

RV-10 Interior Panels

Important Notice: This manual contains important information that may affect the safety of your aircraft. Read the Warranty / Agreement below. There is information in the Warranty / Agreement that may alter your decision to install this product. If you do not accept the terms of the Warranty / Agreement, do not install this product. The product may be returned for a refund if you do not accept the terms of the Limited Warranty / Agreement.

Aerosport Products is not liable or responsible for a builder's action or any situation that results in personal injury, property damage, missed commitments, lack of use of an aircraft or any expenses incurred due to: product failure, installation issues (leaks, obstructions, damage to aircraft or components, incorrect installation of any parts, wrong parts, parts that don't fit, etc.) or any other issues related to the installation or operation of this product. All of the above are solely the builder's and/or installer's responsibility. By installing this product, the aircraft owner/pilot and installer agree to hold Aerosport Products harmless and in no way responsible for monetary compensation, including punitive damages for any incident, harm and/or damage associated with this product (including but not limited to the ones listed above). If you do not agree to the above, **DO NOT INSTALL THIS PRODUCT.**

If you do not have the skills, knowledge, tools, equipment or facility, to perform and determine the installation of this product is safe, reliable and accurate and to determine this product is operating properly after installation, **DO NOT INSTALL THIS PRODUCT**. If the owner/pilot and/or installer are unwilling to take the responsibility for the installation and operation of this product, **DO NOT INSTALL THIS PRODUCT**. This product may be returned for a refund by contacting Aerosport Products. Shipping charges are not refundable.

Before starting the installation, make sure that your planned installation will not interfere with the proper operation of any controls. The installer should use current aircraft standards and practices to install this product. Refer to AC 43.13-2A, Acceptable Methods, Techniques, and Practices - Aircraft Alterations and AC 43.13-1B, Acceptable Methods, Techniques, and Practices--Aircraft Inspection and Repair. The RV-10 Cowl Pin Covers are limited to use in experimental aircraft. Not approved for use in aircraft with FAA or foreign type certificates.

LIMITED WARRANTY / AGREEMENT Aerosport Products warrants its products to be free from defects in materials and workmanship for a period of one year after the retail invoice date. Aerosport Products will repair or replace any components under the terms of this Warranty provided the item is returned to Aerosport Products prepaid. This Warranty shall not apply to any unit or component that has been repaired or altered by any person other than Aerosport Products or that has been subjected to misuse, abuse, accident, , or improper or unprofessional installation by any person. THIS WARRANTY DOES NOT COVER ANY REIMBURSEMENT FOR ANYONE'S TIME FOR INSTALLATION, REMOVAL, ASSEMBLY OR REPAIR. Aerosport Products reserves the right to determine the reason or cause for warranty repair.

- 1. This Warranty does not extend to any aircraft or any other device to which the Aerosport Products system may be connected, attached, or used with in any way.
- 2. THE REMEDIES AVAILABLE TO THE PURCHASER ARE LIMITED TO REPAIR, REPLACEMENT, OR REFUND OF THE PURCHASE PRICE OF THE PRODUCT, AT THE SOLE DISCRETION OF AEROSPORT PRODUCTS. CONSEQUENTIAL DAMAGES, SUCH AS DAMAGE TO THE AIRCRAFT, ARE NOT COVERED, AND ARE EXCLUDED. DAMAGES FOR PHYSICAL INJURY TO PERSON OR PROPERTY ARE NOT COVERED, AND ARE EXCLUDED.
- 3. Aerosport Products is not liable for expenses incurred by the purchaser or installer due to Aerosport Products updates, modifications, improvements, upgrades, changes, notices or alterations to the product.



- 4. Aerosport Products is not responsible for shipping charges or damages incurred during Shipment, except for situations where the system fails away from the aircraft's home base and the pilot is unable to safely fly the aircraft, at which time Aerosport Products shall, at Aerosport Products' sole discretion, pay only one-way shipping charges to the purchaser (US 48 states only).
- 5. No one is authorized to assume any other or additional liability for Aerosport Products in connection with the sale of Aerosport Products units.
- 6. By purchasing these products from Aerosport Products, the Purchaser agrees that he/she will not copy, reverse engineer, modify use to make molds or otherwise attempt to use the purchased products design / functionality to develop a competing product
- 7. IF YOU DO NOT AGREE TO ACCEPT THE TERMS OF THIS AGREEMENT, YOU MAY RETURN THE PRODUCT FOR A FULL REFUND. IF YOU DO NOT AGREE TO ACCEPT THE TERMS OF THIS WARRANTY, **DO NOT INSTALL THE PRODUCT**.
- 8. This warranty is made only to the original purchaser and is not transferable. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES OR OBLIGATIONS, EXPRESS OR IMPLIED, ORAL OR WRITTEN. AEROSPORT PRODUCTS EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THE PURCHASER AGREES THAT IN NO EVENT SHALL AEROSPORT PRODUCTS BE LIABLE FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING DAMAGES TO THE ENGINE OR AIRCRAFT, LOST PROFITS, LOSS OF USE, OR OTHER ECONOMIC LOSS. EXCEPT AS EXPRESSLY PROVIDED HEREIN, AEROSPORT PRODUCTS DISCLAIMS ALL OTHER LIABILITY TO THE PURCHASER OR ANY OTHER PERSON IN CONNECTION WITH THE USE OR PERFORMANCE OF AEROSPORT PRODUCTS UNITS, INCLUDING BUT NOT LIMITED TO STRICT PRODUCTS LIABILITY IN TORT.

What's included:

Depending on which interior package was ordered, the number of panels and parts included may vary. Please see www.aerosportproducts.com for a detailed list of the components in each package. No mounting hardware is included.

What you need to supply:

Nutplates, screws, and rivets are not included because they may vary with each builder's installation and preferences. We will provide suggestions in the instructions, but each builder will need to determine the appropriate hardware for their installation per AC 43.13.

Note: All the RV-10 interior panels have been pre-trimmed to fit any stock RV-10 interior to final size except the two front panels (L & R). We do not cut the two front panels because these can be different between builders depending on which instrument panel and front vents they install. These are trimmed close, but will not fit like the other mid and rear cargo area panels. The Rear passenger area panels are trimmed to size except for the cut out for the rear seat air vents. You will need to trim these holes out if you are using the rear passenger vents. They are pre-marked and should be cut out very precisely so the vents covers fit the hole very close. Please take your time on these, because the tolerance on the opening is minimal. Details on this step are documented in Step 5-1.



Installation Instructions

Step #1

The first thing that you will need to do is trim the aluminum channels F-1042 (forward) and F1005C (aft) to look similar to the photos below to allow for the interior panel to fit properly. Take your time and if your windows are installed tape them off to protect them. We recommend using a sanding disk or some type of cut off wheel.





Step #2

Test fit to make sure the panels fit your airplane correctly. As stated previously they have been pretrimmed and should fit very well. You might need to make a few small trimming adjustments. Fit and Trim only if you feel it necessary. The right mid-rear and rear cargo panels will all be held on by five screws. Wait until Step #6 to trim and fit the front panels.

Step #3 - Installing Rear Panels

The location of the placement of the front screws on the rear panel is illustrated in the photo to the right. We recommend using 6-32 screws with K-1000-06 nut plates. The photo shows the measurements of the front edge screw locations. The lower screw is 1.5" up from the bottom of the panel and the upper screw is 6.625", which should be the center of the vent hole. These locations are for both the right and left sides.





Note: The screws and screw covers shown in the photos are not included in the base interior panel packages.

The position of the screw locations on the aft of the rear panel (and forward of the right baggage panel) is shown in the photo to the right. The aft end of the rear panel will overlap the forward end of the baggage panel. We recommend 6-32 screws with K-1000-06 nut plates. Measurements are about 2" up from the bottom of the panel for the lower screw and between 8" and 8.25" for the upper screw.

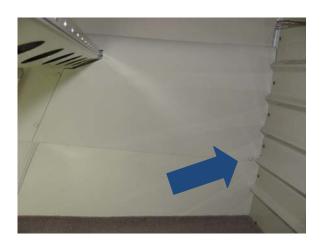
Once satisfied with the fit mark and drill the holes in the panels and then hold them in place and drill your screw hole with a #40 drill bit. Enlarge hole using a #19 drill bit. Install nut plates in these four locations.





Step #4 - Installing Baggage Panels

The rear right baggage panel has one screw in the rear bottom area as shown in the photo to the right. We recommend a #6 sheet metal screw if you have already riveted the F-1080 access panel place. Just be cautious that the screw is well away of any conduit, tubing, or wiring that may be run behind the access panel. Otherwise you can use a 6-32 screw and a K-1000-06 nut plate. Placement of this screw should be about 1.5" from the back trimmed edge of the panel and 0.5" up from the bottom edge. Ensure that the panels are aligned





properly before drilling. Use an appropriate size bit for your choice of screw.

This should be all the attachment points required. The corrugation on the baggage bulk head cover will hold this in as you can see in the above photo.

On the left rear baggage area panel over the baggage door, only two screws are required which will be attached to the longeron.

You can drill and tap the hole in the longeron or you can use K1000-06 nut plates. Be sure to locate the holes centered between the rivets in the longeron.

The forward screw should be drilled and tapped into the doubled up area on the longeron as shown to the right and the aft should be 3-4" from the back edge. These are the only screws needed to hold this panel in place.

Step #5-1 - Rear Vent Installation

Once you have the panels fit, it is time to cut the vent cover holes. On the back side of the panel you will see the cut out line. Cut these holes out to the inside of the lines. You want to make these holes fit the vent as snug as possible. The vent covers have tabs that will hold these in place and if the hole has too much cut away they will not snap in place as needed and then will need to be glued in permanently. See tabs in the photo to the right. There are two sets of tabs at different levels. The second level is for material thickness if you decided to cover your panels with leather or some other material.

Step #5-2

Install the vent slider arms. There is a right and left arm so make sure you install the correct one for its appropriate side. The instructions are for the left side/pilot side vent.









You will need to close the vent tight and tighten the nut up to make the vent stay closed.

Next align slider arm as in the below picture and drill thru the pre-drilled holes in the arm thru the vent arms.

NOTE: In the below picture we show a measurement of 2.125" distance but we recommend 2" or a little less.

The drilled holes should be a tight clearance hole for a 4-40 screw.



The photo above and to the right is how it should look from the bottom side of the slider vent lever.

Step #5-3

Cut a hole in the air deflector tube as shown in the picture below. Once again this is the left side deflector tube we are showing. The right side is a mirror of the left. This hole in the deflector tube is to clear the 10-32 screw and aircraft nut highlighted by the arrow in the previous picture.







Step #5-4

Test fit the panels with the vents installed. Carefully install the vent cover into your side panel and snap the panel edge over the snaps on the vent cover.

Once complete carefully push the deflector tube over the vent cover. This is a tight fit so please be patient. You may need to sand the deflector tube a little bit to get the fit. Try to keep the deflector tube square to the vent cover when trying to fit everything together.

Install the panel in the airplane. You will need to angle the panel a little bit as shown in the photo to the right. Be patient here again and you will see how it works into place. You need to fit the vent area up into its place with the slider arm in its slot. Move the panel around and push the back into place.

Once in place make sure that the deflector tube does not try and push the vent out. It might be a little proud and putting some pressure on the vent cover and creating a slight bulge

If this happens you will need to trim the vent covers a little at a time to adjust for your aircraft.

Do not trim the deflector tube; trim the vent as shown to the right.









Step #6- Front Panels

The front panels are more difficult to install because they are not trimmed to final size like the rear panels. Installing the panel is easier to if your control sticks are removed. You can install and remove panels with the sticks installed. It is just easier to do the initial installation with them out of the way. Insert the panel in the aircraft and start to trim the panel. The bottom edge is trimmed to size and should not need any trimming.



Take your time trimming out the panel to fit your

aircraft a little at a time. Baby cuts are much better than big cuts that cannot be replaced. The panel can be bent carefully to install in place. Be careful and take your time. The bottom edge forward edge and the aft edge should need very little trimming. The aft edge will need a cut as shown above to allow for the jog in the inside cabin walls and will allow for the middle panel under the door to slide behind front panel. There is a 0.125" lip on the aft edge trim to approximately .062" in area shown in the photo. Measure two to three times and cut only once.

You will need to trim the top a little bit to clear your rudder pedal upper rods and your front vents. You may have to trim the front vertical edge of the panel a little depending if you have any insulation on the backside of the fire wall.

The front panels require a minimum of five screws to attach to the airframe. The forward two are seen in the photo to the right and are attached to the F-1022 forward fuselage bulkhead just behind the rudder pedals. These screws should be placed approximately 3" and 10" from the bottom edge.



These dimensions are not critical but should be close. Use 6-32 screws and K-1000-06 nut plates.

The three aft screws are placed at the top, middle and bottom locations as seen in the photos below. The middle hole uses an existing #8 hole with nut plate which should already be installed. Use a strap duplicator to locate the hole on the panel.





The Lower hole is not critical as to location but should be just above landing gear support bar so you can get drill this hole and insert #6 self tapping sheet metal screw. Be sure that there are no conduit, wiring, or tubing located in proximity to this location.

Step 7 – Accessories

If you purchased a cup holder or small webbing pocket, attach these before final installation of the panels.

LARGE MAP POCKET

To install the large map pocket you will need to use five $8-32 \times 3/8$ " screws with aircraft lock nuts (AN365-832A) on each map pocket on the backside. You will need to transfer the holes from the five map pocket holes to the interior panel. Do this by holding the map pocket as shown in below photo. Keep the outside edge of the map pocket even with the interior panel as shown. Drill the five holes using a long #30 drill bit.







Complete opening the holes in the interior panels for clearance holes for the 8-32 screws. Once holes are enlarged, attach the pocket using the 8-32 screws attach the pockets. The screws and lock nuts just need to be snug.

CUP HOLDERS

The cup holders come with four screws and two plastic backer strips. Align the cup holder where you would like it to go on the interior panel and match drill the four holes from the cup holder. Use the same drill bit as used for the map pockets. Make sure after the cup holders are installed that the sharp edge of the screws do not hit or dig into any part of the aircraft or wiring.

SMALL OPTIONAL MAP POCKETS

To install the small map pockets use the same process as the large map pockets.

NOTE: The panel inserts shown in the installation photos are not a part of the interior panel package. You may add your own inserts using leather, carpet, or any material of your choosing.

If you have any questions about your installation, please give us a call or send an email.