



GEYSER

COUNTERTOP WATER FILTER

MODIFICATIONS:

- 1U EURO
- 1UH EURO
- 1UH EURO SP
- 1UH (I) EURO
- 1C EURO
- 1UK EURO

HOUSING COLOR:

- WHITE
- TRANSPARENT



User manuel

PURPOSE

GEYSER countertop cartridge filters are intended for final purification of tap water from harmful impurities (chlorine, heavy metals, nitrates, pesticides, etc.), suspended particles, excess hardness salts and for the correction of mineral composition.

WATER PURIFICATION PRINCIPALS

Water purification and conditioning are fulfilled by replaceable filter elements of Slim Line 10" standard made on the basis of ion-exchange microporous polymer -ARAGON material, pressed activated carbon-block and additional inserts and mineralizers.

1) Ion exchange microporous polymer (Aragon) is a material, combining three purification methods: mechanical, sorption and ion-exchange, simultaneously removing all harmful impurities from water: (chlorine, iron, heavy metals, carcinogens, bacteria and viruses).

Silver, added to the composition of the material in metal indelible form, completely blocks the generation of bacteria.

During the process of filtration through the Aragon cartridge, the structure of the dissolved hardness salts changes and transforms from calcite form into aragonite (available form of calcium). Regular use of water treated by Aragon cartridge reduces the risk of urolithic illness. The manufacturing technology of Aragon material is the patented technology and expertise of GEYSER.

Filter element can be reused after regeneration. Sudden pressure drop of the filtrate water prompts user to replace the filter element (self-indication mechanism). Filter material entirely excludes the ingress of filtered dirt into treated water (antidischage mechanism).

TREATMENT EFFICIENCY

Suspended solids (rust, sand, algae, other particles more than 1 micron)	up to 99%
Heavy and radioactive metals (lead, cadmium, copper, strontium-90, caesium-137)	up to 96%
Active chlorine	up to 99%
Organic compounds (pesticides, carcinogens)	up to 85%
Oil products	up to 88%
Salts of hardness ¹¹	up to 80%
Microorganisms and E. coli	up to 99%

Aragon cartridge is able to remove up to 14-15g of hardness salts, after this period the regeneration is required.

2) Activated carbon is a highly efficient adsorbent made of coconut shell. It improves taste, color, odor and transparency of water. It is used in the form of activated carbon inserts (U, U(V)), or as a separate (CBC)*, manufactured from pressed activated carbon according to "carbon-block" technology. Silver added into the composition of the material, suppresses the reproduction of filtered bacteria.

MODIFICATIONS

Filters are produced in the following modifications:

G-1U euro - for soft water

G-1UH euro, G-1UH (I) euro - for hard water

G-1C euro - for very hard water

G-1UK euro - for conditioning of water

*Carbon block cartridge (CBC).

Kit	Model	G-1U	G-1UH	G-1UH	G-1UH(I)	G-1C	G-1UK
		euro	euro	euro special	euro	euro	euro
Ion-exchange cartridge	Aragon-M	▪					
	Aragon-H			▪	▪		
	Aragon-2		▪			▪	
Carbon insert	U		▪	▪			
	U(V)	▪			▪		
Softening insert	C(V)					▪	
Carbon cartridge	CBC						▪
Mineralizer	B(Ca)	▪					
	B(H)					▪	
	B(I)				▪		

Aragon-M - cartridge for soft water. It is saturated with calcium salts, therefore leaving hardness salts in water.

Aragon-H, Aragon 2 - cartridges for hard water. Removes excess hardness salts. Due to the presence of ion-exchange resin in its composition, the resource to remove hardness salts of Aragon 2 is 12 times greater than the standard Aragon material.

U, U (V) replaceable activated carbon inserts. They improve taste, color, odor of water.

C (V) replaceable insert with ion-exchange softening resin. Removes excess of hardness salts.

B (Ca) container-mineralizer with mineral calcium salts.

B (H) "Anti-scale" container-mineralizer with hydrogen ions. It prolongs the lifetime of C (V) insert and prevents scale formation.

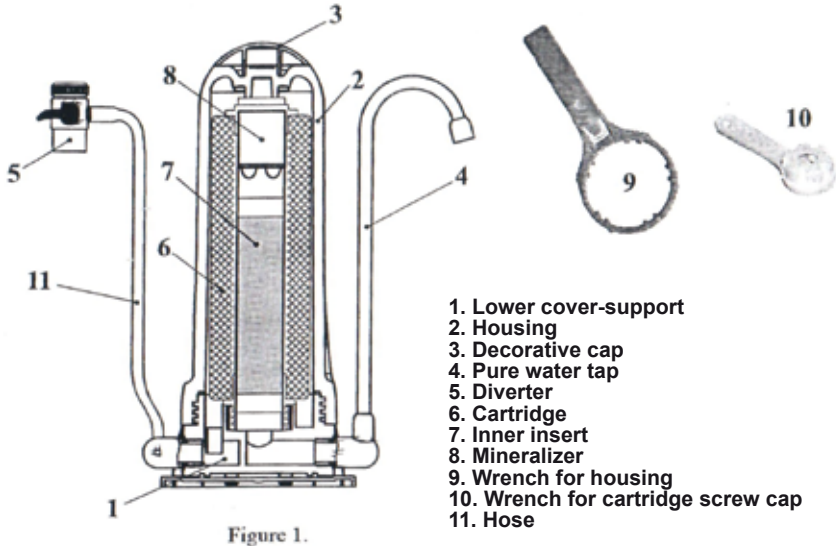
B (I) container-mineralizer is intended for enrichment of drinking water with iodine.

TECHNICAL CHARACTERISTICS

Recommended filtering rate (litre per min), not more than	1.5
Total resource of Aragon cartridge , litre	up to 25,000
Resource of inner carbon insert, litre, not less than	2,000
Resource of carbon cartridge, litre, not less than	(4-6) 000
Resource of mineralizer (depends on its model), litre	up to 600
Resource of C(V) insert at average water hardness, litre	50
Approximate frequency of cleaning of ion-exchange filtering cartridge from hardness salts (depends on water hardness), litre	200-400
Maximum operating pressure, atm	7
Water temperature (°C), not more than	40
Net weight (kg), not more than	2

SET OF EQUIPMENT

1. Filter housing assembled..... 1pc
2. Wrench for housing 1pc
3. Wrench for screw cap of Aragon cartridge (except G-1UK euro)..... 1pc
4. Manual
5. Package



The type of filter connection to the faucet spout depends on the design of the mixing faucet. If the faucet spout has aerator, remove it.

In case the faucet spout has an external M22xl screw thread, then the diverter is screwed directly on the faucet spout.

In case the spout has an internal M24xl screw thread, diverter connects to the spout through 22/24 adapter.

If spout has no thread and its external diameter is 14-16 mm, then the diverter is connected to the spout through the adapter IDA-01 (not shipped in the standard kit).

Before the first installation of the filter, tighten up the housing using the wrench (item 9): usually shipped not tightened.

After the first filling, filter should be turned upside-down. Wait for relieve to release, and then put the filter back into operating position.

Before starting the operation: wash out the filter up to complete washing away of carbon (or other) dust traces. Filter washing should be also done in the following cases:

- a) after cartridge replacement;
- b) after a long (more than 5 days) interruption in operation.

SERVICING THE FILTER

Reason for servicing	Cartridge	Type of servicing
Visible decrease in filtration rate	Aragon-H Aragon-M Aragon 2	Mechanical treatment. Regeneration (iron salts removal)
Formation of a scale and turbid film on water when boiling	Aragon-H Aragon 2 C(V)	Regeneration (hardness salts removal)
Water quality deterioration	CBC, U, U(V), B(Ca), B(H),B(I)	Replacement

All cartridges are to be replaced when resource serves its time.
Service should be done not less than once a year.
Before the sendee of the filter, block water delivery to it and arrange on gathering water from the case.

Mechanical treatment

For purification it is required to turn off the filter housing with the wrench (Fig. 1, item 9), remove the filter-housing, turn off the cartridge cap with a special wrench (10), remove the mineralizer (if there is any).

Set the wrench against a cap in the bottom of internal insert to push out it through threading spout, tighten the cap securely, wash the cartridge surface in warm water and clean with a soft brush (e.g. a clothes-brush).

cartridge cap

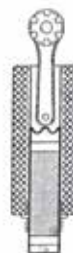


Figure 2

Hardness salts removal (performed following the mechanical purification)

Prepare solution for regeneration. Put 40g of citric acid into 1,5-2 litre reservoir, then add 30g (2 tablespoonfuls) of soda and pour 1 litre of water. Water should be poured by portions so to avoid excess foaming (evolution of carbon dioxide).

Install the cartridge into the housing, having removed a decorative cap (See Figure 1, item 3) and fill the housing with prepared solution (approximately 0,6 litres) (See Figure 3 a). Leave it for 10-12 hours, after that take out the cartridge and pour out the used solution. Put the cartridge into a sink vertically and pass the remained solution through it, filling the solution inside the cartridge through a threading spout. Let the solution drain off completely (See Figure 3b). Wash off the rest of the solution from a cartridge in two stages.

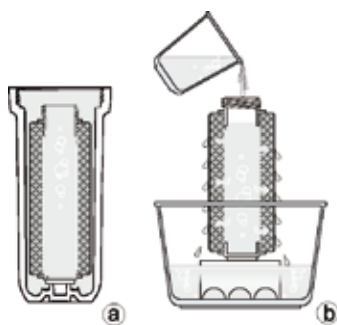


Figure 3.

First fill in 3 l of water (by portions) up to the top of the cartridge through the threading spout. Then wrap the neck with polyethylene film and fasten with a rubber band or twine. Put the cartridge bottom up and unscrew the bottom cover using a proper wrench. Keeping in this position put cartridge into a sink vertically and fill with 3 l of water more as described above. Unwrap and put the bottom cover back to its place. Assemble the filter in reverse order. Open the faucet and wash the filter through with water for 3 minutes at the rate of 1-1.5 l/min.

Iron salts removal (performed following the mechanical purification)

In enamelled or glass ware prepare 3 litres of hot 3 % citric acid solution (30g or 2 tablespoonful for 1 litre of water).

Put the filter element into a sink or suitable reservoir on a support and pour prepared solution through, filling it inside the filter-cartridge through a threading neck by portions up to the very top, until the solution coming out of it does not become clean and transparent.

Prepare 0,6l of 2% baking soda solution (1 teaspoon of soda for 0,6l).

Put the cartridge into the housing and pour soda solution inside. Solution should be filled through the threading neck of the cartridge until the whole cartridge and the housing will be filled with solution (See Figure 3b).

In an hour pour out the solution, assemble the filter in the reverse order and wash it through for 5 minutes.

Inserts and mineralizer replacement

When the resource of carbon or softener inserts and mineralizer is exhausted, the following steps should be taken:

- turn off the filter housing, screw out the cartridge and its cap, take out the mineralizer (if there is any), and push out the insert as described above;
- screw back the cap, lower new mineralizer (open side up), having removed a cover from it. Then lower new carbon or softener insert, grooves down.
- assemble the filter in reverse order, then wash it until traces of carbon or other dust in water disappear.

Regeneration of softening insert (removal of hardness salts)

- turn off the filter housing, turn out the cartridge and its cap, take out the mineralizer;
- prepare 3 litres of 10% common non-iodized salt solution: stir up one glass of salt (without any additives and admixtures) in three-litre jar of water;
- put the cartridge vertically inside the suitable reservoir and pour prepared salt solution by portions inside the softening insert;
- install the mineralizer back, screw in the cap, assemble the filter, connect it to the faucet and wash it until salty taste of water disappears (approximately for 1-2 min.).

SAFETY PRECAUTIONS, STORAGE AND SHIPPING

To avoid cracking of Aragon cartridge, it should be always kept in wet state.

When there are any interruptions in the filter usage of more than 1 month, be sure that water remains in the filter housing.

If the housing was once disassembled, to provide smoother tightening of the housing at next assembling, apply some vaseline to the rubber o-ring.

Protect filter and cartridges from damaging, falling and water freezing inside the housing and cartridges.

Shipment is allowed by any transportation mode (except for unheated aircraft sections), in accordance with the shipping rules applicable for a particular transportation mode.

The filter must be stored packed, at a distance of at least 1m from the heating appliances, at a temperature of no lower than 1°C. Keep away from direct sunlight. No freezing or drying is allowed. Do not expose to aerosols, corrosive and odorous liquids.

WARRANTY

Warranty period of filter is 3 years from the date of sale. If no date of sale and trading organization's stamp are available, the guarantee period is estimated as of the date of manufacture. Warranty does not cover the cartridges and consumable items: their resource is indicated

If any manufacturing defect found the replacement of component parts, cartridges and consumable items is performed only in the presence of the expert's report. The manufacturer disclaims the responsibility for the filter operation and possible consequences if:

- filter or its components have mechanical damages;
 - requirements of this manual were not observed when connecting and operating the filter;
 - the resource of cartridges or consumable items was served out;
 - filter was used for other than the purpose specified, e.g. for treatment of corrosive liquids.
- The average operation life of the filter is 5 years.
The post-warranty service is carried out by the manufacturer and its regional representatives.

THE ADDRESS OF THE MANUFACTURER: AKVATORYA, LTD

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www.geyser.pro

WARRANTY CERTIFICATE

Manufacture date _____

FILLED BY TRADING ORGANIZATION

Date of sale _____

Shop seal _____

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