Fleck 5800 LXT & SXT Downflow/Upflow

Service Manual

The chart below is for dealer use only. Use this information

	US (FT	**(Liters)**		
8	0.75	20	#000	0.125
9		25	#000	0.125
9	1.00	30	#000	0.125
10	1.25	35	#00	0.125
10	1.50	40	#00	0.125
12		45	#00	0.125
12	1.75	50	#00	0.125
12	2.00	55	#0	0.25
13		60	#0	0.25
13	2.25	65	#0	0.25
14	2.50	70	#1	0.25
14		75	#1	0.25
14	2.75	80	#1	0.25
14	3.00	85	#1	0.25
14	3.25	90	#2	0.50
14		95	#2	0.50
14	3.50	100	#2	0.50
16	3.75	105	#3	0.50
16		110	#3	0.50
16	4.00	115	#3	0.50

Job Number: _____

Model Number: _____

Water Hardness: _____

_____

Mineral Tank Size: _____ Diameter: _____ _____

_____

A. 3/4" Paddle Wheel (Not Used)
B. 3/4" Turbine
C. 1" Paddle Wheel (Not Used)
D. 1" Turbine (Not Used)
E. 1-1/2" Electronic Inline Plastic Turbine (Not Used)
F. 1-1/2" Paddle Wheel (Not Used)
G. 2" Paddle Wheel (Not Used)
H. Generic_____Pulse Count_____Meter Size_____

System Type:

A.
B. System #4: Time Clock

A. Backwash: _____ Minutes
B. Brine and Slow Rinse: _____ Minutes
C. _____ Minutes
D. _____ Minutes
E. Pause Time:_____ Minutes
F. Second Backwash: _____ Minutes

gpm

gpm

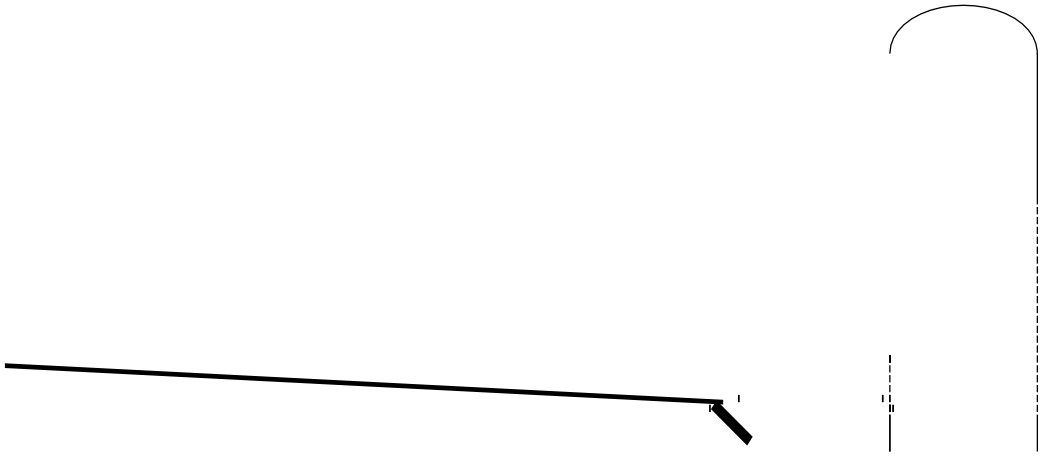
CAUTION **If grid plate is used, cut air check height even with grid plate. This is critical on 6", 7", 8" and 9" tanks. The brine refill water must come above the grid plate and make contact with the salt.**

10.

11.

12.

NOTE: All electrical connections must be connected according to local codes. Be certain the outlet is uninterrupted.



START-UP INSTRUCTIONS LXT

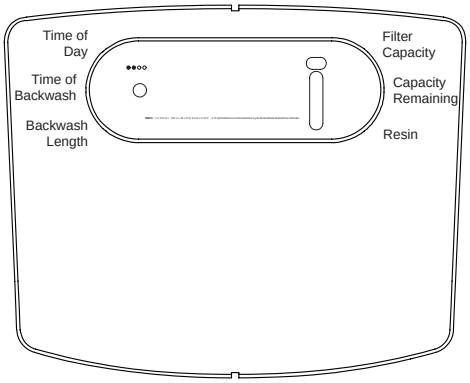
The water softener should be installed with the inlet, outlet, and drain connections made in accordance with the manufacturer's

1.
   in this manual.
2.
   button for 5 seconds. Position the valve to backwash.

   until the water runs clear.
3.
4.

   clear.
5.
6.
7. Put salt in the brine tank.

TIMER FEATURES LXT



should be set to insure that the system delivers treated water

Control Operation During Regeneration

1. Backwash
2. Brine/Slow Rinse
3.
4.

1. Backwash
2.

Control Operation During Programming

1. seconds/Span <</MCID 4 >>BDC ( )TJEMC ETEMC /Span <</MCID 482 >>BDC BT/TT1 1 Tf9 0 0 9 54 244.6476 Tm(2.)Tj4B173.00a C
2.

3. Press the Extra Cycle button once to advance valve to

START-UP INSTRUCTIONS SXT

The water softener should be installed with the inlet, outlet, and drain connections made in accordance with the manufacturer's

1.
   in this manual.
2.
   button for 5 seconds. Position the valve to backwash.

   until the water runs clear.
3.

4.

   clear.
5.

6.
7. Put salt in the brine tank.

TIMER FEATURES SXT

Features of the SXT:

Day-of-the-Week controls.

the user can force the control to advance to the next cycle

Setting the Time of Day

1.

2.
3.

1.

2.
   button.

4. Press the Extra Cycle button once to advance valve to

5. Press the Extra Cycle button once to advance valve to

6. Press the Extra Cycle button once more to advance the valve back to in service.

NOTE: If the unit is a filter or upflow, the cycle step order may change.

NOTE: A queued regeneration can be initiated by pressing the Extra Cycle button. To clear a queued regeneration, press the Extra Cycle button again to cancel. If regeneration occurs for any reason prior to the delayed regeneration time, the manual regeneration request will be cleared.

Control Operation During A Power Failure

that the system delivers treated water between the time the

minimum of 12 hours.

override value.

Day of the Week Control

CAUTION **If power fails during a regeneration cycle, the valve will remain in it's current position until power is restored. The valve system should include all required safety components to prevent overflows resulting from a power failure**

Control Operation During Regeneration

Control Operation During Programming

1.
seconds on the main screen.

2.

3. Press the Extra Cycle button once to advance valve to

CAUT

continued

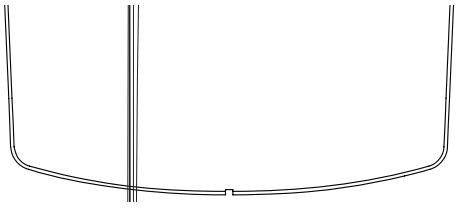
Demand - US Units	
	Description
H1	
H2	
H3	
H4	
H5	
H6	
A1	
A2	
A3	
A4	
A5	
A6	
A7	

Demand - Metric Units	
	Description
H1	
H2	
H3	
H4	for the current day, in cubic meters.
H5	
H6	
A1	in cubic meters.
A2	in cubic meters.
A3	in cubic meters.
A4	in cubic meters.
A5	in cubic meters.
A6	in cubic meters.
A7	in cubic meters.

	Description
H1	
H6	

NOTE: The Engilsh timer will be in gallons. The Metric timer will be in liters for all flow rates.

Diagnostic Programming Mode Steps



CAUTION **Before entering Master Programming, please contact your local professional water dealer.**

Master Programming Options			
Abbreviation		**Option Abbriviation**	**Options**
DF		GAL	Gallons
		Ltr	Liters
VT		5800	5800 Control Valve
RF		dF1b	
		dF2b	
		Fltr	Filter
		AIO	
		dFFF	
		UFbd	
		UFFF	
		Othr	Other
CT		Fd	Meter (Flow) Delayed
		FI	Meter (Flow) Immediate
		tc	Time Clock
		dAY	Day of Week
C			
H	Feedwater Hardness		Hardness of Inlet Water (Grains)
RS	Reserve Selection	SF	
		rc	
SF	Safety Factor		
RC			Fixed volume to be used as reserve
DO	Day Override		
RT			
BW, BD, RR, BF			0-199 minutes. **NOTE: If "Othr" is chosen under "Valve Type", then C1, C2, ..., C20 will be displayed along with available cycle steps RR, BD, SR, BW, RF, SP. LC denotes the Last**
D1, D2, D3, D4,			week systems.
CD	Current Day		The Current day of the week
FM		P0.7	3/4" Paddle Wheel Meter
		t0.7	3/4" Turbine Meter
		P1.0	1" Paddle Wheel Meter
		t1.0	1" Turbine Meter
		P1.5	1.5" Paddle Wheel Meter
		t1.5	1.5" Turbine Meter
		P2.0	2" Paddle Wheel Meter
		Gen	Generic or Other non-Fleck Meter
K			

NOTE: Some items may not be shown depending on timer configuration. The timer will discard any changes and exit Master Programming Mode if any button is not pressed for 5 minutes.

be viewed or set.

Setting the Time of Day

1.

2.

3.

Press and hold the Extra Cycle and Down buttons for 25 seconds while in normal Service mode. This resets all

Display Format (Display Code DF)

the unit of measure that will be used for volume and how

Display Format	Unit of Volume	Time Display
GAL	U.S. Gallons	12-Hour AM/PM
Ltr	Liters	24-Hour

continued

Control Type (Display Code CT)

Abbreviation	
Fd	Meter (Flow) Delayed
FI	Meter (Flow) Immediate
tc	Time Clock
dAY	Day of Week

Unit Capacity (Display Code C)

Feedwater Hardness (Display Code H)

value as needed.

7. Reserve Selection (Display Code RS)

Abbreviation	
SF	Safety Factor
rc	

Safety Factor (Display Code SF)

hand corner of the screen. Use the UP and Down buttons to

9. Fixed Reserve Capacity (Dispaly Code RC)

value as needed.

continued

Day Override (Display Code DO)

cycles can be set. Time for each cycle can be set from 0 to 199

Abbreviation	Cycle Step
RR	
BD	Brine Draw
SR	Slow Rinse
BW	Backwash
RF	
SP	Service Position
LC	Last Cycle

Regeneration Cycle Step Times

are listed below.

Abbreviation	Cycle Step
BD	Brine Draw
BF	Brine Fill
AD	Air Draw
BW	Backwash
RR	
SV	Service

7 days are set to "Off", the unit will return to Day 1 until one or more days are set to "ON".

Current Day (Display Code CD)

Flow Meter Type (Display Code FM)

Abbreviation	Description
P0.7	3/4" Paddle Wheel Meter
t0.7	3/4" Turbine Meter
P1.0	1" Paddle Wheel Meter
t1.0	1" Turbine Meter
P1.5	1.5" Paddle Wheel Meter
t1.5	1.5" Turbine Meter
P2.0	2" Paddle Wheel Meter
Gen	Generic or Other non-Fleck Meter

Meter Pulse Setting (Display Code K)

USER PROGRAMMING MODE SXT

Abbreviation		Description
DO	Day Override	The timer's day override
RT		The time of the day that (meter delayed, timeclock, and day-of-week systems)
H	Feed Water Hardness	The hardness of the inlet water - used to calculate metered systems.
RC or SF		
CD	Current Day	The current day of week.

NOTE: Some items may not be shown depending on timer configuration. The timer will discard any changes and exit User Programming Mode if a button is not pressed for 60 seconds.

User Programming Mode Steps

1.
service, and the time of day is NOT set to 12:01 PM.

2.
the screen.

3.

4.

5.

6.

7.
Mode.

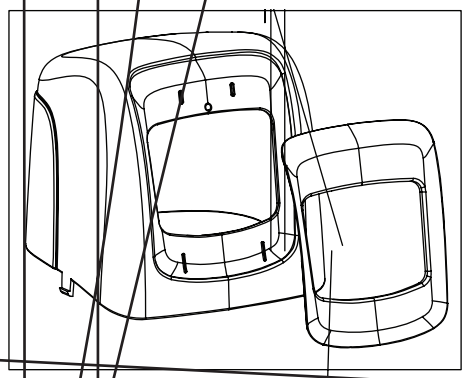
Abbreviation		Description
FR	Flow Rate	
PF	Peak Flow Rate	rate measured since last
HR	Hours in Service	that the unit has been in service.
VU	Volume Used	of water treated by the unit.
RC		feedwater hardness, and safety factor
SV	Software Version	version installed on the controller.

NOTE: Some items may not be shown depending on timer configuration. The timer will discard any changes and exit User Programming Mode if a button is not pressed for 60 seconds.

Diagnostic Programming Mode Steps

1. service.
2. the screen.
3. screen.
4. the screen.
5. screen.
6.
7.
8.

Item No.	QTY	Part No.	Description
1	1	61832-00	Cover Assembly, Black/Blue
2	1	61836	
3	1	*	E Timer
4	1	61835	Motor Assembly

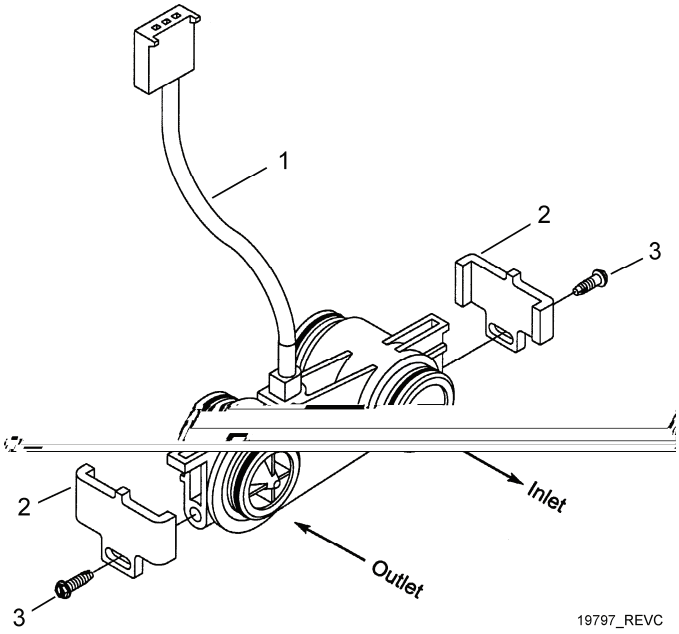


Item No.	QTY	Part No.	Description
1	1	61832-00	Cover Assembly, Black/Blue
2	1	61836	
3	1	61834	
4	1	61835	Motor Assembly

DOWNFLOW/UPFLOW

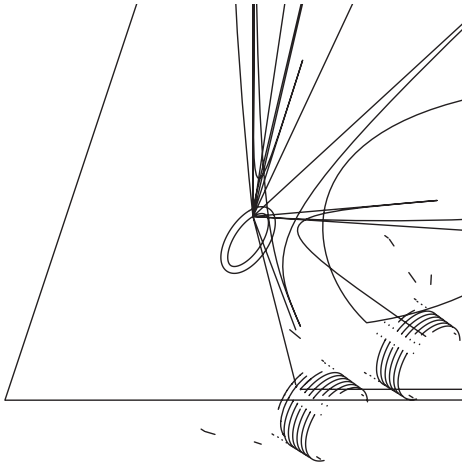
Item No.	QTY	Part No.	Description
1	1	61857-20	
			9, 10, 11 and 12)
2	1	18271	
3	1	40064	
4	1	18277	
		18278-20	
		18278-30	
5	2	18262	Screw, Hex Washer Head, #10-24 x 1.00
6	1	10759	
7	1	13333	
8	3	18261	Screw, Hex Washer Head, #10-24 0.81
9	1	13304	
10	1	18303-01	
11	1	18589	Retainer, Tank Seal
12	1	13030	
13	1	18312	
14	1	14613	
15	1	60628	Meter Assy, Turbine, Electronic
16		61837	Piston and Seal Kit Assy,
		61838	5800
17	1	60032	Brine Valve, 4600/5600
18		60022-25	
		60022-50	
		60022-100	
19		60705-00	DLFC, Plastic, Blank
		60705-06	

3/4" PLASTIC TURBINE METER



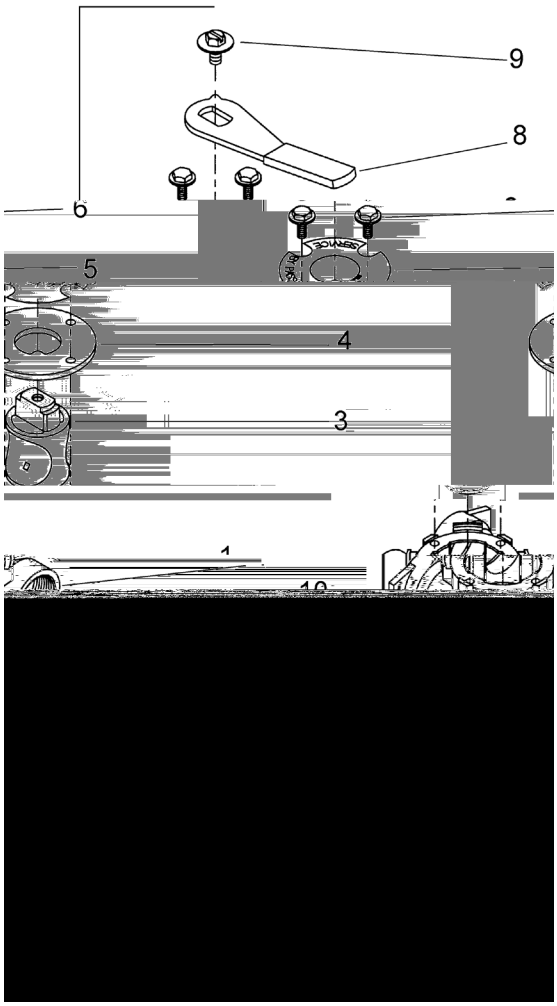
Item No.	QTY	Part No.	Description
1	1	19791-01	
2	2	19569	
3	2	13314	Screw, Slot Ind Hex, 8-18 x 0.60

BYPASS VALVE ASSEMBLY (PLASTIC)



Item No.	QTY	Part No.	Description
1	2	13305	
2	2	13255	
3	2	13314	Screw, Slot Ind Hex, 8-18 x 0.60
4	1	18706	Yoke, 1", NPT, Plastic
		18706-02	Yoke, 3/4", NPT, Plastic
5	1	13708-40	Yoke, 1", Sweat
		13708-45	Yoke, 3/4", Sweat
		19275	
		19275-45	
		19620-01	
		40636	Yoke, 1-1/4", NPT
		40636-49	Yoke, 1-1/4", Sweat
		41027-01	Yoke, 3/4", NPT, Cast, Machined
		41026-01	Yoke, 1", NPT, Cast, Machined, SS
		41026-02	Yoke, 1", BSP, Cast, Machined, SS
		18706-10	Yoke, 1", BSP, Plastic
		41027-02	Yoke, 3/4", BSP, Cast, Machined
		18706-12	Yoke, 3/4", BSP, Plastic
		19620-01	
6	1	60049	
Not Shown:			
	2	19228-01	

BYPASS VALVE ASSEMBLY (PLASTIC)



Item No.	QTY	Part No.	Description
1	1	40614	
		40634	
2	1	14105	
3	1	11972	
4	1	11978	Side Cover
5	1	13604-01	Label
6	8	15727	Screw, 10-24 x 0.5"
7	1	11986	Side Cover
8	1	11979	
9	1	11989	Screw, Hex Head, 1/4-14 x 1.5"
10	1	60040SS	
		60041SS	

Not Shown:

	2	19228-01	

Item No.	QTY	Part No.	Description
1	1	19645	Body, Safety Brine Valve, 2310
2	1	19803	Safety Brine Valve Assy
3	1	19804	Screw, Sckt Hd, Set, 10-24 x 0.75
4	1	19805	Nut, Hex, 10-24, Nylon Black
5	1	19652-01	
6	1	19649	
7	1	11183	
8	1	19647	Elbow, Safety Brine Valve
9	2	19625	Nut Assy, 3/8" Plastic
10	1	18312	Retainer, Drain
11	1	60014	Safety Brine Valve Assy, 2310
12	2	10150	Grommet, 0.30 Dia
13	1	60068-8.06	Float Assy, 2310, w/8.06" Rod
		60068-10.5	Float Assy, 2310, w/10.5" Rod
		60068-11.5	Float Assy, 2310, w/11.5" Rod
		60068-20	Float Assy, 2310, w/20" Rod
		60068-30	Float Assy, 2310, w/30" Rod
14	1	60002-10	Air Check, #500, American Hydro
		60002-11.38	
		60002-24	
		60002-27	
		60002-32	
		60002-34	
		60002-36	
		60002-48	
		60002-26.25	
		60002-33.25	

Downflow

1. Service Position

2. Backwash Position

3. Brine/Slow Rinse Position

4. Rapid Rinse Position

5. Brine Tank Refill Position

continued

Upflow

1. Service Position

2. Backwash Position

3. Brine/Slow Rinse Position

4. Rapid Rinse Position

5. Brine Tank Refill Position

TROUBLESHOOTING LXT

NOTE: Error codes appear on the In Service display.

	Error Type		Reset and Recovery
---0	Motor Stall /Cam Sense Error	sensor are detected for 6 seconds.	

TROUBLESHOOTING SXT

NOTE: Error codes appear on the In Service display.

	Error Type		Reset and Recovery
---0	Motor Stall /Cam Sense Error	sensor are detected for 6 seconds.	necessary.
---1	Motor Run-On Error /Cycle Sense Error		button to clear the error. Press extra cycle button to advance motor to clear error.
---2		for more than 99 days (or 7 days Day-of-Week).	of-Week system, verify that at least one day is set ON. Correct the
---3	Memory Error	Control board memory failure.	
---4	Fail Safe Error	one minute.	