



Lancair Evolution Sunvisor Assembly System

Rosen Kit Number R1980400



**Component Maintenance Manual
With Illustrated Parts List and Continued Airworthiness Instructions**

**Manual Number
Rosen 9041-0198-001
Revision B**

January 14, 2019

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Rosen Sunvisor Systems CMM / IPC for Sunvisor Assembly (P/N R1980400)

Record of Revisions

Rev	Description	Date	Approved
A	Release	5/20/14	GH
B	Change part number from 1980000 to 1980400, update illustrations	1/14/19	SYS

Summary: CMM/ICA/IPC

This ICA must be followed when the R1980400 Sunvisor system is installed.

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.

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Introduction

1. General

- a. This Rosen Component Maintenance Manual provides use, maintenance and supplemental airworthiness instructions for the cockpit sunvisor systems used on the Lancair Evolution.
- 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.

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 pivots are too loose	Pivot clamp too loose	Re-Tension Pivot Clamps
Visor pivots are too tight	Pivot clamp too tight	Re-tension Pivot Clamps

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Product Description

The Rosen Sunvisor System for the Lancair Evolution consists of two independently positionable tinted visors mounted on a common mounting fastened to the front surface of the factory overhead center console. The lenses are made of a tinted translucent acrylic and are capable of being adjusted with one hand.

Installation Instructions

Installation Hardware (included):

Qty:	(1)	1980011	Bracket Assembly, Front
	(1)	1980008	Back Plate Assembly
	(3)	MS24693-C274B	#10-32 X 3/4 Flat Head Phillips Screws
	(2)	MS24671-14BP	#8-32 Flat Head Socket Cap Screws
	(1)	3/32 Hex Key	
	(1)	Lube packet	

Please read through these instructions completely before beginning.

1. Remove the overhead center console to gain access to the forward facing surface of the assembly. There must be access to the interior of the forward detail for installation.
2. Position the Front Bracket Assembly (1980011) on the outside of the forward surface and mark the three mounting holes for drilling.
3. Verify there are no items on the inside of the mounting surface and that drilling holes as marked will not cause damage to any devices.

Note: The back plate assembly (1980008) must be able to fit flat on the inside of the overhead console.

4. Using proper technique, drill three ¼ inch diameter holes at the locations marked in step 2.
5. Position the Front Bracket Assembly (1980011) on the outside of the Overhead Console and the Back Plate Assembly (1980008) on the inside of the console and attach using the provided #10-32 Flat Head Phillips screws.
6. After verifying positioning, tighten screws to full closure plus ¼ turn.
7. Reinstall the overhead console into the aircraft.



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8. Lubricate the two swivel posts on the Front Bracket Assembly, using the supplied packet of lubricant.
9. Attach pilot side visor arm to left swivel post and fasten with #8-32 Flat Head Socket Cap screw provided. Make sure that the lens is positioned so that the side with the Rosen logo faces the pilot. Repeat with copilot side.
10. Using 3/32 hex key (included), set all the pivot point tensions to your preference.

Note: Tension setting should be snug, but not tight, and loose but not free. They should be tight enough to support the visor weight in flight conditions.

11. Verify that all attachments are secure.
12. Tighten front fasteners.

System Use

- The independent visor can be positioned as required to provide sun attenuation during flight.
- For takeoff and landing: Visors should be positioned to avoid any interference with flight operations.

Removal

1. Visor Assembly

- a. Remove #8-32 Flat Head Socket Cap screws from visor arm.
- b. Slide visor assembly down and off the swivel post.

2. Mounting Plate Removal

- a. Reverse installation instructions.

Weight and Balance

This weight and balance information is provided to update the aircraft Weight and Balance Record in the maintenance manual and Basic Empty Weight. The R1980400 system adds 1.3 lbs. at the station of the mounting plate.

Repair

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

Instructions for Continued Airworthiness

- **(On the ground only)**
 - As required, or at least annually, clean the lenses with a soft cloth, mild soap and water or Rosen Cleaner, Polisher and Protectant. Do not use abrasives on the lens.
 - As required, or at least annually, adjust the pivot tensions on the visor assemblies.
 - As required, or at least annually, 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

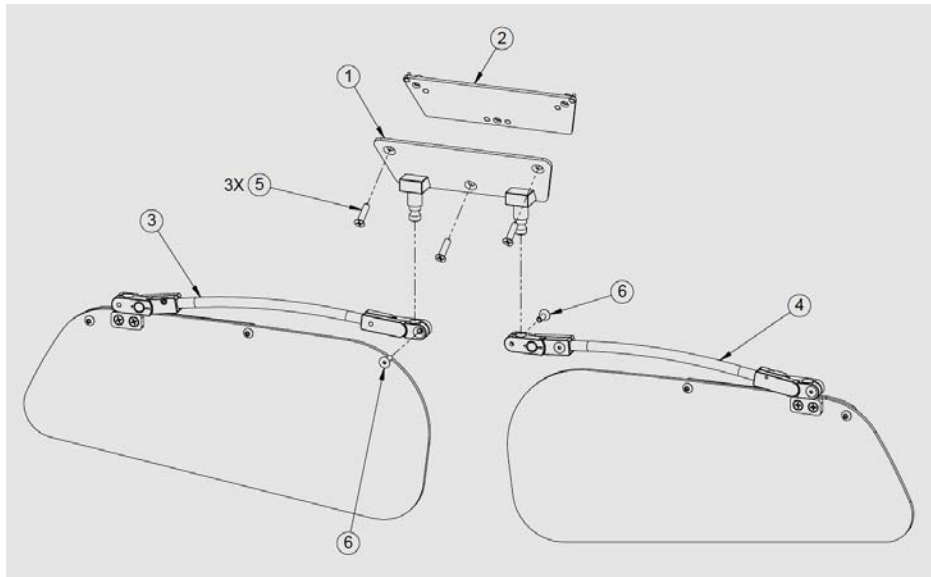


Fig 1 (Assembly R1980400)

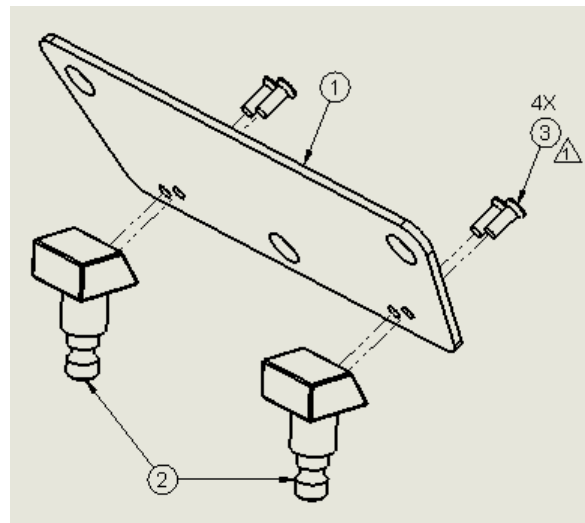


Fig 2 (Assembly 1980011)

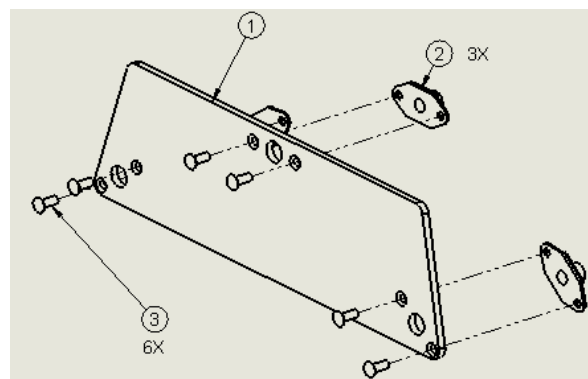


Fig 3 (Assembly 1980008)
Shown upside down

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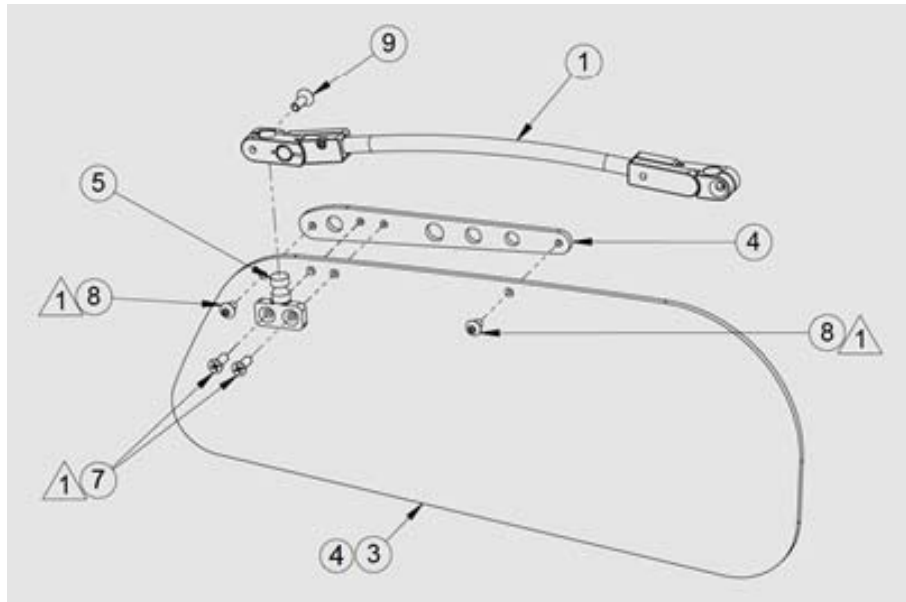


Fig 4 (Assembly 1980010)

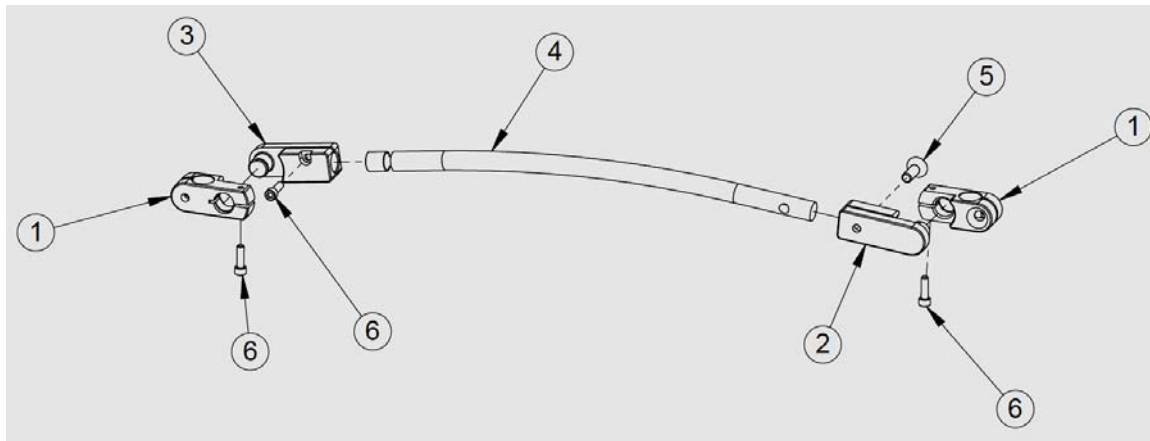


Fig 5 (Assembly 2012110)

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Parts List

Fig. No	Fig. Item	Part Number	Description	Reference	Eff	QTY
1	1	1980011	Front Bracket Assembly			1
1	2	1980008	Back Plate Assembly			1
1	3	1980010-1	Pilot Lens Assembly			1
1	4	1980010-2	Co-Pilot Lens Assembly			1
1	5	MS24693-C274B	#10-32 X ¾ Flat Head Phillips Screw			3
1	6	MS24671-14BP	#8-21 x ½ Flat Head Socket Cap Screw			2
2	1	1980005	Front Bracket			(1)
2	2	1980009	Pivot			(2)
2	3	MS24693-C26B	#6-32 x 3/8 Flat Head Phillips Screw			(4)
3	1	1980007	Back Plate			(1)
3	2	MS21059L3	#10-31 Floating Nut Plate			(3)
3	3	CCR264CS-3-02	Rivet, Cherry 3/32 x .65 - .125 100 deg CSK FH			(4)
4	1	2012110	Arm Assembly			(1)
4	3	1980402-1, -2	Lens			(1)
4	5	2012104	Swivel			(1)
4	6	1961304	Mounting Plate			(1)
4	7	MS24693-C49BP	#8-32 Flat Head Phillips Screw			(2)
4	8	832X14BSHCSSBP	#8-32 x ¼ Hex Button Head Screw			(2)
4	9	MS24671-14BP	#8-32 x ½ Flat Head Socket Cap Screw			(1)
5	1	2012101	Hinge Block			(2)
5	2	2012102	Swivel Block			(1)
5	3	2012103	Visor Block			(1)
5	4	2012105	Rail			(1)
5	5	MS24671-14BP	#8-32 X ½ Flat Head Socket Cap Screw			(1)
5	6	MS16995-10BP	#4-40 X 3/8 Hex Socket Head Screw			(3)