

### **Basic Instructions**

- Remove existing air vent tube from wing root aluminum tube, (Cessna PN 0413163-18 and/or 0413155-12/13)
- Slide liner into wing root to the ring on liner
- Remove liner and wipe a small amount of corrosive resistant compound around the outside surface of the liner (if you desire) and slide the liner back into the aluminum wing root tube
- 4. Slide the Ventube inner tube into the liner after completing the EXTERNAL installation

#### **EXTERNAL**

- 1. Remove Wing Root Fairing between cockpit and wing.
- Drill or punch a size 4D (3/32") diameter hole thru Cessna Aluminum wing root vent tube not closer than 0.5 inch no more than 3 inches from cabin end.
- Slide the Ventube liner into the Aluminum vent tube in the wing.
- Install the High collar lock washer on the #4 sheet metal screw (screw is the holding mechanism for the Ventube).
- Insert the Ventube inner tube and insure it is not binding.
- Replace the wing root fairing.
- Repeat for passenger/co-pilot side as appropriate.

#### Notes:

- If necessary to install Outside Air Temperature Thermometer, drill a small hole in center of a cap and install existing OAT thermometer. WARNING: OAT temperature may be incorrect when Ventube is closed due to NO AIR MOVEMENT past the probe.
- 2. If you desire the Ventube to have additional friction so that the Ventube will stay in an interim position you select, place one of the Velcro pieces between the inner and outer tubes of the Ventube. Specifically, remove the inner tube from the outer tube by aligning the spleens on the tubes. Place one of the Velcro pieces inside the outer tube approximately one and a half to two inches down into the outer tube between the spleen slots and replace the inner tube.

# AIRCRAFT With "V" BRACES IN WINDSHIELD

Ventube furnished without the Cap being glued on the inner tube.

- 1. Install the "O" ring on the inner tube approximately 1" from the end with the air slot. Insert the Inner tube into the Outer tube leaving 1 to 1 1/2 inches of the inner tube protruding out (the end with the air slot) into the cabin.
- Install the tube assembly into the Cessna Wing Root aluminum tube.
- Install the tube assembly into the cessile virily income.
  Apply small amount of glue gel, i.e. two or three drops, on the area marked in RED on the outer surface of the inner ring in the back side of the Cap.
- 4. While holding the inner tube, Push the cap onto the inner tube and quickly rotate the cap 60 to 90 degrees.
- Hold Cap on inner tube for 30 to 45 seconds. Best to wait 24 hours for glue to set completely.
- Follow the rest of the normal installation instructions.

## AIRCRAFT With RETRACTABLE GEAR

Some later model 172 RG and 182 RG aircraft had the Cessna Wing Root Aluminum vent tube from the wing port had this tube into the cockpit, cambered (reduced diameter) in and the Cessna sliding vent tube was cambered (increased diameter) out to keep the Cessna vent tube from blowing out.

To install the Soros Ventube, it is necessary to open the wing root fairing and take the cambered Cessna sliding vent tube out through the wing root. This is accomplished by removing the Cessna Wing Root Aluminum vent tube from the wing port and removing the cambered part of this tube, usually 1/8 to 3/8 of an inch - enough for the Soros outer tube to slide into it.

## **SPECIAL INSTRUCTIONS**

If you desire the Ventube to have additional friction so that the Ventube will stay in an interim position you select, place one of the enclosed Velcro pieces between the inner and outer tubes of the Ventube. Specifically, remove the later tube by aligning the pieces on the tube. Place one piece of the Velcro inside the inner tube approximately one and one quarter to one and a half inches down into the outer tube between the slots and replace the inner tube.