

2123 URINAL

intelligent™ Electronic Urinal Control, 'Retro-Fit' Style



Product Description

- 'Retro-fit' style flusher.
- Electronic module detects the presence of the user and enters its 'stand-by' mode. The urinal flushes when the user leaves the detection area.
- Computer based micro controller w/specially designed infra red sensors to detect within a required distance.
- All non-corrosive materials.
- Auto-courtesy flush every 24 hrs.

Features

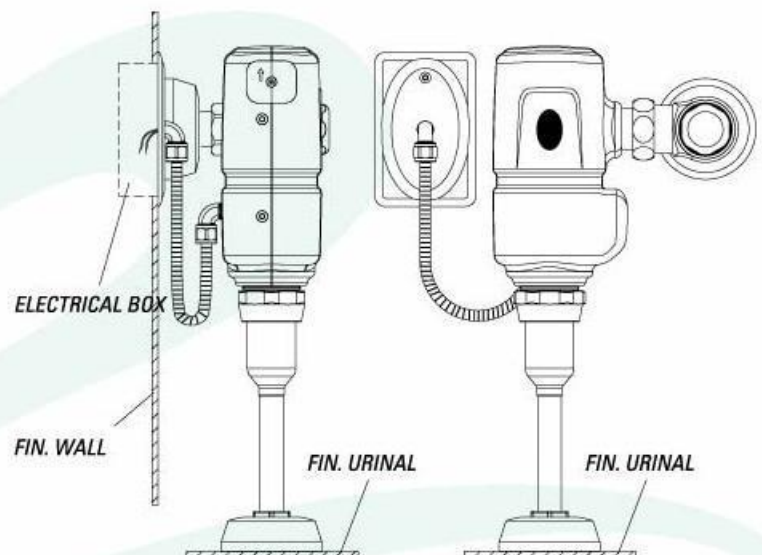
- Low maintenance vs mechanical models
- Very low water consumption
- Operates at very low water pressure
- Heavy duty cast housing
- Vandal Proof / Waterproof
- Remote control re-programmable
Flush Time / Flush delay / Detect Range /
Detect Frequency / Detect delay

Certification

IAPMO cUPC
ADA / ANSI compliant

Model Choice :

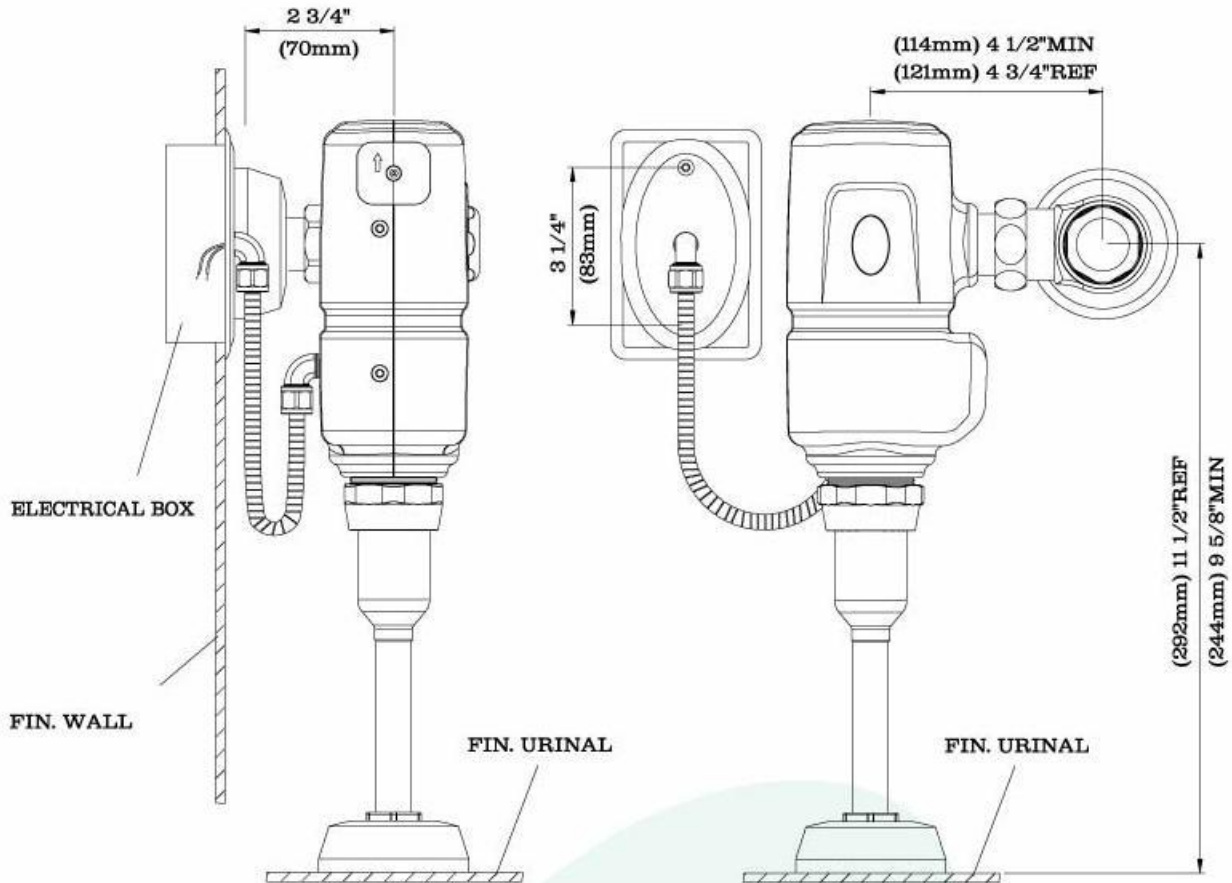
2123
2123-1 Body only, no V. B.



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TECHNICAL SPECIFICATIONS



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PRODUCT DESCRIPTION

Function:

The electronic module detects the presence of the user and sets the circuit on stand-by mode (non-flushing). The computer based micro-processor with specially designed sensors is programmed to detect the presence of a user within a pre-determined distance and time to eliminate unnecessary flushing. After usage, the circuit detects the absence of the user and flushes automatically. The duration of flushing action and operating cycles are adjustable. Also, if the flush cycle is in operation and a user presents himself, the unit will automatically stop to eliminate unwanted splashing of water.

Packaging:

The entire unit is constructed of solid brass waterways. The water entry is the conventional 3/4" connection as standard on most mechanically activated flush systems. The long life solenoid valve is protected by an easy to reach in-line tubular mesh screen filter. The electronic module is totally sealed & waterproof and mounted within the chrome polish, heavy cast housing. The front portion of the housing is removable for access to the solenoid valve, filter, and electronic circuit without disturbing any of the waterway functions. The well designed housing is both aesthetically appealing and easy to clean.

Adjustments:

Adjustments are pre-set by the factory for normal usage; re-programming the control unit to suit special conditions is possible with an optional remote reprogrammer module. This user friendly module permits easy function changes (without dismantling the unit) in the distance and time cycles, for example:

Flush Time	1 to 15 seconds
Detect Delay (Acknowledgment)	0 to 14 seconds
Flush Delay	2 seconds
Sensitivity (Detect Range)	6 to 24 inches
Address (Detect Frequency)	1 to 4 frequencies
** Auto courtesy flush	24 hrs. after last use

Technical Specifications:

Electrical requirements	24 Vac 15 V.A.
Flush Cycle Duration	1 to 15 seconds
Electro-mechanical Valve	24 Vac 50/60 Hz
Operating Water Pressure	15 to 150 psi
Water Flow Rate	Adjustable
Water Connection	3/4" copper

Special Note- Opposed Mounting:

When installing urinals directly opposed to each other (face-to-face), the controls can trigger each other on. Simply program (using a remote control) the 'Address' frequency mode to a different one that the opposed urinal detector is using. Example....a urinal frequency address is at # 1 and the one mounted on the opposite wall can be set to address # 2. This is a design-incorporated intelligent™ feature, thereby eliminating unwanted activation.

Note: Address Detect Frequency re-programmable by remote.

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FUNCTION INFORMATION

A) Flush Time (Run Time)	1 to 15 seconds
B) Detect Delay (Detect Time)	0 to 14 seconds
C) Flush Delay	2 seconds
D) Sensitivity (Detect Range)	1 to 15 level
E) Address (Detect Frequency)	Frequency 1 to 4

A) Flush Time (Run Time)

The water flush time cycle is normally set to 6 seconds.

*** This flush cycle is re-programmable from 1 to 15 seconds (a 1/2 to 1 second longer delay is due to the "slow close" feature the water valve has to prevent water hammer effects).*

B) Detect Delay (Detect Time)

The detection delay is set at 6 seconds. This is to prevent unwanted starts by passers-by in close quarters.

*** The delay is re-programmable from 0 to 14 seconds.*

C) Flush Delay

The flush delay is usually set at 2 seconds. This allows the user to step back or leave before the flush cycle operates and prevents unwanted splash on the user.

D) Detection Range, Sensitivity

The detection range is adjustable through re-programming and detects between 6 to 24".

Factory programmed detection range is set at sensitivity level 8.

- To increase range, re-program sensitivity from level 9 to 15. (15 for a longer range)
- To decrease range, re-program sensitivity from level 7 to 1. (1 for a shorter range)

** The sensitivity cycle is re-programmable from level 1 to 15.*

E) Address - Detect Frequency

This *intelligent™* feature eliminates possible problems of oppositely (face to face) mounted systems.

Such installation can trigger oppositely mounted units unnecessarily. With the remote, change of frequency, address 1 to 4, makes it impossible for one unit to be inadvertently triggered by another.

**The address frequency is factory programmed at 1 and is re-programmable from 1 to 4.*

2123 URINAL - *intelligent™* Electronic Urinal Control, 'Retro-Fit' Style INSTALLATION STEPS

ENTRY VALVE

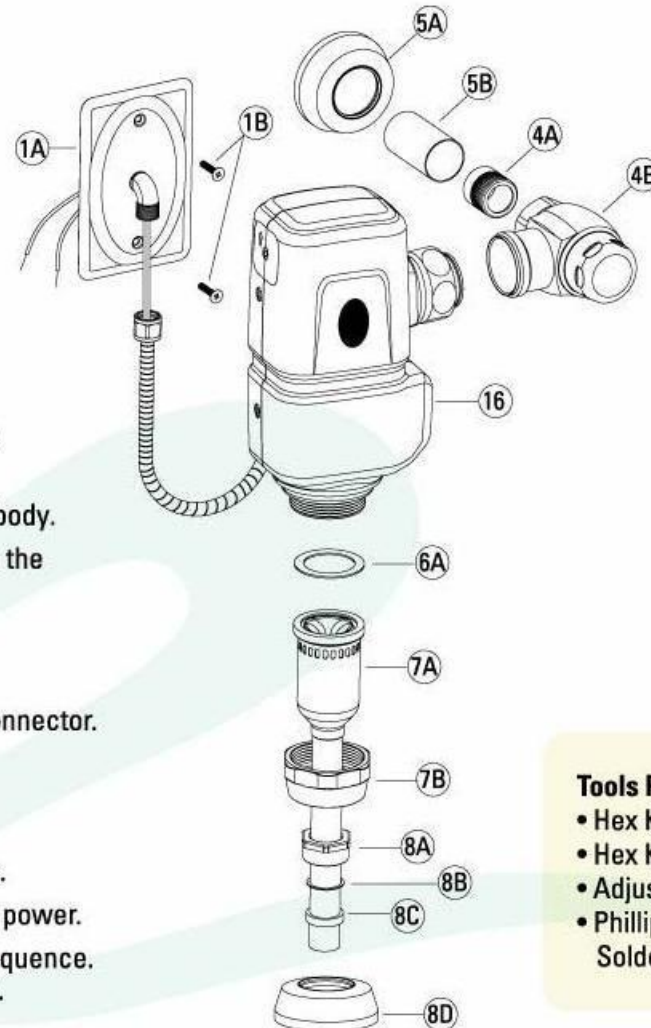
- 1 - Solder the brass collar # 4A to water source at correct wall position.
- 2 - Insert the chrome collar # 5B and wall flange # 5A.
- 3 - Connect the chrome stop valve # 4B to the brass collar # 4A.
- 4 - Open water source and purge waterways.

MAIN BODY AND VACUUM BREAKER

- 5 - Assemble # 8 on the vacuum breaker body # 7. The vacuum breaker tube length has to be cut to proper height.
- 6 - Slip on the spud gasket chrome flange #8D, seals and chrome nut #8A.
- 7 - On vacuum breaker, place gasket #6A and screw to the main body.
- 8 - Align the main body water entry connection, insert and screw the large chrome nut to the stop valve # 4B. Tighten accordingly.
- 9 - Connect the vacuum breaker base nut #7B.

ELECTRICAL CONNECTIONS

- 10 - Pass the electrical wires through the Wall Plate #1A elbow connector. Screw in the chrome nut from the vandal proof cable.
- 11 - Attach the two 24Vac wires with the wire twists supplied. No polarity required.
- 12 - Attach Wall Plate # 1A to electrical box with two # 1B screws.
- 13 - Apply current to the transformer to obtain the required 24Vac power.
- 14 - Place hand in front of the detection lens to begin detection sequence. After the allotted time, remove hand to operate the flush cycle.



Tools Required:

- Hex Key, 2.5mm(supplied)
- Hex Key, 5.0mm(supplied)
- Adjustable Wrench
- Phillips screwdriver
- Soldering Tools

2123 URINAL - *intelligent*™ Electronic Urinal Control, 'Retro-Fit' Style MAINTENANCE

Aquanar products are design and engineered with precision and specially chosen components. Replacement with genuine Aquanar parts are an important factor in product performance. Non genuine parts may void warrenty.

Maintenance

- Remove power from breaker source.
- Remove front cover. (4 hex screws, on sides)
- Disconnect electrical tabs on the solenoid valve and the two power wires.
- Check carefully that corrosion did not form on connections. If corrosion or wire damage is present, repair accordingly.

Cleaning the Solenoid valve / filter

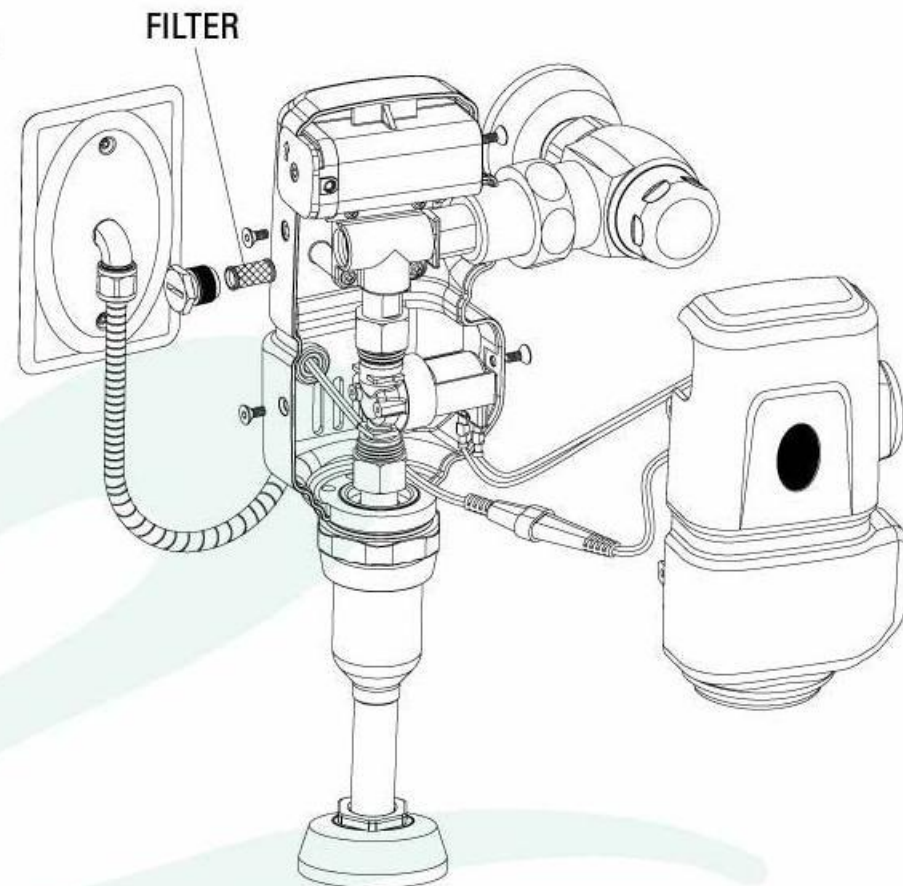
- Close water source at water inlet valve. With flat screwdriver, remove the filter plug and check if filter is clear of debris.
- Remove the solenoid valve, clean and rinse with warm water.
- Dry and re-assemble.

Product Care

Aquanar products are constructed of the highest quality materials. Although durable and robust, abrasives and harsh chemicals can damage surfaces. Clean the chrome housing and lens with a damp soft cloth. Dry with a soft towel.

Re-assembling

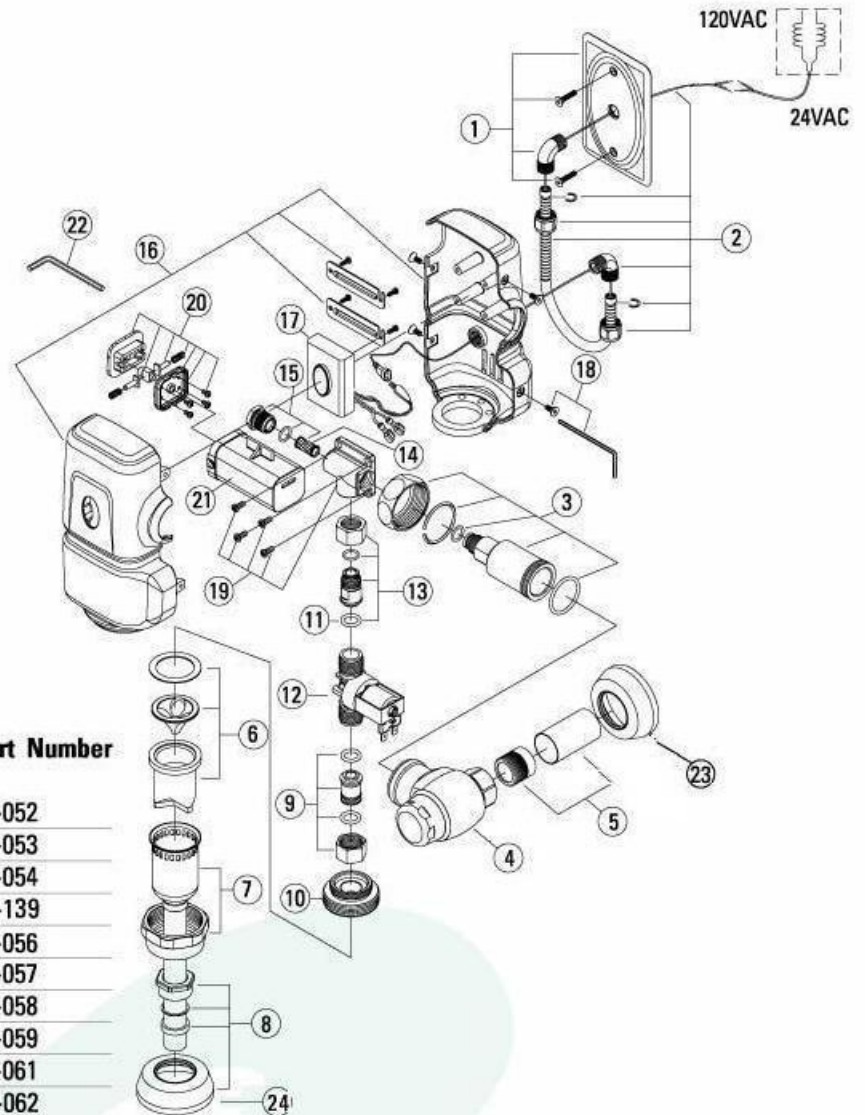
To re-install, reverse the above steps.



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PARTS LIST



#	Description	Part Number
1	Décor Wall Plate CP, Urinal AC	01-052
2	Wire Jacket, vandal proof, AC	01-053
3	Water Inlet CP, Body Assy.	01-054
4	Stop Valve Assy, CP	01-139
5	Sweat Solder Adaptor kit	01-056
6	V.B. Duckbill & Rubber Kit	01-057
7	Vacuum Breaker & Nut Kit, CP	01-058
8	Spud Nut Kit, CP	01-059
9	Swivel Adapter, Lower Solenoid	01-061
10	Discharge, Threaded, CP	01-062
11	"O" ring	04-110
12	Magnetic valve 24Vac	04-025
13	Swivel Adapter, Upper Solenoid	01-063
14	Filter	04-115
15	Filter & Plug Kit	01-064
16	Main Body Assy, CP	01-065
17	Electronic Module	AQN-2123-2
18	Body Screws & Allen Key Kit	01-066
19	Waterway 90° Body & Screw Kit	01-067
20	Snap-pack Cover Assy.	01-107
21	Battery Pack	01-108
22	Hex Key, 4mm	04-124
23	Flange	04-146
24	Flange	01-105