

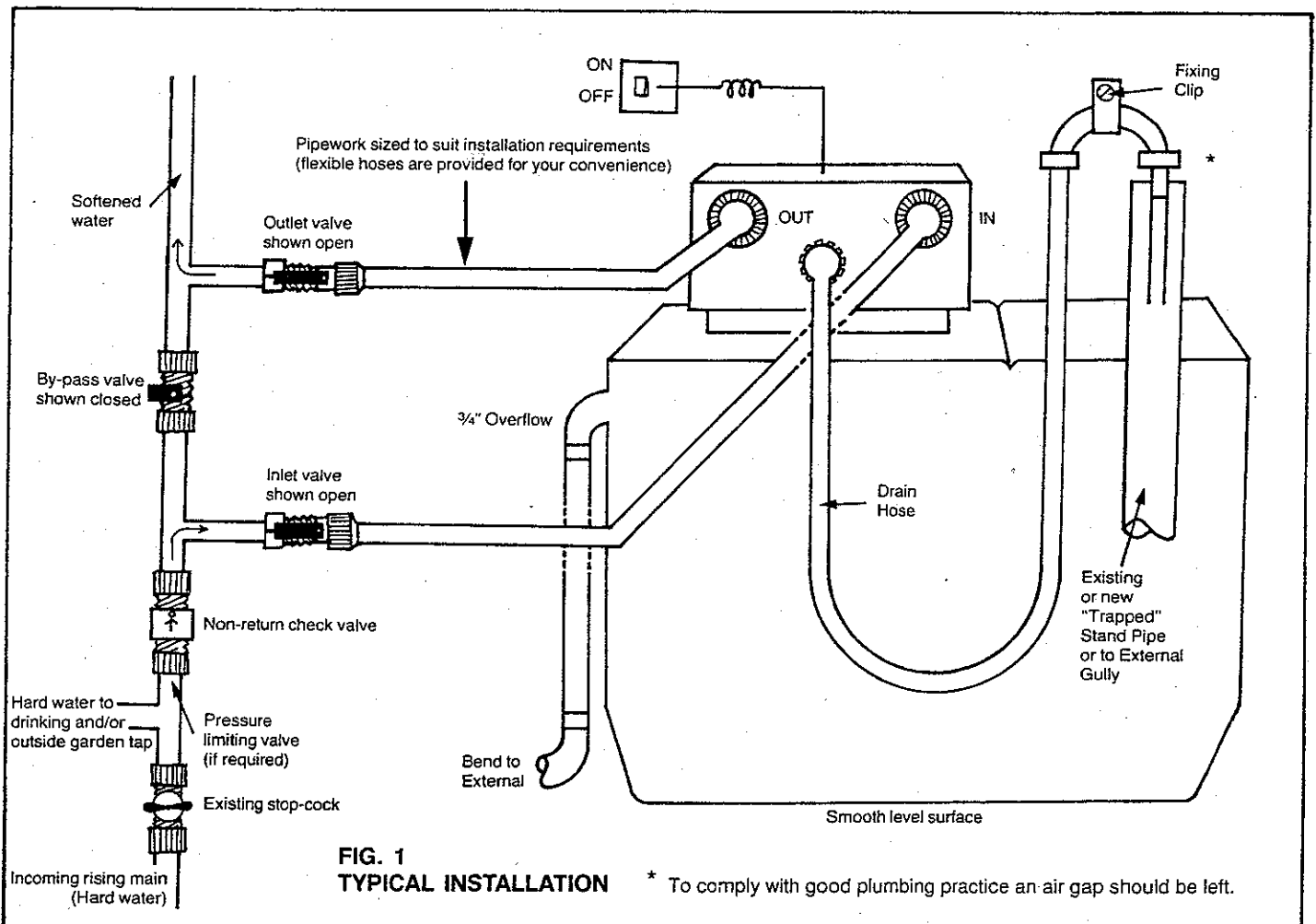


## INSTALLATION, COMMISSIONING PROGRAMMING & USER INFORMATION

# PRISMERTEC WATER SOFTENER

These instructions are designed to give you the customer a complete understanding of how to locate, install, programme and obtain trouble-free running of your AQUA-DIAL PRISMERTEC WATER SOFTENER.

Whether you intend to install the unit yourself or obtain the services of a tradesman, please spend a few minutes reading through this booklet and the other enclosed details. It will give you a complete understanding of the "SOFT WATER WORLD" that you are about to enter. **PLEASE RETAIN FOR FUTURE REFERENCE.**



### LOCATION

The softener should be located as close as practicable to the incoming cold rising main supply. Very often (*but not always*) this main is in the kitchen or utility room. Sometimes the main rises in a downstairs cloakroom, under the stairs, or in the garage. In most cases the softener can be sited in any of these locations as well as outside (*with suitable frost protection*) or even the loft space (when sited in a loft, a safety tank is advisable).

### REQUIREMENTS

#### THE SOFTENER REQUIRES

- Mains Water Supply 20-60 p.s.i. (1.36-4.0 Bar) pressure.
- A waste connection.
- An electrical point.
- Access for salt filling and service.

# PRE-INSTALLATION

## INSTALLATION KIT

Your Softener comes complete with a basic 12mm flexible trade installation kit (*see detail sheet with kit*). Alternatively you can disregard the hoses and "hard plumb" the connections in 15mm or 22mm copper tube.

**Unvented plumbing and hot water systems:** Disregard the inlet and outlet hoses, valves and non-return check valve. "Hard plumb" using 22mm copper tube and fittings. A 22mm (3/4") non-return check valve will also be required. It must be UK W.F.B.S. listed.

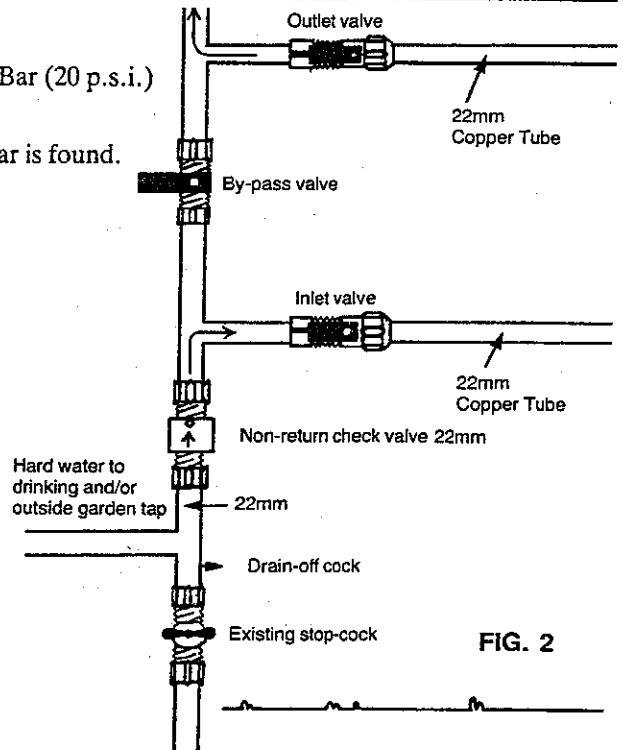
## PRESSURE LIMITING VALVE (P.L.V.)

Your Prismertec will only operate at optimum performance between 1.4 Bar (20 p.s.i.) and 4 Bar (60 p.s.i.).

It is essential that a P.L.V. is fitted where water pressure in excess of 4 Bar is found.

For unvented or maximum flow rate requirements this Softener should be hard plumbed using 22mm copper tube, valves and fittings as shown in Fig. 2.

**Note: Water pressure will typically increase overnight or during periods of low demand. The Prismertec regenerates at night and this should be considered when establishing the necessity for pressure control.**



The following are available from Aqua-Dial or your supplier:

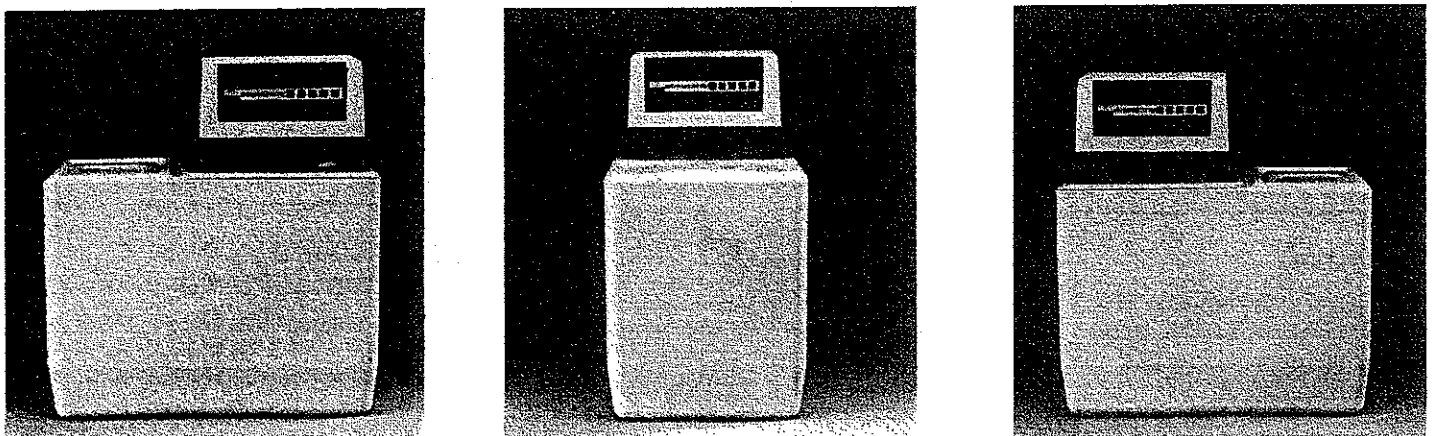
1. 22mm (3/4") non-return check valve.
2. Pressure limiting valve 3.5 Bar (50 p.s.i.) for high pressure areas.
3. Hardness test kit: For accurate testing.
4. Drinking water tap: For hard water drinking point.
5. Drinking water filter kits.
6. 5m low voltage extension lead (specify Prismertec).

**NOTE – If an outside tap is installed a "double check valve" must be fitted to the outside tap.**

## CHOOSING THE BEST POSITION

By using the Prismertec's unique indexing system you can select the easiest valve position to suit your requirements.

FIG. 3



## TO ALTER THE VALVE POSITION

1. Unscrew the four plastic screws and keep safely (Fig. 4).
2. Release the nut and clip from the brine pick-up tube (Fig. 5).
3. Carefully lift the entire valve head pressure vessel and brine pick-up tube. Replace to new position (Fig. 6).
4. Re-route the brine pick-up tube and refix the bracket and nut (Fig. 7).
5. Replace the four plastic screws loosely on the top plate – tighten when all four are located.



FIG. 4

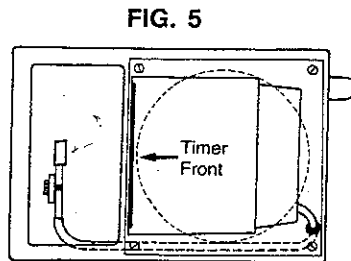


FIG. 5

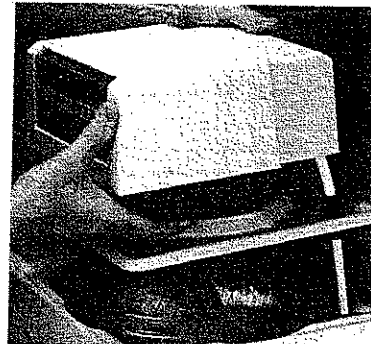


FIG. 6

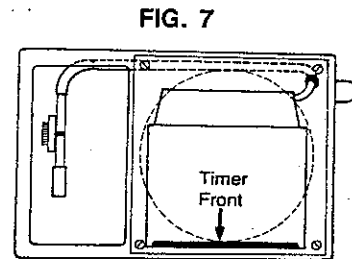
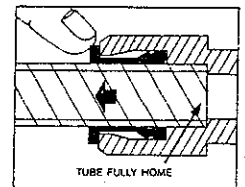


FIG. 7

If at any time you need to remove the brine tube from the push-fit couplings, simply push in the collet and pull out the tube. (Fig. 8)

FIG. 8



TUBE FULLY HOME

**NOTE – Do not shorten or cut brine pick-up tube.**

## LOW HEIGHT – RESTRICTIONS (under low sinks etc)

If you are in a situation where high height is a problem, it is possible to mark out the shape of the Softener cabinet and cut out the wooden plinth. Allow the "Cut-Out" to fall through the hole to act as a smooth base for the Softener to sit on. The gap between the Softener and the cut out can be filled with a plastic edging strip.

It is also possible to cut off the back section of the valve cover to allow the cover to pull forward rather than have to be lifted up.

## INSTALLATION

### 1 STARTING THE INSTALLATION

Before commencing the installation, ascertain that the water pressure is not too low or high. Optimum operating pressure is 1.4 to 4 Bar (20 to 60 p.s.i.). If daytime pressure exceeds 3.5 Bar (50 p.s.i.), then a pressure limiting valve should be installed. These are available from your supplier and should be located as shown in Fig. 1. Pressure can be determined by applying a gauge to an outside tap or single pillar tap or by contacting your local Water Board. If water splashes out over the sink when the cold tap is turned fully on, it is a good indication of high pressure.

### 2 DRAIN THE RISING MAIN

Turn off the existing cold mains supply stopcock and drain down any water in the pipe via the "drain off cock" or kitchen cold tap. To allow air to enter the main via the ballvalve in the loft tank, run a small amount of water from the cold tap in the bathroom. If all your cold supply connections are off the rising main, open a tap at the highest point.

### 3 INSTALLING THE BY-PASS SET

Cut the rising main and install the inlet, outlet and by-pass valves as shown in Fig. 1. Install the non return check valve and connect hard water supply to kitchen drinking tap and/or outside garden supply (if required). Re-site or install a "drain off cock" as indicated. Fit the pressure limiting valve (if applicable) prior to the hard water inlet to the softener.

Turn the inlet and outlet valves to closed (handle pointing across water flow). Turn the by-pass valve to open (handle pointing with the water flow).

Ensure the "drain off cock" is closed and turn back on the existing stopcock. This will allow hard water to again enter the system.

#### 4 CONNECTING INLET/OUTLET HOSES

From the inlet valve connect a hose to the "PORT" marked **hard water inlet** → on the softener control valve (Fig. 1). Ensure that the rubber washers (Fig. 9) are in place and hand tighten nut plus half turn with a spanner. Connect outlet hose from outlet valve to softener in the same manner.

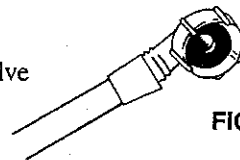


FIG. 9

#### 5 CONNECTING THE HARD WATER DRINKING TAP

The cold supply to the kitchen sink can be left on hard water or alternatively a separate hard water tap can be installed as Fig. 10. Aqua-Dial can supply a hard water drinking tap kit.

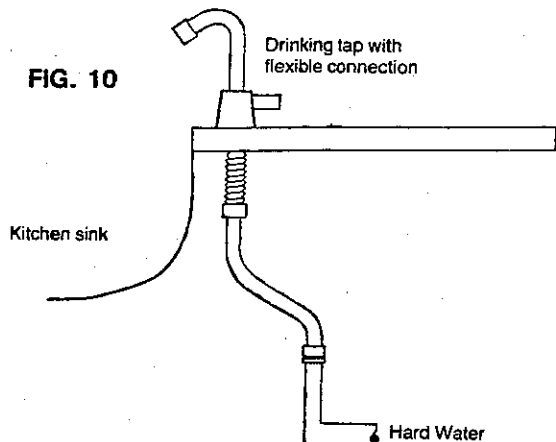


FIG. 10

#### NOTE - IMPORTANT!

Softening water increases the sodium content of raw water. Anybody on a sodium free or low sodium diet should not drink softened water. Do not use softened water in artificial baby feeds. Where practicable install a separate hard water drinking tap.

The Aqua-Dial Drinking Water Filter Kit.

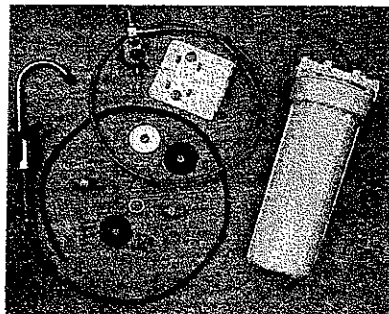


FIG. 11

A complete kit to give you clear fresh tasting drinking water. Available from your Aqua-Dial supplier.

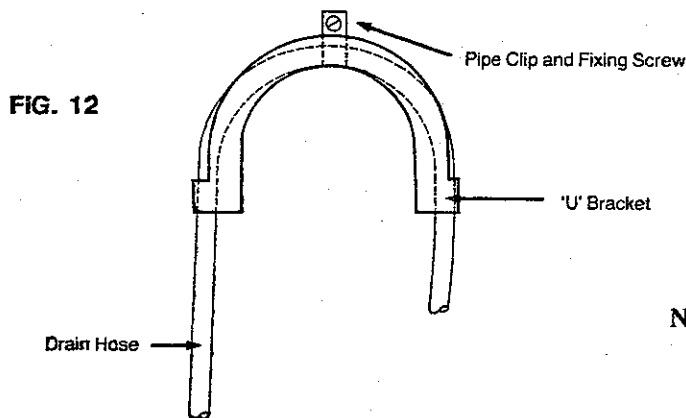
#### 6 PLUMBING THE DRAIN CONNECTION

The drain outlet for the softener is located between the inlet and outlet port. See Fig. 1. The drain operates under mains pressuring during regeneration. White flexible drain hose is supplied with a pre-jointed elbow. The drain hose may be run into an existing or new "stand-pipe" (as in a washing machine installation) or directly into an external gully. If the drain hose is exposed to the outside, the part outside should be insulated to prevent freezing.

The drain can be connected to a soil stack via a deep-seal trapped connection and "stand-pipe".

As the drain is under pressure, it may be elevated as in cellar or under stair type installations.

Always leave an air gap between water level and hose outlet when discharging into a stand-pipe. Secure the hose at stand-pipe to prevent "kinking" and accidental removal or "blow out" of the hose. Using the plastic 'U' bracket and the pipe clip supplied in the kit.



NOTE - It is important that the pipe clip is used to prevent the hose slipping out.

#### 7 OVERFLOW CONNECTION

The overflow connection is located at the rear of the softener. It is *not* under pressure and *cannot* be elevated. The overflow pipe **must run downhill** and terminate outside the building. Use 22mm rigid plastic overflow pipe in conjunction with the elbow supplied. See Fig. 1. Always try to have a vertical drop as shown.

The 22mm rigid plastic overflow pipe can be obtained from your supplier. It is also suitable for long runs.

The overflow bend supplied on the Softener can be adapted to "OSMA" or similar "solvent weld" system by purchasing a suitable adaptor.

## 8 ELECTRICAL CONNECTION

The softener must be connected to an electrical supply. The consumption is only three watts which is used to drive the power unit. All other cycles on the valve are operated by water pressure. The Prismertec has low voltage for safety and is supplied with a plug in transformer.

Connect the transformer to a 13 amp socket. The supply must be continuous. A 5 metre extension lead is available from Aqua-Dial or your supplier. Please specify Prismertec.

## POWER FAILURES

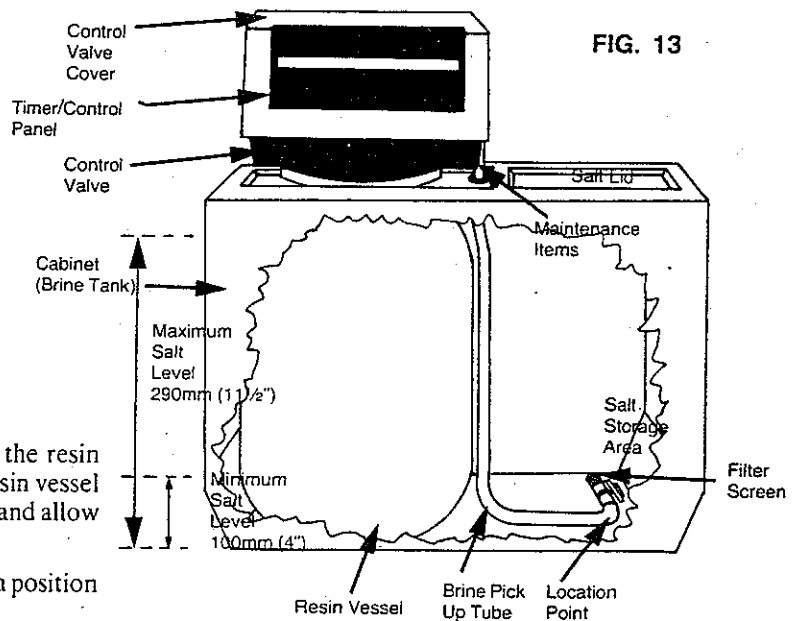
In the event of an electrical power failure, all operational information will be retained in a Nonvolatile Random Access Memory, NOVRAM. During the failure, the controller will not keep time or measure water flow. When power is restored, all functions will continue on from the time of the failure. There is no battery to replace. It may be necessary to reset the time.

## 9 COMMISSIONING

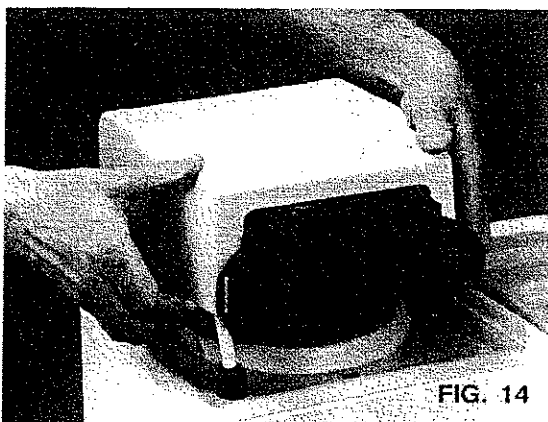
### IMPORTANT!

Ensure that the water and electrical supplies are switched OFF BEFORE attempting to commission your water softener.

- i) Remove the control valve cover by grasping each side of the cover at the bottom, towards the back. Spread the sides apart slightly and lift off. See Fig. 14.
- ii) Locate the black button (Fig. 15) and press down to disengage the cam gear.
- iii) With the cam gear disengaged, rotate the cam gear anti-clockwise to the backwash position.
- iv) Open the inlet valve (Fig. 1) partially to allow the resin vessel to fill. Water will run to drain when the resin vessel has filled. At this point fully open the inlet valve and allow water to run for five minutes.
- v) Disengage the cam gear and slowly advance it to a position just before "service".
- vi) Switch on the power supply. The cam gear should automatically travel to its rest position (approximately in the centre of "service") at which point the drive motor will switch off.
- vii) Close the by-pass valve and open the outlet valve (Fig. 1).
- viii) Remove the salt lid and pour in 2.5 litres (5 pints) of water.
- ix) Add salt. 10 - 20kg.



PRISMERTEC MAIN COMPONENTS



### CAUTION

Do not use block or tablet salt. Use of block or tablet salt will result in improper regeneration. Use only granular salt.

In the event of difficulty obtaining granular salt telephone Aqua-Dial on 0181-549 7812 or Salt Union on 0800-371093.

### ALWAYS

Keep a minimum of 100mm (4") of salt in the water softener to ensure efficient regeneration and continuous softened water. A visual check should be carried out on a 3 - 6 weekly interval depending on usage. Refill as necessary.

**NOTE** - Adding water to the salt tank is not usually necessary. This is only necessary as part of the "Commissioning procedure".

## 10 CONTROL PANEL SETTING

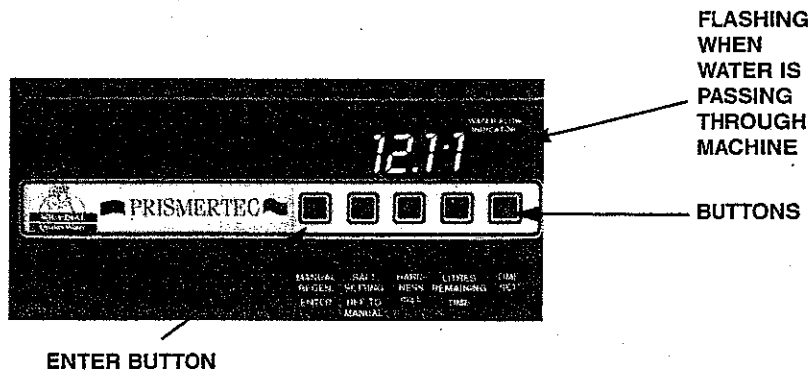
The control panel when first connected to the electrical supply will display the current time of day. For your information the numbers on the control panel are red.

### TO SET THE CORRECT TIME OF DAY

**NOTE** – When the clock is correctly set regeneration will take place from 2.00am and last up to 90 minutes.

- i) Push the button marked TIME SET (Fig. 16).

FIG. 16



- ii) Each digit is controlled by the button below it. The time is displayed on a 24 hour clock basis. Set the time-of-day by pressing the buttons directly below each digit, starting with the digit on the left (the second button from the left).
- iii) After the desired time is displayed, press the ENTER button. The display will show four 9s. These will disappear within 5 seconds. The display now shows the amount of softened water available or "litres remaining". In order to check the time setting just entered press the LITRES REMAINING/TIME button and release.

**NOTE** – During normal service the control panel will display litres remaining (softened water available). If for any reason the "Time" display mode is selected the control will automatically reset to "litres remaining" after regeneration. On commissioning the litres remaining figure will not be accurately displayed. This will automatically adjust after the first automatic regeneration.

### TO SET WATER HARDNESS

The degree of hardness found in water varies. The amount of hardness in water is directly linked to the amount of softened water available before regeneration is needed. It is therefore very important to check the amount of hardness in your local water supply and adjust your water softener if necessary. The Prismertec is factory set for water of 300ppm or mg/l hardness.

### TO CHANGE THE HARDNESS SETTING

- i) Simultaneously push the buttons marked HARDNESS mg/l and LITRES REMAINING/TIME (Fig. 16).
- ii) Set in the hardness value in mg/l by pushing the buttons under the digits displayed.
- iii) After the desired numbers are displayed, press the ENTER button. The display will show four 9s. These will disappear within 5 seconds and the hardness will be set. The display will automatically revert to litres remaining.
- iv) Push the button marked HARDNESS mg/l to check the water hardness setting. The value will be displayed until the button is released.

### TO ADJUST SALT SETTING

From Fig. 17 establish which setting is required. "Normal Usage" or "High Usage".

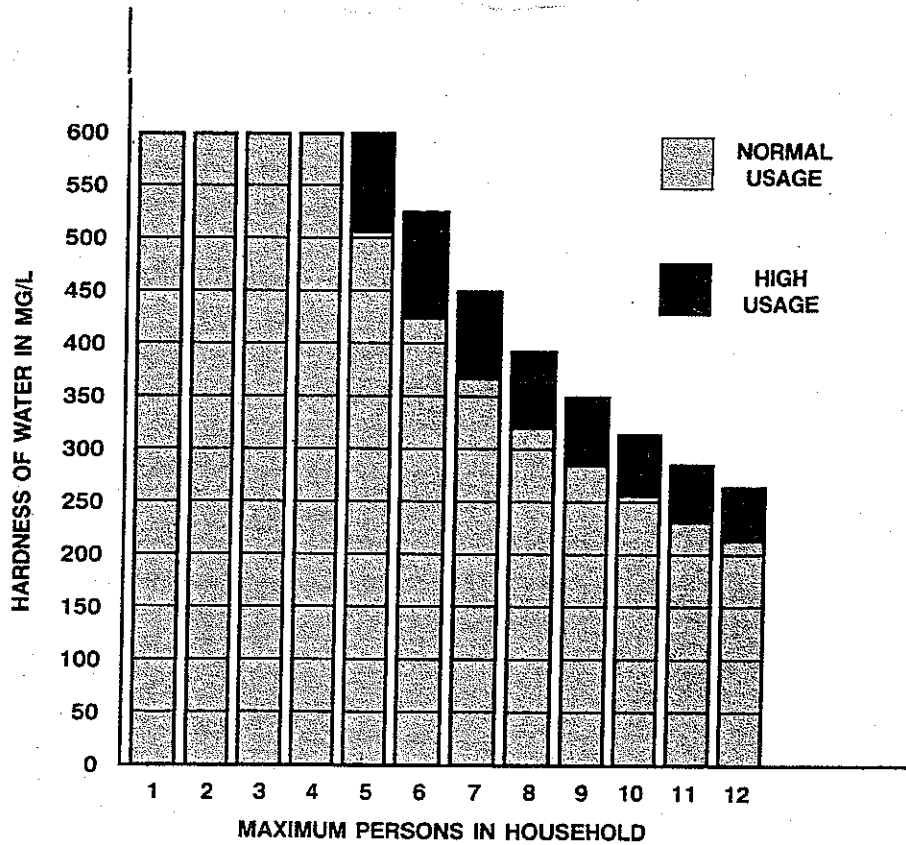
If "Normal Usage" is required then no adjustment is necessary.

### TO SET TO "HIGH USAGE"

- i) Simultaneously push the buttons marked SALT SETTING and LITRES REMAINING/TIME (Fig. 16). The display will show 050.
- ii) Adjust the salt setting for "High Usage" to show 075 by pushing the buttons directly under the digits displayed.
- iii) After the desired numbers are displayed, push the ENTER button. The display will show four 9s. These will disappear within 5 seconds. Push the button marked SALT SETTING to check the salt setting. The value will be displayed until the button is released. The settings are now complete.

Replace Control Valve cover and enjoy the luxury and benefits of softened water.

FIG. 17



## 11 USER MAINTENANCE

Note – All maintenance items are located on the lower right side of the valve (Fig. 13).

- i) Inspect and clean brine tank and filter screen on end of brine pick-up tube once a year or when sediment appears in the bottom of the brine tank.
- ii) In areas which suffer high turbidity or sediment in the water supply clean injector screen, injector and flow controller once a year.
  - a) Unplug electric supply.
  - b) Shut off water supply and put bypass valves into bypass position.
  - c) Relieve tank pressure.
    - Remove the control valve cover.
    - Locate the black button (Fig. 15) and press down to disengage the cam gear.
    - With the cam gear disengaged, rotate the cam gear anti-clockwise to the backwash position.
  - d) Using a screwdriver, unscrew the flow controller. Clean and flush the flow controller. Lubricate all O-rings with silicone lubricant and reassemble flow controller.
  - e) Using a screwdriver, unscrew injector screen. Remove injector screen and clean using a fine brush. Flush until clean. Lubricate O-ring with silicone lubricant and reassemble.
 

**NOTE – Do not overtighten**
  - f) Using a screwdriver, unscrew injector cap. Using needlenose pliers, pull injector straight out. Clean and flush injector. Lubricate all O-rings with silicone lubricant. Reinstall injector and push all the way in (small end first). Tighten cap carefully.
  - g) Rotate the cam gear to a position just before service. Restore electrical supply. The motor will drive the cam gear to the service position.
  - h) Reinstall the control valve cover  
Open water supply valve and return bypass valves to service position.

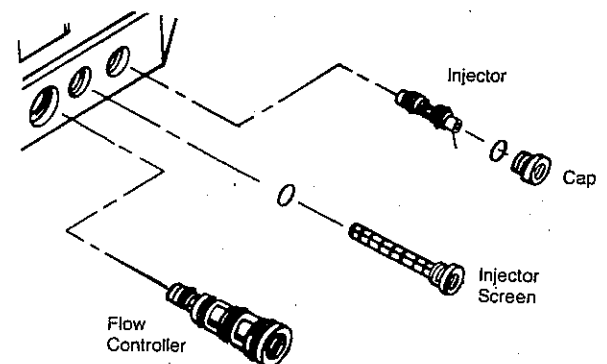


FIG. 18

## 12 GUARANTEE (UK ONLY)

All Aqua-Dial automatic domestic water softeners are covered by a full one year parts and labour guarantee against faulty materials or workmanship.

Aqua-Dial have full service back-up covering the United Kingdom. For help, advice or service phone their technical services department.

## 13 TEN YEAR WARRANTY (UK ONLY)

Aqua-Dial offer a "Peace of Mind" guarantee covering all parts, labour and call-out charges, available for a small yearly premium. Please complete and return the section on the reverse side of the guarantee card.

## 14 TROUBLE SHOOTING -

## FAULT FINDING AND SERVICE PROBLEMS

Before contacting your supplier or our service department, always run a complete check on this page. History shows that the major percentage of service call-outs are due to owner misuse. Service visits can very often be avoided by studying the information below or alternatively discussing the problem over the phone. Always check your salt level at a regular (at least monthly) interval and top up as necessary.

Problem	Possible Cause	Solution
1. Clock does not display time of day	a. Electrical supply disconnected b. Defective transformer c. Defective circuit board	a. Connect power. b. Replace transformer. c. Replace controller.
2. Clock does not display correct time of day	a. Intermittent power source b. Power failure	a. Use supply not controlled by switch. b. Reset clock.
3. Time display continues to advance	a. Defective time set switch	a. Replace controller.
4. Time display shows something other than time of day	a. Electrical interference b. Defective controller c. Incorrect mode	a. Disconnect power to unit. Restore power and reset time of day display. b. Replace controller. c. Reset controller or push time/gallons remaining button on display.
5. No water flow display when water is flowing	a. Bypass valve open b. Meter probe disconnected or not fully connected to meter housing c. Restricted meter turbine rotation due to foreign material in meter housing d. Defective meter probe e. Defective controller.	a. Close bypass valve. b. Fully insert probe into meter housing. c. Remove turbine assembly, free up turbine and flush with clean water. Turbine should spin freely. If not, replace turbine assembly. d. Replace controller. e. Replace controller.
6. Control regenerates at the wrong time of day	a. Power failure b. Clock set incorrectly	a. Reset clock to correct time of day. b. Reset clock to correct time of day.
7. Timer stalled in regeneration cycle	a. Motor dead b. Drive gear skipping on cam gear c. Broken gear d. Air leak in brine connections e. Binding of gear cam f. Water pressure excessive	a. Replace power unit. b. Replace gear. c. Replace gear. d. Repair/replace as necessary. e. Remove foreign object obstruction from valve discs or gear cam. f. Install pressure limiting valve.
8. Continuous regeneration. Gear cam does not stop at the end of regeneration	a. Broken projection on cam gear b. Defective switch	a. Replace cam gear. b. Replace switch.

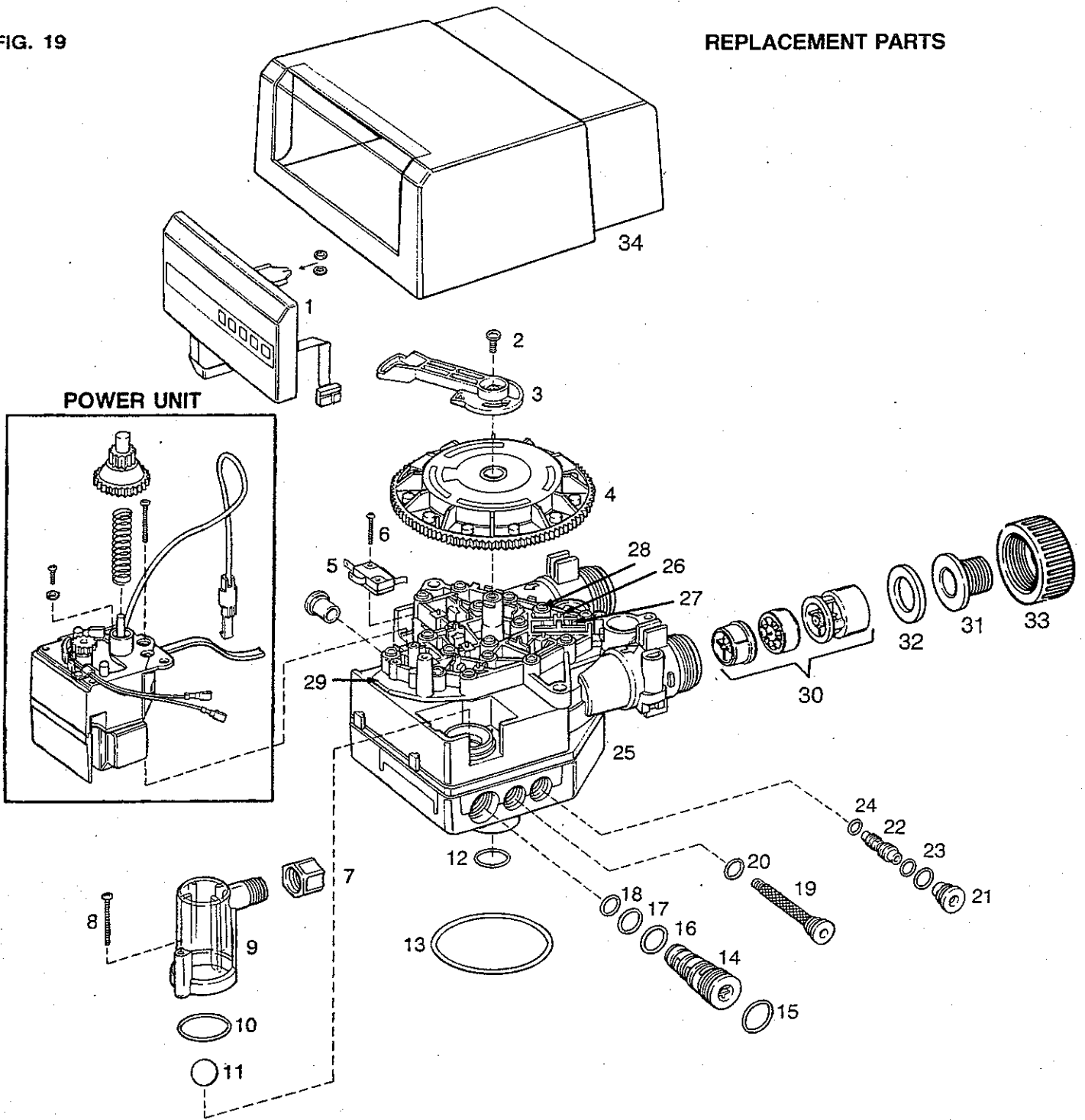


## 14 TROUBLE SHOOTING – CONTINUED

Problem	Possible Cause	Solution
9. Control will not regenerate automatically or when the manual regeneration switch is depressed	<ul style="list-style-type: none"> <li>a. Electric supply disconnected</li> <li>b. Defective power unit</li> <li>c. Broken gear</li> <li>d. Defective switch</li> </ul>	<ul style="list-style-type: none"> <li>a. Reconnect power.</li> <li>b. Replace power unit.</li> <li>c. Replace gear.</li> <li>d. Replace controller.</li> </ul>
10. Control will not regenerate automatically but will regenerate when switch is depressed	<ul style="list-style-type: none"> <li>a. Water flow display is not operative</li> <li>b. Defective controller</li> <li>c. Incorrect hardness and salt settings</li> </ul>	<ul style="list-style-type: none"> <li>a. Same as item 5.</li> <li>b. Replace controller.</li> <li>c. Set to correct values.</li> </ul>
11. Run out of soft water between regenerations	<ul style="list-style-type: none"> <li>a. Improper regeneration</li> <li>b. Incorrect hardness settings</li> <li>c. Water hardness has increased</li> <li>d. Restricted meter turbine rotation due to foreign material in meter housing</li> <li>e. Excessive water usage</li> </ul>	<ul style="list-style-type: none"> <li>a. Repeat regeneration making certain that there is plenty of salt in the salt storage tank. Also see items 12, 14 and 15.</li> <li>b. Set to correct values.</li> <li>c. Set hardness to new value.</li> <li>d. Remove turbine assembly, free up turbine and flush with clean water. Turbine should spin freely, if not replace turbine.</li> <li>e. Repair leaky plumbing and/or fixtures.</li> </ul>
12. Control will not draw brine	<ul style="list-style-type: none"> <li>a. Low water pressure</li> <li>b. Restricted drain line</li> <li>c. Injector or injector screen plugged</li> <li>d. Injector defective</li> <li>e. Inlet or outlet valve disc is not closed</li> <li>f. Air check valve prematurely closed</li> </ul>	<ul style="list-style-type: none"> <li>a. Ensure minimum 1.4 Bar (20 psi) at softener.</li> <li>b. Change drain to remove restriction.</li> <li>c. Remove injector and flush it and injector cap.</li> <li>d. Replace both injector and injector cap.</li> <li>e. Flush out foreign matter by manually rotating cam gear.</li> <li>f. Put control momentarily into brine refill. Replace or repair air check if needed.</li> </ul>
13. Brine tank overflow	<ul style="list-style-type: none"> <li>a. Brine valve disc being held open</li> <li>b. Uncontrolled brine refill flow rate</li> <li>c. Inlet and/or outlet valve disc not closed during brine draw causing brine refill</li> <li>d. Air leak in brine line to air check</li> </ul>	<ul style="list-style-type: none"> <li>a. Manually operate valve stem to flush away obstruction by rotating cam gear.</li> <li>b. Replace brine refill control.</li> <li>c. Flush out foreign matter holding disc open by manually operating valve stem by rotating cam gear.</li> <li>d. Check all connections in brine line for leaks.</li> </ul>
14. System using insufficient or excessive salt	<ul style="list-style-type: none"> <li>a. Inaccurate setting</li> <li>b. Foreign matter in controller causing incorrect flow rates</li> <li>c. Defective controller</li> </ul>	<ul style="list-style-type: none"> <li>a. Make correct setting.</li> <li>b. Remove controller and flush out foreign matter.</li> <li>c. Replace defective part.</li> </ul>
15. Intermittent or irregular brine draw	<ul style="list-style-type: none"> <li>a. Low water pressure</li> <li>b. Defective injector</li> <li>c. Plugged injector screen</li> </ul>	<ul style="list-style-type: none"> <li>a. Ensure minimum 1.4 Bar (20 psi) at softener.</li> <li>b. Replace both injector and injector cap</li> <li>c. Clean or replace screen.</li> </ul>
16. No soft water after regeneration	<ul style="list-style-type: none"> <li>a. Unit did not regenerate</li> <li>b. No salt in brine tank</li> <li>c. Plugged injector</li> <li>d. Air check valve closed prematurely</li> </ul>	<ul style="list-style-type: none"> <li>a. Check for power.</li> <li>b. Add salt to brine tank.</li> <li>c. Remove injector and flush it and injector screen.</li> <li>d. Put control momentarily into brine refill to free air check. Replace or repair air check if needed.</li> </ul>
17. Control backwashes at excessively low or high rate	<ul style="list-style-type: none"> <li>a. Foreign matter affecting controller operation</li> <li>b. Defective controller</li> </ul>	<ul style="list-style-type: none"> <li>a. Remove controller and clean it.</li> <li>b. Replace controller.</li> </ul>
18. Flowing or dripping water at drain or brine line after regeneration	<ul style="list-style-type: none"> <li>a. Drain valve or brine valve held open by foreign matter or particle</li> </ul>	<ul style="list-style-type: none"> <li>a. Manually operate valve stem to flush away obstruction by rotating cam gear.</li> </ul>

FIG. 19

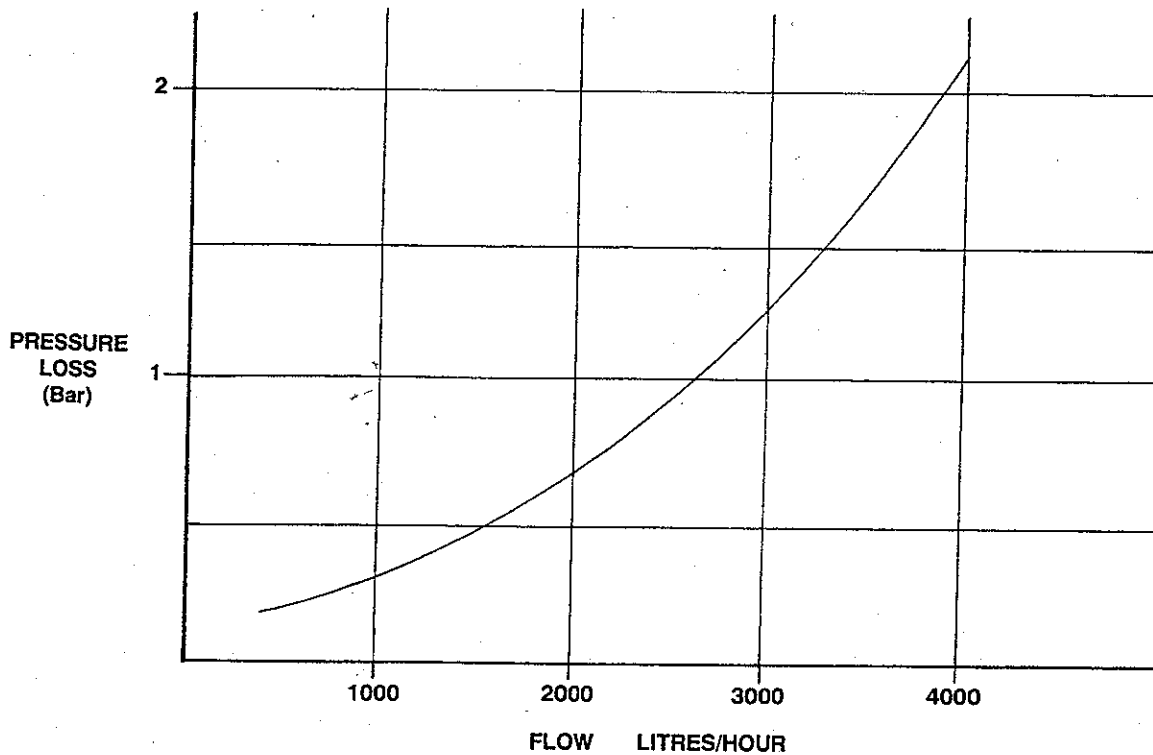
REPLACEMENT PARTS



PARTS LIST – VALVE BODY

Ref. No.	Part No.	Description	Qty. Req.	Ref. No.	Part No.	Description	Qty. Req.
1	1000N52G20	Controller	1	19	155A200G1	Screen Cap Assembly	1
2	22A236	Screw	1	20	6F	O-Ring	1
3	1000D102	Bracket Assembly	1	21	8F-CC	Cap	1
4	1000N94G17	Gear Cam	1	22	150N150G25	Injector Assembly w/O-Rings	1
5	25A459	Switch Assembly	1	23	27F	O-Ring	1
6	23E	Screw	1	24	26F	O-Ring	1
7	24B2P3	Tubing Nut	1	25	1000N35G10	Valve	1
8	22A235	Screw	2	26	1000N72G3	Set of Valve Discs	1
9	1000C25	Air Check	1	27	23F2	Spring	12
10	40A220	O-Ring	1	28	22A182	Screw	17
11	150A61	Ball	1	29	1000N59G2	Top Plate Assembly	1
12	44S	O-Ring	1	30	1000B13G1	Turbine Assembly	1
13	43F	O-Ring	1	31	55F	3/4" BSP Adaptor	2
14	1000B14G/2	Flow Control Assembly w/O-Rings	1	32	54F-1	Gasket, 3/4 inch	2
15	40A117	O-Ring	1	33	56F-3	Nut for 3/4 inch Pipe Adaptor	2
16	40A112P2	O-Ring	1	34	1000N76G3	Cover	1
17	40A113	O-Ring	1				
18	40A114P2	O-Ring	1				

**PRESSURE LOSS/PERFORMANCE DATA**



ABOVE DATA AT 15°C WATER TEMP

FIG. 20

**SPECIFICATION TABLE**

Setting	Control	Litres of Resin	Volume of Softened Water available per Day at Hardness of 300 mg/l. AS CaCO <sub>3</sub>		Salt Used per Regeneration	Max Flow Litres per Min. (# Peak)	No. of Persons in Household (*People Days* based on 160 Litres/Person/Day)	Size in mm HxDxW Front Facing	Salt Efficiency
			Litres	Gallons					
Normal Usage	Microprocessor Meter Control with Total Proportional Salting	11 Litres Dowex *Monosphere	1360	300	600	43 (70)	8	490mm x 477mm x 268mm	79.5%
High Usage			1700	375	900	43 (70)	10		66.5%

(\* At 2 Bar Pressure loss.) Figures shown comply with the B.E.W.A. Quality Water Group Promotional guide lines and the B.E.W.A. C.O.P. 01.85 Code of Practice for performance testing of salt regenerated ion exchange water softeners.

**NOTES**

## NOTES

1. To introduce an additional or manual regeneration press and hold the manual **Regen/Enter** button for 4-5 seconds until an audible click is heard. The Prismertec will take approximately 100 minutes to complete a full cycle during which time no softened water is available to replace any water used in the plumbing system.
2. For minimum and maximum salt levels see Fig. 13, page 5.
3. Regeneration normally takes place at 2am and lasts up to 100 minutes. Regeneration frequency is controlled by the Prismertec's integral microprocessor system.

## SALT

Salt is essential to make the water softener work. It is dissolved in water to make a concentrated brine solution, which is washed over the resin to recharge it. The salt never enters the household water.

You should use only granular salt specially made for water softeners\*. Product quality does vary from one manufacturer to another, with some products containing damaging impurities or being liable to fall apart (mush). That is why we recommend **hydrosoft Granular** which is made to the highest quality standards by Salt Union, the UK's largest manufacturer, and are the only products to come with a consumer satisfaction guarantee.

Hydrosoft salt comes in 25kg and 10kg bags and is usually available from the company that supplied your water softener. If you need any assistance in finding your local supplier, **Freephone Salt Union on 0800 371093.**



### ALWAYS

Keep a minimum of 100mm (4") of salt in the water softener to ensure efficient regeneration and continuous softened water. A visual check should be carried out on a 3-6 weekly interval depending on usage. refill as necessary.

**\* Do not use block or tablet salt. Use of block or tablet salt will result in improper regeneration. Use only granular salt.**

Softened water has a higher sodium content than mains water and the Department of Health currently recommend that it should not be used for drinking and cooking. In fact the level of sodium in softened water is typically less than one quarter of that in milk. After installation of your water softener you will still have an unsoftened mains tap. It is particularly important that this unsoftened water is used for mixing powdered milk for babies, as the powdered milk will already contain the correct level of sodium.

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*As part of the BWT policy of continuous improvement all specifications are subject to change without prior notice*

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**PLEASE RETAIN THIS MANUAL**

*For any installation, programming or technical assistance, please contact  
BWT Service on:  
Tel: 01376 334200  
Fax: 01376 334201*