GUIDE FOR THE PIPER COMANCHE PA-24 Pre 1969 GLARE SHIELD

PLEASE READ ALL THE INSTRUCTIONS CAREFULLY BEFORE STARTING

This Piper glare shield is based on a template for a Piper PA-24 Model with a smooth transition from the pilot to co-pilot side with NO steps or compound curves (**installer may have to add black foam or other material to cover any triangle void left in any step area between the pilot and co-pilot side**)

Over the years the glare shield that Piper installed on their panel has in many cases become an eyesore due to its being subjected to the heat buildup from the sun beating down through the windshield and with the planes are lasting far longer than Piper ever dreamed, the glare shield has become a problem for many.

There are some fiberglass glare shields available as aftermarket options. I have read from those who have them that some have been pleased with them other than some say they are difficult to install. Others have said they do not like the reflective glare they experience. I for one would be concerned about the hard surface of the fiberglass in the event of an impact. Not only does our glare shield greatly add to the beauty of your plane, the eyebrow is soft should you ever hit it from a sudden stop.

Before we get into the replacement of your old glareshield, I'm sure all of you are wondering about the legal aspects. We have discussed this to great length with the FAA FSDO in Oklahoma City and it has been their opinion that this is only a minor cosmetic (like carpeting) addition to the plane and needs no approval other than a log entry; however, it is the owner operator's responsibility to determine airworthiness and applicability. This part can be manufactured under contract with the owner operator under FAR 21.303b2.

If you are concerned, I would suggest you discuss the replacement of the glareshield with your local FSDO. If they are uncomfortable with just a log book entry, you could request that your mechanic submit a 337 and request they grant a field approval. Keep in mind that this glare shield is specifically made/manufactured per owners/operators instructions (your instructions).

Due to the many different models of PA-24's it will be hard to provide specific instructions. We will try to assist with some general instructions regarding the changes that you may need to make. If you have any specific questions regarding your airplane, please feel free to call us at any time and we will try to help with your questions.

If you have a compass installed on the top of your existing glareshield it will need to be removed temporarily until the new glare shield is in place which at that time the holes will need to be transferred and the compass reinstalled. On some of the model PA-24's we have noticed that Piper installed a small avionics vent cover. If you have one of these covers you will need to remove it also to enable the new glare shield to lie flat. Many just leave it off since it was a necessary vent used during the days of old type radio's that produced an enormous amount of heat. If you decide to reinstall it on the new glareshield, you will need to mark the location on the new glareshield and cut a hole approximately the same size. Due to the design of our glareshield this is easily done with aircraft tin snips (Dutchmen's).

Some installers use $\frac{1}{2}$ " wide vinyl pin stripe material (procured locally), in the same color as their windshield posts, and installed on the flat surface next to the windshield. This makes for a nice transition between at the forward edge of the glare shield.

There are two ways for securing the glareshield to the top of your instrument panel. One is with countersunk washers, screws and angle brackets (procured locally) and the other is with the provided PK screws. Depending on your specific model, you may find you will want to attach the new glareshield with any one of the above mentioned methods. You will probably find that you will need to do nothing more than reinstall the compass.

The new glare shield is an exact fit and on the sides between the instrument panel and windshield the fit will be very tight. To enable the ends of the panel to fit properly we suggest you mix up a small solution of dishwasher soap and water and brush on the glareshield in the area where the new glareshield fits between the winshield and the instrument panel.

Place the new glareshield on top of the area above the instrument panel forcing it under the windshield molding around the entire base of the windshield. Don't be concerned if you have a small hump on top of your panel, as the fasteners and compass will hold the Glare shield in place for a smooth contour.

NOTE

When positioning the new Glare shield in place, do not be afraid to be a little aggressive, especially as it conforms around the sides of the instrument panel near the windshield. Continue forcing it down until it is laying flush on top of the instrument panel. With the new Glare shield in position, verify the slot for the defroster outlet on the Glare shield lines up with the defroster opening on the aircraft and ensure it is all the way forward against the windshield molding determining fastener location and before installing the fasteners.

Place the new glareshield on top of your panel making sure it is all the way forward under the windshield. You may find one means of attachment better than the other for your installation. Due to the design of the new glareshield, should you decide on securing it to the top of your panel with the PK screws, it is very easy to punch holes through the vinyl and Lexan using a prick punch or drill. If you decide to attach the glareshield with the screws, use the prick punch to also make the holes on top of the panel. You will need to determine the best location for the fasteners making sure the fasteners will not interfere with any equipment. In most cases the holes will be approximately one inch from the forward edge of the eyebrow (windshield side). Many customers just prefer to let the compass hold the new glare shield in place. This completes the replacement of glareshield.