1. DESCRIPTION AND OPERATION

*Serials 0002 thru 0820*: The two crew/passenger doors incorporate a flush-mount outside door handle, key-operated door lock, and a conventional inside door handle. The door latch handle is centered under the window. Latching pins at the rear top and rear bottom of each door are engaged by that door's handle. To open either door from outside the airplane; push in on the forward end handle to release the handle from the flush mount position, rotate handle down and forward to the OPEN position, and the gas strut will then automatically assist in raising the door to the full up position. To close the door from inside of the airplane, pull the door shut and rotate handle to the CLOSED position. When handle is rotated to the CLOSED position, a detent holds the handle in position. To close the doors from outside of the airplane, close the door with the interior handle in the forward (OPEN) position and then latch the door by rotating the outside door handle up and forward to the CLOSED position.

*Serials 0821 & subs*: The two crew/passenger doors incorporate a push-button outside entry mechanism, key-operated door lock, and an inside door lever. The door lever is centered under the window. Latches at the rear top and bottom of each door are engaged by that door's lever. To open either door from outside the airplane; depress the push-button entry mechanism, and the gas strut will then automatically assist in raising the door to the full up position. To close the door from inside of the airplane, pull the door shut firmly by its handle to engage latches. To close the doors from outside of the airplane, push the door firmly to engage latches.

*Serials 0002 thru 0820*: Rotating the door handle either inserts or retracts two round pins into or out of receivers on the aft door jamb. The round pins operate by push-pull cable and linkage. The handle mechanism is designed to allow the inside handle to operate while the outside handle stays nested into a depression, yet the outside handle will twist the inside door handle to the open or closed position. A detent pin, which is a roller follower on the handle actuation disk, holds the handle assembly in the fully latched, and the open, positions. The inside door handle in the closed position is nested into the armrest, and in the unlatched position, juts up into the crew's forearm. The mechanism has a spring detent which requires a deliberate effort to overcome. This is the only locking mechanism on the inside.

*Serials 0821 & subs*: Depressing the door lever releases two latches from pins on the aft and bottom door jamb. The latches operate by pull cable and linkage.

The external security lock doesn't hinder escape from within. Their function is only to disable external access to the cabin. At least one of the two doors is unlocked anytime the airplane is occupied, for it must be unlocked to enter, and it cannot be locked from inside.

To lock crew/passenger entry doors when leaving the airplane, insert the key into the lock and rotate counter-clockwise.

The outer skin of the door is molded from a glass and carbon fiber-epoxy matrix. Front seat armrests are integral with the doors’ interior.
2. MAINTENANCE PRACTICES

A. Cabin Door - Serials 0002 thru 0820 (See Figure 52-101)

(1) Removal - Cabin Door

(a) Acquire necessary tools, equipment, and supplies.

<table>
<thead>
<tr>
<th>Description</th>
<th>P/N or Spec.</th>
<th>Supplier</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flat, Open-End Wrench</td>
<td>3/4 inch 19 mm</td>
<td>Any Source</td>
<td>Strut removal.</td>
</tr>
</tbody>
</table>

(b) Remove locking cap from gas strut inboard rod end.

(c) Position flat wrench around neck of ball stud between attach bracket and gas strut inboard rod end.

**CAUTION:** The ball stud snaps into four locking tabs integral to the gas strut rod end. Use caution during gas strut removal to avoid damaging locking tabs. If any one of the locking tabs cracks or breaks loose, the rod end must be replaced.

(d) Gently pry gas strut inboard rod end off of ball stud.

(e) Remove glareshield trim. (Refer to 25-10)

(f) Remove lower windshield trim. (Refer to 25-10)

(g) Remove upper windshield trim. (Refer to 25-10)

(h) Cut the safety wire used to secure the lower door hinge bolt to the safety wire tab.

**CAUTION:** Do not remove the lower door hinge bolt. The lower door hinge retaining bolt only needs to be loosened to accomplish door removal. The door must be almost fully closed to allow easy removal.

(i) Loosen the lower door hinge bolt approximately five turns counterclockwise to allow lower door hinge to become dislodged from its mount.

(j) Slide door up and off of the upper door hinge pivot pin.

(2) Installation - Cabin Door

(a) Slide upper door hinge over the upper door hinge pivot pin.

(b) Place the lower door hinge into position and secure the hinge and door by tightening the lower door hinge retaining bolt, washer, shim, and spacer.

(c) Install upper windshield trim. (Refer to 25-10)

(d) Install lower windshield trim. (Refer to 25-10)

(e) Install the glareshield trim. (Refer to 25-10)

**CAUTION:** The ball stud snaps into four locking tabs integral to the gas strut rod end. Verify all four locking tabs are intact. If any one of the locking tabs is cracked or missing, the rod end must be replaced.

(f) Visually inspect gas strut rod ends and locking caps for cracked or missing tabs, security, and general condition.

(g) Position gas strut rod end to ball stud and press firmly to secure.

(h) Install locking cap to gas strut rod end.
Figure 52-101
Cabin Door Installation - Serials 0002 thru 0820

EFFECTIVITY:
Serials 0002 thru 0820

Legend
1. Washer
2. Nut
3. Ball Stud
4. Gas Strut
5. Tab
6. Attach Bracket
7. Spacer
8. Grommet
9. Screw
10. Locking Cap
11. Rod End
12. Locking Tab
13. Catcher/Diverter

NOTE
1. The lower door hinge retaining bolt only needs to be loosened to accomplish door removal.
2. Verify all four locking tabs are intact. If any one of the locking tabs is cracked or missing, the rod end must be replaced.
B. Cabin Door - **Serials 0821 & subs** (See Figure 52-102)

(1) Removal - Cabin Door

**CAUTION:** Two aircraft technicians are needed to provide door support during hinge disassembly.

(a) Acquire necessary tools, equipment, and supplies.

(b) Remove locking cap from gas strut inboard rod end.

(c) Position flat wrench around neck of ball stud between attach bracket and gas strut inboard rod end.

**CAUTION:** The ball stud snaps into four locking tabs integral to the gas strut rod end. Use caution during gas strut removal to avoid damaging locking tabs. If any one of the locking tabs cracks or breaks loose, the rod end must be replaced.

(d) Gently pry gas strut inboard rod end off of ball stud.

(e) Remove glareshield trim. *(Refer to 25-10)*

(f) Remove lower windshield trim. *(Refer to 25-10)*

(g) Remove upper windshield trim. *(Refer to 25-10)*

(h) Remove screws securing upper and lower hinge plate covers to hinges.

(i) Remove bolt, washers, spacer, nut, and cotter pin securing lower rod end to lower door hinge.

(j) Remove bolt, washers, spacer, nut, and cotter pin securing upper rod end to upper door hinge.

(k) Lift door away from the fuselage.

(2) Installation - Cabin Door

**CAUTION:** To facilitate any necessary adjustment, ensure a maximum of five threads are exposed on rod ends at the upper and lower attachment points on the cabin door.

**CAUTION:** Two aircraft technicians are needed to provide door support during hinge assembly.

(a) Fit door onto fuselage door opening in a closed position.

(b) Place the upper rod end into position and secure the rod end to the hinge with bolt, washers, spacer, nut, and cotter pin.

(c) Place the lower rod end into position and secure the rod end to the hinge with bolt, washers, spacer, nut, and cotter pin.

(d) Perform Adjustment - Cabin Door. *(Refer to 52-10)*

(e) Install screws securing upper and lower hinge plate covers to hinges.

(f) Install upper windshield trim. *(Refer to 25-10)*

(g) Install lower windshield trim. *(Refer to 25-10)*

(h) Install the glareshield trim. *(Refer to 25-10)*

<table>
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<th>Description</th>
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<tr>
<td>Flat, Open-End Wrench</td>
<td>3/4 inch 19 mm</td>
<td>Any Source</td>
<td>Strut removal.</td>
</tr>
</tbody>
</table>
CAUTION: The ball stud snaps into four locking tabs integral to the gas strut rod end. Verify all four locking tabs are intact. If any one of the locking tabs is cracked or missing, the rod end must be replaced.

(i) Visually inspect gas strut rod ends and locking caps for cracked or missing tabs, security, and general condition.

(j) Position gas strut rod end to ball stud and press firmly to secure.

(k) Install locking cap to gas strut rod end.
Verify all four locking tabs are intact. If any one of the locking tabs is cracked or missing, the rod end must be replaced.

NOTE

Figure 52-102
Cabin Door Installation - Serials 0821 & subs (Sheet 1 of 2)
(3) Adjustment - Cabin Door - Serials 0821 thru 2499 before SB 2X-52-07 (See Figure 52-103)

(a) With the cabin door in a closed position, visually inspect the door fit-up and ensure that it conforms to the contour of the fuselage opening for the cabin door.

(b) Around perimeter of cabin door, verify linear gap between fuselage exterior and cabin door edge is 0.060 - 0.125 inch (1.524 - 3.175 mm).

(c) If the door is skewed to contour of the fuselage opening, adjustment is required for the upper or lower rod ends.

1. At the opposing direction of the rod end, use a flathead screwdriver to adjust the appropriate hinge sleeve.

(d) Repeat Adjustment - Cabin Door until proper door fit-up is achieved.

(e) Visually inspect the cabin door latch engagements while slowly pulling the cabin door into the closed position. Note the alignment of the striker pins with the door latches.

(f) If the striker pins are centered with the door latch forks, pull the door to the closed position to verify that the latches engage normally with striker pins.

(g) If the cabin door latches are misaligned, perform Adjustment - Cabin Door Striker Pin to adjust striker pins. (Refer to 53-40)

(h) To verify correct latch tension, perform Adjustment - Latch Assembly. (Refer to 52-10)

(4) Adjustment - Cabin Door - Serials 2500 & subs, Serials 0821 thru 2499 after SB 2X-52-07 (See Figure 52-103)

(a) With the cabin door in a closed position, visually inspect the door fit-up and ensure that it conforms to the contour of the fuselage opening for the cabin door.

(b) Around perimeter of cabin door, verify linear gap between fuselage exterior and cabin door edge is 0.060 - 0.125 inch (1.524 - 3.175 mm).

(c) If the door is skewed to contour of the fuselage opening, adjustment is required for the upper or lower rod ends.

To adjust cabin door forward and up:

1. Remove bolt, washers, spacer, and nut securing improved cabin door rod end to upper fuselage hinge.

2. Rotate upper improved cabin door rod end clockwise as required.

3. Install bolt, washers, spacer, and nut securing improved cabin door rod end to upper fuselage hinge.

To adjust cabin door aft and down:

4. Remove bolt, washers, spacer, and nut securing improved cabin door rod end to upper fuselage hinge.

5. Rotate upper improved cabin door rod end counter-clockwise as required.

6. Install bolt, washers, spacer, and nut securing improved cabin door rod end to upper fuselage hinge.

To adjust cabin door forward and down:

7. Remove bolt, washers, spacer, and nut securing improved cabin door rod end to lower fuselage hinge.

8. Rotate lower improved cabin door rod end clockwise as required.

9. Install bolt, washers, spacer, and nut securing improved cabin door rod end to lower fuselage hinge.

To adjust cabin door aft and up:

10. Remove bolt, washers, spacer, and nut securing improved cabin door rod end to lower fuselage hinge.

11. Rotate lower improved cabin door rod end counter-clockwise as required.

12. Install bolt, washers, spacer, and nut securing improved cabin door rod end to lower fuselage hinge.
(d) Repeat Adjustment - Cabin Door until proper door fit-up is achieved.
(e) Visually inspect the cabin door latch engagements while slowly pulling the cabin door into the closed position. Note the alignment of the striker pins with the door latches.
(f) If the striker pins are centered with the door latch forks, pull the door to the closed position to verify that the latches engage normally with striker pins.
(g) If the cabin door latches are misaligned, perform Adjustment - Cabin Door Striker Pin to adjust striker pins. (Refer to 53-40)
(h) To verify correct latch tension, perform Adjustment - Latch Assembly. (Refer to 52-10)
Figure 52-103
Cabin Door Adjustment - Serials 0821 & subs (Sheet 1 of 2)

NOTE
⚠️ Around perimeter of cabin door, verify linear gap between fuselage exterior and cabin door edge is 0.060 - 0.125 inch (1.524 - 3.175 mm).
Serials 0821 thru 2499 before SB 2X-52-07.

With attaching hardware removed, rotate rod end as required to facilitate any necessary adjustment.

To facilitate any necessary adjustment, ensure a maximum of five threads are exposed on rod ends at the upper and lower attachment points on the cabin door.

NOTE

With attaching hardware removed, rotate rod end as required to facilitate any necessary adjustment.

Figure 52-103
Cabin Door Adjustment - Serials 0821 & subs (Sheet 2 of 2)
C. Cabin Door Gas Strut (See Figure 52-101) (See Figure 52-102)

(1) Removal - Cabin Door Gas Strut
   (a) Acquire necessary tools, equipment, and supplies.

   (b) Remove interior door trim. (Refer to 25-10)
   (c) Remove locking cap from gas strut inboard rod end.
   (d) Position flat wrench around neck of ball stud between attach bracket and gas strut inboard rod end.

   **CAUTION:** The ball stud snaps into four locking tabs integral to the gas strut rod end. Use caution during gas strut removal to avoid damaging locking tabs. If any one of the locking tabs cracks or breaks loose, the rod end must be replaced.

   (e) Gently pry gas strut inboard rod end off of ball stud.
   (f) Remove locking cap from gas strut outboard rod end.
   (g) Position flat wrench around neck of ball stud between attach bracket and gas strut outboard rod end.
   (h) Gently pry gas strut outboard rod end off of ball stud.
   (i) Remove gas strut from airplane.

(2) Installation - Cabin Door Gas Strut

   **CAUTION:** The ball stud snaps into four locking tabs integral to the gas strut rod end. Verify all four locking tabs are intact. If any one of the locking tabs is cracked or missing, the rod end must be replaced.

   (a) Visually inspect gas strut rod ends and locking caps for cracked or missing tabs, security, and general condition.
   (b) Position gas strut outboard rod end to ball stud and press firmly to secure.
   (c) Install locking cap to gas strut outboard rod end.
   (d) Position gas strut inboard rod end to ball stud and press firmly to secure.
   (e) Install locking cap to gas strut inboard rod end.
   (f) Install interior door trim. (Refer to 25-10)
D. Catcher/Diverter - Serials 0002 thru 2007 after SB 2X-52-04, 2008 & subs (See Figure 52-101)  
(See Figure 52-102)

(1) Removal - Catcher/Diverter  
(a) Remove cabin door gas strut. (Refer to 52-10)  
(b) Remove nut securing ball fitting and catcher/diverter to forward attach bracket.

(2) Installation - Catcher/Diverter  
(a) Position catcher/diverter over forward attach bracket so that the gas strut rod end will be captured by the catcher/diverter.  
(b) Install nut securing ball fitting and catcher/diverter to forward attach bracket.  
(c) Install cabin door gas strut. (Refer to 52-10)
E. Handle and Latch Assembly - Serials 0002 thru 0820 (See Figure 52-104) (See Figure 52-105)

(1) Removal - Handle Assembly

Note: The exterior handle can be removed by just removing roll pin from interior handle shaft. Always use correct size pin punch when removing roll pins.

(a) Remove screw and washer securing interior handle to interior handle shaft.
(b) Remove door trim panel. (Refer to 25-10)
(c) Remove nuts and washers from spring return bracket. Remove spring return bracket.
(d) Remove roll pin from interior handle shaft.
(e) Serials 0002 thru 0239: Remove screws and washers securing span bracket to door. Remove span bracket.
(f) Serials 0240 thru 0820: Remove nuts and washers securing span bracket to door. Remove span bracket.
(g) Remove roll pin securing main shaft to actuation disk.
(h) Slide actuation disk assembly off main shaft and position aside.
(i) Remove exterior handle from cabin door main shaft.

(2) Installation - Handle Assembly

Note: Lubricate all moving cabin door latch mechanisms with a dry film lubricant. (Refer to 12-20)

(a) Install exterior handle to cabin door main shaft.
(b) Position and slide actuation disk assembly onto main shaft.
(c) Secure main shaft to actuation disk with roll pin.
(d) Serials 0002 thru 0239: Secure span bracket to door with screws and washers.
(e) Serials 0240 thru 0820: Secure span bracket to door with nuts and washers.
(f) Install interior handle shaft roll pin.
(g) Secure spring return bracket with washers and nuts.
(h) Secure door trim. (Refer to 25-10)
(i) Secure interior handle to interior handle shaft with screw and washer.
Figure 52-104
Handle Assembly - Serials 0002 thru 0820

Serials 0002 thru 0239.
Serials 0002 thru 0820.
(3) Removal - Latch Assembly
   (a) Remove screw and washer securing interior handle to interior handle shaft.
   (b) Remove door trim panel. (Refer to 25-10)
   (c) Remove screws, washers, and nuts securing lower and upper cable attach brackets to
door.
   (d) Remove cotter pins, clevis pins, and washers securing yoke rod ends to actuation disk.
   (e) Remove cotter pins, clevis pins, and washers securing yoke rod ends to inner spring
tubes.
   (f) Remove nuts and yoke rod ends from actuation levers.
   (g) Remove roll pins securing door pins and cable pin springs to inner spring tubes.
   (h) Remove grommets and plastic flanged bearings from outer spring tubes.
   (i) Remove screws securing outer spring tubes to door.

(4) Installation - Latch Assembly

   Note: Lubricate all moving cabin door latch mechanisms with a dry film lubricant.
   (Refer to 12-20)

   (a) Install screws securing outer spring tubes to door.
   (b) Slide grommets over back of outer spring tubes.
   (c) Insert plastic flanged bearings into front of outer spring tubes.
   (d) Insert cable pin springs and door pins into inner spring tubes. Secure door pins to inner
spring tubes with roll pins.
   (e) Secure actuation levers to yoke rod ends with nuts.
   (f) Secure yoke rod ends to inner spring tubes with cotter pins, clevis pins, and washers.
   (g) Secure yoke rod ends to actuation disk with cotter pins, clevis pins, and washers.
   (h) Position and secure lower and upper cable attach brackets to door with screws, washers,
and nuts.
   (i) Secure door trim. (Refer to 25-10)
   (j) Secure interior handle to interior handle shaft with screw and washer.
   (k) Perform Adjustment - Latch Assembly. (Refer to 52-10)

(5) Adjustment - Latch Assembly (See Figure 52-106)

   (a) Open cabin door and hold cabin door handle in full open position (keeping pressure on
the compression springs).
   (b) Inspect and measure clearance between both door pins and receivers using a feeler gage.
   (c) The door pin and receiver clearance should be between 0.00 and 0.05 inch (0.00 and 1.27
cm). If pins need adjustment, proceed with the following steps.

   1. Remove door trim panel. (Refer to 25-10)
   2. Remove appropriate rod end and turn rod end in corresponding direction.
   3. Repeat above procedures as required until specified clearance is obtained.
   4. Secure door trim. (Refer to 25-10)
Figure 52-105
Latch Assembly - Serials 0002 thru 0820

Serials 0002 thru 0820.

LEGEND
1. Yoke Rod End
2. Nut
3. Cabin Door Cable Assembly
4. Grommet
5. Door Pin
6. Roll Pin
7. Cable Pin Spring
8. Inner Spring Tube
9. Clevis Pin
10. Plastic Flanged Bearing
11. Screw
12. Outer Spring Tube
13. Thin Washer
14. Cotter Pin
15. Cable Attach Bracket Base, Upper
16. Cable Attach Bracket Plate, Upper
17. Rivet
18. Actuation Disk
19. Actuation Lever
20. Countersunk Screw
21. Washer
22. Self Locking Nut
23. Cable Attach Bracket, Lower

EFFECTIVITY:
Serials 0002 thru 0820

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Figure 52-106
Latch Assembly Adjustment - Serials 0002 thru 0820

LEGEND
1. Yoke Rod End
2. Plain Nut
3. Cabin Door Cable Assembly

DETAIL A

Serials 0002 thru 0820.

DETAIL B

EFFECTIVITY:
Serials 0002 thru 0820
F. Handle and Latch Assembly - Serials 0821 & subs (See Figure 52-107) (See Figure 52-108)

(1) Removal - Handle Lever
   (a) Remove door handle. (Refer to 25-10)
   (b) Remove screw securing handle lever to interior handle shaft. Remove handle lever.

(2) Installation - Handle Lever
   (a) Secure handle lever to interior lever shaft with screw.
   (b) Install door handle. (Refer to 25-10)

(3) Removal - Handle Lever Assembly
   (a) Remove handle lever. (Refer to 52-10)
   (b) Remove door trim panel. (Refer to 25-10)
   (c) Remove cotter pin, washers, and clevis pin securing end of cable to actuation arm.
   (d) Remove bolts, washers, and nuts securing clevis handle to handle bracket.

(4) Installation - Handle Lever Assembly
   (a) Secure clevis handle to handle bracket with bolts, washers, and nuts.
   (b) Secure end of cable to actuation arm with cotter pin, washers, and clevis pin.
   (c) Secure door trim panel. (Refer to 25-10)
   (d) Install handle lever. (Refer to 52-10)
Figure 52-107
Handle Assembly - Serials 0821 & subs

LEGEND
1. Clevis Pin
2. Washer
3. Cotter Pin
4. Interior Handle Shaft
5. Nut
6. Flush Mount Stud
7. Interior Door Handle
8. Screw
9. Bolt
10. Actuation Arm
11. Handle Bracket
12. Latch Actuation Cable
13. Clevis Handle

SR22_MM52_1847B
(5) Removal - Latch Assembly
   (a) Remove handle lever. (Refer to 52-10)
   (b) Remove door trim panel. (Refer to 25-10)
   (c) Remove nut, washers, rotary arm, and spacer securing actuator to rotary latch.
   (d) Remove bolts and washers securing cable bracket, spacer, and rotary latch to door.
       Remove rotary latch.

(6) Installation - Latch Assembly
   (a) Position rotary latch, spacer, and cable bracket to door. Install bolts and washers securing
       rotary latch, spacer, and cable bracket to door. Torque to 15.0 - 20.0 in-lb (1.7 - 2.2 Nm).
   (b) Install actuator.
       1. Acquire necessary tools and equipment.
       2. Solvent clean inner square mating surfaces of rotary arm with isopropyl alcohol.
          (Refer to 20-30)
       3. Use clean brush to apply primer on inner square mating surfaces of rotary arm.
          Allow to dry. (Refer to 20-40)
       4. Position actuator to rotary latch with washers, spacer, and rotary arm.
       5. Use clean brush to apply Loctite on inner square mating surfaces of rotary arm.
          (Refer to 20-40)
       6. Rock rotary arm until Loctite fills entire gap between rotary arm and actuator.
       7. Install upper washer and wipe excess Loctite from actuator threads with cloth.
       8. Secure rotary arm to actuator with nut, washers, and spacer.

   CAUTION: Rotary arm gap verification and alignment must be accomplished within a few minutes of applying Loctite while nut is secured and before Loctite sets.

   (c) Align rotary arms. (See Figure 52-109)
       1. Verify gap between rotary arm and washer/spacer stackup is 0.01 to 0.03 inch (0.25 to
          0.76 mm) and spacer rotates freely.
          If clearance is not within tolerance or spacer does not rotate, remove nut securing
          rotary arm to actuator before Loctite sets and contact Cirrus Design Customer Service for disposition.
For upper rotary arm, perform alignment by locating rotary arm approximately centered between its limits of rotation on actuator.

For lower rotary arm, perform alignment by placing latch into latched position. Apply light pressure to rotary arm until it is approximately 0.01 to 0.03 inch (0.25 to 0.76 mm) above actuation arm of push button. If clearance is below tolerance, gently press rotary arm in the opposite direction and re-apply light pressure until clearance tolerance is met.

(d) Secure door trim panel. (Refer to 25-10)
(e) Install handle lever. (Refer to 52-10)

(7) Removal - Cable Attach Bracket
(a) Remove latch assembly. (Refer to 52-10)
(b) Loosen nuts securing cable to cable attach bracket.
(c) Serials 0820 thru 0890 before SB 2X-52-03: Remove rivets.
   1. Acquire necessary tools, equipment, and supplies.

<table>
<thead>
<tr>
<th>Description</th>
<th>P/N or Spec.</th>
<th>Supplier</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drill bit</td>
<td>#30</td>
<td>Any Source</td>
<td>Remove rivets.</td>
</tr>
<tr>
<td>0.1285 inch (3.2639 cm)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vacuum Cleaner</td>
<td>-</td>
<td>Any Source</td>
<td>Clean rivet removal area.</td>
</tr>
<tr>
<td>Compressed Air (Contaminate free)</td>
<td>-</td>
<td>Any Source</td>
<td>Clean rivet removal area.</td>
</tr>
<tr>
<td>Isopropyl Alcohol</td>
<td>TT-I-735</td>
<td>Any Source</td>
<td>Clean rivet removal area.</td>
</tr>
<tr>
<td>Grade A or B</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cotton Cloth</td>
<td>-</td>
<td>Any Source</td>
<td>Clean rivet removal area.</td>
</tr>
<tr>
<td>(clean and lint free)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5-Minute Epoxy</td>
<td>14240</td>
<td>Devcon Danvers, MA 01923 800-626-7226</td>
<td>Seal rivet hole.</td>
</tr>
</tbody>
</table>

2. Use #30 drill bit to drill out rivet securing cable attach bracket to door.

**CAUTION:** It is permissible to push rivet tail inside door structure. Rivet hole in composite must be open for sealing.

3. Using vacuum cleaner and compressed air, clean rivet removal area.
4. Solvent clean rivet removal area.
5. Use epoxy to injection seal rivet holes. Allow epoxy to cure.
(d) Serials 0820 thru 0890 after SB 2X-52-03, 0891 & subs: Remove cable attach bracket.

(8) Installation - Cable Attach Bracket
(a) Tighten nuts securing cable to cable attach bracket.
(b) Install latch assembly. (Refer to 52-10)
Serials 0821 thru 0890 before SB 2X-52-03:
Use #30 drill bit to drill out rivet securing cable attach bracket to door.

NOTE

- Torque to 15.0 - 20.0 in-lb (1.7 - 2.2 Nm).
- Serials 0821 thru 0890 before SB 2X-52-03:
  Use #30 drill bit to drill out rivet securing cable attach bracket to door.

DETAIL A

Figure 52-108
Latch Assembly - Serials 0821 & subs

EFFECTIVITY:
Serials 0821 & subs

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NOTE

- Verify gap between rotary arm and washer/spacer stack-up is 0.01 to 0.03 inch (0.25 to 0.76 mm) and spacer rotates freely.
- For lower rotary arm, perform alignment by placing latch into latched position. Apply light pressure to rotary arm until it is approximately 0.01 to 0.03 inch (0.25 to 0.76 mm) above actuation arm of push button. If clearance is below tolerance, gently press rotary arm in the opposite direction and re-apply light pressure until clearance tolerance is met.
- For upper rotary arm, perform alignment by locating rotary arm approximately centered between its limits of rotation on actuator.
- Use clean brushes to apply primer and Loctite on inner square mating surfaces of rotary arms.

LEGEND
1. Rotary Arm, Upper
2. Rotary Arm, Lower
3. Actuation Arm, Push Button
4. Actuator
5. Spacer
6. Washer
(9) Adjustment - Latch Assembly *(See Figure 52-1010)*

(a) Open the cabin door.

(b) Manually rotate both latches to closed position with door open.

(c) Slowly depress exterior push button until lower latch releases.

   If upper latch is still engaged or disengages last, latch tension is too loose and adjustment is required.

   If both latches are disengaged, manually depress lever on upper latch mechanism. If upper latch can be closed easily, no adjustment is required. If upper latch closes with difficulty or won’t engage, latch tension is too tight and adjustment is required.

1. Remove handle lever. *(Refer to 52-10)*
2. Remove door trim panel. *(Refer to 25-10)*
3. Loosen nuts securing upper cable to cable attach bracket.
4. Adjust cable end attachment locations by threading nuts as required to achieve specified cable tension.

   **CAUTION:** To minimize slack in cable, ensure cable end ball fitting only has a maximum of 0.03 inch (0.76 mm) of looseness.

5. Tighten nuts securing cable to cable attach bracket.
6. Repeat above procedures as required until both latches disengage as required when cabin door push button is depressed.
7. Secure door trim panel. *(Refer to 25-10)*
8. Install handle lever. *(Refer to 52-10)*
NOTE

⚠️ To minimize slack in cable, ensure cable end ball fitting only has a maximum of 0.03 inch (0.76 mm) of looseness.

Figure 52-1010
Latch Assembly Adjustment - Serials 0821 & subs

LEGEND
4. Nut
5. Ball Fitting
6. Upper Latch Lever
7. Cable Attach Bracket

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G. Cabin Door Seal

For maintenance practices pertinent to the cabin door seal, see Attach Fittings. (Refer to 53-40)