

INSTALLATION INSTRUCTIONS Nuwave MD260

Domestic Water Softener

The following instructions have been put together to assist in the installation of the water softener.

PLANNING THE INSTALLATION

Locate the rising main, drain and overflow facilities and electrical supply. Please allow room for filling with salt and maintenance. On older properties please ensure there is only one rising main.

LOCATION

The softener should be fitted as close to the rising main as possible. Drinking water and garden taps should be drawn from the mains before the inlet to the water softener. The distance between the softener and the drain should be as short as possible.

VERY IMPORTANT. The softener must not be positioned where it or any of the connections which include the drain and overflow are subject to room temperatures lower than 1 Deg (34 Degrees F) or over 49 Deg C (120 Degrees F). If positioning the softener within a cupboard, the cupboard base must be adequately supported. If the softener is to be installed above ground level i.e. within a loft the following instruction must be applied. The softener shall be within a container to which an overflow pipe with a minimum $\frac{3}{4}$ inch diameter shall be fitted. The overflow should be a minimum of six inches below any electrical connection mounted on the softener.

PLUMBING SYSTEMS

Vented Systems

For vented plumbing systems with cold water storage tanks, the softener should be installed using a flexible fitting kit.

Unvented Fully Pressurised Systems

These modern systems require high flow rates, therefore we do not recommend the use of flexible hoses. The softener should be hard plumbed in 15mm or 22mm depending on the sizing of your existing rising main. Copper tube and appropriate fittings should be used. Please bear in mind the maximum flow rate is 50 litres per minute.

Backflow Prevention Valve

A check valve complying with BS6282 part 1 should be correctly fitted.

Drinking Water

The tap used for drinking water must be unsoftened (Hardwater) See Fig.2

1. WATER PRESSURE TEST

Minimum Pressure 25psi (1.7 Bar)

Maximum Pressure 70psi (5.0 Bar)

A water pressure test must be carried out to ensure efficient operation of your water softener. Using a pressure – testing gauge on the kitchen or garden tap, the daytime pressure must be within the limits stated above. If daytime pressure exceeds 70psi a pressure – limiting valve must be fitted. If daytime pressure is below 25psi a pressure pump is required.

2. INSTALLING THE BYPASS VALVES

Switch off the mains stopcock and drain off any excess water left in the rising main. Immediately after the mains stopcock Tee off to your hard water drinking tap and any garden taps. The non-return valve should be installed between the hardwater Tee off point and the inlet to the water softener. Install the 3 valves (inlet, outlet & bypass) as shown in Fig.2. If required (see section 1) a pressure limiting valve should be installed before the inlet to the softener.

CONNECTING INLET/OUTLET HOSES

Connect hoses to the inlet and outlet connections on the rear of the water softener (see Fig.2). The hoses should be hand tightened, then turned half a turn using hose pliers. Connect the hoses to the inlet and outlet taps in the same manner. Do not use washing machine hoses as they can contaminate the water.

4. DRAIN CONNECTION

The softener is supplied with a 2 metre length of drain/overflow hose. Should you require to run the drain or overflow further than 2 metres, the hose is designed to fit 15mm copper pipe to allow longer runs. Connect the drain hose onto the barbed connector as shown in Fig.2, and secure with a jubilee clip. The drain operates under mains pressure, therefore can be elevated. It can also be extended up to 20ft using 15mm copper pipe provided there is a minimum of 40psi pressure. Run the drain hose to a standpipe or drain, always ensure an air gap exists between the end of the drain hose and drain water level. The drain hose must not be kinked or restricted in any way, as this will cause the softener to overflow.

If the drain hose is run outside, it must be insulated to prevent it from freezing which would cause the softener to overflow.

ELEVATED DRAIN HOSE

The drain hose can be elevated 8ft provided there is a minimum of 40psi and a further 2ft for every additional 10psi.

5. OVERFLOW CONNECTION

Cut the required length of pipe from the drain hose and connect to the ½ inch hose spigot on the rear of the cabinet. The overflow cannot be elevated. The overflow must run downhill to the outside of the building or to a standpipe. No securing clip is required. The overflow must not be kinked or restricted and must not be allowed to discharge where damage could occur.

6. ELECTRICAL CONNECTION

The softener comes fitted with a plug incorporating a 3-amp fuse. Connect the plug to a 240v electrical socket (unswitched).

7. SET PROGRAMME

Pre –set prior to despatch.

8. SWITCH ON WATER SUPPLY AND TEST

Turn on mains stopcock. Open the inlet valve to the water softener slowly, then open the outlet valve and close the bypass valve (See Fig.2). Check all the connections for leaks. Water is now passing through the water softener. The first water drawn off may be amber coloured. This is quite normal.

Your water softener is factory set at brine refill stage. This will take approximately 20 minutes and will account for any water flow noises you may hear.

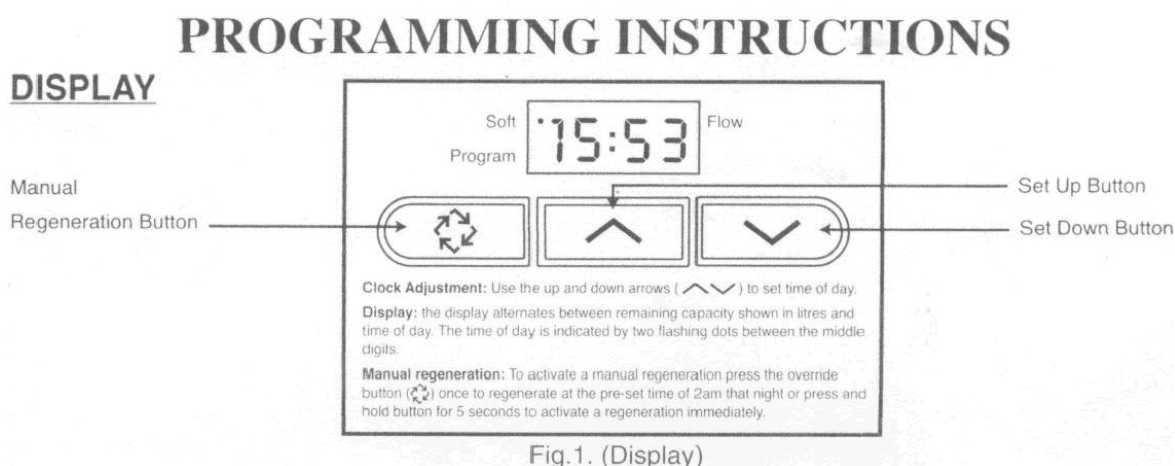
9. SALT

We recommend the use of salt tablets in your water softener.

Fill the cabinet to approx 2 inches from the top of the water softener. The softener will require topping up once the salt has dropped to within 4-5 inches from the bottom of the cabinet.

10. Commissioning Regen Cycle

Push and hold the manual regeneration button (see Fig.1) until the valve starts to activate. The unit will then undertake a manual regeneration. This will give you soft water immediately upon completion of the cycle.



1. The unit comes with the capacity preset based upon the water hardness of your area. Should you feel that it requires alteration please call for advice. Your hardness test kit will allow you to test the performance of the softener.

2. Set Time Of Day. With the softener in the soft mode use the Set Up or Set Down button until the correct time of day is displayed.

Soft
Program **15:53**

3. When the display shows 4 flashes the softener is ready to regenerate at 2am the following morning

Fig.4

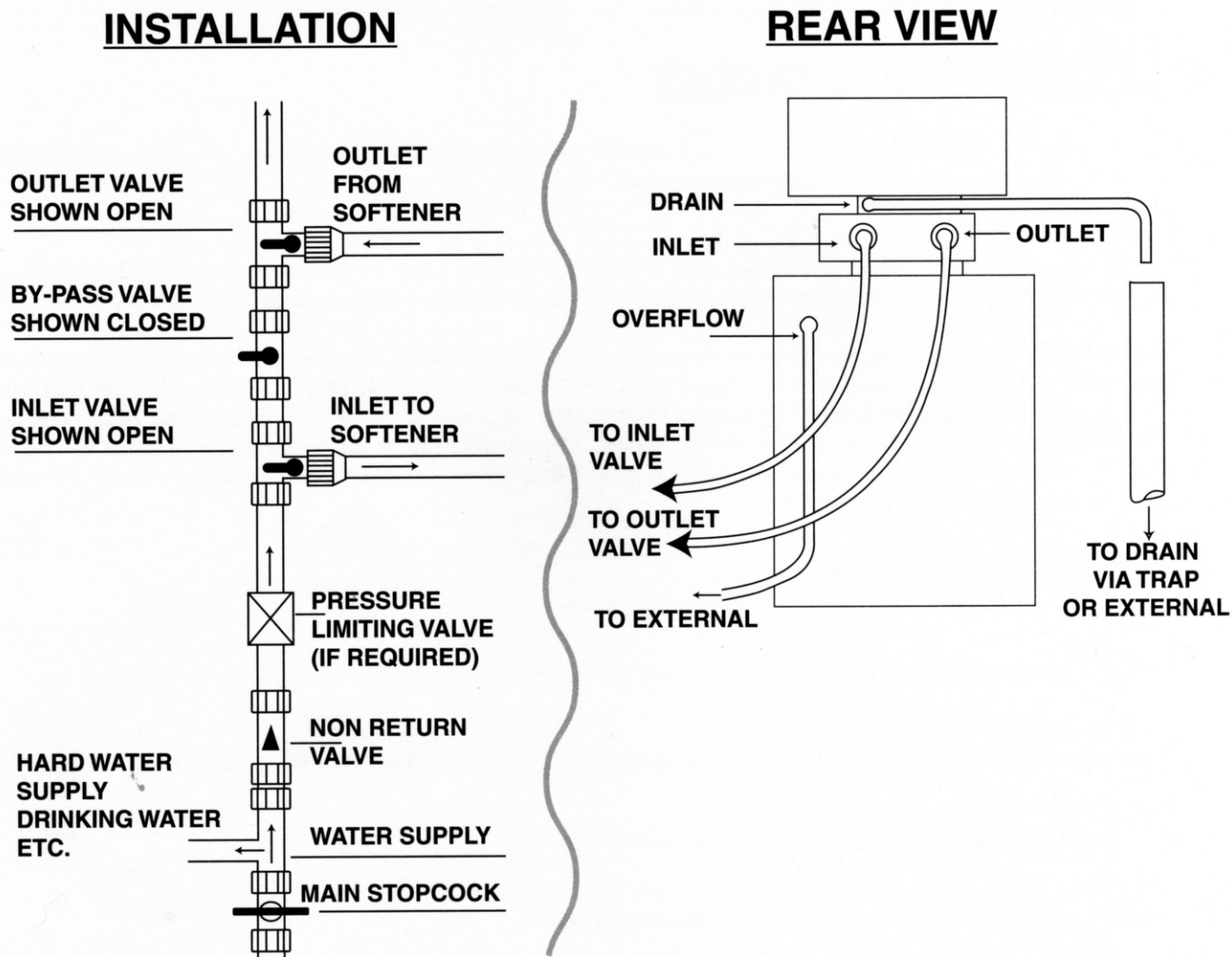
Soft
Program **■ ■ ■ ■**

4. Prime salt tank with one gallon of water (only required when softener is first installed.)

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Fig.2



3. CONNECTING INLET/OUTLET HOSES

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Timer

The timer display on the control alternates between remaining capacity shown in litres and the time of day. The time of day is indicated by two flashing dots between the middle digits. In the event of a power failure, the clock will need adjusting to the correct time of day (refer to “Set Time of Day”)

Soft
Program

15:53

Flashing dots

Extra Regeneration Cycle

Under normal circumstances there would not be any reason to activate an extra regeneration cycle. However if the softener is allowed to run out of salt or the softener has been switched off for a length of time you wish to activate an extra regeneration cycle to speed up the process of returning to soft water.

You have two choices

- 1) To activate a regeneration to start at the pre-set regeneration time, (this is usually 2am) press and hold for 1 second the manual regeneration button. The red dot next to the word SOFT will begin to flash. The timer is now set to regenerate.
- 2) To activate a regeneration immediately. Press and hold the manual regeneration button for 5 seconds, you will hear the water softener start the regeneration cycle.

In both cases once the regeneration cycle is completed the water softener will automatically revert to regenerating on demand. The regeneration cycle takes approximately 60 minutes to complete.

During a regeneration cycle the timer will display the cycle stage that it is in and how many minutes remain in that stage. There are 4 stages to each regeneration cycle. Fig.7 shows you the timer as displayed in stage 2 with 30 minutes remaining.

Fig.7

Soft
Program

2-30

FOUNTAIN SOFTENERS

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