

## Installation Instructions for Cessna 400 Series Monorail Sunvisor System

(Kit RC400-300-1)

This is an FAA STC'd installation requiring a log book entry upon completion.

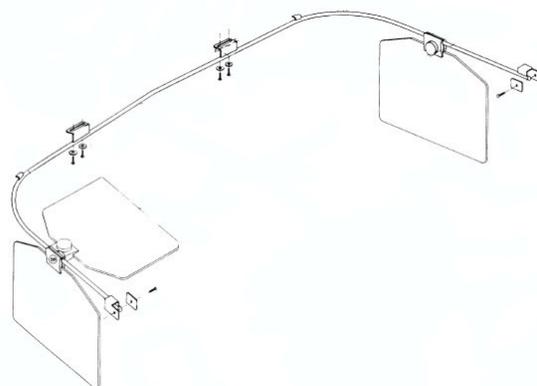
Doc: 9041-0141-001

Rev	Date	Approved
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Please read through these instructions completely before beginning.

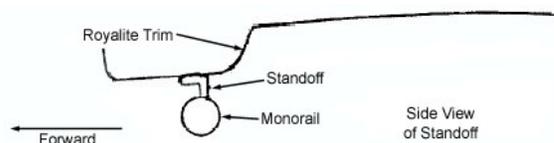
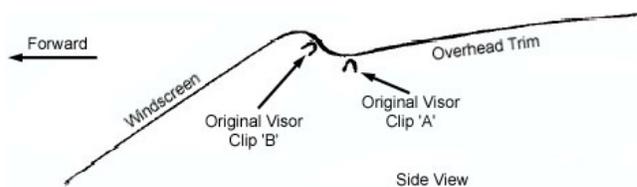
### Hardware:

4	AN526C832R10	#8-32 x 5/8 Screw
4	AN526C832R16	#8-32 x 1 Screw
2	AN526C832R5	#8-32 x 5/16 Screw
4	AN960D9	Washer, Aluminium
4	A8K75	#8 Rivnut
1	3/32 Hex Key	
1	7/64 Hex Key	
2	PCS-1000-14-STZO	E-Clips
2	1410106	Ball Joint Cover
2	1410104	Aft Pressure Plate

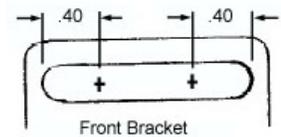


Refer to this drawing as an installation aid.

- There have been several factory sunvisor installations in the 400 series aircraft and although they are basically all the same, the exact location of their mounting positions has been different. To install your new Rosen Sunvisor System you will either fasten the front mounting brackets directly to the nut plates used for the plastic clips from the original visor **OR** you will use the rivnuts provided. To determine which fastening method you will use, please note the clip location diagram below.
- If the aircraft you are installing the visor system into has the original clip in position 'A' skip to **Instruction A**.
- If the clip is in position 'B' you will need to use the four (4) A8K75 rivnuts and the four (4) AN526C832R10 (#8-32 x 5/8) Screws provided to fasten the front mounts to the overhead. The only difference in using the rivnuts to fasten the front brackets is that instead of having the rail positioning predetermined, you must locate its position to insure the correct location of the rivnuts. The monorail must be far enough forward so the standoffs on each corner hold the rail off the Royalite overhead trim. By 'hooking' the rear bracket over the trim at the rear of the cockpit on both sides the monorail can be slid fore and aft to locate the correct position for the front mounts.
- Remove the existing sun visors at the mounting pivot. If you remove the visor retaining clips replace the screws in order to retain the added rigidity to the Royalite trim.



- After centering the monorail and getting the correct forward position mark the Royalite trim for the rivnut installation which will secure the front of the monorail. Each forward bracket has a 1.40 inch slot. The Rivnut placement should be ~.40 inch in from each side of the slot.



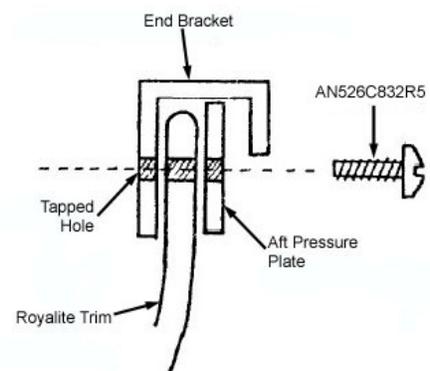
- Drill 4 holes for the rivnut installation in the Royalite only. **Do Not Drill Into The Aircraft Structure.** Carefully install the rivnuts into the Royalite. Do not over compress the rivnut as excess stress on the Royalite can cause it to fracture.
- Using the AN526C832R10 screws provided, fasten the monorail front brackets to the rivnuts just installed.
- Proceed to **Instruction 'B'**.

### **Instruction A**

- Remove the present visors by unscrewing the two (2) #10 fasteners which secure the ball joint cover on both sides of the aircraft. Remove the visor plastic clips from the overhead.
- Install the monorail by 'hooking' the rear brackets over the trim to support the back of the monorail and fasten the front brackets to the nut plates that held the plastic clips using the AN526C832R16 (#8-32 x 1) screws and AN960D9 aluminium washers provided. The front brackets have been made wide enough that they should accommodate the variations in spacing found with the original plastic clip mounting. If this is the case it is acceptable to mount the front brackets with just one fastener per mounting bracket. (Two screws were used to prevent the clip from rotating. If only one fastener is used, and the remaining screw hole is visible beside the bracket, fill it with the second fastener.
- Proceed to **Instruction 'B'**.

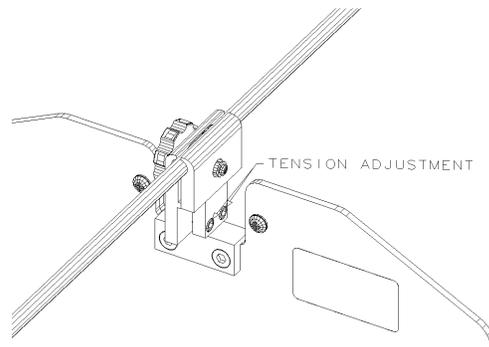
### **Instruction B**

- Hold the rear bracket slightly above the Royalite trim line and mark the center position of the tapped mounting hole. The Royalite will be sandwiched between the aft pressure plate and the threaded rear bracket. Mark both sides approximately 3/8 of an inch from the top of the Royalite.
- Reposition the monorail to allow clearance to drill a 3/16 diameter hole in the Royalite. **Do Not Drill Into The Aircraft Structure.**
- Replace the end bracket over the Royalite Trim aligning the tapped hole with the hole in the trim. Use the Aft Pressure Plate to sandwich the Royalite and secure with the AN526C832R5 (#8-32X5/16) fasteners. Apply a small amount of Loctite to these rear screws.
- Monorail installation is now complete.



### **Installing the visor assemblies**

- Install both visor assemblies by unscrewing the thumb tension knobs until the clamping blocks can be slipped over the rails. Tighten the thumb tension knobs until the snap ring can be installed onto the snap ring groove on the back. Install the provided e-clip. This e-clip prevents inadvertent over loosening of the tensioning knob and acts as a tactile indicator that further loosening must not be attempted.
- When the visor is on the rail the tensioning knob should face the pilots.
- To move the visors loosen the thumb tensioning knob until the clamp is loose enough to be slid along the monorail while holding the thumb knob. To move past the mounting brackets the visor must be positioned so the clamps pass over the brackets.
- Your monorail system is equipped with a swivel design that allows rotation about the axis of the lens. Rotational tension can be adjusted by adjusting one or both of the hex socket head cap screws on the back side of the clamp block and below the thumb knob screw.
- The visor should be aligned with the clamp block before sliding along the monorail.



### **Continued Airworthiness Instructions:**

- **(On the ground only)**
  - Periodically clean the lenses with a soft cloth and Rosen Cleaner, Polisher and Protectant or mild soap and water. Do not use abrasives on the lens.
  - Periodically adjust the pivot tensions on the visor assemblies.
  - Periodically clean rail.
- Updates to this continued airworthiness section are available on the Rosen Website. ([www.rosenvisor.com](http://www.rosenvisor.com))

The most up to date version of this document is available on the Rosen Website. ([www.rosenvisor.com](http://www.rosenvisor.com)) We recommend that you periodically look to make sure you are using the most current version.

### **Airworthiness Limitations:**

The Airworthiness Limitations Section is FAA approved and specifies maintenance required under §§43.16 and 91.403 of the Federal Aviation Regulations unless an alternative program has been FAA approved.

There are no airworthiness limitations associated with this installation.