



# Electronic Exposed TECK® II Flush Valves (with H2Optics™)

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Record model number:

**81T2** **1** **A** - -

**Valve Type**

- 0 = W/C (Water Closet)
- 2 = W/C - 22" outlet tube
- 3 = Urinal

**Power Option**

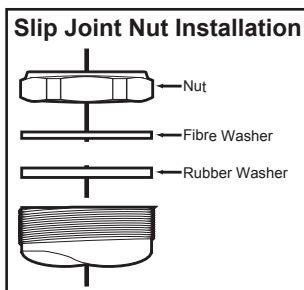
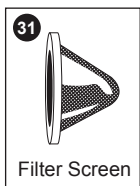
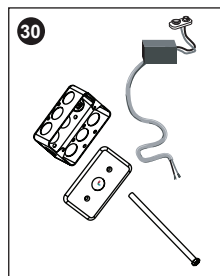
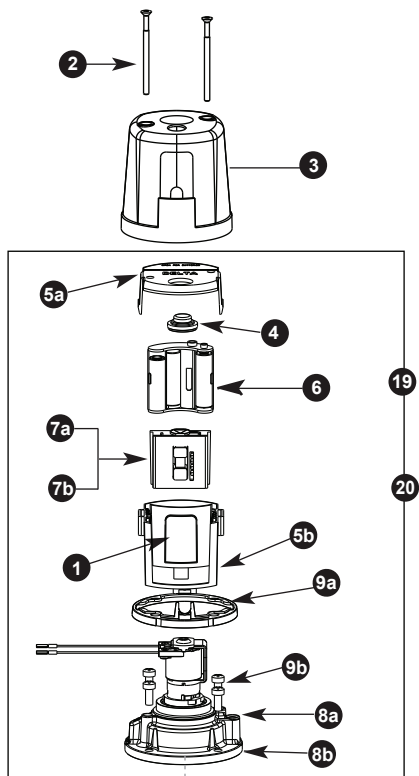
- BT = Battery
- HW = Hardwired

**Additional Options**

- (leave blank if not applicable)
- 30 = w/Sloan ZurnTail
- 20 = Less Stop Assy
- 1 = V/B Tube w/Tee Assy (WC only)

**Alternate Flush Volumes**

- (leave blank if not applicable)
- 6 = 6 litre (1.6 gal) **fixed** flush (WC only)
- 13 = 13 litre (3.4 gal) **fixed** flush (WC Retrofit Kits only)
- 48 = 4.8 litre (1.27 gal) **fixed** flush (WC only)
- 38 = 3.8 litre (1.0 gal) **fixed** flush (Urinal only)
- 19 = 1.9 litre (0.5 gal) **fixed** flush (Urinal only)
- 05 = 0.5 litre (0.13 gal) **fixed** flush (Urinal only)



*For valves manufactured after January 2013.*

**PLEASE LEAVE this M&I Sheet with the owner, maintenance plumber, etc. as items relating to ongoing maintenance suggestions and procedures are included.**

Item #	Part #	Description
1	061063A	Replaceable Lens for 3rd Generation E-FV
2	061138A	Cover Screws for 3rd Generation E-FV
3	061139A	CP Metal Cover
4	see #7	Button Head Assembly
5a	061140A	Case Top for 3rd Generation E-FV
5b	061170A	Plastic Case for 3rd Generation E-FV
6	060334A	Battery Holder
7a	061161A	Water Closet Board for 3rd Generation E-FV & Override Button
7b	061162A	Urinal Board for 3rd Generation E-FV & Override Button
8a	061024A	Regulating Screw & O-Ring
8b	061169A	Cast Cap/Solenoid & Regulating Screw Assembly
9a	061141A*	Cover Gasket (3/pkg)
9b	060078A*	Screws for Cast Cap (4/pkg)
10a	060507A	Poppet Pin Pack (3/pkg) (also see 10b)
10b	062025A	Washer (3/pkg) (required for 6.0 & 4.8L Valves only)
10c	060508A	Poppet Pin Pack (3/pkg) (0.5L Valves only)
11a	061216A**	Diaphragm/Guide Assembly Complete - WC
11b	061217A**	Diaphragm/Guide Assembly Complete - UR
11c	060079A	Diaphragm Package
12	062007A**	Brass Seat with O-Ring
13	060342A	Plug & O-Ring for Handle End
14	060506A	Standard Adjustable Tail CP
15	060735A	Union Nut CP
16	060692A	Retaining Ring
17	060082A*	Adjustable Tail O-Ring Package (20/pkg)
18	060504A	S/S Wall Flange & Cover Tube
19	061142A	Electronic Water Closet Repair Kit for 3rd Generation E-FV
	061143A	Electronic Urinal Repair Kit for 3rd Generation E-FV
20	061144A	Electronic Water Closet Repair Kit for DF 3rd Generation E-FV
21	060697A	1" Copper Sweat Inlet Adaptor
	060694A	¾" Copper Sweat Inlet Adaptor
	060764A	¾" FIP Inlet Adaptor
22	060843A	Retrofit Check Stem Unit, Capnut & Button Complete
	060844A	Seat Washer, Spring, Button & O-Ring Kit
	060859A	Angle Stop with Union Nut & Tail Complete
23	060081A*	Plug Button Package (12/pkg)
24	060785A	VB Sleeve Complete
25	060094A	CP Male Threaded Coupling Ring
26	060782A	1½" x 10" VB, Ring & Tube Complete (for 81T201)
	060783A	1½" x 22¾" VB, Ring & Tube Complete (for 81T221)
	060863A	1¼" x 10" VB, Ring & Tube Complete (for 81T291)
	060784A	¾" x 11½" VB, Ring & Tube Complete (for 81T231)
	060781A	1½" x 10" VB, Side Outlet Tee Tube Complete
27	060004A	1½" Spud Flange
	060463A	¾" CP Coupling Nut, ¾" Washer & ¾" Spud Flange
	060745A	1¼" Spud Flange
28	060778A	1½" Rough Coupling Nut & Washer
	060773A	1¼" Rough Coupling Nut & Washer
	060463A	¾" CP Coupling Nut, ¾" Washer & ¾" Spud Flange
29	060083A *	1½" Rubber Slip Joint Washer (12/pkg)
30	061069A	Hardwire Converter & Rigid Connection Assembly for 3rd Gen E-FV
	061069A-BB	Hardwire Converter & Rigid Connection with Battery Back-up
31	060344A	Filter Screen Kit (12/pkg) for Teck tails
	060972A	Filter Screen Kit (6/pkg) for Sloan®/Zurn® tails (-30 models)
	060704A	Transformer (110 to 24 VAC) for 5 Sensor Modules***
	060771A	Transformer (110 to 24 VAC) for 10 Sensor Modules***
	060772A	Transformer (110 to 24 VAC) for 25 Sensor Modules***

\* Package Quantities May Change. Check the parts section of the latest Delta Commercial Faucet Price List for current quantities.

\*\* For valves manufactured before January 2013, you must replace both 061216A/061217A diaphragm assembly and 062007A brass seat with O-ring.

\*\*\*Each individual sensor module requires its own 24 VAC to 6 VDC hardwire converter.

NOTE: Refer to TECK Flushometer Repair Parts and Maintenance Manual for additional parts and information.

Product #	A	B	C
	Max.	$\pm 11\text{mm}$ ( $7/16"$ )	Min.
All 81T201BT/ 81T201HW variations*	292mm ( $11\frac{1}{2}"$ )	121mm ( $4\frac{3}{4}"$ )	54mm ( $2.13"$ )
All 81T231BT/ 81T231HW variations*	330mm ( $13"$ )	121mm ( $4\frac{3}{4}"$ )	54mm ( $2.13"$ )

\* Note: -30 models, B = 114mm - 131 mm ( $4.5"$  to  $5.18"$ )

## BEFORE THE FIRST FLUSH (COMPLETE VALVES)

### FLUSH BOTH OLD AND NEW PIPES:

It is important to FLUSH and CLEAN thoroughly both new and old water piping to ELIMINATE contaminants (eg. scale, sediment, gravel, cuttings, solder, etc.) from the line.

Where the water has a sediment content, a PIPE STRAINER in the supply line should alleviate that condition and protect working parts of flushometers and faucets.

On a NEW INSTALLATION, always flush the valve 4 or 5 times to clean out supply line debris. It is also advisable where more than one flushometer is installed on a water line, to flush out the water piping through the last flushometer outlet of the pipe line.

### INSTALL FILTER SCREEN (included):

**Note:** Place filter in stop bore with conical screen facing the water flow.  
**Caution:** Do not push filter in too far. Let filter seat against face of flush valve tail. Periodic cleaning of the filter screen with water is recommended depending on local water conditions to remove any dirt or sediment. See filter screen M&I for additional installation information.

### ELIMINATE AIR FROM VALVES:

The FIRST FLUSH should ELIMINATE all air from the TECK flushometer. DO NOT ADJUST flushometer based on the results of the first flush.

### TO PREVENT WATER HAMMER:

A water hammer arrestor may be installed at the last flushometer and/or at the back of an individual installation. This assures SMOOTHER OPERATION of the valves and longer life for the working parts.

HANDS SHOULD BE CLEAN AND FREE OF GREASE AND OIL during any maintenance or handling of electronic housing components to prevent possible damage to internal circuitry.

### IF LEFT HAND STOP REQUIRED:

- Remove the chrome cover by taking out the two cover screws. See Figure 4.
- You will now see the clear electronic compartment with a grey cover.
- Now take hold of the compartment and very carefully, slowly lift the compartment about  $1/4"$  and turn it  $180^\circ$ .
- The sensor eye should now be on the other side.
- Gently push the compartment back down, aligning the two screw holes on the clear case with the screw holes on the brass solenoid cap.
- Rotate cover gasket  $180^\circ$  on brass cap.
- Check for pinched wires between cover and clear case.
- Ensure grey cover is snapped onto clear case and chrome button is properly seated.
- Replace the chrome cover and two cover screws - do not overtighten cover screws.

### Flush volume adjustment:

- 3.43 U.S. gallons / 13.0 litres for water closets
- 1.60 U.S. gallons / 6.0 litres for water closets
- 1.27 U.S. gallons / 4.8 litres for water closets
- 1.0 U.S. gallon / 3.8 litres for urinal valves
- 0.5 U.S. gallon / 1.9 litres for urinal valves
- 0.13 U.S. gallon / 0.5 litre for urinal valves

The Regulating Screw (061024A, item #8) may be adjusted, according to job conditions and fixture installed to the proper water volume to flush that particular fixture (except -6, -48, -38, -19 and -05 models which are not field adjustable).

**NOTE:** 4.8 and 6 Litre water closets or washdown urinals may require the Angle Stop to be set at only ONE TURN OPEN. For a SHORTER flush, turn the Regulating Screw (061024A, item #8) left (counter-clockwise) and right (clockwise) for a LONGER flush (except -6, -48, -38, -19 and -05 models which are not field adjustable).

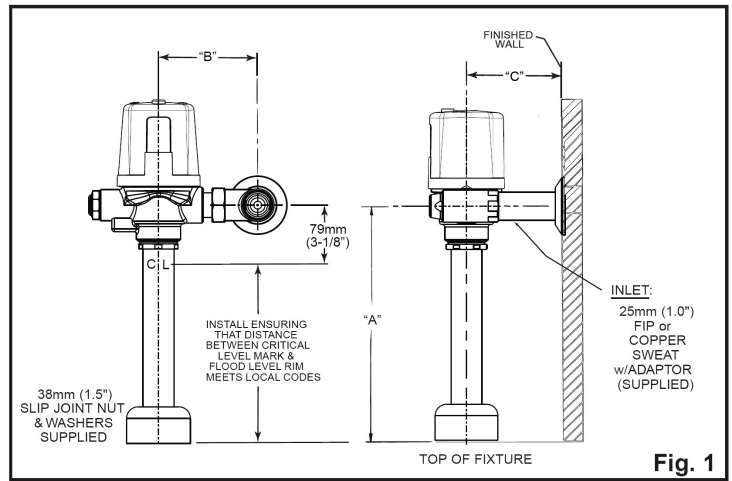


Fig. 1

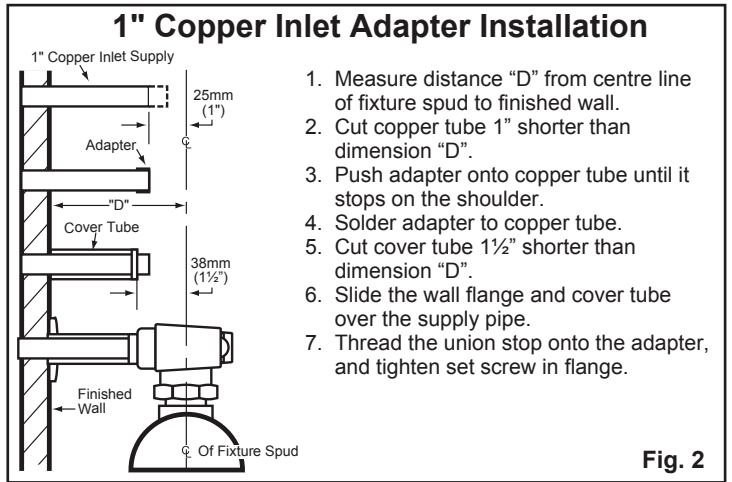


Fig. 2

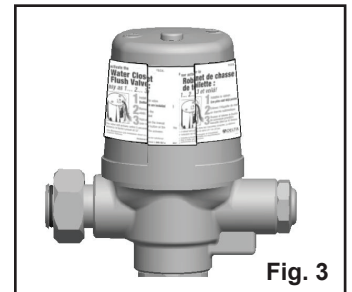


Fig. 3



Fig. 4

# INSTALLATION INSTRUCTIONS - BATTERY FLUSHOMETER (for Hardwire, skip to Step 3)

## Step 1:

- Install battery flushometer to fixture.
- Open inlet stop.

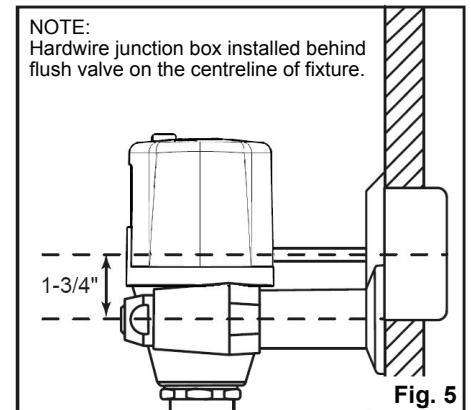
## Step 2:

- Follow instructions on yellow static label (Figure 3). **Note: The batteries are already installed and the product is in hibernation mode waiting to be activated.**
- After you remove the yellow label, you must push the manual over-ride button three times within five seconds to activate the valve and to place it into operation mode. To signify the valve has entered operation mode, you will see an ascending and descending light sequence.
- **Proceed to Step 5.**

# INSTALLATION INSTRUCTIONS - HARDWIRED FLUSHOMETER

## Step 3:

- Before installing the flush valve body. Install 2" x 4" electrical box into wall with centre of box in line with the cut-out in the back of the metal flush valve cover. See Figure 5.
- Securely attach box to wall structure. ⚠ Install CSA and/or UL approved Class 2 transformer or equivalent in a convenient location or in a pipe chase. **(Do NOT install the transformer inside the control box.)** Run suitable wires from 24 VAC step down transformer into the electrical box. The transformer is to be installed in an adjacent accessible space. Use cable which complies to local electrical codes for 1 amp load. No. 18 cable is usually sufficient.
- Assemble plastic bushing into the hole on the coverplate.
- Measure and cut tube assembly to appropriate length so that the bushing will fit under the metal flush valve cover and the free end will protrude into the box through the coverplate by 1/2" minimum. Rotate cover gasket, if necessary, so that the U-shaped wire guides align with the rear opening in valve cover.
- Assemble flush valve to fixture. When ready, remove metal cover and feed the wires from the hardwire converter through the tube assembly and the tube assembly through the bushing on the coverplate.
- Attach the converter wires to the 24 VAC wires from a step down transformer.
- With power to the flushometer, you will see an ascending and descending light sequence to signify that the valve is now in operation mode.
- Assemble coverplate using the bracket and screws provided.
- With the tube bushing located in position, assemble metal cover to flush valve body with tube assembly located in metal cover cut-out.



## Step 4:

- Open inlet stop.

## Step 5: Operation Mode

Upon power up - a sequence of descending and ascending red lights will signify that the valve is in operation mode.

**Once in operation mode, if factory settings are preferred, no further action is required and the valve installation is complete.**

Factory pre-set functions are:

WC bowl length of 24", 24 hour flush is off.  
Urinal sensing distance of 16", 24 hour flush is off.

# MAKING ADJUSTMENTS TO THE ELECTRONIC FEATURES

(Optional: Only required if factory settings are not preferred)

Once in operation mode, if adjustments are preferred, installer must move into set up mode.

**If desired adjustments are not made within 30 minutes of initial power-up, the power must be disconnected for 10 seconds and then reconnected to obtain another adjustment period.**

## Step 6: Set-Up Mode

- If 30 minutes have passed since the initial power-up of the valve - open up the battery compartment (Figures 9 and 10) and disconnect the battery snap for 10 seconds. Reconnect and replace the chrome cover and screws. If hardwired - disconnect battery snap to the hardwire converter for 10 seconds.
- To move from operation mode into set-up mode, push and hold manual override button for five seconds. Release the override button when a solid blue light is visible.
- **The watercloset flushometer models have 2 settings which are adjustable via the Set-Up Mode - Bowl Length Selection and 24 Hour Flush Adjustment.**
- **The urinal flushometer models have 2 settings which are adjustable via the Set-Up Mode - Range Adjustment and 24 Hour Flush Adjustment.**
- While in Set-Up Mode, the user will move through the different adjustment modes one by one, in the order as described above. Use the override button to toggle through the different settings of the adjustment feature being altered. To advance to the next adjustment mode, hold down override button until blue light is present, then release the button. See Figure 6.

## ENTER SETUP MODE

TO ENTER SETUP MODE - HOLD DOWN OVERRIDE BUTTON UNTIL BLUE LIGHT PRESENT. RELEASE BUTTON.

## EXIT SETUP MODE

TO EXIT SETUP AND RETURN TO OPERATION MODE - HOLD DOWN OVERRIDE BUTTON UNTIL BLUE LIGHT PRESENT. RELEASE BUTTON.

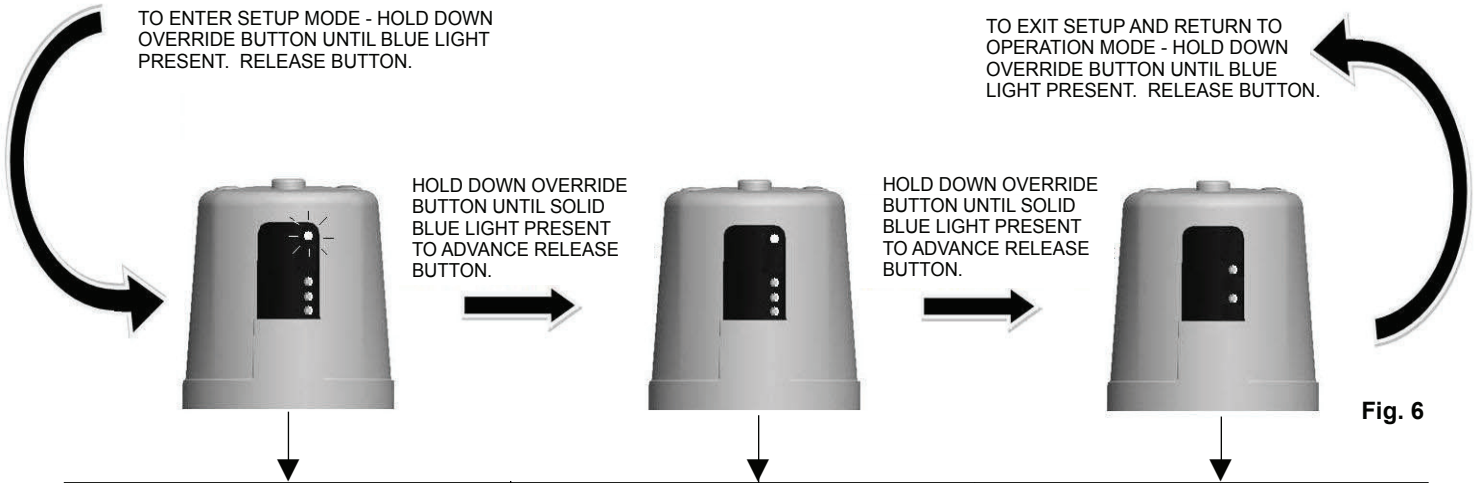


Fig. 6

<p><b>7.1 SENSOR RANGE ADJUSTMENT MODE</b></p> <ul style="list-style-type: none"> <li>- Press and release override to toggle through the settings</li> <li>- Blue light flashes when object is detected</li> <li>- Red lights signify range choices</li> </ul> <table border="1"> <thead> <tr> <th>Lights visible</th> <th>W/C Bowl Length</th> <th>Urinal Sensing Distance</th> </tr> </thead> <tbody> <tr> <td>1 Red</td> <td>20"</td> <td>8"</td> </tr> <tr> <td>2 Reds</td> <td>22"</td> <td>12"</td> </tr> <tr> <td>3 Reds</td> <td>24"</td> <td>16"</td> </tr> <tr> <td>4 Reds</td> <td>26"</td> <td>20"</td> </tr> <tr> <td>5 Reds</td> <td>28"</td> <td>24"</td> </tr> </tbody> </table>	Lights visible	W/C Bowl Length	Urinal Sensing Distance	1 Red	20"	8"	2 Reds	22"	12"	3 Reds	24"	16"	4 Reds	26"	20"	5 Reds	28"	24"	<p><b>INACTIVE MODE</b> (WC only - designed for future options)</p>	<p><b>7.2 24 HOUR FLUSH ADJUSTMENT</b></p> <ul style="list-style-type: none"> <li>- Press and release override to toggle through the settings</li> <li>- No Blue light will be present</li> <li>- Red lights signify 24 Hour flush on or off</li> </ul> <table border="1"> <thead> <tr> <th>Lights visible</th> <th>24 Hour Flush</th> </tr> </thead> <tbody> <tr> <td>2 Reds</td> <td>24 Hour Flush OFF</td> </tr> <tr> <td>3 Reds</td> <td>24 Hour Flush ON</td> </tr> </tbody> </table>	Lights visible	24 Hour Flush	2 Reds	24 Hour Flush OFF	3 Reds	24 Hour Flush ON
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## Step 7: Making Adjustments (Optional: Only required if factory settings are not preferred)

### 7.1 Sensor Adjustment:

#### For Waterclosets:

- Configure the sensing ranges by selecting the appropriate bowl length. Refer to Figure 6 for the different bowl length settings.
- The bowl length is the distance from the centre line of the valve to the lip of the bowl (see Figure 7).
- To ensure the correct distance is selected, stand or place a target at the end of the bowl. Starting with one illuminated red light, step through the distances until the blue light begins to flash. The flashing light confirms that the sensor is configured for that bowl length.
- **NOTE** the WC bowl length setting is **NOT** the sensing range. The advanced sensor activated flush system uses multiple detection distances and the bowl length to react appropriately to different usage patterns.
- If no further length adjustments are desired, press and hold down the override button for 5 seconds, until a solid blue light is present. Release the override button to advance to the next adjustment feature.
- A blue and red light will be present. This mode is currently inactive and is designed for any future options.
- To advance to the 24 Hour Flush, press and hold down override button for 5 seconds until the solid blue light is present.
- Release override button, you are now in 24 Hour Flush configuration.

#### For Urinals:

- Configure the sensing range by selecting the desired detection distance.
- Each press and release of the override button advances to the next length/distance. (See Figure 6 for a list of distances.)
- Start with one red visible light.
- Stand or place a target at the desired detection distance, the top blue light will be flashing if an object is detected.
- Press and release override button to step through the distance options until the blue light begins to flash, indicating that the target has been detected. The blinking blue light indicates that the sensor is configured for that length/distance.
- The sensor is now set at your desired configuration.
- If no further sensing range adjustments are desired, press and hold down the override button for 5 seconds, until a solid blue light is present.
- Release override button, you are now in 24 Hour Flush configuration.

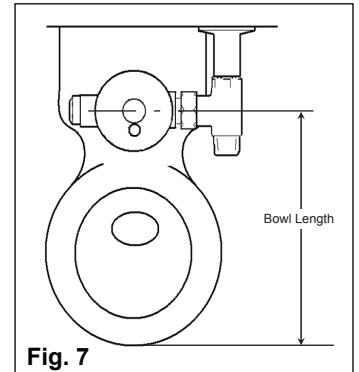


Fig. 7

### 7.2 24 Hour Flush Adjustment Mode:

- When the 2 red lights are present - 24 hour flush is OFF.
- When the 3 red lights are present - 24 hour flush is ON.
- Press manual override button to toggle between ON and OFF mode.

### Exiting Set-Up Mode:

- Can be accomplished in one of two ways;
  1. During the 24 Hour Adjustment feature, press and hold down override button for 5 seconds until solid blue light is present. Release override button.
  2. During all modes, valve will revert back to operation mode automatically if the override button is not pressed within 2 minutes.
- \* After the last adjustment has been completed and the flush valve has returned to operation mode, there is a window of approximately 30 minutes where additional changes can be made. If desired adjustments are not made within 30 minutes, the batteries or hardwire converter must be disconnected for 10 seconds and then re-connected to obtain another adjustment period. To make changes, begin at step #6 above.

## BATTERY STRENGTH INDICATOR & BATTERY REPLACEMENT

### TO CHECK BATTERY STRENGTH:

1. During Operation Mode - press and hold down the override button for approximately 10 seconds.
2. DO NOT RELEASE BUTTON WHEN SOLID BLUE LIGHT IS PRESENT - KEEP HOLDING DOWN.
3. After 10 seconds, the battery strength will be displayed via the red lights. The more lights that are present, the more life the batteries have. See Figure 8.
4. When you are satisfied with the strength indication, release the override button to return to Operation mode.

### BATTERY STRENGTH INDICATION



VERY HEALTHY	- 5 RED LIGHTS
HEALTHY	- 4 RED LIGHTS
AVERAGE	- 3 RED LIGHTS
LOW AVERAGE	- 2 RED LIGHTS
REPLACE BATTERIES	- 1 RED LIGHT

Fig. 8



Fig. 9

### TO REPLACE BATTERIES:

1. Remove the two cover screws and lift off CP metal cover, see Figure 9.
2. Hold case/cover securely with one hand and open hinged lid of the battery compartment in the back of the unit.
3. Pull the battery holder out and insert new set of four "AA" batteries into battery holder. (Use the +/- signs on the batteries and the +/- signs on the battery holder for correct positioning.) **Note:** Do not use a metal screwdriver to remove snap from battery holder.
4. Install the refreshed battery holder back into the electronic housing. (When the new batteries are installed and connected, an initial ascending and descending red light sequence will occur.)
5. Close the battery compartment lid ensuring wires are neatly tucked into compartment and are not pinched between case and cover. Test the manual override button. Blue light flashes once when override is activated.
6. Place the CP metal cover back onto flushometer and replace the two cover screws. DO NOT OVERTIGHTEN. Flushometer is now ready for use.

\* **NOTE: All previously adjusted settings will be retained when batteries are changed.**

1. **Start-Up:** When batteries are first inserted, there is an initial ascending and descending red light sequence that will occur.
2. **Override Button in Operating Mode:** Blue light flashes once when Override Button is activated.
3. **Low Battery Level Indicator:** One RED light flashes every 15 seconds, indicating approximately 5,000 flushes remain from when RED light first started flashing.

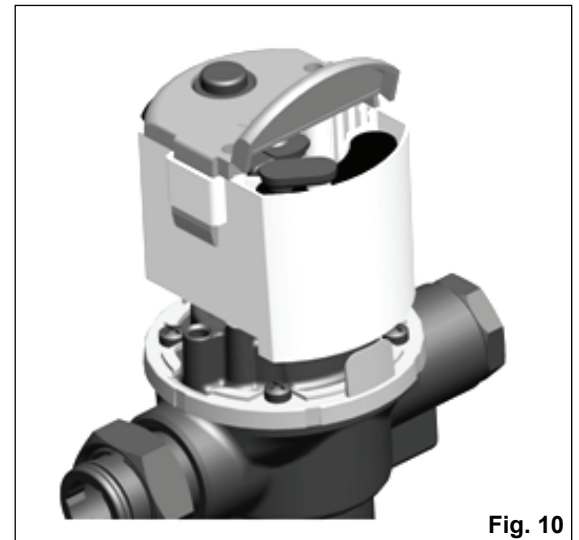


Fig. 10

# PROBLEM SOLVING & MAINTENANCE SUGGESTIONS:

## NO LIGHTS - NO POWER

Check that the 4 "AA" batteries are positioned properly in the battery holder. Use the +/- signs on the batteries and the +/- signs on the battery holder for correct positioning.  
If the batteries are positioned correctly, but there are still no lights, replace with 4 new "AA" Alkaline batteries (see Battery Replacement on page 6).

**NOTE:** DO NOT USE EXCESSIVE FORCE to close the inlet stop stem. We RECOMMEND that the flushometer be flushed while closing the inlet stop. The noise created by the water flow or the flow into the fixture will stop when the inlet water is shut off.

**NOTE:** Always use DELTA COMMERCIAL GENUINE PARTS to maintain the warranty.

## EXCESSIVE NOISE:

1. PARTIALLY close the inlet stop.
2. Pressures OVER 75 PSI may lead to an increase in NOISE, water could SPLASH out of the fixture more easily and the LIFE of any plumbing valve may be SHORTENED.
3. INSTALL a Pressure Reducing Valve set at a lower pressure if actual pressure is over 75 PSI. While the TECK Flushometer will operate up to 125 PSI, the preferred operating range is between 35 to 65 PSI.
4. On flushometers that have been installed for a number of years, check the Renewable Seat (062007A, item #12) for wear and replace if necessary.

## EXCESSIVE WATER FLOW RATE:

1. OPEN inlet stop ONE TURN and adjust Regulating Screw (061024A, item #8a) to the fixture requirement (except on -6, -38, -19, -05 and -48 models which are fixed volume).
2. Operation of flushometer with inlet stop BELOW ONE TURN OPEN may cause EXCESSIVE NOISE. The lowest open setting for the inlet stop may vary dependent on the installation.

## SHORTAGE OF WATER TO PROPERLY FLUSH BOWL:

1. OPEN inlet stop fully.
2. CHECK pipeline for size or obstruction, partially closed gate or other supply line valve, corroded or undersize water piping.
3. CHECK water pressure.
4. Water flow rate is determined by BOTH the water pipe size AND the water pressure available.
5. A water closet flush valve requires a minimum water supply of 1" (or larger), depending on a number of different factors including water pressure (PSI) available, pipe size and length of pipe run, number of fixtures per washroom and per building, fixture type, fixture usage factor, elevation of valve above the water main, etc. We strongly recommend that pipe size calculations be done to insure proper water supply sizes. A Piping Calculation Guide is available on request.

Flushometers do NOT provide a water supply; they are merely automatically timed self-closing valves. The inlet supply piping is the water reservoir that must supply sufficient water volume in a short period of time (4 to 10 seconds) to properly flush and clear the fixture.

## CONTINUOUS FLUSHING:

1. The Regulating Screw (061024A, item #8a) may be turned RIGHT (clockwise) TOO FAR. Adjust by slowly turning the Regulating Screw LEFT (counter-clockwise). (Except -6, -48, -38, -19 and -05 models which are fixed volume).
2. If flush is still continuous, remove 061024A Regulating Screw, CLEAN bypass slot in the Screw, REPLACE it in the valve and ADJUST slowly for proper flush (except -6, -48, -38, -19 and -05 models which are fixed volume).
3. Remove cast cap assembly and Diaphragm/Guide Assembly (061216A - WC or 061217A - UR, item #11), check for contaminants at renewable seat and diaphragm and check for debris in the cap for blockage. Also CHECK that the Diaphragm/Guide slides easily in the Renewable Seat.

## VALVE WILL NOT FLUSH:

1. When the valve has been taken apart for servicing and re-assembled and does NOT operate, check that the Cast Cap has been put on the body properly. The Regulating Screw (061024A, item #8a) should always be on the same side as the inlet stop.
2. When all lights operate as expected but valve will not flush, check that the solenoid makes a clicking sound. If no clicking sound is present, then replace with Electronic Repair Kit (WC - 061142A or UR - 061143A, item #19).
3. After a number of years, the valve will flush but shuts off immediately when activated. The Diaphragm (060079A, item #11c) is worn or split and needs replacing.

## SLIGHT WATER LEAK INTO FIXTURE:

1. EXAMINE the seating surface of the Diaphragm (060079A, item #11c) for imbedded sediment.

## CLEANING INSTRUCTIONS:

CLEAN the outside of the chrome plated flushometer with a damp cloth.

CAUTION: MOST Tub & Tile fixture cleaners contain ACIDS. DO NOT WIPE the cloth used to clean ceramic fixtures over the flushometer as it will remove the chrome plating and leave a discoloured surface.

For a copy of the "TECK Flushometer Maintenance Manual/Piping Calculation Guide", contact your local Delta Representative.

## Delta Commercial Faucet Limited Warranty

All parts of the Delta® HDF® and TECK® faucets are warranted to the original consumer purchaser to be free from defects in material, finish and workmanship for a period of five (5) years unless otherwise specifically stated in the catalogue and price book. This warranty is made to the original consumer purchaser and shall be effective from date of purchase as shown on purchaser's receipt.

Delta will, at its option, repair or replace, FREE OF CHARGE, during the warranty period, any part which proves defective in material or workmanship under normal installation, use and water and service conditions. If Delta Faucet concludes that the returned part was manufactured by Delta Faucet and is, in fact, defective, then Delta Faucet will honour the warranty stated herein. Replacement parts can be obtained from your local dealer or distributor listed in the telephone directory or by returning the part along with the purchaser's receipt to our factory, TRANSPORTATION CHARGES PREPAID, at the address listed. THIS WARRANTY IS THE ONLY EXPRESS WARRANTY MADE BY DELTA. ANY CLAIMS MADE UNDER THIS WARRANTY MUST BE MADE DURING THE FIVE YEAR PERIOD REFERRED TO ABOVE. ANY IMPLIED WARRANTIES, INCLUDING THE IMPLIED WARRANTY OF MERCHANTABILITY OF FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE DURATION OF THIS WARRANTY. LABOUR CHARGES AND/OR DAMAGE INCURRED IN INSTALLATION, REPAIR OR REPLACEMENT AS WELL AS INCIDENTAL AND CONSEQUENTIAL, SPECIAL, INDIRECT OR PUNITIVE DAMAGES CONNECTED THEREWITH ARE EXCLUDED AND WILL NOT BE PAID BY DELTA FAUCET.

Some states do not allow limitations on how long an implied warranty lasts, or the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

This warranty is for commercial products only from Delta Faucet Company and Delta Faucet Canada (a division of Masco Canada Limited) and is void for any damage to this faucet due to misuse, abuse, neglect, accident, improper installation, any use in violation of instructions furnished by Delta Faucet or any use of replacement parts other than genuine Delta parts.

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## Garantie Limitée Delta Commercial

Toutes les pièces des robinets de marque Delta® HDF® et TECK® sont garanties contre tout défaut de matériel, de finition et de main-d'oeuvre pour une période de cinq (5) ans, sauf indication contraire stipulée dans le catalogue et la liste des prix. Cette garantie est offerte à l'acheteur original et entre en vigueur à compter de la date d'achat indiquée sur la preuve d'achat.

Delta procédera, à son entière discrétion, à la réparation ou au remplacement, SANS FRAIS, durant la période de garantie, de toute pièce qui présente un défaut de matériel ou de main-d'oeuvre dans des conditions d'installation, d'usure, d'eau et de service normales. Si Delta Faucet détermine que la pièce retournée a été fabriquée par Delta Faucet et qu'en effet, cette pièce défectueuse, Delta Faucet respectera alors la garantie mentionnée ci-dessous. Les pièces de rechange peuvent être obtenues chez votre marchand local ou le distributeur inscrit dans votre annuaire téléphonique, ou en retournant la pièce ainsi que la preuve d'achat à notre usine, FRAIS DE TRANSPORT PRÉPAYÉS, à l'adresse indiquée. CETTE GARANTIE EST LA SEULE GARANTIE EXPRESSE FAITE PAR DELTA.

TOUTE RÉCLAMATION FAITE EN VERTU DE CETTE GARANTIE DOIT ÊTRE PRÉSENTÉE DURANT LA PÉRIODE DE CINQ ANS MENTIONNÉE CI-DESSUS. TOUTE GARANTIE IMPLICITE, Y COMPRIS LA GARANTIE IMPLICITE DE VALEUR COMMERCIALE D'ADÉQUATION POUR UN USAGE PARTICULIER, EST LIMITÉE DANS LE TEMPS À LA DURÉE DE LA PRÉSENTE GARANTIE.

LES FRAIS DE MAIN-D'OEUVRE ET/OU LES DOMMAGES ENCOURUS DURANT L'INSTALLATION, LA RÉPARATION OU LE REMPLACEMENT AINSI QUE LES DOMMAGES ACCIDENTELS ET CONSÉCUTIFS, SPÉCIAUX, INDIRECTS OU PUNITIFS QUI SONT RELIÉS SONT EXCLUS ET NE SERONT PAS PAYÉS PAR DELTA FAUCET.

Certains états ne permettent pas la limitation de la durée de la garantie implicite, ou l'exclusion ou la limitation des dommages accidentels ou consécutifs, et par conséquent, les limitations ou les exclusions stipulées ci-dessus peuvent ne pas s'appliquer dans votre cas. Cette garantie vous accorde certains droits reconnus par la loi et vous pouvez aussi avoir d'autres droits qui varient d'un état à l'autre.

Cette garantie s'applique seulement aux produits commerciaux de Delta Faucet Company et Delta Faucet Canada (une filiale de Masco Canada Limited) et est nulle de plein droit pour tout dommage causé à ce robinet en raison d'une mauvaise utilisation, d'abus, de négligence, d'accident, de mauvaise installation, pour tout usage en contravention des directives fournies par Delta Faucet ou pour tout usage de pièces de rechange autres que des pièces originales Delta.

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## Garantía Limitada de las Llaves de Agua Comerciales Delta

Todas las piezas de las llaves de agua (grifos) Delta® HDF®, TECK® están garantizadas al comprador consumidor original de estar libres de defectos de material, acabado y fabricación por un periodo de cinco (5) años a menos que sea establecido específicamente de otra manera en el catálogo o libro de precios. Esta garantía se le otorga al comprador consumidor original y será efectiva desde la fecha de compra indicada en el recibo del comprador.

Delta, a su opción, reparará o reemplazará, GRATUITAMENTE, durante el periodo de garantía, cualquier pieza que resulte defectuosa en material o fabricación bajo instalación, uso, agua y condiciones de servicio normales. Si Delta Faucet concluye que la pieza devuelta fue fabricada por Delta Faucet y es, de hecho, defectuosa, entonces Delta Faucet honrará la garantía establecida en este documento.

Las piezas de reemplazo se pueden obtener de su tienda o distribuidor local listado en la guía telefónica o devolviendo la pieza junto con el recibo de compra a nuestra fábrica, CON LOS GASTOS DE ENVÍO PRE-PAGADOS, a la dirección indicada. ESTA GARANTÍA ES LA ÚNICA GARANTÍA EXPRESA HECHA POR DELTA. CUALQUIER RECLAMO HECHO BAJO ESTA GARANTÍA DEBE SER HECHO DURANTE EL PERÍODO DE CINCO AÑOS ARRIBA MENCIONADO. CUALQUIER GARANTÍA IMPLÍCITA, INCLUYENDO LA GARANTÍA IMPLÍCITA DE COMERCIABILIDAD DE EMPLEO PARA UN PROPÓSITO PARTICULAR, TIENE UNA DURACIÓN LIMITADA A LA DURACIÓN DE ESTA GARANTÍA. LOS CARGOS DE MANO DE OBRA Y/O DAÑO INCURRIDO DURANTE LA INSTALACIÓN, REPARACIÓN O REEMPLAZO, COMO TAMBIÉN DAÑOS INCIDENTALES O RESULTANTES, ESPECIALES, INDIRECTOS O PUNITIVOS RELACIONADOS CON LO MENCIONADO, QUEDAN EXCLUIDOS Y NO SERÁN CUBIERTOS POR DELTA FAUCET.

Algunos estados no permiten limitaciones de la duración de una garantía implícita, o la exclusión o limitación de daños incidentales o consecuentes, de manera que las limitaciones o exclusiones arriba mencionadas puedan no aplicarse en su caso. Esta garantía le otorga derechos legales específicos, y usted también puede tener otros derechos que varían de estado a estado.

Esta garantía es solo para productos comerciales de Delta Faucet Company y Delta Faucet Canada (una división de Masco Canada Limited), y queda anulada por cualquier daño ocasionado a esta llave de agua resultante del mal uso, abuso, descuido, accidente, instalación incorrecta, cualquier uso en violación de las instrucciones proporcionadas por Delta Faucet o el uso de cualquier parte de repuesto que no sea una parte genuina de Delta.

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Delta Faucet Canada, a division of Masco Canada Limited  
350 South Edgeware Road, St. Thomas, Ontario, N5P 4L1  
1-800-567-3300 (English) 1-800-265-9245 (French)

Delta Faucet Company  
Box 40980, 55 East 111th St., Indianapolis, IN, U.S.A. 46280  
(317) 848-1812

For further technical assistance, call Delta Commercial Technical Service at 1-800-387-8277.

Pour obtenir de l'assistance technique, appelez le Service Technique de Delta Commercial au 1-800-387-8277.

Por la asistencia técnica adicional, llame al servicio técnico de Delta Comercial al 1-800-387-8277.