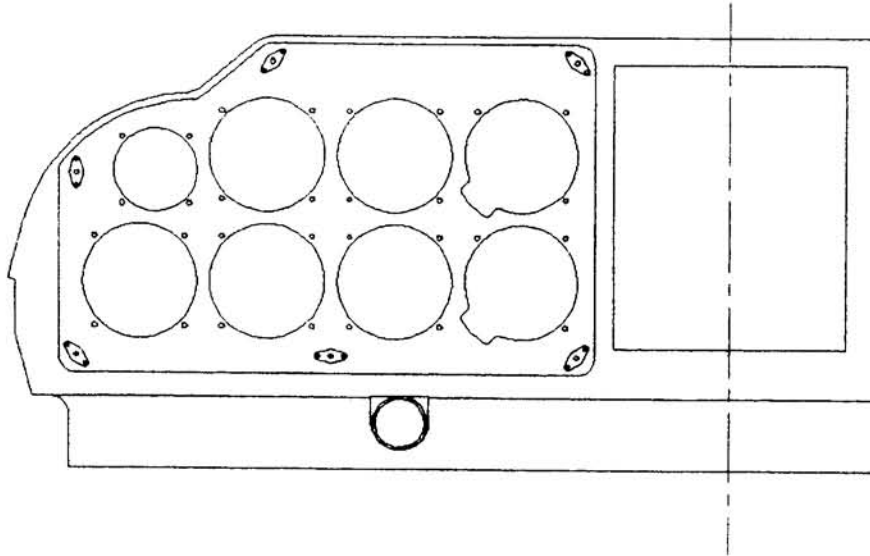


PA-22 Instrument Panel Modification



Application

The later model Tripacers and Colts have a full gyro panel, identified by the raised portion on the L/H side. The production instrument panel was designed to accommodate the AN style instruments available at the time the airplanes were produced. Structural tubing behind the panel complicates the installation of deep instruments (such as a DG) low in the panel, hence the odd configurations seen in many airplanes.

Design Features

This modification (STC SA00428SE) upgrades the panel to use modern 3 1/8" instruments. It raises the location of all instruments and allows for the installation of typical DGs in the center of the "T" below the artificial horizon.

The modification has provisions for (7) 3 1/8" instruments and (1) 2 1/4" instrument. The cutouts for the horizon and turn coordinator allow for leveling to correct for any installation misalignment.

In the event the airplane is to be returned to the production configuration, this can be done in a manner which closely matches the original.

The Kit

The kit consists of a panel overlay with cutouts for the instruments. Placards and mounting hardware together with installation instructions and drawings are included.

Installation

The installation requires trimming the existing panel, deburring and touching up the trimmed areas and the installation of nutplates. No structural tubing needs to be cut.

Approval

After installing the modification, a Form 337 must be completed and signed by an AI confirming that the installation was done per the STC. A record of each aircraft modified will be kept.

The installation of new 3 1/8" instruments is not a part of this STC and will require a separate Form 337.

Kit for PA-22-150/160P/N92WD005100-1
Kit for PA-22-108 ColtP/N92WD005100-501

92WD005 Instrument Panel Modification Kit

Packing List

The following items should be enclosed. If any items are missing, please notify Univair so that we may provide a replacement.

Qty	Part Number	Nomenclature
1	92WD005100-1 (or -501)	Panel Overlay
6	MS21059L08	Nutplates
6	MS24893S28	Machine Screws
1	92WD005000	Drawing; Parts List, Sht 2,3
1	STC Cover Sheet	

Master Drawing List Excerpt

Attached is an excerpt from the Master Drawing List 92WD005-D01 which is referenced on the face of the STC. This page lists the drawings that make up the design package for this STC and lists 92WD005000 as the installation drawing for this modification. 92WD005000 provides complete instructions for the modification and installation of this kit.

Hints and Tips for Installing the Panel Mod.

Location

Be careful when locating the overlay to ensure that adequate edge margin will exist when the nutplates are installed.

The overlay is intended to follow the contour of the production panel along the upper edge with between .1 and .2 inch of the production panel showing. This gap should be made as uniform as possible by shifting the overlay. Use existing mounting holes where possible; these may be pulled or enlarged to allow for proper locating the overlay.

Trimming

Only trim what is required to clear the instruments. Be careful to cover the circuit breakers with a rag or paper to exclude any shavings or chips. A short may develop later in flight if shavings are left on or around the circuit breakers. A cutoff wheel mounted in a die grinder works well for trimming the panel.

When the production panel is trimmed per the drawing, existing holes will be partly trimmed away at a few locations. These should be blended to clean up sharp edges then touched up with primer.

Nutplate Installation

A medium sized pair of Vice-Grips may be used to squeeze the rivets used to attach the nutplates. A steel shim, such as a stainless scale, may be used to shield the countersunk head from the serrated jaws of the Vice-Grips. The throat of the Vice-Grips will reach all required locations if the nutplates are properly clocked. AN426A3-3 rivets are provided for mounting the nutplates though blind rivets may be substituted at the installers option.

On the prototype installation, a single lug nutplate was salvaged and reused at the lower left location due to interference with the structural tube running along the base of the panel. This condition may exist on other aircraft at any of the locations along the base of the panel. Be aware of this when locating the panel overlay.

Touch up

The panel is finished using Randolph Instrument Flat Black; this may be obtained from aircraft supply houses if touch up is required. Extra mounting screws are provided in the event 1 or 2 are stripped during installation.

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All merchandise is sold F.O.B., Aurora, CO. Price and availability subject to change without notice.

FEDERAL AVIATION ADMINISTRATION - PARTS MANUFACTURER APPROVAL

**Univair Aircraft Corporation
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**PMA NO. PQ0012NM
SUPPLEMENT NO. 202
DATE February 14, 2008**

PART NAME	PART NUMBER	APPROVED REPLACEMENT FOR PART NUMBER	APPROVAL BASIS AND APPROVED DESIGN DATA	MAKE ELIGIBILITY	MODEL ELIGIBILITY
Instrument Panel Assembly	92WD005100-1	Modification Part	STC SA00428SE DWG No: MDL 92WD005100 Rev: B Date: 11/09/01 Or later FAA- Approved Revision	Piper	PA-22-150 PA-22-160
Instrument Panel Assembly	92WD005100-501	Modification Part	STC SA00428SE DWG No: MDL 92WD005100 Rev: B Date: 11/09/01 Or later FAA- Approved Revision	Piper	PA-22-108

-----END OF LISTING-----

NOTE: The procedures that are acceptable to the type certificate or TSO authorization holder and their cognizant FAA Aircraft Certification Office, for minor changes to original parts used on type-certificated products, are also acceptable for incorporating the same minor changes on identical FAA-PMA replacement parts. The FAA-PMA holder must show traceability to the TC, STC, or TSO authorization holder on all minor changes incorporated by this procedure. When these procedures are no longer applicable because of completion of the production contract, or termination of the licensing agreement or business relationship, submit all subsequent minor design changes to the PMA parts in a manner determined by the ACO. TC, STC, or TSO authorization holder controls all major design changes to drawings and specifications.



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