<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>25-00</td>
<td>Description</td>
<td>25.1</td>
</tr>
<tr>
<td>25-10</td>
<td>Door Assembly</td>
<td>25.1</td>
</tr>
<tr>
<td>25-20</td>
<td>Windshield Assembly</td>
<td>25.3</td>
</tr>
</tbody>
</table>
25-00 Description

Both cabin doors may be removed and installed by maintenance personnel or pilots.

25-10 Door Assembly

A. Removal

Remove cotter pins from door hinge pins. Open door and lift door pins from door frame hinge assemblies and remove door. Adjust weight and balance as required.

B. Installation

**WARNING**

Failure to install a cotter pin in each door’s two hinge pins may allow door to depart aircraft in flight.

1. Align and insert door hinge pins in door frame hinge assemblies; latch door.
2. Install a cotter pin in both upper and lower door hinge pins.
3. Adjust weight and balance as required.
Total crazing must not be more than 2 in. in length. No single craze (fissure) to be more than 1 in. in length. “Crazing” refers to fissures that don’t fully penetrate windshield.

1 in. minimum clear area between patches of crazing

Crazing must not extend more than 1/2 in. from edge of retainer strips. Replace windshield if crazing can be detected with fingernail, or if crazing impairs pilot view.

If cracks are not parallel to windshield edge and longer than 0.25 in., replace windshield. Cracks less than 0.25 in. may be stop-drilled using 3/32 in.-dia drill.

0.25 in. or less
25-20 Windshield Assembly

A. Removal

1. Remove forward door and hinges.

   NOTE
   To prevent scratching windshield, a protective cover should be taped to the inside and outside of the windshield prior to removal.

2. Remove screws and side retainer holding windshield.

3. Reinstall hinges and doors for cabin structure support with windshield removed.

4. Remove screws and retainers (upper, lower, and middle) holding windshield.

5. Clean silicone from retainers.

6. Clean silicone from windshield for reinstallation.

B. Installation

1. Remove all old silicone from cabin, retainers and windshield.

2. Install windshield and cleco retainer strips.

3. Mask windshield along edge of retainer strips with 1/2” masking tape. This will catch silicone rubber squeeze-out on installation of retainer strips.

4. Remove retainer strips.

5. To ensure a proper seal, run a bead of B270-13 silicone rubber along entire edge of tape line.

6. While holding windshield in place, cleco retainer strips (center, upper and lower) into place.

7. With doors installed and closed, tighten center retainer strip first. Then tighten upper and lower retaining strips. A second person will be required to tighten nuts inside ship.

8. When center, upper and lower retaining strips are secure, remove door and hinges for side strip installation.


10. Reinstall hinges and door. Ensure all fasteners are tight.

11. Fill any gap between retainer and window with B270-13 silicone rubber.

12. Remove masking tape next to retainers. Be careful not to smear wet silicone.

13. Clean any silicone off windshield after it has been allowed to dry.
25-20 Windshield Assembly (continued)

C. Inspection

1. Inspect windshield for cracks and crazing adjacent to retainer strips per Figure 25-1. If cracks exceed these limits, replace windshields per § 25-20 Part D.

D. Replacement

1. Remove all old silicone on cabin and retainers if they are to be reused.
2. Cleco all window retaining strips in place, checking for proper alignment.
3. Install hinges and doors in door frames and secure. Remove bottom and center retaining strips, leaving side retaining strip to hold door and door frame in position.
4. Hold windshield in place by hand, and align it with frame according to contour of frame and windshield.
5. Mark windshield for trim using non-permanent marker, such as grease pencil or masking tape.
6. Trim to mark. A band saw is recommended. Band saw blade should contain at least 24 teeth per inch.

   **NOTE**

   Tape cardboard to band saw table to prevent scratching of windshield. Saw carefully to prevent binding of saw blade and cracking windshield.

7. Hold windshield in place and check for fit. Re-trim as necessary.
8. After windshield is fitted, carefully sand or scrape edges smooth.
9. Install windshield per § 25-20 Part B.