

**CHAPTER**

**5**

**TIME LIMITS /  
MAINTENANCE CHECKS**

# LEARJET 31/31A MAINTENANCE MANUAL

*Record of Temporary Revisions*

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5-2	Inactive	Jul 26/91				Temp Rev 5-4	
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5-4	Inactive	Aug 21/91				Temp Rev 5-6	
5-5	Inactive	Aug 21/91				Temp Rev 5-7	
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## TIME LIMITS AND MAINTENANCE CHECKS

### 1. Description

- A. This chapter contains the minimum maintenance requirements for continued airworthiness recommended by the aircraft manufacturer. All inspections and maintenance requirements defined herein are in accordance with FAR 91.409(f)(3). All scheduled inspections, special inspection requirements, and unscheduled maintenance checks are described in the following sections:
- (1) SCHEDULED INSPECTIONS - Sections 5-10-01 thru 5-10-28 contain those scheduled inspections which are required to maintain the aircraft in an airworthy condition and range from a period of 300 hours or 12 months to 12,000 hours. (Refer to Inspections, this section.)
  - (2) INSPECTION/CHECKS WITH SPECIAL REQUIREMENTS OR INSPECTION/CHECKS DUE AT OTHER INTERVALS - Section 5-10-29 is a list of inspection checks which do not correspond with the regularly scheduled inspections within the approved Learjet Manufacturer's Inspection Program or that have special requirements attached to the inspection item.
  - (3) REPLACEMENT SCHEDULE - Section 5-11-00 is a list of items that shall be replaced at the indicated intervals. The following specifies the allowable tolerances for replacement items:
    - (a) Replacement items that are designated with one asterisk (\*) are mandatory replacement items by FAA certification basis and cannot be changed, increased, or deleted without the approval of the certification airworthiness authority. The inspection tolerances listed in Allowable Inspection Tolerances of this section are not applicable to those items with one asterisk (\*).
    - (b) Replacement items that are designated with two asterisks (\*\*) are part of the manufacturer's recommended maintenance program and can be adjusted according to the tolerances listed in Allowable Inspection Tolerances. (Refer to Allowable Inspection Tolerances, this section.) Vendor recommendations, service experience, and engineering assessment are all factors considered in these recommendations.
  - (4) RVSM INSPECTIONS - Section 5-10-30 is a list of the inspections required to maintain reduced vertical separation minimums (RVSM) certification.
  - (5) UNSCHEDULED MAINTENANCE CHECKS - Section 5-50-00 is a list of maintenance checks covering abnormal aircraft operation including hard or overweight landings, severe turbulence and/or maneuvers, engine change, rejected takeoff, overspeed recovery with landing gear extended, lightning strike, high ground wind gusts, and pressure cabin skin thickness measurement.
  - (6) REFERENCE DATA - Section 5-60-00 contains a listing of the Inspection Reference Numbers (IRN). The IRNs are listed in numerical order with the interval, phase, phase number, and section where the inspection is located.

### 2. Scheduled Inspections

- A. The Learjet Inspection Program is based on 24 Phase Inspections, accomplished one at a time, in groups or collectively, as scheduled by the aircraft operator, and in accordance with Allowable Inspection Tolerances. (Refer to Allowable Inspection Tolerances, this section.) Each Phase Inspection is contained within one of four hourly or calendar driven inspection intervals, the 300 Hour or 12 Month A-Phases, 600 Hour or 24 Month B-Phases, 1,200 Hour or 48 Month C-Phases, and 2,400 Hour or 96 Month D-Phases. Each of the primary inspection intervals (A, B, C, and D) contain six standalone Phase Inspections. The Learjet Inspection Program also contains other inspections and individual standalone inspection checks, which must be accomplished at the specified intervals. All periodic

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inspections, inspection checks, and maintenance requirements are designed to preserve aircraft reliability and ensure the continued airworthiness and safe operation of the aircraft.

- B. The following is a list of all scheduled inspections contained in the Learjet Inspection Program and the overall interval for each inspection.
- (1) Phases A1, A2, A3, A4, A5, and A6 - Each A-Phase Due Every 300 Hours or 12 Months.
  - (2) Phases B1, B2, B3, B4, B5, and B6 - Each B-Phase Due Every 600 Hours or 24 Months.
  - (3) Phases C1, C2, C3, C4, C5, and C6 - Each C-Phase Due Every 1,200 Hours or 48 Months.
  - (4) Phases D1, D2, D3, D4, D5, and D6 - Each D-Phase Due Every 2,400 Hours or 96 Months.
  - (5) 3,000 Landing Inspection - Due Every 3,000 Landings.
  - (6) Major Landing Gear Inspection - Due Every 6,000 Landings.
  - (7) 12 Year Airframe Inspection - Due Every 12 Years or 6,000 Landings.
  - (8) 12,000 Hour Airframe Inspection - Initial Due at first 12,000 Hours/Repeat Due Every 6,000 Hours thereafter.
- C. Compliance with the Learjet A-Phase Inspections (Phases A1 thru A6), B-Phase Inspections (Phases B1 thru B6), and C-Phase Inspections (Phases C1 thru C6) constitute the minimum airworthiness requirements necessary for issuance of a Standard Airworthiness Certificate, as specified in FAR 21.183, FAR 43.15 and FAR 43, Appendix D.
- D. New Inspection requirements, and changes to existing inspection requirements, become effective on the revision date of the change. Unless otherwise noted, compliance of a new or revised inspection requirement will be accomplished no later than the next scheduled interval of the changed item, following receipt of the revision. Unless otherwise noted, an inspection in progress at the time a new revision becomes effective, may be completed, utilizing the inspection criteria in effect when the inspection was initiated.
- E. A signoff in either the MECH or INSP block can constitute task completion on the work forms. A signoff in both blocks is optional and is left to the discretion of the inspector responsible for return to service.
- F. GENERAL INSPECTION CHECKS - The following section defines "General Inspection Checks" that should be reviewed at scheduled inspections, to ensure their applicability and/or compliance at the proper times, dates, or cycles.
- (1) Ensure all applicable FAA Airworthiness Directives are complied with and proper Log Book entries made.
  - (2) Ensure proper time compliance with all Learjet and vendor inspection requirements, and proper Log Book entries made.
  - (3) Review maintenance records to ensure proper time compliance with the special inspection checks and maintenance requirements listed in Section 5-10-29, "Inspection/Checks With Special Requirements or Inspection/Checks Due at Other Intervals" and proper Log Book entries made.
  - (4) Review maintenance records to ensure proper time compliance with the requirements listed in the component "Replacement Schedule" Section 5-11-00 and proper Log Book entries made.
  - (5) Review maintenance records to ensure proper time compliance with FAR 91.411 and FAR 91.413 and proper Log Book entries made.
  - (6) Review all vendor servicing requirements and ensure proper time compliance.

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- (7) Review Learjet and vendor service bulletins for applicability.
- (8) Learjet and STC IFCA maintenance requirements should be reviewed and complied with as specified. Vendor requirements are evaluated and incorporated into Chapter 5 as determined by the Maintenance Review Board (MRB).

G. VISUAL INSPECTION CRITERIA - Any time an area is visible during an inspection or maintenance action, the following "Visual Inspection Criteria" shall be accomplished without requiring disassembly or removal of adjacent equipment unless otherwise specified. It will normally apply to those areas, surfaces, or items which become visible by the removal or opening of access doors, panels, fairings, or cowlings. It shall include a visual examination of the area, component, detail, assembly, or installation and its surrounding environment, as well as any associated equipment within the immediate vicinity, using any inspection aids considered necessary. Visual inspection criteria will normally consist of, but not be limited to, the following criteria:

- (1) GENERAL VISUAL INSPECTION- A visual inspection that will detect obvious unsatisfactory conditions/discrepancies. This type of inspection may require cleaning, removal of fillets, fairings, access panels/doors, etc. Work stands, ladders, etc. may be required to gain proximity.
  - (a) Metal parts (all metal parts, bodies, or casings of units in systems and in electrical, instrument, and radio installations, ducting, tubing, rods, and levers). Inspect for the following:
    - 1) Cleanliness, external signs of damage, leaks, overheating, discharge, or fluid contamination.
    - 2) Obstruction of drainage or vent holes.
    - 3) Correct seating and sealing of fairings and serviceability of fasteners.
    - 4) Security of attachment, fasteners, and connections.
    - 5) Distortion, dents, scores, chafing, pulled or missing fasteners, rivets, bolts, or screws.
    - 6) Signs of cracks or wear.
    - 7) Separation of bond.
    - 8) Failure of welds or spot welds.
    - 9) Deterioration of protective treatment and corrosion.
  - (b) Composite, rubber, fabric, fiberglass, and plastic parts (coverings, ducting, flexible hoses, flexible mountings, seals, insulation of electrical cables, heater muffins, windows, etc.). Inspect for the following:
    - 1) Cleanliness, cracks, cuts, chafing, kinking, twisting, crushing, or contraction - (sufficient free length).
    - 2) Damage, delamination, or deterioration.
    - 3) Crazing.
    - 4) Loss of flexibility (other than fabric covered component).
    - 5) Overheating.
    - 6) Fluid saturation.
  - (c) Control System Components. Inspect for the following:
    - 1) Correct alignment - no fouling.
    - 2) Free movement.
    - 3) Distortion, signs of bowing, scoring, chafing, fraying, kinking, signs of wear, flattening, cracks, or loose fasteners.
    - 4) Deterioration of protective treatment or corrosion.
    - 5) Electrical bonding correctly positioned, undamaged, and secure.

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- 6) Attachments, end connections, and locking devices secure.

NOTE: Free movement should be established at extreme ranges of travel with full trim applied.

Full travel of the rudder circuit should be confirmed with the rudder pedals at the full forward and full aft adjustment positions (if applicable).

- 7) Visual inspection of cable guard pins.

(d) Electrical Wiring Interconnection System (EWIS) and Electrical Components

1) EWIS

- a) Wires and cables
- b) Connections to electrical devices, connectors, and plugs
- c) Circuit breakers and circuit protection devices
- d) Electrical grounding and bonding
- e) Splices
- f) Shields or braids
- g) Conduits
- h) Clamps
- i) Cable tie devices
- j) Labels.

2) Pressure seals associated with EWIS connections.

3) EWIS components inside shelves, panels, racks, junction boxes, distribution panels, back-planes of equipment racks including circuit board back-planes wire integration units.

4) Electrical Components

- a) Motors
- b) Alternators
- c) Generators
- d) Actuators
- e) Relays
- f) Solenoids
- g) Contactors

5) Inspect EWIS components and electrical components for the following:

- a) Cleanliness, obvious damage, corrosion, security of attachments and connections
- b) If protective covers are required to be removed, check for cleanliness, scoring, pitting or burning of contacts, brushes for condition, and security of exposed contacts
- c) Overheating
- d) Fluid contamination.

(e) Inside wet fuel areas. Inspect for the following:

- 1) Cleanliness, corrosion, and bacterial growth.
- 2) Structural fatigue or cracks.
- 3) Flapper valves for freedom of movement, security, positive seal, and general condition.
- 4) Components inside fuel bays for security and general condition.

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- 5) Plumbing and wiring inside fuel bays for security and general condition.
- 6) Foreign objects inside fuel bays and fuel screens clear of debris.
- 7) Sealant for condition.
- (f) Markings, labels, and placards. Inspect for the following:
  - 1) Legibility and security of attachment.
- (2) STRUCTURAL COMPONENTS - When inspecting lap and butt joints, stringers, frames, bulkheads, ribs, longerons and skins, particular attention should be paid to the following possible indications of corrosion:
  - (a) Lack of adhesion of the paint or sealant.
    - 1) This condition could indicate the presence of surface corrosion under the paint film or sealant.
  - (b) Bubbles of the paint film or sealant.
    - 1) This condition could indicate local pockets of corrosion. If bubbles are found, inspect area to determine whether the bubble is a build-up of paint or sealant and not a buildup of corrosion.
  - (c) Signs of corrosion on the edge of any member where it joins the skin.
    - 1) If corrosion is found, remove paint from area. If corrosion has penetrated between the facing surfaces of the joint, visually inspect area. Remove bolts and rivets as needed to check the extent of and to assist in repair of corrosion.

NOTE: Any signs of possible cracking or corrosion is to be stripped of paint and inspected further using dye penetrant.

If a visual inspection is not possible due to the nature of the structure or an excessive amount of dismantling would be necessary, inspection by x-ray or other methods of nondestructive testing in accordance with approved techniques shall be used as the inspection medium.

### H. DETAILED INSPECTION

- (1) When called for by an inspection task, a Detailed Inspection is an intensive examination of a specific item, installation, or assembly for discrete and obvious damage, failure or irregularity. Generally the available lighting to do this inspection is supplemented with a direct source of good lighting at an appropriate intensity. Inspection aids like mirrors, magnifying lenses, remote access flexible borescopes, etc. may be necessary to complete the task. Special cleaning and access procedures may be required to perform the task. The inspection task will generally contain specific procedures giving the location, access, cleaning requirements, area of interest and acceptance criteria, as required. These procedures will also list any special equipment requirements. If no procedure is given, then the criteria of the General Visual Inspection and Structural Component Inspection shall be used.



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## I. TIME COMPLIANCE

### (1) 300 Hour A-Phases

- (a) At or before 300 total aircraft hours or 24 months from the original Certificate of Airworthiness date, whichever occurs first, perform each A-Phase inspection (Phases A1 thru A6) either individually, in groups, or collectively as scheduled by the aircraft operator in accordance with Allowable Inspection Tolerances. (Refer to Allowable Inspection Tolerances, this section.) Perform each subsequent A-Phase inspection every 300 hours or 12 months, whichever occurs first, from the completion date of the previous inspection.

NOTE: Inspections may only be accomplished early to reschedule or adjust future inspection due times.

### (2) 600 Hour B-Phases

- (a) At or before 600 Total aircraft hours or 36 months from the original Certificate of Airworthiness date, whichever occurs first, perform each B-Phase inspection (Phases B1 thru B6) either individually, in groups, or collectively as scheduled by the aircraft operator in accordance with Allowable Inspection Tolerances. (Refer to Allowable Inspection Tolerances, this section.) Perform each subsequent B-Phase inspection every 600 hours or 24 months, whichever occurs first, from the completion date of the previous inspection.

NOTE: Inspections may only be accomplished early to reschedule or adjust future inspection due times.

### (3) 1,200 Hour C-Phases

- (a) At or before 1,200 total aircraft hours or 48 months from the original Certificate of Airworthiness date, whichever occurs first, perform each C-Phase inspection (Phases C1 thru C6) either individually, in groups, or collectively as scheduled by the aircraft operator in accordance with Allowable Inspection Tolerances. (Refer to Allowable Inspection Tolerances, this section.) Perform each subsequent C-Phase inspection every 1,200 hours or 48 months, whichever occurs first, from the completion date of the previous inspection.

NOTE: Inspections may only be accomplished early to reschedule or adjust future inspection due times.

For Aircraft that have exceeded 48 months from the last 1,200 Hour Inspection, perform all C-Phase Inspections (Phase C1 thru C6) at the next B-Phase inspection. Perform subsequent C-Phase inspections at or before 1,200 hours or 48 months, whichever occurs first.

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### (4) 2,400 Hour D-Phases

- (a) At or before 2,400 total aircraft hours or 96 months from the original Certificate of Airworthiness date, whichever occurs first, perform each D-Phase inspection (Phases D1 thru D6) either individually, in groups, or collectively as scheduled by the aircraft operator in accordance with Allowable Inspection Tolerances. (Refer to Allowable Inspection Tolerances, this section.) Perform each subsequent D-Phase inspection every 2,400 hours or 96 months, whichever occurs first, from the completion date of the previous inspection.

NOTE: Inspections may only be accomplished early to reschedule or adjust future inspection due times.

For Aircraft that have exceeded 96 months from the last 2,400 Hour Inspection, perform all D-Phase Inspections (Phase D1 thru D6) at the next B-Phase inspection. Perform subsequent D-Phase inspections at or before 2,400 hours or 96 months, whichever occurs first.

### (5) 3,000 Landing Inspection

- (a) At 3,000 total aircraft landings or 3,000 landings from the last 3,000 Landing Inspection completed, perform a 3,000 Landing Inspection.
  - 1) From this point forward, perform a 3,000 Landing Inspection every 3,000 landings in accordance with Allowable Inspection Tolerances. (Refer to Allowable Inspection Tolerances, this section.)

### (6) Major Landing Gear Inspection

- (a) At 6,000 total aircraft landings or 6,000 landings from the last Major Landing Gear Inspection completed, perform a Major Landing Gear Inspection.
  - 1) From this point forward, perform a complete Major Landing Gear Inspection every 6,000 landings in accordance with Allowable Inspection Tolerances. (Refer to Allowable Inspection Tolerances, this section.)

NOTE: On aircraft having previously performed a 6,000 Landing Inspection, the Major Landing Gear Inspection is due every 6,000 Landings from that point.

### (7) 12 Year Airframe Inspection

- (a) At 12 years from the original Certificate of Airworthiness date or 6,000 total aircraft landings, whichever occurs first, perform a 12 Year Airframe Inspection.
  - 1) From this point forward, perform a 12 Year Airframe Inspection every 12 years or 6,000 total aircraft landings, whichever occurs first, in accordance with Allowable Inspection Tolerances. (Refer to Allowable Inspection Tolerances, this section.)

### (8) 12,000 Hour Airframe Inspection

- (a) At 12,000 total aircraft hours, perform a 12,000 Hour Airframe Inspection.
  - 1) From this point forward, perform a repeat 12,000 Hour Airframe Inspection every 6,000 flight hours in accordance with Allowable Inspection Tolerances. (Refer to Allowable Inspection Tolerances, this section.)

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## 3. Allowable Inspection Tolerances

A. The following specifies the Allowable Inspection Tolerances for Learjet scheduled inspections:

- (1) Inspections controlled by calendar time may be accomplished within a period beginning two weeks before and ending no later than two weeks after the inspection due date. (See Figure 1.)
- (2) Inspections controlled by flight hours may be accomplished within a period beginning 25 flight hours before and ending no later than 25 flight hours after the inspection due time. (See Figure 1.)
- (3) Inspections controlled by landings or cycles may be accomplished within a period beginning 25 landings or cycles before and ending no later than 25 landings or cycles after the inspection due time.

NOTE: These allowable tolerances and conditions do not apply to Airworthiness Limitation (\*) replacement items in 5-11-00.

- (4) A signed and dated record must be prepared and maintained as each inspection task is completed. When the last task of an inspection has been completed, the inspection as a whole (e.g. Phase A1) is to be signed off in the appropriate Log Book/Maintenance Record at the time that inspection was completed.
- (5) After completion of an inspection, the next due time shall be at the scheduled time, date, or cycle as calculated from the DUE TIME of the last completed inspection, NOT from the point of completion.
- (6) In the event of early accomplishment of an inspection task, before the start time, date or cycle of the inspection envelope, the next due-point for that task will be calculated from the point of the early accomplishment of that task.
- (7) Inspection tolerances are not cumulative. Any inspection exceeding its scheduled due time must calculate due time for the next inspection from the due time of the last inspection completed, NOT from the point of completion.
- (8) Any inspection accomplished early, before the beginning of its inspection window, must adjust the next scheduled due for time that inspection from the point of early completion.

NOTE: Inspections may only be accomplished early to reschedule or adjust future inspection due times.

B. Each inspection defined in this section stands on its own and does not specify other inspection intervals. At each inspection a review should be made for any other inspection or maintenance task due in the near future.

## 4. Transitioning To New Phase Inspections

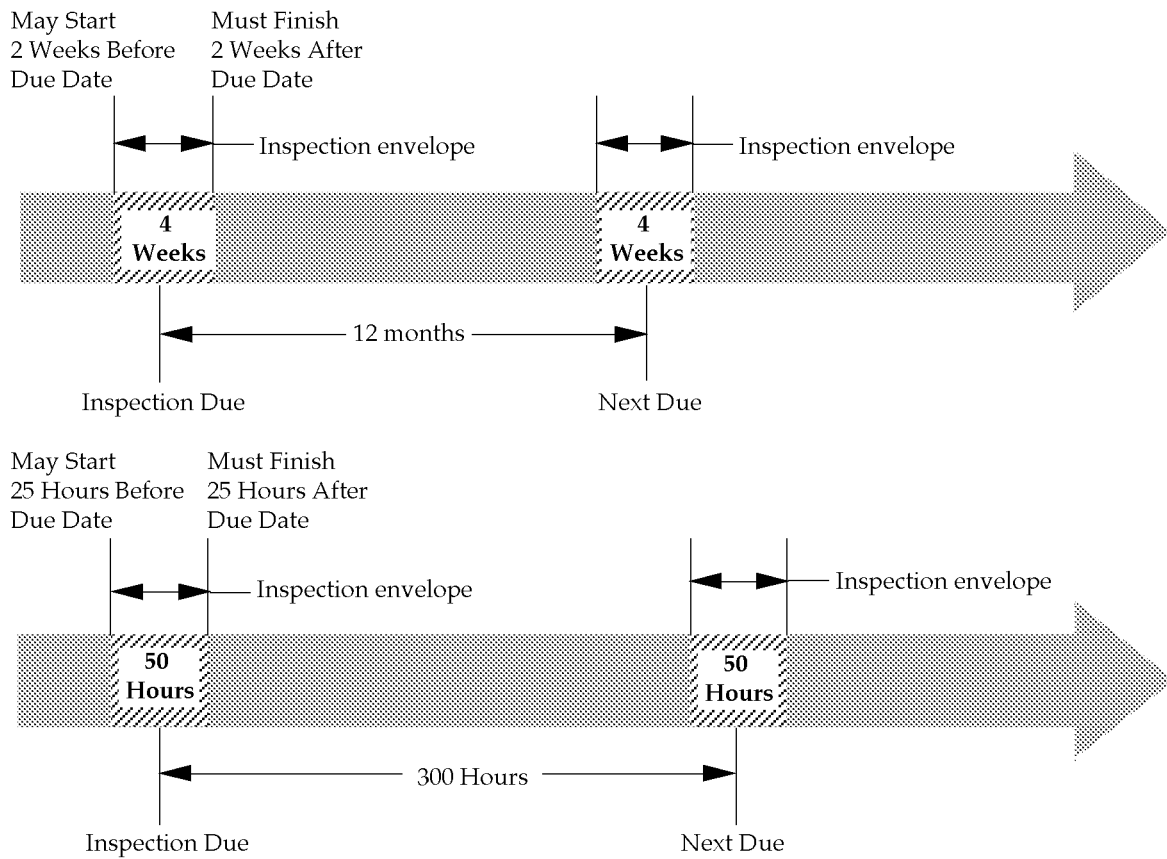
A. Each individual Phase Inspection is basically a zonal inspection of a specific aircraft area or related systems. Other factors considered when determining task placement within a Phase Inspection were convenience, access requirements, and maintenance equipment required. Each Phase Inspection and the following information should be carefully reviewed prior to proceeding with any Phase Inspection contained within this chapter. Several suggested methods of utilizing the new Phase Inspections have been included in this section to aid operators in designing a program best suited to their own specific

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operational requirements. These are suggestions only. Provided no inspection tolerance is exceeded, there is no prescribed method of utilizing the Phase Inspections.

- (1) Sample Inspection Program #1 (See Figure 2.) - A, B, C, and D-Phases performed together at their approved intervals.
  - (a) This example is for operators wishing to remain on a standard 300 Hour, 600 Hour, 1200 Hour, and 2400 Hour Inspection schedule. The Phase Inspections are utilized by performing all A-Phase Inspections together at 300 hour or 12 month intervals, all B-Phases at 600 hour or 24 month intervals, all C-Phases at 1200 hour or 48 month intervals, and all D-Phases at 2400 hour or 96 month intervals. This would be the most frequently used method for low utilization operators, operators utilizing outside maintenance facilities for their required inspections, and operators able to absorb longer down times for scheduled inspections.
- (2) Sample Inspection Program #2 (See Figure 3.) - A-Phases at 50 hour intervals, combined with B, C, and D-Phases
  - (a) This example performs single A-Phases at 50 hour intervals, combined with B, C, and D-Phases performed as required, in accordance with allowable inspection tolerances. This method would be best suited to high utilization operators with complete in-house maintenance capabilities and requiring minimum down times for scheduled inspections.
- (3) Sample Inspection Program #3 (See Figure 4.) - A-Phases at 100 hour intervals, with standard B, C and D intervals.
  - (a) This example utilizes the 300 Hour A-Phases two at a time, at 100 hour intervals, while performing all B-Phases together every 600 hours, all C-Phases together every 1200 hours, and all D-Phases together every 2400 Hours. This method would be best suited for average utilization operators with some limited in-house maintenance capabilities, but still requiring an outside maintenance facility to accomplish more detailed inspections.
- (4) Sample Inspection #4 (See Figure 5.) - A-Phases at 150 hour intervals, combined with B, C, and D-Phases.
  - (a) This example performs multiple A-Phases at 150 hour intervals, combined with single or combined B, C, and D-Phases performed as required, in accordance with allowable inspection tolerances. This method would be best suited for average utilization operators with complete in-house maintenance capabilities and able to absorb longer down times for scheduled inspections.
- (5) Inspection Program Planning and Documentation (See Figure 6.)
  - (a) After careful consideration by the operator, a table recording the sequence the operator will utilize each Phase Inspection should be prepared. A blank table for this purpose has been provided. (See Figure 6.) A copy of the completed Phase Inspection table should be placed in the aircraft's airframe maintenance log for future reference.

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Inspection Tolerances  
Figure 1

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**5. Definition of Zones**

- A. The inspections defined in this chapter have been categorized by zone to aid the owner/operator to better plan the maintenance program.

<b>ZONE</b>	<b>DEFINITION</b>
Cabin	That area from the forward edge of the cabin door aft to the aft pressure bulkhead.
Center Section	That area of the wing where it passes through the fuselage and includes the keel-beam.
Cockpit	That area from the forward edge of the cabin door to the forward pressure bulkhead.
Electrical	No specific zone of the aircraft is defined.
Empennage	That area above the tailcone enclosed by the vertical and horizontal stabilizers.
Engine	That area on and around the engine, including the nacelles and pylons.
Fuselage	The external surface of the fuselage from the nose cone to the tail stinger.
Landing Gear	Main and nose gear struts and attaching parts, including actuators and support structure.
Nose	That area forward of the forward pressure bulkhead.
Tailcone	That area from the aft pressure bulkhead to the tailcone stinger and includes the area around the fuselage fuel cell.
Wing	That area from wing tip to wing tip.

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<b>MODEL 31/31A PHASE INSPECTION PROGRAM</b>				
<b>SAMPLE PHASE INSPECTION PROGRAM #1</b>				
<b>A, B, C, &amp; D-PHASES Performed at Standard Intervals</b>				
<b>HRS C/W</b>	<b>INSP - A PHASE #</b>	<b>INSP - B PHASE #</b>	<b>INSP - C PHASE #</b>	<b>INSP - D PHASE #</b>
50				
100				
150				
200				
250				
300	A1, A2, A3, A4, A5, A6			
350				
400				
450				
500				
550				
600	A1, A2, A3, A4, A5, A6	B1, B2, B3, B4, B5, B6		
650				
700				
750				
800				
850				
900	A1, A2, A3, A4, A5, A6			
950				
1000				
1050				
1100				
1150				
1200	A1, A2, A3, A4, A5, A6	B1, B2, B3, B4, B5, B6	C1, C2, C3, C4, C5, C6	
1250				
1300				
1350				
1400				
1450				
1500	A1, A2, A3, A4, A5, A6			
1550				
1600				
1650				
1700				
1750				
1800	A1, A2, A3, A4, A5, A6	B1, B2, B3, B4, B5, B6		
1850				
1900				
1950				
2000				
2050				
2100	A1, A2, A3, A4, A5, A6			
2150				
2200				
2250				
2300				
2350				
2400	A1, A2, A3, A4, A5, A6	B1, B2, B3, B4, B5, B6	C1, C2, C3, C4, C5, C6	D1, D2, D3, D4, D5, D6

Sample Inspection Program #1

Figure 2

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MODEL 31/31A PHASE INSPECTION PROGRAM				
SAMPLE PHASE INSPECTION PROGRAM #2				
Single A-Phases at 50 hour intervals, combined with single B, C, & D-Phases				
HRS C/W	INSP - A PHASE #	INSP - B PHASE #	INSP - C PHASE #	INSP - D PHASE #
50	A1	B1		D1
100	A2		C2	
150	A3	B3		
200	A4			
250	A5	B5		
300	A6		C6	
350	A1			
400	A2	B2		D2
450	A3		C3	
500	A4	B4		
550	A5			
600	A6	B6		
650	A1	B1		
700	A2			
750	A3	B3		D3
800	A4		C4	
850	A5	B5		
900	A6			
950	A1		C1	
1000	A2	B2		
1050	A3			
1100	A4	B4		
1150	A5		C5	
1200	A6	B6		
1250	A1	B1		
1300	A2		C2	
1350	A3	B3		
1400	A4			
1450	A5	B5		
1500	A6		C6	
1550	A1			
1600	A2	B2		
1650	A3		C3	
1700	A4	B4		D4
1750	A5			
1800	A6	B6		
1850	A1	B1		
1900	A2			
1950	A3	B3		
2000	A4		C4	
2050	A5	B5		D5
2100	A6			
2150	A1		C1	
2200	A2	B2		
2250	A3			
2300	A4	B4		
2350	A5		C5	
2400	A6	B6		D6

Sample Inspection Program #2

Figure 3



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<b>MODEL 31/31A PHASE INSPECTION PROGRAM</b>				
<b>SAMPLE PHASE INSPECTION PROGRAM #3</b>				
<b>A-Phases at 100 hour Intervals, with Standard B, C, &amp; D-Phase Intervals</b>				
<b>HRS C/W</b>	<b>INSP - A PHASE #</b>	<b>INSP - B PHASE #</b>	<b>INSP - C PHASE #</b>	<b>INSP - D PHASE #</b>
50				
100	A1, A2			
150				
200	A3, A4			
250				
300	A5, A6			
350				
400	A1, A2			
450				
500	A3, A4			
550				
600	A5, A6	B1, B2, B3, B4, B5, B6		
650				
700	A1, A2			
750				
800	A3, A4			
850				
900	A5, A6			
950				
1000	A1, A2			
1050				
1100	A3, A4			
1150				
1200	A5, A6	B1, B2, B3, B4, B5, B6	C1, C2, C3, C4, C5, C6	
1250				
1300	A1, A2			
1350				
1400	A3, A4			
1450				
1500	A5, A6			
1550				
1600	A1, A2			
1650				
1700	A3, A4			
1750				
1800	A5, A6	B1, B2, B3, B4, B5, B6		
1850				
1900	A1, A2			
1950				
2000	A3, A4			
2050				
2100	A5, A6			
2150				
2200	A1, A2			
2250				
2300	A3, A4			
2350				
2400	A5, A6	B1, B2, B3, B4, B5, B6	C1, C2, C3, C4, C5, C6	D1, D2, D3, D4, D5, D6

Sample Inspection Program #3

Figure 4

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<b>MODEL 31/31A PHASE INSPECTION PROGRAM</b>				
<b>SAMPLE PHASE INSPECTION PROGRAM #3</b>				
<b>A-Phases at 100 hour Intervals, with Standard B, C, &amp; D-Phase Intervals</b>				
HRS C/W	INSP - A PHASE #	INSP - B PHASE #	INSP - C PHASE #	INSP - D PHASE #
50				
100	A1, A2			
150				
200	A3, A4			
250				
300	A5, A6			
350				
400	A1, A2			
450				
500	A3, A4			
550				
600	A5, A6	B1, B2, B3, B4, B5, B6		
650				
700	A1, A2			
750				
800	A3, A4			
850				
900	A5, A6			
950				
1000	A1, A2			
1050				
1100	A3, A4			
1150				
1200	A5, A6	B1, B2, B3, B4, B5, B6	C1, C2, C3, C4, C5, C6	
1250				
1300	A1, A2			
1350				
1400	A3, A4			
1450				
1500	A5, A6			
1550				
1600	A1, A2			
1650				
1700	A3, A4			
1750				
1800	A5, A6	B1, B2, B3, B4, B5, B6		
1850				
1900	A1, A2			
1950				
2000	A3, A4			
2050				
2100	A5, A6			
2150				
2200	A1, A2			
2250				
2300	A3, A4			
2350				
2400	A5, A6	B1, B2, B3, B4, B5, B6	C1, C2, C3, C4, C5, C6	D1, D2, D3, D4, D5, D6

Sample Inspection Program #4

Figure 5

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<b>MODEL 31/31A PHASE INSPECTION PROGRAM</b>				
<b>PHASE INSPECTION PROGRAM WORKSHEET</b>				
HRS C/W	INSP - A PHASE #	INSP - B PHASE #	INSP - C PHASE #	INSP - D PHASE #
50				
100				
150				
200				
250				
300				
350				
400				
450				
500				
550				
600				
650				
700				
750				
800				
850				
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2150				
2200				
2250				
2300				
2350				
2400				

Inspection Program Planning Form

Figure 6

# LEARJET 31/31A MAINTENANCE MANUAL

## 6. Glossary of Terms and Abbreviations

### A. Definition of terms used in Chapter 5 are as follows:

- (1) **ABRASION** - A roughening or wearing away of a surface by scratches or marks usually caused by foreign matter between moving parts or surfaces.
- (2) **ACCESSORY** - A part, subassembly, assembly, or component designed for use in conjunction with or to supplement another item.
- (3) **ACCUMULATOR PRECHARGE** - Compressed air that is stored in the air chamber of a hydraulic accumulator without producing an increase in hydraulic system pressure.
- (4) **AIRCRAFT OPERATING CYCLE** - A completed takeoff and landing sequence. Touch and go landings are counted as Aircraft Operating Cycles.
- (5) **AIRWORTHINESS** - The condition of an item (aircraft, aircraft system, or part), in which that item operates in a safe manner to accomplish its intended purpose.
- (6) **ASSEMBLY** - A number of parts, subassemblies, or any combination thereof joined together to perform a specific function and which can be disassembled without destruction of designed use.
- (7) **BONDING** - A method of electrically connecting all the components of an aircraft structure together so that static electricity cannot build up on one part of the structure to create a voltage that is high enough to allow it to jump to another part, causing radio interference.
- (8) **BONDING JUMPER** - A low-resistance wire or electrical connection used to electrically ground a component or structure to an airframe.
- (9) **BOROSCOPE INSPECTION** - A maintenance technique that employs an optical device (boroscope) for performing visual inspections of internal parts of an assembly, usually through ports provided for that purpose.
- (10) **CHAFING** - Rubbing action between adjacent or contacting parts under light pressure which results in wear.
- (11) **CHECK** - An examination to determine functional capability or physical integrity of an item.
- (12) **COMPONENT** - Any self-contained part, combination of parts, subassemblies, or units, which perform a distinctive function necessary to the operation of a system.
- (13) **CORROSION** - An electrochemical process in which a metal is transformed into chemical compounds which are powdery and have little mechanical strength.
- (14) **CORROSION (FILIFORM)** - A thread- or filament-like corrosion which forms on aluminum skins beneath any finish.
- (15) **CORROSION (GALVANIC)** - Corrosion due to the presence of dissimilar metals in contact with each other in the presence of an electrolyte, such as water.
- (16) **CORROSION (INTER-GRANULAR)** - The formation of corrosion along the grain boundaries within a metal alloy.
- (17) **CORROSION (MICROBIOLOGICAL)** - Corrosion due to the presence of bacterial organisms (such as Cladosporium) in fuels that have been contaminated with water.
- (18) **CORROSION (PITTING)** - A form of metal corrosion in which small, localized pits filled with salts form on the surface of the metal.
- (19) **CORROSION (STRESS)** - Corrosion of the inter-granular type that forms within metals subject to tensile stresses which tend to separate the grain boundaries.
- (20) **CORROSION (UNIFORM)** - A general covering of corrosion in which the action has been even. No pits or localized damage has formed.
- (21) **CYCLE (ENGINE OPERATING)** - A completed engine thermal cycle including the application of takeoff power.

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- (22) DEFECT - Any confirmed abnormal condition of an item whether or not this could eventually result in a failure.
- (23) DELAMINATION - Separation of the core and faced sheets of a bonded structure along a bond line.
- (24) DETERIORATE - To become worse.
- (25) ELECTRICAL WIRING INTERCONNECTION SYSTEM (EWIS) - An electrical connection between two or more points including the associated termination devices and the necessary means for its installation and identification.
- (26) FAILURE - The inability of an item to perform within previously specified limits.
- (27) FAIRING - A smooth covering over a joint or a junction in an aircraft structure to provide a smooth surface for the airflow. Its primary purpose is to reduce drag.
- (28) FILLET - A rounded-out part at the intersection of two plane surfaces to produce a smooth junction where the two surfaces meet.
- (29) FLIGHT - The entire passage consisting of one or more flight legs, from leaving the airport of origin to arrival at the airport of final destination and operated under one flight number.
- (30) FRETTING - A condition of a surface erosion caused by a slight movement between two parts that are fastened together with considerable pressure.
- (31) FRICTION - Relative motion or rubbing of one object against another.
- (32) FUNCTIONAL TEST - A quantitative check to determine if one or more functions of an item performs within specified limits.
- (33) HARD LANDING - An improper landing of an aircraft which has transmitted undue stresses into the structure. The degree of hardness of the landing will depend on the type of special inspection that will be performed to determine if there is structural damage to the aircraft.
- (34) INSPECTION - An examination of an item against a specific standard.
- (35) INSPECTION (GENERAL VISUAL) - A visual examination that will detect obvious unsatisfactory conditions/discrepancies. This type of inspection may require cleaning, removal of fillets, fairings, access panels/doors, etc. Work stands, ladders, etc. may be required to gain proximity.
- (36) INSPECTION (DETAILED) - An intensive examination of a specified detail, assembly, or installation. It searches for evidence of irregularity using adequate lighting and, where necessary, inspection aids such as mirrors, hand lens, boroscope, etc. Surface cleaning and elaborate access procedures may be required.
- (37) INSPECTION (SPECIAL DETAILED - NDI INSPECTIONS) - An intensive examination of a specific location similar to the detailed inspection except for the following differences. The examination requires some special technique such as nondestructive test techniques, high-powered magnification, etc., and may require disassembly procedures. The following definitions explain the different NDI inspections:
  - (a) EDDY CURRENT INSPECTION - A form of nondestructive inspection used to locate surface or subsurface defects in a metal part. This is a comparative-type inspection, based on the difference in conductivity of a sound and defective part.
  - (b) FLUORESCENT PENETRANT INSPECTION - A form of nondestructive inspection in which a part is thoroughly cleaned and immersed in a vat of penetrating oil. When the part has soaked for a sufficient time, it is removed. The oil is washed from the surface and the part is dried. It is then covered with a developer that will draw the oil from any crack into which it may have seeped. The part is inspected under ultraviolet light which will cause the crack to appear as a vivid green line.

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- (c) **MAGNETIC PARTICLE INSPECTION** - A form of nondestructive inspection for ferrous metal parts in which the part is magnetized, producing north and south poles across any discontinuity, either on the surface or subsurface. Iron oxide, mixed with a fluorescent dye, is attracted and held over the discontinuity. An ultraviolet light flashed on the part shows the iron oxide as an incandescent line.
- (d) **OPTICAL PRISM (LARASCOPE) INSPECTION** - An inspection that provides a reliable means of assessing the condition of stretched acrylic underneath visually opaque retainers, eliminating the need for retainer removal to perform the necessary visual inspections.
- (e) **X-RAY INSPECTION** - A form of nondestructive inspection in which high-frequency, high-energy electromagnetic waves pass through the material and expose a piece of photographic film. Defects or discontinuities within the material show up as variations in the density of the image on the film.
- (38) **ITEM** - Any component or its sets of parts (including the component itself) isolated as an entity for inspection.
- (39) **LANDING - TOUCH AND GO** - A landing in which an aircraft touches the runway and does not come to a full stop prior to commencing an additional flight.
- (40) **LEAD-ACID BATTERY** - A commonly used secondary cell having lead as its negative plate and lead peroxide as its positive plate. Sulfuric acid and water serve as the electrolyte.
- (41) **LIFE LIMITED ITEM** - An item which must be removed from service and discarded before a specified time is achieved.
- (42) **LINE REPLACEABLE UNIT (LRU)** - A unit which can be readily changed on an aircraft during line maintenance operations.
- (43) **MAINTENANCE** - Those actions required for restoring or maintaining an item in serviceable condition, including servicing, repair, modification, overhaul, inspection, and determination of condition.
- (44) **MAINTENANCE (ON CONDITION)** - A primary maintenance process having repetitive inspections or tests to determine the condition of units, systems, or portions of structure with regard to continued serviceability (corrective action is taken when required by item condition).
- (45) **MAINTENANCE (SCHEDULED)** - That maintenance performed at defined intervals to retain an item in a serviceable condition by systematic inspection, detection, replacement of wear out items, adjustment, calibration, cleaning, etc.
- (46) **MAINTENANCE (UNSCHEDULED)** - That maintenance performed to restore an item to a satisfactory condition by providing correction of a known or suspected malfunction and/or defect.
- (47) **MALFUNCTION** - The occurrence of a condition whereby the operation of an item is outside of specified limits.
- (48) **MANUFACTURER** - An organization that makes components, units, or piece parts for use in the construction or maintenance of aircraft.
- (49) **MODIFY (MODIFIED)** - To change or alter through rework and/or through the installation or removal of an item.
- (50) **NICKEL-CADMIUM BATTERY** - A battery made up of alkaline secondary cells. The positive plates are nickel hydroxide, the negative plates are cadmium hydroxide, and potassium hydroxide is used as the electrolyte.
- (51) **OPERATIONAL CHECK** - A task to determine that an item is fulfilling its intended purpose. Does not require quantitative tolerances. This is a failure finding task.
- (52) **OVERHAUL** - The work necessary to return an item to the highest standard specified in the relevant manual.

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- (53) REPAIR - To make an item serviceable by replacing or processing failed or damaged parts.
- (54) SERVICE LIFE - The life of an item at which it is no longer physically or economically feasible to repair or overhaul the item to acceptable standards.
- (55) SERVICEABLE - Equipment or parts that are in a condition which allows them to be returned to operational status on an aircraft.
- (56) SERVICING - Any act of replenishment for the purpose of maintaining the inherent design operating capabilities of an item.
- (57) STORAGE (SHELF) LIFE - The length of time an item can be stored under specified conditions and still meet specified requirements.
- (58) TASK - An action or set of actions required to achieve a desired outcome which restores an item to or maintains an item in serviceable condition, including inspection and determination of condition.
- (59) TENSION - Stress produced in a body by forces acting along the same line but in opposite directions.
- (60) VISUAL CHECK - An observation to determine that an item is fulfilling its intended purpose. Does not require quantitative tolerances. This is a failure finding task.
- (61) WEAR OUT - The process of deterioration which results in an increase of the failure rate with increasing age.

B. The following is a list of abbreviations used in Chapter 5:

- (1) AC - Alternating Current
- (2) A/D - Airworthiness Directive
- (3) AFM - Aircraft Flight Manual
- (4) AN - Air Force-Navy Standard
- (5) APR - Automatic Performance Reserve
- (6) AWG - American Wire Gauge
- (7) BL - Buttock Line
- (8) CH - Chapter
- (9) DC - Direct Current
- (10) ELT - Emergency Locator Transmitter
- (11) EROS - Emergency Respiratory Oxygen Systems
- (12) FAA - Federal Aviation Administration
- (13) FADEC - Full Authority Digital Electronic Control
- (14) FAR - Federal Aviation Regulation
- (15) FLT - Flight
- (16) FR - Frame
- (17) FS - Fuselage Station
- (18) HF - High Frequency
- (19) HSI - Hot Section Inspection
- (20) I.D. - Inside Diameter
- (21) IPC - Illustrated Parts Catalog
- (22) IRN - Inspection Reference Number
- (23) J.E.T. - Jet Electronic and Technology
- (24) L&R - Left and Right
- (25) LBL - Left Buttock Line
- (26) LH - Left Hand
- (27) MLG - Main Landing Gear

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- (28) mm - millimeter
- (29) MPI - Major Periodic Inspection
- (30) MS - Military Standards
- (31) NAS - National Aircraft Standards
- (32) NDI - Nondestructive Inspection
- (33) Nm - Newton meter
- (34) No. - Number
- (35) O.D. - Outside Diameter
- (36) P/N - Part Number
- (37) PBE - Protective Breathing Equipment
- (38) PS - Power Supply
- (39) PSI - Pounds per Square Inch
- (40) PUB - Publication
- (41) PW - Pratt & Whitney
- (42) RBL - Right Buttock Line
- (43) REF - Reference
- (44) REV - Revision
- (45) RH - Right Hand
- (46) RM - Repair Manual
- (47) SB - Service Bulletin
- (48) SOAP - Spectrometric Oil Analysis Program
- (49) STR - Stringer
- (50) TP - Technical Publication
- (51) T/R - Thrust Reverser
- (52) WL - Water Line
- (53) WS - Wing Station



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## PHASE A1 - 300 HOUR INSPECTION/CHECKS

<b>MODEL: 31/31A</b>	<b>INSPECTION DUE TIME/DATE</b>
<b>SERIAL NO.</b>	<b>INSPECTION START TIME/DATE</b>
<b>REGISTRATION NO.</b>	<b>INSPECTION FINISH TIME/DATE</b>

NOTE: Perform the following inspection/checks in accordance with the interval specified in 5-10-00, Inspections.

Each inspection item has an Inspection Reference Number (IRN) assigned for record keeping purposes only.

Ensure that Section 5-10-00 has been reviewed and all requirements have been accomplished

IRN	INSPECTION	MECH	INSP	DATE
	<b>COCKPIT</b>			
E2510000	Deleted. Inspection renumbered as P2510005.			
P2510005	Glareshield, headliner, and trim strips for security and general condition.			
E2510010	Crew seats and seat belts for operation, security of mounting, and general condition.			
E2700002	Deleted. Inspection renumbered as P2700050.			
P2700050	Check for freedom of movement of all flight controls. (Refer to Chapter 27.)			
E2730025	Control columns (including control wheels and boots) for condition, proper operation, and clearances.			
E3100000	Deleted. Inspection renumbered as P3100001.			
P3100001	Instrument panel for security, instrument markings, condition of placards, and general condition.			
E5320000	Deleted. Inspection renumbered as P5320008.			
P5320008	Center pedestal and equipment for security and general condition. Spoiler, throttle, and flap controls for general condition and serviceability.			
	<b>ELECTRICAL</b>			
J2130000	Deleted. Inspection renumbered as P2130069.			

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IRN	INSPECTION	MECH	INSP	DATE
P2130069	Moved to B1.			
E3310000	Deleted. Inspection renumbered as P3310004.			
P3310004	<p>Check operation of interior lighting systems:</p> <p>a. Flight compartment lighting.</p> <p>(1) Map lights.</p> <p>(2) Glareshield floodlights.</p> <p>(3) Instrument/indicator lights.</p> <p>(4) Panel lights.</p> <p>(5) Light dimming control panels.</p> <p>(6) Glareshield warning lights and automatic dimming by photo cell.</p> <p>(7) Electroluminescent panel lights.</p> <p>b. Passenger compartment lighting.</p> <p>(1) Aisle lights.</p> <p>(2) Cabin floodlights.</p> <p>(3) Convenience lights.</p> <p>(4) Lavatory lights.</p> <p>(5) Warning lights.</p>			
E3340000	Deleted. Inspection renumbered as P3340012.			
P3340012	<p>Check operation of exterior lighting systems:</p> <p>a. Landing and taxi light.</p> <p>b. Anti-collision beacons.</p> <p>c. Navigation lights.</p> <p>d. Strobe lights.</p> <p>e. Recognition lights. (When installed.)</p> <p>f. Wing ice inspection lights. (When installed.)</p> <p>g. Emergency exit lights (cabin door and emergency escape).</p>			
	<b>SERVICING - COCKPIT</b>			
D1210005	Deleted. Inspection renumbered as P1210053.			
P1210053	Emergency Air Pressure Gage - Check for proper air pressure (1800 to 3000 psi). (Refer to 12-10-07.)			
D1210006	Deleted. Inspection renumbered as P1210054.			
P1210054	Oxygen Pressure Gage - Check for proper inflation (1500 to 1850 psi). (Refer to 12-10-09.)			

EFFECTIVITY: ALL

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## PHASE A2 - 300 HOUR INSPECTION/CHECKS

<b>MODEL: 31/31A</b>	<b>INSPECTION DUE TIME/DATE</b>
<b>SERIAL NO.</b>	<b>INSPECTION START TIME/DATE</b>
<b>REGISTRATION NO.</b>	<b>INSPECTION FINISH TIME/DATE</b>

NOTE: Perform the following inspection/checks in accordance with the interval specified in 5-10-00, Inspections.

Each inspection item has an Inspection Reference Number (IRN) assigned for record keeping purposes only.

Make sure that Section 5-10-00 has been reviewed and all requirements have been accomplished.

IRN	INSPECTION	MECH	INSP	DATE
	<b>CABIN</b>			
E2520000	Deleted. Inspection renumbered as P2520007.			
P2520007	Cabin seats and seat belts for condition; baggage compartment, stowage cabinets, rugs, headliner, and side panels for security and condition.			
L2620000	Deleted. Inspection renumbered as P2620041.			
P2620041	Inspect portable hand held fire extinguishers for condition and date of manufacture. Check operating pressure and weight per maintenance instructions on fire extinguisher bottle.			
	<b>FUSELAGE</b>			
H5240002	Moved to B2.			
N5323010	Exterior of aircraft- Perform visual inspection.(Refer to 5-10-00.)			
	<b>NOSE</b>			
E2731050	Angle-of-attack vanes for condition and security.			
E3411014	Check drain holes in pitot-static heads. (Refer to 34-11-01.)			
E5360001	Deleted. Inspection renumbered as P5360005.			

EFFECTIVITY: ALL

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IRN	INSPECTION	MECH	INSP	DATE
P5360005	Radome for general condition, finish, and security. Check lightning diverter strips for security and condition.			
	<b>TAILCONE</b>			
N5323012	Exterior of aircraft- Perform visual inspection.(Refer to 5-10-00.)			
	<b>SERVICING - NOSE</b>			
G1230000	Alcohol Anti-ice Tank - Check for quantity of fluid. (Refer to 12-10-08.)			

EFFECTIVITY: ALL

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## PHASE A3 - 300 HOUR INSPECTION/CHECKS

<b>MODEL: 31/31A</b>	<b>INSPECTION DUE TIME/DATE</b>
<b>SERIAL NO.</b>	<b>INSPECTION START TIME/DATE</b>
<b>REGISTRATION NO.</b>	<b>INSPECTION FINISH TIME/DATE</b>

NOTE: Perform the following inspection/checks in accordance with the interval specified in 5-10-00, Inspections.

Each inspection item has an Inspection Reference Number (IRN) assigned for record keeping purposes only.

Make sure that Section 5-10-00 has been reviewed and all requirements have been accomplished.

IRN	INSPECTION	MECH	INSP	DATE
	ENGINE			
P7100023	Perform visual inspection of all bleed air ducts, lines, hoses, and electrical wiring located in the engine nacelle. Inspect for security, clamping, routing, clearance, leaks, and general condition. (Refer to 5-10-00.)			
P7110040	Inspect nacelle structure, skin spot welds, and fasteners for cleanliness and general condition.			
E7110010	Inspect inlet duct for security and general condition.			
E7110020	Inspect rear nacelle for security and general condition.			
E7110031	Inspect generator inlet, exhaust duct seal, and starter/generator terminal block for security and general condition.			
	TAILCONE			
E2400006	Moved To 5-10-09.			
E2820010	Clean and leak check low pressure fuel filters. <u>On Aircraft equipped with paper filters</u> , remove and replace filters. (Refer to 28-20-04.)			
E7611008	Visually inspect all wire harness shield overbraids and shield terminations for security and general condition. (Refer to 5-10-00.)			

EFFECTIVITY: NOTED

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IRN	INSPECTION	MECH	INSP	DATE
	SERVICING - TAILCONE			
D1210008	Hydraulic Accumulator - Check accumulator precharge (850 psi). (Refer to 12-10-01.)			
	SERVICING - ENGINE			
G1221031	Oil Filler Door - Lubricate hinges. (Refer to 12-21-03.)			

EFFECTIVITY: ALL

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## PHASE A4 - 300 HOUR INSPECTION/CHECKS

<b>MODEL: 31/31A</b>	<b>INSPECTION DUE TIME/DATE</b>
<b>SERIAL NO.</b>	<b>INSPECTION START TIME/DATE</b>
<b>REGISTRATION NO.</b>	<b>INSPECTION FINISH TIME/DATE</b>

NOTE: Perform the following inspection/checks in accordance with the interval specified in 5-10-00, Inspections.

Each inspection item has an Inspection Reference Number (IRN) assigned for record keeping purposes only.

Make sure that Section 5-10-00 has been reviewed and all requirements have been accomplished.

IRN	INSPECTION	MECH	INSP	DATE
	<b>WING</b>			
E2700009	Deleted. Inspection renumbered as P2700057.			
P2700057	Check for freedom of movement of all flight controls.			
E2710034	Inspect aileron trim tab installation for general condition and security.			
G3011002	Temperature Sensing and Indication System - Perform Functional Test. (Refer to 30-11-00.) <u>Effective on Aircraft not modified by SB 31-30-06, "Replacement of Wing Anti-ice Transverse Duct".</u>			
N5700004	Wing Surface, Wing to fuselage fairing and winglet exterior - Perform Visual Inspection. (Refer to 5-10-00.)			
F5720071	Stall fences, stall strips, wing stall triangles, and boundary layer energizers for general condition and/or missing parts. Pay particular attention to wing stall triangles to ensure they are sharp edged.			
K5730012	Aileron Brush Seals - Perform Detailed Inspection. (Refer to 57-30-08.)			
G5750050	Inspect flap upper and lower surfaces for skin cracks, loose rivets, and other damage. Pay particular attention to nose roller support structure for cracks.			

EFFECTIVITY: NOTED

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IRN	INSPECTION	MECH	INSP	DATE
	<b>SERVICING - WING</b>			
L1221017	Flaps - Lubricate flap cam followers. (Refer to 12-21-02.)			

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## PHASE A5 - 300 HOUR INSPECTION/CHECKS

<b>MODEL: 31/31A</b>	<b>INSPECTION DUE TIME/DATE</b>
<b>SERIAL NO.</b>	<b>INSPECTION START TIME/DATE</b>
<b>REGISTRATION NO.</b>	<b>INSPECTION FINISH TIME/DATE</b>

NOTE: Perform the following inspection/checks in accordance with the interval specified in 5-10-00, Inspections.

Each inspection item has an Inspection Reference Number (IRN) assigned for record keeping purposes only.

Make sure that Section 5-10-00 has been reviewed and all requirements have been accomplished.

IRN	INSPECTION	MECH	INSP	DATE
	<b>LANDING GEAR</b>			
G3200000	Perform visual inspection of landing gear shock struts for leaks and general condition. Visually inspect landing gear shock struts and landing gear actuator attach points for security and general condition. (Refer to 5-10-00.)			
H3211031	Remove and replace retainer ring lock screw (AN500A6-10) from nose landing gear strut.			
H3211032	<u>On aircraft equipped with retainer rings</u> , remove and replace retainer ring lock screw (AN500A6-10) from main landing gear struts.			
E3230020	Landing gear squat switches for condition.			
E3242000	Nose and main tires for wear, cuts, abrasions, flat spots, and proper inflation. Check chine condition on chined tire. (Refer to 12-10-05 and 32-40-00.)			
E3243010	Brake assemblies for wear, cracks, hydraulic leaks, and release.  NOTE: Refer to 32-43-01 for brake assembly wear measurement procedures.			

EFFECTIVITY: NOTED

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IRN	INSPECTION	MECH	INSP	DATE
	<b>SERVICING - LANDING GEAR</b>			
D1210002	Deleted. Inspection renumbered as P1210051.			
P1210051	Nose Gear Shock Strut - Check for proper fluid level and inflation pressure. (Refer to 12-10-03.)			
D1210003	Deleted. Inspection renumbered as P1210052.			
P1210052	Main Gear Shock Struts - Check for proper fluid level and inflation pressure. (Refer to 12-10-04.)			
D1210007	Deleted. Inspection renumbered as P1210055.			
P1210055	Nose and Main Tires - Check for proper inflation. (Refer to 12-10-05.)			
D1221000	Deleted. Inspection renumbered as P1210043.			
P1221043	Nose Landing Gear - Lubricate trunnion pins. (Refer to 12-21-01.)			
D1221001	Nose Landing Gear Actuator - Lubricate attach fitting. (Refer to 12-21-01.)			
G1221004	Nose Landing Gear Doors - Lubricate hinges. (Refer to 12-21-01.)			
G1221005	Main Landing Gear Doors - Lubricate hinges. (Refer to 12-21-01.)			
D1221009	Main Landing Gear Actuator - Lubricate wing attach points. (Refer to 12-21-01.)			
D1221010	Main Landing Gear - Lubricate aft trunnion pin. (Refer to 12-21-01.)			
D1221011	Main Landing Gear - Lubricate forward trunnion pin. (Refer to 12-21-01.)			
D1221012	Main Landing Gear - Lubricate torque link bushings. (Refer to 12-21-01.)			
D1221013	Main Landing Gear Actuator - Lubricate strut attach point. (Refer to 12-21-01.)			

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## PHASE A6 - 300 HOUR INSPECTION/CHECKS

<b>MODEL: 31/31A</b>	<b>INSPECTION DUE TIME/DATE</b>
<b>SERIAL NO.</b>	<b>INSPECTION START TIME/DATE</b>
<b>REGISTRATION NO.</b>	<b>INSPECTION FINISH TIME/DATE</b>

NOTE: Perform the following inspection/checks in accordance with the interval specified in 5-10-00, Inspections.

Each inspection item has an Inspection Reference Number (IRN) assigned for record keeping purposes only.

Make sure that Section 5-10-00 has been reviewed and all requirements have been accomplished.

IRN	INSPECTION	MECH	INSP	DATE
	<b>EMPENNAGE</b>			
E2360010	Visually inspect static dischargers. (Refer to 23-60-00.)			
E2700008	Deleted. Inspection renumbered as P2700056.			
P2700056	Moved to B6.			
E2710035	Inspect rudder trim tab installation for general condition and security.			
E5500000	Fillets, fairings, and skins for condition, cleanliness, and security of attachment.			
E5510010	Deleted. Inspection renumbered as P5510089.			
P5510089	<p>Conduct a thorough external visual inspection of the horizontal stabilizer forward and rear spar caps (upper and lower) for corrosion, integrity of paint, and general condition. (Elevator removal not required.) (See Figure 1.) (Refer to 5-10-00.)</p> <p>NOTE: Inspection of the forward spar (upper and lower surfaces) is limited to the exposed portion of spar cap extrusion where the horizontal stabilizer leading edge and horizontal stabilizer skin interface.</p>			

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IRN	INSPECTION	MECH	INSP	DATE
	<b>WING</b>			
E2360011	Visually inspect static dischargers. (Refer to 23-60-00.)			

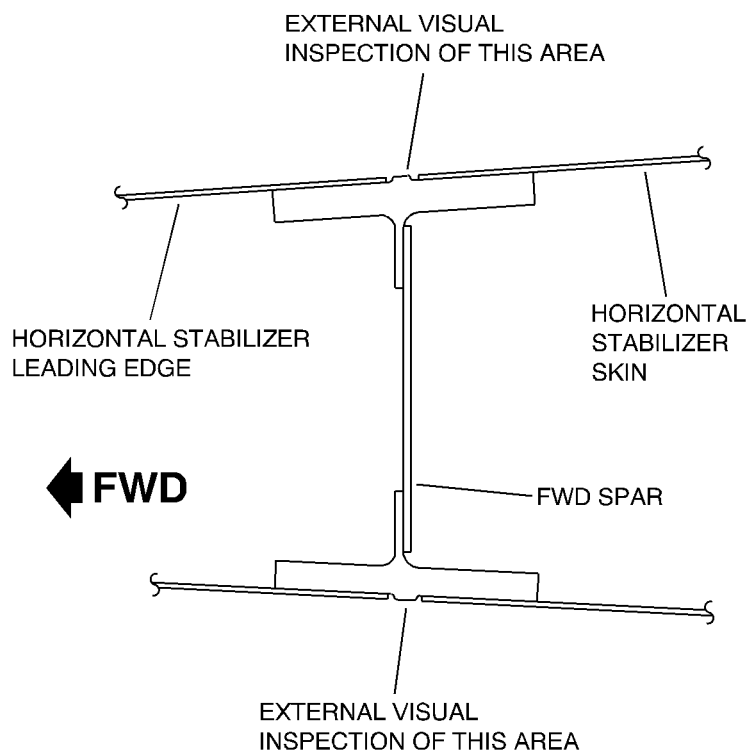
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M55-051006-001-01

Horizontal Stabilizer Forward Spar Cap Inspection  
Figure 1

EFFECTIVITY: ALL

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## PHASE B1 - 600 HOUR INSPECTION/CHECKS

<b>MODEL: 31/31A</b>	<b>INSPECTION DUE TIME/DATE</b>
<b>SERIAL NO.</b>	<b>INSPECTION START TIME/DATE</b>
<b>REGISTRATION NO.</b>	<b>INSPECTION FINISH TIME/DATE</b>

NOTE: Perform the following inspection/checks in accordance with the interval specified in 5-10-00, Inspections.

Each inspection item has an Inspection Reference Number (IRN) assigned for record keeping purposes only.

Make sure that Section 5-10-00 has been reviewed and all requirements have been accomplished.

IRN	INSPECTION	MECH	INSP	DATE
	<b>COCKPIT</b>			
H2450020	Moved to C1.			
H2700004	Deleted. Inspection renumbered as P2700052.			
P2700052	Moved to C1.			
H2720010	Inspect rudder boots for general condition and security.			
	<b>ELECTRICAL</b>			
H2130022	Perform functional test of the cabin safety valve and vacuum shutoff solenoid valve circuit. (Refer to 21-30-00.)  NOTE: Functional test of the vacuum shutoff solenoid valve is included in the functional test of the cabin safety valve.			
T2130069	Perform operational check of cabin pressurization system. (Refer to 21-30-00.)			
H2131014	Perform functional test of cabin pressure warning system aneroid switches (PSW100 and PSW101). (Refer to 21-31-00.)			
H2132002	Perform operational check of emergency pressurization system. (Refer to 21-32-00.)			
H2132020	Perform functional test of the emergency pressurization aneroid switches (S89 and S90). (Refer to 21-32-02.)			

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IRN	INSPECTION	MECH	INSP	DATE
H2142001	Perform operational check of the Auxiliary Cabin Heat Maintenance Switch. (Refer to 21-42-00.) <u>(Effective on Aircraft 31-175 and subsequent.)</u>			
H2143000	Perform functional test of Windshield Auxiliary Defog Heat System (Internal). (Refer to 21-43-00.) <u>(Effective on Aircraft 31-002 thru 31-029.)</u>			
H2731000	Perform stall warning system functional test. (Refer to 27-31-00.)			
J2731014	Perform functional test of stall warning altitude switches. <u>On Aircraft 31-002 thru 31-034</u> , refer to 34-14-01. <u>On Aircraft 31-035 and subsequent</u> , refer to 34-16-00.			
H2740001	Deleted. Inspection renumbered as P2740030.			
P2740030	Perform trim system operational check. (Refer to 27-00-00.)			
H2740003	Deleted. Inspection renumbered as P2740031.			
P2740031	Perform T.O. Trim Operational Check. (Refer to 27-40-00.)			
H2820020	Perform operational check of fuel supply shutoff valve and hydraulic supply shutoff valves. (Refer to 28-20-05 and 29-10-02.)			
H3153000	Perform functional test of Take-Off Configuration Monitor System. (Refer to 31-53-00.)			
H3411031	Perform functional test of static shutoff (isolation) valves. (Refer to 34-11-00.)			
H3412002	Perform functional test of Mach/overspeed system. (Refer to 34-13-00.) <u>(Effective on Aircraft 31-002 thru 31-034.)</u>			

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## PHASE B2 - 600 HOUR INSPECTION/CHECKS

<b>MODEL: 31/31A</b>	<b>INSPECTION DUE TIME/DATE</b>
<b>SERIAL NO.</b>	<b>INSPECTION START TIME/DATE</b>
<b>REGISTRATION NO.</b>	<b>INSPECTION FINISH TIME/DATE</b>

NOTE: Perform the following inspection/checks in accordance with the interval specified in 5-10-00, Inspections.

Each inspection item has an Inspection Reference Number (IRN) assigned for record keeping purposes only.

Make sure that Section 5-10-00 has been reviewed and all requirements have been accomplished.

IRN	INSPECTION	MECH	INSP	DATE
	<b>CABIN</b>			
H2540004	All lavatory paper and linen waste receptacle access doors and disposal doors for proper operation, fit, sealing, latching, and legibility of placard.  NOTE: This inspection is in accordance with AD 74-08-09 R2.			
J5321012	Moved to 5-10-20 as P5321012.			
H5321014	If installed, inspect accessible areas around the galley, potty, and lavatory for evidence of spillage. Investigate further if evidence of spillage is found.			
	<b>COCKPIT</b>			
E2700032	Control cables under floorboards for evidence of cable fraying, strand breakage, and security. Check pulleys, guards, and safeties for proper operation.			
E2710003	Deleted. Inspection renumbered as P2710045.			
P2710045	Remove control wheel sector cover and turnbuckle coverplate from control column. Move control wheel to both extreme right and left while inspecting for frayed or damaged cables.			
N3243047	Power Brake Valve - Perform inspection of adjustment screws for damage. <u>(Effective on aircraft 31-002 thru 31-201 not modified per SB 31-32-16, "Landing Gear - Replacement of Brake Valve Adjustment Screw.")</u>			

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IRN	INSPECTION	MECH	INSP	DATE
	<b>ELECTRICAL</b>			
H3500000	Moved to C2.			
	<b>FUSELAGE</b>			
H2814038	Perform functional test of redundant fuel vent system fuselage tank vacuum relief valve. (Refer to 28-13-05.)  NOTE: <i>On aircraft equipped with extended range tanks</i> , functional test of forward fuselage fuel tank vacuum relief valve and pressure relief valves are not required.			
T5240002	Single Point Refueling Door - Perform visual inspection. (Refer to 5-10-00.)			
M5610002	Moved to C2.			
H5620000	Perform an external visual inspection of the cabin windows and retainers for general condition, security, and cleanliness. Inspect internal and external surfaces of the cabin windows for scratches, pits, or other damage. (Refer to 5-10-00.)			
	<b>NOSE</b>			
M3040004	Moved to C2.			
H3050003	Moved to C2.			
H3050009	Moved to C2.			
H3232002	Nose gear actuator boot and hydraulic plumbing for security and general condition.			
H3400000	Deleted. Inspection renumbered as P3400004.			
P3400004	Nose compartment from the forward side of the forward pressure bulkhead, forward, for cleanliness. Electronic and electrical equipment and antenna installations for security of mounting and general condition. Wire bundle and plumbing routing for security and condition.			
J3411058	Air data sensor or air data computer static, pitot, and drain lines for condition and security. Check static ports and pitot-static probes for distortion. (Refer to 34-11-01.) Check operation of drain valves.			

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IRN	INSPECTION	MECH	INSP	DATE
H3500010	Moved to C2.			
H5240010	Nose compartment doors and fasteners for general condition, proper fit, and seals for bonding and general condition.			

EFFECTIVITY: NOTED

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## PHASE B3 - 600 HOUR INSPECTION/CHECKS

<b>MODEL: 31/31A</b>	<b>INSPECTION DUE TIME/DATE</b>
<b>SERIAL NO.</b>	<b>INSPECTION START TIME/DATE</b>
<b>REGISTRATION NO.</b>	<b>INSPECTION FINISH TIME/DATE</b>

NOTE: Perform the following inspection/checks in accordance with the interval specified in 5-10-00, Inspections.

Each inspection item has an Inspection Reference Number (IRN) assigned for record keeping purposes only.

Make sure that Section 5-10-00 has been reviewed and all requirements have been accomplished.

IRN	INSPECTION	MECH	INSP	DATE
	<b>ENGINE</b>			
H2610010	Inspect firewall and accessory gearbox fire detector elements for chafing, security of clamps, and general condition.  NOTE: This inspection only applies to the firewall and accessory gearbox loops. The engine tailcone loop should be inspected at the major engine inspection.			
H2900003	Perform operational check of engine driven hydraulic pumps. (Refer to 29-10-03.)			
P3020004	Inspect nacelle anti-ice plumbing. Inspect clamp and welded portions on aft side of nose cap bulkhead and that portion visible through openings in nose cap bulkhead. Nose cap removal not required.			
J3610007	Engine Bleed Air Shutoff and Pressure Regulator Valve - Perform Functional Test. (Refer to 36-10-01.)			
H7120020	Perform visual inspection of forward engine mounts. (Refer to 71-20-00.)			

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IRN	INSPECTION	MECH	INSP	DATE
H7611005	Visually inspect all wire harness shield overbraids and shield terminations for security and general condition. (Refer to 5-10-00.)  NOTE: Removal of upper cowling is required for this inspection.			
	<b>TAILCONE</b>			
H2150000	Refrigeration (air conditioning) system components installation for proper V-belt tension, security of mounting, and general condition. If oil leaks are visible and/or refrigerant dumped, check compressor oil level (some leakage is allowable around shaft). (Refer to 12-10-06.)			
K2150003	Perform refrigeration compressor motor brush wear inspection. (Refer to 21-50-02.) <i>(Effective on aircraft equipped with R12 refrigeration systems and not modified per SB 31-21-8, "Installation of Cooling System Compressor Motor Hour Meter.")</i>			
H2160005	Duct temperature limiter for cracks, deformation, and general condition, particularly at mounting flange.			
Q2400006	Perform inspection of all 4 AWG or greater electrical cables. Verify there is no heat damage to the large gauge wire terminal connections to the Power Distribution Assembly. Inspect connectors and terminal lugs for condition and security. Inspect cable routing to the batteries, including the connection to the battery quick disconnects. (Refer to 24-00-00.)  NOTE: Pay particular attention to cables where they exit current limiter panel and where cables route through current sensors.			
P2400009	Moved to C3.			
Q2620010	Perform weight check of engine fire extinguisher containers. After installation of containers, perform functional test of engine fire extinguisher system. (Refer to 26-20-00.)			
E2700031	Check elevator and rudder control cables for evidence of cable fraying, strand breakage, and security. Check pulley, pulley brackets, and guards for security and general condition.			
H2820001	Moved to C3.			
H2900000	Moved to C3.			

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IRN	INSPECTION	MECH	INSP	DATE
S2910025	Remove hydraulic reservoir pressure regulator filter, inspect and clean as required. Inspect hydraulic reservoir check valve and pressure regulator for contamination and operation. (Refer to 29-10-06.) <u>Effective on Aircraft with Aerospace Systems and Components (ASC) (P/N's 2702-12, 2702-13)</u>			
E2910004	Replace pressure and return hydraulic filter elements. (Refer to 29-10-04.)			
P3610044	Bleed air ducting (including clamps and valves) for security of mounting, duct installation, evidence of leakage, and general condition.			
L3610039	Perform operational check of bleed air check valves. (Refer to 36-10-02.)			
H5450000	Check pylon firewalls for cracks, condition of firewall sealant, security of hydraulic and fuel connections, electrical and mechanical feed-throughs, and condition of bleed air flange gaskets.			
H5560000	Delta fins for security of attachment, working fasteners, or damage.			

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## PHASE B4 - 600 HOUR INSPECTION/CHECKS

<b>MODEL: 31/31A</b>	<b>INSPECTION DUE TIME/DATE</b>
<b>SERIAL NO.</b>	<b>INSPECTION START TIME/DATE</b>
<b>REGISTRATION NO.</b>	<b>INSPECTION FINISH TIME/DATE</b>

NOTE: Perform the following inspection/checks in accordance with the interval specified in 5-10-00, Inspections.

Each inspection item has an Inspection Reference Number (IRN) assigned for record keeping purposes only.

Make sure that Section 5-10-00 has been reviewed and all requirements have been accomplished.

IRN	INSPECTION	MECH	INSP	DATE
	<b>WING</b>			
H2700018	Visually inspect spoiler, flap, aileron, and aileron trim tab electrical bonding jumpers for security and general condition. (Refer to 5-10-00.)  NOTE: Check electrical bond of any suspect connection.			
E2700033	All cables, pulleys, sectors, and pulley guard for proper operation and general condition. Particular attention should be given those areas of cables that pass over pulleys, sectors, or through fairleads.			
H2710000	Deleted. Inspection renumbered as P2710042.			
P2710042	Moved to C4.			
E2760000	Deleted. Inspection renumbered as P2760003.			
P2760003	Inspect spoiler actuator installation for security, support structure cracks, and general condition.			
H2760030	Moved to C4.			
E2760031	Moved to C4.			
E5720010	Inspect flap sector support brackets and flap actuator support flap bracket for cracks, distortion, interference, and fastener condition.			

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IRN	INSPECTION	MECH	INSP	DATE
E5770010	Inspect spoiler center hinge brackets (attached to wing spar 8) for cracks emanating from the bolt hole and/or bracket bend relief. Inspect bolt hole for elongation or distortion.			
	<b>SERVICING - WING</b>			
G1221016	Flap and Spoiler Actuators - Lubricate piston rod felt wipers. (Refer to 12-21-02.)			

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I

Moved to C4.

Inspection of Center Spoiler Area  
Figure 1

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## PHASE B5 - 600 HOUR INSPECTION/CHECKS

<b>MODEL: 31/31A</b>	<b>INSPECTION DUE TIME/DATE</b>
<b>SERIAL NO.</b>	<b>INSPECTION START TIME/DATE</b>
<b>REGISTRATION NO.</b>	<b>INSPECTION FINISH TIME/DATE</b>

NOTE: Perform the following inspection/checks in accordance with the interval specified in 5-10-00, Inspections.

Each inspection item has an Inspection Reference Number (IRN) assigned for record keeping purposes only.

Ensure that Section 5-10-00 has been reviewed and all requirements have been accomplished.

IRN	INSPECTION	MECH	INSP	DATE
	<b>CENTER SECTION</b>			
H2400001	Deleted. Inspection renumbered as P2400008.			
P2400008	Electrical wiring for routing, clearance, and general condition (that portion visible through wheel wells).			
E2700006	Deleted. Inspection renumbered as P2700054.			
P2700054	Remove all panels required to gain access to cables, pulleys, sectors, and associated equipment. Visually inspect accessible portions of flight controls for proper operation, cable clearance, and general condition. (Refer to 5-10-00.)			
H2820000	Deleted. Inspection renumbered as P2820004.			
P2820004	Moved to C5.			
H5280001	Visually inspect inboard and outboard main landing gear door bonding jumpers for security and general condition. (Refer to 5-10-00.)  NOTE: Check electrical bond of any suspect connection.			
	<b>LANDING GEAR</b>			
H3230000	Landing gear electrical wiring for routing and general condition.			
H3243000	Brake lines for routing and leaks, MLG and door actuator attach points for security, and strut hinge points for general condition.			

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IRN	INSPECTION	MECH	INSP	DATE
E3244020	Remove and clean anti-skid valve filters. (Refer to 32-44-02.)			
	<b>SERVICING - LANDING GEAR</b>			
D1221002	Nose Landing Gear Actuator - Lubricate piston rod felt wiper. (Refer to 12-21-01.)			
G1221007	Nose Landing Gear Uplatch Actuator - Lubricate piston rod felt wipers. (Refer to 12-21-01.)			
F1221008	Main Landing Gear Door Actuator (48C48608) - Lubricate piston rod felt wiper. (Refer to 12-21-01.)			
D1221014	Main Landing Gear Actuator - Lubricate piston rod felt wiper. (Refer to 12-21-01.)			

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## PHASE B6 - 600 HOUR INSPECTION/CHECKS

<b>MODEL: 31/31A</b>	<b>INSPECTION DUE TIME/DATE</b>
<b>SERIAL NO.</b>	<b>INSPECTION START TIME/DATE</b>
<b>REGISTRATION NO.</b>	<b>INSPECTION FINISH TIME/DATE</b>

NOTE: Perform the following inspection/checks in accordance with the interval specified in 5-10-00, Inspections.

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IRN	INSPECTION	MECH	INSP	DATE
	<b>CABIN</b>			
H5210060	Inspect entire length of lower door cables for evidence of fraying or other damage. Door access panels must be removed.  NOTE: Make sure that proper cable rigging of lower door cables has been performed when inspecting cables.			
	<b>EMPENNAGE</b>			
H2700007	Deleted. Inspection renumbered as P2700055.			
P2700055	Visually inspect elevator, rudder, and rudder trim tab electrical bonding jumpers for security and general condition.  NOTE: Check electrical bond of any suspect connection.			
T2700056	Check for freedom of movement of all flight controls.			
H3011000	Check resistance of horizontal stabilizer anti-ice heating elements (heat blanket) (when installed). (Refer to 30-12-01.)			
H3453003	Moved to C6.			
	<b>FUSELAGE</b>			
H5210010	Deleted. Inspection renumbered as P5210041.			

EFFECTIVITY: ALL

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IRN	INSPECTION	MECH	INSP	DATE
P5210041	Cabin door hooks for proper friction; door seals for adhesion, cuts, and abrasion; latch rigging, lower door at hinge for cracks in frame; and door jamb extrusion and latch receptacles for general condition and security.			
H5220000	Check operation of emergency exit door external and internal handle latching mechanism. Remove and reinstall emergency exit door to ensure freedom of operation and clearance of interior components. (Refer to 52-20-00.)			
	<b>SERVICING - FUSELAGE</b>			
H1221022	Emergency Exit Door - Lubricate the following (Refer to 12-21-05): a. External and internal latch pins. b. Internal latch handle pin. c. Bellcrank linkage. d. Drive bellcrank. e. Idler bellcrank.			
H1221028	Upper and Lower Entry Doors - Lubricate hinges and latch pins. (Refer to 12-21-03.)			

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## PHASE C1 - 1200 HOUR INSPECTION/CHECKS

<b>MODEL: 31/31A</b>	<b>INSPECTION DUE TIME/DATE</b>
<b>SERIAL NO.</b>	<b>INSPECTION START TIME/DATE</b>
<b>REGISTRATION NO.</b>	<b>INSPECTION FINISH TIME/DATE</b>

NOTE: Perform the following inspection/checks in accordance with the interval specified in 5-10-00, Inspections.

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Make sure that Section 5-10-00 has been reviewed and all requirements have been accomplished.

IRN	INSPECTION	MECH	INSP	DATE
	<b>COCKPIT</b>			
E2130055	Remove and replace pressurization module filter. (Refer to 21-30-07.)			
T2450020	Check switch and circuit breaker panels for general condition. Ensure markings are clear and readable.			
T2700052	Using the proper cockpit controls, check flaps, spoilers, horizontal stabilizer, and trim tabs for proper operation and accurate indication.			
H3110000	Moved to D1.			
H3510000	<u>On Aircraft equipped with E.R.O.S. Aviation crew masks</u> , perform functional test of oxygen mask. (Refer to 35-10-01.)			
	<b>ELECTRICAL</b>			
H2130001	Deleted. Inspection renumbered as P2130070.			
P2130070	Perform functional test of cabin pressurization system. (Refer to 21-30-00.)			
H2432000	Moved to D1.			
H2432002	Emergency Electrical Load Distribution System - Perform Functional Test. (Refer to 24-51-00.)			
H2731021	Perform functional test of control column shaker. (Refer to 27-31-02.)			

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IRN	INSPECTION	MECH	INSP	DATE
H3040000	Deleted. Inspection renumbered as P3040008.			
P3040008	Moved to D1.			

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## PHASE C2 - 1200 HOUR INSPECTION/CHECKS

<b>MODEL: 31/31A</b>	<b>INSPECTION DUE TIME/DATE</b>
<b>SERIAL NO.</b>	<b>INSPECTION START TIME/DATE</b>
<b>REGISTRATION NO.</b>	<b>INSPECTION FINISH TIME/DATE</b>

NOTE: Perform the following inspection/checks in accordance with the interval specified in 5-10-00, Inspections.

Each inspection item has an Inspection Reference Number (IRN) assigned for record keeping purposes only.

Make sure that Section 5-10-00 has been reviewed and all requirements have been accomplished.

IRN	INSPECTION	MECH	INSP	DATE
	<b>CABIN</b>			
H1130000	Deleted. Inspection renumbered as P1130001.			
P1130001	Moved to D2.			
H2130046	Cabin safety valve altitude limiter for security, inlet screen for cleanliness and damage. Clean or replace screen if required. (Refer to 21-30-02.)			
E2130059	Remove and replace cabin safety valve filter. (Refer to 21-30-05.)			
E2130060	Remove and clean pressurization vacuum regulator (cabin pressure reference) filter at aft pressure bulkhead. (Refer to 21-30-06.)			
H2160002	Remove, inspect, and clean temperature control system filters. (Refer to 21-60-05.)			
H2213004	Check autopilot roll servo capstan slip clutch torque. (Refer to 22-10-11.) <i>(Effective on Aircraft 31-002 thru 31-034.)</i>			
H2400003	Moved to D2.			
H2700016	Inspect structure and controls from forward edge of cabin door to frame 15 for operation, clearances, and general condition.			

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IRN	INSPECTION	MECH	INSP	DATE
H5321006	Take up carpet and inspect flanges of frames 13 thru 14 LH and frames 10 thru 14 RH for general condition, deformation, and cracks in area above floorboard and inboard of outboard seat rail support.  NOTE: Those flanges covered by cabinets or toilet need not be inspected.			
H7610004	Visually inspect engine throttle system for control cable routing, security of clamps, and general condition. (Refer to 5-10-00.)			
	<b>COCKPIT</b>			
H2211032	Check roll servo cable tension. (Refer to 22-10-14.) <u>(Effective on Aircraft 31-002 thru 31-034.)</u>			
H2400004	Pedestal interior wiring for wire routing, clearances, deterioration, and general condition.			
H2700005	Deleted. Inspection renumbered as P2700053.			
P2700053	Inspect structure and controls in keelbeam from pedestal and control column to forward edge of cabin door for operation, clearances, and general condition.			
H2700010	Deleted. Inspection renumbered as P2700058.			
P2700058	Moved to D2.			
H2710032	Check aileron, rudder, and elevator control system cable tensions. (Refer to Chapter 27.)			
H2720028	Rudder pedals, boots, pedal pushrods, and sectors for security, proper operation, and clearances. (Refer to 27-20-00.)			
H3243020	Power brake valves for security, operation, and leaks.			
N3243053	Power Brake Valve - Perform inspection of adjustment screws for damage. <u>(Effective on aircraft 31-202 and subsequent, and prior aircraft modified per SB 31-32-16, "Landing Gear - Replacement of Brake Valve Adjustment Screw.")</u>			
H7610005	Visually inspect engine throttle system for control cable routing, security of clamps, and general condition. (Refer to 5-10-00.)			

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IRN	INSPECTION	MECH	INSP	DATE
	<b>ELECTRICAL</b>			
T3500000	Perform functional test of oxygen system. (Refer to 35-00-00.)			
	<b>FUSELAGE</b>			
T5610002	Interior and exterior surface of windshield for crazing, including visible portion under retainers for cracks, cleanliness, security, and general condition. Area under anti-ice duct shall be inspected by viewing the epoxy-primed outer surface of the windshield from cockpit. Visually verify integrity of the epoxy-primed surface. (Refer to 12-24-00 and 12-25-00.)  NOTE: Clean interior and exterior surface of windshield in accordance with Chapter 12.			
	<b>NOSE</b>			
T3040004	Windshield defog ducts and external outlets for security, contour, and integrity of sealant to windshield. Check that the external anti-ice nozzles are clear of obstructions.			
T3050003	Perform operational check of alcohol anti-ice system. (Refer to 30-50-00.)			
T3050009	Clean alcohol anti-ice filter element. Replace filter element if made of paper. (Refer to 30-50-01.)			
T3500010	Oxygen bottle for security of mounting and plumbing for routing and security. <u>(Effective on aircraft with oxygen cylinder installed in nose compartment.)</u>			

EFFECTIVITY: NOTED

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## PHASE C3 - 1200 HOUR INSPECTION/CHECKS

<b>MODEL: 31/31A</b>	<b>INSPECTION DUE TIME/DATE</b>
<b>SERIAL NO.</b>	<b>INSPECTION START TIME/DATE</b>
<b>REGISTRATION NO.</b>	<b>INSPECTION FINISH TIME/DATE</b>

NOTE: Perform the following inspection/checks in accordance with the interval specified in 5-10-00, Inspections.

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IRN	INSPECTION	MECH	INSP	DATE
	<b>TAILCONE</b>			
H2120001	Moved to D3.			
E2130062	Remove and inspect vacuum regulator assembly filter. Install new filter if necessary. (Refer to 21-30-06.) <i>(Effective on Aircraft equipped with Airborne vacuum regulator only.)</i>			
K2150025	Perform a fluorescent penetrant inspection of the air conditioner compressor motor fan blades. (Refer to NDI Manual [NDI-1], Part 5, 21-50-01.) <i>(Effective on Aircraft equipped with R12 refrigeration systems and not modified per SB 31-21-8.)</i>  NOTE: Particular attention should be given to the fan blades in the area of the hub.			
H2160000	Remove, inspect, and clean temperature control system filters. (Refer to 21-60-05.)			
H2211012	Check yaw damper servo capstan slip clutch torque. <i>(On Aircraft 31-001 thru 31-034, refer to 22-50-03. On Aircraft 31-035 and Subsequent, refer to 22-11-14.)</i>			
H2211041	Check yaw servo cable tension. (Refer to 22-11-16.)			

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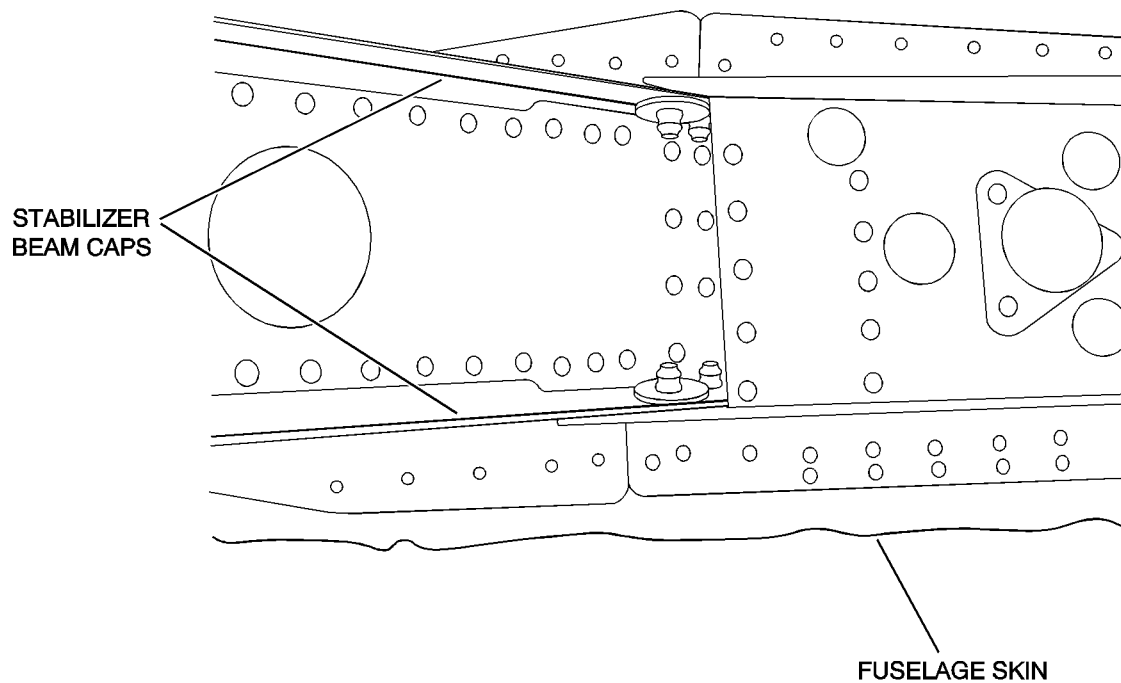
IRN	INSPECTION	MECH	INSP	DATE
T2400009	Electrical wiring for routing, clearance, security, and electrical components for security and general condition. (Refer to 5-10-00.)  NOTE: Refer to 20-10-01 of the Wiring Manual for wire routing clearance information.			
T2820001	Visually inspect fuel plumbing for routing, clearance, leaks, security, and general condition. Check fuel drains for operation. (Refer to 5-10-00.)			
T2900000	Visually inspect hydraulic plumbing for routing, clearance, leaks, security, and general condition. (Refer to 5-10-00.)			
S2910008	Remove hydraulic reservoir pressure regulator filter, inspect and clean as required. Inspect hydraulic reservoir check valve and pressure regulator for contamination and operation. (Refer to 29-10-06.) <i>(Effective on Aircraft with Sterer/Eaton pressure regulators (P/N 55950-2) installed.)</i>			
H5334002	Ensure access cover below rudder is properly sealed with ProSeal 890 sealant. Utilize parting agent on access cover surfaces in contact with sealant.			
K5450010	Inspect pylon beams for cracks, fastener condition, attachment to fuselage frames, and general condition of fittings. Remove upper and lower pylon access covers for complete inspection. (See Figure 1.)			
H7610002	Visually inspect engine throttle system for control cable routing, security of clamps, and general condition. (Refer to 5-10-00.)			

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Inspection of Pylon Beams  
Figure 1

EFFECTIVITY: ALL

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## PHASE C4 - 1200 HOUR INSPECTION/CHECKS

<b>MODEL: 31/31A</b>	<b>INSPECTION DUE TIME/DATE</b>
<b>SERIAL NO.</b>	<b>INSPECTION START TIME/DATE</b>
<b>REGISTRATION NO.</b>	<b>INSPECTION FINISH TIME/DATE</b>

NOTE: Perform the following inspection/checks in accordance with the interval specified in 5-10-00, Inspections.

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IRN	INSPECTION	MECH	INSP	DATE
	<b>ELECTRICAL</b>			
H2812060	Perform operational check of wing low fuel warning system. (Refer to 28-14-09.)			
H2812070	Moved to D4.			
	<b>WING</b>			
H2700014	Deleted. Inspection renumbered as P2700060.			
P2700060	Moved to D4.			
H2700024	Inspect the aileron balance weight installation and supporting structure. Inspect for evidence of vibration, fastener working, fatigue cracks, and general security. Remove access covers for definitive inspection of internal mounting brackets or structure.			
H2710002	Deleted. Inspection renumbered as P2710044.			
T2710042	Aileron and aileron tabs and drive mechanism for security, operation, and general condition.			
P2710044	Check aileron and flap system control cable tensions. (Refer to Chapter 27.)			
E2710005	Hold control wheel in a fixed position and apply up and down loads on the aileron trailing edge. Observe aileron drive assembly area for wear in shaft keyways, failure of bearings, and aileron yoke slippage.			

EFFECTIVITY: ALL

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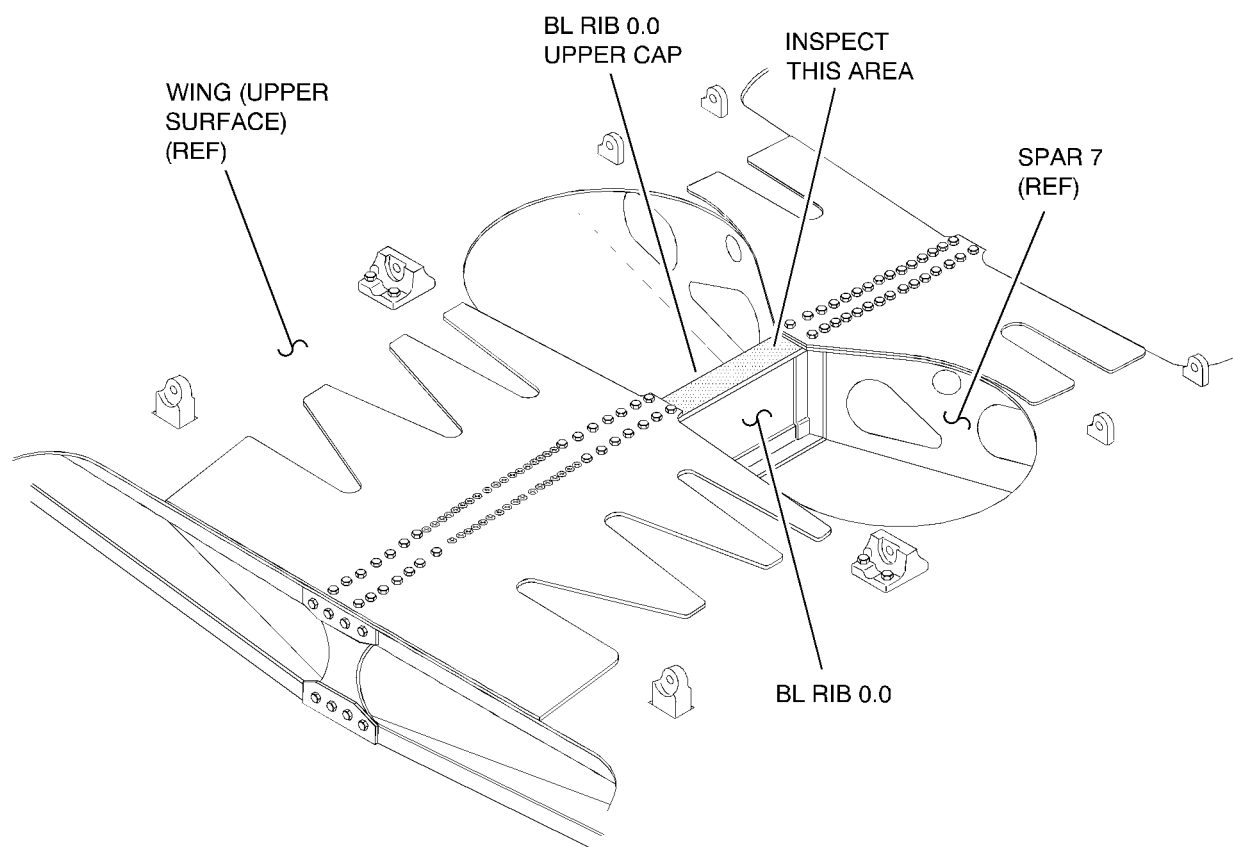
IRN	INSPECTION	MECH	INSP	DATE
E2710033	Inspect the aileron trim tab installation for general condition and security, noting any hinge or pushrod looseness that may contribute to excessive tab free play. (Refer to 27-10-02.)			
T2760030	Inspect spoiler and hinge installation for security, cracks, and general condition.			
T2760031	Inspect spoiler center angle bracket rivets, lower skin center rib and subspar rivets for evidence of working. With spoilers extended, apply alternate up and down loads to spoiler trailing edge. Check motion at center hinge. Inspect spoiler actuator mechanism and hinge installation for security, cracks, and general condition. (See Figure 3.)			
H5710038	Deleted. Inspection renumbered as P5710146			
P5710146	Inspect upper portion of BL 0.0 rib cap, just forward of spar 7. Inspect for any evidence of corrosion, primer blistering, and condition of primer surface. (See Figure 1.)			
E5750020	With flaps extended, apply alternate up and down loads to flap trailing edge. Inspect inboard and outboard flap tracks and nose roller support structure for cracks, distortion, fastener condition, evidence of chafing or interference, and general security.			
E5750030	Inspect flap nose roller bushings. Replace flap nose roller if worn to a diameter less than 0.744 inch. Replace flap nose roller track if slot exceeds 0.775 inch at any point with flaps fully extended. Ensure that a positive clearance exists between nose rollers and aft end of nose roller tracks (two each side).			
E5750060	Clean and visually inspect flap attach fitting (castings attached to flap spar) for cracks. (Refer to 5-10-00.) (See Figure 2.)  NOTE: Pay particular attention to fastener holes, flanges, and lugs. If cracks exist, replace fitting.			

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M55-051016-001-01

Inspection of BL 0.0 Rib Cap  
Figure 1

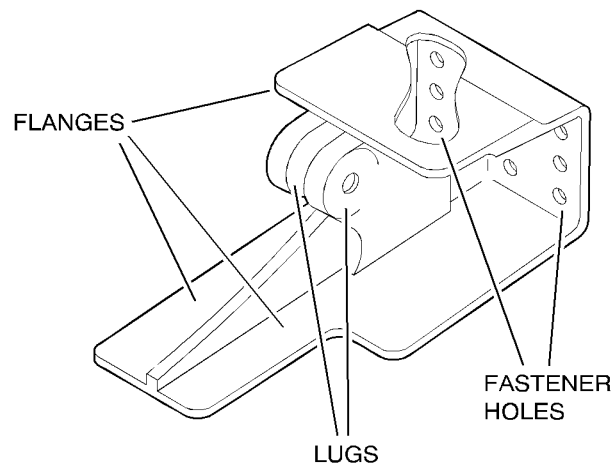
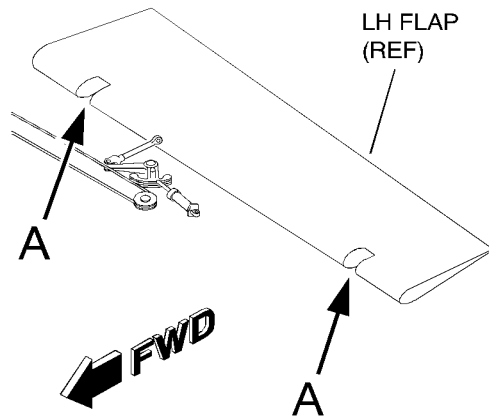
EFFECTIVITY: ALL

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(FLAP ATTACHMENT FITTING-TYPICAL)

Detail A

M55-051016-002-01

Inspection of the Flap Attach Fittings  
Figure 2

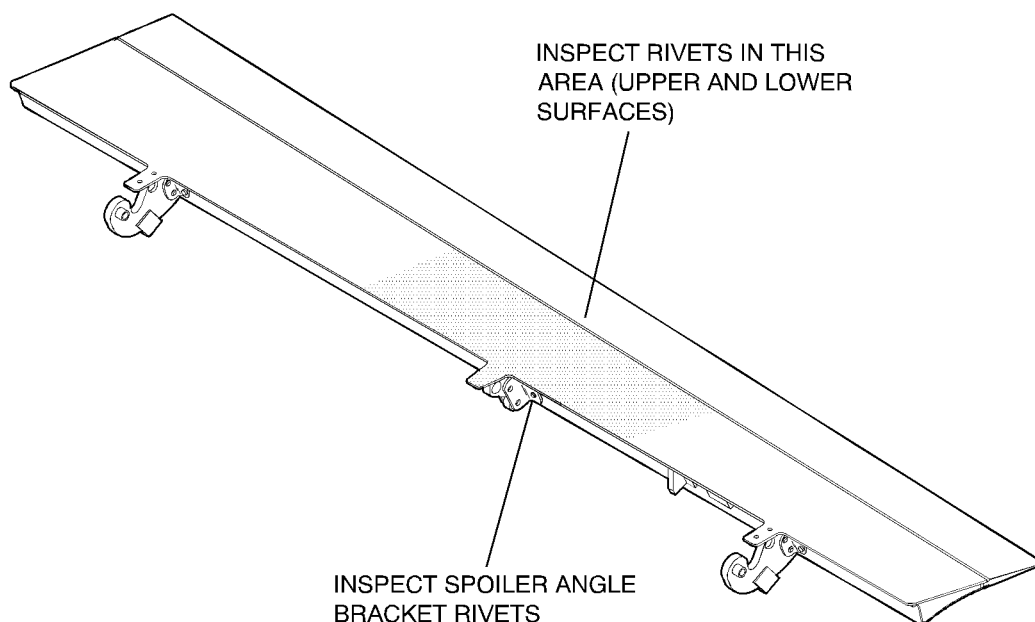
EFFECTIVITY: ALL

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Inspection of Center Spoiler Area  
Figure 3

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## PHASE C5 - 1200 HOUR INSPECTION/CHECKS

<b>MODEL: 31/31A</b>	<b>INSPECTION DUE TIME/DATE</b>
<b>SERIAL NO.</b>	<b>INSPECTION START TIME/DATE</b>
<b>REGISTRATION NO.</b>	<b>INSPECTION FINISH TIME/DATE</b>

NOTE: Perform the following inspection/checks in accordance with the interval specified in 5-10-00, Inspections.

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IRN	INSPECTION	MECH	INSP	DATE
	CENTER SECTION			
H2213001	Check autopilot roll servo capstan slip clutch torque. (Refer to 22-11-11.) <i>(Effective on Aircraft 31-035 and Subsequent.)</i>			
H2700015	Inspect structure and controls from frame 15 to frame 22 for operation, clearances, and general condition.			
T2820004	Lower inboard gear doors and check entire keelbeam and wheel well area for fuel or hydraulic leaks, plumbing for routing, clearances, security of clamps, and general condition.			
E5321015	<p>Visually inspect lower caps and adjacent webs of divan floor transition beam at FS 378.05 and baggage floor transition beam at FS 400.08 from left to right longeron for evidence of fatigue cracks, corrosion, and general condition. (Refer to 5-10-00.)</p> <p>NOTE: Fluorescent penetrant inspect lower caps and adjacent webs of divan floor as required for definitive inspection results. (See Figure 1.) (Refer to NDI Manual, Part 5, 53-10-01.)</p>			
	ELECTRICAL			
H3250001	<p>Perform functional test of nose wheel steering system. (Refer to 32-50-00.)</p> <p>NOTE: This inspection does not apply to aircraft equipped with digital nose wheel steering.</p>			

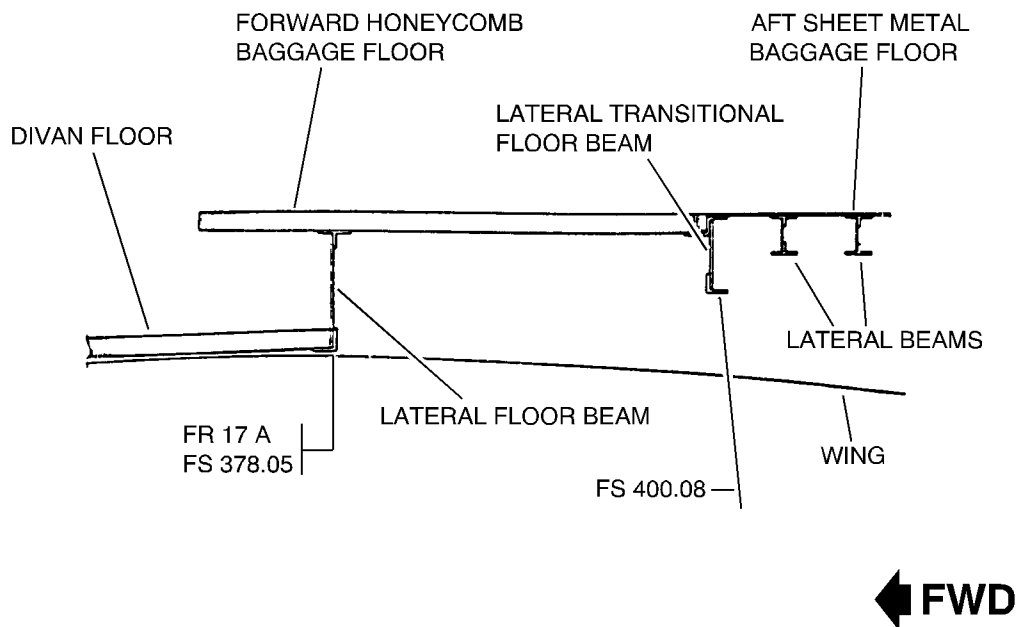
EFFECTIVITY: ALL

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IRN	INSPECTION	MECH	INSP	DATE
	LANDING GEAR			
H3210000	Visually inspect main and nose landing gear strut assemblies, actuators, fasteners, and support structure for fatigue cracks, corrosion, security, and general condition. Inspect nose gear actuator attach bracket in the area around grease fitting. Inspect for cracks emanating from the fitting hole. (Refer to 5-10-00.)			
H3211010	Main landing gear torque links for looseness.			
H3230010	Perform landing gear retraction and extension check. Check automatic brake snubbing and landing lights for retract cutoff. (Refer to 32-30-00.)			
H3230021	Landing gear squat switches for proper operation and condition.			
H3233012	Perform emergency air extension system and emergency brake system plumbing leakage check. (Refer to 32-33-00 and 32-45-00.)			
	SERVICING - LANDING GEAR			
H1221003	Nose Landing Gear Actuator - Lubricate down-lock switch ball. (Refer to 12-21-01.)			
H1221015	Main Landing Gear Actuator - Lubricate actuator down-lock switch ball. (Refer to 12-21-01.)			

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Lateral Transitional Floor Beam (View Looking Inboard at LH Wheelwell)  
Figure 1

EFFECTIVITY: ALL

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## PHASE C6 - 1200 HOUR INSPECTION/CHECKS

<b>MODEL: 31/31A</b>	<b>INSPECTION DUE TIME/DATE</b>
<b>SERIAL NO.</b>	<b>INSPECTION START TIME/DATE</b>
<b>REGISTRATION NO.</b>	<b>INSPECTION FINISH TIME/DATE</b>

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IRN	INSPECTION	MECH	INSP	DATE
	EMPENNAGE			
H2211036	Check pitch servo cable tension. (Refer to 22-10-13.)			
H2212014	Check autopilot pitch servo actuator capstan slip clutch torque. <u>(On Aircraft 31-002 thru 31-034, refer to 22-10-13. On Aircraft 31-035 and Subsequent, refer to 22-11-12.)</u>			
H2212023	Elevator and rudder servo cables for cable fraying and strand breakage; clamps for general condition of mounting.			
Q2700051	Rudder and elevator controls (including downspring installation when installed and push-pull tubes) for proper operation, general condition, and security. (Refer to 27-20-00 and 27-30-00.)			
P2700059	Moved to D6.			
H2700021	Inspect the rudder and elevator balance weight installations and supporting structure. Inspect for evidence of vibration, fastener working, fatigue cracks, and general security. Remove access covers for definitive inspection of internal mounting brackets or structure.			
F2710006	Inspect the rudder trim tab installation for general condition and security, noting any hinge or pushrod looseness that may contribute to excessive tab free play. (Refer to 27-20-03.)			
T3453003	Inspect antenna installations for security, corrosion, and proper tension of HF antenna wire. (Refer to 23-12-03.)			

EFFECTIVITY: NOTED

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IRN	INSPECTION	MECH	INSP	DATE
H3500020	Oxygen bottle for security of mounting and plumbing for routing and security. <i>(Effective on Aircraft with oxygen bottle installed in vertical stabilizer.)</i>			
T5500002	Rudder, rudder tab, and elevator hinge points for evidence of wear, security, and general condition. When installing vertical stabilizer aft fairing, ensure that elevator to fairing clearance is 0.31 ( $\pm 0.12$ ) inch [7.9 ( $\pm 3$ ) mm].			
H5510031	Remove access panels and inspect upper and lower flanges of horizontal stabilizer ribs at right and left butt line 19.4 for cracks.			
H5510035	Inspect horizontal stabilizer actuator upper and lower attach fittings (including attach bolts), support structure, and attach bolt retaining clips (if installed) for cracks, fastener condition, security, wear, and general condition.			
E5510040	With alternating up and down loads (30 to 50 lb.) being applied to the stabilizer tip, observe horizontal stabilizer actuator upper and lower attach fittings, hinge pin and fittings, support structure attaching bolts, and bolt retainers for wear, looseness, free play, cracks, security, and general condition.  NOTE: Pay particular attention to the relative movement that may be present between the hinge pin and the horizontal stabilizer pivot fitting bearing/bushing installation.			
E5520010	With control column fixed, apply alternate up and down loads to the elevator trailing edge. Inspect each elevator hinge location for looseness, free play, fatigue cracks, and general security.			
H5530001	Vertical stabilizer for cracks, fastener condition, and security at attach points, and structure in area of horizontal stabilizer attach fittings.			

EFFECTIVITY: NOTED

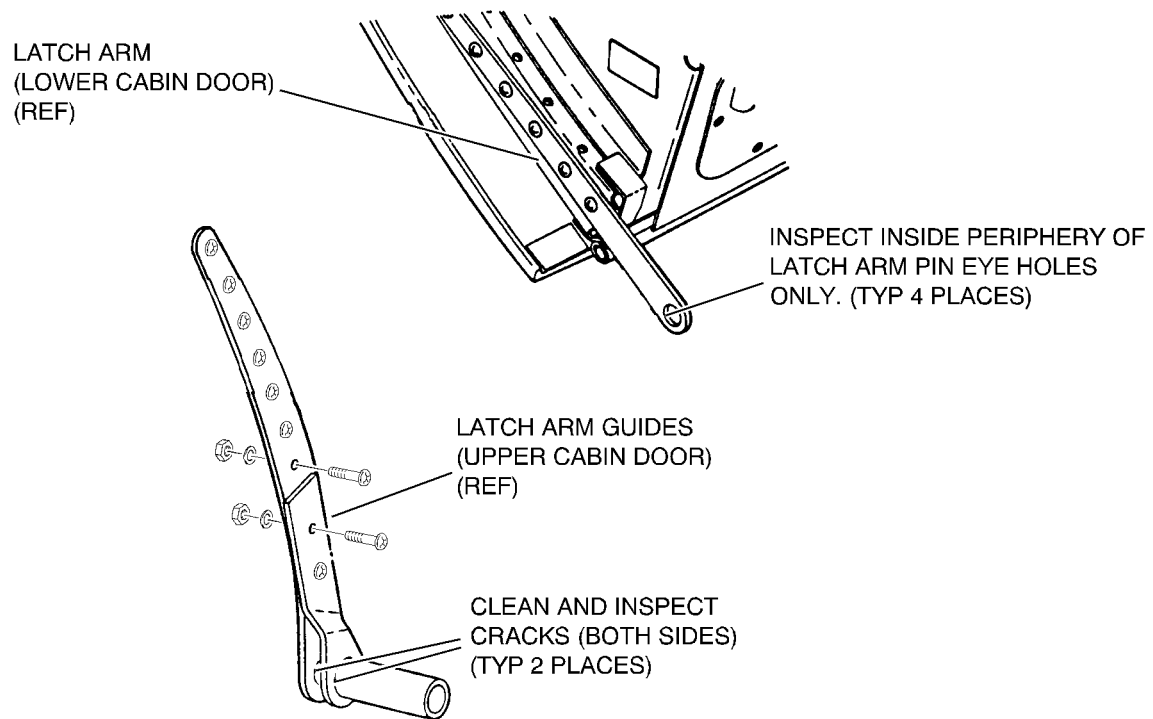
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IRN	INSPECTION	MECH	INSP	DATE
H5530020	<p>Perform eddy current inspection of horizontal stabilizer pivot fitting (located in vertical stabilizer). (<i>Effective on Aircraft equipped with pivot fittings 2331025.</i>)</p> <p><b>DO NOT USE ABRASIVE METHODS TO REMOVE PAINT FROM HORIZONTAL STABILIZER PIVOT FITTINGS IN THE INSPECTION AREA. ABRASIVE METHODS MAY COVER ANY POSSIBLE CRACKS AND INVALIDATE ANY SECONDARY INSPECTION METHODS.</b></p> <p>NOTE: Inspection to be in accordance with the Learjet Nondestructive Inspection Manual. (Refer to NDI Manual, Part 3, 55-30-01, Areas A and G.)</p>			
E5540010	With rudder pedals restrained, apply alternating left and right loads to the rudder trailing edge. Observe rudder hinge fitting attachments for looseness, free play, and general security.			
	FUSELAGE			
H5210040	Clean arm guides of passenger/crew upper door and visually check for cracks. (See Figure 1.)			
H5210065	Clean latch arm of passenger/crew lower door and visually inspect for cracks. (See Figure 1.)			
E5314030	Framing members of entry door for cracks, loose or missing fasteners, and general condition.			
E5620006	Perform prism inspection of emergency exit window. Check for cracks, chips, delamination, or other damage. Pay special attention to the forward and aft edge rabbet cut. Brown discolorations in the area of the fasteners may indicate corroded fasteners. Remove and inspect such fasteners for rust, corrosion, and general condition. (Refer to NDI Manual, Part 4, 56-30-01.)			

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Inspection of Latch Arms and Latch Arm Guides  
Figure 1

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## PHASE D1 - 2400 HOUR INSPECTION/CHECKS

<b>MODEL: 31/31A</b>	<b>INSPECTION DUE TIME/DATE</b>
<b>SERIAL NO.</b>	<b>INSPECTION START TIME/DATE</b>
<b>REGISTRATION NO.</b>	<b>INSPECTION FINISH TIME/DATE</b>

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IRN	INSPECTION	MECH	INSP	DATE
	<b>COCKPIT</b>			
H2130006	Boroscope inspect cabin air exhaust control valve poppet and seat for contamination. (Refer to 21-30-01.)  NOTE: If contaminated, remove cabin air exhaust control valve and clean poppet and seat with mild detergent.			
H2450021	Remove the fasteners that attach the circuit breaker panel to structure. Check for loose circuit breaker terminals, loose wire terminals, corroded terminals or bus bars, and evidence of wire insulation damage.			
H2710004	Deleted. Inspection renumbered as P2710046.			
P2710046	Disassemble control column as required to inspect pulleys, bearings, electrical wiring for proper routing and chafing, and control columns for general condition.			
T3110000	Equipment installations between forward pressure bulkhead and instrument panel for security of mounting, wire routing, and clearances of wiring and plumbing.			
	<b>ELECTRICAL</b>			
T2432000	Perform operational check of DC power distribution system. (Refer to 24-50-00.)			
T3040008	Perform functional test of windshield anti-ice system timer circuit. (Refer to 30-40-00.)			

EFFECTIVITY: ALL

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## PHASE D2 - 2400 HOUR INSPECTION/CHECKS

<b>MODEL: 31/31A</b>	<b>INSPECTION DUE TIME/DATE</b>
<b>SERIAL NO.</b>	<b>INSPECTION START TIME/DATE</b>
<b>REGISTRATION NO.</b>	<b>INSPECTION FINISH TIME/DATE</b>

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IRN	INSPECTION	MECH	INSP	DATE
	<b>ELECTRICAL</b>			
H3421000	Perform functional test of AHRS to autopilot monitor (pilot's and copilot's) circuit wiring. (Refer to 34-28-00.) <i>(Effective on Aircraft 31-035 and Subsequent.)</i>			
	<b>CABIN</b>			
T1130001	Check brightness level of all self-luminous placards. (Refer to 11-30-00.)			
T2400003	Electrical wiring, hydraulic, and pneumatic lines under floorboards for evidence of leakage, security of clamps, and condition. (Refer to 5-10-00.)			
P5321012	Remove divan and baggage compartment upholstery and check structure for corrosion. Pay particular attention to area around threaded inserts in honeycomb structure. Tap-test floor panel to check for unbonding of upper surface plate and honeycomb core structure.			
	<b>COCKPIT</b>			
T2700058	Check for full travel and freedom of movement of all flight controls and for proper engagement of primary stops.			
	<b>FUSELAGE</b>			
H5323020	Deleted. Inspection renumbered as P5323154.			

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IRN	INSPECTION	MECH	INSP	DATE
P5323154	<p>Inspect exterior of the skin, giving particular attention to longitudinal and circumferential skin splices for fastener condition, fatigue cracks, and general splice condition.</p> <p>NOTE: All suspect conditions of local surface (paint) discoloration at skin splice joints in pressure cabin should be thoroughly examined to ensure skin cracks are not present. If external appearance indicates need for a more thorough inspection, confirm with x-rays. (Refer to NDI Manual, Part 2, Chapter 53.)</p>			

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## PHASE D3 - 2400 HOUR INSPECTION/CHECKS

<b>MODEL: 31/31A</b>	<b>INSPECTION DUE TIME/DATE</b>
<b>SERIAL NO.</b>	<b>INSPECTION START TIME/DATE</b>
<b>REGISTRATION NO.</b>	<b>INSPECTION FINISH TIME/DATE</b>

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IRN	INSPECTION	MECH	INSP	DATE
	<b>ELECTRICAL</b>			
H3620001	Perform functional test of pylon overheat thermostat, duct temperature sensor, and electrical system. (Refer to 36-20-00.)			
	<b>TAILCONE</b>			
T2120001	Ram air ducting and heat exchanger for security and general condition. (Refer to 5-10-00.)			
L2150045	Perform functional test of refrigeration system pressure switch. (Refer to 21-50-05.) <i>(Effective on Aircraft equipped with R12 refrigeration system and not modified per SB 31-21-8, "Installation of Cooling System Compressor Motor Hour Meter.")</i>			
R2160011	Duct Temperature Limiter - Perform Functional Test. (Refer to 21-60-03.)  NOTE: Contact Wichita Customer Service Representative for a Material Return Authorization number.			
H2620020	Disconnect plumbing from the fire extinguisher two-way check valve assembly. Inspect for freedom of movement of the two-way check valve, evidence of defects, wear, and corrosion. Replace valve cap O-ring. <i>(Effective on Aircraft equipped with Walter-Kidde two-way check valve.)</i>  NOTE: Overhaul or replace valve assembly if evidence of defects exist.			

EFFECTIVITY: NOTED

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IRN	INSPECTION	MECH	INSP	DATE
J3610038	Perform visual inspection of high pressure bleed air check valves. (Refer to 36-10-04.)			
H5331010	Inspect bulkheads, frames, and stiffeners in the tailcone for fastener security, cracks, and general condition.			
H5331020	Inspect canted bulkheads and lower vertical stabilizer attachments in aft tailcone for fastener security and permanent deformation at bulkheads and spar assemblies.			
H5560001	Visually inspect the delta fin surfaces. Remove tailcone access covers and visually inspect support structure for loose or missing fasteners, fatigue cracks, permanent deformation, and corrosion. Inspect upper and lower surfaces, paying particular attention to the tailcone attachment areas and along the fin spar/skin attachment rows. (Refer to 5-10-00.)			

EFFECTIVITY: ALL

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## PHASE D4 - 2400 HOUR INSPECTION/CHECKS

<b>MODEL: 31/31A</b>	<b>INSPECTION DUE TIME/DATE</b>
<b>SERIAL NO.</b>	<b>INSPECTION START TIME/DATE</b>
<b>REGISTRATION NO.</b>	<b>INSPECTION FINISH TIME/DATE</b>

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IRN	INSPECTION	MECH	INSP	DATE
	<b>ELECTRICAL</b>			
T2812070	Perform operational check of fuel crossflow valve and motive flow control valves. (Refer to 28-14-05 and 28-20-06.)			
	<b>WING</b>			
H2360021	Perform functional test of static dischargers. (Refer to 23-60-00.)			
T2700060	Check for full travel and freedom of movement of all flight controls and for proper engagement of stops.			
J5710001	Deleted. Inspection renumbered as P5710140.			
P5710140	Remove upper wing-to-fuselage fairings and inspect wing skins, wing-to-fuselage attach fittings, and adjacent structure for corrosion, fastener security, cracks, permanent deformation, protective coating, and general condition. Examine exposed edge of honeycomb divan floor for corrosion and security of bond between core and facesheets.			
H5750000	Trailing edge region of wing for local deformation affecting normal usage of flap and aileron.			

EFFECTIVITY: ALL

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## PHASE D5 - 2400 HOUR INSPECTION/CHECKS

<b>MODEL: 31/31A</b>	<b>INSPECTION DUE TIME/DATE</b>
<b>SERIAL NO.</b>	<b>INSPECTION START TIME/DATE</b>
<b>REGISTRATION NO.</b>	<b>INSPECTION FINISH TIME/DATE</b>

NOTE: Perform the following inspection/checks in accordance with the interval specified in 5-10-00, Inspections.

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IRN	INSPECTION	MECH	INSP	DATE
	<b>CENTER SECTION</b>			
H5321030	With wing/fuselage fairings removed, use flashlight and mirror to visually inspect the honeycomb support angle segments at the outboard ends of the divan seat floor and forward baggage floor for fatigue cracks, corrosion, fastener security, and general condition.			
H5321039	Visually inspect lower longeron in region of wing for fatigue cracks, permanent deformation, and general condition. (Refer to 5-10-00.)			
H5710002	Deleted. Inspection renumbered as P5710141.			
P5710141	Wing-to-fuselage attach points for security (that portion visible through wheel wells).			
	<b>LANDING GEAR</b>			
H3211020	Inspect interior and exterior of main landing gear axle for wear and corrosion.			
H3221000	Nose gear and actuator for installation security, fatigue cracks, corrosion, and general condition.			
H3221010	Inspect interior and exterior of nose landing gear axle for wear and corrosion.			
H3231014	Inspect main gear and actuator for installation security, fastener condition, and permanent deformation.			

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IRN	INSPECTION	MECH	INSP	DATE
H3243030	Perform functional test of hydraulic brake fuses. (Refer to 32-43-03.)			
	<b>NOSE</b>			
H5311000	Nose gear support installation for security, fastener condition, panel fatigue cracks, permanent deformation at trunnion fittings, actuator attachment support structure areas, and general condition.			
	<b>WING</b>			
H5710030	Deleted. Inspection renumbered as P5710144.			
P5710144	Wheel well and center section of wing for general condition of skin, spars, attach fittings and supporting structure, landing gear rib, and trunnion fittings. Check for deformation, fatigue cracks, protective finish condition, and general security.			

EFFECTIVITY: ALL

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## PHASE D6 - 2400 HOUR INSPECTION/CHECKS

<b>MODEL: 31/31A</b>	<b>INSPECTION DUE TIME/DATE</b>
<b>SERIAL NO.</b>	<b>INSPECTION START TIME/DATE</b>
<b>REGISTRATION NO.</b>	<b>INSPECTION FINISH TIME/DATE</b>

NOTE: Perform the following inspection/checks in accordance with the interval specified in 5-10-00, Inspections.

Each inspection item has an Inspection Reference Number (IRN) assigned for record keeping purposes only.

Make sure that Section 5-10-00 has been reviewed and all requirements have been accomplished.

IRN	INSPECTION	MECH	INSP	DATE
	<b>EMPENNAGE</b>			
H2360020	Deleted. Inspection renumbered as P2360022.			
P2360022	Perform functional test of static dischargers. (Refer to 23-60-00.)			
T2700059	Check for full travel and freedom of movement of all flight controls and for proper engagement of stops.			
J2730011	Elevator Down Spring Assembly - Remove from aircraft and perform detailed inspection. (Refer to 27-30-01.)			
H5510020	Deleted. Inspection renumbered as P5510090.			
P5510090	Inspect horizontal stabilizer exterior skin for cracks originating from rivet locations at BL 4.5 splice joint and condition of fasteners, stiffeners, ribs, and spars in the center section region.			
H5520000	Elevator: With push-pull tubes disconnected from elevator bellcranks, move each elevator surface through the entire deflection range. Check for smoothness of operation, excessive friction, rough bearings, rust or corrosion, turning on bolt rather than bearing, and general condition.  NOTE: If discrepant condition is found, remove control surface for more definitive evaluation.			

EFFECTIVITY: ALL

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IRN	INSPECTION	MECH	INSP	DATE
H5540011	<p>Rudder:</p> <p>With cables disconnected at aft bellcrank location, move rudder through the entire deflection range. Check for smoothness of operation, excessive friction, rough bearings, turning on bolt rather than bearing, rust or corrosion, and general condition.</p> <p>NOTE: If discrepant condition is found, remove control surface for more definitive evaluation.</p>			
	<b>FUSELAGE</b>			
H5210020	Upper and lower door hinge installations for cracks, loose or missing fasteners, and general condition. Observe forward and aft edges of hinge installation while racking the doors with alternating loads. If hinge installation condition requires a more thorough inspection, use x-rays to obtain definitive inspection result.			
H5210050	Perform upper cabin door handle and rod control assembly free play check. (Refer to 52-12-02.)			
H5210085	<p>Check lower cabin door mechanism. Open upper and lower cabin doors. Move lower door handle toward the open and closed positions while restraining the door pin movement. Check for security and free play in mechanism.</p> <p>NOTE: Excessive free play may be due to mechanism failure, excessive wear, or deformation.</p>			

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IRN	INSPECTION	MECH	INSP	DATE
H5610021	<p>Windshield (Installed in Fuselage)</p> <p>a. Clean interior and exterior surface of windshield in accordance with Maintenance Manual instructions. (Refer to 12-24-00.)</p> <p>b. Conduct a general visual inspection of the accessible areas of the windshield for delamination, chipping, crazing, cracks, gouges, heat damage in the external defog area, and general condition.</p> <p>c. Using prism techniques, inspect fastener area of the windshield installation. Inspect for cracks normal to windshield surface, particularly adjacent to fastener locations. Also inspect for cracks or fracture planes parallel to windshield surface that may emanate from trimmed edge or fastener hole locations. (Refer to NDI Manual [NDI-2], Part 4, 56-10-01.)</p> <p>NOTE: A copy of the Larascope Inspection Report shall be forwarded to Learjet Field Service.</p>			
T5620009	<p>Cabin Windows (including aft emergency exit door window). Using prism techniques, inspect windows for cracks, chips, delamination, or other damage. This inspection is also capable of visually assessing the condition of the attaching fasteners. Brown discoloration in the area of the fasteners may indicate corroded fasteners. Remove and inspect such fasteners for rust, corrosion, and general condition. (Refer to NDI Manual [NDI-2], Part 4, 56-30-01.)</p>			

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## 3000 LANDING INSPECTIONS

<b>MODEL: 31/31A</b>	<b>INSPECTION DUE TIME/DATE</b>
<b>SERIAL NO.</b>	<b>INSPECTION START TIME/DATE</b>
<b>REGISTRATION NO.</b>	<b>INSPECTION FINISH TIME/DATE</b>

NOTE: If the number of landings is undetermined, it is recommended a flight hour/landing ratio of 1:1 be used.

Perform the following inspection/checks in accordance with the interval specified in 5-10-00, Inspections.

Each inspection item has an Inspection Reference Number (IRN) assigned for record keeping purposes only.

Make sure that Section 5-10-00 has been reviewed and all requirements have been accomplished.

IRN	INSPECTION	MECH	INSP	DATE
	CENTER SECTION			
B5321025	<p>Floor Beams Forward of Frame 22. (See Figure 1.)</p> <p>With the inboard gear doors open, remove foam (if installed) from the accessible areas of the baggage floor transition and lateral floor beams lower structure to expose the lower beam caps. Visually inspect entire length of lower caps for evidence of fatigue cracks, corrosion, buckling, condition of primer, or other damage. (Refer to 5-10-00.)</p> <p>NOTE: Use fluorescent penetrant as required to confirm any suspect condition.</p> <p>Seal exposed foam with Pratt &amp; Lambert 998-501 protective coating. Removed foam should not be replaced.</p>			
	FUSELAGE			
E5314053	<p>Visually inspect accessible areas of upper forward corner and upper aft corner of entry door framing members at intersection of frame/skin splice along stringer 6L. Inspect for external evidence of fatigue cracks, corrosion, fastener security, and general condition.</p> <p>NOTE: Confirm any suspect condition with x-ray inspections. Film placement at positions CD8 and CD10.</p>			

EFFECTIVITY: ALL

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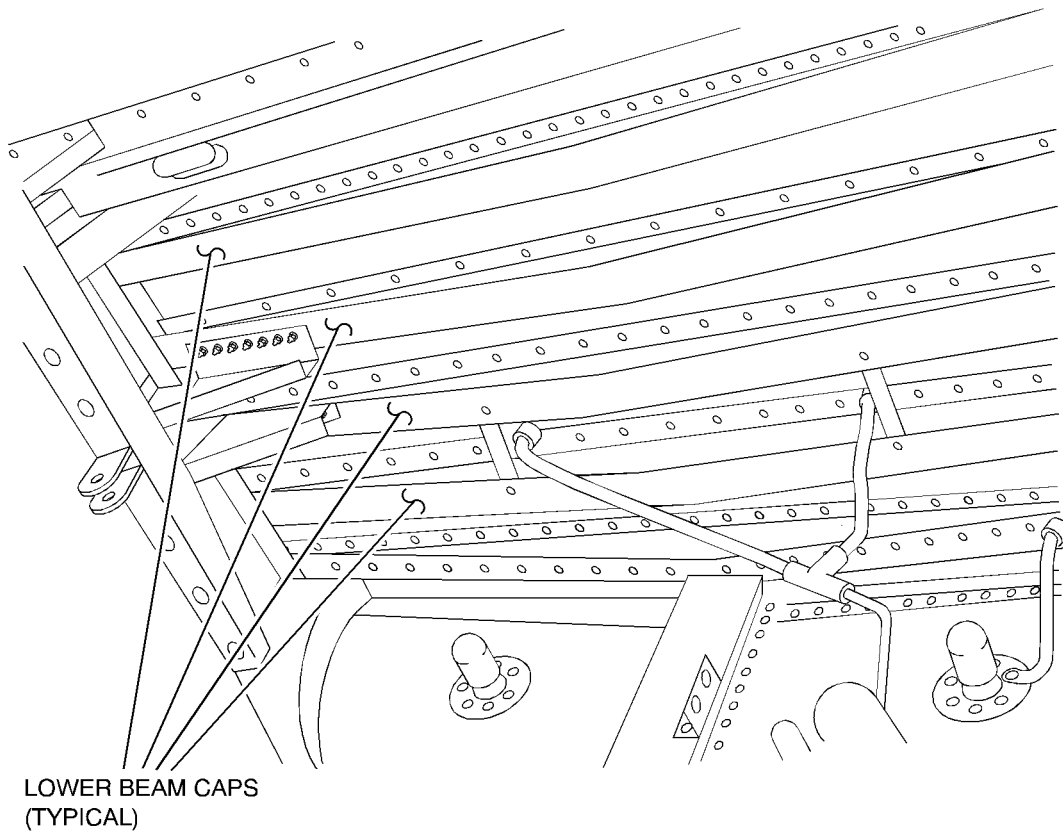
IRN	INSPECTION	MECH	INSP	DATE
E5323038	Deleted. Inspection renumbered as P5323160.			
P5323156	Visually inspect external crown skin circumferential splices at frames 15 and 19 for evidence of fatigue cracks, working rivets, corrosion, and general condition. (Effective on Aircraft 31-002 and Subsequent equipped with extended range tanks.)  NOTE: Confirm any suspect condition with supporting X-rays.			
P5323160	Externally visually inspect crown skin circumferential splice at frames 15, 19, and 22 for evidence of fatigue cracks, working rivets, corrosion, and general condition. <u>(Effective on Aircraft 31-002 and Subsequent not equipped with extended range tanks.)</u>  NOTE: Confirm any suspect condition with supporting X-rays.			
	TAILCONE			
B2813011	Defuel fuselage fuel cell and perform fuel cell static electrical bonding resistance check. Check fuselage fuel cell for cleanliness.			
	WING			
C5710064	Eddy current area around fasteners common to trunnion fittings.  NOTE: Perform this inspection at 6000 landings initially and every 3000 landings thereafter. (Refer to NDI Manual, Part 3, 57-12-01, areas E and D.)			

EFFECTIVITY: NOTED

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Inspection of Lateral Floor Beam Lower Cap  
Figure 1

M35-051025-001-01

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**MAJOR LANDING GEAR INSPECTIONS**

**1. Pre-inspection Checklist**

NOTE: This checklist is intended to be used as a guide for preparing the aircraft for a Major Landing Gear Inspection. It is not an absolute checklist, but should be of help when preparing the aircraft for a Nondestructive Inspection (NDI).

A. Landing Gear

- (1) Main landing gear and actuators removed from wing.
- (2) Nose landing gear and actuators removed from fuselage.
- (3) Disassembly of main and nose landing gear.
- (4) Defuel aircraft.

**2. Major Landing Gear Inspections**

<b>MODEL: 31/31A</b>	<b>INSPECTION DUE TIME/DATE</b>
<b>SERIAL NO.</b>	<b>INSPECTION START TIME/DATE</b>
<b>REGISTRATION NO.</b>	<b>INSPECTION FINISH TIME/DATE</b>
<p>NOTE: Perform the following inspection/checks in accordance with the interval specified in 5-10-00, Inspections.</p> <p>Each inspection item has an Inspection Reference Number (IRN) assigned for record keeping purposes only.</p> <p>Make sure that Section 5-10-00 has been reviewed and all requirements have been accomplished.</p>	

IRN	INSPECTION	MECH	INSP	DATE
	<b>LANDING GEAR</b>			
C3211040	Clean and eddy current inspect upper cylinder. (See Figure 1.) (Refer to NDI Manual, Part 3, 32-40-02.)			
C3211050	Deflate struts and stroke from fully extended to fully compressed positions. Note binding tendencies during stroking, particularly near the fully compressed position.			

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IRN	INSPECTION	MECH	INSP	DATE
D3211059	<p>Completely disassemble main landing gear struts and actuators. Remove axles and pistons from hubs. Conduct visual inspection of all components. (Refer to 5-10-00.) Determine extent of wear by making the required dimensional checks. Conduct fluorescent penetrant or magnetic particle inspection of all components. (Refer to NDI Manual, Parts 5 and 6, Chapter 32.)</p> <p>NOTE: Pay particular attention to the main gear upper trunnion and lower snap ring groove areas of the cylinder forging for cracks.</p>			
	<b>NOSE</b>			
D3211060	<p>Completely disassemble nose landing gear strut and actuator. Remove axle and piston from hub. Conduct visual inspection of all components. (Refer to 5-10-00.) Determine extent of wear by making the required dimensional checks.</p> <p>Conduct fluorescent penetrant or magnetic particle inspection of all components. (Refer to NDI Manual, Parts 5 and 6, Chapter 32.)</p>			
D3211061	<p>Visually inspect nose gear trunnion axle and installation area of trunnion for cracks, corrosion, and damage. (Refer to 5-10-00.) If corrosion is found, remove axle from cylinder and perform fluorescent penetrant inspection of lug area and magnetic particle inspection of axle. If corrosion is not found, conduct fluorescent penetrant inspection of axle portion that is exposed from cylinder. (Refer to NDI Manual, Parts 5 and 6, Chapter 32.)</p>			
C5311001	Deleted. Inspection renumbered as P5311006			
P5311006	<p>Remove nose gear trunnion fittings and visually inspect nose gear trunnion fitting area in forward fuselage for cracks, corrosion, and permanent deformation. (Refer to 5-10-00.) Eddy current inspect nose gear trunnion fitting attach holes and trunnion axle boss. (Refer to NDI Manual, Part 3, 53-61-02.)</p>			

EFFECTIVITY: ALL

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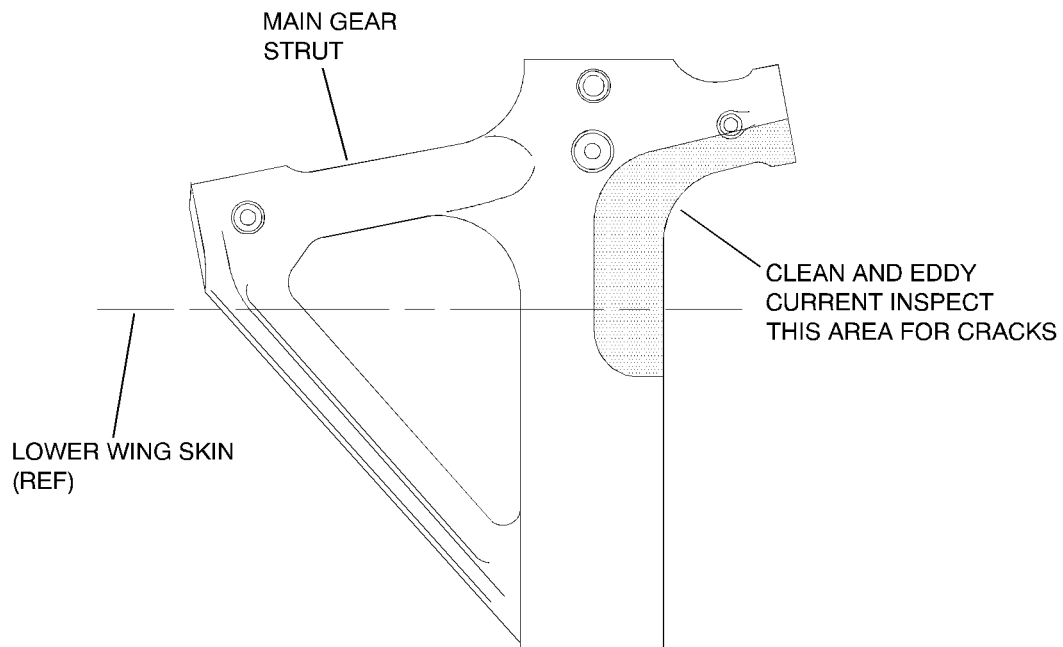
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IRN	INSPECTION	MECH	INSP	DATE
	<b>WING</b>			
C3231030	Inspect inboard attachment of main gear actuator for security, looseness, overload indications, and fatigue cracks. The pillar attachments to spars 7 and 8 are to be specifically inspected for discrepant conditions. Pillar removal is required to facilitate definitive inspection. Magnetic particle inspect pillar. (Refer to NDI Manual, Part 6, 32-24-01.)			
G5720021	Visually inspect internal and external areas of wing structure adjacent to landing gear rib WS 53.04 (between spars 4 and 8). (Refer to 5-10-00.) a. Inspect trunnion fittings for loose or missing fasteners, fatigue cracks, corrosion, elongation of trunnion pin holes, and general security. b. Check main landing gear trunnion bushing I.D. for dimensional conformity for evidence of a hard landing. If evidence of a hard landing exists, conduct Hard Landing Inspection. c. Eddy current inspect areas of trunnion fittings at spar 5 and spar 7. (Refer to NDI Manual, Part 3, 57-10-04 and 57-10-05.)			

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M35-051026-001-01

Inspection of Main Landing Gear Upper Cylinder  
Figure 1

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# LEARJET 31/31A MAINTENANCE MANUAL

## 12 YEAR AIRFRAME INSPECTIONS

### 1. Pre-Inspection Checklist

NOTE: This checklist is intended to be used as a guide for preparing the aircraft for a 12 Year Airframe Inspection. It is not an absolute checklist, but should be of help when preparing the aircraft for a non-destructive inspection (NDI).

#### A. General

- (1) All upholstery removed.
- (2) All sound deadening insulation (except foam, if installed) removed.
- (3) On Aircraft with bag insulation, all bag insulation must be removed.
- (4) Fuselage clear of loose items.
- (5) All floor panels removed.
- (6) Remove leading edge assemblies from wing and cuff fairings from leading edge assemblies.
- (7) Remove wing/fuselage fairings (upper and lower).
- (8) Remove lower surface access doors from wing.
- (9) Remove moveable surfaces from wing (flaps, ailerons, and spoilers).
- (10) Remove elevators from horizontal stabilizer.
- (11) Remove rudder from vertical stabilizer.
- (12) Remove stabilizer actuator.
- (13) Defuel aircraft.

#### B. Wing

- (1) Aircraft jacked to proper height (minimum of 36 inches [91.5 cm] from floor to lower flange of keel-beam at frame 15) and leveled.
- (2) Upper surface of wing blown clean.
- (3) Oblong or kidney shaped access panel just aft of wing spar 1 removed and accessible to NDI personnel.
- (4) Flight control cables between keelbeam loosened and pulled together in center.
- (5) Lower surface clean for eddy current inspection.
- (6) Fuel pumps and major plumbing removed from lower wing.

#### C. Windshield

- (1) Control column assembly removed.

NOTE: An alternate method to control column removal is to remove control wheels from column, loosen control column supports for maximum column travel. Two views of WL2 and WR2 will be required for coverage.

- (2) Pedestal including throttle quadrant must be removed.
- (3) Glareshield removed.
- (4) Compass removed from fuselage.
- (5) Main pilot and copilot instrument panels removed.
- (6) Glareshield frame must allow insertion of film between it and inner skin (WL1 and WR1).
- (7) Inside and outside surfaces of windshield clean for larascope.

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### D. Stringer 14

- (1) Cleared of wiring, tubing, L and R Circuit Breaker Panels, etc. (except foam, if installed) from frame 5 to frame 15.

### E. Stringer 6

- (1) Cleared of wiring, etc. (except foam, if installed) from frame 9 to frame 22 (or frame 18), as applicable.

### F. Cabin Door

- (1) All upholstery trim removed.
- (2) A 4 inch [10.2 cm] width of foam removed from stringer 14 (forward of door frame), down, across bottom and up to stringer 14 (aft of door frame), and area vacuumed out.
- (3) Both upper and lower doors to be operable for opening and closing.

### G. Cabin Windows

- (1) All upholstery trim removed.
- (2) All hanging wires tucked away.

### H. Emergency Exit

- (1) Installed in aircraft.
- (2) All upholstery trim removed from around window.

### I. Frames 9, 13, 15, 19 and 22

- (1) Center upholstery panel removed.

### J. Frame 22

- (1) Air conditioner and as many other items as possible removed.
- (2) On aircraft with electrical junction boxed immediately forward of frame 22, the covers shall be removed and the wiring must be pulled out straight to reduce obscuring areas of interest.

### K. Aft pressure bulkhead

- (1) Area cleared of debris for access.
- (2) Fuel removed from bladder.
- (3) Carpet, black boxes, etc., removed for clear shot.

**CAUTION: CARE SHALL BE TAKEN WHEN ENTERING AND EXITING TO AVOID DAMAGE TO ANY ITEM, ESPECIALLY CABLES - DO NOT CRIMP.**

- (4) Fuel cell must be prepared for entry from the tailcone.

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## 2. 12 Year Airframe Inspection

<b>MODEL: 31/31A</b>	<b>INSPECTION DUE TIME/DATE</b>
<b>SERIAL NO.</b>	<b>INSPECTION START TIME/DATE</b>
<b>REGISTRATION NO.</b>	<b>INSPECTION FINISH TIME/DATE</b>

NOTE: Perform the following inspection/checks in accordance with the interval specified in 5-10-00, Inspections.

Each inspection item has an Inspection Reference Number (IRN) assigned for record keeping purposes only.

Make sure that Section 5-10-00 has been reviewed and all requirements have been accomplished.

IRN	INSPECTION	MECH	INSP	DATE
	<b>CABIN</b>			
G5314010	<p>Below Floorboard Inspection:</p> <p>Remove foam or bagged insulation from each centerline bay (between keelbeams) that serves as a fluid sump. These bays occur forward of frame 15, at each lower centerline antenna installation and/or at each drain hole location. Inspect for corrosion, general condition, and fatigue cracks.</p> <p>NOTE: After inspection, reprime exposed structure and replace bagged insulation. Do not replace foam. Seal coat remaining exposed foam as required.</p>			
C5321073	<p>Conduct X-ray inspection of the aft pressure bulkhead (frame 22) for evidence of fatigue cracks or corrosion, paying particular attention to the aft wall and aft (tension) caps of lateral stiffener beams. (Refer to NDI Manual [NDI-1], Part 2, 53-50-01.) <u>(Effective on Aircraft 31-002 and subsequent not equipped with Extended Range Tanks.)</u></p>			
C5321078	<p><u>On aircraft equipped with extended range fuel tanks</u>, gain access to and remove aft pressure bulkhead (frame 20). Visually inspect bulkhead for evidence of fatigue cracks, corrosion, or other damage. Visually inspect supporting structure along floor, frame periphery, and centerline cell divider for fatigue cracks, fastener security, corrosion, or other degradation. (Refer to 5-10-00.)</p>			

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IRN	INSPECTION	MECH	INSP	DATE
C5321080	<p>At aft pressure bulkhead, remove internal foam, (if installed), for 12 to 15 inches [30.5 to 38.1 cm] above baggage floor on the left and right side of centerline. Visually inspect for cracks, local deformation, and fastener condition. (Refer to 5-10-00.) Install thermal insulation in areas that may be an air passage to "cold" structure. (Refer to AAK 90-1, "Replacement of Thermal Insulation in Cabin Compartment".)</p> <p style="text-align: center;"><b>CAUTION: DO NOT USE METAL TOOLS TO REMOVE FOAM FROM AFT PRESSURE BULKHEAD. DAMAGE TO BULKHEAD COULD RESULT. USE TOOLS MADE FROM PHENOLIC OR PLASTIC BLOCKS TO REMOVE FOAM.</b></p>			
P5321091	Remove divan and baggage compartment upholstery and check structure for corrosion. Pay particular attention to area around threaded inserts in honeycomb structure. Remove all sound deadening material and tap-test entire floor panel to check for unbonding of upper surface plate and honeycomb core structure.			
	<b>CENTER SECTION</b>			
C2700022	Inspect the bearings of all control system bellcranks and sectors for wear, roughness, security, general condition, and ease of operation.			
C5321043	<p>Baggage Floor/Over Wing Area:</p> <p>a. Inspect accessible areas of aft side of frame 15 (lower portion) for corrosion, fatigue cracks, security, and general condition.</p> <p>b. Inspect lateral floor beam lower caps for fatigue cracks at fastener holes.</p> <p>c. After completion of inspection, clean and reprime as required.</p> <p>NOTE: NOTE: If inspection of accessible areas indicates presence of corrosion, wing removal from fuselage may be required to permit more thorough inspection.</p> <p>d. Fluorescent penetrant lower caps, as required, for conclusive results. (See Figure 1.) (Refer to NDI Manual [NDI-1], Part 5, 53-10-01.)</p>			

EFFECTIVITY: ALL

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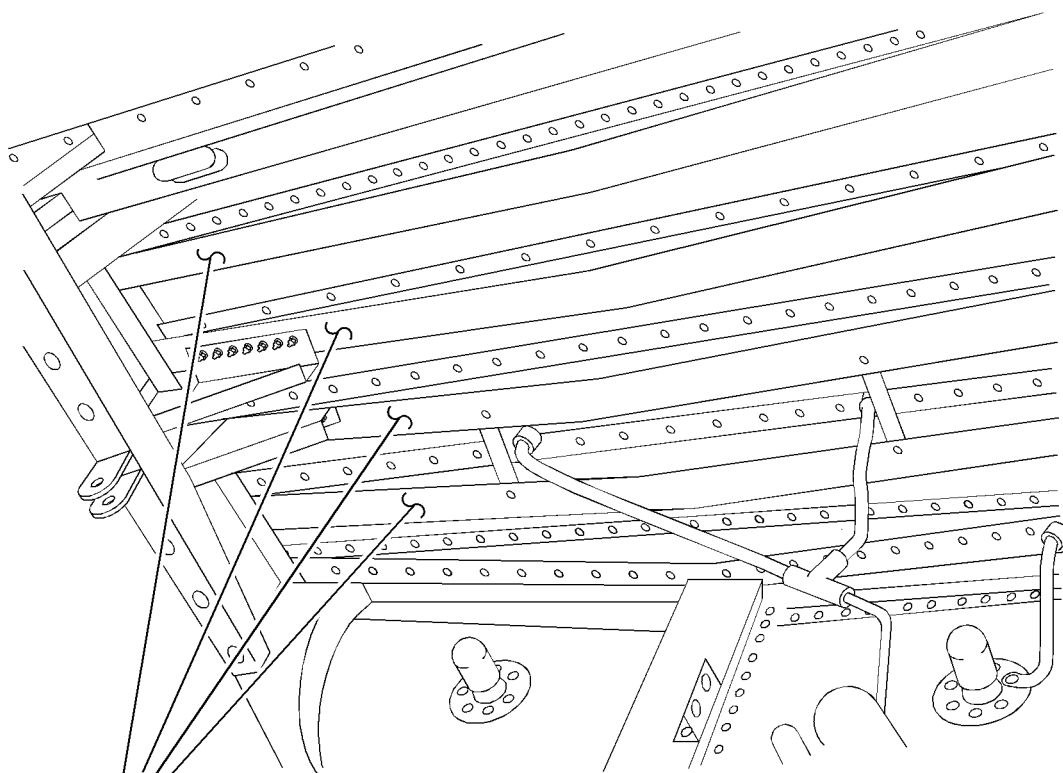
IRN	INSPECTION	MECH	INSP	DATE
F5350010	Visually inspect keelbeam, forward and aft attach fittings on keelbeam and on aircraft, for cracks and general condition. (Refer to 5-10-00.)			
D5350021	Inspect under wing keelbeam and attachments for security, corrosion, fastener condition, fatigue cracks, and permanent deformation. Also inspect attaching fittings, forward of frame 15 and aft of frame 22, for similar effects.			

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LOWER BEAM CAPS  
(TYPICAL)

Lateral Floor Beam Lower Cap Inspection  
Figure 1

M35-051025-001-01

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IRN	INSPECTION	MECH	INSP	DATE
	<b>COCKPIT</b>			
C2700011	Inspect the bearings of all control system bellcranks and sectors for wear, roughness, security, general condition, and ease of operation.			
K5321081	Visually inspect forward pressure bulkhead for cracks, local deformation, and fastener condition. Inspect the top cap at windshield intersection for security, fatigue cracks, and general condition.			
	<b>ELECTRICAL</b>			
C3040002	Perform functional test of windshield electric defog system. (Refer to 30-44-00.) <i>(Effective on Aircraft 31-030 and subsequent and prior aircraft equipped with electrically heated windshields.)</i>			
	<b>EMPENNAGE</b>			
C2700019	Inspect the bearings of all control system bellcranks and sectors for wear, roughness, security, general condition, and ease of operation.			
C2700023	With all moveable flight control surfaces removed (rudder and elevators), inspect all bearings, bushings, and rollers for security, roughness, seizure, rust or corrosion, and wear. Inspect assemblies for corrosion, fatigue cracks, wear, evidence of interference, and general condition. Inspect parent structure elements as well as those on the moveable surfaces.			
F2740020	Remove stabilizer actuator. Inspect upper and lower attachment structure for fatigue cracks, distortion, wear, corrosion, and general security.			

EFFECTIVITY: NOTED

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IRN	INSPECTION	MECH	INSP	DATE
C5510050	<p>Horizontal Stabilizer (Attached to Vertical Stabilizer) (Refer to 5-10-00.)</p> <p>a. With alternating up and down loads (30 to 50 lb. [133 to 222 N]) being applied to the stabilizer tip, observe horizontal stabilizer actuator upper and lower attach fittings, hinge pin and fittings, support structure attaching bolts, and bolt retainers for wear, looseness, free play, cracks, security, and general condition. Pay particular attention to the relative movement that may be present between the hinge pin and the horizontal stabilizer pivot fitting bearing/bushing installation.</p> <p>b. Conduct a general visual inspection of the horizontal stabilizer assembly including upper and lower skin splices at BL 4.5 rib, accessible portions of front and rear spar installations, elevator hinge support locations, upper actuator attachment structure, and gusset installation between L and R BL 4.5 rib installations just forward of pivot fitting cut-out. (Refer 5-10-00.)</p> <p>c. With lower surface access plates removed and using a flashlight and mirror, conduct an internal inspection of the BL 4.5 rib installations, paying particular attention to the rib caps and webs, adjacent spar caps and webs, and joggled stringer attachments. Inspect for general appearance, evidence of overload (stringer buckling internally and/or rivet tipping at BL 4.5 skin splice station externally), fatigue cracks, loose or working fasteners, and corrosion (particularly exposed areas of front and rear spar caps).</p>			

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IRN	INSPECTION	MECH	INSP	DATE
C5530002	<p>Vertical Stabilizer (Attached to Fuselage)</p> <p>a. Conduct a visual inspection of the vertical stabilizer above the fuselage for evidence of permanent deformation, corrosion, loose or working fasteners, fatigue cracks, and general condition. Remove all access panels, and using flashlight and mirror, inspect all internal ribs and spars for corrosion and fatigue cracks. (Refer to 5-10-00.)</p> <p>b. Conduct a visual inspection of upper stabilizer structure, paying particular attention to pivot fitting, pivot fitting attachment structure, and lower stabilizer actuator attachment area. Inspect for fastener security, general condition, wear, fatigue cracks, and corrosion. Use 10X magnification and proper lighting to aid visual inspection. (Refer to 5-10-00.)</p> <p>c. Eddy current inspect horizontal stabilizer pivot fitting, as shown in the NDI Manual (NDI -1).</p> <p>NOTE: Eddy current inspection applies to <u>aircraft equipped with P/N 6031025 pivot fitting, aircraft modified per Repair Drawing #12335-003 and aircraft modified per SSK 9101.</u></p> <p>Inspection to be in accordance with Learjet Nondestructive Inspection Manual, Part 3, 55-30-01 (Areas A and G).</p>			
	<b>FUSELAGE</b>			
D2814025	Perform functional test of main fuel vent system fuselage tank pressure relief valves. (Refer to 28-20-07.) <u>(Effective on Aircraft equipped with extended range fuel tank.)</u>			
D2814040	Perform functional test of main fuel vent system fuselage tank vacuum relief valves. (Refer to 28-13-05.) <u>(Effective on Aircraft equipped with extended range fuel tank.)</u>			
L5210032	Lower Passenger Door - Perform eddy current inspection of door structure around latch pin guides. (Refer to NDI Manual [NDI-1], Part 3, 52-10-02.)			
C5210051	Upper Door Handle Mechanism: Gain access to upper door handle mechanism. Disassemble mechanism and inspect bolt holes common to handle shaft and rod control assembly.			
K5210070	Eddy current inspect around lower cabin door latch arm fasteners and periphery of arm pin eyes for cracks. (Refer to NDI Manual [NDI-1], Part 3, 52-10-01.)			

EFFECTIVITY: NOTED

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IRN	INSPECTION	MECH	INSP	DATE
E5314071	<p>Upper and Lower Cabin Door Hinges and Fuselage Framing Structure:</p> <p>a. Visually inspect accessible structure for security, general condition, excessive wear or looseness, and fatigue cracks. Remove foam from a 4 inch [10.2 cm] band around the lower portion of the doorway from stringer 14 on the aft side of the door to stringer 14 on the forward side of the door. (Refer to 5-10-00.)</p> <p>b. Conduct X-ray inspection of upper and lower hinges, attaching structure, and framing members. Removal of secondary inner skin not required unless X-ray results indicate possible cracks or corrosion or if internal/external visual inspection indicates excessive wear or looseness. (Refer to NDI Manual [NDI-1], Part 2, 52-10-01.)</p> <p>NOTE: Secondary inner skin must be installed to maintain structural integrity.</p> <p>c. After inspection is complete, reprime and restore. Foam should not be replaced.</p>			
C5314075	<p>Perform Eddy current inspection of the door cable support fitting mount structure. (Refer to NDI Manual [NDI-1], Part 3, 53-10-02.)</p>			
C5321055	<p>Wing-to-Fuselage Attachment Fittings:</p> <p>a. Clean and visually inspect with the aid of 10X magnification, flashlight, and mirror, all eight wing-to-fuselage attachment fittings. (Refer to 5-10-00.)</p> <p>b. Inspect fittings and support structure for cracks, corrosion, marks, scratches, fastener working, and general security.</p>			
C5323063	<p>Circumferential Skin Splices:</p> <p>a. Conduct a general visual external inspection of all circumferential skin splices. Inspect for corrosion, fatigue cracks, loose or working fasteners, and general security.</p> <p>b. Conduct specific X-ray inspections of the circumferential skin splices in the pressure cabin across the top of the fuselage from Stringer 6L to 6R at frames 9, 13, and 15 <u>on aircraft with extended range tanks</u>; or frames 9, 13, 15, and 22 <u>on aircraft without extended range fuel tanks</u>. (Refer to NDI Manual [NDI-1], Part 2, 53-10-01, 53-30-01, and 53-31-01.)</p>			

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IRN	INSPECTION	MECH	INSP	DATE
C5323070	<p>Longitudinal Skin Splices:</p> <p>a. Conduct a general visual external inspection of all longitudinal skin splices. Inspect for corrosion, fatigue cracks, loose or working fasteners, and general security. (Refer to 5-10-00.)</p> <p>b. Conduct specific X-ray inspections of the longitudinal splices in the pressure cabin along the main "T" stringers (No. 6 and 14). (Refer to NDI Manual [NDI-1], Part 2, 53-10-01 and 53-11-01.)</p>			
N5323146	<p>Skin Cutouts/Penetrations (Pressure Cabin) - Perform detailed visual inspection. Inspect skin and doublers at skin penetrations and cutouts for antennas and electrical components.</p> <p>NOTE: Removal of antennas and electrical components is necessary for completion of this inspection. (Refer to 5-10-00.)</p>			
P5610012	<p>Windshield (Installed in Fuselage):</p> <p>a. Clean interior and exterior surface of windshield in accordance with Maintenance Manual instructions. (Refer to 12-24-00.)</p> <p>b. Conduct a general visual inspection of the accessible areas of the windshield for delamination, chipping, crazing, cracks, gouges, heat damage in the external defog area, and general condition. (Refer to 5-10-00.)</p> <p>c. Conduct an X-ray inspection of the windshield supporting structure. (Refer to NDI Manual [NDI-1], Part 2, 56-10-01.)</p> <p>d. Eddy current inspect outer retainer. (Refer to NDI Manual [NDI-1], Part 3, 56-10-01.)</p>			

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IRN	INSPECTION	MECH	INSP	DATE
D5610013	<p>Windshield (Removed from Fuselage)</p> <p>If prism inspection equipment is not available, remove windshields from aircraft and visually inspect as follows:</p> <p>a. Remove both the R and L windshield assemblies from the aircraft.</p> <p>b. Inspect stretched acrylic for delamination, chipping, crazing, cracks (particularly at fastener locations), heat damage, and general condition. Particular attention should be given to the inner surface of the windshield opposite the retainer. Clean sealant and dirt from the trimmed edge of the windshield and, using good lighting, inspect for fracture lines/planes along the trimmed surface. View windshield from inner edge (opposite retainer) and inspect for delamination extending away from the trimmed edge and toward the fastener row. Conduct a visual inspection of the accessible structure for security, general condition, and fatigue cracks. (Refer to 5-10-00.)</p> <p>c. Conduct a specific X-ray inspection of windshield support structure. Foam removal not required (if installed) unless X-ray indicates possible cracks. (Refer to NDI Manual [NDI-1], Part 2, 56-10-01.)</p> <p>d. Eddy current inspect outer retainer. (Refer to NDI Manual [NDI-1], Part 3, 56-10-01.)</p>			
M5620003	<p>Cabin Windows and Framing Members (including aft emergency exit door window and framing member.)</p> <p>a. Visually inspect accessible structure for security, general condition, and fatigue cracks. (Refer to 5-10-00.)</p> <p>b. Conduct specific X-ray inspection of windows and support structure. Foam removal not required unless X-ray indicates possible cracks. (Refer to NDI Manual [NDI-1], Part 2, 52-50-01.)</p> <p>c. Conduct X-ray inspection of emergency exit and support structure. (Refer to NDI Manual [NDI-1], Part 2, 56-40-01.)</p> <p>NOTE: A copy of the Larascope Inspection Report shall be forwarded to Learjet Field Service.</p>			
	<b>LANDING GEAR</b>			
C3233010	Perform functional test of landing gear emergency blowdown extension system. (Refer to 32-33-00.)			

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IRN	INSPECTION	MECH	INSP	DATE
	<b>NOSE</b>			
N5311002	Deleted. Inspection renumbered as P5311007.			
P5311007	Eddy current inspect upper attachment area of nose gear actuator for cracks, corrosion, permanent deformation, and attachment fitting security. (Refer to NDI Manual [NDI-2], Part 3, 53-60-01).			
L5321085	<p>Forward Pressure Bulkhead: Visually inspect for cracks, local deformation, and fastener condition. Inspect the top cap at windshield intersection for security, fatigue cracks, and general condition. Gain access to the forward side of the forward pressure bulkhead and inspect pressure bulkhead vertical members for fatigue cracks and the pressure bulkhead for fastener condition, cracks, and deformation. (Refer to 5-10-00.)</p> <p>NOTE: Suspect areas are to be subjected to additional inspection methods, including sealant removal, to confirm findings and determine extent of damage.</p>			
	<b>WING</b>			
	<b>CAUTION: THE EMERGENCY GEAR EXTENSION AND EMERGENCY BRAKE SYSTEM SHALL BE FUNCTIONALLY TESTED FOLLOWING COMPLETION OF THE 12 YEAR AIRFRAME INSPECTION. (REFER TO CHAPTER 32.)</b>			
C2700013	With all moveable flight control surfaces removed (flaps, ailerons, and spoilers), inspect all bearings, bushings, and rollers for security, roughness, seizure, rust or corrosion, and wear. Inspect assemblies for corrosion, fatigue cracks, wear, evidence of interference, and general condition. Inspect parent structure elements as well as those on the moveable surfaces.			
C2700020	Inspect the bearings of all control system bellcranks and sectors for wear, roughness, security, general condition, and ease of operation.			
D2812030	With lower surface access plates removed, inspect interior and exterior wing structure for evidence of fuel leakage, fatigue cracks, loose or missing fasteners, bacterial growth, filiform corrosion, and general condition. Inspect wing flapper valves for freedom of movement, security, positive seal, and general condition.			

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IRN	INSPECTION	MECH	INSP	DATE
C2820030	Inspect fuel supply line check valve orifices for condition and cleanliness. (Refer to 28-20-03.)			
C5710003	Deleted. Inspection renumbered as P5710142.			
P5710142	With wing-to-fuselage fairing removed, clean and visually inspect all eight wing-to-fuselage fittings (four per side). Using a 10X magnifying glass, adequate lighting, and mirror, inspect fittings and support structures for fatigue cracks, deformation, corrosion, marks, scratches, fastener working, and general security. (Refer to 5-10-00.)			
C5710040	Clean and conduct a general external and internal visual inspection of the wing center section, paying particular attention to the lower skin at the fuel pump locations and the splice details at BL 0.0, as accessible. Inspect for evidence of fatigue cracks, corrosion, deformation, and fastener/joint condition. (Refer to 5-10-00.)			
C5710055	Conduct an X-ray inspection of the wing upper structure in-board of the wing-to-fuselage fittings and forward of spar 5. Inspect for corrosion, fatigue cracks, loose or missing fasteners, and general condition. If corrosion is found, wing removal from fuselage may be required to permit a more extensive inspection. (Refer to NDI Manual [NDI-1], Part 2, 57-12-01.)			
E5710061	Conduct an Eddy current inspection for the following wing structural areas (refer to NDI Manual [NDI-1], Part 3, 57-12-01, 57-30-01, and 57-31-01): a. Surface of accessible areas of lower doubler from BL 0.0 to outboard end of doubler along spars 4, 5, and 7, and lower skin adjacent to the outboard 2 inches [5.1 cm] of doubler fingers b. Skin adjacent to fastener rows along lower surface for spars 4, 5, and 7 from outboard end of doubler to WS 60.0. c. Skin adjacent to lower surface access plate fasteners from BL 0.0 to WS 53.04 d. Lower wing skin splice at WS 244, winglet station 6.00 of the winglet front spar and rear spar outboard, and winglet station 6.00 skin splice plate outboard.			
C5710062	Remove the access cover at WS 73.0 between spars 4/5 and 6/7. Inspect all holes at this location in the spar and skin using an eddy current hole probe. (Refer to NDI Manual [NDI-1], Part 3, 57-12-01.)			

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IRN	INSPECTION	MECH	INSP	DATE
C5720020	Visually inspect internal and external area of wing wheel well structure, paying particular attention to main landing gear actuator upper attachment and landing gear rib structure at WS 53.04. (Refer to 5-10-00.)  NOTE: If evidence of a hard landing exists, conduct a Hard Landing Inspection. (Refer to 5-50-00.)			
C5720025	X-ray inspect the outboard lower wing skin from WS 31 to WS 61. (Refer to NDI Manual [NDI-1], Part 2, 57-30-01.)			
C5720040	Inspect the joint at WS 181 that splices the wing to the outer wing extension. Visually inspect for loose or missing fasteners, fatigue cracks, corrosion, and general security. (Refer to 5-10-00.)			
C5740001	With leading edge assemblies removed, inspect forward side of spar 1 for evidence of fatigue cracks, overhear (discolored primer), general corrosion, loose or missing fasteners, filiform corrosion, and general condition.			
C5740002	With leading edge lower cuff fairing assemblies removed, inspect lower wing skin covered by cuff fairing and inner surface of cuff for evidence of fatigue cracks, loose or missing fasteners, corrosion, and general condition.			

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## 12000 HOUR AIRFRAME INSPECTIONS

### 1. Pre-Inspection Checklist

NOTE: This checklist is intended to be used as a guide for preparing the aircraft for a 12000 Hour Airframe inspection. It is not an absolute checklist, but should be of help when preparing the aircraft for a non-destructive inspection (NDI).

#### A. Major Assembly Removals Required Are:

- (1) Under wing keel beam from fuselage.
- (2) Wing from fuselage.
- (3) Lower access panels from wing (BL 0.0 to WS 92.0).
- (4) Engine and engine mounts from fuselage.
- (5) Moveable surfaces from wings (flaps, ailerons, and spoilers).
- (6) Rudder from vertical stabilizer.
- (7) Elevators from horizontal stabilizer.
- (8) Stabilizer actuator.
- (9) Horizontal stabilizer from vertical stabilizer.

#### B. Wing (Removed from Fuselage)

- (1) Fuel pumps, major plumbing, electrical wiring, and conduits removed from lower wing.
- (2) Upper and lower outside surfaces clean.
- (3) Upper surface of lower skin clean (dry bays).
- (4) Oblong or kidney shaped access panel just aft of wing panel removed and accessible.
- (5) All cover plates removed inboard of WS 92 for Eddy current inspection.
- (6) Wing level and area around wing clear for free access.
- (7) Adequate access to spars 5 and 7 and applicable cover plates removed for Eddy current inspection.

#### C. Horizontal Stabilizer

- (1) Remove from aircraft, positioned horizontally at operable height (approximately 36 inches [0.9 m]), level and accessible.

#### D. Vertical Stabilizer

- (1) Accessibility of upper surfaces for Eddy current inspection.

#### E. Fuselage

- (1) Accessibility to fuselage-to-wing fittings.

#### F. Special Inspections

- (1) Visually inspect elevators along spar and trailing edge for signs of corrosion.
- (2) Visually inspect horizontal stabilizer along forward and aft spars and rib 4.5 for signs of corrosion.

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## 2. 12000 Hour Airframe Inspections

<b>MODEL: 31/31A</b>	<b>INSPECTION DUE TIME/DATE</b>
<b>SERIAL NO.</b>	<b>INSPECTION START TIME/DATE</b>
<b>REGISTRATION NO.</b>	<b>INSPECTION FINISH TIME/DATE</b>

NOTE: Perform the following inspection/checks in accordance with the interval specified in 5-10-00, Inspections.

Each inspection item has an Inspection Reference Number (IRN) assigned for record keeping purposes only.

Ensure that Section 5-10-00 has been reviewed and all requirements have been accomplished.

IRN	INSPECTION	MECH	INSP	DATE
	<b>CENTER SECTION</b>			
J5321041	Baggage Floor/Over Wing Area a. Inspect entire area for corrosion, fatigue cracks, security, and general condition. Inspect four (4) segmented honeycomb floor support angles at the outboard edges for corrosion, fatigue cracks, fastener security, and general condition. Inspect lower cap/web area of lateral floor beams for fatigue cracks at fastener locations. (See Figure 1.) b. Fluorescent penetrant lower cap area for fatigue crack detection. (Refer to NDI Manual, Part 5, 53-10-01.) c. Eddy current inspect area A of the baggage floor transition beam and areas B, C, D, and E of the lateral floor beams. (Refer to NDI Manual, Part 3, 53-30-02.) d. Eddy current inspect divan floor transition beam. (Refer to NDI Manual, Part 3, 53-40-01.) e. Tap test upper and lower surface of divan and baggage honeycomb floors.			

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IRN	INSPECTION	MECH	INSP	DATE
A5321060	<p>Wing/Fuselage Fittings:</p> <p>Clean and visually inspect all eight (8) wing/fuselage fittings (four [4] per side). Using 10X magnification and adequate lighting, visually inspect fittings and support structure for fatigue cracks, deformation, corrosion, marks, scratches, fastener working, and general security. (Refer to 5-10-00.)</p> <p>Conduct Eddy current inspection of lug areas at spars 2, 5, 7, and 8 for fatigue cracks. (Refer to NDI Manual, Part 3, 53-50-01.)</p>			
D5350050	<p>Underwing Keelbeam:</p> <p>Visually inspect removed assembly for corrosion, fatigue cracks, and general condition. Pay particular attention to end fittings common to beam assembly as well as those mating fittings forward of frame 15 and aft of frame 22. (Refer to 5-10-00.)</p>			
	<b>EMPENNAGE</b>			
O5510060	<p>Horizontal Stabilizer (Attached to Vertical Stabilizer):</p> <p>With alternating up and down loads (30 to 50 lb. [133 to 222 N]) being applied to the stabilizer tip, observe horizontal stabilizer actuator upper and lower attach fittings, hinge pin and fittings, support structure attaching bolts, and bolt retainers for wear, looseness, free play, cracks, security, and general condition. Pay particular attention to the relative movement that may be present between the hinge pin and the horizontal stabilizer pivot fitting bearing/bushing installation.</p>			

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IRN	INSPECTION	MECH	INSP	DATE
A5510061	<p>Horizontal Stabilizer (Detached from Vertical Stabilizer):</p> <p>a. Conduct a general visual inspection of the stabilizer assembly including upper and lower skin splices at BL 4.5 rib, accessible portions of front and rear spar installations, elevator hinge support locations, upper actuator attachment structure, and gusset installation between L and R BL 4.5 rib installations just forward of pivot fitting cutout. (Refer to 5-10-00.)</p> <p>b. With lower surface access plates removed and using a flashlight and mirror, conduct an internal inspection of the BL 4.5 rib installations, paying particular attention to the rib caps and webs, adjacent spar caps and webs, and joggled stringer attachments. Inspect for general appearance, evidence of overload (stringer buckling internally and/or rivet tipping at BL 4.5 skin splice station externally), fatigue cracks, loose or working fasteners, and corrosion (particularly exposed areas of front and rear spar caps).</p> <p>c. Inspect pivot fitting installation using proper lighting and 10X magnification. Inspect for security, wear, corrosion, and fatigue crack.</p> <p>d. Conduct x-ray inspection of front and rear spar caps from BL 0.0 to L and R BL 25, rib installations at BL 19.4 and BL 4.5, inner spar skin and center box structure. Inspect for fatigue cracks, corrosion, and general fastener condition. (Refer to NDI Manual, Part 2, 55-10-01.)</p> <p>e. Conduct Eddy current inspection of upper and lower skin along the splices at BL 4.5 upper and lower, left and right. Also inspect upper and lower caps of front and rear spars from LBL 25 to RBL 25 adjacent to fasteners. On the rear spar, inspect vertical leg of spar cap adjacent to web attachment fasteners from BL 0.0 to BL 25. Inspect upper actuator fitting attachment structure from front to rear along upper and lower cap members adjacent to fastener locations. Inspect local lug area. (Refer to NDI Manual, Part 3, 55-10-01.)</p>			
A5510062	<p>Clean and visually inspect the hinge pin for wear and corrosion (including the internal surface of the pin). Apply a coat of epoxy primer to the internal surface of the pin prior to reinstallation. (Refer to 5-10-00.)</p> <p>Magnetic particle inspect pin for cracks. (Refer to NDI Manual, Part 6, 55-30-01.)</p>			

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IRN	INSPECTION	MECH	INSP	DATE
A5520020	<p>Elevator (Removed from Horizontal Stabilizer) (Refer to 5-10-00.):</p> <p>a. Clean hinge locations and visually inspect local structure using proper lighting and 10X magnification. Inspect hinge support structure for deformation, corrosion, loose or working fasteners, and fatigue cracks (includes elevator and horizontal stabilizer elements of hinge).</p> <p>b. Inspect bellcranks, attachment to torque tubes and attachment to inboard rib for deformation, rust or corrosion, fatigue cracks, and security of fasteners.</p> <p>c. With elevator tips removed, inspect horn balance weight installation for security of attachments and fatigue cracks in supporting structure.</p> <p>d. Conduct a general visual inspection of the elevator assemblies for permanent deformation (particularly between hinge locations), corrosion, fatigue cracks, wear or chafing, and general condition. Visually inspect all bearings, bushings, and rollers for looseness, roughness, seizure, or wear.</p> <p>e. Fluorescent penetrant inspect bellcranks and exposed portion of torque tubes with bellcranks attached. (Refer to NDI Manual, Part 5, 55-20-01.)</p> <p>f. Conduct an X-ray inspection of the elevator including spar caps, ribs, and rib flanges, and upper and lower skin from LBL 36 to RBL 36. (Refer to NDI Manual, Part 2, 55-20-01.)</p>			

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IRN	INSPECTION	MECH	INSP	DATE
B5530010	<p>Vertical Stabilizer (Attached to Fuselage) (Refer to 5-10-00.):</p> <p>a. Conduct a general visual inspection of the vertical stabilizer above the fuselage for evidence of permanent deformation, corrosion, loose or working fasteners, fatigue cracks, and general condition.</p> <p>b. Remove all access panels, and using flashlight and mirror, inspect internal rib and spar structure for corrosion and fatigue cracks.</p> <p>c. Visually inspect upper vertical stabilizer structure, particularly horizontal stabilizer pivot fittings and attachment area, and lower horizontal stabilizer actuator attachment area. Use 10X magnification and proper lighting to aid visual inspection. Inspect for fastener security, general condition, wear, fatigue cracks, and corrosion of fittings and attaching structure.</p> <p>d. Visually inspect the local structure around the Dorne-Margolin antenna installation for fatigue cracks and fastener security.</p> <p>e. Conduct an X-ray inspection of the antenna area for corrosion and cracks. (Refer to NDI Manual, Part 2, 55-30-01.)</p> <p>f. Eddy current inspect pivot fittings and attaching structure. (Refer to NDI Manual, Part 3, 55-30-01.)</p>			
B5540020	<p>Rudder (Removed from Vertical Stabilizer) (Refer to 5-10-00.)</p> <p>a. Clean hinge locations and visually inspect local structure using proper lighting and 10X magnification. Inspect hinge support structure for deformation, corrosion, and fatigue cracks. (Includes rudder and vertical stabilizer elements of hinge.)</p> <p>b. Inspect lower bellcrank, torque tube, and attachment to lower rib for deformation, rust or corrosion, or fatigue cracks.</p> <p>c. Remove access panels at balance weight location(s) and inspect balance weight installation(s) for security and general condition.</p> <p>d. Conduct a general visual inspection of the rudder assembly for permanent deformation, corrosion, fatigue cracks, wear or chafing, and general condition.</p> <p>e. Inspect trim tab installation, including balance weight, for security and general condition.</p> <p>f. Visually inspect all bearings, bushings, and rollers for looseness, roughness, seizure, or wear.</p>			

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IRN	INSPECTION	MECH	INSP	DATE
	<b>TAILCONE</b>			
B2562010	Inspect drag chute mechanism for proper operation, security, and general condition. Inspect attachment support structure for permanent deformation, fastener security, and general condition. <i>(Effective on Aircraft equipped with drag chute system.)</i>			
B5331030	Tailcone Structure (Refer to 5-10-00.): Conduct a visual inspection of the tailcone structure for evidence of permanent deformation, corrosion, fatigue cracks, and general condition. From the tailcone access door opening, visually inspect accessible areas of internal tailcone structure (frames, stringers, etc.) and check for distortion, corrosion, fatigue cracks, and general condition.			
O5331035	Remove tail cone access plates and use a flashlight and mirror to inspect internal tail cone structure in area where the vertical stabilizer spars attach to the canted fuselage frames. Check for attachment security, frame crippling, corrosion, and fatigue cracks.			
	<b>WING</b>  <b>CAUTION: THE EMERGENCY GEAR EXTENSION AND EMERGENCY BRAKE SYSTEM SHALL BE FUNCTIONALLY TESTED FOLLOWING COMPLETION OF THE 12000 HOUR AIR-FRAME INSPECTION.</b>			
A5710020	Deleted. Inspection renumbered as P5710143.			
P5710143	Clean and visually inspect, using 10X magnification and adequate lighting, all eight (8) wing/fuselage fittings (four [4] per side) and support structure for fatigue cracks, deformation, corrosion, marks, scratches, fastener working, and general security. (Refer to 5-10-00.)  Conduct Eddy current inspection of fitting lug areas for fatigue cracks. (Refer to NDI Manual, Part 3, 57-13-01.)			

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IRN	INSPECTION	MECH	INSP	DATE
A5710045	<p>Remove lower surface access plates from WS 92 inboard to BL 0.0 including fuel pumps at WS 6.0 and 11.0. Visually inspect the periphery of these cutouts for fatigue cracks, corrosion, and general condition. (Refer to 5-10-00.)</p> <p>Conduct Eddy current inspections adjacent to the peripheral fasteners around these cutout areas. (Hole and surface probes.) (Refer to NDI Manual, Part 3, 57-10-01.)</p>			
B5710050	<p>Conduct an X-ray inspection of the wing upper and lower structure in the centerline doubler area. Inspect for fatigue cracks, corrosion, loose or missing fasteners, and general security. (Refer to NDI Manual, Part 2, 57-20-01 and 57-21-01.)</p>			
E5710066	<p>Conduct a visual and Eddy current inspection of the following lower wing structural areas:</p> <p>a. Visually inspect for fatigue cracks, corrosion, loose or working fasteners, and general security. (Refer to 5-10-00.)</p> <p>b. Accomplish Eddy current inspections as follows: (Refer to NDI Manual, Part 3, 57-10-01, 57-10-04, and 57-10-05.)</p> <p>1) Centerline doubler surface from BL 0.0 to outboard end of doubler along spars 3, 4, 5, 7, and 8.</p> <p>2) Skin adjacent to fastener rows along lower surface of spars 3, 4, 5, 6, 7, and 8 from outboard end of doubler to WS 92.0.</p> <p>3) With spar web access plates removed from spars 5 and 7 in wheel well area, inspect around periphery of cutout, particularly adjacent to fastener holes.</p> <p>4) Structure adjacent to fastener holes common to vertical leg of lower cap and web of spars 5 and 7 from BL 0.0 to WS 53, as accessible.</p>			
A5710070	<p>Clean upper and lower centerline splice plate (spar 2 to 5 and 7 to 8) adjacent to BL 0.0 rib cap. Visually inspect these areas for corrosion, fatigue cracks, working fasteners, and general security. (Refer to 5-10-00.)</p>			
E5710071	<p>Conduct an Eddy current inspection of the lower splice plate along the centerline fastener rows. (Refer to NDI Manual, Part 3, 57-10-01.)</p>			

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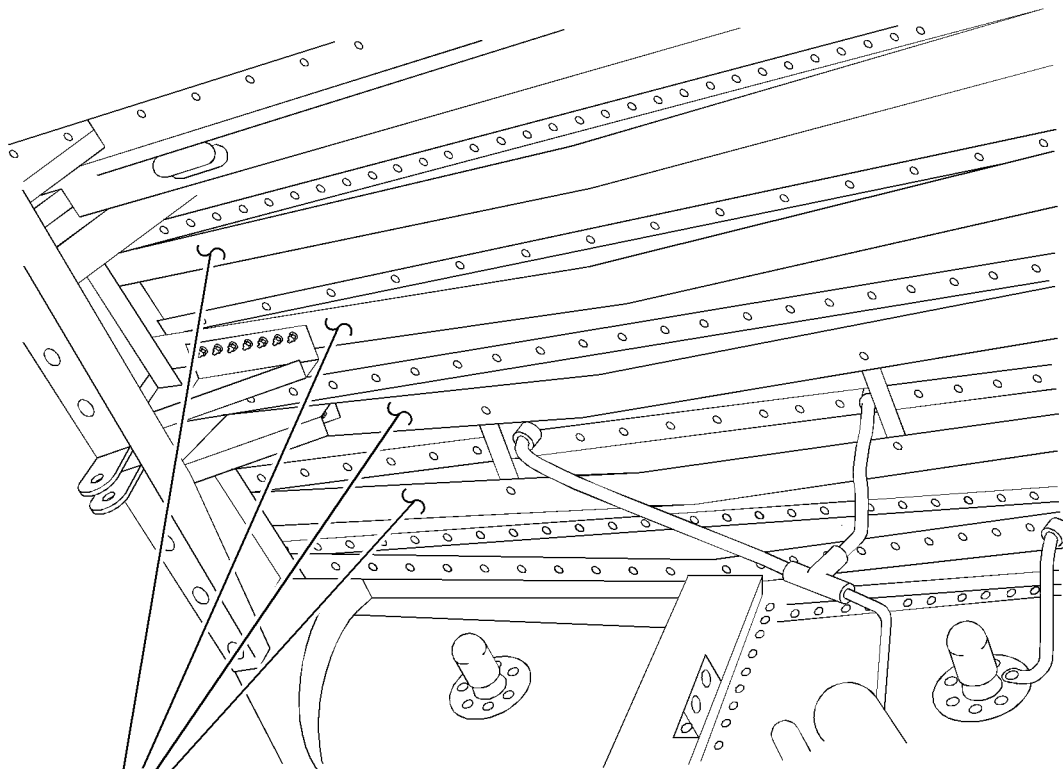
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IRN	INSPECTION	MECH	INSP	DATE
A5750045	<p>Flap (Removed from Wing) visually inspect the following (Refer to 5-10-00.):</p> <p>a. Flap support structure for security, corrosion, fatigue cracks, wear, evidence of interference, and general condition. Inspect the flap sector and supporting bracketry for evidence of overload or fatigue cracks.</p> <p>b. Flap surface for permanent deformation, corrosion, cracks in skin, unusually heavy chafing, and other wear or interference indication.</p> <p>c. With adequate lighting and 10X magnification, inspect the flap track attachment fittings/area for overload or fatigue crack indications. Also, inspect the nose roller support structure and the actuator pushrod attachment area for similar discrepancies.</p> <p>d. All bearings, bushings, and rollers for looseness, roughness, seizure, or wear.</p> <p>e. Remove flap tracks and pushrod from flap assembly and magnetic particle inspect for crack detection. (Refer to NDI Manual, Part 6, 57-70-01 and 57-71-01.)</p> <p>f. Eddy current inspect flap track attach fittings for fatigue cracks. (Refer to NDI Manual, Part 3, 57-40-01.)</p>			
A5760010	<p>Aileron (Removed from Wing) (Refer to 5-10-00.)</p> <p>a. Clean and visually inspect aileron drive/actuation mechanism (yoke, clevis, etc.) using proper lighting and 10X magnification. Check for fatigue cracks, rust or corrosion, wear, and general condition.</p> <p>b. With yoke removed, inspect center hinge casting for corrosion, fatigue cracks, and general condition. (See Replacement Schedule for life limited parts.)</p> <p>c. Inspect other hinge locations for deformation, fatigue cracks, or general condition (includes wing and aileron hinge elements).</p> <p>d. Conduct a general visual inspection of the aileron assemblies for permanent deformation, corrosion, cracks in skin, wear or chafing, and general condition.</p>			

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LOWER BEAM CAPS  
(TYPICAL)

M35-051025-001-01

Lateral Floor Beam Cap Inspection  
Figure 1

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**INSPECTION/CHECKS WITH SPECIAL REQUIREMENTS OR INSPECTION/CHECKS DUE AT OTHER  
INTERVALS**

**1. Description**

- A. This schedule is a list of inspection checks which do not correspond with the regularly scheduled inspections within the approved Learjet Manufacturer's Inspection Program or that have special requirements attached to the inspection item.
- B. Items listed as due per a vendors recommended schedule will require research to determine the required inspection interval for that item and should be noted for future reference.

**2. Inspection Items**

IRN	INSPECTION/CHECK	INTERVAL
	CABIN	
P2561005	Perform inspection of life vest.	Per manufacturer's instructions.
R2620030	Perform ICC Hydrostatic Test of portable hand-held fire extinguisher.  NOTE: Portable hand-held fire extinguishers may either be hydrostatically tested or replaced at this time.  Initial time count for testing or replacement of this item shall commence from the manufacturing date stamped on the item.	12 Years.
	COCKPIT	
P3510021	Comply with factory overhaul of E.R.O.S. oxygen masks (if installed).	6 Years.
N3510015	Comply with factory overhaul of B/E Aerospace (Puritan-Bennett) crew oxygen masks (if installed).  NOTE: On masks that have been in service for more than six years, comply with factory overhaul at the next 300 Hour/12 Month inspection.	6 Years.

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IRN	INSPECTION/CHECK	INTERVAL
	ELECTRICAL	
P1222005	<p>Ni-Cad Batteries - Check or perform the following in accordance with battery manufacturer's service manual. <a href="#">(Refer to 12-22-00 and 24-32-01.)</a></p> <ol style="list-style-type: none"> <li>Liquid level check.</li> <li>Perform complete discharge-recharge procedure.</li> <li>Functional check of battery temperature system thermistors.</li> <li>Functional check battery 140°F and 160°F warning light temperature switches.</li> </ol> <p>NOTE: Interval is the normal allowable period between maintenance activities, if no service interval is specifically recommended by the battery manufacturer. Because of varied flight profiles, certain servicing and maintenance activities may require a more frequent interval or may allow an extended interval, depending on environmental and operational requirements, and should be adjusted by individual operators. Operators should refer to their battery manufacturer's service manual for detailed maintenance instructions.</p>	3 Months. (See NOTE)
G1222001	<p>Lead Acid Batteries - Check or perform the following in accordance with battery manufacturer's service manual. <a href="#">(Refer to 12-22-00, 24-32-02, and 24-32-04.)</a> <u><i>(Effective on aircraft not equipped with captive electrolyte batteries.)</i></u></p> <ol style="list-style-type: none"> <li>Service battery sump jar (if installed).</li> <li>Liquid level check.</li> <li>Top charge battery.</li> <li>Perform battery capacity check or hydrometer test.</li> </ol> <p>NOTE: Interval is the normal allowable period between maintenance activities, if no service interval is specifically recommended by the battery manufacturer. Because of varied flight profiles, certain servicing and maintenance activities may require a more frequent interval or may allow an extended interval, depending on environmental and operational requirements, and should be adjusted by individual operators. Operators should refer to their battery manufacturer's service manual for detailed maintenance instructions.</p>	3 Months. (See NOTE)

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IRN	INSPECTION/CHECK	INTERVAL
G1222002	Lead Acid Batteries - <i>(Effective on aircraft equipped with captive electrolyte batteries.)</i> (Refer to 12-22-00.) a. Service battery sump jar (if installed). b. Perform battery capacity check.	Per manufacturer's instructions.
F1223010	Perform operational check of PS-835 or PS-855 lead-acid emergency power supply battery. (Refer to 24-33-01.)  NOTE: Aircraft equipped with remote test switch may perform operational check as preflight check in lieu of 6 month requirement.	6 Months.
D1223015	Perform discharge check of PS-835 or PS-855 lead-acid emergency power supply battery.  NOTE: Refer to J.E.T. Maintenance Manual, TP-329 (PS-835) or TP-483 (PS-855).	12 Months.
C1223021	Perform emergency exit and wing inspection light power supply battery discharge-recharge cycle.	6 Months.
G1223031	Perform emergency exit light battery supply module charging procedures. (Refer to 12-23-05.) <i>(Effective on Aircraft 31-127 and subsequent equipped with emergency exit lighting.)</i>	12 Months.
O1223040	Perform discharge-recharge reconditioning cycle of GNS-500A standby battery (if installed).	6 Months.
H2130007	Cabin Pressurization System - Perform Cabin Leak Rate Check. (Refer to 21-30-00.)  NOTE: The cabin leak rate check is due 1,200 hours from the date of the last 1,200 Hour Inspection, Phase C1, or last 1,200 Hour Cabin Leak Rate Check.	1,200 Hours.
H2431011	Perform overhaul of starter/generator.	1,000 Hours.
H2431017	Battery Cables and Receptacles - Perform Battery Connector Inspection. (Refer to 24-32-01.)	300 Hours.
J2563001	Inspect Emergency Locator Transmitter (ELT) batteries (if installed). Perform functional test of ELT system (if installed).  NOTE: Perform functional test in accordance with FAR 91.207.	12 Months.

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IRN	INSPECTION/CHECK	INTERVAL
F2565000	CVR/FDR Underwater Locator Beacon - Clean beacon switch, perform functional test of beacon, and perform test of ULB battery. <i>(Effective on aircraft equipped with CVR/FDR System.)</i>	2 Years.
	EMPENNAGE	
Q2740021	Horizontal Stabilizer Actuator - Perform Overhaul.  NOTE: In order to accomplish this requirement, the performing facility must possess the required Repair Manuals and Special Test Equipment.	600 Hours.
R3500017	Oxygen Cylinder (Kevlar wrapped) - Perform ICC Hydrostatic Test and Inspection per U.S. Department of Transportation Exemption E8162. <i>(Effective on aircraft equipped with a Dorsal Oxygen System or Dual Oxygen System.)</i>  NOTE: Initial time count for testing of this item shall commence from the manufacturing date stamped on the item.	5 Years.
R3500018	<i>On aircraft equipped with a Dorsal Oxygen System or Dual Oxygen System</i> , perform ICC Hydrostatic Test on oxygen cylinder (steel, DOT3AA1800).  NOTE: Initial time count for testing of this item shall commence from the manufacturing date stamped on the item.	5 Years.
R3500023	Oxygen Cylinder (steel, DOT3HT1850) - Perform Hydrostatic Test. <i>(Effective on aircraft equipped with a Dorsal Oxygen System or Dual Oxygen System.)</i>  NOTE: Initial time count for testing of this item shall commence from the manufacturing date stamped on the item.	3 Years.
	ENGINE	
P2431059	Check length of all starter generator brushes and replace bearings. <i>(Refer to 24-31-01.)</i>	600 Hours
E2610020	Inspect engine tailcone fire detector element for chafing, security of clamps, and general condition.	During major engine inspection/unscheduled engine change.
E3020001	Inspect nacelle inlet bulkhead, plumbing, and shutoff valve for security, cracks, or other deformation.	During major engine inspection/unscheduled engine change.

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IRN	INSPECTION/CHECK	INTERVAL
P3610045	Inspect high pressure bleed air hose and gasket (located on aft top of engine) for leaks.  NOTE: Perform this inspection during regular engine periodic inspection whenever the afterbody is removed.	During major engine inspection/unscheduled engine change.
G7100000	Refer to Garrett Engine Maintenance Manual (LMM 72-02-01) for inspection requirements.  NOTE: Refer to Garrett Engine Maintenance Manual (LMM 72-02-01) for these and any additional requirements.  Engine inspections should be logged in appropriate engine log book.	Per manufacturer's instructions.
E7120024	Check engine mount castings for corrosion and cracks. Check engine mount attachments for security and general condition.	During major engine inspection/unscheduled engine change.
E7120028	With engine mounts removed, perform a complete magnetic particle inspection of the following items (refer to NDI Manual, Part 6, 71-22-01, 71-23-01, 71-24-01): a. Forward mount castings. b. Forward mount casting attach bolts. <i>(Effective on Aircraft 31-002 thru 31-008 not modified per SB 31-71-1.)</i> c. Forward upper and lower shock mount to engine mount attach bolts. d. Aft mount and attach bolt. e. Aft mount isolator assembly attach bolts.	12 Year Inspection or at the nearest engine MPI prior to the 12 Year Inspection.
E7120033	With engine mounts removed, conduct the following: Fluorescent penetrant inspect the following item: Forward mount casting attach bolts. <i>(Effective on Aircraft 31-009 and subsequent and prior aircraft modified per SB 31-71-1.)</i>	12 Year Inspection or at the nearest engine MPI prior to the 12 Year Inspection.
Q7120063	Perform Inspection/Check of forward and aft engine mount isolators and associated parts. <i>(Refer to 71-20-00.)</i>	Engine MPI/ 2200 Hours.
Q7120067	Aft Engine Attach Bolt (P/N 2652002-1 and -2) - Perform Fluorescent Penetrant Inspection.	Engine MPI/ 2200 Hours.
Q7120072	Aft Engine Attach Bolt (P/N 2652002-3 and -801) - Perform Magnetic Particle Inspection.	Engine MPI/ 2200 Hours.



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IRN	INSPECTION/CHECK	INTERVAL
E7810005	Perform visual inspection of engine exhaust nozzles for cracks, security of installation, and general condition. (Refer to 5-10-00.)	During major engine inspection/unscheduled engine change.
P7830087	<p><u>On aircraft equipped with Dee Howard thrust reversers</u>, refer to Dee Howard Thrust Reverser Maintenance Manual (DHP-G-49-0) for inspection, servicing, and lubrication requirements.</p> <p>NOTE: Refer to Dee Howard Thrust Reverser Maintenance Manual (DHP-G-49-0) for these and any additional inspection, servicing, and lubrication requirements.</p>	Per manufacturer's instructions.
S7830090	<p>Thrust Reverser Aft Body Mating Flange Ring-Perform Fluorescent Penetrant Inspection. (Refer to NDI Manual [NDI-1], Part 5, General Section.) <u>Effective on Aircraft with Dee Howard Thrust Reversers installed.</u></p> <p>NOTE: The removal of the Thrust Reverser Yoke Assembly (P/N 4954101-1, -2) will be required in order to perform the inspection (refer to Dee Howard TR-4000 Maintenance Manual).</p> <p>On Aircraft with over 12,000 Landings, perform inspection at next Engine removal or Thrust Reverser removal.</p>	12,000 Landings initial, 6,000 Landings repeat.
	FUSELAGE	
P2061000	Perform Precipitation Static (P-Static) Test. (Refer to 20-61-00.)	After complete aircraft repaint.
K3414000	Radio Altimeter Antenna - Perform Bonding Check. (Refer to 20-10-02 of the Wiring Manual.)	24 Months.
L5210025	Visually inspect exterior lower cabin door structure, fuselage door cut-out framing members, and hinge area for evidence of corrosion. If corrosion is found, remove door access panels and inspect for evidence of corrosion on inner structure.	24 Months.
M5600008	Cabin Windows - Perform Optical Prism inspection. (Refer to NDI Manual [NDI-2], Part 4, 56-30-01.)	One time only, at the first inspection interval corresponding to 600 hours total aircraft time or 600 hours after window replacement.

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IRN	INSPECTION/CHECK	INTERVAL
G5610023	<p>Windshield:</p> <p>Using prism techniques, inspect the fastener area of the windshield for cracks normal to windshield surface, particularly adjacent to fastener locations. Also inspect for delaminations running parallel to windshield surface at fastener holes and trimmed edges of windshield. (Refer to NDI Manual, Part 4, 56-10-01.)</p> <p>NOTE: A copy of the Larascope Inspection Report shall be forwarded to Learjet Field Service.</p>	This inspection to be performed at the first inspection interval corresponding to 600 hours total aircraft time or 600 hours after windshield replacement.
	LANDING GEAR	
C3255000	<p>Inspect Nose Wheel Steering Actuator (P/N 6608278) per J.E.T. Instruction Manual TP-267. <u>(Effective on Aircraft 31-002 thru 31-054 not modified per SB 31-32-2, "Installation of Digital Nose Wheel Steering System".)</u></p>	2,000 Hours.
	NOSE	
R3500016	<p>Perform ICC Hydrostatic Test on oxygen cylinder (steel, DOT3AA1800).</p> <p>NOTE: Initial time count for testing of this item shall commence from the manufacturing date stamped on the item.</p>	5 Years.
R3500019	<p>Oxygen cylinder (Kevlar wrapped) - Perform ICC Hydrostatic Test and Inspection per U.S. Department of Transportation Exemption E8162.</p> <p>NOTE: Initial time count for testing of this item shall commence from the manufacturing date stamped on the item.</p>	5 Years.
R3500022	<p>Oxygen Cylinder (steel, DOT3HT1850) - Perform Hydrostatic Test.</p> <p>NOTE: Initial time count for testing of this item shall commence from the manufacturing date stamped on the item.</p>	3 Years.

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IRN	INSPECTION/CHECK	INTERVAL
R3610006	<p>Emergency Air Bottles (P/N 6600194-6) - Perform visual inspection and ICC Hydrostatic Test.</p> <p>WARNING: DO NOT METAL STAMP TAVCO AIR BOTTLES.</p> <p>NOTE: Inspection and testing of emergency air bottles shall be accomplished at an authorized testing facility using adequate safety precautions or bottles may be exchanged for tested units.</p> <p>Initial time count for testing of this item shall commence from the manufacturing date stamped on the item.</p>	6 Years.
R3610043	<p>Emergency air bottles (P/N 6600194-1, -2, -3, -4, -5) - Visual Inspection and ICC Hydrostatic Test.</p> <p>WARNING:DO NOT METAL STAMP TAVCO AIR BOTTLES.</p> <p>NOTE: Visual inspection of the emergency air bottle shall include both interior and exterior visual inspection.</p> <p>Initial time count for testing of this item shall commence from the manufacturing date stamped on the item.</p>	Every 3 Years until 15 Years.
R3610053	<p>Emergency Air Bottles (P/N 6600194-1, -2, -3, -4, -5.) - Perform X-Ray Inspection.</p> <p>WARNING:DO NOT METAL STAMP TAVCO AIR BOTTLES.</p> <p>NOTE: Initial time count for inspection of this item shall commence from the manufacturing date stamped on the item.</p>	9 and 12 Years.

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IRN	INSPECTION/CHECK	INTERVAL
R3610054	<p>Emergency Air Bottles (P/N 6600194-1, -2, -3, -4, -5.) - Perform Visual Inspection, Hydrostatic Test, X-Ray, and Magnetic Particle Inspection.</p> <p>WARNING:DO NOT METAL STAMP TAVCO AIR BOTTLES.</p> <p>NOTE: Visual inspection of the emergency air bottle shall include both interior and exterior visual inspection.</p> <p>Initial time count for testing of this item shall commence from the manufacturing date stamped on the item.</p>	15 Years, and every 2 Years thereafter.
R3610055	<p>Emergency Air Bottles (P/N 6600194-6.) - Perform X-Ray Inspection.</p> <p>WARNING:DO NOT METAL STAMP TAVCO AIR BOTTLES.</p> <p>NOTE: Inspection and testing of emergency air bottles shall be accomplished at an authorized testing facility using adequate safety precautions or bottles may be exchanged for tested units.</p> <p>Initial time count for inspection of this item shall commence from the manufacturing date stamped on the item.</p>	12, 24, and 30 Years.
	TAILCONE	
K2150009	<p>Perform refrigeration compressor motor brush wear inspection. <u>Effective on aircraft equipped with R12 refrigeration system and modified per SB 31-21-8, "Installation of Cooling System Compressor Motor Hour Meter."</u></p>	Every 600 refrigeration compressor motor hours.
K2150026	<p>Perform a fluorescent penetrant inspection of the air conditioner compressor motor fan blades. <u>(Effective on aircraft equipped with R12 refrigeration system and modified per SB 31-21-8.)</u></p> <p>NOTE: Particular attention should be given to the fan blades in the area of the hub.</p>	Every 1,200 refrigeration compressor motor hours.
K2150034	<p>Air Conditioning Compressor Motor Brushes - Perform Wear Inspection. <u>(Effective on Aircraft 31-191 and subsequent and prior aircraft equipped with Keith Products vapor cycle air conditioning system using refrigerant R-134.)</u></p>	1,200 Meter Hours.

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IRN	INSPECTION/CHECK	INTERVAL
K2150035	Air Conditioning Compressor Drive Motor - Perform Overhaul. <i>(Effective on Aircraft 31-191 and subsequent and prior aircraft equipped with Keith Products vapor cycle air conditioning system using refrigerant R-134.)</i>	2,000 Meter Hours.
L2150050	Perform functional test of refrigeration system pressure switch. <i>(Refer to 21-50-05.) (Effective on aircraft equipped with R12 refrigeration system and cooling system compressor motor hour meter.)</i>	Every 600 refrigeration compressor motor hours.
B2432010	Inspect battery installation as follows: a. Battery cases for condition and that lids are properly secured. b. Structure under batteries for traces of electrolyte or corrosion. c. Battery vent tubes for kinks, obstructions, and security of attachment. d. Vent fittings and inlet and outlet fittings for obstructions, corrosion, and security of attachment.	6 Months.
E2562001	Functional test the drag chute (if installed). Statically deploy (using adequate precautions) to check release mechanism. Inspect and repack drag chute. <i>(Refer to 12-21-04 and 25-63-00.)</i>	6 Months.
P2620042	Check engine fire extinguisher container pressure gage for proper pressure, and plumbing for condition and security. <i>(Refer to 26-20-00.)</i>	6 Months.
E2620010	Moved to 5-10-09	
Q2620025	Perform ICC Hydrostatic Test of engine fire extinguisher container.  NOTE: Time count for replacement, overhaul, or testing of this item shall commence from the manufacturing date stamped on the item.	5 Years.
F2820011	Clean and leak check low pressure fuel filters. <i>On aircraft equipped with paper filters</i> , remove and replace filters.	On new aircraft, perform first replacement/cleaning and leak check after 50 flight hours.

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IRN	INSPECTION/CHECK	INTERVAL
J5450043	<p>Pylon/Engine Beam Structure: Inspect pylon structure for security, corrosion, distortion, working fasteners, fatigue cracks, and general condition. Visually inspect inside of forward engine beams for cracks and other discrepancies. Observe upper and lower channels and forward and aft webs.</p> <p>NOTE: For inspection of beam interior a 1.25 inch diameter hole must be drilled through baffles to accommodate an inspection mirror. Plug the hole using a NAS451-30 plug button and firewall sealant.</p>	At Engine MPI.
H5450044	<p>Engine Beam Support Fittings: With engine mounts removed, conduct the following: a. Eddy current inspect both forward and aft engine beam support fittings around engine mount attachment lugs and in area adjacent to accessible installation fasteners.</p> <p>NOTE: Removal of support fitting is not required for this inspection.</p>	12 Year Inspection or at the nearest engine MPI prior to the 12 Year Inspection.
J5450045	<p>Pylon/Engine Beam Structure: Inspect pylon structure for security, corrosion, distortion, working fasteners, fatigue cracks, and general condition. Visually inspect aft beam for cracks and other discrepancies. Observe upper and lower channels and forward and aft webs.</p>	At Engine MPI.
	WING	
H2750044	Flap Cam Follower Bearings - Perform detailed visual inspection of bearing. ( <a href="#">Refer to 5-10-00.</a> )	1200 Hours.
L2812002	Remove lower wing access covers outboard of WS 213.602. Inspect the inner wing structure for fatigue cracks, bacterial growth, and corrosion. If corrosion exists at this location, remove all lower surface access plates and inspect remaining wing structure.	24 Months.

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IRN	INSPECTION/CHECK	INTERVAL
L2812010	<p>Defuel wing tanks and remove the three access covers between WS 53 and 92.0 Rib. Using an explosion-proof light, inspect entire area for bacterial growth and corrosion. (<a href="#">Refer to 12-10-00</a> and <a href="#">20-71-00.</a>)</p> <p>a. If area is clean and no bacterial growth or corrosion is evident, install access covers.</p> <p>b. If bacterial growth or corrosion is evident, defuel the wings and fuselage fuel cell. Remove all lower wing access plates and fuselage fuel pumps. Inspect remaining wing structure and bottom of fuel cell for contamination.</p> <p>c. Install fuel pumps and access covers, refuel aircraft, and check for leaks.</p>	24 Months.
L2812020	<p>On RH and LH wings, remove the inboard access covers from WS 72 (forward and middle cover) and the inboard spar 5 vertical access plate. Inspect wing flapper valves for freedom of movement, security, and general condition. Inspect adjacent interior structure for corrosion, fatigue cracks, loose or missing fasteners, and bacterial growth.</p> <p>NOTE: This inspection includes the flapper valves from WS 53 inboard to WS 0.0.</p>	24 Months.
G5700006	<p>Perform eddy current inspection of the winglet structure at winglet station 6.00 and wing to winglet structure at W.S. 244.102. (<i>Effective on Aircraft 31-002 thru 31-173.</i>)</p>	10,000 Hours initial, 1,200 Hours repeat.
P5710145	<p>Perform visual inspection of inboard dry bay of wing adjacent to fuselage and forward of spar 2. Check that moisture drain holes are free of obstructions.</p> <p>NOTE: This inspection is due 24 months from last Phase C4 inspection accomplished, and then every 24 months thereafter.</p>	24 Months.
H5750046	<p>Flap Track Support Fittings - Perform Detailed Visual Inspection.</p>	1,200 Hours.

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## RVSM INSPECTIONS

<b>MODEL: 31/31A</b>	<b>INSPECTION DUE TIME/DATE</b>
<b>SERIAL NO.</b>	<b>INSPECTION START TIME/DATE</b>
<b>REGISTRATION NO.</b>	<b>INSPECTION FINISH TIME/DATE</b>

NOTE: Each inspection item has an Inspection Reference Number (IRN) assigned for record keeping purposes only.

This schedule is a list of inspections that are required for reduced vertical separation minimum (RVSM) operations.

<b>IRN</b>	<b>INSPECTION/CHECK</b>	<b>INTERVAL</b>
	<b>ELECTRICAL</b>	
K3411059	Air Data System - Perform Functional Test. (Refer to 34-16-00.) <u>(Effective on Aircraft 31-035 thru 31-212 and 31-214 thru 31-221 modified per SB 31-34-11, "Replacement of Air Data Computers for RVSM Compatibility" and 31-213, 31-222 and Subsequent, certified and maintained for Reduced Vertical Separation Minimum operations.)</u>  NOTE: This check meets or exceeds the requirements of FAR 91.411.	24 Months.
	<b>FUSELAGE</b>	
N3411063	Pitot-Static Probe - Perform detailed visual inspection. <u>Effective on Aircraft 31-035 thru 31-212 and 31-214 thru 31-221 modified per SB 31-34-11, "Replacement of Air Data Computers for RVSM Compatibility" and 31-213, 31-222 and Subsequent, certified and maintained for Reduced Vertical Separation Minimum operations.</u> (Refer to 34-11-01.)	24 Months.
P5313002	Forward Fuselage Skin - Perform Pitot-Static Probe Zone Skin Contour Check. (Refer to 53-00-01.) <u>(Effective on Aircraft 31-035 thru 31-212 and 31-214 thru 31-221 modified per SB 31-34-11, "Replacement of Air Data Computers for RVSM Compatibility" and 31-213, 31-222 and Subsequent, certified and maintained for Reduced Vertical Separation Minimum operations.)</u>	24 Months.



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IRN	INSPECTION/CHECK	INTERVAL
	NOSE	
P3411055	Pitot-Static Probes - Verify pitch and roll alignment. (Refer to 34-11-01.) <u>(Effective on Aircraft 31-035 thru 31-212 and 31-214 thru 31-221 modified per SB 31-34-11, "Replacement of Air Data Computers for RVSM Compatibility" and 31-213, 31-222 and Subsequent, certified and maintained for Reduced Vertical Separation Minimum operations.)</u>	24 Months.

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## REPLACEMENT SCHEDULE

### 1. Description

- A. This schedule is a list of equipment which shall be replaced by serviceable components at the intervals specified. Items not listed are considered "On Condition" items and will be replaced only as necessary. All intervals are in hours unless otherwise indicated.
- B. Replacement Items that are identified by one asterisk (\*) are mandatory replacement items by FAA certification basis and cannot be changed, increased, or deleted without the approval of the certification airworthiness authority. These items reflect the contents of FAA approved report 31-S47, which is referred to in the aircraft Type Data Sheet A10CE. The inspection tolerances listed in section 5-10-00 are not applicable to those items with one asterisk.
- C. Replacement Items that are identified by two asterisks (\*\*) are part of the manufacturer's recommended maintenance program and can be adjusted according to the tolerances listed in section 5-10-00, Allowable Inspection Tolerances. Vendor recommendations, service experience, and engineering assessment are all factors considered in these recommendations.
- D. All item part numbers will not be listed. The intent is to replace an item at the specified interval based on use, wear, stress, or fatigue, and not based on part number. If a part number change affects the time change interval, that change will be documented separately. The IPC addresses effectivities and replacement spare parts, which have the same service life as the original part, unless otherwise noted.
- E. Replacement part dash numbers are deleted to avoid confusion when ordering parts.

### 2. Replacement Items

IRN	SYSTEM AND COMPONENT	INTERVAL
G2820002	** All Fuel Hose Assemblies (excluding all hoses in engine nacelle area) in aircraft (pressure).  NOTE: Excludes vent and expansion line hoses.	12 Years/6,000 Landings from installation.
G2900001	** Hydraulic Hose Assemblies (excluding hoses for the landing gear and those hose assemblies in the engine nacelle area).  NOTE: <u>On aircraft equipped with Teflon steel-braided hoses</u> , these hoses are not life limited and shall be replaced as condition dictates.	12 Years/6,000 Landings from installation.
	CENTER SECTION	
E5322000	** Keelbeam Attachment Bolts.  NOTE: On aircraft that have already accomplished a 12 Year Inspection, replace bolts at next 1,200 Hour Inspection or 12,000 flight hours, whichever occurs first.	12 Years/6,000 Landings.

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IRN	SYSTEM AND COMPONENT	INTERVAL
	ELECTRICAL	
E2431057	** Right DC 2 and 3 Bus (40 Amp) Circuit Breaker.	12 Years/6,000 Landings.
E2431058	** Left DC 2 and 3 Bus (40 Amp) Circuit Breaker.	12 Years/6,000 Landings.
L2564000	<p>** Dorne and Margolin ELT System Battery Pack.</p> <p>NOTE: The ELT battery must also be replaced after the total of known transmission time exceeds 1 hour, inadvertent activation of unknown duration, and when the system has been used in an emergency.</p>	Replace on or before battery replacement date.
L2564002	<p>** Dorne and Margolin ELT Remote Control Battery. <u>(Effective on aircraft equipped with remote switches.)</u></p> <p>NOTE: The battery must also be replaced after total of known time with switch in ON position exceeds 4 hours.</p>	5 Years from date of installation.
F2566000	** CVR/FDR ULB Battery.	Replace on or before battery replacement date.
	EMPENNAGE	
F2720013	<p>** Primary Rudder Control System Cables.</p> <p>NOTE: Replacement time applies to primary control systems only. Roll, pitch, and yaw servo cables are replaced as required. (Refer to Chapter 27 for control cable damage limits.)</p>	2,400 Hours.
E2720018	* Rudder Assembly (2633001).	20,000 Hours.
E2720021	<p>* Rudder Hinge Bolts (NAS144A23 and AN4H11A).</p> <p>NOTE: There may be some variation in grip lengths among these bolts. Refer to the parts manual for each case. There is no difference in replacement lives.</p>	20,000 Hours.
E2720023	* Rudder Lower Bearing Assembly (2312040).	20,000 Hours.
E2720024	* Rudder Hinge Assembly, Upper (2331030).	20,000 Hours.

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IRN	SYSTEM AND COMPONENT	INTERVAL
E2720025	* Rudder Hinge Assembly, Center (2331031).	20,000 Hours.
E2730016	* Elevator Assembly (2434000).	20,000 Hours.
E2730020	* Hinge Brackets (2332013 Outboard, 2332018 Center, and 2332019 In-board) (Located on Horizontal Stabilizer Assembly).	20,000 Hours.
E2730021	* Elevator Bellcranks (2331511).	20,000 Hours.
E2730023	* Elevator Dual Push-Pull Rods (2331510).	20,000 Hours.
E2730024	* Elevator Hinge Bolts (AN4H11A).  NOTE: There may be some variation in grip lengths among these bolts. Refer to the parts manual for each case. There is no difference in replacement lives.	20,000 Hours.
F2730030	* Primary Elevator Control System Cables.  NOTE: Replacement time applies to primary control systems only. Roll, pitch, and yaw servo cables are replaced as required. (Refer to Chapter 27 for control cable damage limits.)	2,400 Hours.
E2740010	* Horizontal Stabilizer Hinge Pin (2331028).	20,000 Hours.
G2740011	* Horizontal Stabilizer Actuator Attach Bolts (NAS464P6).  NOTE: There may be some variation in grip lengths among these bolts. Refer to the parts manual for each case. There is no difference in replacement lives.	12 Years/6,000 Landings from installation.
R3500051	** Oxygen Cylinder (Kevlar wrapped) <u>On Aircraft equipped with a Dorsal Oxygen System or Dual Oxygen System.</u>  NOTE: Initial time count for replacement of this item shall commence from the manufacturing date stamped on the item.	15 Years
R3500054	** Oxygen Cylinder (steel, DOT3HT1850) <u>On Aircraft equipped with a Dorsal Oxygen System or Dual Oxygen System.</u>  NOTE: Initial time count for replacement of this item shall commence from the manufacturing date stamped on the item.	24 Years

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IRN	SYSTEM AND COMPONENT	INTERVAL
	ENGINE	
G7110021	<p>** Fuel hose assemblies inside engine nacelle area.</p> <p>NOTE: <u>On aircraft equipped with Teflon steel-braided hoses</u>, these hoses are not life limited and shall be replaced as condition dictates.</p>	2,400 Hours or 5 Years from installation.
G7110022	<p>** Hydraulic hose assemblies in the engine nacelle area (including hose assemblies attached to the hydraulic pump and terminating at the firewall).</p> <p>NOTE: <u>On aircraft equipped with Teflon steel-braided hoses</u>, these hoses are not life limited and shall be replaced as condition dictates.</p>	2,400 Hours or 5 Years from installation.
K7120036	<p>** Forward Engine Shock Mount Cover (LM-833-3).</p> <p>NOTE: If required, a tolerance of 200 flight hours may be added to interval to coincide replacement with engine manufacturer's core zone inspection (CZI) tolerance.</p>	4,200 Hours.
L7120037	<p>** Aft engine isolator assembly (6600309-3) consisting of Housing (LM-833-30) and Center Bonded Joint (LM-833-16) or Aft Isolator Assembly (6600309-005).</p> <p>NOTE: If required, a tolerance of 400 flight hours may be added to interval to coincide replacement with engine manufacturer's core zone inspection (CZI) tolerance.</p>	8,400 Hours.
E7120038	* Forward Engine Mount Attach Bolts (2651026).	20,000 Hours.
E7120039	<p>* Aft Engine Attach Bolts (2652002 and 2651027).</p> <p>NOTE: There may be some variation in grip lengths among these bolts. Refer to the parts manual for each case. There is no difference in replacement lives.</p>	20,000 Hours.
E7120040	<p>* Forward Upper and Lower Engine Shock Support Bolts (6600187 and NAS1307-3H).</p> <p>NOTE: There may be some variation in grip lengths among these bolts. Refer to the parts catalog for each case. There is no difference in replacement lives.</p>	20,000 Hours.

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IRN	SYSTEM AND COMPONENT	INTERVAL
E7120041	<p>* Aft Shock Mount Attach Bolts (NAS335CP23).</p> <p>NOTE: There may be some variation in grip lengths among these bolts. Refer to the parts catalog for each case. There is no difference in replacement lives.</p>	20,000 Hours.
K7120064	<p>** Forward Engine Shock Mount Bolts (NAS1304-1H).</p> <p>NOTE: If required, a tolerance of 200 flight hours may be added to interval to coincide replacement with engine manufacturer's core zone inspection (CZI) tolerance.</p>	4,200 Hours.
L7120065	<p>** Forward Engine Shock Mount Mounting Assembly (LM-833-1).</p> <p>NOTE: If required, a tolerance of 400 flight hours may be added to interval to coincide replacement with engine manufacturer's core zone inspection (CZI) tolerance.</p>	8,400 Hours.
L7120066	<p>** Forward Engine Shock Mount Housing (LM-833-2).</p> <p>NOTE: If required, a tolerance of 400 flight hours may be added to interval to coincide replacement with engine manufacturer's core zone inspection (CZI) tolerance.</p>	8,400 Hours.
	FUSELAGE	
S5210104	<p>** Upper Door Torsion Bar Bolts (NAS1003-12H). (Refer to 52-12-01.) <u>Effective on Aircraft with 36 inch doors installed and on Aircraft with 24 inch doors installed modified by SB 31-52-5.</u></p> <p>NOTE: On Aircraft that have already exceeded 12 Years or 6,000 Landings, perform replacement at next 600 Hours/24 Month B2 inspection.</p>	12 Years/6,000 Landings from installation.
	LANDING GEAR	
G3210003	<p>** Hydraulic hose assemblies attached to the main and nose gear actuators, main gear door actuators, and the main and nose gear uplatch actuator.</p> <p>NOTE: <u>On aircraft equipped with Teflon steel-braided hoses</u>, these hoses are not life limited and shall be replaced as condition dictates. 1,500 hour replacement of hoses is only applicable to those hoses directly attached to respective actuator.</p>	1,500 Hours or 5 Years from installation.

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IRN	SYSTEM AND COMPONENT	INTERVAL
F3211075	* Main Gear Strut (with Cylinder Assembly 2441011). (Hard surface runway landings only.)  NOTE: Incorporation of SSK 930, "Replacement of Main Landing Gear Upper Cylinder" does not "zero time" the overall assembly to allow an additional 12,000 landings before replacement.	12,000 Landings.
E3211078	* Main Gear Actuator Attach Pin (2341109).	12,000 Landings.
E3211080	* Main Gear Actuator Pillar Assembly (2341123-1 and -14).	18,000 Landings.
E3211082	* Nose Gear Strut (2342100). (Hard surface runway landings only.)	20,000 Landings.
E3211083	* Nose Gear Actuator (2317100). (Hard surface runway landings only.)	20,000 Landings.
E3211084	* Main Gear Actuator Attach Pin (5441101).	20,000 Landings.
E3211087	* Main Gear Actuator (2327100). (Hard surface landing only.)	20,000 Landings.
F3211094	Combined with 3211099	
M3211097	* Main Gear Actuator Pillar Assembly (2341123-17, -18, and -23).	20,000 Landings.
Q3211099	* Main Gear Strut Assembly (3141100) with Cylinder Assembly 6041101) (Hard surface landing only).	16,500 Landings.
G3233003	** Emergency air hose assemblies for landing gear emergency freefall extension, landing gear emergency blowdown, and emergency braking systems.	12 Years/6,000 Landings from installation.
G3243040	** Hydraulic brake hose assemblies located on the strut and in the wheel well area.  NOTE: <u>On aircraft equipped with Teflon steel-braided hoses</u> , these hoses are not life limited and shall be replaced as condition dictates.	2,400 Hours or 5 Years from installation.

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IRN	SYSTEM AND COMPONENT	INTERVAL
	NOSE	
J3411056	** Left Primary Pitot-Static Probe (P/N 0856NA1). <i>(Effective on Aircraft 31-035 thru 31-212 and 31-214 thru 31-221 modified per SB 31-34-11, "Replacement of Air Data Computers for RVSM Compatibility" and 31-213, 31-222 and Subsequent, certified and maintained for Reduced Vertical Separation Minimum operations.)</i>	15,000 Hours.
J3411057	** Right Primary Pitot-Static Probe (P/N 0856NA2). <i>(Effective on Aircraft 31-035 thru 31-212 and 31-214 thru 31-221 modified per SB 31-34-11, "Replacement of Air Data Computers for RVSM Compatibility" and 31-213, 31-222 and Subsequent, certified and maintained for Reduced Vertical Separation Minimum operations.)</i>	15,000 Hours.
R3500052	** Oxygen Cylinder (Kevlar wrapped)  NOTE: Initial time count for replacement of this item shall commence from the manufacturing date stamped on the item.	15 Years
R3500053	** Oxygen Cylinder (steel, DOT3HT1850)  NOTE: Initial time count for replacement of this item shall commence from the manufacturing date stamped on the item.	24 Years
R3610056	** Emergency Air Bottles (P/N 6600194-6.)  NOTE: Initial time count for replacement of this item shall commence from the manufacturing date stamped on the item.	40 Years
	TAILCONE	
H2620035	** Engine fire extinguisher cartridges (Walter-Kidde) (841155).  NOTE: On Walter-Kidde Cartridges, cartridge replacement time interval shall begin from the date of manufacture stamped on the cartridge.	6 Years.
H2620036	** Engine fire extinguisher cartridges (Walter-Kidde) (841155-1).  NOTE: On Walter-Kidde Cartridges, cartridge replacement time interval shall begin from the date of manufacture stamped on the cartridge.	10 Years.
P2620040	** Engine fire extinguisher cartridges (HTL).  NOTE: On HTL cartridges, cartridge replacement time interval shall begin from the date of manufacture stamped on the cartridge.	6 Years.



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IRN	SYSTEM AND COMPONENT	INTERVAL
	WING	
F2710036	<p>* Primary Aileron Control System Cables.</p> <p>NOTE: Replacement time applies to primary control systems only. Roll, pitch, and yaw servo cables are replaced as required. (Refer to Chapter 27 for control cable damage limits.)</p>	2,400 Hours.
E2710010	<p>* Aileron Drive Yoke Bolt (NAS1104-38D).</p> <p>NOTE: There may be some variation in grip lengths among these bolts. Refer to the parts catalog for each case. There is no difference in replacement lives.</p>	3,600 Hours.
E2710014	<p>* Aileron Center Hinge Bolt (AN4H13A).</p> <p>NOTE: There may be some variation in grip lengths among these bolts. Refer to the parts manual for each case. There is no difference in replacement lives.</p>	3,600 Hours.
G2710016	* Aileron Assembly.	20,000 Hours.
E2710020	<p>* Aileron Clevis Bolt (NAS464P4).</p> <p>NOTE: There may be some variation in grip lengths among these bolts. Refer to the parts catalog for each case. There is no difference in replacement lives.</p>	20,000 Hours.
M2710021	<p>* Aileron Inboard and Outboard Hinge Bolts (AN4H12A).</p> <p>NOTE: There may be some variation in grip lengths among these bolts. Refer to the parts manual for each case. There is no difference in replacement lives.</p>	20,000 Hours.
E2710023	* Aileron Pulley Assembly (2324513).	20,000 Hours.
E2710024	* Aileron Clevis (2324517).	20,000 Hours.
E2710026	* Aileron Yoke Assembly (2324511).	20,000 Hours.
E2710028	* Aileron Bearing Support Assembly (5425016).	20,000 Hours.
E2710031	* Aileron Hinge Bracket Assembly (2322530).	20,000 Hours.
E2750002	** Flap Nose Roller Bushings (NAS76A4).	1,200 Hours.
E2750007	<p>* Outboard Flap Track Assembly (2335022).</p> <p>NOTE: Applicable for aircraft certified for operation in Italy.</p>	9,000 Hours.

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<b>IRN</b>	<b>SYSTEM AND COMPONENT</b>	<b>INTERVAL</b>
E2750010	* Inboard Nose Roller Track (Flap) (2322511).	12,000 Hours.
E2750011	* Outboard Nose Roller Track (Flap) (2322512).	12,000 Hours.
E2750012	* Inboard and Outboard Flap Track Assembly (2325022).	12,000 Hours.
E2750013	<p>* Inboard Flap Track Hinge Fitting (2625023).</p> <p>NOTE: Flap track hinge fitting (2625023) is riveted to wing flap assembly (2625010). These wing flap assembly parts have no specific life limit and do not require replacement.</p>	15,000 Hours.
E2750014	<p>* Outboard Flap Track Hinge Fitting (2625024).</p> <p>NOTE: Flap track hinge fitting (2625024) is riveted to wing flap assembly (2625010). These wing flap assembly parts have no specific life limit and do not require replacement.</p>	15,000 Hours.
G2750034	** Wing Flap Sector Mounting Bolt which secures Flap Sector.	12 Years/6,000 Landings from installation.
E2760080	<p>* 5/16" Spoiler Attach Bolts (NAS464P5A14).</p> <p>NOTE: There may be some variations in grip lengths among these bolts. Refer to the parts manual for each case. There is no difference in replacement lives.</p>	12 Years/6,000 Landings.
E2760081	<p>* 5/16" Spoiler Pivot Bolts (NAS464P5-18).</p> <p>NOTE: There may be some variations in grip lengths among these bolts. Refer to the parts manual for each case. There is no difference in replacement lives.</p>	12 Years/6,000 Landings.
E2760082	* 1/4" Spoiler Actuator Bolt (NAS464P4-13).	12 Years/6,000 Landings.

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## UNSCHEDULED MAINTENANCE CHECKS

### 1. Description

- A. The following unscheduled maintenance checks cover abnormal aircraft operation and include hard landing, departure from runway, overweight landing, severe turbulence and/or maneuvers, engine change, rejected takeoff, landing gear extension at high speed, lightning strike, high ground wind gust, high speed drag chute deployment, heat damage inspection and pressure cabin skin thickness measurement.
- B. A hard landing is defined as any landing which is believed to have been made at an excessive sink rate. An overweight landing is closely related to a hard landing and is defined as landing the aircraft at a gross weight exceeding placard landing weights.
- C. Severe turbulence is defined as violent buffeting of the aircraft due to atmospheric conditions. Severe maneuvers are defined as maneuvers which exceed limits prescribed in the Flight Manual.
- D. High ground wind gust conditions are defined as exposure to known, sustained, wind gust conditions or ramp jet blast velocities exceeding 60 knots in strength.
- E. The following inspections must be performed to determine and evaluate the extent of damage in local areas and to structure adjacent to those areas.

### 2. Hard Landing or Departure From Runway (See Figures 1, 2, and 3)

- A. After every hard landing or departure from runway, inspect the following areas:
  - (1) Wing lower skin in landing gear rib (WS 53) area for skin buckles, fastener failures, security of landing gear rib, and trunnion fittings.
  - (2) Wing-to-fuselage fittings and supporting structure for security, fastener conditions, and permanent deformation. Remove the wing to fuselage fairing and inspect the fuselage skin panel for diagonal compression wrinkles in the area indicated on (Figure 1.). Inspect the longerons for deformation at the location shown in (Figure 1.) paying particularly close attention to the areas immediately adjacent to the lightning holes.
  - (3) Trailing edge region of wing for local deformation affecting normal usage of flaps and ailerons.
  - (4) Keel beam upper web, side panels, and attachments for security, fastener condition, and permanent deformation. Check proper torque of keel beam attachment bolts. (Refer to 53-10-01.)
  - (5) Conduct a thorough visual inspection of gear trunnion fittings and actuator attachment fitting for security, sheared fasteners, elongation or deformation of holes, backup structure integrity, or other indication of overload (See Figure 2.)
    - (a) Visually inspect access panels common to spar 7 in wheel well for deformation.

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- (6) Engine mount/pylon beam structure for security, fastener condition, firewall web wrinkles, or other permanent deformation.
  - (a) With engine mounts removed, conduct the following: (See Figure 3.)
    - 1) Inspect pylon structure for security, corrosion, distortion, working fasteners, cracks, and general condition. Visually inspect inside of forward engine beams for cracks and other discrepancies. Observe upper and lower channels and forward and aft webs.

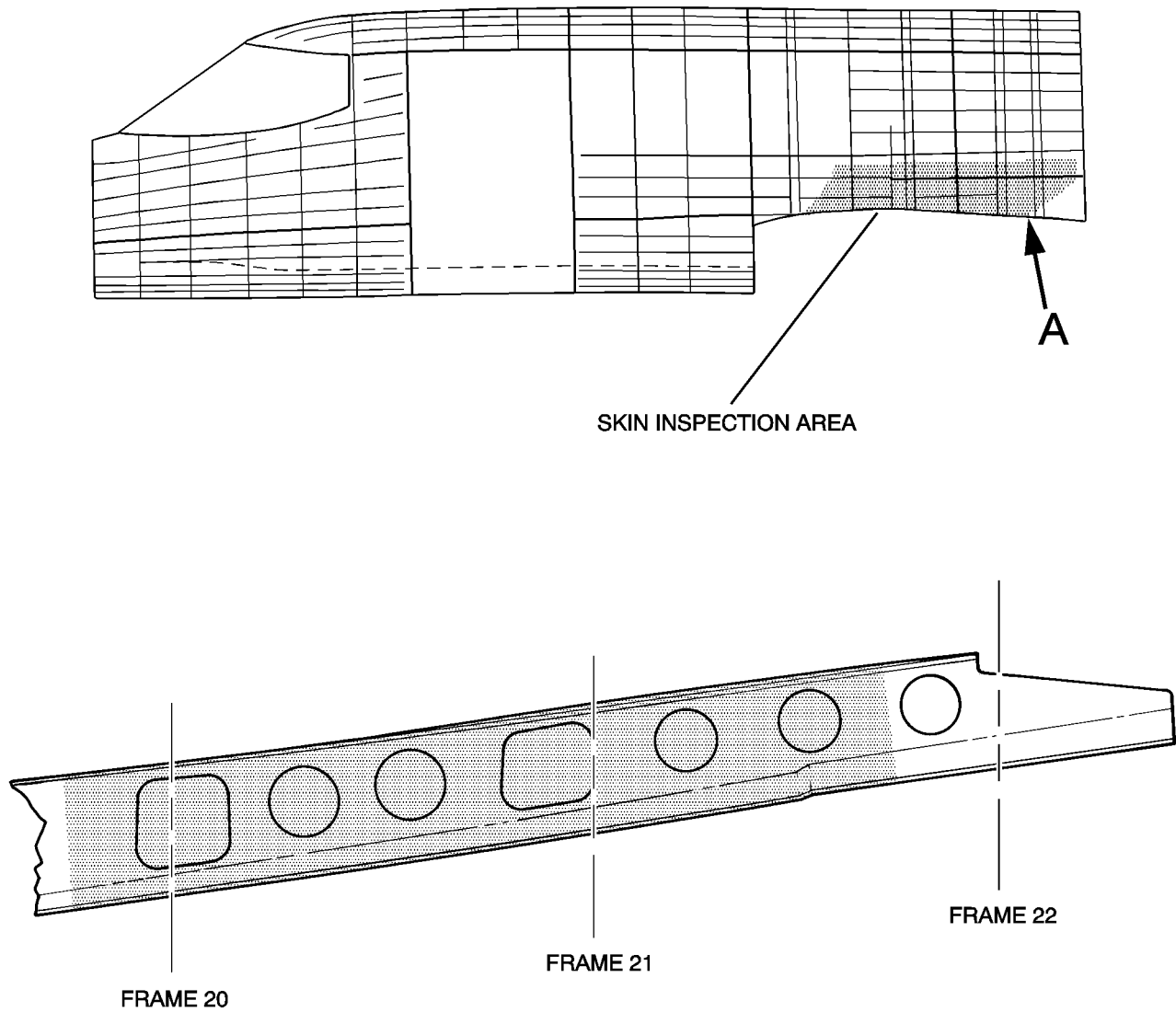
NOTE: For inspection of beam interior, a 1.25 inch [3.17 cm] diameter hole must be drilled through baffles (vapor block panel) to accommodate an inspection mirror. Plug the hole using a NAS451-30 plug button and firewall sealant.

- (7) Remove main gear wheels and perform eddy current inspection of wheel bead seat radius, in accordance with procedures outlined in 32-40-00.
    - (a) Replace main gear tires.
  - (8) If excessive landing force was exerted on the nose gear, remove nose gear wheel and perform eddy current inspection of wheel bead radius in accordance with procedures outlined in 32-40-00.
    - (a) Replace nose gear tire.
- B. If excessive landing gear forces are indicated by the above noted inspection or if unusual load conditions have occurred such as landing short, going off of runway, or engagement of some obstacle on the runway, conduct the following inspections:
- (1) Depressurize struts and stroke through full travel and note any indication of cylinder wall deformation that impedes full stroke travel.
  - (2) Disassemble and inspect detail parts of both main landing gear and actuators for overload failures. Conduct visual inspections with magnification, magnetic particle, fluorescent penetrant, or eddy current inspections to determine integrity of components. (Refer to Chapter 32, Part 3 [Eddy Current], Part 5 [Penetrant], and Part 6 [Magnetic Particle] of the NDI Manual.)
  - (3) If excessive force was exerted on the nose gear, disassemble and inspect detail parts of nose landing gear and actuator for overload failures. Conduct visual inspections with magnification, magnetic particle, fluorescent penetrant, or eddy current inspections to determine integrity of components. (Refer to Chapter 32, Part 3 [Eddy Current], Part 5 [Penetrant], and Part 6 [Magnetic Particle] of the NDI Manual.)
  - (4) Conduct an eddy current inspection of the following areas:
    - (a) Basic trunnion fitting forging installations, forward and aft, particularly the inside radii areas. (Refer to 57-10-04, Area 'D' and 57-10-05, Area 'E' of the NDI Manual.)
    - (b) Spar 5 and spar 7 upper and lower spar cap radii from landing gear rib (WS 53.04) inboard to WS 35. (Refer to Part 3, 57-10-06, of the NDI manual.)
    - (c) Landing gear rib (WS 53), inboard upper and inboard lower rib cap radii between spar 5 and 7.

NOTE: If deformation or defect indications are noted in rib cap radii, further inspection of the outboard radii will be required.

- (d) Nose trunnion fitting (installed on aircraft.) (Refer to Part 3, 53-61-01, of the NDI Manual.)
- (5) Inspect main landing gear for excessive free play in trunnion fitting attach area by placing the aircraft on jacks and pulling forward and aft on the gear.
- (6) Check main landing gear trunnion bushing I.D. for dimensional conformity.

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VIEW LOOKING DOWN, LH SIDE

Detail A

M24-082002-000-01

Fuselage Skin and Longeron Inspection  
Figure 1

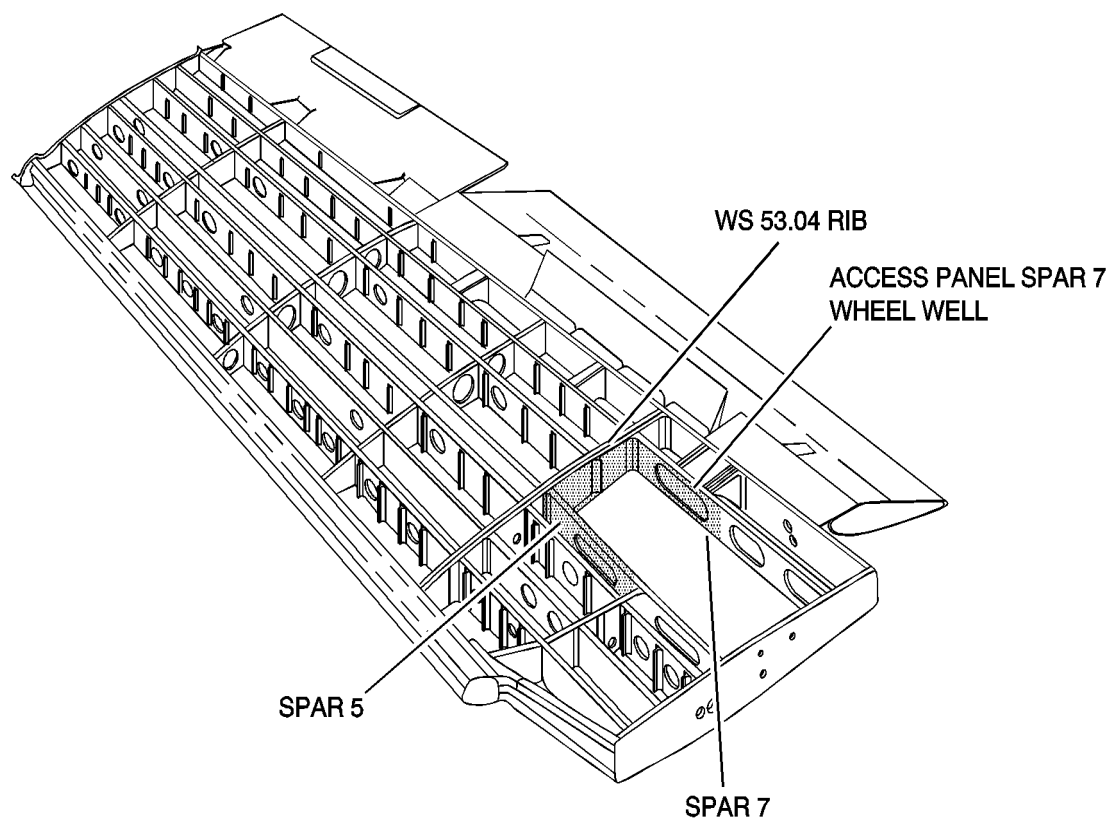
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Wing Spar and Rib Inspection  
Figure 2

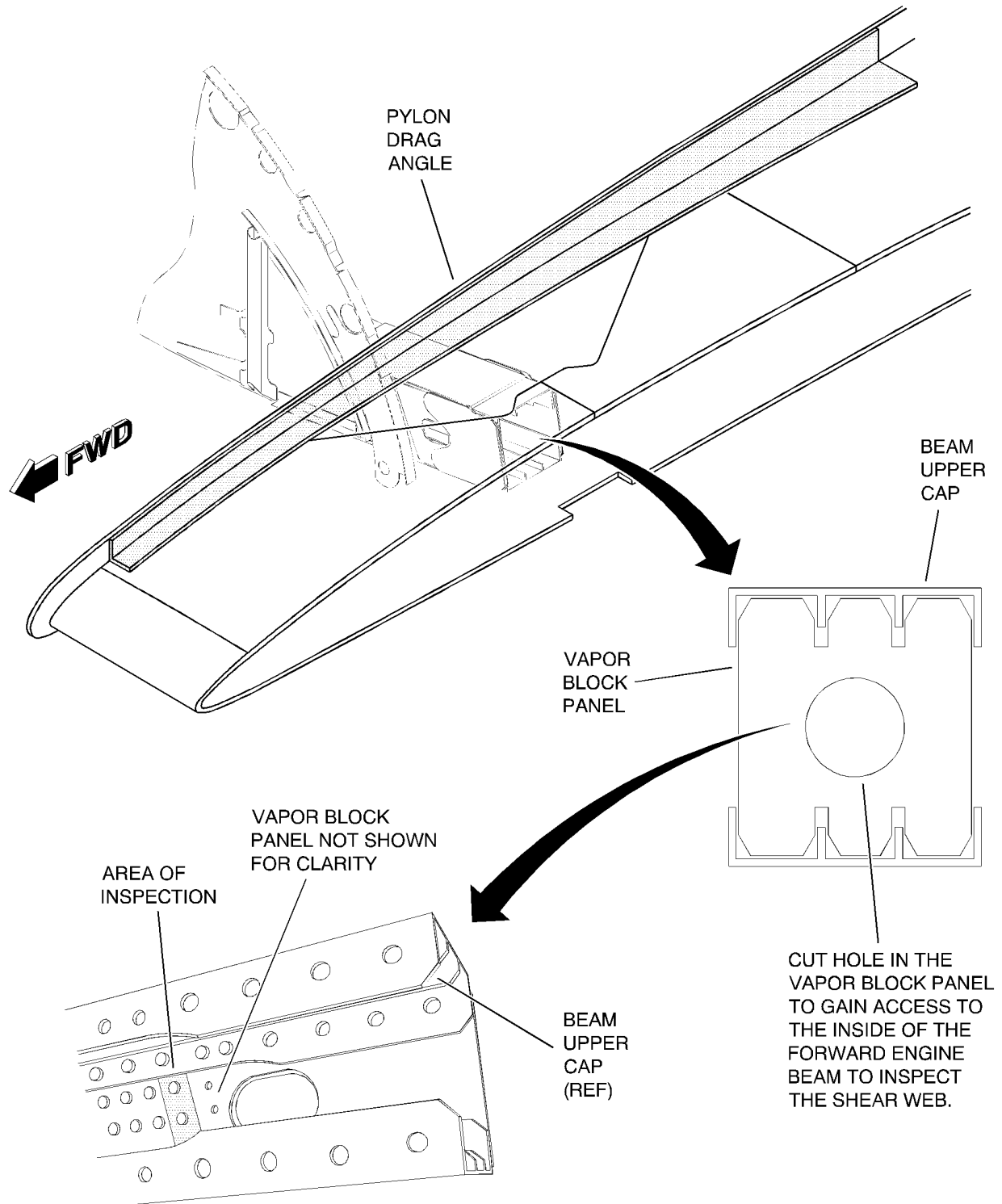
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Pylon Structure  
Figure 3

EFFECTIVITY: ALL

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### 3. Overweight Landing (Weight in Excess of Maximum Landing Weight)

NOTE: If noticeable damage/deformation is noted during overweight landing inspection, perform Hard Landing Inspection.

#### A. After every overweight landing inspect the following areas:

- (1) Wing lower skin in landing gear rib (WS 53) area for skin buckles, fastener failures, security of landing gear rib, and trunnion fittings.
- (2) Wing-to-fuselage fittings and supporting structure for security, fastener conditions, and permanent deformation. Remove the wing to fuselage fairing and inspect the fuselage skin panel for diagonal compression wrinkles in the area indicated on Figure 1. Inspect the longerons for deformation at the location shown in Figure 1 paying particularly close attention to the areas immediately adjacent to the lightning holes.
- (3) Trailing edge region of wing for local deformation affecting normal usage of flaps and ailerons.
- (4) Keelbeam upper web, side panels, and attachments for security, fastener condition, and permanent deformation.
- (5) Remove main gear wheels and perform eddy current inspection of wheel bead seat radius, in accordance with procedures outlined in 32-40-00.
  - (a) Replace main gear tires.
- (6) If excessive landing force was exerted on the nose gear, remove nose gear wheel and perform eddy current inspection of wheel bead radius in accordance with procedures outlined in 32-40-00.
  - (a) Replace nose gear tire.
- (7) Conduct a thorough visual inspection of gear trunnion fittings and actuator attachment fitting for security, sheared fasteners, elongation or deformation of holes, backup structure integrity, or other indication of overload. (See Figure 2.)
  - (a) Visually inspect access panels common to spar 7 in wheel well for deformation.

### 4. Severe Turbulence and/or Maneuvers

#### A. After flight involving severe turbulence and/or maneuvers, conduct the following inspections:

- (1) Wing-to-body fittings and supporting structure for security, fastener condition, and permanent deformation.
- (2) Trailing edge region of wing for local deformation affecting normal usage of flap and aileron.
- (3) Keelbeam and attachments for security, fastener condition, permanent deformation, and torque of keelbeam attachment bolts.
- (4) Canted bulkheads and lower fin spar attachments in aft tailcone. Check for fastener security and permanent deformation of bulkheads and spar assemblies.
- (5) Horizontal stabilizer hinge fittings, actuator and fittings, and stabilizer center section structure for security, permanent deformation, or other evidence of overload.
- (6) Vertical stabilizer for permanent deformation, skin buckles, and security at primary attachments.
- (7) Engine mount castings for permanent deformation or cracks and support structure, including pylon beams and beam-to-fuselage fittings, for security and fastener condition.



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### 5. Engine Change/Removal

A. At every unscheduled engine change/removal, perform the following visual inspections:

NOTE: Refer to 5-10-00, for visual inspection criteria.

- (1) Visually inspect all bleed air ducts, lines, hoses, and electrical wiring located in the engine nacelle.
- (2) Visually inspect all wire harness shield overbraids and shields.
- (3) Visually inspect firewall and accessory gearbox fire detector elements.
- (4) Visually inspect nacelle anti-ice plumbing. Inspect clamp and welded portion of aft side of nose cap bulkhead and that portion visible through openings in nose cap bulkhead. Nose cap removal is not required.
- (5) Visually inspect nacelle structure, skin spot welds, and fasteners.
- (6) Visually inspect inlet duct.
- (7) Visually inspect rear nacelle.
- (8) Visually inspect generator inlet and exhaust duct seals.
- (9) Visually inspect engine mount assemblies (castings) and attachments. Pay particular attention to forward and aft corners of forward mounts near pylon attachment.
- (10) Visually inspect pylon firewalls for cracks, condition of firewall sealant, security of hydraulic and fuel connections, electrical and mechanical feed-throughs, and condition of bleed air flange gaskets.
- (11) Visually inspect tailcone fire detector element (engine change only).
- (12) Visually inspect nacelle inlet bulkhead, plumbing, and shutoff valve.
- (13) Visually inspect high pressure bleed air hose and gasket (located on aft top of engine) (engine change only).
- (14) Visually inspect engine exhaust nozzles.
- (15) Check that all applicable engine FAA Airworthiness Directives are complied with and Log Book entries made.

### 6. High Energy Stop (Landing and Rejected Takeoff)

- A. If an aircraft should experience either a rejected takeoff or a landing stop such that maximum effort braking was used and aircraft weight is above that of the maximum brake energy for landing (See AFM Landing Weight Limits Charts), the following must be accomplished:
- (1) Wheels and fuse plugs must be inspected for condition.
  - (2) Remove brakes, disassemble and inspect for condition and excessive wear. (Refer to 32-43-01.)
  - (3) The main wheel tires should be removed and scrapped. A visual inspection of these tires may not show any apparent damage, however, incipient damage may have occurred which could cause premature failure.

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CAUTION: IF A FIRE WAS ASSOCIATED WITH MAXIMUM EFFORT BRAKING, THOSE WHEELS EXPOSED TO THE FIRE SHALL BE SCRAPPED. FIRE MAY CAUSE A LOSS OF HEAT TREAT THAT MAY NOT BE DETECTABLE BY ANY INSPECTION METHOD.

- (4) If a fire was associated with the maximum effort braking, those wheels exposed to the fire are to be scrapped due to the detrimental effect on their heat treat strength.

### 7. Overspeed Recovery Landing Gear Inspection (Landing Gear Extension and Retraction at High Speed)

#### A. Inspect main gear inboard and outboard doors.

- (1) Check doors and door hinges for any signs of deformation, cracks, fastener conditions, and freedom of movement.
- (2) Check inboard door actuator and actuator attach points for deformation, cracks, security of attachment, and freedom of movement.
- (3) Check brake and hydraulic lines for condition and security of attachment. Check both the wheel well and strut area.
- (4) Check electrical wiring for condition and security of attachment. Check both the wheel well and strut areas.

#### B. Inspect nose gear doors.

- (1) Check doors and door hinges for any signs of deformation, security of attachment, and freedom of movement.
- (2) Check door linkage for any signs of deformation, security of attachment, and freedom of movement.

#### C. Inspect lower wing and fuselage for signs of damage.

### 8. Lightning Strike Inspection

#### A. Perform the following inspection criteria when it is suspected or known that the aircraft has been struck by lightning. It is important to note that, in many cases, the occupants and flight crew are not aware the aircraft may have been struck by lightning.

#### B. General

- (1) Inspect each airplane extremity for evidence of lightning attachment. The evidence is usually indicated by spots of molten and resolidified metal ranging in diameter from 0.004 to 0.04 inch [0.10 to 1.0 mm], usually surrounded by a region of discolored paint.
- (2) Generally, skin damage will be limited to minor pitting or fusing of a few rivet heads, but small punctures do sometimes occur.
- (3) Ferrous metals can become magnetized. All ferrous metal components in critical areas should be inspected. After parts have been demagnetized, all compasses should be recalibrated by compass swinging.
- (4) Lightning strikes may indirectly affect electronic equipment located elsewhere in the aircraft from the point of lightning attachment.

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### C. Inspection

- (1) Determine where the lightning struck the aircraft and inspect the surrounding area carefully for damage.
- (2) Determine where the lightning exited the aircraft and inspect the surrounding area carefully for damage.
- (3) From the determination of the entry and exit points, a probable electrical path of the lightning through the aircraft can be established. It is along this path the inspection needs to be concentrated, but not necessarily restricted to this path.
  - (a) Inspect all static wicks.
  - (b) Inspect all flight control surface electrical bonding straps.
  - (c) Generally inspect all radio and navigation antennas. If electrical and avionics functional checks isolate a damaged component, then a more thorough inspection of this system antenna should be accomplished.
  - (d) Inspect radome area carefully for puncture or delamination points. If damage is found, remove the radome and inspect for further damage to radome or radar components.
  - (e) Inspect fuselage and empennage for burnt spots.
  - (f) Inspect wing and winglets for burnt spots.
  - (g) Inspect flight control surface skins for burnt spots.
  - (h) Remove flight controls on or near the probable electrical path. Inspect flight control bearings for a rough or welded condition.
  - (i) Inspect all control cables for damage.
  - (j) Inspect pulley bearings for rough or welded condition.
  - (k) Inspect hydraulic and fuel lines for burnt spots.
  - (l) Perform complete electrical and avionics preflight.
  - (m) Perform magnetic compass compensation.
  - (n) Inspect engines for general condition and complete SOAP check prior to returning the aircraft to service.
  - (o) Inspect engine nacelles closely for evidence of lightning strike, paying special attention to fan, spinner, exhaust nozzle, and nacelle drains. If lightning strike on the engine and/ or nacelle is suspected, refer to the engine maintenance manuals for additional requirements.

### 9. Drag Chute

- A. If the drag chute was deployed above 150 KIAS, or if jettison failure occurred above 100 KIAS, perform structural inspection. (Refer to 25-63-00.)

### 10. High Ground Wind Gust Inspection

- A. The following outlines inspection criteria to be performed when it is suspected or known that the aircraft has been subjected to sustained ground wind gust conditions or ramp jet blast velocities in excess of 60 knots. The assumption is that the Learjet approved cockpit gust lock restraint has been installed prior to wind gust exceedance. The areas to be inspected are those comprising the aileron, elevator, external rudder skins, and their primary flight control stops.

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### B. Inspection

- (1) Remove necessary wing and empennage access panels to access the control's primary stops, rudder lower torque tube, and cable sector assemblies.
- (2) Visually inspect the following areas for signs of sheet metal damage, deformation, buckling, loose rivets, and separations:
  - (a) Aileron Assembly

NOTE: Aileron control surface access panel removal is not required.

- 1) Aileron drive link, drive lever, cable drum and attachment assembly, and the mechanical stop plate.
- 2) Aft side of the rear wing spar in the vicinity of the primary stops.
- 3) Aileron skins.

#### (b) Elevator Assembly

NOTE: Elevator control surface access panel and horizontal stabilizer top fairing removal is not required.

- 1) LH and RH elevator aft sector assemblies and their primary mechanical stops.
- 2) Vertical stabilizer mid spar in the area of the aft elevator sector attachment.
- 3) Verify that the elevator rigging pin can be properly inserted through both aft elevator control sectors, but do not de-rig the system to perform this inspection. If the rigging pin cannot be inserted, investigate and resolve the malfunction.
- 4) Elevator skins.
- 5) Elevator bob weight assembly and stops.

#### (c) Rudder Assembly

NOTE: Rudder control surface access panel removal is not required.

- 1) Vertical stabilizer aft spar in the vicinity of the primary stops.
  - 2) Lower torque tube and primary mechanical stop arms.
  - 3) Rudder skins.
- (3) Move the aileron, elevator, and rudder control surfaces by hand and visually verify that there is unrestricted movement to travel between their primary stops and that both primary stops are being contacted prior to contacting the system secondary stops.
  - (4) If damage is found, perform the following additional inspection checks in conjunction with the items outlined above. If no damage is apparent, but a more intensive inspection is felt necessary to compensate for incident circumstances, and/or the aircraft is subjected to high wind gust conditions without the use of a Learjet approved gust lock restraint system, perform these additional inspection tasks:
    - (a) Check control surface full travel measurements, control cable tensions, and, if the primary stops are altered, check the system secondary stop values for each of the following flight control surfaces:
      - 1) Aileron Control System. (Refer to Chapter 27-10-00.)
      - 2) Aileron Trim Tab Control System. (Refer to Chapter 27-10-00.)

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- 3) Rudder Trim Tab Control System. (Refer to Chapter 27-20-00.)
- 4) Rudder Control System. (Refer to Chapter 27-20-00.)
- 5) Elevator Control System. (Refer to Chapter 27-30-00.)
- (b) Check each control surface's balance weights and support structure for damage, deformation, buckling, loose rivets, and separations.
- (5) Install wing and empennage access panels.

### 11. Heat Damage Inspection

**CAUTION:** DO NOT REMOVE PAINT FINISHES OR ANY METAL DISCOLORATION UNTIL DETERMINATION OF HEAT DAMAGE HAS BEEN COMPLETED.

- A. When heat damage has occurred such as brake fire, bleed air leak, electrical burn, lightning strike, etc., inspect surrounding areas for overheat exposure. Signs to look for, but not limited to, are paint discoloration, metal discoloration, bubbled finish, buckled parts, canning parts, melted material (Ref Chapter 51-10 of SRM). If a part or surrounding area is heat damaged, contact Learjet Field Support Engineering for inspection requirements.

### 12. Pressure Cabin Skin Thickness Measurement (See Figure 4.)

**NOTE:** To be accomplished when aircraft has been stripped for repaint preparation.

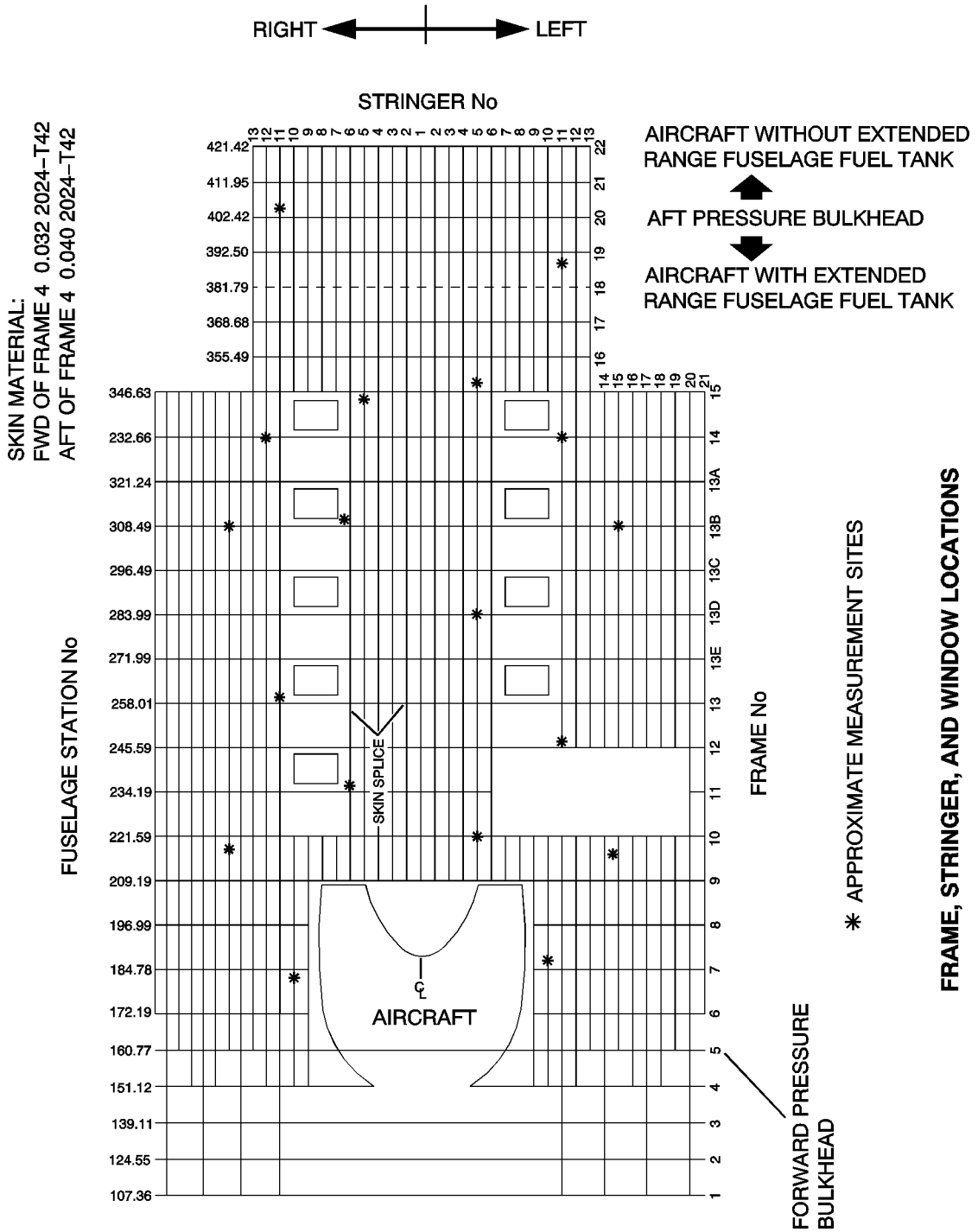
- A. The purpose of this pressure cabin skin thickness measurement is to monitor the effects of multiple paint applications that may have occurred to aircraft that have been in service for a considerable period of time. Old paint removal may have been accomplished by a combination of stripping and sanding plus additional sanding for surface roughening for new primer/paint adhesion. Experience has shown that up to 0.001 inch [0.051 millimeter] of skin thickness removal occurs with each sanding operation. This results in degraded levels of fatigue and crack propagation characteristics for the pressure cabin skins on aircraft that have been subjected to multiple painting operations. The procedure below outlines the necessary skin thickness measurements and procedures that are required to compensate for a possible "thin skin" condition.
- B. Figure 4 illustrates the general locations for measurement of the local skin thickness. There are a total of 18 location sites distributed throughout the pressure cabin area. The local thickness shall be determined by eddy current inspection procedure. (Refer to Part 3, Chapter 53, of the NDI Manual.) This equipment may be used from inside the aircraft or may be used externally. For inside use, the foam must be removed locally down to the skin interior surface and slightly away from the adjacent stringer or frame fuselage attachment to provide proper probe clearance. Following thickness measurements, the readings are to be averaged as described below.

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- C. After a reliable skin thickness measurement has been established for each of the sites depicted by the following figure, the evaluation of these results is to be accomplished in the following manner:
- (1) Rank order the thickness values in descending order ( $t_1 = .040$ ,  $t_2 = .038$ ,  $t_3 = .037$ , etc.).
  - (2) Isolate the lower (thinner) one-half of the readings. Average these to determine a representative 'thin' value.
  - (3) Compare this average 'thin' value with the disposition criteria listed below:
    - (a) If the average skin 'thin' value is 0.037 inch [0.940 mm] or greater, adhere to the standard inspection program.
    - (b) If the average skin 'thin' value is 0.036 inch [0.939 mm] or less, contact Learjet Field Service for disposition assistance. Having the individual thickness values available will expedite disposition.
- D. It is emphasized that the repainting procedure for aircraft should minimize any sanding activity on the pressure cabin skin. It may not be feasible to eliminate sanding altogether, but curtailed use is recommended and where absolutely necessary, the smallest grit size possible (largest number) should be used.
- E. Chapter 20 of this Maintenance Manual outlines an acceptable technique for repainting an aircraft. This procedure is recommended to minimize further degradation of your Learjet pressure cabin structural integrity.

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## SKIN THICKNESS MEASUREMENT LOCATIONS



Skin Thickness Measurement Locations  
Figure 4 (Sheet 1 of 2)

M31-055000-004-01

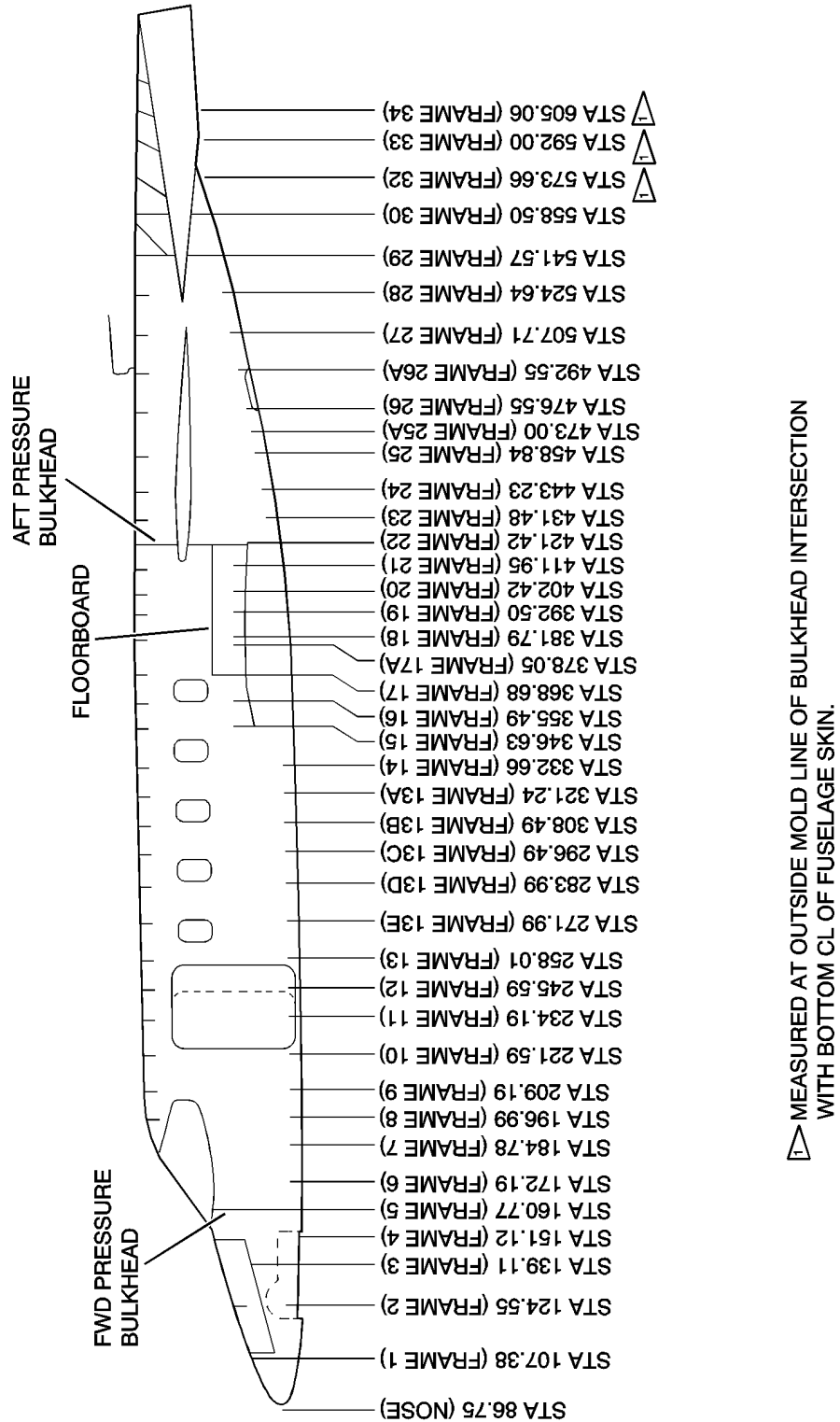
EFFECTIVITY: ALL

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Skin Thickness Measurement Locations  
Figure 4 (Sheet 2 of 2)

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### 13. Inspection of Flaps After Contaminated Runway Takeoff or Landing

**NOTE:** If you have taken off or landed on a runway with standing or puddling water, snow, or slush estimated to be more than 0.5 inches deep or experienced a rapid uncommanded deceleration on a runway with any of these conditions, perform this unscheduled inspection.

- A. Lower the flaps to 40 degrees.
- B. Gain access to the flap sector actuator attach point, flap actuator, and flap actuator attach bracket.
- C. Inspect for fatigue cracks, deformation, corrosion, marks, scratches, fastener working, and general security. (Refer to 5-10-00.)
- D. Inspect the upper and lower flap skins, particularly around the inboard attach points, for deformation. (Refer to 5-10-00.)

### 14. Volcanic Ash Inspection and Maintenance Procedures

- A. The inspection and maintenance criteria contained in this document is to be performed when it is suspected or known that the aircraft has been contaminated by volcanic ash when one or more of the following occurred:
  - (1) The aircraft flew through a cloud of volcanic ash.
  - (2) The aircraft was covered in volcanic ash fallout during ground operations, such as towing, taxiing, or parking (even if the engines were not running).

**NOTE:** Volcanic ash fallout can be circulated by wind gusts or aircraft/ramp vehicle movement in an area contaminated by volcanic ash.

- (3) The aircraft encountered volcanic ash fallout during landing or take-off.

#### B. General

- (1) Volcanic ash is a highly abrasive, acidic material produced during volcanic events, such as an eruption. The texture of volcanic ash is equivalent to talcum powder; the majority of particles are under 5 microns, with small quantities that are more than 50 microns. Acidity levels can vary from 7 pH (neutral) to 2 pH (very acidic). Volcanic ash can cause erosion, abrasion, or etching on surfaces. It can also remove finishes, which lets corrosion occur. During volcanic ash encounters, smoke or dust accompanied by an acrid odor may be detected in the flight and passenger compartments. Indications of an in-flight volcanic ash encounter include: electrostatic discharge across the windshields, decreased visibility, and a bright glow in the engine inlets. Volcanic ash will melt when it goes through the combustion chamber of the engines. Volcanic ash causes engine malfunctions such as: stalls, fluctuating engine parameters, increasing interturbine temperatures (ITT), torching from the exhaust pipe, and flameout.

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- (2) If the aircraft was contaminated while parked, it is not necessary to do a check of the systems which are protected by the applicable covers/protective devices if you do not find ash behind the covers.
- (3) Some subtasks in this procedure are optional if the level of volcanic ash contamination in the aircraft is in the limits given in the subtask.

**NOTE:** If the aircraft encounters any condition not outlined in these procedures, contact your local Field Service Representative.

**C. Tools and Equipment.**

- (1) Get the necessary tools and equipment.

**NOTE:** You can use equivalent alternatives for these items:

NAME	PART NUMBER	MANUFACTURER	USE
Vacuum cleaner		Commercially Available	Clean volcanic ash from aircraft.
Soft brushes		Commercially Available	Clean volcanic ash from aircraft.
Goggles		Commercially Available	Protect eyes from airborne particles.
Respirator with filter (capable of filtering volcanic ash particles)			Protect respiratory track from airborne particles.
Protective clothing			Protect from abrasive volcanic ash.
Air Blower			Clean volcanic ash from aircraft.
Soft cloths			Clean volcanic ash from aircraft.
Warning placards			Warning to personnel in the area.
Compressed dry air or nitrogen			Clean volcanic ash from aircraft.

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**WARNING:** WEAR PROTECTIVE CLOTHING, EYE GOGGLES, AND RESPIRATOR MASKS CAPABLE OF FILTERING VOLCANIC ASH PARTICLES WHEN YOU WORK WITH VOLCANIC ASH. VOLCANIC ASH CAN CAUSE EYE IRRITATION AND MAY BE HAZARDOUS TO YOUR RESPIRATORY SYSTEM.

MAKE SURE THAT SAFETY DEVICES, WARNING SIGNS, AND WARNING PLACARDS ARE IN POSITION BEFORE YOU START A PROCEDURE ON OR NEAR: FLIGHT CONTROLS, FLIGHT CONTROL SURFACES, OR COMPONENTS THAT MOVE.

MAKE SURE THAT THERE ARE NO PERSONNEL OR EQUIPMENT ON OR NEAR THE FLIGHT CONTROL SURFACES. ACCIDENTAL MOVEMENT OF THE FLIGHT CONTROLS CAN CAUSE INJURIES TO PERSONNEL AND/OR DAMAGE TO EQUIPMENT.

- (2) Make sure that all devices, warning signs, and warning placards are in the applicable positions on the aircraft.
- (3) Install the applicable warning tags on the pilot and copilot control columns.
- (4) Park the aircraft in an area suitable for removing and cleaning the volcanic ash.
  - (a) Make sure that the aircraft is properly grounded after parking.

**WARNING:** OBEY ALL THE SAFETY PRECAUTIONS WHEN YOU DO MAINTENANCE ON OR NEAR ELECTRICAL/ELECTRONIC EQUIPMENT. INJURY TO PERSONNEL AND/OR DAMAGE TO THE EQUIPMENT MAY OCCUR.

- (5) Obey all the electrical precautions.
- (6) Extend the flaps to the full down position.
- (7) Make sure that the electrical circuits are de-energized. (Refer to 24-20-00.)
- (8) Release the pressure in the hydraulic system. (Refer to 29-00-00.)

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### D. Clean the Aircraft.

**CAUTION:** VOLCANIC ASH IS ABRASIVE. DO NOT RUB THE AIRCRAFT WHEN YOU REMOVE THE ASH FROM THE AIRCRAFT. IF YOU RUB THE SURFACE YOU COULD DAMAGE THE SURFACE.

DO NOT REMOVE VOLCANIC ASH WITH FLUIDS. FLUIDS CAN MIX WITH THE ASH AND MAKE AN ABRASIVE PASTE. IF THERE IS A LAYER OF ASH ON THE AIRCRAFT, REMOVE THE ASH WITH A VACUUM CLEANER, AIR BLOWER, SOFT CLOTH, OR A SOFT BRUSH.

WHEN USING COMPRESSED AIR OR NITROGEN TO REMOVE VOLCANIC ASH, USE A MINIMAL AMOUNT OF AIR PRESSURE REQUIRED TO REMOVE THE ASH. THIS PREVENTS CONTAMINATING THE WORK ENVIRONMENT, COMPONENTS, OR OTHER AIRCRAFT IN THE AREA. FAILURE TO DO SO MAY CAUSE INJURIES TO PERSONNEL AND/OR DAMAGE TO THE EQUIPMENT OR AIRCRAFT.

- (1) If there is a layer of ash on the surface of the aircraft, remove the ash with a vacuum cleaner, air blower, soft cloth, or a soft brush.

**NOTE:** After removing volcanic ash from the aircraft, it is acceptable to clean the aircraft as needed using the procedures in the Aircraft Maintenance Manual.

- (2) Clean the aircraft exterior. (Refer to 12-24-00.)
- (3) Clean the aircraft interior. (Refer to 12-25-00.)
- (4) Clean the aircraft windows. (Refer to 12-24-00.)
- (5) Remove power from the aircraft.

### E. Inspection of the Fuselage (Interior).

**NOTE:** Contact Field Service Representative for disposition on damage to any of the following items.

- (1) Inspect the aircraft passenger and flight compartments for evidence of volcanic ash. Vacuum and clean as necessary.
- (2) Inspect the compartments above floor level, closets, seats, floor coverings, lavatory and galley.
- (3) Drain, flush and fill all fluid and water containers.
- (4) Inspect the nose area forward of the pressure bulkhead for contamination. Inspect all electronic connections and equipment. Clean as necessary.
- (5) Inspect the aft baggage and service areas for contamination. Clean as necessary.

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**F. Inspection of the Fuselage (Exterior).**

**NOTE:** Contact Field Service Representative for disposition on damage to any of the following items.

- (1) Inspect the radome for damage.

**NOTE:** If radome has been penetrated, remove and inspect weather radar antenna.

- (2) Inspect the windshield for damage.
- (3) Inspect the side windows for damage.
- (4) Inspect the passenger windows and emergency exit windows for damage.
- (5) Inspect the fuselage, including the fairings, for damage.
- (6) Clean and repair as necessary.

**G. Inspection of the Wings.**

**NOTE:** Contact Field Service Representative for disposition on damage to any of the following items.

- (1) Inspect all static dischargers for damage.
- (2) Inspect the top and bottom skin of the wings for damage.

**NOTE:** If skin areas have been penetrated, inspect behind the surfaces for damage.

- (3) Inspect the flap fairings for damage.

**CAUTION:** MAKE SURE ALL VOLCANIC ASH IS REMOVED FROM THE AREA BETWEEN THE SEALS AND THE SURFACE OF THE AIRCRAFT. VOLCANIC ASH IS AN ABRASIVE SUBSTANCE AND CAN CAUSE DAMAGE TO THE SEALS AND THE SURFACE OF THE AIRCRAFT.

- (4) Inspect the vortex generators or Boundary Layer Energizers (BLE's) for damage.
- (5) Inspect the skin of all control surfaces (flaps, spoilers, ailerons, and aileron tabs) and leading and trailing edges for damage.
- (6) Inspect all antennas for damage.
- (7) Inspect the hinge areas of the spoilers, ailerons, and aileron tabs for contamination. Clean as necessary.
- (8) Inspect all emergency exits and doors, door seals, door operating handles and mechanisms for contamination. Clean as necessary.
- (9) Inspect the flap tracks and the flap rollers. If contamination is found do the following:
  - (a) Clean the flap tracks and the flap rollers as necessary and then lubricate. (Refer to 12-21-02.)
- (10) Inspect all flap actuators, cables, and bellcranks for contamination. If contamination is found, clean the flap actuators, cables, and bellcranks as necessary.

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- (11) Inspect the spoiler areas. If contamination is found, do the following:
  - (a) Move the hydraulic actuators to the fully extended position.
  - (b) Clean the spoiler areas and the hydraulic actuators with a soft cloth.
- (12) Lubricate aircraft as necessary. (Refer to Chapter 12-00-00.)

### H. Inspection of the Power Plant and Nacelles.

**NOTE:** If the aircraft was on the ground with the applicable protective covers/devices installed when the volcanic ash contamination occurred, this inspection is not necessary when there is no ash behind the covers.

- (1) Do the volcanic ash inspection of the engines.

**NOTE:** All engine work to be done in accordance with Engine Maintenance Manuals and Technical Support.

- (2) Do a detailed inspection of the fire extinguisher system lines for blockages and contamination. Remove and clean as necessary.
- (3) Clean engine exterior as necessary with dry compressed air, soft cloths or soft brushes.
- (4) Inspect the air intake cowl for damage and/or contamination.
- (5) Remove the lower and upper cowls. (Refer to 71-10-00.)
- (6) Inspect the lower and upper cowls for contamination. If contamination is found, clean as necessary.
- (7) Install the lower and upper cowls. (Refer to 71-10-00.)
- (8) Do the detailed inspection of the thrust reverser systems. (Refer to the Thrust Reverser Manual.)

### I. Inspection of the Air Conditioning and Bleed Air System (Refer to 21-00-00 and 36-00-00.)

**NOTE:** This inspection is necessary if contamination in the engine was found during engine inspection.

- (1) Check ram air ducting and heat exchanger for volcanic ash accumulation. Clean as necessary.
- (2) Clean or replace the cabin pressurization filter elements (if installed).
- (3) Clean or replace the pressurization module filter (if installed).
- (4) Remove the cabin air exhaust control valve and clean poppet and seat with mild detergent.
- (5) Inspect positive ventilation check valve (if installed).
- (6) Clean or replace the pressurization module filter (if installed).
- (7) Clean or replace cabin safety valve filter.
- (8) Clean or replace servo air pressure regulator.
- (9) Clean or replace pressurization vacuum regulator filter.
- (10) Clean or replace temperature control system filters.
- (11) Inspect cabin safety valve altitude limiter inlet screen. Clean if necessary.
- (12) Inspect refrigeration (air conditioning) system components. Clean if necessary.

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- (13) Perform functional test of cabin safety valve pressure aneroid switch (if installed).
- (14) Perform functional test of the pressurization aneroid switch (if installed).
- (15) Perform functional test of cabin pressure warning system aneroid switch (if installed).
- (16) Perform functional check of cabin dump switch (if installed).
- (17) Perform functional test of auxiliary defog system (internal).
- (18) Perform functional test of cabin pressurization system.
- (19) Perform functional test of emergency pressurization system.
- (20) Perform functional test of emergency pressurization aneroid switches. (S89 & S90)

J. Inspection of the De-Icing/Anti-Ice System. (Refer to 30-00-00.)

**NOTE:** This inspection is necessary if contamination is found in the engine during the engine inspection.

- (1) Inspect the leading edge anti-ice components as follows:
  - (a) Remove the LH and RH wing anti-ice bypass valves. (Refer to 30-10-00.)
  - (b) Inspect the valves for contamination. If contamination is found, clean the valve with a soft cloth or compressed air, or replace as necessary.
  - (c) Install the LH and RH wing anti-ice bypass valves. (Refer to 30-10-00.)
  - (d) Remove the wing anti-ice shutoff and pressure regulator valve. (Refer to 30-10-00.)
  - (e) Inspect the valves for contamination. If contamination is found, clean the valve with a soft cloth or compressed air, or replace as necessary.
  - (f) Install the wing anti-ice shutoff and pressure regulator valve. (Refer to 30-10-00.)
  - (g) Remove the wing leading edges to get access to the wing piccolo tubes and areas around the tubes. Clean as necessary. (Refer to 57-20-01.)

**WARNING:** AFTER EACH INSTALLATION OF THE WING LEADING EDGE, A STALL FLIGHT TEST SHALL BE DONE TO DETERMINE THAT THE WING LEADING EDGE IS PROPERLY INSTALLED. STALL FLIGHTS MUST BE CONDUCTED BY A PILOT APPROVED BY LEARJET, INC. ADJUSTMENTS TO THE STALL WARNING SYSTEM MAY BE NECESSARY.

- (h) Install the piccolo tubes and leading edge panels. (Refer to 57-20-01.)
- (i) Contact Learjet Field Service Engineering to do the stall warning flight test.

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### K. Inspection the Fuel System:

**CAUTION:** OBEY ALL FUEL SAFETY PRECAUTIONS WHILE YOU INSPECT THE FUEL SYSTEM.

- (1) Obtain fuel samples for examination from each fuel tank through their respective drain valves and low pressure fuel filters.
- (2) If the fuel was found to be contaminated, do the steps that follow:
  - (a) Drain all tanks of contents. Flush and clean the fuel system completely. (Refer to 12-10-10.)
  - (b) Open all wing access panels. (Refer to 57-30-01.)
  - (c) Inspect wing for contamination. If contamination was found, clean as necessary.
  - (d) Remove all fuel pumps. Inspect to make sure no volcanic ash contamination is present. (Refer to 28-00-00.)
  - (e) Remove and clean all drain valves. Replace o-ring seals.
  - (f) Install all fuel pumps and drain valves.
  - (g) Inspect the vent tube lines for contamination. If contamination is found, clean as necessary.
  - (h) Install the vent tube lines. (Refer to 28-00-00.)
  - (i) Clean or replace low pressure fuel filters as necessary.
  - (j) Close all wing access panels. (Refer to 57-30-01.)

### L. Inspection of Hydraulic System. (Refer to 29-00-00.)

- (1) Inspect all hydraulic actuators, exposed piston rods and rod ends. Clean as necessary.
- (2) Inspect all hydraulic components within the nacelle to include the electrical connectors. Clean if necessary.
- (3) Get a sample of the hydraulic fluid for examination. If ash contamination is evident in the hydraulic fluid, do the hydraulic system flush procedure and replace all hydraulic filter elements as required.

### M. Inspection of the Sensors and Probes.

**NOTE:** If the aircraft was on the ground with applicable protective covers/devices installed when the volcanic ash contamination occurred, this inspection is not necessary when there is no ash behind the covers.

- (1) Inspect the following sensors and probe for contamination:
  - (a) Pitot tubes
  - (b) Static probes
  - (c) Total Air Temperature (TAT) sensors
  - (d) Angle of Attack (AOA) sensors

**NOTE:** Make sure that the AOA sensors move freely and that drain holes of the pitot tubes are not clogged.

- (e) Ice detector probes



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### N. Inspection of the Landing Gear Wheels.

- (1) Inspect the landing gear wheels as follows:
  - (a) Inspect the landing gear wheels for volcanic ash contamination.
  - (b) If contamination is found, remove the ash from the wheel and brake assemblies with compressed air.
- (2) Inspect the tires as follows:
  - (a) Inspect the tires for volcanic ash contamination.
  - (b) If contamination is found, remove the ash from the exterior of the tires, tread, and sidewall with a soap solution.

**CAUTION:** DO NOT LET THE SOAP AND ASH MIXTURE (SLURRY) COME INTO CONTACT WITH THE WHEEL SPEED TRANSDUCER (WST) WHEN WASHING THE TIRES. THE SLURRY WILL DAMAGE THE WHEEL SPEED TRANSDUCER INTERFACE.

- (3) Inspect the wheel speed transducer (WST) and hubcaps as follows:
  - (a) Inspect the hubcaps for volcanic ash contamination.
  - (b) If contamination is found, remove the ash from the hubcaps with compressed air.
  - (c) At the subsequent tire change, remove the hubcaps and remove the remaining ash from the WST interface with compressed air.

### O. Inspection of the Landing Gear Doors, Gears, and Wheel Wells:

- (1) Inspect the landing gear doors as follows:
  - (a) Inspect the doors for damage and/or contamination, including the following components:
    - 1) Door skin
    - 2) Door hinges
    - 3) Switches
    - 4) Actuator rods
  - (b) If contamination is found at the nose landing gear (NLG) doors, remove the contamination from all surfaces before subsequent flight.
- (2) Inspect the landing gears as follows:
  - (a) Inspect the landing gears for damage and/or contamination, especially the following components:
    - 1) Landing gear attachment points
    - 2) Shock strut pistons
    - 3) Mechanical linkages and moving joints
- (3) Inspect the landing gear wheel wells as follows:
  - (a) Inspect the landing gear wheel wells for damage and/or contamination.
  - (b) If contamination is found at the landing gear wheel wells, remove the contamination from all surfaces before subsequent flight.

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### P. Inspection of the APU Intake, Exhaust, and Fire Extinguisher.

- (1) Inspect the APU intake and exhaust for contamination and/or damage.
- (2) If contamination is found and the APU was not in operation during the volcanic ash contamination, clean the APU air intake and exhaust.
- (3) If contamination is found and the APU was in operation, do the following:
  - (a) Clean the APU air intake and exhaust.
  - (b) Reference the APU Manufacturers recommendations.
- (4) Inspect the APU fire extinguisher container for damage and contamination.

### Q. Fully inspect the Air Conditioning System.

- (1) Inspect the Condenser. (Refer to 21-50-03.)
- (2) Using an air blower, blow air through the condenser and check if ash comes out of the unit. If ash is present, thoroughly clean the condenser with compressed air.

### R. Do an internal inspection of the aircraft:

**NOTE:** This inspection is necessary if you found contamination in the engine during the engine inspection, or if you found contamination in the air conditioning during the air conditioning inspection.

- (1) Inspect the cabin area for ash contamination. If contamination is found, clean all of the contaminated surfaces.
- (2) Inspect the flight compartment for ash contamination. If contamination is found, clean all of the contaminated surfaces.
- (3) Remove the crew oxygen masks. (Refer to 35-10-01.)
- (4) Inspect the crew oxygen masks for contamination. If contamination is found, clean all of the contaminated surfaces with a soft cloth.
- (5) Remove the crew oxygen mask storage boxes.
- (6) Inspect the storage boxes for contamination. If contamination is found, clean all of the contaminated surfaces with a soft cloth.
- (7) Install the crew oxygen mask storage boxes.
- (8) Install the crew oxygen masks. (Refer to 35-10-01.)
- (9) Inspect the oxygen bottles, regulator and fittings (from the outside). If contamination is found, clean the contaminated surfaces using a soft brush, soft cloth or a cotton swab.
- (10) Do a leak test of the oxygen system. (Refer to 35-00-00.)
- (11) Inspect the avionics compartment including all visible items (especially around the ventilated compartments) for ash contamination. If contamination is present, clean all contaminated surfaces.
- (12) Inspect the baggage compartment for ash contamination. If contamination is found, clean all of the contaminated surfaces.
- (13) Inspect engine fire bottles and fittings in tailcone and clean as necessary using a soft cloth.
- (14) Do an operational test of the fire extinguishing system. (Refer to 26-21-00.)
- (15) Deactivate smoke detector. (Refer to 26-12-01.)
- (16) Remove the smoke detector. (Refer to 26-12-01.)

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- (17) Inspect the smoke detector for contamination as follows.
  - (a) Obey all electrostatic discharge precautions.
  - (b) Determine if the unit can be cleaned and Installed.
  - (c) If the smoke detector is severely contaminated and can not be cleaned, replace the unit
- (18) Clean the internal components using a soft brush, soft cloth or cotton swab.

NOTE: Make sure that the inner area of the opening to the photodiode is clean. If the photodiode is dirty, the smoke detector will not operate correctly.

- (19) Install the smoke detector. (Refer to 26-12-01.)
- (20) Reactivate the smoke detector. (Refer to 26-12-01.)
- (21) Do an operational test of the smoke detection system. (Refer to 26-12-00.)
- (22) Remove/open the nose avionics bay doors.
- (23) Inspect for contamination. If contamination is found, clean all contaminated surfaces using dry compressed air or dry cloth.
- (24) Open aft equipment doors.
- (25) Inspect for contamination. If contamination is found, clean all contaminated surfaces using dry compressed air or dry cloth.

### S. Inspection of the Main Hydraulic System:

- (1) Take a sample of the fluid from the Hydraulic System for particle count.
- (2) If contamination is found above acceptable limits, do the hydraulic flushing procedure. (Refer to 29-00-00.)

### T. Inspect the following components for contamination:

- (1) Engine Starter Generators
- (2) APU Generator
- (3) Main batteries
- (4) If contamination is found on any of the components, use dry air or nitrogen to remove the ash.

### U. Inspection of the Potable Water System

- (1) Drain the galley potable water, flush and fill with water. (Refer to 12-10-12.)
- (2) Drain the lavatory potable water system, flush and fill with water. (Refer to 12-10-12.)

### V. Restore aircraft and perform functional testing:

- (1) Restore aircraft as required after performing inspections.
- (2) Lubricate all external doors. (Refer to 12-00-00.)
- (3) Do the operational checks of the flight control system. (Refer to 27-00-00.)
- (4) Do the operational checks of the hydraulic system. (Refer to 29-00-00.)
- (5) Do the operational checks of the Landing Gear system. (Refer to 32-00-00.)
- (6) Do the functional test of any electrical component found contaminated.
- (7) Fuel aircraft and do the leak checks and fuel system operation checks. (Refer to 12-00-00 & 28-00-00.)
- (8) Do the operational check of ECS/Bleed Air systems. (Refer to 21-00-00 & 36-00-00.)
- (9) Do the operational check of the wing and stab Anti-ice system. (Refer to 30-00-00.)

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## REFERENCE DATA

### 1. Revision Level

A. The table below contains a listing of the nominal revision level and date reference that can be used to estimate when the last change to an inspection occurred. This change may be to the wording of the inspection, the interval of the inspection, or may be the date that the inspection was originally put into the manual. By referring to the letter in each IRN, a manual revision and date can be determined. In most cases, this is the date of the last change to the inspection. A possible exception to this is as follows:

(1) The inspection may have been changed by a Temporary Revision prior to the date of the revision to the manual.

B. For assistance in determining the exact history of a specific inspection, contact Learjet Maintenance Engineering.

REVISION LETTER	MANUAL REVISION NUMBER	MANUAL REVISION DATE
O	Original	Aug 1/88
A	16	Sep 13/93
B	19	Sep 16/94
C	22	Aug 14/95
D	25	Aug 30/96
E	26	Feb 28/97
F	29	Apr 17/98
G	31	Feb 12/99
H	32	Dec 17/99
J	35	Dec 15/00
K	37	Dec 7/01
L	38	Nov 7/03
M	39	Dec 10/04
N	40	Jan 30/06
N, P	41	Feb 26/07
P, Q	42	Feb 25/08
Q	43	Feb 23/09
R	44	Nov 23/09
S	45	Oct 25/10
T	46	Feb 28/11

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## 2. IRN Listing

A. This section contains a listing of the Inspection Reference Numbers (IRN). The IRNs are listed in numerical order with the interval, phase, phase number, and section where the inspection is located.

IRN BY ATA	INTERVAL	PHASE	PHASE NUMBER	SECTION
T1130001	2400 HOURS/96 MONTHS	D	2	D-INSPECTION
D1210008	300 HOURS/12 MONTHS	A	3	SERVICING
P1210051	300 HOURS/12 MONTHS	A	5	SERVICING
P1210052	300 HOURS/12 MONTHS	A	5	SERVICING
P1210053	300 HOURS/12 MONTHS	A	1	SERVICING
P1210054	300 HOURS/12 MONTHS	A	1	SERVICING
P1210055	300 HOURS/12 MONTHS	A	5	SERVICING
D1221001	300 HOURS/12 MONTHS	A	5	SERVICING
D1221002	600 HOURS/24 MONTHS	B	5	SERVICING
H1221003	1200 HOURS/48 MONTHS	C	5	SERVICING
G1221004	300 HOURS/12 MONTHS	A	5	SERVICING
G1221005	300 HOURS/12 MONTHS	A	5	SERVICING
G1221007	600 HOURS/24 MONTHS	B	5	SERVICING
F1221008	600 HOURS/24 MONTHS	B	5	SERVICING
D1221009	300 HOURS/12 MONTHS	A	5	SERVICING
D1221010	300 HOURS/12 MONTHS	A	5	SERVICING
D1221011	300 HOURS/12 MONTHS	A	5	SERVICING
D1221012	300 HOURS/12 MONTHS	A	5	SERVICING
D1221013	300 HOURS/12 MONTHS	A	5	SERVICING
D1221014	600 HOURS/24 MONTHS	B	5	SERVICING
H1221015	1200 HOURS/48 MONTHS	C	5	SERVICING
G1221016	600 HOURS/24 MONTHS	B	4	SERVICING
L1221017	300 HOURS/12 MONTHS	A	4	SERVICING
H1221022	600 HOURS/24 MONTHS	B	6	SERVICING
H1221028	600 HOURS/24 MONTHS	B	6	SERVICING
G1221031	300 HOURS/12 MONTHS	A	3	SERVICING
P1221043	300 HOURS/12 MONTHS	A	5	SERVICING
G1222001	3 MONTHS			SPECIAL INSPECTION
G1222002	Per manufacturer's instructions			SPECIAL INSPECTION

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IRN BY ATA	INTERVAL	PHASE	PHASE NUMBER	SECTION
P1222005	3 MONTHS			SPECIAL INSPECTION
F1223010	6 MONTHS			SPECIAL INSPECTION
D1223015	12 MONTHS			SPECIAL INSPECTION
C1223021	6 MONTHS			SPECIAL INSPECTION
G1223031	12 MONTHS			SPECIAL INSPECTION
O1223040	6 MONTHS			SPECIAL INSPECTION
G1230000	300 HOURS/12 MONTHS	A	2	SERVICING
P2061000	After complete aircraft repaint.			SPECIAL INSPECTION
T2120001	2400 HOURS/96 MONTHS	D	3	D-INSPECTION
H2130006	2400 HOURS/96 MONTHS	D	1	D-INSPECTION
H2130007	1200 HOURS			SPECIAL INSPECTION
H2130022	600 HOURS/24 MONTHS	B	1	B-INSPECTION
H2130046	1200 HOURS/48 MONTHS	C	2	C-INSPECTION
E2130055	1200 HOURS/48 MONTHS	C	1	C-INSPECTION
E2130059	1200 HOURS/48 MONTHS	C	2	C-INSPECTION
E2130060	1200 HOURS/48 MONTHS	C	2	C-INSPECTION
E2130062	1200 HOURS/48 MONTHS	C	3	C-INSPECTION
T2130069	600 HOURS/24 MONTHS	B	1	B-INSPECTION
P2130070	1200 HOURS/48 MONTHS	C	1	C-INSPECTION
H2131014	600 HOURS/24 MONTHS	B	1	B-INSPECTION
H2132002	600 HOURS/24 MONTHS	B	1	B-INSPECTION
H2132020	600 HOURS/24 MONTHS	B	1	B-INSPECTION
H2142001	600 HOURS/24 MONTHS	B	1	B-INSPECTION
H2143000	600 HOURS/24 MONTHS	B	1	B-INSPECTION
H2150000	600 HOURS/24 MONTHS	B	3	B-INSPECTION
E2150003	600 HOURS/24 MONTHS	B	3	B-INSPECTION
K2150009	Every 600 refrigeration compressor motor hours			SPECIAL INSPECTION
H2150025	1200 HOURS/48 MONTHS	C	3	C-INSPECTION
K2150026	Every 1200 refrigeration compressor motor hours			SPECIAL INSPECTION
K2150034	1200 METER HOURS			SPECIAL INSPECTION
K2150035	2000 METER HOURS			SPECIAL INSPECTION
K2150045	2400 HOURS/96 MONTHS	D	3	D-INSPECTION

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IRN BY ATA	INTERVAL	PHASE	PHASE NUMBER	SECTION
K2150050	Every 600 refrigeration compressor motor hours			SPECIAL INSPECTION
H2160000	1200 HOURS/48 MONTHS	C	3	C-INSPECTION
H2160002	1200 HOURS/48 MONTHS	C	2	C-INSPECTION
H2160005	600 HOURS/24 MONTHS	B	3	B-INSPECTION
R2160011	2400 HOURS/96 MONTHS	D	3	D-INSPECTION
H2211012	1200 HOURS/48 MONTHS	C	3	C-INSPECTION
H2211032	1200 HOURS/48 MONTHS	C	2	C-INSPECTION
H2211036	1200 HOURS/48 MONTHS	C	6	C-INSPECTION
H2211041	1200 HOURS/48 MONTHS	C	3	C-INSPECTION
H2212014	1200 HOURS/48 MONTHS	C	6	C-INSPECTION
H2212023	1200 HOURS/48 MONTHS	C	6	C-INSPECTION
H2213001	1200 HOURS/48 MONTHS	C	5	C-INSPECTION
H2213004	1200 HOURS/48 MONTHS	C	2	C-INSPECTION
E2360010	300 HOURS/12 MONTHS	A	6	A-INSPECTION
E2360011	300 HOURS/12 MONTHS	A	6	A-INSPECTION
H2360021	2400 HOURS/96 MONTHS	D	4	D-INSPECTION
P2360022	2400 HOURS/96 MONTHS	D	6	D-INSPECTION
P2400008	600 HOURS/24 MONTHS	B	5	B-INSPECTION
T2400009	1200 HOURS/48 MONTHS	C	3	C-INSPECTION
T2400003	2400 HOURS/96 MONTHS	D	2	D-INSPECTION
H2400004	1200 HOURS/48 MONTHS	C	2	C-INSPECTION
Q2400006	600 HOURS/24 MONTHS	B	3	B-INSPECTION
E2431010	300 HOURS/12 MONTHS	A	3	A-INSPECTION
H2431011	1000 HOURS			SPECIAL INSPECTION
H2431017	300 HOURS			SPECIAL INSPECTION
E2431057	12 YEARS/6000 LANDINGS			REPLACEMENT SCHEDULE
E2431058	12 YEARS/6000 LANDINGS			REPLACEMENT SCHEDULE
P2431059	600 HOURS			SPECIAL INSPECTION
T2432000	2400 HOURS/96 MONTHS	D	1	D-INSPECTION
H2432002	1200 HOURS/48 MONTHS	C	1	C-INSPECTION
B2432010	6 MONTHS			SPECIAL INSPECTION

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IRN BY ATA	INTERVAL	PHASE	PHASE NUMBER	SECTION
T2450020	1200 HOURS/48 MONTHS	C	1	C-INSPECTION
H2450021	2400 HOURS/96 MONTHS	D	1	D-INSPECTION
P2510005	300 HOURS/12 MONTHS	A	1	A-INSPECTION
E2510010	300 HOURS/12 MONTHS	A	1	A-INSPECTION
P2520007	300 HOURS/12 MONTHS	A	2	A-INSPECTION
H2540004	600 HOURS/24 MONTHS	B	2	B-INSPECTION
P2561005	per manufacturer's instruction.			SPECIAL INSPECTION
E2562001	6 MONTHS			SPECIAL INSPECTION
B2562010	12000 HOURS			12000 HOUR INSPEC- TION
J2563001	12 MONTHS			SPECIAL INSPECTION
L2564000	On or before battery replacement date.			REPLACEMENT SCHEDULE
L2564002	5 years from date of installation.			REPLACEMENT SCHEDULE
F2565000	2 YEARS			SPECIAL INSPECTION
F2566000	Replace on or before battery replacement date			REPLACEMENT SCHEDULE
H2610010	600 HOURS/24 MONTHS	B	3	B-INSPECTION
E2610020	DURING MAJOR ENGINE INSPEC- TION/UNSCHEDULED ENGINE CHANGE			SPECIAL INSPECTION
Q2620010	12 MONTHS			SPECIAL INSPECTION
H2620020	2400 HOURS/96 MONTHS	D	3	D-INSPECTION
Q2620025	600 HOURS/24 MONTHS	B	3	B-INSPECTION
R2620030	12 YEARS			SPECIAL INSPECTION
H2620035	6 YEARS			REPLACEMENT SCHEDULE
H2620036	10 YEARS			REPLACEMENT SCHEDULE
P2620040	6 YEARS			REPLACEMENT SCHEDULE
P2620041	300 HOURS/12 MONTHS			A-INSPECTION
P2620042	6 MONTHS			SPECIAL INSPECTION

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IRN BY ATA	INTERVAL	PHASE	PHASE NUMBER	SECTION
C2700011	12 YEARS/6000 LANDINGS			12 YEAR AIRFRAME INSPECTION
C2700013	12 YEARS/6000 LANDINGS			12 YEAR AIRFRAME INSPECTION
H2700015	1200 HOURS/48 MONTHS	C	5	C-INSPECTION
H2700016	1200 HOURS/48 MONTHS	C	2	C-INSPECTION
H2700018	600 HOURS/24 MONTHS	B	4	B-INSPECTION
C2700019	12 YEARS/6000 LANDINGS			12 YEAR AIRFRAME INSPECTION
C2700020	12 YEARS/6000 LANDINGS			12 YEAR AIRFRAME INSPECTION
H2700021	1200 HOURS/48 MONTHS	C	6	C-INSPECTION
C2700022	12 YEARS/6000 LANDINGS			12 YEAR AIRFRAME INSPECTION
C2700023	12 YEARS/6000 LANDINGS			12 YEAR AIRFRAME INSPECTION
H2700024	1200 HOURS/48 MONTHS	C	4	C-INSPECTION
E2700031	600 HOURS/24 MONTHS	B	3	B-INSPECTION
E2700032	600 HOURS/24 MONTHS	B	2	B-INSPECTION
E2700033	600 HOURS/24 MONTHS	B	4	B-INSPECTION
P2700050	300 HOURS/12 MONTHS	A	1	A-INSPECTION
Q2700051	1200 HOURS/48 MONTHS	C	6	C-INSPECTION
T2700052	1200 HOURS/48 MONTHS	C	1	C-INSPECTION
P2700053	1200 HOURS/48 MONTHS	C	2	C-INSPECTION
P2700054	600 HOURS/24 MONTHS	B	5	B-INSPECTION
P2700055	600 HOURS/24 MONTHS	B	6	B-INSPECTION
T2700056	600 HOURS/24 MONTHS	B	6	B-INSPECTION
P2700057	300 HOURS/12 MONTHS	A	4	A-INSPECTION
T2700058	2400 HOURS/96 MONTHS	D	2	D-INSPECTION
T2700059	2400 HOURS/96 MONTHS	D	6	D-INSPECTION
T2700060	2400 HOURS/96 MONTHS	D	4	D-INSPECTION
E2710005	1200 HOURS/48 MONTHS	C	4	C-INSPECTION
F2710006	1200 HOURS/48 MONTHS	C	6	C-INSPECTION
E2710010	3600 HOURS			REPLACEMENT SCHEDULE

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<b>IRN BY ATA</b>	<b>INTERVAL</b>	<b>PHASE</b>	<b>PHASE NUMBER</b>	<b>SECTION</b>
E2710014	3600 HOURS			REPLACEMENT SCHEDULE
G2710016	20000 HOURS			REPLACEMENT SCHEDULE
E2710020	20000 HOURS			REPLACEMENT SCHEDULE
M2710021	20000 HOURS			REPLACEMENT SCHEDULE
E2710023	20000 HOURS			REPLACEMENT SCHEDULE
E2710024	20000 HOURS			REPLACEMENT SCHEDULE
E2710026	20000 HOURS			REPLACEMENT SCHEDULE
E2710028	20000 HOURS			REPLACEMENT SCHEDULE
E2710031	20000 HOURS			REPLACEMENT SCHEDULE
H2710032	1200 HOURS/48 MONTHS	C	2	C-INSPECTION
E2710033	1200 HOURS/48 MONTHS	C	4	C-INSPECTION
E2710034	300 HOURS/12 MONTHS	A	4	A-INSPECTION
E2710035	300 HOURS/12 MONTHS	A	6	A-INSPECTION
F2710036	2400 HOURS			REPLACEMENT SCHEDULE
T2710042	1200 HOURS/48 MONTHS	C	4	C-INSPECTION
P2710044	1200 HOURS/48 MONTHS	C	4	C-INSPECTION
P2710045	600 HOURS/24 MONTHS	B	2	B-INSPECTION
P2710046	2400 HOURS/96 MONTHS	D	1	D-INSPECTION
H2720010	600 HOURS/24 MONTHS	B	1	B-INSPECTION
F2720013	2400 HOURS			REPLACEMENT SCHEDULE
E2720018	20000 HOURS			REPLACEMENT SCHEDULE
E2720021	20000 HOURS			REPLACEMENT SCHEDULE

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IRN BY ATA	INTERVAL	PHASE	PHASE NUMBER	SECTION
E2720023	20000 HOURS			REPLACEMENT SCHEDULE
E2720024	20000 HOURS			REPLACEMENT SCHEDULE
E2720025	20000 HOURS			REPLACEMENT SCHEDULE
H2720028	1200 HOURS/48 MONTHS	C	2	C-INSPECTION
J2730011	2400 HOURS/96 MONTHS	D	6	D-INSPECTION
E2730016	20000 HOURS			REPLACEMENT SCHEDULE
E2730020	20000 HOURS			REPLACEMENT SCHEDULE
E2730021	20000 HOURS			REPLACEMENT SCHEDULE
E2730023	20000 HOURS			REPLACEMENT SCHEDULE
E2730024	20000 HOURS			REPLACEMENT SCHEDULE
E2730025	300 HOURS/12 MONTHS	A	1	A-INSPECTION
F2730030	2400 HOURS			REPLACEMENT SCHEDULE
H2731000	600 HOURS/24 MONTHS	B	1	B-INSPECTION
J2731014	600 HOURS/24 MONTHS	B	1	B-INSPECTION
H2731021	1200 HOURS/48 MONTHS	C	1	C-INSPECTION
E2731050	300 HOURS/12 MONTHS	A	2	A-INSPECTION
E2740010	20000 HOURS			REPLACEMENT SCHEDULE
G2740011	12 YEARS/6000 LANDINGS FROM INSTALLATION			REPLACEMENT SCHEDULE
F2740020	12 YEARS/6000 LANDINGS			12 YEAR AIRFRAME INSPECTION
Q2740021	600 HOURS			SPECIAL INSPECTION
P2740030	600 HOURS/24 MONTHS	B	1	B-INSPECTION
P2740031	600 HOURS/24 MONTHS	B	1	B-INSPECTION
E2750002	1200 HOURS			REPLACEMENT SCHEDULE

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IRN BY ATA	INTERVAL	PHASE	PHASE NUMBER	SECTION
E2750007	9000 HOURS			REPLACEMENT SCHEDULE
E2750010	12000 HOURS			REPLACEMENT SCHEDULE
E2750011	12000 HOURS			REPLACEMENT SCHEDULE
E2750012	12000 HOURS			REPLACEMENT SCHEDULE
E2750013	15000 HOURS			REPLACEMENT SCHEDULE
E2750014	15000 HOURS			REPLACEMENT SCHEDULE
G2750034	12 YEARS/6000 LANDINGS FROM INSTALLATION			REPLACEMENT SCHEDULE
H2750044	1200 FLIGHT HOURS			SPECIAL INSPECTION
P2760003	600 HOURS/24 MONTHS	B	4	B-INSPECTION
T2760030	1200 HOURS/48 MONTHS	C	4	C-INSPECTION
T2760031	1200 HOURS/48 MONTHS	C	4	C-INSPECTION
E2760080	12 YEARS/6000 LANDINGS			REPLACEMENT SCHEDULE
E2760081	12 YEARS/6000 LANDINGS			REPLACEMENT SCHEDULE
E2760082	12 YEARS/6000 LANDINGS			REPLACEMENT SCHEDULE
L2812002	24 MONTHS			SPECIAL INSPECTION
L2812010	24 MONTHS			SPECIAL INSPECTION
L2812020	24 MONTHS			SPECIAL INSPECTION
D2812030	12 YEARS/6000 LANDINGS			12 YEAR AIRFRAME INSPECTION
H2812060	1200 HOURS/48 MONTHS	C	4	C-INSPECTION
T2812070	2400 HOURS/96 MONTHS	D	4	D-INSPECTION
B2813011	3000 LANDING			3000 LANDING INSPEC- TION
D2814025	12 YEARS/6000 LANDINGS			12 YEAR AIRFRAME INSPECTION
H2814038	600 HOURS/24 MONTHS	B	2	B-INSPECTION

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IRN BY ATA	INTERVAL	PHASE	PHASE NUMBER	SECTION
D2814040	12 YEARS/6000 LANDINGS			12 YEAR AIRFRAME INSPECTION
T2820001	1200 HOURS/48 MONTHS	C	3	C-INSPECTION
G2820002	12 YEARS/6000 LANDINGS FROM INSTALLATION			REPLACEMENT SCHEDULE
T2820004	1200 HOURS/48 MONTHS	C	5	C-INSPECTION
E2820010	300 HOURS/12 MONTHS	A	3	A-INSPECTION
F2820011	On new aircraft, perform first replacement/cleaning and leak check after 50 flight hours.			SPECIAL INSPECTION
H2820020	600 HOURS/24 MONTHS	B	1	B-INSPECTION
C2820030	12YEARS/6000 LANDINGS			12 YEAR AIRFRAME INSPECTION
T2900000	1200 HOURS/48 MONTHS	C	3	C-INSPECTION
G2900001	12 YEARS/6000 LANDINGS FROM INSTALLATION			REPLACEMENT SCHEDULE
H2900003	600 HOURS/24 MONTHS	B	3	B-INSPECTION
E2910004	600 HOURS/24 MONTHS	B	3	B-INSPECTION
S2910008	1200 HOURS/48 MONTHS	C	3	C-INSPECTION
S2910025	600 HOURS/24 MONTHS	B	3	B-INSPECTION
H3011000	600 HOURS/24 MONTHS	B	6	B-INSPECTION
G3011002	300 HOURS/12 MONTHS	A	4	A-INSPECTION
E3020001	DURING MAJOR ENGINE INSPEC- TION/UNSCHEDULED ENGINE CHANGE			SPECIAL INSPECTION
P3020004	600 HOURS/24 MONTHS	B	3	B-INSPECTION
C3040002	12 YEARS/6000 LANDINGS			12 YEAR AIRFRAME INSPECTION
T3040004	1200 HOURS/48 MONTHS	C	2	C-INSPECTION
T3040008	2400 HOURS/96 MONTHS	D	1	D-INSPECTION
T3050003	1200 HOURS/48 MONTHS	C	2	C-INSPECTION
T3050009	1200 HOURS/48 MONTHS	C	2	C-INSPECTION
P3100001	300 HOURS/12 MONTHS	A	1	A-INSPECTION
T3110000	2400 HOURS/96 MONTHS	D	1	D-INSPECTION
H3153000	600 HOURS/24 MONTHS	B	1	B-INSPECTION

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<b>IRN BY ATA</b>	<b>INTERVAL</b>	<b>PHASE</b>	<b>PHASE NUMBER</b>	<b>SECTION</b>
G3200000	300 HOURS/12 MONTHS	A	5	A-INSPECTION
H3210000	1200 HOURS/48 MONTHS	C	5	C-INSPECTION
G3210003	1500 HOURS OR 5 YEARS FROM INSTALLATION			REPLACEMENT SCHEDULE
H3211010	1200 HOURS/48 MONTHS	C	5	C-INSPECTION
H3211020	2400 HOURS/96 MONTHS	D	5	D-INSPECTION
H3211031	300 HOURS/12 MONTHS	A	5	A-INSPECTION
H3211032	300 HOURS/12 MONTHS	A	5	A-INSPECTION
C3211040	6000 LANDINGS			MAJOR LANDING GEAR INSPECTION
C3211050	6000 LANDINGS			MAJOR LANDING GEAR INSPECTION
D3211059	6000 LANDINGS			MAJOR LANDING GEAR INSPECTION
D3211060	6000 LANDINGS			MAJOR LANDING GEAR INSPECTION
D3211061	6000 LANDINGS			MAJOR LANDING GEAR INSPECTION
F3211075	12000 LANDINGS			REPLACEMENT SCHEDULE
E3211078	12000 LANDINGS			REPLACEMENT SCHEDULE
E3211080	18000 LANDINGS			REPLACEMENT SCHEDULE
E3211082	20000 LANDINGS			REPLACEMENT SCHEDULE
E3211083	20000 LANDINGS			REPLACEMENT SCHEDULE
E3211084	20000 LANDINGS			REPLACEMENT SCHEDULE
E3211087	20000 LANDINGS			REPLACEMENT SCHEDULE
F3211094	Combined with 3211099			
M3211097	20000 LANDINGS			REPLACEMENT SCHEDULE
Q3211099	16,500 LANDINGS			REPLACEMENT SCHEDULE

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H3221000	2400 HOURS/96 MONTHS	D	5	D-INSPECTION
H3221010	2400 HOURS/96 MONTHS	D	5	D-INSPECTION
H3230000	600 HOURS/24 MONTHS	B	5	B-INSPECTION
H3230010	1200 HOURS/48 MONTHS	C	5	C-INSPECTION
E3230020	300 HOURS/12 MONTHS	A	5	A-INSPECTION
H3230021	1200 HOURS/48 MONTHS	C	5	C-INSPECTION
H3231014	2400 HOURS/96 MONTHS	D	5	D-INSPECTION
C3231030	6000 LANDINGS			MAJOR LANDING GEAR INSPECTION
H3232002	600 HOURS/24 MONTHS	B	2	B-INSPECTION
G3233003	12 YEARS/6000 LANDINGS FROM INSTALLATION			REPLACEMENT SCHEDULE
C3233010	12 YEARS/6000 LANDINGS			12 YEAR AIRFRAME INSPECTION
H3233012	1200 HOURS/48 MONTHS	C	5	C-INSPECTION
E3242000	300 HOURS/12 MONTHS	A	5	A-INSPECTION
H3243000	600 HOURS/24 MONTHS	B	5	B-INSPECTION
E3243010	300 HOURS/12 MONTHS	A	5	A-INSPECTION
H3243020	1200 HOURS/48 MONTHS	C	2	C-INSPECTION
H3243030	2400 HOURS/96 MONTHS	D	5	D-INSPECTION
G3243040	2400 HOURS OR 5 YEARS FROM INSTALLATION			REPLACEMENT SCHEDULE
N3243047	600 HOURS/24 MONTHS	B	2	B-INSPECTION
N3243053	1200 HOURS/48 MONTHS	C	2	C-INSPECTION
E3244020	600 HOURS/24 MONTHS	B	5	B-INSPECTION
H3250001	1200 HOURS/48 MONTHS	C	5	C-INSPECTION
C3255000	2000 HOURS			SPECIAL INSPECTION
P3310004	300 HOURS/12 MONTHS	A	1	A-INSPECTION
P3340012	300 HOURS/12 MONTHS	A	1	A-INSPECTION
P3400004	600 HOURS/24 MONTHS	B	2	B-INSPECTION
E3411014	300 HOURS/12 MONTHS	A	2	A-INSPECTION
H3411031	600 HOURS/24 MONTHS	B	1	B-INSPECTION
N3411055	24 MONTHS			RVSM INSPECTIONS

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J3411056	15000 FLIGHT HOURS			REPLACEMENT SCHEDULE
J3411057	15000 FLIGHT HOURS			REPLACEMENT SCHEDULE
J3411058	600 HOURS/24 MONTHS	B	2	B-INSPECTION
K3411059	24 MONTHS			RVSM INSPECTIONS
N3411063	24 MONTHS			RVSM INSPECTIONS
H3412002	600 HOURS/24 MONTHS	B	1	B-INSPECTION
K3414000	24 MONTHS			SPECIAL INSPECTION
H3421000	2400 HOURS/96 MONTHS	D	2	D-INSPECTION
T3453003	1200 HOURS/48 MONTHS	C	6	C-INSPECTION
T3500000	1200 HOURS/48 MONTHS	C	2	C-INSPECTION
T3500010	1200 HOURS/48 MONTHS	C	2	C-INSPECTION
R3500016	5 YEARS			SPECIAL INSPECTION
R3500017	15 YEARS			SPECIAL INSPECTION
R3500018	5 YEARS			SPECIAL INSPECTION
R3500019	15 YEARS			SPECIAL INSPECTION
H3500020	1200 HOURS/48 MONTHS	C	6	C-INSPECTION
R3500022	3 YEARS			SPECIAL INSPECTION
R3500023	3 YEARS			SPECIAL INSPECTION
R3500051	15 YEARS			REPLACEMENT SCHEDULE
R3500052	15 YEARS			REPLACEMENT SCHEDULE
R3500053	24 YEARS			REPLACEMENT SCHEDULE
R3500054	24 YEARS			REPLACEMENT SCHEDULE
H3510000	1200 HOURS/48 MONTHS	C	1	C-INSPECTION
N3510015	6 YEARS			SPECIAL INSPECTION
P3510021	6 YEARS			SPECIAL INSPECTION
R3610006	6 YEARS			SPECIAL INSPECTION
J3610007	600 HOURS/24 MONTHS	B	3	B-INSPECTION
J3610038	2400 HOURS/96 MONTHS	D	3	D-INSPECTION
L3610039	600 HOURS/24 MONTHS	B	3	B-INSPECTION

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R3610043	EVERY 3 YEARS UNTIL 15 YEARS	B	3	SPECIAL INSPECTION
P3610044	600 HOURS/24 MONTHS			B-INSPECTION
P3610045	DURING MAJOR ENGINE INSPEC- TION/UNSCHEDULED ENGINE CHANGE			SPECIAL INSPECTION
R3610053	9 and 12 YEARS			SPECIAL INSPECTION
R3610054	15 YEARS, AND EVERY 2 YEARS THEREAFTER			SPECIAL INSPECTION
R3610055	12, 24, and 30 YEARS			SPECIAL INSPECTION
R3610056	40 YEARS			REPLACEMENT SCHEDULE
H3620001	2400 HOURS/96 MONTHS	D	3	D-INSPECTION
P5210041	600 HOURS/24 MONTHS	B	6	B-INSPECTION
H5210020	2400 HOURS/96 MONTHS	D	6	D-INSPECTION
L5210025	24 MONTHS	C	6	SPECIAL INSPECTION
L5210032	12 YEARS/6000 LANDINGS			12 YEAR AIRFRAME INSPECTION
H5210040	1200 HOURS/48 MONTHS			C-INSPECTION
H5210050	2400 HOURS/96 MONTHS			D-INSPECTION
C5210051	12 YEARS/6000 LANDINGS			12 YEAR AIRFRAME INSPECTION
H5210060	600 HOURS/24 MONTHS			B-INSPECTION
H5210065	1200 HOURS/48 MONTHS			C-INSPECTION
K5210070	12 YEARS/6000 LANDINGS	D	6	12 YEAR AIRFRAME INSPECTION
H5210085	2400 HOURS/96 MONTHS			D-INSPECTION
S5210104	12 YEARS/6000 LANDINGS			REPLACEMENT SCHEDULE
H5220000	600 HOURS/24 MONTHS	B	6	B-INSPECTION
T5240002	600 HOURS/24 MONTHS	B	2	B-INSPECTION
H5240010	600 HOURS/24 MONTHS	B	2	B-INSPECTION
H5280001	600 HOURS/24 MONTHS	B	5	B-INSPECTION
H5311000	2400 HOURS/96 MONTHS	D	5	D-INSPECTION
P5311006	6000 LANDINGS			MAJOR LANDING GEAR INSPECTION

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P5311007	12 YEARS/6000 LANDINGS	C	6	12 YEAR AIRFRAME INSPECTION
P5313002	24 MONTHS			RVSM INSPECTIONS
G5314010	12 YEARS/6000 LANDINGS			12 YEAR AIRFRAME INSPECTION
E5314030	1200 HOURS/48 MONTHS			C-INSPECTION
E5314053	3000 LANDINGS			3000 LANDING INSPEC- TION
E5314071	12 YEARS/6000 LANDINGS			12 YEAR AIRFRAME INSPECTION
C5314075	12 YEARS/6000 LANDINGS	A	1	12 YEAR AIRFRAME INSPECTION
P5320008	300 HOURS/12 MONTHS			A-INSPECTION
H5321006	1200 HOURS/48 MONTHS			C-INSPECTION
P5321012	2400 HOURS/96 MONTHS			D-INSPECTION
H5321014	600 HOURS/24 MONTHS			B-INSPECTION
E5321015	1200 HOURS/48 MONTHS			C-INSPECTION
B5321025	3000 LANDINGS	C	5	3000 LANDING INSPEC- TION
H5321030	2400 HOURS/96 MONTHS			D-INSPECTION
H5321039	2400 HOURS/96 MONTHS			D-INSPECTION
J5321041	12000 HOURS			12000 HOUR INSPEC- TION
C5321043	12 YEARS/6000 LANDINGS			12 YEAR AIRFRAME INSPECTION
C5321055	12 YEARS/6000 LANDINGS			12 YEAR AIRFRAME INSPECTION
A5321060	12000 HOURS	D	5	12000 HOUR INSPEC- TION
C5321073	12 YEARS/6000 LANDINGS			12 YEAR AIRFRAME INSPECTION
C5321078	12 YEARS/6000 LANDINGS			12 YEAR AIRFRAME INSPECTION
C5321080	12 YEARS/6000 LANDINGS			12 YEAR AIRFRAME INSPECTION

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<b>IRN BY ATA</b>	<b>INTERVAL</b>	<b>PHASE</b>	<b>PHASE NUMBER</b>	<b>SECTION</b>
K5321081	12 YEARS/6000 LANDINGS			12 YEAR AIRFRAME INSPECTION
L5321085	12 YEARS/6000 LANDINGS			12 YEAR AIRFRAME INSPECTION
P5321091	12 YEARS/6000 LANDINGS			12 YEAR AIRFRAME INSPECTION
E5322000	12 YEARS/6000 LANDINGS			REPLACEMENT SCHEDULE
N5323010	300 HOURS/12 MONTHS	A	2	A-INSPECTION
N5323012	300 HOURS/12 MONTHS	A	2	A-INSPECTION
C5323063	12 YEARS/6000 LANDINGS			12 YEAR AIRFRAME INSPECTION
C5323070	12 YEARS/6000 LANDINGS			12 YEAR AIRFRAME INSPECTION
N5323146	12 YEARS/6000 LANDINGS			12 YEAR AIRFRAME INSPECTION
P5323154	2400 HOURS/96 MONTHS	D	2	D-INSPECTION
P5323156	3000 LANDINGS			3000 LANDING INSPEC- TION
P5323160	3000 LANDINGS			3000 LANDING INSPEC- TION
H5331010	2400 HOURS/96 MONTHS	D	3	D-INSPECTION
H5331020	2400 HOURS/96 MONTHS	D	3	D-INSPECTION
B5331030	12000 HOURS			12000 HOUR INSPEC- TION
O5331035	12000 HOURS			12000 HOUR INSPEC- TION
H5334002	1200 HOURS/48 MONTHS	C	3	C-INSPECTION
F5350010	12 YEARS/6000 LANDINGS			12 YEAR AIRFRAME INSPECTION
D5350021	12 YEARS/6000 LANDINGS			12 YEAR AIRFRAME INSPECTION
D5350050	12000 HOURS			12000 HOUR INSPEC- TION
P5360005	300 HOURS/12 MONTHS	A	2	A-INSPECTION
H5450000	600 HOURS/24 MONTHS	B	3	B-INSPECTION

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IRN BY ATA	INTERVAL	PHASE	PHASE NUMBER	SECTION
K5450010	1200 HOURS/48 MONTHS	C	3	C-INSPECTION
J5450043	AT ENGINE MPI			SPECIAL INSPECTION
H5450044	12 Year inspection or at the nearest MPI prior to the 12 Year Inspection.			SPECIAL INSPECTION
J5450045	AT ENGINE MPI			SPECIAL INSPECTION
E5500000	300 HOURS/12 MONTHS	A	6	A-INSPECTION
T5500002	1200 HOURS/48 MONTHS	C	6	C-INSPECTION
H5510031	1200 HOURS/48 MONTHS	C	6	C-INSPECTION
H5510035	1200 HOURS/48 MONTHS	C	6	C-INSPECTION
E5510040	1200 HOURS/48 MONTHS	C	6	C-INSPECTION
C5510050	12 YEARS/6000 LANDINGS			12 YEAR AIRFRAME INSPECTION
O5510060	12000 HOURS			12000 HOUR INSPECTION
A5510061	12000 HOURS			12000 HOUR INSPECTION
A5510062	12000 HOURS			12000 HOUR INSPECTION
P5510089	300 HOURS/12 MONTHS	A	6	A-INSPECTION
P5510090	2400 HOURS/96 MONTHS	D	6	D-INSPECTION
H5520000	2400 HOURS/96 MONTHS	D	6	D-INSPECTION
E5520010	1200 HOURS/48 MONTHS	C	6	C-INSPECTION
A5520020	12000 HOURS	C	6	12000 HOUR INSPECTION
H5530001	1200 HOURS/48 MONTHS			C-INSPECTION
C5530002	12 YEARS/6000 LANDINGS			12 YEAR AIRFRAME INSPECTION
B5530010	12000 HOURS			12000 HOUR INSPECTION
H5530020	1200 HOURS/48 MONTHS	C	6	C-INSPECTION
E5540010	1200 HOURS/48 MONTHS	C	6	C-INSPECTION
H5540011	2400 HOURS/96 MONTHS	D	6	D-INSPECTION
B5540020	12000 HOURS			12000 HOUR INSPECTION
H5560000	600 HOURS/24 MONTHS			B-INSPECTION

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IRN BY ATA	INTERVAL	PHASE	PHASE NUMBER	SECTION
H5560001	2400 HOURS/96 MONTHS	D	3	D-INSPECTION
M5600008	One time only, at the first inspection interval corresponding to 600 hours total aircraft time or 600 hours after window replacement.			SPECIAL INSPECTION
T5610002	1200 HOURS/48 MONTHS	C	2	C-INSPECTION
P5610012	12 YEARS/6000 LANDINGS			12 YEAR AIRFRAME INSPECTION
D5610013	12 YEARS/6000 LANDINGS			12 YEAR AIRFRAME INSPECTION
H5610021	2400 HOURS/96 MONTHS	D	6	D-INSPECTION
G5610023	This inspection to be performed at the first inspection corresponding to 600 hours total aircraft time or 600 hours after windshield replacement.			SPECIAL INSPECTION
H5620000	600 HOURS/24 MONTHS	B	2	B-INSPECTION
M5620003	12 YEARS/6000 LANDINGS			12 YEAR AIRFRAME INSPECTION
E5620006	1200 HOURS/48 MONTHS	C	6	C-INSPECTION
M5620009	2400 HOURS/96 MONTHS	D	6	D-INSPECTION
N5700004	300 HOURS/12 MONTHS	A	4	A-INSPECTION
G5700006	10,000 HOURS INITIAL, 1,200 HOURS REPEAT			SPECIAL INSPECTION
C5710040	12 YEARS/6000 LANDINGS			12 YEAR AIRFRAME INSPECTION
A5710045	12000 HOURS			12000 HOUR INSPECTION
B5710050	12000 HOURS			12000 HOUR INSPECTION
C5710055	12 YEARS/6000 LANDINGS			12 YEAR AIRFRAME INSPECTION
E5710061	12 YEARS/6000 LANDINGS			12 YEAR AIRFRAME INSPECTION
C5710062	12 YEARS/6000 LANDINGS			12 YEAR AIRFRAME INSPECTION
C5710064	3000 LANDINGS			3000 LANDING INSPECTION

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IRN BY ATA	INTERVAL	PHASE	PHASE NUMBER	SECTION
E5710066	12000 HOURS			12000 HOUR INSPEC- TION
A5710070	12000 HOURS			12000 HOUR INSPEC- TION
E5710071	12000 HOURS			12000 HOUR INSPEC- TION
P5710140	2400 HOURS/96 MONTHS	D	4	D-INSPECTION
P5710141	2400 HOURS/96 MONTHS	D	5	D-INSPECTION
P5710142	12 YEARS/6000 LANDINGS			12 YEAR AIRFRAME INSPECTION
P5710143	12000 HOURS			12000 HOUR INSPEC- TION
P5710144	2400 HOURS/96 MONTHS	D	5	D-INSPECTION
P5710145	24 MONTHS			SPECIAL INSPECTION
P5710146	1200 HOURS/48 MONTHS	C	4	C-INSPECTION
E5720010	600 HOURS/24 MONTHS	B	4	B-INSPECTION
C5720020	12 YEARS/6000 LANDINGS			12 YEAR AIRFRAME INSPECTION
G5720021	6000 LANDING			MAJOR LANDING GEAR INSPECTION
C5720025	12 YEARS/6000 LANDINGS			12 YEAR AIRFRAME INSPECTION
C5720040	12 YEARS/6000 LANDINGS			12 YEAR AIRFRAME INSPECTION
F5720071	300 HOURS/12 MONTHS	A	4	A-INSPECTION
K5730012	300 HOURS/12 MONTHS	A	4	A-INSPECTION
C5740001	12 YEARS/6000 LANDINGS			12 YEAR AIRFRAME INSPECTION
C5740002	12 YEARS/6000 LANDINGS			12 YEAR AIRFRAME INSPECTION
H5750000	2400 HOURS/96 MONTHS	D	4	D-INSPECTION
E5750020	1200 HOURS/48 MONTHS	C	4	C-INSPECTION
E5750030	1200 HOURS/48 MONTHS	C	4	C-INSPECTION
A5750045	12000 HOURS			12000 HOUR INSPEC- TION
H5750046	1200 HOURS			SPECIAL INSPECTION

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IRN BY ATA	INTERVAL	PHASE	PHASE NUMBER	SECTION
G5750050	300 HOURS/12 MONTHS	A	4	A-INSPECTION
E5750060	1200 HOURS/48 MONTHS	C	4	C-INSPECTION
A5760010	12000 HOURS			12000 HOUR INSPEC- TION
E5770010	600 HOURS/24 MONTHS	B	4	B-INSPECTION
G7100000	Per manufacturer's instructions.			SPECIAL INSPECTION
E7110010	300 HOURS/12 MONTHS	A	3	A-INSPECTION
E7110020	300 HOURS/12 MONTHS	A	3	A-INSPECTION
G7110021	2400 HOURS OR 5 YEARS FROM INSTALLATION			REPLACEMENT SCHEDULE
G7110022	2400 HOURS OR 5 YEARS FROM INSTALLATION			REPLACEMENT SCHEDULE
P7100023	300 HOURS/12 MONTHS	A	3	A-INSPECTION
E7110031	300 HOURS/12 MONTHS	A	3	A-INSPECTION
P7110040	300 HOURS/12 MONTHS	A	3	A-INSPECTION
H7120020	600 HOURS/24 MONTHS	B	3	B-INSPECTION
E7120024	DURING MAJOR ENGINE INSPEC- TION/UNSCHEDULED ENGINE CHANGE			SPECIAL INSPECTION
E7120028	12 Year inspection or at the nearest engine MPI prior to the 12 Year Inspection.			SPECIAL INSPECTION
E7120033	12 Year inspection or at the nearest engine MPI prior to the 12 Year Inspection.			SPECIAL INSPECTION
K7120036	4200 HOURS			REPLACEMENT SCHEDULE
L7120037	8400 HOURS			REPLACEMENT SCHEDULE
E7120038	20000 HOURS			REPLACEMENT SCHEDULE
E7120039	20000 HOURS			REPLACEMENT SCHEDULE
E7120040	20000 HOURS			REPLACEMENT SCHEDULE
E7120041	20000 HOURS			REPLACEMENT SCHEDULE

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IRN BY ATA	INTERVAL	PHASE	PHASE NUMBER	SECTION
Q7120063	ENGINE MPI/ 2200 HOURS			SPECIAL INSPECTION
K7120064	4200 HOURS			REPLACEMENT SCHEDULE
L7120065	8400 HOURS			REPLACEMENT SCHEDULE
L7120066	8400 HOURS			REPLACEMENT SCHEDULE
Q7120067	ENGINE MPI/ 2200 HOURS			SPECIAL INSPECTION
Q7120072	ENGINE MPI/ 2200 HOURS			SPECIAL INSPECTION
H7610002	1200 HOURS/48 MONTHS	C	3	C-INSPECTION
H7610004	1200 HOURS/48 MONTHS	C	2	C-INSPECTION
H7610005	1200 HOURS/48 MONTHS	C	2	C-INSPECTION
H7611005	600 HOURS/24 MONTHS	B	3	B-INSPECTION
E7611008	300 HOURS/12 MONTHS	A	3	A-INSPECTION
E7810005	DURING MAJOR ENGINE INSPEC- TION/UNSCHEDULED ENGINE CHANGE			SPECIAL INSPECTION
P7830087	Per manufacturer's instructions			SPECIAL INSPECTION
S7830090	12,000 LANDINGS			SPECIAL INSPECTION

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