

Instruction Sheet

Bubble Trap/Head Regulator Cat. No. 4668000

Instructions for Installation and Use

The Hach Bubble Trap/Head Regulator is designed for use with Hach Surface Scatter 6 and 7 Turbidimeters and other process instruments to reduce or eliminate gas bubbles that may interfere with measurement. The device may also be used as a head regulator to dampen fluctuations in flow due to pulsations from a pump and/or sample pressure.

Using the Bubble Trap/Head Regulator will increase response time to changes in sample turbidity or concentration. The body of the unit holds approximately 3 liters (3/4 gal.). Response time may vary from one to two minutes at high flow rate (2 L/minute) to five minutes or more at flow rates less than 1 L/minute. For best response time, use the highest flow practical for the sample conditions. High flow rates decrease effectiveness of bubble removal. The need for response time and bubble removal must be balanced for optimum performance.

Description

The Bubble Trap/Head Regulator is constructed of PVC (polyvinyl chloride) plastic and is resistant to most chemicals. The device should not be used for samples containing solvents such as tetrahydrofuran, toluene, trichloroethylene or methyl acetone. The unit body is equipped with four 3/4-inch female NPT ports for plumbing connections—one in the bottom comes with a factory installed plug. Three 3/4-inch NPT-to-hosebarb fittings are supplied and must be installed on the side ports. See [Figure 1](#).

Installation

Note: *The Bubble Trap/Head Regulator can also be installed with smaller user-supplied plumbing connections. Using smaller plumbing connections and tubing requires the Bubble Trap/Head Regulator to be installed at a greater height above the process instrument. Each foot of head height will create a static pressure of 0.433 psi.*

The Bubble Trap/Head Regulator is designed for wall mounting with the two pipe hangers provided with the unit. Refer to [Figure 1](#) and install the unit as follows:

1. Mount the pipe hangers approximately 11 inches apart, one above the other, using two 3/8-inch bolts or screws for each. Position the pipe hangers so that the overflow fitting of the Bubble Trap/Head Regulator is above the top water level of the turbidimeter or analyzer. Allow approximately 6-inches of clearance at the top to facilitate cleaning.
2. Install the 3/4-inch NPT-to-hosebarb fittings in the side ports of the Bubble Trap/Head Regulator. Teflon thread tape (not supplied) is recommended.
3. Position the body of the Bubble Trap/Head Regulator in the hangers so that the fittings do not interfere with the pipe hangers when they close. When in position, press the body firmly against the back of the hangers. The hangers will close and lock.
4. Connect the sample line to the center hose barb fitting on the side of the device.
5. Using flexible tubing or hard piping, connect the sample outlet fitting on the Bubble Trap/Head Regulator (lowest side fitting) to the sample inlet of the turbidimeter or analyzer.
6. Connect a sample overflow line to the highest side fitting and run it to a drain.

Maintenance

Remove the top cap of the Bubble Trap/Head Regulator to clean the body. Remove the bottom plug to drain the instrument without disturbing other plumbing connections. Use a mild soap solution or dilute acid rinses to remove accumulated sediment and scale.

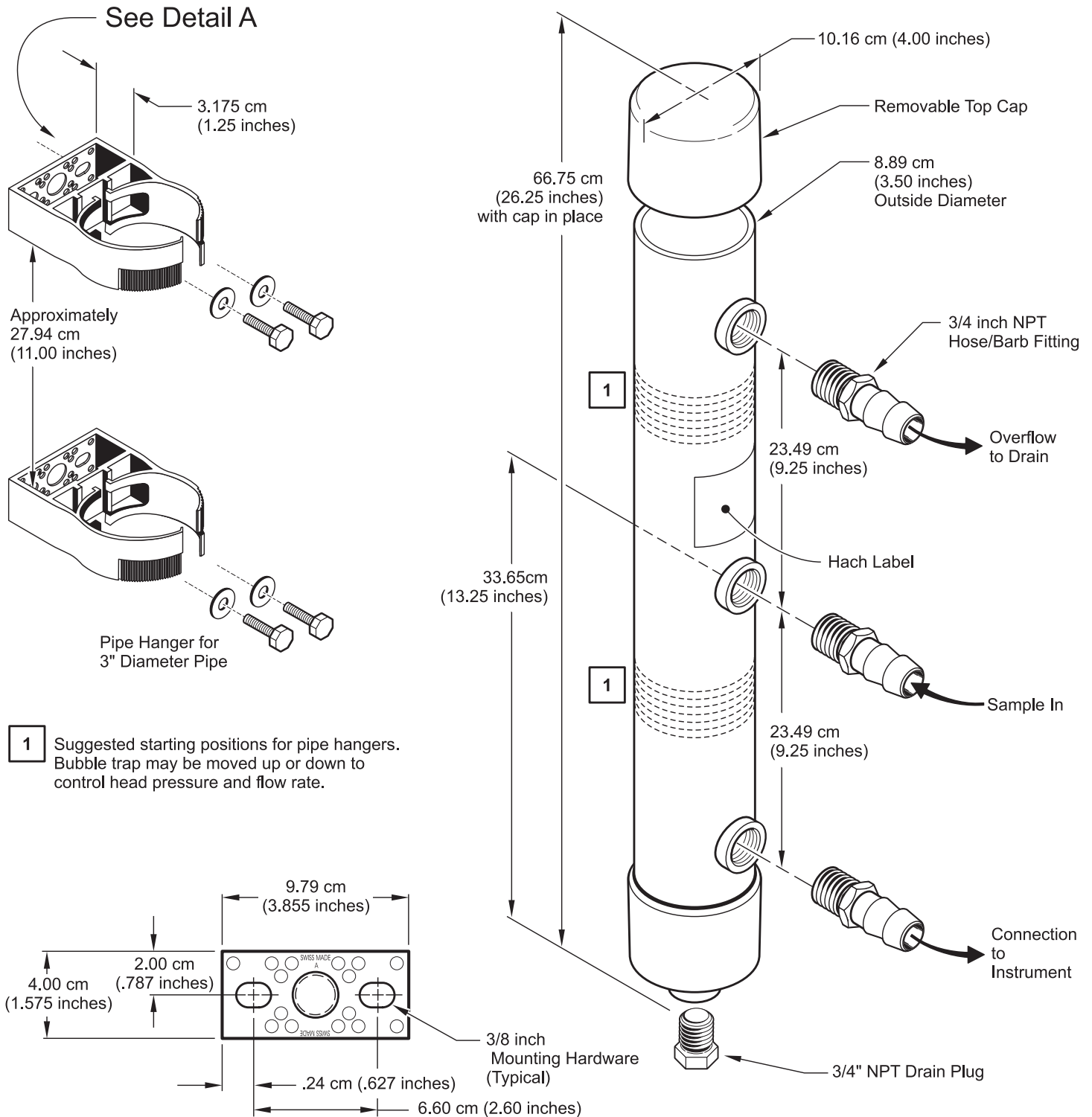
To remove the Bubble Trap/Head Regulator from the pipe hangers, pry the notched straps apart with a screwdriver or other suitable tool while spreading the holder.

Replacement Parts

Description	Cat. No.
Plug, threaded, 3/4-inch NPT	4667600
Cap, Bubble Trap/Head Regulator top	4667800
Pipe hanger, 3-inch iron pipe size	4668500

Bubble Trap/Head Regulator

Figure 1 Installing the Bubble Trap/Head Regulator



Detail "A" Pipe Hanger Base



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