742/762 Control
255 and Performa Series Valves
(263, 268, 268FA)

Operation Manual

TABLE OF CONTENTS

Q - 3

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4 /

4

4 / 43

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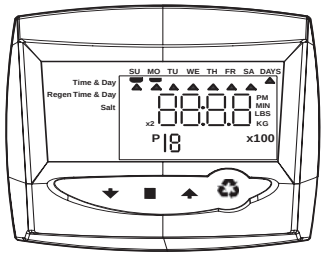
LOGIX™ SERIES INSTALLER QUICK-START SHEET

Logix Series Controllers

742 Controller -

762 Controller -

The Logix Series will operate on both the 255 and Performa valve body series.

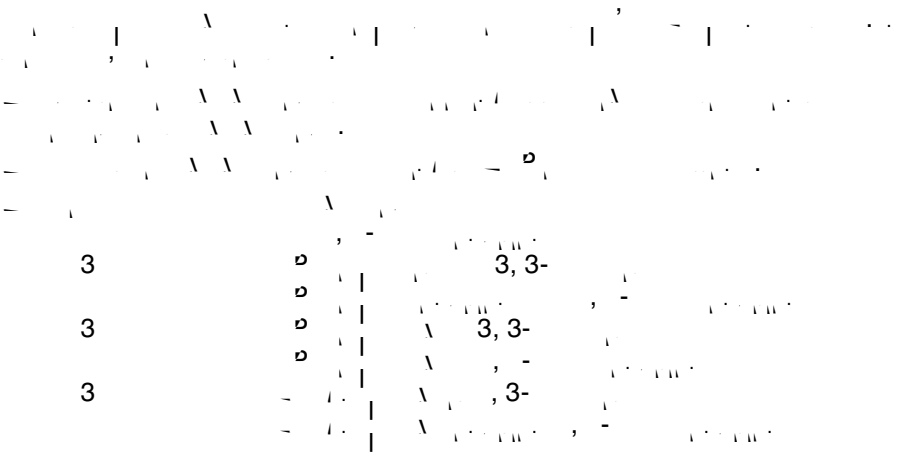


Initial Power-up

Initial Power Up - (CAMSHAFT proceeds to HOME position)

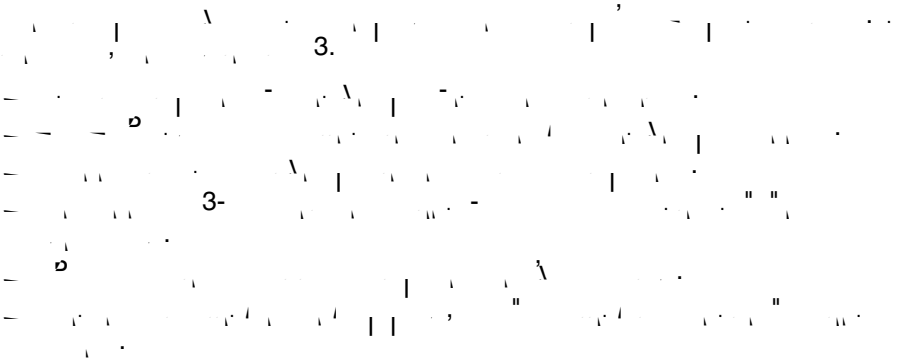
Initial Start-up Step-by-step Instructions

Step 1: Select Valve Type

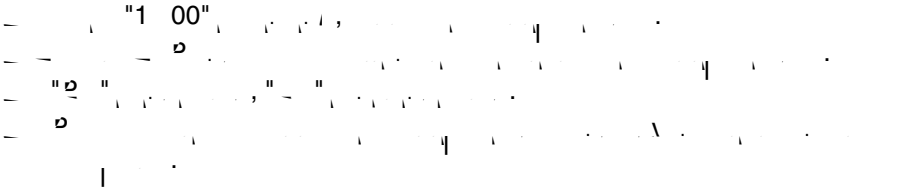


NOTE:

Step 2: Program System Size



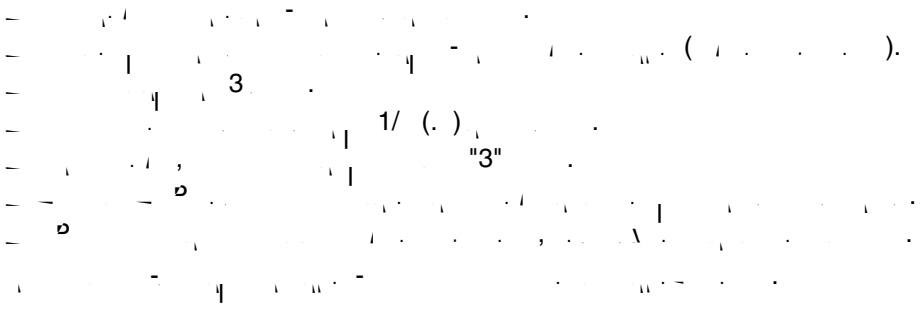
Step 3: Program Time of Day



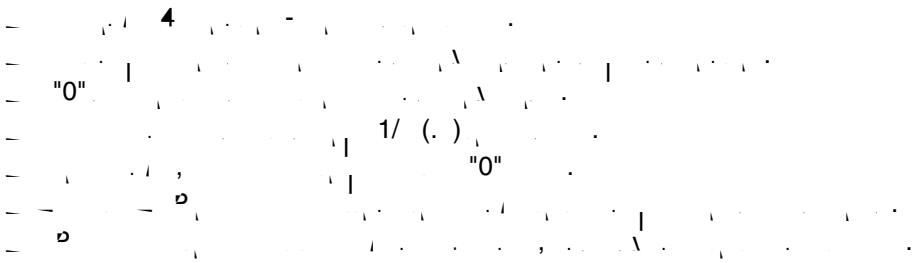
Step 4: Set Day of Week

Step 5: Set Regen Time

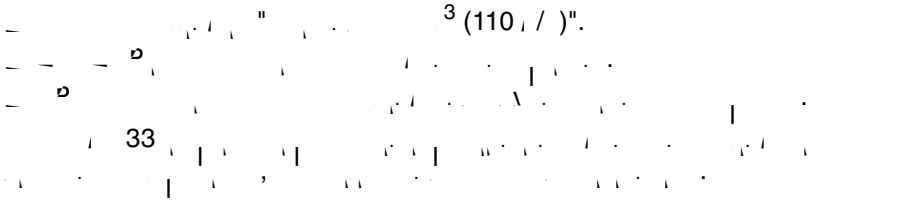
Step 6: Set Days to Regenerate (742 Time-clock Control Only)



Step 6a: Set Calendar Override (762 Demand Control Only)



Step 7: Set Salt Amount (Regenerant Amount)



Step 8: Estimated Capacity

1. 14 0.00 0.00

Step 9: Enter Hardness (762 Demand Control Only)

30

For system start-up procedure, including: purging the mineral tank, refilling the regenerant tank, and drawing regenerant, see *Initial Startup Step-By-Step Instructions* on page 31.

Manual Regeneration Procedures

To Initiate a Manual Regeneration:

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During a Regeneration:

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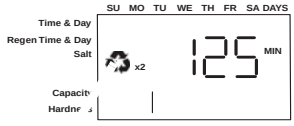

To Advance Regeneration Cycles:

1-

Regeneration Cycles:

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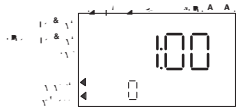
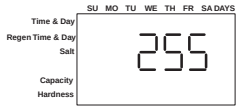
Resetting The Control



Resetting the Logix Controller



Unprogrammed control after reset

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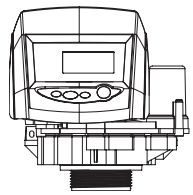
WARNING:

Further programming or set-up instructions can be found in this manual.

QUICK START

MANUAL OVERVIEW

How To Use This Manual



Icons That Appear In This Manual

WARNING:

NOTE:

EQUIPMENT INSTALLATION

General Warnings And Safety Information

Electrical

Mechanical

100%

. Do not use pliers or pipe wrenches.

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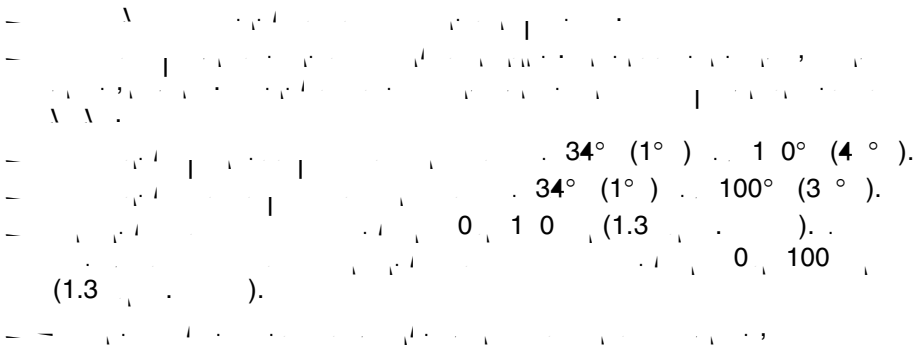
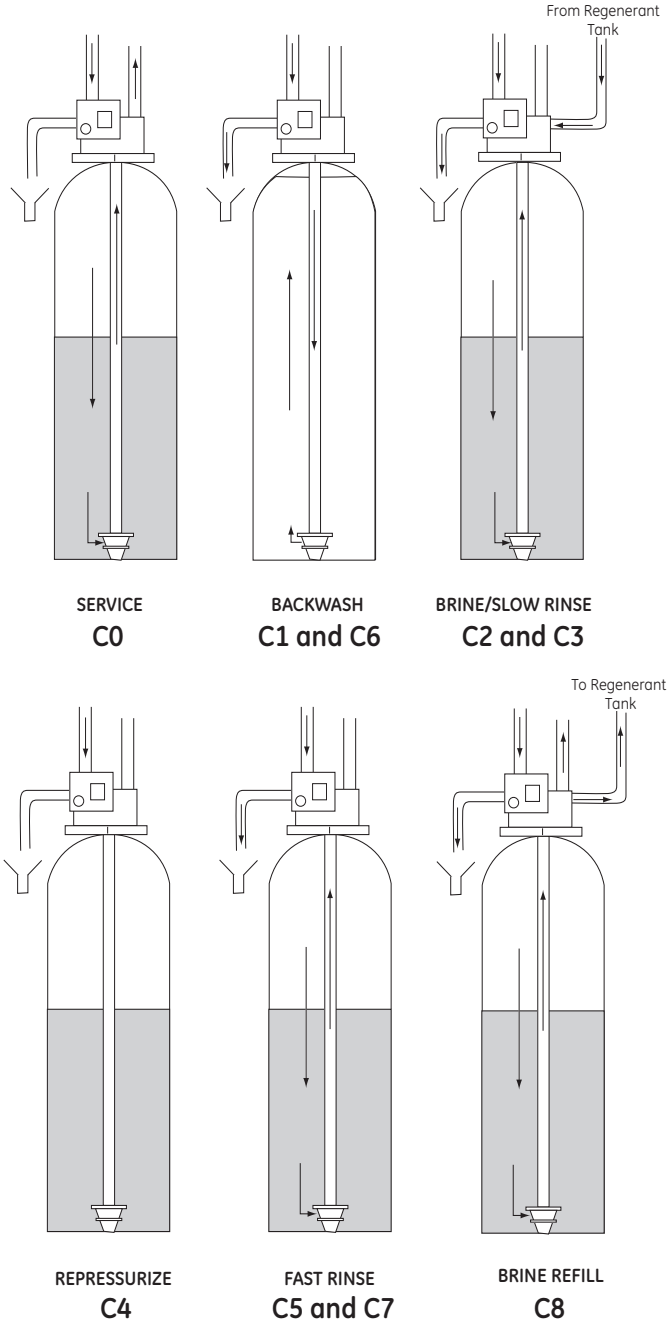
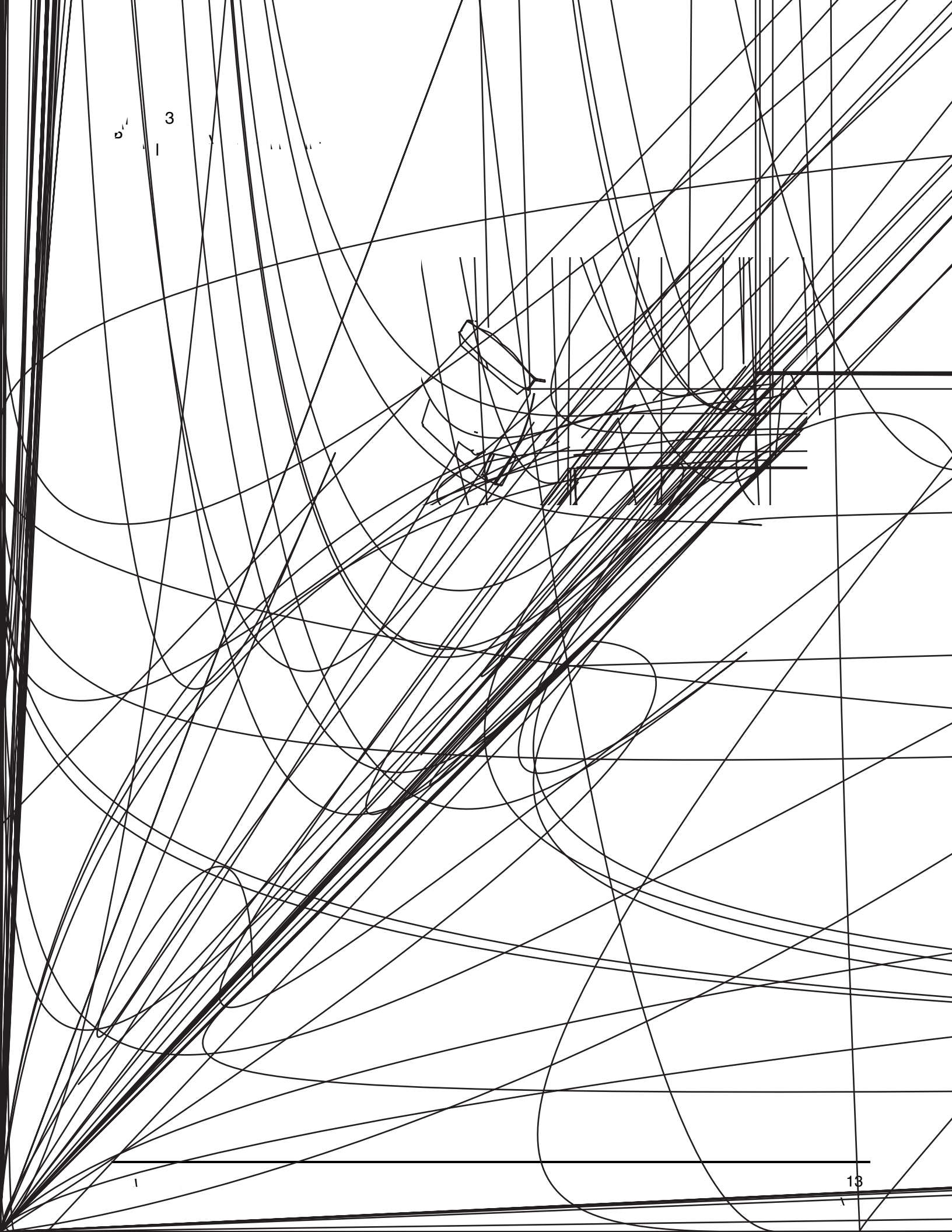
General

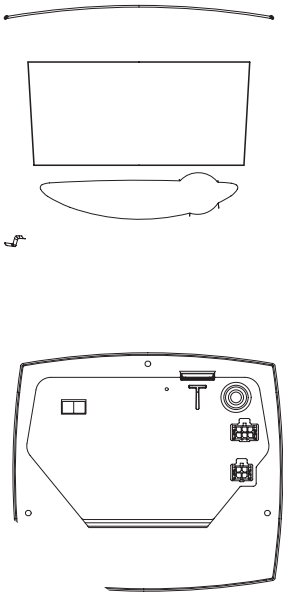


5. Fast Rinse (Downflow) — Cycles C5, C7:

6. Brine Refill — Cycle C8:







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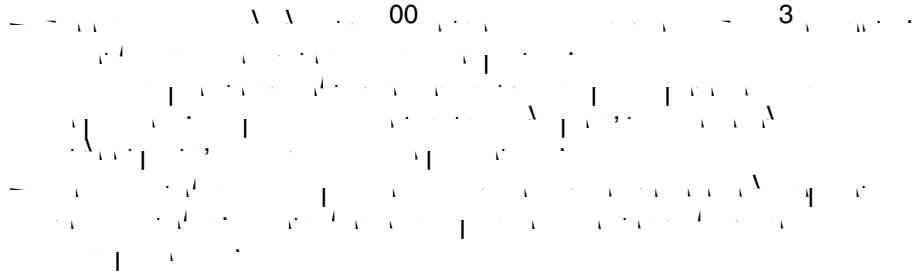
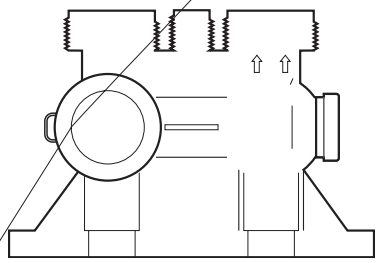


Normal Operation **In Bypass**



WARNING:

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Drain Line Connection

NOTE:

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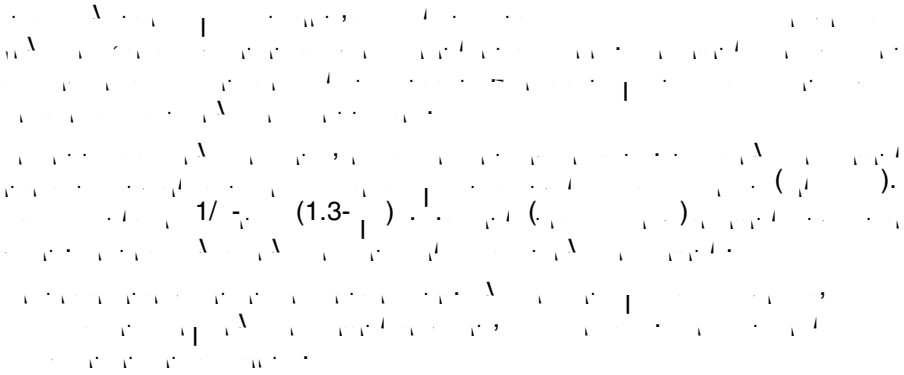
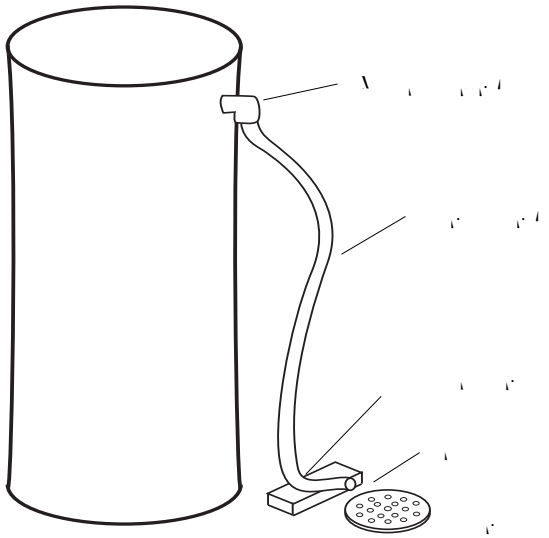
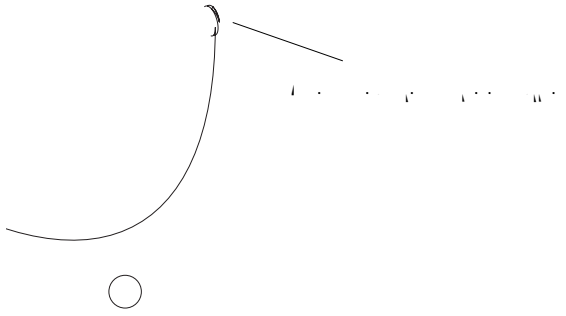
Overflow Line Connection
(not used with 3-cycle filter system)





Regenerant Line Connection
(not used with 3-cycle filter system)

10



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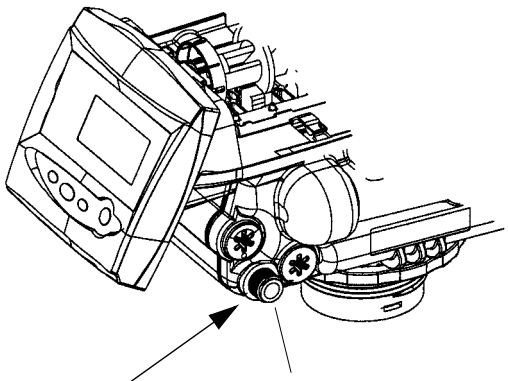
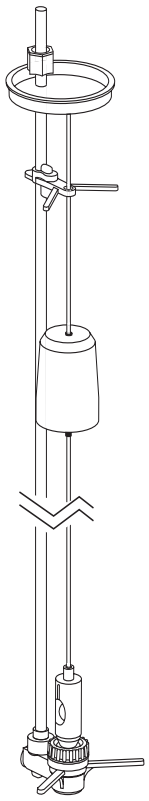


NOTE: 3/

NOTE: 3- (3, 3, 3)



Electrical Connection

CAUTION:

AC Adapter	Input Voltage	Application	Part Number
	1 0 0		1000 11
	1 0 0		1 3 44

100 VAC, 120 VAC and 230 VAC AC Adapters:

NOTE:

Controller Location

Valve Camshaft

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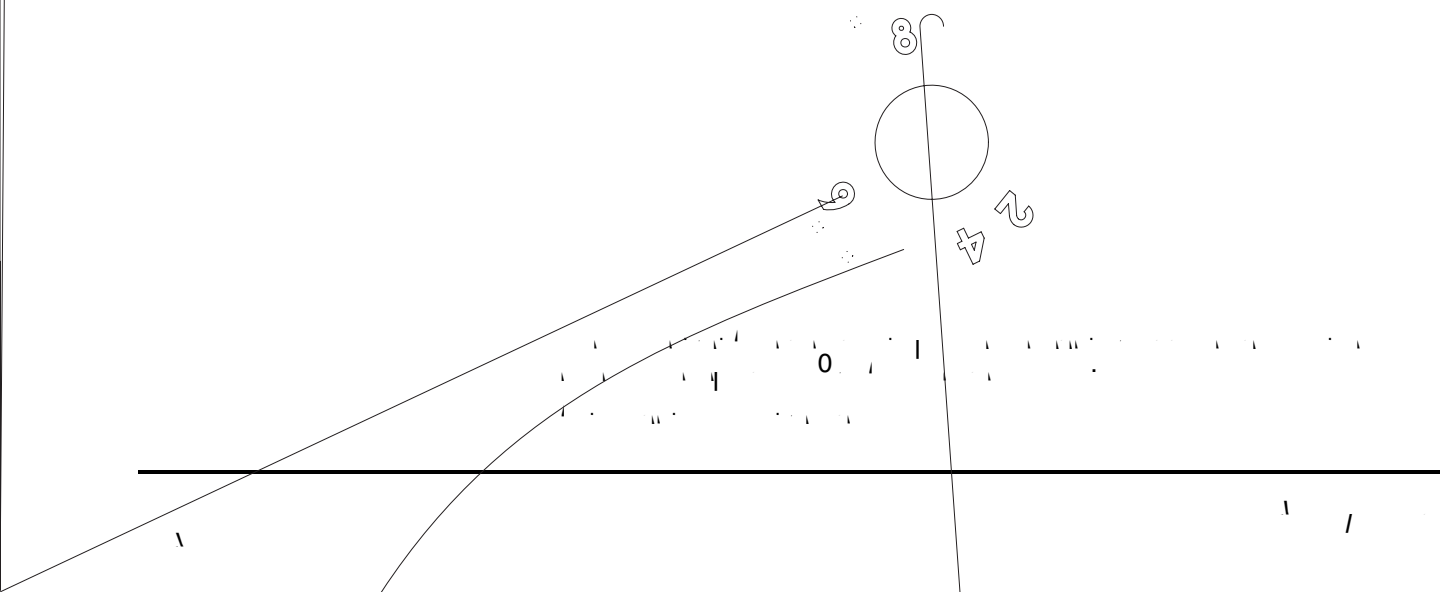
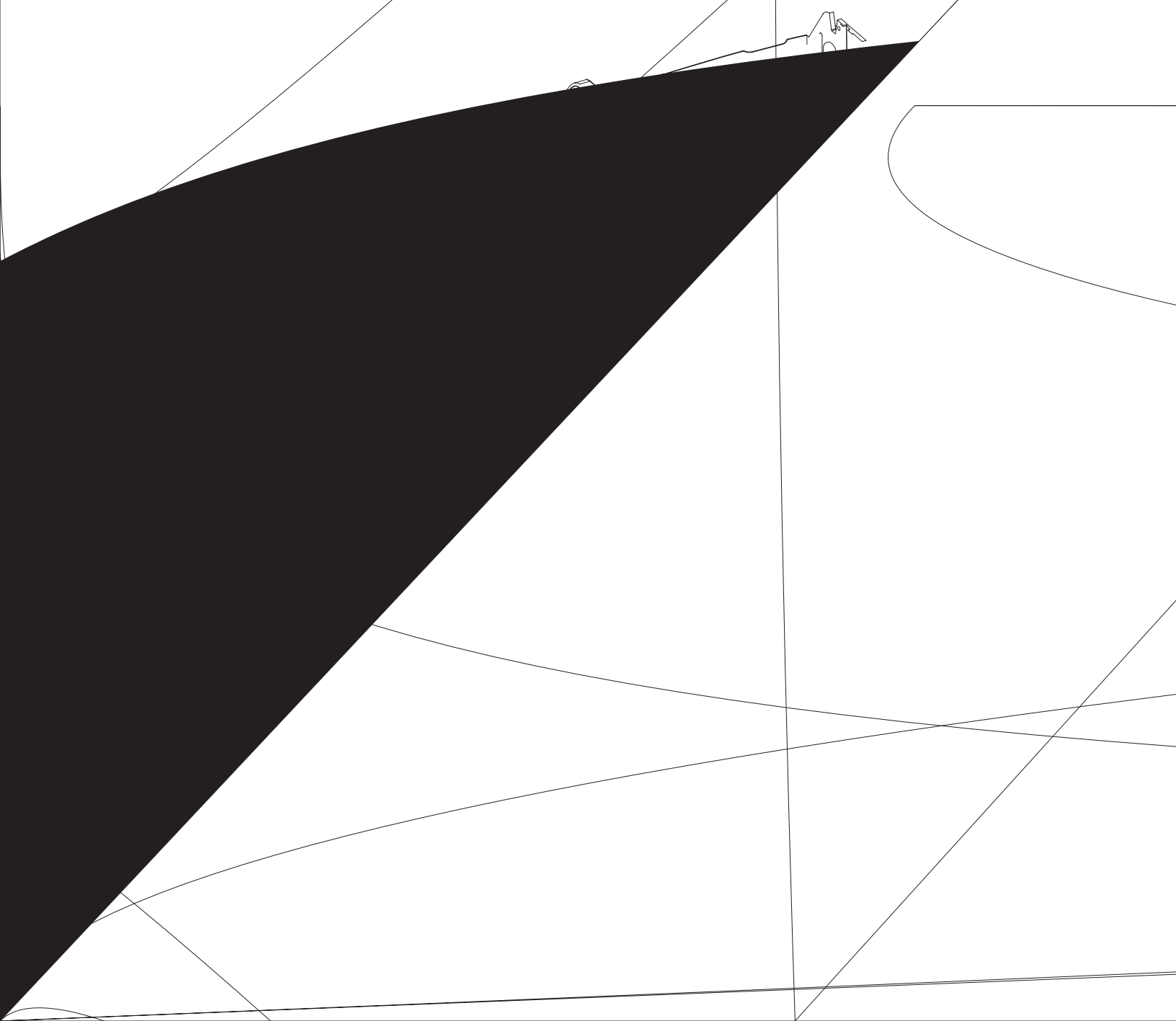


Valve Disc Operation



SYSTEM DISINFECTION

Disinfection Of Water Conditioners

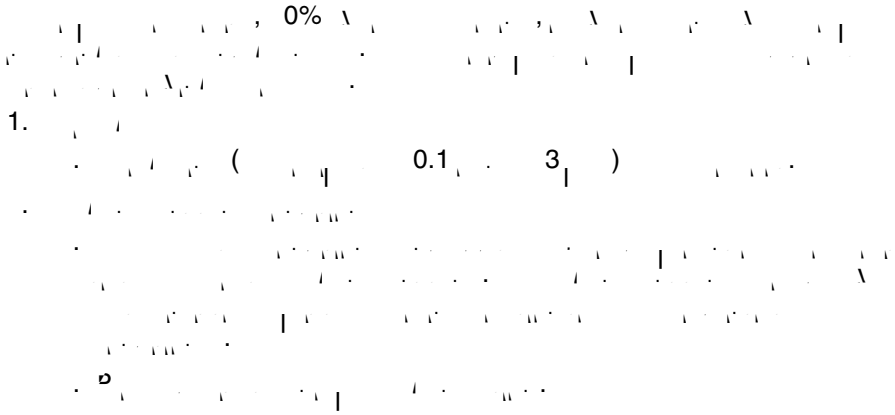
Sodium or Calcium Hypochlorite

Application

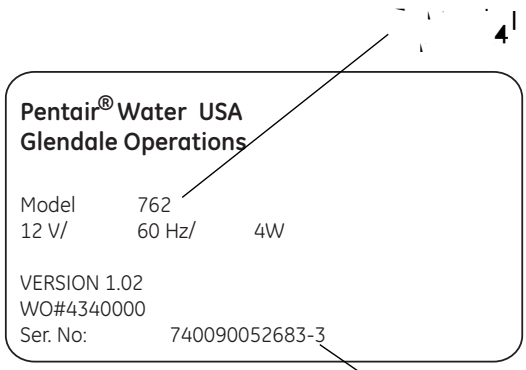
5.25% Sodium Hypochlorite

1.

Calcium Hypochlorite



DETERMINING IF YOU HAVE A 742 OR 762 CONTROL



Display Icons 700 Controller

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Keypad — Buttons

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Programming Conventions

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Regeneration Modes

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To Initiate a Manual Regeneration:

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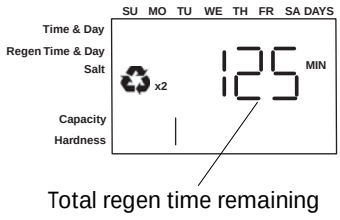
During a Regeneration:



" #"

To Advance Regeneration Cycles:

1

Regeneration Cycles:

1

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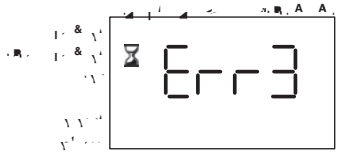
742/762 Series Initial Power-Up

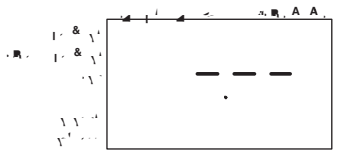
Initial Power Up – (Camshaft proceeds to HOME position)



NOTE:

Initial Start-up Step-By-Step Instructions

Step 1: Select Valve Type



Step 2: Program System Size

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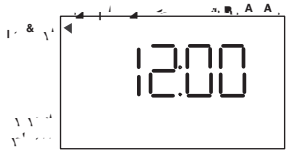
NOTE:

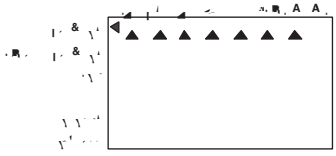
NOTE:



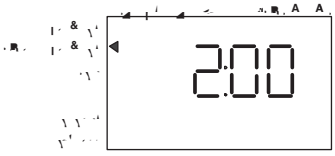
Set 3: Program Time of Day

1 00

Step 4: Set Day of Week



After steps 1-4, the controller will operate most systems. Proceed to step 5 if further adjustments to your system's programming is needed.



Step 5: Set Regen Time

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Step 6: Set Days to Regenerate (742 Time-Clock Control Only)

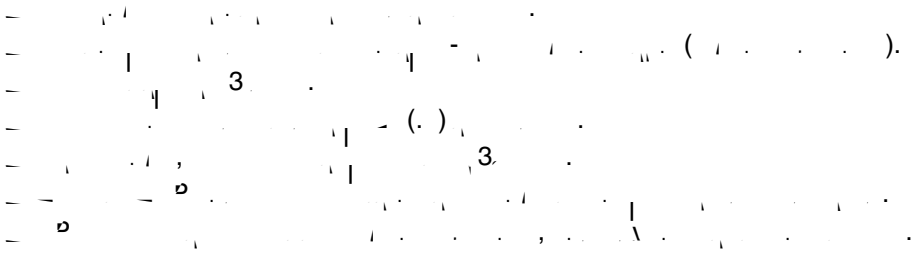
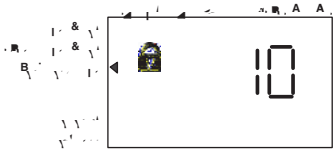


Table 1- High Efficiency Exchange Capacity

Salt lbs/cu ft	Exchange Capacity grains/cu ft	Salt grams/ liter	Exchange Capacity grams/liter
3	14100	0	33.
4	1 30	0	40.0
	11 0	0	44.
	34 0	0	4 .4
	4 0	0	1.
	1	100	4.
	3	110	.
10	3001	1 0	0.
11	31 3	130	.
1	3 3 0	140	4.
13	333 3	1 0	.
14	343 0	1 0	0.4
1	3 0	00	.
1	3 0	30	.3
1	3 0	0	.
1	3 33	0	.1

Table 2

To Convert Capacity in	Into Capacity in	Multiply by
( )	( )	1 .43
( )	( )	0.0 4
3	( )	0.10
3	( )	0.0



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Filter backwash time (filter mode only)

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Step 8: Estimated Capacity

PLACING CONDITIONER INTO OPERATION (turning on the water)

Conditioner and FA Filter Start-Up

WARNING:

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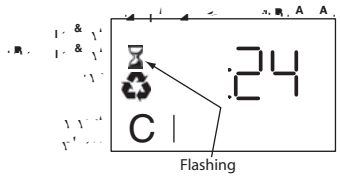

4.

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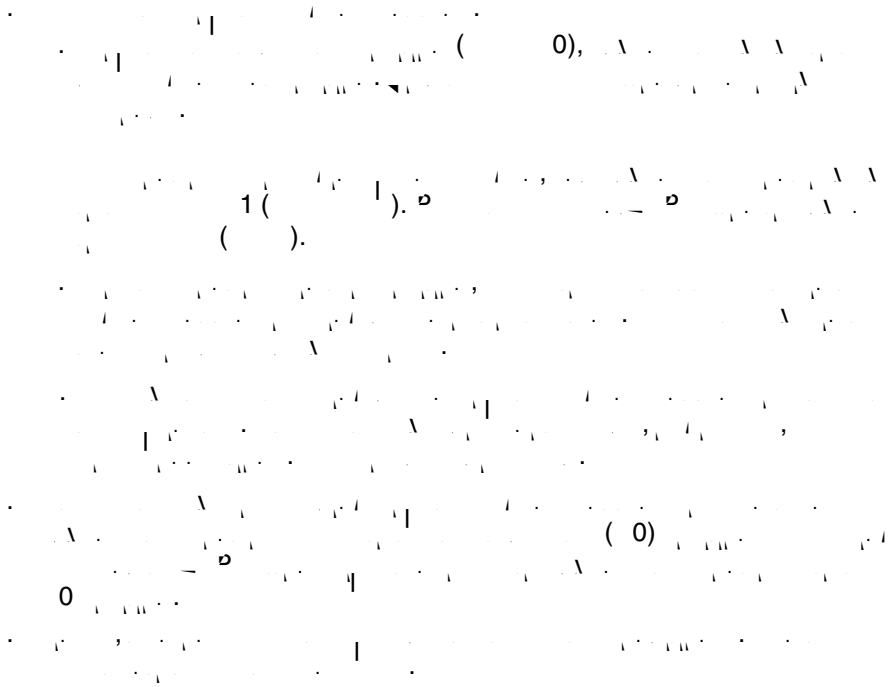
WARNING:

NOTE:



PROGRAMMING THE 700 FOR 5-CYCLE FILTER APPLICATIONS

Manganese Greensand Systems

Sizing FA Filters

Backwash Controller

Injector

Refill Controller

0.33

Initial Resin Volume Setting

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"Salt" Setting for $KMNO_3$ Regenerant

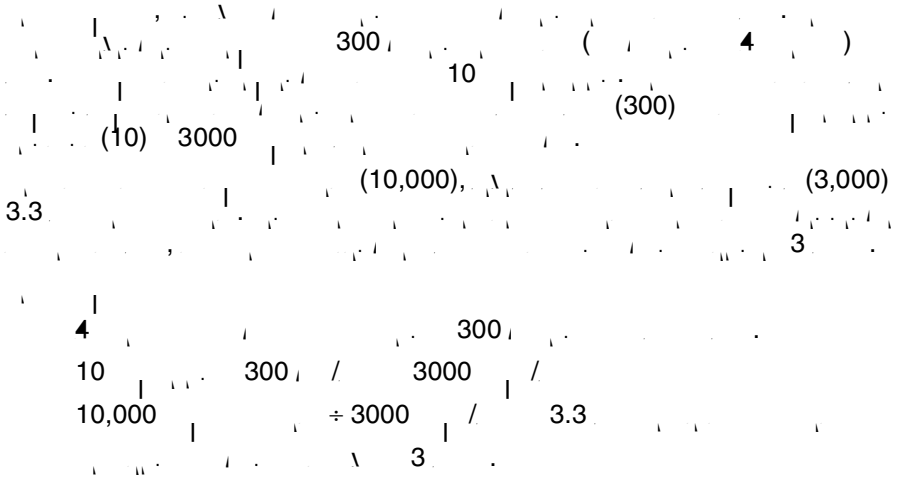
Days Between Regeneration Setting (742 FA)

10,000

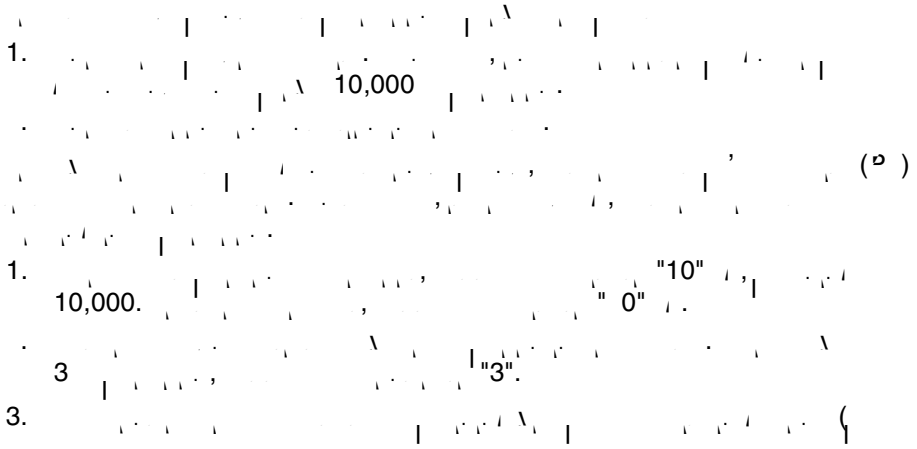
10,000.

1

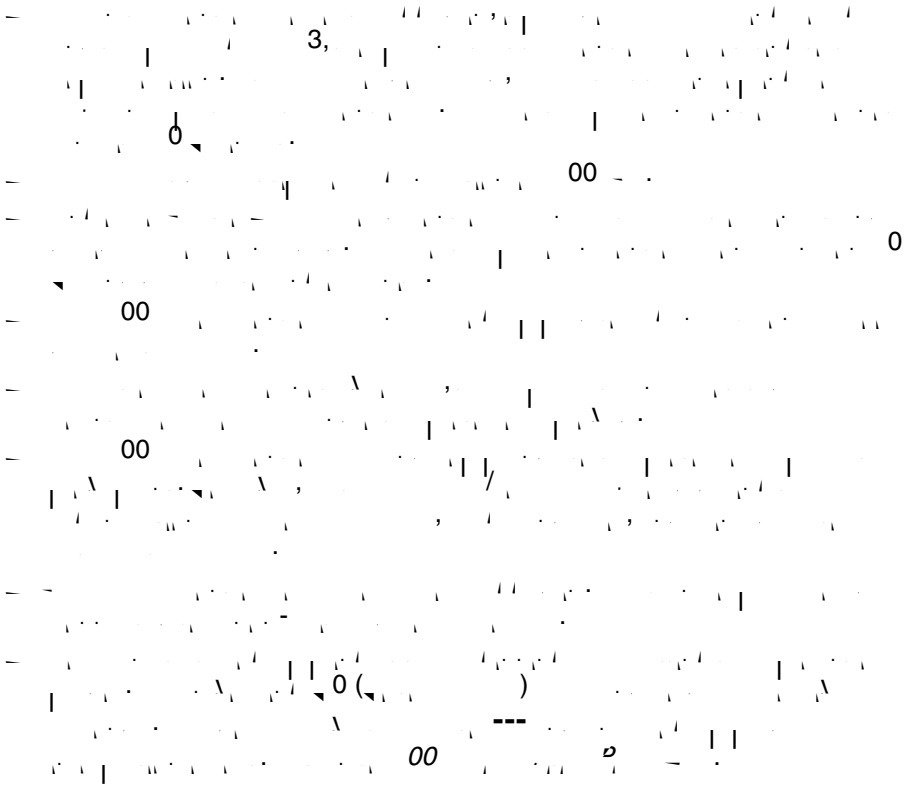
10,000

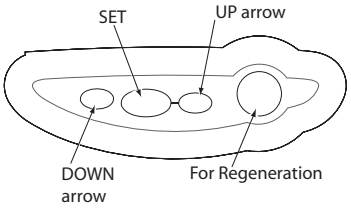


Volume/Demand Regeneration Setting



Things You Might Need to Know





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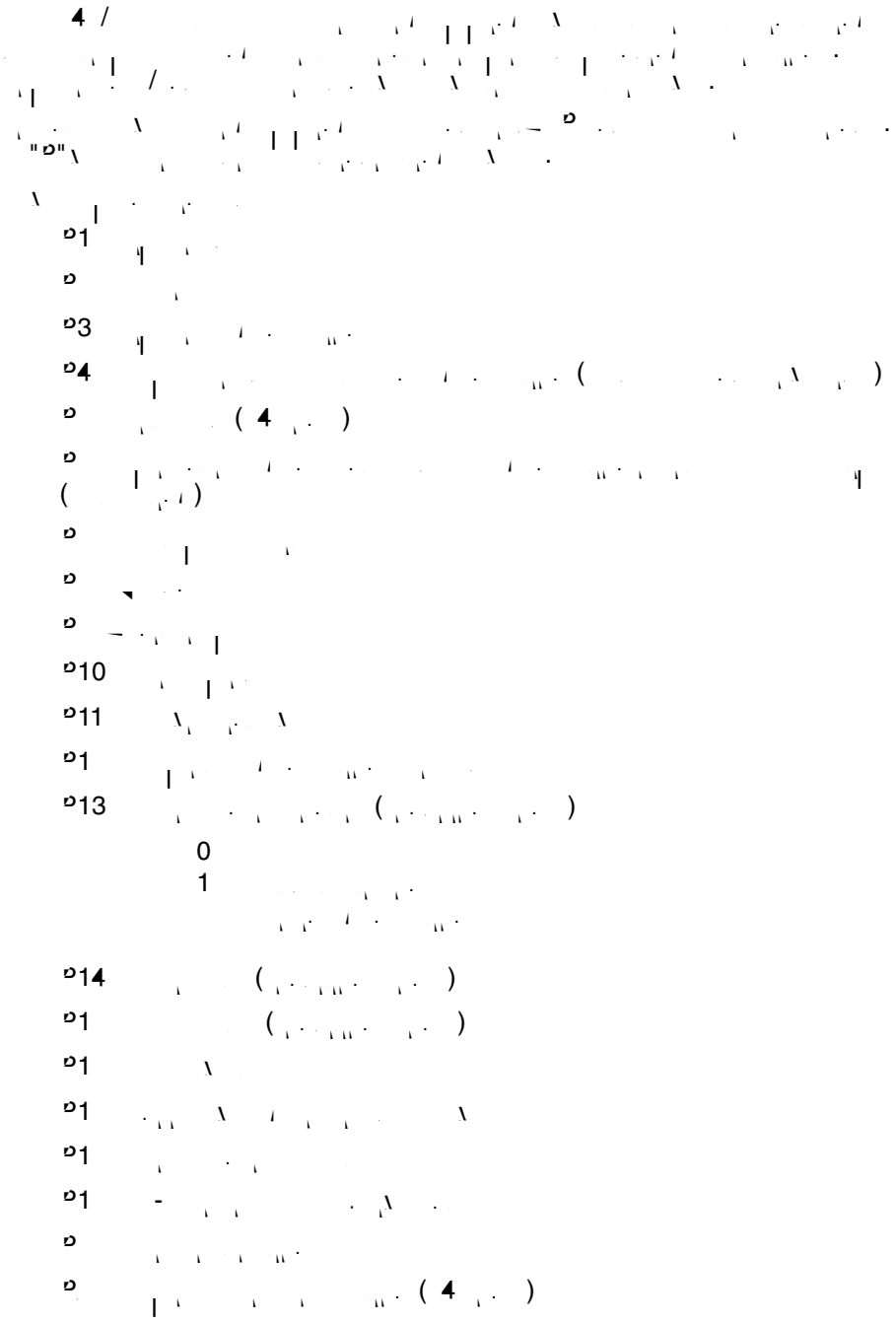
Action	Key	Duration	Display
			1



Accessing History Values

History Values

	Description	Range	Notes
0			
1		0	
3		0 131,0 0 0 1,310. 0	
4		0 131,0 0 0 1,310. 0	
	100	0 , 00 0 ,	
	1,000,000	4, 4 10 4, 4 10	
		0 131,0 0 0 1,310. 0	
		0 131,0 0 0 1,310. 0	
		0 131,0 0 0 1,310. 0	
10		0 131,0 0 0 1,310. 0	
11		0 131,0 0 0 1,310. 0	
1		0 131,0 0 0 1,310. 0	
13		0 131,0 0 0 1,310. 0	
14		0 -	
1		0 - 00 1,000	
1			
1		0 - ,1 4	
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Resetting the Control

1.
0
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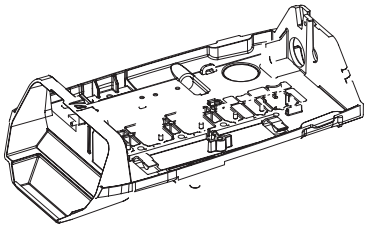
WARNING:

All further advance programming or set-up instructions can be found in the Dealer Installation and Service Manual, P/N 1255652.

PARTS AND ACCESSORIES

255 Valve Exploded View



255 Valve Parts List

Code	Part No.	Description	Qty.
1	1 44 0		1
	1033 4		1
3	10104	-	1
4	10104	-	
	1 3 340	, 00/ 0	1
	1 3 341	,	1
	1 3 4 *	, 00/ 0	1
	1001404	-	1
	10404	-	1
10	1001	13/1 ( )	1
*	1000 0	-	1
*	1 3 0	00/ 00	1
11			1
	103140		
	1031403		
	1031404		
	103140	/	
	103140		
	103140		
	100 0 3	- - /1	
1			1
	1 3 3 3	/ 00- 0 , ,	
	1 3 1	/ 00- 0 , , ( )	
13	1 3 3 1	/	1
14	1000	/ -	1
1		( )	1
	103 30	( ) - (-)	
	103 31	( ) - (-)	
	103 3	( ) - (-)	
	103 33	( ) - (-)	
	103 34	( ) - (10-)	
	103 3	( ) - (1 -)	
	103 3	( ) - (13 - 14-)	

Code	Part No.	Description	Qty.
1	1000	-	1
1		-	1
	1000 0	(1.3 4.)	
	1000 10	(1. .4)	
	1000 11	(.3)	
	1000 1	.10 (10.)	
	100 130	.1 (3. 14.)	
	1000 14	.13 (4. 1)	
	1000 1	.14 (.3 0)	
1	1000	, 0.33	1
1	1 43 10		
1			1
	103 41	3/ -	
	103 41	1/4-	
0	1 3 3 3	- , ,	1
1	1030 0	,	1
*	10330		1
	1 3 44		1
*	1 331	-	
*	1 4433	, 0.33	
*	1 4 4411		
*	1 3 11	, 0.1	
*	1 3	,	
*	1 3 3	, 0.1	
*	1 3 4	,	

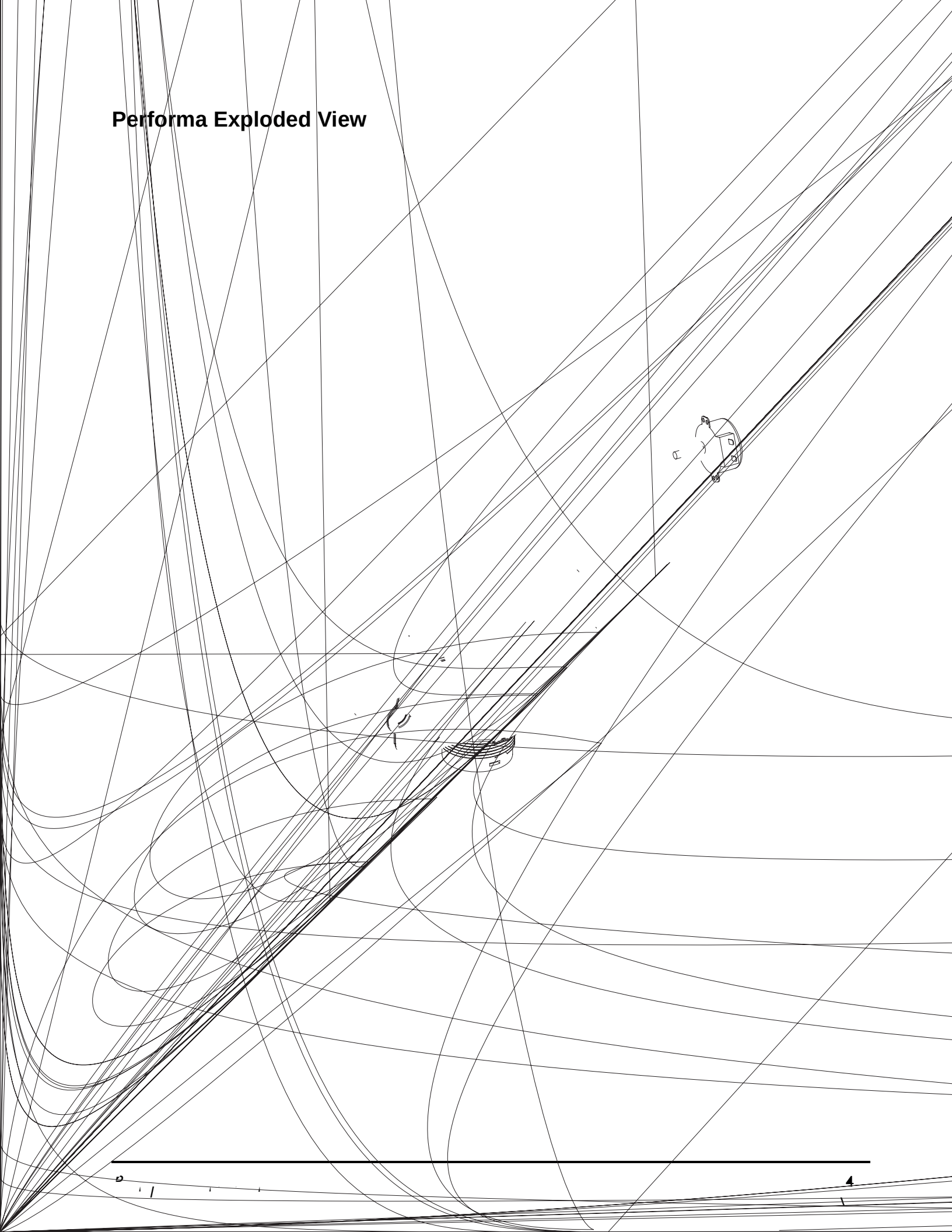
*

255 Valve Parts List (Continued)

Code	Part No.	Description	Qty.
*			
		( )	
	1040	3/4- , 3/ -	
	1040	1- , 1/ -	
	1040 1	3/4- , 3/ -	
	1040	1- , 1/ -	
	1040	3/4- , 1/ -	
	1040 0	1- , 1/ -	
	1040 3	3/4- , 1/ -	
	1040 4	1- , 1/ -	
*	104033		1
*			
	103 3 0		1
	103 3 1		1
*			
	1040		1
	1040 4		1

Code	Part No.	Description	Qty.
*	1001 0	3/4-	1
*	1001 0	1-	1
*	1001 0	-	1
*	1001 13	3/4-	1
*	1001 14	1-	1
*	1001 1	-	1
*	1001	3/4-	1
*	1001 03	1-	1
*	1001 04	3/4-	1
*	1001 0	1-	1
*	1001 11	3/4-	1
*	1001 10	1-	1
*	1001 1	1-	1

Performa Exploded View



Performa Parts List

Code	Part No.	Description	Qty.
1	1 44 1	\ /	1
	1 3 33 *	, / 00 \	1
3	1 3 33 *	\ , ,	1
4	1 3 4 *	\ , \ , /ɒ 00/ 0	1
		ɒ	
	1 3 3 *	, 3- / 00- 0 \ , ,	
	1 3 40 *	, / 00- 0 \ , ,	
	1 3 403*	, 3/ 00- 0 \ , ,	
	1 3 404*	, 3/ 00- 0 \ ,	
		(.)	
	1 3 40 *	, / 00- 0 \ , ,	
	1 3 40 *	, / 00- 0 \ , , .	
		(.)	
			1
	1000 0	. (1.3 4.)	
	1000 10	. (1. .4)	

Code	Part No.	Description	Qty.
	103 3	( ) - ɒ	
		(1 - .)	
	103 3	( ) -	
		(13 & 14- .)	
	103	ɒ 3	
	103	ɒ	
1	10 1000	, 0.33	1
	10 1 43 10		
	11 1030 0	,	
	* 1030334	ɒ - 3 \	
	1 100 44	(3/4-)	1
	13 10104	-	1
	14 1000	-	1
	1 103		1
	* 10411 4	\	
	1 ɒ		1
	1001 0	3/4-	
	1001 0	1-	
1	1001 0	-	
	1001 13	3/4- ɒ	
	1001 14	1- ɒ	

*

Logix 700 Series Controllers Parts List

TROUBLESHOOTING

700 Series Controller Troubleshooting

Problem	Possible Cause	Solution
1		
	0 0	0 0
3		
	3	

System Troubleshooting

Problem	Possible Cause	Solution
1.		
3.		
4.		

		).
		0 .(.)
10.		.(.)
11.		(.)
1 . 0		.(.)
13.		.(.)
14.	1	