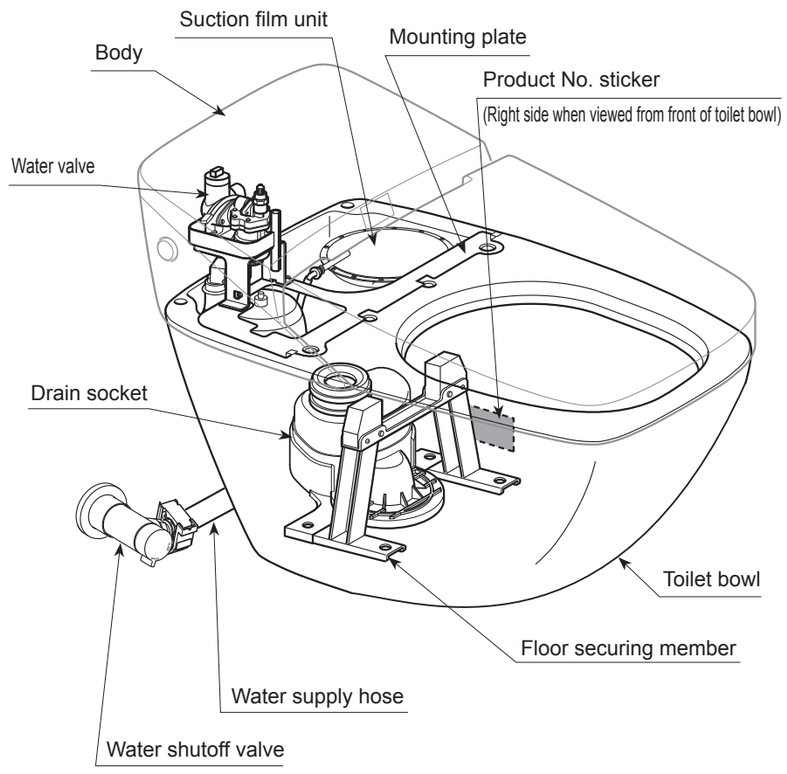
- **When lifting the toilet bowl, be sure to use the handhold and lift the toilet bowl with two persons.**
- **Be sure to work in two person teams when installing the toilet bowl.**




## Checking Parts (check inside the package)




## Names of Parts



Thank you for purchasing this product.

| | |
|---|---|
| **CAUTION** | • Carefully read this Installation Manual to install the product correctly.<br>• Be sure to test operation after installation has been completed.<br>• Be sure to pass this Installation Manual, User's Manual and Warranty Certificate to customers. When passing these to customers, explain the operation method. |

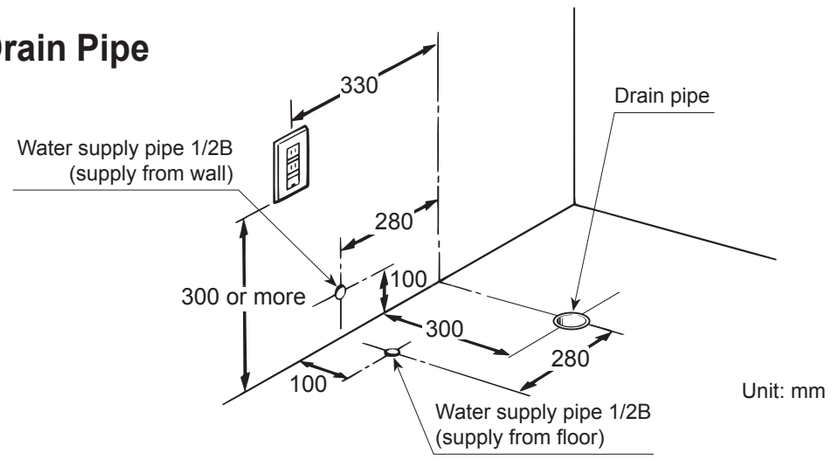
# Installation Procedure

## 1 Position of Water Supply Pipe and Drain Pipe

Prepare the water supply pipe and the drain pipe.

* When water supply is on the right side, prepare the water supply pipe symmetrically relative to the drain pipe.

See Note 1 See Note 2




## 2 Attaching Water Shutoff Valve See Note 3

(1) Remove the open/close handle.

(2) After wall or floor work has been completed, attach the water supply pipe and the water shutoff valve.

* When attaching the water shutoff valve to the water supply pipe, wrap the threaded section of the pipe with sealing tape or similar sealing material.

* Remove the open/close handle from the water shutoff valve, and set the tool to the tool setting section (hexagonal) on the water shutoff valve, and then tighten the valve firmly.

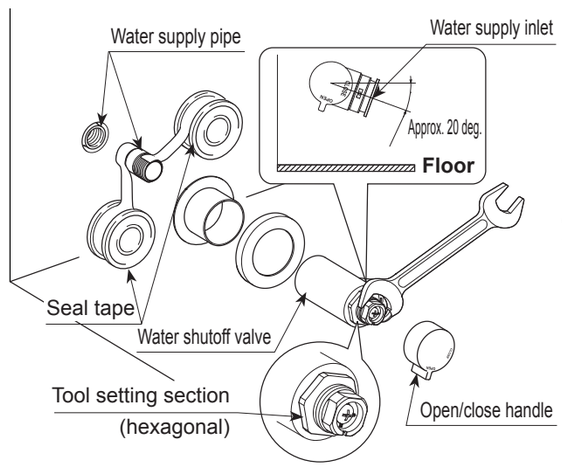
* When supplying water from the wall, angle the water supply inlet of the water shutoff valve approximately 20 degrees below horizontal level. This makes water supply hose attachment easier.

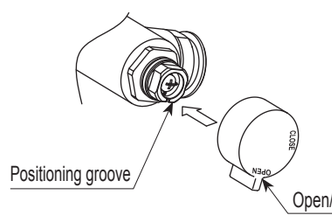
When supplying water from the floor, angle the water supply inlet of the water shutoff valve approximately 45 degrees toward the wall for the same purpose.

(3) After the water shutoff valve has been attached, attach the open/close handle.

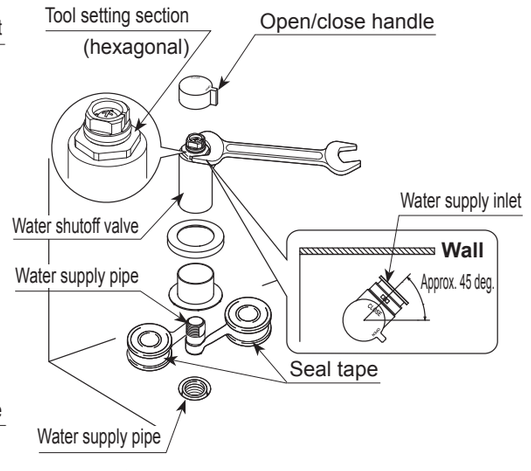
* Check that the handle is at the closed position.

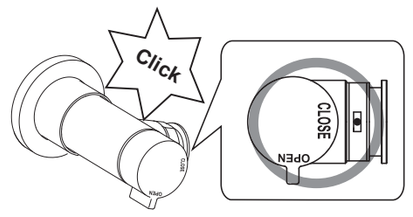
**●Water supply from wall**




**●Water supply from floor**

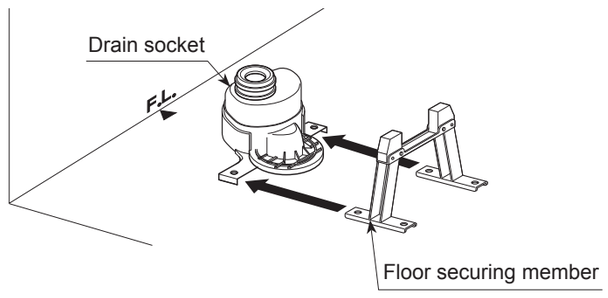


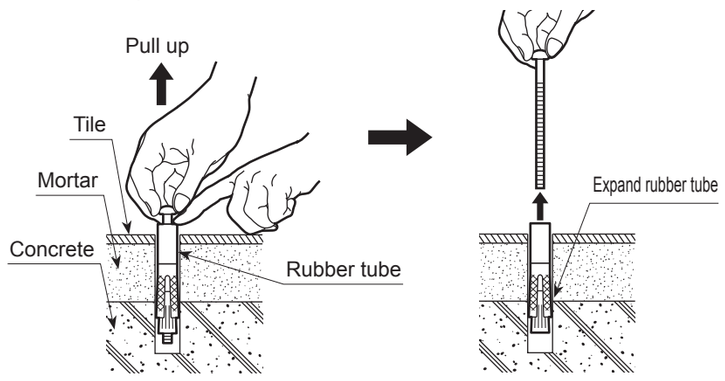

## 3 Attaching Drain Socket See Note 4 See Note 5 See Note 6 See Note 7

(1) Attach the flange to the drain pipe, and set the T-bolts upside down.

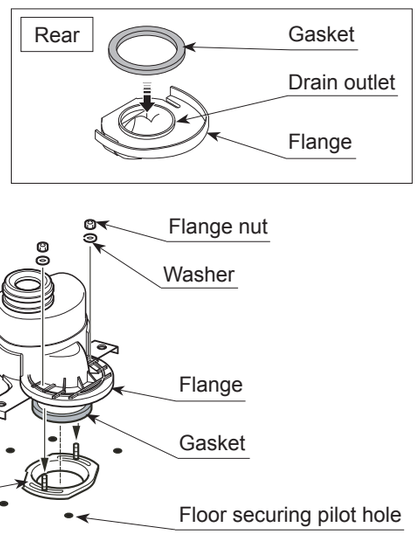
(2) Position the drain socket and the floor securing member temporarily, and mark the positions of the pilot holes for the floor securing AY bolts (5 locations).



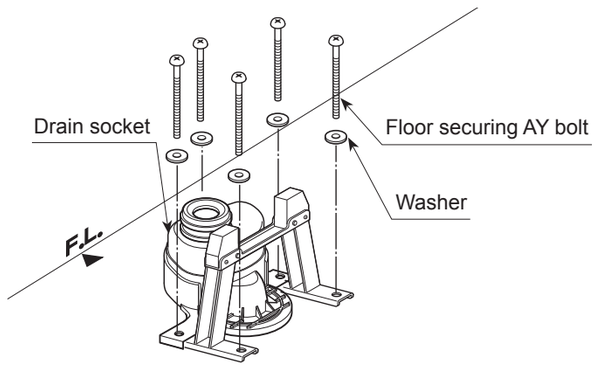

(3) Drill the pilot holes (ø11 mm, 55 mm deep) at the positions marked in step (2). Completely remove chips, and then insert the floor securing AY bolts. Push the edge of the rubber tube into the the hole, pull the bolt in the tube hard to expand the rubber tube to form complete contact with the hole, and then unscrew the bolt to remove it.




(4) Attach the gasket to the drain socket and secure these with T-bolts.




(5) Secure the drain socket with the floor securing AY bolts (5 locations).




**Note 1**

**Be sure to observe the dimensions on the drawing to position the water supply pipe.**

**Note 2**

- **Insert a plug (LF-7T recommended) into the water supply pipe and cover the drain pipe with a vinyl bag or similar to protect these pipes from foreign matter until the toilet is installed.**
- **Firmly secure the water supply pipe to prevent it wobbling.**

**Note 3**

- **Do not put your hand on, or step on, the water shutoff valve.**
  * The pipe may buckle or be damaged, causing water leakage.
  * The wall or floor may be damaged.
- **Attach the water supply inlet of the water shutoff valve, to prevent the water supply hose being bent.**

**Note 4**

**Attach the flange so that the two T-bolts are parallel to the wall.**

**Note 5**

**Do not drop the drain socket by mistake.**

* The member may be damaged, causing water leakage.

**Note 6**

**Be sure to attach the drain socket so that it is parallel to the rear wall. If the socket is angled, the toilet bowl will also be on an angle when installed.**




**Note 7**

**When attaching the drain socket to the flange, be sure to attach the gasket to the drain socket (rear).**

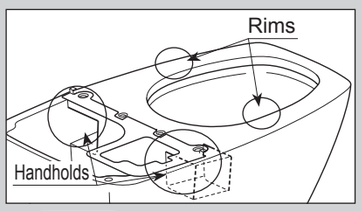
**Note 8**

- **Do not hold the mounting plate of the toilet bowl.**

* Deformation of the mounting plate may hinder correct connection or correct flushing of the toilet, or may cause water leakage.

Reference 1

- **Handholds (2 locations) are provided on the toilet bowl. Hold the handholds and the rims to lift the toilet bowl.**



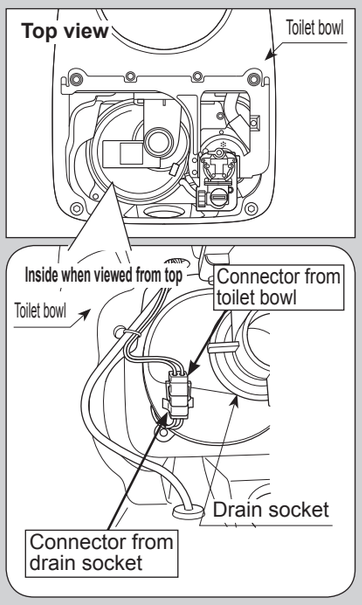

**Note 9**

**Do not place the base or drain outlet of the toilet bowl on the drain socket.**

* The socket or packing may be damaged, causing water leakage.

Reference 2

- **After the drain outlet of the toilet bowl is inserted into the drain socket, connect the connector of the cord from the toilet bowl and that from the drain socket.**



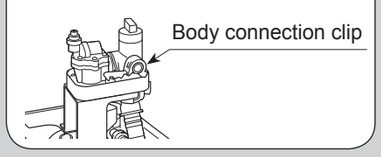

**Note 10**

**Do not tighten the screws too tightly against the ceramic.**

* Doing so may crack the ceramic.

**Note 11**

**Do not remove the body connection clip until after checking the water flow.**




**Note 12**

**Do not drop the water valve by mistake.**

* The member may be damaged, causing water leakage.

**Note 13**

**Firmly attach the clip.**

* Incorrect attachment will cause water leakage.

**Note 14**

**Be careful not to damage the O-ring.**

* Broken or damaged O-ring will cause water leakage.

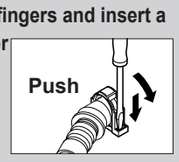
**Note 15**

**Attach the clip so that the ends of the clips are engaged and you hear a click.**

* Incorrect attachment will cause water leakage.

Reference 3

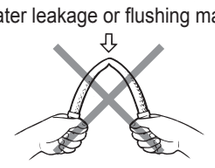
- **When removing the clip, hold the clip with your fingers and insert a flat screwdriver as shown in the figure and push it downward.**




**Note 16**

**Do not bend the water supply hose at a sharp angle or make it too taut.**

* The hose may be damaged, causing water leakage or flushing malfunction.

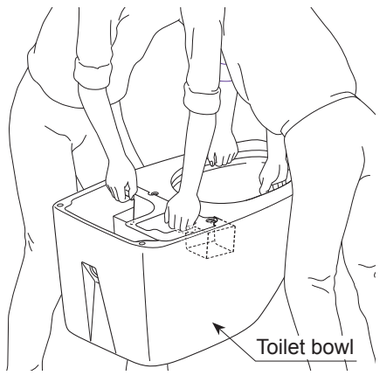


# 4 Installing Toilet Bowl

*** Be sure to work in two person teams when installing the toilet bowl.**

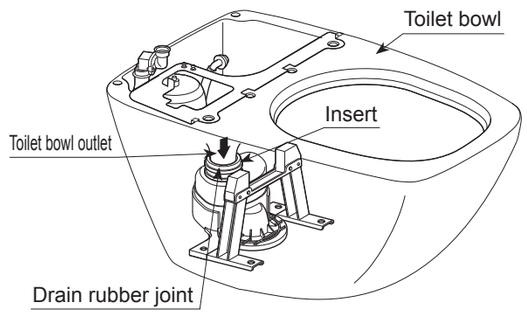
(1) Lift the toilet bowl holding both sides with two persons.

**See Note 8** See Reference 1

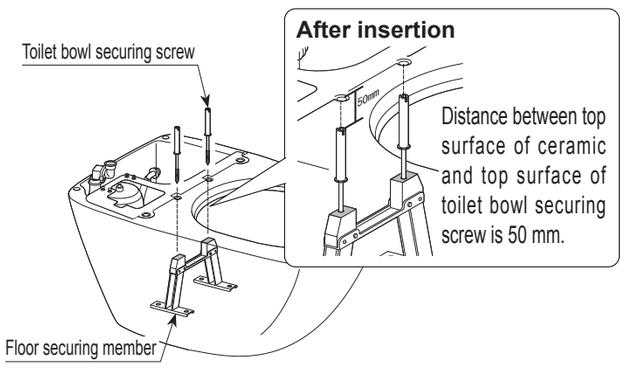



(2) Insert the drain outlet of the toilet bowl into the center of the drain rubber joint of the drain socket. **See Note 9**

For toilet bowl with heater: See Reference 2




(3) Insert the toilet bowl securing screw into the center hole at the top of the toilet bowl, and use a flat screwdriver (or hexagon wrench) to secure the toilet bowl. **See Note 10**

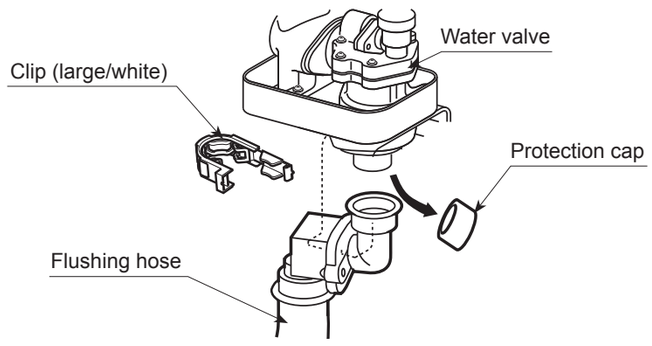



# 5 Connecting Flushing Hose to Water Valve

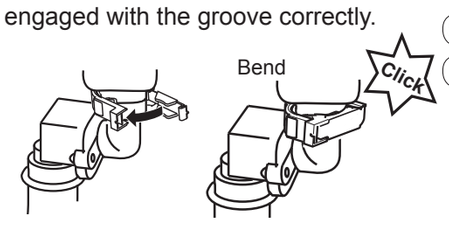
**See Note 11**

(1) Remove the protection cap from the water valve spout.

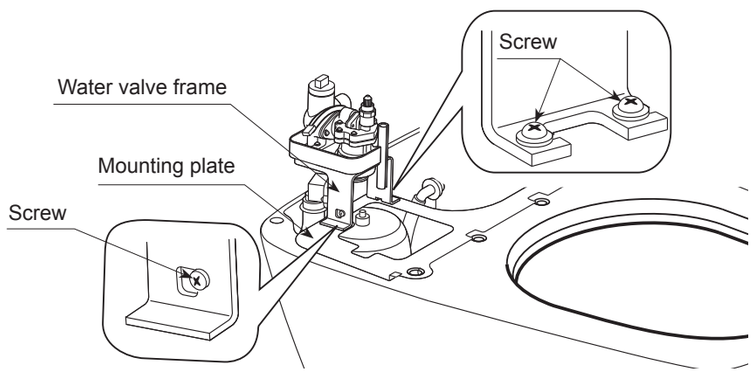
(2) Insert the flushing hose into the water valve spout, and secure these with the clip (large/white). **See Note 12** **See Note 13** **See Note 14**



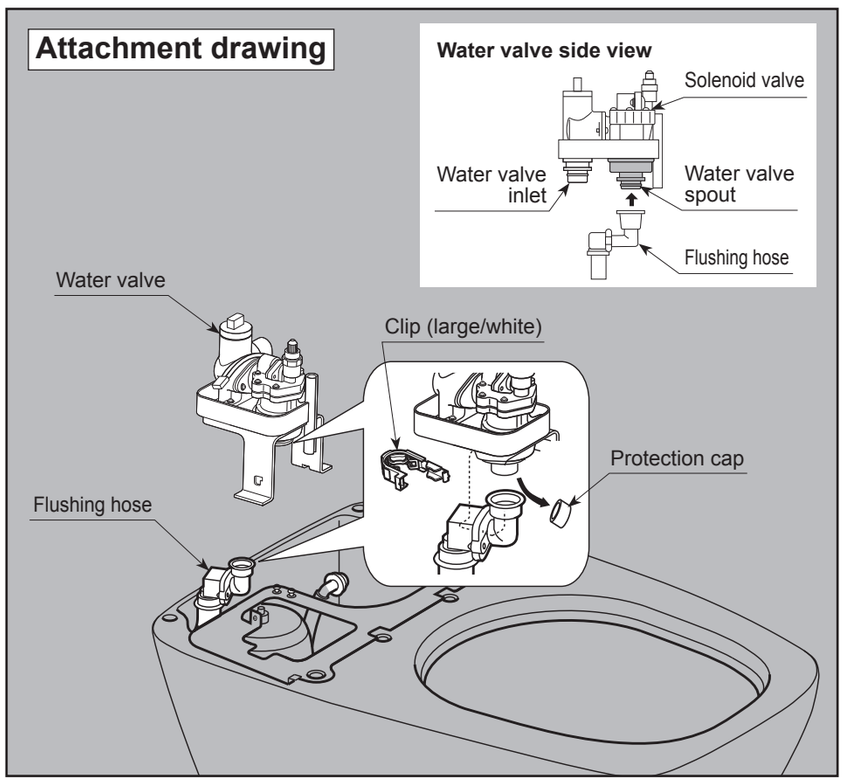

(3) After the clip (large/white) has been attached, turn the clip to check that the clip is engaged with the groove correctly. **See Note 15** See Reference 3



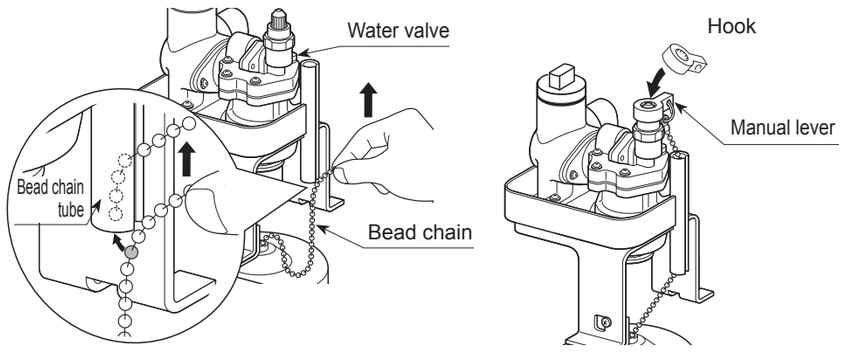

(4) Secure the water valve frame to the mounting plate of the toilet bowl with the screws (3 locations).




**Attachment drawing**




**(5) Thread the bead chain through the bean chain tube of the water** valve, and hook the manual lever on the water valve.



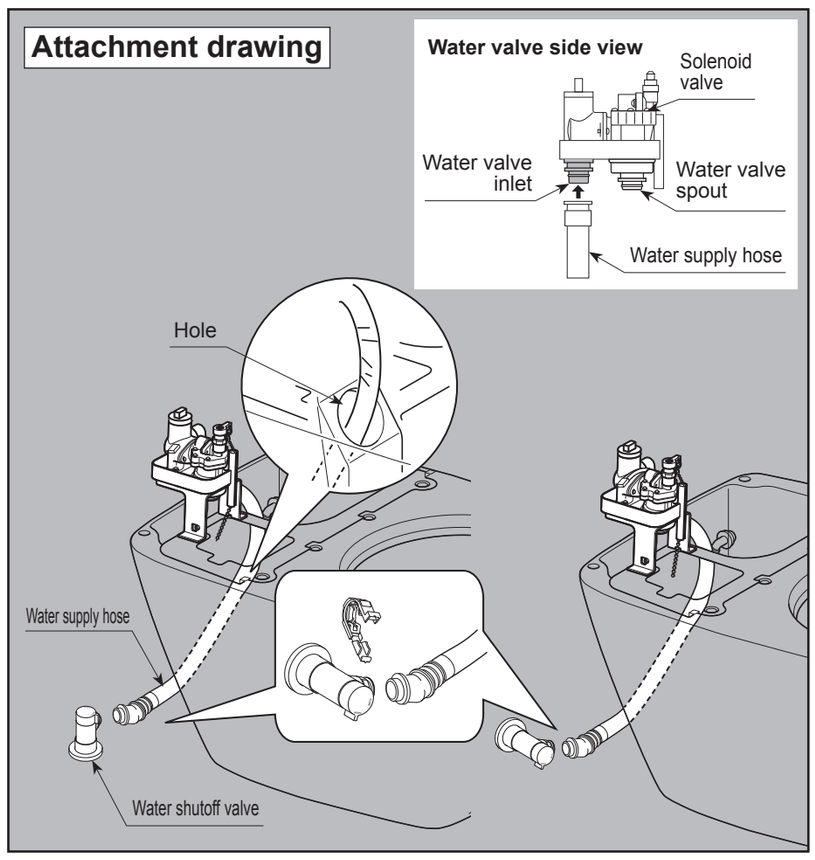

* Insert the thin section between beads near the manual lever through the slit into the bead chain tube, and pull the chain up. The entire bead chain is inserted in the tube.

# 6 Connecting Water Supply Hose

**See Note 16**

Thread the water supply hose through the hole on the rear of the toilet bowl, and connect this hose to the water valve and the water shutoff valve.

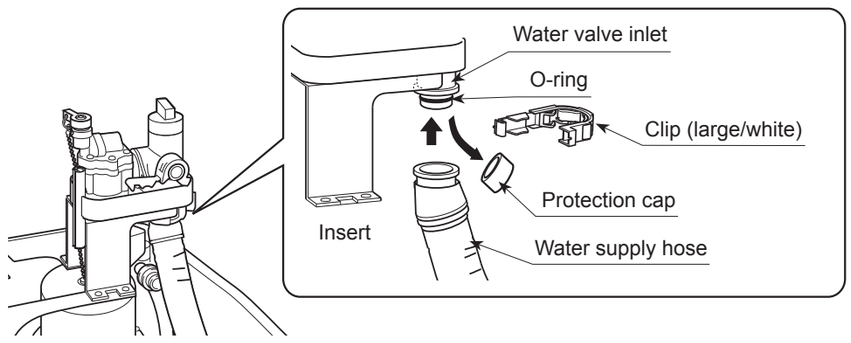
**Attachment drawing**



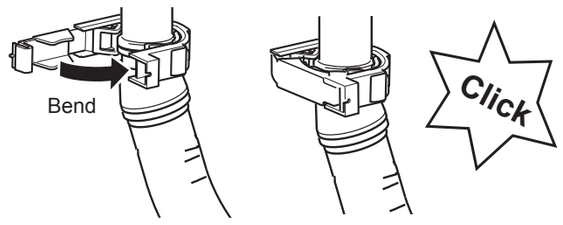

## [On toilet bowl side]

(1) Remove the protection cap from the water valve inlet.

(2) Insert the water supply hose into the water valve inlet, and secure these with the clip (large/white). **See Note 13** **See Note 14** **See Note 17**



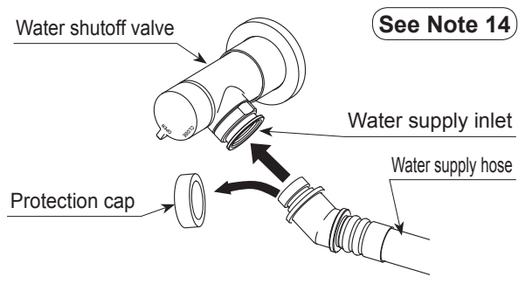

(3) After the clip (large/white) has been attached, turn the clip to check that the clip is engaged with the groove correctly. **See Note 15** See Reference 3



# 6 Connecting Water Supply Hose (continued from previous page)

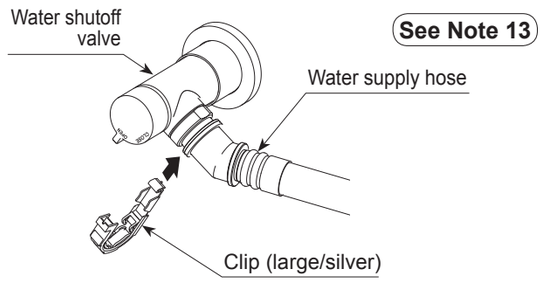
## [On water shutoff valve side]

(1) Remove the protection cap from the water supply hose, and insert the water supply hose into the water supply inlet of the water shutoff valve.




See Note 14

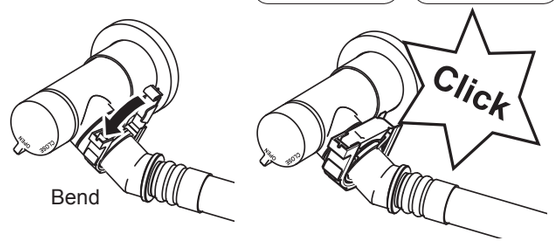
(2) Secure these with the clip (large/silver).




See Note 13

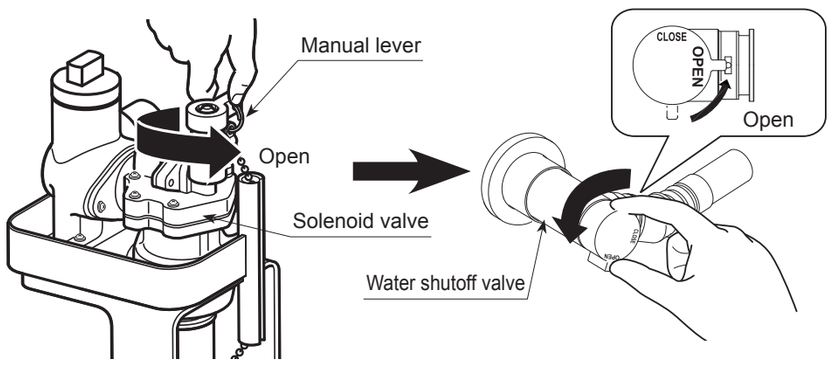
(3) After the clip (large/silver) has been attached, turn the clip to check that the clip is engaged with the groove correctly.

See Note 15 See Reference 3




# 7 Checking Water Leakage

**1. Turn the manual lever on the water valve counterclockwise 180 degrees to open the water valve. Then open the water shutoff valve fully to supply water.**

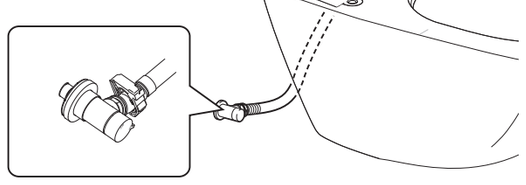



**2. Open and close the manual lever several times to check that there is no water leaking at connecting sections.**

Water is stopped approximately five seconds after the manual lever is closed. See Note 18

| Leakage check sections |
|---|
| Connecting section between water shutoff valve and wall or floor |
| Connecting section between water shutoff valve and water supply hose |
| Solenoid valve |
| Floor |
| Connecting section between hoses and water valve |

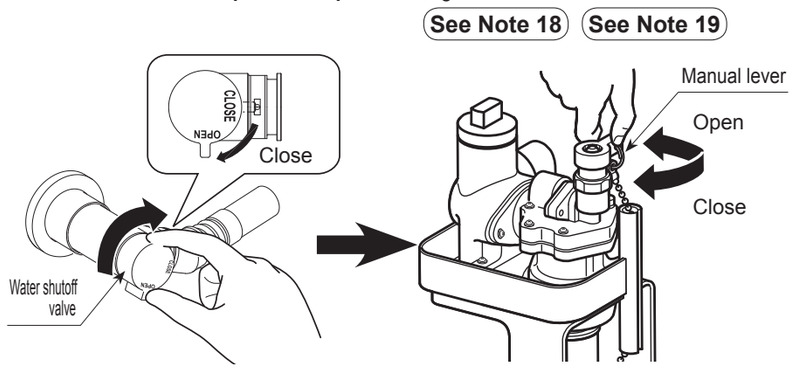
For the bonding section between the water shutoff valve and wall, lift the ring shaped cover and the water supply pipe cover to check that there is no water leakage.



# 8 Depressurizing

**Close the water shutoff valve. Then open and close the manual lever on the water valve to perform depressurizing, and then close the manual lever.**

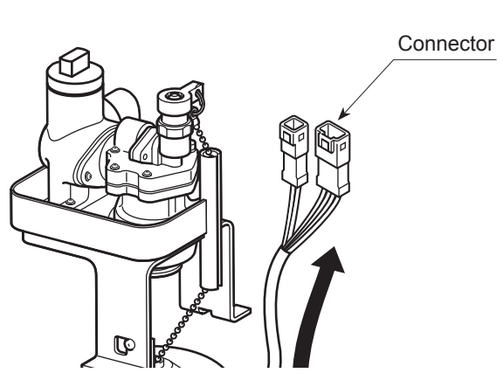
See Note 18 See Note 19




# 9 Preparing to Connect Toilet Bowl to Body

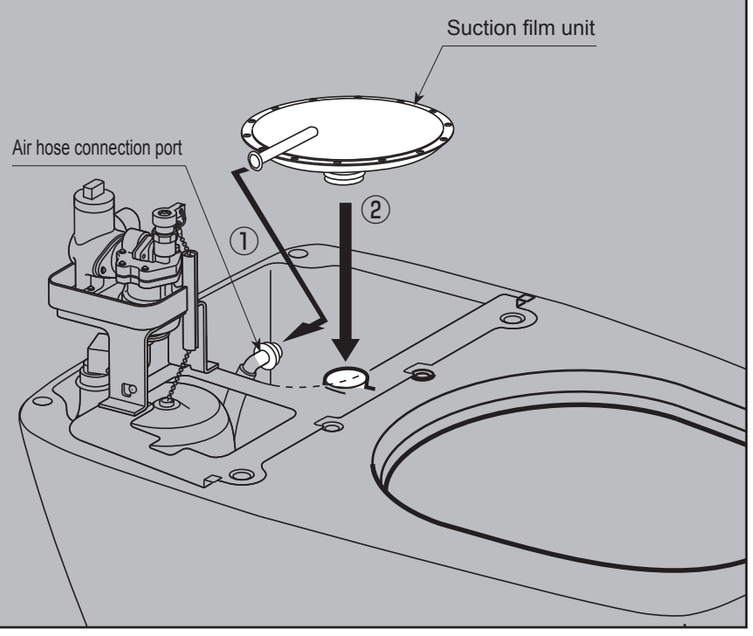
**Pull up the connector of the cord from the driving unit close to the water valve section.**

**This makes installation of the body easier.**




# 10 Attaching Suction Film Unit

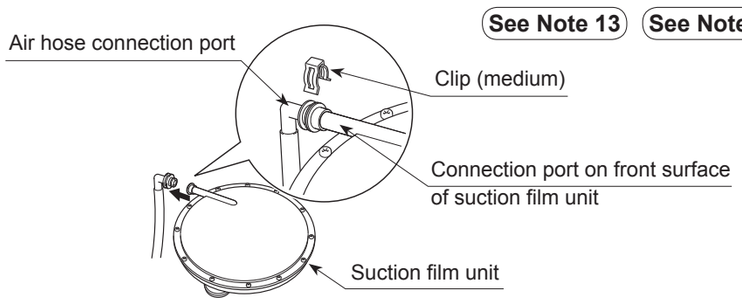
**Attachment drawing**




(1) Insert the air hose connection port into the connection port on the front surface of the suction film unit, and secure these with the clip (medium).

Turn the clip to check (medium) that the clip is engaged with the groove correctly.

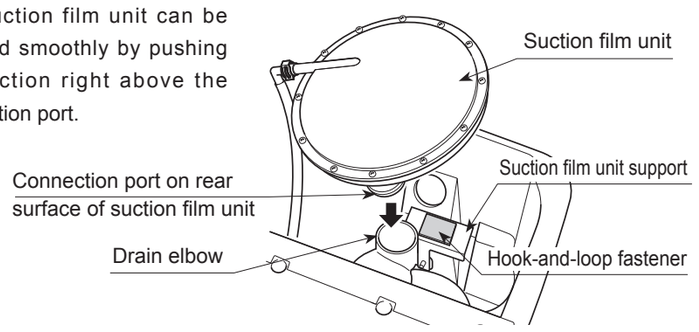
See Note 13 See Note 14




(2) Insert the connection port on the rear surface of the suction film unit into the elbow of the drain until the connection port contacts the hook-and-loop fastener.

See Note 14 See Reference 4

* The suction film unit can be inserted smoothly by pushing the section right above the connection port.




**Note 17**

**Remove the cap from the water supply hose immediately before connecting the hose to the water shutoff valve.**

* Dust may enter the water supply hose during installation, resulting in water shutoff failure.

Reference 3

- When removing the clip, hold the clip with your fingers and insert a flat screwdriver as shown in the figure and push it downward.




**Note 18**

**Be very careful not to open or close the manual lever excessively.**

* The manual lever may be damaged.

**Note 19**

**Be sure to perform depressurizing.**

* Omission of depressurizing will cause water to splash when connecting the body.

Reference 4

- **Lightly pull up the suction film unit to check that the unit is secured with the hook-and-loop fastener.**