#### United States of America

#### Department of Transportation Federal Aviation Administration

## Supplemental Type Certificate

### Number SA2678NM

This certificate, issued to

Rosen Sunvisor Systems, LLC 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 25 of the Federal Aviation Regulations. (See Type Certificate Data Sheet A14SW for complete certification basis.)

Original Product Type Certificate Number:

A14SW

Make:

Mitsubishi

Model:

MU-300

Description of the Type Design Change: Cockpit Sun Visor installation in accordance with FAA approved Rosen Drawing List Number RMD-00DL, Revision A, dated November 1984, 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. A copy of this Certificate and FAA approved Drawing List Number RMD-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:

November 1, 1984

Date reissued:

March 24, 2003

Date of issuance:

December 6, 1984

Date amended:

March 24, 2003

By direction of the Administrator

(Signature)

Acting 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



### Mitsubishi Diamond Monorail System

Date	Revision	Aprv
2/18/22	J	SYS

## Drawing List RMD-00 DL

Doc. # 9040-0187-001

Drawing	Reference	Description	Rev.
R1870000	RMD-300-1	Diamond System	В
R1870110	RMD-300-4	Front Rail Assembly	Α
1870111	RMD-100-11	Front Rail	Α
1870102	RMD-100-3,-4	Bracket – Front Rail	В
R1870100-1	RMD-300-2	Pilot Rail Assembly	Α
R1870100-2	RMD-300-3	Copilot Rail Assembly	Α
1870101	RMD-100-9, -10	Side Rail	В
1870103	RMD-100-2, -5	Front Side Bracket	В
1870104-1	RMD-100-1	Rear Bracket – Pilot Rail	С
1870104-2	RMD-100-6	Rear Bracket – Copilot Rail	С
1230108	R1230108	Plug	Е
1870510	RMD-300-11	Front Visor Assembly	С
1350400	RMD-300-10; R1350400	Side Visor Assembly	Ν
1870511	RMD-200-21 R1870511	Side Lens	С
1350401	RMD-200-1	Front Lens	K
1110202		Swivel Nut Plate	Е
1120000-001	R1120000-001 RCBS-100	Complete Assembly Clamping Block	K
1120101-001	RCBS-100 RCBS-100-7A R1120101-001	Nut Plate, Standard	L
1120102-001	RCBS-100-8AB R1120102-001	Clamping Block Body	L
1120104	1120104-001	Thumb Knob – Standard	М
1120203	RCBS-300-8 R1120203	Swivel, Clamping Block	Р
9041-0187-001		Installation Instructions for Diamond	В



# **Installation Instructions for Mitsubishi Diamond Monorail Sunvisor System**

(Kit RMD-300-1)

This is an FAA STC'd installation requiring a logbook entry upon completion.

 Rev
 Date
 Approved

 B
 2/25/08
 GH

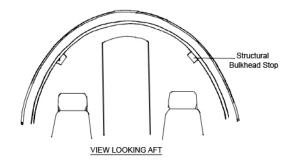
Please read through these instructions completely before beginning.

#### **Tools required:**

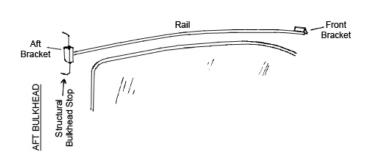
Drill, #2 drill bit, Lock-Tite

#### Installation Hardware (included):

- 1 3/32 Hex Key
- 1 7/64 Hex Key
- 1 1/8 Hex Key
- 4 A8K75 Rivnuts
- 4 AN526C832R10 #8-32 X 5/8 Pan Head Phillips Screw
- 2 AN526C832R12 #8-32 X 3/4 Pan Head Phillips Screw
- 6 AN960D9 Washer
- 4 1428X38CPSSA 1/4-28 X 3/8 Set Screw
- Your new Rosen monorail sun visor system is a three part, total coverage unit. There are two (2) side rail/visor assemblies and one (1) small front rail/visor assembly to cover any sun shielding problems in your Diamond.
- The pilot and copilot monorails run parallel to the sharp crease above either window line. The aft bracket slides over and fastens to the structural bulkhead stop aft of either window.

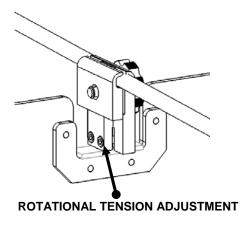


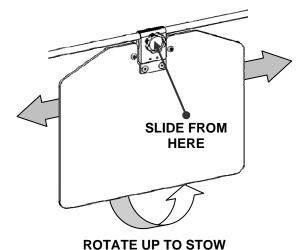
 Take the pilot's rail and align it with the interior décor crease above the window, slide the aft block over the structural bulkhead stop. It may be necessary to tap it lightly to get it all the way down, depending on the paint buildup on the stop.



• It is a good idea to view the placement of the rail both from the pilot's seat and when standing in the cockpit entry. This is really a matter of cosmetics but the installation should look as good as possible.

- Snug the 1428X38CPSSA ¼-28X3/8 set screws and then, with a visor assembly on the rail (thumb knob facing the interior of the aircraft), hold the front bracket in place while the visor is rotated to the stowing position overhead. The thumb tension knob should not hit the overhead as it rotates (the thumb tension knob cannot be loose or it will protrude and hit). If clearance is fine, mark through the slots in the front brackets for positioning of the A8K75 rivnuts. If clearance is a problem, either reposition the front bracket slightly or shim it out after installation.
- Remove the rail for the rivnut installation.
- Taking the center of the marked reference slots for the front bracket, use a #2 drill to install the
   A8K75 rivnut. Installation hole size references are .221" min and .226" max. Drill only through the thin
   overhead shell <u>DO NOT DRILL INTO THE AIRCRAFT STRUCTURE</u>. Since the A8K75 is a keyed
   rivnut, use a key cutting tool or simply a small file to give a keyway. Install two (2) A8K75 rivnuts.
- Reinstall the pilot's rail and secure aft bracket 1428X38CPSSA ¼-28X3/8 set screws using Loc-Tite or a similar product. Install two (2) AN526C-8/32R10 machine screws and two (2) AN960D9 washers through the front bracket. Secure to the rivnuts from the previous step. Reinstall the visor and install an "E" clip (retaining clip) onto the rear of the thumb tension knob.
- Repeat the same procedure on the copilot's side and ensure that both front brackets are fairly even prior to installing the copilot rivnuts.
- Install the front rail with the "L" leg on the brackets pointing to the front of the aircraft. The original panel fasteners are replaced with two (2) AN526C-8/32R10's and two (2) AN960D9 washers. The front rail brackets are slotted so that there is some vertical adjustment possible. The front visor is stowed by sliding the visor to the far side and rotating up above the compass and then centering. The front clamping block should not hit the front panel and the clearance can be adjusted with the vertical position of the rail.
- Installation should now be complete.





#### **Operating Instructions:**

- To operate your visors, loosen the thumb tension knob by turning it counterclockwise, and while still
  holding the knob, slide the visor in the desired direction (the retaining clip is installed on the rear of
  the thumb knob to prevent the pilot from inadvertently over loosening the visor assembly).
- To lock the visor in place, simply tighten the thumb knob by turning clockwise.
- The side visors will stow overhead simply by rotating them upwards. The front visor stows by rotating the visor upwards and sliding to either side of the compass. When stowing, the side visors should be tensioned in the down position and then rotated up. Sufficient tension can be applied in the down position so that the stowed visor will stay in place even in turbulent air. The visor itself provides enough leverage to rotate down when necessary, thereby eliminating a costly double knob tension system. When stowed above the compass, the front visor knob is accessible to adjust tension.
- Both side visors incorporate the swivel modification that allows the visors to rotate about the vertical axis. Tension can be adjusted with the set screw in the side of the clamping block.

#### **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. (<a href="https://www.rosenvisor.com">www.rosenvisor.com</a>)

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.