



Installation Instructions for Commander 112, 114 Sunvisor System

This is a FAA STC'd installation requiring an aircraft maintenance log entry

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Rev	Date	Approved
C	6/29/2004	GH

Installing your Rosen NSA Sunvisor System is easily performed and should take approximately 1 to 2 hours.

Please read these short instructions **COMPLETELY** before starting.

Installation Hardware (included)

Qty: (1) 7/64 Allen Key for #6-32 Cap Screw

Qty: (1) 9/64 Allen Key for #8-32 Cap Screw

Qty: (1) 5/32 Allen Key for #10-32 Cap Screw

Qty: (1) 11/32 Flat Closed End Tightening Wrench

Qty: (2) Plastic Nut Cap

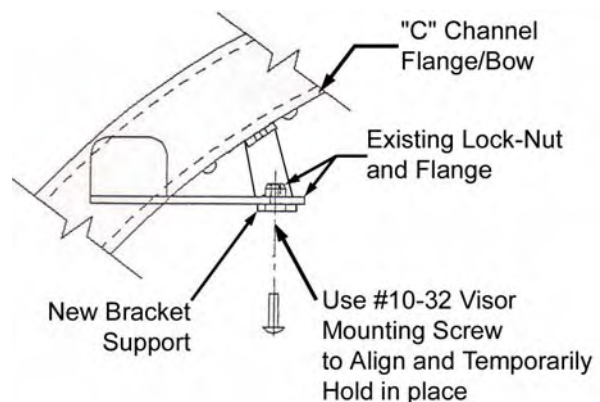
- Your New Rosen Sunvisor System is very easy to install but needs a few tools to complete the job.
 - 1) A short Phillips tip screwdriver, 2) Allen wrenches (included in installation package), 3) A 3/16 drill,
 - 4) A 3/8 drill (for some models) to enlarge the trim hole for the visor mounting stud, 5) A tool to remove the 'C' clips on the trim of some models, 6) A 5/16" open end wrench, 7) A 3/4" open end wrench.
- Remove the original visors from your aircraft with a Phillips tip screwdriver.
- Starting on the pilot's side remove the trim exposing the existing visor mounting flange.

Note: All illustrations are of the pilot's side.

- Position the New Bracket Support on the Existing Lock-Nut and Flange and restrain in this position with a #10-32 screw as shown.

NOTE: The beveled edges mark the upper end of the bracket.

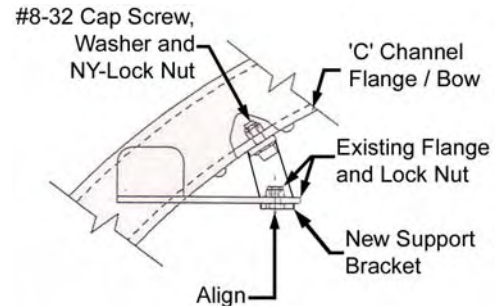
Use the slot to provide the best fit condition between the New Support Bracket and the "C" Channel Flange.



- Mark the center of the upper bracket flange slot on the structural channel flange. Remove the temporarily installed bracket.
- Check behind the structural channel flange to clear any wiring or other materials that may be disturbed. Reposition anything that may be damaged. If necessary add additional protection for any wiring in the vicinity of the fastener.

- Drill a 3/16" diameter hole at the marked location in the channel flange. **Be careful not to penetrate the structural outer surface.**

- Using the #8-32 X 3/4 Hex Head Cap Screw, #8 washer, and #8-32 Ny-Lock nut install the bracket as shown. Check the alignment of the bottom flange slot in relationship to the existing mounting flange hole and lock nut prior to tightening the cap screw fastener on the new bracket support. Use the 11/32 closed end tightening wrench (provided) to tighten the screw/nut.

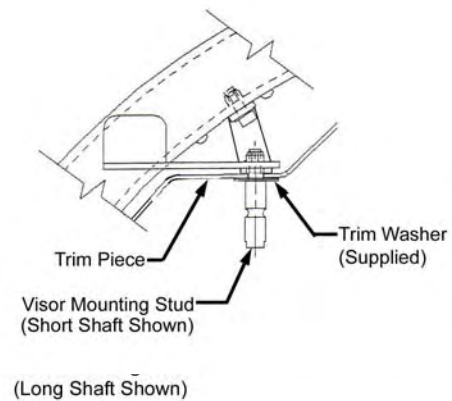


- Fit the plastic cap over the nyloc nut to protect the wiring.

- Remove the Rosen mounting stud and Locking Washer from the hardware packet and verify the raised internal threaded section of the washer fits into the trim clearance hole prior to installing the trim.

- Use a 3/8 inch drill to enlarge the hole in the trim and reinstall the trim covering the visor mounting bracket you have just prepared.

- Screw the Locking Washer onto the Mounting Stud until the flat surface of the washer is in contact with the base of the stud. Install the Mounting Stud through the trim hole and new bracket into the original mounting nut. Tighten the stud using a 5/16 open end wrench. Be sure the raised diameter of the locking washer is located through the hole in the Trim Piece. After the stud is tightened use a 3/4" open end wrench to tighten the locking washer against the bracket system.



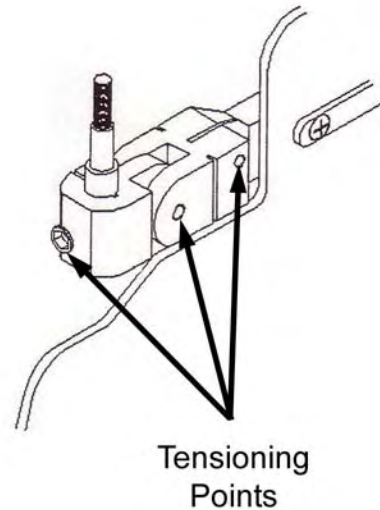
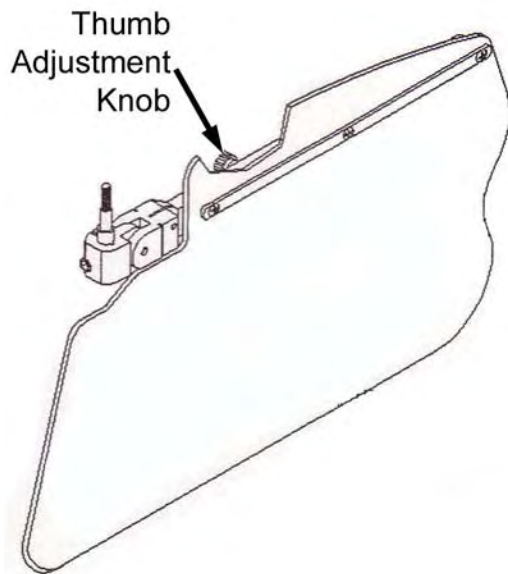
- Install the Rosen Visor Assemblies as appropriate. When installed the red tensioning knob should be towards the windscreen. The Visor mounting hole is pre-lubricated from the factory so you may need to wipe off the excess grease when installed.

- Repeat this procedure for the co-pilot's side.

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

- Congratulations, you have now completed the installation procedure.

- Your new Rosen Sunvisor System has been designed to cover all those areas the factory system missed, especially the complete side of the face. For the first time you will be able to see your traffic while still cutting the suns glare reducing pilot fatigue.



For continued airworthiness (Ground maintenance only)

- Do not use the visor to try to shield the cockpit from heat while parked on the ramp for extended times. Excessive heat buildup in the lens can cause damage.
- Adjust the tension on the red visor slide knob so the visor can be slid using the red knob. This should be tight enough that the visor will not slide during take-off, landing or maneuvering.
- Adjust the tension on all the pivot points with the provided Hex Keys so that they can be moved freely but not loosely. The tension should support the weight of the visor in the fully extended position without drooping.
- Tension the visor 'flip up' pivot so that it will support the visor when rotated into the stow position.
- Periodically check and re-tension the visor pivots.
- Periodically clean the visor lens with a mild detergent or other Aircraft Approved Windscreen cleaning solution and a soft lint free cloth. **Do not use abrasive cleaners or glass cleaners.**