

# **HYDROTEK INTERNATIONAL, INC.**

5055 Forsyth Commerce Rd., Ste. 124, Orlando, FL 32807

Phone (800)922-9883 / Fax (866)670-5580

[www.hydrotekintl.com](http://www.hydrotekintl.com)

## **OPERATION & MAINTENANCE MANUAL**

**HYDROTEK MODEL #H-2603C FAUCET**

TECHNICAL SUPPORT TEAM:

Michael Hu & Armin Kharazi

Phone (800) 922-9883 ext. 105

Email: [mike@hydrotekintl.com](mailto:mike@hydrotekintl.com) or [armin@hydrotekintl.com](mailto:armin@hydrotekintl.com)



**Solid Brass AC or Battery Powered**

# Automatic Faucet

2603C Series

ISO 9002 Certified



## High Technology For No Touch Operation

- ADA Compliant. Meets all barrier free codes
- Conserves water and energy
- Easily installed in new or retrofit applications
- Competitively priced for today's commercial market
- Promotes cleanliness & hygiene
- Proven Hydrotek craftsmanship and reliability

2603C Series

U.S. Patent: 192530B1

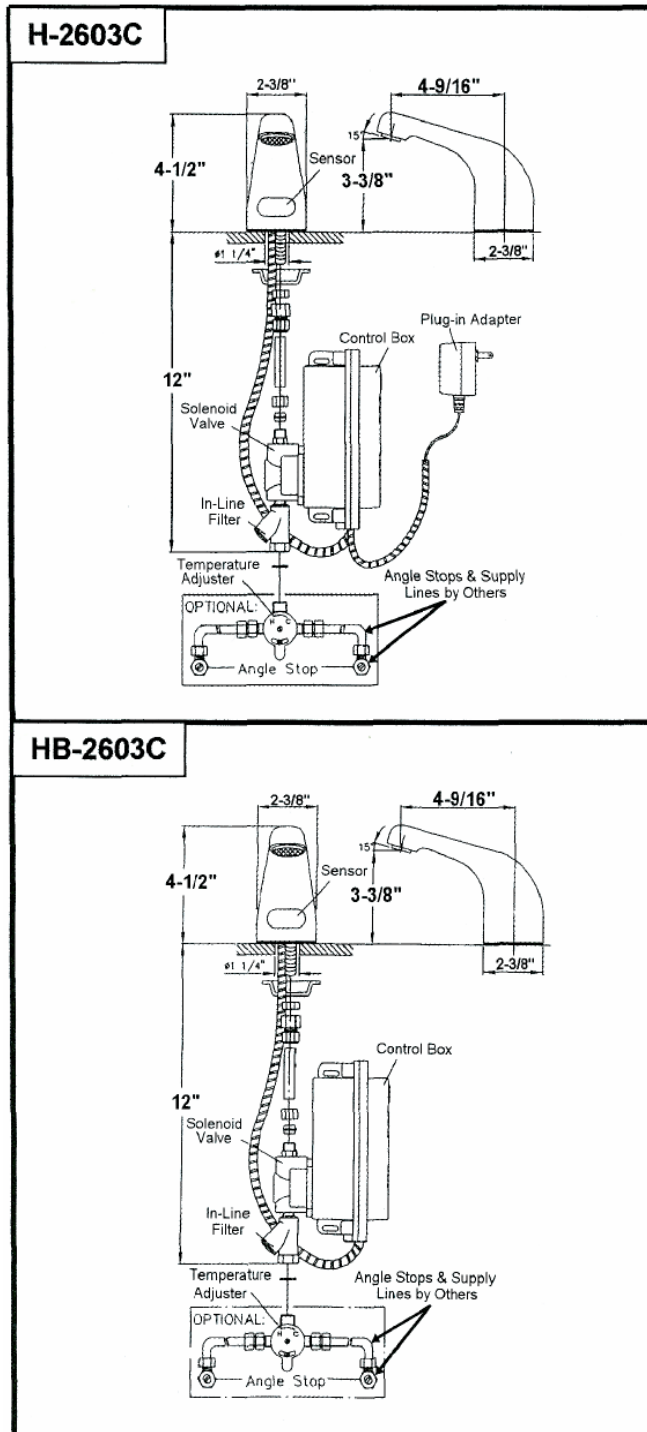
## Features:

- **ACCU-SENSE** adjustable sensor eyes.
- Chrome plated, solid brass construction.
- Wall mountable, waterproof control box with armored, vandal resistant control and power cables.
- Preset/adjustable sensor range 6" - 30" for various installation requirements.
- Standard automatic time-out feature. Preset at 30 but adjustable to 0, 15 or 60 seconds. Prevents accidental sink overflow.
- Shut-off delay is adjustable from 1 second (preset) to 8 seconds.
- Solid brass body with single hole deck mounting. Optional 4" or 8" Cover Plate for 3 point anchoring.
- Includes in-line filter with clean-out trap to reduce maintenance costs.
- All parts are field-replaceable to ensure quick and easy repair.
- Same faucet, field switchable to/from AC Powered or Battery Powered.
- Slow closing, piston-operated solenoid valve provides reliable and smooth operation without water hammer.
- Superior VSI silicone elastomer piston seals are unaffected by chlorine, chloramines or ammonia.
- Standard 1.5 GPM Laminar Flow Control.
- Control module automatically performs a unique self-check of all electrical components.

# Hydrotek Non-Mixing Automatic Faucet

Model H-2603C (AC) or HB-2603C (Battery)

Meets ANSI/ASME A112.18.1M-1989



## Operation:

1. A continuous, invisible beam is emitted from the sensor.
2. The faucet is activated by placing hands under the spout within the effective range of the beam. Water starts to flow immediately for as long as the user's hands remain in the sensor range.
3. When hands are removed, the water flow stops. The sensor will automatically reset and be ready for the next user.
4. In battery powered mode, flashing red light will indicate low battery condition.

## Specifications:

Faucet Construction

- Solid Brass, Chrome Plated

Control Circuit

- Solid state, AC or Battery, Switchable

Auto. Time-out:

- Preset and Adjustable for 0, 15, 30, or 60 seconds

Sensor Range:

- Preset and Adjustable

Shut-Off Delay:

- Preset and Adjustable from 1 - 8 seconds

Control Cable:

- Armored, Vandal Resistant

Solenoid Valve:

- 6V DC, Normally closed  
- Wattage: 0.4W (idle), 5W (in use)  
- Operating Pressure: 0.3 Bar to 10 Bar (5 psi to 125 psi)

Flow Control:

- 1.5 GPM, Vandal Resistant

## AC Mode

Power Adapter

Standard plug-in:

- Input AC 120V 60 Hz or 220 V

(UL/CSA)

- Output DC 12V, 0.8A/Class 2

Power Cable:

- Armored, Vandal Resistant

Optional Multi-Unit Adapter

- Serves up to 8 Faucets

(UL/CSA)

- Input AC 120V, Output DC 12V, 3A

## Battery Mode

Battery Powered Models:

- (4) AA Alkaline Batteries

Battery Service Life:

- 400,000 on/off cycles, up to 4 years

## Standard Package Includes:

### H-2603C (AC)

- X (1) Faucet with Electronic Sensor
- X (1) Control Box w/6V DC Solenoid
- X (1) 12V DC Plug-in Power Adapter
- X (1) In-Line Filter with Clean-Out Trap
- X (1) Copper Supply Tube, 3/8"
- X (1) Mounting Hardware
- X (1) 1.5 GPM V.R. Laminar Flow Control
- X (4) AA Alkaline Batteries
- X (1) Battery Holder

### HB-2603C (Bat)

- X
- X
- X
- X
- X
- X
- X
- X
- X

## Dimensions:

Base Width (Outside Measurement)	2-3/8"
Base Depth	2-3/8"
Faucet Height (Aerator to Base)	3-3/8"
Faucet Height Overall	4-1/2"
Depth (Center of Aerator to Center of Faucet Base)	4-9/16"
Mounting Bolt Length	2-1/4"
Mounting Bolt Pattern	Single-Hole Mount

## Optional Variations and Accessories:

- 0.5 Rosette & 1.6 GPM VR Soft-Flow Aerator 2.0 & 2.5 GPM Laminar Flow
- 4" or 8" Centerset Cover Plate
- HC-010 Multi-Unit Voltage Adapter (AC Powered Only)
- HC-001 Mixing/Check Valve (Mechanical)
- HBL-04 Thermostatic Mixing Valve with Checks

## HYDROTEK INTERNATIONAL, INC.

5055 Forsyth Commerce Rd., Ste. 124

Orlando, FL 32807

1.800.922.9883 (Phone)

1.866.670.5580 (Fax)

www.hydrotekintl.com

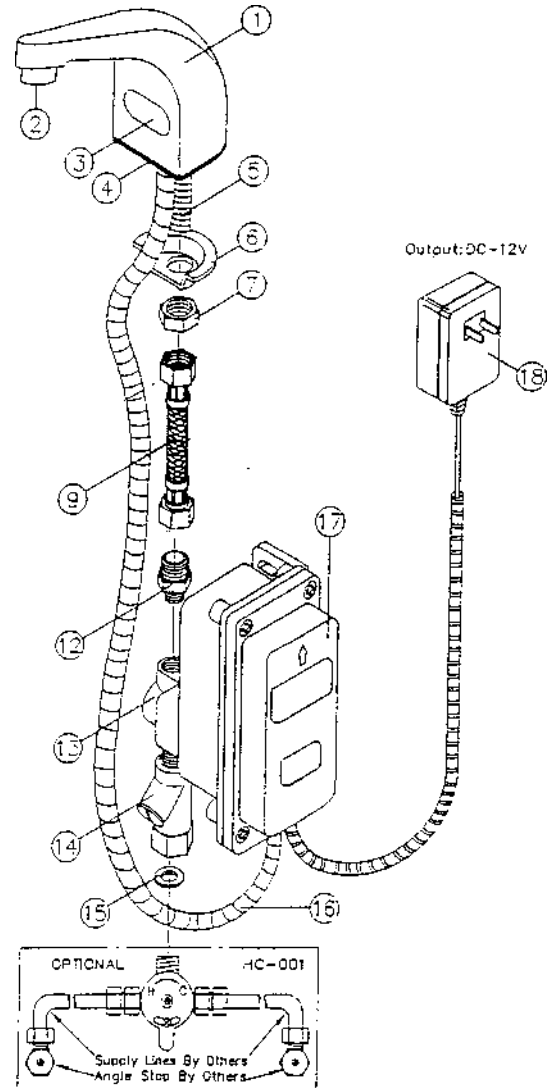


# INSTALLATION INSTRUCTIONS

## Hydrotek Non-Mixing Automatic Faucet (AC Powered)

Model H-2603C

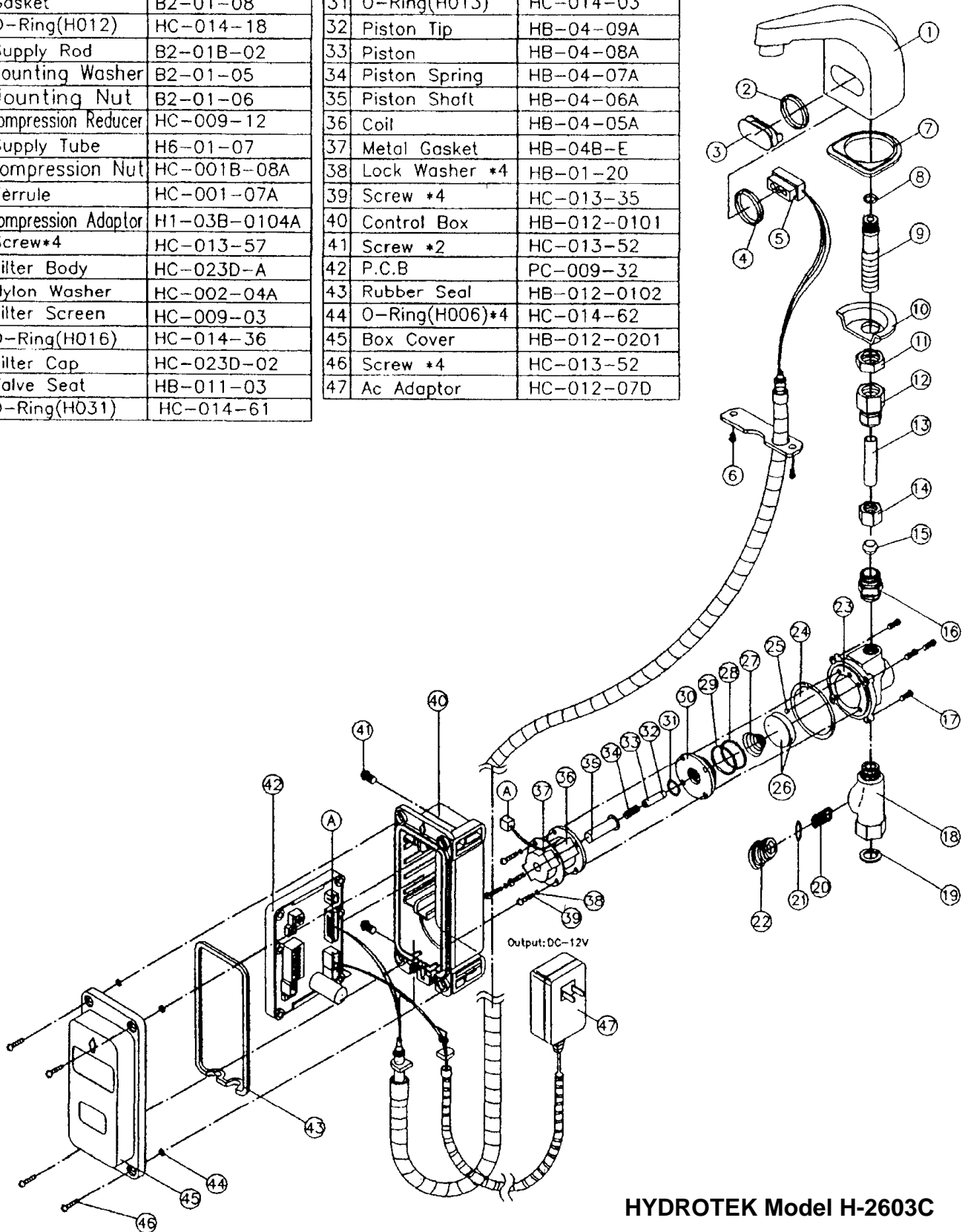
1. Prior to installing this faucet, thoroughly flush all water lines and replace stop washers, if necessary.
2. To insure proper operation, "DRY TEST" the faucet by plugging (16) Sensor eye cable connector into the matching connector on the PC board inside the (17) Control box (pull out the PC board for easy access). Plug (18) Power adapter output connector into the corresponding connector on the PC board. Plug Power adapter into 120 V AC outlet. Place your hand in front of faucet sensor eye. If there is a clicking sound, the faucet is activating properly. If not, call the factory.
3. After successful "DRY TEST," unplug Sensor eye cable and Power adapter cable from PC board.
4. Set faucet on sink. Apply plumbers putty to the bottom of the gasket. Secure faucet to sink using (6) Washer and (7) Mounting nut.
5. Connect electrical Sensor eye cable and Power adapter cable as described in STEP #2, making sure that the Sensor eye and Power adapter cables are seated in the Control box housing properly.
6. Attach (13) Solenoid valve outlet to (9) Supply tube and (5) Supply rod, using (12) Compression fitting. Insert (15) Nylon washer into swivel nut located on (14) In-line filter inlet (**for pre-tempered or cold water only**). Using a union fitting (not supplied), connect supply line (not supplied) from a supply stop to (14) In-line filter inlet swivel nut (**for tempered water**).  
>>Attach optional Hydrotek HC-001 Mixing/Check Valve or HC-003 Mixing "T" w/ checks to In-line filter inlet. Connect supply lines (not supplied) from hot and cold supply stops to Mixing valve or Mixing "T" inlets. **Use Teflon Tape, not Pipe Dope for all connections.**
7. Turn on water and check for leaks. Plug (18) Power adapter into 120 V AC outlet. Reinstall Control box cover and tighten screws to ensure that the box is water-resistant. Place hands in front of Sensor eye to activate the water flow. Remove hands and water should stop. If not, refer to the troubleshooting guide.
8. Periodically clean the filter element located inside (14) In-line filter.
9. For minor adjustments, refer to the instructions located inside Control box cover.



Part Number Descriptions	
1. Faucet body	12. Compression fitting
2. Laminar flow control	13. Solenoid valve
3. LED sensor	14. In-line filter
4. Gasket	15. Nylon washer
5. Supply rod	16. Sensor eye cable
6. Washer	17. Control box
7. Mounting nut	18. Power adapter
9. Supply tube	

**HYDROTEK INTERNATIONAL, INC.**  
 5055 Forsyth Commerce Rd. , Ste. 124  
 Orlando, FL 32807  
 1.800.922.9883 (Phone)  
 1.866.670.5580 (Fax)  
 www.hydrotekintl.com

NO	DESCRIPTION	PART NO.	NO	DESCRIPTION	PART NO.
1	Body	B2-01D-01D	25	Rubber Plug	HB-02-06
2	O-Ring(H118)	HC-014-16	26	Control Disc+Rubber	HC-005-03E
3	Sensor Cover	PC-004-31A	27	Control Disc Spring	HC-003-03
4	O-Ring(H021)	HC-014-33	28	O-Ring(H022)	HC-014-30
5	Sensor Eye & Cable	PC-006-27	29	O-Ring(H023)	HC-014-11
6	Screw*2	HC-013-27	30	Control Valve	HB-05-04
7	Gasket	B2-01-08	31	O-Ring(H013)	HC-014-03
8	O-Ring(H012)	HC-014-18	32	Piston Tip	HB-04-09A
9	Supply Rod	B2-01B-02	33	Piston	HB-04-08A
10	Mounting Washer	B2-01-05	34	Piston Spring	HB-04-07A
11	Mounting Nut	B2-01-06	35	Piston Shaft	HB-04-06A
12	Compression Reducer	HC-009-12	36	Coil	HB-04-05A
13	Supply Tube	H6-01-07	37	Metal Gasket	HB-04B-E
14	Compression Nut	HC-001B-08A	38	Lock Washer *4	HB-01-20
15	Ferrule	HC-001-07A	39	Screw *4	HC-013-35
16	Compression Adaptor	H1-03B-0104A	40	Control Box	HB-012-0101
17	Screw*4	HC-013-57	41	Screw *2	HC-013-52
18	Filter Body	HC-023D-A	42	P.C.B	PC-009-32
19	Nylon Washer	HC-002-04A	43	Rubber Seal	HB-012-0102
20	Filter Screen	HC-009-03	44	O-Ring(H006)*4	HC-014-62
21	O-Ring(H016)	HC-014-36	45	Box Cover	HB-012-0201
22	Filter Cap	HC-023D-02	46	Screw *4	HC-013-52
23	Valve Seat	HB-011-03	47	Ac Adaptor	HC-012-07D
24	O-Ring(H031)	HC-014-61			



**HYDROTEK Model H-2603C**

# HYDROTEK AUTOMATIC FAUCET TROUBLESHOOTING GUIDE

(AC Powered)

Normal Operation: When power is connected or RESET button is pushed, the lights on the Printed Circuit Board (PCB) will blink in the following sequence: red – red (with solenoid clicking) – green – red – red. Green light will remain lit. When the user's hands are placed under the spout, the red indicator light on the faucet and PC board will illuminate and water will begin to flow. Water flow will stop when hands are removed. Always push the RESET button BEFORE attempting to diagnose any problem and AFTER taking corrective action.

<u>PROBLEM</u>	<u>POSSIBLE CAUSE</u>	<u>TO DIAGNOSE</u>	<u>REMEDY</u>
<b>Faucet will not turn on:</b>	Water not turned on.	Check water supply.	Turn water on.
	Power supply failure.	Check power adapter voltage, polarity, wires, and connections.	Replace power adapter and reconnect. Push RESET button.
	Sensor distance is too short.	Use hand/palm to find focal point of sensor beam.	To adjust sensor distance out, turn adjustment clockwise. Push RESET button.
	Electronic PCB is defective.	With power adapter plugged in, push RESET button. No light, no action.	Replace PCB.
	Sensor eyes are defective.	With power adapter plugged in, place hands in front of sensor eyes. Indicator light on faucet does not blink.	Replace sensor eyes and cable.
	Solenoid valve is clogged.	Solenoid is clicking but no water is coming out.	Clean solenoid and blow free all by-pass holes. Replace control disc. Push RESET button.
	In-line filter is clogged.	Open clean-out trap and check filter screen.	Clean or replace filter screen.
	Solenoid coil is defective.	With power adapter plugged in, push the RESET button. Light blinks but no solenoid clicking.	Replace solenoid coil. Push RESET button.

**Faucet will not shut off:** Solenoid valve is normally closed. Turn off water and activate faucet. If there is a clicking sound, the solenoid valve is dirty. If there is no clicking sound, then replace solenoid valve. Other factors could be problematic (Sensor distance adjustment could be too long or electronic PCB could be defective). If the faucet is dripping, the solenoid valve needs a rebuild kit. Follow the same procedures as above for remedies.

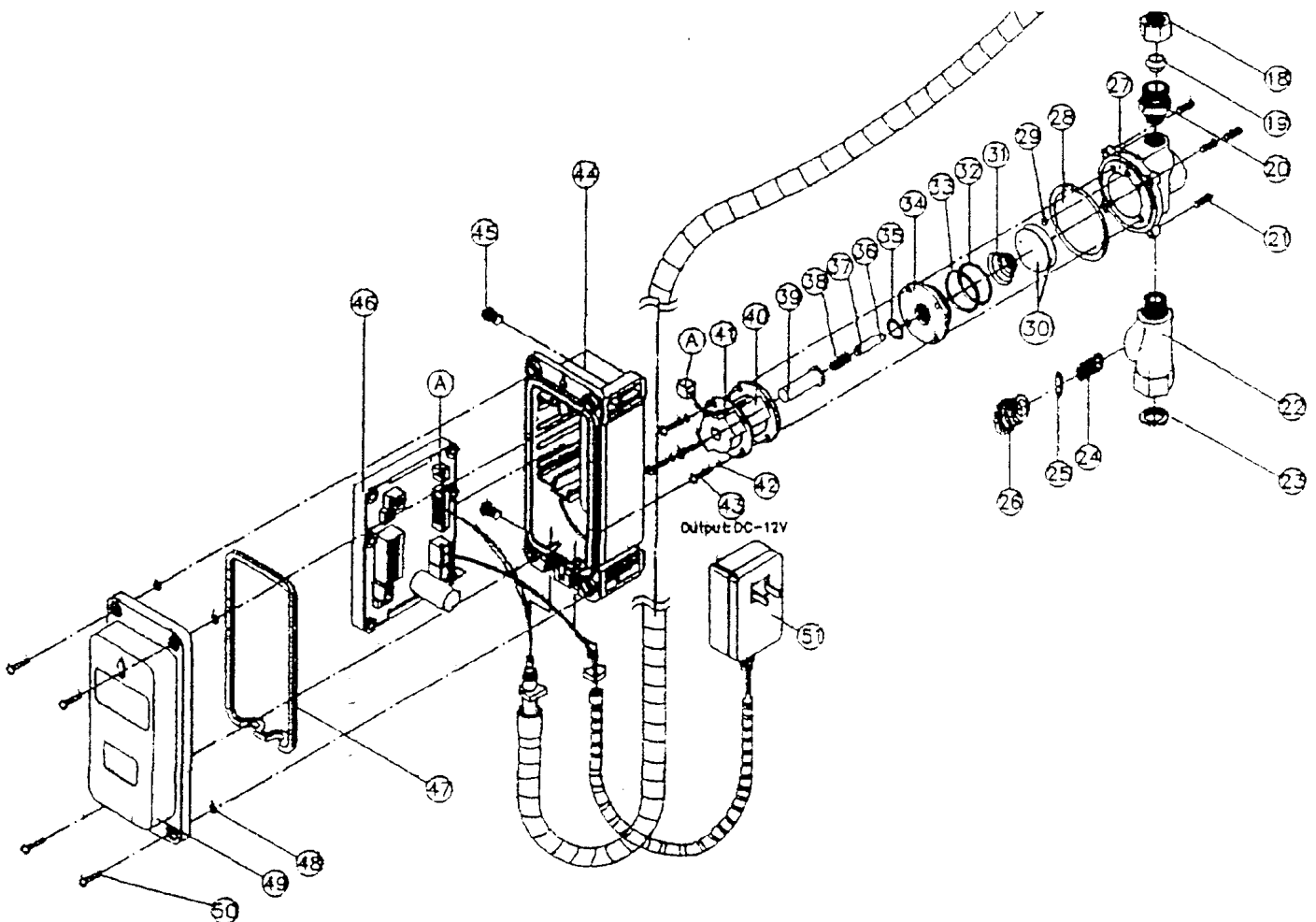
**IMPORTANT:** Periodic maintenance is required for smooth and trouble-free operation of this faucet.

*For more detailed remedy procedures, please call Hydrotek Tech Support at (800)922-9883 ext. 105*

## SOLENOID VALVE CLEANING FOR HYDROTEK 1000C, 2603C, 6000C, 6700C FAUCETS (AC AND BATTERY POWERED)

1. Turn off water supply at stop valve.
2. Remove control box (if possible) to gain access to the solenoid valve.
3. Remove four Screws (#21) and separate the valve from the box.
4. Remove four Coil Screws (#43) and separate Coil (#41) from Valve Seat (#27).
5. When separating Plastic Control Valve (#34) be careful to retain the small Orange Rubber Plug (#29). Re-install this on Brass Valve Seat (#27).
6. Clean or replace Control Disc (#30), Disc Spring (#31), Piston & Tip (#36 and 37), Piston Spring (#38), and check Sleeve (#39) for corrosion.
7. Re-install all parts in same order as the diagram below.
8. Re-install solenoid on the control box and re-mount box in water line.
9. Check and clean Filter Screen (#24) in Filter Body (#22).
10. Reset P.C. Board and make sure solenoid clicks open and thumps closed.
11. Turn on water and check for leaks and proper operation.

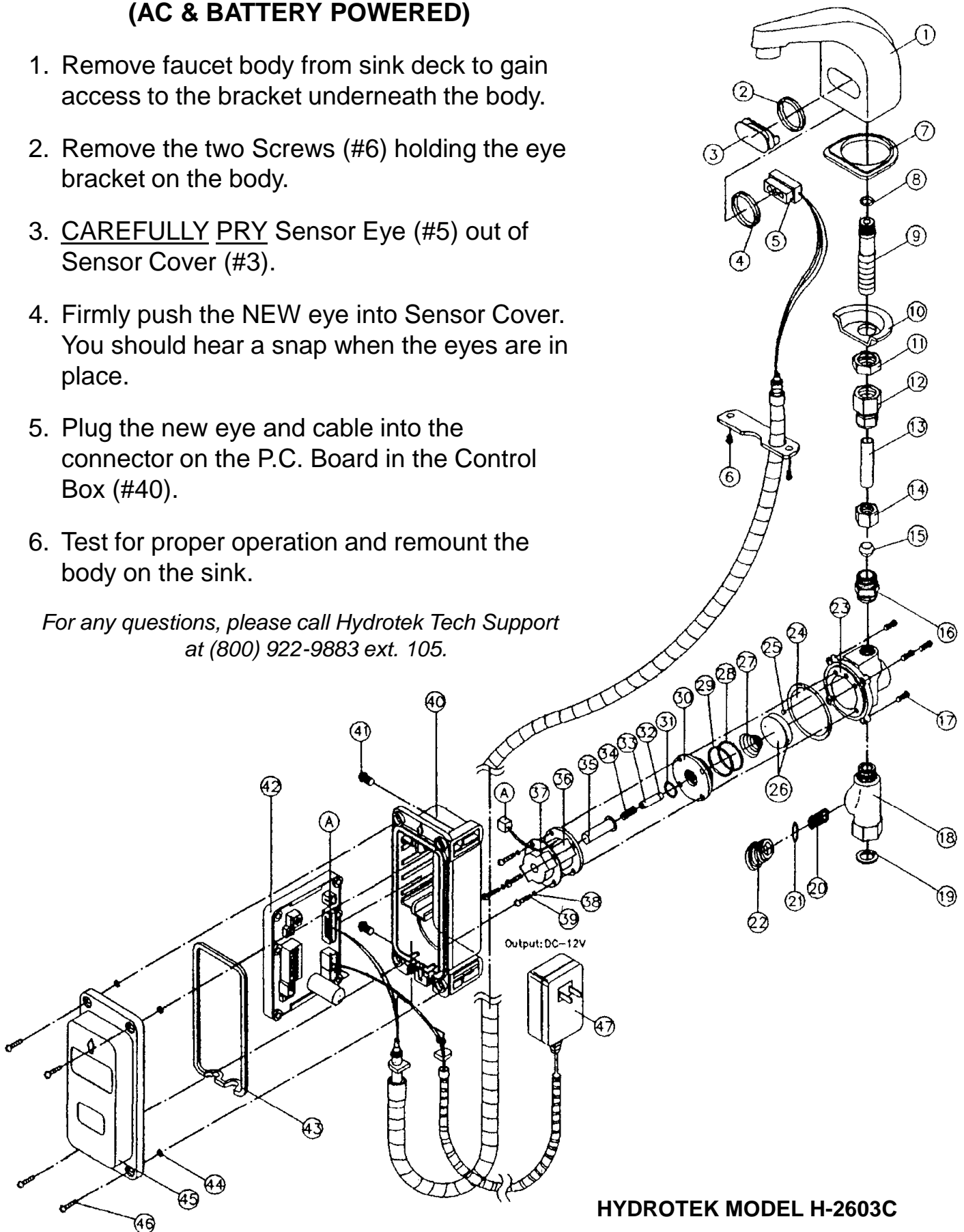
*(For further questions, please call Hydrotek Tech Support at 1-800-922-9883 ext. 105)*



## SENSOR EYE AND CABLE REPLACEMENT FOR 2603C SERIES FAUCETS (AC & BATTERY POWERED)

1. Remove faucet body from sink deck to gain access to the bracket underneath the body.
2. Remove the two Screws (#6) holding the eye bracket on the body.
3. CAREFULLY PRY Sensor Eye (#5) out of Sensor Cover (#3).
4. Firmly push the NEW eye into Sensor Cover. You should hear a snap when the eyes are in place.
5. Plug the new eye and cable into the connector on the P.C. Board in the Control Box (#40).
6. Test for proper operation and remount the body on the sink.

*For any questions, please call Hydrotek Tech Support  
at (800) 922-9883 ext. 105.*



**HYDROTEK MODEL H-2603C**

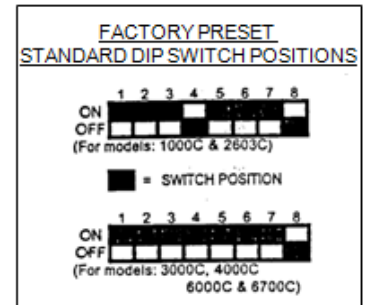


# HYDROTEK AUTOMATIC FAUCET: DIP SWITCHES

**\*NOTE: ALWAYS PUSH THE RESET BUTTON AFTER ANY ADJUSTMENTS\***

A. Shut Off Time Delay (After hands are removed):

Sw 1	Sw 2	Sw 3	Time Delay
ON	ON	ON	1-Sec
ON	ON	OFF	2-Sec
ON	OFF	ON	3-Sec
ON	OFF	OFF	4-Sec
OFF	ON	ON	5-Sec
OFF	ON	OFF	6-Sec
OFF	OFF	ON	7-Sec
OFF	OFF	OFF	8-Sec



B. Automatic Time Off (Maximum run time after activation):

Sw 4	Sw 5	Time Off
ON	ON	0 Sec
ON	OFF	15 Sec
OFF	ON	30 Sec
OFF	OFF	60 Sec

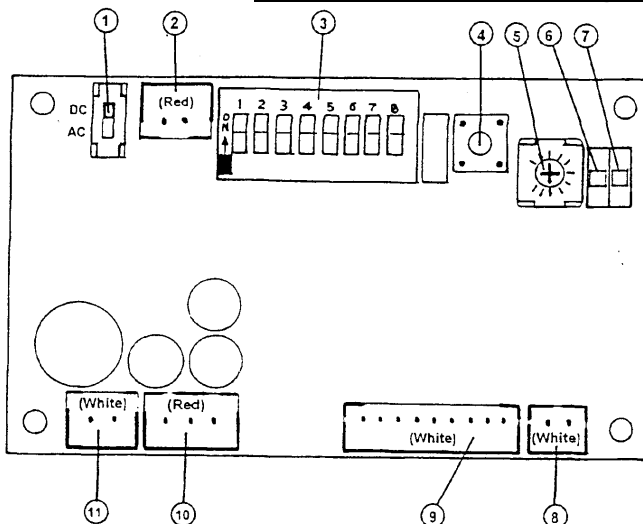
C. Sensor Distance: To increase distance, turn SDA screw clockwise.  
To decrease distance, turn screw counter-clockwise.

Sw 6	Mode	Distance
ON	Std	4" – 12"
OFF	Enhanced	10" – 24"

D. Faucet Switch:

Sw 7	Sw 8	Product
ON	OFF	Auto Faucet

## **Control Module Diagram for C-Series Faucets**



1. AC/DC Switch
2. Battery Holder Pin Connector (Red)
3. Dip Switches
4. Reset Button
5. Sensor Distance Adjustment (SDA)
6. Indicator LED (Green)
7. Indicator LED (Red)
8. Solenoid Pin Connector (White)
9. Sensor Eye Control Cable (White)
10. AC Power Adapter Pin Connector (Red)
11. Battery Holder Pin Connector (White)

Hydrotek International, Inc.  
 Phone: 800-922-9883 / Fax: 866-670-5580

**Suggested Backup Parts for 2603C Series Faucets**  
 AC or Battery Powered Lavatory Faucets

<b>Part Number From Drawing</b>	<b>Hydrotek Item Code</b>	<b>Description</b>
47	HCC-008B	12V AC Adapter (AC Model)
18-22	HC-009B	Filter without Check
5	HCC-030	Sensor Eye & Cable
42 42	HCC-011A HCC-011B	Module – PCB for AC Model Module – PCB for Battery Model
10	HC-015C	Mounting Kit
20	HC-020	Filter Screen
26,27,31,32,33,34	HCB-017A	Valve Repair Kit
36	HCC-019	Solenoid Coil
26	HCB-005A	Control Disc Only
19	HC-040	Nylon Washer (Filter Inlet)
17-47	HCC-003A	Complete Control Box Assembly

*(Please visit [www.hydrotekintl.com](http://www.hydrotekintl.com) to view our most current Products Pricing Sheet)*