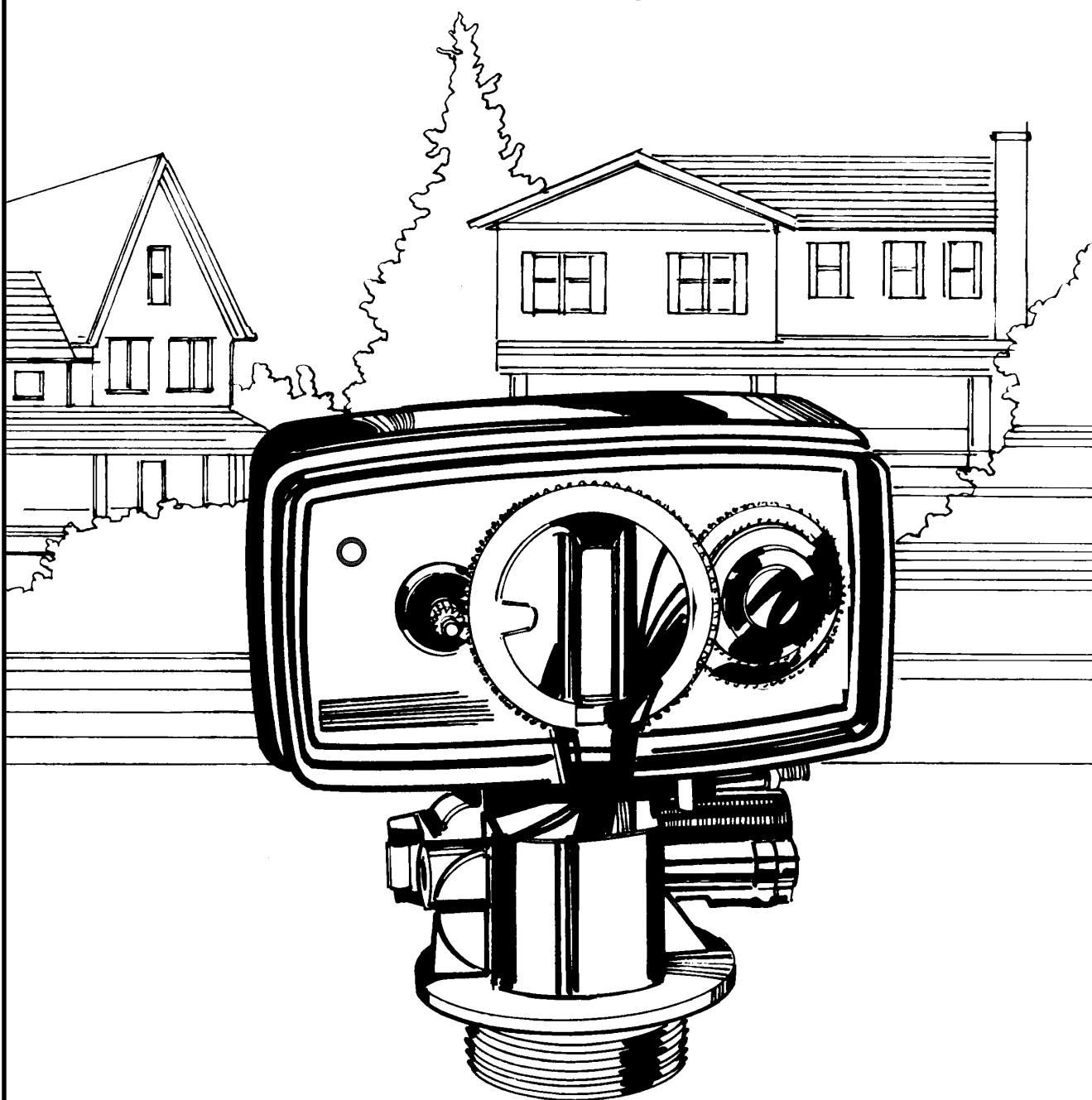


# **Model 5600TS Customer Manual**



# MODEL 56TS

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## installation information

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JOB NO: . . . . .

MODEL NO: . . . . .

DESIGN HARDNESS: . . . . . mole/m<sup>3</sup> (mg/l as CaCO<sub>3</sub>)

CAPACITY PER UNIT: . . . . . mole/m<sup>3</sup> (mg/l as CaCO<sub>3</sub>)

RESIN VESSEL SIZE: . . . . . DIA. x . . . . . HIGH

BRINE TANK SIZE: . . . . . DIA. x . . . . . HIGH

SALT SETTING PER REGENERATION: . . . . . Kg. NaCl

RESIN VOLUME: . . . . . LITRES

**56ts/16 Cold Water CONTROL VALVE SPECIFICATIONS & SETTINGS:**

1) Type of Timer: 7 day Chronometric - FAST CYCLE

*Please Note: Total regeneration cycle time is 90 minutes between initiation and return to service due to the time taken for the valve piston to move between cycle positions.*

- 2) Regeneration programme settings:
- a) Backwash . . . . . 4 min.
  - b) Brine & Slow Rinse . . . . . 42 min.
  - c) Rapid Rinse . . . . . 6 min.

- 3) Drain Line Flow Control . . . . . 1.2 USgpm.
- 4) Brine refill rate: . . . . . 0.25 US gpm
- 5) Ejector size: . . . . .
- 6) Electrical: 24 volt 50 Hz 15VA

FOR SERVICE CONTACT:

# MODEL 56TS

## general installation check list

**WATER PRESSURE:** A minimum water pressure of 1,8 bar is required for the regeneration valve to operate effectively.

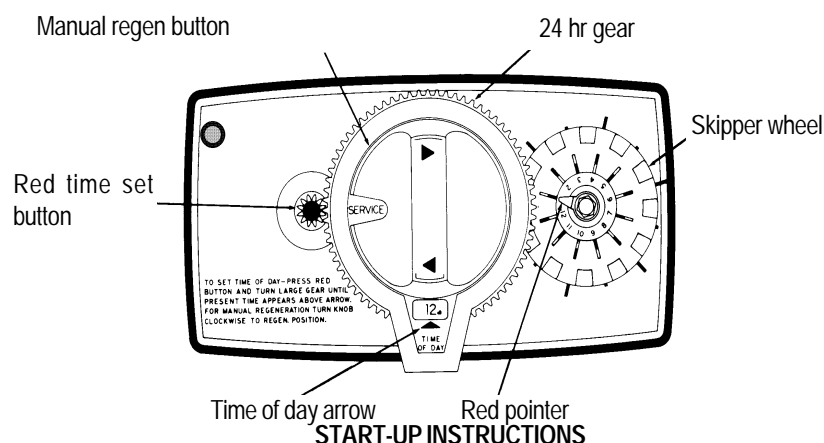
**ELECTRICAL FACILITIES:** A continuous 24 volt, 50 Hz. current supply is required. Make certain the current supply is always live and cannot be turned off with another switch.

**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 softener.

**LOCATION OF SOFTENER AND DRAIN:** The softener should be located close to a drain.

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

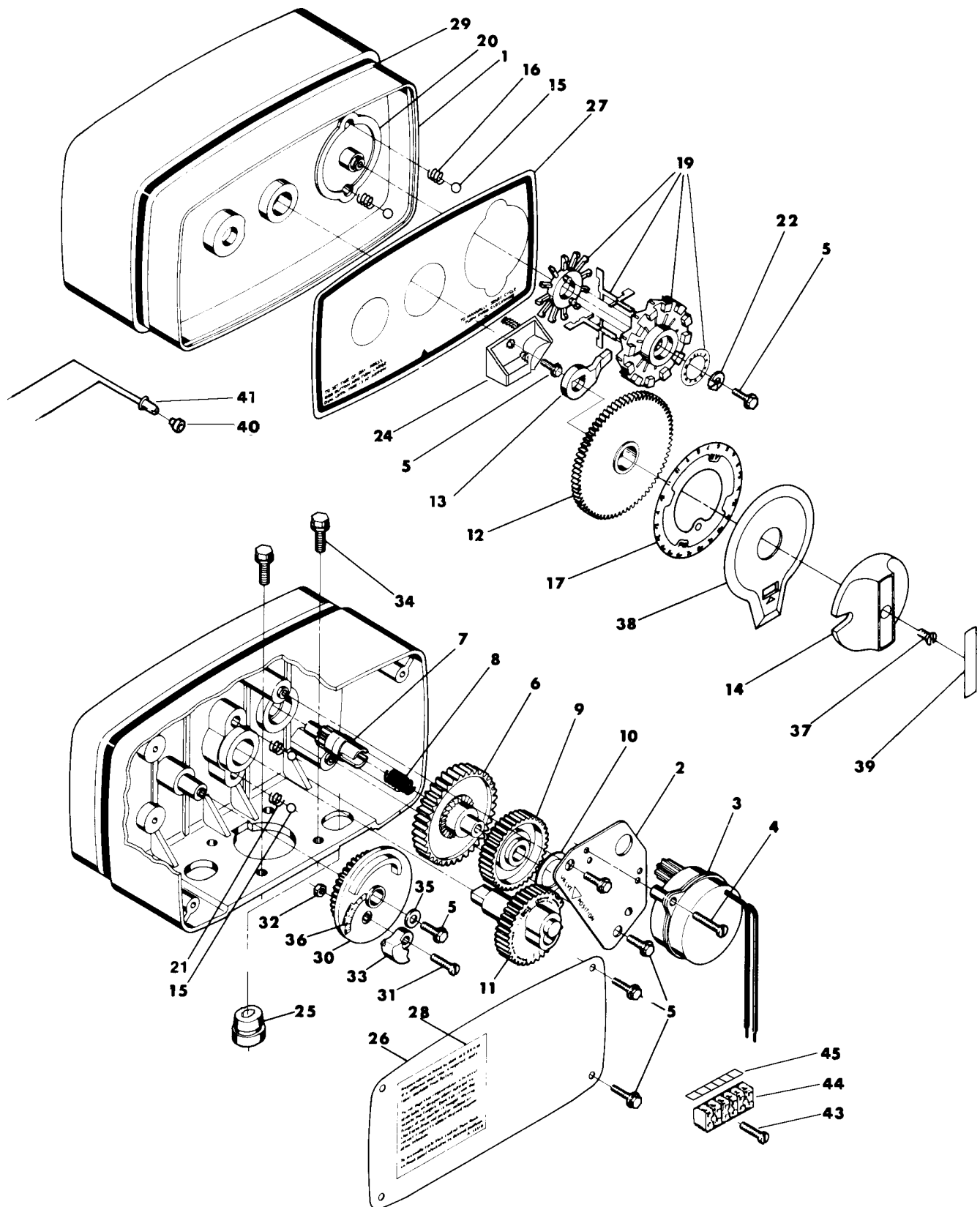
**CAUTION:** Water pressure is not to exceed 8,5 bar. Water temperature is not to exceed 50°C. The unit must not be subjected to freezing conditions.



- 1). Manually index the softener control into the **Service** position & let water flow into the system. When the flow stops, slowly open a softened water outlet until all air is expelled from the system. Then close the outlet.
- 2). Manually index the control to the **Backwash** position and allow water to run to drain for 3 or 4 minutes.
- 3). Ensure that the power supply is disconnected and then remove the backplate cover.
- 4). Make sure that the salt setting is as recommended by the manufacturer (see page 1). When correctly set, manually index the control to the **Brine Fill** position and allow the brine tank to fill to the top of the air check (approx 10cm).
- 5). Manually index the control to the **Brine Draw** position and allow the control to draw water from the brine tank until it stops.
- 6). Connect the electrical supply and check in the sight hole in the back of the timer motor that the motor runs. Carefully refit the back cover. Set the days when regeneration is to occur by sliding tabs on the skipper wheel outwards to expose the trip fingers. The finger at the red pointer is TODAY. Moving clockwise from the red pointer, extend or retract fingers to obtain the desired regeneration schedule.
- 7). Manually index the control to the beginning of the brine fill position and then allow the control to return to the **Service** position automatically.
- 8). Fill the brine tank with suitable clean salt.
- 9). This is a **Fast Cycle** valve to reduce regeneration water consumption. To set the correct time of day, depress the red time set button & rotate the 24 hr. gear. The AM setting is when the white peg is visible in the hole between 4.30 & 5.30
- 10). Check that any bypass valving is in the service position.

# MODEL 56TS

## control drive assembly



# MODEL 56TS

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## control drive assembly

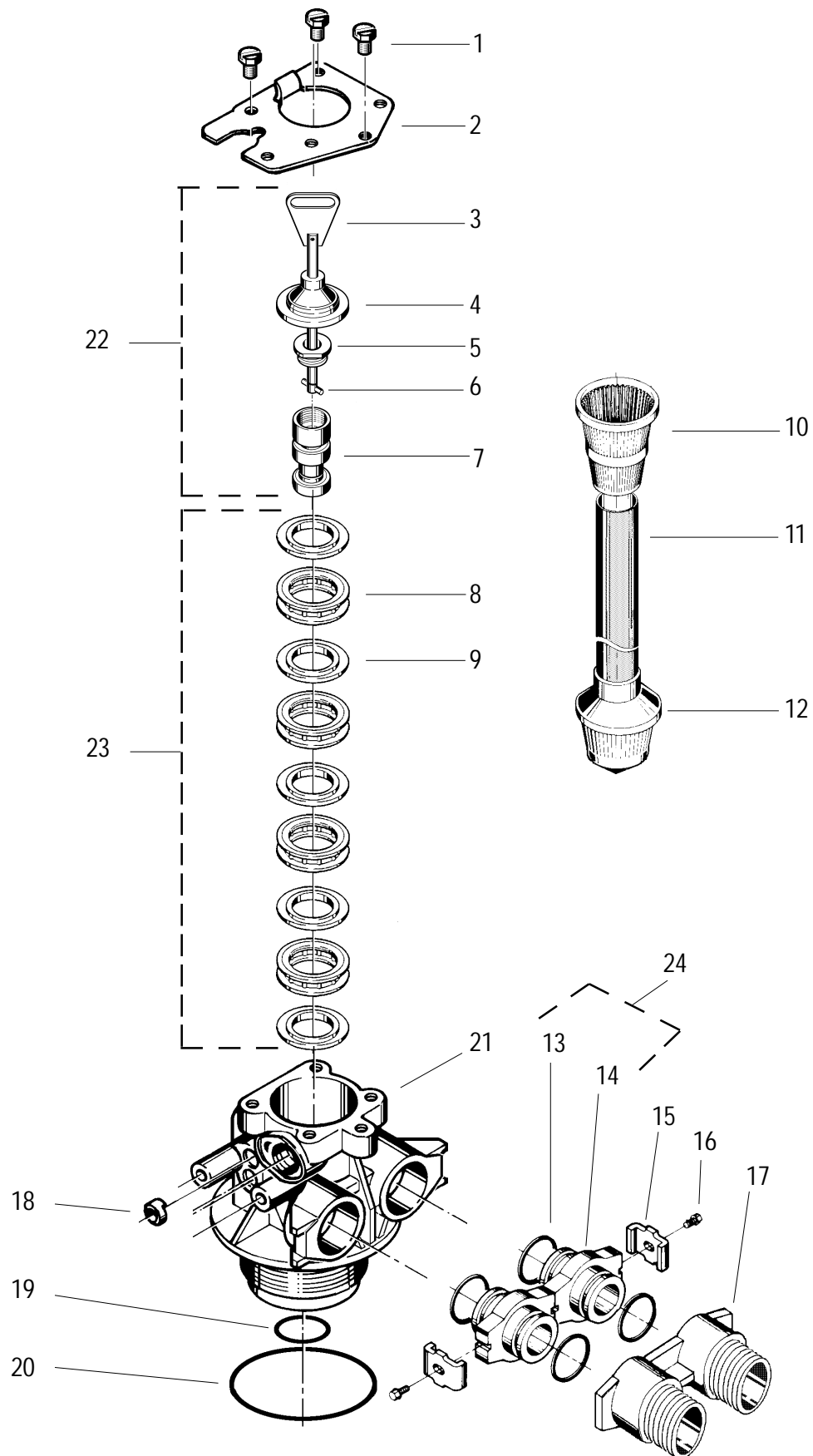
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### PARTS LIST

Item No.	Quantity	Part No.	Description
1	1	13162	Drive housing
2	1	23341	Motor plate
3	1	19168	Motor 24v 50Hz (1/15th RPM)
4	3	11384	Screw - Motor mtg
5	8	13296	Screw
6	1	13017	Idler gear
7	1	13018	Idler pinion
8	1	13312	Spring - Idler
9	1	13164	Drive gear
10	1	13299	Curved washer
11	1	13170	Main gear & shaft
12	1	18090	12 Hour gear assy FAST REEGEN
13	1	13011	Cycle actuator arm
14	1	14177	Knob - Manual regeneration
15	4	13300	Ball - 1/4" dia
16	2	13311	Spring - Detent
17	1	16818	12 hour label
19	1	24100	Skipper wheel assy - 12 day
20	1	13864	Skipper wheel ring
21	2	14457	Spring - Detent
22	1	13014	Regeneration pointer
24	1	16949	Cam trip
25	1	13547	Strain relief
26	1	13229	Back cover
27	1	25793	Front label
28	1	13310	Rear label
30	1	16849	Brine cam
31	1	11980	Screw
32	1	11081	Nut
33	1	13169	Time fill cam
34	2	12473	Screw
35	1	12037	Washer
36	1	25549	Salt label 1-4 Kg
37	1	15151	Screw
38	1	18406	Valve position dial
39	1	24750	Knob label - Siler/Black
40	1	24024	Diode support
41	1	25798	Green light (24v)

# MODEL 56TS

## valve body assembly



# MODEL 56TS

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## valve body assembly

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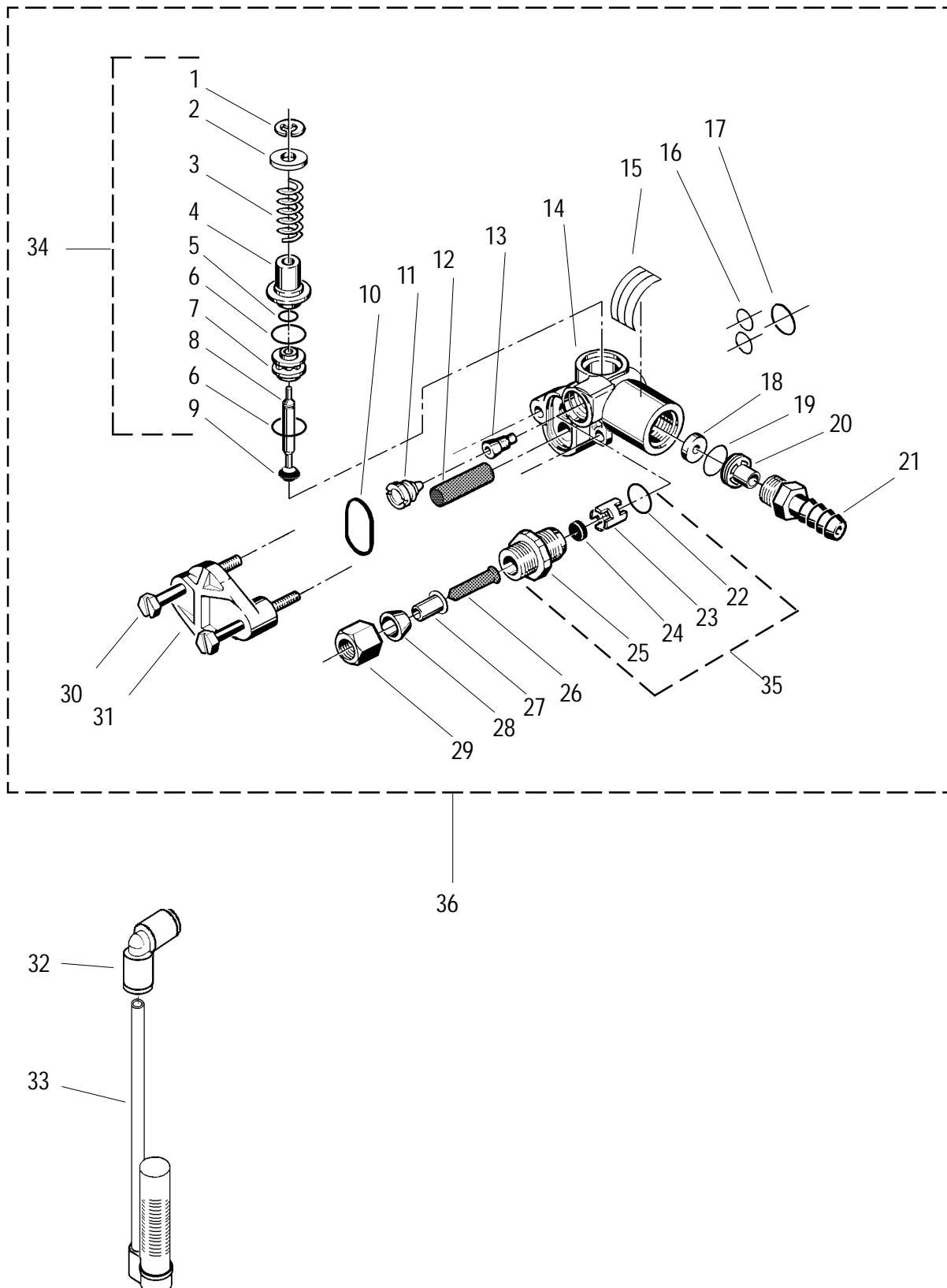
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### PARTS LIST

Item No.	Quantity	Part No.	Description
1	3	21716	Screw
2	1	13546	End plug retainer
3	1	18091	Piston rod assy
4	1	18088	End plug assy
5	1	12953	Piston retainer
6	1	10696	Piston pin
7	1	13781	Piston
8	4	14241	Spacer
9	5	13242	Seal
10	1	18280	Bayonet top screen 1in.
11	1	23059	Riser tube 1in.
12	1	25797	Bottom screen 1in HiCap
13	4	13305	O-Ring
14	2	13709	Adaptor coupling
15	2	13255	Adaptor clip
16	2	13314	Screw - adaptor clip
17	1	18706	Plastic yoke - 3/4" BSP male
18	1	13497	Air disperser
19	1	13304	O-Ring
20	1	12281	O-Ring
21	1	14066	Valve body
22	1	18089	Piston assembly (Blue end cap)
23	1	24115	Seal & spacer kit
24	2	13709	Coupling assy w/ seals

# MODEL 56TS

## injector / drain assembly





# MODEL 56TS

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## injector / drain assembly

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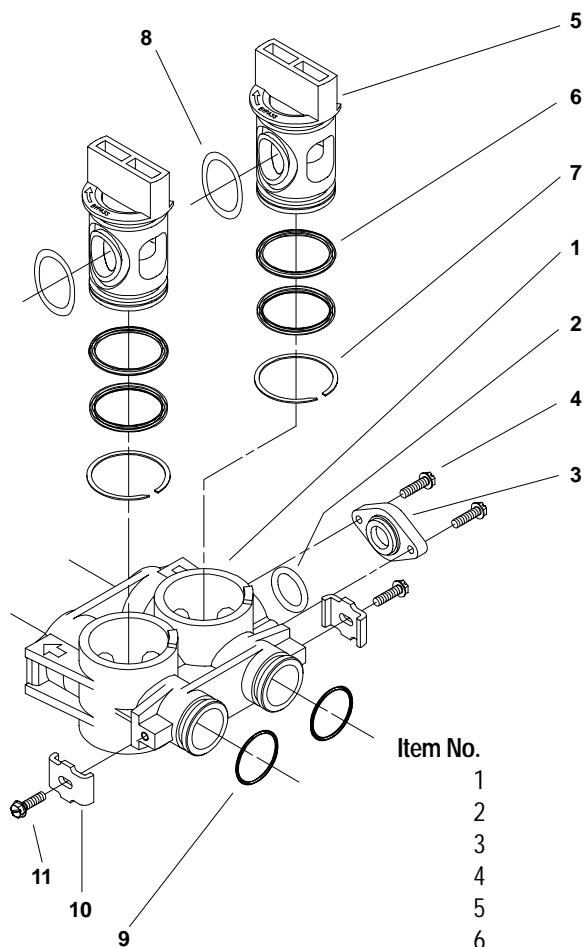
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### PARTS LIST

Item No.	Quantity	Part No.	Description
1	1	11981	Retaining ring
2	1	12035	Washer
3	1	11973	Brine valve spring
4	1	13165	Brine valve cap
5	1	12550	Quad ring
6	2	13302	O-Ring
7	1	13167	Brine valve spacer
8	1	13172	Brine valve stem
9	1	12626	Brine valve seat
10	1	13303	O-Ring
11	1	10913-0	Injector nozzle - # 0
12	1	10227	Injector screen
13	1	10914-0	Injector throat - # 0
14	1	13163	Injector body/drain housing
15	1	24052	Injector label
16	2	13301	O-Ring
17	1	21741	O-Ring
18	1	12085	Flow washer - 1,2 USgpm
19	1	15348	O-Ring
20	1	13173	DLFC button retainer
21	1	13308	Drain hose barb
22	1	12977	O-Ring
23	1	13245	BLFC button retainer
24	1	12094	BLFC button - 0.25 USgpm
25	1	13244	BLFC fitting
26	1	12767	Screen - Brine line
27	1	10332	Insert sleeve
28	1	10330	Delrin sleeve
29	1	10329	BLFC fitting nut
30	2	13315	Screw
31	1	13166	Injector cover
32	1	12794	Elbow 3/8in x 3/8in
33	1	18168	500A air check assy
34	1	21114	1600 Brine valve assy
35	1	18332-25	BLFC fitting - 0.25USgpm
36	1	24118	Injector assy

# MODEL 56TS

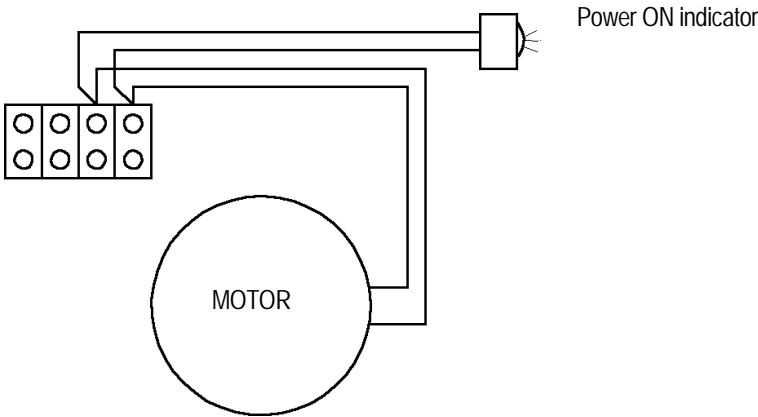
## bypass assembly (option)



### PARTS LIST

Item No.	Quantity	Part No.	Description
1	1	17819	By-pass valve body
2	1	11183	O-Ring
3	1	18582	Cap - By-pass
4	2	17512	Screw
5	2	17820	Plug - By-pass
6	4	18661	O-Ring
7	2	18662	Retaining ring
8	2	18660	O-Ring
9	2	13305	O-Ring
10	2	13255	Mouting clip
11	2	13314	Screw

## electrical wiring schematic



NOTE:  
24 VAC 3 Va power supply  
to terminals 3 & 4