

US ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF PESTICIDES PROGRAMS
REGISTRATION DIVISION (75-767)
WASHINGTON, DC 20460

EPA REGISTRATION NO.
35900-9

DATE OF ISSUANCE
MAR 13 1995

TERM OF ISSUANCE

NOTICE OF PESTICIDE: REGISTRATION
 REREGISTRATION
(Under the Federal Insecticide, Fungicide,
and Rodenticide Act, as amended)

NAME OF PESTICIDE PRODUCT
Hygiene Replacement Media for
General Ionics Bacteriostatic
Water Conditioner

NAME AND ADDRESS OF REGISTRANT (Include ZIP code)

Ionics, Inc.
3039 Washington Pike
Bridgeville, PA 15017

NOTE: Changes in labeling formula differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above U.S. EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby Registered/Reregistered under the Federal Insecticide, Fungicide, and Rodenticide Act.

A copy of the labeling accepted in connection with this Registration/Reregistration is returned herewith.

Registration is in no way to be construed as an indorsement or approval of this product by this Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

Based on your response to the Silver Reregistration Eligibility Document, EPA has reregistered the above named product subject to the comments recorded in the succeeding paragraph. This action is taken under the authority of section 4(g)(2)(C) of the Federal Insecticide, Fungicide, and Rodenticide Act, as amended. Reregistration under this section does not eliminate the need for continual reassessment of pesticides. EPA may require submission of data at any time to maintain the registration of your product. Make the following labeling changes before you release the product for shipment: Make the following labeling changes listed below before you release the product for shipment:

- a. Add the phrase "EPA Registration No. 35900-9"
- b. Include the appropriate EPA Establishment No.
- c. Revise the statement "Removes....tap water" to read "This product is designed to remove objectionable tastes, odors, and color from municipally treated tap water."

ATTACHMENT IS APPLICABLE

SIGNATURE OF APPROVING OFFICIAL

DATE

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- d. Delete the phrase "General Classification" to read "Directions for Use."
- e. Revise the statement "Inhibits the growthfilter media" to read "This product is designed to remove objectionable tastes, odors, and color from municipally treated tap water."
- f. Place the statement "Keep Out of Reach of Children" directly above the signal word "Caution."
- g. Place the misuse statement "It is a violation of the Federal Law to use this product in a manner inconsistent with its labeling" directly under the subheading "Directions for Use."

Both Confidential Statements of Formula dated April 11, 1994, is in compliance with PR Notice 91-2, it agrees with the label and are acceptable.

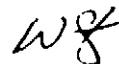
Both label ingredient statements are in compliance with PR Notice 91-2, agree with the Confidential Statements of Formula and the label claims are the nominal concentration and are acceptable.

A stamped copy of the labeling is enclosed for your records.

Submit one copy of final printed labeling before releasing the product in channels of trade with the revised labeling.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

Sincerely,



Walter C. Francis
Acting Product Manager (31)
Antimicrobial Program Branch
Registration Division (7505C)

- 2424

**GENERAL IONICS®
MODEL IQ0820B
BACTERIOSTATIC WATER CONDITIONER
WITH HYGENE®**

Inhibits the growth of bacteria within the ion exchange softener
filter medium for municipally treated water.

KEEP OUT OF REACH OF CHILDREN

CAUTION:

EPA Reg. No. 35900-9 EPA Est. No. 35900 PA 01

Storage of HYgene® Material: Store in closed container which excludes moisture
and chemical fumes.

Active Ingredient: Silver as metallic	0.07%
Inert Ingredients:	99.93%
Total	100.00%

Directions For Use: See Homeowner's Manual

Disposal Of Spent Media: Remove HYgene® media from top of filter bed,
wrap in paper, and discard with trash.

Net Contents: One (1) Bacteriostatic Water Conditioner with HYgene®

Another fine product by the manufacturers of General Ionics Water Conditioning Equipment



3039 Washington Pike, Bridgeville, PA 15017

ACCEPTED
WITH COMMENTS
BY EPA LABORATORY

MAR 13 1995

Under the Federal Insecticide,
Fungicide, and Rodenticide Act,
this product is registered under EPA Reg. No.

35900-9

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**HYGENE® REPLACEMENT MEDIA
GENERAL IONICS® BACTERIOSTATIC
WATER CONDITIONER**

Inhibits the growth of bacteria within the ion exchange softener filter media from municipally treated tap water.

CAUTION

KEEP OUT OF REACH OF CHILDREN

STORAGE OF HYGENE® MEDIA: Store in closed container which excludes moisture and chemical fumes.

DIRECTIONS FOR USE: See enclosed instruction sheet.

DISPOSAL OF SPENT MEDIA: Retain shipping carton and plastic liner for disposing of exhausted filter media with trash.

ACTIVE INGREDIENT
Silver as Metallic 1.05%

INERT INGREDIENT
Activated Carbon 98.95%

NET CONTENTS One (1) Bacteriostatic Media Replacement only for General Ionics Bacteriostatic Water Conditioner

<u>MODEL NUMBER</u>	<u>EPA Reg.</u>	<u>NET WEIGHT</u>
<input type="checkbox"/> IQ 0820 B	No 35900-3	2.0 lbs.
<input checked="" type="checkbox"/> IQ 1240 B	XXXXXXXXXX	4.0 lbs.

EPA Est No 35900 PA 1 LOT NO _____
Another fine product by the manufacturers of General Ionics Water Conditioning Equipment
 3039 Washington Pike Bridgeville, Pa 15017
IONICS, INCORPORATED

ACCEPTED
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in EPA L

3

Use
For
and
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35900-3

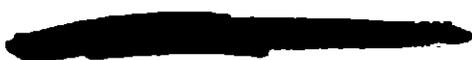
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HYGENE MEDIA REPLACEMENT INSTRUCTIONS
FOR
GENERAL IONICS BACTERIOSTATIC WATER CONDITIONER

- . Inhibits the growth of bacteria in the ion exchange softener filter media
- . Removes objectionable tastes, odors, and color from municipally treated water

FOR USE ON COLD WATER ONLY



It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

ACCEPTED
DATE
BY
No.

35900-9

REV. 2/1/94

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HYGENE TRANSFER PROCEDURE

MAR 13 1995

TO REMOVE EXHAUSTED MEDIA

Remove cover from control valve.

Loosen flow control retainer screw on drain line and remove flow control housing and drain line from control valve body.

Replace the 1.5 gpm flow control button with a 2.4 gpm button.

Reinstall flow control housing and drain line to valve body. Tighten screw.

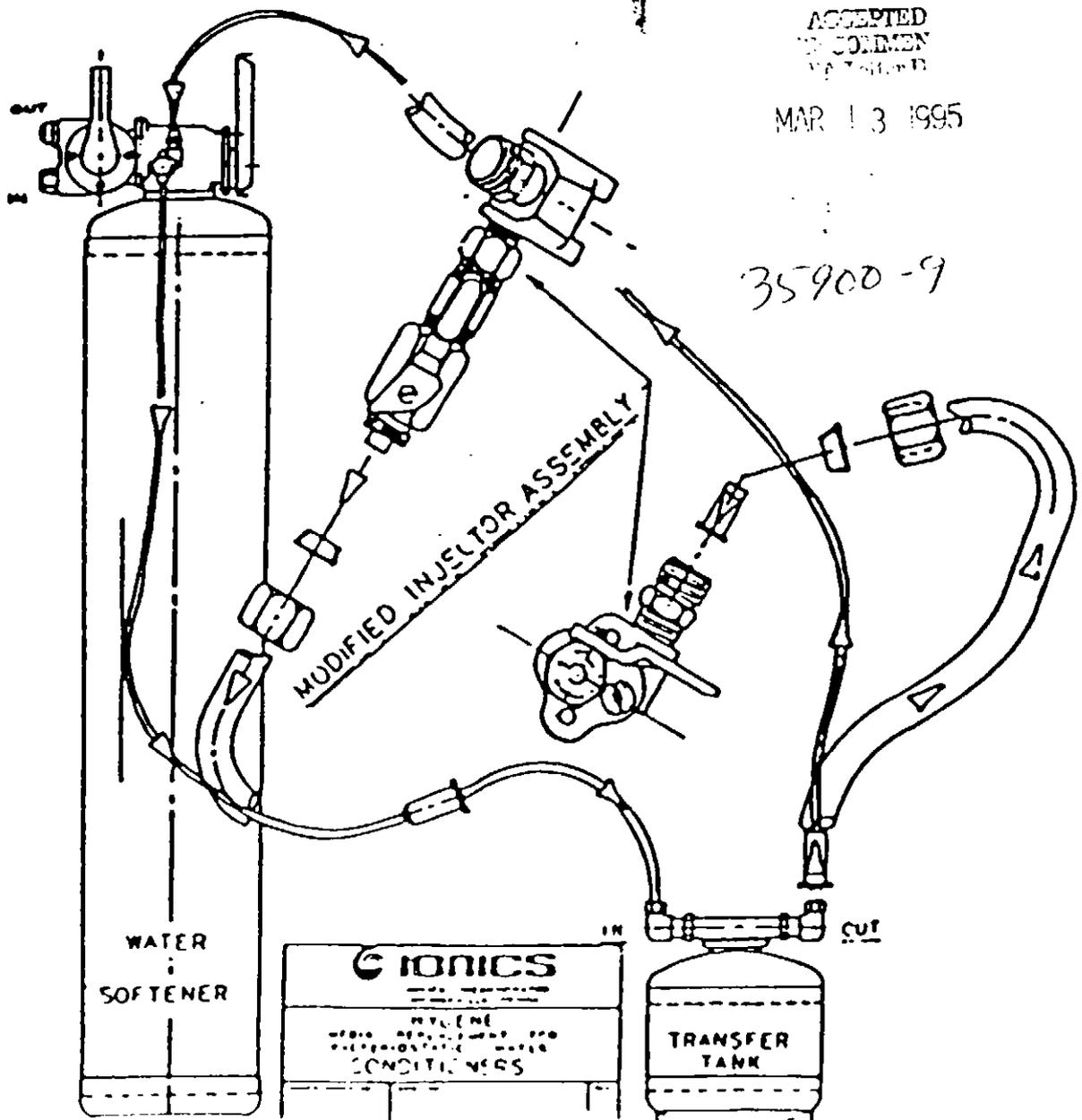
Depress red button on front of timer and turn black center knob clockwise to Backwash position. Allow unit to backwash until all exhausted HYGENE media is removed. Move bypass handle to Bypass position.

TO ADD NEW HYGENE MEDIA

- 1) Depress red button on front of timer. Turn black center knob to next cycle, Brine and Rinse position. Pull electrical plug.
- 2) Add new HYGENE recharge to transfer tank and fill tank with water.
- 3) Remove present injector assembly and brine tube from control valve and install the modified injector body, gasket and two screws provided. (For correct orientation, refer to drawing)
- 4) Attach 3/8" O.D. poly flow tubes as shown in drawing. (Headpiece on transfer tanks is marked "In" and "Out".)
- 5) Make sure single lever ball attached to modified injector is closed. (Lever turned 90° in reference to valve body)
- 6) Invert stainless steel transfer tank to permit HYGENE media to suspend itself in water. Open single lever ball valve while tank is inverted or immediately after uprighting tank. This will eliminate the possibility of HYGENE media becoming packed in the bottom of the transfer tank.
- 7) Feed water will pass through the ball valve and poly flow tubing, entering the inlet at the top of the transfer tank. Push the new HYGENE media up the PVC dip tube, through the other poly flow tube and into the water softener. The new HYGENE media will locate itself on top of the water softener media bed. Since the poly flow tubing is natural in color, the new HYGENE media can be seen moving through the piece of poly flow tubing that is attached to the vertical adapter on the modified injector body. When this line becomes clear, slightly agitate transfer tank to disturb possible remaining HYGENE in transfer tank. When line is clear, move bypass handle to Bypass position. Allow pressure in system to pass through the drain line. Leaving poly flow tubes attached for next transfer, remove modified injector body. Inspect and replace original injector assembly and safety brine valve. Remove the 2.4 gpm flow button from the drain line and replace with the original 1.5 gpm button. Connect drain line.
- 8) Depress red button on front of timer and move control valve to the Service position. Move bypass handle to Service position. Plug in cord set and set timer to correct time of day. Open a cold water tap and run cold water for approximately 3 minutes.

TRANSFER EQUIPMENT

- I. Transfer Tank complete with #490 Headpiece, Dip Tube and necessary fittings. (completely assembled)
- II. Two, 5 ft. lengths of 3/8" O.D. Natural Poly Flo Tubing
- III. Plastic bag containing the following:
 - (1) 2.4 gpm Drain Line Flow Control Rubber Button
 - (3) Brass Insert Sleeves (one not required at 1/4" ball valve)
 - (1) Modified Transfer Injector Body with necessary fittings, completely assembled (Nozzle Orifice plugged)
 - (1) Injector Body Gasket
 - (2) Injector Screws 10-24 x 1 1/4"



7.2.24

HYGENE TRANSFER PROCEDURE

TO REMOVE EXHAUSTED MEDIA

Remove cover from control valve.

Loosen flow control retainer screw on drain line and remove flow control housing and drain line from control valve body.

Replace the 1.5 gpm flow control button with a 2.4 gpm button.

Reinstall flow control housing and drain line to valve body. Tighten screw.

Depress red button on front of timer and turn black center knob clockwise to Backwash position. Allow unit to backwash until all exhausted HYGENE media is removed. Move bypass handle to Bypass position.

TO ADD NEW HYGENE MEDIA

1) Depress red button on front of timer. Turn black center knob to next cycle, Brine and Rinse position. Pull electrical plug.

2) Add new HYGENE recharge to transfer tank and fill tank with water.

3) Remove present injector assembly and brine tube from control valve and install the modified injector body, gasket and two screws provided. (For correct orientation, refer to drawing)

4) Attach 3/8" O.D. poly flow tubes as shown in drawing. (Headpiece on transfer tanks is marked "In" and "Out".)

5) Make sure single lever ball attached to modified injector is closed. (Lever turned 90° in reference to valve body)

6) Invert stainless steel transfer tank to permit HYGENE media to suspend itself in water. Open single lever ball valve while tank is inverted or immediately after uprighting tank. This will eliminate the possibility of HYGENE media becoming packed in the bottom of the transfer tank.

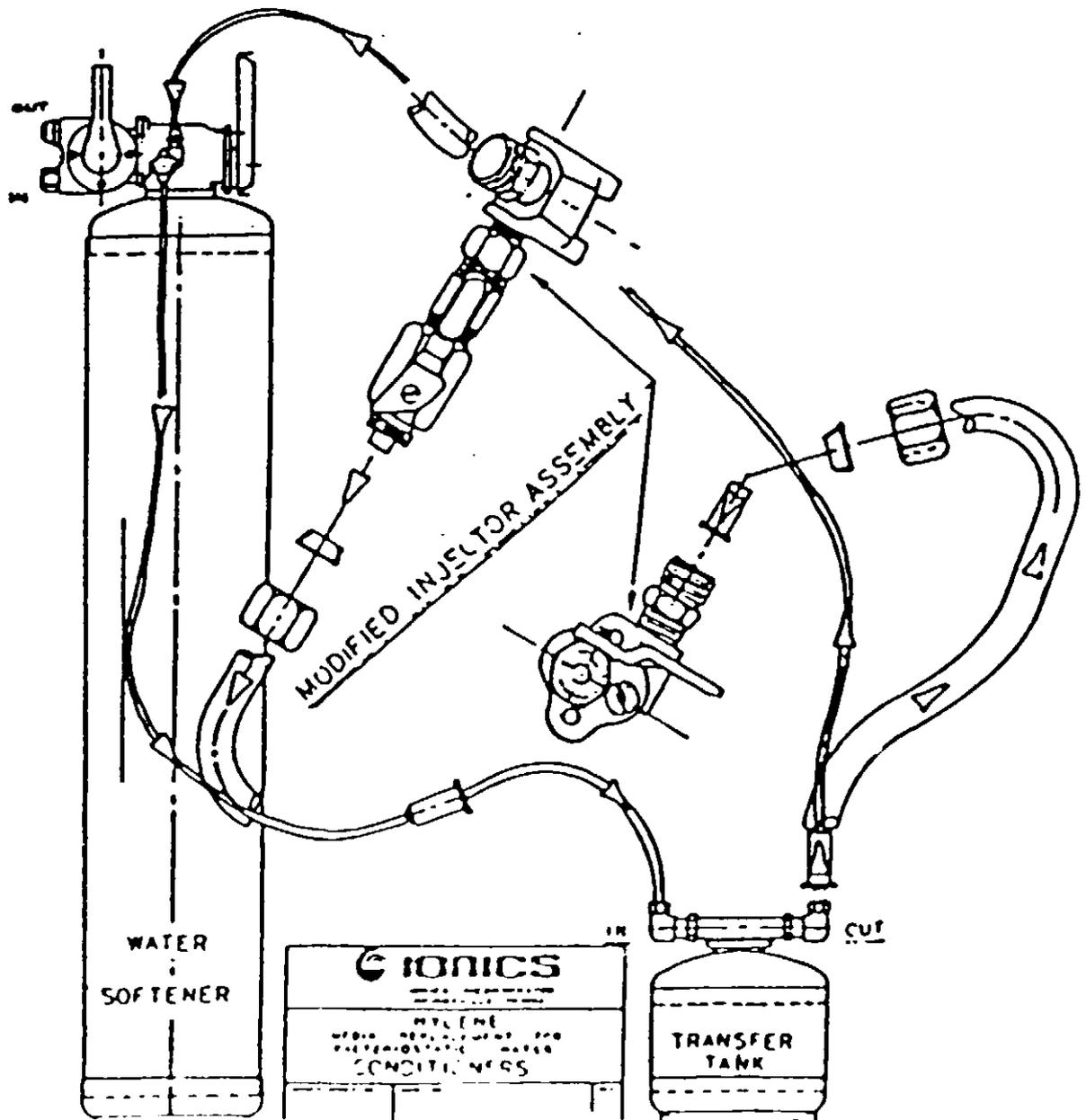
7) Feed water will pass through the ball valve and poly flow tubing, entering the inlet at the top of the transfer tank. Push the new HYGENE media up the PVC dip tube, through the other poly flow tube and into the water softener. The new HYGENE media will locate itself on top of the water softener media bed. Since the poly flow tubing is natural in color, the new HYGENE media can be seen moving through the piece of poly flow tubing that is attached to the vertical adapter on the modified injector body. When this line becomes clear, slightly agitate transfer tank to disturb possible remaining HYGENE in transfer tank. When line is clear, move bypass handle to Bypass position. Allow pressure in system to pass through the drain line. Leaving poly flow tubes attached for next transfer, remove modified injector body. Inspect and replace original injector assembly and safety brine valve. Remove the 2.4 gpm flow button from the drain line and replace with the original 1.5 gpm button. Connect drain line.

8) Depress red button on front of timer and move control valve to the Service position. Move bypass handle to Service position. Plug in cord set and set timer to correct time of day. Open a cold water tap and run cold water for approximately 3 minutes.

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TRANSFER EQUIPMENT

- I. Transfer Tank complete with #490 Headpiece, Dip Tube and necessary fittings. (completely assembled)
- II. Two, 5 ft. lengths of 3/8" O.D. Natural Poly Flo Tubing
- III. Plastic bag containing the following:
 - (1) 2.4 gpm Drain Line Flow Control Rubber Button
 - (3) Brass Insert Sleeves (one not required at 1/4" ball valve)
 - (1) Modified Transfer Injector Body with necessary fittings, completely assembled (Nozzle Orifice plugged)
 - (1) Injector Body Gasket
 - (2) Injector Screws 10-24 x 1 1/4"





GENERAL IONICS BACTERIOSTATIC WATER CONDITIONERS

ACCEPTED
with COMMENTS
in EPA Letter Dated:

MAR 13 1995

Under the Federal Insecticide,
Fungicide, and Rodenticide Act as
amended, for the pesticide
registered under EPA Reg. No.

35900-9

Q. First, what is a Bacteriostatic Water Conditioner?

A. A Bacteriostatic Water Conditioner is one which not only softens municipally treated water, but also inhibits the growth of bacteria within the ion exchange softening filter medium.

Q. Is there a need to inhibit the growth of bacteria in potable (drinking) water?

A. Since potable water can, by law, contain a number of harmless bacteria indigenous to municipally treated water, the potential for a build-up or growth of these bacteria trapped within the ion exchange softening filter medium does exist.

Q. Why is there a build-up of bacteria in a water conditioning unit?

A. The low level of bacteria in the municipally treated water along with organic compounds normally present in a water supply become trapped in the filter media bed. After a period of time the filter bed contains a considerable number of bacteria and, in the presence of the organic compounds which become a source of nutrients for bacteria, the filter then becomes a breeding place for bacterial growth.

Q. What is in the Bacteriostatic Water Conditioner that inhibits the growth of bacteria within the filter medium?

A. The inhibiting agent is HYgene—an Environmental Protection Agency Registered Bacteriostatic Water Filter Medium. It is the exclusive property of Ionics, Incorporated. Technically, HYgene is a silver-impregnated granular activated carbon. A layer of HYgene is placed on top (water inlet side) of the ion exchange softening resin inside the water conditioner. The top section of the filter bed is the area where excessive bacteria growth usually takes place, especially during non-flow periods when the water is not in use, such as overnight or when the unit is unused during vacation periods. Bacterial level in ion exchange resins is a transitory phenomenon which is markedly decreased after a period of flow or a regeneration cycle.

Q. What is the expected life of the HYgene Bacteriostatic Water Filter medium contained in the General Ionics Water Conditioning Unit?

A. The HYgene medium should be replaced in accordance with water conditioner model size as follows:

Softening Capacity	Tank Diameter	HYgene Content	Bacteriostatic Medium Life	
			Gallons	Family of 4
20 Kg	8 inch	2 lb.	75,000	1 year
40 Kg	12 inch	4 lb.	150,000	2 years

Q. Are there any Environmental Protection Agency restrictions that I should know?

A. There are no restrictions or precautions for your concern. The EPA has, however, registered the General Ionics Bacteriostatic Water Conditioners for use on treated municipally supplied tap water, which precludes its use on well water.

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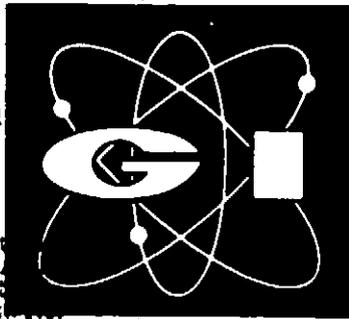
HOMEOWNER'S MANUAL

GENERAL IONICS WATER CONDITIONER Model IQ and Model EE

ACCEPTED
with COMMENTS
in EPA Letter 11/84

MAR 13 1995

Under the Federal Insect
Fungicide, and Rodenticide Act
amended by the pest
registration act of 1974 EPA Reg.

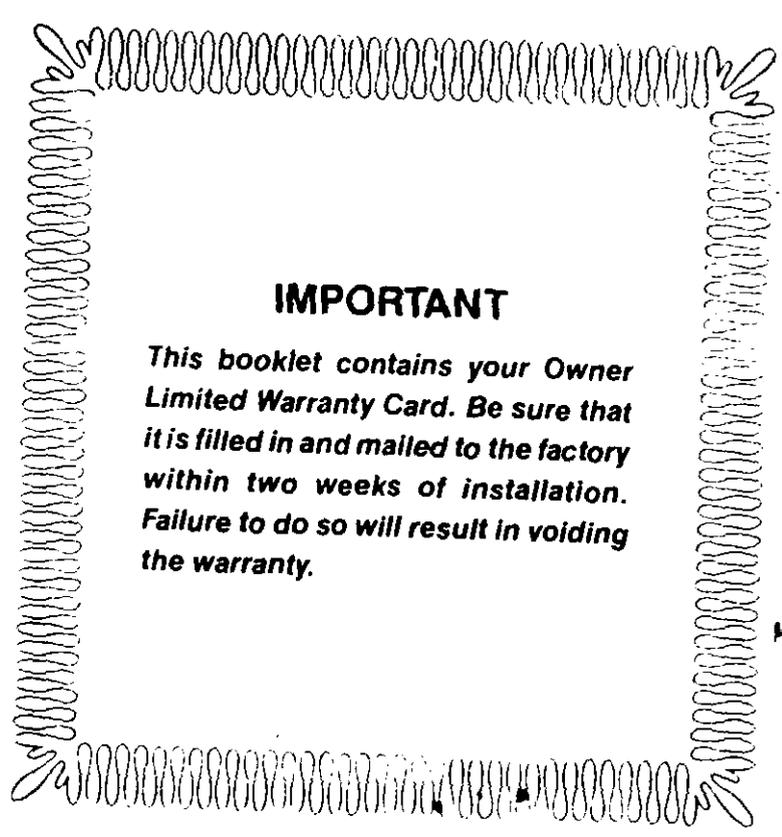


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IMPORTANT

This booklet contains your Owner Limited Warranty Card. Be sure that it is filled in and mailed to the factory within two weeks of installation. Failure to do so will result in voiding the warranty.

Your General Ionics Dealer is...

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Congratulations

Ionic, Incorporated welcomes you to a new, carefree way of life with conditioned water. You can take pride and satisfaction knowing that you own the very best.

We are proud that you have selected the General Ionic deluxe quality Water Conditioner for your home. Your sound judgment is supported by the wide acceptance received for these units throughout the world. More and more quality conscious homeowners are purchasing General Ionic Water Conditioning equipment because of its superior performance and its premium quality workmanship.

The following pages of this booklet will introduce you to your new General Ionic Water Conditioner by explaining operation, care and maintenance. In addition, the booklet provides recommendations for getting the very best performance from your unit as well as answers to commonly asked questions.

ACCEPTED
RE COMMENTS
PA Letter Dated:

PA 13 JCS
55960-9



Vice President
Household Water Conditioning
Ionic, Incorporated

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11/10/01



General Information

Your General Ionics Water Conditioner is completely automatic. It will provide an abundance of conditioned water with just an occasional addition of salt to the brine tank when the salt reaches the "add salt" level. Your unit was thoroughly tested at the factory before shipping, and again at the time of installation.

The automatic timer is set to "regenerate" your water conditioner at night while you are sleeping. From experience, this is the best time because your water demand is lowest then and regeneration will not interfere with baths, washing clothes, etc. However, unconditioned water is available from all faucets during the regeneration cycle. With the General Ionics Water Conditioner you are never without water.

It is a good idea to wipe the unit occasionally and then apply a good coat of wax. This procedure will keep your water conditioner looking bright and clean for a lifetime.

In case some problem should arise, you can manually by-pass the unit by throwing one lever (see illustration on page 5). Then call your authorized General Ionics dealer. He has been trained in all phases of maintenance and repair work and will have the unit back in operation quickly. If there is not a General Ionics dealer in your vicinity, then contact another reliable water conditioning firm. Failing that, please write directly to the factory: Ionics, Incorporated, P.O. Box 99, Bridgeville, Pennsylvania 15017, Attention: Service Department.

NOTE: Whenever you correspond with the factory, be sure to include the model and serial number written on the inside back cover of this booklet. Explain the problem, as best you can. With this information factory technicians can handle the problem promptly with little chance of error.

ACCEPTED
with COMMENTS
EPA Letter Dated:

MAR 13 1995

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Regeneration

Your General Ionics Water Conditioning unit consists of a tank filled with a premeasured amount of a special mineral called S-759, formulated especially for General Ionics equipment. On top of the tank is the control valve/timer, which works on the same principle as an electric clock. Alongside the unit is a storage tank which holds the salt and brine for the regeneration cycle.

Regeneration means recharging or recleaning the special S-759 mineral. It is important to know that the entire cycle is automatic and you will have nothing to do with it. The following steps are for your own enlightenment... and to demonstrate the thoroughness of the automatic cycle: 1. Backwashing, which reverses the action of the water, throws off the sediment (called turbidity) that has been filtered out of the water, and flushes it down the drain. 2. Salt, as brine, is injected into the unit to clean and revitalize the S-759 mineral. (The amount of salt used is controlled by a float valve, which operates the same as the float in the water tank of your toilet.) 3. Slow rinse. 4. Fast rinse. 5. Valve automatically returns to the service position to again supply you with good, conditioned water.

What Salt To Use

Salt is your water conditioner's fuel. Using the right fuel is as important here as it is to get the best performance from your car. It is strongly recommended to use only nugget or pellet type salt in your water conditioner. This type of salt is pure and free of undesirable insolubles. Nugget or pellet type water conditioner salt is available from your General Ionics dealer.

NOTE. Common rock salt is NOT recommended because much of it contains insolubles. The continued use of common rock salt will necessitate more frequent cleaning of the brine tank, or worse, it may cause a malfunction of the valving. However, specially processed water conditioner rock salt, as handled by your local dealer, may be used.

When To Add Salt

The brine tank has a capacity up to 250 lbs. of nugget or pellet salt. You can add salt whenever it is most convenient for you, but it is important to replenish the supply before the pellets reach the "add salt" level indicated by the label on the salt storage tank.

Bridging Or Caking

The salt platform in your brine tank has been engineered to eliminate salt bridging or caking. However, under certain atmospheric conditions these circumstances can occur and will prevent the salt from coming in contact with the water level. When your water seems to be hard, check the salt in the storage tank. If it appears to be bridging or caking, break it up with a short wooden stick. In doing so, be careful not to probe the full depth of the brine tank because you may damage the salt platform.

Bacteriostatic — An Ionics Exclusive

If your General Ionics Water Conditioner is an Environmental Protection Agency (EPA) Registered Bacteriostatic model, you have two unique added features. First, this unit inhibits the growth of bacteria within the S-759 ion exchange filter media bed. Second, it reduces and in many cases completely eliminates organic tastes, odors and colors from the water.

Inside the Bacteriostatic model water conditioner a layer of HYgene® silver-impregnated activated carbon (EPA-Registered Bacteriostatic Water Filter Media) is placed on top of the S-759 mineral. The silver acts as the inhibiting agent while the activated carbon adsorbs objectionable tastes, odors and colors.

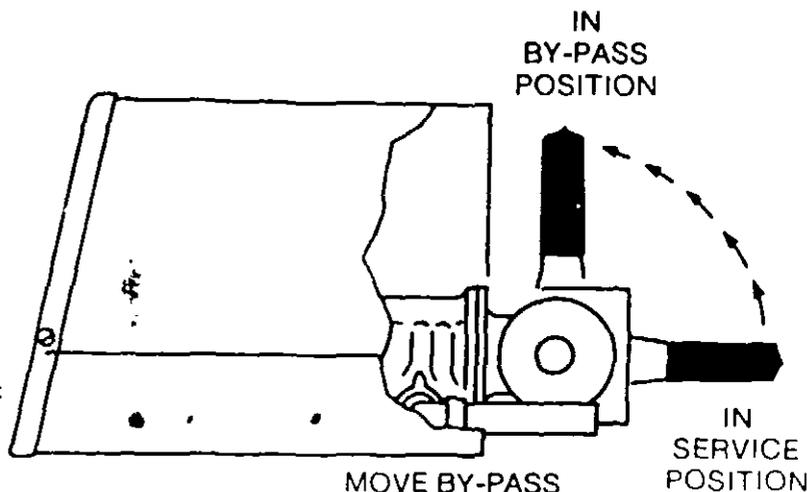


IT IS A VIOLATION OF FEDERAL LAW to use this product in a manner inconsistent with its labeling. Only use EPA Registered Hygene silver-impregnated Carbon replacement media in this unit. Use of any media material other than Hygene silver carbon manufactured by Ionics, Incorporated is a violation of the improper operation of the unit, and voids the manufacturer's warranty. For your protection, do not accept a replacement media unless it is factory-sealed with both the tape and label reading "Hygene" manufactured by Ionics, Incorporated.

EPA has restricted the Bacteriostatic models for use only on treated municipally supplied tap water, which precludes its use on well water.

By-Pass Instruction

In case any problem should occur that cannot be immediately resolved, it is recommended to manually by-pass the unit as shown and call your authorized General Ionics dealer.



MOVE BY-PASS HANDLE UNTIL THE INDICATOR POINTS TO "BY-PASS"

ACCEPTED
REQUIREMENTS
BY THE USER

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LIFE EXPECTANCY OF HYGENE BACTERIOSTATIC MEDIA

Model Nos. (EE or IO)	Tank Diameter	HYgene Content	Bacteriostatic Medium Life Gallons	Family of 4
0820-B	8"	2 lb.	75,000	1 year
1240-B	11"	4 lb.	150,000	2 years

It is suggested that a water meter reading be noted at time of installation. Add to that reading the expected gallonage life of the Bacteriostatic medium from the above chart. Record what the water meter reading will be when replacement should be made.

Water meter reading at time of installation _____ Gallons

Expected life of Media (from above chart) + _____ Gallons

Water meter reading, media replacement _____ Gallons

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Model IQ Special Features

Directions For Use

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

For use on cold water only.

Meter-Controlled Regeneration

The Model IQ control minimizes salt usage and water waste by accurately monitoring the conditioned water and then initiating a regeneration only when the S-759 mineral is near exhaustion. Six-cycle down-flow brining assures accurate salting while the adjustable time regeneration program uses the minimum amount of water required per cycle.

In service a mechanical meter accurately monitors water usage. This feature eliminates the costly wasted capacity due to premature regenerations.

Vacation Periods

There is no need to be concerned about disconnections or adjustments on your Model IQ Water Conditioner before leaving your home for long periods of time. When no water is being used, the "brain" will simply remain idle for that period of time and be ready to monitor water usage when you return home.

High Usage Demand/Weekend Guests

The Model IQ Water Conditioner's "brain" will automatically recognize the increase in water usage and regenerate before running out of conditioner water. Unpredictable water demand is never a problem with the General Ionics Model IQ.

How To Set The Time Of Day

If you should have a power failure or want to adjust for Daylight Savings Time, follow these instructions:

Press and hold in the red button to disengage the drive gear.

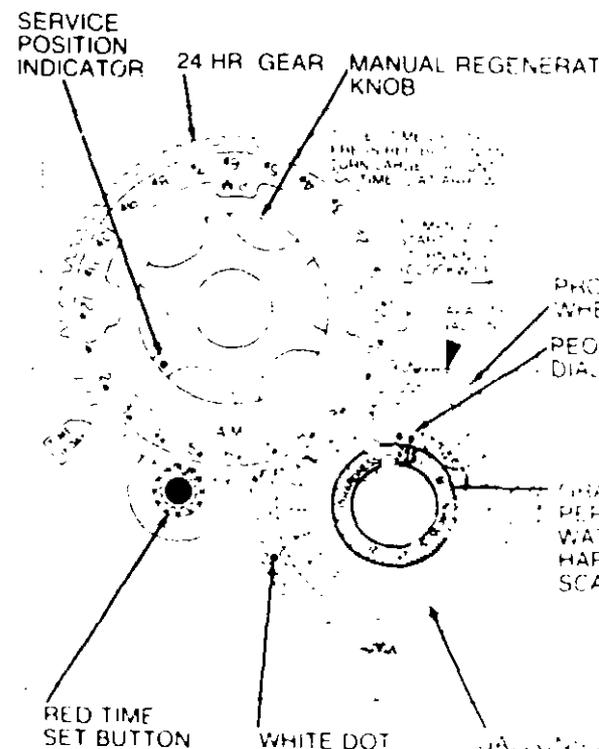
Turn the large gear until the actual time of day is opposite the time of day pointer.

Release the red button to engage the drive gear.

ACCEPTED
with COMMENTS
EPA Letter Dated:

MAR 13 1995

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How To Manually Regenerate Your Water Conditioner At Any Time

Turn the manual regeneration knob clockwise. This slight movement of the manual regeneration knob engages the program wheel and starts the regeneration program.

The black center knob will make one revolution in the following three hours and stop in the position shown in the drawing.

Even though it takes three hours for this center knob to complete one revolution, the regeneration of your unit might be set for only one-half of the time.

In any event, conditioned water may be drawn and rinse water stops flowing from the water conditioner drain line.



Model EE Special Features

Directions For Use

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

For use on cold water only.

Energy Efficient Control

This fully automatic six-cycle valve with 12-day timer schedules regenerations at preset intervals. The day and the hour for regeneration, as well as the salt dosage, have been set at the time of installation by the installer. These settings have been carefully calculated according to your family needs and to get the maximum recovery of the resin while minimizing water usage. **Do Not Change These Settings Without First Consulting Your Dealer.**

Vacation Periods

Why allow your water conditioner to continue regenerating while you are on vacation? It would be a waste of salt to recharge an already charged mineral bed. With your Energy Efficient General Ionics Model EE Water Conditioner, vacation time has been taken into account. Simply move the by-pass valve lever (see illustration on page 5 of this manual) until the indicator points to "by-pass". By doing so, the unit will continue to go through the preset regeneration cycles, but actually it will not regenerate. When you return home, move the by-pass valve lever back to the "service" position and you will again have conditioned water as before.

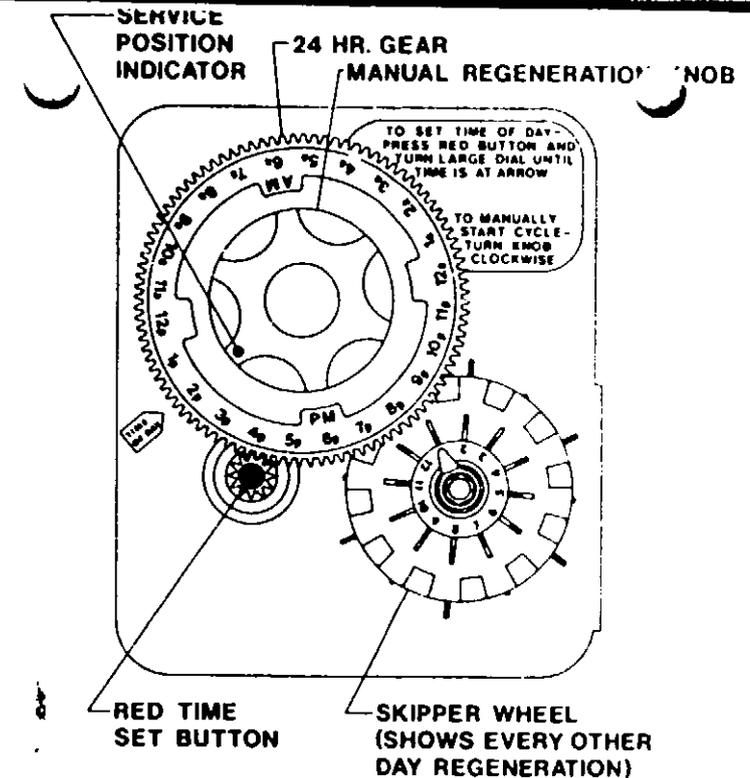
High Usage Demand/Weekend Guests

As mentioned previously, your General Ionics Model EE unit is set for your own needs. Higher than normal usage such as weekend guests will naturally place a greater demand for conditioned water on the unit. The method for manually regenerating the unit is covered on page 9. This "extra" regeneration will not interfere with the regular programmed cycle.

ACCEPTED
with COMMENTS
in EPA Letter 8-8-83

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How To Set The Time Of Day

If you should have a power failure or want to adjust for Daylight Savings Time, follow these instructions:

Press and hold in the red button to disengage the drive gear.

Turn the large gear until the actual time of day is opposite the time of day pointer.

Release the red button to engage the drive gear

How To Manually Regenerate Your Water Conditioner At Any Time

Turn the manual regeneration knob clockwise

This slight movement of the manual regeneration knob engages the program wheel and starts the regeneration program

The black center knob will make one revolution in the following three hours and stop in the position shown in the drawing

Even though it takes three hours for this center knob to complete one revolution, the regeneration cycle of your unit might be set for only one-half of this time.

In any event, conditioned water may be drawn after rinse water stops flowing from the water conditioner drain line.

Questions And Answers

Q. What is water conditioning?

A. Water conditioning is that branch of engineering that determines the chemical characteristics of a tap water supply, as it enters your home, and treats these characteristics so as to provide water more suitable and economical for household use.

Q. Why is it essential to improve water quality?

A. Beyond being an absolute necessity of life, water is an outstanding cleaning agent. The trouble is that nature does a lot of things with water long before you have a chance to use it in your laundry or at your kitchen sink. You get it, as it were, second hand. Therefore, improving your water quality by water conditioning is just as essential as any other home appliance.

Q. Does the conditioned water have a "different" taste?

A. Taste is difficult to define as no two people have the same sense of taste. A water conditioner will remove certain minerals and turbidity from the water, giving you a cleaner, better tasting water.

Q. Will conditioned water give a cleaner, brighter wash?

A. Yes. For best results, you should use the proper amount of laundering agent. Keep in mind a 60 to 80% soap saving can be achieved with conditioned water. Learn to use less laundering agent because none of the cleansing compound will be wasted as in hard water cleaning. The amount of laundering agent you use depends on (1) its effectiveness, (2) the volume and temperature of water, (3) the size of the wash load, and (4) the type and amount of dirt and grime.

Q. What effect will conditioned water have on plumbing?

A. Before the water was conditioned, the hard water caused a scale build-up in the hot water pipes and water heater. Scale acts as an insulating material. In the water heater, scale reduces heat transmission, wastes fuel and often causes heating coil and tube failure. The installation of a water conditioner not only prevents further scale formation but will gradually remove previously formed scale deposits. A recent study indicates that softened water offers a saving of 23% in energy cost in the operation of a hot water heater.

Q. Are the minerals which a conditioner removes from hard water essential to health?

A. No. The quantity of minerals found in hard water are not essential to good health.

Q. Is the sodium in softened water harmful to people on restrictive diets?

A. Much depends on the strictness of the diet itself. When the patient is on an extremely restrictive diet, he should drink neither hard nor softened water. Under these conditions he should have demineralized water, distilled water, or water known to be free of sodium for drinking and for the cooking of foods. Such patients are commonly hospitalized.

In establishing a salt-free diet for patients, physicians should not overlook the fact that even hard water may contain appreciable amounts of sodium. To determine the amount a complete analysis of the water is necessary.

Q. How much sodium is added to softened water?

A. Each grain per gallon (GPG) hardness removed adds 7.875 milligrams (mg) of sodium to a liter of water, which is approximately one quart. The average daily sodium intake of an adult individual is 3,000 to 4,000 milligrams and the average fluid intake is 1.6 to 2.0 liters per day. A liter is slightly more than four 8-ounce glasses of water. Two liters per day or 8.4 eight-ounce glasses of water amounts to a total sodium intake from a source of softened 8 GPG water of 125.16 milligrams. This is approximately 3% of the average daily sodium intake.

There is another way to answer this question, and that depends on the hardness of your raw water. The following table shows the additional amount of sodium consumed by drinking ONE quart of softened water.

Initial Water Hardness	Sodium Added By Softening
5 Grains/Gallon	37.5 Milligrams/Quart
10 Grains/Gallon	75.0 Milligrams/Quart
20 Grains/Gallon	150.0 Milligrams/Quart
40 Grains/Gallon	300.0 Milligrams/Quart

Q. How does this sodium content of conditioned water compare to sodium found in common foods?

A. The data in the following table demonstrate the usual range of sodium in common foods.

Food	Amount	Milligrams Of Sodium
Milk	2 Cups	226
Bread	2 Slices	322
Corn Flakes	1 Ounce	260
Tomato Juice	4 Ounces	504
Chili	1 Cup	1,194
Tomato Soup	1 Cup	932
Beef Broth	1 Cup	1,152
Frankfurter	1 Medium	610
Hamburger (Fast Food)	1/4 Pound	1,510
Catsup	1 Tablespoon	204
Canned Baked Beans	3/4 Cup	1,130
Canned Asparagus	1/2 Cup	560
Frozen Peas	1/2 Cup	295
Cottage Cheese	4 Ounces	457
Parmesan Cheese	1 Ounce	528
Pretzels	1/4 Pound	1,925

It is important to note that about 2/3 of the daily water intake of any individual is through food and only about 1/3 from water itself.

ACCEPTED
with COMMENTS
in EPA List

MAR 10 1975

Under the Act
Furnished by
attended
registered

35900-9

GENERAL IONICS BACTERIOSTATIC WATER CONDITIONERS

TABLE I
**INSTALLATION FLOW RATES PRIOR TO
IN-SERVICE USE**

Model Nos. (EE or IQ)	Step 9 (a) Service	Step 9 (b) Backwash	Step 9 (c) Service
0820-B	3 GPM/15 min.	1.5 GPM/10 min.	8 GPM/10 min.
1240-B	6 GPM/15 min.	3.0 GPM/10 min.	10.9 GPM/10 min.

NOTE: If flow rate in Step 9 (c) cannot be achieved due to low line pressure, run water at a maximum flow until equivalent gallonage is reached.

TABLE II
**LIFE EXPECTANCY OF HYGENE
BACTERIOSTATIC MEDIA**

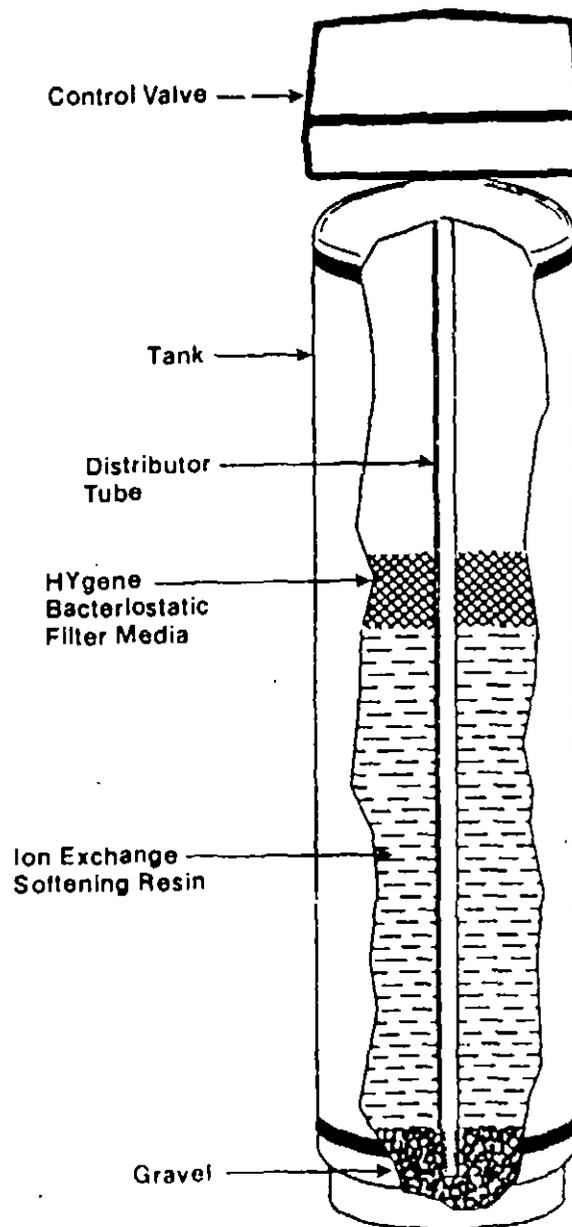
Model Nos. (EE or IQ)	Tank Diameter	HYgene Content	Bacteriostatic Medium Life Gallons	Family of 4
0820-B	8"	2 lb.	75,000	1 year
1240-B	11"	4 lb.	150,000	2 years

It is suggested that a water meter reading be noted at time of installation. Add to that reading the expected gallonage life of the Bacteriostatic medium from the above chart. Record what the water meter reading will be when replacement should be made.

Water meter reading at time of installation _____ Gallons

Expected life of Media (from above chart) + _____ Gallons

Water meter reading, media replacement _____ Gallons



treated water but also inhibits the growth of bacteria within the filter media bed. Additionally, the Model IQ — the unit with a brain — features state-of-the-art Metered Regeneration Control that provides salt savings of up to 40% over conventional timers.

The Model IQ Control monitors the conditioned water you use, and then initiates a regeneration cycle only when the ion exchange mineral is near exhaustion.

With the IQ Regeneration Control there is no need for "vacation" or

metered regeneration only when necessary. As a result, you realize savings three ways: (1) salt consumption, (2) water usage, and (3) sewage taxes.

The General Ionics Model IQ Bacteriostatic Water Conditioner gives you absolutely carefree convenience and reliable performance, plus the unique polishing of your water with the silver-impregnated activated carbon that removes objectionable tastes and odors.

The Water Conditioner with a brain gives you all these advantages:

- Bacteriostatic feature inhibits

- Meter-Controlled Regeneration for big savings
- Corrosion-resistant 6-cycle bronze control valve for trouble-free operation
- Beautifully polished chrome/nickel stainless steel mineral tank with a limited lifetime warranty
- High-density polypropylene brine tank with a 5-year limited warranty
- High-capacity S-759 resin for superior hardness removal as well as high recovery rates during regeneration

GENERAL IONICS — THE MAGIC NAME IN WATER CONDITIONING SINCE 1947

SPECIFICATION	MODEL NUMBER	
	IQ 0820-B	IQ 1240-B
Capacity (Grains)	20,000	40,000
Tank Size — Diameter by Height (Inches)	8 x 51	12 x 59
Salt Storage Capacity (Pounds)	250	200
Brine Tank Size — Diameter by Height (Inches)	18 x 30	18 x 30

ACCEPTED
with COMMENTS
in EPA Letter Dated:

MAR 13 1995



MANUFACTURERS OF GENERAL IONICS WATER CONDITIONERS
P.O. BOX 99 • BRIDGEVILLE, PA 15017 (PITTSBURGH DISTRICT)
INTERNATIONAL WATER CONSULTANTS AND EQUIPMENT MANUFACTURERS
MEMBER WATER QUALITY ASSOCIATION

Under the Federal Insecticide,
Fungicide, and Rodenticide Act as
amended, this product is a pesticide
registered under EPA Reg. No.

35900-9

E.P.A.

Environmental Protection Agency

REGISTERED

No. 35900-9

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• GENERAL IONICS Model IQ •

BACTERIOSTATIC



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