TRACE Analytics LLC

AIRCHECK™ KIT
K902N INSTRUCTIONS

TESTING FOR GAS, WATER, OIL MIST AND PARTICULATES
Low Pressure < 500 PSI

BEFORE YOU BEGIN

1. If sampling from compressor, run for 5-10 minutes. Open fill valve slightly and purge air for 5 minutes. Proceed with preparation of sampling kit during this time.

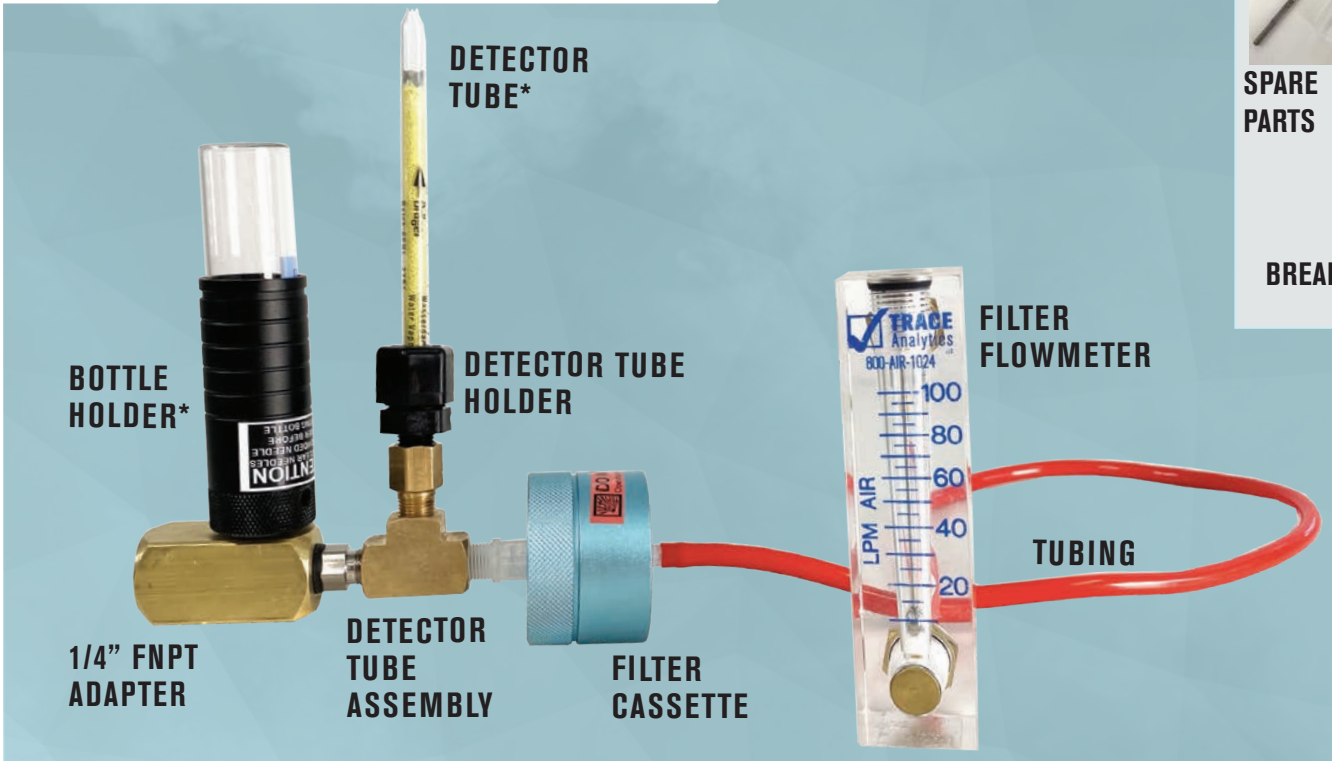
2. Inspect brass parts and remove any oil or dirt. Ensure threads are not damaged. *If wire mesh falls out of brass adapter, contact Trace Analytics for replacement.*

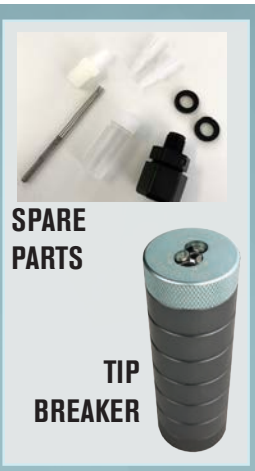
3. Remove barrel from base of bottle holder to inspect needles. Replace needle(s) if broken, bent, loose, or needle points are damaged. Replace o-ring on bottle holder if dirty, dry, or damaged. Reassemble bottle holder.
CAUTION: Needles are sharp. Do not use solvent or alcohol on needles. **See Section 1: Gas & Ambient Air for needle replacement.**

4. Carefully remove any glass fragments from Detector Tube Holder. If Holder is disassembled or threads are damaged, replace. WARNING: if nut is removed from male connector, stainless steel grab ring and o-ring may fall out. Detector tube will not be held properly in place. Damaged or misassembled Detector Tube Holder may affect results.

**Needles and Detector Tube Holders are consumable parts and should be replaced periodicially.*

KIT ASSEMBLY





*Source Bottle and Detector Tube are inserted immediately prior to opening air valve. See Step 1 and 2.

KIT ASSEMBLY INSTRUCTIONS

1. Connect the **DETECTOR TUBE ASSEMBLY** with reducing nipple and o-ring to the brass **1/4" FNPT ADAPTER.** Thread black **DETECTOR TUBE HOLDER** onto Assembly. Loosen nut.
2. Remove red or blue caps from the **FILTER CASSETTE**. Gently screw luer end of the **FILTER CASSETTE** onto the plastic end of the **DETECTOR TUBE ASSEMBLY** (do not remove the filter cassette from the blue aluminum housing)
3. Thread **BOTTLE HOLDER** to the top threaded hole on the **ADAPTER**
4. Connect brass **1/4" FNPT ADAPTER** to the sampling outlet.
5. Insert barbed luer end of red **TUBING** onto **FILTER CASSETTE**.
6. Attach open end of red **TUBING** to **FILTER FLOWMETER** barb connection.
7. Leave upper back hole of **FLOWMETER** unobstructed.
   (Additional luers, o-rings, and DT holder are found in spare parts bag)

*Red or blue caps must be removed for sampling

1 GAS & AMBIENT AIR

1. Regulate OUTPUT pressure to 200 psi or less, or 50 LPM through the FILTER FLOWMETER.

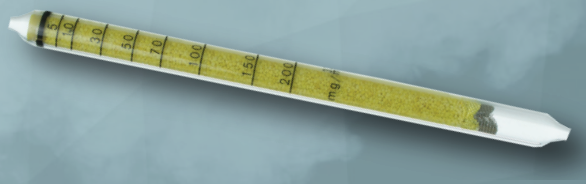
2. Insert source bottle into bottle holder and firmly press onto needles. To avoid puncturing the blue cap, hold bottle holder at an angle with outer needle on lower side as the needles are off center. **DO NOT TWIST BOTTLE.**

Optional Ambient Sample: Remove black cap from Ambient Bottle and place bottle close to compressor intake. Recap after 1-10 minutes.
Ambient bottle cannot be used for compressed gas testing.

REPLACING NEEDLES *if damaged or loose

1) Unscrew Bottle Holder and slide the stainless steel needle tool onto plastic base of needle.
2) Turn the tool counter-clockwise to remove
3) Hand thread new needle into the threaded base, then slide tool onto needle to gently tighten.
4) Needles should be straight and firmly in place. Dispose of damaged needles in safe container

2 WATER VAPOR

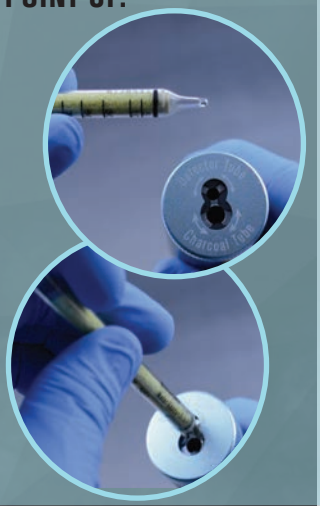


1. Remove the caps and netting from the detector tube. Insert detector tube into tip breaker, score the glass tip by rotating the tube, then angle sideways to break off tip, repeat for other side.

2. Immediately insert detector tube into DT holder until it bottoms out. Hand tighten the nut. **ARROW MUST POINT UP.**

3. Replace netting over tube and holder. **Open fill valve slowly** and adjust to 50 LPM. Sample for 10 minutes. A minimum of 500 liters of air is required. If you are unable to reach 50 LPM, adjust sampling time using the following chart:

Formula for Sampling Time
$\frac{\text{AIR VOLUME}}{\text{FLOWRATE, LPM}}$ = SAMPLE TIME, MIN



4. Watch tube for duration of test. If reddish-brown stain reaches 200 mark before sampling is complete, write exact time the stain reached the 200 mark on the data sheet. Do not remove the detector tube from set up.

5. Once air is flowing, if possible, feel for gas flow out of Bottle Holder side port. If air is not flowing through, sample may result in an inadequate air exchange. Retesting will be required.

3 FINAL STEPS

1. Smell the air flowing from the side port of the Bottle Holder. Mark ODOR as either None, Slight, or Pronounced on the datasheet.

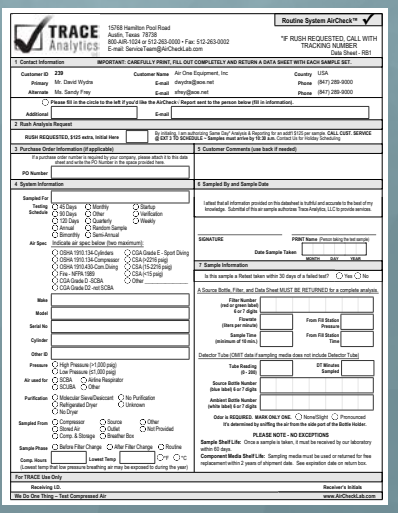
2. After 10 minutes, **while air is still flowing,** remove source bottle.

3. STOP AIR FLOW. Remove detector tube and immediately determine numerical value for length of reddish/brown stain on detector tube (ignore gray discoloration) and record on section 7 of data sheet.

4. Remove AirCheck Kit from fill whip, remove filter cassette from kit.

5. Replace caps on filter cassette and netting on source bottle and detector tube.

6. Fill out data sheet completely and return filter cassette, source bottle, detector tube, and data sheet to Trace.


TRACE Analytics
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E-mail: ServiceTeam@AirCheckLab.com

Routine System AirCheck™ ✓

*IF RUSH REQUESTED, CALL WITH TRACKING NUMBER

Data Sheet - RB1

1 Contact Information — IMPORTANT: CARE/FULLY PRINT, FILL OUT COMPLETELY AND RETURN A DATA SHEET WITH EACH SAMPLE SET.

Customer ID: 239 — Customer Name: Air-One Equipment, Inc — Country: USA

Primary: Mr. David Wydra — E-mail: dwydra@aoe.net — Phone: (847) 289-9000

Alternate: Ms. Sandy Frey — E-mail: sfrey@aoe.net — Phone: (847) 289-9000

Please fill in the circle to the left if you'd like the AirCheck / Report sent to the person below (fill in information).

Additional: E-mail:

2 Rush Analysis Request

RUSH REQUESTED, $125 extra, Initial Here: By initialing, I am authorizing Same Day* Analysis & Reporting for an add'l $125 per sample. CALL CUST. SERVICE @ EXT. 3 To SCHEDULE – Samples must arrive by 10:30 a.m. Contact Us for Holiday Scheduling.

3 Purchase Order Information (if applicable)

If a purchase order number is required by your company, please attach it to this data sheet and write the PO Number in the space provided here.

PO Number:

5 Customer Comments (use back if needed)

4 System Information

Sampled For:

Testing Schedule: ○ 45 Days ○ Monthly ○ Startup ○ 90 Days ○ Other ○ Verification ○ 120 Days ○ Quarterly ○ Weekly ○ Annual ○ Random Sample ○ Bimonthly ○ Semi-Annual

Air Spec: Indicate air spec below (two maximum):

○ OSHA 1910.134-Cylinders ○ CGA Grade E - Sport Diving
○ OSHA 1910.134-Compressor ○ CSA (<2216 psig)
○ OSHA 1910.439-Cert.Diving ○ CSA (15-2216 psig)
○ Fire - NFPA 1989 ○ CSA (<15 psig)
○ CGA Grade D -SCBA ○ Other
○ CGA Grade D2 -not SCBA

Make:

Model:

Serial No.:

Cylinder:

Other ID:

Pressure: ○ High Pressure (>1,000 psig) ○ Low Pressure (≤1,000 psig)

Air used for: ○ SCBA ○ Airline Respirator ○ SCUBA ○ Other

Purification: ○ Molecular Sieve/Desiccant ○ No Purification ○ Refrigerated Dryer ○ Unknown ○ No Dryer

Sampled From: ○ Compressor ○ Source ○ Other ○ Stored Air ○ Outlet ○ Not Provided ○ Comp. & Storage ○ Weather Box

Sample Phase: ○ Before Filter Change ○ After Filter Change ○ Routine

Comp. Hours: Lowest Temp: ○ °F ○ °C

(Lowest temp/ max flow pressure breathing air may be exposed to during the year)

6 Sampled By and Sample Date

I attest that all information provided on this datasheet is truthful and accurate to the best of my knowledge. Submittal of this air sample authorizes Trace Analytics, LLC to provide services.

SIGNATURE: PRINT Name (Person taking the test sample):

Date Sample Taken: MONTH DAY YEAR

7 Sample Information

Is this sample a Retest taken within 30 days of a failed test? ○ Yes ○ No

A Source Bottle, Filter, and Data Sheet MUST BE RETURNED for a complete analysis.

Filter Number (red or green label) 6 or 7 digits:

Flowrate (liters per minute):

From Fill Station Pressure:

Sample Time (minimum of 10 min.):

From Fill Station Time:

Detector Tube (DMIT data if sampling media does not include Detector Tube)

Tube Reading (0 - 200):

DT Minutes Sampled:

Source Bottle Number (blue label) 6 or 7 digits:

Ambient Bottle Number (white label) 6 or 7 digits:

Odor is REQUIRED. MARK ONLY ONE. ○ None/Slight ○ Pronounced

If it's determined by sniffing the air from the side port of the Bottle Holder.

PLEASE NOTE - NO EXCEPTIONS

Sample Shelf Life: Once a sample is taken, it must be received by our laboratory within 60 days.

Component Media Shelf Life: Sampling media must be used or returned for free replacement within 2 years of shipment date. See expiration date on return box.

For TRACE Use Only

Receiving I.D.: Receiver's Initials:

We Do One Thing – Test Compressed Air — www.AirCheckLab.com

THANK YOU FOR TESTING WITH TRACE Analytics LLC

Have questions? Contact us:

Phone	512-263-0000 ext 3
Email	ServiceTeam@AirCheckLab.com
Website	AirCheckLab.com