



INSTRUCTIONS FOR FILLING VARIABLE LEAK-RATE CALIBRATORS (VSLC and VLC models)

GENERAL INSTRUCTIONS

The model VSLC Variable-Leak Sniffer Calibrator and the model VLC Variable-Leak Calibrator contain a crimped stainless steel capillary to regulate the gas flow. The leak element, inside a ¼" tube for protection, is attached to a 110 cc stainless steel gas reservoir. (Note: These models are occasionally also made and calibrated for other gases, such as various Refrigerants. The filling procedure is essentially the same, although the maximum pressure may be different.)

The reservoir has a pressure gauge for use when adjusting the driving pressure behind the capillary leak element in order to change the fill gas flow rate.

Flow rates for different pressures are given on the calibration tag attached to the leak.

REFILLING

CAUTION: Slowly introduce fill gas into the reservoir. Rapidly filling the reservoir may cause condensation inside the reservoir, which will plug the capillary.

1. Attach a clean metal or Teflon line from your pure fill gas bottle to the fill valve of the leak, but do not tighten the connection.
2. Slowly flow fill gas through the line to purge the remaining air from the line.
3. Tighten the connection to the valve.
4. Open the fill valve.
5. Slowly fill the leak reservoir to the maximum allowed on the pressure gauge.
6. Loosen the connection from the fill gas source.
7. Open fill valve and vent the leak to approximately 5 psig.
8. Repeat steps 3-7 three times to assure gas purity.
9. Fill to the pressure indicated on the label to obtain the desired flow rate.

CAUTION: To avoid clogging of the capillary, the line from your fill gas source must be clean and free of moisture. Copper or stainless steel lines are recommended. A rubber hose should NOT be used.

CAUTION: Extreme caution should be used to insure that the pressure gauge IS NOT OVERPRESSURIZED. If the pressure gauge is overpressurized, it may result in loss of calibration and/or personal injury.

STORAGE

Capillary leaks are subject to clogging and must be kept clean and dry. Store in an air-tight container when not in use. Care should be taken that the end of the capillary tube is not exposed to oil and dirt.

Recalibration is recommended on an annual basis. Certification of NIST-traceable calibration is provided.