TRACE Analytics LLC

AIRCHECK™ KIT
K902S INSTRUCTIONS

TESTING FOR GAS, WATER, OIL MIST AND PARTICULATES
High Pressure > 1000 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.

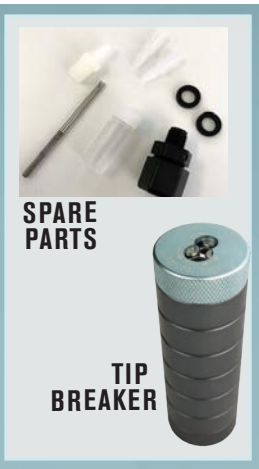
2. Inspect brass parts and remove any oil or dirt. Ensure threads are not damaged. *If wire mesh falls out of brass adapter, contact Trace Analytics for replacement.*

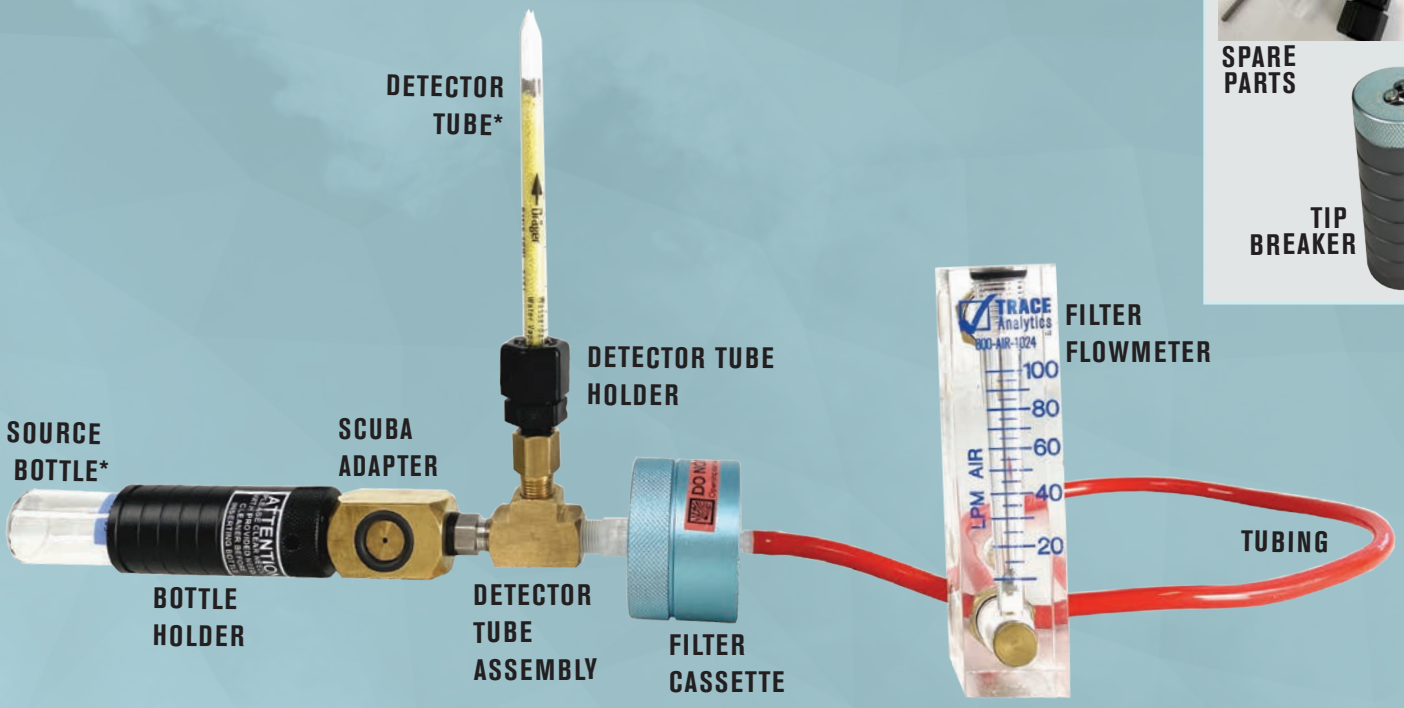
3. Remove barrel from base of bottle holder to inspect needles. Replace needle(s) if broken, bent, loose, or needle points are damaged. Replace o-ring on bottle holder if dirty, dry, or damaged. Reassemble bottle holder.
CAUTION: Needles are sharp. Do not use solvent or alcohol on needles. **See SECTION 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 & 2.

KIT ASSEMBLY INSTRUCTIONS

1. Connect the **DETECTOR TUBE ASSEMBLY** with reducing nipple and o-ring to the brass **SCUBA 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 side threaded hole on the **ADAPTER**

4. Connect brass **SCUBA ADAPTER** to the fill hose or 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 2000 psi or less, or 50 LPM through the FILTER FLOWMETER.

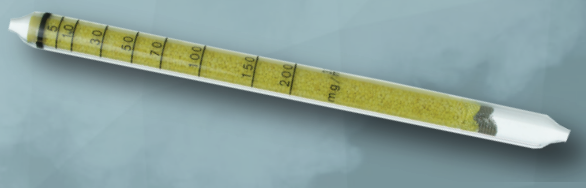
2. Insert source bottle into bottle holder and firmly press onto needles. To avoid puncturing the blue cap, hold bottle holder at an angle with outer needle on lower side as the needles are off center. **DO NOT TWIST BOTTLE.**

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:

*If sampling inside fill station, remove Filter Flowmeter. Make sure pressure is regulated to no more than 500psi.

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.

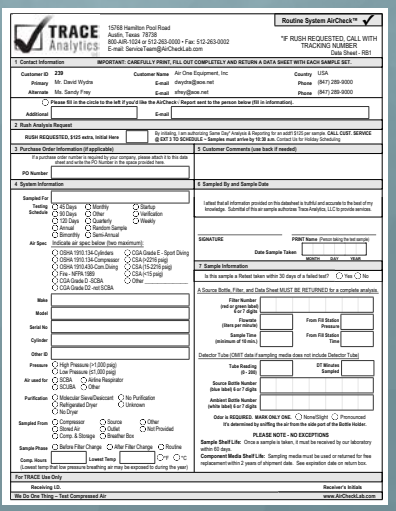
2. After 10 minutes, **while air is still flowing,** remove source bottle.

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

Routine System AirCheck™

*IF RUSH REQUESTED, CALL WITH TRACKING NUMBER

Data Sheet - RB1

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

2 Rush Analysis Request

3 Purchase Order Information (if applicable)

4 System Information

5 Customer Comments (use back if needed)

6 Sampled By and Sample Date

7 Sample Information

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THANK YOU FOR TESTING WITH TRACE Analytics LLC

Have questions? Contact us:

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