



Scale Scale Control & Conditioners

Installation and Instruction Manual For:

ST-SCS1
ST-SCS2

ST-SCCS3
ST-SCCS4
ST-SCCS5



Installer: Please leave this manual with owner/operator.

Owner/Operator: Please retain for operation and future maintenance instructions.



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SAFETY INFORMATION

Read, understand, and follow all safety information contained in these instructions prior to installation and use of the ScaleTek Series Housings. Retain these instructions for future reference.

Intended Use:

The ScaleTek Series Scale Control and Conditioner Systems are intended for use in Scale Reduction or Scale / Sediment / Taste & Odor Reduction in potable water and have not been evaluated for other uses. These systems may be installed in front of a water heater, or at Point-of-Entry for whole house applications and must be installed as specified in the installation instructions.

EXPLANATION OF SIGNAL WORD CONSEQUENCES	
 WARNING	Indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury and/or property damage.
 CAUTION	Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury and/or property damage.
CAUTION	Indicates a potentially hazardous situation, which, if not avoided, may result in property damage.

 WARNING	
To reduce the risk associated with choking:	
<ul style="list-style-type: none"> • Do not allow children under 3 years of age to have access to small parts during the installation of this product. 	
To reduce the risk associated with the ingestion of contaminants:	
<ul style="list-style-type: none"> • Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system. 	
To reduce the risk associated with hazardous voltage due to an installer drilling through existing electric wiring or water pipes in the area of installation:	
<ul style="list-style-type: none"> • Do not install near electric wiring or piping which may be in path of a drilling tool when selecting the position to mount the filter bracket. 	
To reduce the risk of physical injury:	
<ul style="list-style-type: none"> • Depressurize system as shown in manual prior to cartridge removal. 	

CAUTION	
To reduce the risk associated with property damage due to water leakage:	
<ul style="list-style-type: none"> • Read and follow Use Instructions before installation and use of this system. • Installation and Use MUST comply with all state and local plumbing codes. • Protect from freezing, remove filter cartridge when temperatures are expected to drop below 40°F (4.4°C); • Do not install on hot water supply lines. The maximum operating water temperature of this filter system is 100°F (37.8°C). • Do not install if water pressure exceeds 125 psi (862 kPa). If your water pressure exceeds 80 psi (552 kPa), you must install a pressure limiting valve. Contact a plumbing professional if you are uncertain how to check your water pressure. • Do not install where water hammer conditions may occur. If water hammer conditions exist, you must install a water hammer arrester. Contact a plumbing professional if you are uncertain how to check for this condition. • Do not use a torch or other high temperature sources near filter system, cartridges, plastic fittings or plastic plumbing. • On plastic fittings, use an approved pipe sealant or pipe dope. Use PTFE thread tape is widely acceptable • Take care when using pliers or pipe wrenches to tighten plastic fittings, as damage may occur if overtightening occurs. • Do not install in direct sunlight or outdoors. • Do not install near water pipes which will be in path of a drilling tool when selecting the position to mount the bracket. • Mount filter in such a position as to prevent it from being struck by other items used in the area of installation. • Ensure that the location and fasteners will support the weight of the system when installed. • Ensure all tubing and fittings are secure and free of leaks. 	

IMPORTANT NOTES	
<ul style="list-style-type: none"> • Failure to follow instructions may void warranty. • Allow a minimum of 2" (5 cm) clear space under filter to facilitate cartridge change. • Install with the inlet and outlet ports as labeled. Make sure not to reverse connections. • The filter system may be used with metallic or non-metallic piping systems. Any non-metallic fittings used for the installation must be of adequate rating for the line pressure. 	

Procedure for Installing Filter:

The ScaleTek Series Scale Control and Conditioner Systems require an external shut-off valve installed before the system. Housing styles come with 1" or 1½" NPT ports, wrench, and mounting bracket.

Filter System Assembly:

1. Turn off incoming water supply.

IMPORTANT NOTES
<ul style="list-style-type: none">• Mount bracket onto filter head. Use mounting holes provided to mount system to a wall or support structure.

2. Connect the incoming water supply to the filter system's inlet water connection. Be careful not to Cross Thread.
3. Connect the outlet port of the system to the outlet water line. Be careful not to Cross Thread.
4. After all connections are complete, if cartridge is not already installed, install cartridge, referring to the cartridge replacement instructions on following page, if necessary.
5. Turn on incoming water to the system.

IMPORTANT NOTES
<ul style="list-style-type: none">• Pressurize system. Check for leaks. Retighten connections if necessary.• ScaleTek Series Scale Control: It is recommended that the unit be flushed for approximately 5 minutes in order to remove entrapped air.• ScaleTek Series Scale Control and Conditioner Systems: Flush as above. Conditioner Systems <u>may</u> require longer flushing periods if carbon fines are still observed after flushing for 5 minutes.

6. System is now ready for service.

Cartridge Replacement Instructions

NECESSARY MAINTAINANCE

- To retain optimal system performance, the disposable filter cartridge(s) **MUST** be replaced every 6 to 12 months, or at the rated capacity, or if a noticeable reduction in flow rate occurs, or line pressure downstream of filter system drops below 20 psi (138 kPa).
- Refer to Page 6 of this manual to determine correct replacement cartridges for your system.

1. Turn off incoming water supply.

IMPORTANT NOTES

- On ALL ScaleTek Series depress the pressure relief button(s) on top of filter head(s) to relieve pressure in filter housing(s)

2. Unscrew sump from filter head. Empty water from sump and dispose of spent cartridge.
3. Clean and inspect all components, including the o-ring seal. Lubricate o-ring seals with a light coating of food grade lubricant. Replace o-ring if there is visible damage.
4. Install new cartridge into sump. For ScaleTek Series Scale Control and Conditioner Systems, make certain cartridge #1 (Scale Cartridge) is installed in Sump #1 and Cartridge #2 (Conditioner Cartridge) is installed in Sump #2.
5. Screw sump(s) into head(s) until sump becomes snug and cartridge is sealed. **HAND TIGHT IS USUALLY SUFFICIENT.**
6. Turn on incoming water supply.

IMPORTANT NOTES

- Wait until the filter is filled with water and check for leaks. Snug with sump wrench if small leak is observed.
- Open and close the valve once to release trapped air. Depress pressure relief button on filter head until air is purged from system.
- ScaleTek Series Scale Control: It may be necessary that the unit be flushed for approximately 5 minutes in order to remove entrapped air.
- ScaleTek Series Scale Control and Conditioner Systems: Flush as above. Conditioner Systems may require longer flushing periods if carbon fines are still observed after flushing for 5 minutes.

7. System is now back in service.

Cartridge Selection Guide

The ScaleTek Series Scale Control and Conditioner Systems are designed to use only ST-4510,4520,4510-K, or 4520-K replacement cartridges. Use of replacement cartridges other than those specified below may seriously compromise water quality and/or cartridge life.

Replacement Cartridges for Scaletek Series Scale Control and Conditioner Systems

Model No.	Cart. Part No.	Micron	Description	GPM Capacity
ST-SCS1	ST-4510	N/A	Scale reduction cartridge	10
ST-SCS2	ST-4520	N/A	Scale reduction cartridge	18
ST-SCCS3	ST-4510-K*	5 Nominal	Scale/Particulate/Taste & Odor reduction cartridges	10
ST-SCCS4	ST-4520-K*	5 Nominal	Scale/Particulate/Taste & Odor reduction cartridges	18
ST-SCCS5	ST-4520-K*	5 Nominal	Scale/Particulate/Taste & Odor reduction cartridges	18

*Includes Scale Cartridge & Conditioning cartridges packaged as a kit

Parts and Accessories:

Part #	Description
AT-BBOR	Oring
AT-BBW	Wrench
AT-BBMB	Bracket for ST-SCS1 and ST-SCS2
AT-DBBMB	Bracket for ST-SCCS3, ST-SCCS4, and ST-SCCS5