# **HYDROTEK INTERNATIONAL, INC.**

5055 Forsyth Commerce Rd., Ste. 124, Orlando, FL 32807 Phone (800)922-9883 / Fax (866)670-5580 www.hydrotekintl.com

### **OPERATION & MAINTENANCE MANUAL**

HYDROTEK MODEL #H-6000C FAUCET

TECHNICAL SUPPORT TEAM: Michael Hu & Armin Kharazi Phone (800) 922-9883 ext. 105

Email: mike@hydrotekintl.com or armin@hydrotekintl.com



### Solid Brass AC or Battery Powered

# **Automatic Faucet**

6000C 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



6000C Series
U.S. Patent:
6192530B1

### **Features:**

- ACCU-SENSE adjustable sensor eyes.
- Chrome plated, solid brass construction.
- Wall mountable, waterproof control boxwith armored, vandal resistant control and power cables.
- Preset/adjustable sensor range 6" 30" for various installation requirements.
- Standard automatic time-out feature. Preset at 0 but adjustable to 15, 30, or 60 seconds.
   Prevents accidental sink overflow.
- Shut-off delay is adjustable from 1 second (preset) to 8 seconds.
- Standard single-hole deck mount. Adaptable to optional 4" or 8" cover plates.
- Includes in-line filters with clean-out trap to reduce maintenance costs.

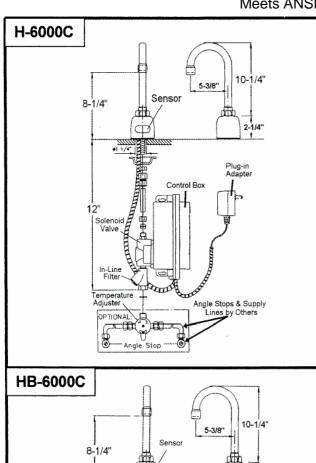
- Standard 6" gooseneck spout and 2.0 GPM laminar flow control.
- All parts are field replaceable to ensure quick and easy repair.
- Same faucet, field switchable to/from AC Powered or Battery Powered.
- Slow closing, piston-operated solenoid valve provides reliable and smooth operation without water hammer.
- Superior VSI silicone elastomer piston seals are unaffected by chlorine, chloromines or ammonia.
- Control module automatically performs a unique self-check of all electrical components.
- No-touch system enhances hygiene in medical institutional, food service industries, etc.

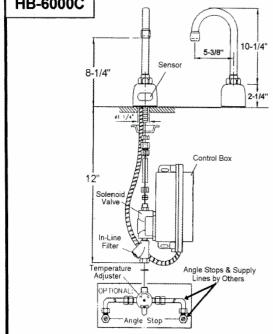
## **Hydrotek Automatic Gooseneck Faucet**

#### **Non-Mixing / Deck Mounted**

Model H-6000C (AC) or HB-6000C (Battery)

Meets ANSI/ASME A112.18.1M-1989





#### HYDROTEK INTERNATIONAL, INC.

5055 Forsyth Commerce Rd., Ste. 124

Orlando, FL 32807

1.800.922.9883 (Phone) 1.866.670.5580 (Fax)

1.866.670.5580 (Fax) www.hydrotekintl.com



#### 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:

Control Circuit

- Solid Brass, Chrome Plated
- 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: 5psi to 125psi

Flow Control: - 2.0 GPM, Laminar

#### AC Mode

Power Adapter

Standard plug-in:

(UL/CSA)

Power Cable:

Operational Multi-Unit Adapter

- Input AC 1 20V 60 Hz or 220 V

Output DC 12V, 0.8A/Class 2

- Armored, Vandal Resistant

- Serves up to 8 Faucets

(UL/CSA)

**Battery Mode**Battery Powered Models: - (4) AA Alkaline Batteries

Battery Service Life: - 400,000 on/off cycles, up to 4 yrs

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

Standard Package Includes:

Starius	alu Fackage Iliciuues.	
H-600	OC (AC)	HB-6000C (Bat)
X	(1) Faucet with Electronic Sensor	X
X	(1) Control Box w/6V DC Solenoid	X
Χ	(1) 12V DC Plug-in Power Adapter	
X	(1) In-Line Filter with Clean-Out Trap	X
X	(1) Copper Supply Tube, 3/8"	X
X	(1) Mounting Hardware	X
X	(1) 6" Gooseneck Spout	X
X	(1) 2.0 GPM V.R. Laminar Flow Control	X
	(4) AA Alkaline Batteries	X
	(1) Battery Holder	X
Dimer	nsions:	
Base \	Width (Outside Measurement)	2-1/4"
Base [	Depth	2-1/4"
Fauce	t Height (Aerator to Base)	8-1/4"

Base Width (Outside Measurement)

2-1/4"

Base Depth

Faucet Height (Aerator to Base)

Faucet Height Overall

Depth (Center of Aerator to Center of Faucet Base)

Mounting Bolt Length

Mounting Bolt Pattern

Single-Hole Mount

#### **Optional Variations and Accessories:**

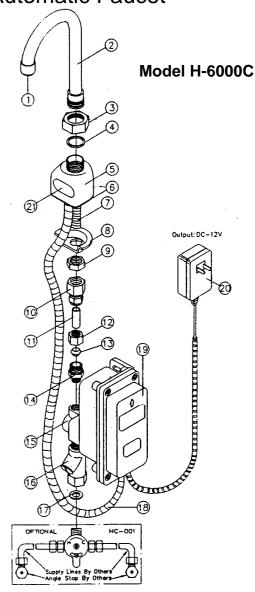
- 1.6 GPM Soft-Flow Aerator 1.5 & 2.5 GPM Laminar Flow Control and Rose Spray Head
- 4" or 8" Centerset Cover Plate
- HC-010 Multi-Unit Voltage Adapter (AC Powered Only)
- HC-001 Mixing/Check Valve (Mechanical)
- HBL-04 Thermostatic Mixing Valve with Checks
- 8" deep Gooseneck and 6" or 8" Swing Spout

### INSTALLATION INSTRUCTIONS

Hydrotek Non-Mixing Gooseneck Automatic Faucet

(AC Powered)

- 1. Prior to installing this faucet, thoroughly flush all water lines and replace stop washers, if necessary.
- 2. To ensure proper operation, "DRY TEST" the faucet by plugging (18) Sensor eye cable connector into the matching connector on the PC board inside the (19) Control box. Pull out PC board for easier access. Plug (20) Power adapter output connector into matching connector on PC board. Plug (20) Power adapter into 120 V AC outlet and push RESET on the PC board. 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.
- After successful "DRY TEST," unplug connectors from both the Sensor eye cable and Power adapter to the PC board.
- 4. Use Teflon Tape, not Pipe Dope for all connections. Loosen (1) Flow control device and assemble (2) Gooseneck spout using (4) Split washers and (3) Spout nut. Mount gooseneck spout onto (5) Faucet body and set the faucet on the sink. Apply Plumber's Putty to the bottom of the gasket. Secure faucet to sink using (8) Washer and (9) Mounting nut. Attach (10) Compression adapter and (11) Supply tube to (7) Supply rod.
- Connect Sensor eye cable and Power adapter as described in STEP #2, making sure that the Sensor eye and Power adapter cables are seated into the Control box housing properly.
- 6. Attach (14) Compression fitting to (15) Solenoid valve and reconnect it to (11) Supply tube using (12) Compression nut and (13) Compression ferrule. Insert (17) Nylon washer into swivel nut located on (16) In-line filter inlet (for pre-tempered or cold water only). Using a union fitting (not supplied), connect supply line (not supplied) from supply stop to (16) 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 (20) Power adapter into 120V AC outlet and push RESET on the PC board. Reinstall Control box cover and tighten screws to insure that the box is water-resistant. Coil excess Power Adapter wire and secure in a safe, dry area. Place hand in front of Sensor eye to activate water flow. Remove hands and water should stop. If not, refer to troubleshooting guide.
- Periodically clean the filter element located inside the (16) In-line filter.
- 9. For minor adjustments, refer to the instructions located inside the Control box cover.



Part No. Description	Part No. Description
1. Flow Control Device	12. Compression Nut
2. Gooseneck Spout	13. Compression Ferrule
3. Spout Nut	14. Compression Fitting
4. Split Washer	15. Solenoid Valve
5. Body	16. In-Line Filter
6. Gasket	17. Nylon Washer
7. Supply Rod	18. Sensor Eye Cable
8. Washer	19. Control Box
9. Mounting Nut	20. Power Adapter
10.Compression Adapter	21. LED Sensor Cover
11. 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

DECODIOTION .	DADT NO. I	NO DESCRIPTION	PART NO.		
NO DESCRIPTION	PART NO.	NO DESCRIPTION 27 Filter Cap	HC-023D-02		
1 Flow Control Device 2 Gooseneck Spout		28 Valve Seat	HB-011-03		
		29 O-Ring(H031)	HC-014-61	//	
3 0-Ring(H018)	HC-014-09 H4-01D-02A	30 Rubber Plug	HB-02-06		
4 Spout Nut		31 Control Disc+Rubber	HC-005-03E	I MIT	
5 Spill Washer+2	H4-01-03			Y 11 0	
6 Body	B6B-01D-01D	32 Control Disc Spring		A M	
7 O-Ring(H118)	HC-014-16	33 O-Ring(H022)	HC-014-30	· • • • • • • • • • • • • • • • • • • •	
8 Sensor Cover	PC-004-31A	34 O-Ring(H023)	HC-014-11	9	
9 0-Ring(H021)	HC-014-33	35 Control Valve	HB-05-04	<b>6</b>	
10 Sensor Eye & Coble		36 0-Ring(H013)	HC-014-03		
11 Screw+2	HC-013-27	37 Piston Tip	HB-04-09A	<b>6</b>	
12 Gasket	B2-01-08	38 Piston	HB-04-08A		
13 0-Ring(H012)	HC-014-18	39 Piston Spring	HB-04-07A		
14 Supply Rod	B2-01B-02	40 Piston Shaft	HB-04-06A		
15 Mounting Washer	B2-01-05	41 Coil	HB-04-05A		
16 Mounting Nut	B2-01-06	42 Metal Gosket	HB-04B-E	8	
17 Compression Reducer	HC-009-12	43 Lock Washer *4	HB-01-20		
18 Supply Tube	H6-01-07	44 Screw +4	HC-013-35		
19 Compression Nut	HC-001B-08A	45 Control Box	HB-012-0101		
20 Ferrule	HC-001-07A	46 Screw +2	HC-013-52		
	H1-03B-0104A	47 P.C.B	PC-009-32		
22 Screw+4	HC-013-57	48 Rubber Seal	HB-012-0102		
23 Filter Body	HC-023D-A	49 O-Ring •4	HC-014-62		
		50 Box Cover	HB-012-0201		
24 Nylon Washer	HC-002-04A		HC-013-52		
25 Filter Screen	HC-009-03	51 Screw +4			
26 0-Ring(H016)	HC-014-36	52 Ac Adaptor	HC-012-07D		
	9		HYDR	OTEK Model H-6000C	

#### 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.

PROBLEM	POSSIBLE CAUSE	TO DIAGNOSE	REMEDY
Faucet will not turn on:	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.

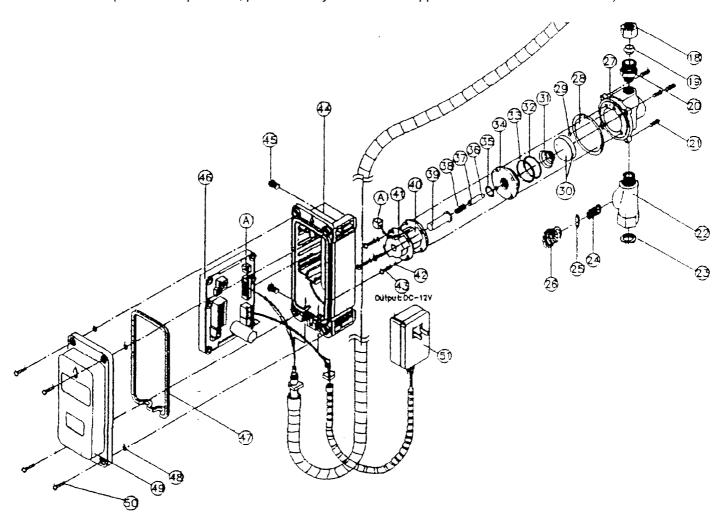
For more detailed remedy procedures, please call Hydrotek Tech Support at (800)922-9883 ext. 105

# 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)

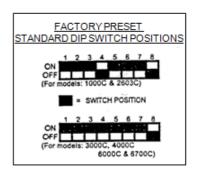


#### HYDROTEK AUTOMATIC FAUCET: DIP SWITCHES

#### \*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

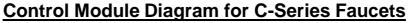
C. Sensor Distance: To increase distance, turn SDA screw <u>clockwise</u>.

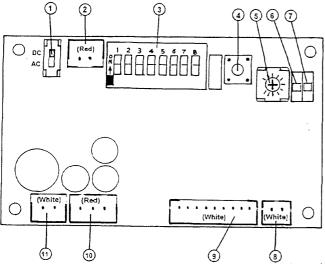
To decrease distance, turn screw counter-clockwise.

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

D. Faucet Switch:

Sw 7	Sw 8	Product
ON	OFF	Auto Faucet





- 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 6000C Series Faucets

AC or Battery Powered Lavatory Faucets

Part Number From Drawing	Hydrotek Item Code	Description
52	HCC-008B	12V AC Adapter (for AC model)
23-27	HC-009B	Filter without Check
10-11	HCC-031	Sensor Eye & Cable
47 47	HCC-011A HCC-011B	Module – PCB for AC Model Module – PCB for Battery Model
15-16	HC-015C	Mounting Kit
25	HC-020	Filter Screen
31,32,36,37,38,39	HCB-017A	Valve Repair Kit
41	HCC-019	Solenoid Coil
31	HCB-005A	Control Disc Only
24	HC-040	Nylon Washer (Filter Inlet)
22-51	HCC-003A	Complete Control Box Assembly

(Please visit www.hydrotekintl.com to view our most current Products Pricing Sheet)