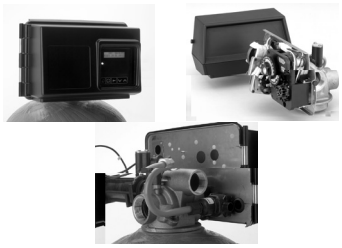


Service Manual

Downfow: **Upfow** **Upfow Variable**

units on and offine based on fow.

Timer Program Settings:

Brine Tank Refll:

Drain Line Flow Control:

Water Pressure

Electrical Facilities

Existing Plumbing

iron filter unit should be installed ahead of the water softener.

Location Of Softener And Drain

breaks and back flow.

BY-PASS VALVES

CAUTION **Water pressure is not to exceed 125 psi (8.6 bar), water temperature is not to exceed 110°F (43°C), and the unit cannot be subjected to freezing conditions.**

Installation Instructions

making sure the unit is level and on a firm base.

should be a minimum of 1/2" (13 mm). Backwash flow rates

lines should be the same size as the drain line flow control.

distributor tube flush with the top of the tank.

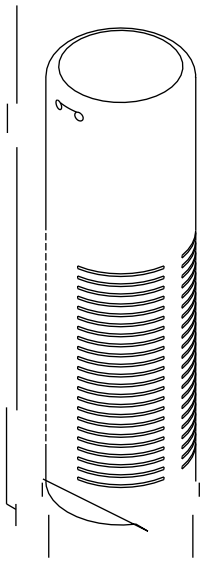
connecting the Drain Line Flow Control fitting (DLFC).

Teflon tape is the only sealant to be used on the drain fitting. The drain from twin tank units may be run through a

Make sure that the floor is clean beneath the salt storage

plate. If a grid is not utilized, fill to the top of the air check

flow into the mineral tank. When water flow stops, slowly



3200 TIMER SETTING PROCEDURE

How To Set Days On Which Water Conditioner Is To Regenerate (Figure 2)

tabs on the skipper wheel outward to expose trip fngers.

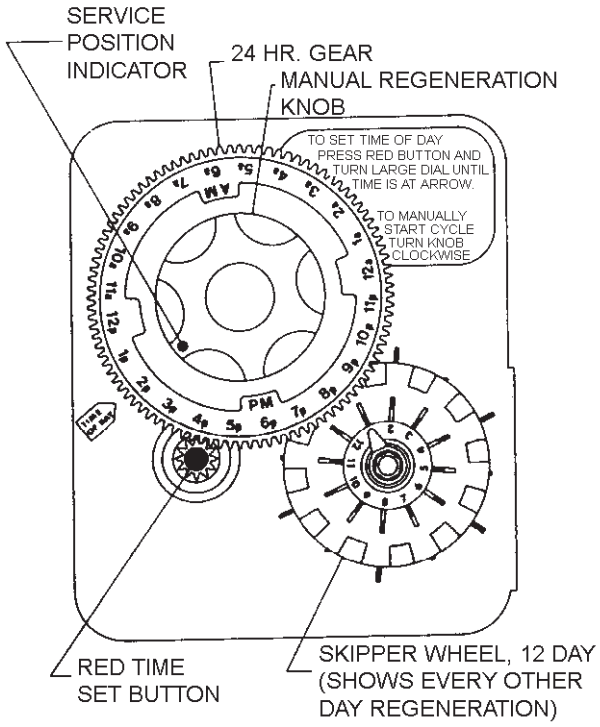
clockwise from the red pointer, extend or retract fngers to

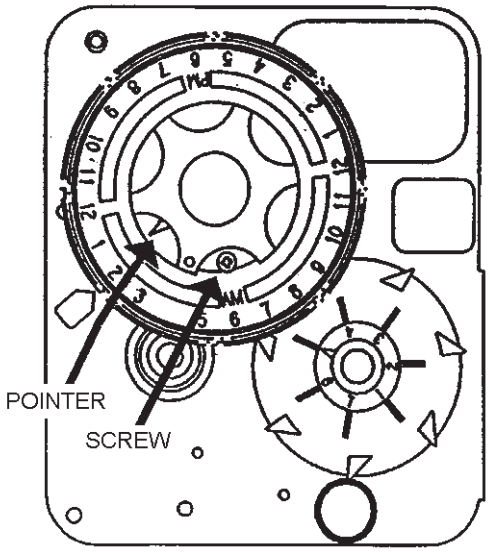
How To Set The Time Of Day

How To Manually Regenerate Your Water Conditioner At

water stops fowing from the water conditioner drain line.

How to Adjust Regeneration Time





3200 ADJUSTABLE REGENERATION TIMER

IMPORTANT!
SALT LEVEL MUST ALWAYS BE ABOVE WATER LEVEL IN BRINE TANK

3210 TIMER SETTING PROCEDURE

Typical Programming Procedure

NOTE: Drawing shows 8,750 gallon setting. The capacity (gallons) arrow (15) shows zero gallons remaining. The unit will regenerate tonight at the set regeneration time.

How To Set The Time Of Day

How To Manually Regenerate Your Water Conditioner At

water stops fowing from the water conditioner drain line.

Immediate Regeneration Timers

NOTE: The program wheel to the left may be different than the program wheel on the product.

NOTE:To set meter capacity rotate manual knob one - 360° revolution to set gallonage.

3200, 3210, 3220, 3230 REGENERATION CYCLE SETTING PROCEDURE

How To Set The Regeneration Cycle Program

3200 Series Timers (Figure 4)

Timer Setting Procedure

How To Change The Length Of The Backwash Time

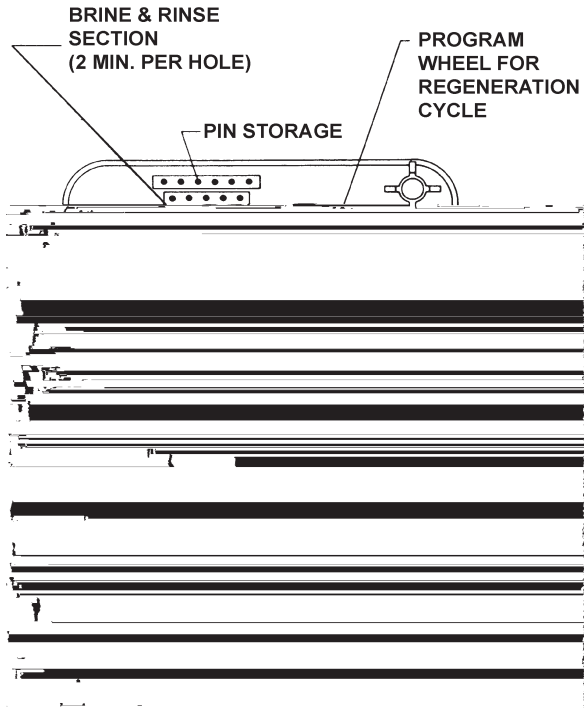
How To Change The Length Of Brine And Rinse Time

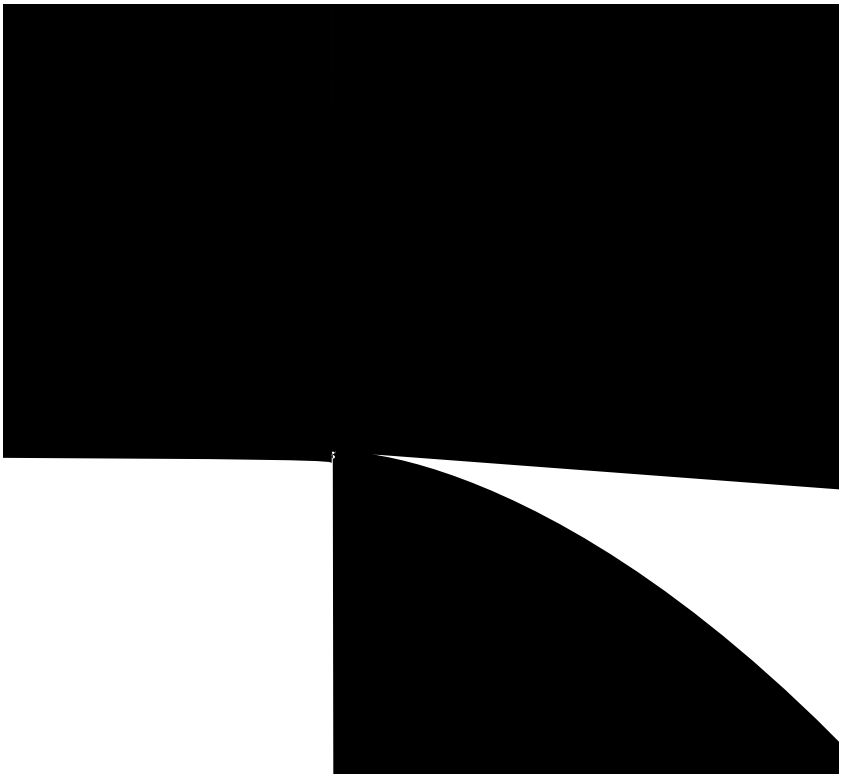
How To Change The Length Of Rapid Rinse

How To Change The Length Of Brine Tank Refill Time

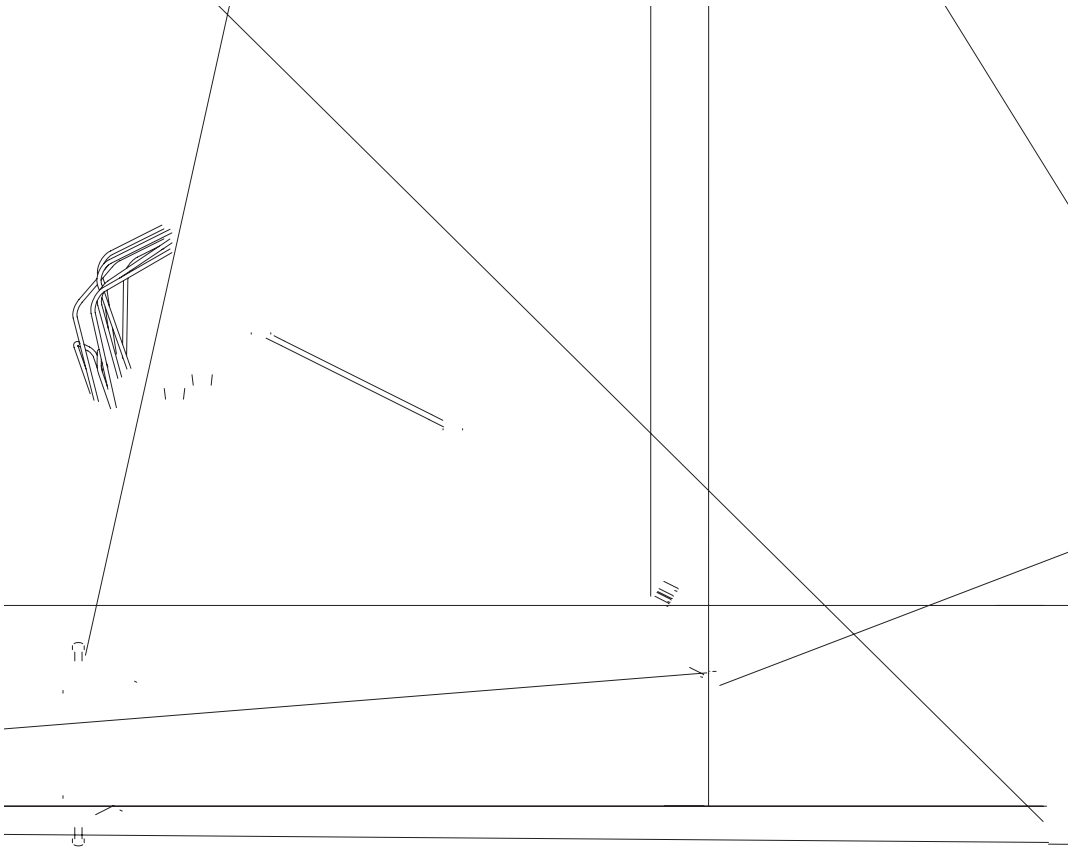
will refill the brine tank (2 min. per hole).
To change the length of refill time, move the two pins at the

tank refill section.





Item No.	QTY	Part No.	Description



CONTROL VALVE ASSEMBLY

Item No.	QTY	Part No.	Description

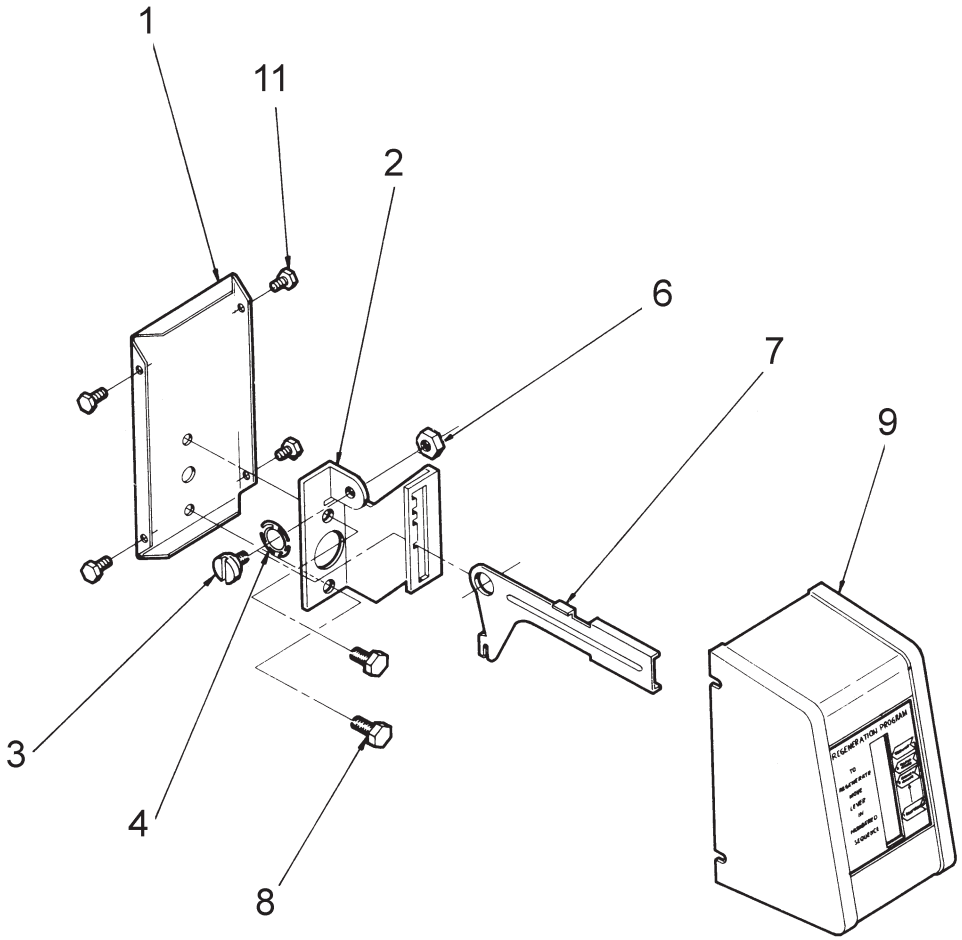
CONTROL VALVE ASSEMBLY *continued*

Item No.	QTY	Part No.	Description	Item No.	QTY	Part No.	Description

Not Shown:

Item No.	QTY	Part No.	Description

MANUAL DRIVE ASSEMBLY



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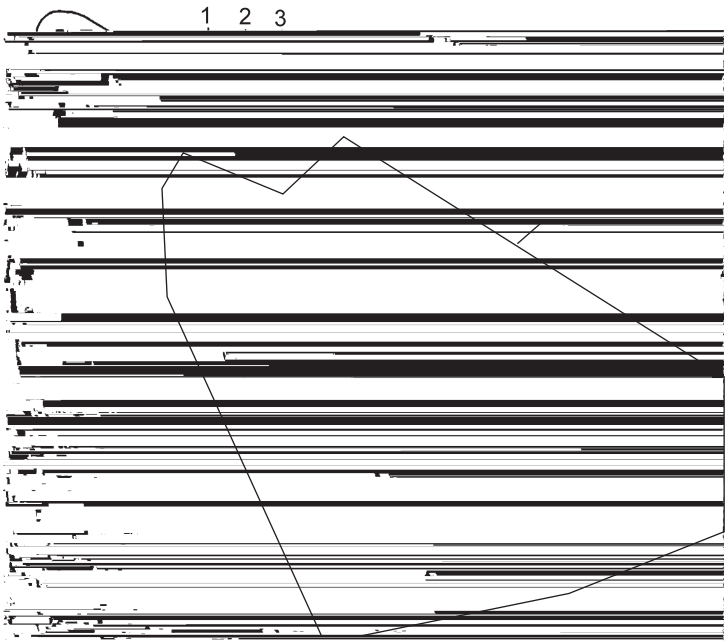
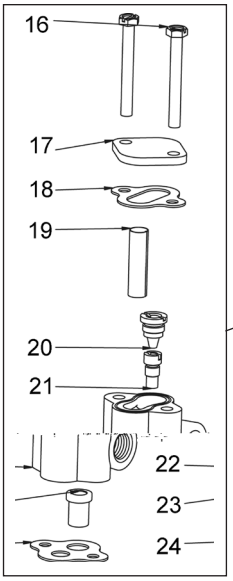
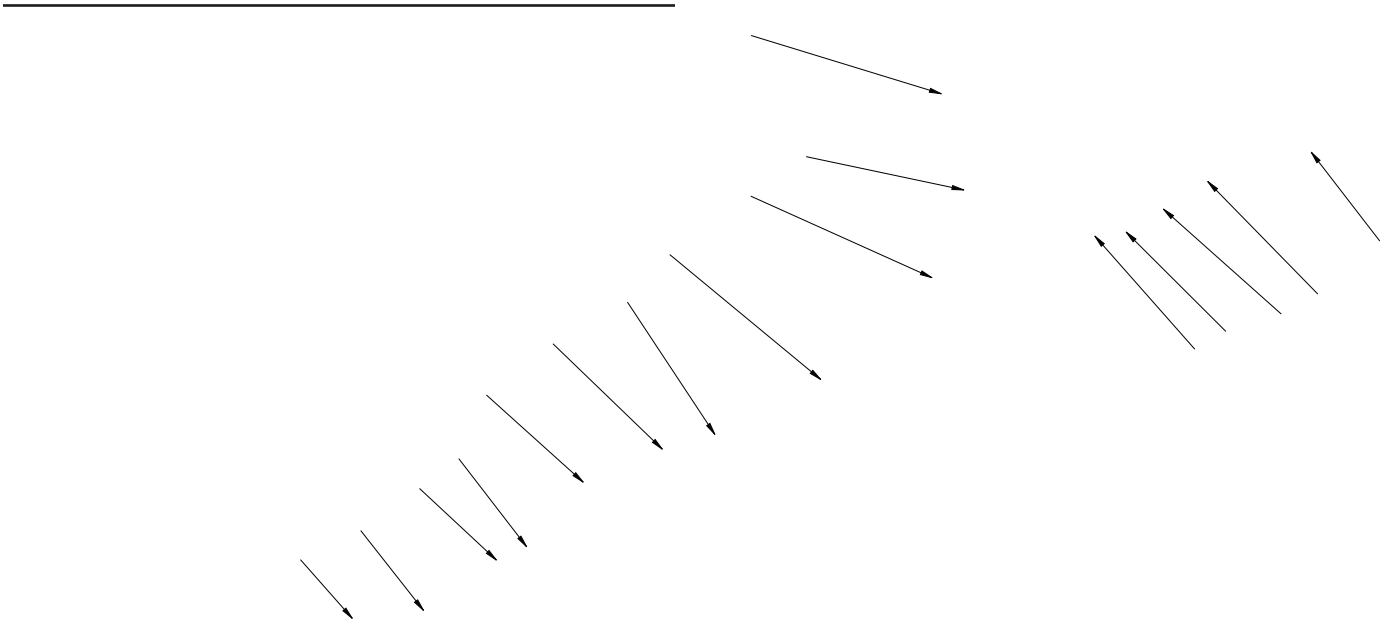




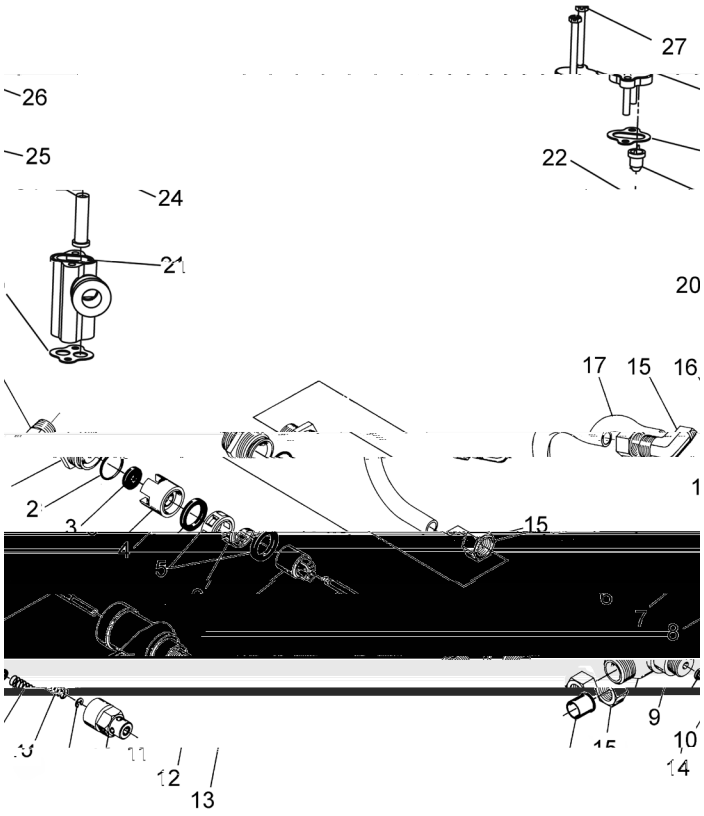
Item No.	QTY	Part No.	Description	Item No.	QTY	Part No.	Description



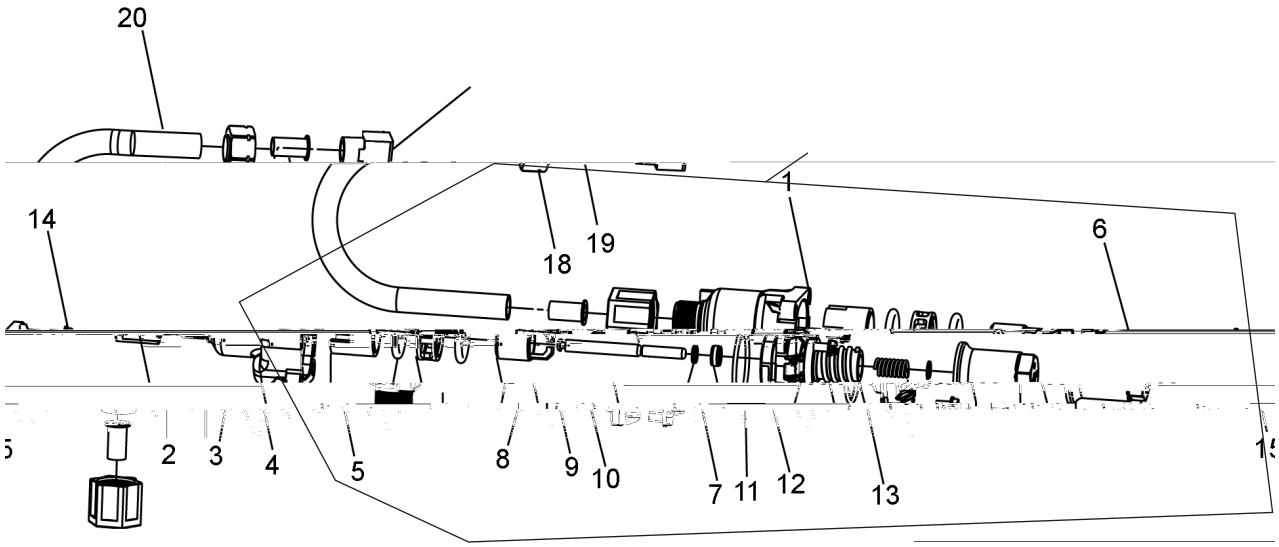
continued

Item No.	QTY	Part No.	Description
			Body, Injector, 1600 Upfow

Item No.	QTY	Part No.	Description
			*Upfow Only



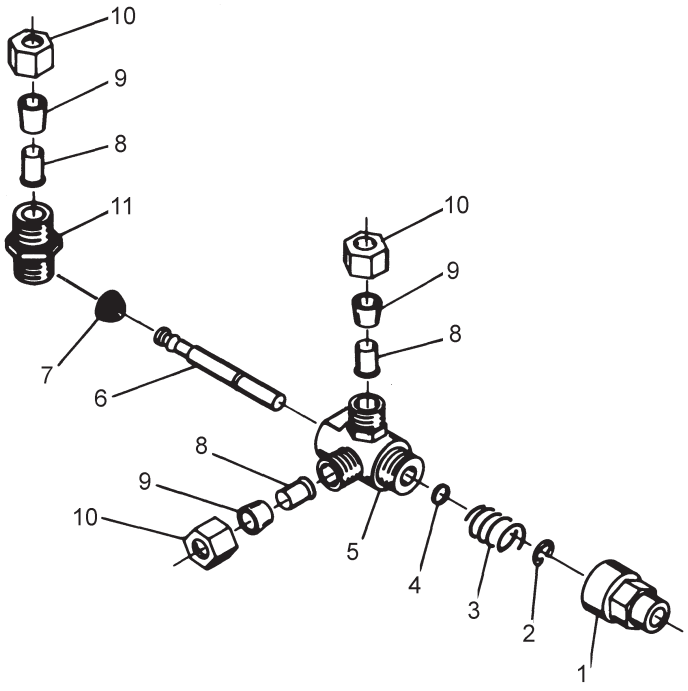
Item No.	QTY	Part No.	Description



Item No.	QTY	Part No.	Description	Item No.	QTY	Part No.	Description

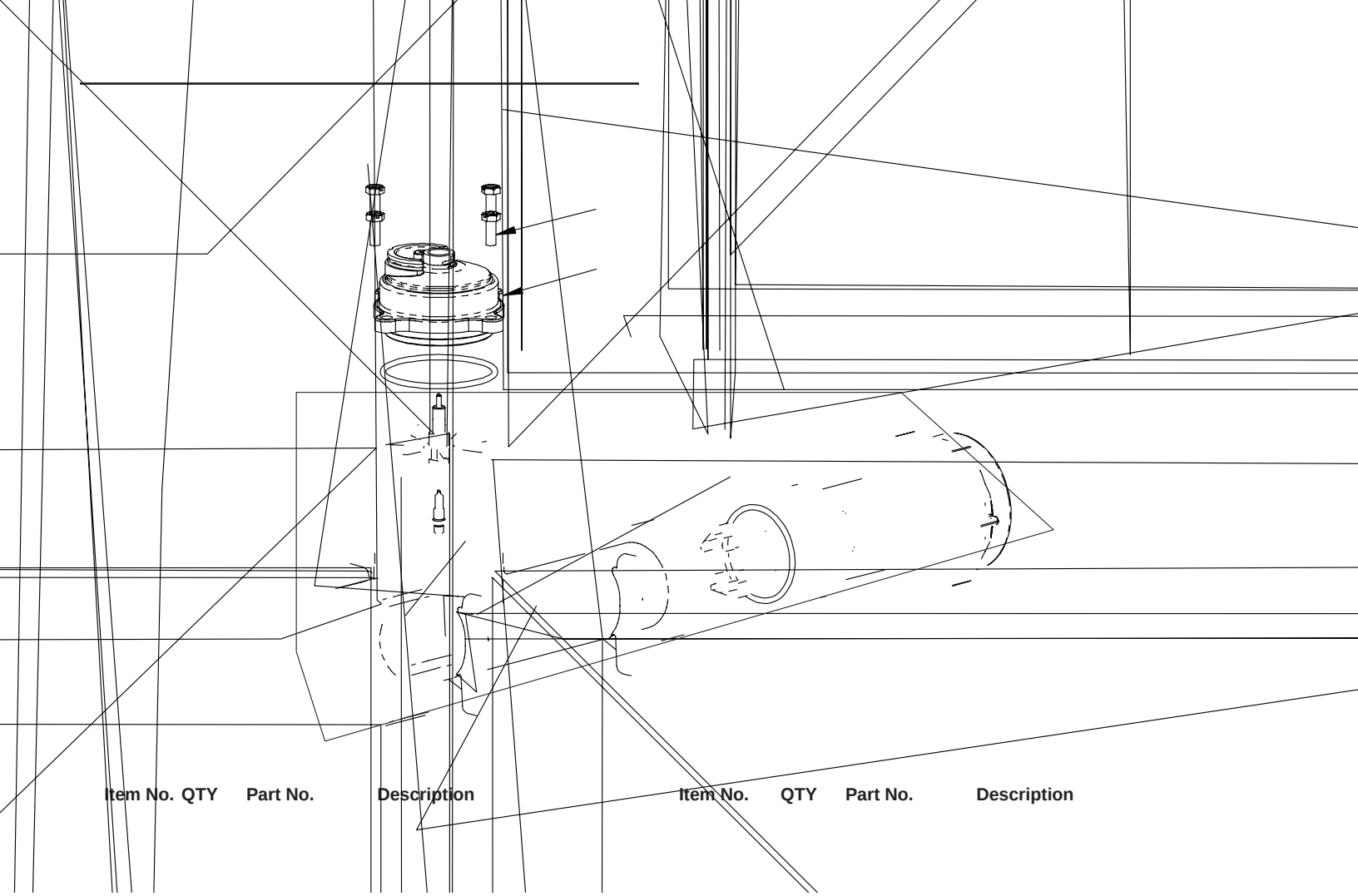
Not Shown

1600 SERVICE VALVE OPERATOR ASSEMBLY (OLD STYLE)



Item No.	QTY	Part No.	Description

Item No.	QTY	Part No.	Description



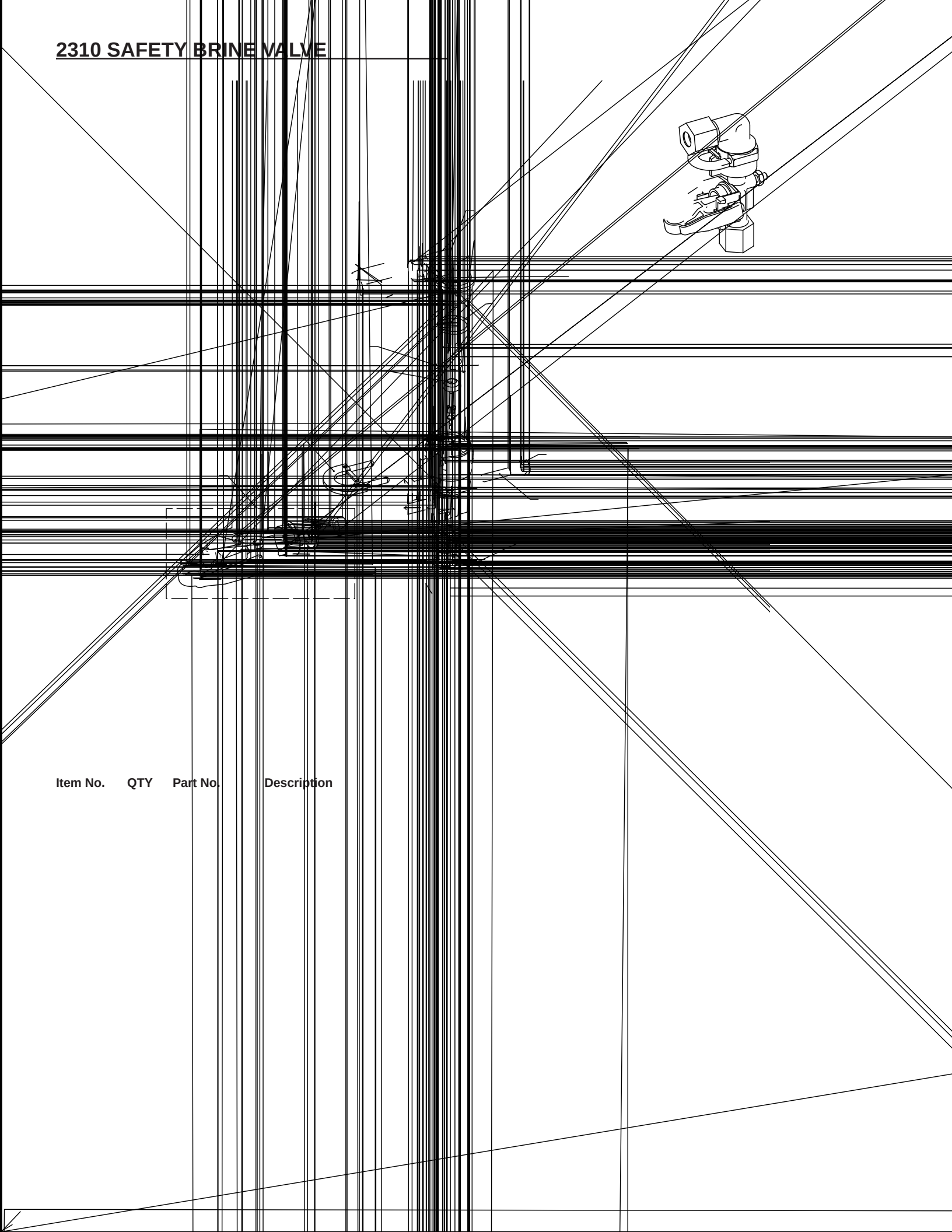
Item No.	QTY	Part No.	Description

Item No.	QTY	Part No.	Description

Not Shown

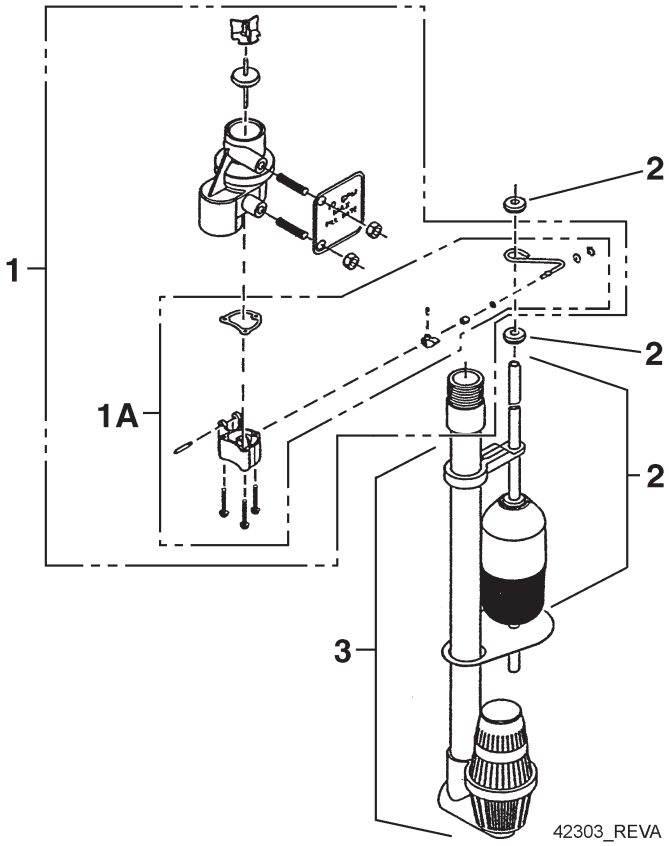
Item No.	QTY	Part No.	Description

2310 SAFETY BRINE VALVE



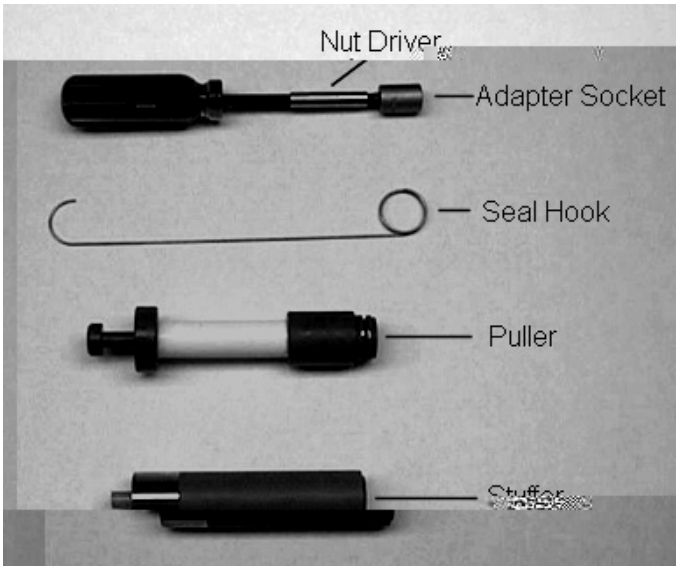
Item No.	QTY	Part No.	Description

2350 SAFETY BRINE VALVE



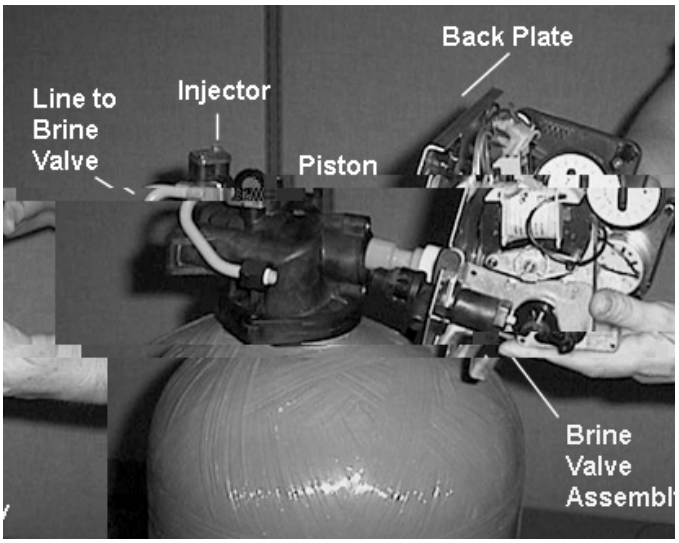
Item No.	QTY	Part No.	Description

Not Shown

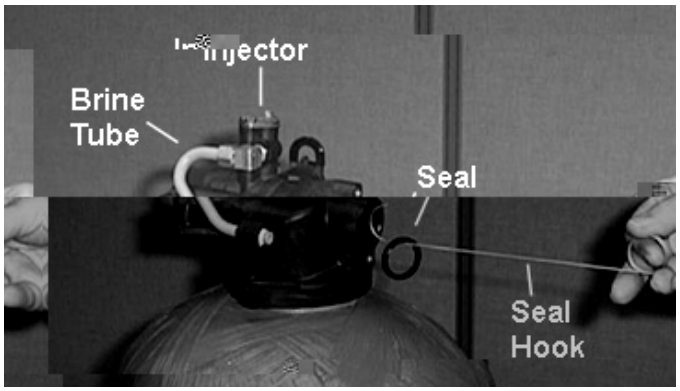


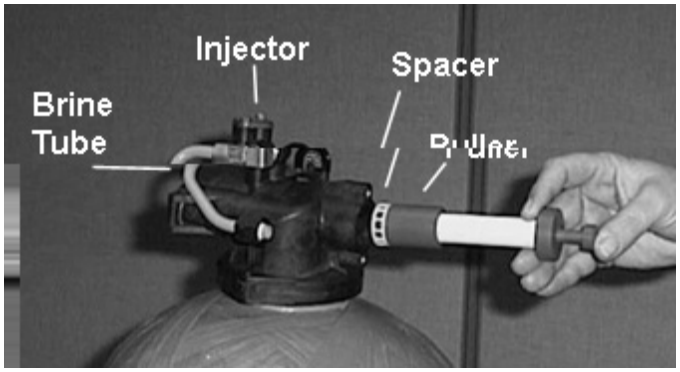
NOTE: Photos shown are for reference only for replacing the seal and spacer. Actual valve may be different.

brine valve (if your unit has timed brine tank fll).



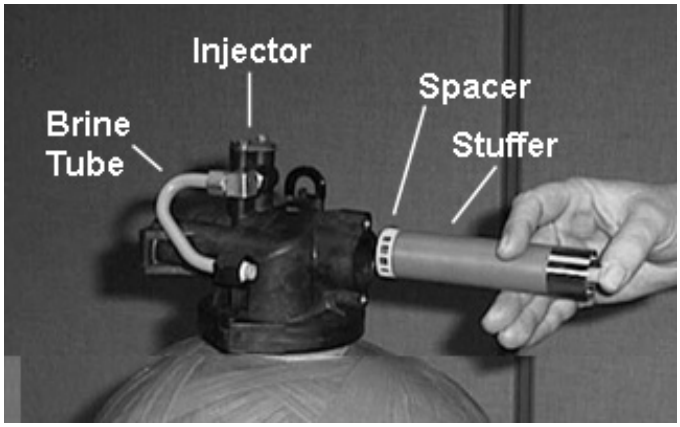
Remove the seal frst using the wire hook with the fnger





does not come out on the frst try, try again using the wire hook with the fnger loop.

continued



To restuff a valve body, frst take the end ring (the plastic or

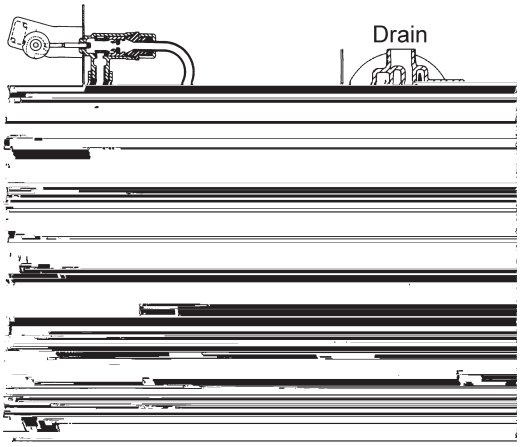
GENERAL SERVICE HINTS FOR METER

Problem: Softener delivers hard water
Reason:

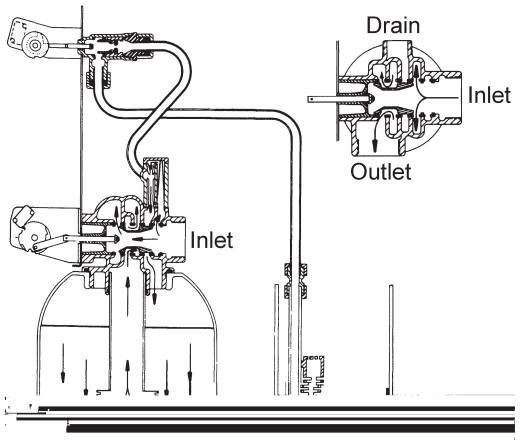
Reason:

Reason: Meter is not measuring fow.

Problem	**Cause**	
	Insuffcient water fowing into brine tank.	Check brine tank fll time and clean brine line fow
		Repeated fushings of the hot water tank is

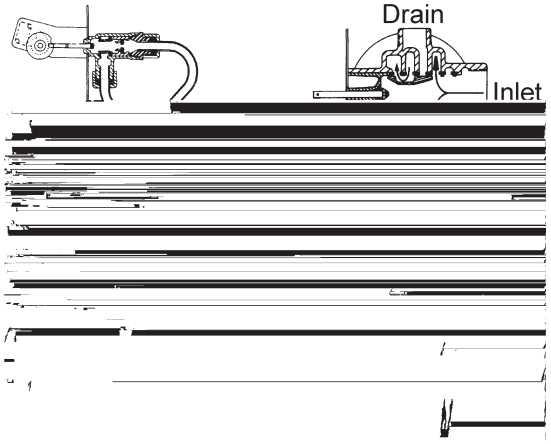


Hard water enters unit at valve inlet and flows down through center tube through the bottom distributor, then flows up



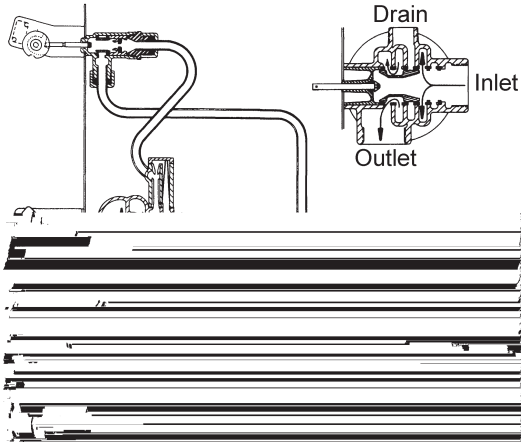
Hard water enters unit at valve inlet, flows up into injector bottom distributor, flows up through center tube, around piston

2 Backwash Position

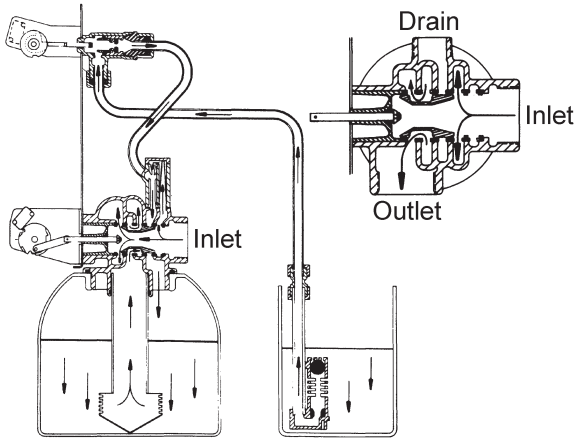


Hard water enters unit at valve inlet, flows through piston,

5 Rapid Rinse

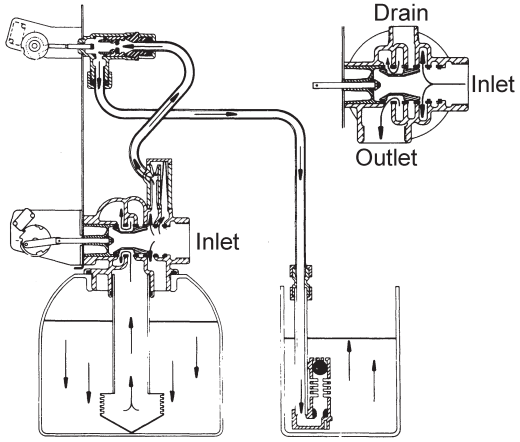


Hard water enters unit at valve inlet, flows directly from inlet

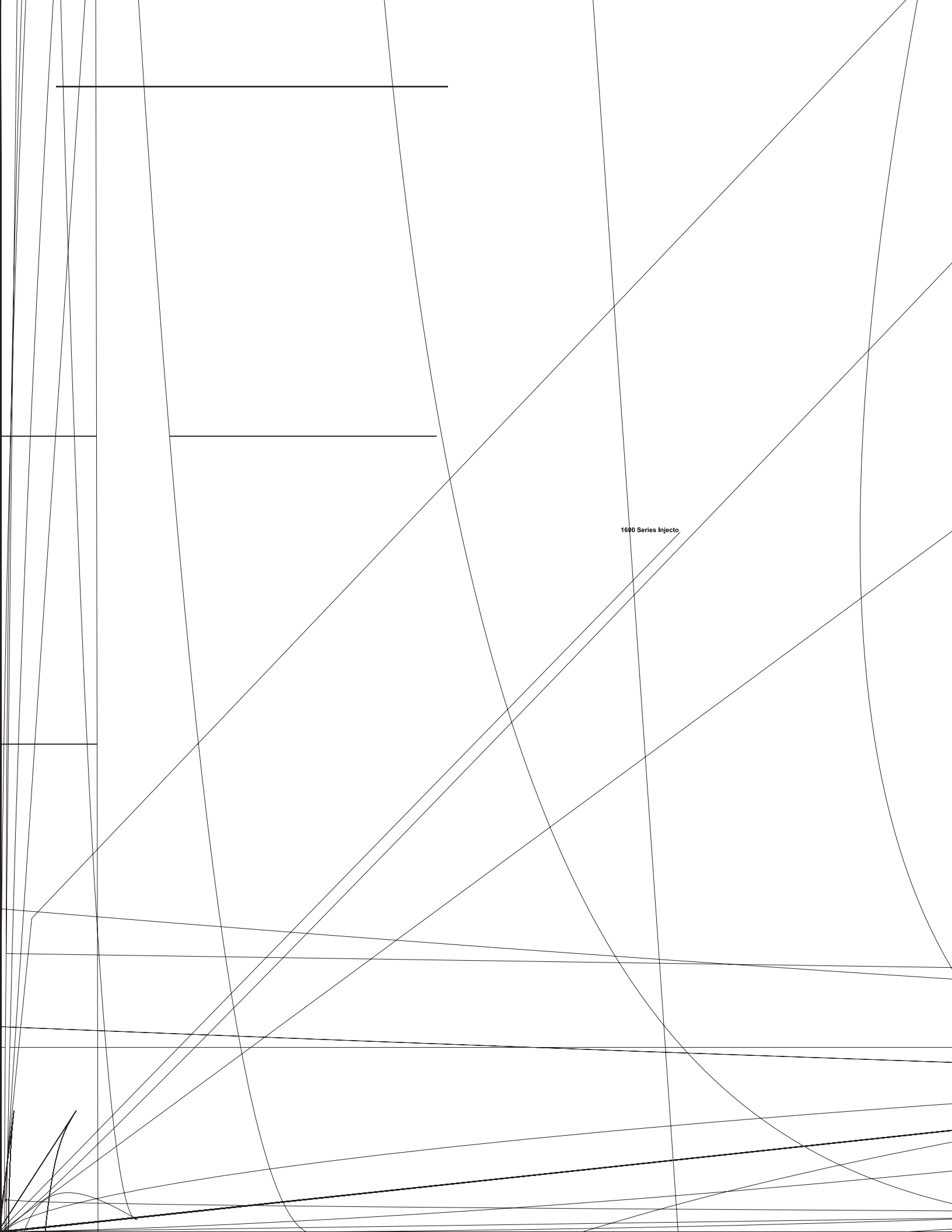


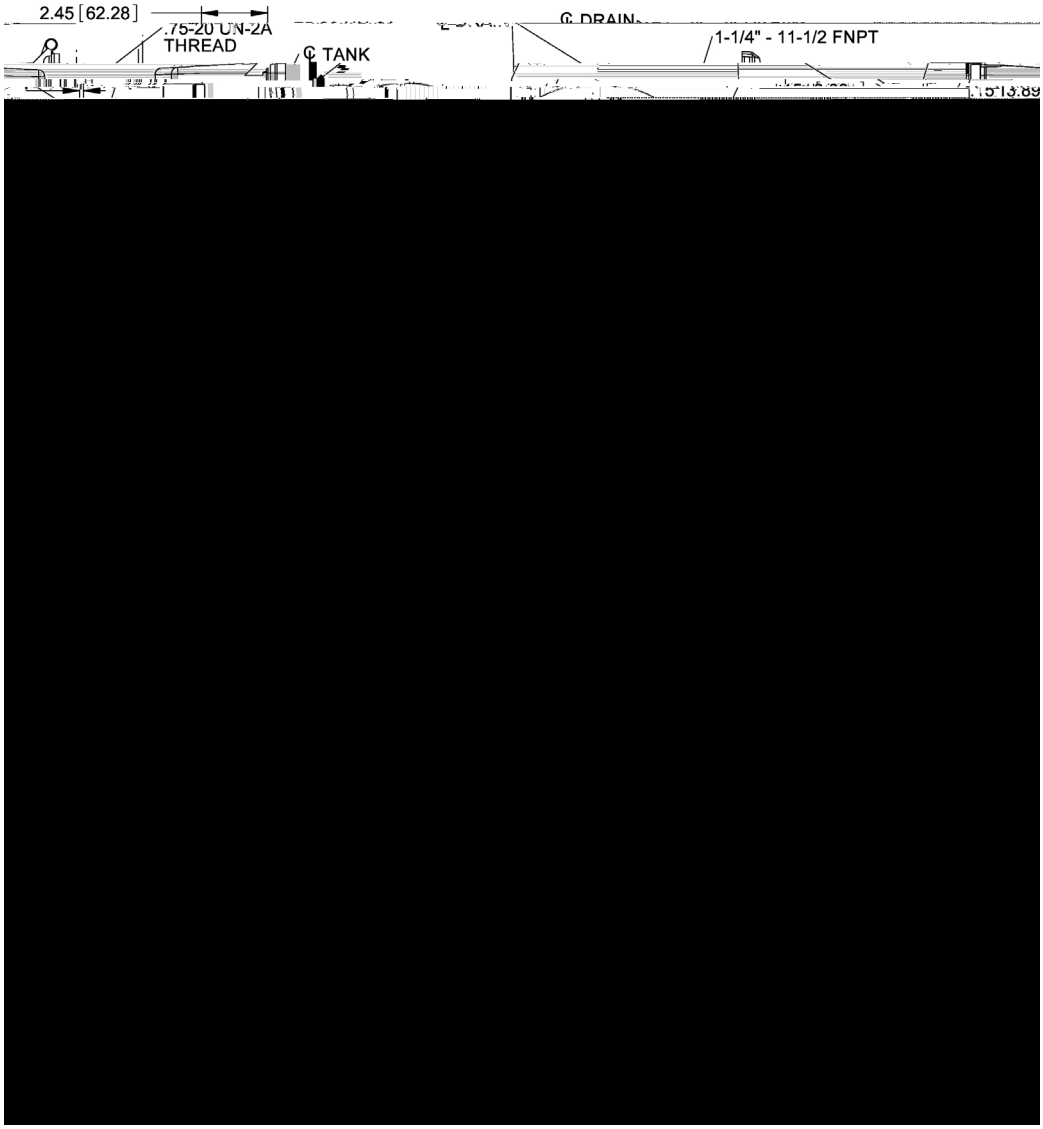
Hard water enters unit at valve inlet, flows up into injector from the brine tank, brine flows down through mineral and

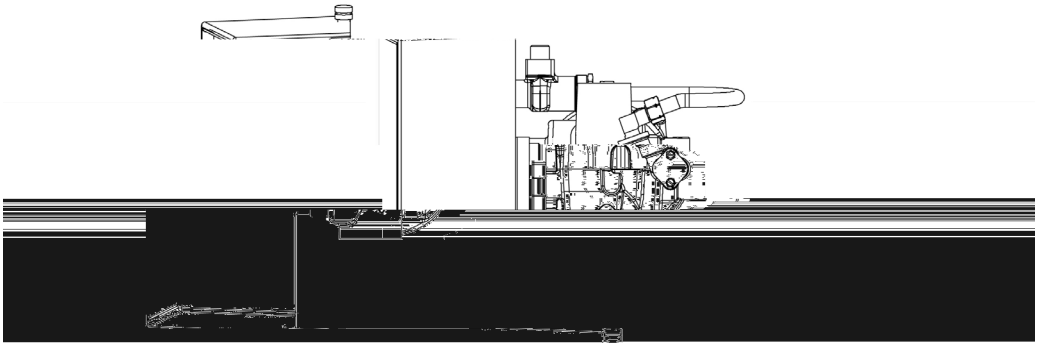
6 Brine Tank Refill Position

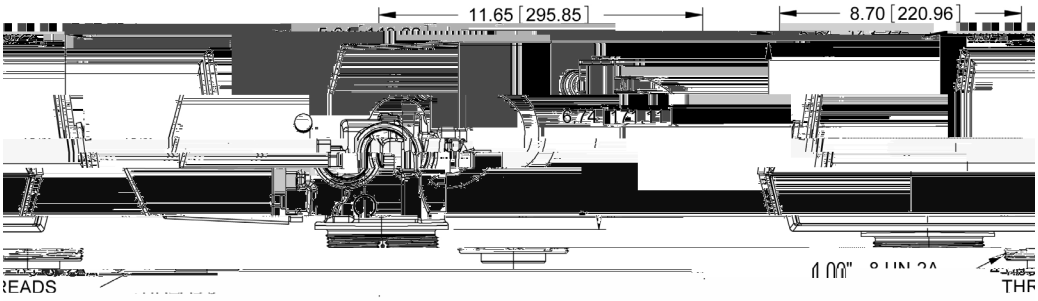


Hard water enters unit at valve inlet, flows up through the injector housing, through the brine valve to refill the brine tank.

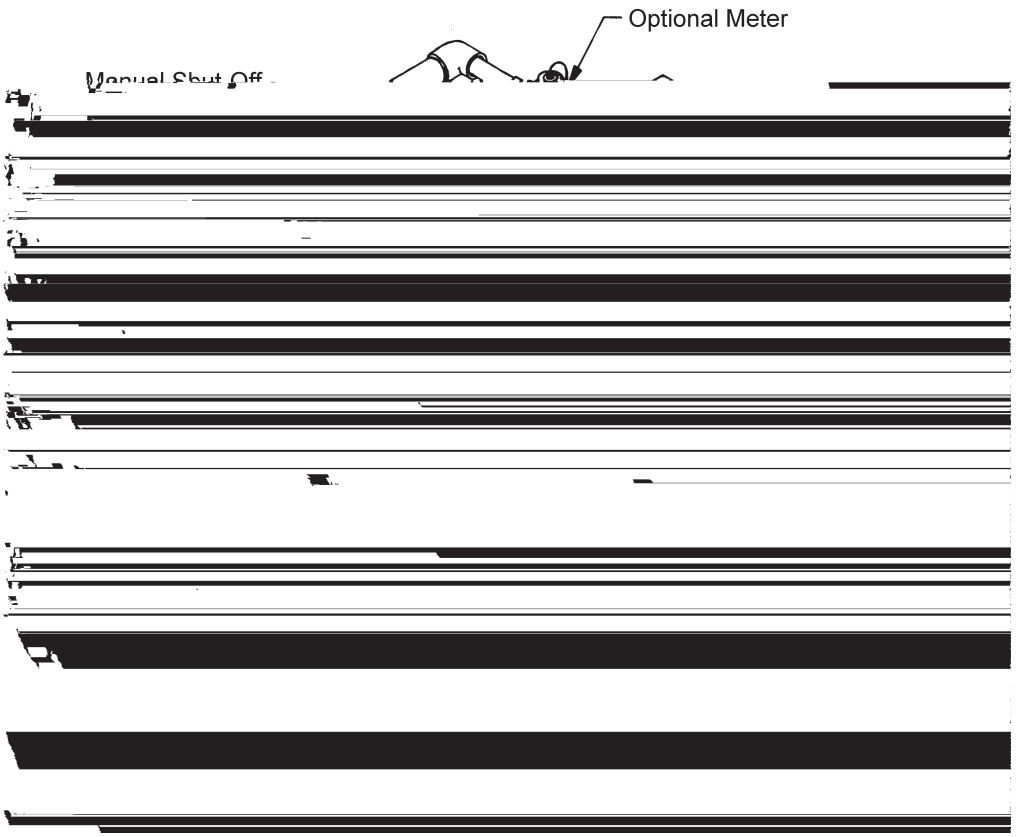

1600 Series Injecto


2.45 [62.28]
.75-20 UN-2A
THREAD
℄ TANK
℄ DRAIN
1-1/4" - 11-1/2 FNPT



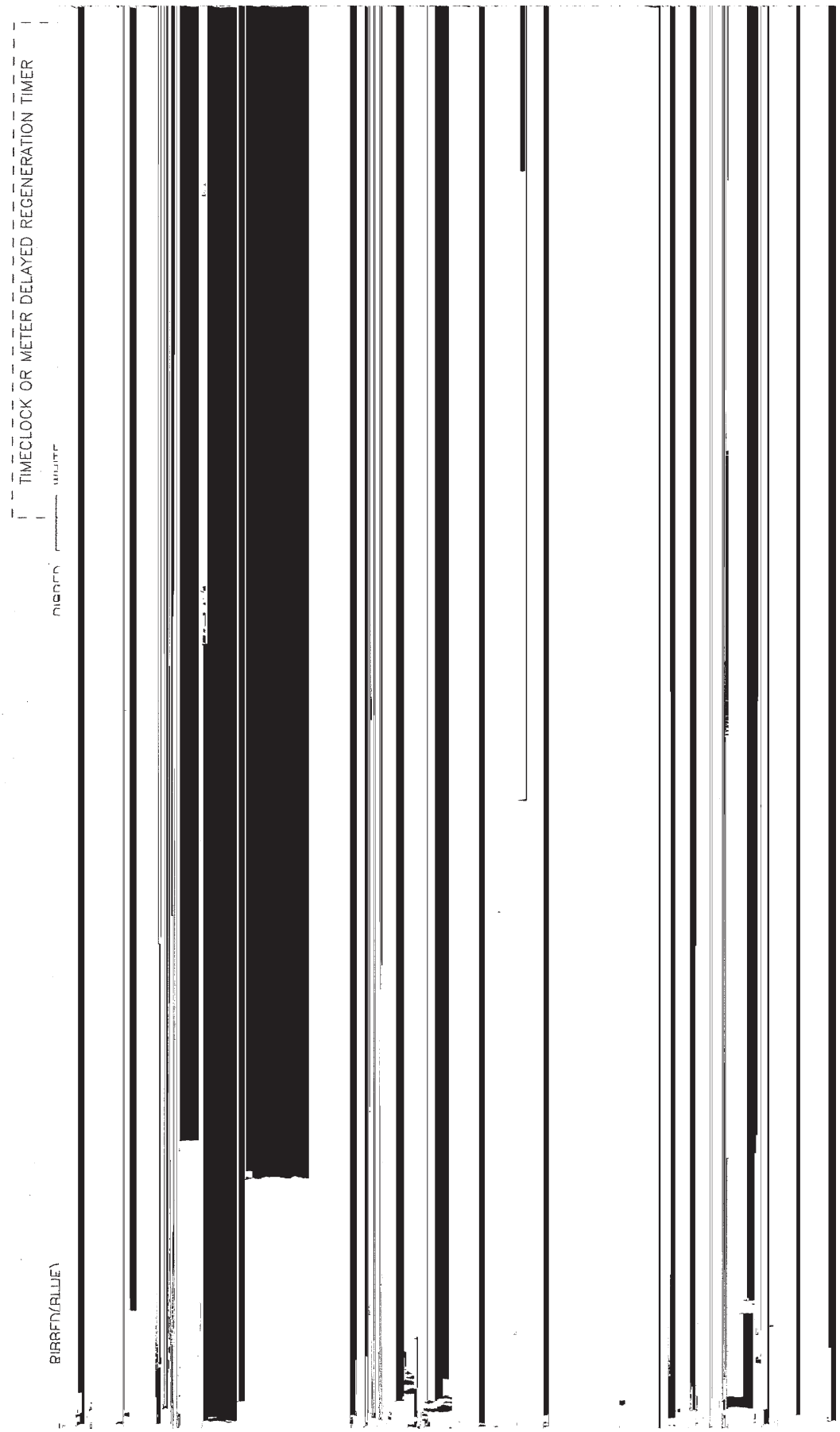

11.65 [295.85]
8.70 [220.96]
6.74

Typical Single Tank Installation with Optional

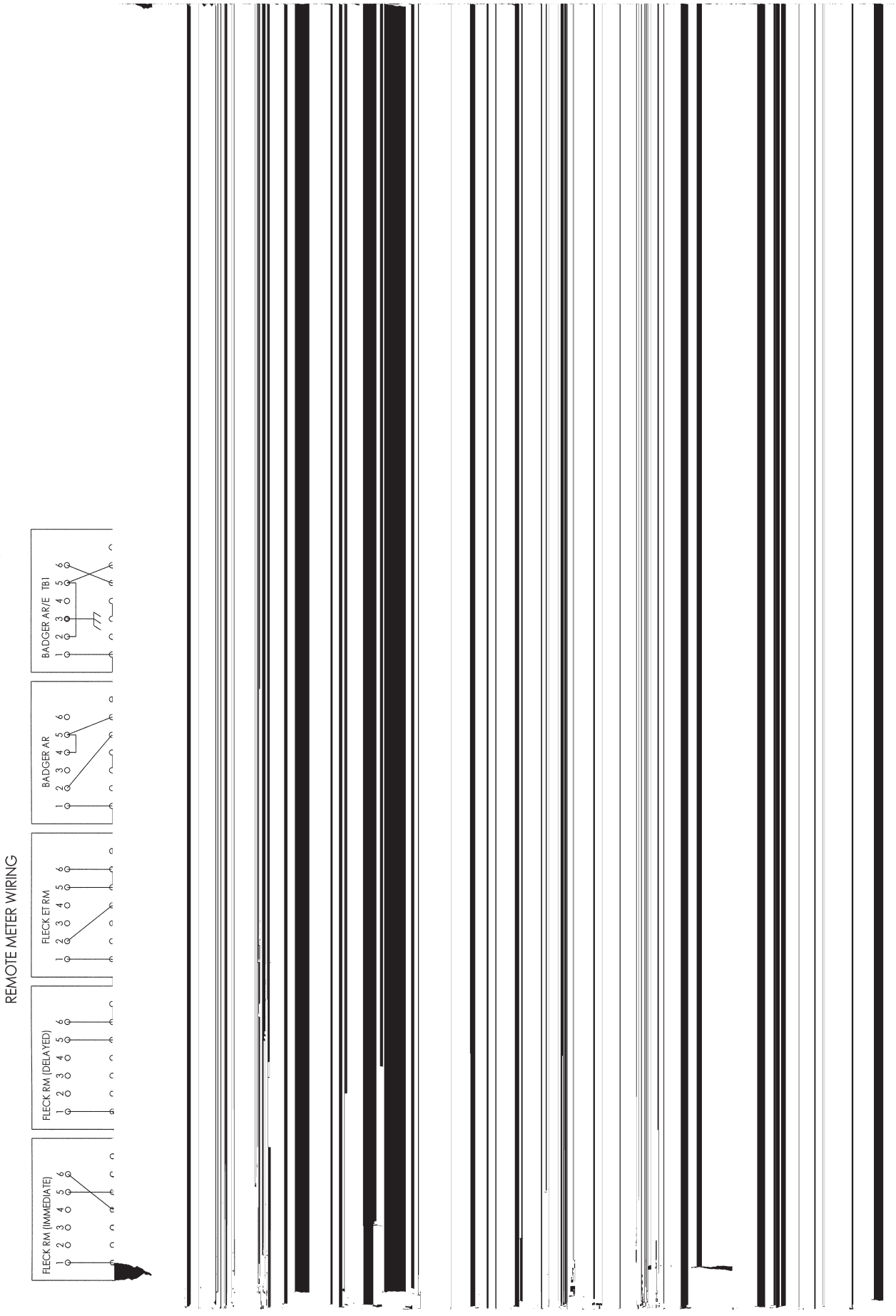


Typical Twin Tank Installation with Optional Meter Interlock and No Hard Water Bypass

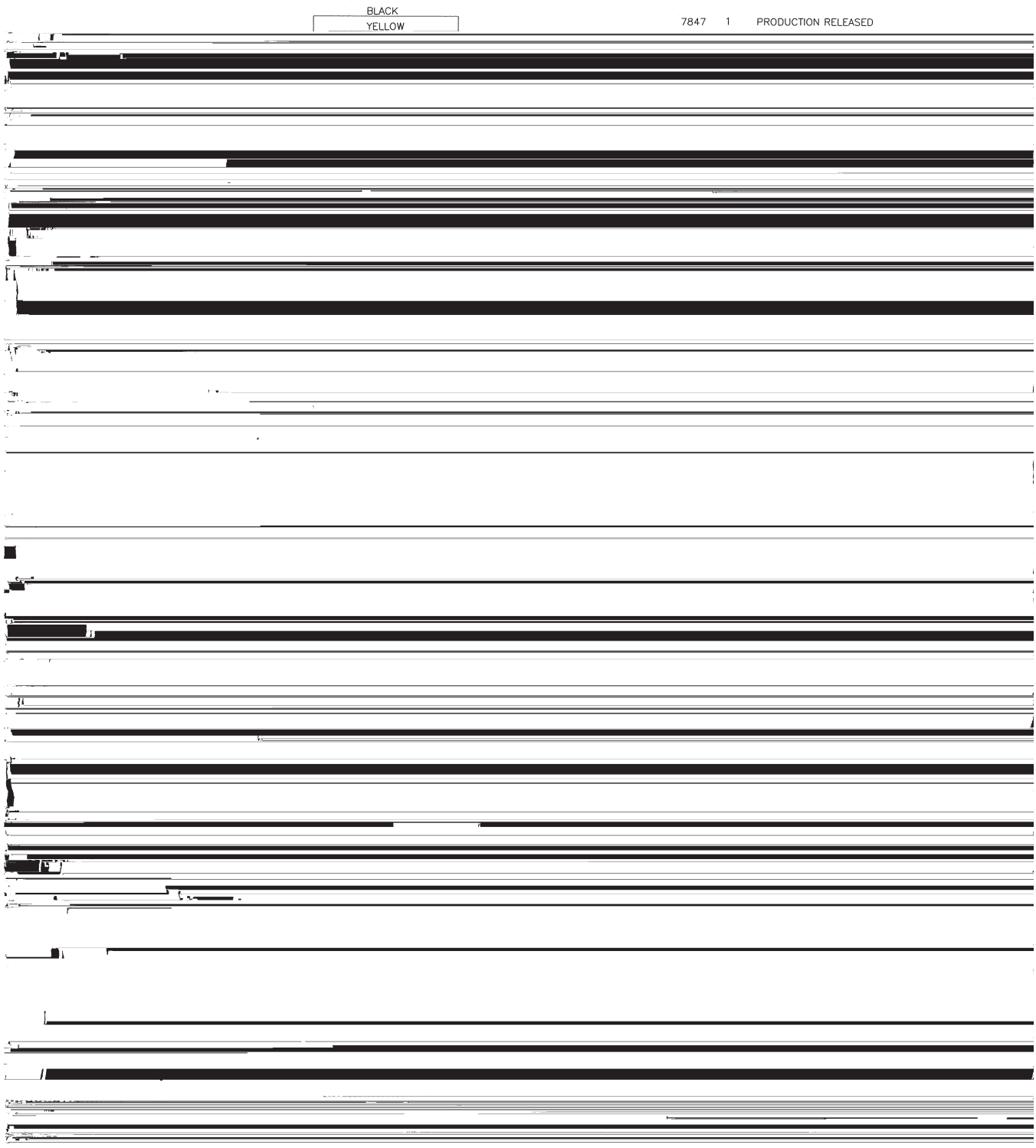
Single Valve Regeneration Immediate and Delayed Valve Wiring



With Remote Starter Valve Wiring

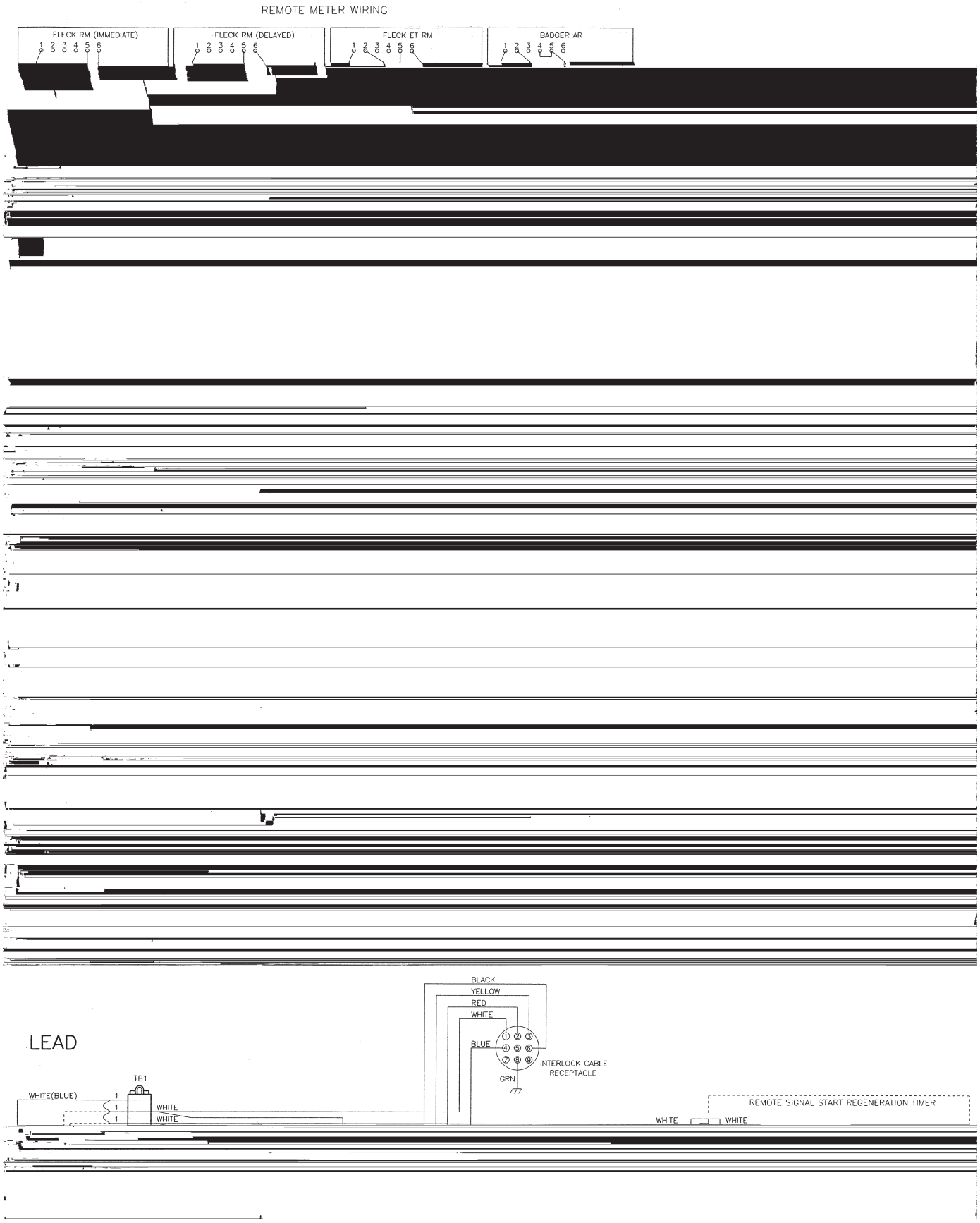


Interlocked Regeneration Valve Wiring



Series Regeneration Valve Wiring

Alternating Regeneration 230V / 3-Way Solenoid Output Valve Wiring



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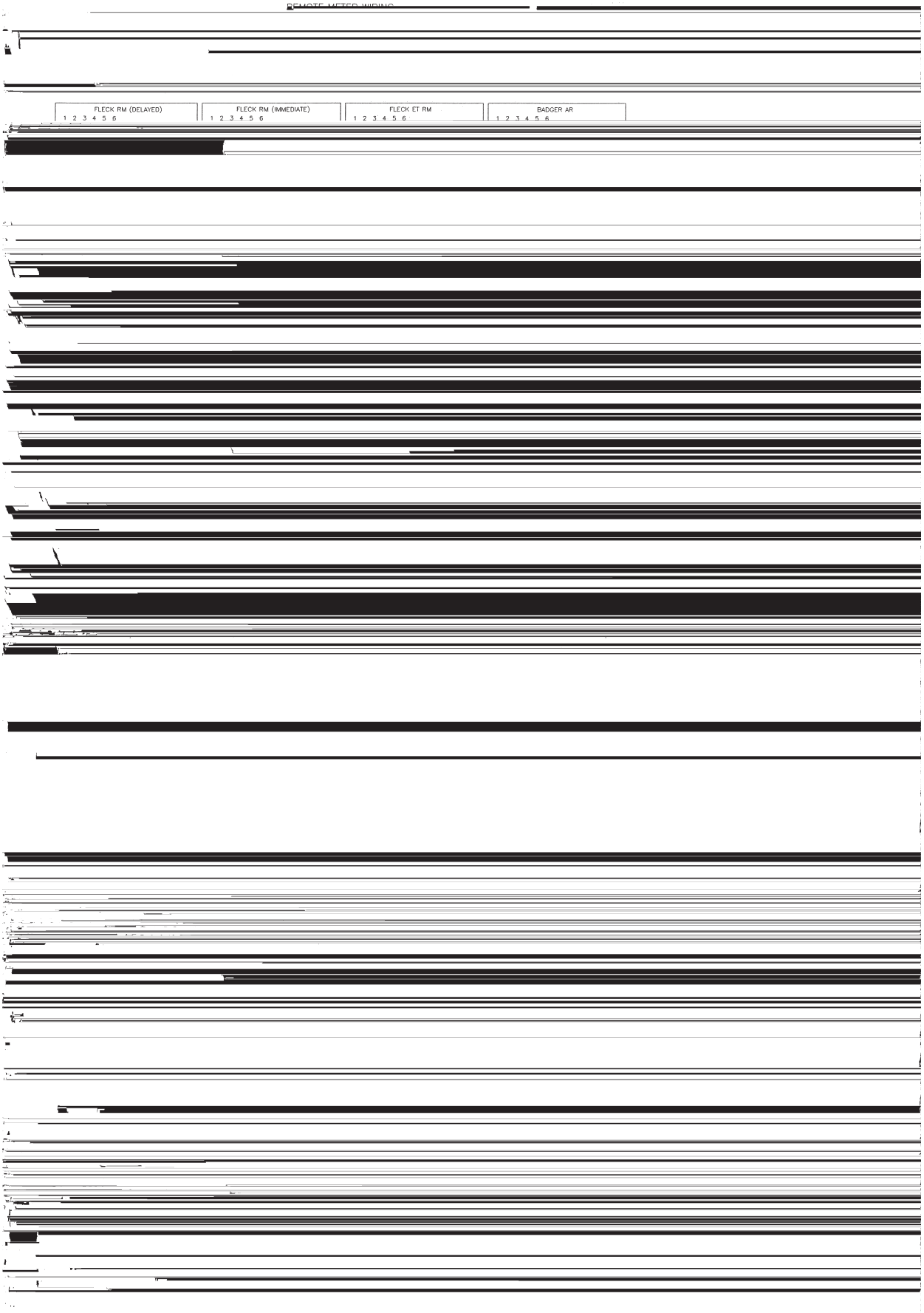
Alternating Regeneration 24V / 120V / 3-Way Solenoid Output Valve Wiring



SERVICE ASSEMBLIES *continued*

Safety Brine Valves

Sales and Service Aids

Seal & Spacer Kits

Service Equipment

Service Valve Operator Assemblies (SVO)

Skipper Wheel Assemblies