



**TRI AIR TESTING, INC.**  
 1607 N. CUERNAVACA DRIVE STE. 500  
 AUSTIN, TX 78733-1600  
 (800) 880-8378



**The Champion 35**  
**Air Sampling Instructions Extended Time For Lower**  
**Detection Limit**

**1**

If a moisture sample is to be obtained, go to moisture sampling instructions and perform the test before continuing with this air sampling instruction. 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 and 3 of these instructions.



Filter Case and Filter

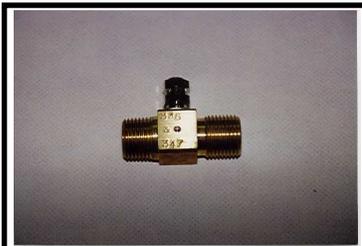
**2**

Record the filter number. (Remove a filter assembly from red filter case and carefully locate the number on the screen. The number is found on the side of the filter assembly opposite of 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.

**3**

Record the orifice plate size on the data sheet under "Oil Mist/Particulate Sample Data." To install or check the size of the installed orifice plate, unscrew the multi-holed noise muffler. The orifice plate is the aluminum disk with a hole in it. The size is imprinted on it. Proper size is determined by your air system's operating flow rate in standard cubic feet/minute (scfm) at the sampling point. (see chart below)

Air Capacity	Orifice Plate Size	Optimum Sampling Time
<2 scfm	.078	100 min @ 9-12 psig
2-6 scfm	.115	50 min @ 9-12 psig
6-15 scfm	.200	20 min @ 9-12 psig
15-35 scfm	.300	10 min @ 9-12 psig



Input Fitting



Both Halves of PVC Filter Holder Before Final Assembly



PVC Filter Holder Assembly

**4**

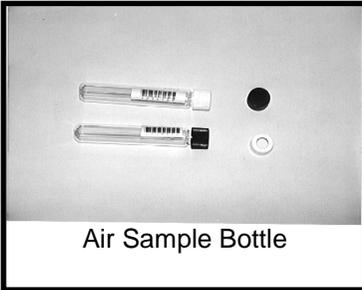
Assemble the sampling equipment as follows: Screw the input fitting into the short half of the PVC filter holder. Place one filter assembly into the other half of the PVC filter holder (white filter pad facing out, see picture). Assemble the two halves of the PVC filter holder. Make sure all equipment is securely tightened. **DO NOT INSERT A SAMPLING BOTTLE YET.**



## The Champion 35 Air Sampling Instructions (Continued)

# 5

Connect the complete unit to your air source. Open the charging lead or air source valve **SLOWLY** and allow the pressure on the flow section gauge to stabilize in the 9-12 psi range. Run the sample according to the time specified in the table in step 3. Complete step 6 during this run time. If you are unable to obtain 9-12 psi change the size of the orifice plate. Remember to record the size used during testing.



Air Sample Bottle



Complete Assembly with  
Sample Bottle

# 6

As step 5 is running, choose a sample bottle and record the bottle number on the data sheet under "Breathing Air Sample". Remove the **black** shipping cap and replace it with the **white** sampling cap. Insert the bottle into the fitting containing the needles just above the pressure gauge, by pressing straight down onto the needles. **DO NOT TWIST** the bottle, the needles will be damaged.

The air sample bottle must run at least one (1) minute. The air sample will be taken during a portion of the time step 5 is running. Be sure to check that the white Teflon float inside the sample bottle has risen away from the needed fitting. (If the float does not rise and stays by the needles there may be a clog in the needed fitting.) Call TRI at (800) 880-8378 if you have any problems.

While the air is still flowing, remove the sample bottle (**DO NOT TWIST**) and replace the **white** sampling cap with the **black** shipping cap. **The sample must be returned with the black cap tightly in place or the sample will not be analyzed.**

# 7

While you are sampling, be aware of any pronounced odor coming from the noise muffler of the flow section. Record your observation on your data sheet under "Pronounced Odor".

# 8

You have just completed the basic sampling procedure. If you are not doing any additional sampling, turn off the charging lead or air source valve, turn off your compressor and disassemble the sampling equipment. Return each part to your kit. Make sure the sample bottles are capped with the black shipping caps. (If white caps are left on the sample bottles, the samples will not be analyzed.) Place the filter into the red case. Check that the data sheets have been correctly and completely filled out. Return to TRI for analysis. If you are using a return shipping tag place it on the package and call FedEx (800) 238-5355 or UPS (800) 742-5877 to request a pick-up or use their drop boxes.

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.

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