

CF112S  
CF112Z

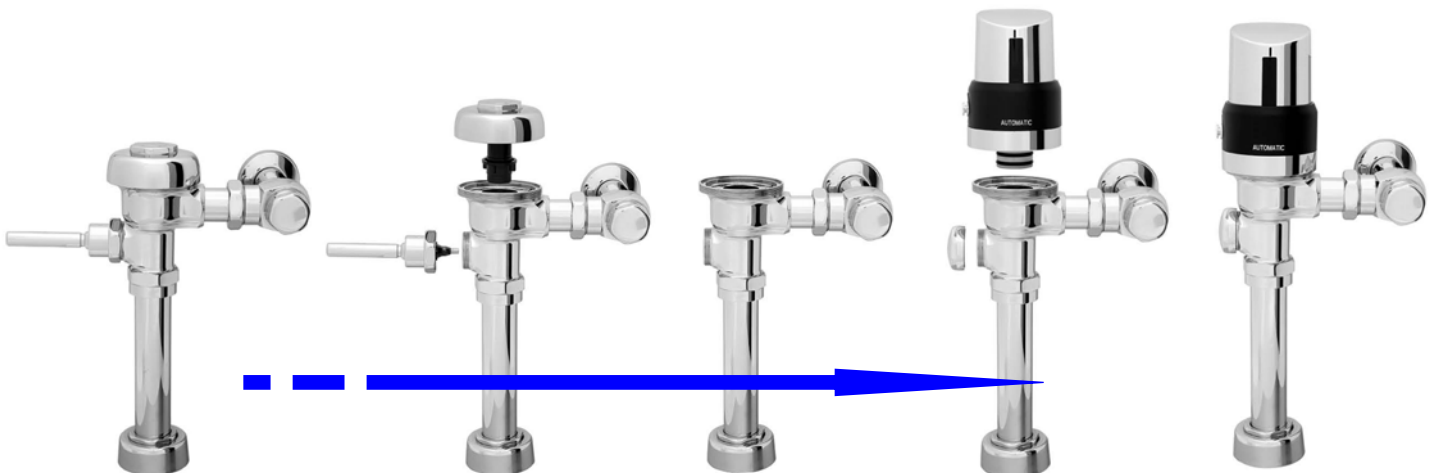
## Flush Valve Retrofit Kit

### Installation Instructions



CF112S : Retrofits for Royal, Regal (Sloan) Manual Flush Valve

CF112Z : Retrofits for Z6000 (Zurn) Manual Flush Valve



# PRODUCT STRUCTURE

Chrome-Plated Metal Casting Cover

Operates on 4 AA Alkaline Batteries

Latching Solenoid Operator

Manual Mechanical Override Button :  
allows user to flush the valve during a power outage

Operating Pressure :  
15 to 100 PSI

Easy Installation and maintenance

Retrofits for Royal, Regal (Sloan) and Z6000 Manual Flush Valve (Zurn)

Infrared Sensor :  
Accurate, stable performance, even in the sunlight or any light.  
Adjustable sensor range :  
15~32 inch.

Adjustable Flush Volume  
Closet : 1.28/1.6/2.4 GPF  
Urinal : 0.25/0.5/1.0/1.5 GPF

Interchangeable from Closet to Urinal Valve

## Dual Flush

Light Flush (1.1 GPF) :  
if user is in detection zone for 60 seconds or less  
Standard Flush (1.6 GPF) :  
if user is in detection zone for more than 60 seconds

Diaphragm Type:  
self-cleaning mechanism, prevents clogging, reduces maintenance and ensures stable flow



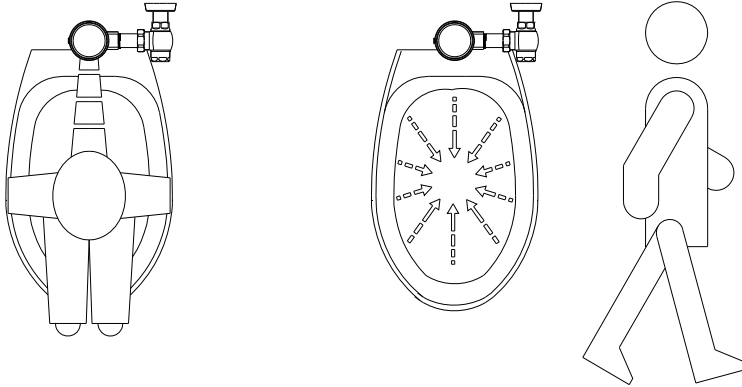
## SPECIFICATION

Product	Retrofit Kit for Water Closet Flush Valve
Casing Material	Chrome Plated
Power Supply	4 AA Alkaline Batteries
Power Consumption	3W or less
Battery Life	3 Years (Based on 3,000 cycles per month)
Sensing Distance	Adjustable 15 ~ 32 inch
Minimum Detection Time	5 Seconds
Flush Delay Time	3 Seconds
Operating Pressure	15 ~ 100 PSI
Flush Volume	Adjustable 1.28 / 1.6 / 2.4 GPF
Sanitary Flush	Flushes after every 24 hours of non-use
Dual Flush	Light Flush : 1.1 GPF Standard Flush : 1.6 GPF

Product	Retrofit Kit for Urinal Flush Valve
Casing Material	Chrome Plated
Power Supply	4 AA Alkaline Batteries
Power Consumption	3W or less
Battery Life	3 Years (Based on 3,000 cycles per month)
Sensing Distance	Adjustable 15 ~ 32 inch
Minimum Detection Time	5 Seconds
Flush Delay Time	1 Second
Operating Pressure	15 ~ 100 PSI
Flush Volume	Adjustable 0.25 / 0.5 / 1.0 / 1.5 GPF
Sanitary Flush	Flushes after every 24 hours of non-use

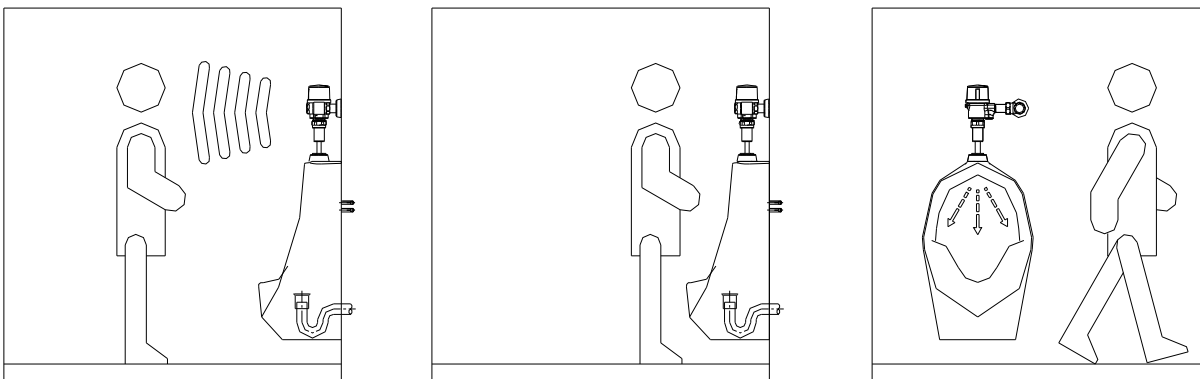
# HOW TO USE

## A. Closet Flush Valve



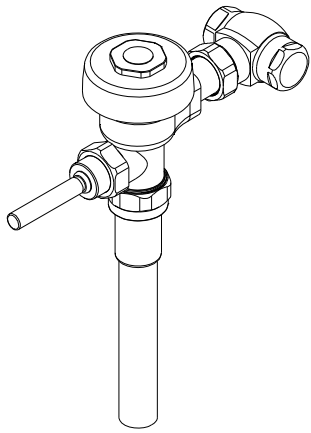
1. A continuous invisible light beam is emitted from the sensor. As the user enters the beam's effective range (15-32 inch) more than 5 seconds, the output circuit continues in a "hold" mode for as long as the user remains within the effective range of the sensor.
2. When the user steps away from the Valve, the circuit initiates a flushing cycle to flush the fixture. The circuit then automatically resets and is ready the next user.

## B. Urinal Flush Valve



1. A continuous invisible light beam is emitted from the sensor. As the user enters the beam's effective range (15-32 inch) more than 5 seconds, the output circuit continues in a "hold" mode for as long as the user remains within the effective range of the sensor.
2. When user leaves the sensing area, the unit automatically flushes the urinal.

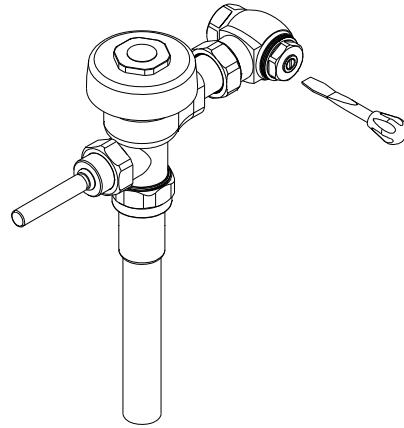
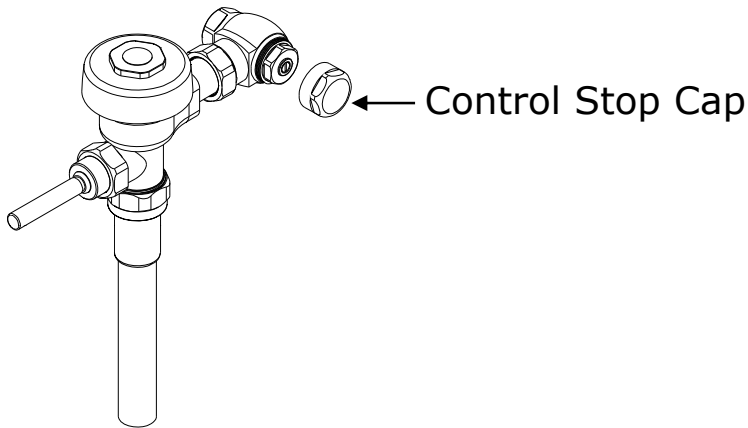
# INSTALLATION AND CAUTIONS



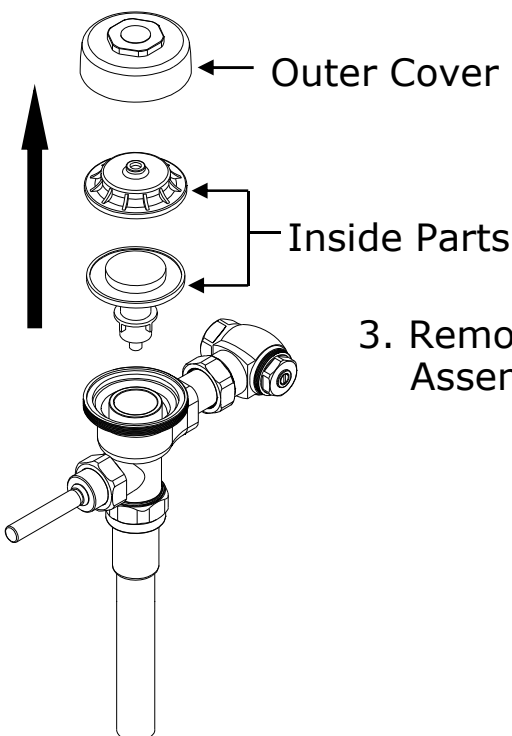
1. Select the model (CF112S / CF112Z)

CF112S : Retrofits for Royal, Regal (Sloan) Manual Flush Valve

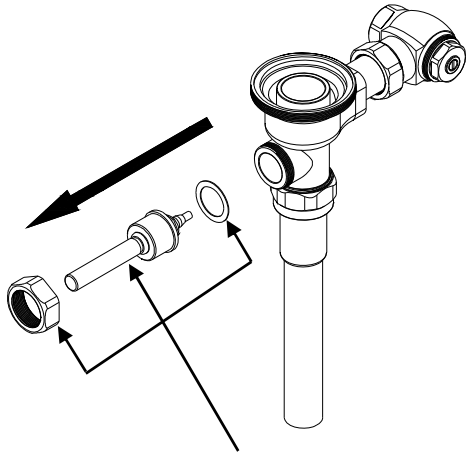
CF112Z : Retrofits for Z6000 (Zurn) Manual Flush Valve



2. Remove Control Stop Cap and turn off water supply at Stop Cap.  
Push Valve Handle to relieve water pressure.

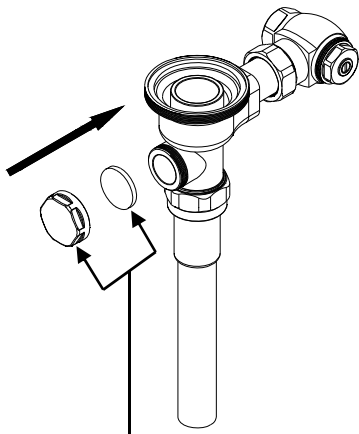
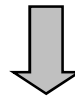


3. Remove Outer Cover and lift out inside Parts Assembly.



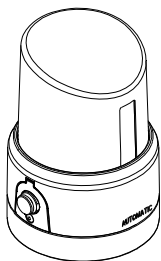
4. Remove Handle Assembly and Gasket.

Handle Assembly & Gasket



5. Install New Handle Cap with Gasket to handle opening on Flushometer Body. Tighten Handle Cap securely.

Handle Cap with Gasket



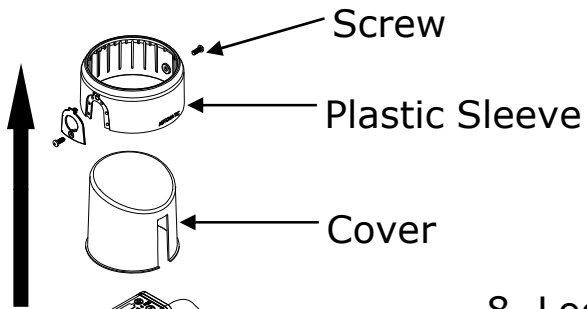
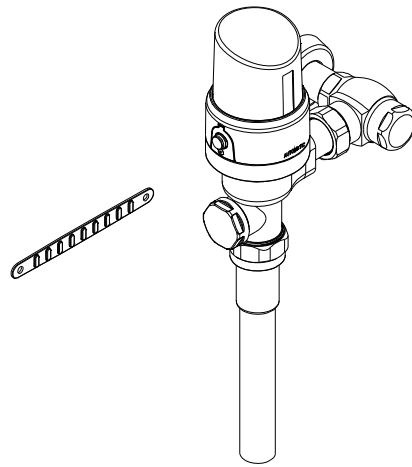
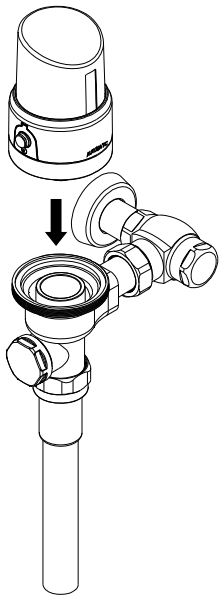
6. Remove the plastic blue cover under the retrofit kits.

Retrofit kits

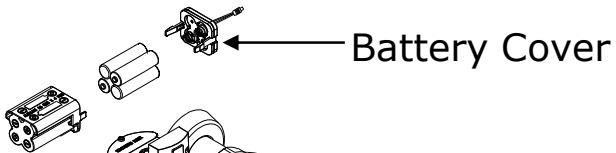
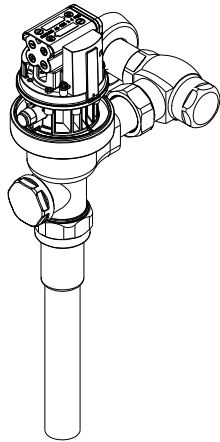


Plastic blue cover

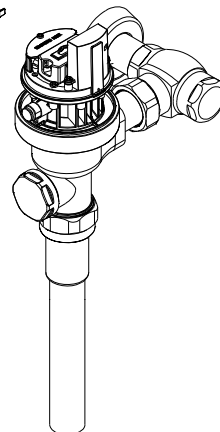
7. Place entire Retrofit Assembly onto the valve body. Use provided plastic tool or Strap Wrench tightly secure Locking Ring.

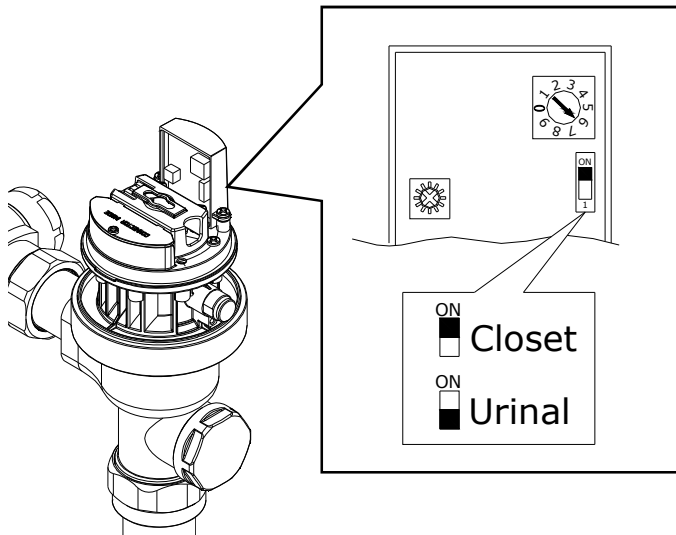


8. Loosen the two screws with Hexagonal wrench to remove the Plastic Sleeve and then remove the Cover.

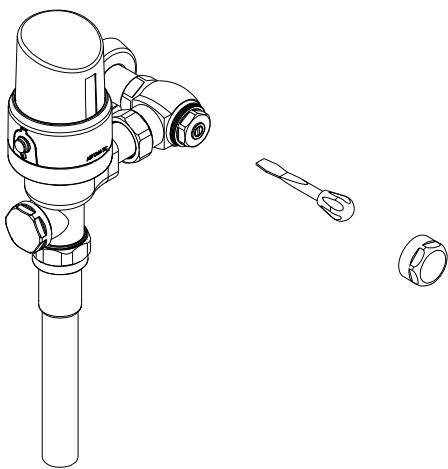


9. Remove the Battery Compartment, remove the Cover, install 4 Alkaline AA size Batteries exactly as illustrated



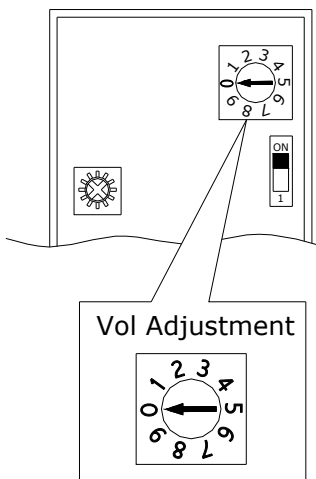


10. Set up desired flush valve function as illustrated.



11. Turn on the water supply for operation test.

## 12. Flush volume adjustment



Retrofit Kit for Water Closet Flush Valve

SW NO.	Flush Volume	
0	Dual Flush (1.1GPF/1.6GPF)	
1	4.8 LPF	1.28 GPF
2	4.8 LPF	1.28 GPF
3	4.8 LPF	1.28 GPF
4	6.0 LPF	1.6 GPF
5	6.0 LPF	1.6 GPF
6	6.0 LPF	1.6 GPF
7	9.0 LPF	2.4 GPF
8	9.0 LPF	2.4 GPF
9	9.0 LPF	2.4 GPF

### Dual Flush ( Water Closet Only)

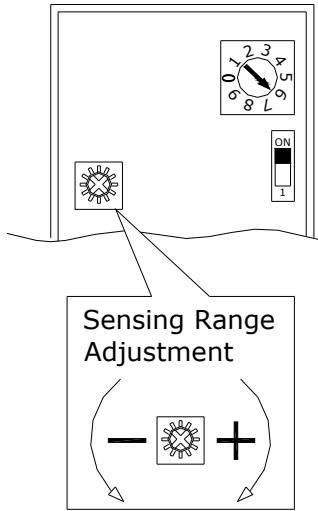
Light Flush (1.1 GPF) :  
if user is in detection zone for  
60 seconds or less

Standard Flush (1.6 GPF) :  
if user is in detection zone for  
more than 60 seconds

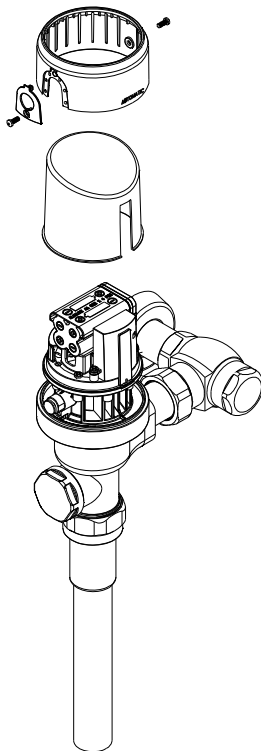
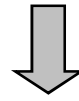
Retrofit Kit for Urinal Flush Valve

SW NO.	Flush Volume	
0	1.0 LPF	0.25 GPF
1	1.9 LPF	0.5 GPF
2	1.9 LPF	0.5 GPF
3	1.9 LPF	0.5 GPF
4	3.78 LPF	1.0 GPF
5	3.78 LPF	1.0 GPF
6	3.78 LPF	1.0 GPF
7	5.7 LPF	1.5 GPF
8	5.7 LPF	1.5 GPF
9	5.7 LPF	1.5 GPF

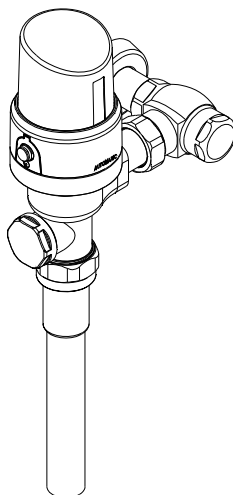
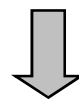




13. Sensing Range adjustment.  
Adjustable 15 ~ 32 inch  
(Adjust only if necessary)



14. Reinstall the Cover and Plastic Sleeve  
as illustrated.



15. Installation Completed.

# PARTS LIST



Chrome-Plated Metal Casting Cover



Plastic sleeve



Battery box



Alkaline Batteries



Electronic Module



Plastic Holder



Rubber Gasket



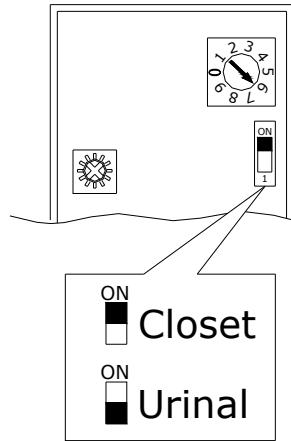
Solenoid Valve Module

## TROUBLESHOOTING

<b>Trouble</b>	<b>Possible cause</b>	<b>Troubleshooting</b>
Red lamp flashing	1. Low battery	Replace new battery (Alkaline Battery 4 pcs)
No flushing (Red lamp does not light on during sensing process)	1. Low battery	Replace new battery (Alkaline Battery 4 pcs)
	2. Dirty sensor window	Wipe sensor window with tissue paper
	3. Sensing distance too long	Shorten sensing distance
	4. Control circuit failure	Replace control circuit
No flushing (Red lamp flashes on and off during sensing process)	1. Water supply not turned on	Water supply is turned off
	2. Loose Solenoid terminal	Re-connect solenoid terminal
	3. Solenoid failure	Replace solenoid Valve Module
	4. Control circuit failure	Replace control circuit
Water keeps running	1. Solenoid diaphragm obstructed	Replace solenoid Valve Module
	2. Control circuit failure	Replace control circuit
Volume of water is insufficient	1. Water inflow too weak	Adjust Control Stop to increase water flow
	2. Filter obstructed	Clean filter

# ADJUSTMENT

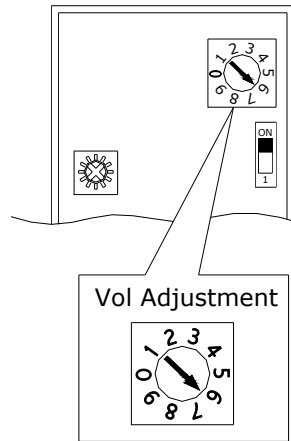
Interchangeable  
from Closet to  
Urinal Valve



Adjustable Flush Volume

Closet : 1.28 / 1.6 / 2.4  
GPF

Urinal : 0.25 / 0.5 / 1.0 /  
1.5 GPF



Infrared Sensor :  
Adjustable sensor  
range: 15~32 inch

