AirCheck ✔ Kit Contents

Your Kit Should Include the Following Items

The following items are included in the AirCheck ✔ Kit.

1. Flowmeter
2. Bottle Holder
3. Needle Cleaner
4. 2 ft. Red Tubing
5. Plastic Bag with Spare O-Ring(s), 1 Threaded Luer for Flowmeter, & Barbed Luer
6. Adaptor (modified CGA 346/347, SCUBA, or 1/4"NPT) included in kit, others available at extra cost
7. Carrying Bag (or a white box for special packaging for group purchases)

If an equipment part is damaged or non-working, call Trace for a free replacement. Verify that your kit contains all the necessary items. If any discrepancies, contact us.

SAMPLING MEDIA are also included with your kit depending on the quantity requested. Sampling media sets consist of either:

- Part Number A100-##X, the Source Bottle (blue cap), Filter Cassette (red label/shrink wrapped), Ambient Bottle (black cap), or
- Part Number A100-##Y, the Source Bottle (blue cap), and Filter Cassette (red label/shrink wrapped)

For your convenience, we also provide return shipping containers, and data sheets.

When requesting RESTOCKING SUPPLIES, please provide your customer number. The correct terminology for restocks is SAMPLING MEDIA, Part Number A100-##x (with an ambient) or A100-##y (without an ambient).
AirCheck® Sampling Instructions

Quick Overview
read complete details on following page

1
BEFORE EACH TEST,
run needle cleaner through bottom two holes

Check o-rings & clean threads

Needle cleaner is inside another needle

2
Blow out Fill Hose, **ASSEMBLE EQUIPMENT** as shown, then firmly attach Adaptor to Fill Hose. Use ONLY the blue-capped Source Bottle to obtain the gas and moisture portion of your air test. The filter cassette obtains the oil mist/particulate portion of your test and **MUST BE RETURNED FOR ANALYSIS**.

3

OBTAIN AMBIENT SAMPLE (optional)
Remove black cap, place bottle close to compressor intake. Recap after ten minutes.

4
**START TEST.** Gently push Source Bottle **STRAIGHT DOWN** onto Bottle Holder - **DO NOT TWIST.** Open your system valve and immediately **START TIMING TEST.** Run test for at least 10 MINUTES* keeping flowmeter reading between 20 and 100 LPM. Remove Source Bottle by pulling straight out. Ambient Bottle cannot be used in this Step.

5
**STOP TEST,** complete data sheet, and return sample bottle(s), filter, and data sheet to lab. Attach postage or send by other convenient method.

*See Yellow shaded box on next page for instructions on how to sample for Oxygen Compatible Specifications and other non-routine specs.

**A NOTE ABOUT ADAPTORS**

High pressure air sources (1-25 cfm, 1000-5000 psi) use either a CGA or SCUBA adaptor, low pressure air sources (>25 cfm, <500 psi) use a 1/4" NPT adaptor.
STEP 1 – Before Each Test
◆ To avoid problems with invalid tests, BEFORE EACH TEST, remove O-Ring from Bottle Holder, run Needle Cleaner through both needles from the bottom of the Bottle Holder. Check that needles are straight, if needed, carefully straighten with needlenose pliers. ◆ Replace O-rings if necessary, if dry, lubricate. ◆ Inspect & clean threaded parts. If any piece of equipment is not working properly, return to Trace for a free replacement.

STEP 2 – Assemble Equipment
(If compressor is being sampled, warm up 10-20 minutes.) Open valve for a few seconds to blow out charging lead. ◆ Attach brass Adaptor to charging lead and hand tighten (no air should leak from around this connection). Carefully attach the aluminum Bottle Holder to the threaded hole on the Adaptor (as shown on Quick Overview) taking care that you do not cross-thread the fittings. Gently push & turn the Filter 1/4 turn onto the nickel plated Filter Fitting (male luer fitting) located on the side of the Adaptor (do not remove the clear shrink wrap & do not overtighten). Use Red Tubing with barbed/luer fitting attached (barbed end inside red tubing, luer end toward filter outlet side) to connect the Filter to Flowmeter.

STEP 3 – Obtain Ambient Sample (optional)
◆ Simply remove black cap from Ambient Bottle and place bottle as close to compressor intake as possible. Recap after 1-10 minutes. ◆ If red septum falls out of cap, replace it. ◆ NOTE: AMBIENT BOTTLE MUST ONLY be used for obtaining a sample at the intake of the compressor, IT CANNOT be used for Step 4.

STEP 4 – Start Test from Source Air
◆ WARNING Bottle holder contains two sharp needles – do not insert fingers into bottle holder. ◆ Insert the SOURCE BOTTLE (blue capped) into the Bottle Holder by gently pushing bottle straight down. Do not twist or turn bottle – this will damage needles. YOU CANNOT USE THE AMBIENT (black capped) BOTTLE for this step. ◆ Open your system valve slowly to normal operating pressure. Check flowmeter reading which MUST BE BETWEEN 20 and 100 LPM. Begin timing test (timing must be accurate). Run test for 10 MINUTES or more.

STEP 5 – Stop Test
While air is still flowing, remove Source Bottle from Bottle Holder, then close system valve. Place Protective Netting on bottle(s). Return the 1) used Filter, 2) Source Bottle, and 3) Ambient Bottle (if used), and 4) Data Sheet using the return preaddressed mailer. Complete Data Sheet with ALL requested information NEATLY. Affix First Class postage or arrange for other shipping method of your choice. Ship samples immediately to Trace’s lab. Do not submit samples that are over 30 days old (count from sample date). Samples can be returned by mail, or other method such as UPS, Federal Express, etc. Be aware that our lab is located outside of city limits. Any sample sent via Express Mail (through the post office) is delivered with our routine mail late in the day. URGENT SAMPLES should be shipped via UPS, Federal Express, or other similar delivery service.

If you have questions, refer to Sampling Notes, then call us

AirCheck✔ Kit Detailed Sampling Instructions

◆ IF TESTING ACCORDING TO ANDI, IANTD, NFPA 99, or other air specification with an oil or particulate level less than 1.0 mg/m³, sample time will need to be determined by using the following equation:

\[
\text{Sample Time, min.} = \frac{1000}{\text{flowrate}}
\]

(For example: if reading on flowmeter is 50 LPM, sample time = 20 min.) If using the modified Gr E spec that includes particle size not to exceed 2 μm in diameter YOU MUST USE A FILTER CASSETTE WITH A GREEN LABEL.

◆ The Adaptor and Bottle Holder may become cold and ice up. This is normal. Air is vented from the side ports of the Bottle Holder. ◆ If possible, the reading on the flowmeter should be steady. If flow rate drops or varies, determine an average flow rate and indicate on data sheet that steady flow rate was not achieved. ◆ If flow rate drops below 20 and you can not regulate pressure, insert the spare barbed fitting firmly into the lowest side port on the bottle holder or cover port to reduce bypass air. You may need to squeeze the barbed fitting tip to get it to fit into the side port. This will increase flow rate. If this does not accomplish a minimum of 20 LPM, stop test, and refer to Sampling Notes.