

Installation Instructions for Bell 222 Series Monorail Sunvisor Systems (Kit R1420000)

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

Doc: 9041-0142-001

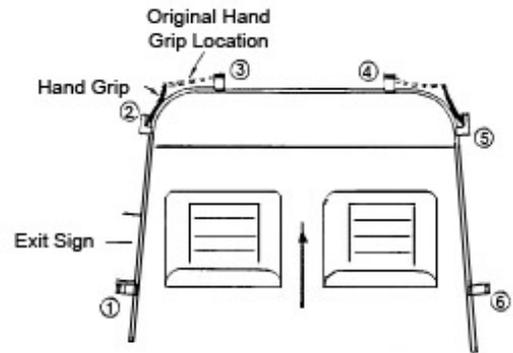
Rev	Date	Approved
B	11/9/10	GH

Please read through these instructions completely before beginning.

Installation Hardware (included):

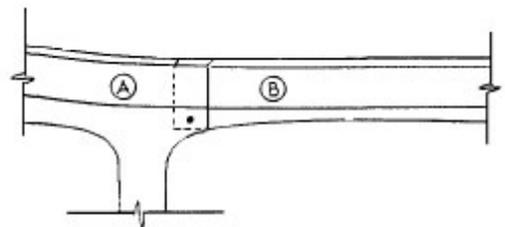
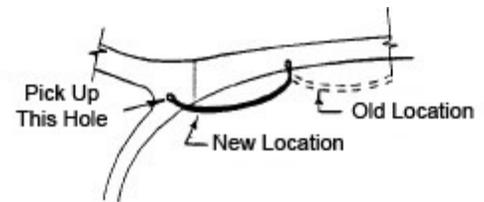
Qty:	(4)	AN526C832R10	#8-32 x 5/8 Truss Head SS Screw
	(2)	AN526C1032R16	#10-32 x 1 Truss Head SS Screw
	(4)	A8K75	#8-32 Rivnut
	(2)	A10K80	#10-32 Rivnut
	(1)	3/32 Hex Key	
	(1)	7/64 Hex Key	
	(2)	PCS-1000-14-STZ	E-Clips

Your instructions will refer to brackets numbered per the following Figure:



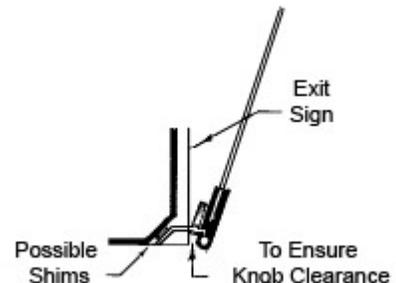
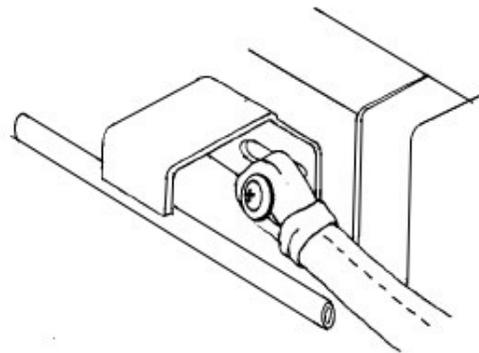
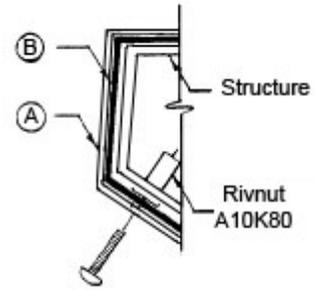
The monorail will run above the door on the sides and has been contoured to travel underneath the front trim with a minimum of clearance (to keep light from coming over the top).

- Remove the inboard screws from the leather hand grips on the front overhead and loosen the outboard screws. (If your helicopter is one of the few without this hand grip, continue to read the instructions.)
- The hand grip will be relocated by swinging the original inboard end so that it now becomes the outboard end. This is to give the rail more clearance. To fasten the hand grip and the #2 and #5 brackets, you will install the A10K80 rivnut in the box structure where the existing hole has already been drilled (to provide clearance for the fastener that is used to hold trim sections A and B together). The rivnut is to be installed in the structure while the trim only needs holes large enough for the head of the rivnut to be slipped through. Before installing the rivnuts, check to make sure that when brackets #3 and #4 are temporarily fastened to the position of the inboard screws that the slots in brackets #2 and #5 align where you will install the rivnuts. Also check that bracket #1 is aft of the exit sign. In the position that you want to install the #10 rivnut, you will notice that Bell may have installed a #6 rivnut in trim section B. If this



is the case, it is easily knocked out.

- If your Bell 222 does not have hand grips, the location of the #10 rivnut where trim sections A and B meet will be the method by which you locate the rail's position. Without the fastener for the grip, you will need to install the A8K75 rivnut provided to attach brackets #3 and #4. (You can do this in the Royalite since the other four brackets are picking up the structure or you can go into the structure and use a spacer. If you go into the structure you will need longer fasteners.)
- Using the screws from the inboard hand strap, temporarily fasten brackets #3 and #4.
- Using the 10/32 screws provided, temporarily fasten brackets #2 and #5 (don't worry about the hand grip at this time).
- Mark the bracket locations for #1 and #6 and make sure that the bottom of the brackets are in line with the bottom of the 45 slope of the side trim.
- Install the A8K75 rivnuts for brackets #1 and #6 in the box structure while drilling a large enough hole for the head in trim section B. (This trim section B is easy to remove if you want to install the rivnut with the trim off.)
- Reinstall the rail and this time fasten the hand grips between the rail and brackets #2 and #5 using the AN526C832R10's for brackets #1 and #6. Use the washer from the original hand grip screw to hold the hand grip with the AN526C1032R16 provided.
- Check bracket #1 with the visor assembly attached to the rail to ensure that sufficient clearance exists between the thumb tension knob and the exit sign so that there is no contact when the visor is rotated up to stow. If there is contact, shim bracket #1 as required. The visor is transparent so does not interfere with the ability to read or observe the exit sign when the visor is stowed.



Operating Instructions

To operate your visors, loosen the thumb tension knob by turning it counterclockwise, and slide the visor in the desired direction while holding on to the knob. (A snap ring is installed on the rear of the thumb knob to prevent the pilot from inadvertently over-loosening the visor assembly.)

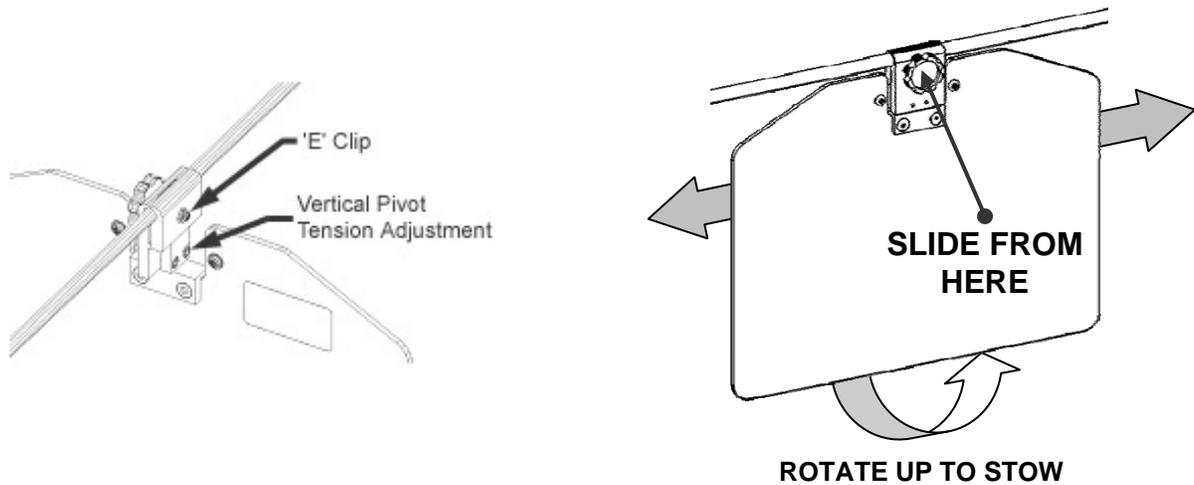
Because of the fairly sharp bends in some parts of the rail, the thumb tension knob must be turned all the way counterclockwise to negotiate these areas.

To lock the visor in place, simply tighten the thumb knob by turning it clockwise.

Your visors incorporate a swivel modification that allows the visor to rotate in the vertical axis. Swivel tension can be increased or decreased by adjusting the set screw on the side of the visor clamping block.

The visor assembly will stow almost anywhere on the rail, but for the most head room, it is suggested that the visor be stowed just forward of the middle side bracket.

To stow the visors simply tighten the thumb tension knob and rotate the visor up. There is a small learning curve in determining how tight the visor should be. After several operations the visor assembly can be stowed with ease and the correct tension used.



The above figures show where to rotate the visor for storage and that the thumb tension knob is held to push/pull the visor assembly.

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)

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.