

## AviTool - Static Port Adapter Instructions

The AviTool static port adapter is designed to work with the AviTool Leak Detector kit. The static port adapter eliminates the need to connect directly to your static system via a tee or other connection when testing the entire static system.

### Using the static port adapter

Start by determining how many static ports the aircraft has. Higher-end Cessna's and most Pipers and other GA aircraft have two. Generally speaking the 152 and 172 have one unless it has retractable gear.



Static ports are pin-size holes, usually positioned in the center of a small disk about the size of a 50 cent piece.

Van's RVs and some other aircraft have static ports mounted flush and may be difficult to locate. As a general rule, static ports are found mid-ship on the side of the fuselage about half way between the wing and the tail, unless it is a Cessna. The Cessna static port(s) are found in front of the door(s) below the engine cowling.



If the aircraft has multiple static ports, tape over the alternate port. Use the wide 2" poly tape provided with the Leak Detector kit. When applying the tape, apply a 3-4" piece over the static port, any small disk-shaped fitting and onto the surrounding aircraft body, typically overlapping about 1/4". Fold over one end of the tape to facilitate its removal.

Before attaching the static port adapter, wipe off the area where the suction cups will be applied. Avoid attaching the suction cups over paint lines, decal edges, overlapping sheet metal or rivets for obvious reasons. The adapter does not have to be positioned horizontally — turn it so the suction cups will be on a clean nearly flat area of the fuselage. Some curvature is okay. Wipe off the suction cups, as well, before securing them. For an excellent seal, moisten the suction cups before affixing.

Adjust the height of the wing nuts on the large suction cups to lift and lower the arm so that the center suction cup has a good connection. The arm should be roughly parallel to the side of the fuselage.

Connect the static port adapter to the Leak Detector using a 1/4" OD tube from the push-to-connect fitting on the adapter to the tee connector of the Leak Detector. Make sure you fully insert the 1/4" poly tube in the fitting. Also ensure you have sufficient tube length between the static port adapter to the Leak Detector so you won't tug on or disturb on the mounted static port adapter. If the static port becomes disconnected during a leak test, it can damage your instruments. To confirm of the effectiveness of the "mount", wait a minute or two after affixing it, then tug gently on the adapter before using it for leak testing.

If you have more than one size center suction cup for your static port adapter (an option) to accommodate different static port designs like for the Cirrus, it is a good idea to use the smallest cup for the job.



If you feel that the adapter's connection with the aircraft's static port is the cause of a leak, you can test this theory by locating the static port adapter over a flat (clean) area of the fuselage and performing a leak test. Obviously, there should be no leak. If there is, it is probably in the leak tester assembly. Perform the leak detector self test described in the Leak Detector kit instructions before proceeding.