



Champion 35 Test Kit
 NFPA 99 Instructions for Piping Purge/Particulate and Gas Sampling
 (Cylinder Quick Connect Version)

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. Remove the data sheet from the kit and complete steps 2 and 3 of these instructions.



Filter Case and Filter

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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.

For NFPA 99, 1999 Edition Piping Purge Test or other specifications of **0.1 mg** matter use a filter labeled Prewashed Filter.

For NFPA 99, 2002 Edition Piping Particulate Test or other specifications of **1.0 mg** matter use a standard filter.

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 gas system's operating flow rate in standard cubic feet/minute (scfm) at the sampling point. (see chart below). If unable to stabilize the pressure in the below range you can adjust the flow time to compensate for a different pressure. See the attached chart titled **TRI Champion 35 Alternate Sampling Pressure and Time** for acceptable combinations that will meet the minimum NFPA flow rate of 100 liters/minute and minimum volume of 1000 liters.

Flow Volume	Orifice Plate Size	Optimum Sampling Time
2-6 scfm	.115	10 min @ 11-12 psig
6-15 scfm	.200	4 min @ 9-12 psig

Safety notes: Allow adequate ventilation in sampling area if using gases other than compressed air, since you are exhausting the test gas into your work area. Always use personal protective equipment such as goggles when working with pressurized gases.



Input Fitting



Both Halves of PVC Filter Holder Before Final Assembly



Completed 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 CYLINDER YET.

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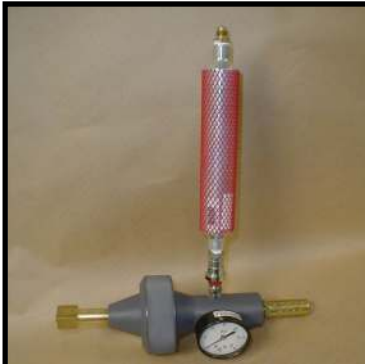
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Connect the complete unit to your gas source. Open the gas source valve SLOWLY and allow the pressure on the flow section gauge to stabilize in the specified psi range. Run the sample according to the time specified in the table in step 3. If you are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



Gas Sample Cylinder



Complete Assembly with
Sample Cylinder

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As step 4 is running, choose and record a sample cylinder. Only one sample per location is required with the metal cylinders. Record the cylinder barcode number (KAxx, KTxx or KFxx) on the data sheet under "Gas Sample." Insert the cylinder onto the quick connect fitting just above the pressure gauge by pressing the cylinder straight down onto the fitting while supporting the flow section from underneath with your other hand. Remove the knurled nut from the sample cylinder.

Gas should flow through the sample cylinder for **at least one (1) minute**. Note: The pressure gauge reading will drop during this sampling. DO NOT adjust the pressure on your system while the cylinder is in place. Replace the knurled nut after thirty seconds. Note: The knurled nut should be replaced tightly, but finger tighten only. Use NO TOOLS. Over-tightening will destroy the sample. While the gas is still flowing from your source, remove the sampling cylinder by pressing down on the quick connect fitting. **Do not turn off the gas source until the knurled nut is in place and the sample cylinder has been removed.**

Safety notes: Allow adequate ventilation in sampling area if using gases other than compressed air, since you are exhausting the test gas into your work area. Always use personal protective equipment such as goggles when working with pressurized gases.

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You have just completed the basic sampling procedure. If you are not doing any additional sampling turn off the gas source valve and disassemble the sampling equipment. Return each part to your kit. Place the filter into the filter cup. Check that the data sheets have been correctly and completely filled out.

Place the filter(s), cylinder(s), and datasheets in a padded package and return to TRI for analysis.

If for any reason you damage a filter or cylinder, please return this media to TRI for a replacement. This will help us keep your inventory current.

AT THE LAB

TRI Air Testing, Inc.'s laboratory will perform analysis within one (1) business day of receipt of the sample. If the sample does not pass the specification you request, you will be notified within one (1) business day. TRI will put the analyses results into a report and immediately upload it to your online account. Visit our website to activate your online account. www.airtesting.com "My Air" login.

Upon request, TRI will also supply your facility with a certificate of analyses for the samples that met the requested specifications.

If for some reason you need to have your results sooner, call to let us know at (512) 263-0498 or indicate this on the "Rush Analysis" section of the data sheet. Purchase order or credit card is required for additional charges.

Should you have any other questions or concerns, feel free to call us at (512) 263-0498.

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