United States of America

Becartment of Transportation—Hederal Aviation Administration

Supplemental Type Certificate

Number SH2695NM

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 6 of the Civil Air Regulations. (See Type Certificate Data Sheet H2SW for complete certification basis.)

Original Product—Type Certificate Number:

H2SW

206 series

Description of the Type Design Change: Cockpit Sun Visor installation in accordance with FAA approved Rosen Drawing List Number RB206-00DL, dated January 1985, or later FAA approved revisions.

Limitations and Conditions: Approval of this change in type design applies to the above model aircraft only. This approval should not be extended to other aircraft of this model on which other previously approved modifications are incorporated unless it is determined that the interrelationship between this change and any other previously approved modifications, including changes in type design, will introduce no adverse effect upon the airworthiness of that aircraft. A copy of this Certificate and FAA approved Rosen Drawing List Number RB206-00DL shall be maintained as part of the permanent records for 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: November 30, 1984

Date reissued:

March 24, 2003

Date of issuance:

February 8, 1985

Date amended: March 24, 2003

By direction of the Administrator

(Signature) Acting Manager, Seattle Aircraft

Certification Office

(Title)



Bell 206 Series Helicopter Monorail Sunvisor Systems

Date	Rev	Approved
2/18/22	Н	SYS

Drawing List RB206-00 DL

Doc. 9040-0146-001

R146			Drawing	Number	Description	Rev.
0000	1000	2000		Reference		
*			1460000	R1460000 RB206-300-1 RB206-200	Jet Ranger Complete Monorail System	В
1			1460100	R1460100 RB206-100	Monorail Assembly	В
1			1460101	RB206-100	Rail	В
2			1460104	RB206-100-3, 4	Front Bracket	Α
		*	1462000	R1462000 RB206-300-35 RB206-200	Jet Ranger Complete Monorail System with Air	В
		1	1462100	R1462100 RB206-100-15	Monorail Assembly	С
		1	1462101	RB206-100-15	Rail	В
		1	1462104-1	RB206-100-11	Front Bracket – Pilot	В
		1	1462104-2	RB206-100-10	Front Bracket – Co-Pilot	В
	*		1461000	R1461000 RB206-300-10 RB206-200	Long Ranger Complete Monorail System	Α
	1		1461100	R1461100 RB206-300-10	Monorail Assembly	В
	1		1461101	RB206-100-10	Rail	В
	2		1461104	RB206-100-8,9	Front Bracket	Α
1	1	1	1460102-1	RB206-100-6	End Bracket – Pilot	Α
1	1	1	1460102-2	RB206-100-1	End Bracket – Co-Pilot	Α
2	2	1	1460103	RB206-100-2, 5	Side Bracket	Α
2	2	2	1350400	R1350400 RB206-300-3	Visor Assembly	N
2	2	2	1350401	R1350401	Lens	K
2	2	2	1110202		Swivel Nut Plate	E
2	2	2	1120203	R1120203	Swivel, Clamping Block	Р
2	2	2	1120000-001	R1120000-001	Complete Clamping Block Assembly	K
2	2	2	1120101-001	R1120101-001	Standard Nut Plate	L
2	2	2	1120102-001	R1120102-001	Clamping Block Body	L
2	2	2	1120104	R1120104-001	Thumb Knob – Standard	M
1	1	1	9041-0146-001	RB206-400	Installation Instructions	В

<u>KITS</u>		
RCBS-300-11M	Kit, Standard Thumb Knob	D
1120104-002	Thumb Knob	М
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
832X716FSHCSSBP	Screw, 8-32X7/16 Flat Socket Head 82°	
832X14BSHCSSBP	Screw, 8-32X1.4 Button Head	
PCS-1000-14-STZO	Socket E-Clip	
R1350401	Lens	К



Installation Instructions for Bell 206 Series Monorail Sunvisor Systems

(Kits R1460000, R1461000, R1462000)

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

Please read through these instructions completely before beginning.

oc: 9041-0146-001			
Rev	Date	Approved	
В	1/8/08	GH	

Installation Hardware (included):

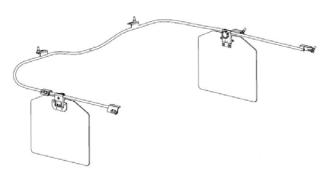
Qty:	(6)	AN526C832R10	#8-32 x 5/8 Truss Head SS Screw (R146	30000)
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(6) AN526C832R12 #8-32 x 3/4 Truss Head SS Screw (R1461000 & R1462000)

(6) AN960D9 D9 Washer (6) NAS42DD516 Spacer (6) A8K75 #8-32 Rivnut

Jet Ranger Monorail Sunvisor System (R1460000)

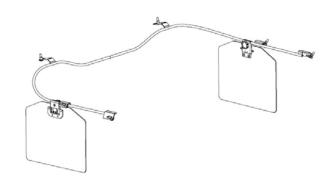
- Take the Jet Ranger monorail system and carefully place it inside the helicopter cockpit.
- Position the rail so that the brackets align with the existing fasteners in the aluminum skin or Kydex trim material. The brackets have been slotted to allow for variances in the fastener spacing. Remove these fasteners.



- Secure the two main front brackets with the AN526C832R10 machine screws provided. Do not tighten at this time; only hold the rail so either side can be secured.
- When all brackets have their respective fasteners attached, tighten all fasteners.
- Install both visors onto the monorail with the thumb tension knob inboard.
- Install retainer clip to the back of the thumb tension knob.
- Remove the protective covering from the visor lens.
- Proceed to Operating Instructions at this point.

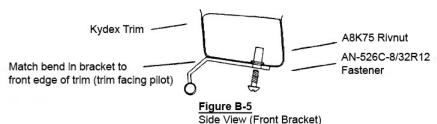
Long Ranger Monorail Sunvisor System (R1461000)

- Carefully place the Long Ranger monorail system into the helicopter.
- With the help of an assistant, hold the rail up to the front overhead so that the side view of the front bracket is as it appears in Figure B-5.
- With the front brackets equally spaced from the center, insure that the rail has adequate clearance around the



speed reference box on the center column. Mark the front bracket slots on the Kydex trim.

- Drill a small pilot hole (~1/16") in the center of the slot mark, drilling through the Kydex and then through the aluminum sheet box structure. (DRILL ONLY INTO THE INTERIOR SECTION OF THE BOX STRUCTURE and not the structural outer surface.)
- Drill a 11/32" hole in the Kydex only for clearance for the NAS42DD516 spacer.
- Drill a hole in the interior portion of the aluminum box structure with a #2 drill for an A8K75 rivnut.
 (Installation hole size references are .221" min. and .226 max.) DRILL ONLY IN THE INTERIOR SECTION OF THE BOX STRUCTURE.
- Install the front bracket rivnuts.
- Using the NAS42DD516 spacers and AN526C832R12 fasteners provided, fasten the rail

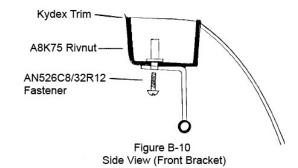


temporarily into place. Center the side brackets on the side panels and mark the slot locations as with the front brackets.

- Remove the monorail and repeat the procedure to install the A8K75 rivnuts. AGAIN, DRILL ONLY INTO THE INTERIOR SECTION OF THE ALUMINUM BOX STRUCTURE.
- Reinstall the monorail using the NAS42DD516 spacers, AN526C832R12 fasteners and AN960D9 washers.

Bell 206 Series with Factory Installed Air Conditioning (R1462000)

- With the help of an assistant, hold the monorail up in the Jet Ranger cockpit with the side brackets fairly
 well centered on the horizontal trim panels between the door and eyebrow windows.
- The front brackets should mate up to the trim running on top of either front window and to either side of the air conditioning vents, as approximated in Figure B-10.
- Make sure there is a minimum of .150" clearance between the rail and air conditioning ducts and the rail and window center post. If there is not sufficient clearance, move the rail to the rear and/or shim front brackets slightly.
- When proper clearance is obtained, make sure rail is square and mark center of forward bracket slots on Kydex trim.
- Mount the front two brackets first with the following procedure.



- Drill a small pilot hole (~1/16") in the center of the slot mark, drilling through the Kydex and then through the aluminum sheet box structure. DRILL ONLY INTO THE INTERIOR SECTION OF THE BOX STRUCTURE and not the structural outer surface.
- Drill an 11/32" hole in the Kydex only for clearance for the NAS42DD516 spacer.

- Drill a hole in the interior portion of the aluminum box structure with a #2 drill for an A8K75 rivnut.
 Installation hole size references are .221" min. and .226 max. DRILL ONLY IN THE INTERIOR SECTION OF THE BOX STRUCTURE.
- Install the front bracket rivnuts.
- Using the NAS42DD516 spacers and AN526C832R12 fasteners provided, fasten the rail temporarily into place.
- Center the side brackets on the side panels and mark the slot locations as with the front brackets.
- Remove the monorail and repeat the procedure to install the A8K75 rivnuts. AGAIN, DRILL ONLY INTO THE INTERIOR SECTION OF THE ALUMINUM BOX STRUCTURE.
- Reinstall the monorail using the NAS42DD516 spacers, AN526C832R12 fasteners, and AN960D9 washers.
- When all brackets have their respective fasteners attached, tighten all fasteners.
- Install both visors onto the monorail with the thumb tension knob inboard.
- Install retainer clip to the back of the thumb tension knob.
- Remove the protective covering from the visor lens.

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.)

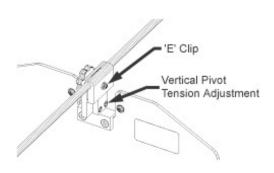
Because of the fairly sharp bends in some parts of the rail, the thumb tension knob must be turned all the way counterclockwise to negotiate these areas.

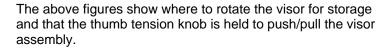
To lock the visor in place, simply tighten the thumb knob by turning it clockwise.

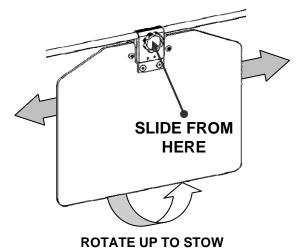
Your visors incorporate a swivel modification that allows the visor to rotate in the vertical axis. Swivel tension can be increased or decreased by adjusting the set screw on the side of the visor clamping block.

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.







Optional passenger compartment visors can be stowed at any point on the rail, however, the most preferable place would be over the least used seat in the case of the Long Ranger, or on the opposite side in the Jet Ranger.

Continued Airworthiness Instructions

• (On the ground only)

- Periodically clean the lenses with a soft cloth, mild soap and water or an approved aviation grade windscreen cleaner. 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. (<u>www.rosenvisor.com</u>)

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.