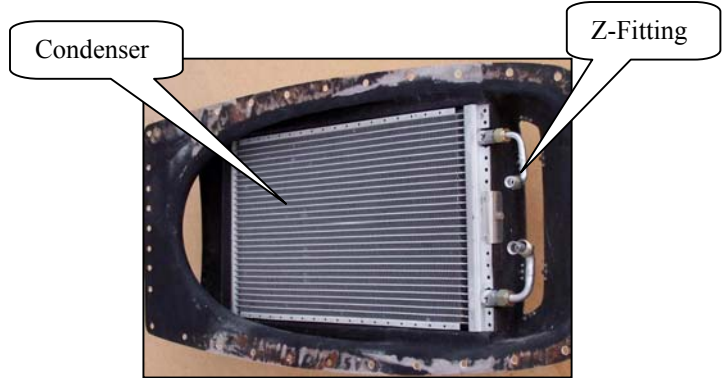
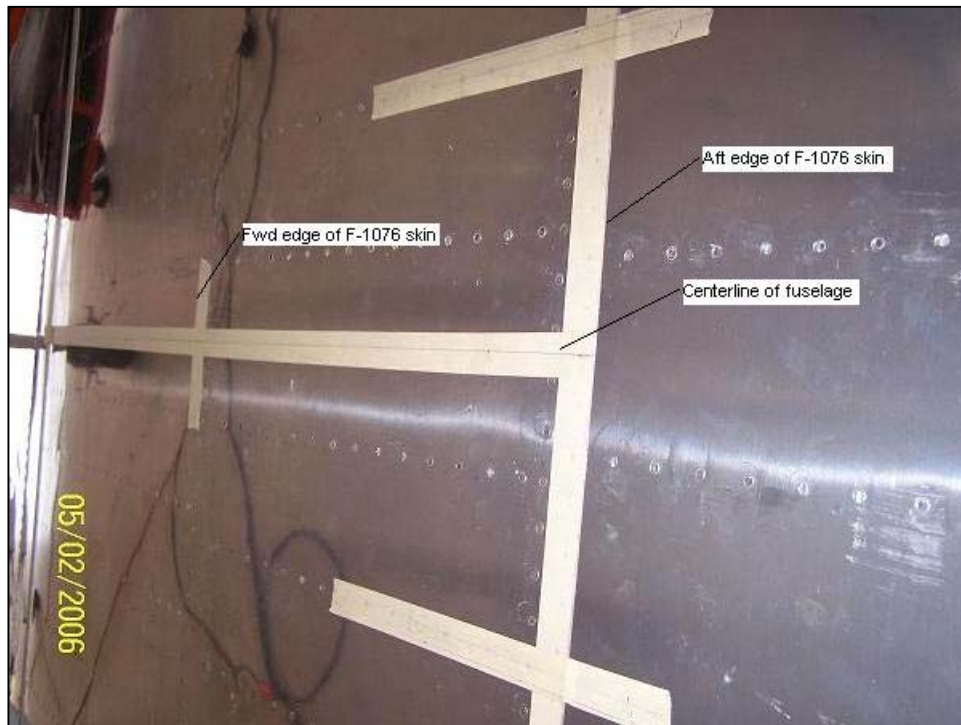


Installation of Airflow's Condenser

The P51 style scoop contains the air conditioner condenser. On the ground the big fan up front (propeller) supplies cooling air across the condenser. Ram air cools the condenser in flight.



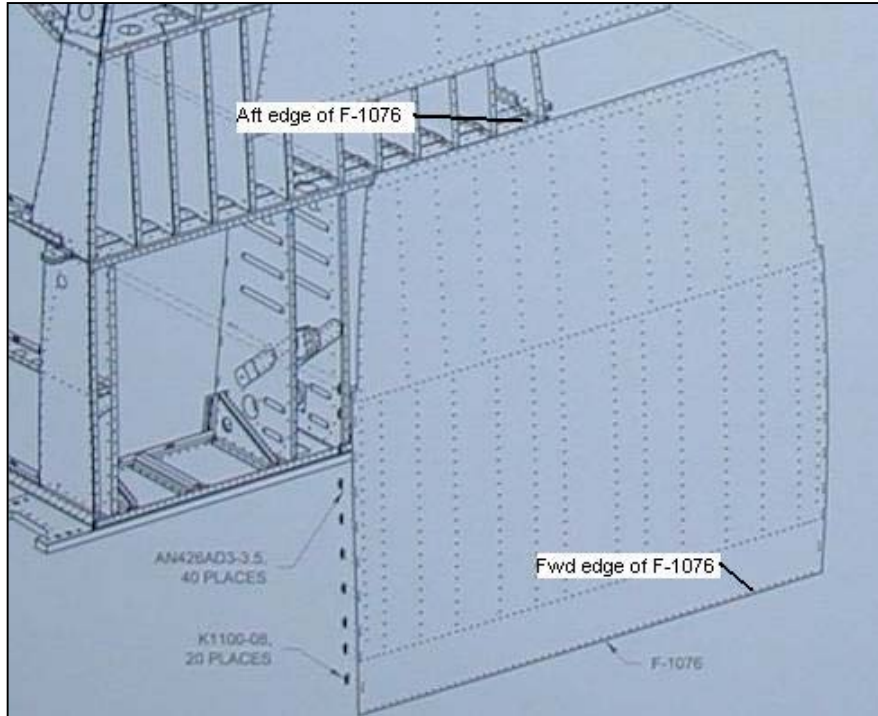
The scoop comes with the condenser installed. I found it easier holding the duct in place by removing the condenser from the scoop. You will need to locate the centerline of the scoop. Place a mark on the scoop's fwd and aft edge flange to reflect this location. You will use these marks to locate the scoop on the bottom of the fuselage. The attachment screw locations were 5/8" inside the flange's outside edge. The spacing of the screws is about 3" between centers. The final size of the location holes will be 3/8" dia. This will allow for any final alignment issues and the countersunk washers to fit flush on the scoop.



Locate the centerline of the fuselage on the bottom of the F-1076 skin. The aft edge of the scoop is located 3 3/8" fwd of the F-1076 skin's aft edge. This should place the fwd edge of the scoop 4 1/2" aft of the F-1076 skin's fwd edge.

An attachment rivet on the F-1017 A-R rear seat sub assembly lies under one of the aft attachment points of the scoop. Drill out this rivet and enlarge hole for rivnut.

I used 10-32 size rivnuts for attachment. Place a dab of Loctite 262 ThreadLocker to prevent movement of rivnut.



The dimensions provided below were used for my RV10. You might want to verify the dimensions for your installation.

The condenser is attached to the Freon hoses with custom Z-fittings provided by Airflow. I made a cardboard layout for locating the Z-fittings holes through the fuselage skin. Place the cardboard on a table and draw an outline of the rear portion of the scoop. Also locate a couple of attach holes on the cardboard for alignment.

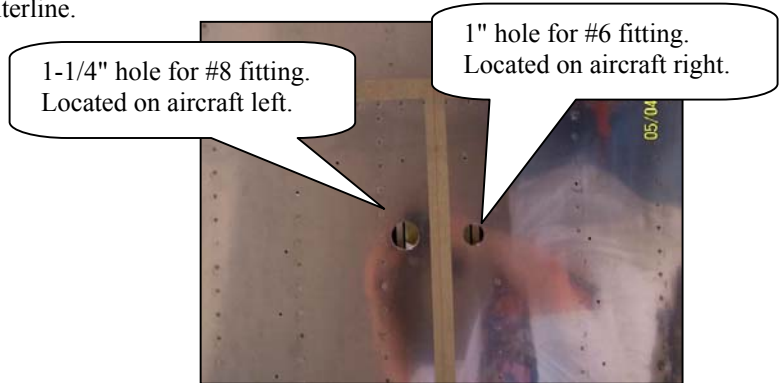
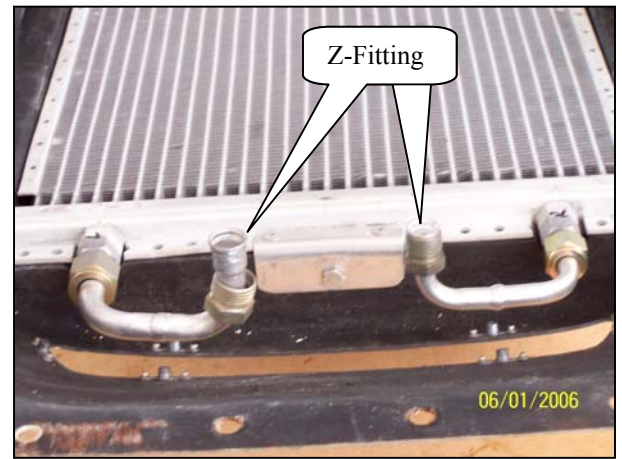
Note: Before drilling the Z-fitting holes, make sure the fittings will not interfere with the elevator control tube. You can use the two center scoop mounting holes to locate the Z-fitting holes on the inside of the fuselage.

The 1" dia. hole for the #6 fitting is located 4 1/4" fwd of the aft edge of the scoop and 1 9/16" from the scoop centerline.

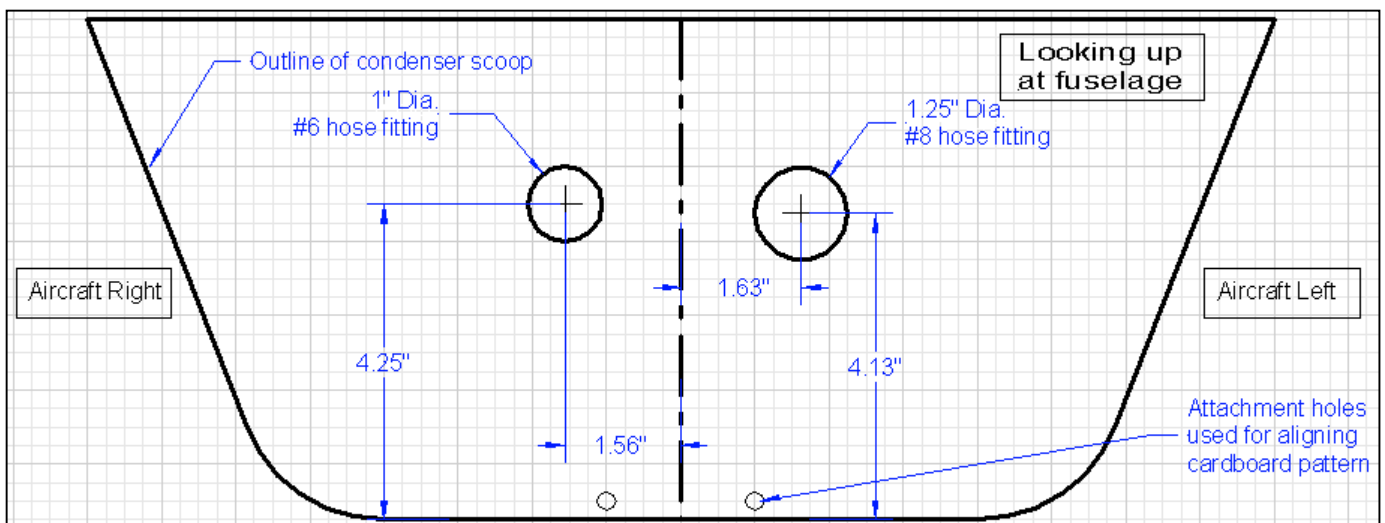
The 1 1/4" dia. hole for the #8 fitting is located 4 1/8" fwd of the aft edge of the scoop and 1 5/8" from the scoop centerline.

Note: The #8 fitting is located on the left side of the fuselage centerline.

Sealing grommets needed are #8 fitting = AN931-8-20 and #6 fitting = AN931-6-16.



Cardboard template used to locate holes in fuselage for Z-Fittings.
 These dimensions are provided as an example of what I did. Your dimensions may be different.



Temporary install of condenser scoop.

