



**MEFE**  
MITCHELL ENGINEERING  
FOOD EQUIPMENT PTY LTD

# Operating Manual



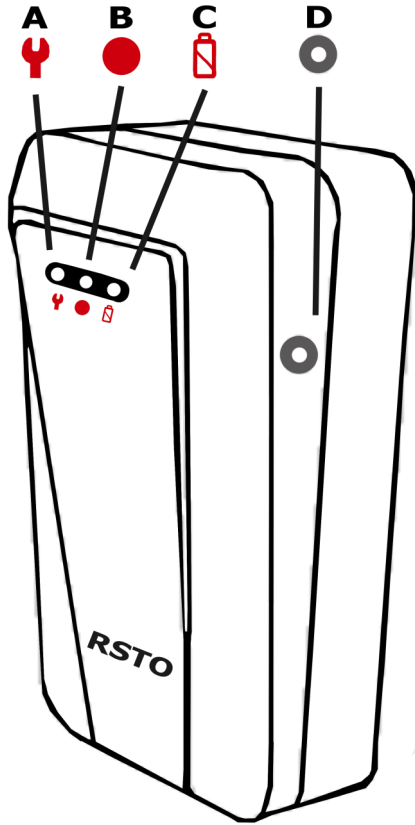
## Auto Toilet Flush

For side handle type cisterns

CAT 67SH1

Revision 3

## Sensor Appearance and Instruction:



A. SET UP MODE (left) - Adjust the Half/Low flush cycle time by holding a magnetic wand (part 13) against the right side (D) circular magnetic target until the desired water release is achieved. Note the speed and distance of flush motor up/down cycle and adjust accordingly.

B. PRESENCE DETECTION - A computerised Sensor measures the “time-at-the-toilet” and then activates a flush motor inside the tank which lifts the flush lever for either a half/low-flush or full/large flush as required.

C. LOW BATTERIES - It will flash when the battery is low, please replace the battery.

D. MAGNETIC TARGET (half/low flush)

NOTE 1: After setup is complete, if the half flush water volume is insufficient or too much (based on personal demand), simply repeat the Set Up Mode instructions located above at A. The memory model of sensor must be reset after replacing batteries.

NOTE 2: When computerised Sensor starts to measure the “time-at-toilet” the Sensor presence detection LED will flash for 10 seconds above (maximum flush cycle: 10 secs) by standing in front of the Sensor which then activates a flush motor inside the tank which lifts the flush lever for either a half/low flush or full/large flush as required.







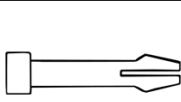


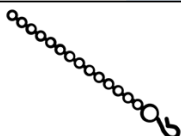
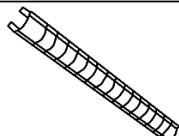

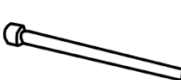

## Specifications:

Model/Product name	CAT 67SH1—auto toilet flush
Power	6x AA batteries
Flush Method	Auto-induction, Two-stage flush (low/large water volume)
Detection Rang	80cm +/- 10cm
Sensor	Half Flush Timer: 10-60 secs Full Flush Timer: >60 secs Maximum Flush Cycle: 10 secs
Applicable toilet tank style	Side-pressing type toilet, Water tank contains: 1. Flush lever 2. Bead Chain 3. Flapper 4. Flush valve

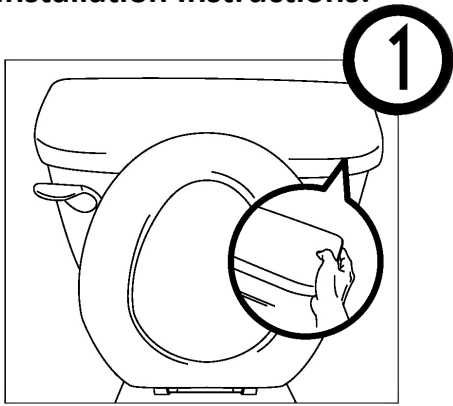
## Precautions:

1. This electronic dual-flush toilet conversion system fits most side-pressing toilets.
2. The Sensor has the function of self-learning, determining whether the sensor distance has at least 100 cm above to the wall or any obstacles, otherwise it will shorten the detection to just 40-50cm.
3. Upon powering up the Sensor will automatically detect the distance in 1 min, the Sensor presence detection LED will flash, please keep any obstacles or mirrored surfaces out of the detection beam at least 100cm during detecting to prevent false direction and random flush.
4. The Sensor must not be obstructed by any reflectors, such as mirrors, glossy bright objects etc. as they can cause the distance to reduce to 30cm.
5. Please keep the detection window clean, any dirt, smudges or water drippings will affect the sensitivity of the sensor.
6. Anytime the batteries (6 standard AA alkaline) are replaced or the Sensor range needs to be recalibrated, simply repeat resetting. To prevent from false detection and random flushing, keep any obstacles or mirrored surfaces out of the detection beam.

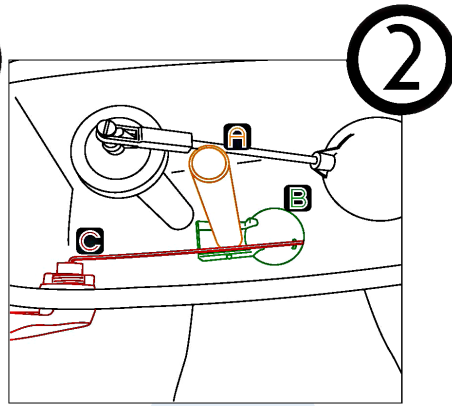
## Various Parts:

<b>No. 1</b>		Sensor x 1	<b>No. 2</b>		Battery Cover x 1	<b>No. 3</b>		Screws of Battery Cover x 2
<b>No. 4</b>		Back Plate x 1	<b>No. 5</b>		Flush Motor x 1	<b>No. 6</b>		Tie Rod x 1
<b>No. 7</b>		Bolt x 1	<b>No. 8</b>		Fixing Ring x 1	<b>No. 9</b>		O-Rubber Washer - 1 x Large 1 x Small
<b>No. 10</b>		Bead Chain x 1	<b>No. 11</b>		Decorative Cover x 1	<b>No. 12</b>		Installation Demonstration Sticker x 1
<b>No. 13</b>		Magnetic Wand x 1	<b>No. 14</b>		Installation Instructions x 1			

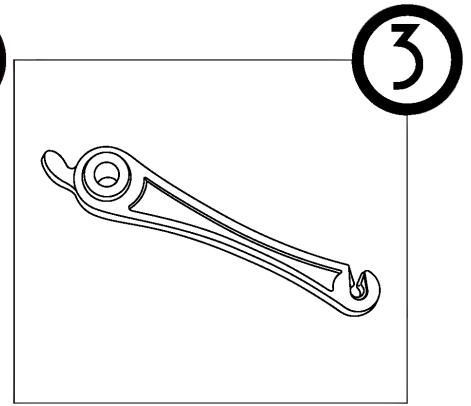
## Installation Instructions:



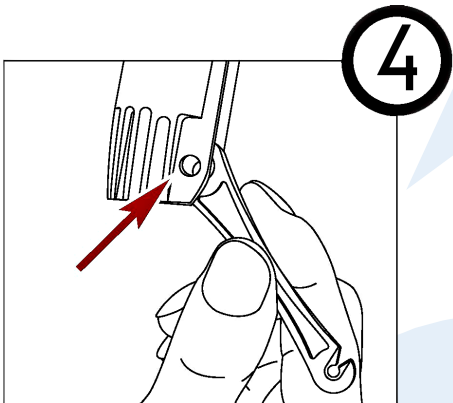
Lift the toilet tank cover.



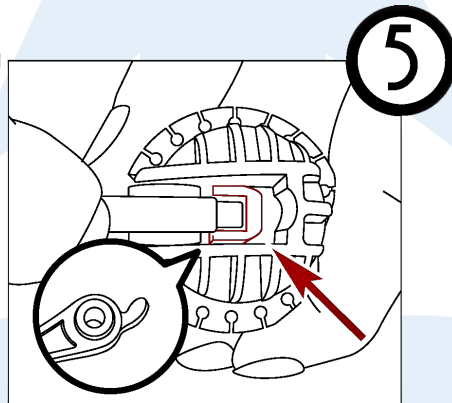
Tank internal structure shows:  
*A: Overflow Tube, B: Flapper,*  
*C: Flush Handle.* If your toilet looks  
different you can still install as long as  
you have the parts listed above.



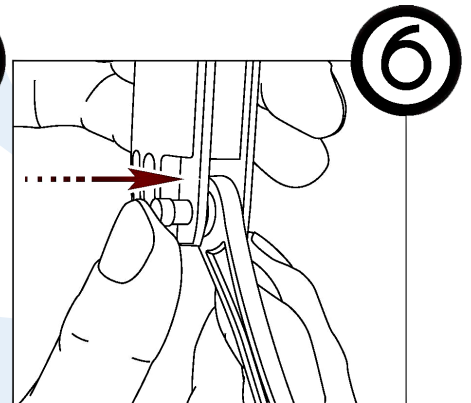
Take out the **(6)** tie rod.



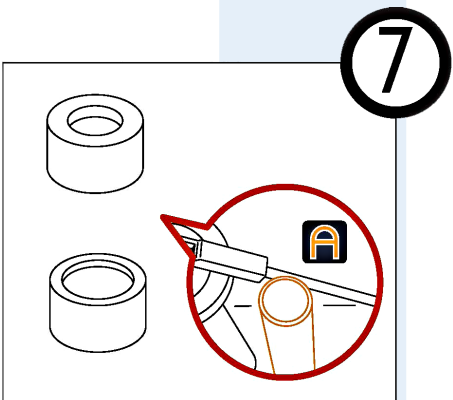
Align **(6)** Tie Rod to the bolt hole of  
the **(5)** flush motor.



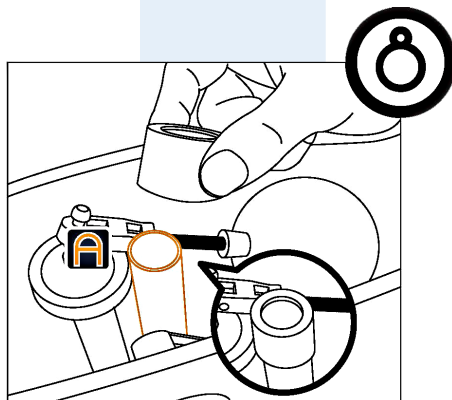
Place the end of the **(6)** tie rod inside  
square groove of **(5)** flush motor.



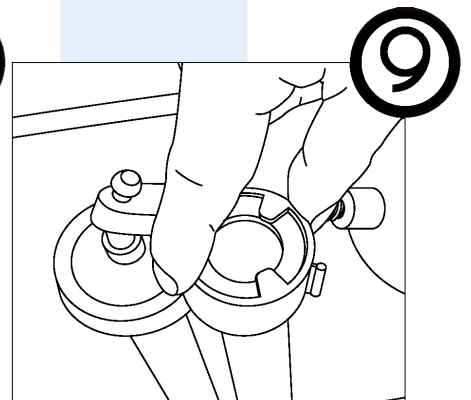
Push the **(7)** bolt into the centre to  
secure the tie rod.



Choose appropriate **(9)** O-rubber  
washer (thick or thin) to fit **(A)** over-  
flow tube of flush valve.

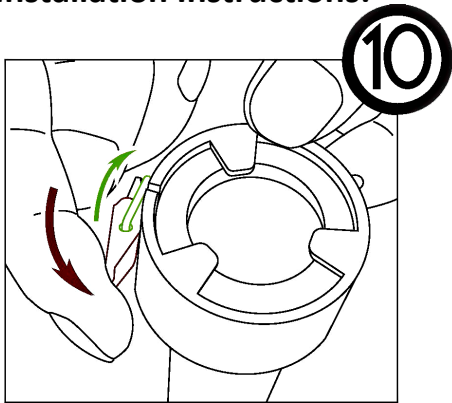


Put **(9)** O-rubber washer on over the  
**(A)** overflow tube, and place the  
smaller inner ring lip face up.

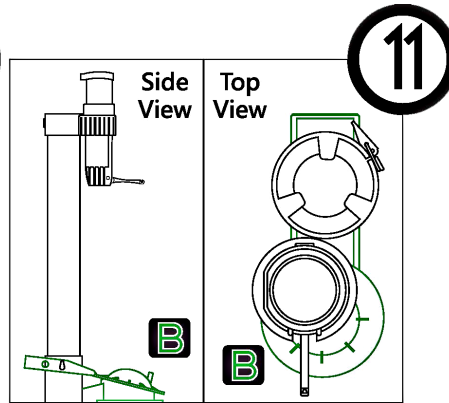


Place the **(8)** fixing ring's triangle face  
up, then put the fixing ring on, over  
the **(9)** O-rubber washer.

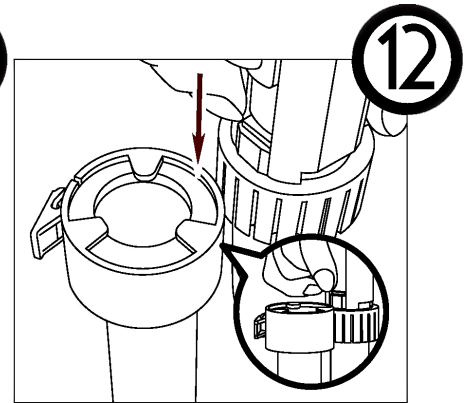
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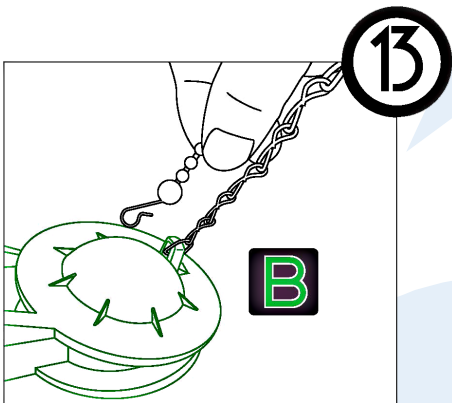
Use the snap to secure the **(8)** Fixing Ring.



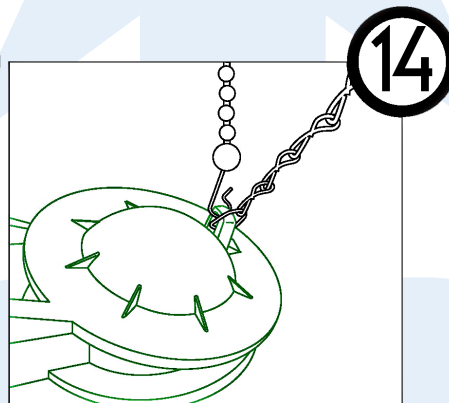
Place the **(5)** flush motor as close to the top of the flusher valve, and set **(6)** tie rod towards **(B)** flapper. If tank is different from figure 11; adjust the position of the multi-directional fixing hole on the outer ring of the flush motor to the bolt on the fixing ring.



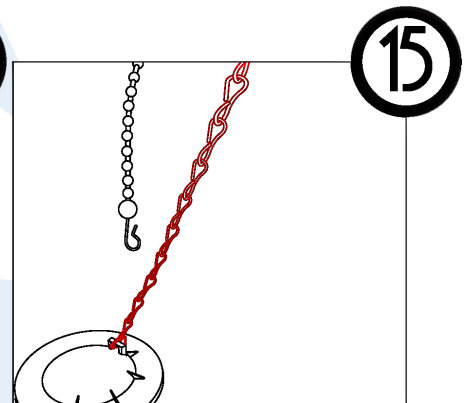
Top-down inserting the bolt into the fixing hole.



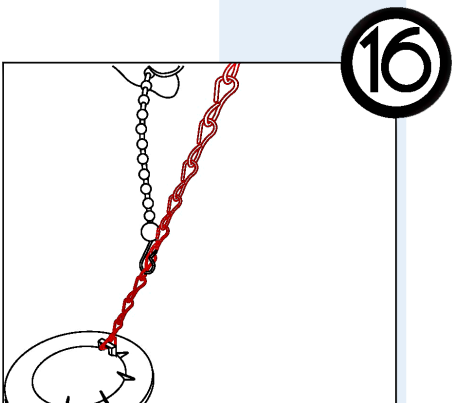
Secure the hook on the end of the **(10)** bead chain onto the **(B)** flapper.



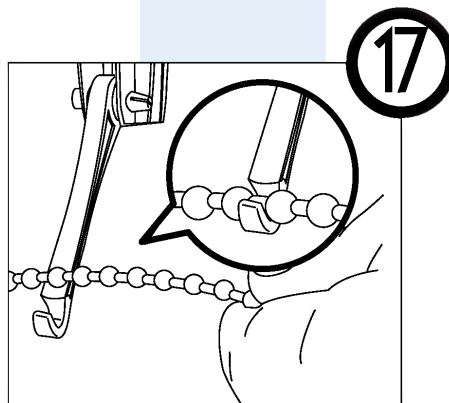
Completed.



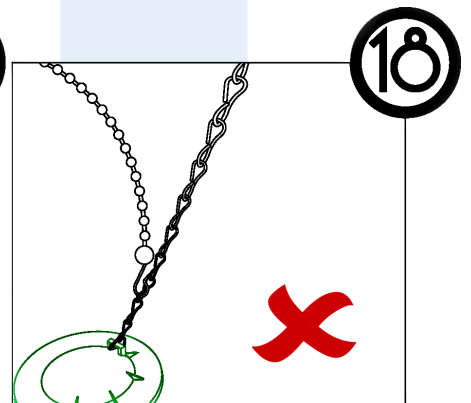
Or can choose to secure the hook on the end of the **(10)** bead chain onto the chain of the flush handle.



Completed.

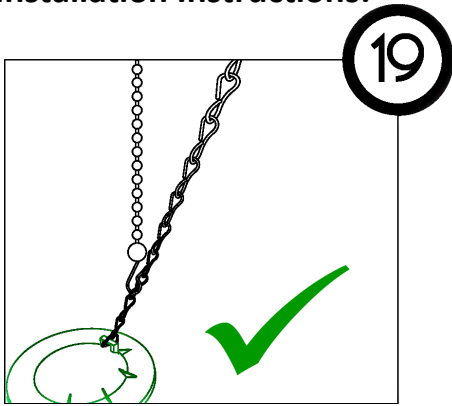


Adjust the length of the **(10)** bead chain appropriately and hook it into the U groove of the **(6)** tie rod.

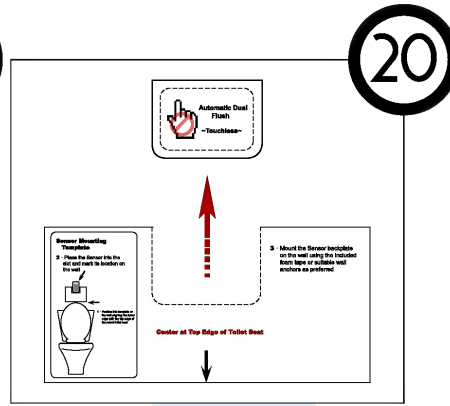


Please note: After the **(10)** Bead Chain is fixed to the lever, it cannot be bent as shown above or it may fail to open flapper or open too late.

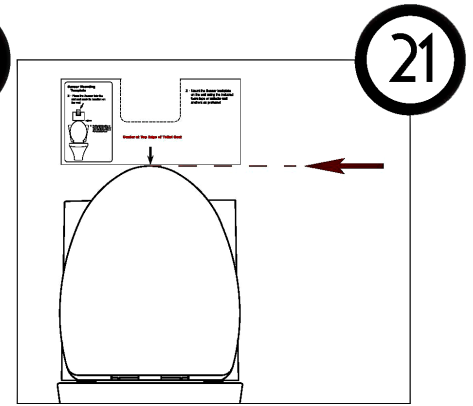
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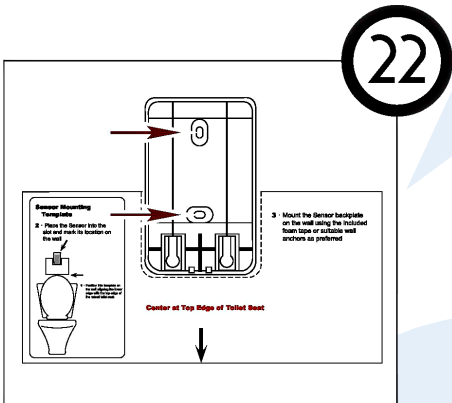
Correct installation of **(10)** Bead Chain as shown above. Chain should be as straight as possible for optimal functionality.



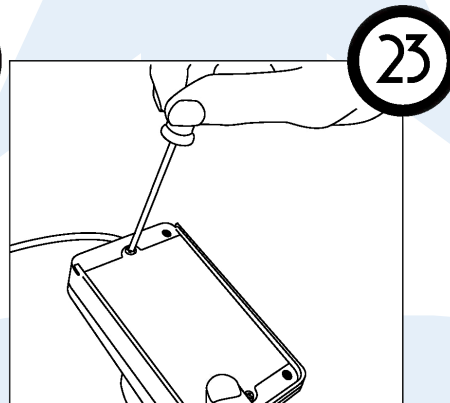
Pull out the **(12)** installation sticker, tear off the small sticker on inside of the dotted box and paste it around the toilet used as sign of warning.



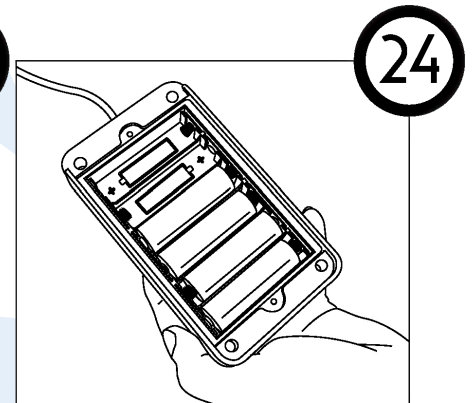
Align the bottom edge of **(12)** installation demonstration sticker to the top edge of toilet lid, and affix to the wall.



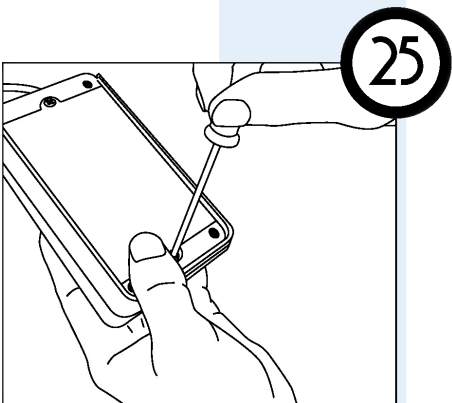
Remove the **(4)** Back plate and align with the groove in the middle of **(12)** Install sticker. Affix to the wall using your preferred method, then peel off the **(12)** Install sticker from wall.



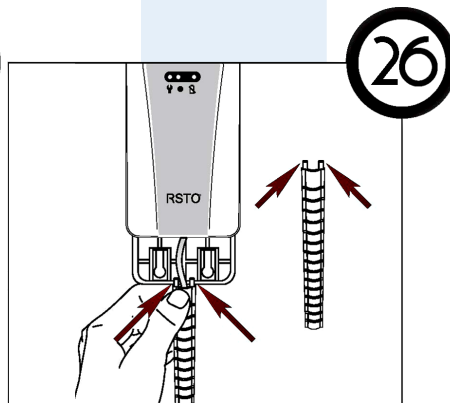
Remove the **(1)** sensor from its wall plate by sliding upward and off. Remove the **(2)** battery cover with small Philips screwdriver.



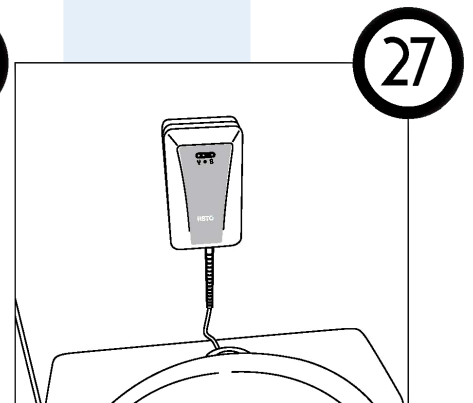
Place 6 x AA batteries in and check that the silicone gasket inside the battery compartment is not out of place and is in good condition.



Reinstall the **(3)** screws of **(2)** battery cover and replace the sensor back on the wall.



Hide the power cable in the **(11)** decorator cover and hook the groove of back plate with claw on the **(11)** decorator cover.



After installation if you feel the **(11)** decorative cover is too long, cut the horizontal grooves on the **(11)** decorator cover to the required length.

## Trouble Shooting:

Issue	Possible Cause	Solution
Replace battery indicator flashes	Lack of Power	Replace the batteries
	Body Failure	Take out batteries first, wait for 30 minutes then reload the machine, let the sensor automatically set again.
Induction / Power indicator no flicker, no action	Body Failure	Take out batteries first, wait for 30 minutes then reload the machine, let the sensor automatically set again.
	Incomplete during the initial automatic setting process	
	Insufficient power or incorrect battery polarity installation	Please replace the battery. Please check if the positive and negative batteries are installed correctly.
	The battery is not covered	Please pay attention to whether the battery cover is stuck or not closed.
	Fixed obstacles (such as toilet paper) within 10cm of the front of the sensor	Please remove the obstacles and keep the distance of 130cm or more. The system will automatically reset and return to normal after 30 minutes.
	The sensor detects obstacles or reflective objects (mirrors, walls, boards, cabinets or various fixtures)	Please remove obstacles mirrors or reflective objects and keep a distance of at least 130cm
Sensing / Power indicator blinks continuously	The sensor is placed too low and is blocked by the toilet cover.	Please adjust the sensor position so that the sensor window exceeds the top edge of the toilet lid.
	When the system is automatically set, it senses someone or a dynamic object.	Take out batteries first, wait for 30 minutes, then reload it, let the sensor automatically set again, make sure there is no object within 130 cm in front of the sensor.
	Sensor surface has stains	Please be careful to avoid scratching, so as not to affect the infrared sensing distance.
	The toilet in which the sensor is installed is less than 130 cm from the wall.	A toilet with a minimum of 130 cm or more from the wall in front of the sensor can be used.
Battery Life is too short	Bad Battery	Please replace the battery
	Lack of power	Please replace the battery (use the lithium or alkaline battery produced within half a year to maintain the best use time).
Not sensing or need to be very close	Sensing window surface with stains or water droplets	Gently wipe the sensor window to avoid scratching, so as not to affect the sensing window
	There is an obstacle in front of the sensor when it is automatically set for the first time.	Take out the battery first, wait for 30 minutes, then re-load it, let the sensor automatically set again, make sure there are no obstacles within 130cm of sensor.