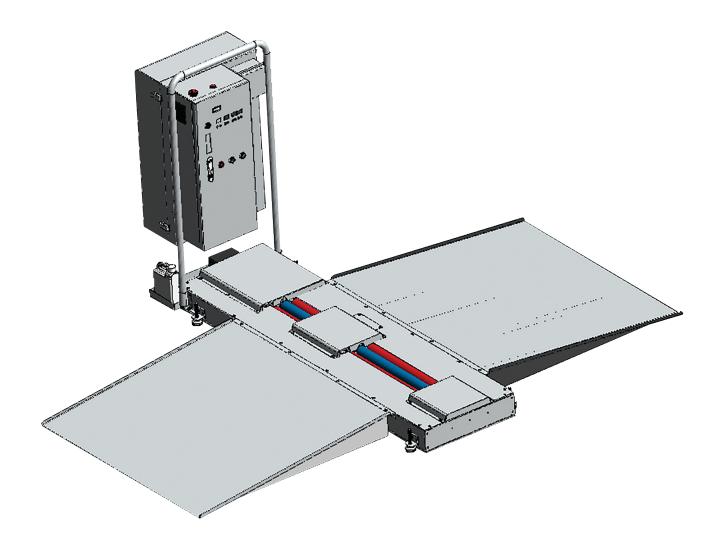




User Manual



Notice

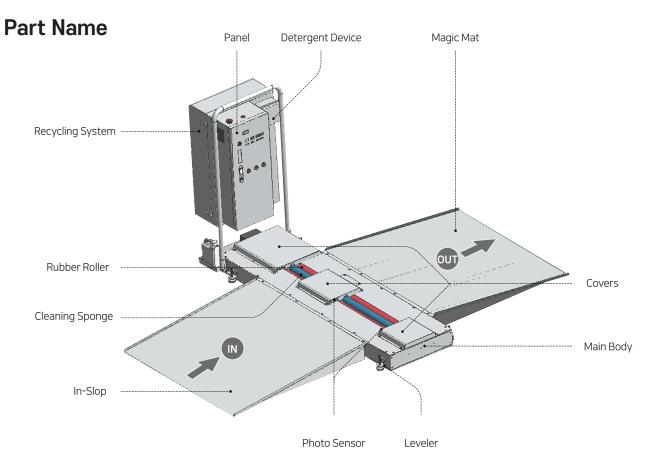
Before use, please read this manual thoroughly, and then install and use machine. Do not disassemble or remodel this device except an expert repair engineer.

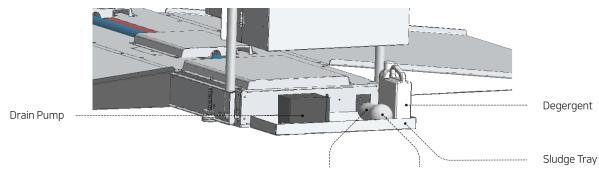
Guarantee & Responsibility

· Guarantee period is 1 year as from On-Board date of shipment.
· Damage caused by design and production within guarantee period can be serviced as free of charge.
· Damage caused by customer of wrong operation within guarantee period will be serviced as Charge.
· Following our company policy, our products are packed as safely and properly as possible when we ship the goods. Therefore, when you receive the damaged products which happened during shipment, we have no responsibility of the reimbursement or replace of the products.
· We have no responsibility either of the reimbursement or replace of the products, when the product damaged by the unexpected natural disaster including thunderstorm, fire, flood, earthquake, etc. which happened during shipment.
· Responsibility for damaged happened during shipment is on the forwarder company.

Contents

Guarantee & Responsibility	2	Recycling System Setting (Water Supply, Drain)	10-11	Move Easily	19
Part Name	3	Panel Setting	12	Problems	20
Recycling System	4	Auto Detergent Device Setting	13	How to use	21
Panel	5	Auto Detergent Device Setting	14	Notices while using Caster Cleaner	22
Basic Installation(Slope Type)	6-7	Consumable Filter Exchange (Cleaning Sponge)	15-16	Notices for Rotating Wheel	23
Basic Installation(In-Ground Type)	8-9	(1st, 2nd Filter, Sludge Bag) (Detergent, Magic Mat)	17 18		

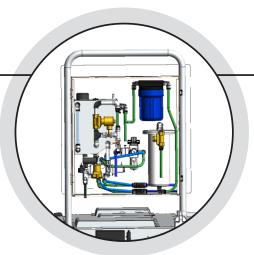


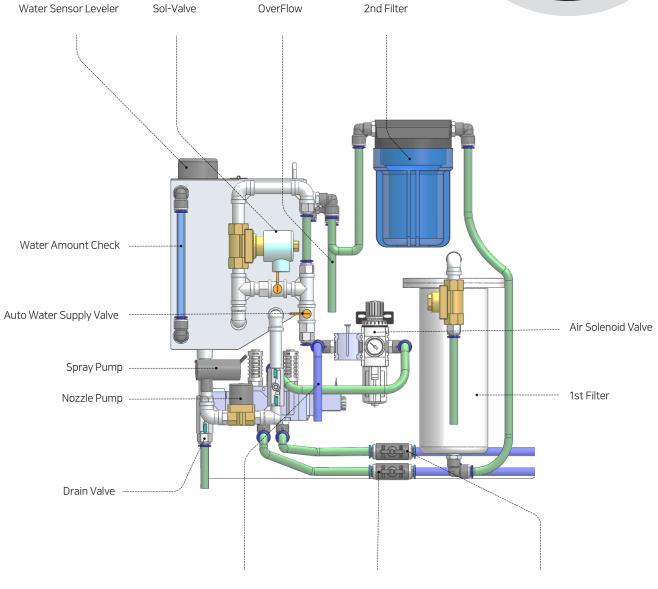


Sludge Screw

Sludge Bag

Recycling System

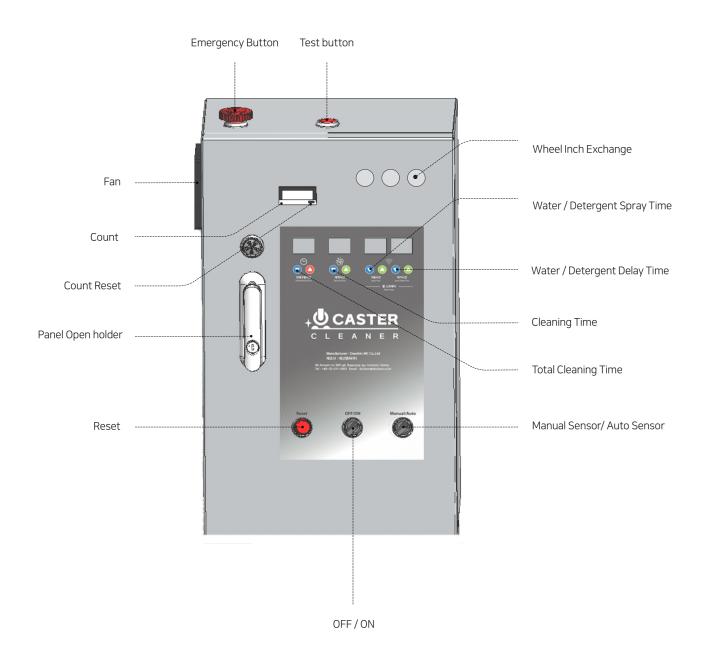




Air Hose

Water Spray Amount Controller (Left Sponge)

Water Spray Amount Controller (Right Sponge)



Basic Installation

(Slope Type)

Prepare before installation.



Bubble leveler 5mm hex wrench

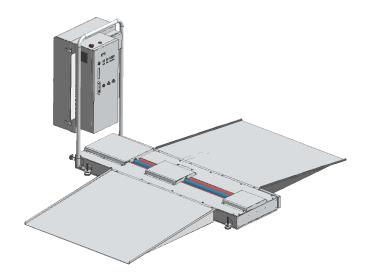
Monkey wrench A small cart to move the caster cleaner

Please check before installation.

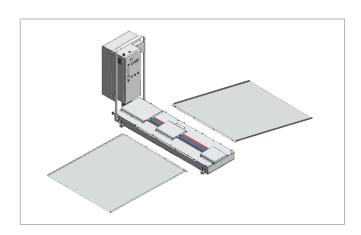


- Check that the floor to be installed is clean and flat.
- Check if the air pressure (5 bar) is ready.
- Check that 6-7 liters of water is ready (when using manually)
- Please check that you have 1 electrical cords ready.

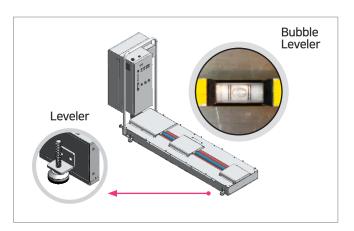
Slope type installation completed



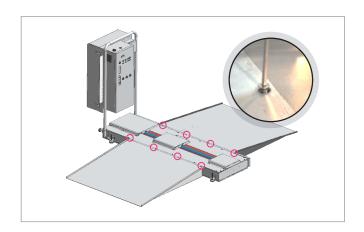
Put Caster Cleaner on the even ground.



1 Unbox and place the Caster Cleaner.



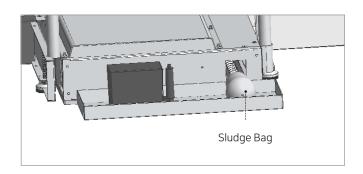
- 2 Install Caster Cleaner evenly using Bubble Leveler and
 - ※ Important Step!!! If it is not evenly installed, wheel can be floated above sponge roller and cleaning cannot be perfect.



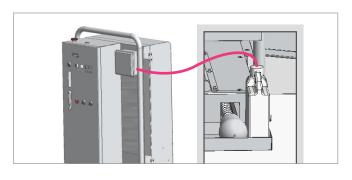
Drain Pump Sludge Tray

3 Attach both slopes using Hexagon wrench.

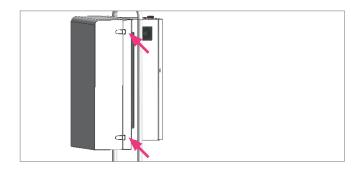
4 Put Sludge Tray and Drain Pump next to main body.



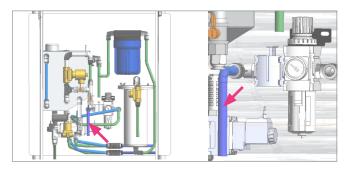
5 Tie Sludge bag to Sludge pipe



6 Exchange the detergent lid into provided lid with hole. Link hose from Detergent Device into the detergent bottle.



7 Open the Recycling Cover.



8 Link Air Hose(10 \emptyset) from Air Solenoid Valve to Air supply valve.

Basic Installation

II. In-Ground Type

Prepare before installation.



- Bubble leveler
- 5mm hex wrench
- Monkey wrench A small cart to move the caster cleaner

Please check before installation.



- Check that the floor to be installed is clean and flat
- Check if the air pressure (5 bar) is ready
- Check that 6-7 liters of water is ready (when using manually)
- Please check that you have 1 electrical cords ready.



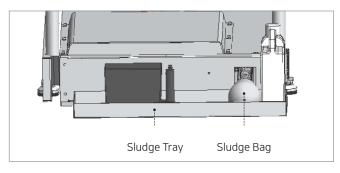
In-Ground type installation completed



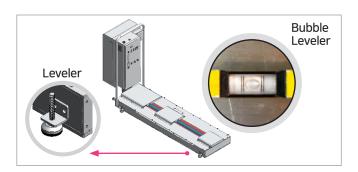
1 After digging the ground according to the construction drawing, dry it completely.



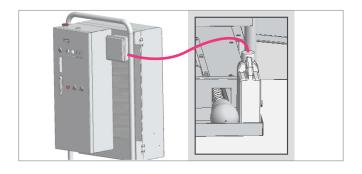
2 Place the device in the exact center of the In-Ground space.



3 Position the Sludge Tray next to the Main Body, connect the Sludge Bag and place Detergent in it.



- 4 Install Caster Cleaner evenly using Bubble Leveler and Levelers.
 - ※ Important Step!!! If it is not evenly installed, wheel can be floated above sponge roller and cleaning cannot be perfect.

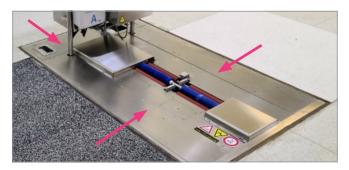




5 Exchange the detergent lid into provided lid with hole. Link hose from Detergent Device into the detergent bottle.



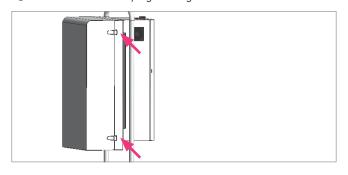
6 Close the covers, check that the Main Body and the covers are properly seated, and then open the covers again.



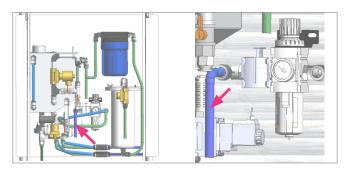
7 Fix the Main Body to the wall using the adjusters.



8 Close the covers by tightening the bolts on the three sides.



 $\begin{tabular}{ll} \bf 9 & The \ remaining \ space \ on \ the \ edge \ is \ neatly \ finished \ with \ cement. \end{tabular}$

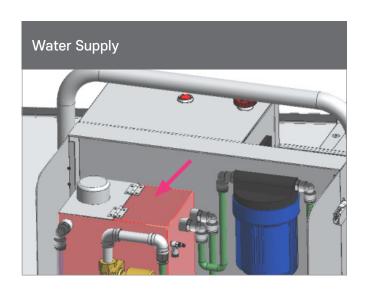


10 Open the Recycling Cover.

11 Link Air Hose(10Ø) from Air Solenoid Valve to Air Supply Valve.

Recycling System Setting

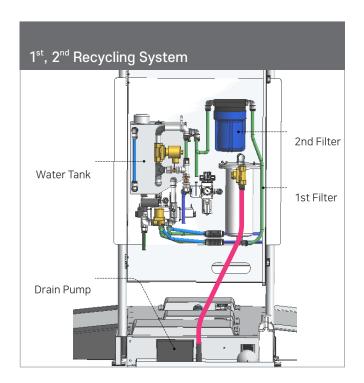
Use Recycling System



Water Drain

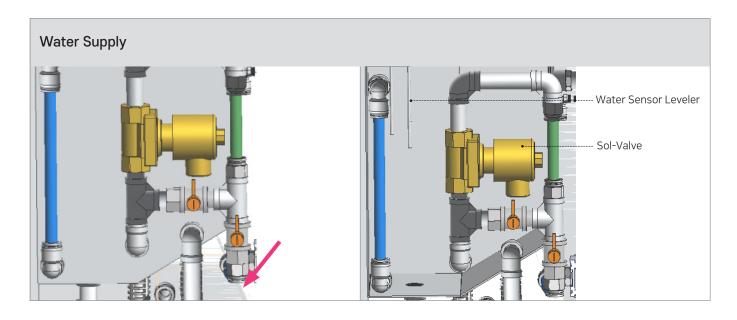
1 Manual Water Supply: Pour out water manually after opening the lid of Water Tank. (About 6-7 liter)

2 Manual Water Drain: Link hose and connect the hose (12Ø) and open the drain valve. (Prepare bucket)

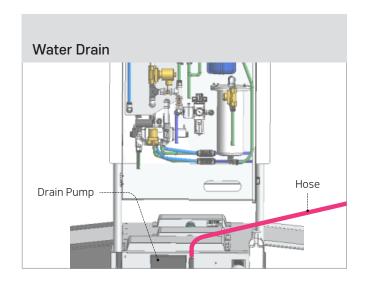


3 Drain Filtration: Link Drain Pump and 1st filter Valve with provided hose.
Dirty water will be filtered into 1st and 2nd filters and go into Water Tank again.

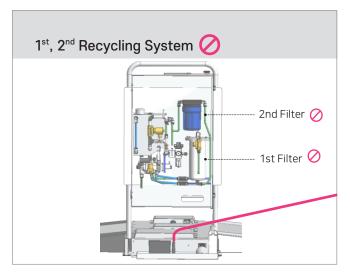
No Use Recycling System



- 1 Auto Water Supply: Link the hose (12Ø) into Auto Water Supply Valve
- 2 Sol-Valve and Water Sensor Leveler inside of the Water Tank control the water supply automatically.



3 Auto Drain: Link hose from Drain Pump to the Waste Water Treatment place.



4 Filtration: Since water drains into Waste Water Treatment place, there is no filtration recycling usage.



Panel Setting



- 1 Connect the electrical cord from the panel to an electrical outlet.
- 2 Turn on the switch.
- 3 Select Automatic/Manual cleaning method.
 - Auto: The automatic sensor detects wheel and automatically cleans wheels.
 - Manual: Put the wheel on the driving part and press the test button for cleaning.)
- 4 Set the cleaning time. (Press and hold the button, the number blinks. Then press up and down buttons to set.)
 - Total Cleaning Time: Total time for the cleaning sponge to go down, run and up again. (In general, after setting the Washing Time, set 2-3 seconds longer than the washing time.)
 - Washing Time: It is the actual washing time as the washing sponge is actually driven. (1-25 seconds)
 - Water detergent spraying Time: When the cleaning sponge is driven, water and detergent are sprayed to the sponge. (Basic Setting: 2seconds)
 - Water Detergent Spray Delay Time: After spraying as much as the water detergent spray time, it is the spray delay time. (It was created to prevent water overflowing from the sludge tray when spraying is continued.) (Basic Setting: 2seconds)

5 Emergency Button

- Press in case of emergency.
- Release the button to start operation again, press the reset button to start cleaning again.
- 6 The number of times of cleaning is counted.
- 7 Press the button matching to the inch of the wheel to be cleaned. (It takes a few seconds to change inches.)

Auto Detergent Device Setting



Standard Settings:

- 01 units of indicator = 2 seconds.
- As soon as it is turned on, it is sprayed immediately.
- 2 sec input at one time (17ml/2 sec)
- Delay 40 minutes
- 252ml / 36 sprays per day (24 hours)
- About 1,260ml / 5 days ON
- After 5 days, turn it off until the next consumable replacement. (About 1,000ml of detergent per bottle)



Caution

Foreign objects entering the container can block the pump and cause malfunction.

If the pump is operating when the chemical (liquid) is not supplied, the pump noise will increase and the pump may be damaged.

Please turn off the power when there is no chemical.

Pump Delay Time(min.) Pump Input Time(Second)	8 min	10 min	20 min	30 min	40 min	50 min	60 min	70 min	80 min	90 min
1 sec					7 ml					
2 sec					17ml					
4 sec					30ml					
6 sec					40ml					
8 sec					49ml					
10 sec					55ml					
12 sec					60ml					
14 sec					65ml					
16 sec					72ml					
18 sec					78ml					
30 sec					150ml					
1min					270ml					
Number of inputs per day	FULL	144 Times	72Times	48Times	36Times	29Times	24Times	20Times	18Times	16Times
2 sec. input	TOLL	1,008ml	504ml	336ml	252ml	203ml	168ml	140ml	126ml	112ml

Auto Detergent Device Setting



VR1 Pump Operation Adjustment

Auto/manual adjustment

Pump operating unit control

Adjust the waiting time unit

Turn VR (Variable Resistance) clockwise to set it.

Caution

OFF
ON
1CYCLE

When changing DIP S/W, be sure to TURN OFF on the cover!!!

ON
ON
1 2 1 2 1 2 1 2

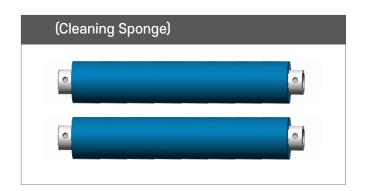
DIP S/W	Delay Time Setting	Pump operation settings	Manual setup
ON	2 SEC. X 9 STEPS (VR-2 ADJUST) 0-18 SEC. SETTING	2 SEC. X 9 STEPS (VR-1 ADJUST) 0-18 SEC. SETTING	POWER-ON (NO.2 S/W OFF) PUMP OPERATE
ON 1 2	1 MIN. X 9 STEPS (VR-2 ADJUST) 0-9 MIN. SETTING	6 SEC. X 9 STEPS (VR-1 ADJUST) 0-54 SEC. SETTING	POWER-ON (NO.2 S/W OFF) Delay Time Operate
ON 1 2	10 MIN. X 9 STEPS (VR-2 ADJUST) 0-90 MIN. SETTING	30 SEC. X 9 STEPS (VR-1 ADJUST) 0-4 MIN. 30 SEC. SETTING	Start S/W (No.1 S/W ON) PUMP ON (Setting Time) PUMP OFF - REPEAT
ON 1 2	1 HOUR X 9 STEPS (VR-2 ADJUST) 0-9 HOUR SETTING	1 MIN. X 9 SETTINGS (VR-1 ADJUST) 0-9 MIN. SETTING	Start S/W (NO.1 S/W OFF) Works only when pressed

Consumable Filter Exchange

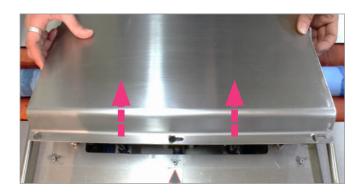
 Π

Turn off the switch first at Pannel.

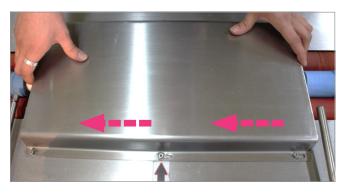
All consumables should be replaced with new ones usually once every two months. The magic mat can be washed and used for about 3 years.



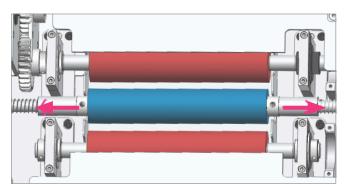
1 Prepare new Cleaning Sponge.



3 Pull up the cover and detach it.

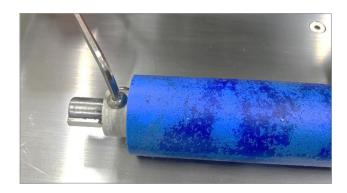


2 Pull out covers.

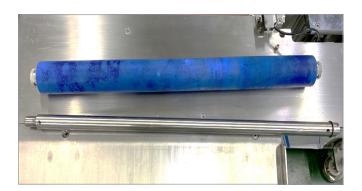


4 Pull both sides at the same time and disunite the Cleaning Sponge.

Consumable Filter Exchange



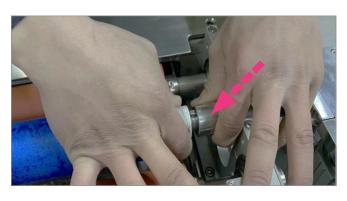
 $\begin{tabular}{ll} 5 & Loosen each side volts of the Cleaning Sponge with \\ & Hexagon wrench. \end{tabular}$



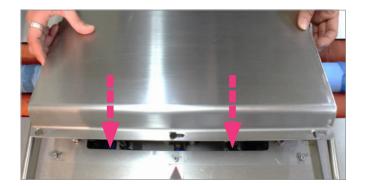
6 Detach it, and exchange it with new one.



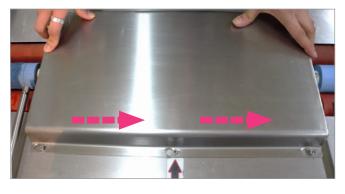
7 Fit it into the hole.



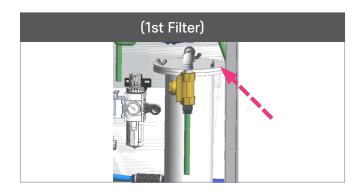
8 Rotate the marked part to fit it with the hole.



9 Put the cover down.



10 Pull out covers and make sure it is fixed.



1 Open the Recycling Cover, loosen the 1st filter's volts.



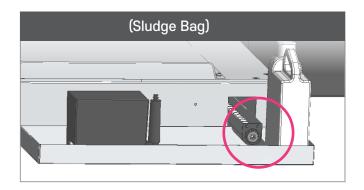
2 Throw away water in it, exchange it with new one. Assemble in reverse.



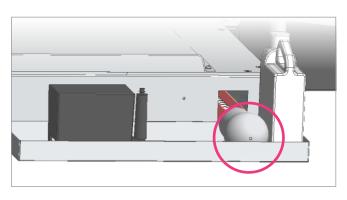
3 Turn left the 2nd filter's body.



4 Throw away water in it, exchange it with new one. Assemble in reverse.



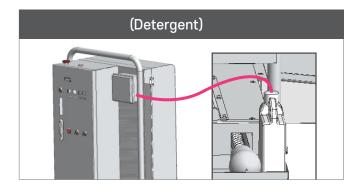
5 Throw away used Sludge Bag.



6 Tie it to the Sludge screw.



Consumable Filter Exchange



Remove the Detergent hose, replace it with a new detergent bottle, and connect the hose again.



7 Loosen the volts.



8 After cleaning it with water, get rid of water. Dry it. (When mat is contaminated severely, put some neuter detergent together.)



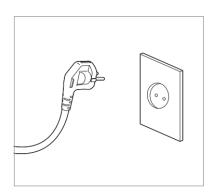
9 While the mat is being dried (1 day), use an extra Magic Mat.

Move Easily

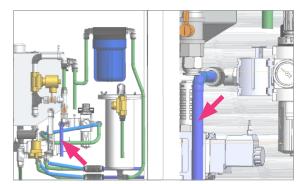


Caution

Turn off the switch first at Pannel.



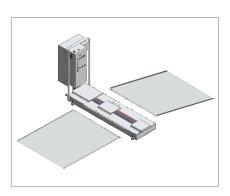




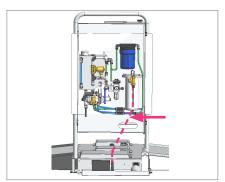
1 Detach electric cord of MACHINE.

2 Turn off Air Supply.

3 Detach blue Air Hose of Machine from Air Supply



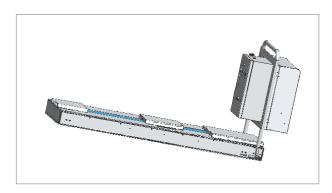
4 Detach each slopes from main body.



5 Detach Pump Hose from 1ST Filter.



6 Discard water in the Sludge tray, and put it on the main body.



7 Lift up the end of main body, and put Jack Pallet.

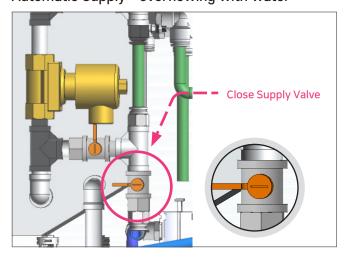


8 Move Main Body easily, as well as 2slops



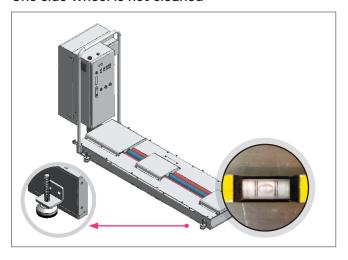
Problems

Automatic Supply - overflowing with water



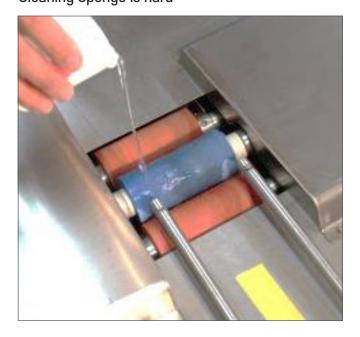
Close the supply valve.

One side wheel is not cleaned



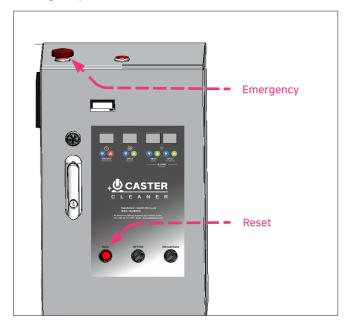
Check the machine is evenly installed.

Cleaning Sponge is hard



Activate the sensor to drive the sponge, and pour hot water 1-2 times over the sponges.

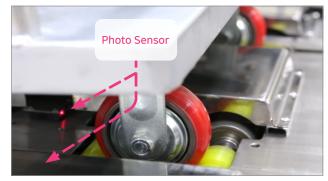
Emergency



Push Emergency button. Turn right to release it. To start again, push Reset Button.

How to use





1 Move Caster along the guides.

2 By Photo Sensors, cleaning starts. (When Auto Cleaning Setting)



3 Put caster wheels slowly and safely at the cleaning area.



4 Push forward caster slightly after finishing cleaning.

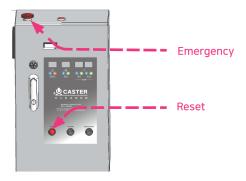


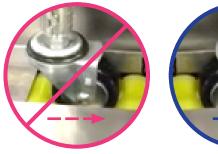
5 Get rid of water remained on the wheels.

Notices while using Caster Cleaner

1

Please follow the below instructions when you use Caster Cleaner.







<Emergency> Push Emergency button. Turn right to release it. To start again, push Reset Button.

For rotation wheels, check wheel direction while cleaning!



The max. weight is 200kg!! (DS-200S-R)



Be careful hands and feet!



Take caster into cleaning area slowly!



Do not open Pannel cover except allowed person!

Notices for Rotating Wheel

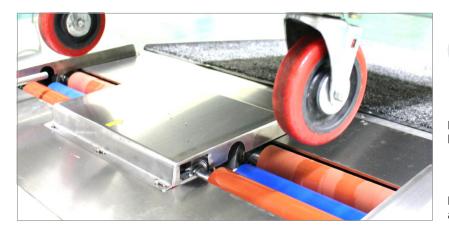


Please follow the below instructions when you use Caster Cleaner.





When wheels are being rotated!





If carts are unloaded, Lift cart up, and put it back matching to the cleaning sponges.

If carts are loaded, push the Emergency button, and start cleaning. again





It is important to put rotating wheels into the cleaning sponge properly. (If not, Sponge Roller's lifespan can be shorten.)



