SEPTEMBER 1989

AQUA-DIAL
Quality Water

15mm CERAMIC WATER CONDITIONER Installation and Service Details

General

The Aqua-Dial is a magnetic water conditioner designed to prevent the build up of hard scale in domestic plumbing and hot water systems. It is not a water softener. No chemicals, salts or external power supply is required. It works by passing the water through a very strong magnetic field. This causes the hardness salts to precipitate into the body of the water, where they are held in suspension thus preventing scale formation.

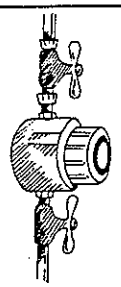
Installation

Whether you intend to install the Aqua-Dial yourself or obtain the services of a tradesman, the following recommendations should be carefully considered.

1) Location

The unit should be located on the incoming cold mains supply pipe, as close to the stop-cock as possible. See Fig. 1. It can be in the vertical or horizontal position. No bye-pass pressure reducing or non-return valves are required. It is however recommended that a stop-cock be located just above the unit. This facilitates easy servicing by preventing water in the pipe draining back down.

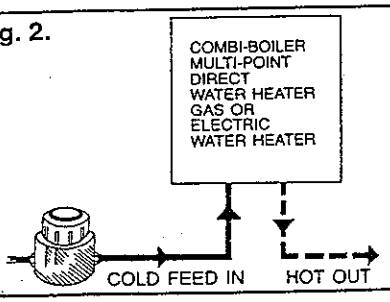
Fig. 1.



NOTE: Do not over tighten the connectors (hand tight plus half turn)

It can be located on individual appliances ie combination boilers. See Fig. 2.

Fig. 2.



2) Connections

The Aqua-Dial is internally threaded to 15 mm (½") B.S.P. threads. It can be jointed by using adaptors to virtually any pipe.

When connecting to 15 mm (½") copper tube, use the two washers supplied (Part No. 21) and two 15 mm compression couplings, male iron to copper (Conex 302 or similar). Soldered connections are not recommended.

3) Installing

Installing the unit into 15 mm copper tube. Firstly, turn off the main stop-cock and drain down any water in the pipe. Tighten a connector into the **inlet** side of the main body. Position the unit on the pipe and mark the amount of pipe to be removed (this length will include the effective length of the adaptor on the outlet side and the second stop-cock if applicable).

Cut out the section of pipe. Place the unit over the incoming end and mark the screw holes with a nail or thin screwdriver. Remove the unit. Drill and plug the two holes. If the back of the main body does not touch the wall, then a packing piece must be installed.

Tighten the second connector into the outlet side of the unit. Spring the complete assembly and stop-cock into the two ends of the pipe and tighten the compression couplings with a spanner. Locate the two screws and tighten the main body to the wall or packing piece.

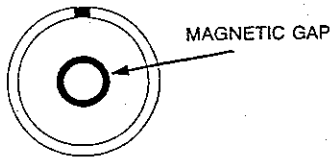
NOTE: Do not over tighten these screws or stress the main body. Check that the arrows are with the water flow. Tighten the locking nut hand tight plus an eighth turn by using the end of the spanner. Turn on the water supply and check for any leaks.

4) Servicing

This magnetic gap (see Fig. 3) should be cleaned from time to time (approx. twice per year).

To remove the treatment head, turn off stop-cocks and drain down as before. Included in your kit is a multi-function spanner (Part No. 22). Unscrew and remove locking nut with spanner. Remove Part 17 and 16 by gently pulling forward. Clean this magnetic gap with a nail brush or matchstick. Do not use screwdriver or sharp instrument.

Fig. 3.



PART No. 16

Kit Contents Material Specifications and Spares List

Part No.	Description	Material
15	Main Body	Kemetal Acetal Copolymer suitable for temperatures up to 70°C under pressure.
16	Treatment Head	Stainless Steel (EN.57) with Ceramic Magnet.
17	Treatment Head Carrier	Acetal
18	Locking Nut	UP.V.C. nut with 2" B.S.P. internal thread
19	Small 'O' Ring	Rubber
20	Large 'O' Ring	Rubber
21	2 off Seal Washers	Polythene
22	Multi-Purpose Spanner	Polycarbonate
23	2 off 2½"-10 Fixing Screws	Zinc Plated Steel
24	2 off Wall Plugs	Plastic
25	2 off 15mm (½") Compression Adaptors	Brass (not illustrated)

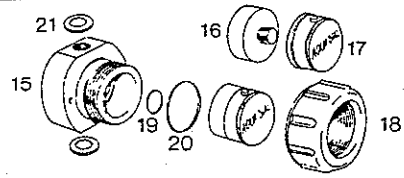


Fig. 4.

NOTE: By unscrewing item 16 from 17. Part No. 17 can be used as a service plug. Tightening item 18 into the main body. See servicing.

5) Service/Moving Plug

This treatment head carrier (17) has two basic functions.

During routine cleaning, it can be installed into the body to prevent any water leakage due to partial stop-cock failure.

Should, at any time, you drop, damage or require factory service on your treatment head (Part No. 16) install the plug into the main body and tighten. This will allow you to carry on using the water whilst the treatment head is being repaired.

6) Electrical Earthing or Cross Bonding

The main body of the Aqua-Dial is made of Kemetal (an acetal copolymer). If electrical "earthing" or "bonding" is required across the unit, suitable cable and clips should be use to bye-pass the main body. If in doubt, consult a qualified technician.

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