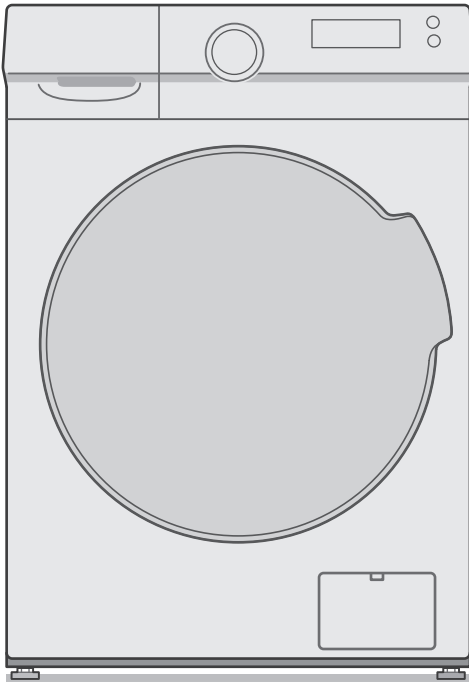


Panasonic®

Operating & Installation Instructions

Washing Machine
(Household Use)

Model No. **NA-148MR1**



Contents

	Safety Precautions	2
	Checking Your Appliance	6
	Before Washing	7
	Control Panel	8
	Detergent	10
	Washing	12
	Program List	14
	Details of Programs	16
	Washing Tips	18
	Changing Program Settings	20
	Changing Appliance Settings	27
	Maintenance	28
	Troubleshooting	32
	Error Display	38
Installation	Choosing the Right Location	40
	Moving and Installing	41
	Connecting the Hoses	43
	Test Run	45
	Specifications	47

Thank you for purchasing this product.

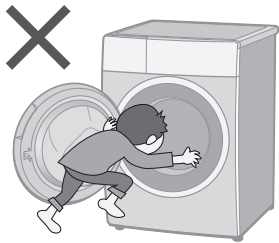
- Read these instructions carefully for optimum performance and safety before use.
- Keep this manual for future reference.

Safety Precautions

⚠ WARNING

May cause serious injury or death

Children must not use it alone.



- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- Children should be supervised to ensure that they do not play with the appliance.

Setting the Child Lock. (P. 27)

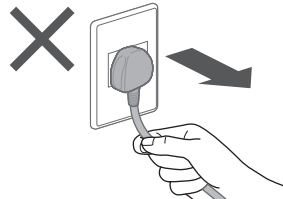


May cause fire or electric shock

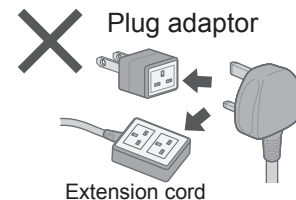
Do not touch it with wet hands.



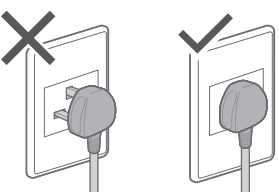
Do not hold or pull on the cord.



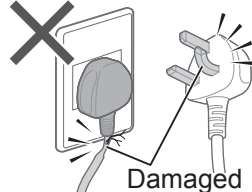
Do not use.



Fully insert it.

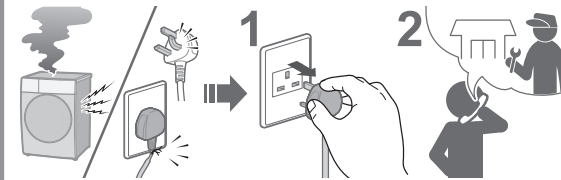


Do not use.

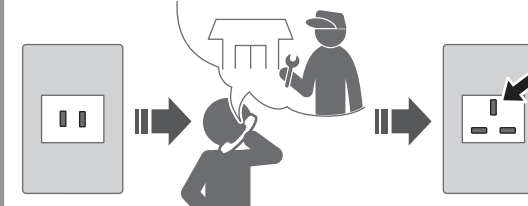


- If the power cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.

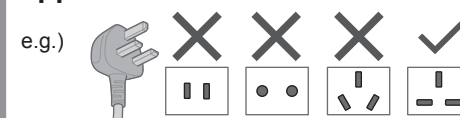
In case of failure or damaged power cord, stop use and ask the electrical technician.



Securely insert the ground prong. Ask the electrical technician for a new socket.

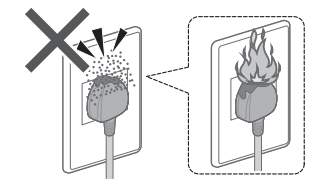


Use a socket appropriate for this appliance.



- The plug shape, socket shape and rating requirement vary with the region.

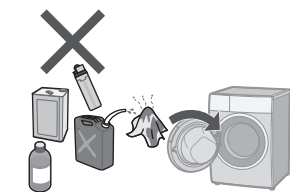
Accumulated dust may cause fire.



Wipe the power plug periodically.



Keep away from flammable materials.



May cause failure

Do not disassemble, repair or modify it by yourself.



Safety Precautions (continued)

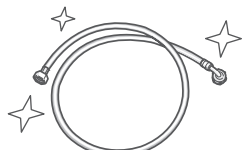
⚠ CAUTION

May cause water leakage

Turn off the water faucet.



Use new hose-sets.



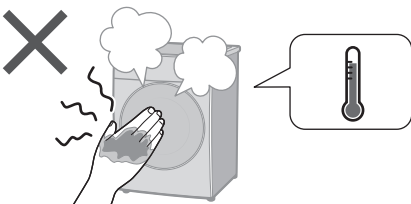
- New hose-sets supplied with the appliance are to be used and old hose-sets should not be reused.

May cause injury

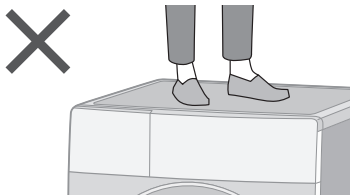
Be careful not to get your fingers caught.



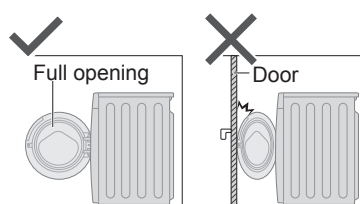
Do not touch when it is hot.



Do not climb on the appliance.



Install the appliance correctly.

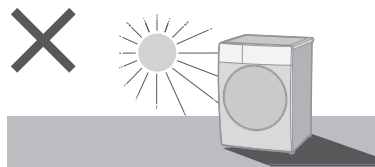


- The appliance must not be installed behind a lockable door, a sliding door or a door with a hinge on the opposite side to that of the appliance, in such a way that a full opening of the appliance door is restricted.

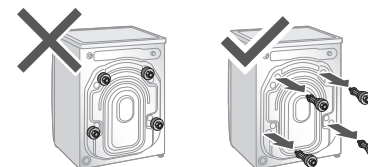
■ For maximum mass of dry cloth and pressure of tap water, see P. 47.

May cause failure

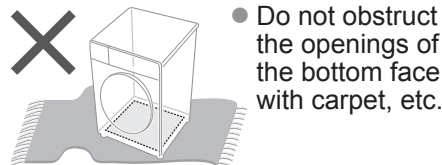
Keep away from heat and direct sunlight.



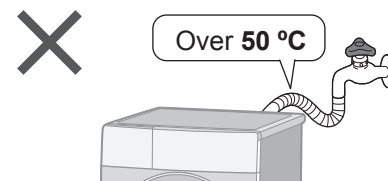
Remove shipping bolts before operation.



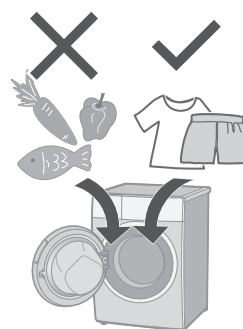
Do not obstruct.



Do not use hot water.



For machine-washable items only.



- This appliance is intended to be used in household. This appliance is not intended to be used in applications such as:
 - staff kitchen areas in shops, offices and other working environments;
 - farm houses;
 - by clients in hotels, motels and other residential type environments;
 - bed and breakfast type environments;
 - areas for communal use in blocks of flats or in laundrettes.

Do not wash excessively oily clothes.



Follow the instructions.

- Fabric softeners, or similar products, should be used as specified by the fabric softener instructions.

Checking Your Appliance

Part names

Detergent drawer (P. 10)

Control panel
(P. 8)

Door

Drum

Hinge

Door seal

Adjustable feet
(P. 42)

Drain filter cover
(P. 31)

Drain hose
(P. 43, 44)

Water inlet (P. 44)

Shipping bolts
(P. 42)

Power cord and plug

Accessories

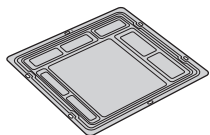
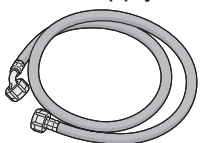
□ Hose hanger (1) (P. 44)

□ Cover cap (4) (P. 42)



□ Water supply hose (1) (P. 43, 44)

□ Bottom cover (1) (P. 41)

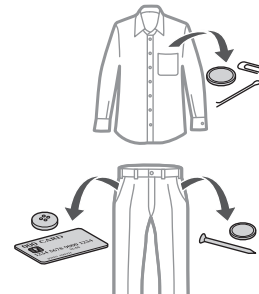


Before Washing

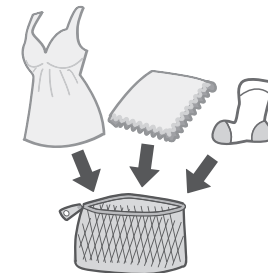
Preparing laundry

Before put clothes in drum

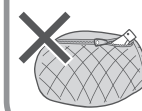
● Remove foreign objects.



● Use laundry nets for delicates and small items.



Overpack



Pre-laundry check

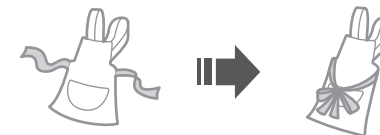
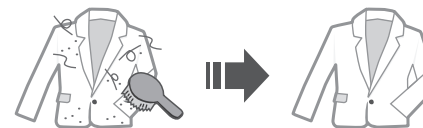


● Observe care labels.

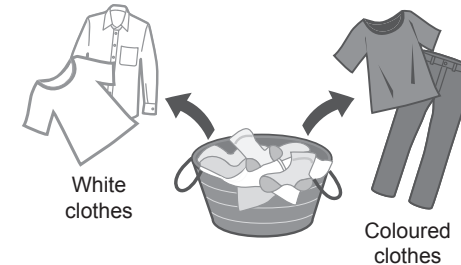


Reverse

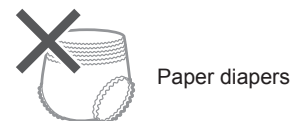
Clothes likely to pill



● Wash separately.



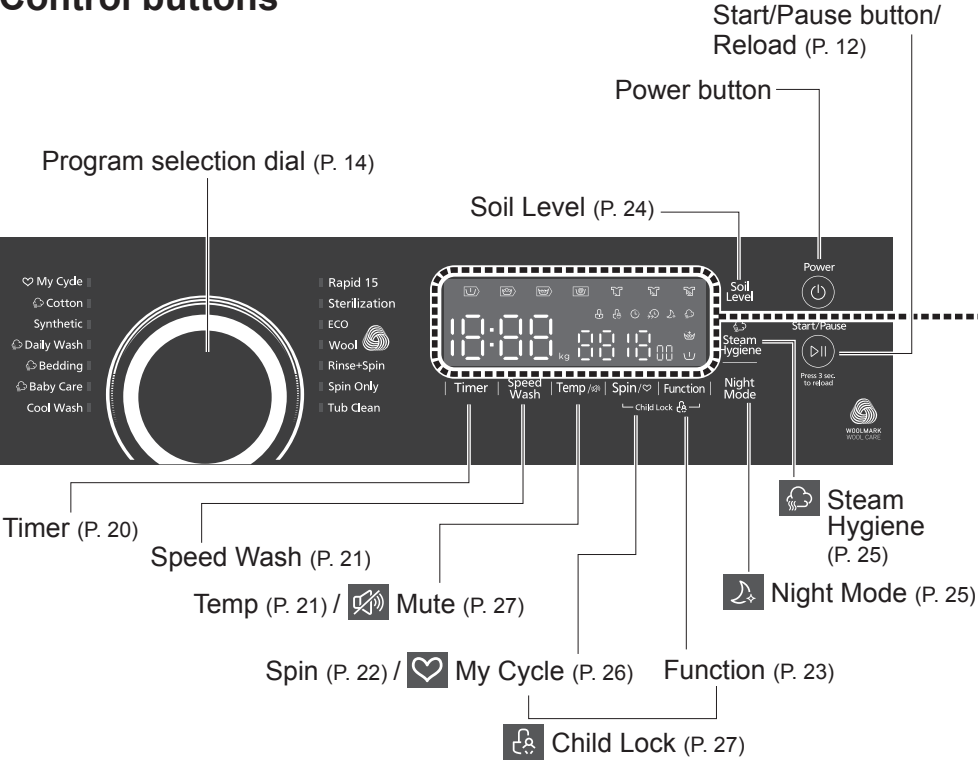
● Pretreat for heavy stains.



Paper diapers

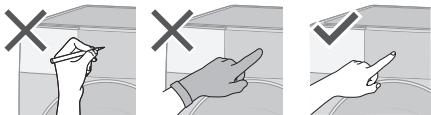
Control Panel

Control buttons



Touch operation

- If water, detergent or softener gets on, turn off and wipe off with a towel etc. immediately. (Cause of malfunction)



NOTE

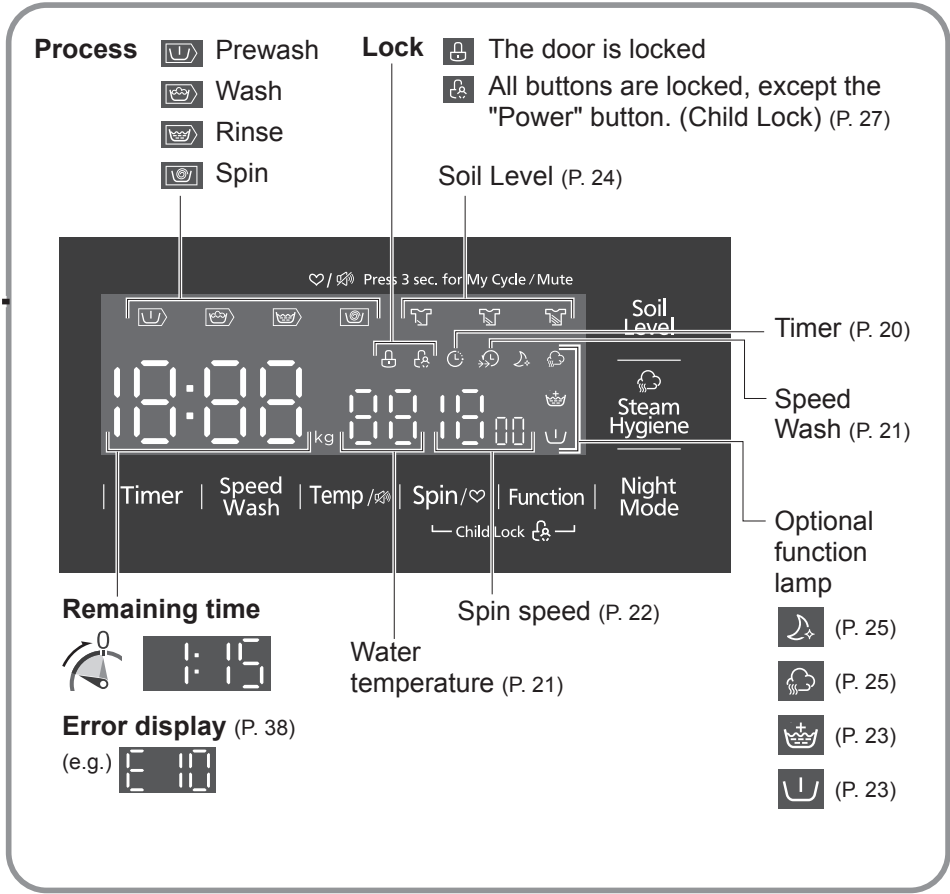
- No operation ➡ auto power off



- In case of a power failure

➡ When the power recovers, operation resumes from where it stopped. (Auto Restart)

Display

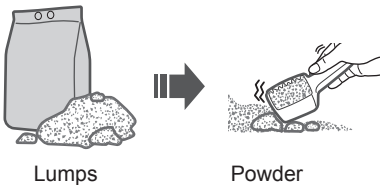
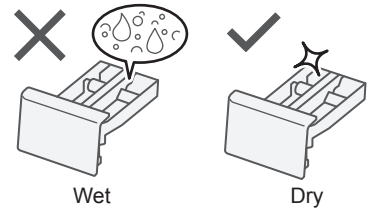


Detergent

● Follow the instructions on each package.

Detergent

Use a low foam detergent.
● To prevent powder detergent from remaining in the detergent drawer:

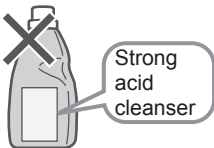


II Main wash

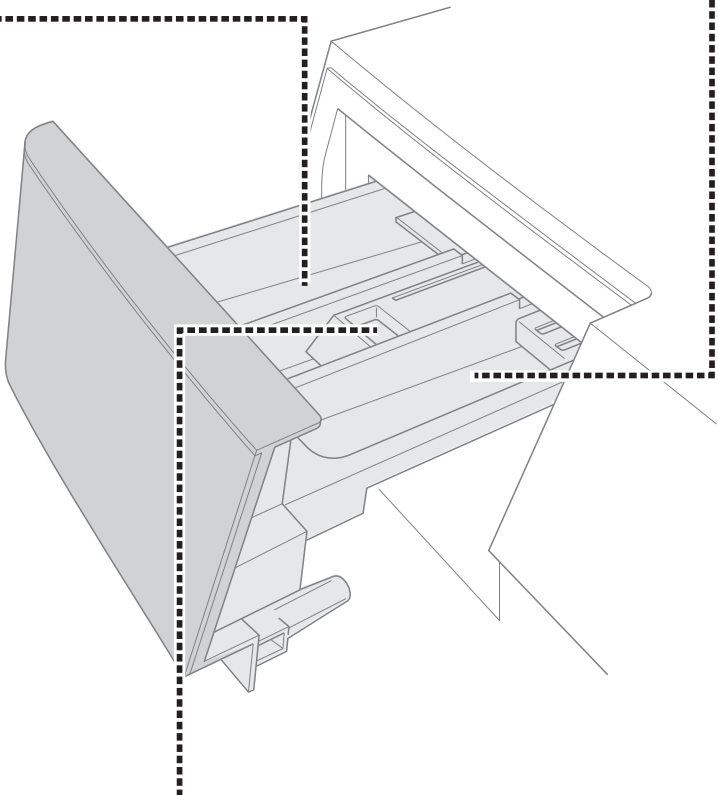
Powder detergent Liquid detergent



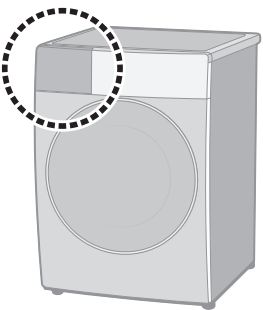
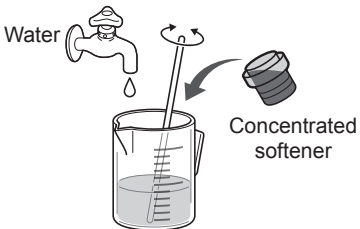
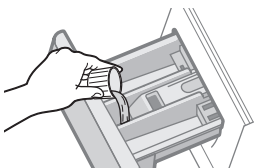
Bleach



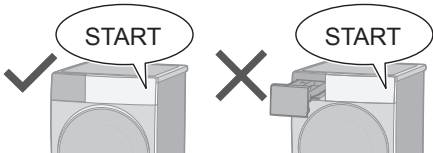
I Prewash (P. 23)



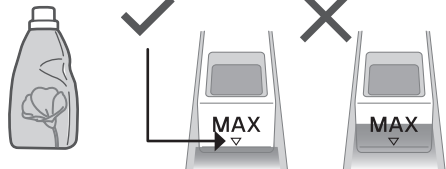
Fabric softener



NOTE

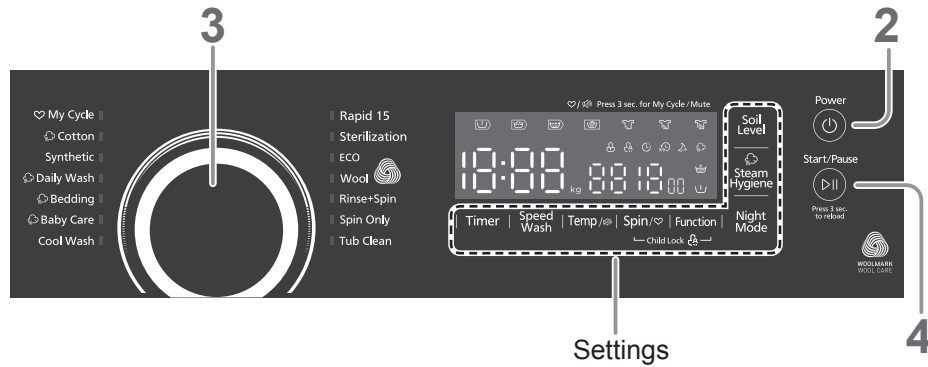


Softener



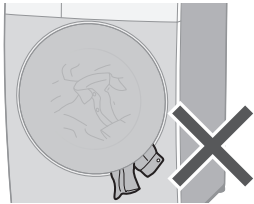
Washing

Basic Method

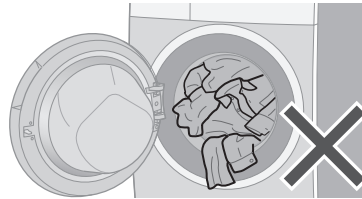


NOTE

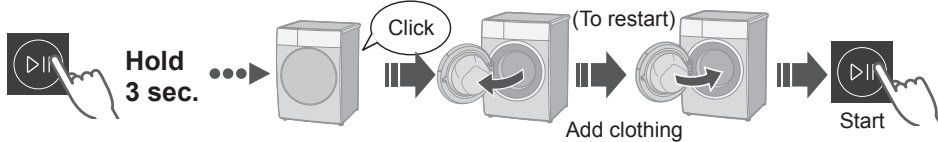
■ Do not let laundry get caught in the door.



■ Do not overfill the drum with laundry.



■ Reload
(To open the door during operation)



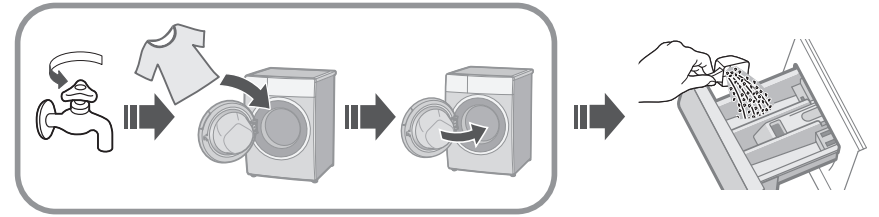
NOTE

● Door does not open. → (P. 33)

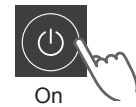


● When adding clothing, do not open the door with the "Power" button off. Water increases when resuming. This action dilutes the detergent. Furthermore, if this operation is repeated, water may come out when the door is opened.

1



2



3

Select a program.
(P. 14)

■ Changing the settings.

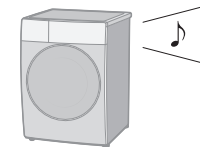
Displays Max. load and total time alternately.

Max. load (e.g.) 8.0 kg ↔ Total time (e.g.) 1:28

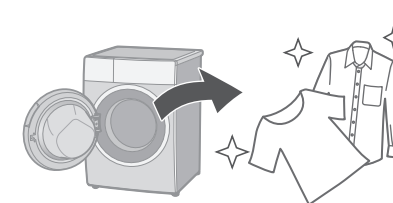
Settings

Timer (P. 20)	Speed Wash (P. 21)	Temp / °C (P. 21)
Spin / ♡ (P. 22)	Function (P. 23)	Soil Level (P. 24)
Steam Hygiene (P. 25)	Night Mode (P. 25)	My Cycle (P. 26)

4



5



Program List

Program	Description	Max. load (kg)	Total time
Cotton	Everyday clothes (Cotton and linen) 	8.0	1:28
Synthetic	Chemical fibres 	4.0	1:25
Daily Wash	Everyday clothes (Quicker than "Cotton" program) 	8.0	1:20
Bedding	Large items 	8.0	1:48
Baby Care	- Clothes for babies & sensitive skin - Rinsing thoroughly 	8.0	2:01
Cool Wash	Low temperature, low energy	4.0	1:01
Tub Clean	Cleaning the drum 	—	1:18
Spin Only	Spinning only 	8.0	0:12
Rinse+Spin	Rinsing only or rinsing once more with fabric softener 	8.0	0:20

Program	Description	Max. load (kg)	Total time
Wool	Machine-washable woollen clothes 	2.0	1:07
ECO	Cotton intended for washing at 40 °C or 60 °C can be washed in the same program. Energy and water consumption is efficiency. 	2.0	0:59
Sterilization	Sterilization wash (only for white clothes) 	4.0	2:27
Rapid 15	Small loads, lightly soiled 	2.0	0:15



WOOLMARK
WOOL CARE

"Wool" program of this appliance has been approved by The Woolmark Company for the washing of machine washable wool products provided that the products are washed according to the instructions on the garment label and this manual.
M2138: NA-148MR1

- **Total time is approximate** (When the standard water supply rate is 15 L / min). For each program's default water temperature.

Details of Programs

Settings Program	Auto setting		Setting range		Optional functions							
	Temp (°C)	Spin (r/min)	Temp (°C)	Spin (r/min)	Timer	Steam Hygiene	Prewash	Rinse+	Night Mode	Speed Wash	Soil Level	My Cycle
Cotton	40	1000	Cold, 20, 30, 40, 60, 90	0, 400, 600, 800, 1000, 1200, 1400	✓	✓	✓	✓	✓	✓	✓	✓
Synthetic	40	1000	Cold, 20, 30, 40, 60	0, 400, 600, 800, 1000, 1200	✓	—	✓	✓	✓	✓	✓	✓
Daily Wash	40	800	Cold, 20, 30, 40, 60, 90	0, 400, 600, 800, 1000, 1200, 1400	✓	✓	✓	✓	✓	✓	—	✓
Bedding	40	1000	Cold, 20, 30, 40, 60	0, 400, 600, 800, 1000, 1200, 1400	✓	✓	✓	✓	✓	✓	✓	✓
Baby Care	60	1000	Cold, 20, 30, 40, 60, 90	0, 400, 600, 800, 1000, 1200	✓	✓	✓	✓	✓	✓	✓	✓
Cool Wash	20	1000	Cold, 20	0, 400, 600, 800, 1000, 1200	✓	—	—	✓	✓	✓	—	✓
Tub Clean	90	—	90	—	✓	—	—	—	✓	—	—	✓
Spin Only	—	1000	—	0, 400, 600, 800, 1000, 1200, 1400	✓	—	—	—	✓	—	—	✓
Rinse+Spin	—	1000	—	0, 400, 600, 800, 1000, 1200, 1400	✓	—	—	✓	✓	—	—	✓
Wool	40	600	Cold, 20, 30, 40	0, 400, 600, 800	✓	—	—	✓	✓	—	—	✓
ECO	30	1000	Cold, 20, 30, 40, 60	0, 400, 600, 800, 1000, 1200, 1400	✓	—	—	✓	✓	—	—	✓
Sterilization	70	800	70	0, 400, 600, 800, 1000, 1200, 1400	✓	—	—	✓	✓	—	✓	✓
Rapid 15	Cold	800	Cold, 20, 30	0, 400, 600, 800	✓	—	—	—	✓	—	—	✓

NOTE

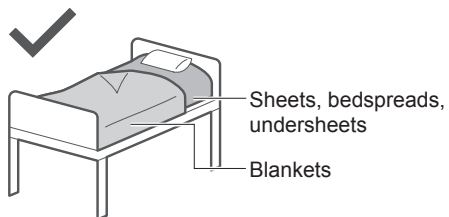
- Actual water temperature may differ from the declared cycle temperature.
- These results depend on water pressure, water hardness, water inlet temperature, room temperature, type and amount of load, degree of soiling, utilized detergent, fluctuations in the main electricity supply and chosen additional options.

Washing Tips

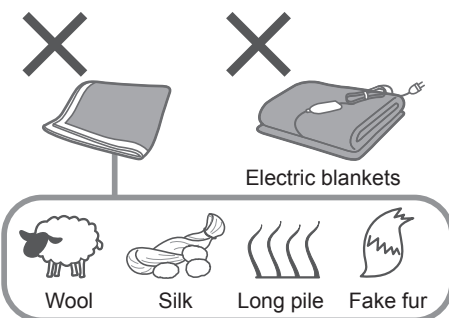
Bedding

■ Washable items

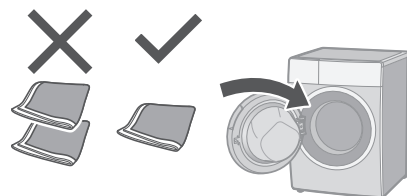
- 100 % cotton or 100 % synthetic



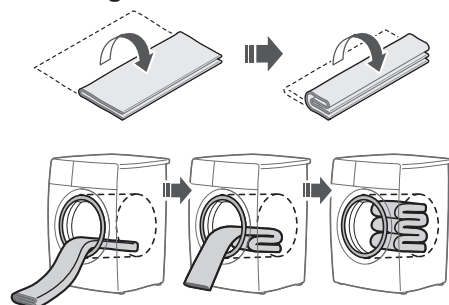
■ Not washable items



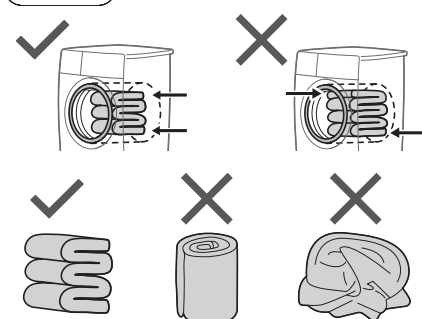
NOTE



■ Putting blankets into the drum



NOTE

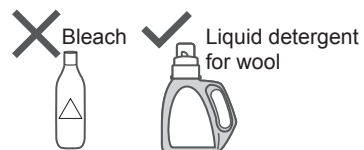


Wool

■ When washing

- To rinse fully, use the "Rinse+" function. (P. 23)

NOTE



■ After operation ends



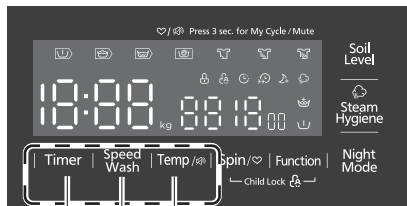
Changing Program Settings

■ Preparing

- Sort the laundry and put it into the drum. (P. 7)
- Add the detergent. (P. 10)



3 Change the program's settings.



Timer

Speed Wash

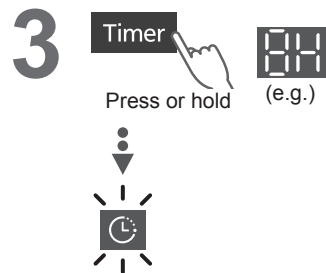
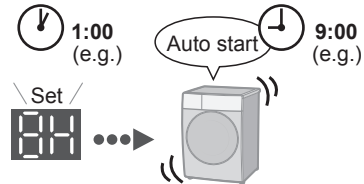
Temp

- Available options and setting ranges are different depending on the program. (P. 16)
- An alarm sounds if you select an option that is unavailable.



Timer

Set how many hours later to start operation. (Up to 24 hours)



■ To cancel settings

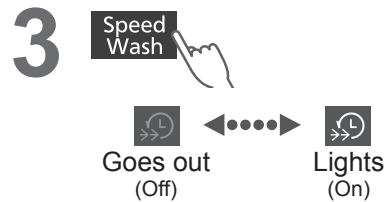


NOTE

- All indications turn off except
- 
- (e.g.)

Speed Wash

Decrease the washing time.



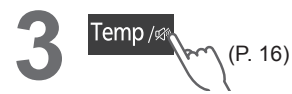
Temp

Change the washing temperature.



■ Setting guide

Low	High
● Colours	● White
● Lightly Soiled	● Heavily Soiled
● Easily shrinks	● Cotton



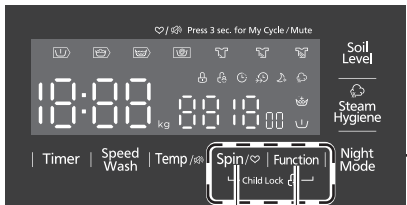
Changing Program Settings (continued)

■ Preparing

- Sort the laundry and put it into the drum. (P. 7)
- Add the detergent. (P. 10)



3 Change the program's settings.



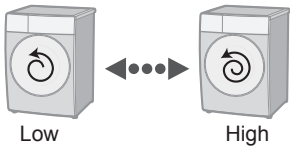
Prewash
Rinse+
Spin

- Available options and setting ranges are different depending on the program. (P. 16)
- An alarm sounds if you select an option that is unavailable.

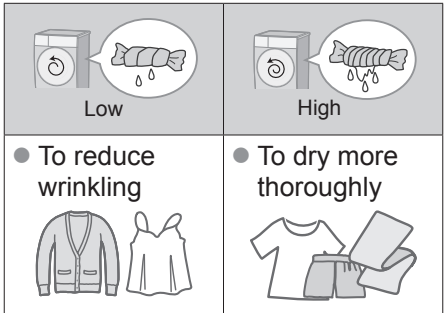


Spin

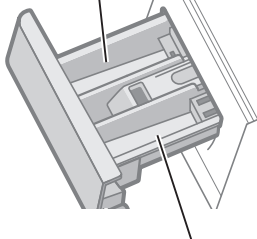
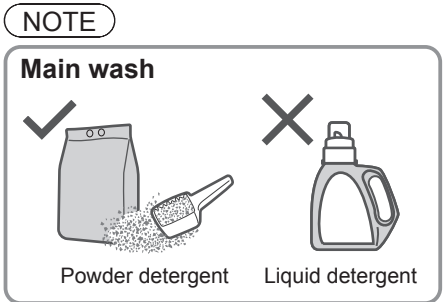
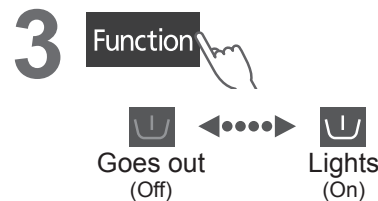
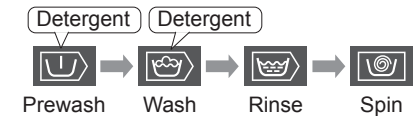
Change the spin speed.



■ Setting guide



Prewash



Prewash (P. 11)
Half the amount of the Main wash

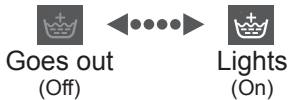
- Liquid detergent put in the Main wash drawer will just flow out during Prewash.
- Detergent needs to be added to the compartment I.

Rinse+

Add extra rinse process.



- Programs without "Prewash":
Cool Wash, Rinse+Spin, Wool, Sterilization



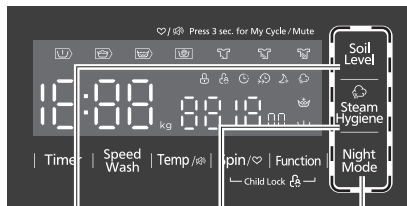
Changing Program Settings (continued)

■ Preparing

- Sort the laundry and put it into the drum. (P. 7)
- Add the detergent. (P. 10)



3 Change the program's settings.



Soil Level Steam Hygiene

Night Mode

- Available options and setting ranges are different depending on the program. (P. 16)
- An alarm sounds if you select an option that is unavailable.



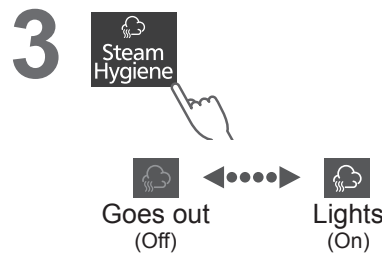
Soil Level

Increase or decrease washing time by 15 minutes in accordance with the dirt level.



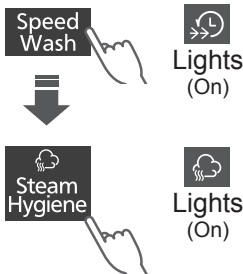
Steam Hygiene

Generate warm steam before washing and achieve 99.99 % bacteria elimination.



NOTE

- When using "Steam Hygiene", temperature will be over 70 °C. Please check care labels on clothes before using this function.
- When using "Speed Wash"



Night Mode

Spin speed is reduced to 800 r/min to be quieter. Button sound is cancelled.



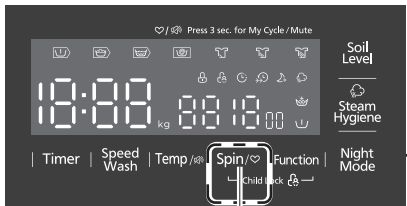
Changing Program Settings (continued)

■ **Preparing**

- Sort the laundry and put it into the drum. (P. 7)
- Add the detergent. (P. 10)



3 **Change the program's settings.**



 My Cycle

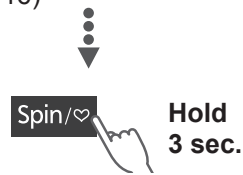
- Available options and setting ranges are different depending on the program. (P. 16)
- An alarm sounds if you select an option that is unavailable.



 My Cycle

Memorize favourite settings. Selecting "My Cycle" program recalls those settings from memory.

3 **Change washing settings or optional functions.** (P. 16)



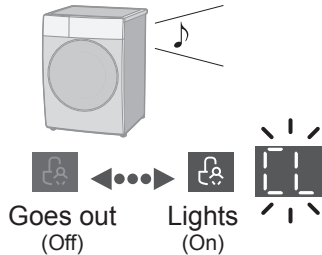
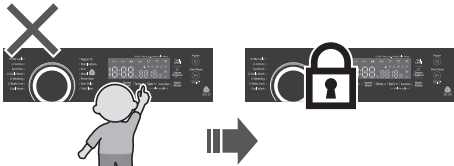
- The default setting program is "Cotton".

■ **To change:**
Same procedure

Changing Appliance Settings

 Child Lock

All are locked, except the "Power" button.

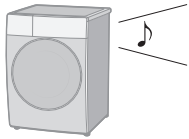
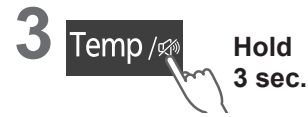


■ **To cancel:**

Same procedure 

 Mute

After Muting the buzzer function, the sounds will not be activated any more.



■ **To cancel:**

Same procedure 

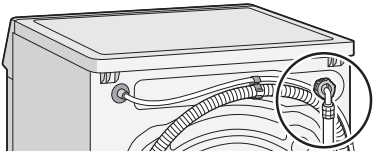
NOTE

- Child Lock is not released, even when the power is turned off.

Maintenance

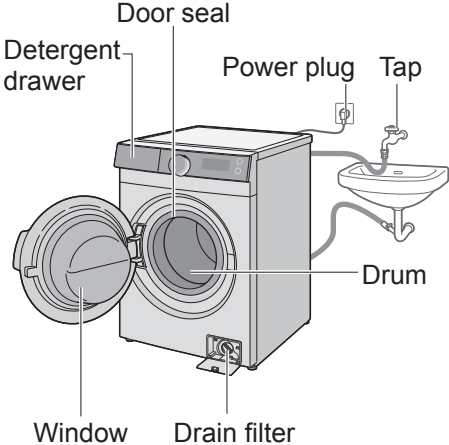
Water supply filter

Every 3 months or **E 11** error message appears

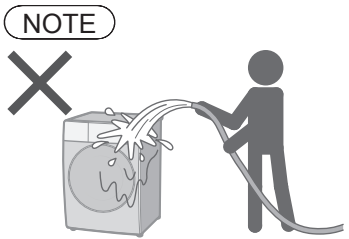
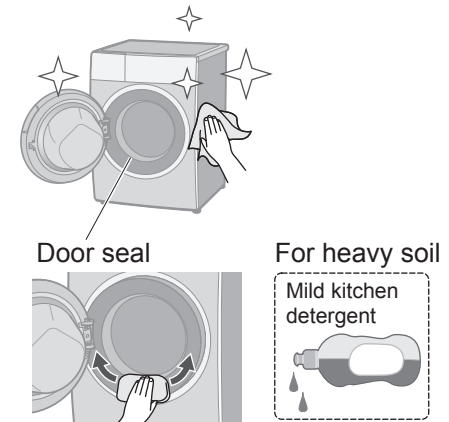


- 1 Empty
- 2 On
- 3 Select "Cotton"
- 4 Start 1 min. Turn off
- 5

- 6
- 7
- 8



Appliance



- Do not use gritty cleaners or thinners, or products containing alcohol or paraffin oil.

Detergent drawer

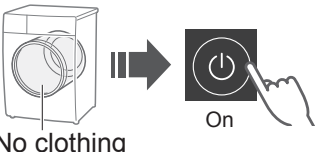
- 1
- 2
- 3
- 4
- 5

Maintenance (continued)

Drum

Regularly according to the need

Clean the drum by using 90 °C high temperature sterilization.

- 1 
- 2 

No clothing

On
- 3 

Select "Tub Clean"
- 4 

Start

NOTE

- When this program is performed, the clothes or other washing items cannot be added.
- When proper amount of chlorine bleaching agent is put in, the drum cleaning effect will be better.

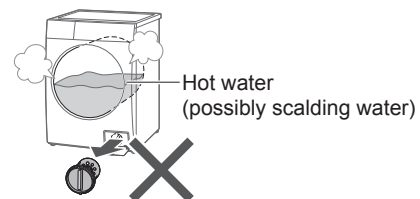
Drain filter

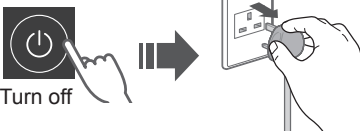
Every 3 months or  error message appears

Be sure to check the following before this procedure.

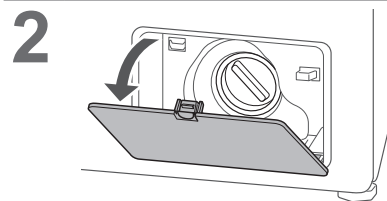
- Water in the drum has been drained.
- The operation has finished.
- The drum is empty.

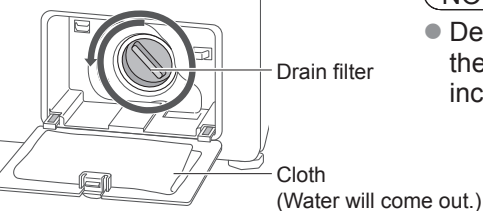
CAUTION



- 1 

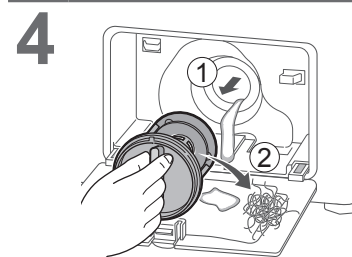
Turn off



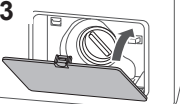
- 3 

Drain filter

Cloth (Water will come out.)



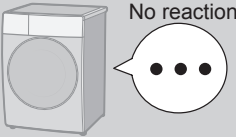
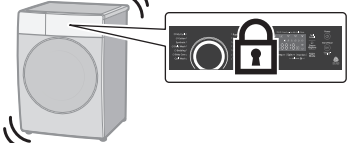
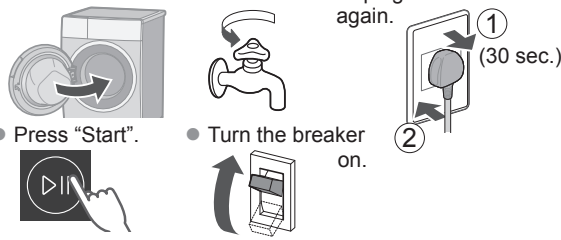
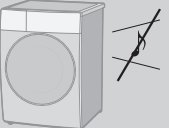
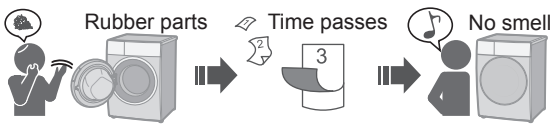
5 Replace

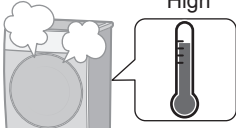
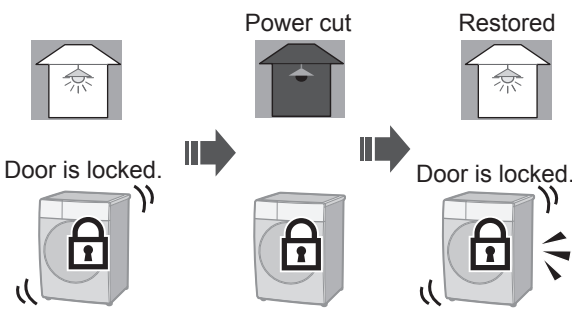
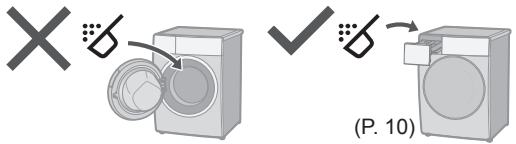
- 1 
- 2 Until it is in place 
- 3 

NOTE

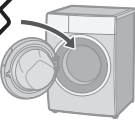
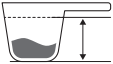
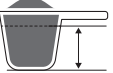
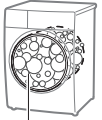
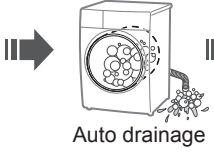
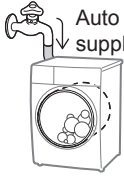
- Depending on drainage conditions, the remaining water amount may increase.

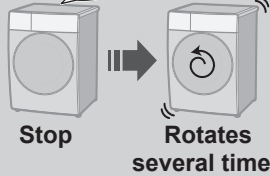
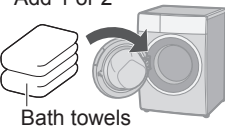
Troubleshooting

	Symptoms	Points to be checked
Main unit	Touch the buttons  No reaction 	☐ Possible cause - During an operation  ☐ Try - Child Lock (P. 27)  (Off)
	No operation 	☐ Check - Power cut - Timer  ☐ Try - Close the door. - Turn on. - Unplug and insert again. - Press "Start". - Turn the breaker on. 
	No buzzer sounds 	☐ Check Mute (P. 27)  Hold 3 sec.
	Odour of rubber 	☐ Possible cause  ☐ Try "Tub Clean" (P. 30)

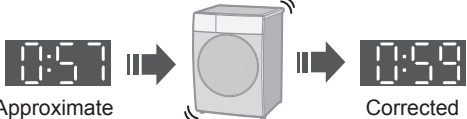
	Symptoms	Points to be checked
Main unit	Door does not open 	☐ Possible cause - During an operation  Door is locked. To open the door during operation (P. 12) ☐ Check - Temperature  High NOTE 
	After washing 	☐ Check  (P. 10)

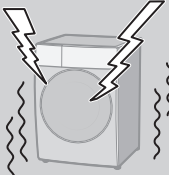
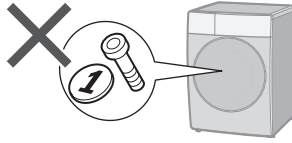
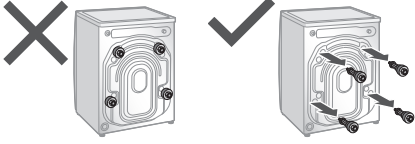
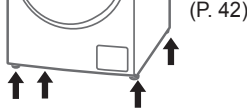
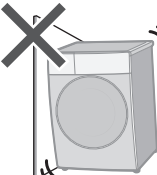
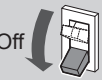
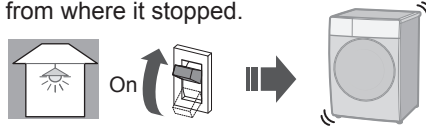
Troubleshooting (continued)

	Symptoms	Points to be checked
Detergent and foam	 Foam	□ Possible cause • The amount of foam varies. • Temperature  • Water softness 
	Not enough 	□ Check • Powder detergent   (P. 10) • Too little detergent  • Low foam detergent  • Heavily soiled  • Load too large 
	Too much 	□ Check • Too much detergent 
	Detergent for Prewash does not flow  Prewash	□ Check Function  (P. 23)
Wash	During a wash  Wash Water drainage	□ Possible cause Excess foam    Foam Auto drainage

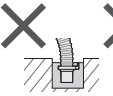
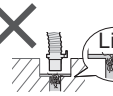
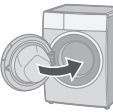
	Symptoms	Points to be checked
Rinse/Spin	During the spin process  Stop Rotates several times	□ Possible cause Unevenness      □ Try Too light   Bath towels
	After washing  Foam or water	□ Try Wipe   

Troubleshooting (continued)

	Symptoms	Points to be checked
Time	During a wash Displayed time  Changes	□ Possible cause ● Remaining time is corrected during operation.  Approximate Corrected ● If the settings are changed  ● If clothes are uneven  ➡ The remaining time may increase.
	Remaining time Does not decrease  or Suddenly decrease 	□ Possible cause The displayed time is a guideline.
Noise	During water drainage 	□ Possible cause ● This is normal. The drain pump is working.

	Symptoms	Points to be checked
Noise	Unusual noise (or vibration) 	□ Check ● Metal items  ● Shipping bolts (P. 42)  ● Slope or an unstable surface  ● Adjust 4 feet.  (P. 42) ● Touching  ● Uneven 
Others	Power cut  Breaker Off 	□ Check ● When the power recovers, operation resumes from where it stopped. 

Error Display

Error code	Code description	Points to be checked
E 10	Unable to supply water	1 Check 2  Start Water outage  Turned off  Water supply filter (P. 28)  - Check the water pressure. (0.05 - 1.0 MPa) - To repair or replace parts, contact authorized repair agents. 
E 21	Unable to drain	1 Check 2  Start      (P. 31) - Confirm that the drain hose is attached correctly. (P. 44) - To repair or replace parts, contact authorized repair agents. 
E 30	Door is open	1  2  Start To repair or replace parts, contact authorized repair agents. 

Error code	Code description	Points to be checked
E 12	Overflow alarm	1  2  3  Contact authorized repair agents.
E 33	Water sensor error	
E 64	Communication error between computer board and motor	
E XX	Others	

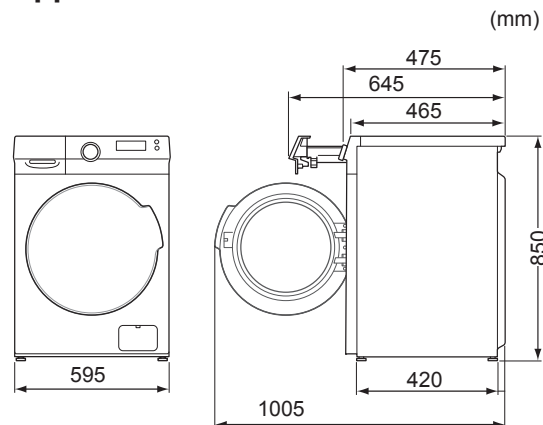
Choosing the Right Location



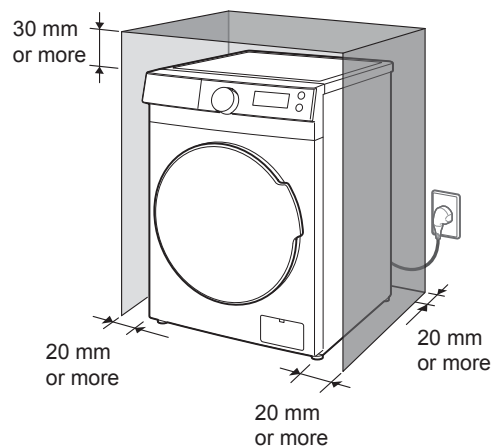
Make sure to ask a service person for installation.

- Do not install the appliance by yourself.
- Follow this installation method. If you do not, Panasonic will not be liable for any accidents or damages.

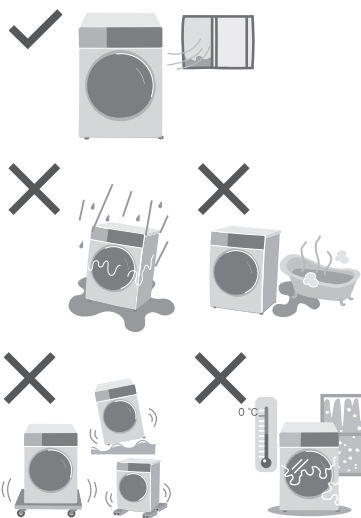
Appliance dimensions



Set-in installation



Check the location.



NOTICE

May cause malfunction.

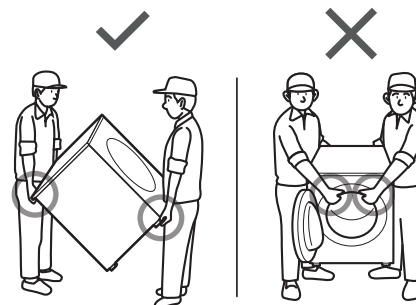


Do not install the appliance near the equipment that generates electromagnetic waves, such as an IH rice cooker.

Moving and Installing

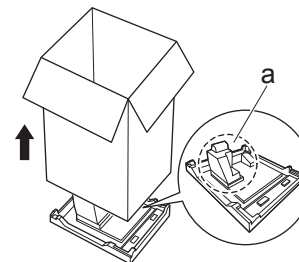
Carrying the appliance

Do not do it alone.



Unpacking the appliance

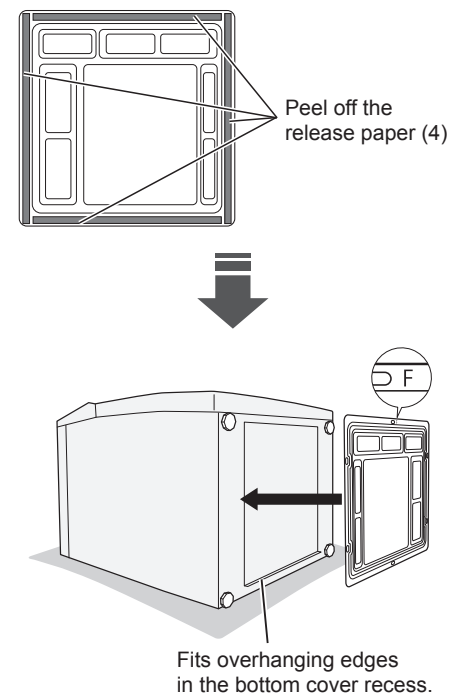
Remove the small triangle foam (a) with the bottom packaging together.



NOTE

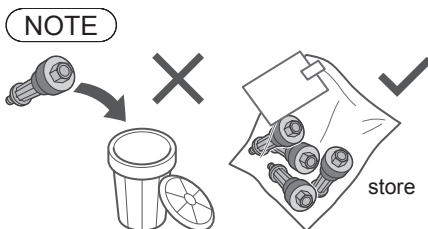
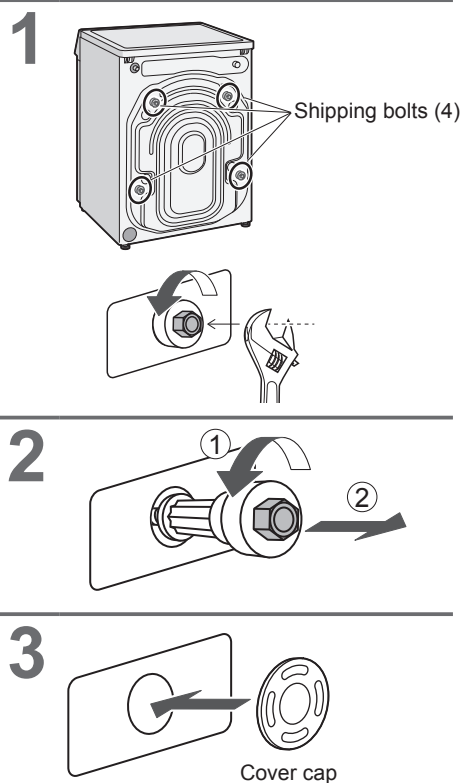
- There is a risk of suffocation. Keep all packaging material (e.g. Films, Styrofoam) well away from children.

Installing the bottom cover

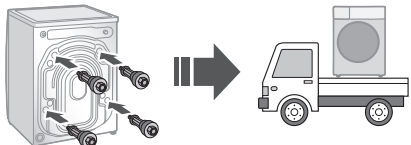


Installation Moving and Installing (continued)

Removing the shipping bolts

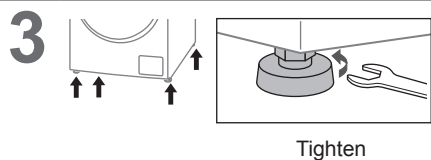
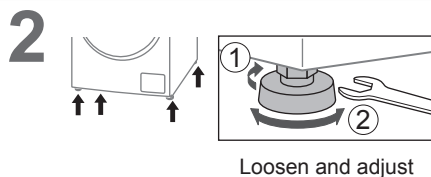
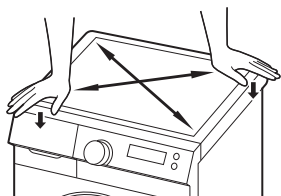


■ Moving the appliance again

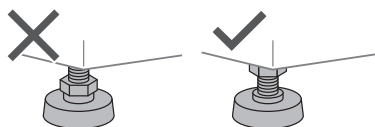


Levelling the appliance

1 Press on opposing corners of the top to check that the feet don't wobble.



NOTE

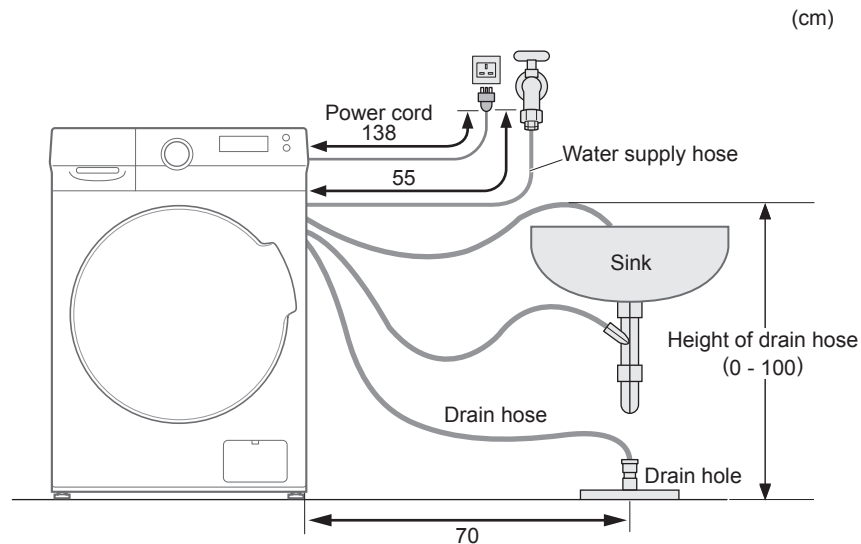


Installation Connecting the Hoses

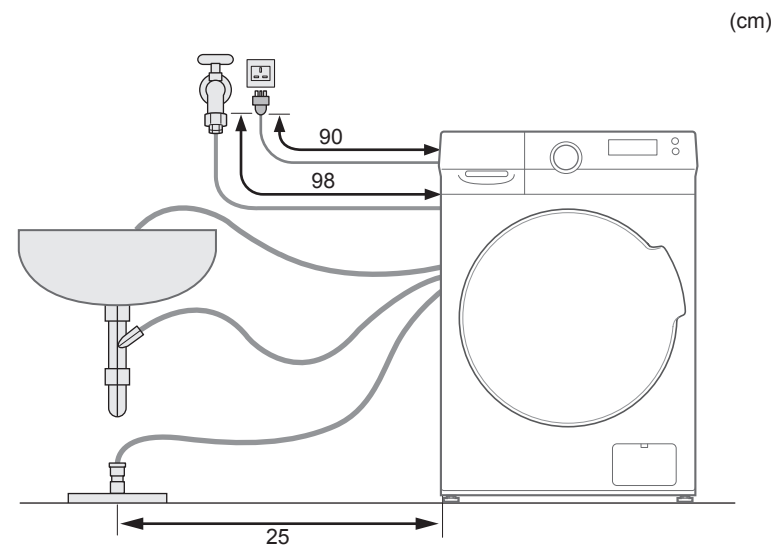
Connect the hoses properly to prevent water leaks.

Maximum connection distances for hoses and the power cord

Right side connection



Left side connection



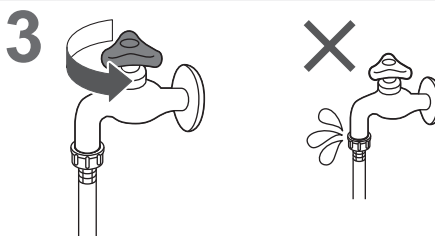
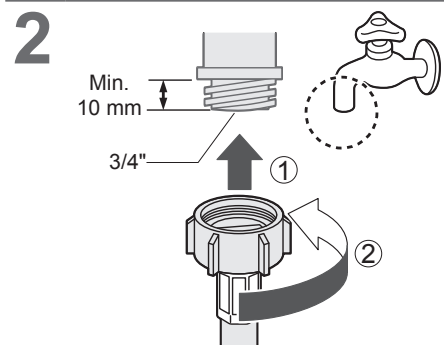
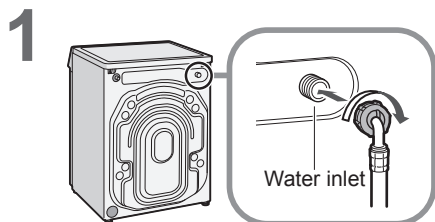
Installation Connecting the Hoses (continued)

Water supply hose

■ Connecting the water supply hose

⚠ CAUTION

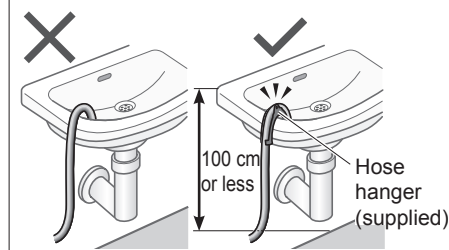
- Tighten the nut firmly.
- Do not twist, squash, modify or cut the hose.



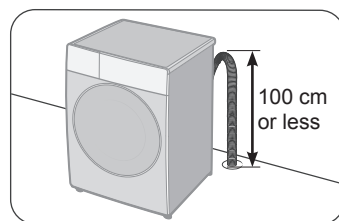
Drain hose

■ Draining to a sink or wash basin

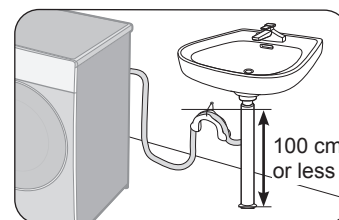
NOTICE



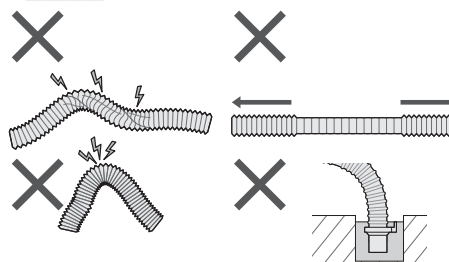
■ Draining to a floor directly



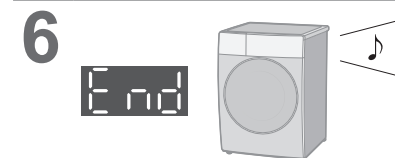
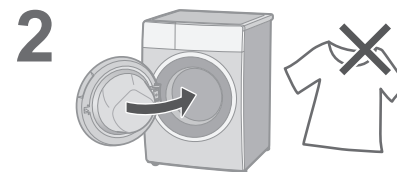
■ Draining to a sink drain hose branch



NOTE



Installation Test Run



Checking after test run

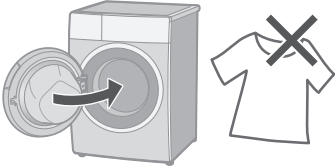
Problem	Causes and Measures
Water leaks	Connect the water supply hose properly.
Abnormal sounds	● Remove the shipping bolts (P. 42). ● Install stably.
Error display	See P. 38.

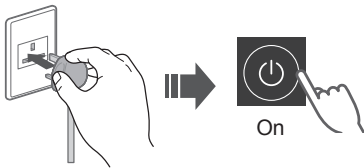
Test Run (continued)

Calibration

Recommendation for best performance

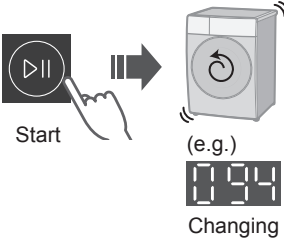
- 1

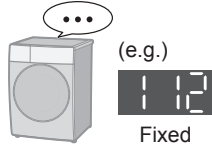

- 2


- 3


- 4


- 5


- 6


- 7



Specifications

	NA-148MR1
Rated voltage (V)	220 - 240
Rated frequency (Hz)	50
Maximum energy rated power input (W)	1700 - 2000
Maximum spin speed (r/min)	1400
Product dimensions (W x D x H) (mm)	595 × 475 × 850
Product weight (kg)	63
Maximum mass of dry cloth (kg)	8.0
Pressure of tap water (MPa)	0.05 - 1.0

