

A. J. ANTUNES & CO. www.ajantunes.com 180 Kehoe Blvd., Carol Stream, Illinois 60188

# TAC-05 SYSTEM (P/N 9700905)

#### PARTS INCLUDED:

- 1 TAC 20" Blue Housing (P/N 2180254)
- 1 TAC Housing Head Bracket with Filter Head Screws (P/N 0504359)
- 1 Filter Wrench (P/N 2180226)
- 2 Stem Adaptor (P/N 2190154)
- 2 Male Connector (P/N 2190157)
- 1 Giant Bowl O-Ring Kit (P/N 7000556)
- 1 TAC-05 Cartridge Single (P/N 7000554)
- 1 Installation Instructions (P/N 1010462)

#### TOOLS:

- · Mounting Hardware (Not Provided)
- · Drill with Bits
- Tape Measure
- · Pipe Wrenches
- · Adjustable Wrenches
- · Level
- Pipe Dope, Thread Seal Tape, or Thread Sealing Cord
- Screwdriver (Flat Blade and Phillips)
- Two Gallon Bucket
- Fresh 6% Unscented Liquid Chlorine Bleach

## General

If you experience any problems with these instructions, or if any parts are damaged or missing, contact the factory Technical Service Department at 630-784-1000 or toll free in the U.S. at 877-392-7836.

The TAC System improves the quality of the water by addressing scale issues on hot water applications. The TAC System should be installed upstream of equipment using hot water. The TAC system will not affect taste or carbonation and can be installed on lines going to ice and post mix.

## **Equipment Setup**

When installing the system, follow these guidelines:

- Do NOT install above electrical equipment.
- Allow space below the TAC Housing to allow for easy TAC Cartridge replacement.

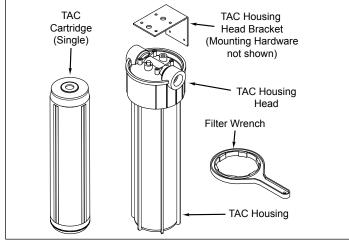


Figure 1. TAC System



Do NOT use this system with water that is microbiologically unsafe or of unknown quality without adequate disinfection installed before or after the system.



CAUTION



This equipment must be installed to comply with the basic plumbing code of the Building Officials and Code Administrators, Inc. (BOCA) and the Food Service Sanitation Manual of the Food and Drug Administration (FDA).



CAUTION A



Water pressure must not exceed 100 psig. To reduce water pressure, install a Water Pressure Regulator and set the water pressure to below 100 psig.

## **PLUMBING**

NOTE: This system is designed to be used on tap water not to exceed 100°F (38°C) or 100 psig (690 kPa). The kit must be connected to the COLD water line. Do NOT connect the kit to the hot water line.

The TAC System has the following connections:

•Inlet: 1" NPT • Outlet: 1" NPT

When making a plumbing connection to the system, use a back-up wrench on the supporting plumbing. Always use a quality, approved pipe sealant or thread seal tape on the pipe threads. Be careful not to get the pipe sealant inside the pipe when making connections.

Do NOT over tighten the connections. The use of plastic fittings when connecting to the plastic head will reduce the possibility of cracking the head due to over tightening.

If soldered plumbing is used, do NOT apply heat to, or near, the filter head. The use of union (O-ring seal) connections is highly recommended for ease of installation and future servicing.

Fittings included with the system can be used on both the Inlet and/or Outlet of the TAC Housing Head. It is recommended that thread seal cord and pipe dope be used on the 1" NPT thread. When attaching the Stem Adaptor to the head, do NOT overtighten the fitting.

The Male Connector can be attached to the Stem Adaptor to create a 3/4" NPT male thread connection. Push the Male Connector onto the Stem Adaptor, making sure the Male Connector is fully seated on the Stem Adaptor (about 1.5"). If the Male Connector needs to be removed from the Stem Adaptor, push the collet on the Male Connector squarely against the face of the fitting. With the collet pushed in place, remove the Male Connector from the Stem Adaptor.

Thread seal tape and pipe dope are recommended on 3/4" NPT threads. When attaching the inlet and outlet plumbing to the Male Connector, do NOT overtighten the connection.

## **INLET WATER PLUMBING**

The plumbing leading to the TAC System must be flushed clear of all debris before connecting to the TAC Housing Head inlet. Hold a bucket at the inlet water line and slowly open the inlet water valve. Allow the pipe to flush until all debris is removed.

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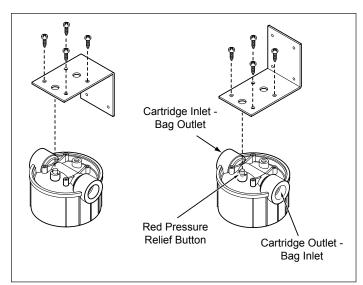


Figure 2. Mounting Bracket Position

## MOUNTING THE SYSTEM

Before mounting the TAC System, please consider the following:

- The system must be mounted with sufficient access to replace the TAC Cartridge. The TAC Housing is 22 inches tall. An additional 3 inches should be allowed below the blue bowl to allow proper access when changing cartridges.
- The system must be mounted with hardware capable of supporting 20 lbs or more of weight.
- The mounting bracket supplied with the system can be mounted either up or down (Figure 2). The bracket comes with screws for attaching the bracket to the TAC Housing Head. These special thread-forming screws should only be used for mounting the head to the bracket.
- If installing the mounting bracket face down, be sure to attach the mounting bracket to the wall before attaching it to the head.
- The TAC Housing Head can be mounted with the inlet on the left or on the right. When the inlet is on the left, the Red Pressure Relief Button is at the front. Consult the top of the TAC Housing Head and note that the inlet connection is labeled "Cartridge Inlet - Bag Outlet" (Figure 2).
- The TAC System must be installed upstream of all equipment using
- The inlet water should only be connected to the "Cartridge Inlet-Bag Outlet" port on the TAC Housing Head. The filtered water should only be connected to the "Cartridge Outlet - Bag Inlet" port on the TAC Housing Head. See Figure 2.

## ATTACHING TO THE INLET

Use adaptors and connectors with a pipe thread sealant that is drinking water-approved for use on plastic fittings.

## CAUTION A



Do NOT connect the Inlet water to the Cartridge Outlet -Bag Inlet port on the TAC Housing Head.

## Sanitizing the System and Lines

The plumbing must be sanitized to eliminate possible contamination that may have occurred during the installation process.

Liquid chlorine bleach (regular bleach, unscented 6% sodium hypochlorite) can be used to sanitize the plumbing. The amount of bleach needed depends on the system installed and the amount of plumbing downstream of the TAC System. Generally 10 drops (one-half ml) of bleach is sufficient to sanitize the Housing and associated plumbing.

NOTE: Make sure the TAC Cartridge is removed from the housing before sanitizing.

- 1. Direct the water line from the outlet of the TAC Housing Head to
- 2. Unscrew the TAC Housing counter clockwise to remove the housing from the head.
- 3. Pour the liquid chlorine bleach into the bowl.
- 4. Screw the TAC Housing (containing the bleach) into the TAC Housing Head. Tighten the housing until it stops; it will come to a hard stop at the end of the thread. Use the Filter Wrench if nec-

NOTE: Do NOT overtighten the TAC Housing Head.



## CAUTION A



Make sure to follow any handling or safety instructions supplied with the bleach.

- 5. Slowly turn on the water supply and pressurize the system. Allow water to flow out of the housing until the smell of bleach is present.
- 6. Turn off the water supply and let the system stand without water flow for at least 15 minutes to allow the bleach to sanitize the
- 7. After 15 minutes without water flow, turn on the water supply and flush until the presence of bleach is gone.
- 8. Shut off the water supply and depressurize the system.

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# Installing or Replacing the TAC Cartridge

NOTE: Remove the plastic wrap from the TAC Cartridge before use. Make sure the end seal gasket is in place on the end of the TAC Cartridge and not retained in the packaging.

- 1. Unscrew the TAC Cartridge Housing counter clockwise to remove the housing from the TAC Housing Head.
- Inspect the O-ring on the TAC Housing and replace if it is cracked, twisted, or missing.
- The O-ring is pre-lubricated at the factory. However, it can be lubrcated with an approved food grade lubricant if needed. Install the O-ring onto the TAC Housing.
- Unwrap the new TAC Cartridge and place it into the TAC Housing.

NOTE: Make sure the end seal gasket is retained on the end of the TAC Cartridge in the recessed groove. Be careful that the gasket does NOT fall off when placing the TAC Cartridge into the housing.

Screw the TAC Housing containing the new TAC Cartridge into the TAC Housing Head. Tighten the housing until it stops. The housing will come to a hard stop at the end of the thread. Use the Filter Wrench if necessary.

## NOTE: Do NOT overtighten the TAC Housing Head.

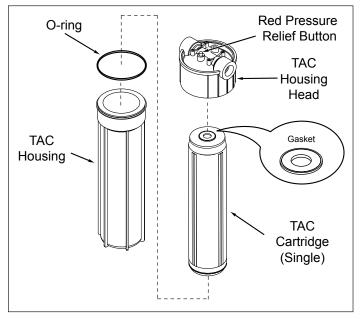


Figure 3. TAC System Components

# **Maintaining the System**

## RINSING THE TAC CARTRIDGE

The newly installed TAC Cartridge must be rinsed before returning the system to operation.

NOTE: Direct the system outlet to a drain during this process. Do NOT use the water resulting from rinsing process.

- 1. Direct water from the outlet to a drain.
- Turn on the water to the system. Allow water to flow through the TAC Cartridge and TAC Housing for 5 minutes to flush out trapped air.
- To help remove trapped air from the TAC housing, press and hold the Red Pressure Relief Button on the top of the housing until water just begins to come out then release the button. See Figures 2 and 3.

## **RETURNING SYSTEM TO OPERATION**

After making the connection to the outlet of the system, open a faucet or tap downstream to the system. Allow the pipe to flush to remove any debris. The system is now ready for use.

#### FREQUENCY OF CARTRIDGE REPLACEMENT

The TAC Cartridge should be replaced once a year to allow for continual scale reduction on equipment using hot water.

## LIMITED WARRANTY

Equipment manufactured by A.J. Antunes & Co. has been constructed of the finest materials available and manufactured to high quality standards. These units are warranted to be free from defects in materials and workmanship for a period of one year from date of purchase under normal use and service, and when installed in accordance with manufacturer's recommendations\*. The ultra filtration membrane cartridge is warranted under the same terms and conditions on a prorated basis for 24 months from date of purchase.

\*To ensure continued proper operation of the units, follow the maintenance procedure outlined in the Owner's Manual.

- 1. This warranty does not cover failures due to improper system installation, defects caused by improper storage or handling prior to placing of the equipment into service. This warranty does not include overtime charges or work done by unauthorized service agencies or personnel. This warranty does not cover normal maintenance, calibration, or regular adjustments as specified in operating and maintenance instructions of this manual, and/or labor involved in moving adjacent objects to gain access to the Equipment.
- 2. A.J. Antunes & Co. reserves the right to make changes in design or add any improvements on any product. The right is always reserved to modify equipment because of factors beyond our control and government regulations. Changes to update equipment do not constitute a warranty charge.
- 3. If shipment is damaged in transit, the purchaser should make a claim directly upon the carrier. Careful inspection should be made of the shipment as soon as it arrives and visible damage should be noted upon the carrier's documentation. Damage should be reported to the carrier. This damage is not covered under this warranty.
- 4. THIS WARRANTY IS EXCLUSIVE AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, EACH OF WHICH IS HEREBY EXPRESSLY DISCLAIMED. THE REMEDIES DESCRIBED ABOVE ARE EXCLUSIVE AND IN NO EVENT SHALL A.J. ANTUNES & CO. BE LIABLE FOR SPECIAL CONSEQUENTIAL OR INCIDENTAL DAMAGES FOR THE BREACH OR DELAY IN PERFORMANCE OF THIS WARRANTY.

Prices and specifications are subject to change without notice.



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