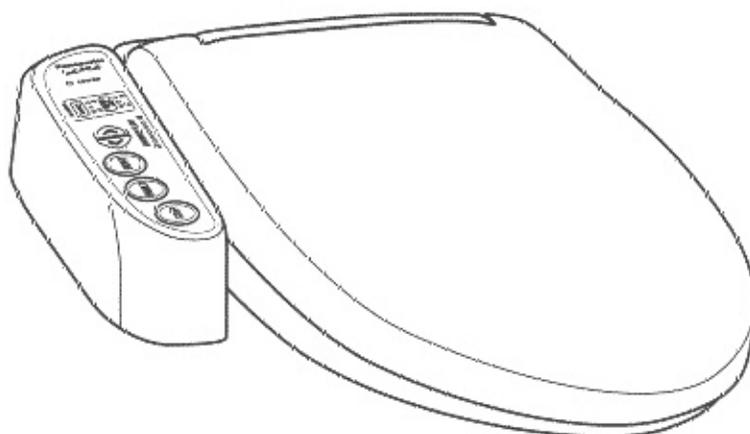


Panasonic

Operating Instructions with Installation Instructions

Personal Hygiene System

**Model Number : DL-S10AR/S20AR (Regular Type)
: DL-S10AE/S20AE (Elongated Type)**



(Shown in the illustration is the model DL-S20A)

This is a sophisticated electronic product. Read all operating and installation instructions before use.

NOTE TO INSTALLER:

PLEASE GIVE THESE INSTRUCTIONS TO THE CUSTOMER AFTER INSTALLATION.

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The serial number may be found on the name plate of the unit. You should note the model number and the serial number of this unit and retain this book as a permanent record of your purchase for future reference.

Model No. _____

Serial No. _____

Date of Purchase _____

Installer's Name _____

(Dealer's Name) _____

1. Important Safeguards

Please observe the following precautions before using this appliance.

1. Read all instructions before using this appliance.
2. This appliance must be GROUNDING. Connect the grounding wire properly to the grounding terminal. Refer to the grounding instructions found on page 4.
3. Failure to comply could result in a short circuit, shock or fire. To avoid injury, operation and use of this appliance is restricted to a water supply line with a pressure between 10 psi and 60 psi.
4. This appliance must be connected to an AC 120 volt power source. Any other power source may cause a fire.
5. Use this appliance only as described in the operating instructions.
6. Do not permit anyone to operate this appliance who has not been instructed in its use. Keep the operating instructions of this appliance in a visible place for easy reference.
7. Stay close to the user if the user is an infirm person or a child. Adjust the seat temperature and the shower temperature properly when this appliance is to be used by any of the following people:
 - Child, infirm person, sick person.
 - Person with particularly sensitive skin.
 - Physically handicapped person.
8. Do not splash water on this appliance.
9. Do not operate this appliance if it is not working properly.
10. This appliance should be serviced only by qualified service personnel.
11. If you are using this appliance for the first time, it is recommended that you operate it on reduced water pressure and temperature settings. If any discomfort is felt, and persists, discontinue use and consult your doctor.
12. Do not stand or sit on the seat cover lid. It is not designed to support a user's body weight.
13. If using any chemical toilet bowl cleaner, be sure to wipe up any spills that splash onto this appliance.
14. Drain off the water from this appliance if it is not going to be used for an extended period of time.
15. Take steps to prevent the water from freezing.
16. Tighten the drain plug securely. There is a danger that water may leak unless the drain plug is tightened up securely after the strainer is cleaned.

SAVE THESE INSTRUCTIONS

2. Grounding Instructions

Grounding Instructions

This appliance has a three-prong grounding plug. The plug must be plugged into an outlet that is properly installed and grounded.

In the event of an electrical short circuit, grounding reduces the risk of electric shock by providing an escape wire for the electric current.

DANGER

IMPROPER GROUNDING CAN RESULT IN A RISK OF ELECTRIC SHOCK.

The use of an extension cord is not recommended or advised.

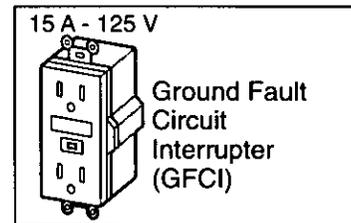
If it is necessary to use an extension cord, use only a three wire extension cord that has a three blade grounding plug, and a three slot receptacle that will accept the plug on this appliance.

(See below wiring requirements.)

The marked rating of the extension cord should be equal to or greater than the electrical rating of the unit (8 Amps). Consult a qualified electrician or service person if you are not sure whether the unit is properly grounded.

As a further safety precaution, your local electrical code may require a Ground Fault Circuit Interrupter (GFCI).

This device is highly recommended. You may purchase it locally for a nominal charge.

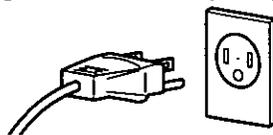


Wiring Requirement

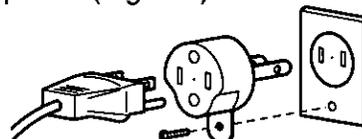
- (1) This appliance must be plugged into at least a 15 AMP, 120 VOLT, AC, 60 Hz GROUNDED OUTLET.

Where only a standard two-prong outlet is available, it is the responsibility of the user to properly ground this appliance.

Installation of a grounded three-prong outlet is required. (Fig. 2-1)



(Fig. 2-1)



(Fig. 2-2)

- (2) A TEMPORARY CONNECTION with a two-prong adaptor may be made where LOCAL CODES PERMIT, provided that the adaptor is grounded. (Fig. 2-2)

Unless the cover screw is grounded through the house wiring, attaching the adaptor grounding plate to the cover screw will **not** ground the unit. If there is any doubt that the cover screw is grounded, have it checked by a qualified electrician or service person.

- (3) This appliance must be on a separate circuit. No other appliance should share the circuit with this appliance.

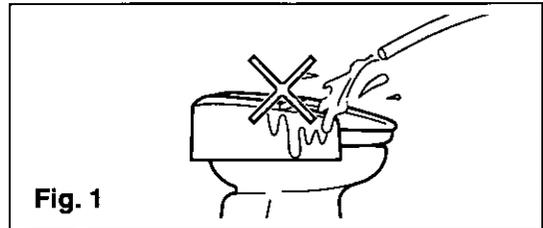
Sharing a circuit could cause the branch circuit fuse to blow or the circuit breaker to trip. Continuous usage under these conditions could result in a fire.

- (4) The voltage used must be the same as specified on this appliance (120 V, AC). Using a higher voltage is dangerous and may result in a fire or other accident. PANASONIC is not responsible for damage resulting from the use of this appliance on other than specified voltage, or operating it without proper grounding.

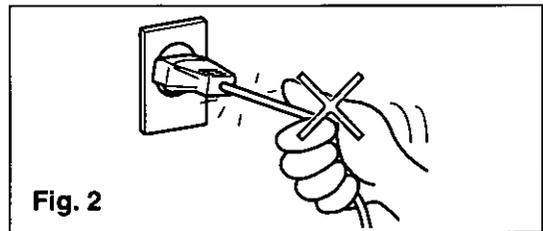
3. Precautions

To avoid electric shock, fire, personal injury and/or product malfunction, please observe the following precautions.

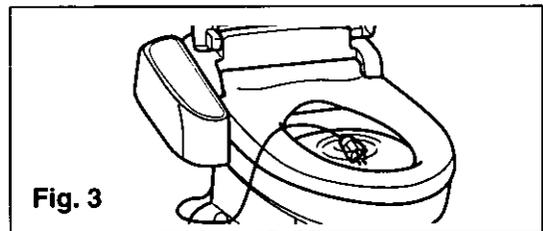
1. Do not splash water or waste water on this appliance. (Fig. 1)



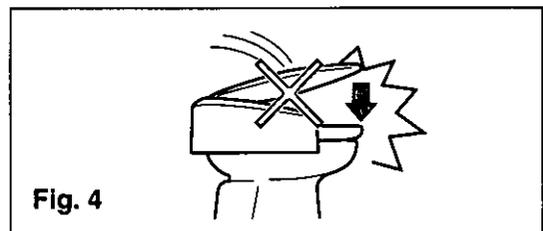
2. Do not bend or pull the cord. (Fig. 2)



3. Do not immerse cord or plug in water. (Fig. 3)



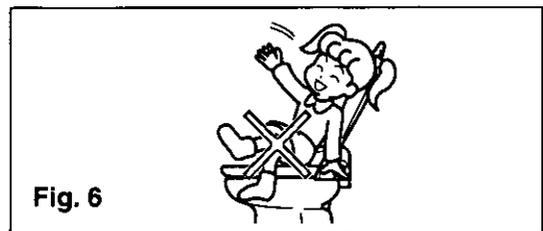
4. Do not slam the lid violently. (Fig. 4)



5. Do not step on the lid or sit on it, as it was not designed to support a user's body weight. (Fig. 5)



6. Do not use the lid as a back rest. The lid may crack. (Fig. 6)



7. If you have sensitive skin, set the temperature of the heated seat at "LOW" for protection against low temperature burn. (Fig. 7) (DL-S20A only)

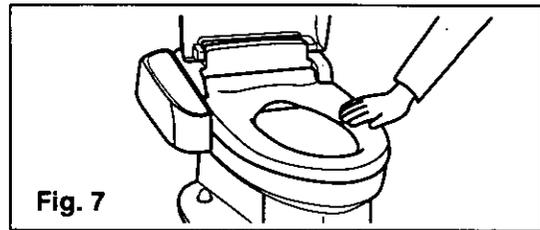


Fig. 7

(Low-temperature burn)

Usually, a burn or a scald is caused as a result of the skin coming in contact with something very hot such as fire, hot water, hot oil, etc. However, even contact with something of a relatively low temperature (104° F – 140° F) may cause a low-temperature burn if it is in contact with the skin for an extended period of time (though the effect of such contact differs depending on the physical condition or individuals). If there is someone of delicate physical condition, you are requested to advise him/her to take the above-mentioned precaution.

8. When a handicapped person or a child uses this appliance, adjust the operating controls for them and take all possible safety precautions. (Fig. 8)

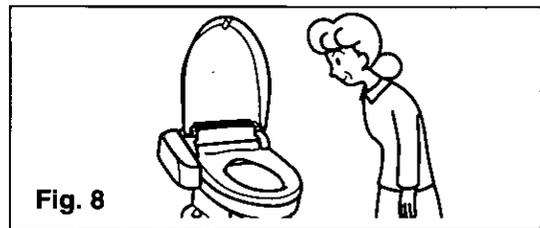


Fig. 8

9. Do not put a cover on the heated seat, as it may affect performance of the seat's temperature control. (Fig. 9) (DL-S20A only)

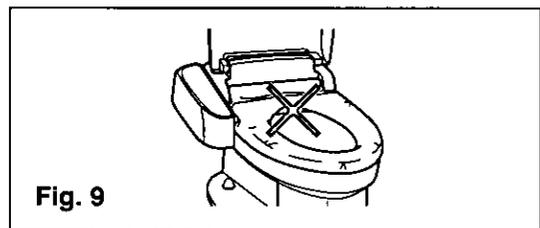


Fig. 9

10. If unit is not operated for an extended period of time, remove the plug from the outlet. (Fig. 10)

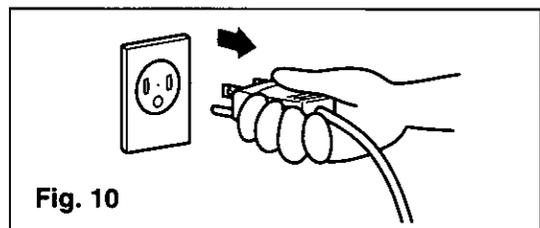


Fig. 10

11. Drain off water (page 20) from this appliance if it is not going to be used for an extended period of time. (Fig. 11)

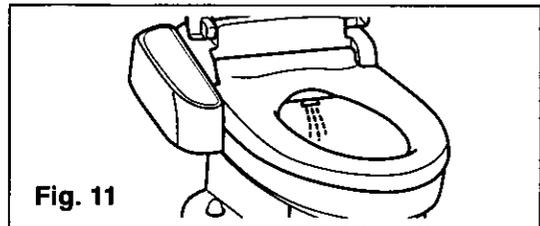


Fig. 11

12. Take steps (page 20) to prevent the water from freezing. (Fig. 12)

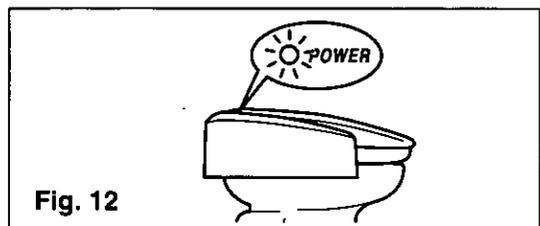
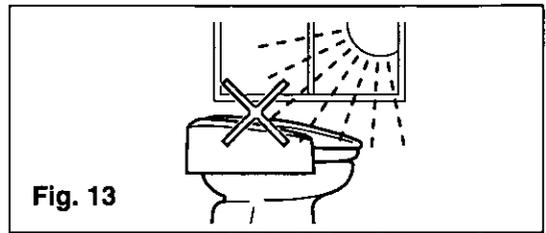
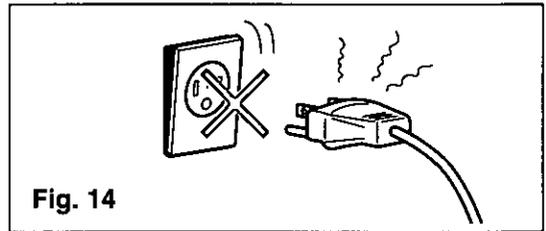


Fig. 12

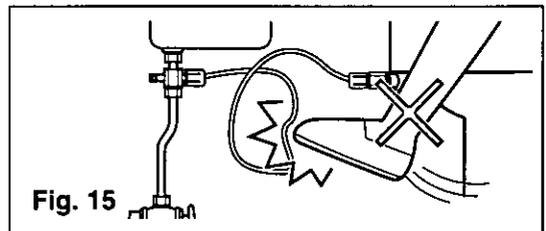
13. Do not expose this appliance to direct sunlight, as it may discolor the plastic. (Fig. 13)



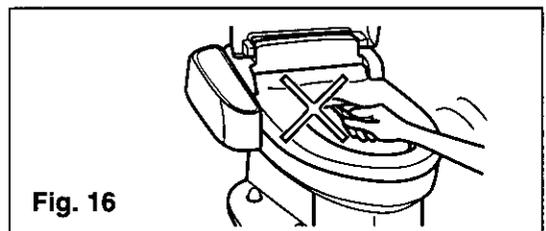
14. Do not plug this appliance into a loose electrical outlet. (Fig. 14)



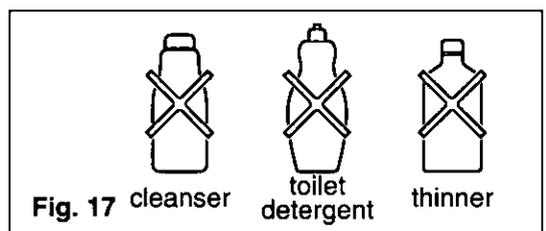
15. Do not push or pull the connecting tube, otherwise it may cause water leakage. (Fig. 15)



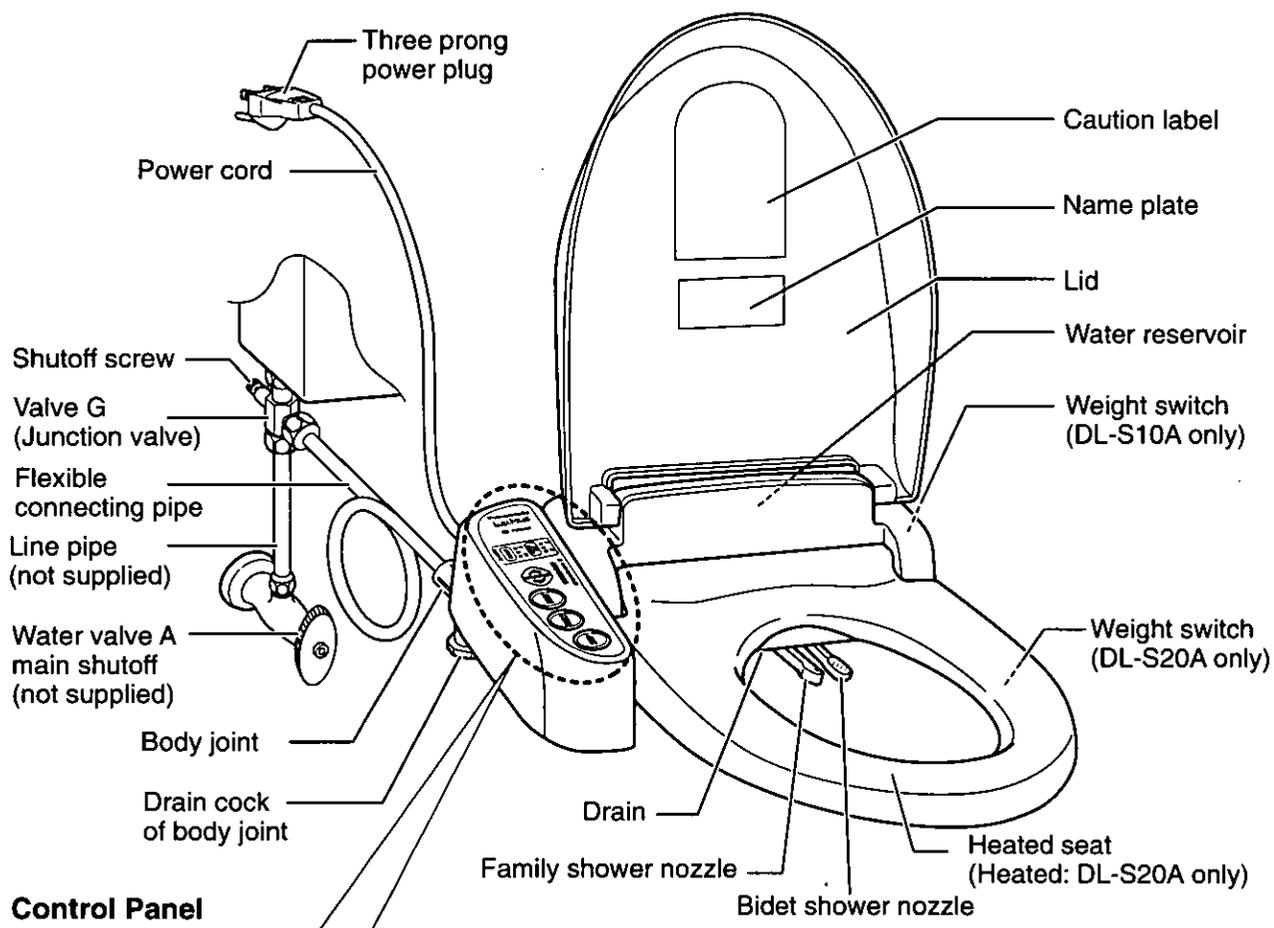
16. Do not apply excessive force to the shower nozzle. (Fig. 16)



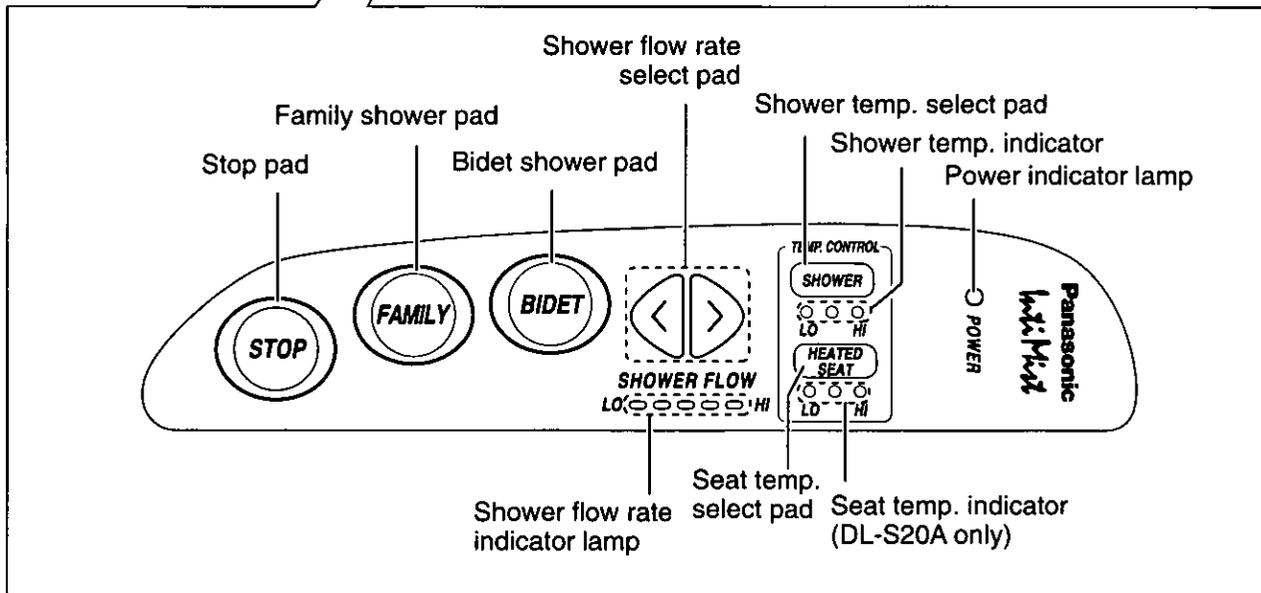
17. The shower nozzle is made of plastic. When cleaning, wipe it with a damp cloth. (See page 18 for Maintenance) (Fig. 17)



4. Feature Diagram



Control Panel



5. Installation Instructions

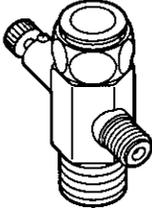
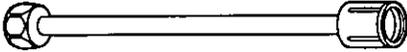
Note:

Unpack the unit, remove all packing material, and examine for damages. Do not proceed with installation if the unit is damaged.

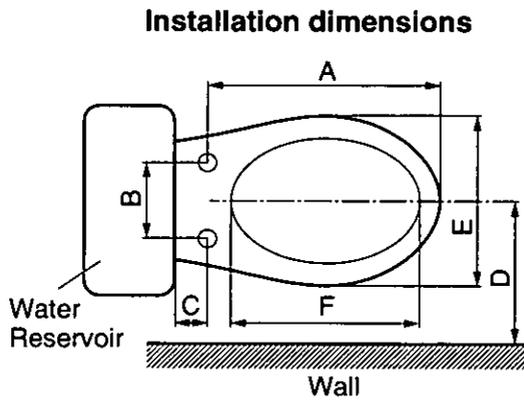
Placement of the Unit

1. This unit has electronic components which are not water tight. Do not install where there is the possibility of excessive water being splashed onto the appliance.
2. The electrical outlet should be installed on the wall within 2.6 ft. from the unit and in accordance with local codes.
3. In order to avoid damage to electronic components due to high humidity, it is recommended to provide adequate ventilation. You may find it beneficial to operate an exhaust ventilating fan.
4. This unit was manufactured primarily for household use. For commercial purposes, please contact your dealer.

Hardware Supplied

		Junction valve G
		Flexible connecting pipe (to connect junction valve and main unit)
Packing		Packing for junction valve outlet (Water reservoir side)

Dimension of Toilet Bowl and Distance to Bathroom Walls



Dimension	Regular type (DL-S10AR/DL-S20AR)	Elongated type (DL-S10AE/DL-S20AE)
A	Approx. 17-21/64" (440 mm)	Approx. 18-1/2" (470 mm)
B	5-1/2" (140 mm)	
C	Min. 1-31/32" (50 mm)	
D	Min. 13-25/32" (350 mm)	
E	Max. 14-61/64" (380 mm)	
F	12-19/32" – 13-63/64" (320 – 355 mm)	14-11/64" – 14-61/64" (360 – 380 mm)

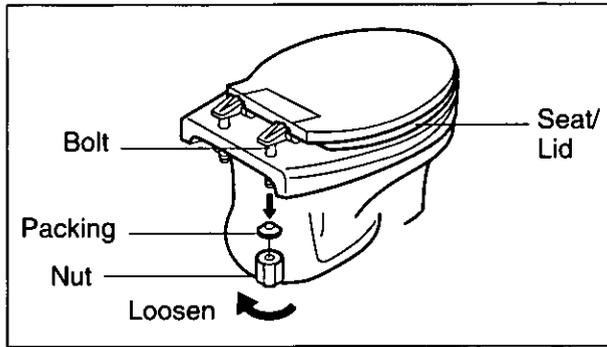
NOTE This product may not fit onto certain one-piece china bowls. Please contact your dealer for details.

Caution

- (1) Connect the feed – water pipe to potable service water only.
- (2) The operational range of water pressure required for this appliance is 10 psi to 60 psi. Although this appliance can operate below a supplied water pressure of 15 psi, the user adjustable shower force range will be affected.
- (3) Do not turn on power and water to this appliance until the installation process is completed.

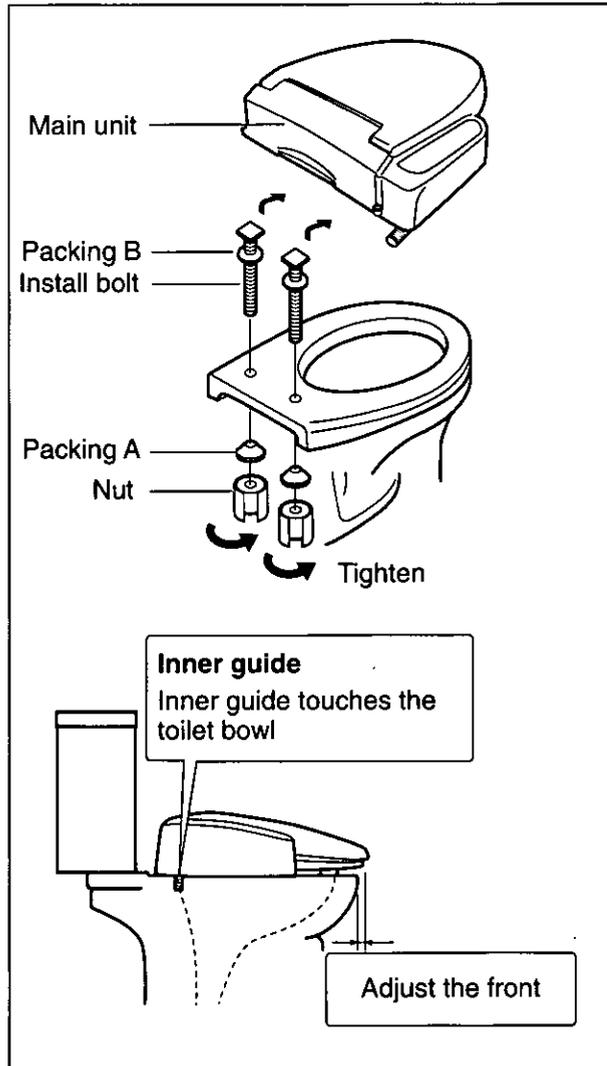
How to Install

1 Remove the existing toilet seat and lid



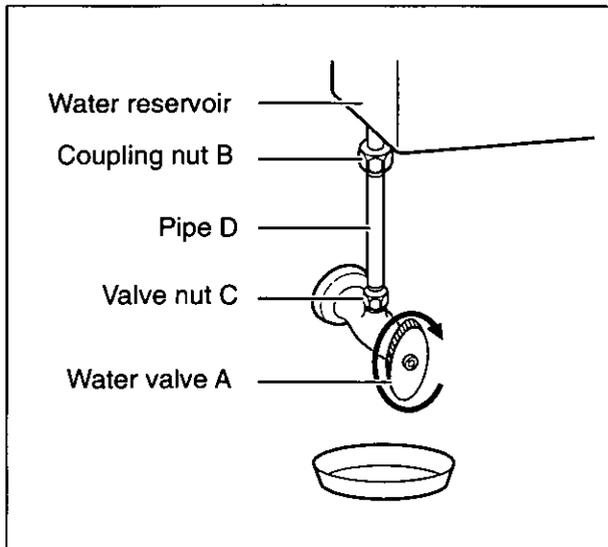
By using a wrench or other proper tool, release the nuts on both sides of the china bowl to remove the toilet seat and lid.

2 Place the main unit

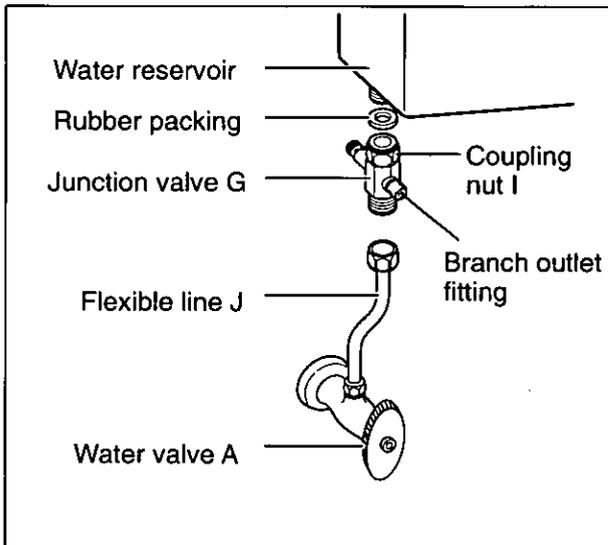


1. Take off the nut, packing A from the supplied bolts and keep it.
2. Slide in the bolts into the bolts guide rail on the bottom side of the main unit.
3. Fit the two bolts into the toilet china bowl holes and fasten with packing A and nuts.
4. Adjust the position of the front end of the main unit to the toilet china bowl.

Do not plug in the power plug until you complete installation.

3**Remove existing pipe D**

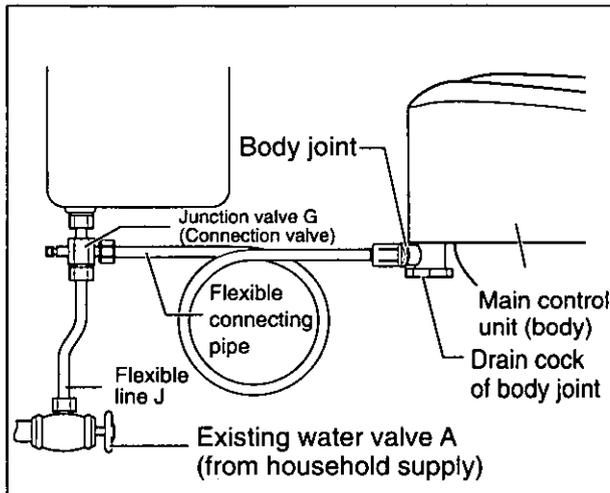
1. Shut off water supply to the water reservoir by closing valve A.
2. Place a small pan or towel around or under the valve to catch the small amount of water that will spill as you proceed with removal and installation.
3. Flush toilet to remove water from the water reservoir.
4. Remove existing pipe D.

4**Connect the junction valve G**

1. Install junction valve G onto existing fitting at the bottom of the water reservoir. Put a rubber packing (supplied) into coupling nut I and tighten.
2. Connect flexible line J to existing water shutoff valve A and tighten.
3. Connect opposite end of flexible line J to bottom of junction valve G and tighten.

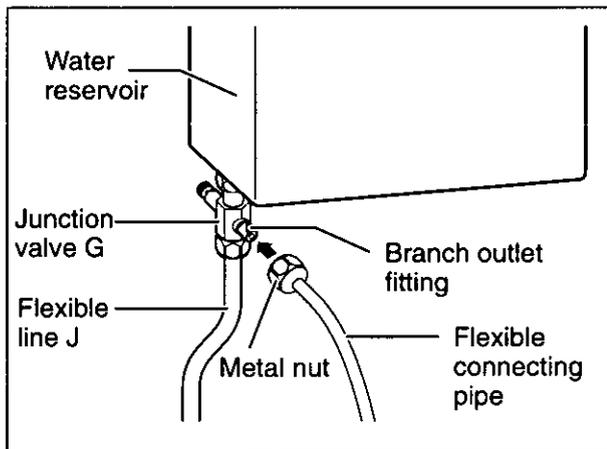
NOTE Be sure to position the junction valve G as shown with branch fitting facing out before tightening.

5 Attach connecting tubing

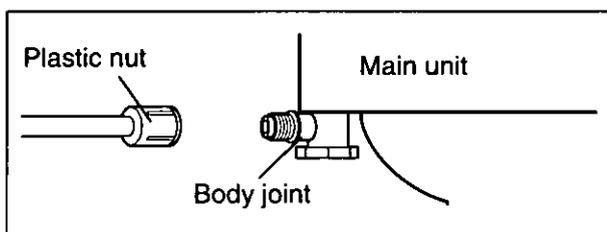


Connect the water branch outlet of the junction valve G to the body joint using the supplied flexible connecting pipe.

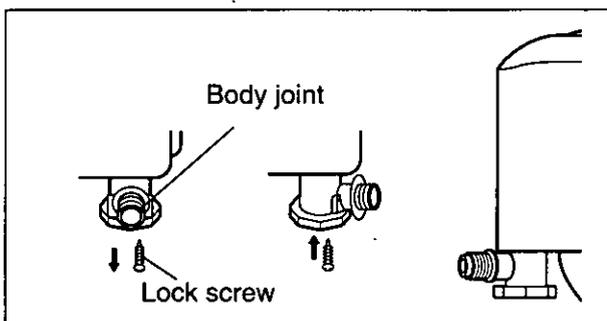
- If it is necessary to bend the flexible connecting pipe, be careful not to kink the pipe.



1. Connection with junction valve G
 - Hand tighten the metal nut first and then wrench tighten 1/4 turns.



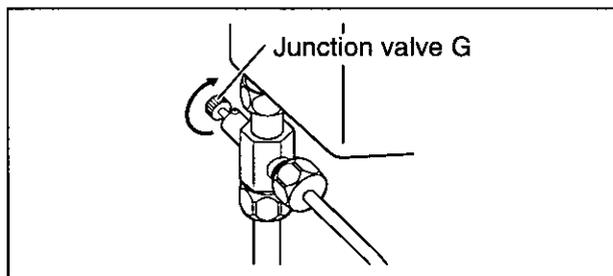
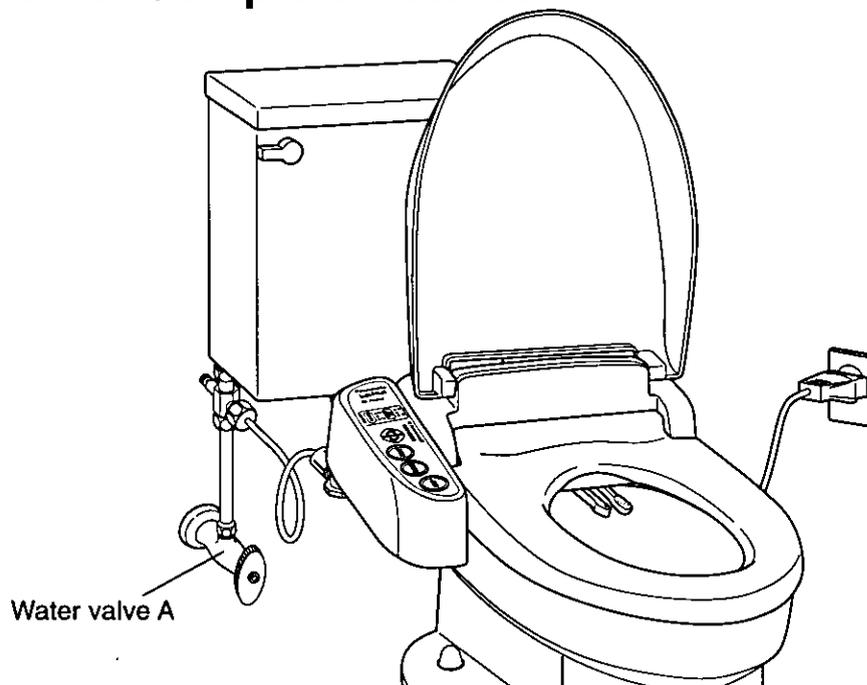
2. Connection to the main unit (Body joint)
 - Insert the pipe ends into the body joint.
 - Hand tighten the plastic nut.



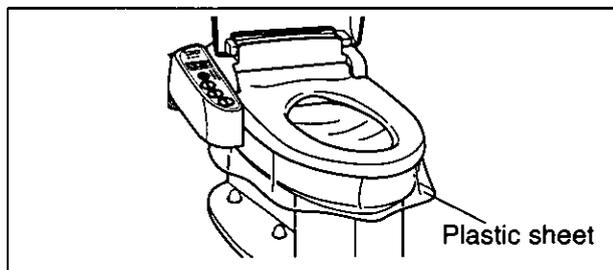
If the body joint comes too close to an obstacle (such as a drain pipe), take off the lock screw of body joint, and turn the joint as illustrated. (Body joint can be fixed at 3 positions.)

6. Trial Operation (Optional)

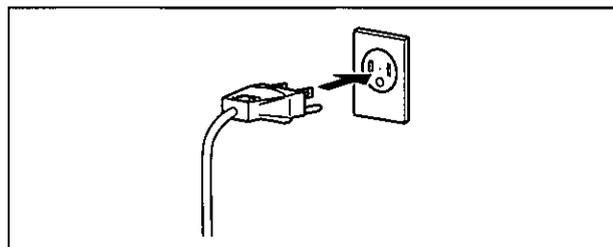
Overview of Complete Installation



- 1** Open the water valve A and junction valve G, and check for water leaks.



- 2** Cover the china bowl with a plastic sheet, as shown.

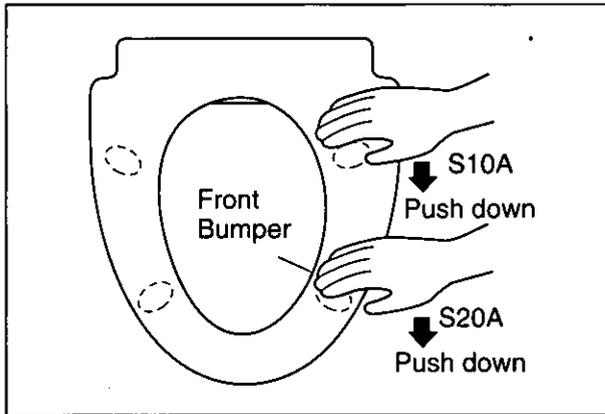


- 3** Plug in the power plug.

→ Continue to page 15.

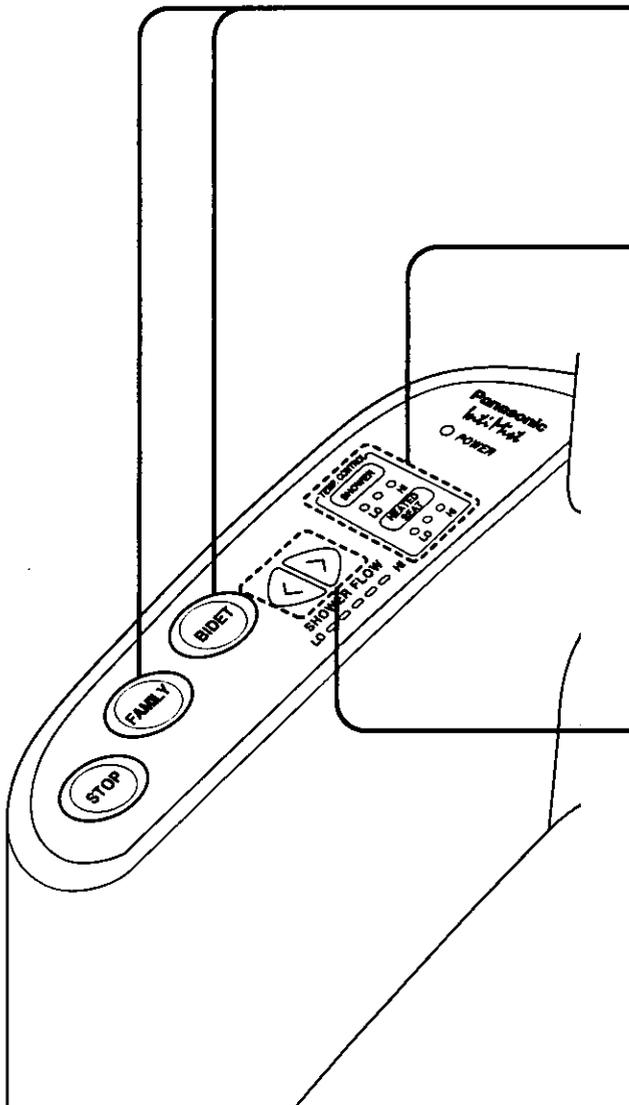
Continued from page 14.

(Activate weight switch)



Push down the seat and hold on the described area for the following steps ④, ⑥ and ⑦.

- For DL-S10A: Right back area
- For DL-S20A: Right front area (Position above Front Bumper)



- 4** Press the **FAMILY** or **BIDET** buttons and shower will come out after approx. 1 min.
To stop, press **STOP** pad.
- 5** Select desired shower temp. and seat temp. and wait 5 minutes. (release hand from the seat)
- 6** Press the **FAMILY** or **BIDET** buttons and check the water temp. by hand.
To stop, press **STOP** pad.
Readjust if necessary.
- 7** Press and check the water flow change by selecting the level.
- 8** Check the warm level of the seat.
Readjust if necessary.
(DL-S20A only)
- 9** Remove plastic sheet installed in step ② (page 14).

7. Washing and Adjusting the Functions

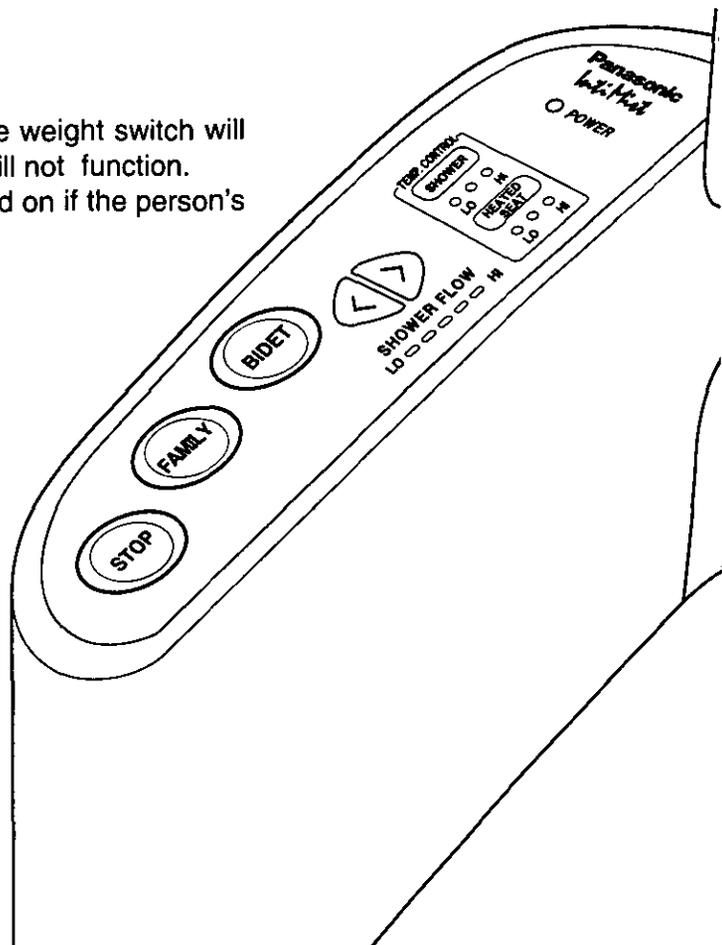
1 Sit down on the seat.

2 Press **FAMILY** or **BIDET** to proceed with washing.

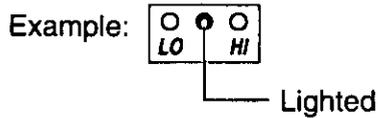
- When the water (shower) is first sprayed, the water pressure is slightly higher than normal.

3 Press **STOP** to stop operation.

- If you do not sit down on the seat, the weight switch will not be turned on, and the appliance will not function. Similarly, this switch may not be turned on if the person's body weight is less than 22 lbs.



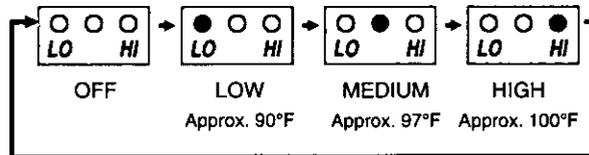
“●” in the illustrations indicates the lighted state.



Adjusting the toilet seat temperature (DL-S20A only)

Press **HEATED SEAT**.

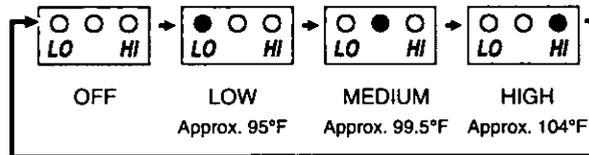
- Each time this switch is pressed, the temperature adjustment lamp switches.



Adjusting the shower temperature

Press **SHOWER**.

- Each time this switch is pressed, the temperature adjustment lamp switches.



Adjusting the shower strength

- Initially, the shower starts up at the intermediate shower strength. (The adjusted strength applies while you are seated but the intermediate strength is restored as soon as you stand up.)
- Each time the switch is pressed, shower flow lamps change from either low to high or high to low.

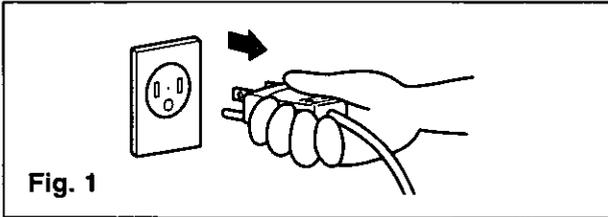
While the water is being sprayed, press .



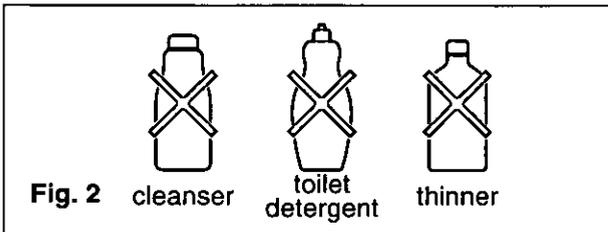
8. Maintenance

When cleaning this unit please observe the following.

1. Before cleaning:

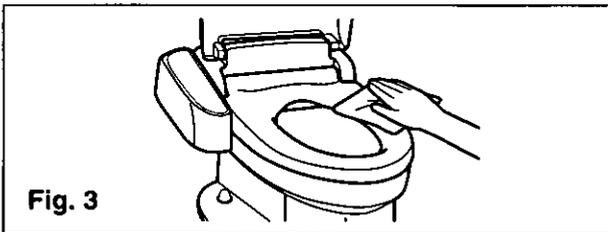


- Remove the power plug from the electrical outlet. (Fig. 1)
Do not pull the cord while removing the plug.

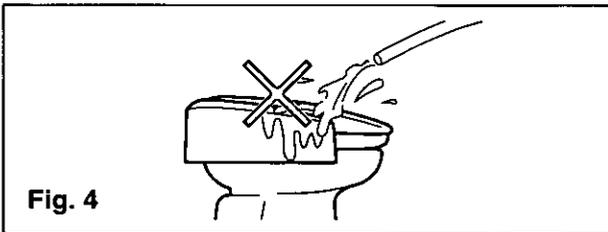


- Use only mild dish washing detergent when cleaning plastic parts. Do not use any cleanser with abrasive powder, acid or alkaline detergent, benzene, thinner, etc. as they will damage the plastic parts. (Fig. 2)

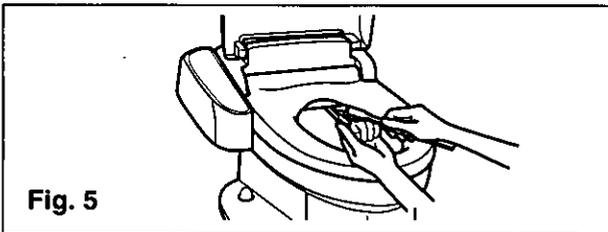
2. Cleaning of the seat cover lid and control area:



- Wipe with a damp soft cloth. To remove any excessive dirt, wipe with a cloth dampened with mild dish washing detergent and then wipe again with a damp cloth to remove the detergent. (Fig. 3)

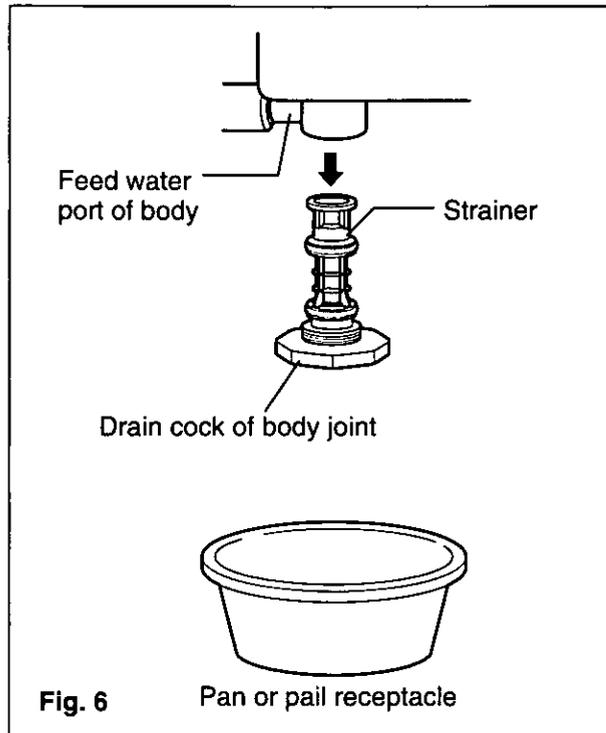


- Do not splash or pour water on this appliance. (Fig. 4)



- If a spray nozzle is stained, carefully pull it forward and clean it with a toothbrush using a mild detergent if necessary. (Fig. 5)

3. How to clean the water inlet strainer:

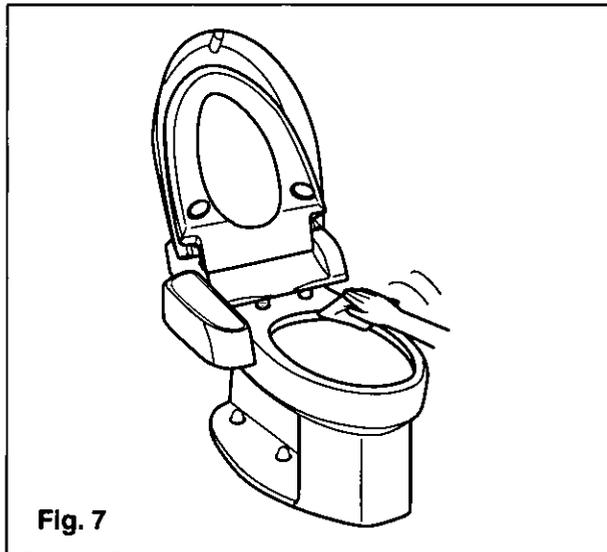


- If the flow rate of the water drops down, you may have a blockage at the inlet strainer. Clean the strainer by the following procedure. (Fig. 6)
 - (1) Close the water valve A. (shown in page 8)
 - (2) Flush the toilet.
 - (3) Take out the strainer by turning the drain cock of body joint in a counterclockwise direction and lower the strainer assembly.
 - (4) Clean the strainer screen.
 - (5) Put the strainer back in its original position and secure tightly.
 - (6) Open the water valve A.
 - (7) Check to see that there is no water leaking.

Note Tighten the drain cock securely to prevent water leaks.

4. Empty the water reservoir if the appliance is not to be used for a period of 7 days or longer. Refer to page 20 for draining procedure.

5. To clean the bottom surface of the body, follow these steps:



- (1) Close the main water supply valve A. (shown in page 8)
- (2) Loosen the set bolts of seat body, raise the body to such an extent that the area may be cleaned. (Fig. 7)

Note Do not push the seat body back hard, or the set bolts will break.

- (3) Reattach in reverse order.
 - Check that there is no leakage of water.

9. To Prevent from Freezing

When there is a chance of the temperature in the house dropping below the freezing point, take the protective measure indicated below. (If the water freezes, it may cause damage to the inner reservoir tank, the shower body and/or the flexible connecting pipe, leading to water leakage.)

Drain all water from the unit:

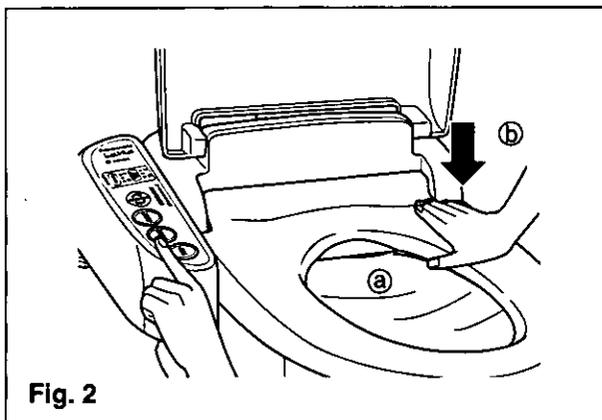
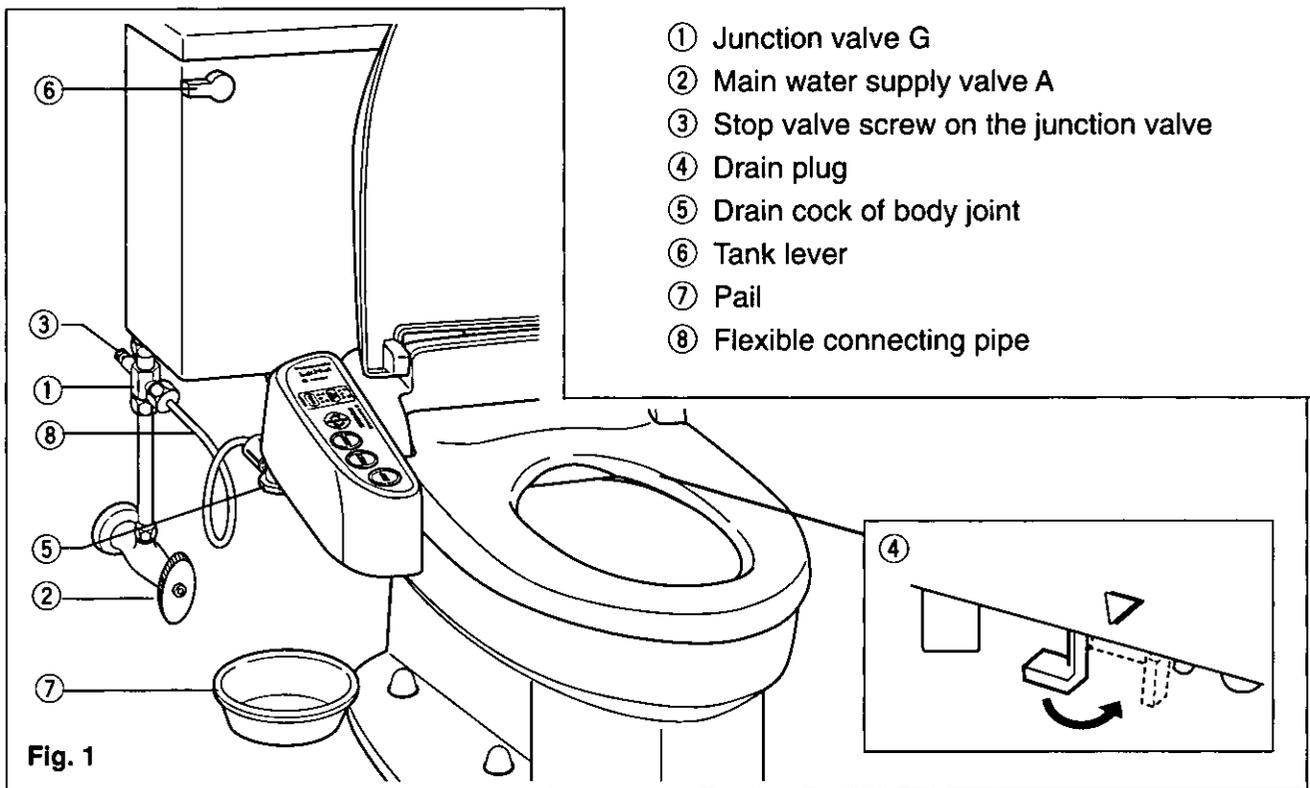
When not using the unit for an extended period of time, empty the water from inside the main body and the flexible connecting pipe as follows:

1. Put a pail under the drain plug and drain cock of the reservoir of main body (⑦ in Fig. 1, page 21).
2. Close the main water supply valve A (②).
3. Empty the water from inside the Water reservoir by flushing the toilet (⑥).
4. Empty the water from inside the main body by removing the drain plug (④) and the drain cock of body joint (⑤).
5. Press the family pad while pushing down the right side of the seat.
 - At this time, make sure that the stop valve screw on the junction valve (③) is in the open position.
6. When the draining of water is completed, tighten the drain plug (④) and drain cock (⑤).
7. Remove the power supply plug of the main body from the electrical outlet. In order to prevent shock hazard, make sure your hands are dry and area is free of water before making contact with AC cord.

Note Tighten the drain cock securely. Otherwise, there is a danger that water may leak.

How to put the unit back into operation after draining:

1. Open the main water supply valve A (② in Fig. 1) and the stop valve on the junction valve G (③ in Fig. 1)
2. Insert the power supply plug in the electrical outlet.
3. Put a plastic bag (Ⓐ in Fig. 2) on the toilet bowl in advance for protection against splashing of water and then push down the seat. (Ⓑ in Fig. 2)
4. Press the family pad while holding down the right side of the seat with one hand. (Ⓒ in Fig. 2)
 - When the main body reservoir is filled with water, the water will start spraying from the tip of the nozzle.
 - If there is no water spray coming out after 1 minute, recheck main water supply valve A and branch junction valve G to be sure you have opened them and you are supplying water to the main unit.



- Ⓐ Wrapping bag or plastic bag (for protection against splashing)
- Ⓑ Press down on seat to activate weight switch

10. Before Calling for Service

Please check the following points before calling for service:

Symptom	Point to be checked
No water is coming out of the nozzle (alternative blinking of family shower lamp and bidet shower lamp)	<ul style="list-style-type: none"> • Check if the water valve A is open. (See page 14) • Check if the branch junction valve G is open. • Check if it is a case of low water supply. (See page 10 regarding water pressure)
Weak shower force	<ul style="list-style-type: none"> • Check if the strainer of the drain cock is clogged. (See page 19, #3) • Check if the shower nozzle is not stained and clogged. (Clean the nozzle, see page 18, #2)
Heated seat is not warm (DL-S20A only)	<ul style="list-style-type: none"> • Check if the seat temperature setting is at OFF or LOW. (See page 17)
Shower water not warm	<ul style="list-style-type: none"> • Check if the shower temperature setting is at OFF or LOW. (See page 17 note on shower water temperature)

If service is required

- Drain the water from the appliance as explained on page 20.
- Disassemble and remove the appliance from the toilet bowl for carry-in or ship-in service as per warranty statement.

Important notes:

1. During operation with the shower, you will hear water coming out from a bypass drain (near the nozzle). This is a normal condition and is not a defect.
2. If the supply water pressure is less than 15 psi you may not necessarily obtain a desired water force even if you press the strength adjusting pad to maximum. You may also not obtain a sufficient water force if the water is flushed from the Water reservoir or if water is also used at some other outlet and the supply water pressure drops to less than 15 psi.
3. The shower body is made of plastic. When cleaning, wipe the body with a damp cloth. Avoid using harsh detergents or abrasives as they may damage the plastic parts (See page 18).

Service information:

- For further service support, please contact your dealer or write to Panasonic at the address printed on the back cover.

11. Specifications

		DL-S20A	DL-S10A
Electrical Rating		AC 120V – 465 W 60 Hz	AC 120 V – 410 W 60 Hz
Standard surface temperature range of heated seat		“Low” 90° F (32° C) “Mid” 97° F (36° C) “High” 100° F (38° C)	—
Heated seat safety device		Thermal fuse	—
Washing unit	Max. flow rate	Family shower 0.26 gal/min (1 L/min) Bidet shower 0.26 gal/min (1 L/min)	
	Shower temperature	“Low” 95° F (35° C) “Mid” 99.5° F (37.5° C) “High” 104° F (40° C)	
	Safety device	Thermal fuse Thermal cutout Float switch prevents overheating when tank is empty.	
Cord length		3.94 ft. (1.2 m)	
Dimensions	Regular type (DL-S20AR) (DL-S10AR)	19.9" x 7.5" x 19.3" (505 x 190 x 490 mm)	
	Elongated type (DL-S20AE) (DL-S10AE)	19.9" x 7.5" x 20.5" (505 x 190 x 520 mm)	
Weight	Regular type	10.6 lbs (4.8 kg)	9.7 lbs (4.4 kg)
	Elongated type	11 lbs (5.0 kg)	10.1 lbs (4.6 kg)

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