United States of America

Department of Transportation Federal Aviation Administration

Supplemental Type Certificate

Number **SA3068NM**

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* Federal Aviation *Regulations.*

Original Product—Type Certificate Number: A31CE
Make: Raytheon
Model: F90

Description of the Type Design Change: Installation of monorail sun visor system in accordance with FAA approved Rosen Sunvisor Systems, Drawing List RBKA-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 Sunvisor Systems, Drawing List Number RBKA-00DL, 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: May 20, 1985

Date of issuance: July 16, 1985

Date reissued: March 24, 2003

Date amended: March 24, 2003, July 15, 2004

By direction of the Administrator

(Signature)

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.

FAA Form 8110-2(10-68)

King Air Series Monorail Sunvisor System for 200, A90, B90, C90, E90, F90, 100

Date	Revision	Approved
2/18/22	H	SYS

Drawing List

RBKA-00DL **Doc.#9040-0150-001**

200	90 Series					100	PART NUMBER		DESCRIPTION	REV
	A	B	E	C	F					
1A	1B	1F	1D	1C	1E	1G		Replaces		
1							**1500000**	**R15000000 RBKA-300-1A**	**Complete System**	**B**
1							1500200	R1500200 RBKA-200-100	King Air 200 Monorail Assembly	E
1							1500201	RBKA-100-1A	King Air 200 Monorail	D
1							1500202	RBKA-200-100-3	King Air 200 Center Bracket	C
1							1500203-001	RBKA-200-100-2	Corner Bracket, Pilot	D
1							1500203-002	RBKA-200-100-4	Corner Bracket, Co-Pilot	D
					1		**1560000**	**R1560000 RBKA-300-1E**	**Complete System**	**B**
					1		1560200	RBKA-100-50 R1560200	King Air F90 Monorail Assembly	E
					1		1560201	RBKA-100-1E	King Air F90 Monorail	D
					1		1560202	RBKA-100-53	King Air F90 Center Bracket	E
					1		1560203-001	RBKA-100-52	King Air F90 Corner Bracket – Pilot	D
					1		1560203-002	RBKA-100-54	King Air F90 Corner Bracket – Co-Pilot	D
				1			1561000		Complete System King Air C-90	B
		1				1	1562000		Complete System A,B,E-90 & 100	B
		1		1		1	1562100	RBKA-100-*	Rail Assembly	B
		1		1		1	1562101		Rail, King Air Series	B
		2		2		2	1562102		Bracket - Forward	B
		2		2		2	1562103		Bracket - Mid	C
1		1		1	1	1	1560100-1	RBKA-100-1	End Bracket Assembly (Pilot	G
1		1		1	1	1	1560100-2	RBKA-100-5	End Bracket Assembly (Co-Pilot side)	G
2		2		2	2	2	1560101		End Bracket Tube	E
2		2		2	2	2	1560102		End Bracket Mounting Plate	D

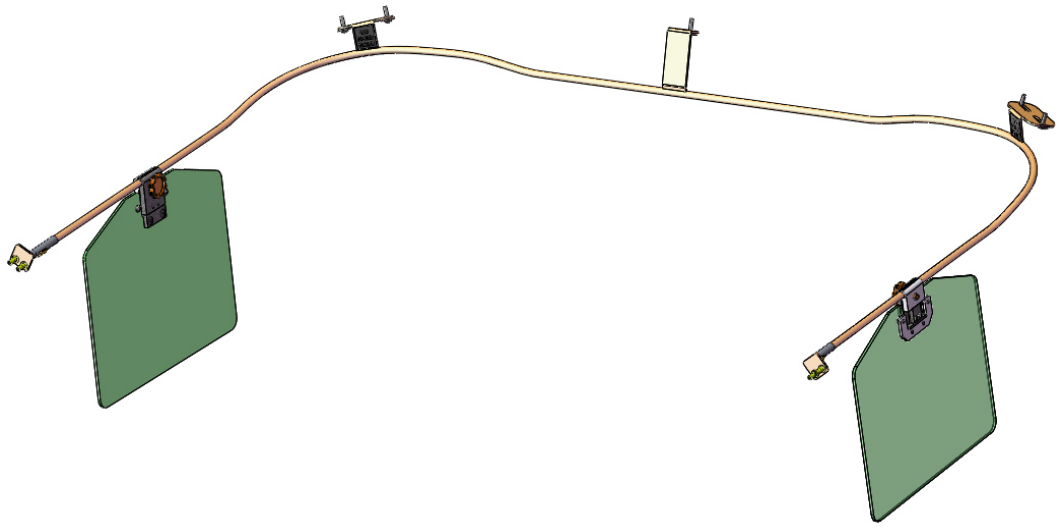
Drawing List
RBKA-00DL
Continued from Page 1

200	90 Series					100	PART NUMBER		DESCRIPTION	REV
	A	B	E	C	F					
1A	1B	1F	1D	1C	1E	1G		Replaces		
		2		2	1	2	1560103		Square Washer	D
2		2		2	2	2	1560104	RBKA-100-38	Clamping Washer	D
2		2			2	2	1500400-1	R1500400-1 RBKA-300-3-1	Visor Assembly (Includes parts listed below)	C
				2			1500400-2	R1500400-2 RBKA-300-3	Visor Assembly (Includes parts listed below)	C
									Clamp Block Assembly	
2		2		2	2	2	1120000-001		Complete Assembly	K
2		2		2	2	2	1120101-001		Nut Plate, Standard	L
2		2		2	2	2	1120102-001		Clamping Block Body	L
2		2		2	2	2	1120104-002	R1120104-002	Thumb Knob – Original (Powder Coat)	M
2		2		2	2	2	1120104-001	R1120104-001	Thumb Knob – Standard	M
2		2		2	2	2	1120203		Swivel, Clamping Block	P
									Lens Components	
2		2		2	2	2	1110202	R1110202	Swivel Nut Plate	E
2		2			2	2	1500401	R1500401 RBKA-200-1	King Air Sunvisor System Lens	G
				2			1500402	R1500402 RBKA-200-1A	King Air C-90 Lens	D
								KITS		
							RCBS-100		**Complete Clamping Block Assembly**	E
							RCBS-300-11M		**Kit, Standard, Thumb Knob**	D
							R1500401		**King Air Sunvisor System Lens**	G
							R1500402		**King Air C-90 Lens**	D
									Installation Instructions	
1							9041-0156-001		King Air Monorail Sunvisor System for 200, 300 and 1900	D
		1		1		1	9041-0156-003		King Air Monorail Sunvisor System for A90, C90, E90	E
					1		9041-0156-004		King Air Monorail Sunvisor System for F90	D

* Construction of RBKA-100 Monorails for 90 Series A, B, C, and E are customized for individual airframes.

King Air F90 Monorail Sunvisor System

Rosen Kit Number R1560000
RBKA-300-1E



Component Maintenance Manual with Illustrated Parts List and Instructions for Continued Airworthiness

Manual Number
Rosen 9041-0156-004
Revision D

November 11, 2015

Rosen Sunvisor Systems LLC
86365 College View Road
Eugene, Oregon 97405 USA

This ICA must be followed when the R1560000 Sunvisor system is installed in accordance with Supplemental Type Certificate, (STC) No. SA3068NM, dated March 24, 2003.

The information contained in this document supplements or supersedes the basic manual only in those areas listed herein. For limitations, procedures, and performance information not contained in this manual, consult the basic aircraft ICA or Maintenance Manual.

STATEMENT OF Rev D CERTIFICATION

This manual complies with Federal Aviation Association (FAA) Airworthiness Requirements Part 23 .

FAA Acceptance: A. Buss Date: 10/24/19 .

The above certification does not apply to revisions or amendments made after the date of initial certification by other Approved Organizations. Revisions or amendments made by other Approved Organizations must be separately certified and recorded on separate record sheets

Record of Revisions

Rev	Description	Date	Approved
D	Updated to CMM/IPC format	11/11/15	GH

Table of Contents

Introduction

1. General

a. This Rosen Component Maintenance Manual provides use, maintenance and continued airworthiness instructions for the cockpit Sunvisor system used on the Beechcraft (formerly Raytheon and Hawker Beechcraft) F90 aircraft.

b. Rosen reserves the right to revise this document for changed procedures, improved parts or changes to the system or components.

c. All technical support, spare sales, repairs or modifications are to be directed directly to Rosen Sunvisor Systems LLC. RSS must be contacted for future revision of this document as it is possible this does not contain the latest revisions.

2. Revision Service

Current revision status and revisions to this document may be obtained from Rosen Sunvisor Systems' website: www.rosenvisor.com. We recommend that you periodically check to make sure you are using the most current version.

Fault Isolation

1. **General**
   - **a.** This section identifies Probable Causes and Corrections for possible faults.

Problem	Probable Cause	Corrective Action
Visor assembly does not slide easily on rail	Thumb knob too tight	Loosen knob and slide using knob
Lens does not rotate smoothly on vertical axis	Vertical pivot tension incorrectly set	Re-tension vertical pivot (see p.8)
Visor clamp does not hold to rail	Moisture, dust, and lubricant on rail	Wipe rail and clamp surface with non-residual cleaner.

Product Description

General

a. The Rosen Sunvisor System consists of one rail and two visor assemblies which have been designed to improve pilot comfort during standard cockpit operations. The rail assembly is fastened to the airframe on provided hard points to provide stability and support.
The aft section of each rail is the stow location for the visor.

Installation Instructions

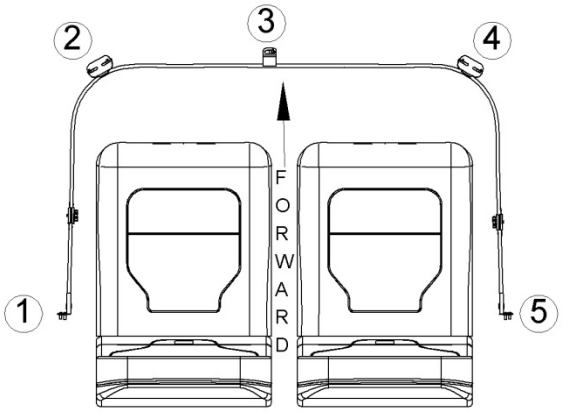
This is an FAA STC'd Installation requiring a log book entry upon completion.

NOTE: This installation is to be completed by a qualified aircraft mechanic and an FAA Form 8130-3 (Airworthiness Approval Tag) must be completed.

Please read through these instructions completely before beginning.

Hardware:

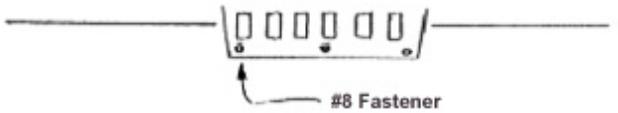
4	AN526C832R5	#8-32 X 5/16 Screws
5	AN526C832R10	#8-32 X 5/8 Screws
4	AN960D9	#8 Aluminum Washers
4	A8K75	#8-32 Rivnuts
2	PCS-1000-14STZO	E-Clips
1	1560103	Square Washers
1	3/32 Hex Key	
1	7/64 Hex Key	



- During the installation of your new monorail sun visor system we will refer to Brackets #1 through #5 as diagrammed here:

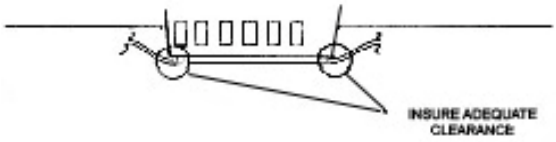
- This monorail system has been designed for ease of installation and uses the original visor nut plates as the main fastening points for Brackets #2 and #4. Brackets #1 and #5 will be secured to the rear bulkhead using appropriate fastening devices. (#8-32 screws and Rivnuts are supplied for this purpose.)

- Remove the original swing arm visors.



- Remove the left #8-32 fastener in the left front top panel.

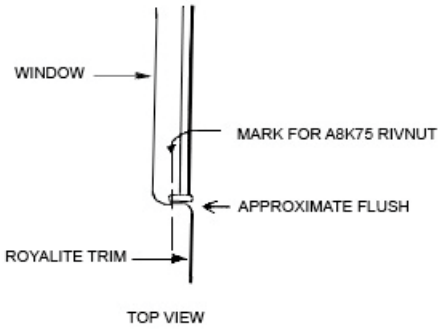
- Carefully bring the monorail into the cockpit and install brackets #2 and #4 to the original visor nut plates using AN526C832R10 (#8-32 X 5/8 Philips Head Screw) and



AN960D9 washers. Snug fasteners but do not tighten.

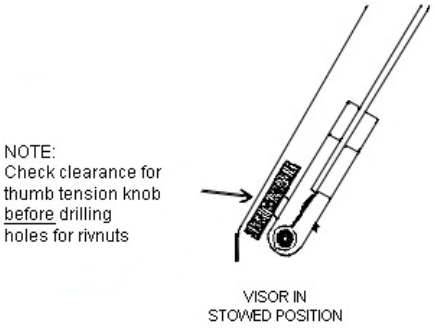
- Loosely reinstall the AN526C832R10 #8 screw fastener in Bracket #3 using the square washer provided (1560103). Verify the monorail appears to be centered and there is adequate clearance between the rail and either end of the top panel.

- On both the pilot and copilot side, the aft portion should roughly follow the headliner seam which is horizontal. The end Brackets #1 and #5 should fit in the window recess as shown here:

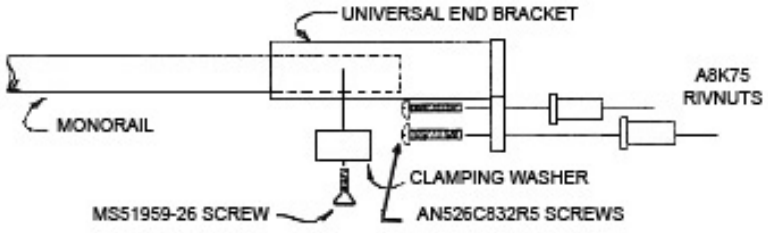


- The outside of the rail should be approximately flush with the continuing Royalite trim. When properly located, mark the Royalite trim through the #18 hole in the bracket. This is the location to install the A8K75 rivnut provided.

Note: Be certain there is adequate clearance between the thumb tension knob and the headliner when the visor is in the stow position.



- Because of variances in cockpits, the rear brackets are fitted with an extending feature to provide for a good fit.



- Install rivnuts in this manner on both sides of the aircraft. **(Do not drill into the aircraft structure.)**

- Due to differences in interior fitting, the end brackets may or may not need to be shimmed slightly.

- Install the end brackets with the AN526C832R5 (#8-32 x 5/16) screws provided. If shimming is necessary longer fasteners may be required.

- Tighten all the fasteners.

- If brackets do not align perfectly prior to tightening fasteners due to irregularity between aircraft, the brass substructure of the rail and brackets will conform slightly to the aircraft contour.

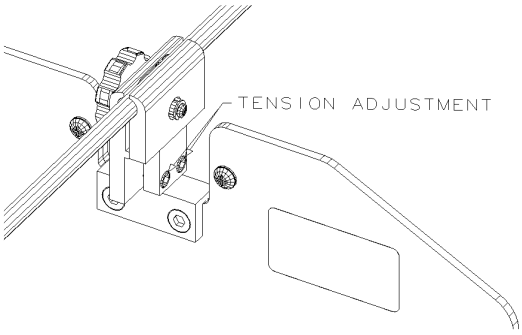
- Install both visor assemblies by loosening the thumb knob until the clamp blocks can be slipped over the rail. Tighten the thumb tension knobs until the snap ring groove is visible on the thread of the thumb knob in back. Install the snap rings provided. These are provided to limit the opening of the clamping block and prevent accidental disengagement of the visor assembly from the rail.

NOTE: When the visor is on the rail the tensioning knob should face the pilots.

- Check the clearance for the clamp block as it passes behind the compass. If more clearance is required loosen brackets #3 and #4 and move the rail towards the windshield.

General Operating instructions:

- To move the visors, loosen the thumb tensioning knob until the clamp is loose enough to slide 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.
- To stow the visor assemblies, tighten the clamp knob in the down position at the monorail position you want to stow it at and rotate the visor up and parallel with the cockpit headliner.
- As this is a one piece monorail system, either visor can move the entire length of the rail providing complete sun coverage of the cockpit.

NOTE: Due to the design of your monorail system it is possible to use the rail in the vicinity of the front main brackets as a hand hold. *IT IS IMPORTANT THAT THIS IS NOT PERMITTED*. These areas have been marked "NO HAND HOLD". The monorail and bracketry is not designed to be used as a loading assist device.

- Place the FAA STC and AML (if appropriate) in the Aircraft Maintenance Log and make an installation entry.

Removal

1. **Visor**
   - **a.** Remove and retain e-clip from back of clamp block.
   - **b.** Loosen the clamp screw until the clamp opens enough to remove from rail.
   - **c.** Pull down to detach from the rail
   - **d.** Reverse procedure to re-attach.

2. **Rail**
   - **a.** Remove Visor Assemblies from the Rail. (See above)
   - **b.** Remove 4 screws.

Weight and Balance

This system adds 3.20 lbs. 11.5" aft of mount point '3'.

Repair

General

a. All components that do not meet the requirements for continued use must be replaced.

Instructions for Continued Airworthiness

- (**On the ground only)**
  - Periodically clean the lenses with a soft cloth, mild soap and water or Rosen Cleaner. Do not use abrasives on the lens.
  - Periodically adjust the pivot tensions on the visor assemblies.
  - Periodically clean rail with a no residue alcohol based cleaner and inspect for wear and damage.

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.

Illustrations and IPC

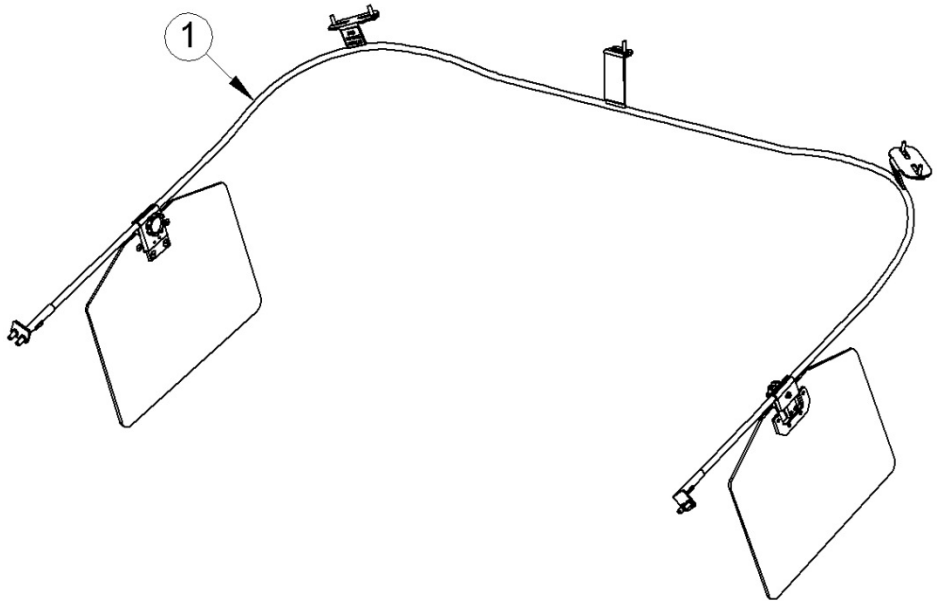


Fig 1

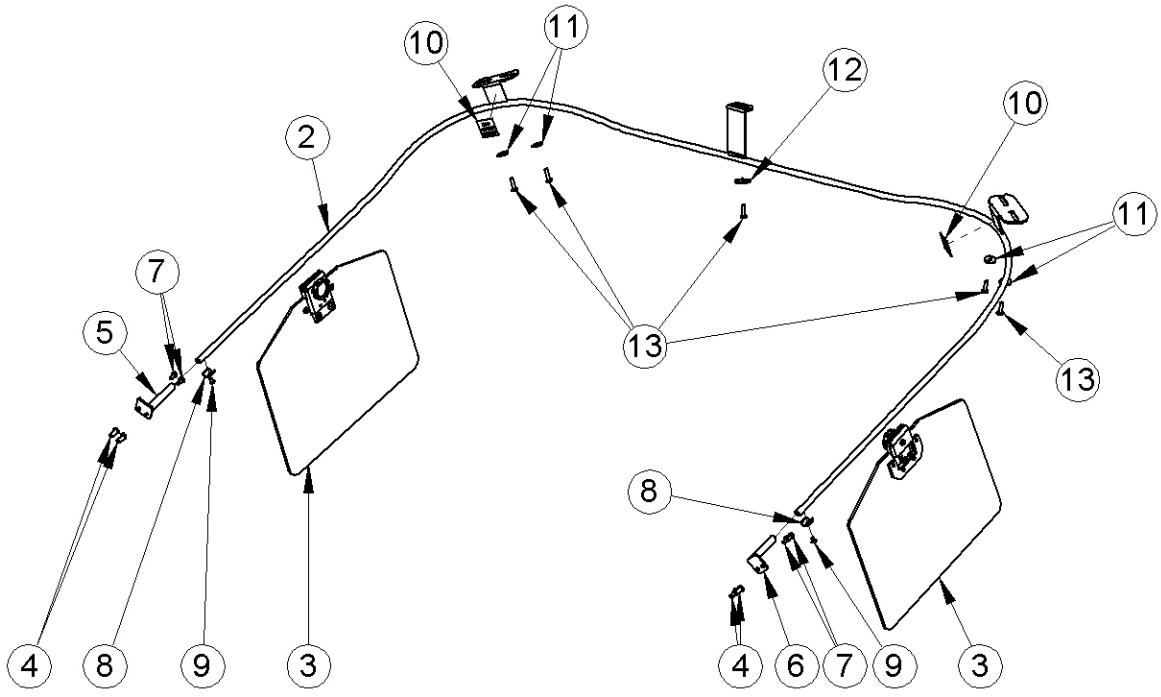


Fig 2

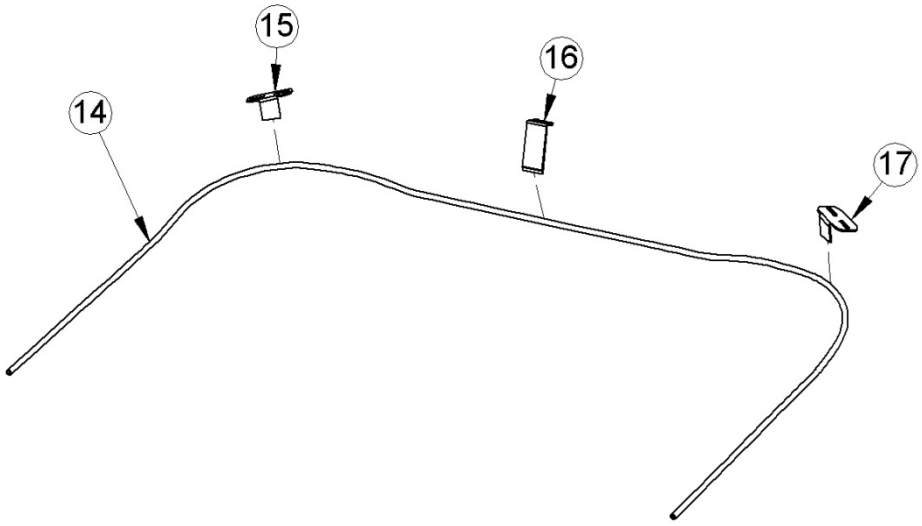


Fig 3

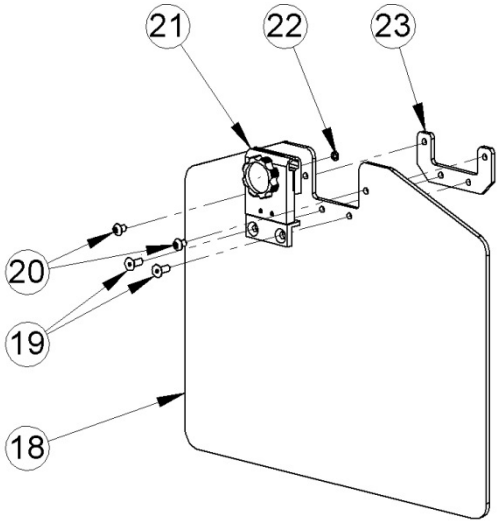


Fig 4

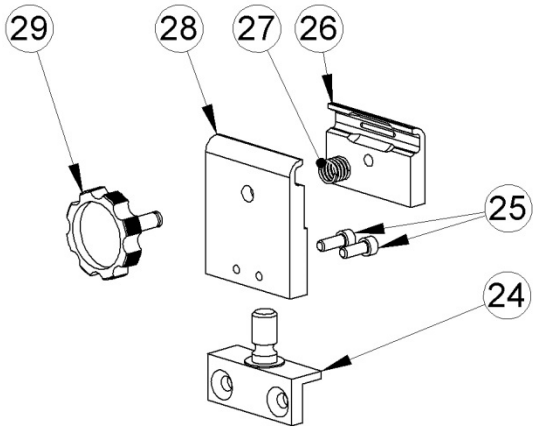


Fig 5

Part List

Fig. No	Fig. Item	Part Number	Description	Reference	Eff	QTY
1	1	R1560000	Complete System			System
2	2	1560200	Monorail Assembly			1
2	3	1500400-1	Visor Assembly			2
2	4	A8K75	#8-32 Rivnut			4
2	5	1560100-1	End Bracket Assembly Pilot			1
2	6	1560100-2	End Bracket Assembly Copilot			1
2	7	AN526C832R5	Screw #8-32 X 5/16 Trusshead, SST			4
2	8	1560104	Washer, Clamping			2
2	9	MS51959-26	Screw #6-32 X 1/4 FHP SST			2
2	10	2407-1036	Label			2
2	11	AN960D9	D9 Washer			4
2	12	1560103	Washer Square			1
2	13	AN526C832R10	Screw #8-32 X 5/8 Trusshead, SST			5
3	14	1560201	Rail			1
3	15	1560203-001	Corner Bracket - Pilot			1
3	16	1560202	Bracket, Center			1
3	17	1560203-002	Corner Bracket - Copilot			1
4	18	1500401-1	Lens			2
4	19	832X716FSHCSSBP	#8-32 X .4375 Flat Socket Screw (Black Patch)			4
4	20	832X14BSHCSSBP	#8-32 X .25 Button Head Socket Screw (Black Patch)			4
4	21	1120000-001	Complete Clamping Block Assembly			2
4	22	PCS-1000-14-STZO	Clamping Block E-clip			2
4	23	1110202	Swivel, Nut Plate			2
	24	1120203	Swivel			2
5	25	MS16995-17B	Screw #6-32 X .375 Hex SST Blk			4
5	26	1120101-001	Nut Plate, Standard			2
5	27	RCBS-300-18	Clamping Block Spring			2
5	28	1120102-001	Clamping Block Body			2
5	29	1120104-002	Thumb Knob – Original			2