



Pentair Water

Model 1000 Remote Reset Meter

Service Manual



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JOB SPECIFICATION SHEET

- Job No. _____
- Meter Model No. _____
- Pipe Size Inlet To Softener _____
Outlet To Feed Lines _____
- Estimated Or Measured Flow Rate Min. _____ Gpm
- Estimated Or Measured Flow Rate Max. _____ Gpm
- Type Of Reset Meter _____
 - a. Immediate Pulse (6 Minute Reset)
 - b. Delayed Pulse
(Factory Set @ 2:00 A.M. with 10 Minute Pulse)
- Meter Gallon Range _____
 - a. 1" Remote Meter
Standard Range 310 Gallon Min. – 5,270 Gallon Max.
Extended Range 1,550 Gallon Min. – 26,350 Gallon Max.
 - b. 1-1/2" Remote Meter
Standard Range 625 Gallon Min. – 10,625 Gallon Max.
Extended Range 3,125 Gallon Min. – 53,125 Gallon Max.
 - c. 2" Remote Meter
Standard Range 1,250 Gallon Min. – 21,250 Gallon Max.
Extended Range 6,250 Gallon Min. – 106,250 Gallon Max.
 - d. 3" Remote Meter
Standard Range 3,750 Gallon Min. – 63,750 Gallon Max.
Extended Range 18,750 Gallon min. – 318,750 Gallon Max.
- Meter Set @ _____ Gallons
Reserve Gallons For Delayed Pulse Meters _____ Gallons

METHOD OF OPERATION

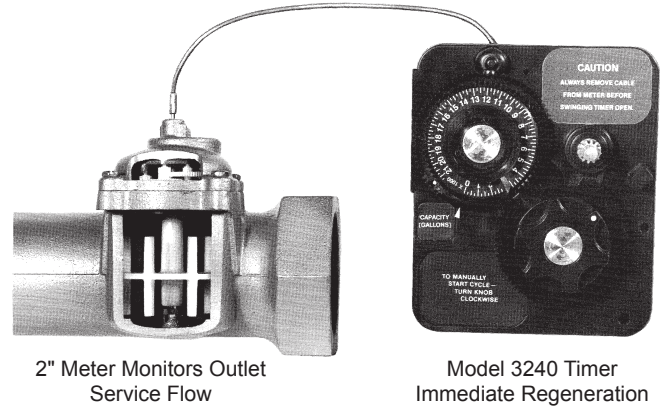


Figure 1

The Econominder answers today's commercial/industrial water conservation needs by saving water, salt and sewer use tax. The Econominder mechanical meter monitors the soft water service flow at the control outlet with the meter impeller being the only instream moving part. As the turbine turns, its rotation drives a water lubricated gear train in the dome of the meter. As the output shaft at the top of the meter rotates, the cable connection to the timer clutch assembly turns the meter program wheel on the face of the timer counterclockwise until it reaches the regeneration stop position. Regeneration may occur immediately or on a delayed basis depending upon system requirements.

GENERAL INSTALLATION AND START-UP INSTRUCTIONS

Flow Range

- 1" Remote Meter – 0.7 gpm to 40 gpm.
- 1-1/2" Remote Meter – 1.5 gpm to 75 gpm.
- 2" Remote Meter – 3 gpm to 150 gpm.
- 3" Remote Meter – 7 gpm to 300 gpm
- 5% registration accuracy over these flow ranges.

Electrical

Meter and control valve operating voltages must match.

CAUTION: Water pressure is not to exceed 120 psi, water temperature is not to exceed 110° or 150°F with hot water package, and meter cannot be exposed to freezing conditions.

GENERAL INSTALLATION AND START-UP INSTRUCTIONS *continued*

Installation Instructions

- All plumbing shall be done in accordance with local plumbing codes. The meters are to be installed on soft water outlets. Twin units with (1) one meter shall be installed on the common soft water outlet of the units.
NOTE: Arrow on brass casting indicates direction of water flow.
- All water lines should be flushed prior to meter installation.
- For ease of service, a union should be installed on the outlet of the meter. The inlet has its own built-in union.
- Meter bodies must be installed the horizontal position with the reset timer assemblies in the vertical position. See Figure 2 and Figure 3.

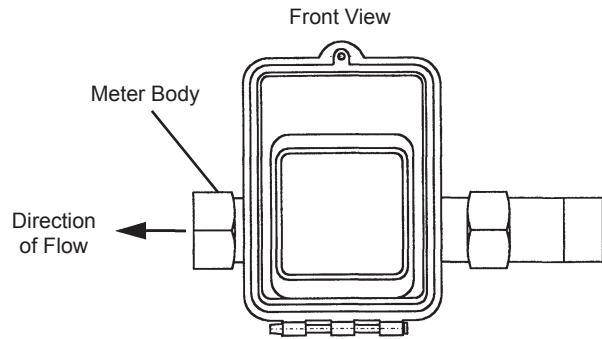


Figure 2

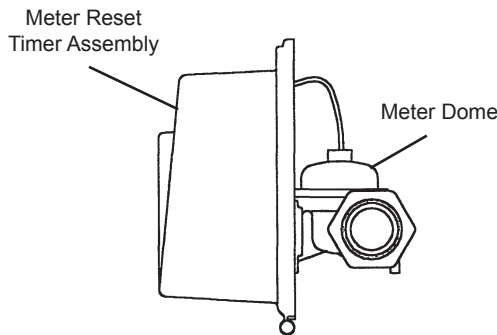


Figure 3

NOTE: If "Meter Reset Timer Assembly" must be located on the opposite side of meter body, use bracket PN 14955 or 15371. See Figure 4.

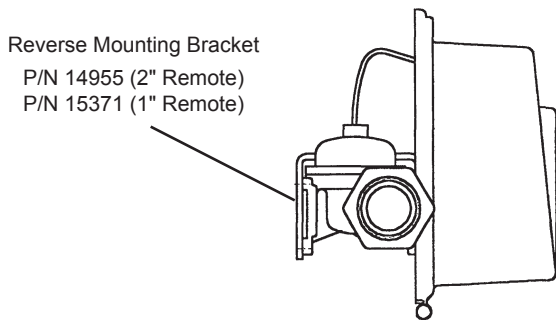


Figure 4

CAUTION: Always remove meter cable from dome only. Do not remove from meter reset timer assembly.

- All electrical connections must be made in accordance to local codes. Follow control valve manufacturer's wiring schematic.
- Once pressurized check for leaks. Use meter checker (enclosed in package) to check operation. See Figure 5 and Figure 6.

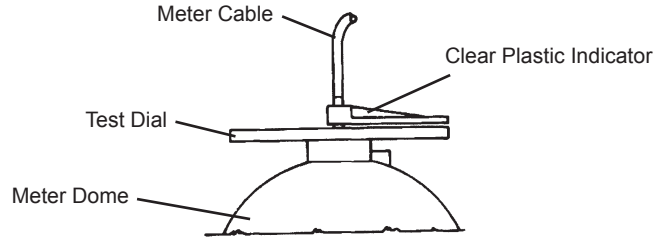


Figure 5

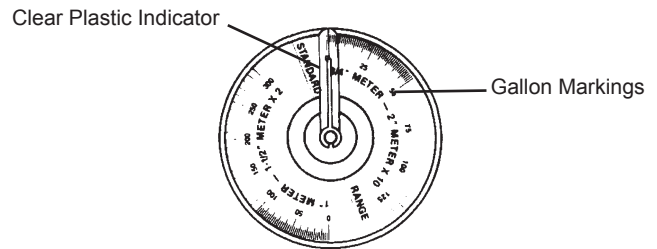


Figure 6

- Pull cable out of meter dome.
- Place test dial over protruding hub on meter dome.
- Push brass cable fitting into split hole in clear plastic indicator (ribbed side up).
- Push cable into socket in meter dome.
- Rotate clear plastic indicator counter clockwise until line is at desired start point.
- The numbers will count up from zero. Draw a measured volume of water or time a desired flow rate. The clear plastic indicator hair line should read the appropriate gallons on the test dial.

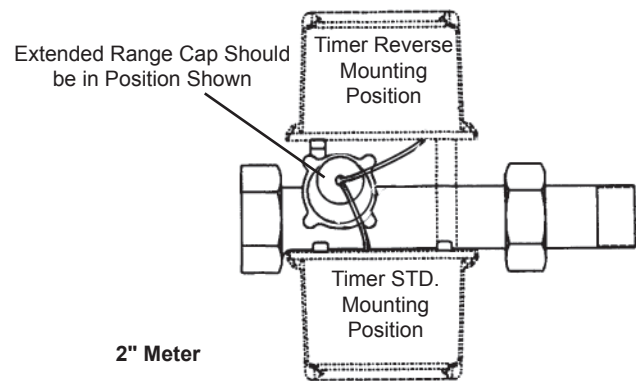


Figure 7

GENERAL INSTALLATION AND START-UP INSTRUCTIONS *continued*

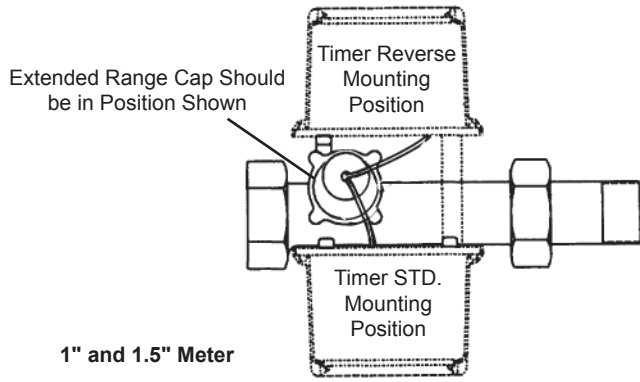


Figure 8

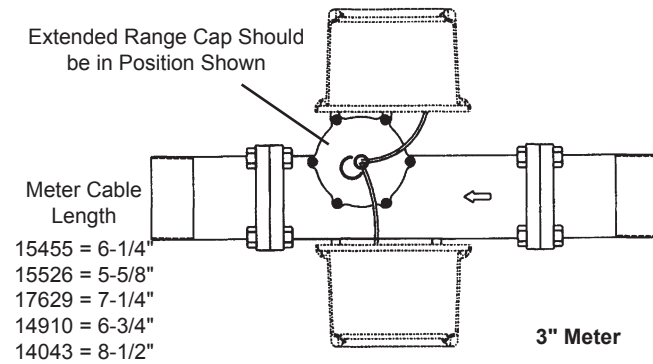


Figure 9

Mechanical RM	Meter Cable P/N	
	Std. Range	Ext. Range
1" Std. Mount	15526	15526
1" Rev. Mount	14910	15455
1.5" Std. Mount	15526	15526
1.5" Rev. Mount	17629	17629
2" Std. Mount	17629	17629
2" Rev. Mount	15455	15455
2" Plastic Std. Mount	14043	14043
2" Plastic Rev. Mount	15455	15455
3" Std. Mount	17629	17629
3" Rev. Mount	15526	15526

Spare cable sent to allow change in orientation of remote meter.
*2" and 2" Ext meter gets 1 cable.

3240 AND 3250 TIMER SETTINGS

Typical Programming Procedure

Calculate the gallon capacity of the system, subtract the necessary reserve requirement and set the gallons available opposite the small white dot on the program wheel gear (Figure 10).

NOTE: Figure 10 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:

1. Press and hold the red time set button in to disengage the drive gear.
2. Turn the large gear until the actual time of day is opposite the time of day pointer.
3. Release the red button to again engage the drive gear.

How To Manually Regenerate Your Remote Meter:

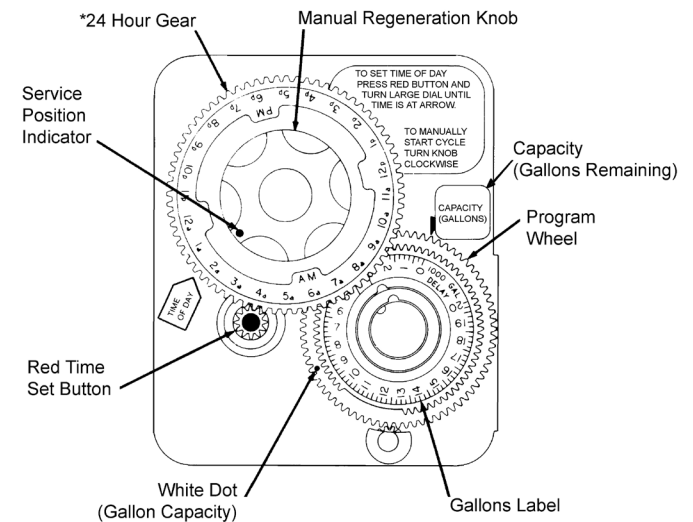
1. Turn the manual regeneration knob clockwise.
2. This slight movement of the manual regeneration knob engages the program wheel and starts the regeneration signal.
3. The black center knob will make one revolution:
Delayed Regeneration - 3 hrs
Immediate Regeneration - 6 min

Immediate Regeneration Timers:

These timers do not have a 24 hour gear. Setting the gallons on the program wheel and manual regeneration procedure are the same as previous instructions. The timer will regenerate as soon as the capacity gallons reaches zero.

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.



*Immediate regeneration timers do not have a 24-hour gear. No time of day can be set.

Figure 10

REGENERATION PULSE SETTING PROCEDURE

Delayed Regeneration (See Figure 11)

Signal Section Minimum Setting
 (2 Min. per Pin) 2 Pins = 4 Mins.
 Preset 3 Pins = 6 Mins.

Total Reset Time 3 Hours

NOTE: Regeneration can be done from remote meter with proper program wheel setting.

Immediate Regeneration (See Figure 12)

Total reset time 6 Min.
 Signal (fixed) — 6 Min.

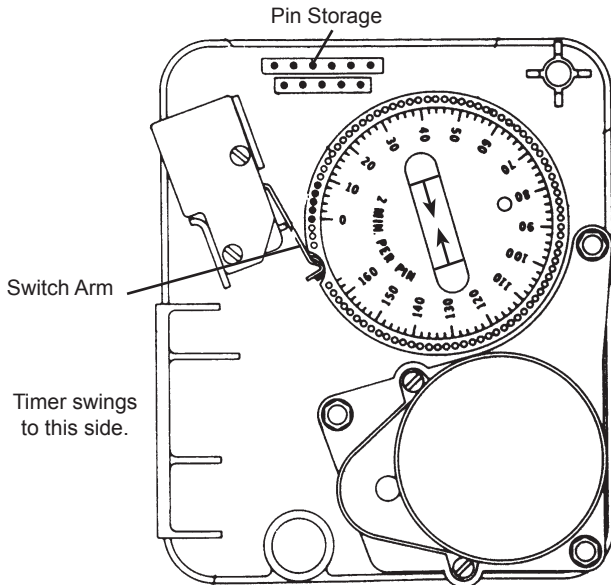


Figure 11

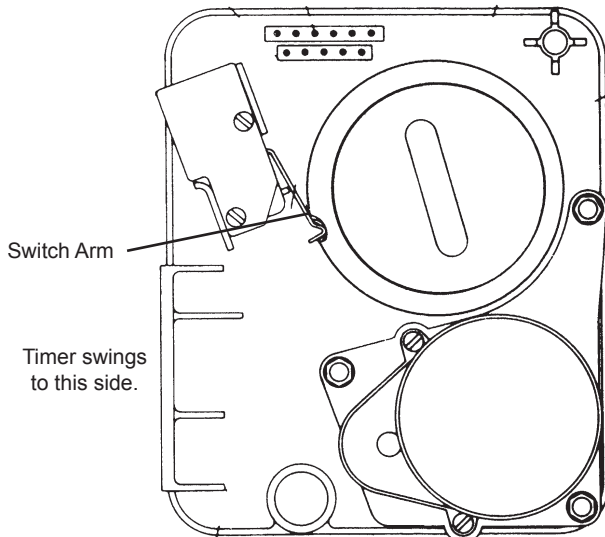


Figure 12

The regeneration signal on Delayed Regeneration timers (Figure 11) is pre-set for 6 mins. This setting should not be changed.

Immediate Regeneration units Figure 12 have a fixed 6 min. signal and reset time; no adjustments can be made unless optional 180 min. program is used.

DOME AND IMPELLER REPLACEMENT PROCEDURE

To replace the meter dome and impeller:

1. Turn off water supply and remove pressure from pipes.
2. Remove cover bolts.
3. Remove meter dome assembly. Meter dome can be rotated 360° to help loosen O-ring seal.
4. Inspect impeller for foreign material. Clean or replace. If the meter is defective, replace entire assembly. DO NOT attempt to remove gear box cover plate.
5. Lubricate meter dome O-ring with silicone lubricant and place on dome assembly.
6. Place impeller on impeller shaft.
7. Place meter dome on top of meter assembly, making sure the impeller slips into body bearing.
8. Replace and tighten cover bolts.

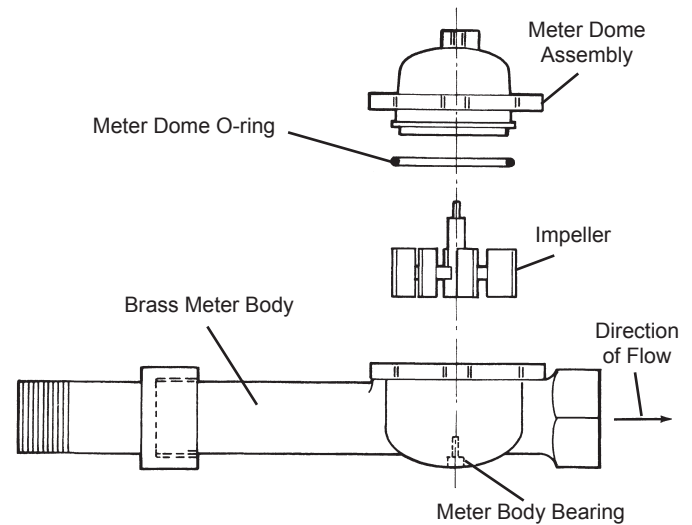
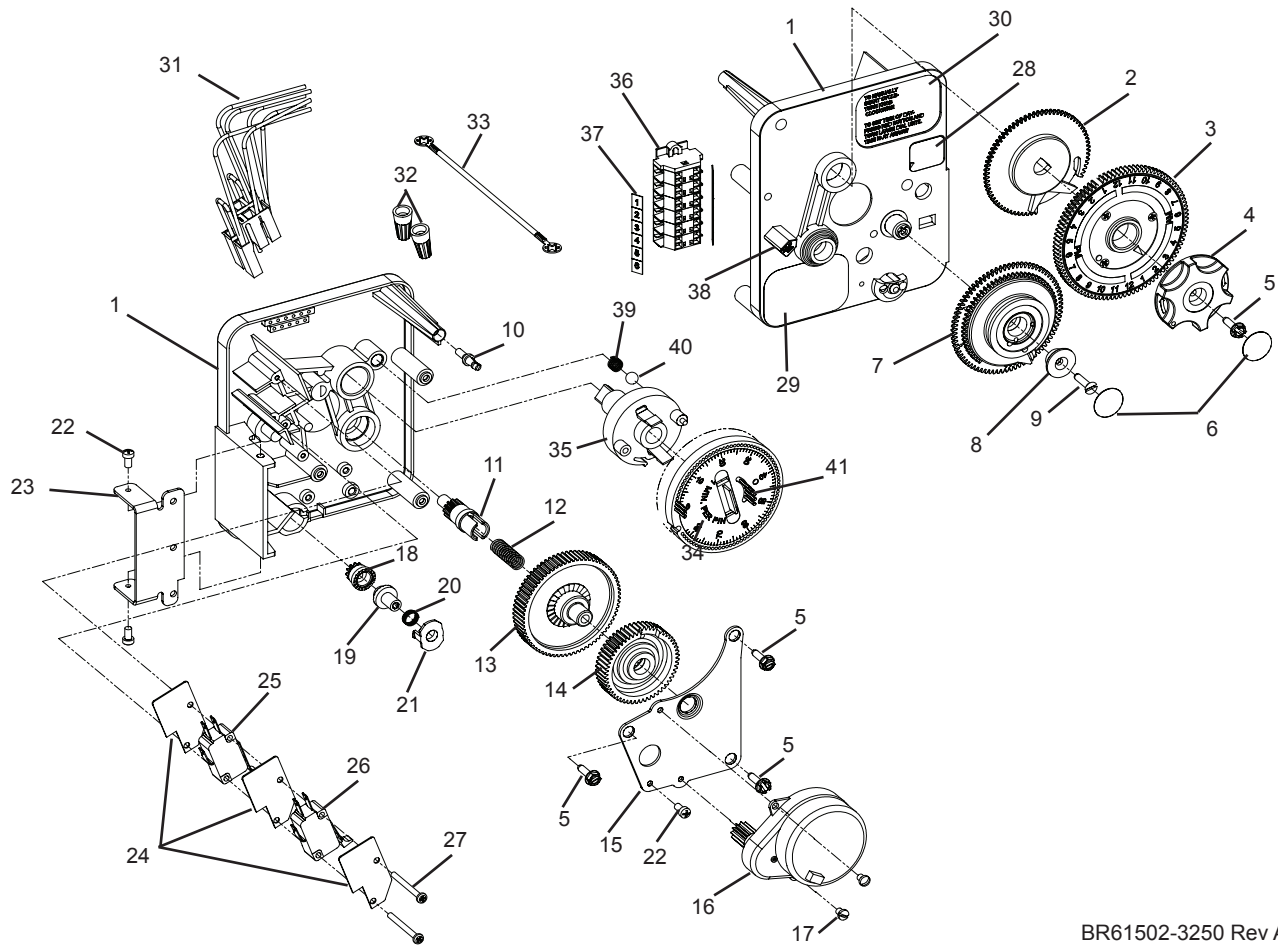


Figure 13

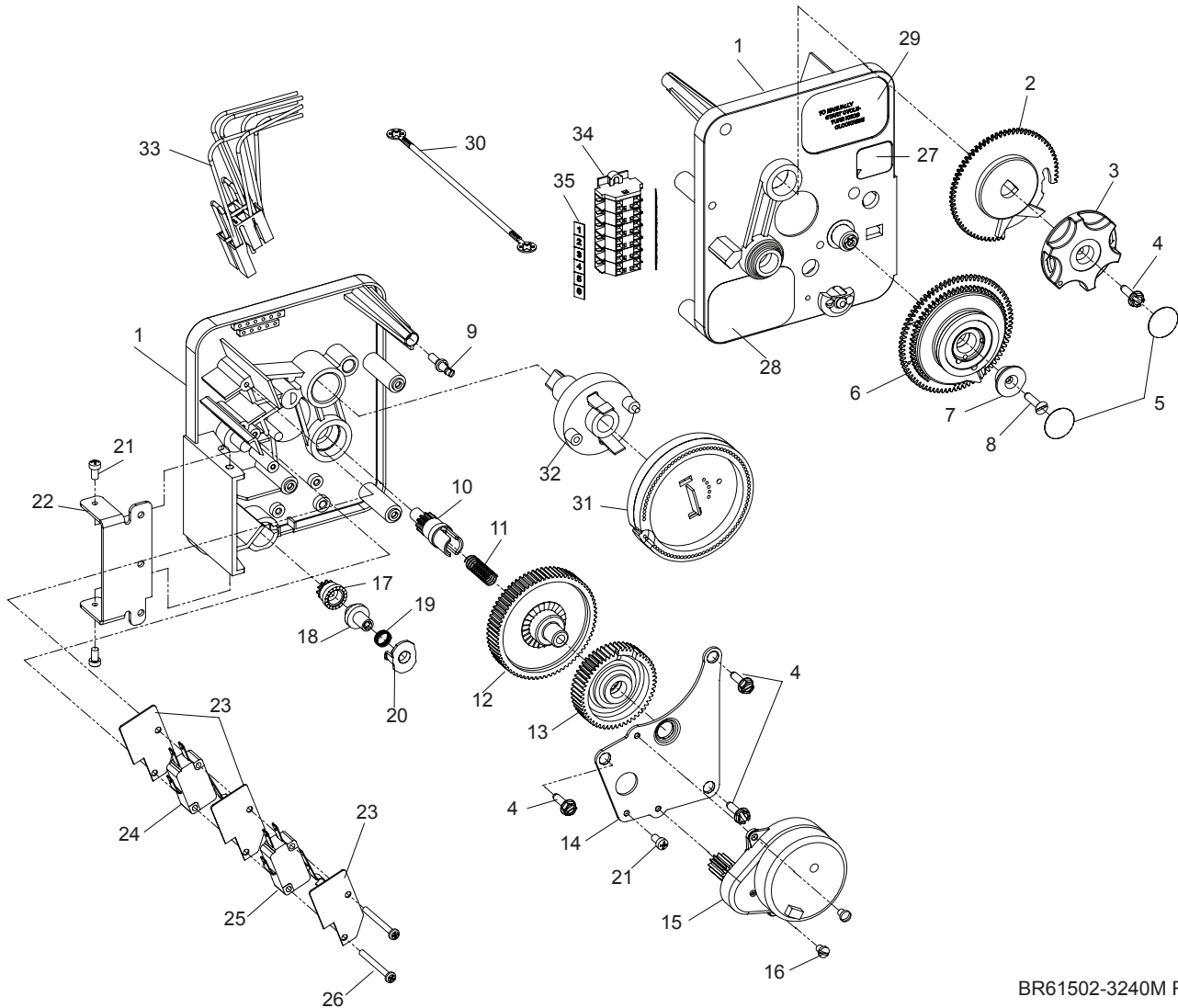
3250 DELAYED REGENERATION TIMER ASSEMBLY



BR61502-3250 Rev A

Item No.	QTY	Part No.	Description	Item No.	QTY	Part No.	Description
1	1	13870	Housing, Timer	20	1	14276	Meter Clutch Spring
2	1	13802	Gear, Cycle Actuator	21	1	14253	Retainer, Clutch Spring
3	1	40096-24	Dial 12 AM Regen Assy, Black	22	3	11384	Screw, Phil, 6-32 x 1/4 Zinc
4	1	13886	Knob, 3200	23	1	13881	Bracket, Hinge Timer
5	4	13296	Screw, Hex wsh, 6-20 x 1/2	24	3	14087	Insulator
6	2	11999	Label, Button	25	1	10896	Micro Switch
7	1	60405-50	Program Wheel, w/2" Std Label	26	1	15320	Switch, Micro, Timer
8	1	13806	Retainer, Program Wheel	27	2	11413	Screw, Pan Hd Mach, 4-40 x 1 1/8
9	1	13748	Screw, Fit Hd St, 6-20 x 1/2	28	1	17870	Label, Indicator
10	1	14265	Spring Clip	29	1	15465	Label, Caution
11	1	13018	Pinion, Idler	30	1	16118	Label, Instruction
12	1	13312	Idler Shaft Spring	31	1	14710	Harness, 3250, Delayed
13	1	13017	Gear, Idler	32	2	40422	Nut, Wire, Tan
14	1	13164	Drive Gear	33	1	15354-01	Wire, Ground, 4"
15	1	13887	Plate, Motor Mounting	34	1	19210-02	Program Wheel Assy, 9000 1/15
16	1	18743-1	Motor, 120V-60Hz, 1/30 rpm	35	1	13911	Main Drive Gear
	1	18752-1	Motor, 100V-50Hz, 1/30 rpm	36	1	15226-6	Terminal Strip
	1	18824-1	Motor, 23V-50Hz, 1/30 rpm	37	2	15250	Label, Terminal Strip
	1	18826-1	Motor, 24V-50Hz, 1/30 rpm	38	1	16119	Label, Time of Day
	1	19659-1	Motor, 24V-60Hz, 1/30 rpm	39	1	15424	Spring, Detent
	1	19660-1	Motor, 230V-60Hz, 1/30 rpm	40	1	15066	1/4" Ball
17	2	13278	Screw, Sltd Fillster Hd	41	8	41754	Pin, Spring, 1/16 x 5/8 SS, Timer
18	1	13830	Program Wheel Drive Pinion				
19	1	13831	Clutch, Drive Pinion				

3240 IMMEDIATE REGENERATION TIMER ASSEMBLY

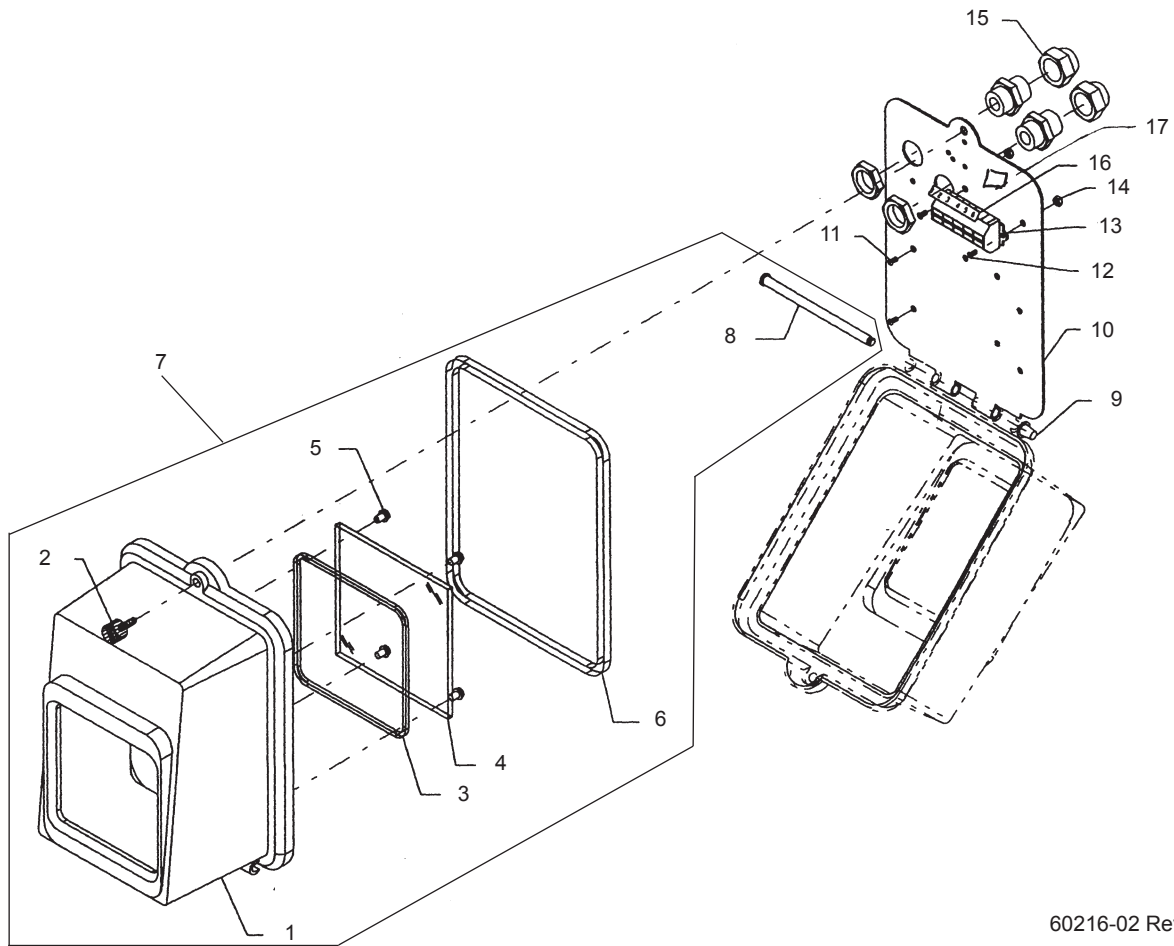


BR61502-3240M Rev A

Item No.	QTY	Part No.	Description
1.....	1	13870.....	Housing Timer
2.....	1	15431.....	Gear, Cycle Actuator SYS #5
3.....	1	13886.....	Knob, 3200
4.....	4	13296.....	Screw, Hex WSH, 6-20 x 1/2
5.....	2	11999.....	Label, Button
6.....	1	60405-50.....	Program Wheel, w/2" STD Label
7.....	1	13806.....	Retainer, Program Wheel
8.....	1	13748.....	Crew, FLT HD ST, 6-20 x 1/2
9.....	1	14265.....	Spring Clip
10.....	1	13018.....	Pinion, Idler
11.....	1	18563.....	Idler Shaft Spring
12.....	1	13017.....	Gear, Idler
13.....	1	13164.....	Drive Gear
14.....	1	13887.....	Plate, Motor Mounting
15.....	1	14974.....	Motor, Drive, 120V, 60 Hz, 1 rpm
	1	15443.....	Motor, 220V, 50 Hz 1 rpm
	1	15459.....	Motor, 24V, 50 Hz 1 rpm
16.....	2	13278.....	Screw, SLTD FILLISTER HD
17.....	1	14502.....	Pinion, Program Wheel

Item No.	QTY	Part No.	Description
18.....	1	14501.....	Clutch, Drive Pinion
19.....	1	14276.....	Meter Clutch Spring
20.....	1	14253.....	Retainer, Clutch Spring
21.....	3	11384.....	Screw, PHIL, 6-32 x 1/4 Zinc
22.....	1	13881.....	Bracket, Hinge Timer
23.....	3	14087.....	Insulator
24.....	1	15314.....	Switch, Micro
25.....	1	10896.....	Micro Switch
26.....	2	11413.....	Screw, Pan HD Mach, 4-40 x 1 1/8
27.....	1	17870.....	Label, Indicator
28.....	1	15465.....	Label, Caution
29.....	1	15148.....	Label, Instruction
30.....	1	15354-01.....	Wire, Ground, 4"
31.....	1	13880-04.....	Program Wheel
32.....	1	BR15055.....	Gear, Main Drive
33.....	1	15615.....	Harness, 3240, Immediate
34.....	1	15226-6.....	Terminal Strip
35.....	2	15250.....	Label, Terminal Strip

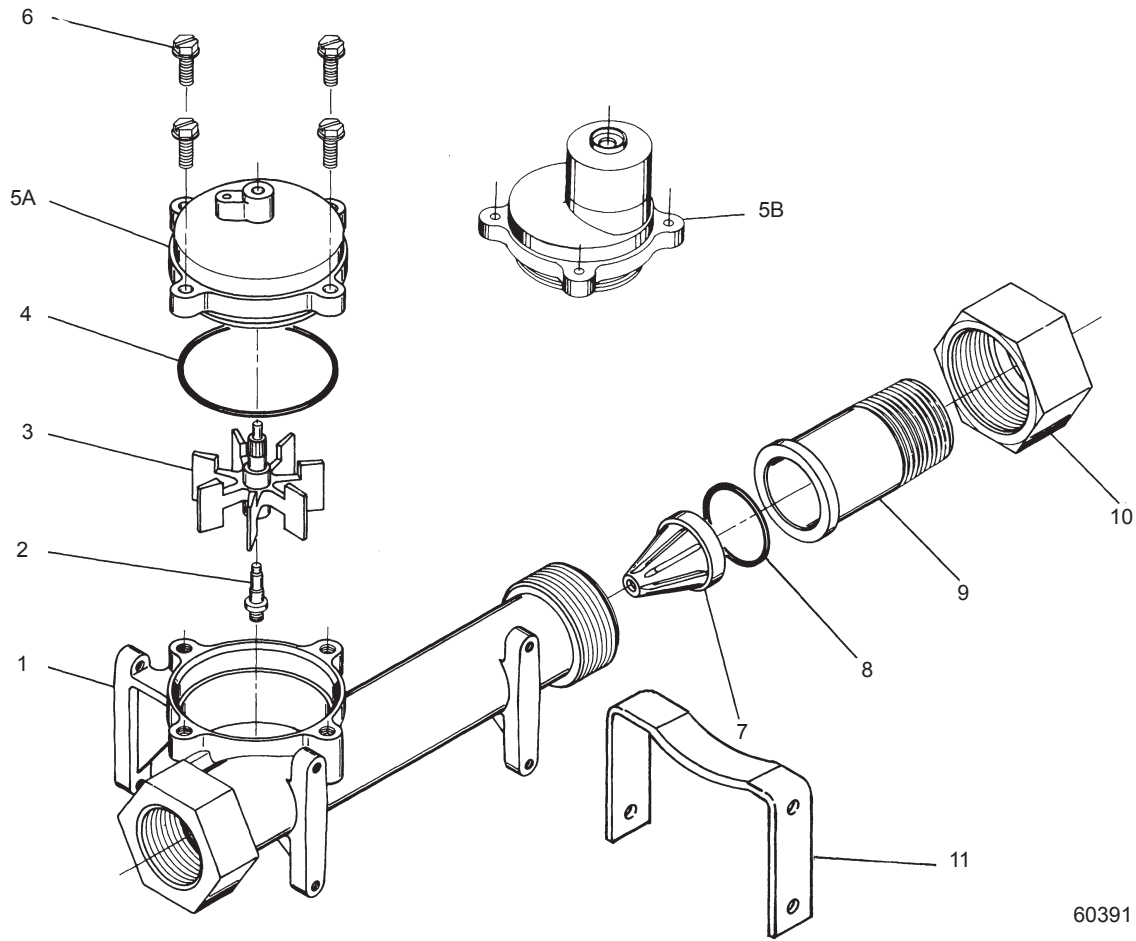
REMOTE METER W/ENVIRONMENTAL COVER



60216-02 Rev A

Item No.	QTY	Part No.	Description
1.....	1	18881.....	Cover, Head
2.....	1	18744.....	Screw, Plastic
3.....	1	18615-02.....	Seal, .125 dia.
4.....	1	18745.....	Window
5.....	4	19203.....	Screw, #6-20 x 7/16"
6.....	1	18716-03.....	Seal, .25 dia.
7.....	1	60216-02.....	Cover Assy, Remote, Black, Items 1, 2, 3, 4, 5, 6 and 8
8.....	1	17845-01.....	Hinged Pin
9.....	1	18679.....	Tapered Cap
10.....	1	19073.....	Backplate, Specify System/Timer
11.....	4	14930.....	Screw, #8-32 x 1/2"
12.....	2	10299.....	Screw, #5-40 x 3/8"
13.....	1	15226-6.....	Terminal Strip (6-Position Gray)
14.....	1	12732.....	Nut, #5-40
15.....	2	17967.....	Fitting, Liquid Tight
16.....	2	15250.....	Label, Terminal Strip
17.....	1	19913.....	Label, Warning

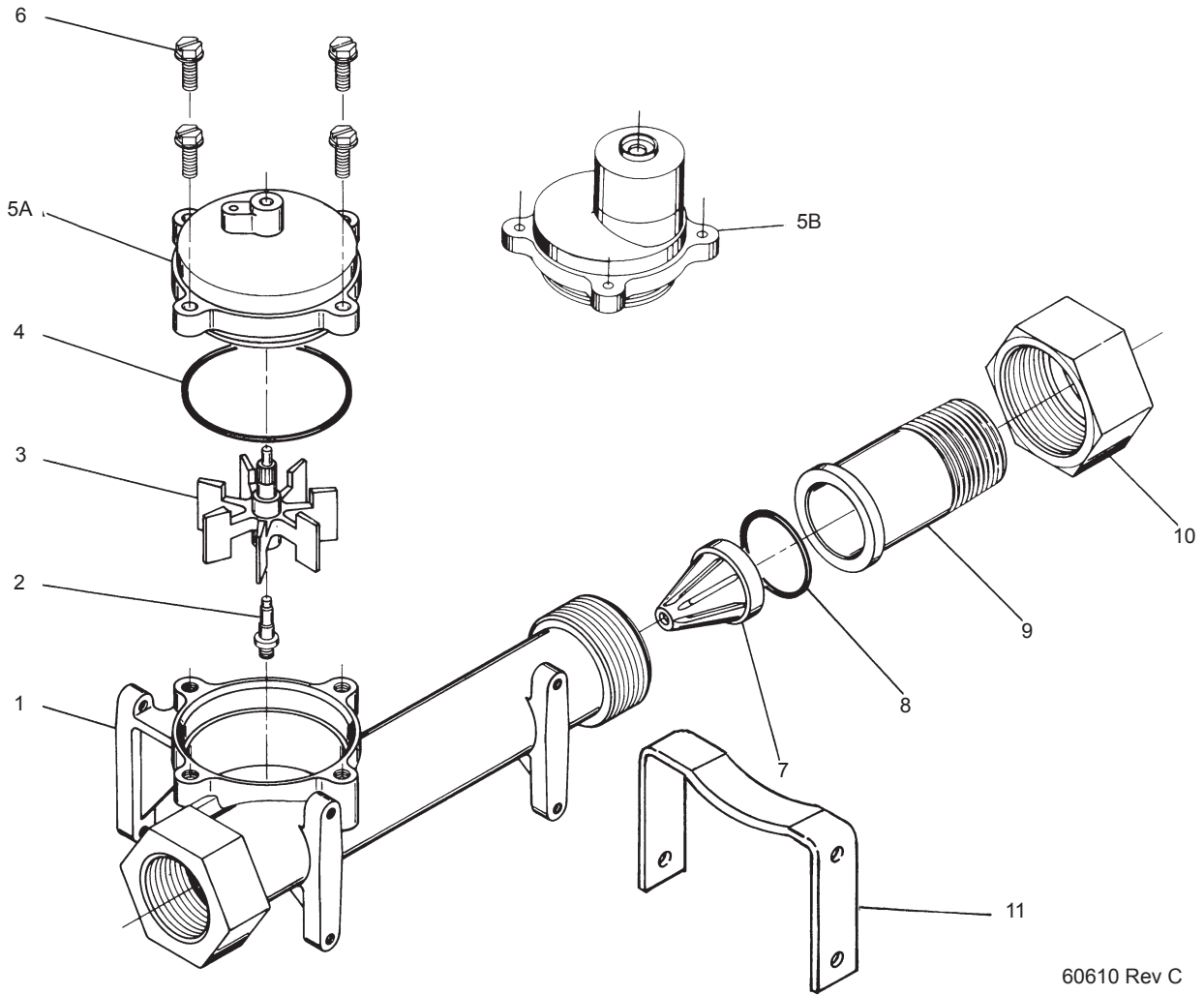
1" METER ASSEMBLY



60391 Rev D

Item No.	QTY	Part No.	Description
1.....	1	14959.....	Meter Body
2.....	1	13882.....	Post
3A.....	1	13509.....	Impeller
3B.....	1	13509-01.....	Impeller, HW
4.....	1	13847.....	O-ring - Meter Cover
5A.....	1	14038.....	Meter Cap Assy, Std, Plastic
	1	15218.....	Meter Cap Assy, Std, Brass, Hot Water
5B.....	1	15150.....	Meter Cap Assy, Ext, Plastic
	1	15237.....	Meter Cap Assy, Ext, Brass, Hot Water
6A.....	4	12473.....	Screw, Plastic Meter Cap Assy
6B.....	4	12112.....	Screw - Brass Meter Cover
7.....	1	14960.....	Flow Straightner
8.....	1	13287.....	O-ring - Quick Connect
9.....	1	14961.....	Nipple - Quick Connect
10.....	1	14962.....	Nut - Quick Connect
11.....	1	15371.....	Reverse Mounting Bracket (Optional as needed)

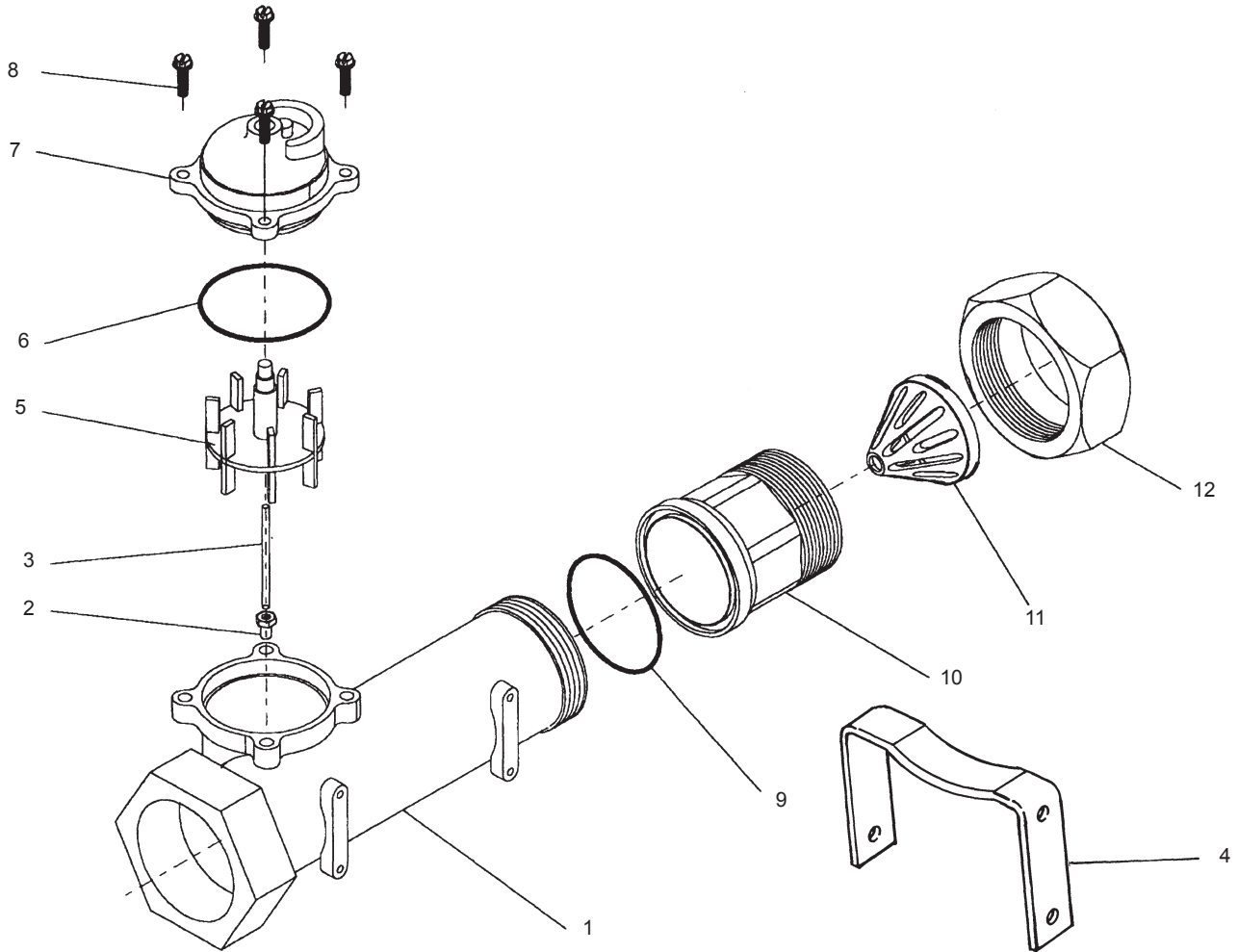
1-1/2" METER ASSEMBLY



60610 Rev C

Item No.	QTY	Part No.	Description
1.....	1	17569.....	Meter Body
2.....	1	13882.....	Post
3A.....	1	13509.....	Impeller
3B.....	1	13509-01.....	Impeller, HW
4.....	1	13847.....	O-ring - Meter Cover
5A.....	1	14038.....	Meter Cap Assy, Std, Plastic
	1	15218.....	Meter Cap Assy, Std, Brass, Hot Water
5B.....	1	15150.....	Meter Cap Assy, Ext, Plastic
	1	15237.....	Meter Cap Assy, Ext, Brass, Hot Water
6A.....	4	12473.....	Screw, Plastic Meter Cap Assy
6B.....	4	12112.....	Screw - Brass Meter Cover
7.....	1	17542.....	Flow Straightner
8.....	1	12733.....	O-ring
9.....	1	17544.....	Nipple - Quick Connect
10.....	1	17543.....	Nut - Quick Connect
11.....	1	15371.....	Reverse Mounting Bracket

2" BRASS METER ASSEMBLY



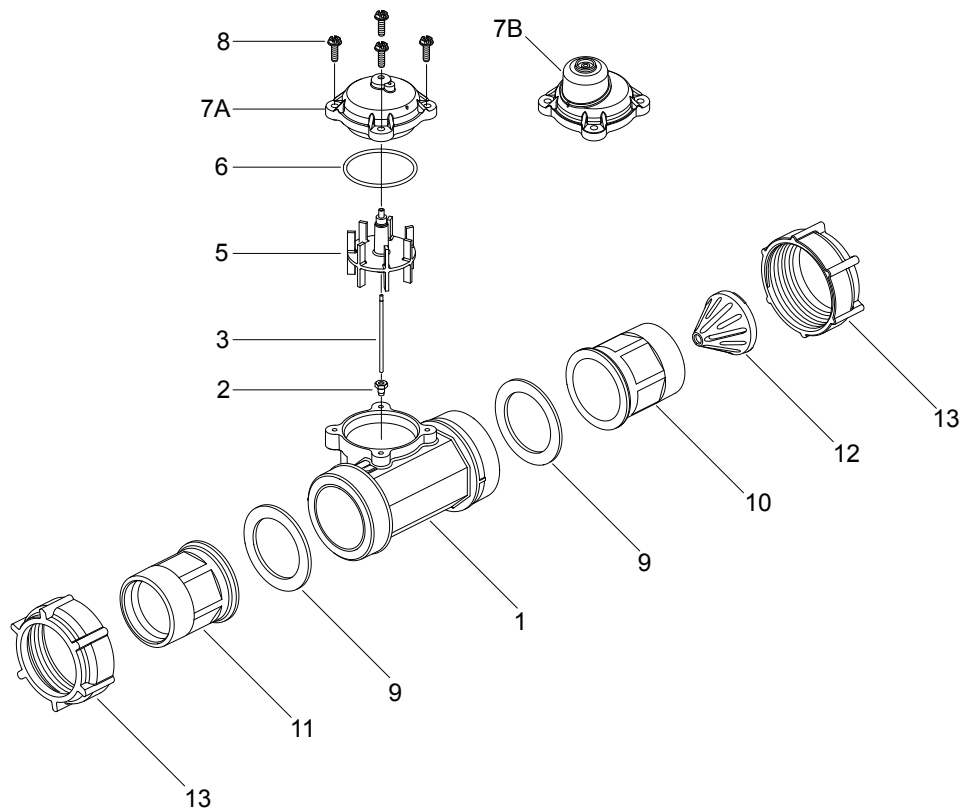
60393 Rev E

Item No.	QTY	Part No.	Description
1.....	1	14456.....	Meter Body
2.....	1	15532.....	Impeller Shaft Retainer
3.....	1	15432.....	Impeller Shaft
4.....		14955.....	Reverse Mounting Bracket (Optional as needed)
5.....	1	15374-01.....	Impeller
6.....	1	13847.....	O-ring - Meter Cover
7.....	1	14038.....	Meter Cap Assy, Std, Plastic
8.....	4	12473.....	Screw, Plastic Meter Cap Assy
9.....	1	14679.....	O-ring - Quick Connect
10.....	1	14568.....	Nipple - Quick Connect
11.....	1	14680.....	Flow Straightener
12.....	1	14569.....	Nut - Quick Connect

Not Shown

1	15150.....	Meter Cap Assy, Ext, Plastic
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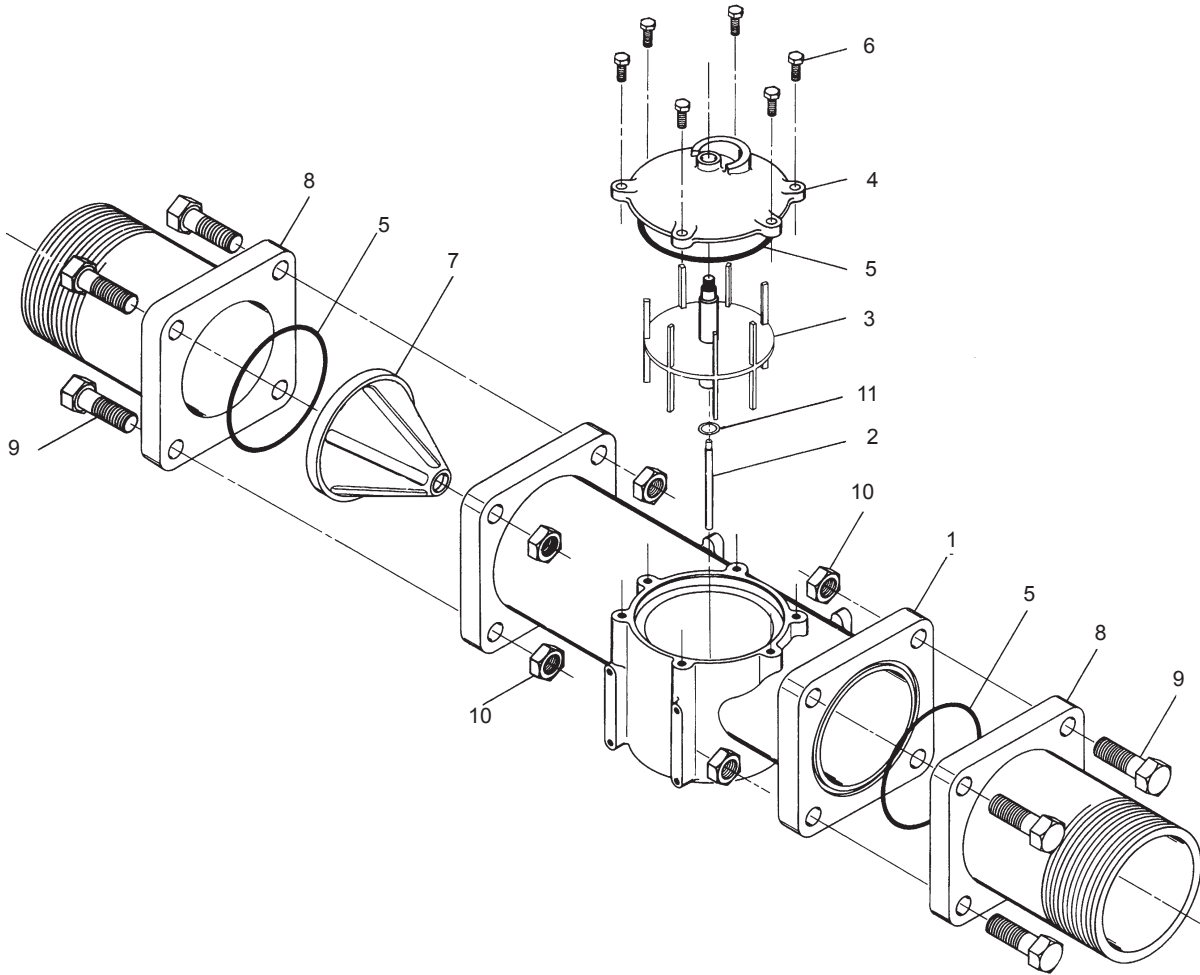
2" METER ASSEMBLY



60621 Rev B

Item No.	QTY	Part No.	Description
1	1	17689	Body, Meter, 2" Plastic w/ Impeller Shaft Seat
2	1	15532	Seat, Impeller Shaft, Hex
3	1	15432	Shaft, Impeller, Stainless Steel
5	1	15374-01	Impeller Assy, 2" Meter
6	1	13847	O-ring, - 137, Std/560CD, Meter
7A	1	14038	Meter Cap Assy, Std, Plastic
7B		15150	Meter Cap Assy, Ext, Plastic
8	4	12473	Screw, Hex Wsh, 10-24 x 5/8 18-8 Stainless Steel
9	2	40666	Seal, Face, 2", Plastic Meter
10	1	17987-001	Fitting, Nipple, 2", Plastic, NPT, Machined, Flow Straightener
	1	17987-101	Fitting, Nipple, 2", Plastic, BSP, Machined, Flow Straightener
	1	14568-01	Fitting, Nipple, 2", Brass
11	1	17987-000	Fitting, Nipple, 2", Plastic, NPT
	1	17987-100	Fitting, Nipple, 2", Plastic, BSP
	1	14568-01	Fitting, Nipple, 2", Brass
12	1	14680	Flow Straightener
13	2	17988	Nut, 2" Meter

3" METER ASSEMBLY

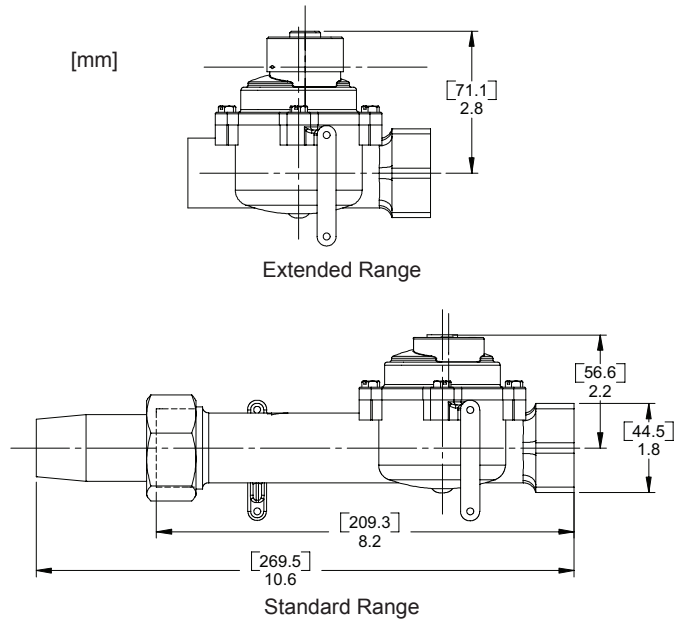


60608 Rev F

Item No.	QTY	Part No.	Description
1.....	1	16254.....	Body, Meter, 3900, NPT
	1	16254-20.....	Body, Meter, 3900, Metric
2.....	1	16279.....	Impeller Shaft
3.....	1	16575.....	Impeller Assembly
4.....	1	16400.....	Meter Cover Assembly - Std.
	1	16401.....	Meter Cover Assembly - Ext. Range
5.....	3	15707.....	O-ring - 236
6.....	6	12112.....	Screw - Hex Hd.
7.....	1	16280.....	Flow Straightener
8.....	2	16328.....	Adapter, Flange, 3", NPT
	2	16328-10.....	Adapter, Flange, 3", BSP
9.....	8	16042.....	Screw - Hex. Hd.
10.....	8	16386.....	Nut - 1/2-13
11.....	1	16574.....	Washer, Thrust

DIMENSION DRAWINGS

Meter Assy, 1" MECH

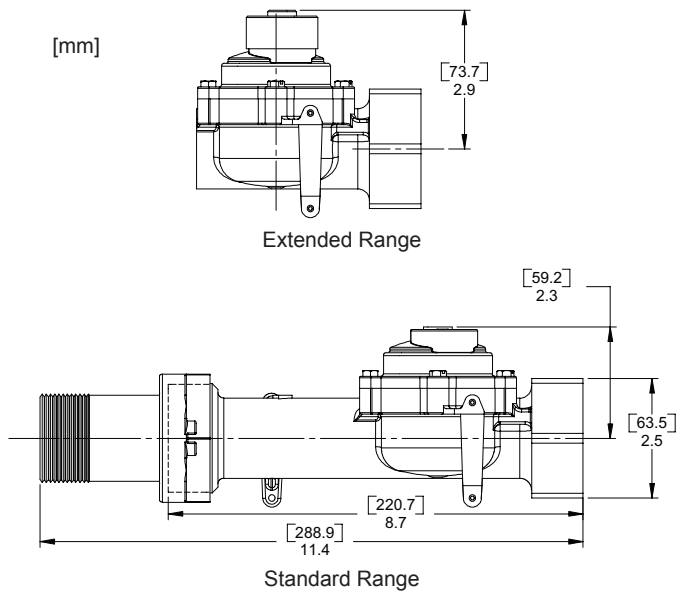


61500-60391LNE Rev A

1" Brass Mechanical Meter and Flow/Pressure Loss Data

Standard Range: 310 gal. minimum to 5,270 gal. max.
 Extended Range: 1,550 gal. minimum to 26,350 gal. max.
 Flow Accuracy: $\pm 5\%$ 0.7 to 40 gpm

Meter Assy, 1 1/2" MECH

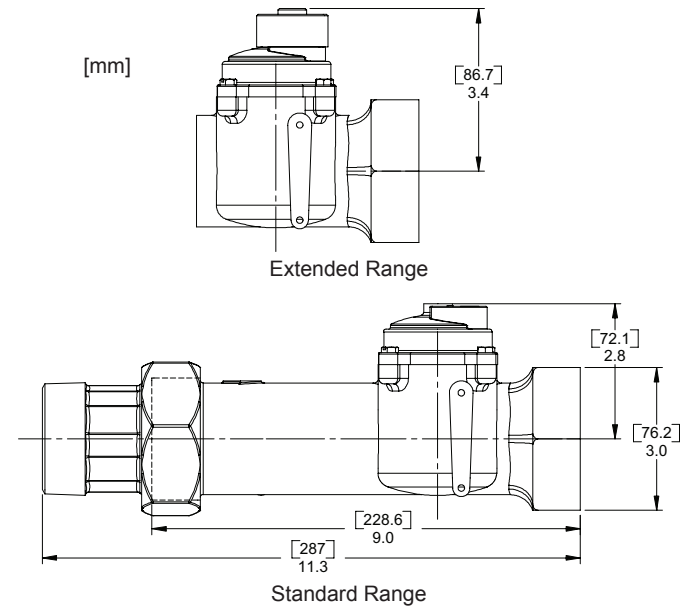


61500-60610LNE Rev A

1-1/2" Brass Mechanical Meter and Flow/Pressure Loss Data

Standard Range: 625 gal. minimum to 10,625 gal. max.
 Extended Range: 3,125 gal. minimum to 53,125 gal. max.
 Flow Accuracy: $\pm 5\%$ 1.5 to 75 gpm

Meter Assy, 2" MECH

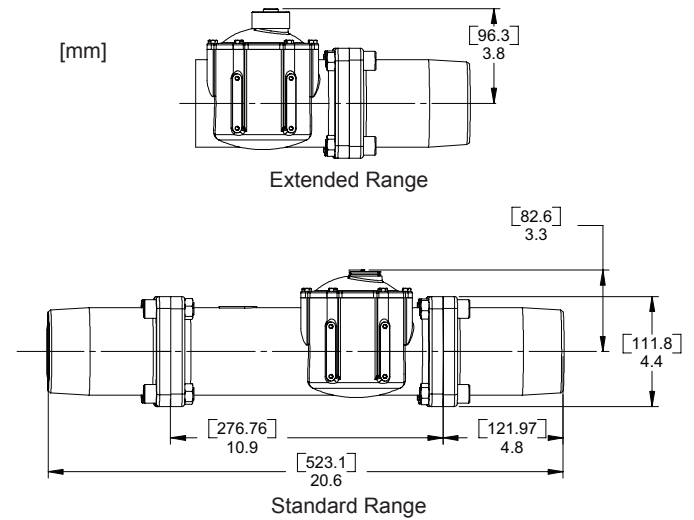


61500-60393LNE Rev A

2" Brass and Plastic Mechanical Meter and Flow/Pressure Loss Data

Standard Range: 1,250 gal. minimum to 21,250 gal. max.
 Extended Range: 6,250 gal. minimum to 106,250 gal. max.
 Flow Accuracy: $\pm 5\%$ 3 to 150 gpm

Meter Assy, 3" MECH



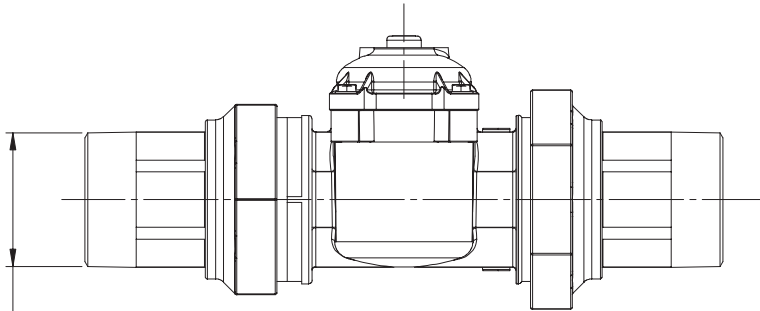
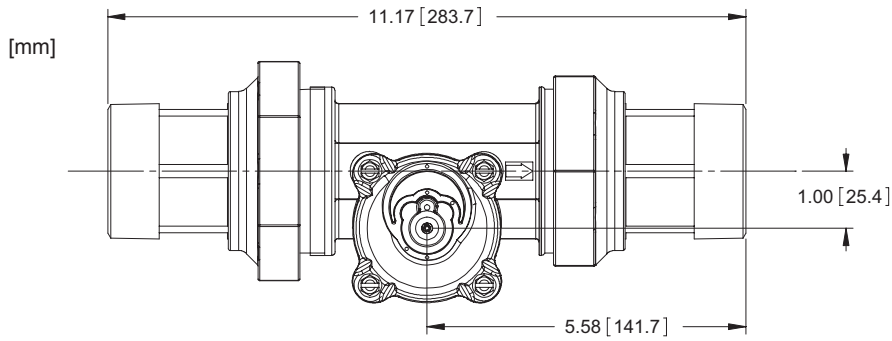
61500-60608LNE Rev A

3" Brass Mechanical Meter and Flow/Pressure Loss Data

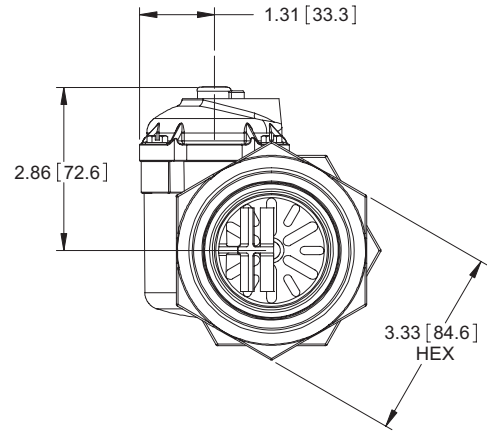
Standard Range: 3,750 gal. minimum to 63,750 gal. max.
 Extended Range: 18,750 gal. minimum to 318,750 gal. max.
 Flow Accuracy: $\pm 5\%$ 7 to 300 gpm

ENGINEERING DRAWINGS

Line Drawing, Meter Assy, 2" Plastic with Plastic Nipples

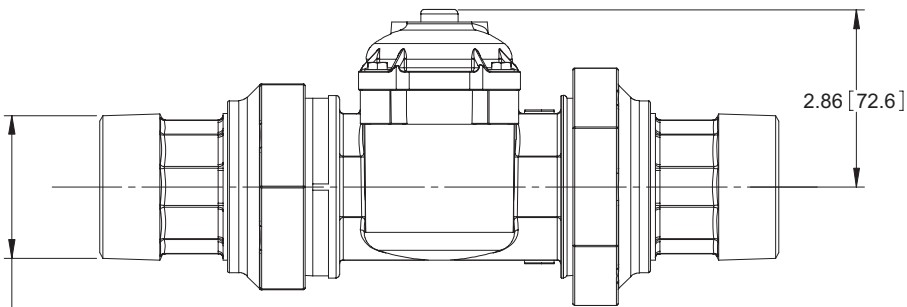
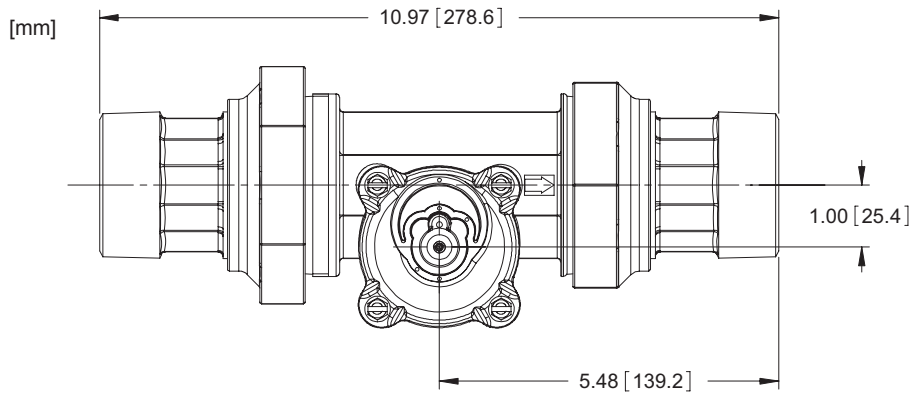


2" NPT OR 2" BSP THREADS BOTH ENDS.
PLASTIC

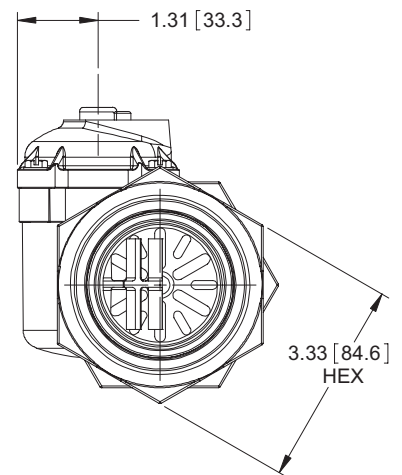


61500-60620LNE Rev A

Line Drawing, Meter Assy, 2" Plastic with Brass Nipples



2" NPT OR 2" BSP THREAD BOTH ENDS.
BRASS



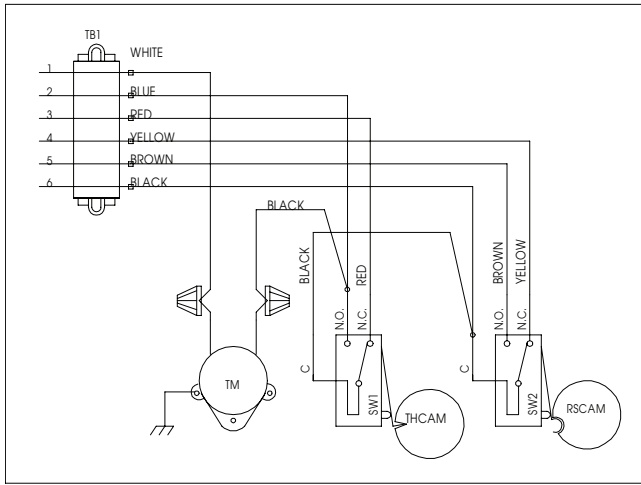
61500-60620LNE Rev A

REMOTE METER WIRING

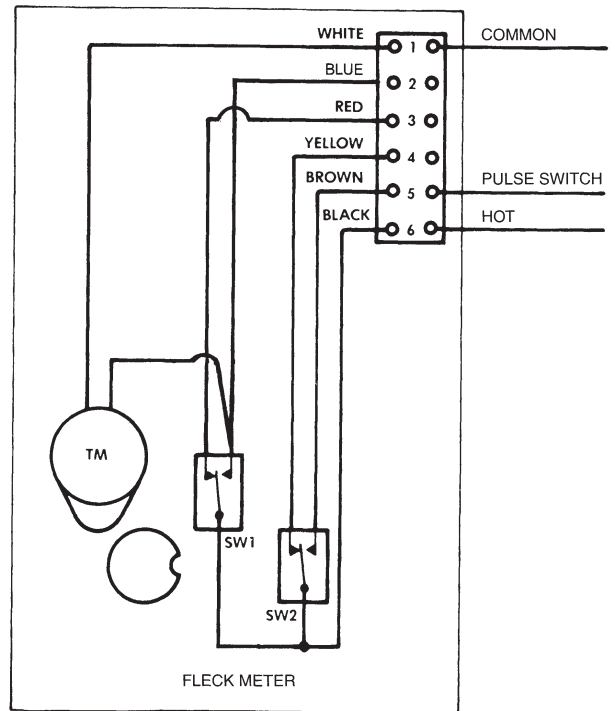
Immediate Regeneration — Internal Wiring

For Time Clock override, a 2-5 minute signal to terminal "2" will reset the Meter.

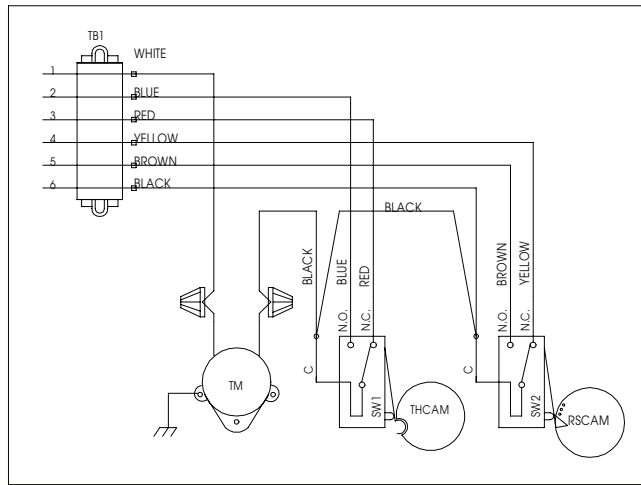
NOTE: See wiring diagram enclosed with valve for proper meter to valve wiring.



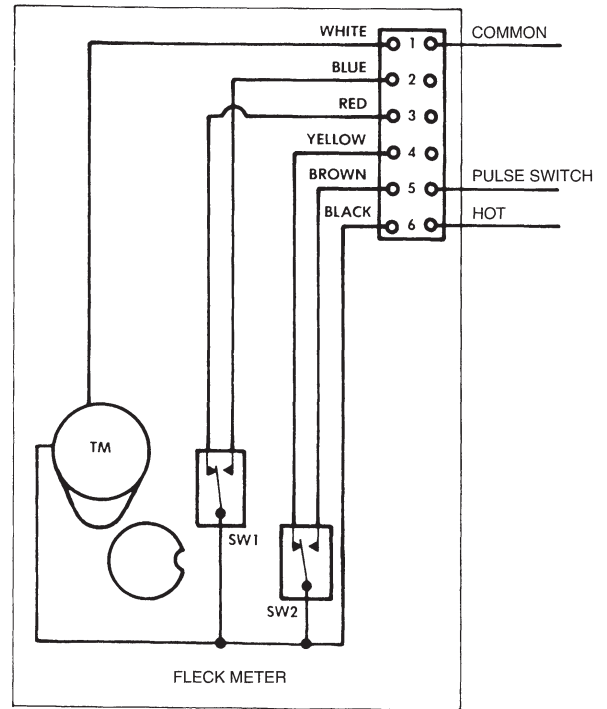
15234 Rev D



Delayed Regeneration — Internal Wiring

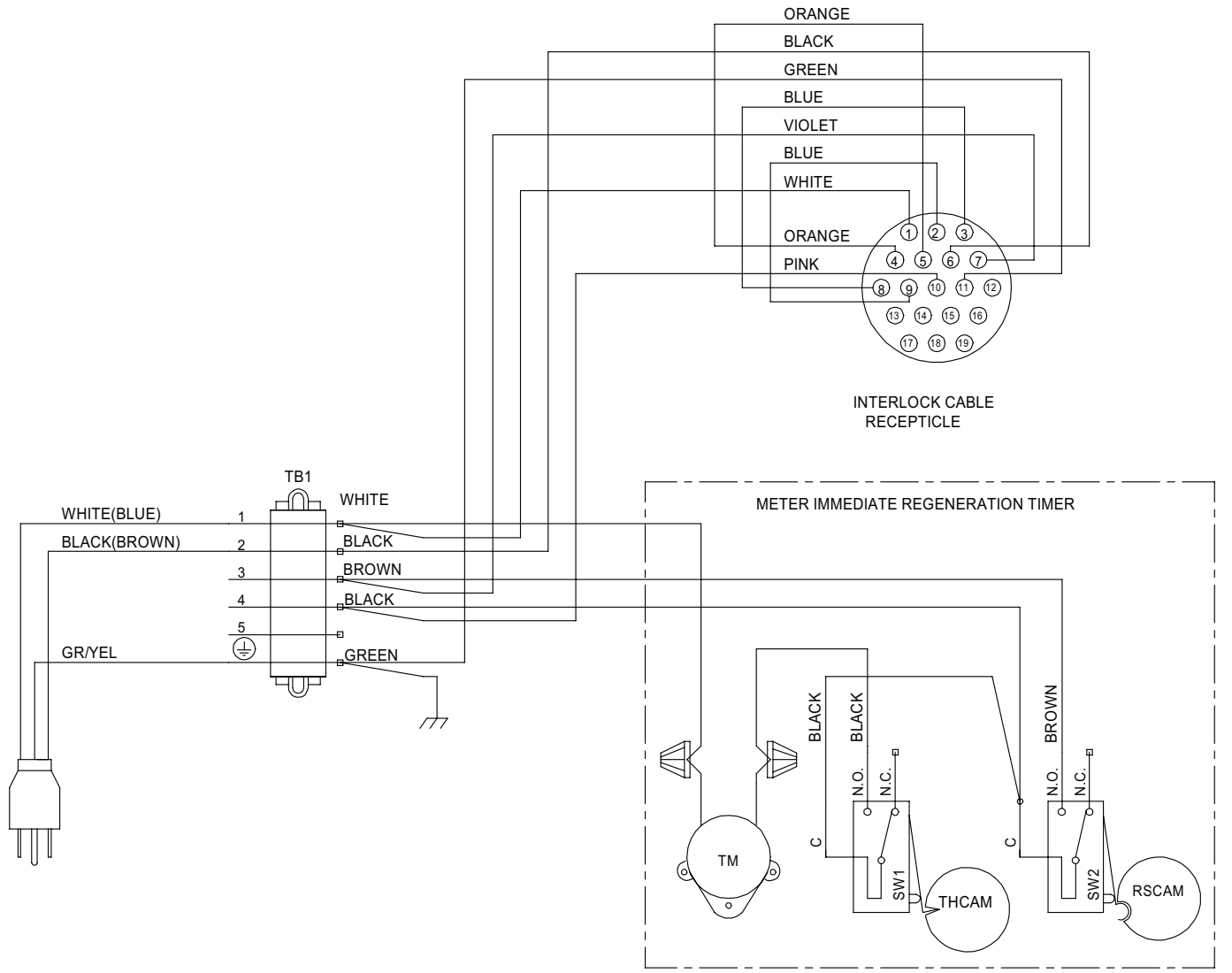


15234 Rev D



REMOTE METER WIRING *continued*

Wiring Diagrams, Sys 7 Multi, Remote Meter



16249 Rev F

SERVICE ASSEMBLIES

Back Plates:

19073.....	Backplate, Hinged
19073-01	Backplate, Hinged, w/19 Pin
19073-02	Backplate, Hinged, Remote Meter 3200 Timer-Mechanical
19073-03	Backplate, Hinged, Remote Meter

Covers:

60216-02	Cover Assy, Environmental
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Gallon Wheel Assemblies:

60405-20	3/4" Ext Range (0-10,000)
60405-30	1" Std Range (0-5,000)
60405-40	1" Ext Range (0-25,000)
60405-20	1.5" Std Range (0-10,000)
60405-70	1.5" Ext Range (0-50,000)
60405-50	2" Std Range (0-21,000)
60405-60	2" Ext Range (0-100,000)
60405-80	3" Std Range (0-60,000)
60405-90	3" Ext Range (0-300,000)

Meter Assemblies

60391.....	Meter Assy, 2750
60392.....	Meter Assy, 2750, 1" Ext
60610-01	Meter Assy, 2850/9500, 1.5" Std
60610-02	Meter Assy, 2850/9500, 1.5" Ext
60610-21	Meter Assy, 1.5", Std, Brass, Metric
60610-22	Meter Assy, 1.5", Ext, Brass, Metric
60393.....	Meter Assy, 2900, 2" Std
60393-20	Meter Assy, 2", Std, Brass, Metric
60394.....	Meter Assy, 2900, 2" Ext
60394-20	Meter Assy, 2", Ext, Brass, Metric
60608-01	3" 3900 Meter Assy, Std Range
60608-02	3" 3900 Meter Assy, Ext Range
60608-21	Meter Assy, 3", Std, Brass, Metric
60608-22	Meter Assy, 3", Ext, Brass, Metric
60620.....	Meter Assy, 2", Plastic, Std
60620-01	Meter Assy, 2", Plastic, Std, Plastic w/Brass Nipples
60621.....	Meter Assy, 2", Plastic, Ext, Plastic w/Plastic Nipples
60621-01	Meter Assy, 2", Ext, Plastic w/Brass Nipples

Meter Cables:

	Std	Ext
1" Std Mount.....	15526	15526
1" Rev Mount.....	14910	15455
1.5" Std Mount.....	15526	15526
1.5" Rev Mount.....	17629	17629
2" Std Mount.....	15455	15455
2" Rev Mount.....	17629	15455
2" Plastic Std Mount	14043	14043
2" Plastic Rev Mount	15455	15455
3" Std Mount.....	17629	17629
3" Rev Mount.....	15526	15526

Spare cable sent to allow change in orientation of remote meter.

*Ext meter gets 1 cable.

Meter Caps:

14038.....	Meter Cap Assy, .75" to 2", Plastic, Std
15150.....	Meter Cap Assy, .75" to 2", Plastic, Ext
15218.....	Meter Cap Assy, .75" to 2", Brass, Std
15237.....	Meter Cap Assy, .75" to 2", Brass, Ext
16400.....	Meter Cap Assy, 3", Brass, Std
16401.....	Meter Cap Assy, 3", Brass, Ext

Meter Checker Kits

60460.....	Meter Checker Kit, .75" to 2", Std Range
60461.....	Meter Checker Kit, .75" to 2", Ext Range
60462.....	Meter Checker Kit, 3" Std & Ext Range
60463.....	Meter Checker Kit, .75 to 2", Std & Ext Range Combined

Timer Assemblies:

3240 Configured	Remote Meter Immediate
3250 Configured	Remote Meter Delay

TROUBLESHOOTING

Issue	Possible Cause	Corrective Action
No gallon registration on meter.	Defective gear box in dome.	Check with meter checker. Replace dome assembly.
	Stuck impeller due to foreign material, pipe dope, flux, etc, causing the impeller not to rotate.	Check with meter checker. Remove and clean impeller.
	Meter cable not inserted in meter dome or in meter reset timer.	Insert meter cable in dome and meter reset timer.
	Low flows: Less than 0.7 gpm for 1" Less than 1.5 gpm for 1.5" Less than 3.0 gpm for 2" Less than 7.0 gpm for 3"	Consult factory.
	Improper installation.	See installation section.
No pulse from meter unit.	No power to meter (test terminals 1 & 6 - should read line voltage).	Check wiring to meter. Check wiring at control valve.
	Defective switch	Immediate pulse models replace switch P/N 15320-180 & 90 min., 10896 - 6 min. Delayed pulse models replace switch P/N 15320
	Defective reset motor.	Replace motor.
Extended or continuous pulse.	Defective reset motor.	Replace reset motor.
	Defective pulse switch.	Immediate pulse models replace switch P/N 15320-180 & 90 min., 10896 - 6 min. Delayed pulse models replace switch P/N 15320
Softener running into hard water before meter sends pulse.	Capacity of softener not set-up properly.	Readjust salt settings for proper capacity. See softener mfg. set-up instructions.
	Incorrect gallon setting.	Check raw water hardness and unit capacity recalculate gallons.
	Not enough reserve capacity for Delayed Pulse meter.	Adjust meter setting to a lower gallon setting.
	Low flows: Less than 0.7 gpm for 1" Less than 1.5 gpm for 1.5" Less than 3.0 gpm for 2" Less than 7.0 gpm for 3"	Consult factory.

