



# THE CHAMPION 35 - INSIDE FILL STATION AIR SAMPLING INSTRUCTIONS

**1** Start the compressor and allow it to run with air flowing from the sampling point for at least 5 minutes before sampling. While the compressor is running complete steps 2, 3 and 4 of these instructions.



Filter Cup and Filter

**2** Record the filter number. (Remove a filter assembly from the red filter cup and carefully locate the number on the screen. The number is found on the backside of the filter assembly opposite the white filter pad.) Record this information on the data sheet under "Oil Mist/Particulate Sample Data." Do not touch the filter pad. Handle the filter assembly by the sides.



Input Fitting



Input Fitting connected to the PVC filter holder



Both Halves of PVC Filter Holder Before Final Assembly



Completed Assembly

**3** Assemble the sampling equipment as follows: Screw the input fitting into the PVC filter holder. Place one filter cassette into the PVC filter holder (white filter pad facing out, see picture). Assemble the two halves of the PVC filter holder. Make sure all equipment is securely tightened. Make sure the black whistle cover is not blocking the whistle hole.

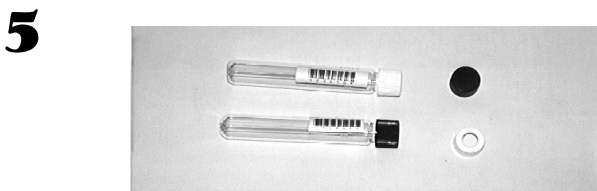
**4** Locate the orifice plate in the sampling equipment (see photo to the right). Check to see that a 0.200 or 0.115 orifice plate is installed by unscrewing the muffler from the final assembly. If any other orifice plate is installed remove it and replace it with the 0.200 or 0.115 orifice.

ORIFICE PLATE	7 or fewer SCFM use .115 orifice	8 or more SCFM use .200 orifice
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The side of the orifice plate with a bevel on the hole must face the muffler.



Orifice Plate



Air Sample Bottle



Complete Assembly with Sample Bottle

**Connect the complete unit to your air source.** After connecting the complete unit to your air source, choose a sample bottle and record the bottle number on the data sheet under "Breathing Air Sample". Remove the **black** sealing cap and replace it with the **white** sampling cap. Insert the bottle into the fitting containing the needles, by pressing straight onto the needles. **DO NOT TWIST the bottle or the needles will be damaged.**



## The Champion 35 (Blast Chamber) Air Sampling Instructions (Continued)

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Moisture Tube



Locate the moisture tube and find the end marked "Insert Other End". **Caution: Wear eye protection to avoid injury from flying glass.** Carefully break the glass tip off this end by inserting it into the hole on the **side** of the tube fitting and gently applying sideways pressure. Then break the other tip off using the same procedure.

Without delay, insert the proper end of the moisture tube into the tube fitting, past the o-ring, until it bottoms out. **Caution: Use layers of paper or cloth around the tube to protect your hands in case of tube breakage.**

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**Carefully lower the complete unit into the fill station (blast chamber) and close the chamber door.** Set the compressor pressure to **1000 psi** for the **0.200 orifice plate** and run the sample for **12 minutes OR** set the compressor pressure to **430 psi** for the **0.115 orifice plate** and run the sample for **12 minutes**. You will hear a whistle sound if the sampling is performed properly. Record on the oil mist/particulate section of your datasheet, that you ran your sample for 12 minutes using the 0.200 or 0.115 orifice plate.

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Once the sampling has been completed, slowly reduce the pressure to zero and open the fill station blast chamber door.

Immediately remove the bottle and moisture tube from their fittings and record the length of reddish-brown color change from the moisture tube onto the data sheet, or check (✓) beneath the drawing in the space provided, if no stain occurred. Replace the red caps on both ends of the moisture tube and return the tube to the foam holder.

Replace the white sampling cap on the sample bottle with a black sealing cap. (If white cap is left on the sample bottle, the sample will not be analyzed). Place the bottle and moisture tube in the protective foam.

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Be aware of any pronounced odor. Record your observation on your data sheet under "Pronounced Odor".

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You have just completed the basic sampling procedure. If you are not doing any additional sampling, disassemble the sampling equipment\*. Return each part to your kit.

Check that the data sheets have been correctly and completely filled out. Place the filter into the red cup. Place the red cup containing the filter, the bottle (in the protective foam), the moisture tube (in the protective foam), and your datasheet into the padded envelope or your shipping box.

Return the sample to TRI for analysis. If you are using a return shipping tag place it on the package. If for any reason you damage a filter or break a bottle, please return this media to TRI for a replacement. This will help us keep your inventory current.

\* If you are sampling additional locations, the condensation present in the sampling equipment must be allowed to dry before using the equipment on another location.

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