



# SILEX WALL MOUNT DEIONIZER

## OPERATION & INSTALLATION MANUAL



**Manufactured With Pride**

**In The USA**

[www.amerewater.com](http://www.amerewater.com) • 800-535-5585

AmeriWater LLC • 3345 Stop 8 Rd. • Dayton, OH 45414

98-0160C



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# SECTION 1, GENERAL INFORMATION

## 1.1 INTRODUCTION

### Your Deionizer System

#### How does the deionizer work?

Your system is simple and maintenance-free. When your monitor light signals that the water quality has dropped below the desired quality; just exchange the resin cartridges.

#### What is a deionizer?

To fully appreciate deionization and how it works, we must first look at the contaminants found in our water supply and what purification processes may be needed, in addition to deionization, to provide the level of water purity for your specific application.

Because pure water is the “supreme solvent”, it actively gathers contaminants from everything it passes over or through. Dissolved ionized solids such as Sodium ( $\text{Na}^+$ ), Calcium ( $\text{Ca}^+$ ), and Chloride ( $\text{Cl}^-$ ) are stripped from rock and soil. Organic molecules are gathered from decaying debris and environmental pollutants. Particles include organic debris, dirt and rust from soil and piping; bacteria and microbes (including pyrogens) from normal growth in water; dissolved ionized gases such as Chlorine ( $\text{Cl}_2$ ) and Carbon Dioxide ( $\text{CO}_2$ ) from water treatment and organic decay; and colloids from rock and sand. All of these contaminants are present in varying concentrations in water. Each presents different problems to users depending upon their application.

Ionic contaminants are dissolved within the chemical structure of water. Dissolved ionized solids and dissolved ionized gases are removed using ion exchange resin, which act like tiny magnets stripping ions from water, replacing them with H and OH ions which ultimately join to form water ( $\text{H}_2\text{O}$ ). Ion exchange resins are synthetic polymers with many ion exchange sites attached to the surface.

## What is resistivity/conductivity?

The majority of impurities in potable water are in the form of disassociated ionized mineral salts, such as NaCl and CaCO<sub>3</sub>. Because such ions carry an electrical charge, their presence is directly related to the ability of the water to conduct electricity (conductivity). Conversely, their relative absence is directly proportional to the water's inability to conduct electricity, or its resistivity. Hence, resistivity, (and its reciprocal, conductivity) are the best parameters by which to gauge the quality of purified water.

Resistivity is measured in ohms/cm and its reciprocal, conductivity is measured in mhos/cm or siemens. It is important to realize that resistivity and conductivity are measures of only ionic impurities and are not affected by particulates, bacteria, or other organic contamination.

## **SECTION 2, INSTALLATION OF SYSTEM**

### **2.1 INSTALLATION**

The Ameriwater Wall Mount Deionizer should be installed on a wall capable of supporting 50 pounds.

1. Designate a location on the wall for the wall mount bracket, preferably close to a floor drain and within 6 feet from a 120 volt 60 hertz receptacle.
2. Assembly should be level when mounted to the wall.
3. Connect the inlet water supply to the ½" ball valve.
4. Connect tubing to the swivel outlet fitting.
5. Make sure that the deionizing cartridges are installed in the filter housing and that the bowls are hand tightened only.
6. Plug transformer into the receptacle and open the inlet and sample port valves.
7. Run water thru cartridges until water flows through the sample port and the resistivity light turns GREEN then close the sample port.
8. If leaks occur, tighten all fittings associated with the leaks.
9. Remember to always follow the local plumbing codes.

## **SECTION 3, CARTRIDGE REPLACEMENT**

### **3.1 REPLACEMENT**

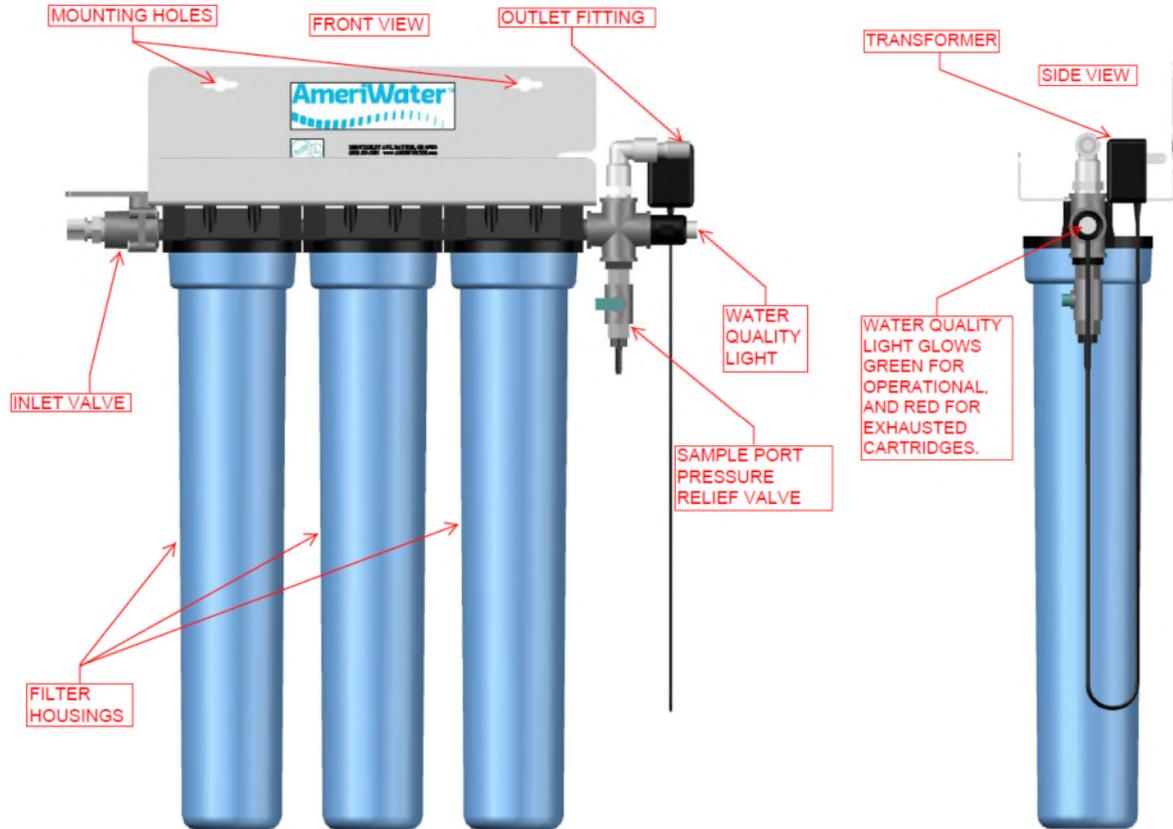
1. Turn off the water supply and open the sample port to relieve water pressure.
2. Slide the supplied filter wrench up from the bottom of the filter housing while placing one hand on the front of the wall bracket.
3. Turn the handle from right to left to loosen and remove each filter bowl.
4. Pour water from filter bowls into the drain and remove the spent cartridges.
5. Unwrap the new cartridges and place into filter bowls. Make sure that the filter bowl o-rings are not damaged and in place. It is acceptable to apply a small amount of non-petroleum based lubricant on the o-rings before reinstalling the filter bowls. (repeat steps 7-8 in section 2.1)

**NOTE - DISPOSE OF CARTRIDGES IN A SAFE MANNER**

## SECTION 4, SYSTEM DRAWINGS

### FRONT AND SIDE VIEWS

### 00MW50, 00MW200 and 00MW1000 SILEX WALL MOUNT DEIONIZER



# EXPLODED VIEW OF ALL MODELS

**NOTES:**

1. ALWAYS COMPARE THE WORK ORDER TO ON HAND DRAWINGS, TEST PROCEDURES, FORMS AND BOM TO ASSURE THAT THE CORRECT REVISION LEVEL IS BEING BUILT.
2. REFER TO P-WKI #17 FOR SEALING THREADED CONNECTIONS. DO NOT OVERTIGHTEN FITTINGS.
3. ATTACH BRACKET TO FILTER HEADS AFTER FITTINGS HAVE BEEN INSTALLED ON THE HEADS.
4. ATTACH AMERIOWATER LABEL AS SHOWN.
5. SHIP ITEM NUMBERS 3, 13, 16, 17, AND 18 WITH THE COMPLETED ASSEMBLY.

REV	DATE	DESCRIPTION	INIT
A	19MAR13	ORIGINAL ISSUE	SFW

AWI P/N	ITEM#	QTY	DESCRIPTION
98-0160	18	1	MANUAL,SILEX,WALL MOUNTED DEIONIZER
08530818	17	12'	TUBING,.380D,NYLON,250PSI,BLACK
10520804	16	3	JACO,CON,.5MPTX.38T,PPG
10-L353	15	1	LEGRIS REDUCER, 0.5T X .38T
99-0052	14	1	LABEL, AMERIOWATER TM
21675184	13	1	WRENCH,FILTER,10" OR 20"
937302	12	12	SCREW 8-18 X 1IN. TRUSS HEAD ZINC PLATED
10-L107	11	1	LEGRIS SWIVEL EL,MALE, 0.5T X 0.5MPT
75679115	10	1	RESISTIVITY LIGHT 50K
10521027	9	1	ADPT,CON,.25STEMX.25HB
041002	8	1	VAL,BALL,.25,MPTXFPT,PVC80
046530201	7	1	BUSH,.5X.25,THRD,PP
044-0057	6	1	CROSS,.5 THRD.,SST304
041610050	5	3	NIPPLE,.5XCL.,PVC80
041720199	4	1	VAL,BALL,.5,MPTXFPT,PVC80,EPDM
20-6001	3	3	FILTER CARTRIDGE,MIXED BED 0.20"x2.5",11000 mg/L
21-0032	2	3	FLTR,HOUS,#20 "SLIMLINE", BLUE/BLK,.50/0,NO PR
21-0041	1	1	BRACKET,MOUNTING,3 HOOSING,ALUMINUM,FR #20 SLIM LINE BLUE

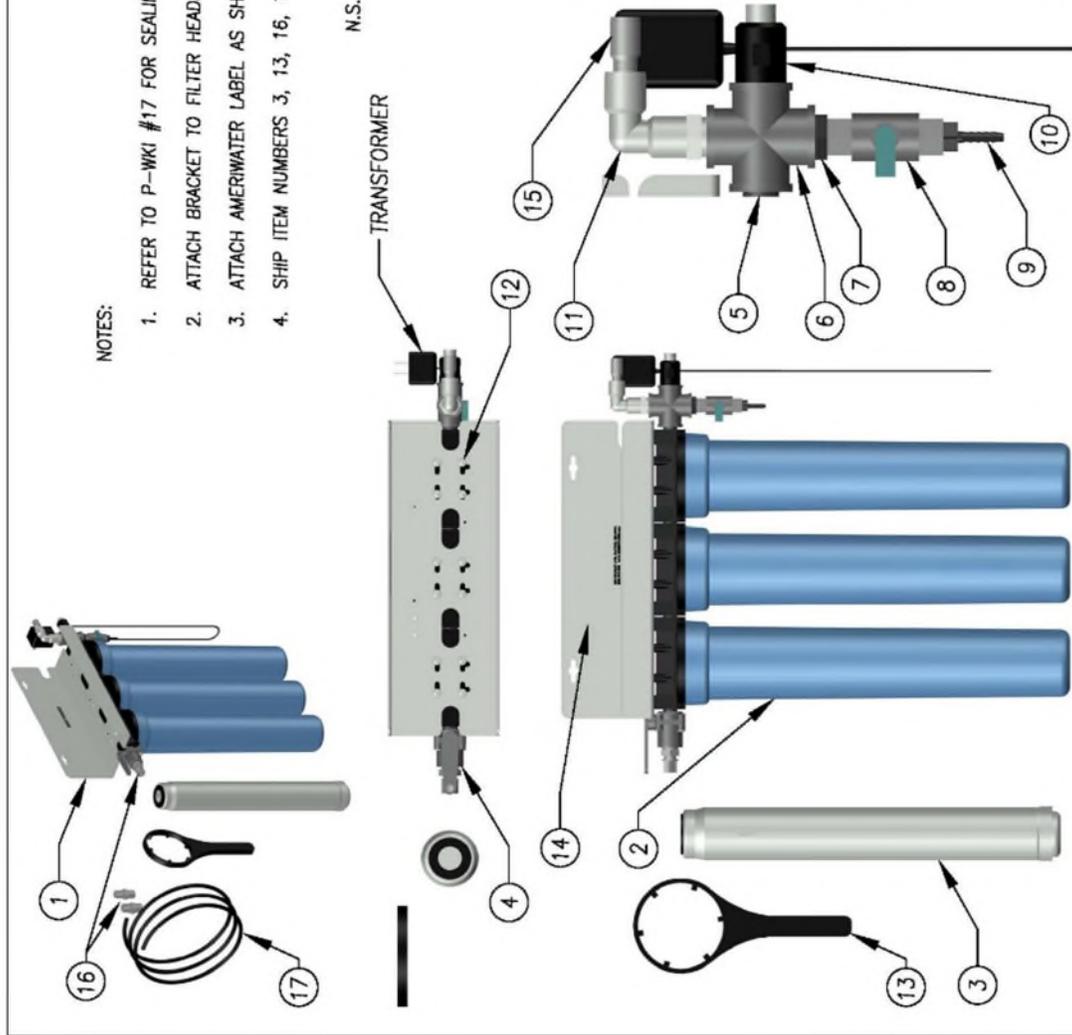
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 www.amerewater.com

DRAWN BY: STEVE WEBER  
 DATE: 19MAR13  
 SHEET 1 OF 1  
 S/O# NA  
 SCALE: FULL  
 OOMW50A

REV	DATE	DESCRIPTION	INIT
A	17JULY17	ECR 2017-068	BS
-	-	-	-

NOTES:

1. REFER TO P-WKI #17 FOR SEALING THREADED CONNECTIONS. DO NOT OVERTIGHTEN FITTINGS.
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N.S.

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937302	12	12	SCREW 8-18 X 1IN. TRUSS HEAD ZINC PLATED
10-L107	11	1	LEGRIS SWIVEL EL, MALE, 0.5T X 0.5MPT
75679120	10	1	RESISTIVITY LIGHT 200K
14760335	9	1	ADPT, .25MPTX.25HB, PP
041002	8	1	VAL, BALL, .25, MPTXFPT, PVC80
046530201	7	1	BUSH, .5X.25, THRD, PP
044-0057	6	1	CROSS, .5 THRD., SST304
041610050	5	3	NIPPLE, .5XCL, PVC80
041720199	4	1	VAL, BALL, .5, MPTXFPT, PVC80, EPDM
20-6001	3	8	FILTER CARTRIDGE MIXED BED DI, 20X2.5, 11000 mg/L
21-0032	2	3	FLTR, HOUS, #20 "SILMINE", BLUE/BLK, .50/0, NO PR
21-0041	1	1	BRACKET, MOUNTING, 3 HOUSING, ALUMINUM FOR #20 SILMINE BLUE

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DRAWN BY: BRIAN SMITH  
 DATE: 17JULY17  
 S/O# NA

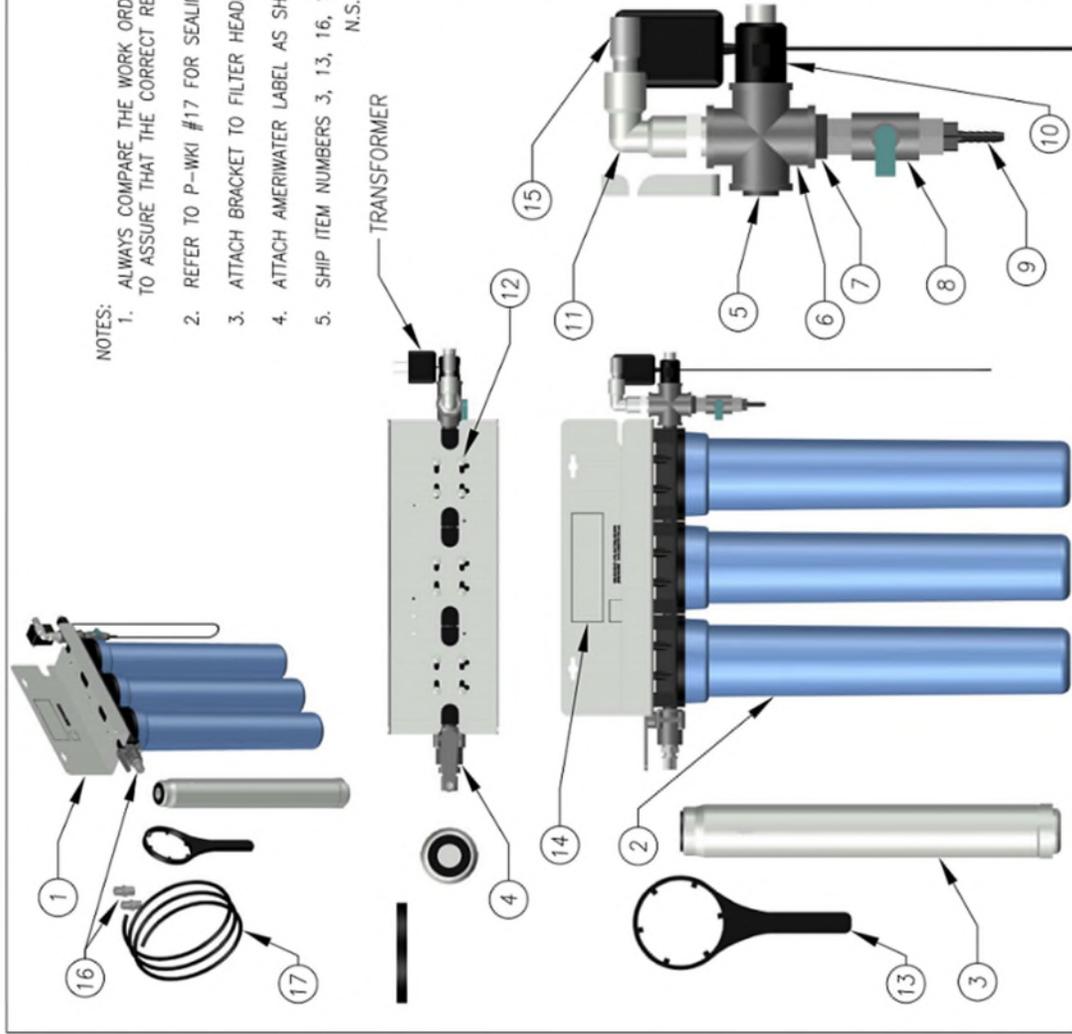
SILEX WALL MOUNTED DEIONIZER  
 200K RESULITE & 3 MIXED BED CARTRIDGES  
 OOMW200A

SCALE: FULL  
 SHEET 1 OF 1

REV	DATE	DESCRIPTION	INIT
A	19MAR13	ORIGINAL ISSUE	SFW
A	29APR15	DCR 2015-015	BS

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21675184	13	1	WRENCH,FILTER,10" OR 20"
937302	12	12	SCREW 8-18 X 1IN. TRUSS HEAD ZINC PLATED
10-L107	11	1	LEGRIS SWIVEL EL,MALE, 0.5T X 0.5MPT
75679110	10	1	RESISTIVITY LIGHT 1 MEG
14760335	9	1	ADPT.,25MPTx.25HB,PP
041002	8	1	VAL,BALL,.25,MPTXFPT,PVC80
046530201	7	1	BUSH,.5X.25,THRD,PP
044-0057	6	1	CROSS,.5 THRD.,SST304
041610050	5	3	NIPPLE,.5XCL,PVC80
041720199	4	1	VAL,BALL,.5,MPTXFPT,PVC80,EPDM
20-6001	3	3	FILTER CARTRIDGE,MIXED BED DI,20"x2.5",1000 mg/L
21-0032	2	3	FLTR,HOUS,#20 "SILLINE", BLUE/BLK, .50/O,NO PR
21-0041	1	1	BRACKET,MOUNTING,3 HOUSING,ALUMINUM,OR #20 SLM LINE BLUE

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 S/O# NA SCALE: FULL

## SECTION 5, PARTS LIST

20-6001	2.5" X 20" MIXED BED DI FILTER CARTRIDGE, EACH
75676110	RESISTIVITY LIGHT 1 MEG OHM
75679120	RESISTIVITY LIGHT 200K OHM
75676115	RESISTIVITY LIGHT 50K OHM
041002	.25" MPT X FPT PVC80 BALL VALVE
041720199	.5" MPT X FPT PVC80 BALL VALVE
08530818	.38" O.D. BLACK NYLON TUBING
21675184	FILTER WRENCH
21-0040	FILTER HOUSING O-RING

### OPTIONAL FOR CARBON PRE FILTER

21-0044	2.5" X 10" FILTER HOUSING W/BRACKET AND PR
20-5101	CARBON BLOCK, 10 $\mu$ , 2.5" X 10", DOE CARTRIDGE

**Contact your local authorized AmeriWater dealer to order parts or request service. If you do not know who your dealer is, please contact AmeriWater at 800-535-5585.**



## **SECTION 6, DISINFECTION OF THE UNIT**

### **DISINFECTION PROCEDURE**

AmeriWater recommends that you disinfect your deionizer periodically to ensure continuous high-quality water is produced. To disinfect the system, follow these easy steps:

1. Remove the three filter cartridges from their housings.
2. Pour a half cup of bleach in the filter housing closest to the water inlet.
3. Place filter housings back on the system.
4. Close the system completely.
5. Turn on the water to flush the bleach through the system until bleach is present at the outlet sample port.
6. Turn off the water and allow the system to soak for 30 minutes.
7. After 30 minutes, remove all three filter housings and dump the water down a drain.
8. Place the filter housings back on the system.
9. Turn the water supply on to flush out the deionizer. Allow water to flow until there is no presence of bleach at the outlet sample port.
10. Drain the deionizer and verify that all standing water in the system is removed.

Apart from the regular filter cartridge exchange and system disinfection, your deionizer requires no maintenance.

In the event your deionizer system is damaged, contact your local AmeriWater dealer to order replacement parts.

## SECTION 7, WARRANTY INFORMATION

AmeriWater warrants their products to be free from defects in parts and workmanship for one year; provided that the product is not subject to abuse, misuse, alteration, neglect, freezing, accident or negligence; and provided further that the product is not damaged as the result of any unusual force of nature such as, but not limited to, flood, hurricane, tornado, or earthquake. This warranty covers all product components, with the exception of the cartridges, under normal use and operation. AmeriWater's obligation under this warranty is limited to the replacement of equipment and/or parts shown to be defective only. The warranty does not cover labor charges or travel expenses resulting from the service of equipment. The manufacturer is excused if failure to perform its warranty obligations is the result of strikes, government regulation, materials shortages, or other circumstances beyond its control.

To obtain warranty service, notice must be given to the manufacturer within 30 days of the discovery of the defect. Each product for which a warranty claim is asserted shall, at the request of AmeriWater, be returned freight prepaid with proof of purchase date to AmeriWater at the expense of the purchaser. Any replacement parts shall be warranted as stated above for the original one-year warranty.

There are no warranties on AmeriWater products beyond those specifically described above. All implied warranties, including any implied warranty of merchantability or of fitness for a particular purpose are disclaimed to the extent they might extend beyond the above periods. The sole obligation of the manufacturer under these warranties is to replace or repair the component or part which proves to be defective within the specified time period, and the manufacturer is not liable for consequential or incidental damages. No dealer, agent, representative, or other person is authorized to extend or expand the warranties expressly described above.

Some states do not allow limitations on how long an implied warranty lasts or exclusions or limitations of incidental or consequential damage, so the limitations and exclusions in the warranty may not apply to you. This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.