PENTAIR

FLECK 2510 & 2510 ECONOMINDER

SERVICE MANUAL

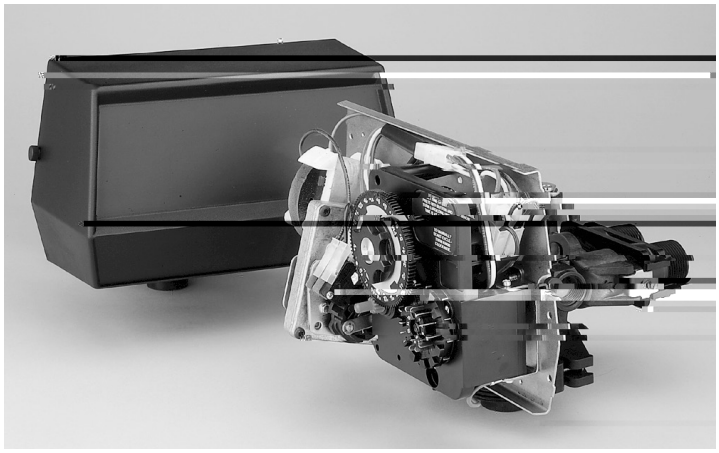


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GENE AL、E ICE HIN、FO JN/_ /M4BDC B -0.033 /_ /A _ l EEFF002EDBDC 9 0 0 9 216.5795 423.4041 4 0 9DBDC N/_

5. P
E
6.
7. P
NOTE: Do not use ranulated or rock salt.

3200 TIMER SETTING PROCEDURE

How To Set Days On Which Water Conditioner Is To Re enerate (Fi ure 2)

1.
E . F . M

How To Set The Time Of Day

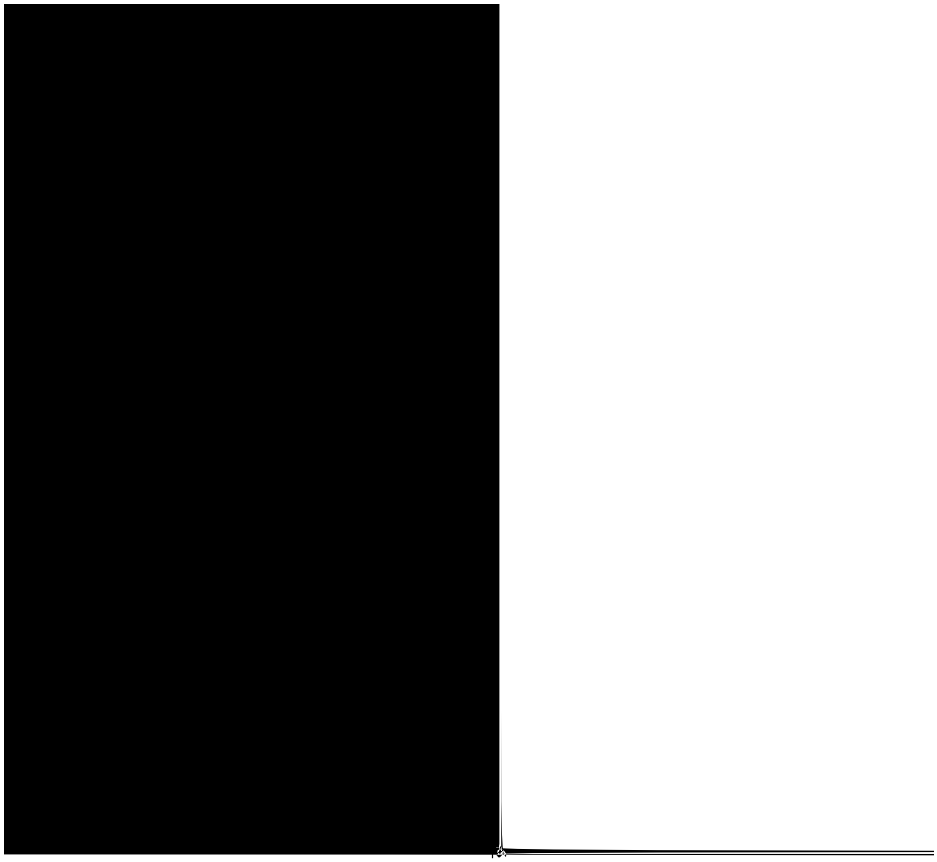
3200 TIME CLOCK TIMER ASSEMBLY

CONTINUED

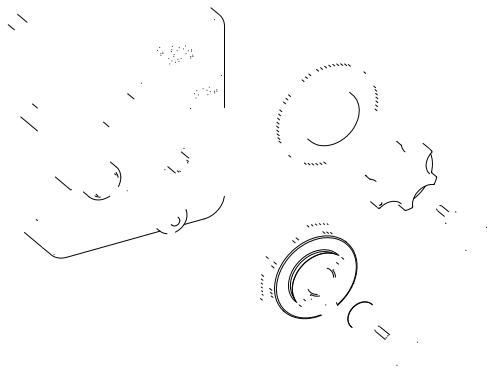
Item No.	QTY	Part No.	Description
1	1	13[illegible]70	H[illegible], 3200
2	1	14265	Cl[illegible]
3	3	140[illegible]7	I[illegible]
4	1	10[illegible]96	[illegible], M[illegible]
5	1	15320	[illegible], M[illegible],
6	2	11413	[illegible], P[illegible] H[illegible] M[illegible], 4-40 1-1/[illegible]
7	1	13[illegible]6	K[illegible], 3200
[illegible]	5	13296	[illegible], H[illegible], 6-20 1/2
9	1	11999	L[illegible]l, B[illegible]
10	1	1301[illegible]	P[illegible], l[illegible]
11	1	13312	[illegible], l[illegible]
12	1	13017	G[illegible], l[illegible]
13	1	13164	G[illegible], D[illegible]
14	1	13[illegible]7	Pl[illegible], M[illegible]M[illegible]
15	1	1[illegible]743-1	M[illegible], 120, 60H, 1/30 PM
[illegible]	1	1[illegible]752-1	M[illegible], 100, 50H, 1/30 PM
[illegible]	1	1[illegible]24-1	M[illegible], 230, 50H, 1/30 PM
[illegible]	1	1[illegible]26-1	M[illegible], 24, 50H, 1/30 PM
[illegible]	1	19659-1	M[illegible], 24, 60H, 1/30 PM
[illegible]	1	19660-1	M[illegible], 230, 60H, 1/30 PM
16	2	1327[illegible]	[illegible], l[illegible] Fll[illegible] H[illegible] 6-32 .156
17	1	15424	[illegible], D[illegible],
1[illegible]	1	15066	B[illegible]ll, 1/4-[illegible], D[illegible]l
19	1	15465	L[illegible]l, C[illegible]
20	1	19210	P[illegible], [illegible]l A
21	1	13911	G[illegible], M[illegible] D[illegible],
22	17	41754	P[illegible], [illegible], 1/16 5/[illegible], [illegible]
23	1	13011	A[illegible], C[illegible]l A[illegible]
24	1	13[illegible]64	[illegible], [illegible]l
25	2	13311	[illegible], D[illegible],
26	2	13300	B[illegible]ll, 1/4-[illegible],
27	1	143[illegible]1	[illegible]l A[illegible], 12 D[illegible]
[illegible]	[illegible]	14[illegible]60	[illegible]l A[illegible], 7 D[illegible]
2[illegible]	1	13014	P[illegible], [illegible]
29	1	40096-24	D[illegible]l, 12 AM[illegible] A[illegible], Bl[illegible]
[illegible]	[illegible]	40096-02	D[illegible]l, 2 AM[illegible] A[illegible], Bl[illegible]
30	1	13[illegible]1	B[illegible], H[illegible]
31	2	113[illegible]4	[illegible], P[illegible]l, 6-32 1/4[illegible]
32	1	13902	H[illegible], 3200
33	2	40422	N[illegible], [illegible],
34	1	15354-01	[illegible], G[illegible], 4[illegible]
35	1	14007	L[illegible]l, [illegible] D[illegible]
36	1	*	C[illegible]l 3200 [illegible] Cl[illegible] [illegible] A[illegible]l
37	[illegible]	60320-02	[illegible] K, 3200/9000 [illegible] A[illegible] L[illegible], O[illegible]l
3[illegible]	[illegible]	61420-03	P[illegible], [illegible]l, G[illegible] A, Fl[illegible] 2 M P[illegible] P
[illegible]	[illegible]	61420-04	P[illegible], [illegible]l, G[illegible] A, [illegible], 2 M P[illegible] P

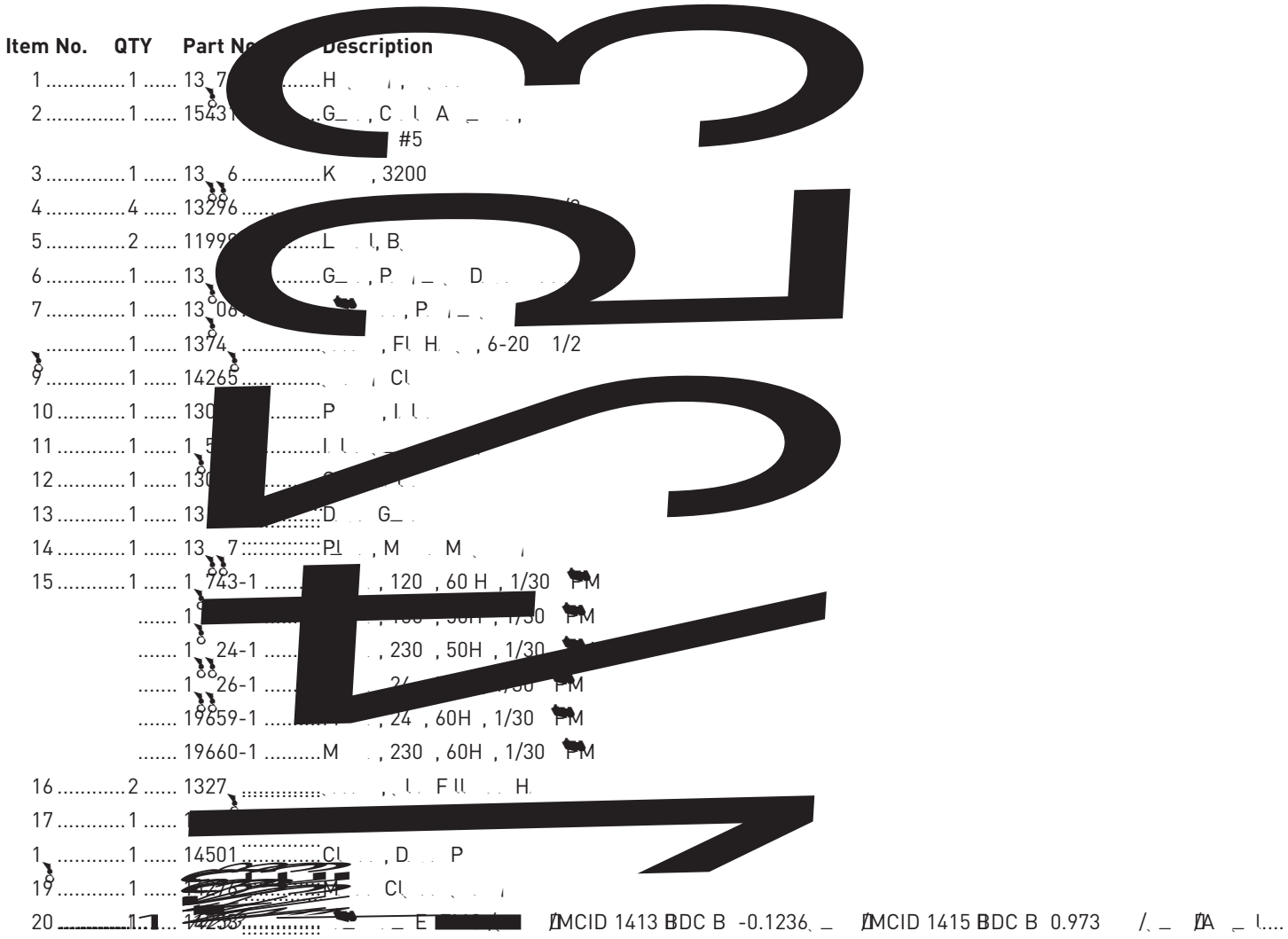
*C[illegible]ll [illegible] P[illegible] N[illegible]

3210 METER DELAYED TIMER ASSEMBLY



3220 METER IMMEDIATE TIMER ASSEMBLY





Item No.	QTY	Part No	Description
1	1	13 7	H , ,
2	1	15431	G , C l A _ , #5
3	1	13 6	K , 3200
4	4	13296	
5	2	11998	L l, B
6	1	13	G , P _ D
7	1	13 08	, P _
	1	1374	, F H , 6-20 1/2
9	1	14265	C
10	1	130	P ,
11	1	1 5	
12	1	130	
13	1	13	D G
14	1	13 7	P , M M
15	1	1 743-1	, 120 , 60 H , 1/30 PM
	1		, 230 , 50H , 1/30 PM
	1	24-1	, 230 , 50H , 1/30
	1	26-1	, 230 , 50H , 1/30 PM
	19659-1		, 24 , 60H , 1/30 PM
	19660-1	M	, 230 , 60H , 1/30 PM
16	2	1327	, l F H
17	1	1	
1	1	14501	C , D P
19	1	1	M C
20	1	142	E

MCID 1413 BDC B -0.1236 MCID 1415 BDC B 0.973 A

POWERHEAD ASSEMBLY
(ENVIRONMENTAL) *CONTINUED*

Item No.	QTY	Part No.	Description
1	1	1 697-15	B ,H
2	1	11 3	P C , 6- , N A _ , Fl
		19303-01	P C , 6- , A _ L
		19 5-01	P C , 6- , J _
		11545-01	P C , 6- , E _
3	1	13547	_ , C
4	1	40400	H , D D / E l
5	2	10231	, l H 1/4-20 1/2 35 -l , 20%
6	2	1021	, M
7	1	10909	P , C
	1	60160-15	D C A , F, Bl , 2900
9	2	1033	P , 3/32 7/
10	2	14923	, P H MACH, 4-40 1 5.0 -l , 10%
11	1	41543	M , D , 115 /60 H
		41545	M , D , 220 , 50-60H , P, E 1
11A		42579	M , D , 24 AC/DC, 50-60 H , E 1
12	1	12777	C , - _ l
13	2	10300	, H _ H_ , 3/ 20 -l , 20%
14	1	3200	A , 3200 7 12 D
			3210 M D
			3220 M l _
15	1	15 06	H l Pl , (H C)
16	1	16493	Pl , H l , H C , D
17	1	17421	Pl , 1.20 H l
1	2	19691	Pl , .750 D . H l , Fl
19	7	19 00	Pl (H l : D .140)
20	4	19 01	Pl , D .190
21	1	43560	F , B _ l (F l _ l)
22	1	10269	N , 3/4-16 (Fll _ l)
23	2	415 1	Pl , H l .125 D ,
24	1	10 72	, H H, -32 5/16 20 IN-LB , 20%
25	1	14202-01	, H _ # -32 5/16 H
26	1	60219-02	C A , E _ l, Bl , Cl
		60219-12	C A , E _ l, Bl , Bl
27	1	*	P _ A l
2	1	60050-23	D M A , 24 AC/ DC, 50-60 H FAM 1
		60050-21	D M A , 115 /60 H
		60050-22	D M A , 220 , 50-60 H , P FAM1
29		60320-12	K , 1500-2 50 D M

Not Shown:

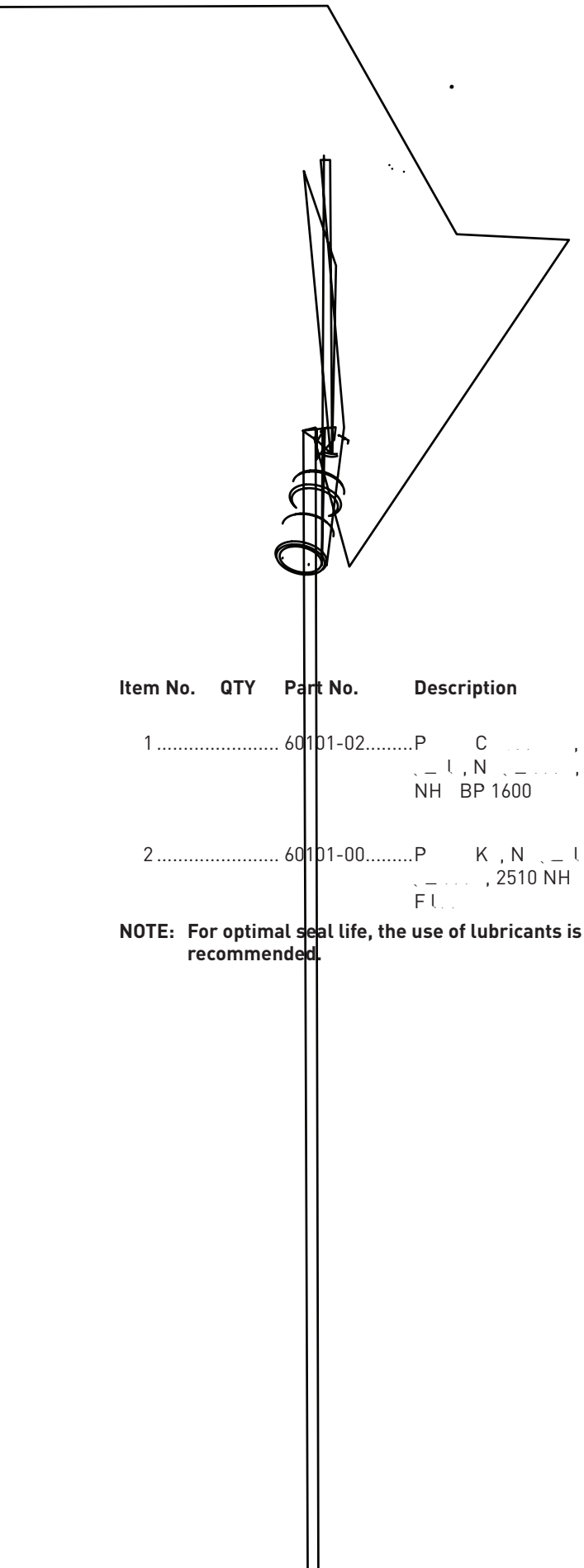
1	15441	C l G A , 2510
1	15495	M C l , 13 7

*C ll P N

CONTROL VALVE ASSEMBLY *CONTINUED*

Item No.	QTY	Part No.	Description
25	1	1233[illegible]	F[illegible], El[illegible], 90 D[illegible]. 1/2-[illegible] NP[illegible] 1/2-[illegible] B[illegible]
26	1	11[illegible]93	C[illegible], I[illegible], [illegible] l[illegible]
		1022[illegible]	C[illegible], I[illegible], B[illegible]
27	1	15137[illegible]	[illegible], H[illegible] M[illegible], 10-24 3/[illegible]
2[illegible]	1	10757	[illegible], E[illegible]
29[illegible]	1	12973-0	N[illegible] l[illegible], I[illegible], #0, P C
		12973-1	N[illegible] l[illegible], I[illegible], #1, P C
		12973-2	N[illegible] l[illegible], I[illegible], #2, P C
		12973-3	N[illegible] l[illegible], I[illegible], #3, P C
		12973-4	N[illegible] l[illegible], I[illegible], #4, P C
		10913-000	N[illegible] l[illegible], I[illegible], #000 B[illegible]
		10913-00	N[illegible] l[illegible], I[illegible], #00 l[illegible]
		10913-0	N[illegible] l[illegible], I[illegible], #0 [illegible]
		10913-1	N[illegible] l[illegible], I[illegible], #1 [illegible]
		10913-2	N[illegible] l[illegible], I[illegible], #2 Bl[illegible]
		10913-3	N[illegible] l[illegible], I[illegible], #3 [illegible]ll
		10913-4	N[illegible] l[illegible], I[illegible], #4 G[illegible]
30	1	12974-0	[illegible]_[illegible], I[illegible], #0, P C
		12974-1	[illegible]_[illegible], I[illegible], #1, P C
		12974-2	[illegible]_[illegible], I[illegible], #2, P C
		12974-3	[illegible]_[illegible], I[illegible], #3, P C
		12974-4	[illegible]_[illegible], I[illegible], #4, P C
		10914-000	[illegible]_[illegible], I[illegible], #000 B[illegible]
		10914-00	[illegible]_[illegible], I[illegible], #00 l[illegible]
		10914-0	[illegible]_[illegible], I[illegible], #0 [illegible]
		10914-1	[illegible]_[illegible], I[illegible], #1 [illegible]
		10914-2	[illegible]_[illegible], I[illegible], #2 Bl[illegible]
		10914-3	[illegible]_[illegible], I[illegible], #3 [illegible]ll
		[illegible]	

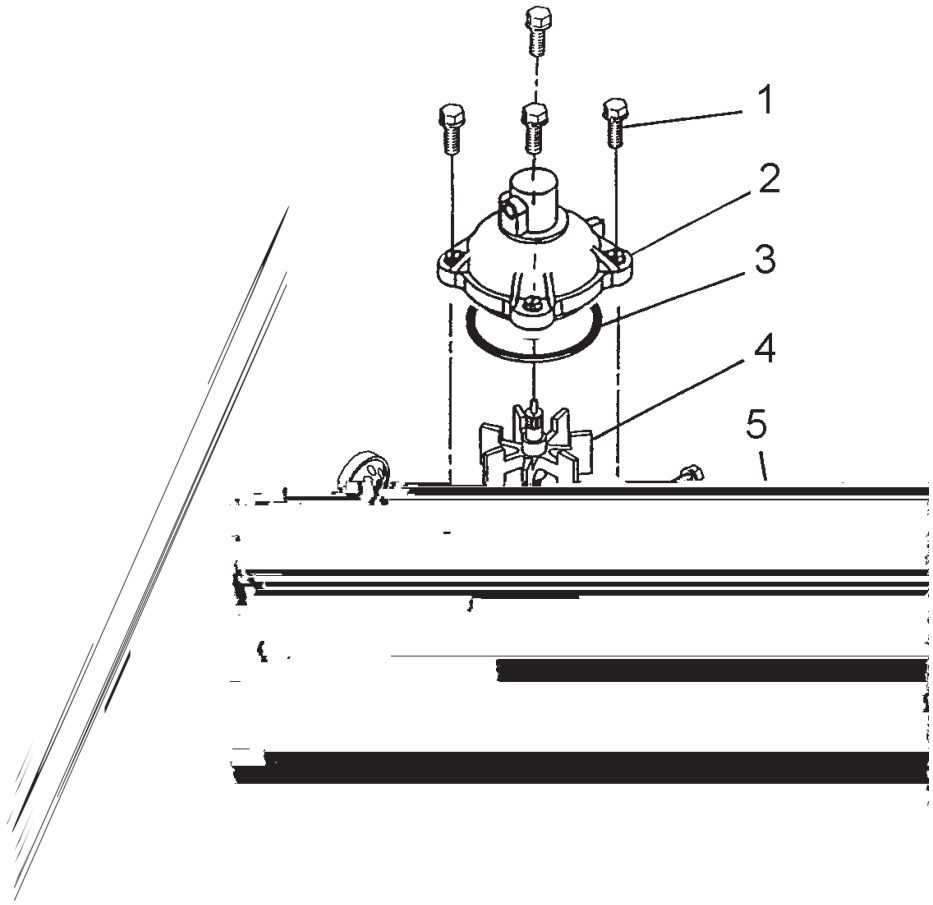
SOFTENER FILTER CONVERSION KITS



61671 E

Item No.	QTY	Part No.	Description
1		60101-02	P C , N , 2510 NH BP 1600
2		60101-00	P K , N , N , 2510 NH BP

NOTE: For optimal seal life, the use of lubricants is not recommended.



Item No.	QTY	Part No.	Description
1	4	12473	- M C A l, 10-24 5/ -
2	1	15[illegible]	[illegible] A l (N)
		15452	

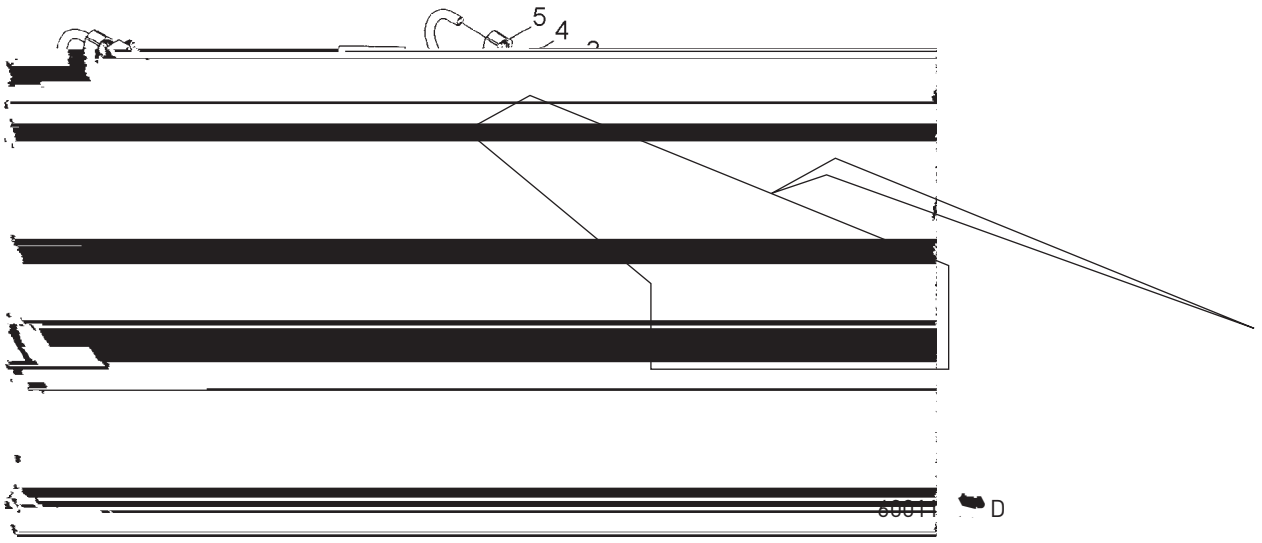
1600 BRINE SYSTEM ASSEMBLY



60029 C

Item No.	QTY	Part No.	Description
1	2	10332	F , I , 3/
2	1	12767	, B
3	1	1032	F , E , 90 D . 1/4- NP 3/
4	3	10329	F , , 3/ N , B
5	3	10330	F , , , 3/ C
6	1	1650 -01	, B _ , 2 50/2900
		12774	, B _ , 1500
		40027	, B _ , 2510, H BP
		1442	, B _ , 1600/1650, NH BP
		15221-01	, B _ , 2750/2900
		421 4	, B _ , 2 50
		416 3	, B _ , F, 2900 1600/1650
7	1	10250	,
	1	11749	G , B _
9	1	10249	, B _
10	1	12550	, -009
11	1	1274	B _ B A , 1600 /
12	1	12552-02	B _ , 1600,
13	1	12626	_ , B _
14	1	119 2	O- , -016
15	1	60020-25	BLFC, .25 GPM, 1600
		60020-50	BLFC, .50 GPM, 1600
		60020-100	BLFC, 1.0 GPM, 1600
16	1	60029-010	B _ , 1600 , 0.25
		60029-020	B _ , 1600 , 0.50
		60029-030	B _ , 1600 , 1.00

16 0 BRINE SYSTEM

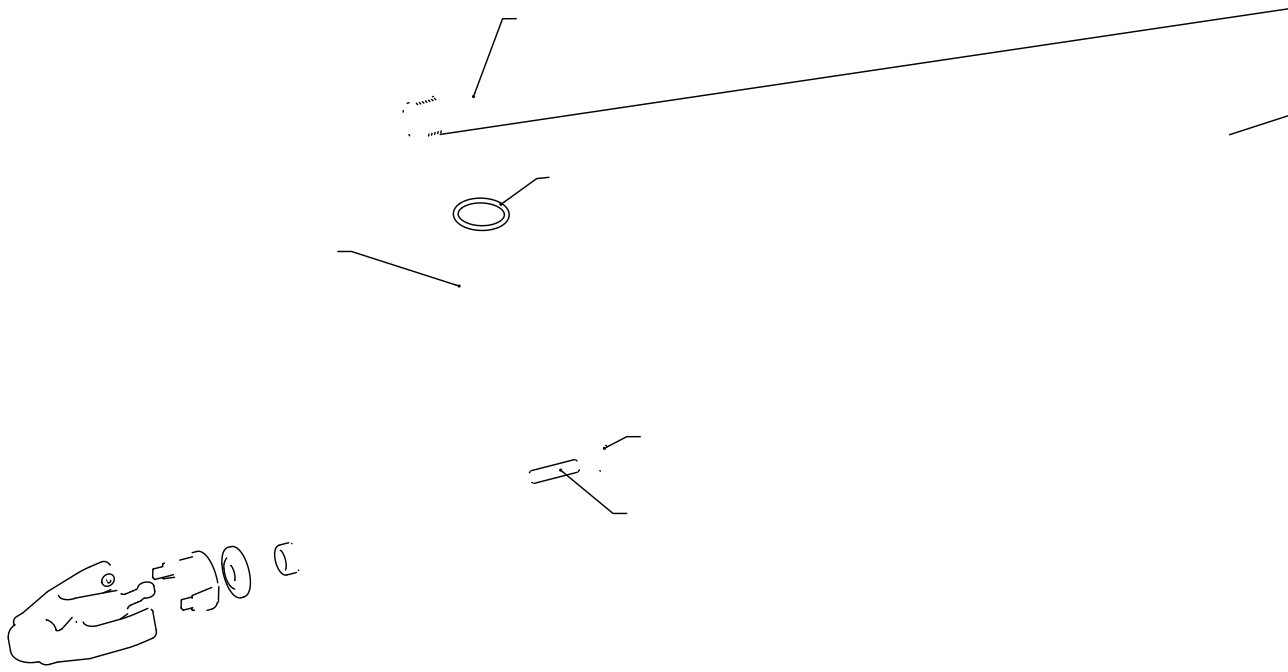


Item No.	QTY	Part No.	Description
1	1	1032	El , 90 1/4 NP 3/
3	3	10332	I , 3/
4	1	10330	, 3/ N B
5	1	10329	F , 3/ N B
6	1	1650 -01	, B _ l , 2 50/2900
		12774	, B _ l , 1500
		40027	, B _ l , 2510, H BP
		1442	, B _ l , 1600/1650, NH BP
		15221-01	, B _ l , 2750/2900
		421 4	, B _ l , 2 50
		416 3	, B _ l , F, 2900, 1600/1650
7	2	19625	A ., GFN N
	1	16924	O- , -01
9	1	12626	_ , B _ l
10	1	12552	B _ l , 1600
12	1	17906	G , B _ l
13	1	10250	_ ,
14	1	10249	, B _ l
15	1	17 4	B _ l B A ., Pl
17	1	12794	El , 3/ P l ,
1	1	60002	#500 A C

Item No.	QTY	Part No.	Description
1	2	13305	O- , -119
2	2	13255	Cl , M
3	2	13314	, l I H , -1 .60
4A	1	1 706	, 1- , NP , Pl
		1 706-02	, 3/4- , NP , Pl
4B	1	1370 -40	, 1- , —
		1370 -45	, 3/4- , —
		19275	, A l 90 D , 3/4- , NP
		19275-45	, A l 90 D , 3/4- , —
		19620-01	A , 3/4- , /A l , 90 D /O- , Cl &
		40636	, 1-1/4 , NP
		40636-49	, 1-1/4 , —
		41027-01	, 3/4- , NP , C , M
		41026-01	, 1- , NP , C ,

Item No.	QTY	Part No.	Description
1	1	60027-00	B , 2300, L E
2	1	1013	B , 3/ - , B
3	1	11566	B , F
4	1	1032	F , E , 90 D . 1/4 NP 3/
5	1	10332	F , , 3/
6	1	10330	F , , 3/ C
7			

2310 SAFETY BRINE VALVE



2310 SAFETY BRINE VALVE *CONTINUED*

Item No.	QTY	Part No.	Description
1	1	19645	B , _ B _ l , 2310
2	1	19 03	_ B _ l A
3	1	19 04	, , H , , 10-24 .75
4	1	19 05	N , H , 10-24, N l Bl
5	1	19652-01	P A , B /O- ,
6	1	19649	Fl D
7	1	111 3	O- , , -017
	1	19647	El , _ B _ l
9	2	19625	N A , 3/ - Pl
10	1	1 312	_ , D_
11	1	60014	_ B _ l A , 2310
12	2	10150	G , .30 D_
13	1	6006 - .06	Fl_ A , 2310, /.06-
		6006 -10.5	Fl_ A , 2310, /10.5-
		6006 -11.5	Fl_ A , 2310, /11.5-
		6006 -20	Fl_ A , 2310, /20-
		6006 -30	Fl_ A , 2310, /30-
14	1	60002-10	A C , #500, A _ H
		60002-11.3	A C , #500, 11.3
		60002-24	A C , #500, 24
		60002-27	A C , #500, 27
		60002-32	A C , #500, 32
		60002-34	A C , #500, 34
		60002-36	A C , #500, 36
		60002-4	A C , #500, 4
		60002-26.25	A C , #500, 26.25
		60002-33.25	A C , #500, 33.25

SEAL & SPACER TOOLS & REPLACEMENT

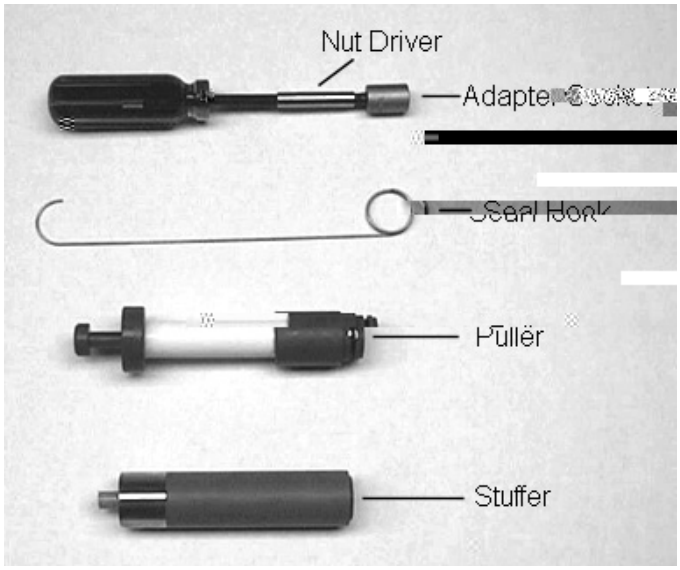


Figure 5

NOTE: Photos shown are for reference only for replacing the seal and spacer. Actual valve may be different.

1. [illegible]. Note [illegible]. Note [illegible].
2. [illegible].
3. D[illegible] (Figure [illegible]).
4. [illegible].
5. G[illegible] (Figure 6). [illegible].

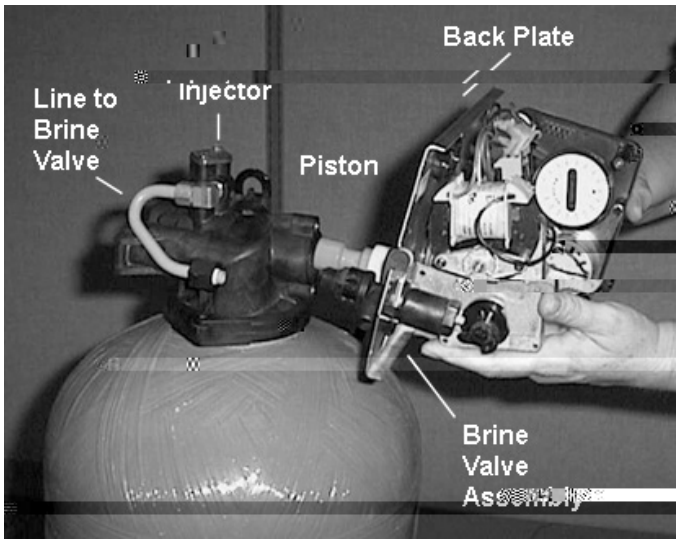


Figure 6

6. [illegible] (Figure 7).

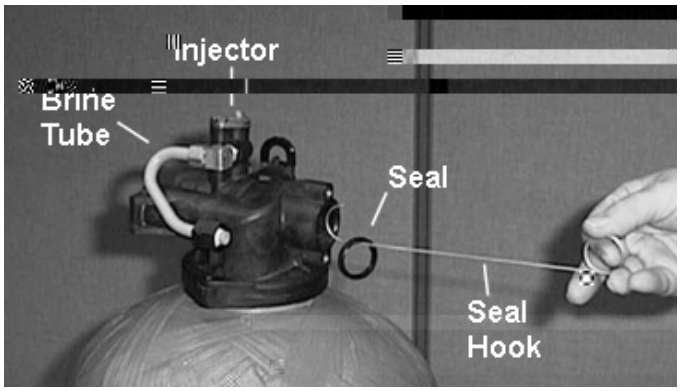


Figure 7

7. [illegible]. P[illegible] (Figure [illegible]).
8. [illegible] 1/4 [illegible]. P[illegible].

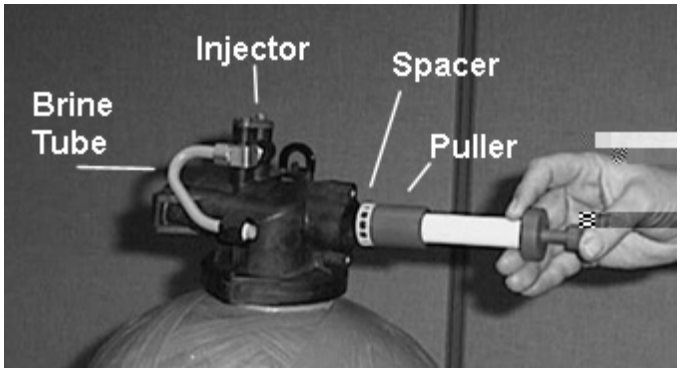


Figure [illegible]

9. Al[illegible] N. 6.
10. [illegible].

SEAL & SPACER TOOLS & REPLACEMENT

CONTINUED

11. [illegible] (Fig. 5). [illegible]

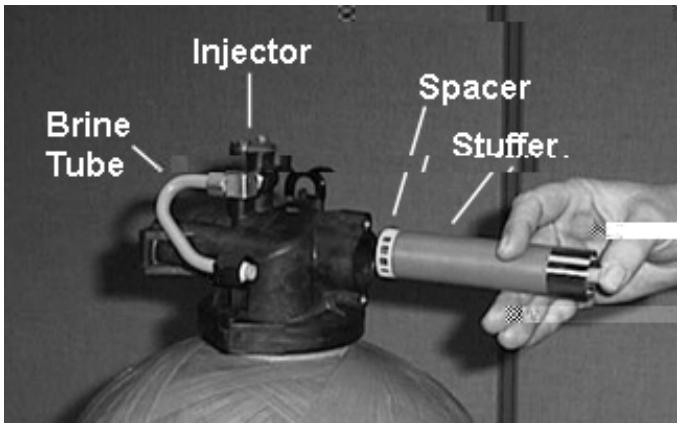


Fig. 9

12. [illegible] (Fig. [illegible]). Pl[illegible]

13. [illegible]

14. [illegible] Pl[illegible]

GENERAL SERVICE HINTS FOR METER CONTROL

Problem: Softener delivers hard water

Reason: [illegible]

Correction: C[illegible]

Reason: P[illegible]

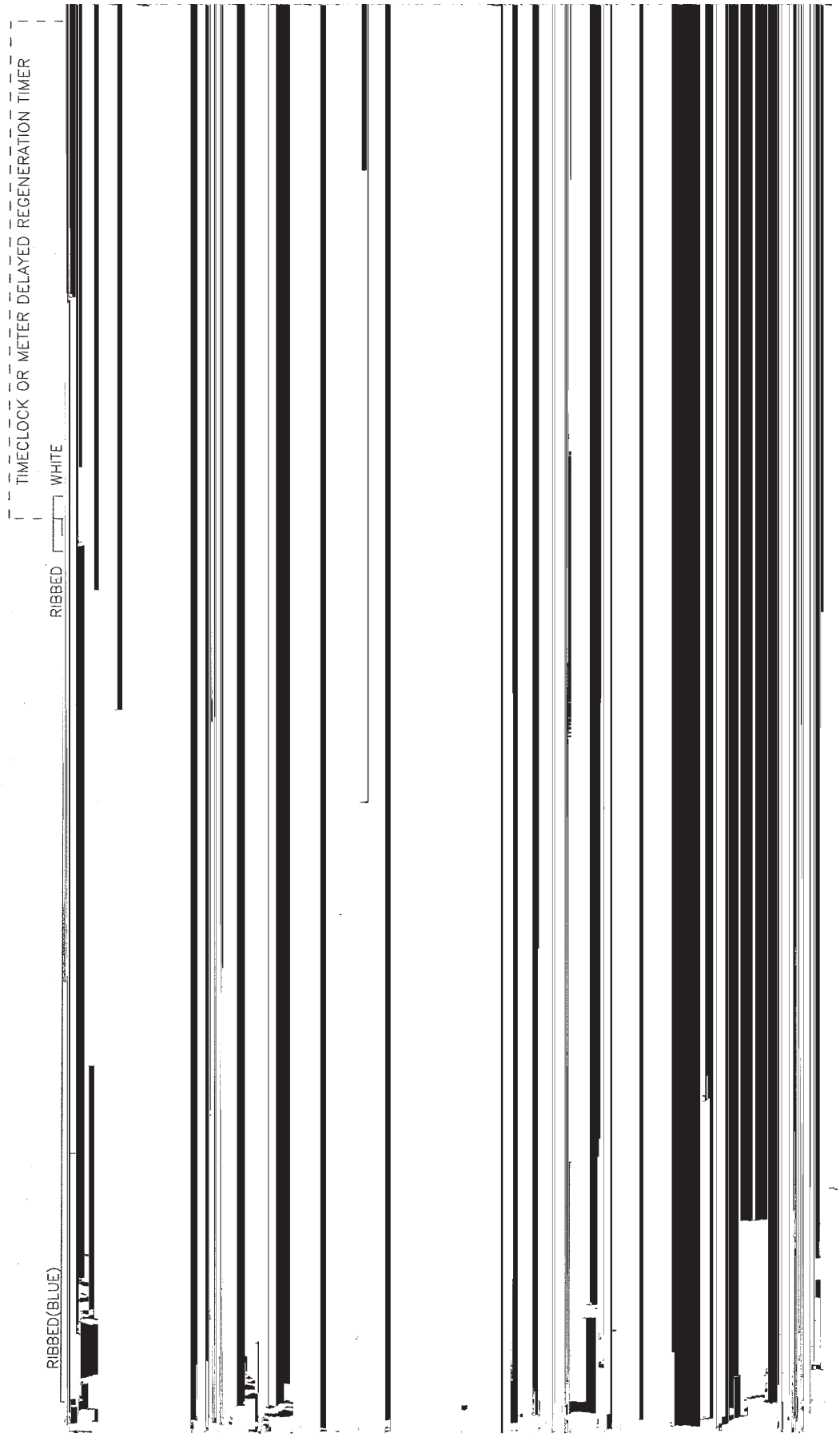
Correction: P[illegible]

Reason: M[illegible]

Correction: C[illegible]

TROUBLESHOOTING

Problem	Cause	Correction


TIMECLOCK OR METER DELAYED REGENERATION TIMER
RIBBED
WHITE
RIBBED(BLUE)
19201 C

SERVICE ASSEMBLIES

24 Hour Gear Assemblies
40096-02 ..... Dial 2AM Regen Assy, Black
40096-24 ..... Dial 12AM Regen Assy, Black
60519-02 ..... Gear Assy, 3200 24 Hour 2 Times/Day
60519-03 ..... Gear Assy, 3200, 24 Hour 3 Times/Day
60519-04 ..... Gear Assy, 3200, 24 Hour 4 Times/Day
60519-06 ..... Gear Assy, 3200, 24 Hour (12:00) 6 Times/Day

Brine Line Flow Control (BLFC)
60010-25 ..... BLFC, 1650, .25 GPM, Plastic
60010-50 ..... BLFC, 1650, .50 GPM, Plastic
60010-100 ..... BLFC, 1650, 1.0 GPM, Plastic

Brine Valves
60011-010 ..... Brine Valve, 1650, Short Stem, .25 GPM, Less Tube
60011-030 ..... Brine Valve, 1650, Short Stem, 1.0 GPM, Less Tube

Bypasses
60049..... Bypass Plastic Assy
60040SS ..... Bypass Valve, 5600, 3/4-inch NPT
60041SS ..... Bypass Valve, 5600, 1-inch NPT

Cam
60160-15 ..... Drive Cam Assy, STF, Blue

Clamp
60503..... Clamp Ring Assembly, 2510

Couplin
60510..... Adapter Coupling Assy, 5600

Drain Line Flow Controls
60705-00 ..... DLFC, Plastic, Blank
60705-06 ..... DLFC, Plastic, .60 GPM
60705-08 ..... DLFC, Plastic, .80 GPM
60705-10 ..... DLFC, Plastic, 1.0 GPM
60705-12 ..... DLFC, Plastic, 1.2 GPM
60705-13 ..... DLFC, Plastic, 1.3 GPM
60705-15 ..... DLFC, Plastic, 1.5 GPM
60705-17 ..... DLFC, Plastic, 1.7 GPM
60705-20 ..... DLFC, Plastic, 2.0 GPM
60705-24 ..... DLFC, Plastic, 2.4 GPM
60705-30 ..... DLFC, Plastic, 3.0 GPM
60705-35 ..... DLFC, Plastic, 3.5 GPM
60705-40 ..... DLFC, Plastic, 4.0 GPM
60705-45 ..... DLFC, Plastic, 4.5 GPM
60705-50 ..... DLFC, Plastic, 5.0 GPM
60705-60 ..... DLFC, Plastic, 6.0 GPM
60705-70 ..... DLFC, Plastic, 7.0 GPM
60705-8.0 ..... DLFC, QC x 3/4-inch F, 8.0 GPM
60705-9.0 ..... DLFC, QC x 3/4-inch F, 9.0 GPM
60705-12 ..... DLFC, QC x 3/4-inch F, 12.0 GPM
60705-15 ..... DLFC, QC x 3/4-inch F, 15.0 GPM

Drives
60050-21 ..... Drive Assy, 2750, STF, 120V Softener

Injectors
60480-xx..... 1600 Injector Assy (Specify size of Injector)

Meters
60088-180 ..... Meter Assy, 3/4-inch Dual Port, Slip Std, Rt Ang/180 Plastic Paddle w/clps
60089-180 ..... Meter Assy, 3/4-inch Dual Port, Slip Ext, Rt Ang/180 Plastic Paddle w/clps

Pistons
60090..... Piston Assy, 1500, 2510, 2750
60101-01 ..... Piston Assy, NHWBP
60101-02 ..... Piston Conversion, 2510 NHWBP 1600
60101-00 ..... Piston Kit, 2510 NHWBP Filter

Pro ram Wheels
60405-10 ..... Program Wheel, w/3/4-inch Std Label Set @ 21
60405-15 ..... Program Wheel, w/3/4-inch Std Label w/People Label Set @ 21

Safety Brine (2300)
60028-30 ..... Float Assy, 2350, 30-inch , White
60027-FFA..... Safety Brine Valve Body, 2300 Fitting Facing Arm
60027-FFS..... Safety Brine Valve Body, Fitting Facing Stud

Sales and Service Aids
40097..... Literature, 2510, S/Manual
16510..... Literature, 2510, Spec Sheet

Seal & Spacer Kits
60121..... Seal Kit, 1500, 2510, 2750
60121-10 ..... Seal & Spacer Kit, 2750, Silicone

Skipper Wheels
14860..... Skipper Wheel Assy, 7 Day
14381..... Skipper Wheel Assy, 12 Day

Yokess
13708-40 ..... Yoke, 1-inch , Sweat
13708-45 ..... Yoke, 3/4-inch , Sweat
18706..... Yoke, 1-inch , NPT, Plastic
18706-20 ..... Yoke, 3/4-inch , NPT, Plastic
19275..... Yoke, Angle 90 Deg. 3/4-inch , NPT
19275-45 ..... Yoke, Angle 90 Deg. 3/4-inch Sweat
19620-01 ..... Yoke Assy, 3/4-inch , R/Angle, 90 Deg w/O-rings, Clips and Screws
40636..... Yoke, 1-1/4 inch, NPT
40636-49 ..... Yoke, 1-1/4 inch, Sweat
41026-01 ..... Yoke, 1-inch , NPT, SS
41027-01 ..... Yoke, 3/4-inch , NPT, Cast, Machd

