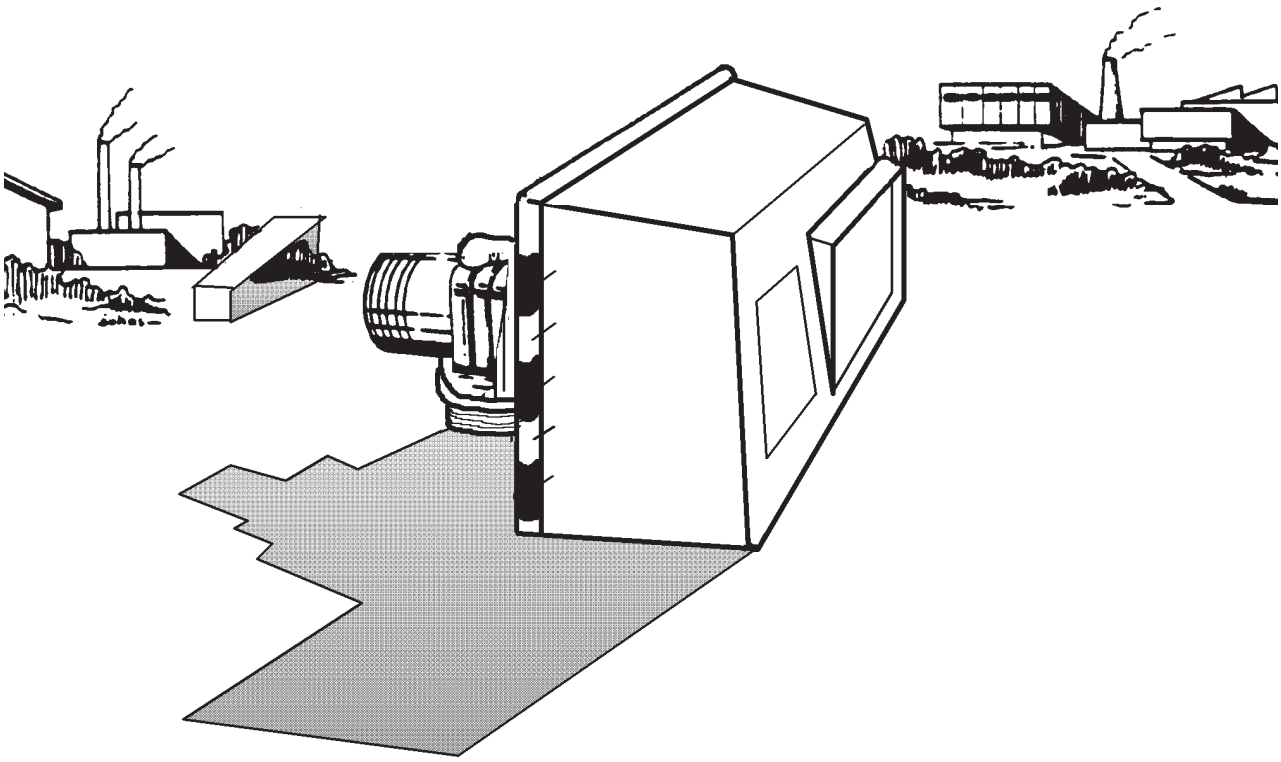
Model 2750SE/FILTER w/NBP
Customer Manual



CM2750SE_F 06/2003

MODEL 2750SE/FILTER

installation information

JOB NO: . . . . . .

MODEL NO: . . . . . .

FILTER VESSEL SIZE: . . . . . DIA. x . . . . . HIGH

MEDIA VOLUME: . . . . . LITRES

2750SE/FILTER CONTROL VALVE SPECIFICATIONS & SETTINGS

1) *Type of Timer: SE electronic

Time only
Immediate meter initiation
Delayed meter initiation

*Delete as required

2) Recovery programme settings:

a) Backwash . . . . . min.

b) Rapid Rinse . . . . . min.

3) Drain Line Flow Control . . . . . lpm.

4) Electrical: 24 volt 50 Hz 35VA

FOR SERVICE CONTACT:

MODEL 2750SE/FILTER

general installation check list

WATER PRESSURE: A minimum water pressure of 1,8 bar is required for the recovery control valve to operate effectively. The maximum water pressure must not exceed 8,6 bar.

ELECTRICAL FACILITIES: A continuous 24 volt, 50 Hz. current supply is required. Make certain the current supply is always live and cannot be turned off with another switch.

EXISTING PLUMBING: Existing plumbing should be free from hardness scale and iron buildup. Piping that is built up heavily with hardness scale and/or iron should be replaced. If piping is clogged with iron, a separate iron filter unit should be installed ahead of the water filter.

LOCATION OF FILTER AND DRAIN: The filter should be located close to a drain.

BYPASS VALVES: Always provide for the installation of a bypass valve system.

CAUTION: Water pressure is not to exceed 8,0 bar. Water temperature is not to exceed 43°C. The unit must not be subjected to freezing conditions.

INSTALLATION AND START-UP INSTRUCTIONS

1). Place the filter pressure vessel in position, making sure the vessel is level and on a firm base.

2). All plumbing should be in accordance with local water bylaws. The minimum pipe size for the drain line should not be less than 22mm (3/4") N.B.

3). The distributor tube should be cut 5mm **ABOVE** the top of the vessel. *Note: Top of vessel includes any vessel adaptor if used.*

4). Lubricate the distributor O-Ring seal and vessel O-Ring seal with silicone lubricant (Dow Corning® 7 compound).

5). Fit the control valve on the filter vessel.

6). Place the installation in the bypass position. Turn on the main water supply. Open a cold water outlet nearby and let it run for a few minutes or until such time as the pipework system is flushed free from foreign material that may have resulted from the installation.

7). Place the installation in the service position and let the water flow slowly into the filter vessel. Air should be expelled via the open water outlet and this should be closed when the water runs free of air entrapment.

Electrical: All electrical connections must be made according to the appropriate codes. Connect the system to a suitable transformer if required.

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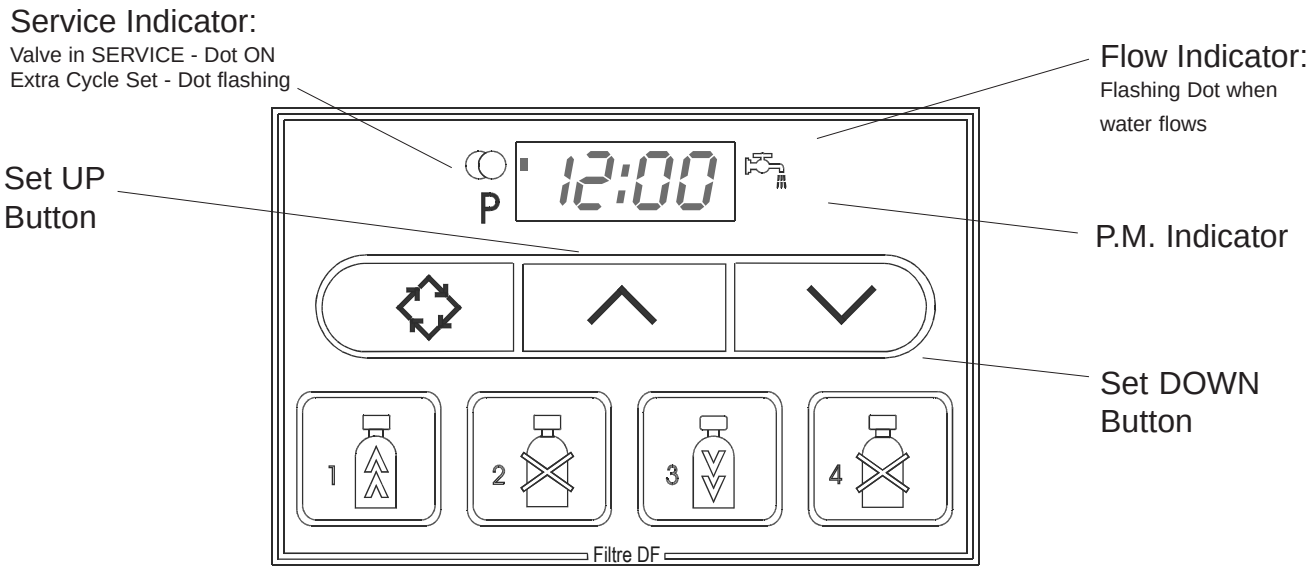
Control Start-Up Procedures

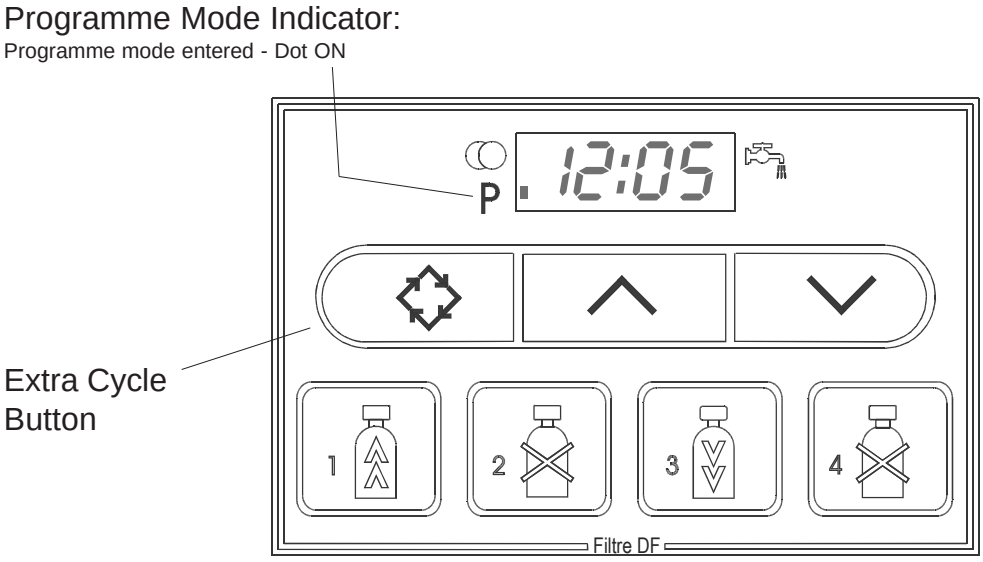
1. Set Time of Day

Whenever the valve is in Service the current time of day can be adjusted, the control programmed or an extra recovery cycle initiated



Push either the UP or DOWN set button once to adjust the Time of DAY display by one digit. Push and HOLD either the UP or DOWN set button to adjust the Time of Day display by multiple digits

2. Enter Control Programming Mode

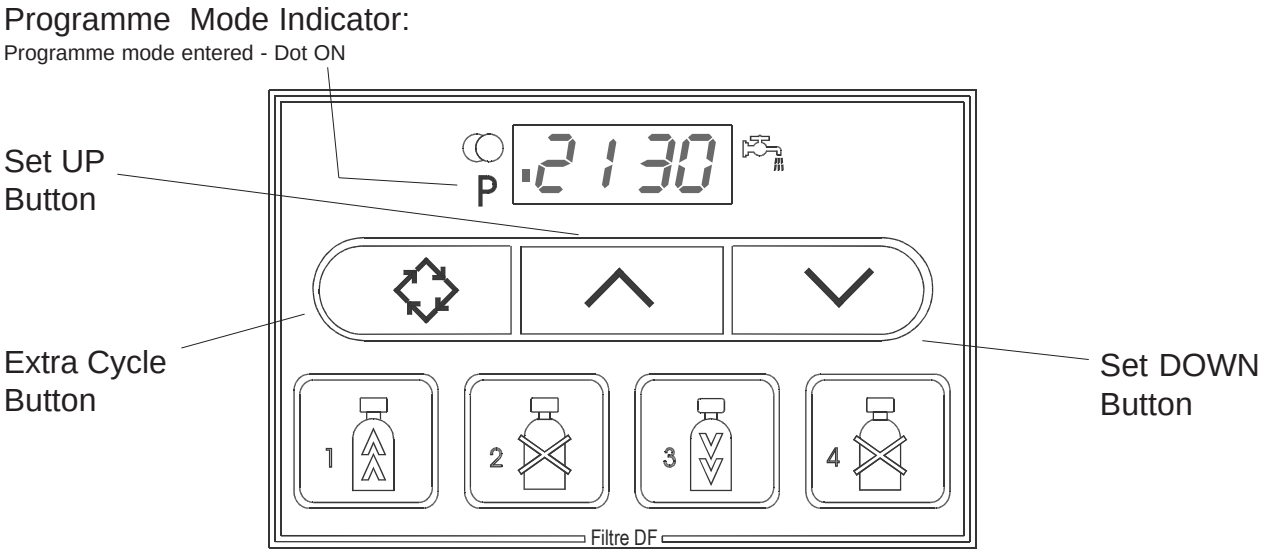


1. Push and HOLD both the UP or DOWN set button to enter Programming Mode.
2. Push the Extra Cycle Button once per display until all have been viewed and this mode is exited and normal operation is resumed.

Control Start-Up Procedures

3. Set Control Programming

NOTE: Depending on current control programming, option setting displays that are not required to be set will not be viewed.



1. The first option setting display *(meter systems only)* that apears in the Programme Mode is Treated Water Capacity. using the Set UP or DOWN button, set the display to the capacity of the system in LITRES. For example:

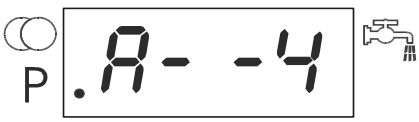
   2130 litres treated water capacity

2. Push the Extra Cycle button. The second option setting display that appears is Recevery Time. using the set UP or DOWN buttons, adjust the display to the time of day when you want a recovery cycle to start. For example:

   2:00 AM recovery start

3. Push the Extra Cycle button. The third option setting that appears is the Revovery Day Override. using the set UP or DOWN button, adjust the maximum number of days before a recovery cycle MUST occur. For example:

   Recovery cycle every 4 days



4. Control programming is now complete. Push the Extra Cycle button again to exit the programming mode and return to normal service.

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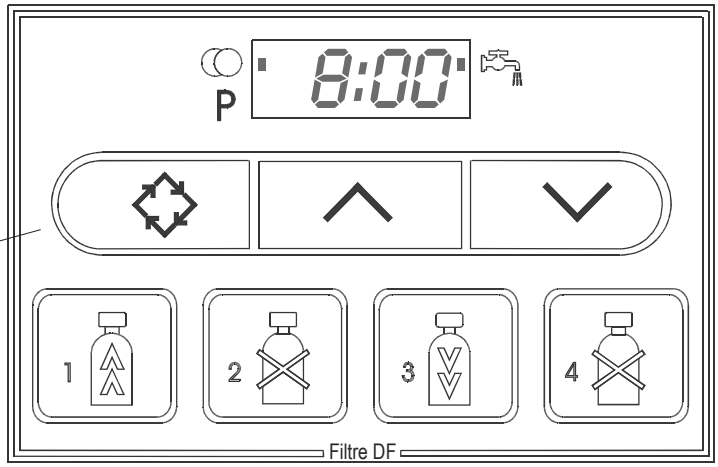
Control Start-Up Procedures

4. Start an Immediate Recovery cycle

When starting an extra recovery cycle you will have one or two options, depending on how your control is set up:



Extra Cycle Button

1. Press and Release to Extra Cycle button:

- With ***Immediate Recovery*** controls the control will go into recovery immediately.
- With ***Delayed Recovery*** controls the service arrow will begin to flash immediately and a recovery will occur at the preset recovery time.

2. Press and HOLD for the Extra Cycle button for 5 seconds:

- With ***Delayed Recovery*** controls this will force an immediate recovery.

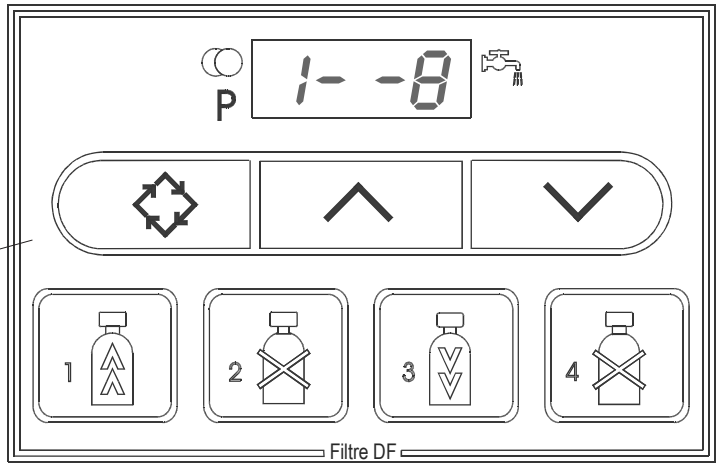
5. Recovery Cycle Displays

The following series of displays appear when the control enters a recovery cycle *(times indicated are examples only)*:

Valve driving to regen step #1	P 1 - - -	Then	P 1 - - 8	Less than 9 min. remains in regen step #1
Valve driving to regen step #2	P 2 - - -	Then	P 2 - 5 8	Less than 59 min. remains in regen step #2
Valve driving to regen step #3	P 3 - - -	Then	P 3 - - 8	Less than 9 min. remains in regen step #3
Valve driving to regen step #4	P 4 - - -	Then	P 4 - 1 1	Less than 12 min. remains in regen step #4
Regen complete. Valve driving to service position	P - - - -	Then	P • 8:8 8	Valve has returned to service

Control Start-Up Procedures

6. Fast Cycling the Valve through a Recovery cycle



A. Initiate a regeneration - see step 4. Once the valve reaches Recovery step #2 let water flow to drain for approx. 5 minutes.

Next, manually step the valve through a recovery, check the valve function in each step:

B. Push the ***Extra Cycle*** button once to advance the valve to Recovery step # 3
C. Push the ***Extra Cycle*** button a last time to advance the valve back to SERVICE

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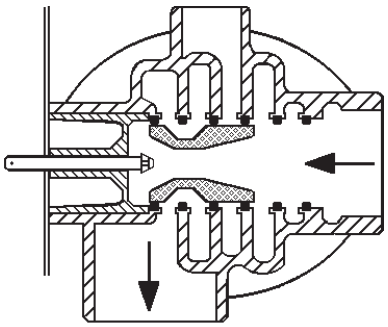
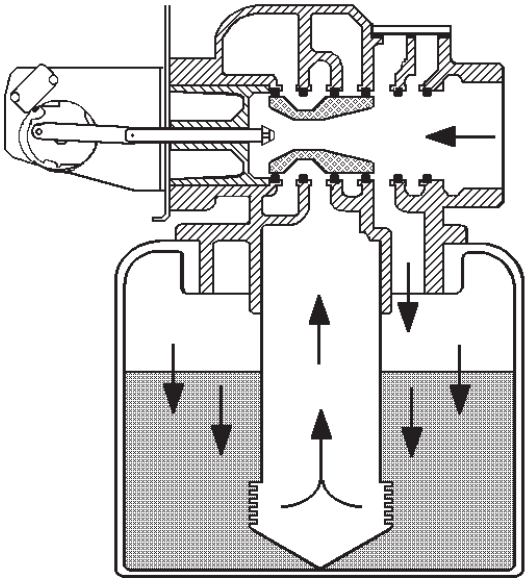
Flow diagrams

1 SERVICE POSITION





Raw water enters the unit at the valve inlet & flows down through the media in the vessel. Filtered water enters the centre tube through the bottom screen, then flows up through the centre tube, around the piston and exits from the valve outlet.

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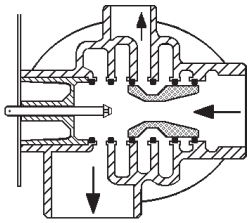
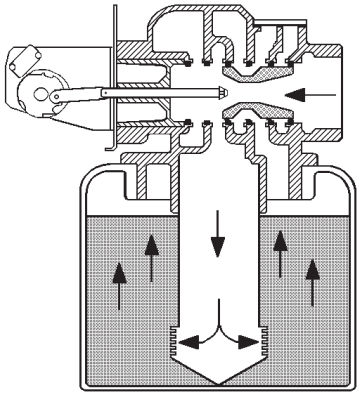
Flow diagrams

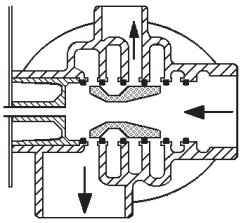
2 BACKWASH POSITION

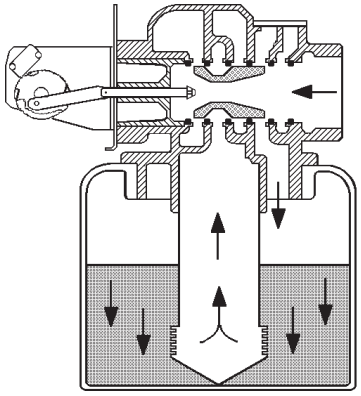




Water enters the unit at the valve inlet, flows through the piston, down the centre tube, through the bottom screen and up through the media, around the piston and exits via the valve outlet.

5 RAPID RINSE POSITION





Raw water enters the unit at the valve inlet, flows directly from the inlet down through the media, into the bottom screen and up through the center tube, around the piston and exits via the valve drain port.

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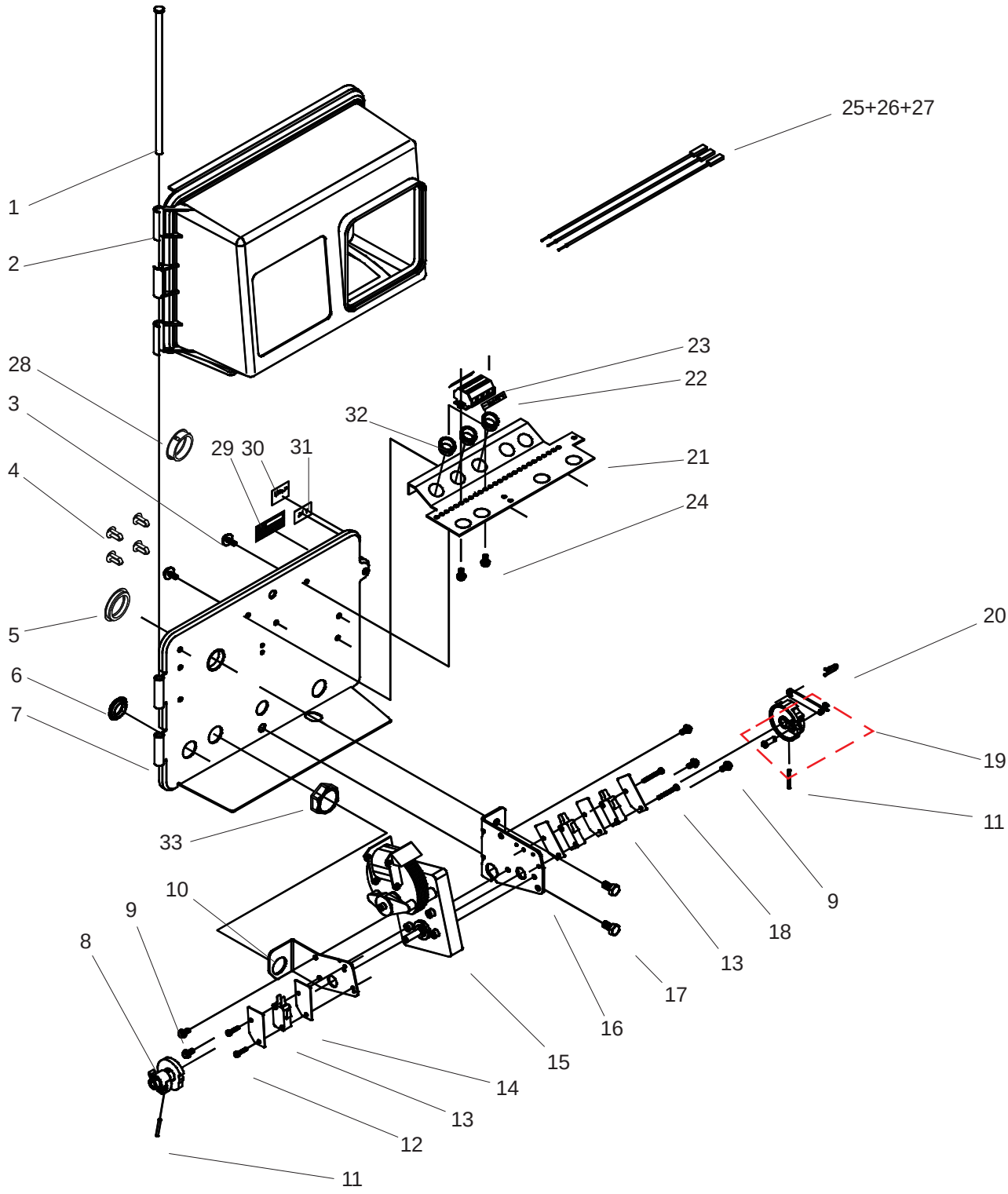
control drive assembly



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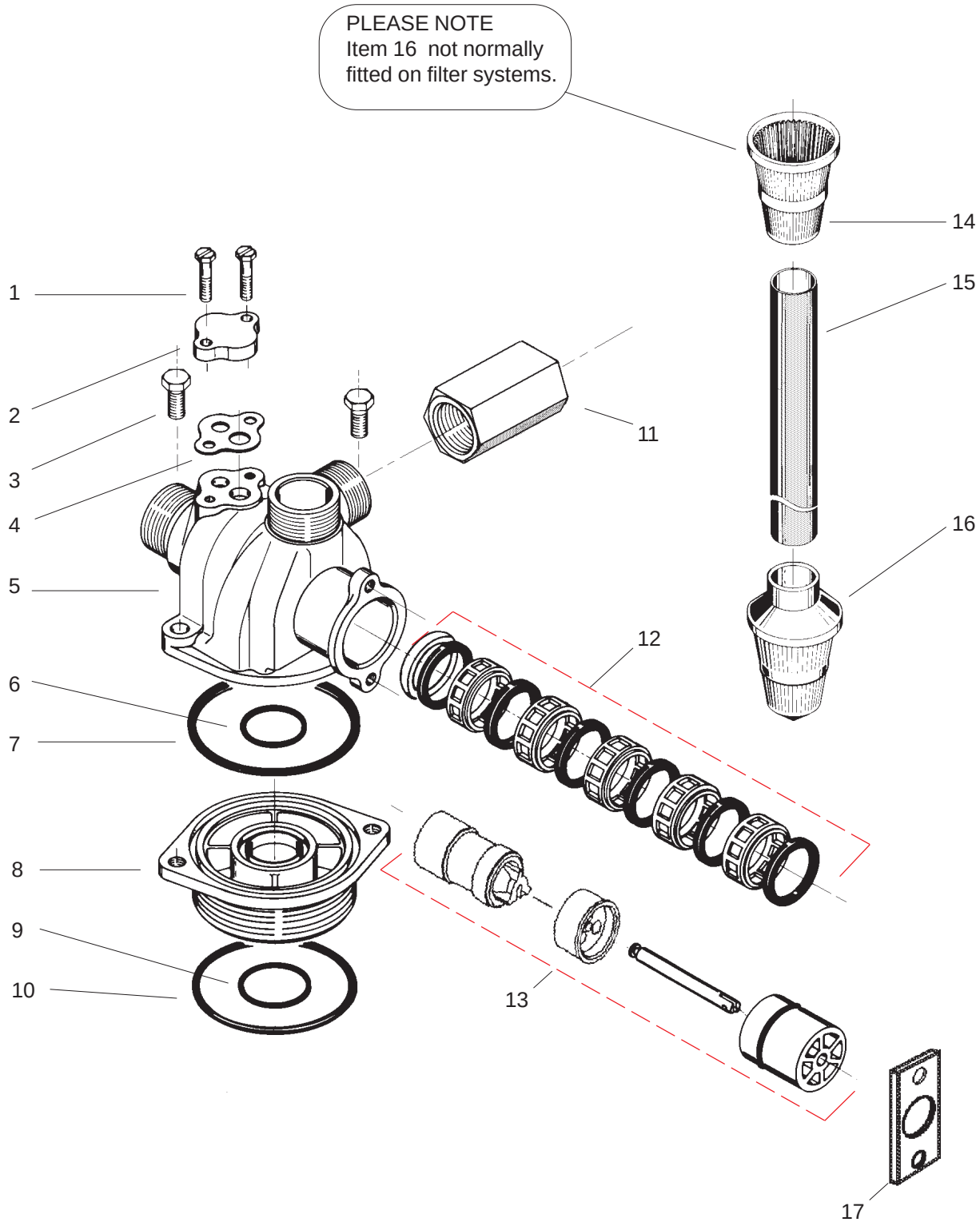
control drive assembly

Item	Qty	Part No.	Decription
1	1	17845-02	Hinge pin
2	1	26217	Cover assembly
3	2	10330	Screw
4	4	19801	Blanking plug
5	2	19590	Plug
6	2	17967	Plug
7	1	18697-14	Backplate
8	1	12777	Brine valve cam - short
9	5	10872	Motor mount screw
10	1	11826	Motor bracket - Brine side
11	2	10338	Drive roll pin
12	2	11805	Screw
13	3	10218	Microswitch
14	5	10302	Insulator
15	1	40385	Drive motor 24vac
16	1	10774	Mortor bracket - Drive side
17	2	23728	Screw - M6 X 12
18	2	25178	Screw
19	1	24267	Drive cam assy - STF
20	1	10909	Connecting rod clip
21	1	19772	Terminal bracket
22	1	24934-60	Terminal label
23	1	23511	Terminal strip
24	2	13296	Screw
25	1	27171	Motor wire - Blue
26	1	27169	Motor wire - Brown
27	1	27170	Motor wire - White
28	1	17421	Plug
29	1	21271	Serial number label
30	1	26210k	CE label
31	1	24388	24v label
32	2	19704	Wire sleeve
33	1	18004	Bolt assembly

MODEL 2750SE/FILTER

valve body assembly



MODEL 2750SE/FILTER

valve body assembly

Item	Qty	Part No.	Description
1	2	21716	Screw - Injector cover
2	1	11893	Injector cover
3	2	21361	Cap screw - TCHC 8x16
4	1	23304	Injector body gasket
5	1	23383NP	2750 body casting
6	1	11710	O-Ring 560-CD
7	1	11208	O-Ring 560-CD
8	1	23786NP	Valve body adaptor 2 1/2-8
9	1	13304	O-Ring 560-CD
10	1	12570	O-Ring 560-CD (Park tank)
11	1	700**	DLFC w/plug - ** specify size
12	1	24271	Seal and spacer kit
13	1	26495	Piston assy - NBP
14	1	18280-01	Top screen - WHITE - *option*
15	1	21874	Tubing 1" x 1.85m
16	1	25360	Bottom screen - *option*
17	1	19670	Spacer

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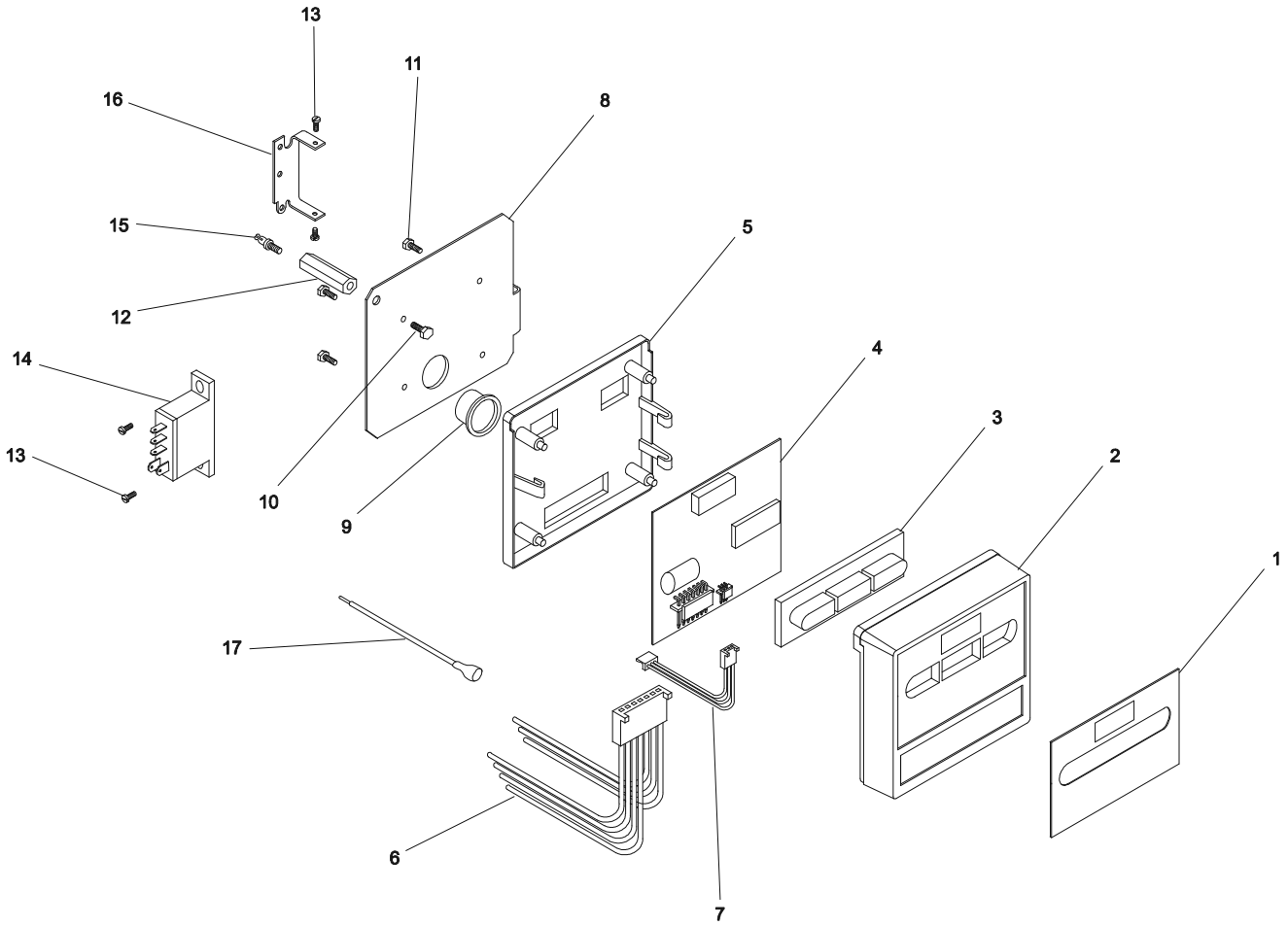
SE timer assembly



Item	Qty	Part No.	Description
1	1	27793	Display front panel - DF
2	1	19471-02	Front panel cover
3	1	40376	Rubber button assy
4	1	40283	Circuit board
5	1	19889	Circuit board housing
6	1	27167	Wire harness - Power
7	1	27808	Harness assy - Flow meter
8	1	27168	Timer mounting plate
9	1	17904	Bushing
10	1	21363	Screw
11	4	13296	Screw
12	1	27172	Stand-off
13	4	11384	Screw
14	1	17749	Relay
15	1	14265	Spring clip
16	1	13881	Hing bracket
17	1	27169	Connector lead

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wiring diagram for valve drive & timers

Electrical supply connections:
24vac 50 Hz. 60 Va
Negative to TERMINAL 1
Positive to TERMINAL 4