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

Operation Manual

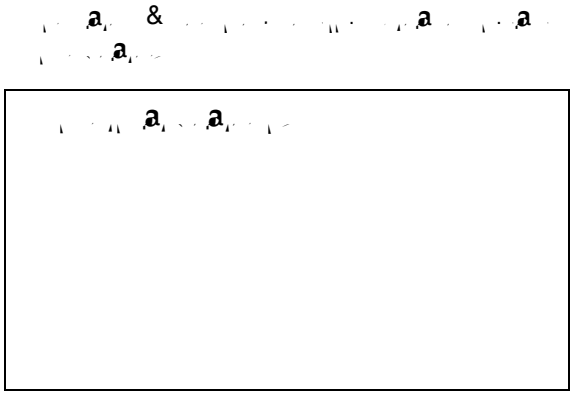


TABLE OF CONTENTS

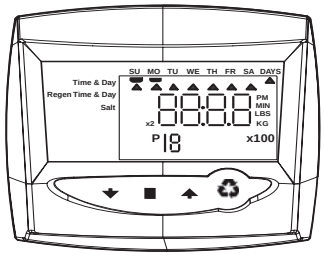
LOGIX™ SERIES INSTALLER QUICK-START SHEET

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

Step 9: Enter Hardness (762 Demand Control Only)

[illegible]

30

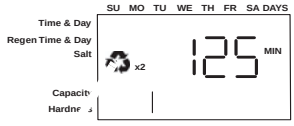
For system start-up procedure, including: purging the mineral tank, refilling the regenerant tank, and drawing regenerant, see *Initial Startup Step-By-Step Instructions* on page 31.

Manual Regeneration Procedures

To Initiate a Manual Regeneration:

[illegible]

During a Regeneration:



[illegible]

To Advance Regeneration Cycles:

[illegible]

Regeneration Cycles:

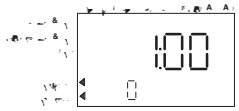
1 - [illegible]

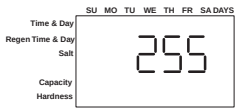
- [illegible]

3 - [illegible]

- [illegible]
- [illegible]
- [illegible]
- [illegible]
- [illegible]

Resetting The Control





1.
3.

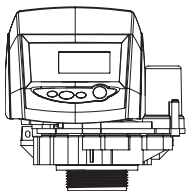
WARNING:

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:

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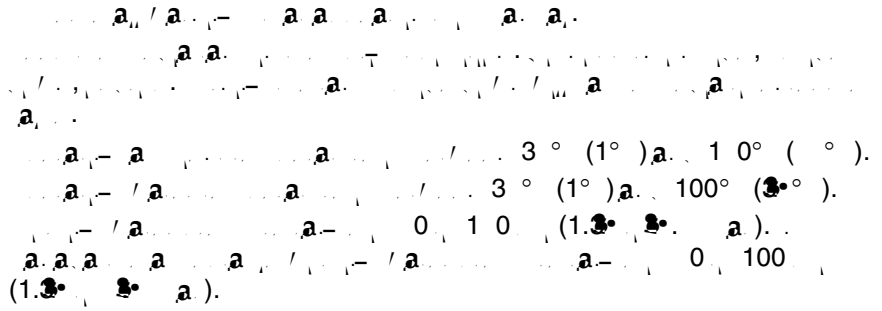
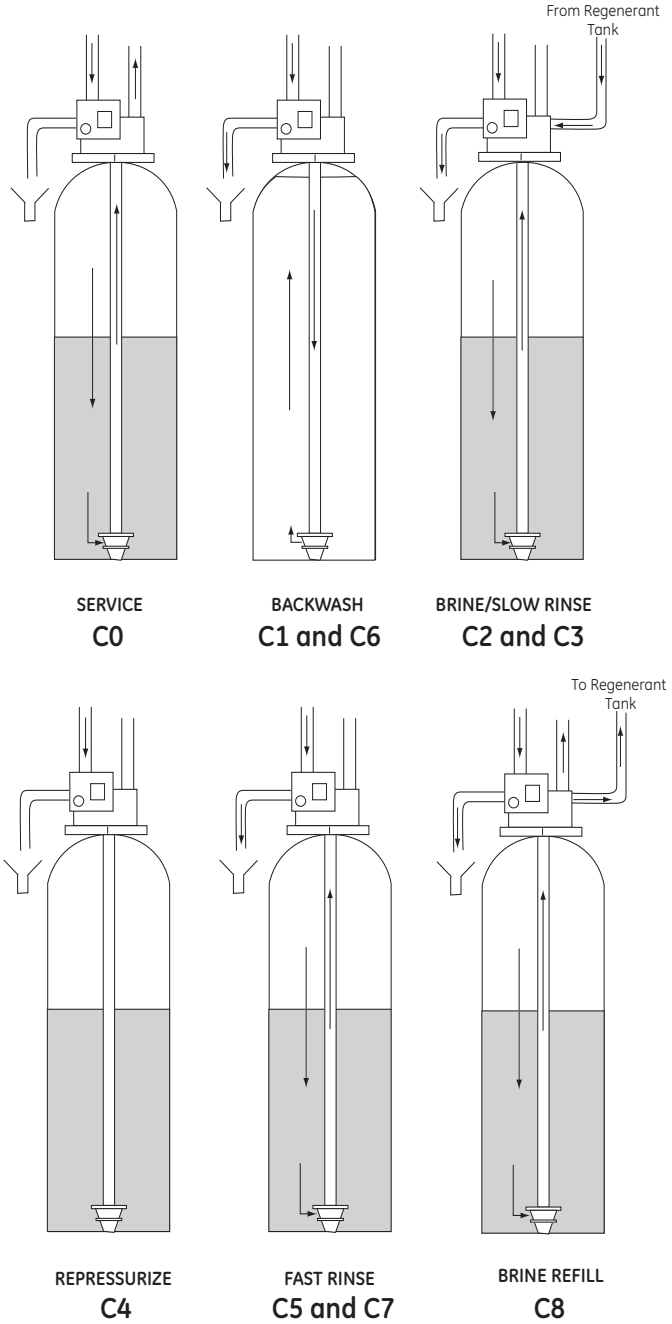
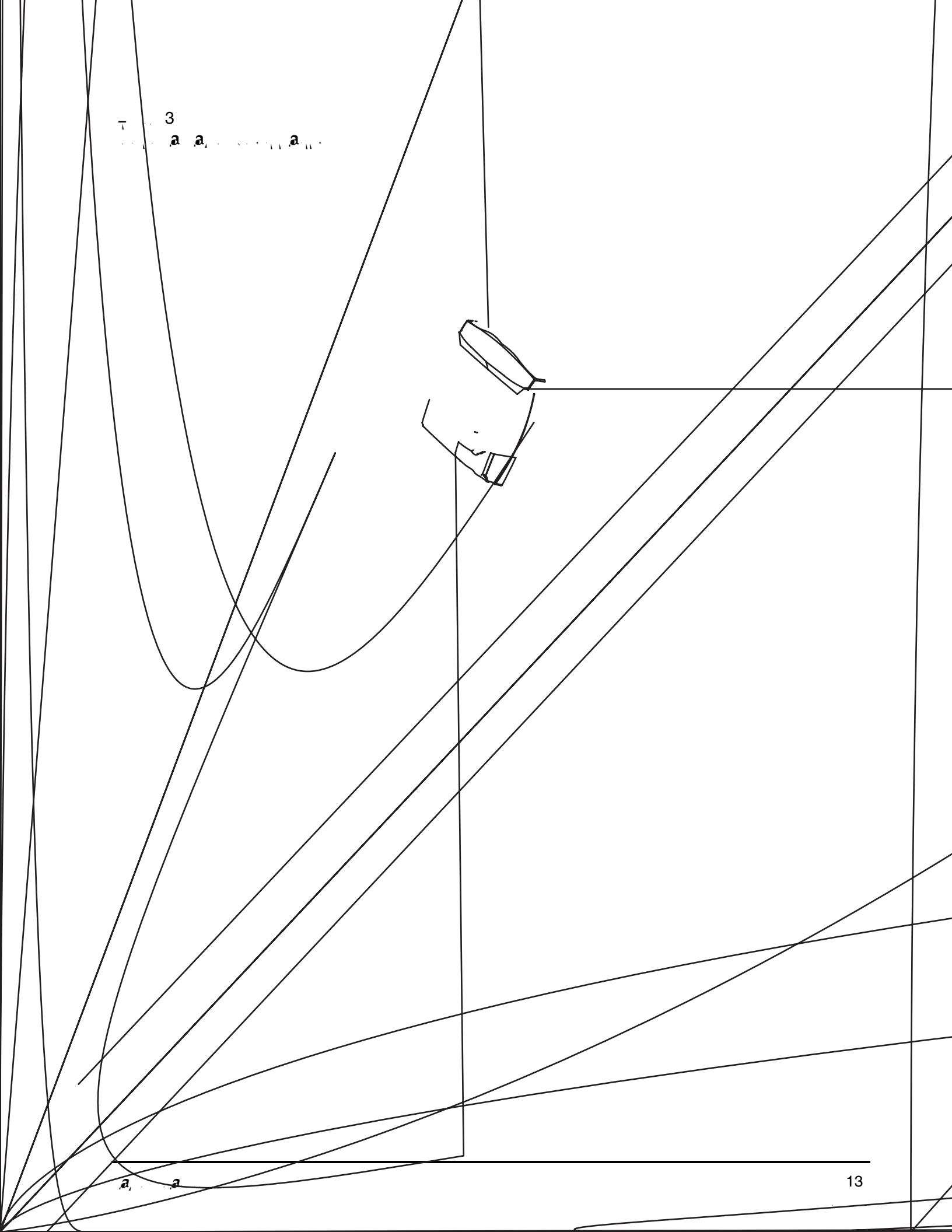
General

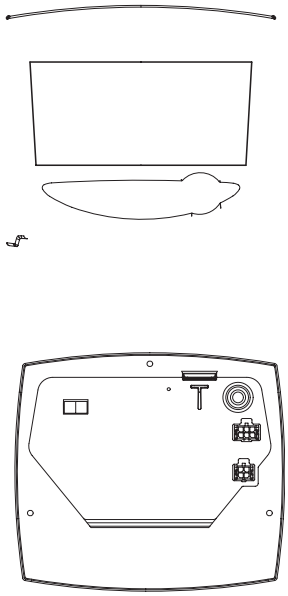


5. Fast Rinse (Downflow) — Cycles C5, C7:

6. Brine Refill — Cycle C8:

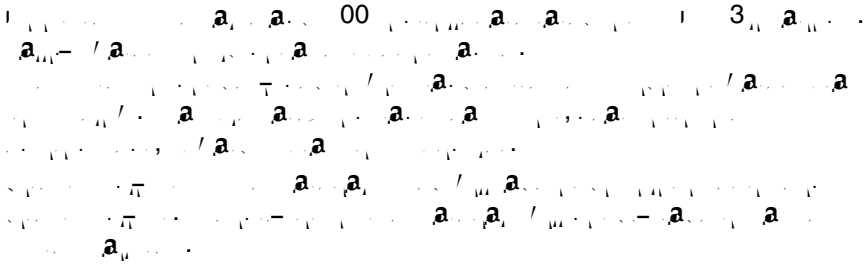




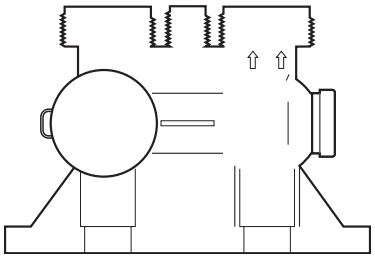


Location Selection

Outdoor Locations



Normal Operation **In Bypass**



WARNING:

WARNING:

WARNING:

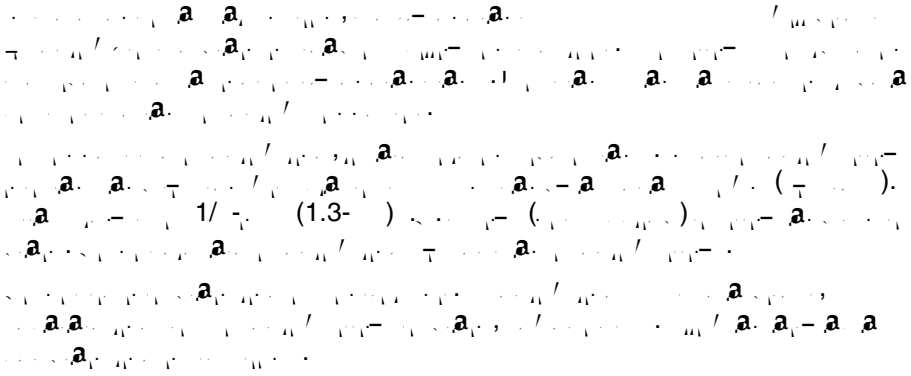
Drain Line Connection

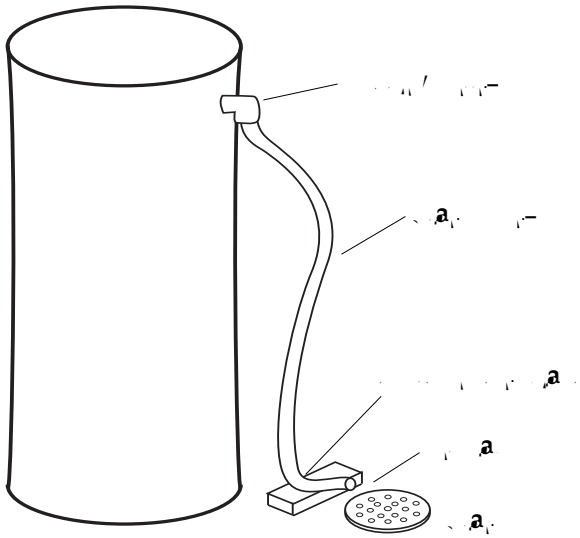
NOTE:

1.

3.

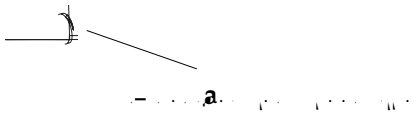
Overflow Line Connection
(not used with 3-cycle filter system)

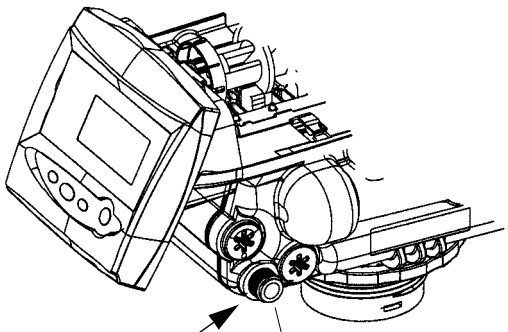




Regenerant Line Connection
(not used with 3-cycle filter system)

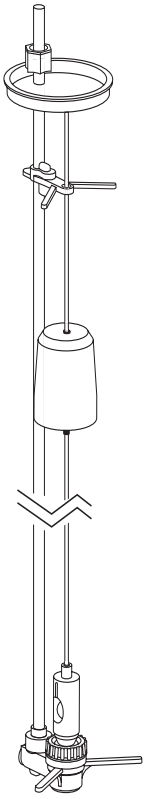
10





NOTE:

NOTE:



Electrical Connection

CAUTION:

AC Adapter	Input Voltage	Application	Part Number

100 VAC, 120 VAC and 230 VAC AC Adapters:

NOTE:

Controller Location

Valve Camshaft

13).

13

3,

SYSTEM DISINFECTION

Disinfection Of Water Conditioners

Sodium or Calcium Hypochlorite

Application

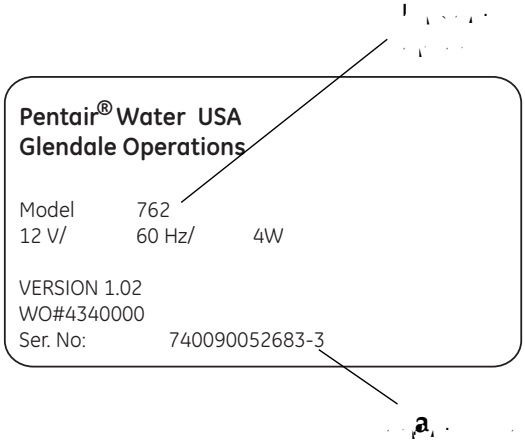
5.25% Sodium Hypochlorite

1.

Calcium Hypochlorite

1.

DETERMINING IF YOU HAVE A 742 OR 762 CONTROL



Display Icons 700 Controller

1

1. a / a a / a / a a a / a a a a – a a a a – a (/ - a – a –).

#3

3. a / a / – a a –

11. [illegible]

1 . [illegible]

13. [illegible]

1 . [illegible]

1 . [illegible]

1 . [illegible]

1 . [illegible]

1 . 100 [illegible]

0. [illegible]

1. [illegible]

[illegible] 11.

3. [illegible]

[illegible] ( ). [illegible] # 3 [illegible]

[illegible] ( ). [illegible] # 3 [illegible]

[illegible] ( ). [illegible] # 3 [illegible]

[illegible]

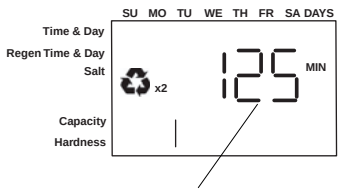
[illegible]

Regeneration Modes

00

To Initiate a Manual Regeneration:

(00).



During a Regeneration:

" #"

To Advance Regeneration Cycles:

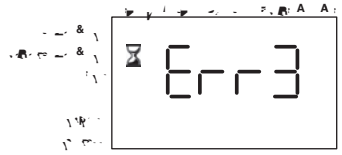
1

Regeneration Cycles:

1

3

742/762 Series Initial Power-Up



Initial Power Up – (Camshaft proceeds to HOME position)

[illegible]

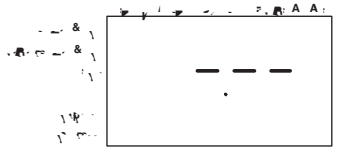
NOTE:

Initial Start-up Step-By-Step Instructions

[illegible]

Step 1: Select Valve Type

[illegible]

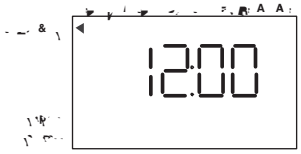


Step 2: Program System Size

3.

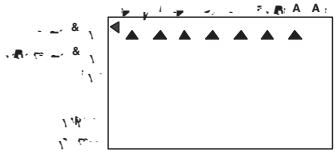
NOTE:

Set 3: Program Time of Day

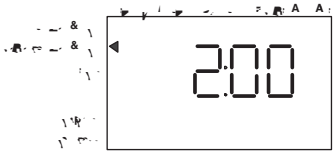


_1 00

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

00 ( )

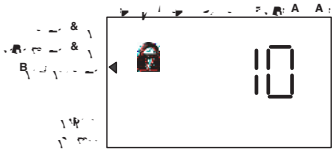
Step 6: Set Days to Regenerate (742 Time-Clock Control Only)

Table 1- High Efficiency Exchange Capacity

Salt lbs/cu ft	Exchange Capacity grains/cu ft	Salt grams/ liter	Exchange Capacity grams/liter
3	1 100	0	33.
	30	0	0.0
	11 0	0	.
	3 0	0	.
	0	0	
	1	100	.
	3	110	.
10	3001	1 0	0.
11	31	130	.
1	3 3 0	1 0	
13	333 3	1 0	
1	3 3 0	1 0	0.
1	3 0	00	.
1	3 0	30	.3
1	3 0	0	.
	3 33	0	.1

Table 2

To Convert Capacity in	Into Capacity in	Multiply by
– a (–)	– a (–)	1 . 3
– a (–)	– a (–)	0.0
a 3	– a (–)	0.10
a a 3	– a (–)	0.0



– a – a a , a . (/ 3) a / – a – – a. – a a a – . a .

Filter backwash time (filter mode only)

a a , – a. a a. a a – a. a – , a. a– a. a a / a . a– . a 1 / – a . – – a. a a / a . a a. a . a. 0 . a / a . a a. a .

Step 8: Estimated Capacity

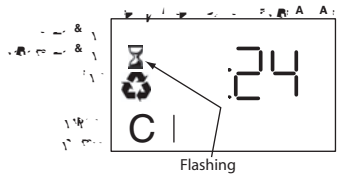
PLACING CONDITIONER INTO OPERATION (turning on the water)

Conditioner and FA Filter Start-Up

WARNING:

1.

3.



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

.00

"Salt" Setting for $KMNO_3$ Regenerant

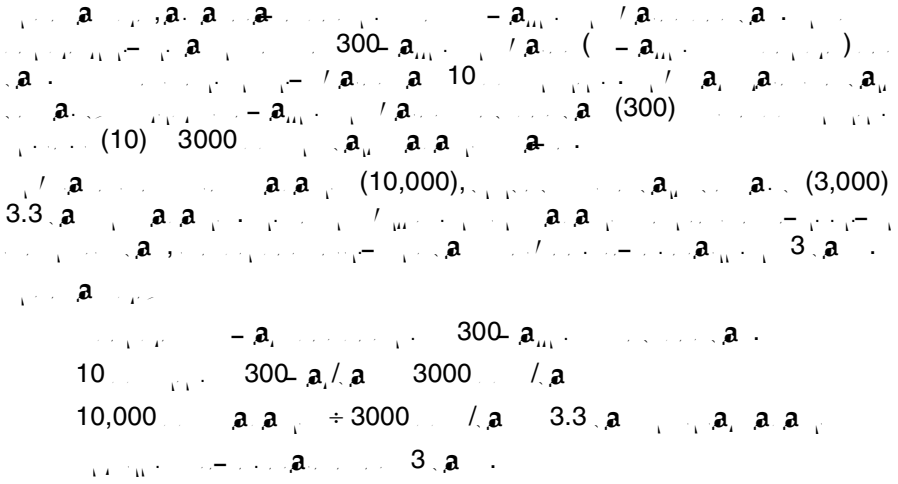
Days Between Regeneration Setting (742 FA)

10,000

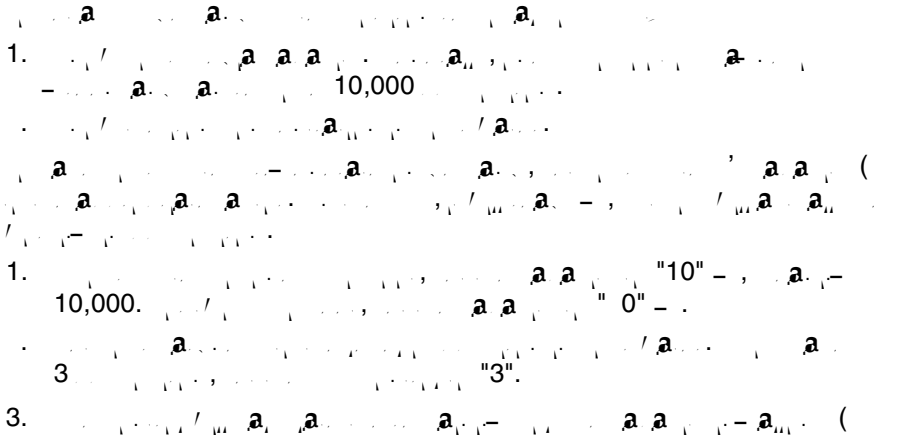
10,000.

1

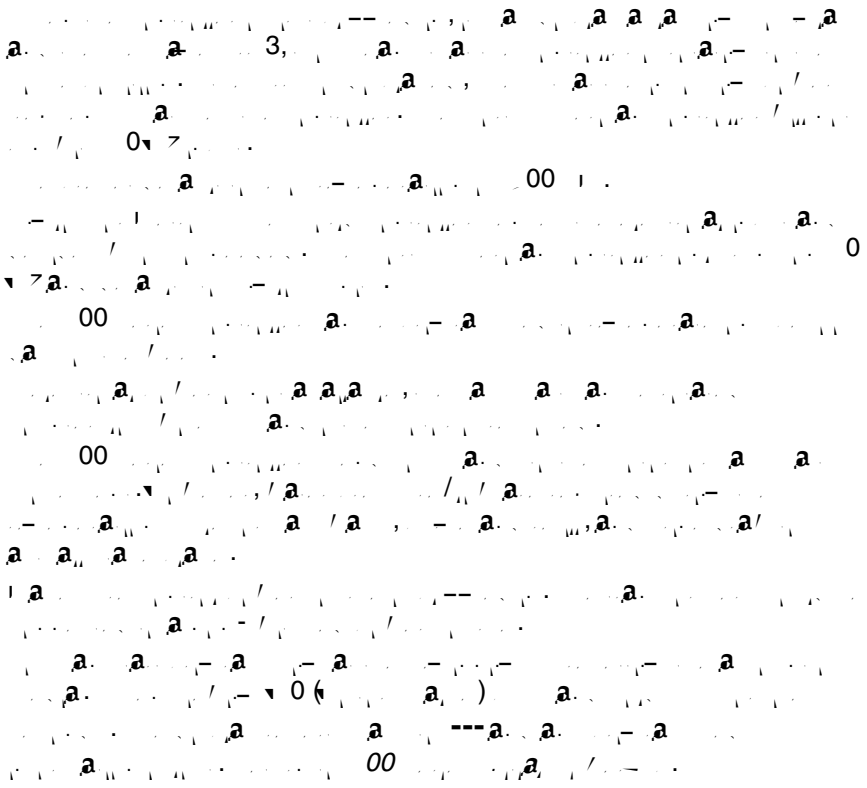
10,000

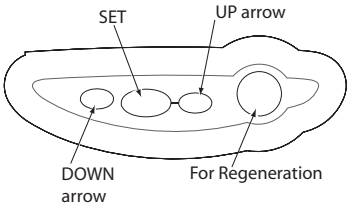


Volume/Demand Regeneration Setting



Things You Might Need to Know

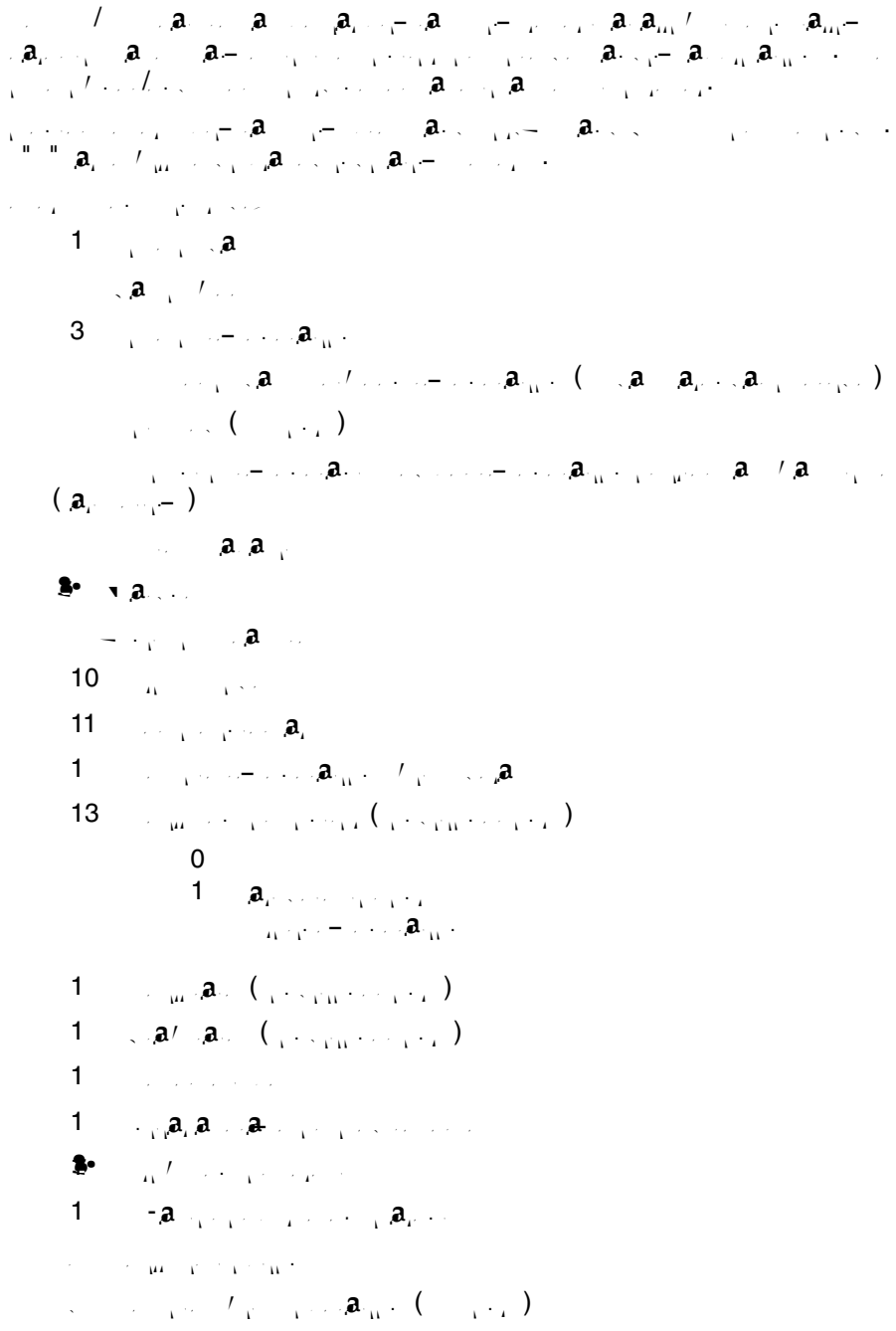




00

Action	Key	Duration	Display
			1

742/762 Level II Professional Programming



Accessing History Values

History Values

	Description	Range	Notes
0			
1		0	
3	/ 3	0 131,0 0 0 1,310. 0 3	
	/ 3	0 131,0 0 0 1,310. 0 3	
	100	0 , 00 0 , 3	
	1,000,000	, 10 , 10 3	
	3	0 131,0 0 0 1,310. 0 3	
	3	0 131,0 0 0 1,310. 0 3	
	3	0 131,0 0 0 1,310. 0 3	
10	3	0 131,0 0 0 1,310. 0 3	
11	3	0 131,0 0 0 1,310. 0 3	
1	3	0 131,0 0 0 1,310. 0 3	
13	3	0 131,0 0 0 1,310. 0 3	
1		0 -	
1	/	0 - 00 1,000	
1	/		
1		0 - ,	
	, 3	0 - , 3	

Resetting the Control

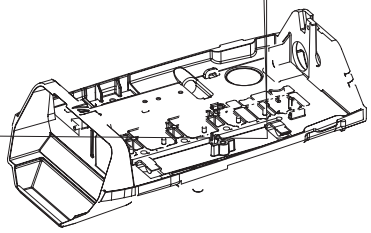
1.
. 0 , ( ) /
3. 0 0
.
.
. / –

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 0	a , / / /	1
	1033•	a. a /	1
3	1010	- –	1
	1010 •	- –	
	1 3 3 0	a , a , 00• 0	1
	1 3 3 1	– , , a ,	1
	1 3 *	, a , / a , 00• 0	1
•	1001 0	- – a. a	1
	10 0	- – –	1
10	1001•	13/1 (a)	1
*	1000 0	a - a. a	1
*	1 3 0	– a 00/ 00	1
11		– a	1
	1031 0	– a – a – a	
	1031 03	a – a – a	
	1031 0	a. a – a – a	
	1031 0	a a. a – a – / a	
	1031 0	a a. a – a – a	
	1031 0	a. a – a – a	
	100 0 3	– a / - • - /1	
1		a a	1
	1 3 3 3	a / 00• 0 a , , a	
	1 3 1	a / 00• 0 a , , a. ( )	
13	1 3 3 1	/ a, a	1
1	1000	/ a / / - –	1
1		(–)	1
	103 30	(–) - / (-. a.)	
	103 31	(–) - a (-. a.)	
	103 3	(–) - a. •-. a.)	
	103 33	(–) - (-. a.)	
	103 3	(–) - (10-. a.)	
	103 3	(–) - (1 -. a.)	
	103 3	(–) - a – (13 - 1 -. a.)	

Code	Part No.	Description	Qty.
1	1000	a / - –	1
1		a / - –	1
	1000 0	. (1.3– .)	
	1000 10	• (1. – .)	
	1000 11	. (. – •.3)	
	1000 1	. 10 (. – 10.)	
	100 130	. 1 (3. – 1 .)	
	1000 1	. 13 (. – 1)	
	1000 1	. 1 (.3– 0)	
•	1000	– a , a , 0.33– a .	1
•	1 3 10	– a	
1			1
	103 1	3• -. a	
	103 1	1/ -. a	
0	1 3 3 3		1
1	1030 0	a , /	1
*	10330	/ a	1
	1 3	a	1
*	1 33•	–	
*	1 33	a , 0.33–	
*	1 11	a	
*	1 3 11	, , 0.1 a	
*	1 3	, , a	
*	1 3 3	, a , 0.1 a	
*	1 3	, a , a	

*

a a

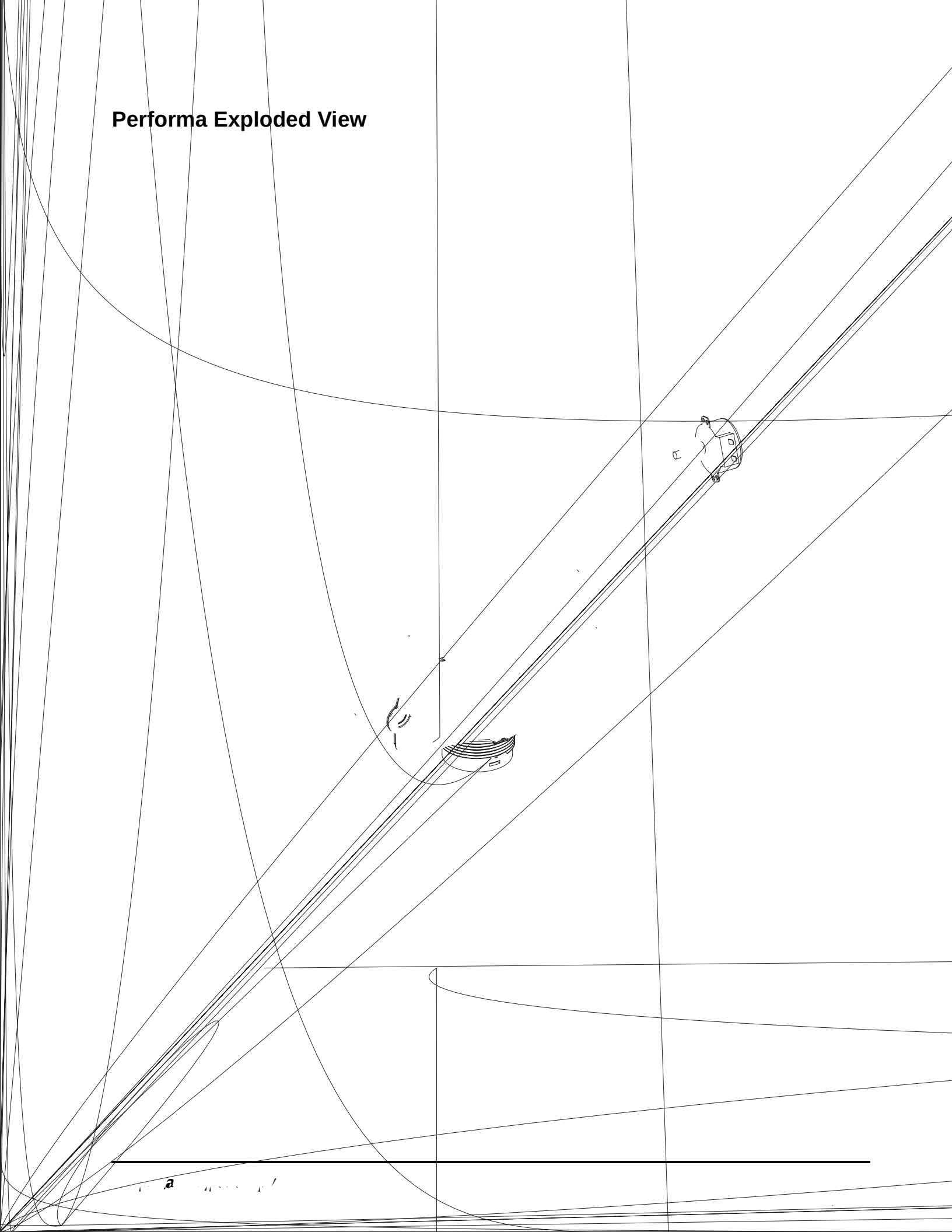
255 Valve Parts List (Continued)

Code	Part No.	Description	Qty.
*			
	10 0	3/ - , a 3 - a	
	10 0 1	1- , a 1/ - a	
	10 0 1	3/ - , a 3 - a	
		a	
	10 0 1	1- , a 1/ - a	
	10 0	3/ - , a 1/ - a	
	10 0 1 0	1- , a 1/ - a	
	10 0 1 3	3/ - , a 1/ -	
		a	
	10 0 1	1- , a 1/ -	
		a	
*	10 033	a a	1
*		a	
	103 3 0	a	1
	103 3 1	a	1
*		a a	
	10 0	a / a	1
	10 0	a a a	1

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

*

Performa Exploded View



Performa Parts List

Code	Part No.	Description	Qty.
1	1 1	a / /	1
	1 3 33*	/ 00 a	1
3	1 3 33 *	a – , , a	1
		a	
	1 3 *	, a , / a 00 0	1
		a – a a	1
	1 3 3 *	a , 3- / 00 0 a , ,	
		a	
	1 3 0 *	a , / 00 0 a , ,	
	1 3 03*	a , 3/ 00 0 a , , a	
	1 3 0 *	a , 3/ 00 0 a ,	
		( )	
	1 3 0 *	a , / 00 0 a , ,	
		/ .	
	1 3 0 *	a , / 00 0 a , , a.	
		( )	
		a	1
	1000 0	. (1.3 .)	
	1000 10	(1. .)	

Code	Part No.	Description	Qty.
	103 3	( ) -	
		(1 - a.)	
	103 3	( ) - a	
		(13 & 1 - a.)	
	103	-- 3	
	103	-- a	
10	1000	a , 0.33	1
10	1 3 10	a.	
11	1030 0	a , /	
*	103033	-- / - 3 a	
1	100	a – / (3/ - a)	1
13	1010	- –	1
1	1000	a / - –	1
1	103	a. –	1
*	10 11	a a. a	
1		– a	1
	1001 0	3/ - a	
	1001 0	1- a	
	1001	- a	
	1001 13	3/ - a	
	1001 1	1- a	

* / a/ –

Logix 700 Series Controllers Parts List

TROUBLESHOOTING

700 Series Controller Troubleshooting

Problem	Possible Cause	Solution
1		
3		
	3	

System Troubleshooting

Problem	Possible Cause	Solution
1. [illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
3. [illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]

9.		
10.		
11.		
12.		
13.		
14.		