

INSTALLATION AND MAINTENANCE GUIDE

PERFECT TIME 2032 / 2032 E

ELECTRONIC TOILET FLUSH VALVE
OPERATED BY PIEZO ELECTRIC TECHNOLOGY



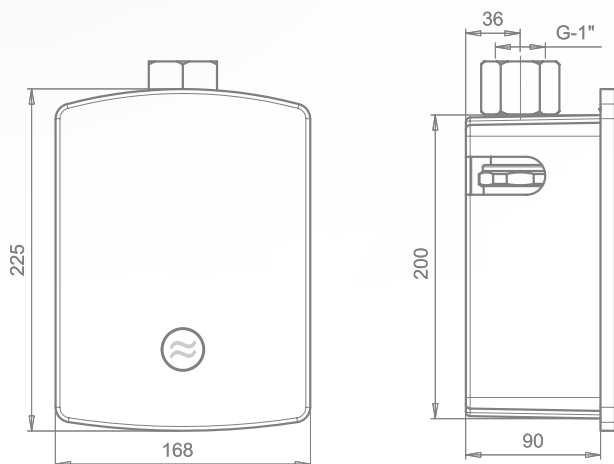
stern

STERN ENGINEERING LTD.

INDEX

| | |
|-----|----------------------------------|
| 1 | TECHNICAL DATA |
| 1 | OPERATION |
| 2 | PACK CONTENTS |
| | PERFECT TIME 2032 |
| | PERFECT TIME 2032 E |
| 3 | PRE-INSTALLATION INFO |
| 3-4 | INSTALLATION |
| 5-6 | FLOW TIME ADJUSTMENT |
| 7 | 24 HS HYGIENE FLUSH |
| 8 | BATTERY REPLACEMENT INSTRUCTIONS |
| 8 | CARE AND CLEANING |
| 8 | LIMITED WARRANTY |
| 9 | SERVICE CHECK LIST |
| 9 | SPARE PARTS LIST |

TECHNICAL DATA



Power specification:

9V low voltage system

Power Supply:

Internally mounted 9V battery or 9V transformer

Operating water pressure:

1.0-8.0 bar (14.5 – 116.0 PSI).

With water pressure of more than 8 Bars,
use a pressure reducing valve for reduction.

Default flow rate:

6L

Programmable flow time:

Maximum 111 seconds

24 Hours hygiene flush:

Optional. See 24 hs hygiene flush section

Supplied pipe size:

Min 1"

OPERATION

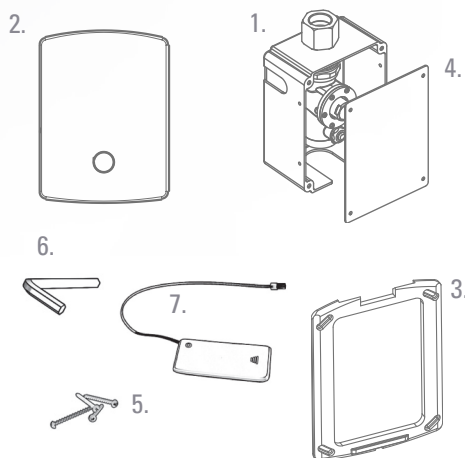
When the user touches the button the flush valve delivers a full flush (default value 6 liters).

PACK CONTENTS

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

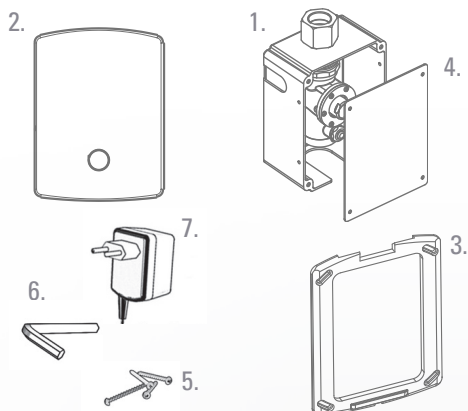
Perfect Time 2032

- 1. 1 x Plastic box with concealed flush valve
- 2. 1 x Wall cover plate with two piezo buttons
- 3. 1 x Plastic seat for the cover plate
- 4. 1 x Temporary protective cover
- 5. 4 x Screws
- 6. 1 x Allen key
- 7. 1 x Battery box with battery



Perfect Time 2032 E

- 1. 1 x Plastic box with concealed flush valve
- 2. 1 x Wall cover plate with the electronic unit
- 3. 1 x Plastic seat for the cover plate
- 4. 1 x Temporary protective cover
- 5. 4 x Screws
- 6. 1 x Allen key
- 7. 1 x Transformer



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 your Perfect Time flush valve until you obtain the missing parts.

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.

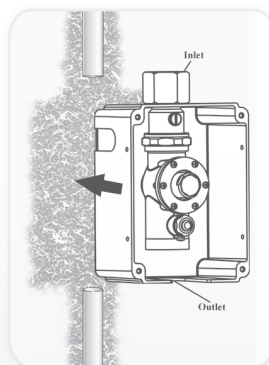
Shut off water supply.

Important

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

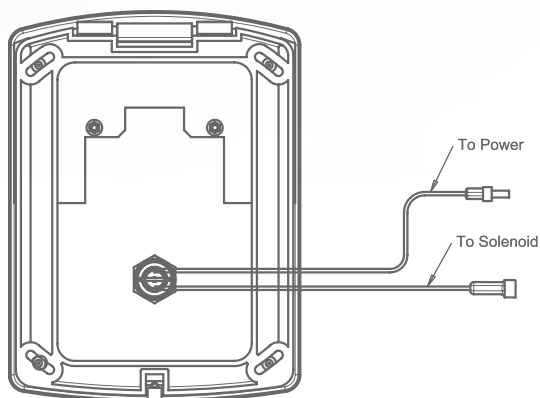
INSTALLATION

- 1) Shut off the water supply.
- 2) Cut an adequate opening in the wall for the dimensions of the box. If your model is Perfect Time 2032 E make room for the transformer cable.
- 3) Insert the electronic flush valve's 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 toilet's inlet.
- 6) Once the electricity, plumbing and tiles works are finished, replace the temporary protective cover with the plastic seat. Adjust it using the four screws provided.
- 7) If your model is Perfect Time 2032 E, place the transformer cable near the electricity plug and thread the transformer's wire to the box.

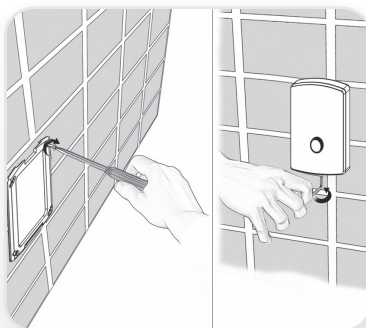


INSTALLATION

- 8) Connect the power cable coming from the piezo button to the power supply connector.
- 9) Connect the solenoid cable coming from the piezo button to the solenoid connector.



- 10) Turn on the water supply. Make sure that there is no water leakage.
- 11) If your model is Perfect Time 2032 stick the battery box inside the product box using the two sided adhesive foam tape. The cable connection must point down.
- 12) Assemble the wall cover panel to the cover seat and tighten it with the bottom screw.
- 13) If your model is Perfect Time 2032 E plug the transformer to the main electricity supply.
- 14) To activate the flush valve touch the piezo button.
- 15) If needed adjust the flow capacity by turning the regulating valve.
- 16) If you need to change the flow time, please refer to the "Flow time adjustment" section.



FLOW TIME ADJUSTMENT

Adjustment levels

If necessary, the default flow time of each piezo button can be adjusted to any value up to a maximum of 15 seconds. The Piezo adjustment mechanism is composed by 3 adjustment levels. To set the desired flow time you need to arrive to the appropriate adjustment level and press at the center of the piezo button. An indicator light (LED) will let you know when you have passed between one level to the other.

The default flow time in Perfect Time 2032 is 2.4 sec. Each adjusting level has a number of steps to arrive to the next level. The duration of each step is different at each level. The following table shows the number of steps, its duration at each level and how you can recognize that you have passed to the next level.

Adjust only if necessary.



| | Level 1 | Level 2 | Level 3 | Level 4 | Level 5 |
|--|---|------------------------------|--------------------------------|---------------------------------|--------------------------------|
| | | | | Enables the 24 hs hygiene flush | Out of adjusting mode |
| No. of steps | 100 steps | 100 steps | 100 steps | | |
| Seconds to be increased by touching once | 0.01 sec | 0.1 sec | 1 sec | | |
| Adjustment level indicator | After entering into adjusting mode level 1 is reached | Indicator light blinks twice | Indicator light blinks 3 times | Indicator light blinks 4 times | Indicator light blinks 5 times |

The following example shows how to manage the adjustment levels:

You want to adjust the flow time of the full flush to 3.5 seconds.

At level 2 perform 5 steps of 0.1 seconds (you will get 0.5 seconds). Total: 0.5 seconds

Go to level 3 and perform 3 step of 1 second (you will get 3 seconds). Total: 3.5 seconds

- The product is delivered with Hygiene Flush in Off mode (24h after last activation, 25sec)

- The product is delivered with Lock Out Time in Off mode

FLOW TIME ADJUSTMENT

How to adjust the flow time

- 1) Release the cover plate with the piezo button using the provided Allen key. See the figure below.
- 2) Disconnect the power supply from the piezo button. To do it, disconnect the connector from the piezo button that leads to the power source. Do not disconnect the connector to the solenoid valve.
- 3) Touch the piezo button twice.
- 4) Reconnect the power supply by connecting again the connector coming from the piezo button to the power source.
- 5) The indicator light (LED) at the back side of the piezo button will start blinking. After a few blinks the LED will give a steady red light. Touch the piezo button when the steady red light is still on to enter the adjusting mode. When done correctly, the light will stop blinking.

Note: If you do not press at the indicated area, the previous adjustment will remain.

- 6) By touching the piezo button the new flow time will be programmed. In adjusting mode level 1, each touch increases the flow time by 0.01 seconds with a maximum of 1 seconds in total. You will see the LED blinking every time that a new step is performed.
- 7) If you do not need more levels stop pressing. The LED will blink 2 times, then 3 times, 4 times and 5 times to leave the adjusting mode. When that occurs, the activation button of the Perfect Time 2032 will be adjusted to the desired flow time.
- 8) If you need to perform steps at adjusting level 2, wait after you see the LED blinking twice and then, perform the needed quantity of steps (with a maximum of 100 steps of 0.1 second).
- 9) If you do not need more levels stop pressing. The LED will blink 3 times, and after that 4 times and 5 times to leave the adjusting mode. When that occurs, the button at the Perfect Time 2032 will be adjusted to the desired flow time.
- 10) If you need to perform steps at adjusting level 3, wait after you see the LED blinking three times and then, perform the needed quantity of steps (with a maximum of 100 steps of 1 second).
- 11) If you do not need more levels stop pressing. The LED will blink 4 times, and after that 5 times to leave the adjusting mode. When that occurs, the button at the Perfect Time 2032 will be adjusted to the desired flow time.

24 HS HYGIENE FLUSH

Only to be performed by authorized personnel

Perfect Time 2032 allows you to enable a 24 hygiene flush factory setting. When you enable this function, an hygiene flush will occur once in 24 hours when no one has touched the piezo button.

The default factory setting is that the product will not perform an hygiene flush. In order to enable the function follow the instructions below:

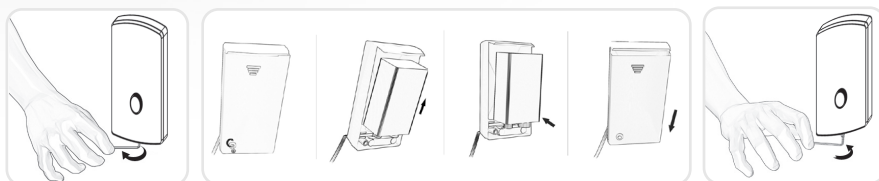
- 1) Release the cover plate with the piezo button using the provided Allen key.
- 2) Disconnect the power supply from the piezo button. To do it, disconnect the connector from the piezo button that leads to the power source. Do not disconnect the connector to the solenoid valve.
- 3) Touch the piezo button twice.
- 4) Reconnect the power supply by connecting again the connector coming from the piezo button to the power source.
- 5) The indicator light (LED) at the back side of the piezo button will start blinking. After a few blinks the LED will give a steady red light. Touch the piezo button when the steady red light is still on to enter the adjusting mode. When done correctly, the light will stop blinking.
Note: If you do not press at the indicated area, the previous settings will remain (with or without hygiene flush).
- 6) In order to enable or disable the hygiene flush you will need to arrive to the adjusting level 4. After you arrive to the adjusting mode, wait until the LED blinks one time, two times, three times and then when it blinks four times, touch the piezo button to enable or disable the hygiene flush.
- 7) The LED will blink five times to leave the adjusting mode. When that occurs, the button at the Perfect Time 2032 will perform now a 24 hours hygiene flush.

Important:

- Once you have enabled this function, you will need to perform exactly the same steps in order to disable it.
- The hygiene flush is now set and will remain unchanged even if the power source is disconnected.
- The duration of the 24 hours hygiene flush is the one that was factory set for the full flush.

BATTERY REPLACEMENT

1. Release the cover plate.
2. Carefully open the battery box.
3. Replace the used battery with a new 9V battery (Lithium battery is recommended).
4. Close the battery box.
5. Reaffix the wall cover plate.



CARE AND CLEANING

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.

LIMITED WARRANTY

This product is covered by a limited warranty of two years from date of purchase. During this period, STERN undertakes, at its option, to repair or replace any faults caused by defective materials or manufacturer defaults that may arise (see Stern Warranty).

The guarantee does not cover faults or damage caused by incorrect installation and/or maintenance, wear and tear, battery, or water composition. This includes, but is not limited to 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.

SERVICE CHECK LIST

No water is coming out of the flush valve

Check the flow time. If needed adjust it following the instructions at the Flow time adjustment section.

Check the solenoid valve. If debris or scale is present, unscrew the solenoid valve, pull out the plunger and the spring and clean them. Use scale remover if needed. When replacing the spring, make sure that it is in vertical position.

Check the flow time. See page 5.

Check the connection between the piezo button connector, the power to the solenoid and the solenoid connector.

Check that the battery box is correctly connected.

Check the solenoid valve. If debris or scale is present, unscrew the solenoid valve, pull out the plunger and the spring and clean them. Use scale remover if needed. When replacing the spring, make sure that it is in vertical position.

Check the piston. If needed, clean or replace it.

Check the water supply pressure. It must be 1.0-8.0 bar (14.5 – 116.0 PSI). With water pressure of more than 8 Bars, use a pressure reducing valve.

Water flow does not stop

SPARE PARTS LIST

| PART NAME | PART CODE |
|---|-----------|
| Panel Kit | 07040122 |
| Solenoid Valve Kit with Acetal Body | 07230015 |
| Piston Kit | 07290038 |
| Piston + Piston Cover Kit | 07290049 |
| Piezo Button | 07225076 |
| Battery box | 06530008 |
| Transformer | 06522042 |



STERN ENGINEERING LTD.

15 Gan Rave Blvd., 81222 Gan Rave, Yavne, Israel

Tel: 972-8-9326000, Fax: 972-8-9326025, export@sternfaucets.com

www.sternfaucets.com



05.12 01500200