



# LANCASTER

## WATER TREATMENT

### INSTALLATION, OPERATING AND SERVICE MANUAL

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### ECOSENSE RESIDENTIAL ANTI-SCALE SYSTEM WITH THE D1400 1" IN/OUT HEAD

- 7-UFAS-011
- 7-UFAS-016
- 7-UFAS-026



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Congratulations on purchasing your new **Lancaster Anti-Scale System**. This unit is designed to give you many years of trouble free service. When installed in accordance with the following instructions and if given reasonable care, reduced scale in your water system/piping will be the result. For servicing and future inspection purposes, please file this booklet with your important documents. In the event that you need assistance for servicing your anti-scale system, please first contact the professional contractor who installed the system.

**OPERATING PARAMETERS:**

- Water pressure: 12-125 psi.
- Water temperature: 34°F-120°F.
- pH range: 6.0-9.0.
- Maximum hardness: 25 grains per gallon.
- Hydrogen sulfide, iron and manganese must be pretreated.
- Maximum chlorine 3ppm. De-chlorination is recommended.
- Do not exceed recommended flow rates.
- Designed for intermittent flows. For continuous flows please contact Lancaster Water Treatment.
- Additional equipment will be needed if using a tankless water heater. Consult factory.
- Conservative life expectancy of the mineral is 5 years minimum based on meeting the above parameters.

**PACKAGING:** All systems are shipped from the factory in cartons.

**COMPONENTS:** Fiberglass mineral tank, in/out head, installation fitting package, distributor tube assembly, mineral.

MODEL NUMBER	MAXIMUM SERVICE FLOW	MEDIA CU.FT. (LBS.)	MINERAL TANK (DIA. x HT.)
7-UFAS-011	10 GPM	0.11 (5.0)	8"x44"
7-UFAS-016	15 GPM	0.16 (7.6)	10"x54"
7-UFAS-026	25 GPM	0.26 (12.7)	13"x48"

**INSTALLATION:** Place system in desired location close to water supply inlet keeping far enough away from walls and other obstructions to allow enough room for servicing the unit.

**INSTALL THE ANTI-SCALE SYSTEM AS AN UPFLOW FILTER.**

The words "UPFLOW INLET" and "DOWNFLOW INLET" are molded into the in/out head.

**ADD MINERAL:** Remove the in/out head by turning counter-clockwise. Plug the distributor tube to prevent mineral from entering and add the mineral. Remove plug from the distributor tube and replace the in/out head.

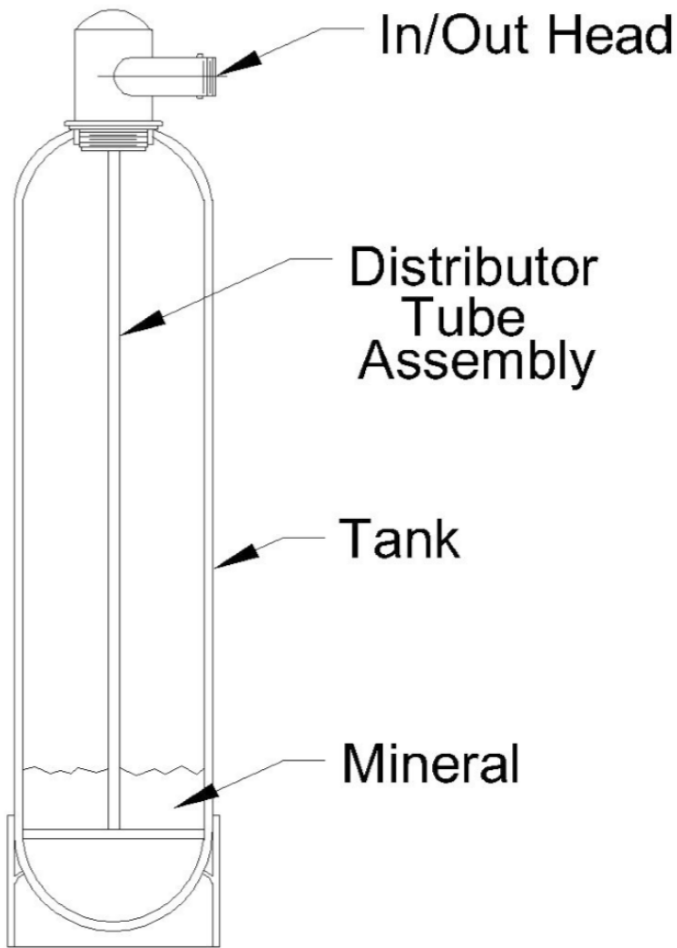
**OPTIONAL BYPASS VALVE:** The use of a bypass valve is recommended for ease of maintenance. The bypass valve connects to the in/out head using nuts that only require hand tightening. Install with red knobs in the upward position. Press end of bypass valve with o-rings into the in/out head. **HAND TIGHTEN NUTS.**

Avoid getting primer and solvent cement on any part of the o-rings, bypass valve or in/out head. **DO NOT** use pipe dope or any other sealant on threads. Teflon tape is not necessary on the caps because of o-ring seal.

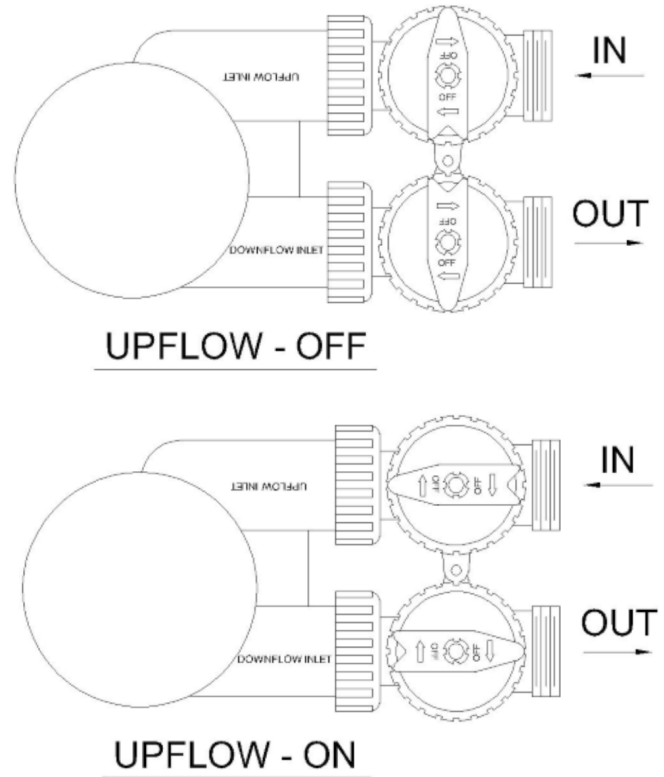
**DO NOT** use Vaseline or other unacceptable lubricants on o-rings. A silicone lubricant may be used on black o-rings.

**FITTING ADAPTER:** V3007 1" PVC Male NPT elbow assembly comes standard with each unit. Other options available (see page 4).

When assembling the installation fitting package (inlet and outlet), connect the fitting to the plumbing system first and then attach the nut, split ring and o-ring. Heat from soldering or solvent cements may damage the nut, split ring and o-ring. Solder joints should be cool and solvent cements should be set before installing the nut, split ring and o-ring. **Avoid** getting primer and solvent cement on any part of the o-rings, split rings, bypass valve or in/out head.



**POSITION HANDLES ON OPTIONAL BYPASS:** Orient the red handles on the bypass to point as shown below by lifting red arrow handles straight off of bypass valve and replacing in the proper position.



Turn bypass to the OFF position and connect to water pipes.

**PLACING THE SYSTEM INTO SERVICE:**

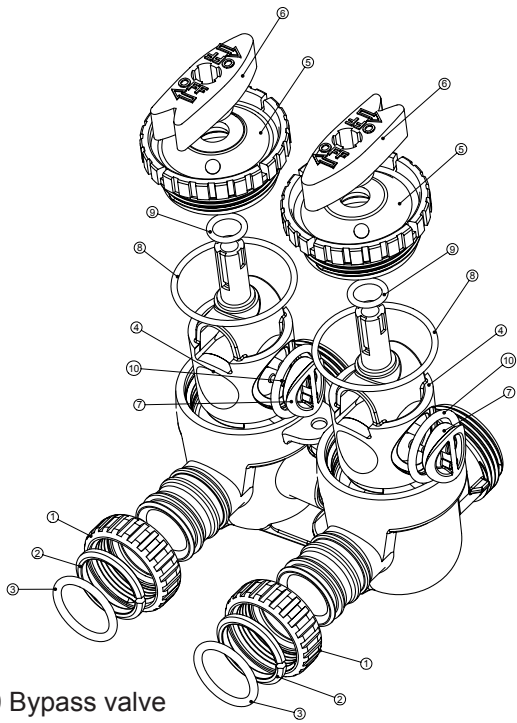
**SLOWLY** turn on water supply to the system. If using the optional bypass valve, slowly turn the bypass to the UPFLOW-ON position. Open nearest cold water faucet and allow water to run until clear. Turn off faucet.

**HOT WATER TANKS** should be drained and flushed after the initial 30-90 days and again in a year to remove the fallen scale in the bottom of the tank caused by the descaling action of the system. Follow the manufacturer's instructions when draining the tank.

**FAUCET** aerators and drains may plug occasionally as old scale is removed from your plumbing system and water heater. Unscrew the aerators to clean the screens, then reinstall. You may also experience milky water while descaling is taking place.

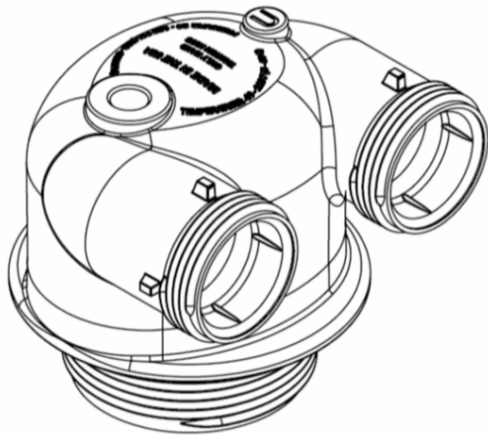
**DISHWASHERS** with existing scale buildup on the sidewalls and washing arm may need to be treated by the use of a product like Jet-Dry® Dishwasher cleaner until all of the scale in the plumbing is dissolved. You may find unusual initial spotting because of the descaling taking place.

***This system is not a water softener.*** Low or phosphate-free cleaning products are recommended to achieve optimum results.



BP2000 Bypass valve

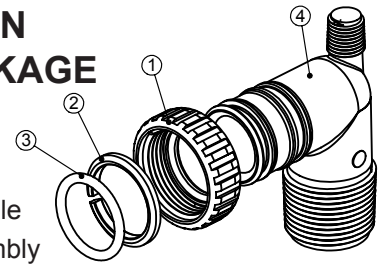
Item No.	Qty.	Part No.	Description
1	2	V3151	Nut 1" Quick Connect
2	2	V3150	Split Ring
3	2	V3105	O-Ring 215
4	2	V3145	Bypass 1" Rotor
5	2	V3146	Bypass Cap
6	2	V3147	Bypass Handle
7	2	V3148	Bypass Rotor Seal Retainer
8	2	V3152	O-Ring 135
9	2	V3155	O-Ring 112
10	2	V3156	O-Ring 214



D1400  
1" In/Out Head Assembly

Item No.	Qty.	Part No.	Description
1	1	D1400	Body Assembly
2	1	V3105	Distributor Tube O-Ring
3	1	V3180	Body O-Ring
4	1	D1203	Upper Basket (not shown)

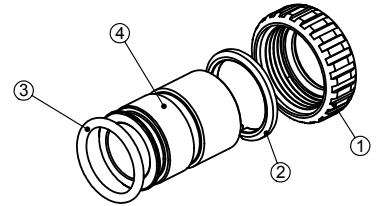
## INSTALLATION FITTING PACKAGE



V3007 1" PVC Male  
NPT Elbow Assembly

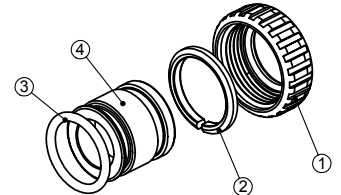
Item No.	Qty.	Part No.	Description
1	2	V3151	Nut 1" Quick Connect
2	2	V3150	Split Ring
3	2	V3105	O-Ring 215
4	2	V3149	PVC Mans NPT Elbow

OPTIONAL:  
V3007-02 1" Brass  
Sweat Assembly



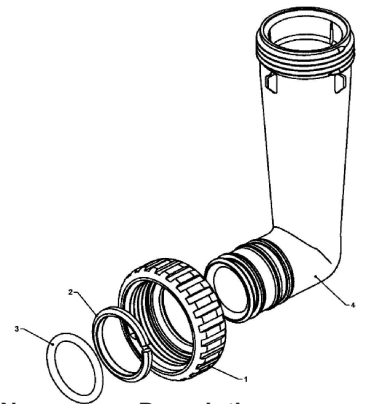
Item No.	Qty.	Part No.	Description
1	2	V3151	Nut 1" Quick Connect
2	2	V3150	Split Ring
3	2	V3105	O-Ring 215
4	2	V3188	Fitting-1" Brass Sweat

OPTIONAL:  
V3007-02 3/4" Brass  
Sweat Assembly



Item No.	Qty.	Part No.	Description
1	2	V3151	Nut 1" Quick Connect
2	2	V3150	Split Ring
3	2	V3105	O-Ring 215
4	2	V3188-01	Fitting-3/4" Brass Sweat

OPTIONAL:  
V3191-01 Vertical  
Adapter Assembly



Item No.	Qty.	Part No.	Description
1	2	V3151	Nut 1" Quick Connect
2	2	V3150	Split Ring
3	2	V3105	O-Ring 215
4	2	V3191	Vertical Adapter