

DOORS - INSPECTION/CHECK

1. General

- A. This section has the inspections and checks necessary to keep the doors in a serviceable condition.

TASK 52-00-00-220

2. Crew Doors and Crew Door Entrance Steps Detailed Inspection

A. General

- (1) This task gives the information needed to do a detailed inspection of the crew doors and the crew door entrance steps.

B. Special Tools

- (1) Dry Solid Film Lubricant (MIL-L-23398)
(2) Isopropyl Alcohol

C. Access

- (1) Remove the left and the right crew door upper and lower interior panels. Refer to Crew Door - Maintenance Practices.
(2) Remove floorboard access panels 231AL, 231CL, 232AR, and 232AC that are adjacent to the crew ladder mounting brackets. Refer to Chapter 6, Access/Inspection Plates - Description and Operation.

D. Do a Detailed Inspection of the Crew Doors and Crew Door Entrance Steps between FS 128.00 to FS 166.45.

- (1) Examine the crew door external panel surface for condition, cracks, corrosion, delamination, and security.
(2) Examine the areas around the door frame, door hinges hinge pin and attach screws for condition, corrosion, security, and correct attachment.
(3) Examine the crew door latch mechanism assembly for condition, corrosion, security, and correct attachment.
(a) Make sure that you examine the door handle, roll pin, escutcheon, handle support, and lock pin.
(b) Make sure that you examine the bell crank, bell crank bushing, bell crank pin, and door handle spindle.
(c) Make sure that you examine the pushrod assembly, clevis, latch bolt, and latch bolt spring.
(4) Examine the crew door entrance step assembly for condition, corrosion, and security of assembly to the floor.
(5) Examine the upper arm attachments to the floor mounting brackets for condition and security.
(a) Examine the bushings for wear.
(6) Examine the ladder mounting bracket attach structure for condition, cracks, buckling, bending, and corrosion.
(7) Examine the lower arm mount points for condition and security.
(a) Examine the bushings for wear.
(8) Examine the step anti-skid material for condition and security.
(9) Examine the arm rest pad for condition and security.
(10) Examine the crew door seals for correct installation, security, cuts, abrasions, and wear.
(a) Clean the door seals with a cloth slightly dampened with water or isopropyl alcohol.
(11) Examine the door lock assembly for condition, wear, and security.
(12) Lubricate any pivot point or sliding surface with MIL-L-23398 before you install the crew door interior panels.

E. Restore Access

- (1) Install floorboard access panels 231AL, 231CL, 232AR, and 232AC. Refer to Chapter 6, Access Plates and Plates Identification - Description and Operation.
(2) Install the left and the right crew door upper and lower interior panels. Refer to Crew Door - Maintenance Practices.

END OF TASK

TASK 52-00-00-221

3. Passenger/Cargo Doors and Door Frames Detailed Inspection

A. General

- (1) This task gives the information needed to do a detailed inspection of the passenger and cargo doors and door frames.

B. Special Tools

- (1) None

C. Access

- (1) Remove the upper and the lower passenger door interior panels. Refer to Passenger Doors - Maintenance Practices.
- (2) Remove the upper and the lower cargo door interior panels. Refer to Cargo Doors - Maintenance Practices.

D. Do a Detailed Inspection of the Passenger Door Assembly between FS 234.00 to FS 284.00 for the Model 208 and FS 282.00 to 332.00 for the Model 208B.

- (1) Examine the upper and lower passenger doors for condition, cracks, corrosion, delamination, and security.

CAUTION: Do not apply too much torque to any of the attaching hardware to the doors. Too much torque can strip the threaded inserts.

- (2) Examine the passenger door frames and hinge areas for condition, cracks, and corrosion.

WARNING: If the upper and lower gas cylinders are removed at the same time, do not interchange the upper and lower cylinders. Severe injury and damage to the airplane could occur.

- (3) Examine the upper door spring gas cylinders for condition and security.

- (a) Make sure that the upper door will hold in the open position.

- (4) Examine the lower door gas spring cylinders for condition and security.

- (a) Make sure that the cylinders cushion the lower door when the door is released to free-fall from the closed position.

- (5) Examine all four restraint cables for condition and security.

- (a) Look closely for broken cable strands in the area where the cable comes out of the clevis end.

- (6) Examine the entrance step assembly for condition, corrosion, security, and wear.

- (a) If the step anti-skid material is worn, replace the material.

- (7) Examine the lower cables for correct adjustment.

- (a) Both cables must carry all of the load of the lower door when the door is open.

- (b) The gas cylinders must not be fully extended.

- (8) Examine the cargo upper door external panel surface, upper door hinge and the fuselage door frame and hinges for condition, corrosion, security, and correct attachment.

- (9) Examine the upper door latch mechanism assembly to include the following:

- (a) Door handle, roll pin, escutcheon, handle support, and lock pin for condition, corrosion, security, and correct attachment.

- (b) Bell crank, bell crank bushing, bell crank pin, and door handle spindle for condition, corrosion, security, and correct attachment.

- (c) Pushrod assemblies, clevis, latch bolt, and latch bolt spring for condition, corrosion, security, and correct attachment.

- (10) Examine the lower door latch mechanism assembly to include the following:

- (a) Door handle, roll pin, escutcheon, handle support, and lock pin for condition, corrosion, security, and correct attachment.

- (b) Bell crank, bell crank bushing, bell crank pin, and door handle spindle for condition, corrosion, security, and correct attachment.

- (c) Pushrod assemblies, clevis, latch bolt, and latch bolt spring for condition, corrosion, security, and correct attachment.

- (11) Examine the door lock assembly for condition, wear, and security.

- (a) Lubricate the locking mechanism with Moly Sulfide or an equivalent lubricant.

- (12) Examine the door seals for correct installation, security, cuts, abrasions, and wear.

- (a) Clean the door seals with a cloth slightly dampened with water or isopropyl alcohol.

E. Do a Detailed Inspection of the Cargo Door Assembly between FS 234.00 to FS 284.00 for the Model 208 and FS

282.00 to 332.00 for the Model 208B.

- (1) Examine the upper and the lower cargo doors for condition, cracks, corrosion, delamination, and security.
CAUTION: Do not apply too much torque to any of the attaching hardware to the doors. Too much torque can strip the threaded inserts.
- (2) Examine the upper and the lower cargo door hinges for condition, corrosion, security, and correct installation.
- (3) Examine the cargo door frames for cracks.
- (4) Examine the upper cargo door spring gas cylinders for condition and security.
 - (a) Make sure that the upper door will hold in the open position.
- (5) Examine the upper cargo door restraint cables for condition and security.
 - (a) Look closely for broken cable strands in the area where the cable comes out of the clevis end.
- (6) Examine the areas around the door hinges and the door handle, hinge pin, and attach screws for condition, corrosion, security, and correct attachment.
- (7) Examine the upper door latch mechanism assembly to include the following:
 - (a) Door handle, roll pin, escutcheon, handle support, and lock pin for condition, corrosion, security, and correct attachment.
 - (b) Bell crank, bell crank bushing, bell crank pin, and door handle spindle for condition, corrosion, security, and correct attachment.
 - (c) Pushrod assemblies, clevis, latch bolt, and latch bolt spring for condition, corrosion, security, and correct attachment.
- (8) Examine the lower cargo door latch mechanism assembly to include the following:
 - (a) Door handle, roll pin, escutcheon, handle support, and lock pin for condition, corrosion, security, and correct attachment.
 - (b) Bell crank, bell crank bushing, bell crank pin, and door handle spindle for condition, corrosion, security, and correct attachment.
 - (c) Pushrod assemblies, clevis, latch bolt, and latch bolt spring for condition, corrosion, security, and correct attachment.
- (9) Examine the door lock assembly for condition, wear, and security.
- (10) Examine all door seals for correct installation, security, cuts, abrasions, and wear.
 - (a) Clean all door seals with a cloth slightly dampened with water or isopropyl alcohol.

F. Restore Access

- (1) Install the upper and the lower cargo door interior panels. Refer to Cargo Doors - Maintenance Practices.
- (2) Install the upper and the lower passenger door interior panels. Refer to Passenger Doors - Maintenance Practices.

END OF TASK