

HITACHI FULLY AUTOMATIC WASHER

Model SF-P80CJ

Thank you for purchasing your new HITACHI Fully Automatic Washer.

- Please read this guide carefully to operate the machine properly.
- Please keep this manual for future reference.

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Convenient New Features

One Touch-Sensor Wash

Convenient one touch operation where water level, load size and fabric mix are automatically sensed to ensure correct wash action for each load.

Heavy Duty, Large Capacity (8.0 kg), Stainless Steel Wash Bowl

Large capacity wash bowl will handle a large, family sized load with ease.

Water-level Selector in 12 Levels

Economical washing can be done even for small load of laundry.

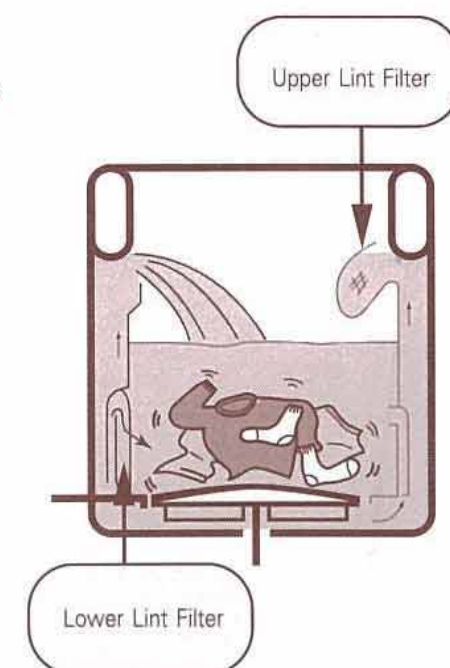
Depending on a wide variety of washing load sizes (800 to 8.0 Kg.) fine adjustment for washing water level can be made automatically in 12 levels.

Double Lint Filter

Lint can be collected assiduously through the upper and lower lint filters.

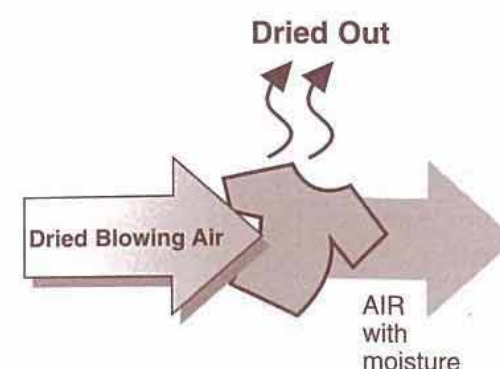
Lint filters located in upper and lower sections of the washbowl enable lint to be collected effectively.

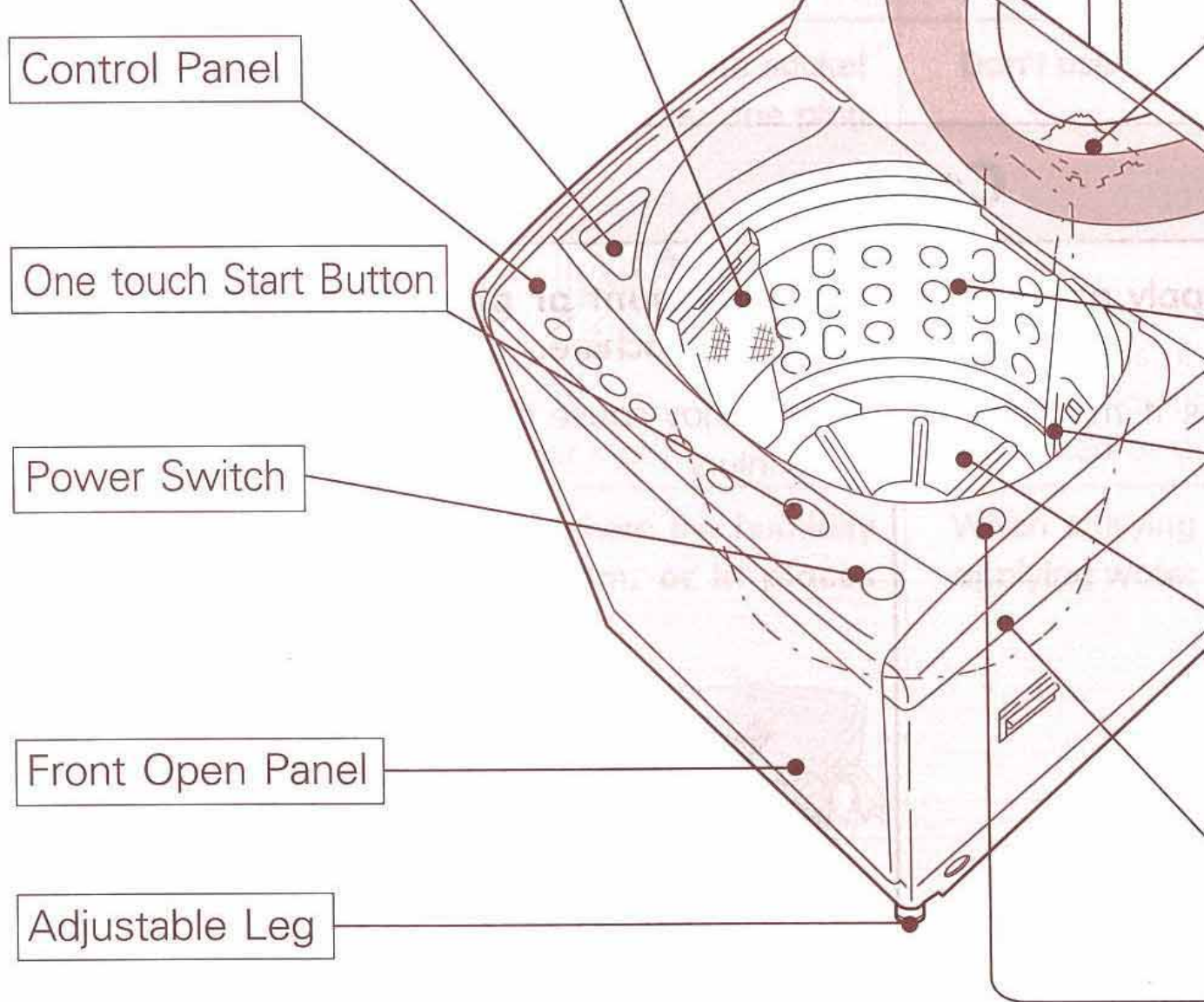
Even when washing is under way at a low water level, the lower lint filter can take away lint to a satisfactory degree. ➡ 46



"AIR JET" (Spinning with Blowing AIR)

During the process of dry function, water content of laundries is blown away by dried blowing air and laundries can be dried earlier than usual spinning time.





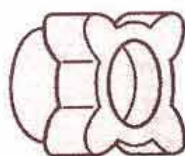
- If the washing machine is to be connected to the water mains, using a new water supply hose and the old water supply hose should not be used.

Attachments

Check that the followings are contained in the washer package. If not provided, please contact your retailer immediately.



Water supply hose x 2



Water inlet cap



Leg cap x 6

Important Safety Precaution

Avoid breaking the lid.

- If the lid is damaged, you may get injured because laundry may be entangled with your hand or may come in contact with the washbowl rotating in spin mode.

The automatic washer of this model type will not be deformed or damaged as long as you do not place heavy objects on or apply pressure to the washer.

Whenever you open or close the lid, handel it with utmost care observing the following.

Caution

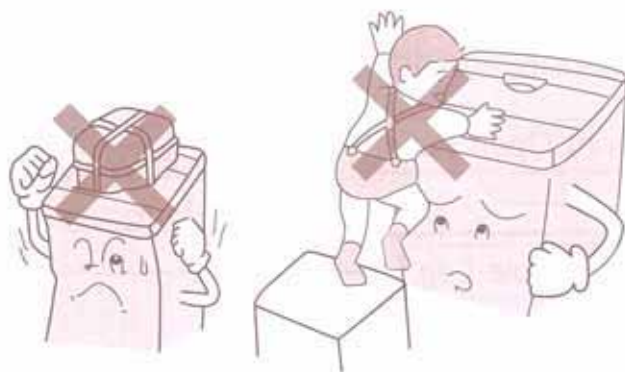
Don't rest heavy objects on or apply pressure to the lid.

- Don't bend the lid forcibly, as it may break.

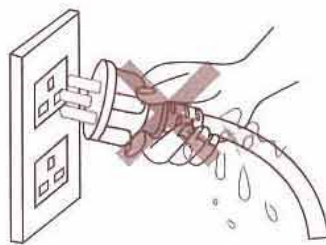


Do not mount or place heavy objects on the washing machine.

- This may cause deformation or damage, leading to injury.



Be sure to pull out the power plug from the socket when maintaining the unit. Do not pull out the plug from the socket with wet hands.

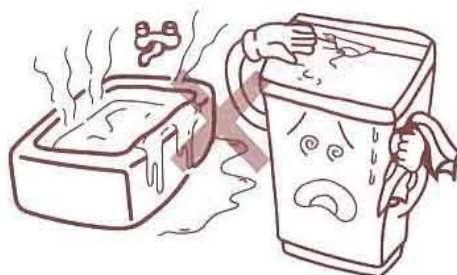


- This may result in electric shock or injury.

Don't use excessively hot water.

- Plastic parts of the washer may be deformed or damaged.

Do not install the unit in places where the humidity level is high such as a bathroom, or in places exposed to wind and rain.



- Doing so may cause fire, resulting from electric shock or electricity leak.

When carrying out maintenance, do not apply water directly to the machine.

- This may cause a short or electric shock.

Never touch the washing inside until the inner washing container comes to a full stop.

- Even slow spinning of the inner container may cause you to get caught in the washing cycle, which may cause injury. Particular care is required in this regard when children are involved.



Never put kerosene, gas, alcohol or caustic soda, or other flammable substances, into the inner container.

- This may cause a fire or explosion.

Do not allow infants to look into the inner washing container, and do not place a stand in the proximity of the washing machine.

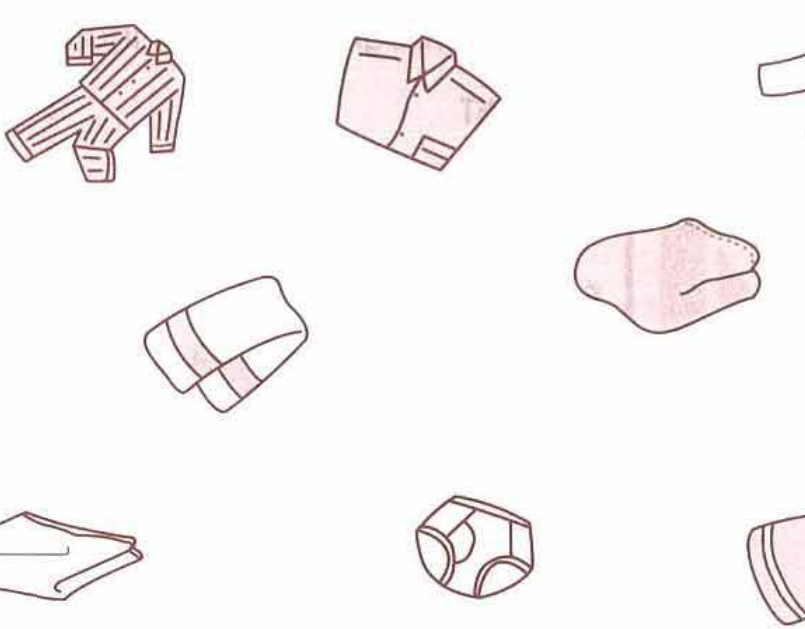
- This may result in your child falling into the inner washing container, possibly resulting in injury.



Thoroughly wipe the prongs of the power plug, and do not let them adhere to the prong of the power plug.

- Failure to do so may result in electric shock or fire.

General types of laundry
(cotton, synthetic fiber,
and blended yarn fabric)



Delicate clothes, including 100% wool garments
with a tag indicating "Hand Washing", wool-blended
yarn fabric such as knitwear, and lingerie.



Clothes that are labeled with "Dry Cleaning" only
as well as "Dry Cleaning" and "Hand Washing"

👉 25



Heavily stained clothes	Socks and sportswear stained with mud Bulky clothes such as jeans	
	Stubborn stains, such as oil and fat fouling, on collars and cuffs	

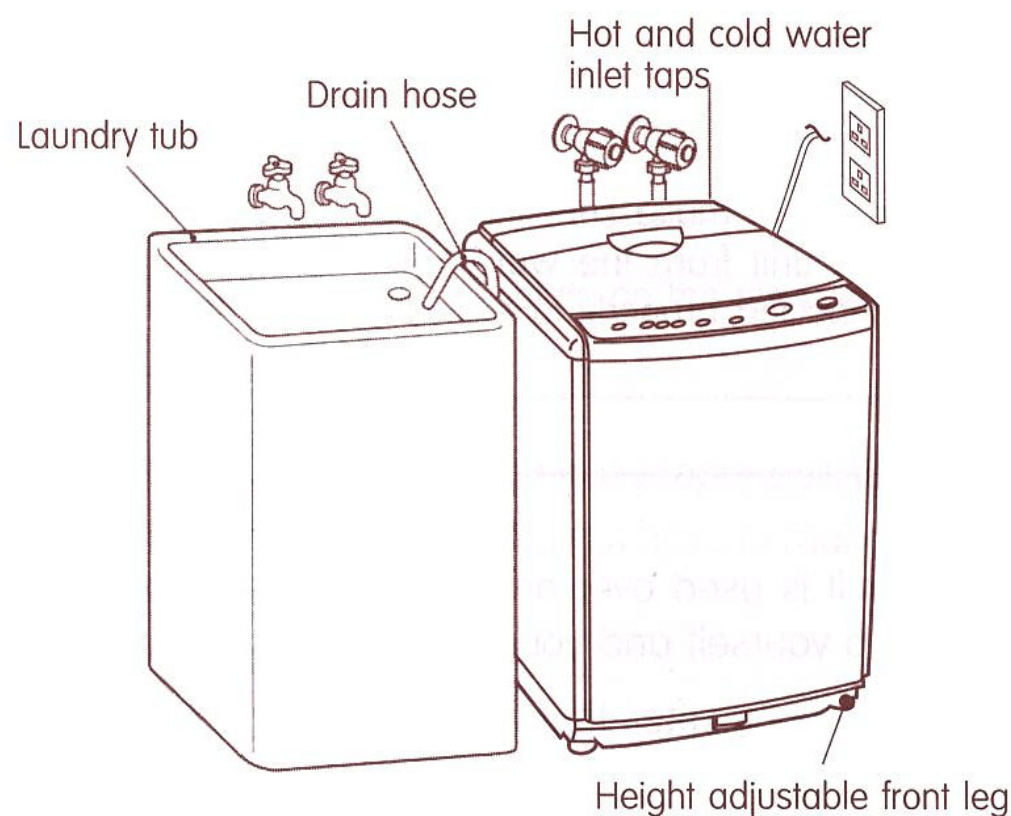
Blanket



- Load size and detergent 👉 38
- When using bleach, liquid detergent and softener 👉 39
- When using powder detergent 👉 40

three-prong wall power point. This will reduce the risk of electric shock should a wiring fault occur.

Recommended installation method

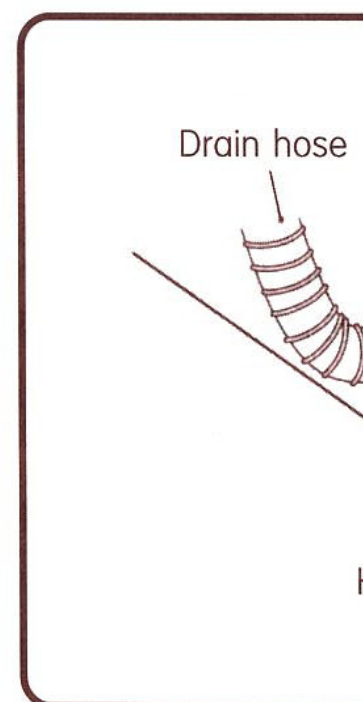


1. Attaching Drain Hose

- Connect the drain hose to drain outlet and clamp tightly by the hose clamp.
- Hook the U-shape end of the drain hose over the rim of a sink to drain

(Note)

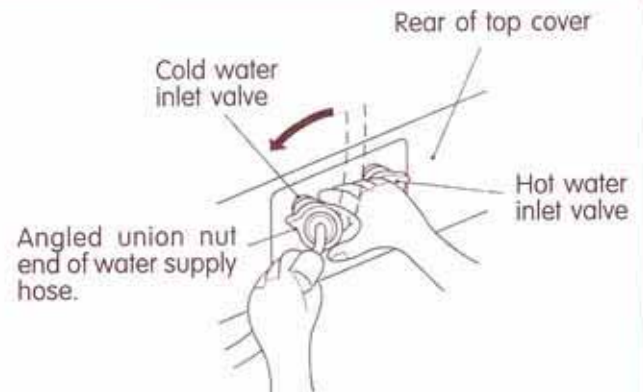
- Never lay down the drain hose, as water will be discharged.
- The discharge height should be approx. 1 m above the base of the washer.
- Be sure the drain hose is properly routed so it will not kink or lift from the sink.



2. Connecting the Water Supply Hose

- Securely connect water supply hose to the hot and cold taps and washing machine water supply inlets with the angled union nut, so use the following procedure.
- ✦ Be sure to connect the water supply hose to the washer before the main unit of washer is installed.

- ① Tighten the union nut.
 - ✦ Tighten the union nut lightly first. Then, tighten it firmly after making sure that two or three threads of the nut are engaged with the inlet valve.
- ② Hold the union nut stationary, swing the water supply hose counter clockwise about a quarter turn back from the desired final position, then tighten the union nut and water supply hose together.
- ③ If the water supply hose swings past the desired position in Step ②, hold the union nut and swing the water supply hose back as in Step ②, then tighten the union nut and water supply hose again.
- ④ Repeat these orders until the water supply hose is held securely at the desired position.
- ⑤ Prior to washing, open a water tap to make sure that washing water is supplied to the unit from the water supply hose which has been connected properly to the unit.



Make sure the hoses are connected to the correct inlet, Cold to Cold and Hot to Hot.

- If the union nut is loosened after it is used over an extended period of time, water leakage may occur, leading to unexpected damage to yourself and your property.
- If some malfunction is still found even after the union nut is further tightened and/or replaced with another one, replace the water supply hose with a new one.

Loosened union nut may invite unexpected accidents, such as water leakage or burn.

Hints:

- When you use hot water, lower its temperature as low as possible. The washer of this model type allows laundry to be washed cleanly even the washing water temperature is low.
- Washing laundry in low-temperature washing water is environmentally friendly measures as well.

✦ Connecting the cold water inlet hose only.

Make sure the water inlet cap shown below, is securely fitted to the hot water inlet valve.



Water inlet cap

To be fitted to hot water inlet valve when only cold water inlet hose is connected.

4. How to install Your Washer

- Place your Washer on dry, well-ventilated, flat and level floor in a horizontal position. Otherwise, the Washer may stop functioning during spin cycle or cause abnormal noise.

1. Place your Washer in the place where you wish to install it.

✱ If the Washer rattles, make the following adjustments for it:

■ If the adjustable leg rattles;

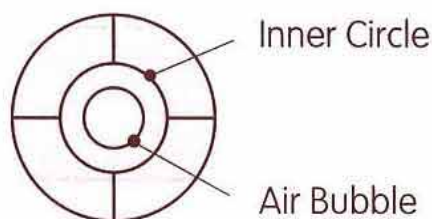
Make height adjustments for it to remove the rattling.

■ If any one of non-adjustable leg(s) rattles;

Rest the rear legs on the floor and place a proper, flat plate on the area between the legs to remove the rattling.

2. Check to see if the air bubble in the level is located in a proper position.

✱ If the air bubble stays within the inner circle, you do not have to make height adjustments.



✱ Take a look at the level from the top immediately after placing the washer on the floor.

✱ If the bubble does not remain in the circle, use the supplied leg cap(s) to make the non-adjustable leg(s) level.

■ About leg Caps

Three kinds of leg caps (2mm, 4mm and 8mm in height), two pieces each, are provided as accessories. Combine them with each other, if necessary.

If you stack them on top of each other, attach the short cap (s) in height to longer cap(s).

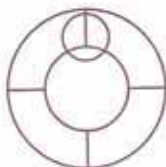
3. Depending on a position of the bubble in the level, attach the leg cap and applicable leg(s).

(For adjustable leg, turn it in either clockwise or counterclockwise direction for adjustment.)

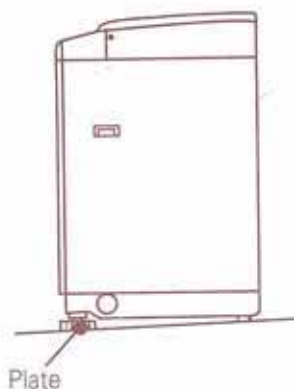
(Example) What to do when Washer leans forward

If one-half or more of the bubble stays outside the circumferential edge of inner circle:

Attach 12mm (8mm + 4mm) leg caps to the (non-adjustable) front leg. (Turn the adjustable leg clockwise or counterclockwise to make its height adjustment.)



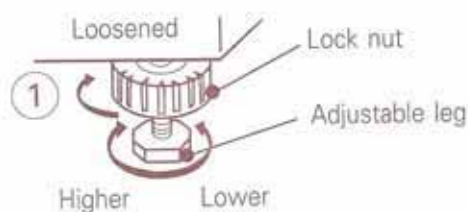
- For details see the information on the back of "Check Sheet for Installing Washer".
- When one-half or more of the bubble stays outside the circumferential edge of inner circle, height adjustments cannot be made only through the leg cap (s) because the floor is tilted excessively. In this case, lay a proper, flat plate or the like under the legs.



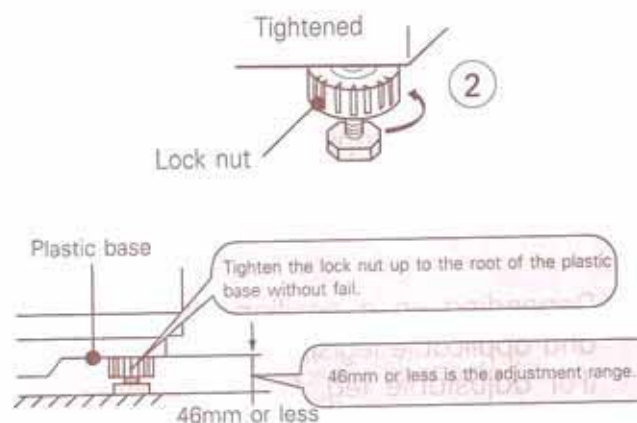
4. Make sure that Washer does not rattle.
- If the Washer still rattles, adjust its height using the adjustable leg.

How to use the adjustable leg

- 1** Loosen the lock nut by turning it in the arrow direction ① and turn the adjustable leg to adjust looseness.
- The height can be adjusted by up to 14mm.



- 2** If adjustment is complete, fix the lock nut by turning it in the direction of the arrow ②



Trial Operation

- After you finish installing the Washer in place, check for its mounting condition on the floor according to the "Check Sheet for Installing Washer".

Caution

- Before washing laundry, open the water tap to make certain that the water supply hose is connected correctly to the Washer.
- Loosened mounting screw (s) may invite unexpected accidents resulting from water leakage.

Control Panel

Indication of detergent and water quantity

As soon as the operation gets started, recommendable amount of detergent (as a rough measure) and water level are indicated on the control panel.

- The amount of detergent indicated is for concentrated detergent usage.
- After laundry load is detected, recommendable amount of detergent (rough measure) will be indicated for about 5 seconds, then water level indicated.
- If you press the "WATER LEVEL" button when water is supplied into the washer during washing process, recommendable detergent quantity (rough measure) will be indicated for about 2 seconds.
- Some courses do not indicated a detergent quantity (rough measure) 📖 14

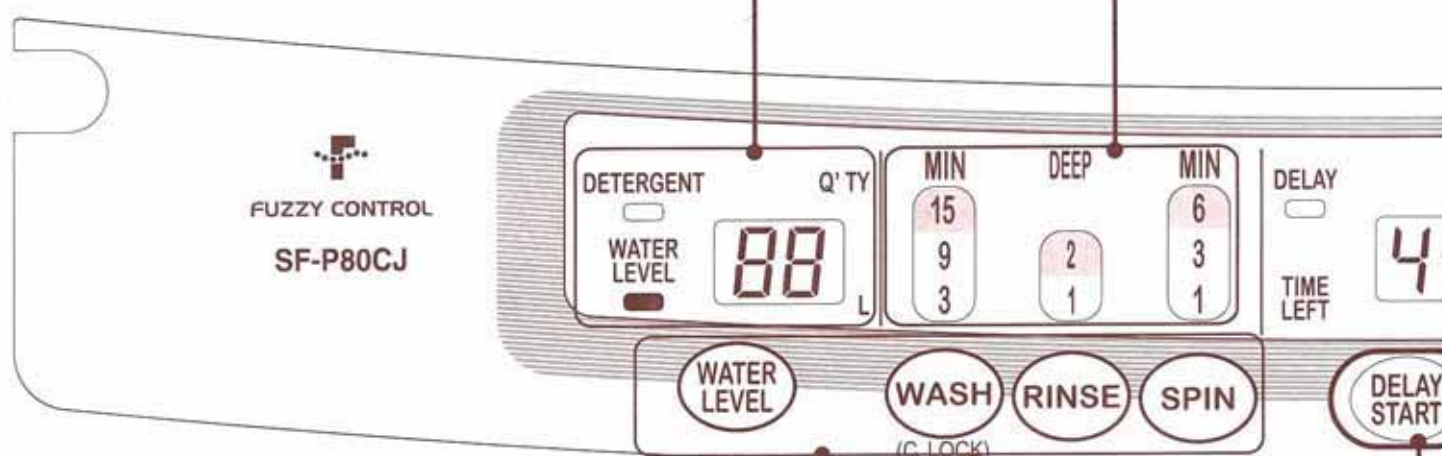
Indication of progress in washing process

Illuminated washing lamps indicate the corresponding progress in washing process.

- Flicking of lamps which indicate the ongoing washing process of the washing process when the machine is on.

Remaining time/Time indicator

It indicates the remaining time after cycle starts. Pushing the DELAY START button will indicate preset time. (After 12 ~ 3 hours Finish)



WATER LEVEL ● WASH ● RINSE ● SPIN ● Buttons

Push this button when setting water level, wash, rinse and spin according to your need, or change preset data.

- Should you change a course to another one after cycle starts, be sure to stop the cycle and make the change. Remember that you will no longer change a washing course after the currently selected washing course is completed. (However, some courses cannot be changed.)
- Press the water level button when wishing to add water during the washing and rinsing processes. While the button is being pressed, water is continuously fed. (When the water level reaches "high", the water feed stops.)

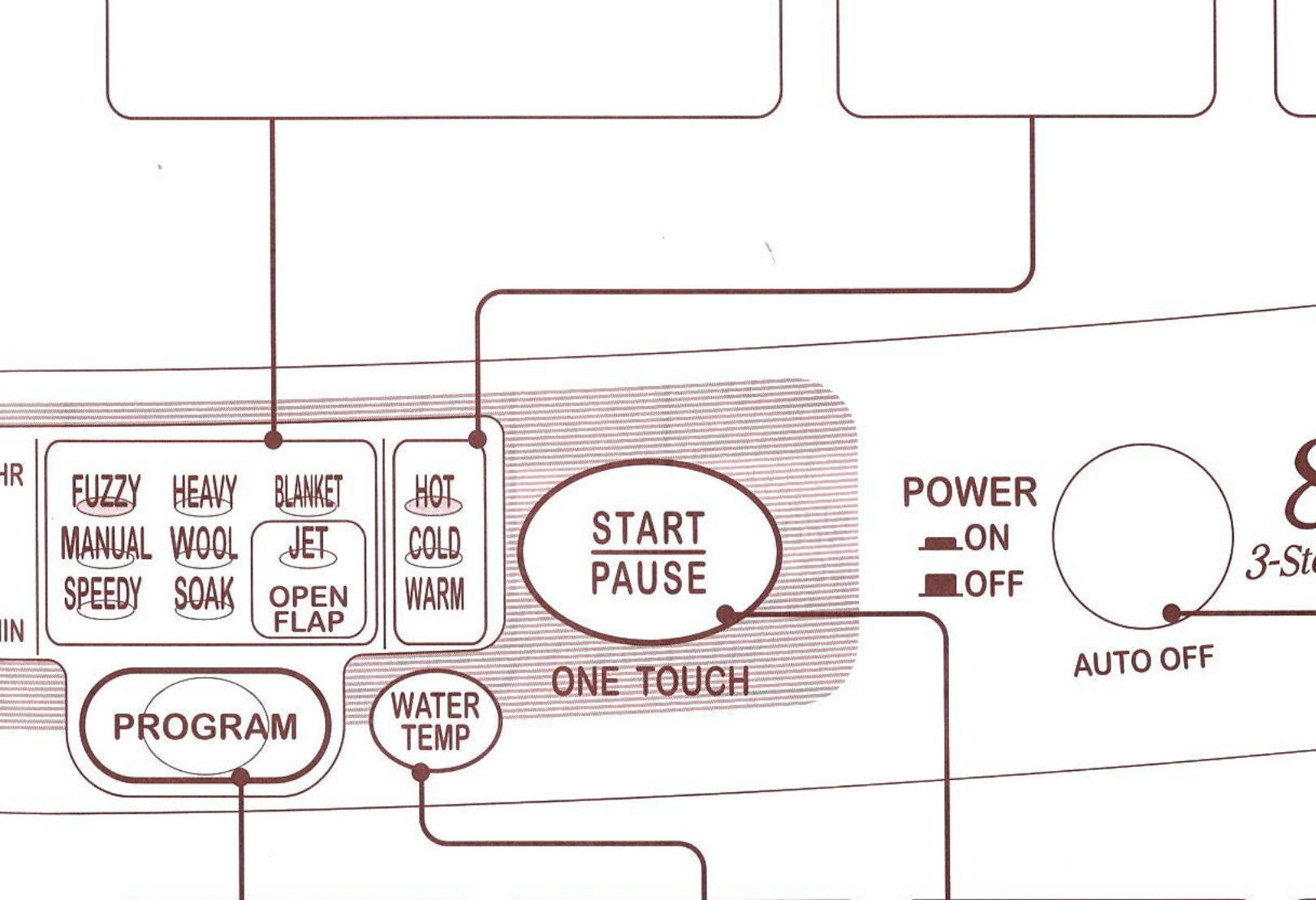
Child Lock

If you press and hold down the "WASH" button for 3 seconds or longer after turning on the Power switch, "CH" will be indicated to inform you that the Child Lock is activated. 📖 42

Delay Start button

For timed washing. 📖 37 Washing can be set to finish at any hour within 12~: hours.

You will hear two beeping sounds when setting the water level to "88L", washing time to "15 min.", rinsing cycle to "double rinse", spin to "6 min.", delay start to "12" hours later, water temp to "WARM" and course to "Fuzzy" course. (This is to inform you of the lamp's reference value.)



Program button

Eight courses are available, depending on the type of washing and the level of dirtiness. 🖱️ 16~32.

WATER TEMP button

- Used to select proper water temperature of washing water.
- 「Hot → Cold → Warm (Hot and Cold light on) → Hot」 Mode repeats.

START / PAUSE button ("One Touch" button)

- This button is used to start the operation or temporarily pause the operation.

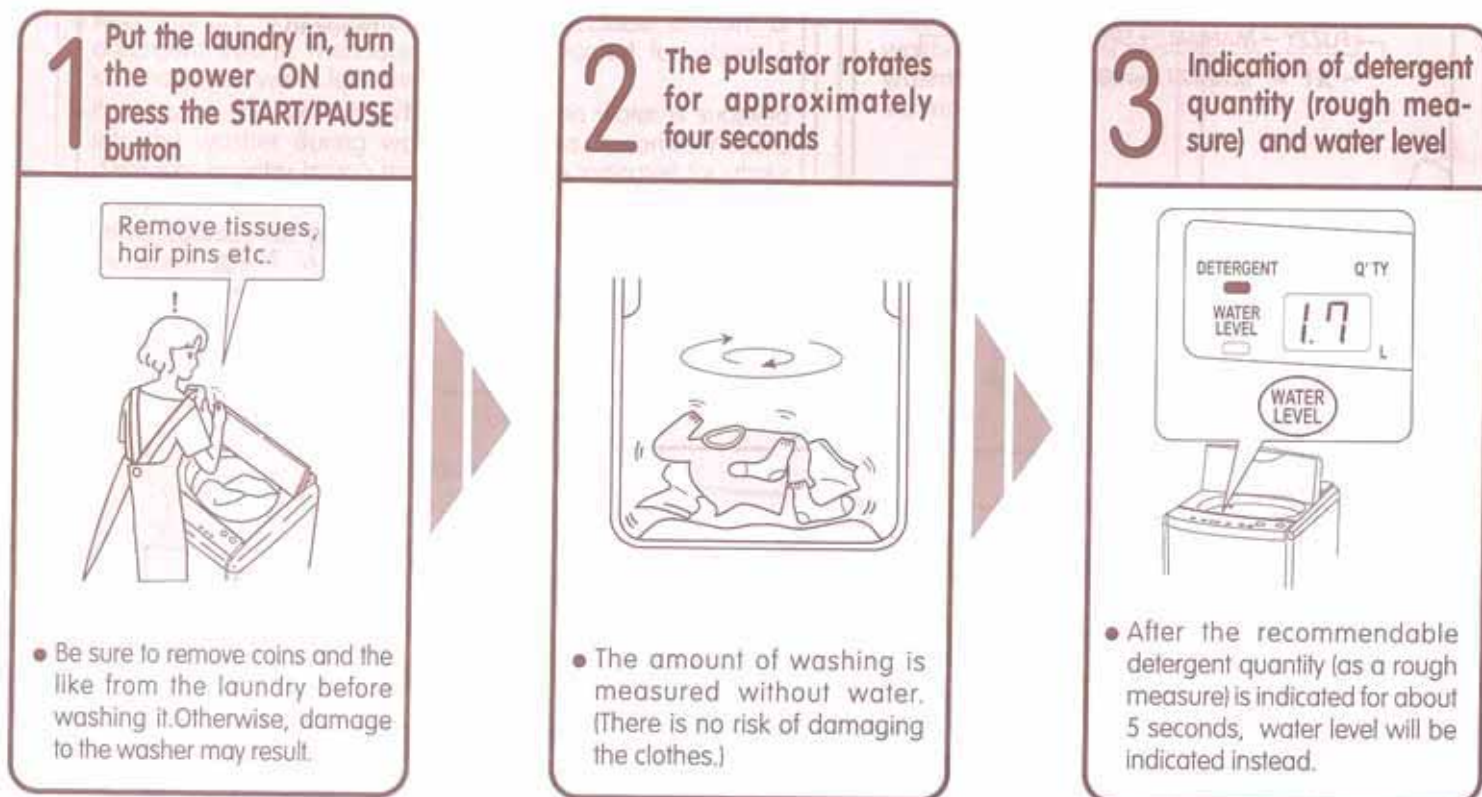
CAUTION

- Never push the two-or-more buttons simultaneously. Otherwise,

Detection of laundry load, and indication of amount of detergent (rough measure) and water level

Detection of laundry load

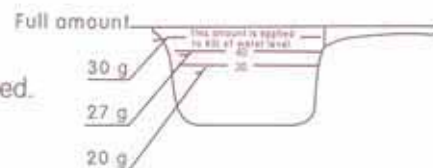
The built-in sensor automatically detects any laundry load and indicates recommendable amount of detergent and water level as follows:



Detergent quantity (rough measure) indicator and its recommendable amount

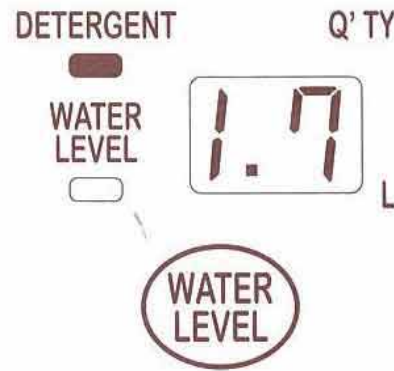
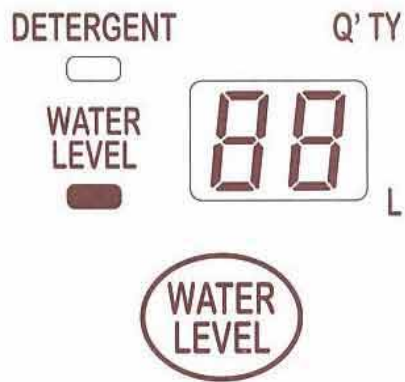
The detergent quantity (rough measure) indicator shows you the recommendable amount of concentrated-type powder detergent (20g is enough to wash laundry at 32L water level) which is measured by a measuring spoon (with max. capacity of 35g).

- The detergent quantity (rough measure) indication is determined based on one spoonful of measuring spoon with the max. capacity of 35g. (The capacity of a measuring spoon may vary depending on detergent manufacturer and brand.)
- See page 38 for other kinds of detergents.
- Do not use excessive amount of detergent. Otherwise, a poor rinsing performance may result or excessive foams may cause some trouble.
- For details, observe the instructions of each detergent you use.
- In "WOOL", and "BLANKET" courses, no detergent quantity (rough measure) is indicated.



Water level indication

Detergent quantity (rough measure) indication



(Approx.



Use about

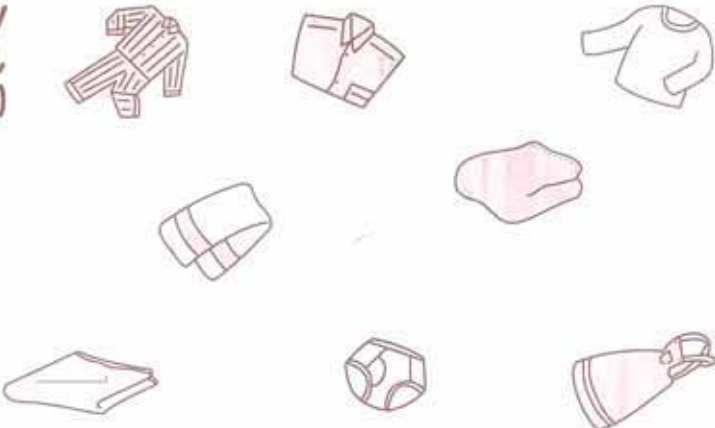
- If you press the WATER LEVEL button while a water level is appearing recommendable detergent quantity (rough measure) will be indicated for abo (This indication is available only when washing water is fed into the washe In other cases, no indication is available).

Types of laundry and how to select your desired fully automatic washing course



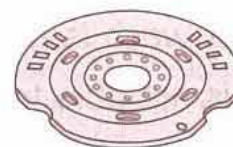
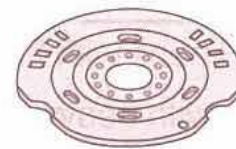
This washer has been designed to provide you with 8 different kinds of fully automatic washing courses.

Select your desired washing course and suitable amount or type of detergent for laundry type to ensure an effective washing.

Types of laundry		
General types of laundry (cotton, synthetic fiber, and blended yarn fabric)		
Delicate clothes, including 100% wool garments with a tag indicating "Hand Washing", wool-blended yarn fabric such as knitwear, and lingerie.		
Clothes that are labeled with "Dry Cleaning" only as well as "Dry Cleaning" and "Hand Washing"		
Heavily stained clothes	Socks and sportswear stained with mud Bulky clothes such as jeans	
	Stubborn stains, such as oil and fat fouling, on collars and cuffs	
Blanket		

- Load size and detergent 38
- When using bleach, liquid detergent and softener 39
- When using powder detergent 40

Automatic Washing suitable for laundry will be performed.	➡ 18	
Laundry mode suitable for individual home use is programmed into the built-in memory for customized washing.	➡ 20	Sy (powde
Lightly-stained laundry is quickly washed.	➡ 23	
Hand-wash-like water current enables laundry to be washed gently.	➡ 31	Mil
Whirl-wash water current enables laundry to be washed gently. (An optionally available Washing Cap is required.)	➡ 22	Deterge clothe
Strong washing water current enables the laundry to be cleansed to a satisfactory degree.	➡ 24	
Through activation of enzyme element contained in detergent, the laundry is washed clean without damaging it.	➡ 28	Sy (powde
The laundry is washed carefully with blanket-oriented washing water current. (An optionally available Washing Cap is required.)	➡ 29	



Easy-to-wash-course ("FUZZY" course)

The sensor detects the type and quantity of the laundry, and the mode to best process the washing is automatically selected. (for course details.  33)

"Spinning rinse cycle with water injection" is performed in the "FUZZY" course to save water.

For water temperature, see Table 1 and Table 2.



1 Turn the power switch ON

POWER
ON
OFF



2 Select the (FUZZY) course



Table 1. WASH WATER TEMPERATURE GIUDE

WATER TEMPERATURE	USED FOR
Hot	White and colorfast cottons, linens with heavy or normal soil. Permanent press & synthetics with heavy or oily soil.
Warm	Dark or non-color fast fabrics. White & colored synthetics. Permanent press with normal or light soil. Wool is only selected with warm.
Cold	Normal or lightly soiled fabrics.

Table 2. FILL TEMPERATURE OF EACH CYCLE FOR PROGRAM

For each program, washing machine automatically selects a suitable fill water temperature.

PROGRAM	Fill TEMPERATURE		APPENDIX EXPLANATION
	WASH	RINSE	
FUZZY, JET MANUAL, SPEEDY, HEAVY	WARM HOT COLD	COLD	● Fill temperature for wash is able to change for your washing style. ● Fill cold for rinse is not able to change because of energy saving.
WOOL	WARM	WARM	● Fill temperature is not able to change to protect laundry transformation.
SOAK	COLD, WARM	COLD	● Fill temperature for wash is able to change for your washing style.
BLANKET	WARM COLD	WARM COLD	● Water temperature remains unchanged for both WASH and RINSE cycles.

 A wash temperature to be selected is illuminated during a complete cycle on the control panel.

Washing actions of FUZZY HEAVY SPEEDY AND JET courses.

After closing the lid

follow the procedures given below to determine the type of washing

Step 1:

Dissolve detergent in small amount of water and do washing with the thick detergent water.



1



Step 2:

Add water. Wash in strong water flow to get the all dirt out of laundry.



2



Step 3:

Add more water and wash in regular water level.



3

3 Press the START/PAUSE button



- The pulsator rotates for approximately eight seconds to detect the amount of washing, and then the guideline for the amount of detergent and water is indicated before the water starts feeding in.

4 Put the detergent in and close the lid.

To ensure that the detergent dissolves well in the water, place the detergent in the area where the feed water falls.



According to the recommendable detergent quantity (as a rough measure) indicated on the control panel, put the measured detergent into the bowl.

- 39 when using bleach, liquid detergent and softener.
- 40 when using powder detergent. (natural oils and fats.)
- The spin cycle will not proceed if the cover remains open.

5 Washing finished.

The beeping buzzer indicates the completion of the washing process.

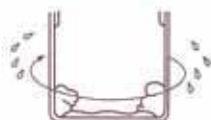


- When the buzzer stops beeping, the power switches off automatically. (Automatic switching off function)

Rinsing operations in "FUZZY" course 33

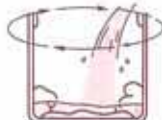
First rinsing cycle (spinning rinse cycle with water injection)

Washer spin-dries the laundry after draining wash water.



About 6 to 10 min.

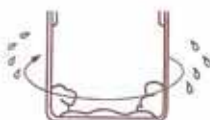
Washbowl rotates itself slowly while water is fed into it.



About 1 min.

Second rinsing cycle (deep rinse)

Washer spin-dries the laundry after draining wash water.



Water is fed up to the preset water level.



Laundry is stirred with water current (deep rinse).



Repeat cycle 2 times

User-customized washing course for home use ("MANUAL" course)

A wide variety of washing courses, including "wash and rinse course" to keep laundry from becoming wrinkled, can be made available according to your needs.

Once you programmed your own washing course into the built-in memory, you can start the course anytime with the touch of the ONE TOUCH (START/PAUSE) button.

(For details of the washing processes of each course;  33)



1 Turn the power switch ON

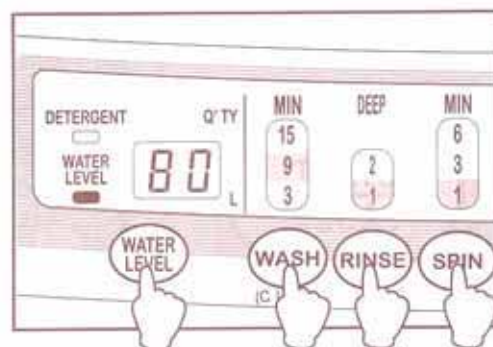
POWER
ON
OFF



2 Select the [MANUAL] course



3 Select your favorite course.



- By default, the water level is set to "80L", washing time to "18 min.", rinsing cycle to "double rinse", and spinning time to "9 min." at the factory prior to shipment.

How to use WATER LEVEL, WASH, RINSE and SPIN buttons (Different setting is made accordingly every time you press each button.)

WATER LEVEL	WASH	RINSE	SPIN

- Each setting enclosed by rectangle box is factory-adjusted setting (default setting) prior to shipment.

4 Press the START/PAUSE button



- Your setting is stored in the built-in memory. From the next time when you use the washer in "MANUAL" course, its washing cycle will run according to this setting.

Helpful Hints:

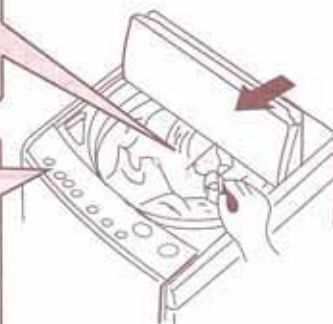
If you wish to change your setting you have made to another setting, turn off the power first, then perform the procedural steps from 1 to 4 described below. (If you wish to reset your setting to the default setting, activate the washer after setting each mode back to the default setting as mentioned in the step 3.)

5 Put the detergent in and close the lid

To ensure that the detergent dissolves well in the water, place the detergent in the area where the feed water falls.

According to the indication of recommendable amount of detergent (rough measure), put measured detergent into the washbowl.

When you press the "WATER LEVEL" button, the detergent quantity will be indicated on the control panel for about 2 seconds. 15.



- If the lid is left opened, the sensor cannot detect a proper amount of detergent and no spinning operation can be performed.

Leave the rest of the washing process to the machine until the buzzer beeps.

<Example of manual course setting>

In cases such as:	Course	Button operations
• When it is not desirable to spin clothes in order to avoid wrinkles. • When you use the used rinsing water for the next washing process:	Washing → Rinsing (When washer spin-dries laundry, it stops.)	15 MIN → DEEP 2 → Washer stops while rinsing liquid remains. • For draining wash water: 35
• If you wish to wash laundry with your own setting for complete washing to especially meet your needs for home use:	Washing → Rinsing → Spinning	18 MIN → DEEP 2 → 9 MIN → →

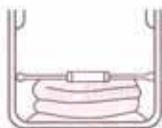
Using the Washing Cap

Washing Cap is optionally available component.
Be sure to use this Cap whenever you use "WOOL" and "BLANKET" courses.

How to set Washing Cap in position according to washing course

"WOOL" course

This course should be used to wash clothes with a tag indicating "Dry Cleaning". 📄 26



"BLANKET" course

This course should be used to wash blanket or the like. 📄 29



Caution

If the Washing Cap is set incorrectly as shown in the figure in the right-hand section, do not use it.

- Otherwise, water may splash and the Cap can pop out of the washbowl, which may result in injury or damage to the unit and laundry.



Do not use the Washing Cap for other washing courses except for "BLANKET" and "WOOL" courses.

- Otherwise, water may splash and the Cap can pop out of the washbowl, which may result in injury or damage to the unit and laundry.

Installation of Washing Cap

1

The side with written instructions should face up as shown in the figure, bend the washing cap and let the back parts fit into the bowl.



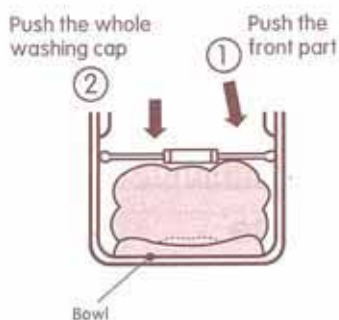
Place the Cap in position after aligning concave sections of the Cap with convex sections of the washbowl.

If the Washing Cap is set incorrectly, the Cap can pop out of the washbowl, which may invite unexpected accidents.



2

- Push the front parts of washing cap down. Make sure that it is completely fits into the bowl.
- Push the whole washing cap down to horizontal.

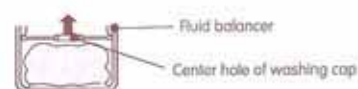


3

(For "WOOL" course)
Push the Cap downward up to the desired position. 📄 26



(For "BLANKET" course)
While holding the center hole of Cap, lift it up gently until it comes into contact with the bottom surface of fluid balancers in such a manner that no laundry gets caught between the inner wall of washbowl and the Cap. 📄 29



Pull out the net of lint filter over the Cap, as illustrated in the figure below.



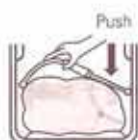
CAUTION

- Make sure that the washing cap is not trapped with in clothes, otherwise, damages to laundry may occur.

Taking out the Washing Cap

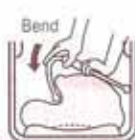
1

Push the front part of the washing cap down.



2

As shown in the figure, hold on to the center part and bend it to the arrowed direction.



3

Pull the Washing Cap out.



- Whenever you store the Washing Cap in a safe place for future use, take care not to deform it.
- Since the Washing Cap is an expendable article, please purchase it again at the nearest distributor if it is broken.

Rapid Washing (SPEEDY Course)

With this course, you can wash lightly stained laundry or small amount of laundry quickly with ease.

(For details of the washing processes of each course;  33)



1 Turn the power switch ON and select the (SPEEDY) course.



- The water level is automatically set at a [64L] (Washing capacity : 4 kg)

2 Press the START/PAUSE button



3 Put the detergent in and close lid

To ensure that the detergent dissolves well in the water, place the detergent in the area where the feed water falls.



According to the indication of recommendable amount of detergent (rough measure), put measured detergent into the washbowl.

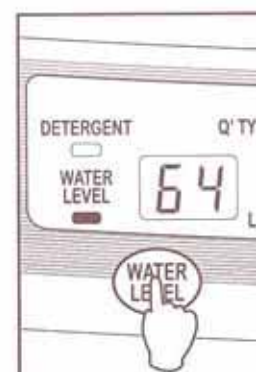
When you press the "WATER LEVEL" button, the detergent quantity will be indicated on the control panel for about 2 seconds.  15

- The spin cycle will not proceed if the lid remains open.

Leave the rest of the washing process to the machine until the buzzer beeps.

■ Helpful tips for effective washing

- For washing lightly stained laundry, the recommendable amount of detergent which is almost one-half the normal quantity (approx. 50 to 60%).
(For detergent quantity;  38)
- Depending on amount of laundry you wash, change water level accordingly.
(For a guidance of laundry load;  38)



Washing Heavily Stained Clothes (HEAVY Course)



HEAVY course is designed to wash heavily stained clothes such as sportswear and socks with strong water currents. (33 for details)

CAUTION

Whenever you use the "HEAVY" course, never attempt to wash those clothes that are liable to get damaged.

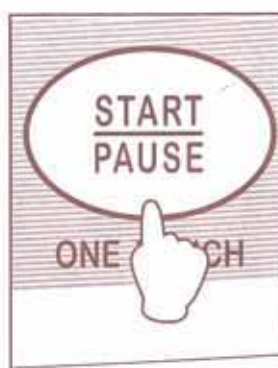
- Otherwise, damage to the clothes may result.

1 Turn the power switch ON and select the (HEAVY) course.



- The amount of washable clothes is a maximum 3.0kg.
- The water level is automatically set at a (68L)
(If necessary, the water level can be changed to any level in the range from 32L to 68L (in 7 levels)).

2 Press the START/PAUSE button



3 Put the detergent in and close lid

To ensure that the detergent dissolves well in the water, place the detergent in the area where the feed water falls.



According to the indication of recommendable amount of detergent (rough measure), put measured detergent into the washbowl.
When you press the "WATER LEVEL" button, the detergent quantity will be indicated on the control panel for about 2 seconds. 15

- The spin cycle will not proceed if the lid remains open.

Leave the rest of the washing process to the machine until the buzzer beeps.

■ Helpful tips for effective washing.

When washing bulky clothes such as jeans:

Water level "68L" is suitable for washing four jeans.
Water level "32L" is suitable for washing one jeans.

When washing away stubborn stains of socks:

For better washing performance, it is advisable to set water level to "32L" and put a small towel into each of a pair of socks, prior to washing.

- This aims at washing away stained portions which can be rubbed against the pulsator.



Washing course for clothes with "DRY Cleaning" label ("WOOL" course)

Even those clothes with "Dry Cleaning" label and/or "Hand Washing" and "Dry Cleaning" labels can be washed gently and carefully through a whirl water current produced by rotating the washbowl itself without activating the pulsator. However, since some materials cannot be washed, check to see if the laundry you wish to wash is machine-washable prior to the washing. (For details of the washing processes of each course;  33



■ Machine-washable clothes and articles are as follows:

Machine-washable items

- Sweater, cardigan (wool, angora, cashmere, etc.)
- Trousers and skirt
- Blouse, shirt, one-piece dress (silk, hemp, etc.)



Non-machine-washable items

- Leather product, leather ornament
- Garments with ornament (feather, fur, etc.)
- Blended yarn fabric, such as rayon and cupro
- Non-colorfast articles
- Necktie, suits, and coat
- Items to which coating and resin (or adhesive) is applied or emboss (convex and concave patterns) processing is given.
- Wool or silk items using forcibly stranded threads (hard twist yarn), especially woven fabrics.
- Pile fabrics, such as velvets and corduroys

CAUTION

- When washing other items except those mentioned above, observe instructions of detergent you are using.

■ Checking laundry for colorfastness

- Please ascertain in advance whether those clothes that may not be colorfast are easily discolored or not. (For this purpose, use a white clean towel dampened with a small amount of liquid detergent and rub it against a hidden portion of a cloth to ascertain whether or not color is transferred to the towel.)

If you find that color is transferred from the cloth to towel, do not wash it.

CAUTION

Precaution to bear in mind when washing clothes with "Dry Cleaning" label

Use a suitable amount of detergent

- You cannot make any difference in washing results even though you use larger amount of detergent than the specified amount. On the contrary, however, it may result in a poor rinsing performance, causing a cloth to be damaged. Do not use bleach.
- Because bleach is extremely alkaline, it causes damage to fabrics.

Washing course for clothes with "Dry Cleaning" label ("WOOL" course) - Continued from the previous page.

Before using the washer, read. 📖 25

- Be sure to use an optionally available Washing Cap.
- "WOOL" course cannot be used with timer. 📖 33

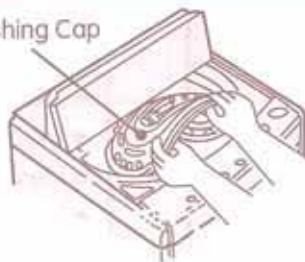
Preparation (Pretreatment)

- Prior to washing, wash away dirt beforehand from heavily soiled laundry, if any.
- Turn clothes inside out first to which buttons or embroideries are attached, then wash them.
- In the event that the washed laundry is shrunk excessively, it is advisable to keep its dress-pattern paper to restore its shape to the original form.



1 Put laundry into the washbowl, and put the Washing Cap on the laundry.

Washing Cap



- Put the laundry neatly into the washbowl in such a manner that the laundry is distributed evenly and uniformly inside the washbowl, then put the Washing Cap on the laundry to prevent it from being swung out.
 - ※ This measure is required to prevent the laundry from being deformed or kept off-balance during spin-drying cycle.
- Do not perform the washing without using the Washing Cap.
- The maximum load of laundry is 1.5 kg or less.

2 Turn the power switch ON and select the "WOOL" course.



- Water level is designed to automatically reach "38L". If necessary, the level can be changed to any level in the range from "32L" to "52L". (Except the water level button, other buttons remain in operable.)
- A suitable water level should be that the whole laundry is submerged into water.
- Fill temperature is not able to change to protect laundry transformation.

■ Helpful tips for effective washing

How to remove dirt

- Place a clean towel on the reverse side of laundry first, then apply a small amount of liquid detergent to a dirty spot. Pat the spot lightly through the use of brush or the like to remove the dirt.
- Apply a small amount of liquid detergent to a stained spot on cuffs, collars, hems and other areas around pockets of laundry. Then, give a brush finish to it unidirectionally to scour a stain away.



■ Setting position of Washing Cap

- The position (or height) into which the Washing Cap should be placed must be the height from where laundry can be lightly covered with it, depending on type, amount and thickness of the laundry to be washed.
- Refer to the guide marks for the setting position, which are indicated on the inner wall of the washbowl.

Guide marks for setting position	Available water level	Washable laundry load
	52L	Max. 1.5 kg
	45L	Max. 1.2 kg
	38L	Max. 0.8 kg
	32L	Max. 0.5 kg

- When you wash a thin cloth such as blouse, put a clean towel and so on into the washbowl to adjust a height of water level, so that the laundry will be prevented from being non-uniformly distributed inside the washing tub during spin cycle.

Washing cycle of WOOL course

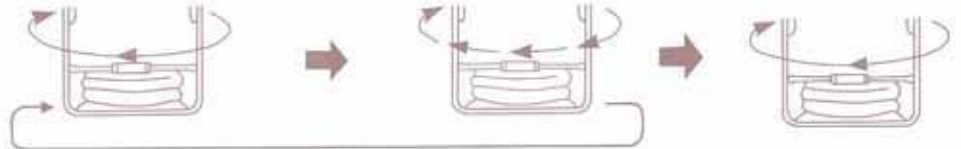
Washing (9 min).
Whirl current (2 min). + Soak (2.5 min).
[This cycle is repeated twice.]

Draining → Spinning
(1 min)

Deep rinse.
Whirl current + Soak
(30 sec.) (1.5 min)

Draining → Spinning
(1 min)

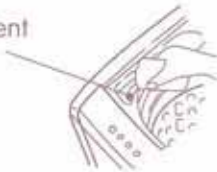
Whirl current
Washbowl rotation : 6 to 8 sec.
Pause : 12 to 14 sec.



This cycle is repeated twice.

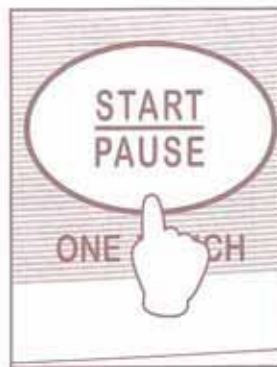
3 Put the detergent

Liquid detergent
inlet



- When you wash a cloth with a tag indicating "Dry Cleaning", be sure to use a detergent (liquid detergent) for exclusive use for that kind of cloth. Mild detergent (liquid detergent) can also be used for those clothes that are labeled with "Hand Washing".
- For amount of detergent, follow its instruction.
- Dilute liquid detergent with water and pour it gently into the washbowl through the liquid detergent inlet.
- Do not use powder detergent because it does not dissolve well in water.

4 Close the lid and Press the START/PAUSE button



- Be sure to close the main lid completely. (Opening the lid causes the washbowl to stop rotating and indication "E3" will start blinking.)

5 When the washing finishes

- Keep sweater of wool, angora and cashmere in shape first and let it dry in the shade in a horizontal position.
- Laying these items flat on such objects ensures that they retain their shape.



- Keep the shape of blouse or onepiece dress neatly and let it dry by hanging it on a hanger in the shade.

Leave the rest of the washing process to the machine until the buzzer beeps.

■ Finish (How to correct shrunk and slightly deformed laundry)

Keep a steam iron off the laundry to spray steam onto it, so that it may keep in shape.



After spraying a large amount of steam over the laundry, use its dress-pattern paper to stretch it out until its shape is restored to the original form.



Thorough washing cycle ("SOAK" course)

This course is designed to soak load around 2 hours for thorough washing without causing any damages. ( 33 for course details)



1 Turn the power switch ON and select the (SOAK) course.



- Not indicating wash and rinse cycles. ( 33 for course details)

2 Press the START/PAUSE button



- The remaining wash time starts appearing on the control panel after it comes to "99" min.

3 Put the detergent in and close the lid

To ensure that the detergent dissolves well in the water, place the detergent in the area where the feed water falls.



Add in the indicated amount of detergent.

- To prevent garments from being creased, spin cycle will not be activated except when it is preset to function.
- To set spin manually,  35

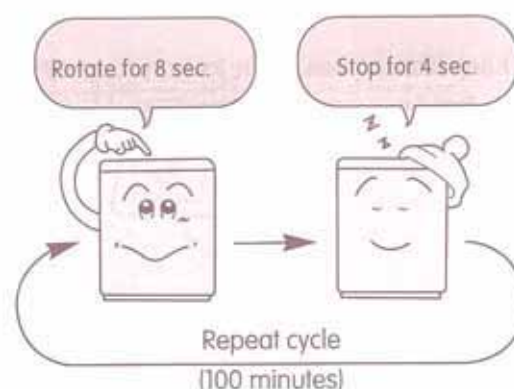
Leave the rest of the washing process to the machine until the buzzer beeps.

■ What's SOAK course?

Soaking means to soak laundry load with gentle water currents to thoroughly wash heavily stained parts such as collars and cuffs.

CAUTION

- Please do not wash clothes of easily-fadeaway colors.
- Be sure not to use powder detergent (natural oils and fats), as it may cause the whole laundry to become yellowish or blackish.



Washing Blanket, Bedspread (BLANKET Course)

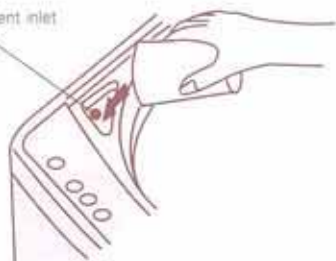
The blanket rotates and creates "Blanket washing current" and "Soak" course to gently wash blanket and bedspread.

- Be sure to use an optionally available Washing Cap for this washing course.
- Blanket course cannot be used with timer. ( 33 for details)



1 Turn the power switch ON and put the detergent

Liquid detergent inlet



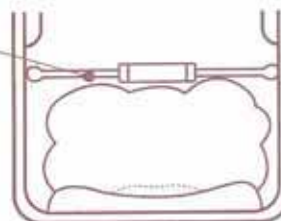
Be sure to dilute the liquid detergent with a suitable amount of water in the proportions of one part detergent to two parts water (Concentrated type : 73 ml, Regular type : 117 ml).  39

- Water level is automatically set to (88L)
- Do not use powdered detergent which is difficult to dissolve in water.
- Use fabric softener for better results.

2 Put in the blanket or bedspread and place the washing cap in position

Put the blanket or bedspread in the bowl and set the washing cap as illustrated in the Figure below.  22

Washing Cap



- Be sure to use the Washing Cap whenever you use the "BLANKET" course.
If you fail to do so, water may splash and the Cap can pop out of the washbowl, which may result in injury or damage to the unit and laundry.

■ Washable Blanket

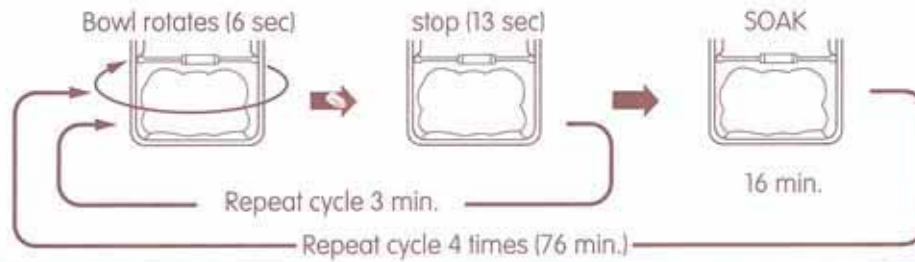
- Blankets with "Hand Washing" label
- Material Types : Acrylic, tufted and woven blankets, which are made of acrylic and polyester (double-sized blanket : 180 cm or less in width x 230 cm or less in length, weight: 4.7 kg or less per piece)
- When washing a "machine-washable electric blanket", observe its instruction manual.

■ Other machine-washable items

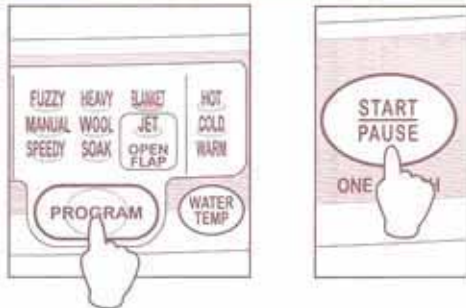
- Bed pad with "Hand Washing" label
- Cushion with "Hand Washing" label (which is stuffed with synthetic fiber, such as polyester).



Washing cycle of BLANKET course



3 Select the (BLANKET) Course and press the START/PAUSE button



- Not indicating WASH and RINSE cycle. (Refer to page 33 for details)
- The remaining wash time starts appearing on the control panel after it comes to 99 min.
- Be sure to close the lid completely. (Opening the lid causes the washbowl to stop rotating and indication "E3" will start blinking.)
- During washing cycle, make sure that blanket and bedspread is completely soak into the water.
- Water temperature remains unchanged for WASH and RINSE cycle.

Leave the rest of the washing process to the machine until the buzzer beeps.

How to put in blanket

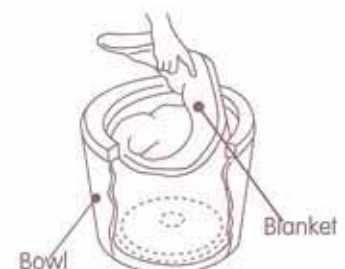
1 Put in the corner first, then the rest of the blanket slowly.



2 Put it in slowly.



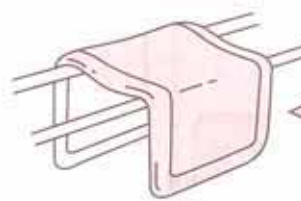
3 Taking it out



- Pull from the top of the blanket slowly.

4 When the washing finished

Hang dry at well ventilated places.



For faster drying, hang blanket as shown in left figure.

- During drying process, brush the hair of the blanket following one direction when it is still wet for grooming purpose.

User-customized washing course for home use ("JET" course)

- A wide variety of washing courses, including "wash and rinse and JET course" to keep laundry from becoming wrinkled, can be made available according to your needs.
 - Once you programmed your own washing course into the built-in memory, you can start the course anytime with the touch of the ONE TOUCH (START/PAUSE) button.
- (For details of the washing processes of each course; ➡ 33)

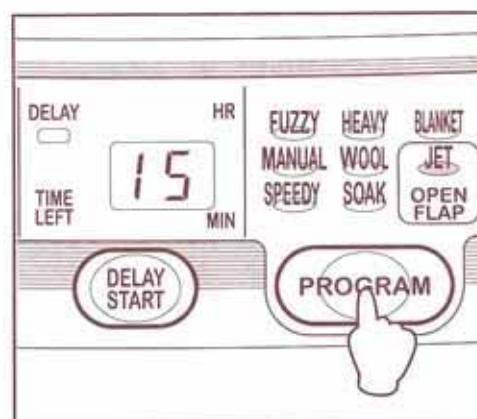


1 Turn the power switch ON

POWER
ON
OFF



2 Select the [JET] course



How to use PROGRAM (JET COURSE), WASH, RINSE and WATER LEVEL (Different setting is made accordingly every time you press each button)

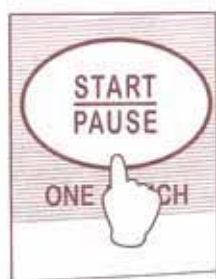
PROGRAM (JET COURSE)	WASH	RINSE	WATER LEVEL
45 MIN Heavy clothes 25 MIN Heavy/Normal clothes 15 MIN Normal clothes	18 MIN Heavily soiled clothes (15 MIN and 3 MIN, light on) 15 MIN Normally soiled clothes 12 MIN Normally/Light soiled clothes (9 MIN and 3 MIN, light on) 9 MIN Light soiled clothes 3 MIN Delicate clothes No washing	DEEP 2 Double rinse DEEP 2 Single rinse No rinsing	88L 64L 84L 59L 80L 52L 76L 45L 72L 38L 68L 32L

- Each setting enclosed in rectangle box is factory-adjusted setting (default setting) prior to shipment.

Helpful Hints:

If you wish to change your setting you have made to another setting, turn off the power first, then perform the procedural steps from 1 to 4 described below. (If you wish to reset your setting to the default setting, activate the washer after setting each mode back to the default setting as mentioned in the step 3.)

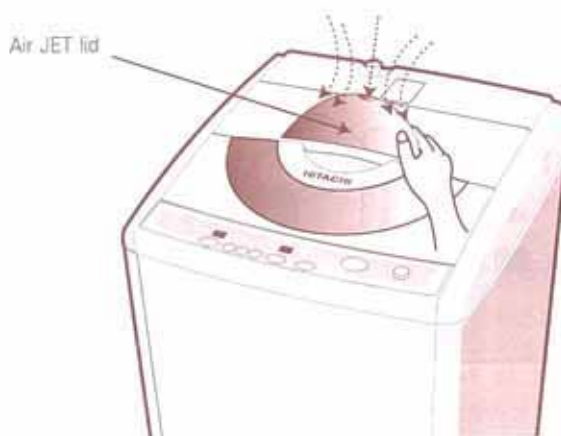
3 Press the **START/PAUSE** button and put the detergent and close the lid.



To ensure that the detergent dissolves well in the water, place the detergent in the area where the feed water falls.



4 Open the Air Jet lid.



Leave the rest of the washing process to the machine until the buzzer beeps.

(Example of manual course setting)

In cases such as:	Course	Button operations
- When it is not desirable to spin clothes in order to avoid wrinkles. - When you use the used rinsing water for the next washing process:	Washing → Rinsing (When rinsing is completed, washer will stop.)	15 MIN 2 WASH → RINSE Washer stops while rinsing liquid remains • For draining wash water: → 35
If you wish to wash laundry with your own setting for complete washing to especially meet your needs for home use:	Washing → Rinsing → Spinning	18 MIN 2 WASH → RINSE → SPIN

FUZZY (3 STEP WASH)	88 L  32 L (12 levels Automatic setting)	18 min. 15 min. 12 min. 9 min. 8 min.
MANUAL Each setting value enclosed by parentheses is designed to illuminate first whenever you turn on the washer if you have already programmed it into the builtin memory.	Initial Setting 80L (88L ~ 32L) (12 levels)	Initial Setting 18 min (18 min, 15 min, 12 min, 9 min, 3 min)
SPEEDY (3 STEP WASH)	64L (88L ~ 32L) (12 levels)	9 min (18 min, 15 min, 12 min, 9 min, 3 min)
HEAVY (3 STEP WASH)	68L (68L ~ 32L) (7 levels)	18 min (18 min, 15 min, 12 min, 9 min, 3 min)
WOOL	38L (52L ~ 32L) (4 levels)	9 min (Fixed)
JET (3 STEP WASH)	88 L  32 L (12 levels Automatic setting)	18 min. 15 min. 12 min. 9 min. 8 min.
SOAK	88 L  32 L (12 levels Automatic setting)	110 min. 103 min.
BLANKET	88L (88L ~ 32L) (12 levels)	76 min (Fixed)

9 min. 6 min. 4 min. (3 levels)	54 min. 60 min. ~ 31 min.
Initial Setting 9 min. (9min, 6 min, 3 min, 1min)	64 min. 66 min. ~ 18 min.
3 min. (9min, 6 min, 3 min, 1min)	32 min. 66 min. ~ 18 min.
6 min. (9min, 6 min, 3 min, 1min)	58 min. 58 min. ~ 14 min.
1 min. (Fixed)	34 min.
Initial JET Setting 15 min. (45min, 25 min, 15 min)	55 min. 85 min. ~ 55 min.
Spin in timed cycle only. Spin for 6 min. In timed cycle.	146 min. 154 min. ~ 127 min.
6 min. (9min, 6 min, 3 min, 1min)	114 min.

the rinsing perfor

- The required tim calculated on the takes 2 to 3 minu
- When SOAK cou 3 min. to fully dis
- SOAK course wi washing.

CAUTION

- Higher than nor in greater water down the water t

Changing

Wash course can pressed.

- Be sure to turn changing a was

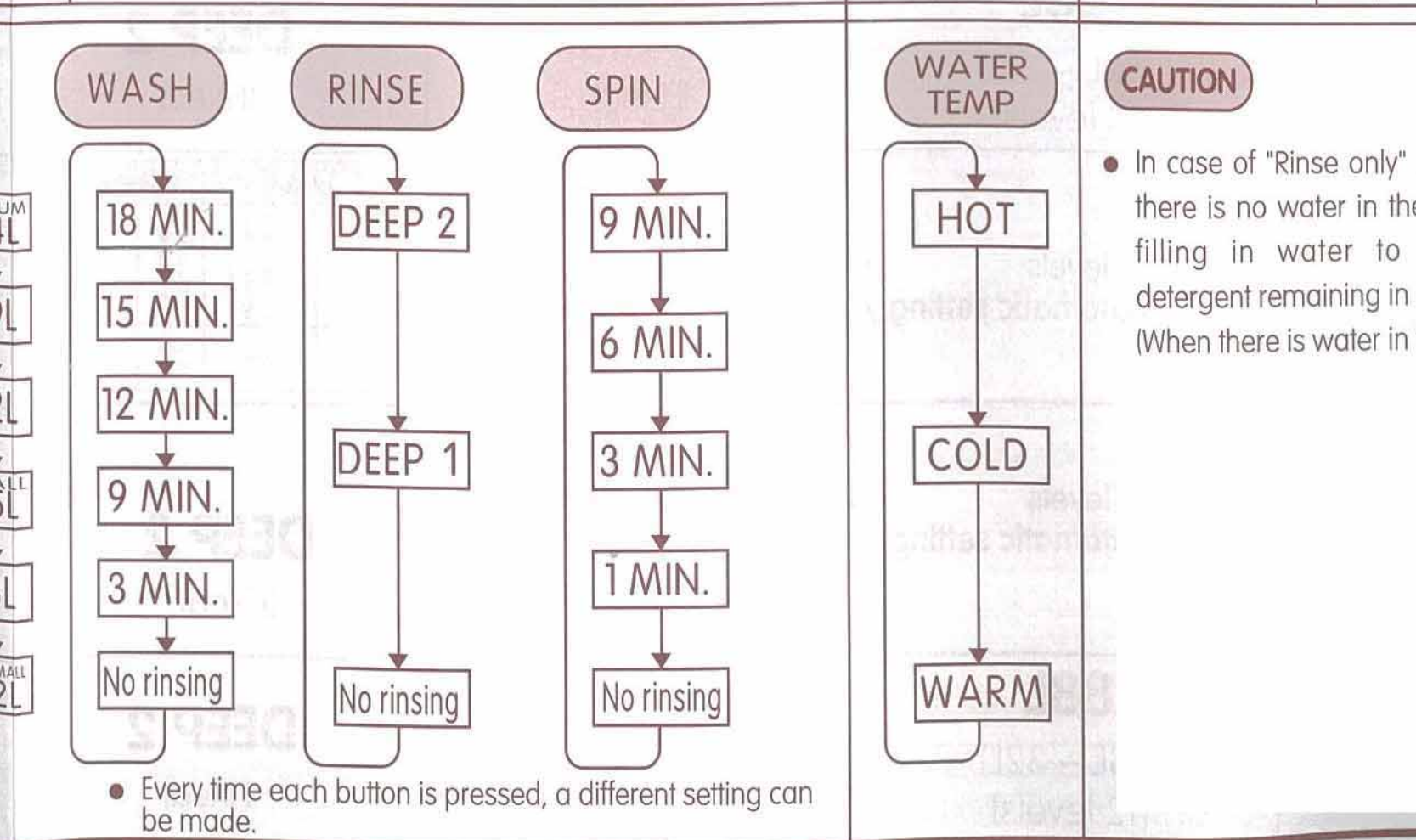
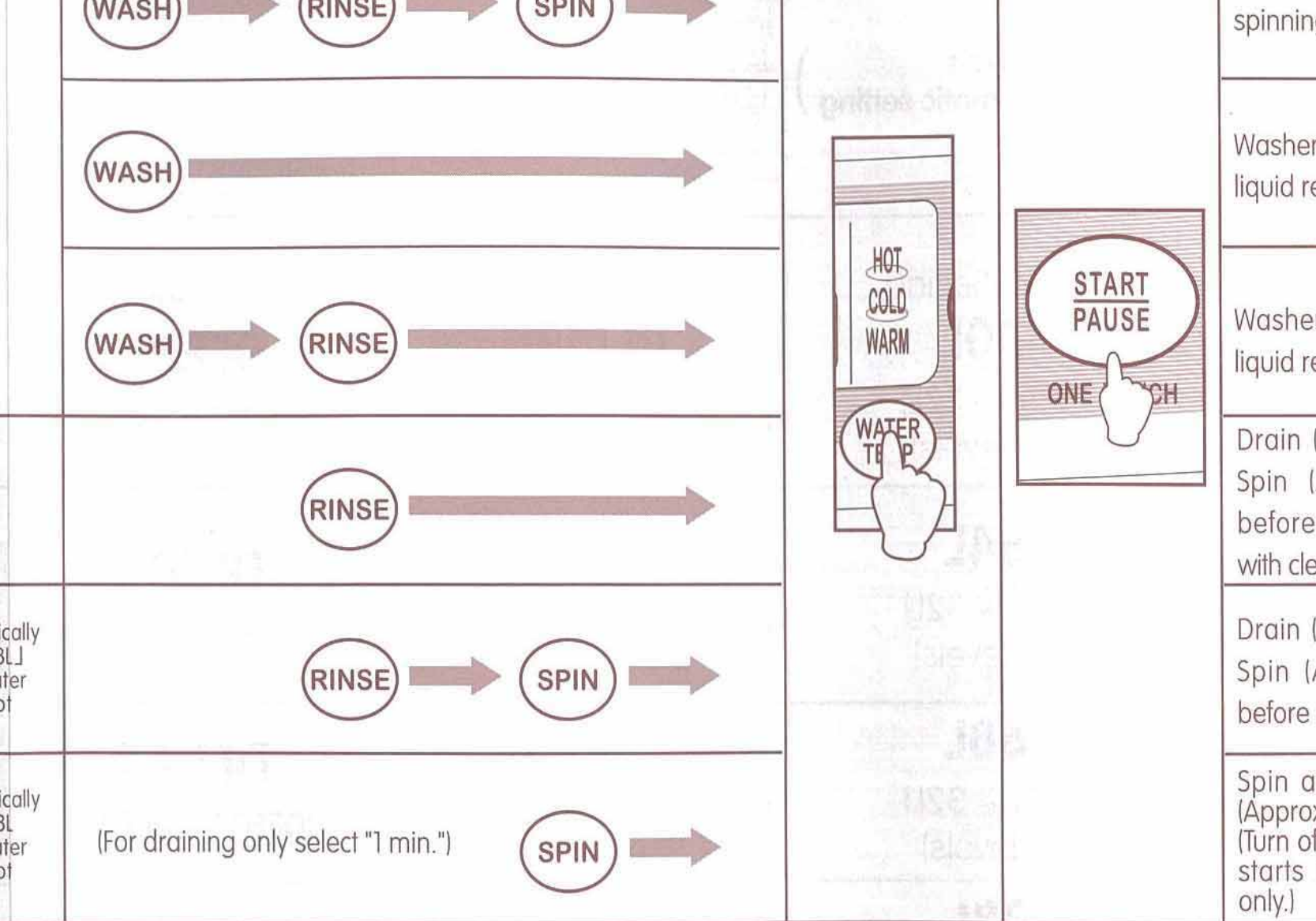
Manual Operation

It is possible to set WASH, RINSE and SPIN separately or a combination of two or more of these.

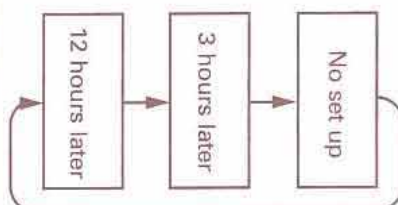
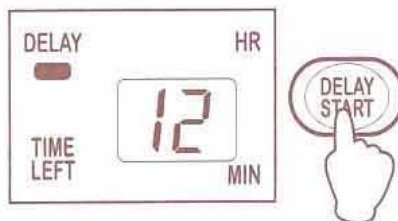
(The detailed wash courses cannot be programmed into the built-in memory.)



Examples	Manual Operation Options.	Operating		
		1 Turn the power switch ON	2 Select the FUZZY course	3 Select the Water level
When it is desirable to wash, rinse and spin manually.	Washing → Rinsing → Spinning	POWER ON OFF		WATER LEVEL
When washing liquid is to be used twice.	Washing only			
When it is not desirable to spin clothes in order to avoid wrinkles.	Washing → Rinsing			
When it is desirable to rinse clothes which have already been washes.	Rinsing only			Sensor automatically set Water level when it is not preset.
When it is desirable to rinse and spin clothes which have already been washes.	Rinsing → Spinning			WATER LEVEL Automatically set to 88L when water level is not preset.
When it is desirable to drain water from the bowl or spin clothes before drying.	Drainage or spinning only			WATER LEVEL Automatically set to 88L when water level is not preset.
WATER LEVEL XT-A LARGE 88L 84L 80L LARGE 76L 72L 68L MEDIUM 64L 59L 52L SMALL 45L 38L XT-A SMALL 32L				



POWER
ON
OFF



- Select finishing time by pressing the delay start button.



- Pulsator rotates for 8 seconds to be used will be indicated.
- All other indicators are off.

4

Put the detergent in and close the lid.

Hold the bulge part at the edge of the detergent dispenser and let it all forward to fill in powdered detergent.

(Dispenser in released position)

- For concentrated powdered detergent use only.
- Put the dispenser back in position after timed washing finisheds.
- The washing process commences in accordance with the preset finish in time.
- When detergent dispenser falls ➡ 45

CAUTION

- Make sure that the detergent dispenser is dry, otherwise, detergent will stick on the surface.

CAUTION

- The timer operation will be cancelled when electricity is cut off.
- The actual washing time varies according to different types and quantities of laundry and amount of detergent. It may differ from the preset washing time slightly.
- To prevent wrinkles, take out and hang dry laundry as soon as washing finishes.

In the follow cases

- To verify the timer setup : Keep pressing the delay start button to check progress and remain.
- To cancel the timer washing process : Turn the power off.
- When water injection is slow (approximately below 10L/minute) or detergent remains in the basket, put a white handkerchief in the middle of the basket. Make sure detergent is not in contact with the handkerchief.

Lid



Load Size and Detergent

- Maximum mass of dry cloth 8.0 kg.

Load size		Water level	Ind. of detergent qty. (rough measure)	Compact type (20 grams or 25 milliliters for 30 liters of water)		Conventional type (40 grams or 40 milliliters for 30 liters of water)	Powder Detergent (natural oils and fats) (40 grams or 30 liters of water)
				Powder	Liquid	Powder (Liquid)	
8.0 kg		88L	1.7 spoonful quantity	59 g	73mL	117g (117mL)	117g
7	XT'A LARGE	84L	1.6 spoonful quantity	56g	70mL	112g (112mL)	112g
6		80L	1.5 spoonful quantity	53g	67mL	107g (107mL)	107g
5		76L	1.4 spoonful quantity	51g	63mL	101g (101mL)	101g
4	LARGE	72L	1.4 spoonful quantity	48g	60mL	96g (96mL)	96g
3		68L	1.3 spoonful quantity	45g	57mL	91g (91mL)	91g
2		64L	1.2 spoonful quantity	43g	53mL	85g (85mL)	85g
1	MEDIUM	59L	1.1 spoonful quantity	39g	49mL	79g (79mL)	79g
		52L	1.0 spoonful quantity	35g	43mL	69g (69mL)	69g
		45L	0.9 spoonful quantity	30g	38mL	60g (60mL)	60g
	SMALL	38L	0.7 spoonful quantity	25g	32mL	51g (51mL)	51g
		32L	0.6 spoonful quantity	20g	25mL	40g (40mL)	40g

- The detergent quantity (rough measure) indication is determined based on one spoonful of measuring spoon with the max. capacity of about 35g (for such detergent that 20g is enough to wash laundry at 30L water level)

If you are using a different measuring spoon from the said one, use a proper amount of detergent which is suitable for the desired water level, in accordance with the instruction of your detergent.

- For washing lightly stained laundry, amount of detergent which is almost one-half the normal quantity (approx. 50 to 60%) will do.
- Do not use excessive amount of detergent. Otherwise, a poor rinsing performance may result or excessive foams may cause some trouble.

■ Amount of laundry

- Each amount of laundry as shown in the table above may vary according to the type, size and thickness of the laundry to be washed.
- When washing regular clothes, the approximate amount of washing is about 70 to 80 percent of the amount indicated. If the clothes stop moving, it indicates that the load is too large. Adjust the load by looking at how the clothes are moving in the machine.

Using liquid detergent, bleach and softener

How to use liquid detergent and bleach

Liquid detergent

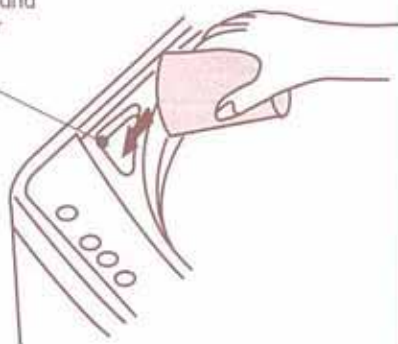
Dilute liquid detergent and gently pour into the dispenser .

- When using washer timer, dilute liquid detergent twice.

Bleach

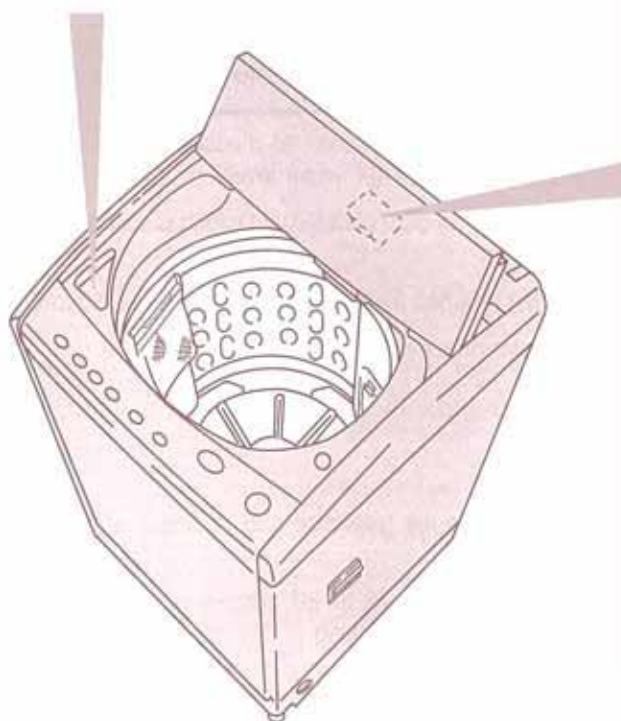
Dilute bleach with water and gently pour into dispenser before washing starts.

Liquid detergent and bleach dispenser



CAUTION

- Follow the indication shown on the liquid detergent and bleach labels for the amount to use and how to use them.
- Do not pour bleach directly onto the items being washed. Doing so may cause discoloring and damage to the clothes.



How to use softener

Automatic fabric softener dispenser is for use of concentrated fabric softener only.

- 1 **Open the automatic fabric softener dispenser lid until it comes to a full stop.**

Automatic dispenser lid



- Make sure the dispenser is working properly.

- 2 **Switch power on, select appropriate wash course and press the START button.**



- 3 **Add softener according to water level indicator.**

- 4 **Close dispenser lid.**
 - Softener will be automatically injected before last rinse.



(Guidelines on the amount of softener)

Water amount	32L	38L	45L	52L	59L	64L
Amount of softener	7mL	9mL	10mL	12mL	13mL	14mL
Water amount	68L	72L	76L	80L	84L	88L
Amount of softener	15mL	16mL	17mL	18mL	19mL	20mL

- Concentrated type : use 6.6 milliliters of softener for 30 liters of water.

CAUTION

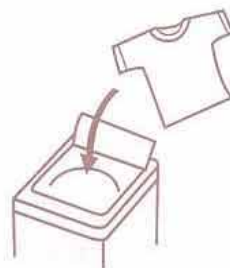
- Do not add too much softener, otherwise, discoloring may occur owing to the leakage of softener from dispenser.
- Use an appropriate amount of detergent. Too much detergent means poorer rinsing and softener performance.
- Do not add softener when unit is filling in water, otherwise, liquid may spill out.
- Maintenance of fabric softener dispenser. ➡ 47

- 2** When the agitation begins, put the powder detergent in and let it rotate for approximately three minutes.



- 3** When the powder detergent is dissolved into the water, turn OFF the power switch and load the washing.

- Be sure to sufficiently soak the laundry in the washing liquid.



- 4** Turn the power switch ON and select the course you want to wash and the water level to start washing.

- The quantity of detergent and water be indicated slightly more than the actual one when pouring water because a small quantity of water has already been in the tub.

- 2** While sufficiently, pour the appropriate detergent.

- To prevent solidification or residue of powder detergent, dissolve it sufficiently in the wash bowl before pouring it into the wash bowl.

Helpful Hints

- When you use powder detergent, it is recommendable to mix it with synthetic detergent of the powder detergent in volume so as to prevent the detergent scum from being.

CAUTION

- The powder detergent is more likely to stay in the laundry than synthetic detergent, the Failure to do so may cause discoloration or bad odors.
- If the amount of powder detergent used is excessive or if the powder detergent is at a low temperature, the residue of the powder detergent which is not properly dissolved may remain in the interior of the wash bowl.

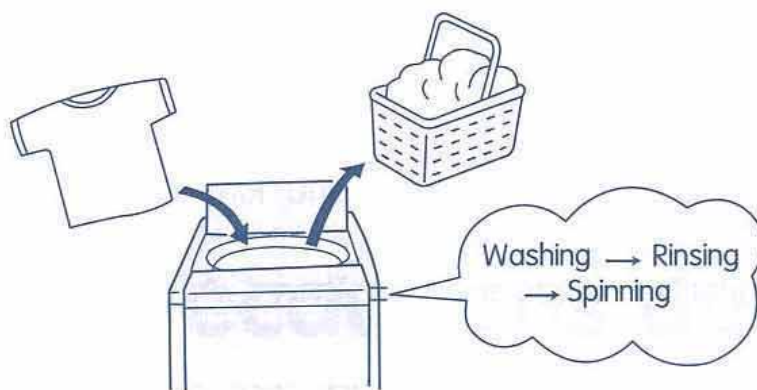
In the following cases, avoid using powder detergent:

- When performing user-preset wash cycle. The powder detergent may solidify in the washbowl.
- When using "BLANKET", "SOAK" and "WOOL" courses. Soak course may cause the whole laundry to be soiled.

Clothes with
light stains.

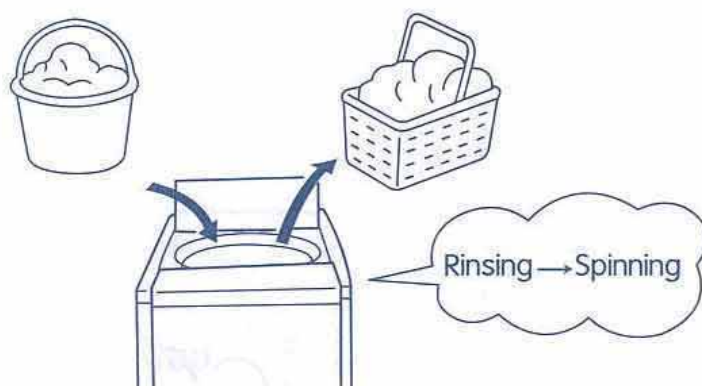
2 Load the second time of washing and select the course you want.

- A water level appropriate to the type of washing is set.



3 Carry out rinsing → spinning cycles for the first load of laundry. 35

- Set a water level appropriate to the type of washing



- Amount of water
Use the amount of water on the starch label as a guide.
- Amount which can be washed
Maximum 3.0kg.

- 1 Put ready-to-wash bowl after washing.
- 2 Power switch to the course.
- 3 Select water level mode. 35

WATER LEVEL	WATER LEVEL
52L	10

- 4 Press the ST

- 5 Pour starch into the rotating and

CAUTION

- Do not machine-wash

After starch

Please wash washed starch.

- 1 Select FUZZ
- 2 Select water level spin mode. 35

WATER LEVEL	WATER LEVEL
90L	10

- 3 Press the ST

2 Press WATER LEVEL button for at least 3 seconds.

- When restoring the original melody, connect power and press WATER LEVEL button for at least 3 seconds.

2 Press START button

- When restoring the completion, connect for at least 3 seconds

Child Lock

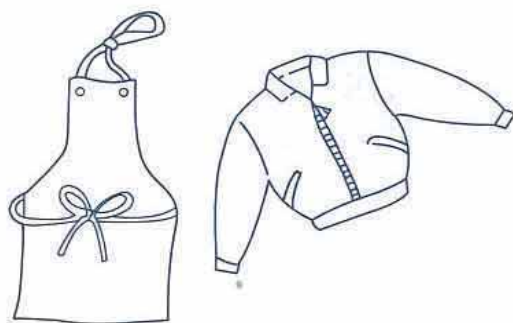
This function has been provided with the washer as a safety switch for those housewives who have children, to prevent them from tampering with the washer.

When you press the power switch first and then "WASH" button for 3 seconds or longer, "ch" appears on the display, indicating tamper-proof mode. If the lid is opened during the washing process, agitation cycle during "Wash" will stop. (At this stage, error indication "E3" appears on the control panel.)

- If you wish to cancel this function, press the "WASH" button once again for 3 seconds or longer. "ch" will disappear, indicating that the function is disabled.
- If you set this function to active in the "FUZZY" course, on "wash" cycle will be available. In this case, you can turn it on again.

Handy Washing Hints

Before putting any items with loose strings or zippers into the machine, be sure to tie the strings, and to zip up all zippers.



- This aims at preventing damage to the clothes or fasteners.

When you are worried about the tangling of wool garments, put the item inside out.



Remove items, etc.,

Load large items or items which are likely to resurface into the wash bowl first.



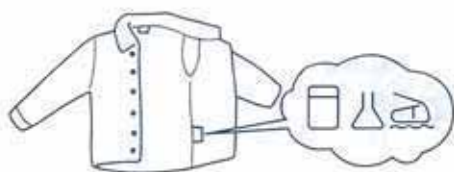
- Be sure to put large-size clothes or materials which are likely to resurface onto the water, such as synthetic textiles, in the bottom of the wash bowl. Doing so improves the movement of the clothes.

If the neck or cuffs of a shirt are heavily soiled, it is recommended to scrub the area in advance with a liquid detergent, or prewash stain remover.



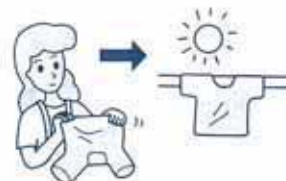
- Using the "SOAK" course enables the stubborn stains on the collar or cuffs of shirts to be washed away effectively.

Wash according to the cleaning instruction tag attached to the clothing.



Before hanging up, stretch clothes after spinning.

- ※ Good finish and reduces creasing of the clothes.



It is advisable to turn clothing inside out to minimize formation of lint.



Hang up synthetic clothes without spinning.

- ※ Good finish and reduces creasing of the clothes.



Precautions during use

Do not push the buttons with a pointed object



- This may result in damage or breakdown.

Do not allow flames near the unit such as kerosene stove or cigarettes.



- This may cause deformation or fire.

Take proper care after the washing process

- Close the water tap.
- Turn the POWER button "OFF" at the wall power outlet, if you will not be using the machine for a long period of time.
- ※ To prevent water leakage, fire, electric shocks, etc.

If the wash bowl does not stop within 15 seconds from opening the lid during the spin cycle, immediately stop using the machine.

- Request repair. Failure to do so may result in injury.

Care and Maintenance

After using the washer, perform the normal maintenance for it, taking the following procedures.

Maintenance of the wash bowl (to ensure clean washing)

Using the washing machine for an extended period may produce a blackish soap scum in the wash bowl, which may stain the clothes. Make sure to wash the wash bowl in the procedures set below approximately once every two months.

1 Select SOAK course. 👉 28



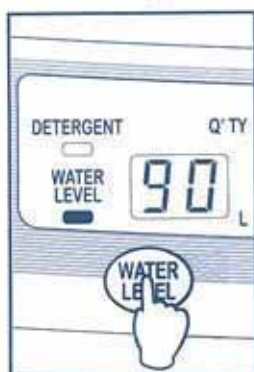
3 Put 250g (About one bottle) of bleach oxide which is generally available into the wash bowl.

4 Set spin cycle at "1 min." when cycle stops and spinning will start instantly. 👉 35



2 Set water level at (90L) and press the START button.

- After filling up with water, keep pressing the water level button when the machine starts stirring until water supply stop.



REQUESTS

- Please read the instructions of the bleaching agent to be used before use.
- Warm water of approximately 40°C will increase the efficiency of cleaning.

Rusting Precautions

Stainless steel is usually rust-proof except under the following situations.

- ① If iron products which rust easily such as hair pins and pins remain in contact with the bowl they may cause rust.
- ② If water containing red rust enters the bowl and red rust adheres to the bowl. It will mark the clothing.

If you notice rust, apply a commercial cream cleanser to a sponge or cloth to remove it. (For details refer to the cleanser instruction.)

- Do not use a metal scrubbing brush because it may damage the bowl.

Observing the following will prevent rust from occurring.

- Do not leave water in the bowl for a long time.
- Do not leave a chlorine type bleaching agent in the bowl for a long time



Commercial cream cleanser is most suitable for cleaning.

Care and Maintenance (Cont.)

Cleaning the detergent dispenser

When detergent is adhering to the detergent dispenser, open the tray and wipe it with a soft cloth.

- When the level of adhesion is severe, wipe it off with a cloth while applying water with a hose.

Detergent dispenser



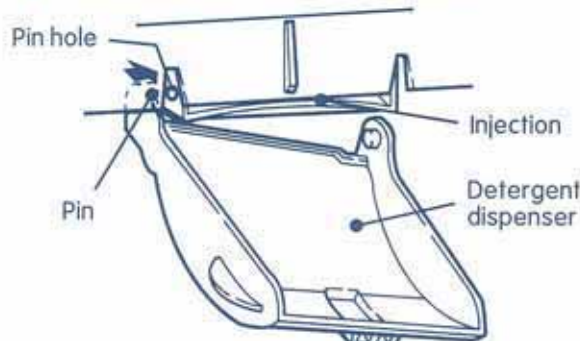
CAUTION

- Do not apply excessive force when it is opened. The dispenser may become detached.

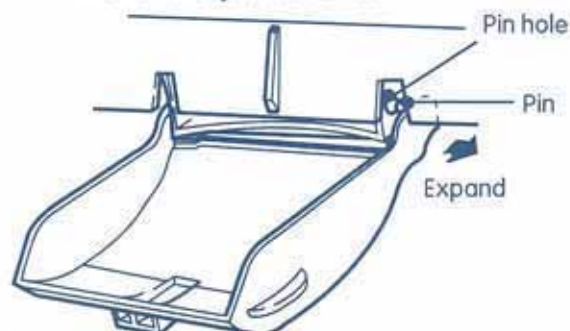
When detergent dispenser detached from the unit.

Follow instructions below for reattachment.

- Fit the left pin of detergent dispenser into the pin hole of the inlet



- Insert the pin into the pin hole while expanding the right-hand side where the pin is to fit.



REQUESTS

- When the detergent injection tray is not used, make sure return it to the original (closed) position.

When there is a fear of freezing

- Close the water taps and remove the water supply hoses.

- Hold the water supply hoses as shown in the drawing so that it does not sag.



- Set the POWER switch to "ON" and the WATER TEMP to warm.

- Press START button and operate the washing machine for 30 seconds.

- Water which remains in the water supply is removed.



- Press START/PAUSE button to stop the operation.

- Lower the drain hose and select manual spin mode.

- Press START button and operate for 30 seconds. 35

If frozen

- Remove the water supply hose, and immerse it in hot water at approx. 40°C.

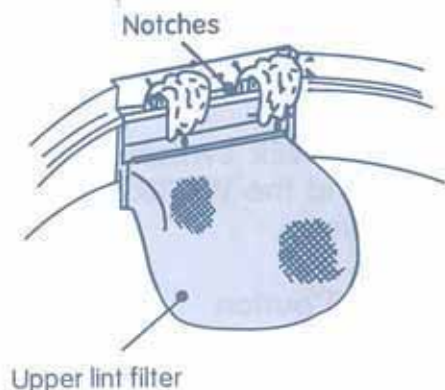
- Pour approx. 2 liters of hot water at approx. 40°C, into the bowl and let it stand for 10 minutes.

- Connect the water supply hose to the water tap, and confirm that the washing machine performs the supply and drainage of water.

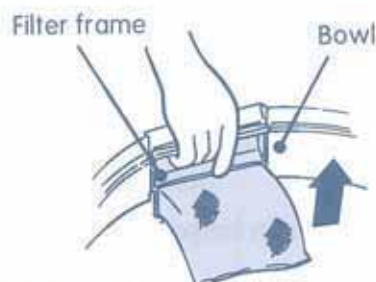
Cleaning the upper lint filter.

(Be sure to clean it each time you finish using the washer.)

Overflowing of washing water from the notches of the upper lint filter is a sign to inform you that the filter's net is fully clogged with debris.



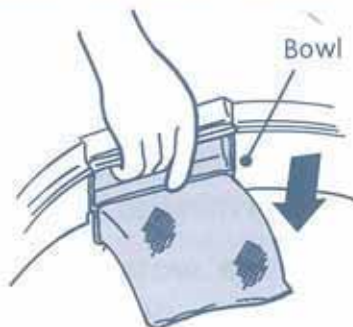
1 Remove the filter frame.



2 Turn the filter net inside out and wipe off the lint in the water.



3 Firmly insert the filter frame.



CAUTION

- Lint filters are consumable items. When you find a tear in the net, please purchase a new one at a sales outlet.

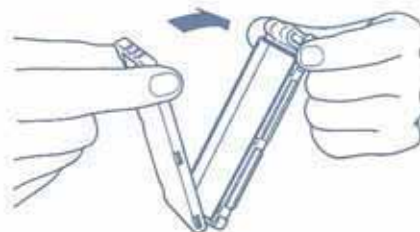
Cleaning the lower lint filter

(Be sure to clean it each time you finish using the washer.)

1 While depressing the tab, lean the filter frame toward you and remove it.



2 Open the filter and wipe off the lint.



3 Close the filter.

4 Attach the lower lint filter firmly to the bowl as illustrated.



CAUTION

- When you take away the lower lint filter, take care not to drop hair pin, coin, etc. into the grooves or openings of the washbowl.
- Do not operate the washer with the lower lint filter removed. Otherwise, damage to the laundry may result.

REQUESTS

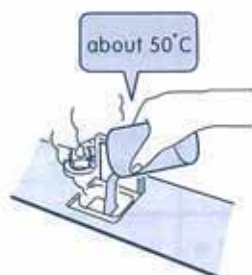
- The lower lint filter is a consumable item.
- When the filter is damaged or lost, please purchase a new one at the nearest distributor.

Cleaning the softener dispenser

(For concentrated type only)

When residue remains in the dispenser.

- 1 Pour hot water of about 50°C into the dispenser and leave it for about 5-10 minutes.



- 2 Remove residue using a toothbrush.

- Do not use your finger to clean the dispenser.



- 3 Connect power, set RINSE once and press the START button. 35

After drain-spin, switch power off after water fill for about 30 seconds.

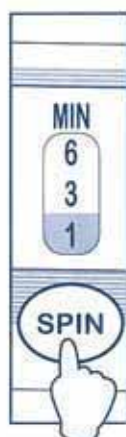
- When filling in water for rinsing purpose, softener dispenser works automatically and drain out the hot water inside.



- 4 Connect power, set SPIN cycle and run for 1 minute.

- Conduct drain-spin cycles.

35



Note

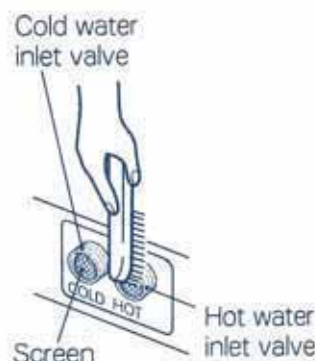
Do not supply water during cleaning because it may overflow and wet the floor.

Cleaning the water inlet valve

If dirt has accumulated, water flow will be impeded.

- 1 Close the water tap and disconnect the water supply hose.

- 2 Remove any lint or dirt on the screen of the water inlet valves. (Use a toothbrush or similar.)



CAUTION

- Be sure to return the screen to the original position.

Cleaning the cabinet

Wipe stains from the cabinet and the control panel with a soft cloth.



CAUTION

When performing maintenance, do not apply water directly to any unit section.

- This may cause a short or electric shock.

CAUTION

- Do not wipe with cloth wet with benzene, thinner, cleanser, alkali detergent, weak alkali detergent or wax, or scrub it with a scrub brush.
- Follow the instructions when using a rag made of a synthetic material.
- Wipe detergent off immediately when it adheres to the plastic part of the washing machine lid. Leaving it may cause damage to the washing machine.

Alarm Mode Indicators

Before requesting repair, check the following points one more time.

- Abnormality alarm : When the following cases occur, you will be alert by flashes of indicators and sound of buzzer.

Symptoms	Indicator flashes	Check items	Restart
Not running		- Check if electricity is cut off? - Check if fuse of circuit break is blown? - Check if power cord is properly plugged?	- Make sure power is on. - Make sure the power cord is properly plugged.
Not filling in water	 (Not filled with water after 30 minutes.)	- Is the water tap closed? - Is city water frozen or water supply stopped? - Does dust clog the screen in the water supply inlet?	Press START/PAUSE button and eliminate the cause of the trouble.
Not draining	 (Drain isn't completed with in 5 minutes.)	- Is the drain hose crushed? - Is the remaining water in the built-in drain hose frozen?	
Not spinning		Is the lid open?	Close the lid.
		Are clothes placed to one side?	Evenly distribute the load and close the lid.

- If warning signs to tell you some failure or trouble, such as "F0", "F9" and "EF", are generated, immediately stop operating the washer and contact an authorized service dealer or a service agent for further inspection and or repair.

General Information

Phenomenon	Causes
When the washing machine is used for the first time, water may flow out of the drain hose.	This is the water which remains after the performance test is conducted at factory.
When the water supply hose is set and the water tap is opened, a slight amount of water may come out of water supply inlet.	It takes a while to close the special water hammer noise reducing valve assembly.
The remaining time increases or decreases.	The remaining time is corrected depending on the time of water supply and drainage.
Water is supplied during washing.	When the water level decreases during washing, water is automatically supplied.
When the reserved operation is in progress, the operation does not come to an end even after the preset time elapsed.	If amount of washing water is in a short supply, the washer may continue functioning even after the preset time elapsed.
Spinning stops and water is supplied at the time of spinning before rinsing.	The safety switch has functioned because the clothes have moved to one side.
Spinning stops during last spinning cycle and reverse back to rinse with water filling in.	This takes place when the safety switch is activated as a result of an uneven distribution of laundry. When water fill in and pulsator rotates, laundry can be balanced by the motion and spin cycle will resume.
Spinning cycle takes place intermittently.	The number of spinning rotations is controlled by the rotation sensor in order to perform an effective spin-drying operation.
When the bowl is moved by hand, a splashing sound can be heard.	This is the sound of water in the fluid balancer that eliminates vibration during spinning.
When the "FUZZY" course is in operation, spinning rinse cycle with water injection is not performed.	The safety switch has been activated because the load is off-balance in the bowl.
Water not coming out from upper lint filter.	Rotation speed is slow in WOOL course, as a result, water is not coming out from the lint filter. It also happens when water is at (40L).

Automatic power OFF

- When the operation finishes, power is automatically turned, off.
- Power is automatically cut off if the following situation remain for over an hour.
 - ① Pause mode.
 - ② Lid is left opened during spin cycle.
 - ③ Abnormal situations as described on page 49.
- When START button is not pressed 5 minutes after machine is being turned on, power is automatically cut off.

Trouble Shooting Guide

If there is a problem, please follow the instructions in the "Trouble Shooting Guide" carefully and check the washer before requesting repair service.

If there is still a problem, contact an authorized service dealer or a service agent.

Do not try to repair the washer by yourself.

Problem	What to check
Washer does not start	● Check the fuses circuit breaker of the household electrical supply. ● Make sure the power cord is firmly plugged in.
Water does not fill or enters slowly	● Is the water tap closed? ● Is the water pipe frozen or has the water supply been stopped? ● Is dirt blocking the screen in the water inlet?
Water does not drain out	● Make sure the drain hose is not kinked or pinched.
Washer does not spin	● Is the load off-balance? ● Is the water able to drain? ● Is the lid open?

- The washing machine bottom must not be obstructed by carpeting when the washing machine is installed on a carpet floor.

Safety check

If any of these (or other) unusual conditions occur, immediately unplug the power cord to prevent accidents. Contact an authorized service dealer or a service agent for further inspection and/or repair.

- Even if timer is set ON, the machine will not operate.
- Cracks in the power cord can be seen.
- Unusual noise or vibration during operation.
- Stop of bowl rotation is taking much longer than normal.
- Water leakage detected at or around the tub, hose, joint, etc.
- There is a burning smell.
- An electric shock (tingling or strong) is felt when the machine is touched.
- Never attempt to make repairs by yourself. This could be dangerous.

Even if the machine operates without problems, it is advisable to have it inspected by an authorized service dealer or a service agent after four to five years. This will assure safe and reliable operation.

- If the supply cord is damaged, it must be replaced by the manufacturer or its service agent or a similarly qualified person in order to avoid hazard.

