

Supplemental Type Certificate

Number SA3305NM

This certificate, issued to

**Rosen Sunvisor Systems
86365 College View Road
Eugene, OR 97405**

certifies that the change in the type design for the following product with the limitations and conditions therefor as specified hereon meets the airworthiness requirements of Part CAR 3 of the Civil Air Regulations.

Original Product—Type Certificate Number: A18EA
Make: Piper
Model: PA-31T, PA-31T1, PA-31T2

Description of the Type Design Change: Installation of monorail sun visor system in accordance with FAA approved Rosen Product Development, Inc., Drawing List RPC-00DL, Revision N/C, or later FAA approved revision.

Limitations and Conditions: The approval of this change in type design applies basically to the above model aircraft only. This approval should not be extended to aircraft of this model on which other previously approved modifications are incorporated unless it is determined that the interrelationship between this change and any of those other previously approved modifications, including changes in type design, will introduce no adverse effect upon the airworthiness of the aircraft. The resulting interior arrangement, along with the required placarding has not been evaluated and is not part of this STC. A copy of this Certificate and FAA approved Rosen Drawing List Number RPC-00DL, Revision N/C, shall be maintained as part of the permanent records of the modified aircraft.

If the holder agrees to permit another person to use this certificate to alter the product, the holder shall give the other person written evidence of that permission.

This certificate and the supporting data which is the basis for approval shall remain in effect until surrendered, suspended, revoked, or a termination date is otherwise established by the Administrator of the Federal Aviation Administration.

Date of application: October 15, 1985

Date reissued: March 24, 2003

Date of issuance: December 9, 1985

Date amended: March 24, 2003



By direction of the Administrator

[Handwritten Signature]
(Signature)

[Handwritten Initials]

Acting Manager, Seattle Aircraft Certification Office
(Title)

Any alteration of this certificate is punishable by a fine of not exceeding \$1,000, or imprisonment not exceeding 3 years, or both.

This certificate may be transferred in accordance with FAR 21.47.

Supplemental Type Certificate

Number SA3306NM

This certificate, issued to **Rosen Sunvisor Systems
86365 College View Road
Eugene, OR 97405**

certifies that the change in the type design for the following product with the limitations and conditions therefor as specified hereon meets the airworthiness requirements of Part 23 of the Civil Air Regulations.

Original Product—Type Certificate Number: A23SO
Make: Piper
Model: PA-42, PA-42-720

Description of the Type Design Change: Installation of monorail sun visor system in accordance with FAA approved Rosen Product Development, Inc., Drawing List RPC-00DL, Revision N/C, or later FAA approved revision.

Limitations and Conditions: The approval of this change in type design applies basically to the above model aircraft only. This approval should not be extended to aircraft of this model on which other previously approved modifications are incorporated unless it is determined that the interrelationship between this change and any of those other previously approved modifications, including changes in type design, will introduce no adverse effect upon the airworthiness of the aircraft. The resulting interior arrangement, along with the required placarding has not been evaluated and is not part of this STC. A copy of this Certificate and FAA approved Rosen Drawing List Number RPC-00DL, Revision N/C, shall be maintained as part of the permanent records of the modified aircraft.

If the holder agrees to permit another person to use this certificate to alter the product, the holder shall give the other person written evidence of that permission.

This certificate and the supporting data which is the basis for approval shall remain in effect until surrendered, suspended, revoked, or a termination date is otherwise established by the Administrator of the Federal Aviation Administration.

Date of application: October 15, 1985

Date reissued: March 24, 2003

Date of issuance: December 6, 1985

Date amended: March 24, 2003



By direction of the Administrator

[Handwritten Signature]
(Signature)

for

Acting Manager, Seattle Aircraft Certification Office
(Title)

Any alteration of this certificate is punishable by a fine of not exceeding \$1,000, or imprisonment not exceeding 3 years, or both.

This certificate may be transferred in accordance with FAR 21.47.



Piper Cheyenne Monorail
Sunvisor System

Date	Rev	Approved
2/18/22	J	SYS

Drawing List
RPC-00 DL

Doc. # 9040-0160-001

R1600000		Drawing	Replaces	Description	Rev.
-1	-2				
1	1	1600000	RPC-300-1	Complete System	A
1	1	1600100	RPC-200-3	Rail Assembly	A
1	1	1600101	RPC-100-1	Monorail	A
2	2	1600102	RPC-100-2	Bracket - Front	B
2	2	1600103	RPC-100-3, 4	Bracket - Rear	B
2	2	1600104		Latch	A
2	2	1600105		Latch Body	H
2		1600400	RPC-300-3	Visor Assembly	A
2		1120000-001		Original Clamping Block Assembly	K
2		1120101-001	RPC-200-7A	Nut Plate, Standard	L
2		1120102-001	RPC-200-8A	Clamping Block Body	L
2		1120104	RPC-200-5A	Thumb Knob - Standard	M
2		1120203	RPC-200-8AA	Swivel, Clamping Block	P
2		1110202	RPC-200-8AB	Swivel Nut Plate	E
2		1600401	RPC-200-1	Cheyenne Lens	F

R1600000		Drawing	Reference	Description	Rev.
-1	-2				
	2	1600430		3rd Axis Visor Assembly	B
	2	1120000-003		3 rd Axis Clamping Block Assembly	K
	2	1120101-001		Nut Plate, Standard	L
	2	1120102-001		Clamping Block Body	L
	2	1120104		Thumb Knob - Standard	M
	2	1120200		3 rd Axis Assembly	D
	2	1120220		Swivel Assembly	D
	2	1120207		Sleeve, Body	C
	2	1120208		Sleeve Leg	C
	2	1600431		3 rd Axis Lens	D
			KITS		
√		RCBS-300-11M		Kit, Standard Thumb Knob	D
		1120104		Thumb Knob	M
		RCBS-300-18		Spring	
		PCS-1000-14-STZO		E-Clip	
√		RCBS-100		Clamping Block Assembly	E
		1120000-001		Clamping Block	K
		1110202		Swivel Nut Plate	E
		R1600401		Lens	F
		R1600431		3rd Axis Lens	D
		9041-0160-001		Installation Instructions	B

Installation Instructions for Piper Cheyenne Monorail Sunvisor System

(Kit RPC-300-1)

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

Doc: 9041-0160-001

Please read through these instructions completely before beginning.

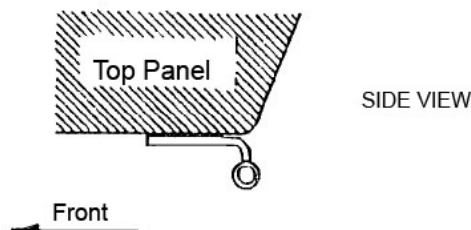
Rev	Date	Approved
B	9/22/09	GH

Hardware:

4	AN526C832R12	#8-32x3/4 PHT SS
6	AN526C832R7	#8-32x7/16 Truss Head Phillips Screw SS
10	A8K75	#8-32 Aluminum Rivnut
2	PCS-1000-14-STZO E-Clip	
1	3/32 Hex Key	
1	7/64 Hex Key	

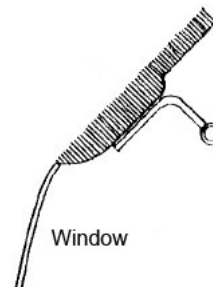
The Piper PA-31 and PA-42 series of aircraft have a variety of interior treatments that our monorail sunvisor system handles very well. Since head room and aft storage room for the visor is extremely limited, we stopped the rail prior to the end of the side window. This accomplished covering the side window completely while keeping the rail away from the pilot/copilot's heads.

- Carefully bring the monorail into the cockpit and place a light pencil mark 9.0 inches on either side of the center line on the overhead front trim. This will be the approximate location of the two front brackets.
- Holding the rail so as to center the brackets on your mark, hold the rail so that it aligns underneath the front panel as shown.
- Mark one hole in the right front bracket and one hole in the left front bracket for the rivnut installation.



- Install the A8K75 rivnuts in the Royalite after insuring that the drill bit will not hit any installation in the top panel. **DO NOT DRILL INTO THE AIRCRAFT STRUCTURE.** (On some aircraft, operators may want to install nut plates at this location.)

- Loosely install the monorail with the AN526C832R7 fasteners provided.
- Mark the second hole in each main bracket and mark each side bracket in the window Royalite trim. Side treatments vary from model to model but one common factor is the window reveal.
- Install rivnuts into the trim for the side brackets, again making sure not to drill into the aircraft structure.

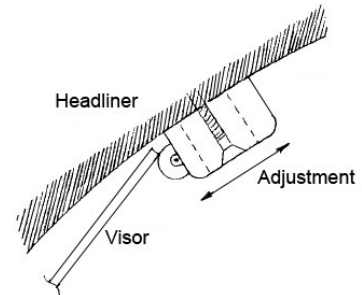


- Install the two remaining rivnuts for the front brackets.
- Reinstall the monorail and tighten all brackets.
- Install each visor assembly to the rail with the thumb tension knob inboard towards the crew.
- Install one retainer clip on the back of each thumb tension knob.
- The preferred visor stowage position is vertically beside and behind the outboard shoulder of the pilot or copilot. Stowing the visor in a horizontal position is not advised.

- AT YOUR OPTION install the spring-loaded visor clip (under most circumstances the visor will stay up in the stowed position if sufficient tension was applied to the thumb tension knob). To use, the operator merely uses the visor as a lever and rotates it down. Since the visors in these aircraft are stowed so close in front of the pilots, a positive latch is supplied.

Note for 3rd Axis Visor Installation: When mounting the springloaded clip or stowing the visor, be sure the 3rd axis pivot is biased up toward the overhead.

- With the visor stowed in a desirable position overhead, hold the spring-loaded catch and its cover somewhere along the inboard edge of the visor. (Again, this location will vary between models.)
- With the roller of the latch touching the lens, firmly mark the center of each slot. There should be enough adjustment fore and aft to insure sufficient pressure to hold the lens in a positive up position while not causing undo stress on the plastic in stowing or unstowing.
- Install the A8K75 rivnuts and AN526C832R12 machine screws. Adjust latching clip as necessary.
- Repeat for copilot's side.



Operating Instructions

To use either visor, rotate down if stowed by using the lens as a lever.

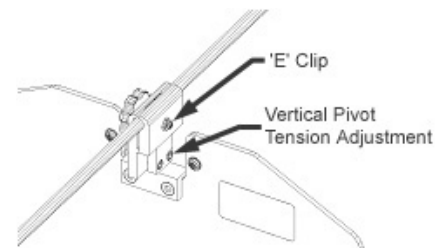
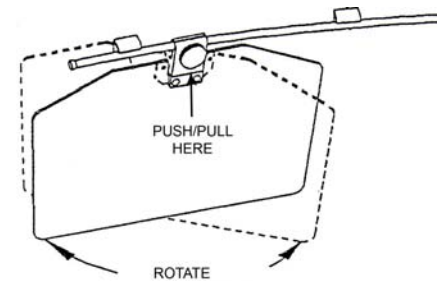
Loosen the thumb tension knob and while still holding the knob, slide the visor smoothly along the monorail. (DO NOT SLIDE THE VISOR BY HOLDING THE LENS.)

To use anywhere on the system, tighten the thumb tension knob as desired. To swivel just rotate the lens in the vertical axis. Swivel tension can be adjusted with the set screw on the side of the clamping block.

To have additional room when the visor is used on the side windows, rotate the visor into the window recess.

To stow, tighten the thumb tension knob and, using the visor as a lever, rotate to the overhead. If the spring-loaded clip was installed, insure the visor is located in the correct position.

Periodic cleaning of the rail with rubbing alcohol will insure a positive clamp.



Continued Airworthiness Instructions:

- **(On the ground only)**
 - Periodically clean the lenses with a soft cloth and Rosen Plastic 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.
- Updates to this Continued Airworthiness section are available on the Rosen Website. (www.rosenvisor.com)

The most up to date version of this document is available on the Rosen Website. (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.