



## Champion 35 Test Kit Gases Only Sampling Instructions Using TRI Cylinder For Gases Only With Protective Filter (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.



2

Locate a filter in your kit that says **Use for Gas Sampling Only**. (Do not use this filter if you are obtaining an Oil Mist/Particulate Sample since you have the wrong instructions.)

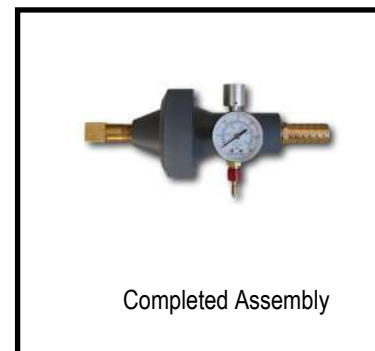
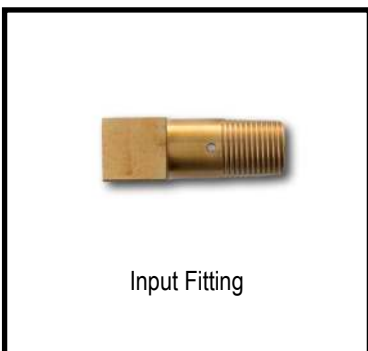
Remove the filter from the red filter case. This filter can be used multiple times as long as the white filter material has not collected excessive oil or particulate material and it remains intact on the support screen. Change to another filter if it appears to be excessively discolored with contaminants. **The only purpose of this protective filter is to keep condensed oil and particulate material from entering the sample cylinder.**

3

Determine the orifice plate in the flow section by unscrewing 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).  
You can also adjust the flow with an inline valve. The .200 orifice plate will work for this test at most sites.

Flow Volume	Orifice Plate Size
<2 scfm	.078
2-6 scfm	.115
6-15 scfm	.200
15-35 scfm	.300

**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.



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 CONNECT A SAMPLING CYLINDER YET.**

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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 between 4 and 20 psi. You can adjust the psi with an inline valve to achieve the pressure. Do not allow the TRI gauge to exceed 30 psi. If you are unable to obtain the optimum psi change the size of the orifice plate. Remember to record the size used during testing.



Gas Sample Cylinder

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Choose and record a sample cylinder. Only one sample per location is required with the metal cylinders. Record the cylinder barcode number (KA..., or KT ...) on the data sheet under "Gas Sample Data." Insert the cylinder onto the quick connect fitting by the pressure gauge by pressing the cylinder straight onto the fitting while supporting the flow section with your other hand. Remove the knurled nut from the sample cylinder. Gas should flow through the sample cylinder for at least 30 seconds.

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 from the sample equipment.**

Call TRI at (512) 263-0498 if you have any problems or questions.



Complete Assembly with Sample Bottle

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"

Note: This is not required for the NFPA99 testing.

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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 red case. Check that the data sheets have been correctly and completely filled out.

Place the filter(s), cylinders(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](http://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.

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