



# Hot Gas Sampling Probe and Trap Instructions

## Introduction

The Sampling Probe and Trap is designed for use with the MSA Gascope® Series 300, Gasport®, Passport®, Orion® G, and Mini Series™ instruments. The Sampling Probe and Trap consists of:

- a stainless steel probe equipped with a 12-inch straight portion for insertion into a furnace stack
- a coiled portion for cooling the gas sample and removing excess moisture.

The Probe and Trap is designed for sampling flow rates in the range of 200 to 400 mL/minute (or for diffusion in the case of the Mini Series units). The trap has an internal volume of approximately 40 mL and will add approximately 1/2-minute to the sampling time required for a maximum or minimum instrument reading for pumped instruments (or two squeezes when using the squeeze bulb with the Mini Series units).

## Preparation for use

1. Connect the Probe and Trap to the instrument. The outlet fitting accepts MSA 1/8-inch diameter sampling lines; only the Orion G instrument can accommodate the sampling lines with airline fittings (see TABLE).
2. **For Pumped Instruments:**  
Operate the instrument pump and verify that air is flowing into the Probe by momentarily blocking the inlet with a finger. Note that the instrument signals a blocked flow condition.

### For Diffusion Instruments:

Block the air flow through the tubing. Squeeze one time and ensure that the aspirator bulb does not reinflate; this tests for leaks.

### ⚠ WARNING

**A metal probe conducts electricity; do not touch high voltages when using the metal probe; otherwise, injury or death can result.**

3. Insert the probe into the furnace stack and hold the trap in the vertical position. After a few minutes of sampling, the trap bowl may start to accumulate small drops of water. If sampling is continued until water reaches the level of the trap filter, it will be necessary to unscrew, remove and empty the water from the trap bowl.
4. When sampling is finished, remove the probe from the stack.

### ⚠ CAUTION

**The probe may be very hot; it takes several minutes for the probe to cool enough to touch or store away.**

5. Allow the instrument to draw ambient air through the probe to help cool the probe and thoroughly dry the internal bore of the probe.
6. Empty any water from the trap bowl before storing.

PART	PART NO.
5 Foot Sampling Line, Threaded	492332
10 Foot Sampling Line, Threaded	497333
15 Foot Sampling Line, Threaded	497334
20 Foot Sampling Line, Threaded	497335
Replacement Filter Element	630616
5 Foot Coiled, Airline	10040662
5 Foot, Airline	10040666
10 Foot, Airline	10040665
15 Foot, Airline	10040663
25 Foot, Airline	10040664
3 Foot, Airline	10040667