

INSTALLATION AND MAINTENANCE GUIDE

NARA 2030 / 2030 E

ELECTRONIC FLUSH VALVE FOR URINALS



stern

STERN ENGINEERING LTD.

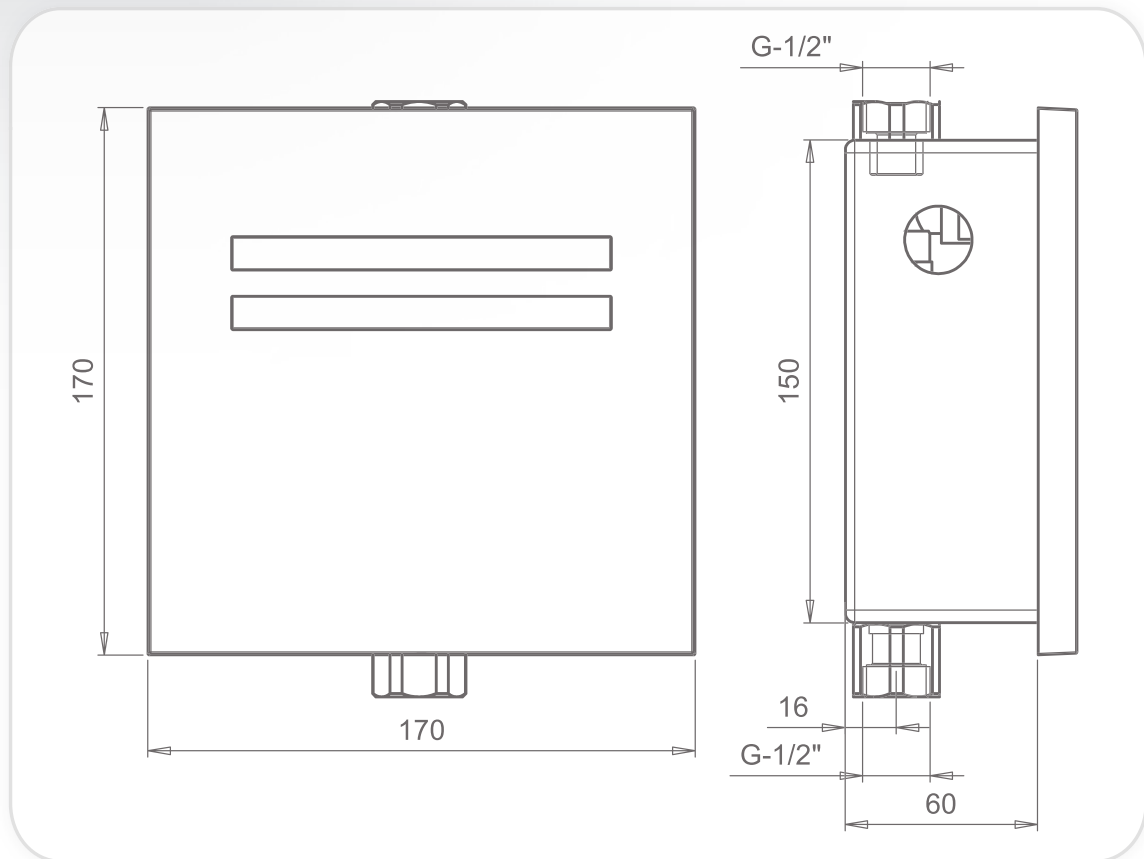
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OPERATION

Nara 2030 is a Touch free electronic flush valve for urinal operated by sensor. Water will start flushing when the user will walk away from the urinal.

TECHNICAL DATA

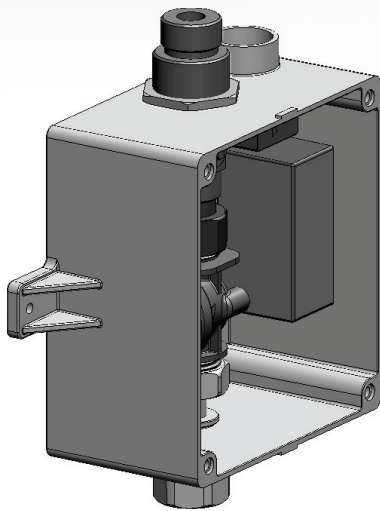


| | |
|----------------------------------|---|
| Power Supply: | 9V battery or 9V transformer |
| Operating water pressure: | 0.5-8.0 bar. |
| Hygiene flush: | 24 hours automatic flush after last use. |
| Sensor range: | 600 mm. Factory set. Adjustable manually with remote control. |
| Flushing Time: | 6 secs. Factory set. Adjustable: 3 to 20 secs. |
| Prior use Flush Mode: | Optional feature. |

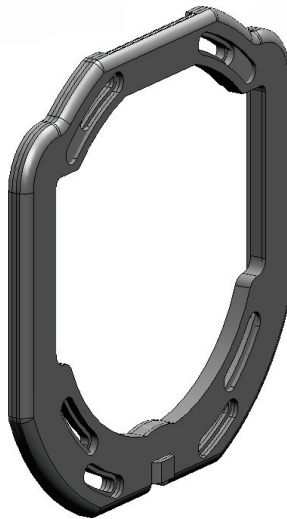
PACK CONTENTS

Familiarize yourself with the part names and confirm that the parts are included:

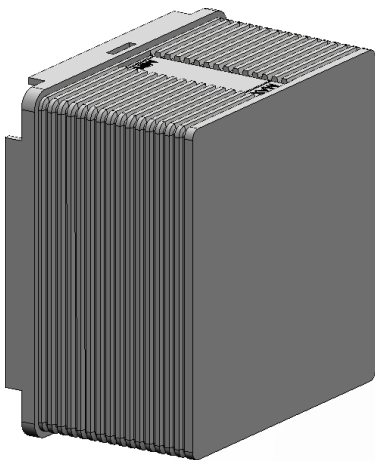
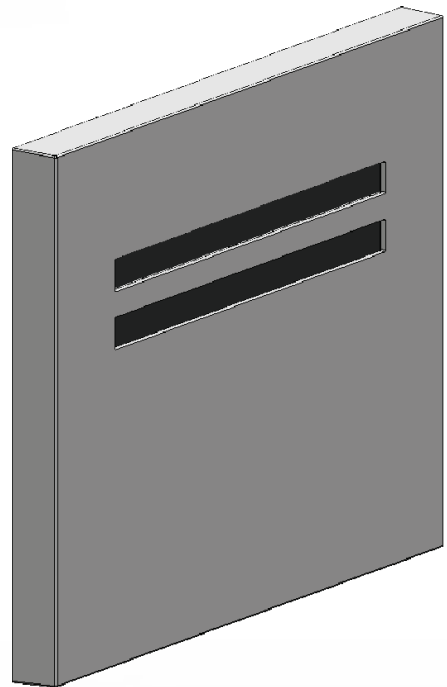
1 x Box assembly with
concealed flush valve
*(switching transformer
included in electronic versions)*



1 x Plastic seat
for the cover plate



1 x Wall cover plate with
electronic unit *(battery box
included in battery versions)*



1 x Mud guard cover



4 x Screws

1 x M4x10 Screw



Allen Key

PRE-INSTALLATION INFO

Check contents

Separate all parts from packaging and check each part with the pack contents section.

Make sure all parts are accounted for before discarding any packaging material. If any parts are missing, do not attempt to install the electronic flush valve until you obtain the missing parts.

Warnings

Do not install the system facing a mirror or any other electronic system operated by an infra-red sensor.

To prevent reflection problems, it is recommended keep a minimum distance of 1.50 meters between the flush valve and other objects.

Preparation for installation

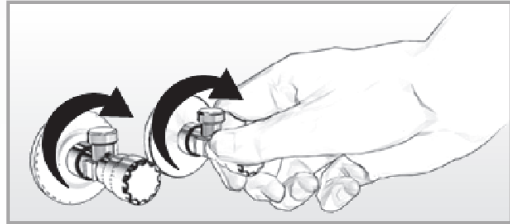
Flush water supply lines thoroughly before installing the flush valve. Do not allow dirt, Teflon tape or metal particles to enter the flush valve.

All plumbing is to be installed in accordance with applicable codes and regulations.

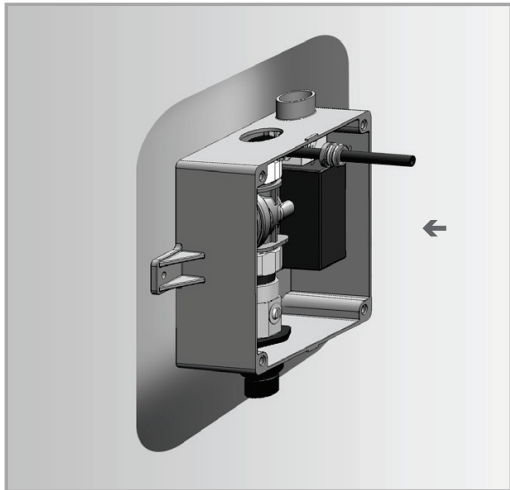
INSTALLATION

STEP 1 – INSTALLING THE FLUSH VALVE

- 1** Shut off the water supply.

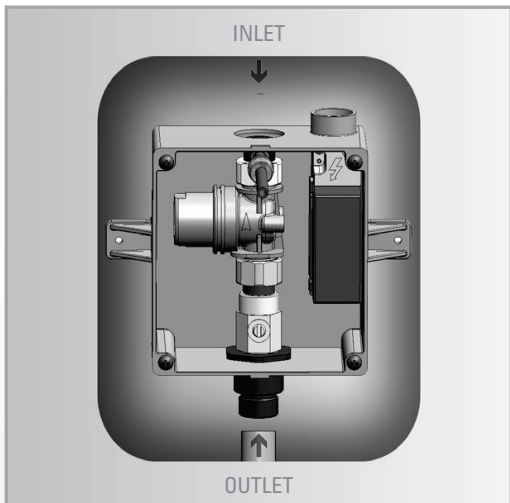


- 2** Cut an adequate opening in the wall for the dimensions of the box and the corrugated tube (for E versions, not supplied).



- 3** Insert the electronic flush valve box through the opening.

- 4** Connect the flush valve inlet to the water supply.

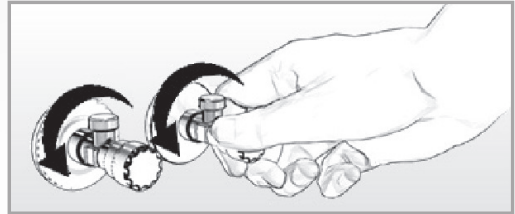


- 5** Connect the flush valve outlet nipple to the pipe leading to the urinal's inlet.

INSTALLATION

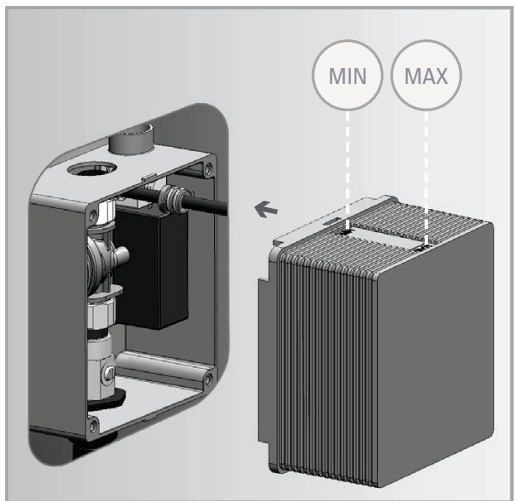
6

Turn on the water supply. Make sure there is no leakage.



7

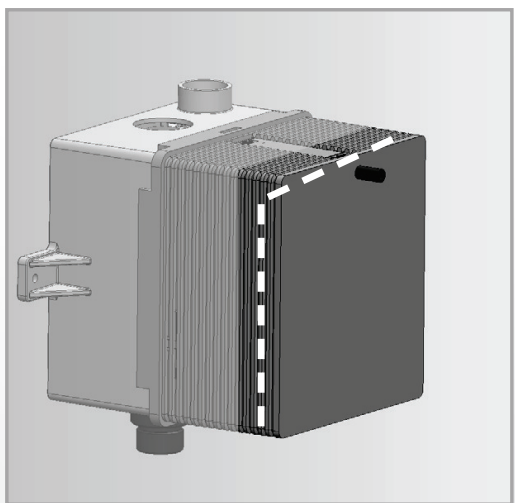
Assemble the mud guard cover to protect the flush valve.
Note the MIN and MAX marks on the box.



STEP 2 – CONNECTING THE WATER SUPPLY AND THE POWER SOURCE

1

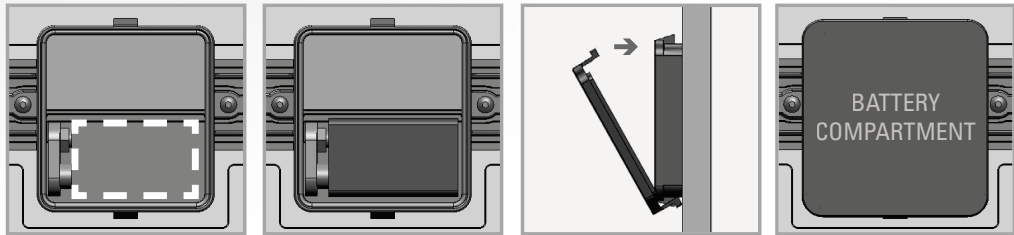
Once the electricity, plumbing and tile works are finished, cut the mud guard cover wherever required by the installation.



INSTALLATION

If your model is Nara 2030, assemble the battery into its compartment in the wall cover plate, close the battery compartment and proceed to clause 8

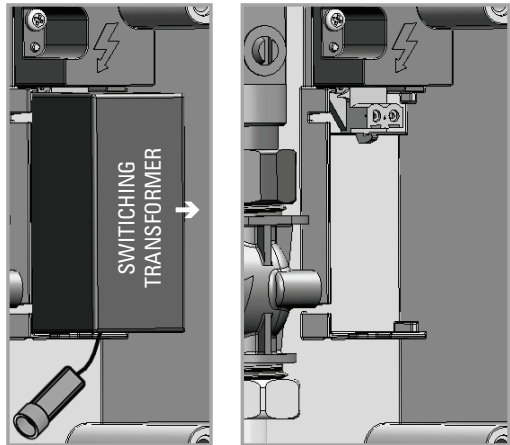
2



IMPORTANT: CLAUSES 3-7 ARE TO BE EXECUTED BY AN AUTHORIZED ELECTRICIAN ONLY

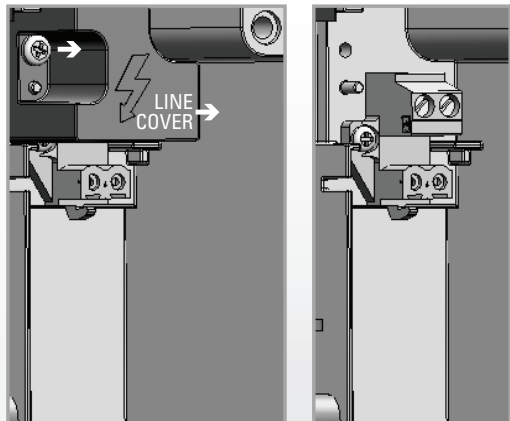
3

If your model is Nara 2030E, detach the switching transformer from the flush valve box.

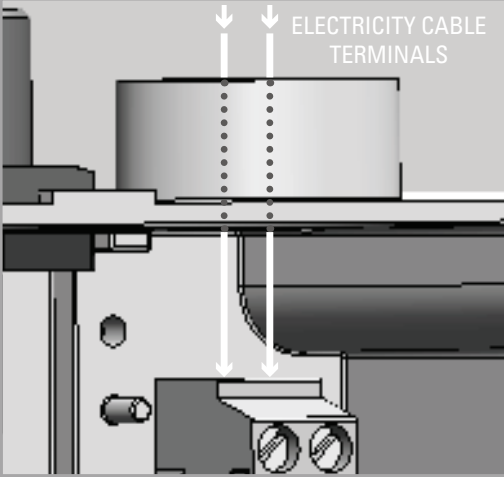
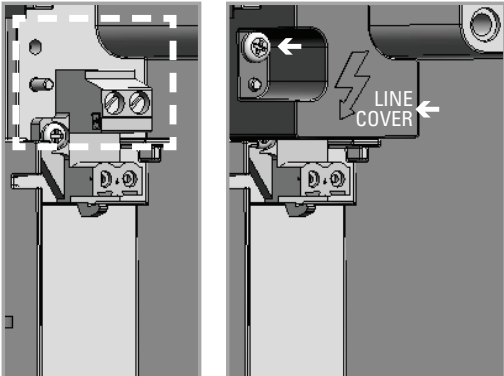
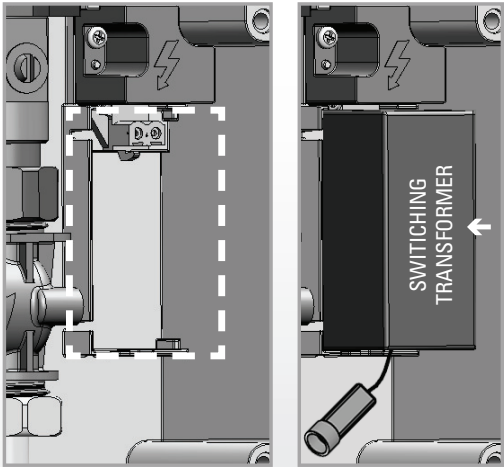


4

Detach the line cover in the flush valve box by unscrewing the line cover screw.



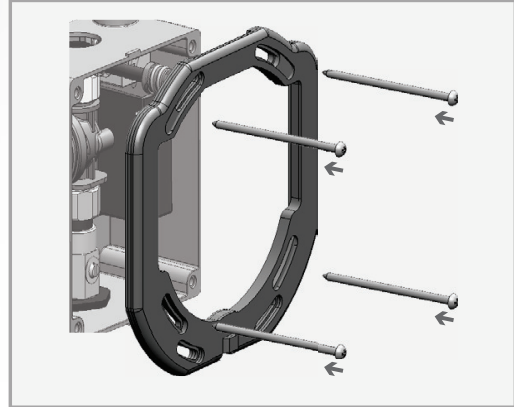
INSTALLATION

| | | |
|----------|---|---|
| <p>5</p> | <p>Connect the electricity cable terminals.</p> |  <p>ELECTRICITY CABLE TERMINALS</p> |
| <p>6</p> | <p>Reattach the line cover and fasten the line cover screw.</p> |  <p>LINE COVER</p> |
| <p>7</p> | <p>Reattach the switching transformer into its location in the flush valve box.</p> |  <p>SWITCHING TRANSFORMER</p> |

INSTALLATION

8

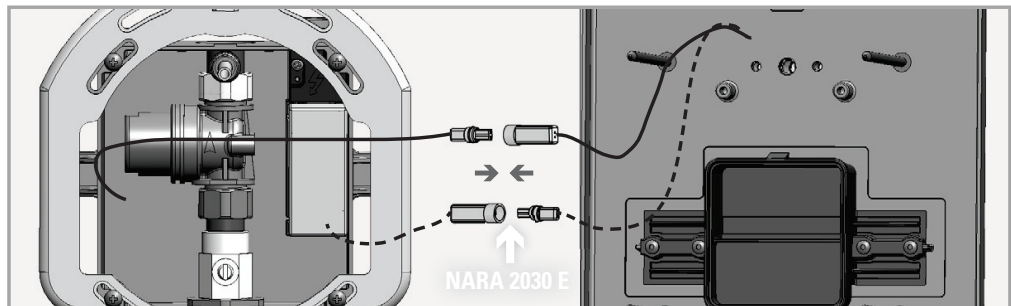
Assemble the plastic seat for the wall cover plate using the four screws provided.



9

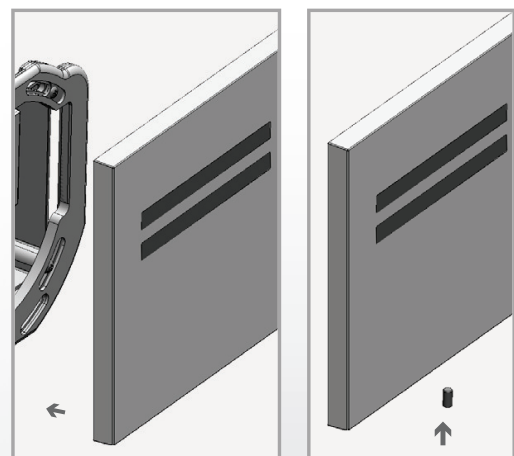
Connect the electronic unit connector that leads to the solenoid valve to the solenoid connector.

For Nara 2030 E models only: Connect the other electronic unit connector to the switching transformer connector.



10

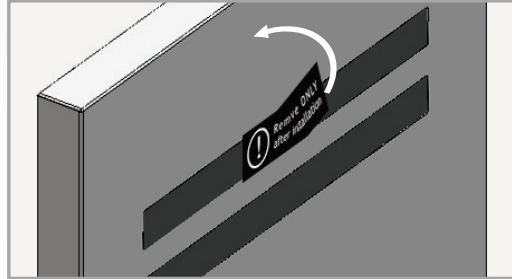
Assemble the panel to the cover seat and tighten it with the bottom screw.



INSTALLATION

11

Now, remove the protecting sticker that covers the sensor.



IMPORTANT: WAIT A FEW SECONDS BEFORE ACTIVATING THE FLUSH VALVE TO AVOID ENTERING INTO "ADJUSTING MODE".

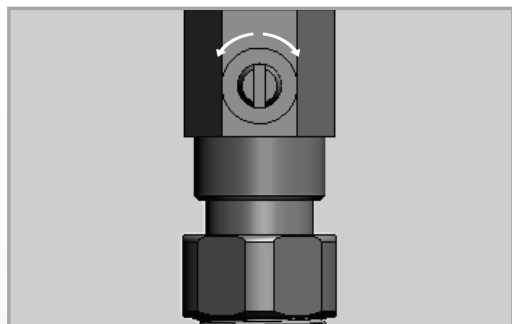
12

Move away and the flush valve will flush a few seconds after your departure.



13

If needed adjust the flow capacity by turning the regulating valve.



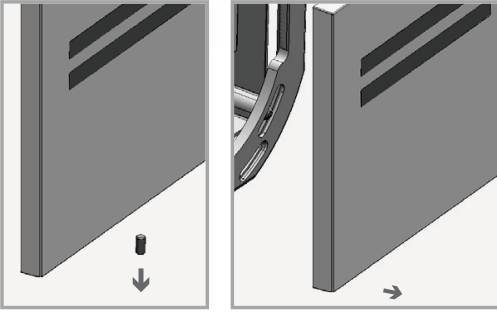
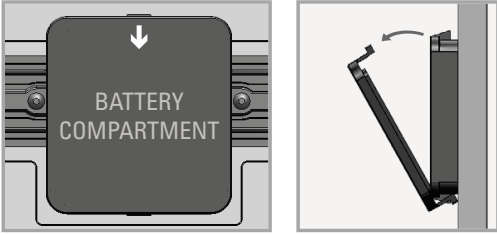
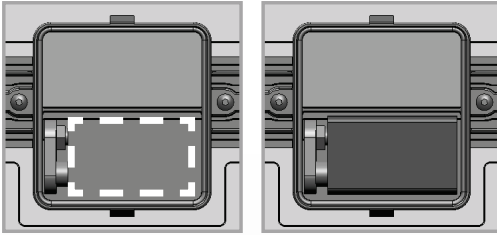
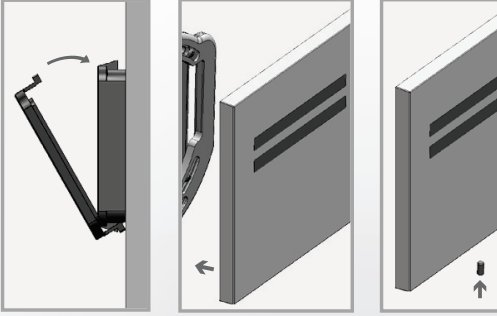
IF THE RANGE IS UNSATISFACTORY, REFER TO THE SECTION ENTITLED "SETTINGS ADJUSTMENT"

BATTERY REPLACEMENT

Battery replacement instructions – Nara 2030 only

When the battery weakens, the red indicator light will blink at a constant rate. The battery must be replaced within two weeks.

To replace the battery:

| | | |
|----------|---|--|
| <p>1</p> | <p>Release the screw at the bottom of the cover plate and remove the cover plate.</p> |  |
| <p>2</p> | <p>Open the battery compartment located at the back of the cover plate.</p> |  |
| <p>3</p> | <p>Replace the used battery with a new 9V battery (Lithium battery is recommended).</p> |  |
| <p>4</p> | <p>Close the battery compartment and refit the cover plate.</p> |  |

SETTINGS ADJUSTMENT WITH REMOTE CONTROL



Adjusting the settings with the remote control

If necessary, the sensor settings can be adjusted as following:

Shut off the water supply. In order to adjust the sensor with the remote control, hold the remote control straight in front of the sensor in a distance of about 6-8" (15-20cm). Choose the function you want to adjust by pressing once on one of the function buttons. After pressing once on a specific function button, a quick flashing of the red light at the front of the sensor will occur. At this stage, you can change the setting by pressing the (+) or the (-) buttons, every push will increase or decrease one level. After finishing the adjustment, turn the water supply back on.



DETECTION RANGE: The sensor range is the greatest distance that an object can be away from the sensor to activate the flush valve. The sensor is factory preset.

To adjust the sensor range press + to increase detection range and – to decrease the detection range of the sensor.

SETTINGS ADJUSTMENT WITH REMOTE CONTROL



FLOW TIME: This function determines the water flushing time once the user leaves the urinal.

Press the two waves button. Wait until a quick flashing of the red light of the sensor eye is perceived. Then, press + to increase the flow time and – to reduce it.



DELAY IN TIME: If required, the delay in time can be modified as follows:

Press the IN button. Wait until a quick flashing of the red light of the sensor eye is perceived. Then, press + to increase the delay in time and – to reduce it.



DELAY OUT TIME: This button changes the time interval the water starts to flush after the user has left the urinal.

If required, the delay out time can be modified as follows:

Press the OUT button. Wait until a quick flashing of the red light of the sensor eye is perceived. Then, press + to increase the delay out time and – to reduce it.



24 HOUR HYGIENE FLUSH: If you have a compatible model with a 24 hours hygiene flush it is possible to enable and disable it.

To activate the hygiene flush, press the clock button. Wait until a quick flashing of the red light of the sensor eye is perceived. Then press + to activate the hygiene flush or – to deactivate it.



TEMPORARY OFF FUNCTION: This function is ideal to perform any kind of activity in front of the sensor without operating the system (for example, cleaning).

Urinals will remain shut for 1 minute when this button is pressed once. To cancel this function and to return to normal operation press the On/Off button again or wait 1 minute.



RESET BUTTON: This function allows the sensor to return to the original factory preset settings.

If required, press the Reset button and without releasing it, press the + button once.

RANGE ADJUSTMENT

The sensor range is the range an object can be away from the sensor in order to activate the flush valve. The sensor is factory preset. If necessary, it can be adjusted as follows:

Adjusting the sensor range manually:

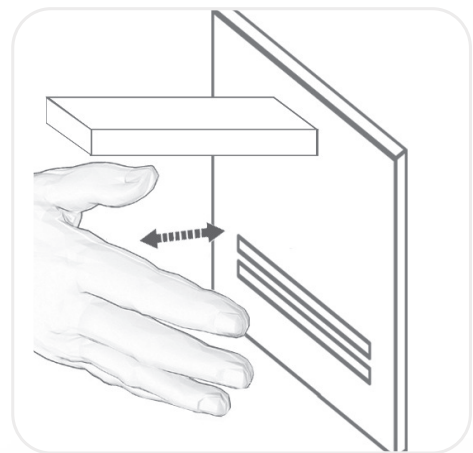
1. Disconnect the battery or switch off the electricity supply to the sensor.
2. For Nara 2030, make a short circuit between the (+) and the (-) connections of the sensor. A screw driver or any conductive material can be used to make this short circuit. Alternatively and for Nara 2030 E, activate the sensor three or four times after disconnecting the power supply.

Do not make a short circuit on the power supply or on the sensor when the power supply is connected to the sensor.

3. Reconnect the power supply to the sensor.
4. To enter into the adjusting mode, put your hand in front of the sensor at a distance of 2" (5cm) within 5 seconds from the re-connection of the power supply.

Note: If you will not put your hand in front of the sensor after connecting the power supply, the sensor will not enter into the adjusting mode and the previous adjustment will continue.

5. When the sensor enters into the adjusting mode and your hand is in front of the sensor, the red light in front of the sensor will flash slowly.
6. Keep your hand in front of the sensor until the slow flashing changes to quick flashing, At this point move your hand to the required distance from the sensor and wait until the red light will stop flashing.
7. When the red light has turned off, the sensor is adjusted to the required distance.
8. Check the distance you have set and if it is not satisfactory, repeat the procedure.



MAINTENANCE

Filter cleaning instructions

This flush valve is provided with a stainless steel filter preventing foreign particles to enter the lines. If the water flow has decreased, this may be because the filter is clogged. The filter can be cleaned as follows:

1. Turn off the regulating valve.
2. Disassemble the solenoid valve by opening the nuts.
3. Remove the filter and wash it under running water.
4. Reassemble the filter.
5. Reassemble the solenoid valve.
6. Turn on the regulating valve and adjust the flow capacity.
7. Make sure that there is no water leakage.

Care and cleaning of chrome and special finishes

DO NOT use steel wool or cleansing agents containing alcohol, acid, abrasives, or the like. Use of any prohibited cleaning or maintenance products or substances could damage the surface of the flush valve. For surface cleaning use ONLY soap and water, then wipe dry with clean cloth or towel. When cleaning bathroom tile, the flush valve should be protected from any splattering of harsh cleansers.

If system chemical disinfection is practiced, chlorine can be used (calculated chlorine concentration of 50mg/l maximum in water per one hour dwell time) at service interval frequency.

SPARE PARTS LIST

| | |
|------------------------------|-------------------|
| Panel Kit | Cat. No. 07040135 |
| Sensor Kit Nara 2030 | Cat. No. 07220062 |
| Sensor Kit Nara 2030 E | Cat. No. 07220063 |
| Solenoid & Housing Kit | Cat. No. 07231010 |
| Nipple Kit | Cat. No. 07246002 |
| Filter | Cat. No. 08530013 |
| Switching transformer..... | Cat. No. 06522062 |

LIMITED WARRANTY

Y. Stern Engineering Ltd. warrants that its electronic faucets, flush valves and controls will be free of defects in material and workmanship during normal use for two years from the date the product is purchased.

If a defect is found in normal use, Y. Stern Engineering Ltd. will, at its discretion, repair, provide a replacement part or product, or make appropriate adjustments. Damage caused by accident, misuse, or abuse is not covered by this warranty. Improper care and cleaning will void the warranty. Proof of purchase (original sales receipt) must be provided to Stern Engineering Ltd. with all warranty claims.

Stern Engineering Ltd is not responsible for labor charges, installation, or other incidental or consequential costs other than those noted above. In no event shall the liability of Stern Engineering Ltd. exceed the purchase price of the faucet, valve or control.

If you believe that you have a warranty claim, contact your Stern Distributor, Dealer or Plumbing Contractor. Please be sure to provide all pertinent information regarding your claim, including a complete description of the problem, the product, model number, the date the product was purchased, from whom the product was purchased and the installation date. Also include your original invoice.

Y. STERN ENGINEERING AND/OR SELLER DISCLAIM ANY LIABILITY FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES. This warranty excludes product damage due to installation error, incorrect maintenance, wear and tear, battery, water composition, product abuse, or product misuse, whether performed by a contractor, service company, or the consumer. This warranty does not cover product damage caused by the following:

- Incorrect installation, inversions of supply pipes.
- Pressures or temperatures exceeding recommended limits.
- Improper manipulation, tampering, bad or lapsed maintenance.
- Foreign bodies, dirt or scale introduced by the water supply.

TROUBLE – SHOOTING

| PROBLEM | INDICATOR | CAUSE | SOLUTION |
|-------------------------|---|---|--|
| Valve does not flush | Sensor flashes continuously when user's steps within the sensor's range. | Low battery. | Replace battery. |
| | | Range is too short. | Increase the range. |
| | | Range is too long. | Decrease the range. |
| | | Battery is completely used up. | Replace battery. |
| | Red light in the sensor does not flash when user's steps within the sensor's range. | Sensor is picking up reflections from mirror or other object. | Eliminate cause of reflection. |
| | | Connectors between the electronic unit and the solenoid valve are disconnected. | Connect the connectors of the electronic unit to the solenoid valve. |
| | Red light in the sensor flashes when user's steps are within the sensor's range. | Debris or scale in solenoid. | Unscrew solenoid, pull out the plunger and the spring from solenoid. Clean them with pressure or use scale remover material if needed. |
| | | The central orifice in the diaphragm is plugged or the diaphragm is torn. | Clean the orifice or replace diaphragm. |
| | | The water supply pressure is higher than 8 bars. | Reduce the water supply pressure. |
| | | | |
| Valve does not shut off | Sensor flashes when user's steps within the sensor's range. | Debris or scale in diaphragm or the diaphragm is torn. | Clean the orifice or replace diaphragm. |
| | | | |
| | Red light in the sensor does not flash when user's steps within the sensor's range. | Sensor is dirty or covered. | Clean or eliminate cause of interference. |
| | | Sensor is picking up reflections from mirror or another object. | Decrease the range or eliminate cause of reflection. |

STERN

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