

INSPECTION DOCUMENT 03

Date: _____
 Registration Number: _____
 Serial Number: _____
 Total Time: _____

1. Description

- A. Inspection Document 03 gives a list of item(s), which are completed at every 48 calendar months.
- B. Inspection items are given in the sequence of the zone in which the inspection is completed. A description of the inspection, as well as the Item Code Number are supplied for cross-reference to section 5-10-01. Frequently, tasks give more information about each inspection. These tasks are found in the individual chapters of this manual.
- C. The right portion of each page gives space for the mechanic's and inspector's initials and remarks. You can use copies of these pages as a checklist while you complete the tasks in this Inspection Document.

2. General Inspection Criteria

- A. As you complete each of the inspection tasks in this Inspection Document, examine the adjacent area while access is available to find conditions that need more maintenance.
- B. If it is necessary to replace a component or to make a change to a system while you complete a task, do the task again before the system or component is returned to service.
- C. Inspection Kits are available for some Inspection Documents. They supply consumable materials used to complete the inspection item(s) given for the interval. Refer to the Model 208 Illustrated Parts Catalog, Introduction, Service Kit List to find applicable part numbers.

| ITEM CODE NUMBER | TASK | ZONE | MECH | IN-SP | REMARKS |
|------------------|--|--|------|-------|---------|
| A281003 | Fuel Storage System Detailed Inspection Task 28-10-01-221 | 521 621 | | | |
| A321003 | Center-Spring and Main Gear-Spring Interface Area Special Detailed (Corrosion Inspection and Repair) Task 32-10-00-221 | 721 722 | | | |
| A531003 | Internal Cockpit Zonal Inspection Task 53-10-00-211 | 211 212 213 214 215 216 217 218 231 232 233 234 | | | |
| A531007 | Internal Tail Cone Zonal Inspection Task 53-10-00-213 | 311 312 320 330 | | | |

| ITEM CODE NUMBER | TASK | ZONE | MECH | IN-SP | REMARKS |
|--|---|---------|------|-------|---------|
| A571001 | Wing Zonal Inspection Task 57-10-00-210 | 500 600 | | | |
| *** End of Inspection Document 03 Inspection Items *** | | | | | |

Task 28-10-01-221

3. Fuel Storage System Detailed Inspection

A. General

- (1) This task gives the information needed to do a detailed inspection of the fuel storage systems.

B. Special Tools

- (1) None

C. Access

- (1) Fuselage access panels and covers

NOTE: The fuel access panels and covers are removed after the inspection steps for removing the fuel.

D. Do a Detailed Inspection of the Fuel Storage System.

WARNING: Before you do maintenance on the fuel system, you must read and understand all of the fuel system maintenance, fire precautions, and safety practices. Refer to Fuel System - Maintenance Practices and Chapter 12, Fuel – Servicing.

- (1) Defuel the airplane. Refer to Chapter 12, Fuel – Servicing.
 - (a) Remove the remaining fuel from the fuel storage areas with the fuel drain valves. Refer to Chapter 12, Fuel – Servicing.
- (2) Remove lower wing fuel access panels 521AB, 521BB, 521DB, 521EB left, and 621AB, 621BB, 621DB and 621EB right. Refer to Chapter 6, Access Plates and Panels Identification - Description and Operation.

CAUTION: Be careful to not separate the wing skin doubler from the wing skin.

- (a) Purge the fuel tanks. Refer to Chapter 12, Fuel – Servicing.
- (3) Examine the eight (8) quantity transmitter mounting plates for condition, leaks, and security.
- (4) Examine the transmitters wire harnesses and terminals at the transmitters for condition and security.
- (5) Examine the tank drains for condition, leaks, and security.
- (6) Examine the fuel lines, fuel shut-off-valves, and filters for condition and security.

E. Do a Fuel Reservoir Tank Inspection.

NOTE: This inspection includes the system and components of the inner reservoir tank cavity only. On airplanes with pods, the reservoir includes a mechanical drain that is connected to a push/pull cable on the left side of the pod.

- (1) For airplanes with a POD installed, remove the drain line cover.
 - (a) Install a plug in the drain line opening.
 - (b) Pull the drain valve open and examine the line connections for leaks.
 - (c) Examine the reservoir drain system for condition, security, correct drain valve rigging, and correct operation of the drain valve.
 - (d) Remove the plug from the drain line opening.
- (2) Examine the metal fuel lines, manifold, vent lines, and drain lines in the tank area for condition, security, and signs of leakage.

NOTE: The auxiliary fuel pump seal drain line is not installed on airplanes with the Airborne pump installed.

- (3) Examine the seals where fuel and vent lines go through the structure for condition and security.
- (4) Examine the rubber hoses (7 each) and the hose clamps for condition, leaks, deterioration, and security.
- (5) Examine the fuel pressure switch and the auxiliary pump relay for condition, security, correct wire routing, chafing of wires, and leaks at the pressure switch.

CAUTION: Before you remove fuselage access panel 253AC, make sure that all residual fuel is drained.

- (6) Remove fuselage access cover 253AC. Refer to Chapter 6, Access Plates and Panels Identification - Description and Operation.
- (7) Examine the reservoir tank for condition, leaks, and security of installation
- (8) Examine the reservoir tank mounting brackets and attachment structure for condition, cracks, corrosion, and security.
- (9) Examine the auxiliary fuel pump, ejector boost pump, and plumbing for condition and security.
- (10) Examine the swing check valves for condition, security, and freedom of movement from the closed to the open position.
- (11) Examine the interior paint primer to make sure that it is not peeled, blistered, or separated from the surfaces of the reservoir.
 - (a) If loose primer is found, find the cause and correct it. Refer to Fuel Tanks - Maintenance Practices.
 - 1 If no paint primer particles are found, no further action is necessary.

F. Restore Access

- (1) Install fuselage access cover 253AC. Refer to Chapter 6, Access Plates and Panels Identification - Description and Operation.
- (2) Install lower wing fuel access panels 521AB, 521BB, 521DB, 521EB left, and 621AB, 621BB, 621DB and 621EB right. Refer to Chapter 6, Access Plates and Panels Identification - Description and Operation.

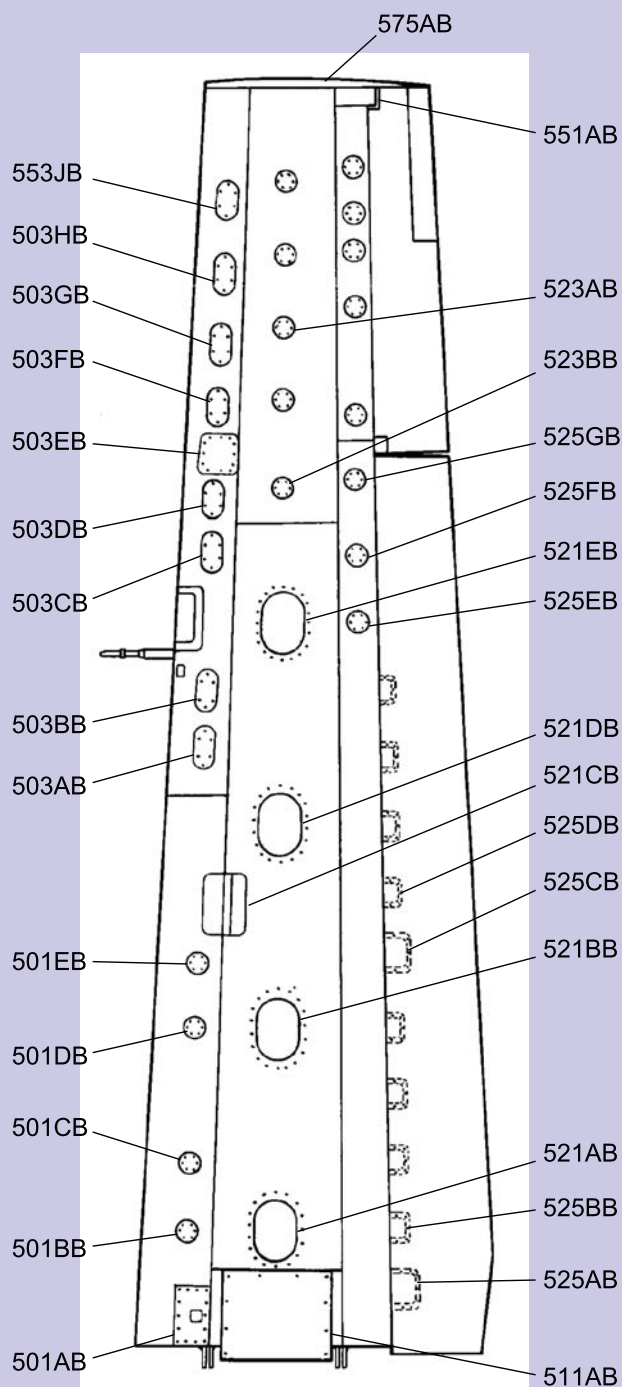
CAUTION: Be careful to not separate the wing skin doubler from the wing skin.

- (a) Purge the fuel tanks. Refer to Chapter 12, Fuel – Servicing.
- (3) Refuel the airplane. Refer to Chapter 12, Fuel – Servicing.

End Task

Figure 7. Left Lower Wing Panels

A22961



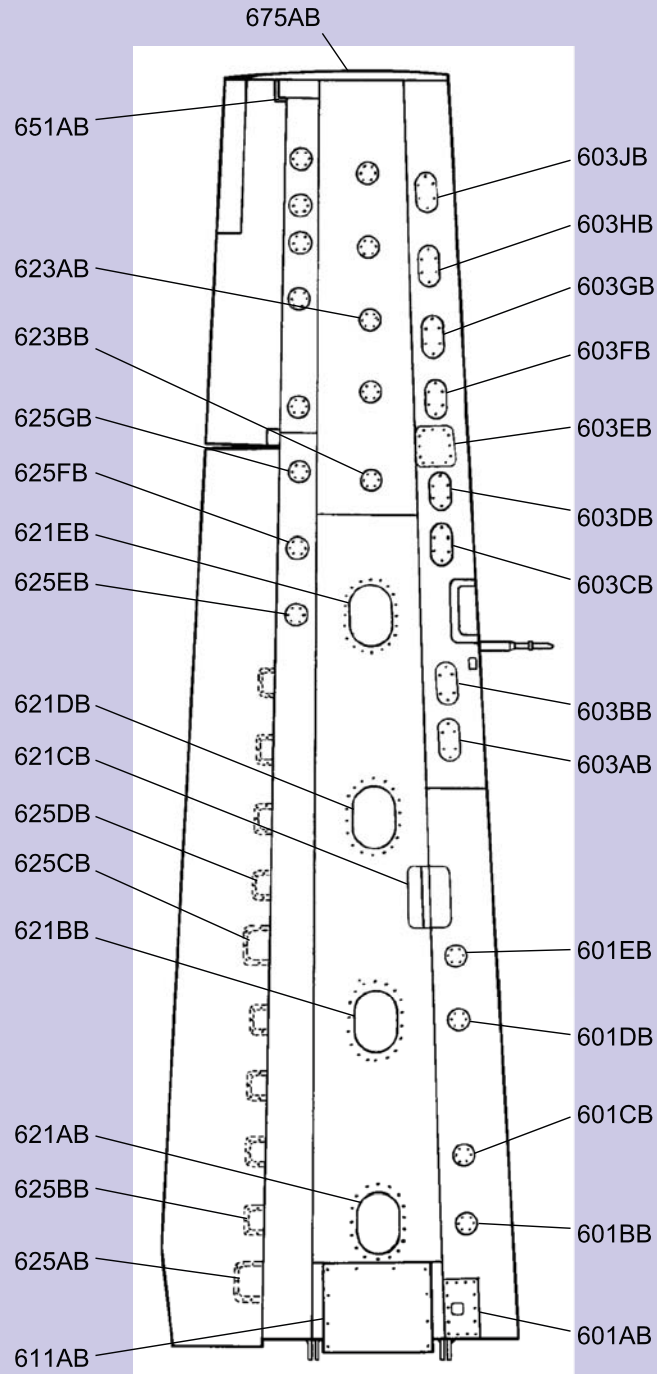
VIEW LOOKING UP AT LEFT WING

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2610R2008

Figure 8. Right Lower Wing Panels

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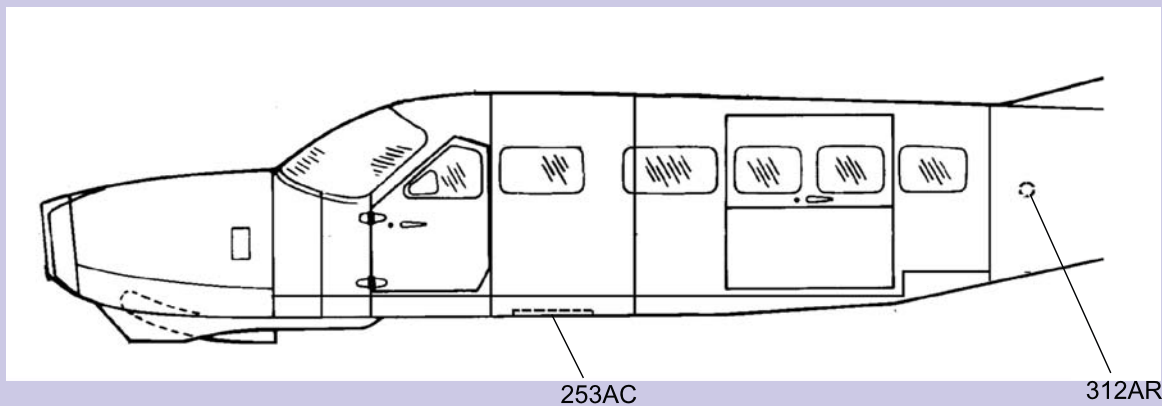
VIEW LOOKING UP AT RIGHT WING

Sheet 1 of 1

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Figure 1. Fuselage Access Plates/Panels Identification

A22944



VIEW LOOKING AT LEFT SIDE OF FUSELAGE

Task 32-10-00-221

3. Center-Spring and Main Gear-Spring Interface Area Special Detailed (Corrosion Inspection and Repair)

A. General

- (1) This task gives the procedures to do a detailed inspection and repair of the center spring and main gear spring interface area.

B. Special Tools

- (1) Airplane Jacks
- (2) Tail Stand

C. Access

- (1) None

NOTE: The main landing gear fairings are removed during the inspection.

D. Do a Center Spring and Main Gear Spring Interface Area Detailed Inspection and Repair (Refer to Figure 602 and Figure 603).

- (1) Remove and disassemble the main landing gear assembly. Refer to Main Landing Gear - Maintenance Practices.

NOTE: The main landing gear fairings are removed during the landing gear removal procedure.

NOTE: The airplane is lifted on jacks during the landing gear removal procedure.

- (2) Examine the center spring and main gear spring interface area for gouging, chafing, or corrosion.

- (a) If no gouging, chafing, or corrosion is found, install the main landing gear assembly. Refer to Main Landing Gear - Maintenance Practices.

- (b) If gouging, chafing, or corrosion is found, prepare the damaged area for a measurement.

E. Prepare the Damaged Area of the Interface Area for a Measurement.

- (1) Use abrasive cloths and brushes to clean the damaged area.

NOTE: For normal cleaning procedures the abrasive cloths are 180 grit or finer. If it is necessary to remove heavy layers of scale or oxides, a steel brush or 150 grit abrasive cloth can be used.

- (2) Remove the paint in the damaged area.

CAUTION: Make sure that you do not use a chemical stripper on the main gear spring.

- (a) Remove only enough paint to get the correct measurement of the damaged area.

F. Measure the Damaged Area of the Interface Area. Refer to Figure 602 and Table 602.

Table 602. Maximum Repair Depth Interface Area

| REPAIR LOCATION | | MAXIMUM REPAIR DEPTH | DIAMETER |
|-----------------|--------------------------------|----------------------|--------------------|
| Center Spring | Inner Surface - Interface Area | 0.050 inches | |
| | Model 208 | | 2.703 inches (max) |

| REPAIR LOCATION | | MAXIMUM REPAIR DEPTH | DIAMETER |
|-----------------|--------------------------------|----------------------|--------------------|
| | Model 208B | | 2.794 inches (max) |
| Main Spring | Outer Surface - Interface Area | 0.050 inches | |
| | Model 208 | | 2.698 inches (min) |
| | Model 208B | | 2.789 inches (min) |

- (1) Use a micrometer to measure and record the diameter of the interface area of the main gear spring externally and center spring internally.

NOTE: The grid of measurements is specified as follows: The first set of measurements are 0.25 inches from the end of the spring. The next 5 sets of measurements are made every 1.20 inches after the first set. Each set of measurements are made at 45 degree intervals around the spring diameter. There will be a total of 24 measurements on each spring end.

- (a) If more than 20 percent of the measurements on the center spring in the interface area are more than the maximum diameter, replace the center spring. Refer to Main Landing Gear - Maintenance Practices.
- (b) If more than 20 percent of the measurements on the main gear spring in the interface area are less than the minimum diameter, replace the main gear spring. Refer to Main Landing Gear - Maintenance Practices.

- (2) Use a pin type depth micrometer to measure the difference between the undamaged spring surface and the deepest portion of the damage. Record the measurement of the difference.

NOTE: A micrometer with a tolerance of +0.001 or -0.001 inch is necessary to make this measurement.

- (a) If the depth of damage is greater than the permitted maximum repair depth, replace the center spring or main gear spring. Refer to Main Landing Gear - Maintenance Practices.
- (b) If the measurement is less than or equal to the maximum repair depth, repair the damage.

NOTE: The permitted interface area spring repair depth is 0.050 inches or less.

- 1 Repair the damaged area.

CAUTION: Make sure to remove only the necessary amount of material from the damaged area. Do not increase the depth of the damaged area when you remove the material. This will help prevent the replacement of springs that can be repaired.

CAUTION: Use small hand-held type tools to do the repair procedure. Make sure not to stay in one spot for a long time. This will help to prevent too much heat in one area of the spring material.

- a Use a blending procedure to repair the damage and to get a smooth length-to-depth ratio between the damage and the adjacent area.
- b Make sure that only enough material is removed to get a lengthwise blending transition ratio of 20 to 1 in the longitudinal direction.

- c Make sure that only enough material is removed to get a blending transition of width-to-depth ratio of 5 to 1 in the circumferential direction.
- d Use a pin type depth micrometer to measure the depth of the repaired area. Refer to Table 602 for the permitted depths.

NOTE: A micrometer with a tolerance of +0.001 or -0.001 inch is necessary to make this measurement.

- (c) When the measurement is more than the maximum repair depth, replace the spring. Refer to Main Landing Gear - Maintenance Practices.

G. Do a Magnetic Particle Inspection of the Repaired Area of the Interface Area of the Main Gear Spring(s) and/or Center Spring for Cracks. Refer to the Model 208, Nondestructive Testing Manual, Part 8, Main Gear Spring.

- (1) When the magnetic particle inspection of the repaired area of the interface area of the main gear spring(s) is complete, do the steps that follow.

- (a) If cracks are found, replace the main gear spring(s). Refer to Main Landing Gear - Maintenance Practices.

- (b) If no cracks are found, and the main gear spring interface area was repaired, do a shot peening procedure.

- 1 Use size 330, cast steel shot and do a shot peening procedure to a Almen intensity of 0.12 - 0.16A on the repaired area. Refer to Model 208 Structural Repair Manual Chapter 51, Shot Peening of Ferrous and Nonferrous Metals.

- (2) When the magnetic particle inspection of the repaired area of the interface area of the center spring is complete, do the steps that follow.

- (a) If cracks are found, replace the center spring. Refer to Main Landing Gear - Maintenance Practices.

- (b) If no cracks are found, and the center spring interface area was repaired, do a shot peening procedure.

- 1 Use size 330, cast steel shot and do a shot peening procedure to a Almen intensity of 0.12 - 0.16A on the repaired area. Refer to Model 208 Structural Repair Manual Chapter 51, Shot Peening of Ferrous and Nonferrous Metals.

- (3) Install the main landing gear assembly. Refer to Main Landing Gear - Maintenance Practices.

NOTE: The airplane is lowered, and the jacks and tail stand are removed during the landing gear installation procedure.

- (4) Record the necessary airplane and inspection information on the Model 208 Main Landing Gear Separation Data Form and send it to the address or fax it to the number on the form.

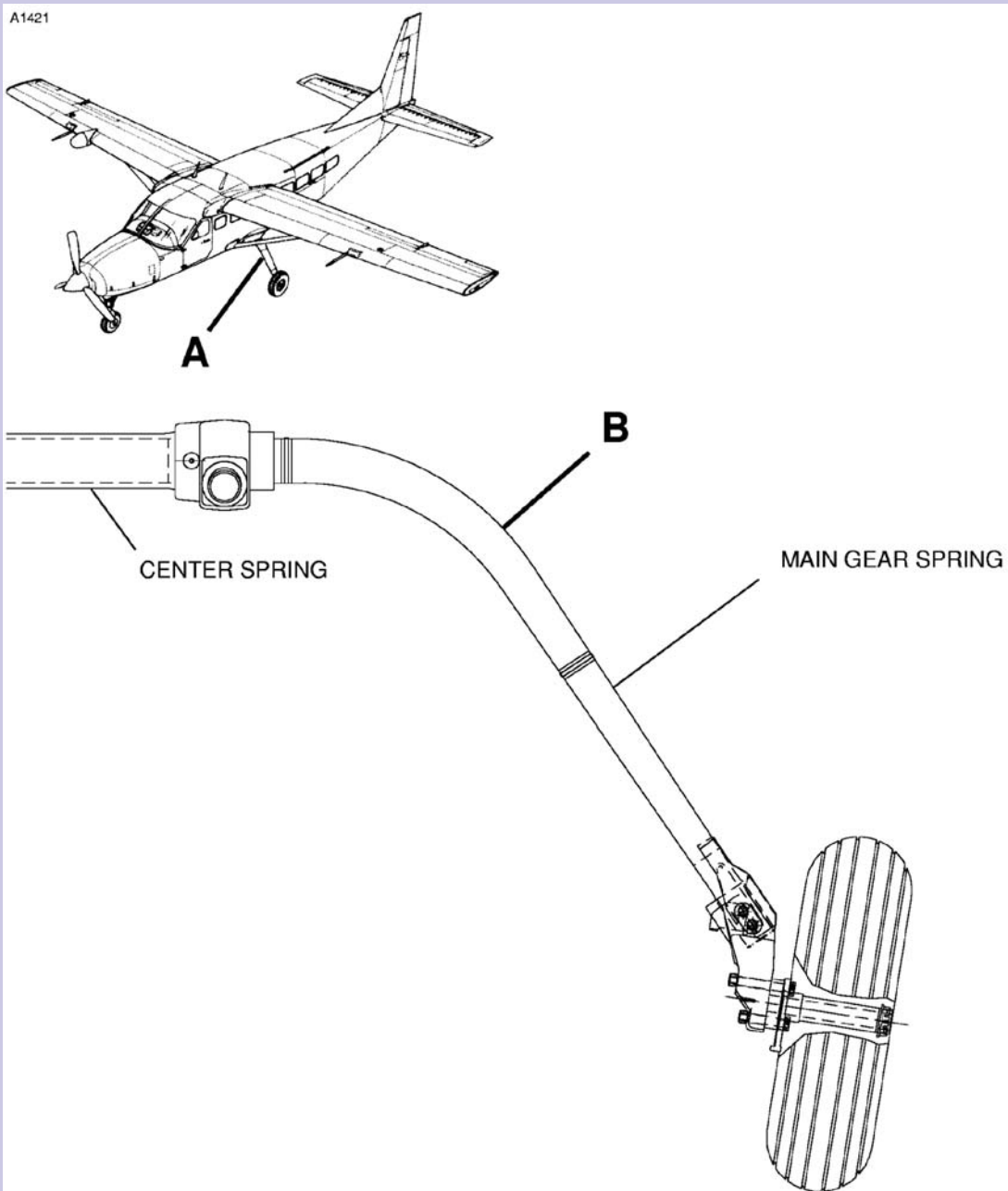
H. Restore Access

- (1) None

NOTE: The main landing gear fairings are installed during the landing gear installation procedure.

End Task

Figure 602. Main Gear Interface Area

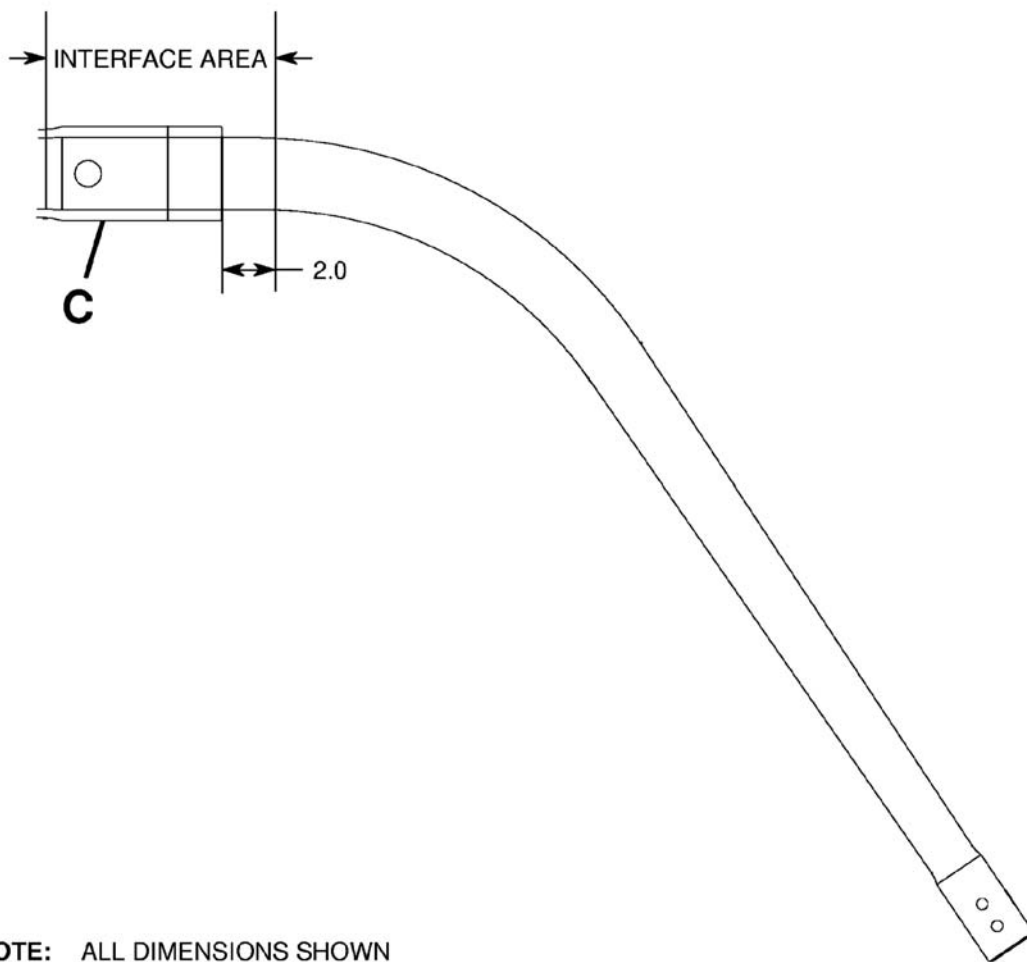


DETAIL A
LEFT SHOWN
RIGHT OPPOSITE

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Sheet 1 of 3

A16143

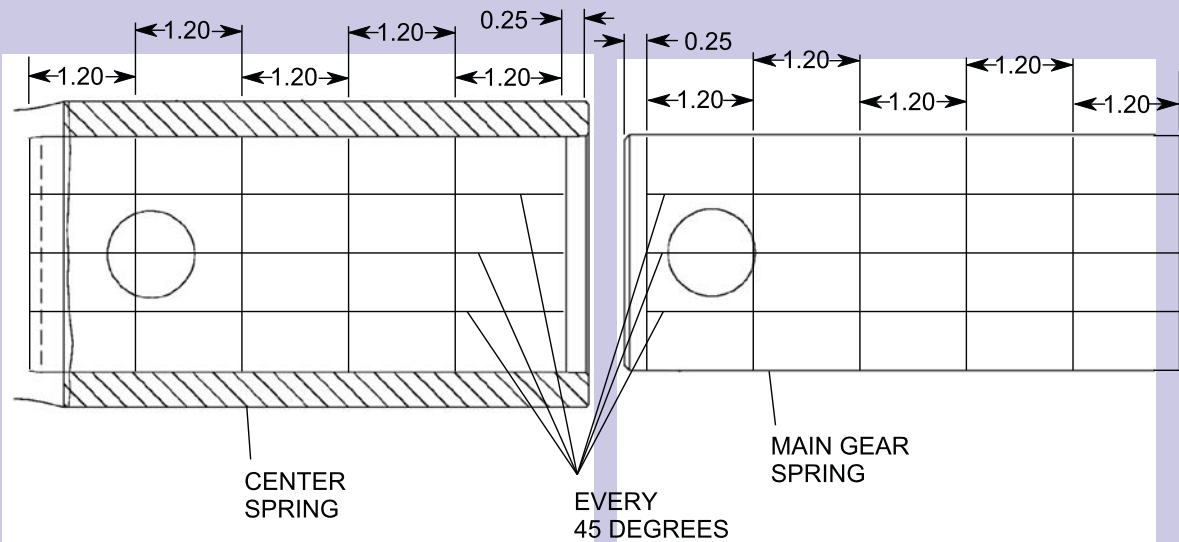


NOTE: ALL DIMENSIONS SHOWN
ARE IN INCHES

DETAIL B

Sheet 2 of 3

A19943



DETAIL C

B2641R2004

Figure 603. Model 208 Main Landing Gear Separation Data Form

A84104

208 MAIN LANDING GEAR SEPARATION DATA

Model 208(B) MLG Separation Inspection
Page:1 of _____ Date: _____

TO:

Cessna Aircraft Company
Dept. 764 Propeller Aircraft Customer Service
2121 S. Hoover Rd. Wichita, KS 67209
EMAIL: customercare@cessna.textron.com
Phone: 316-517-5800, FAX: 316-517-7271 ATTN: Dept. 764

Irrespective of the inspection results, the following information should be pulled out in its entirety and returned to Cessna in every instance where the Model 208 Maintenance Manual Task 32-10-00-221 is performed.

| | | | | |
|--|-----------------|-----------------------------------|---|--------------------------------------|
| Operator Information | | | | |
| Fax: | | Maintenance Contact Name: | | |
| ASF or Operator Address: | | | | |
| E-mail: | | Phone: | | |
| Aircraft Information | | | | |
| Aircraft Serial Number: | | Registration Number: | | |
| Aircraft Total Time in Service (hours): | | Aircraft Total Landings / Cycles: | | |
| Current Base of Operation and Duration: | | | | |
| Previous Base of Operation: | | | | |
| Normally Stored in Hangar? | | Yes | No | Unknown |
| Exterior Clean: | Power Wash | Steam | Hand Wash | Other |
| Clean Frequency: | Daily / Weekly | Monthly | Infrequently | Unknown |
| Inspection Data | | | | |
| MLG Corrosion Inspection Performed: | | Task 32-10-00-221 | | Unscheduled |
| Gear Separation Event: | 1 st | 2 nd | | Other |
| Hours, Cycles and Date of Last Separation: | Hours: | Cycles: | N/A | |
| Labor Hours to Complete Inspection: | | | | |
| Condition of MLG Interface Fillet Seal: | | Good | Damaged, Disbonded, Cracked, or Dried Out | Visible Corrosion Before Disassembly |
| Gear Leg Interface Corrosion Found? | | Yes | No | |
| If Yes, Please Classify the Corrosion*: | | Repairable | Not Repairable | |
| Description of Corrosion and Corrective Action Taken: (attach photo or sketch) | | | | |
| MLG Spring Measurement (if measured): | | (Enter on tables on next page) | | |
| What (if any) deviations from the MM were necessary on removal and installation? | | | | |
| *For maximum repair depth criteria refer to Section 32-10-00, Table 602. | | | | |

A85474

| Left Gear Measurements | | | | | | | | |
|------------------------|----------|----|----|-----|-----|-----|-----|-----|
| | Degrees: | | | | | | | |
| Location (in inches) | 0 | 45 | 90 | 135 | 180 | 225 | 270 | 315 |
| 1.20 | | | | | | | | |
| 2.40 | | | | | | | | |
| 3.60 | | | | | | | | |
| 4.80 | | | | | | | | |
| 6.00 | | | | | | | | |

| Right Gear Measurements | | | | | | | | |
|-------------------------|----------|----|----|-----|-----|-----|-----|-----|
| | Degrees: | | | | | | | |
| Location (in inches) | 0 | 45 | 90 | 135 | 180 | 225 | 270 | 315 |
| 1.20 | | | | | | | | |
| 2.40 | | | | | | | | |
| 3.60 | | | | | | | | |
| 4.80 | | | | | | | | |
| 6.00 | | | | | | | | |

| Left Center Gear Measurements | | | | | | | | |
|-------------------------------|----------|----|----|-----|-----|-----|-----|-----|
| | Degrees: | | | | | | | |
| Location (in inches) | 0 | 45 | 90 | 135 | 180 | 225 | 270 | 315 |
| 1.20 | | | | | | | | |
| 2.40 | | | | | | | | |
| 3.60 | | | | | | | | |
| 4.80 | | | | | | | | |
| 6.00 | | | | | | | | |

| Right Center Gear Measurements | | | | | | | | |
|--------------------------------|----------|----|----|-----|-----|-----|-----|-----|
| | Degrees: | | | | | | | |
| Location (in inches) | 0 | 45 | 90 | 135 | 180 | 225 | 270 | 315 |
| 1.20 | | | | | | | | |
| 2.40 | | | | | | | | |
| 3.60 | | | | | | | | |
| 4.80 | | | | | | | | |
| 6.00 | | | | | | | | |

Additional Comments:

Task 53-10-00-211

3. Internal Cockpit Zonal Inspection

A. General

- (1) The Zonal Inspection Program (ZIP) includes a series of General Visual Inspection (GVI) tasks. This section gives ZIP procedures for an internal zonal inspection of the complete cockpit above and below the floorline.

NOTE: An internal zonal GVI is a general visual examination that includes all of the systems and the structural components of an interior area, installation, or assembly. This includes a check for signs of corrosion, cracks, chafing of tubing, loose duct support, wiring damage, cable and pulley wear, fluid leaks, drainage that is not sufficient, and other conditions that can cause corrosion or damage. This level of inspection is made during typical lighting conditions such as daylight, hangar light, flood light, or flashlight by approximately an arm-length distance to the inspection object. It can be necessary to remove and/or open access panels or doors to complete an internal GVI. You can use an inspection mirror to help with visual access to all opened surfaces in the inspection area. You can use maintenance stands, ladders, or platforms to get near the inspection area.

B. Special Tools

- (1) None

C. Access

NOTE: The removal of the Primary Flight Displays (PFDs), and the Multi-Function Flight Display (MFD) from the instrument panels is not necessary, but it will help get access to the areas of this inspection.

- (1) Remove the flight crew seats. Refer to Chapter 25, Flight Compartment - Maintenance Practices.
- (2) Remove the carpet in the cockpit to get access to the necessary floorboard panels.
- (3) Remove center pedestal panels 226A, 226B, 226C, and 226D. Refer to Chapter 6, Access Plates and Panels Identification - Description and Operation.
- (4) Remove cockpit floorboard panels 211EL, 212FR, 231BL, 231DL, 232AC, 232BC, 232BR, and 232DR. Refer to Chapter 6, Access/Inspection Plates - Description and Operation.

D. Do the Internal Cockpit Zonal Inspection.

NOTE: This inspection is for the cockpit, and starts at and includes the aft side of the forward bulkhead (FS 100.00) to the aft end of the seat tracks (FS 166.45) above and below the floorline.

- (1) Examine all of the wire bundle assemblies and the electrical components for signs of overheating, correct installation, frayed or chafed wiring insulation, electrical bonding, damage, and corrosion. Refer to Chapter 20, High Intensity Radiated Fields (HIRF) - Inspection/Check, Internal Zonal Visual Inspection of Lightning and High Intensity Radiated Fields.
- (2) Examine all of the systems and structural components for damage, corrosion, cracks, loose fasteners, loose/misalignment of linkage, and correct installation.
 - (a) Make sure that you examine the areas that follow between FS 100.00 to FS 118.00. The left and right fuselage skin areas, the left and right side longerons at BL 8.00 and BL 19.00 and outboard longerons. the channels and stiffeners common to the BL 8.00 longeron, the bottom bulkhead segment at FS 118.00, and the firewall support structures, brackets stiffeners, and doublers.
 - (b) Make sure that you examine the areas that follow between FS 118.00 to FS 128.00. The left and right fuselage skin areas, the left and right side longerons at BL 8.00 and BL 19.00 and outboard longerons. the bulkhead segment at FS 128.00, the left and right side inboard control column support and pulley support structures.

- (c) Make sure that you examine the areas that follow between FS 128.00 to FS 166.45. The top right and left fuselage side skin surface, the bottom forward skin surface, the center right side and center left side skin surface, the left and right side longerons at BL 8.00 and BL 19.00 and outboard longerons, the bulkhead segments at FS 143.00 and FS 158.00, the elevator bellcrank support assembly, the left and right side crew door sill assembly, the elevator trim and aileron and rudder pulley brackets.
- (3) Examine all tubing, hose and fluid fittings for evidence of leaks, damage and chafing, and correct clamp installation.
- (4) Examine all placards and markings for security of installation, legibility, and correct location. For the correct placards and placard locations, refer to the Model 208 Illustrated Parts Catalog or the Pilot's Operating Handbook.
- (5) Examine for contamination and look carefully for quantities of combustible material.
 - (a) Remove all of the combustible material that has collected.

NOTE: Combustible material can be fuel vapor, engine oil, and/or dust or lint that has collected.

NOTE: An inspection for contamination and combustible material meets the requirements of the Enhanced Zonal Inspection Program.

E. Restore Access

- (1) Install cockpit floorboard panels 211EL, 212FR, 231BL, 231DL, 232AC, 232BC, 232BR, and 232DR. Refer to Chapter 6, Access/Inspection Plates - Description and Operation.
- (2) Install the carpet.
- (3) Install center pedestal panels 226A, 226B, 226C, and 226D. Refer to Chapter 6, Access Plates and Panels Identification - Description and Operation.
- (4) Install the flight crew seats. Refer to Chapter 25, Flight Compartment - Maintenance Practices.

End Task

Figure 6. Panels

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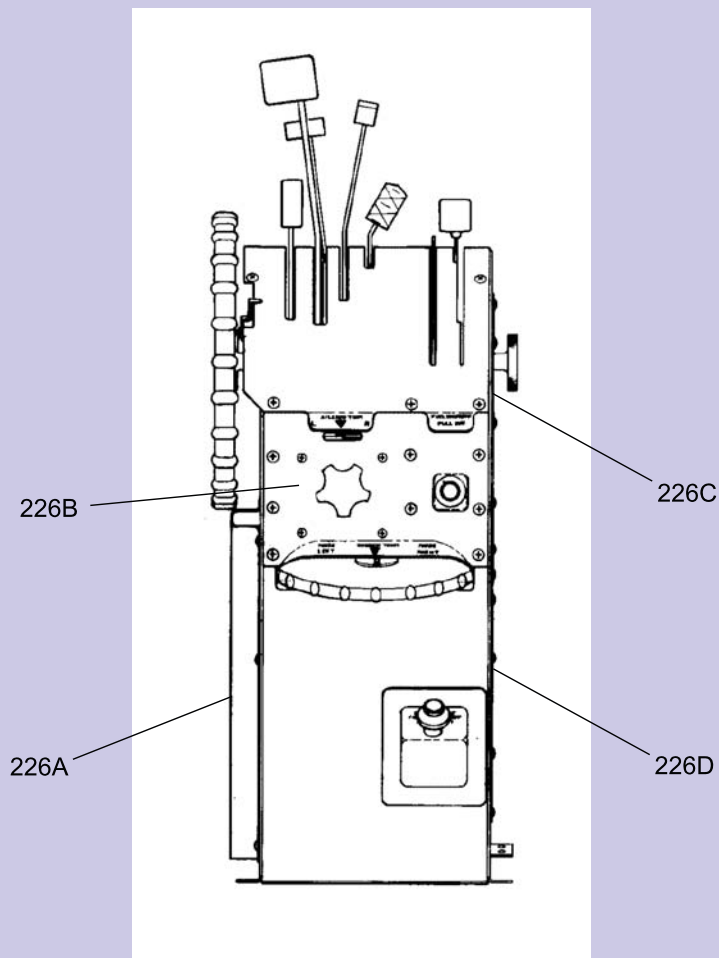
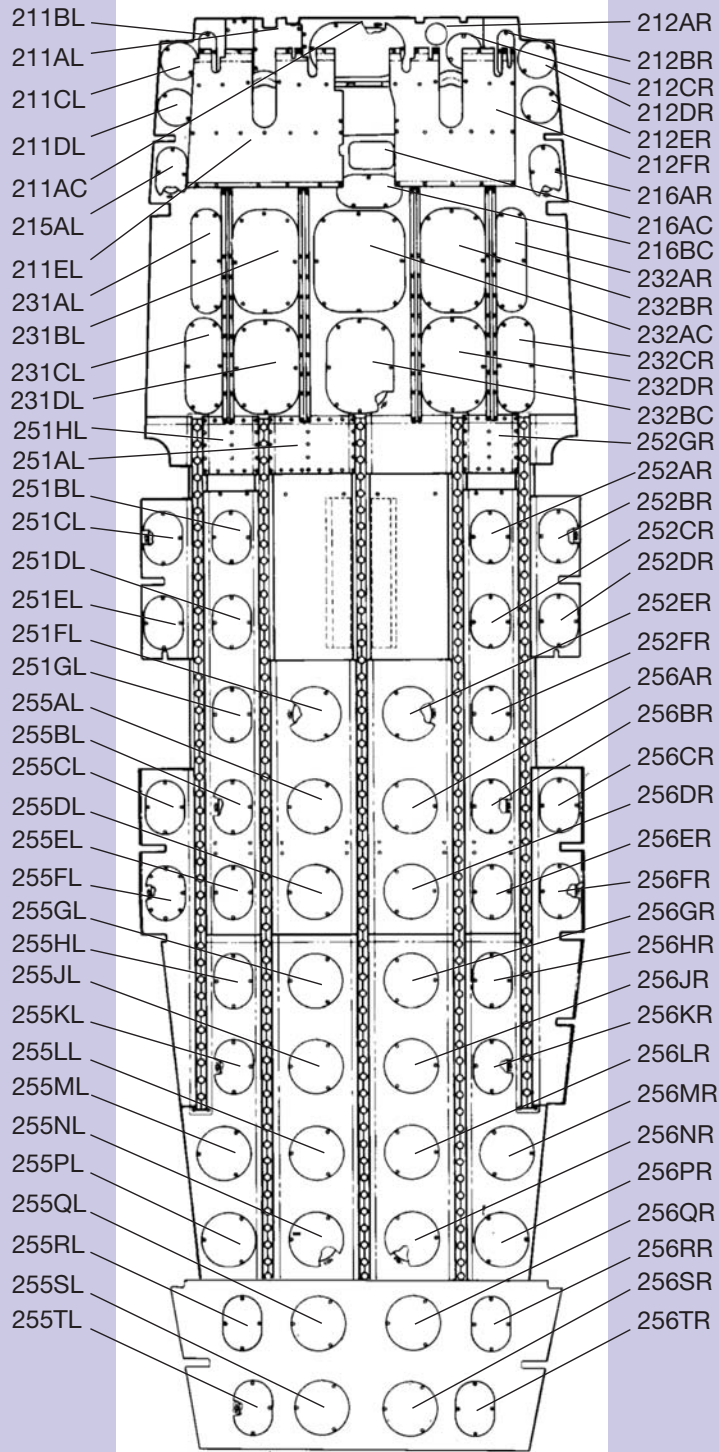


Figure 2. Model 208 Floorboard Access Plates/Panels Identification

A22946



MODEL 208

Sheet 1 of 1

2611R4005
2611R3001

Task 53-10-00-213

5. Internal Tail Cone Zonal Inspection

A. General

- (1) The Zonal Inspection Program (ZIP) includes a series of General Visual Inspection (GVI) tasks. This section gives ZIP procedures for an internal zonal inspection of the tail section.

NOTE: An internal zonal GVI is a general visual examination that includes all of the systems and the structural components of an interior area, installation, or assembly. This includes a check for signs of corrosion, cracks, chafing of tubing, loose duct support, wiring damage, cable and pulley wear, fluid leaks, drainage that is not sufficient, and other conditions that can cause corrosion or damage. This level of inspection is made during typical lighting conditions such as daylight, hangar light, flood light, or flashlight by approximately an arm-length distance to the inspection object. It can be necessary to remove and/or open access panels or doors to complete an internal GVI. You can use an inspection mirror to help with visual access to all opened surfaces in the inspection area. You can use maintenance stands, ladders, or platforms to get near the inspection area.

B. Special Tools

- (1) None

C. Access

- (1) Remove the aft bulkhead cabin partition. Refer to Chapter 25, Rear Compartment Wall - Maintenance Practices.
- (2) Remove tailcone panel 320A . Refer to Chapter 6, Access Plates And Panels Identification - Description and Operation.

D. Do the Internal Tail Cone Zonal Inspection.

NOTE: This inspection starts and includes the aft side of the aft cabin bulkhead (F.S. 308.00 for the 208 and F.S. 356.00 for the 208B) and goes to the tip of the tailcone.

- (1) Examine all of the wire bundle assemblies and the electrical components for signs of overheating, correct installation, frayed or chafed wiring insulation, electrical bonding, damage, and corrosion. Refer to Chapter 20, High Intensity Radiated Fields (HIRF) - Inspection/Check, Internal Zonal Visual Inspection of Lightning and High Intensity Radiated Fields.
- (2) Examine all of the systems and structural components for damage, corrosion, cracks, loose fasteners, loose/misalignment of linkage, and correct installation.
 - (a) Make sure that you examine the areas that follow between FS 322.00 to FS 388.68 for the Model 208 and FS 365.00 to FS 436.68 for the Model 208B. The tailcone upper and lower skin surface. The tailcone left and right side skin surface. The tailcone dorsal skin surface.
 - (b) Make sure that you examine the areas that follow, FS 388.68 for the Model 208 and FS 436.68 for the Model 208B. The upper and lower tailcone canted bulkhead, The elevator bellcrank bracket assembly including the bracket, angles, doublers and stiffeners. The left and right stabilizer attach fittings.
 - (c) Make sure that you examine the areas that follow between FS 388.68 to FS 427.88 for the Model 208 and FS 436.68 to FS 475.88 for the Model 208B. The left and right side aft tailcone skin surface. The lower aft tailcone skin surface.
- (3) Examine all tubing, hose and fluid fittings for evidence of leaks, damage and chafing, and correct clamp installation.
- (4) Examine all placards and markings for security of installation, legibility, and correct location. For the correct placards and placard locations, refer to the Model 208 Illustrated Parts Catalog or the Pilot's Operating Handbook.
- (5) Examine for contamination and look carefully for quantities of combustible material.
 - (a) Remove all of the combustible material that has collected.

NOTE: Combustible material can be fuel vapor, engine oil, and/or dust or lint that has collected.

NOTE: An inspection for contamination and combustible material meets the requirements of the Enhanced Zonal Inspection Program.

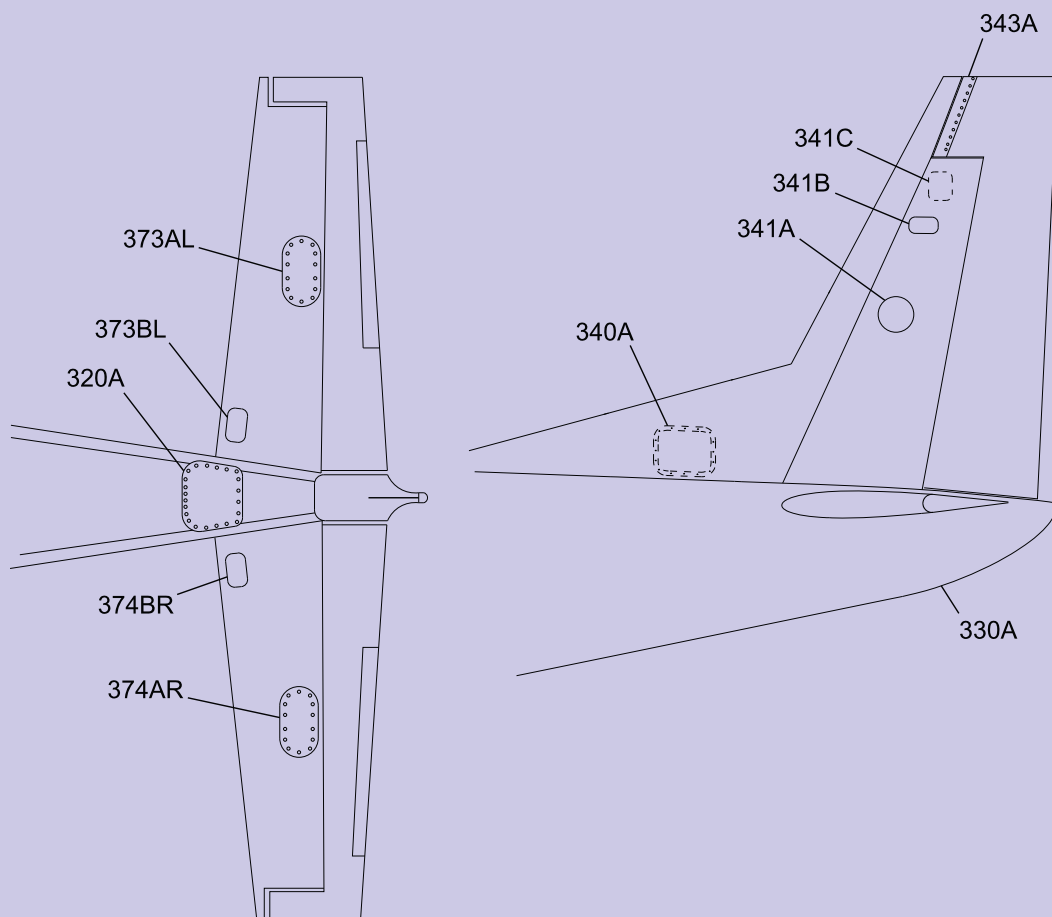
E. Restore Access

- (1) Install tailcone panel 320A . Refer to Chapter 6, Access Plates And Panels Identification - Description and Operation.
- (2) Install the aft bulkhead cabin partition. Refer to Chapter 25, Rear Compartment Wall - Maintenance Practices.

End Task

Figure 9. Aft Fuselage, Horizontal and Vertical Stabilizer Panels

A22967



VIEW LOOKING UP AT TAILCONE

Task 57-10-00-210

2. Wing Zonal Inspection

A. General

- (1) The Zonal Inspection Program (ZIP) includes a series of General Visual Inspection (GVI) tasks. This section gives ZIP procedures for an zonal inspection of the wings.

NOTE: An external zonal GVI is a general visual examination of an exterior area, and/or an open installation or assembly to find damage, failure or defects. This level of inspection is made during typical lighting conditions such as daylight, hangar light or flashlight by approximately an arm-length distance to the inspection object. Unless it is specified, it is not necessary to remove or open access panels or doors to do an external GVI. You can use an inspection mirror to help with visual access to all opened surfaces in the inspection area. You can use maintenance stands, ladders, or platforms to get near the inspection area.

B. Special Tools

- (1) None

C. Access

NOTE: The lower wing fuel access panels and lower wing dry bay panels are removed after the inspection steps for removing the fuel.

- (1) Lower wing fuel access panels.
- (2) Lower wing dry bay panels.
- (3) Wing and strut fairing panels.

D. Do the External Zonal Inspection of the Wings.

- (1) Examine the external wings for loose fasteners, corrosion, cracks, wrinkles, and dents.

NOTE: If you suspect corrosion under the deice boots (if installed), remove the deice boots for inspection. Refer to Chapter 30, Pneumatic Deice Boots Removal/Installation.

- (a) Make sure that you examine the areas that follow between WS 35.00 to WS 155.90. The wing leading edge skin surface. The access covers around the screw attachments.
- (b) Make sure that you examine the areas that follow between WS 155.90 to WS 308.00. The wing leading edge skin surface. The access covers around the screw attachments.
- (c) Make sure that you examine the areas that follow between WS 53.00 to WS 214.30. The wing upper and lower forward skin surface. The access covers around the screw attachments.
- (d) Make sure that you examine the areas that follow between WS 214.30 to WS 308.00. The wing upper and lower forward skin surface. The access covers around the screw attachments.
- (e) Make sure that you examine the areas that follow between WS 35.00 to WS 229.00. The wing upper and lower aft skin surface. The access covers around the screw attachments.
- (f) Make sure that you examine the areas that follow between WS 35.00 to WS 228.00. The flap skin surface and the flap leading edge skin surface.
- (g) Make sure that you examine the areas that follow at WS 53.00, WS 126.50, and WS 214.30. The flap track structure including the inboard, center, and outboard flap tracks. The inboard, center, and outboard flap support attach bolt, bracket and attach bolt.
- (2) Examine the attach points for condition and security of installation.
- (3) Examine the full wing surface for fuel leaks.
- (4) Examine the wing spar fittings and bolts for corrosion, condition and security of installation.
 - (a) Make sure that you examine the areas that follow at WS 35.00. The forward spar fitting and lug surface. The rear spar fitting and lug surface.

NOTE: If corrosion is found on the lug surface or the attaching hardware (bolt, nut, or cotter pin), remove the attach bolt and inspect the lug bore.

- (5) Examine the wing struts for signs of damage, condition, and security of installation.

- (6) Examine the upper and lower wing strut fittings, fairings and bolts for corrosion, condition and security of installation.
 - (a) Make sure that you examine the areas that follow at FS 168.70 for the Model 208 and FS 188.70 for the Model 208B. The lower wing strut to fuselage attach fitting and lug surface. The wing strut to wing attach fitting and lug surface.

NOTE: If corrosion is found on the lug surface or the attaching hardware (bolt, nut, or cotter pin), remove the attach bolt and inspect the lug bore.

- (7) Examine the drain openings and vent holes in the bottom of the wing for obstructions.
- (8) Examine all wing access panels for security of installation and signs of damage.
- (9) Examine the fuel access panels for signs of leaks.
- (10) Examine the external wing surface for damage and signs of overheating. Refer to Chapter 20, High Intensity Radiated Fields (HIRF) - Inspection/Check, External Zonal Visual Inspection of Lightning and High Intensity Radiated Fields.

E. Do the Internal Zonal Inspection of the Wing Wet Bays.

NOTE: An internal zonal GVI is a general visual examination that includes all of the systems and the structural components of an interior area, installation, or assembly. This includes a check for signs of corrosion, cracks, chafing of tubing, loose duct support, wiring damage, cable and pulley wear, fluid leaks, drainage that is not sufficient, and other conditions that can cause corrosion or damage. This level of inspection is made during typical lighting conditions such as daylight, hangar light, flood light, or flashlight by approximately an arm-length distance to the inspection object. It can be necessary to remove and/or open access panels or doors to complete an internal GVI. You can use an inspection mirror to help with visual access to all opened surfaces in the inspection area. You can use maintenance stands, ladders, or platforms to get near the inspection area.

WARNING: Before you do maintenance on the fuel system, you must read and understand all of the fuel system maintenance, fire precautions, and safety practices. Refer to Fuel System - Maintenance Practices and Chapter 12, Fuel – Servicing.

- (1) Defuel the airplane. Refer to Chapter 12, Fuel – Servicing.
 - (a) Remove the remaining fuel from the fuel storage areas with the fuel drain valves. Refer to Chapter 12, Fuel – Servicing.
- (2) Remove lower wing fuel access panels 521AB, 521BB, 521DB, 521EB left, and 621AB, 621BB, 621DB and 621EB right. Refer to Chapter 6, Access Plates and Panels Identification - Description and Operation.

CAUTION: Be careful to not separate the wing skin doubler from the wing skin.

- (a) Purge the fuel tanks. Refer to Chapter 12, Fuel – Servicing.
- (3) Purge fuel tanks. Refer to Chapter 12, Fuel - Servicing.
- (4) Examine the eight (8) quantity transmitter mounting plates for condition, leaks, and security.
- (5) Examine the transmitters wire harnesses and terminals at the transmitters for condition and security.
- (6) Examine the tank drains for condition, leaks, and security.
- (7) Examine all of the wire bundle assemblies and the electrical components for signs of overheating, correct installation, frayed or chafed wiring insulation, electrical bonding, damage, and corrosion. Refer to Chapter 20, High Intensity Radiated Fields (HIRF) - Inspection/Check, Internal Zonal Visual Inspection of Lightning and High Intensity Radiated Fields.
- (8) Examine all of the systems and structural components for damage, corrosion, cracks, loose fasteners, and correct installation.
- (9) Examine all tubing, fuel shut-off-valves, hose, and fluid fittings for signs of leaks, damage, chafing, correct clamp installation, condition, and security.

F. Do the Internal Zonal Inspection of the Wing Dry Bays.

- (1) Remove lower wing dry bay panels 501AB, 501BB, 501CB, 501DB, 501EB, 503AB, 503BB, 503CB, 503DB, 503EB, 503FB, 503GB, 503HB, 503JB, 511AB, 525AB, 525BB, 525CB, 525DB, 525EB, 525FB, 525GB, 551AB, and 575AB left, and 601AB, 601BB, 601CB, 601DB, 601EB, 603AB, 603BB, 603CB, 603DB, 603EB, 603FB, 603GB, 603HB, 603JB, 611AB, 621CB, 623AB, 625AB, 625BB, 625CB, 625DB, 625EB, 625FB, 625GB, 651AB, 675AB right, for the internal zonal inspection. Refer to Chapter 6, Access/Inspection Plates - Description and Operation.
 - (2) Examine all of the wire bundle assemblies and the electrical components for signs of overheating, correct installation, frayed or chafed wiring insulation, electrical bonding, damage, and corrosion. Refer to Chapter 20, High Intensity Radiated Fields (HIRF) - Inspection/Check, Internal Zonal Visual Inspection of Lightning and High Intensity Radiated Fields.
 - (3) Examine all of the systems and structural components for damage, corrosion, cracks, loose fasteners, loose/misalignment of linkage, and correct installation.
 - (4) Examine all tubing, hose, and fluid fittings for signs of leaks, damage, chafing, and correct clamp installation.
 - (5) Examine for contamination and look carefully for quantities of combustible material.
 - (a) Remove all of the combustible material that has collected.
- NOTE:** Combustible material can be fuel vapor, engine oil, and/or dust or lint that has collected.
- NOTE:** An inspection for contamination and combustible material meets the requirements of the Enhanced Zonal Inspection Program.
- (6) Install lower wing fuel access panels 521AB, 521BB, 521DB, 521EB left, and 621AB, 621BB, 621DB and 621EB right. Refer to Chapter 6, Access Plates and Panels Identification - Description and Operation.
 - (7) Install lower wing dry bay panels 501AB, 501BB, 501CB, 501DB, 501EB, 503AB, 503BB, 503CB, 503DB, 503EB, 503FB, 503GB, 503HB, 503JB, 511AB, 525AB, 525BB, 525CB, 525DB, 525EB, 525FB, 525GB, 551AB, and 575AB left, and 601AB, 601BB, 601CB, 601DB, 601EB, 603AB, 603BB, 603CB, 603DB, 603EB, 603FB, 603GB, 603HB, 603JB, 611AB, 621CB, 623AB, 625AB, 625BB, 625CB, 625DB, 625EB, 625FB, 625GB, 651AB, 675AB right. Refer to Chapter 6, Access/Inspection Plates - Description and Operation.
 - (8) Refuel the airplane. Refer to Chapter 12, Fuel – Servicing.
 - (9) Examine the fuel bay panels for leaks.

G. Restore Access

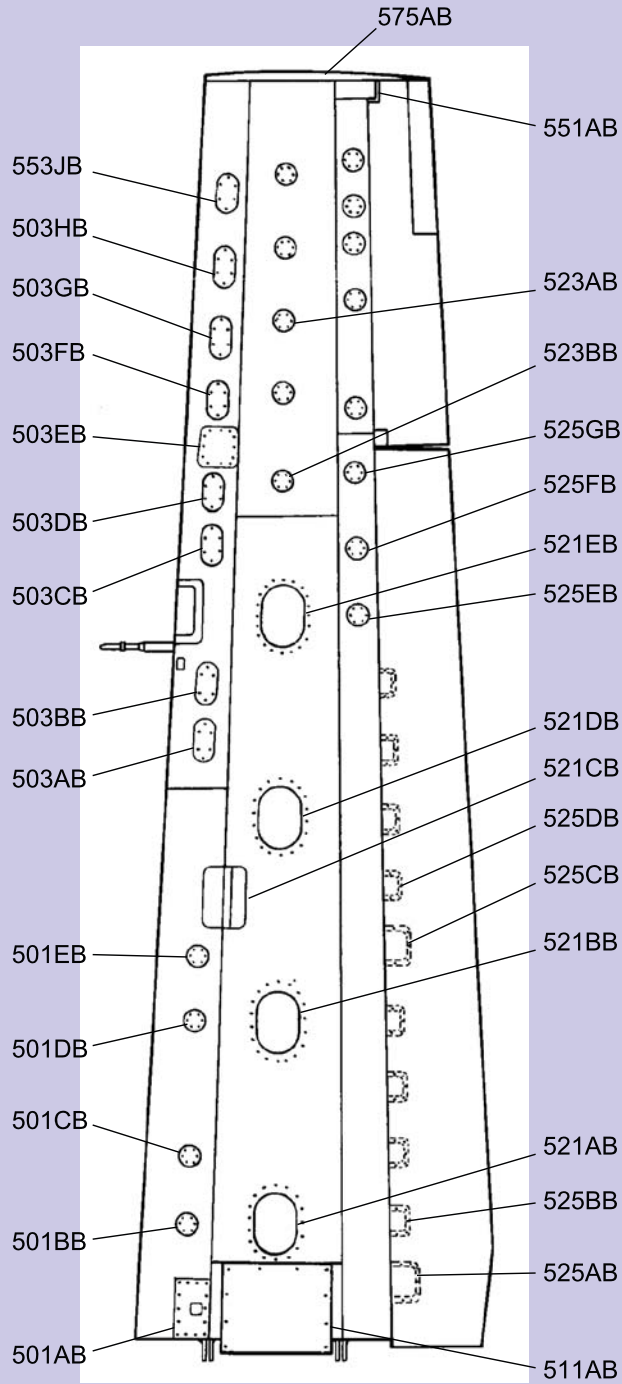
NOTE: The lower wing fuel access panels and lower wing dry bay panels are installed before the inspection step to do a leak check of the panels.

- (1) None

End Task

Figure 7. Left Lower Wing Panels

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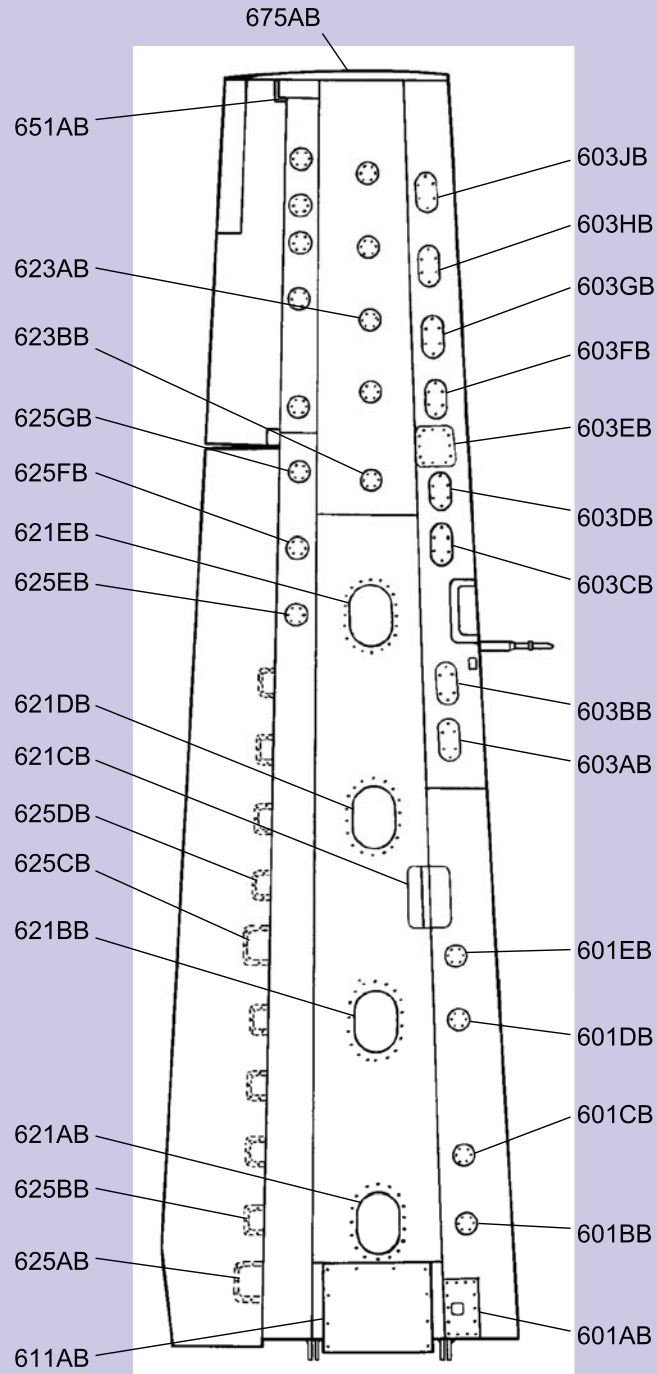
VIEW LOOKING UP AT LEFT WING

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Figure 8. Right Lower Wing Panels

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VIEW LOOKING UP AT RIGHT WING

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