

King Air 90 Series Maintenance Manual
Scheduled Inspection Programs - Description (LJ-1063 and After)

Current as of Dec 1/07

SCHEDULED INSPECTION PROGRAMS - DESCRIPTION (LJ-1063 AND AFTER)

PHASE INSPECTION PROGRAM

Note: Additional inspections may be required by engine or propeller manufactures in their manuals. Refer to the unscheduled maintenance checks portion of the supplier issued manuals to ensure continued airworthiness.

The owner/operator is ultimately responsible for maintaining the airplane in an airworthy condition, including compliance with all applicable Airworthiness Directives as specified in Part 39 of the Federal Aviation Regulations (FAR) under the Title 14 of the Code of Federal Regulations. The owner or operator should select only qualified personnel to maintain the airplane, and ensure that the airframe and power plant mechanic inspecting the airplane has access to all necessary manuals and service information as well as to an approved inspection guide.

Airframe and power plant mechanics must have had previous experience in the satisfactory performance of the tasks required by this inspection before being qualified to supervise, approve and return to service the airplane or any part thereof in need of maintenance, preventative maintenance, repair or alteration.

It is further the responsibility of the owner/operator to ensure that the airplane is inspected in conformity with the requirements covered in 14 CFR Part 91.409 (f) (3) of the Federal Aviation Regulations. This FAR Part covers the requirements concerning approved airplane inspection programs. Hawker Beechcraft Corporation has prepared the Inspection Program to assist the owner/operator in meeting the foregoing responsibilities.

It is the responsibility of the owner/operator to obtain specific approval from their local airworthiness authority for any alteration to the inspection Program.

Note: When warranted by service experience or engineering recommendations, an approved maintenance program, including the inspection intervals, may be changed at any time with the approval of the local airworthiness authority.

This document is a portion of the publications by which Hawker Beechcraft Corporation provides the inspection requirements and maintenance schedules for the continued airworthiness of the airframe of your airplane. Remember, maintenance requirements for some supplier components (such as engines, propellers, avionics and other equipment) are separately provided by their respective manuals. Those maintenance requirements and schedules are adopted by reference in the airframe maintenance instructions for continued airworthiness. Have your maintenance personnel review the equipment installed on your airplane to ensure the current, up-to-date supplier maintenance publications and manuals are available and that all required maintenance is scheduled and performed as required under 14 CFR 91.403 (c).

This Inspection Program is provided to enable the owner/operator to inspect and maintain the airplane on an ongoing basis. Included in the program is a sequence for conducting the program along with suggested times. The times and sequence are recommendations that may be altered to suit a particular operation. While this program may be used as an outline, detailed information of the systems and components in the airplane will be found in the various chapters/sections of the maintenance manual and the pertinent supplier publications. It is also recommended that reference be made to the applicable maintenance handbooks, service instructions, applicable FAA Regulations, Publications and supplier's specification for torque values, clearance, settings, tolerances and other requirements.

This program is not intended to be all-inclusive, for no such program can replace the good judgement of a certified airframe and power plant mechanic in the performance of his duties.

Note: In addition to the inspections prescribed by this schedule, the altimeter instrument (LJ-1063 thru LJ-1846, LJ-1848 thru LJ-1852) and static system and all ATC transponders MUST be tested and inspected in compliance with the requirements specified in 14 CFR 91.411 and 91.413 at 24-month intervals or

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NOTE: If you have chosen a 'selected text' print out, the selection may not include all relevant data, such as; process specifications, Warnings, Cautions & Notes that may be found elsewhere in the complete document or in other applicable service information documents. Make sure you have read and understood all associated information before performing any maintenance on the aircraft. It is the responsibility of the mechanic, repairman or inspector to understand the current instructions of the manufacturer and the manuals, for the specific operation concerned.

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anytime the system is opened.

Information contained herein is applicable to Beech King Air 90 airplanes except where differences are indicated by serial number effectivity.

SPECIAL CONDITIONS CAUTIONARY NOTICE

The time periods for the inspections noted in this schedule are based on normal usage under average environmental conditions. Airplanes operated for Air Taxi or other than normal operations and airplanes operated in humid tropics, or in cold damp climates, etc., may need more frequent inspections for wear, corrosion, lubrication, and/or lack of maintenance. Under these adverse conditions, perform periodic inspections in compliance with this guide at more frequent intervals until the owner or operator can set his own inspection periods based on the contingencies of field experience.

Caution: The time periods in this schedule do not constitute a guarantee the item will reach the period without malfunction as the aforementioned factors cannot be controlled by the manufacturer.

Warning: Use only genuine Hawker Beechcraft Corporation, or Hawker Beechcraft Corporation-approved parts obtained from Hawker Beechcraft Corporation approved sources in connection with the maintenance and repair of Hawker Beechcraft Corporation airplanes to assure that the airplane is returned to service in a condition at least equal to its original or properly altered condition. Genuine Hawker Beechcraft Corporation parts are produced and inspected under rigorous procedures to ensure airworthiness and suitability for use in Hawker Beechcraft Corporation airplane applications. Parts purchased from sources other than Hawker Beechcraft Corporation, even though outwardly identical in appearance, may not have had the required tests and inspections performed, may be different in fabrication techniques and materials, and may be dangerous when installed in an airplane.

Salvaged airplane parts, reworked parts obtained from non-Hawker Beechcraft Corporation sources, or parts, components, or structural assemblies, the service history of which is unknown or cannot be authenticated, may have been subjected to unacceptable stresses or temperatures or have other hidden damage not discernible through routine visual or usual nondestructive testing techniques. This may render the part, component, or structural assembly, even though originally manufactured by Hawker Beechcraft Corporation, unsuitable and unsafe for airplane use.

Hawker Beechcraft Corporation expressly disclaims any responsibility for malfunctions, failures, damage or injury caused by use of non-Hawker Beechcraft Corporation-approved parts or procedures.

SCHEDULED INSPECTION GENERAL INFORMATION

INSPECTION INTERVAL TOLERANCE

To facilitate scheduling inspection, Hawker Beechcraft Corporation authorizes the following inspection interval tolerances:

PHASE INSPECTIONS (HOUR INTERVAL)

A tolerance of ± 20 hours is allowed. Each phase inspection must be completed within 20 hours of the prescribed time.

EXAMPLE: A PHASE 1 INSPECTION, due at 200 hours, may be accomplished anytime between 180 and 220 hours. A PHASE 2 INSPECTION, due at 400 hours, may be accomplished anytime between 380 and 420 hours, etc.

SPECIAL INSPECTION ITEMS - CALENDAR DATE LIMITED

A tolerance of ± 12 days per 12 calendar months is allowed, not to exceed a total of 60 calendar days.

SPECIAL INSPECTION ITEMS - FLIGHT CYCLE LIMITED

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A tolerance of $\pm 10\%$ is allowed.

SPECIAL INSPECTION ITEMS - HOURLY LIMITED

A tolerance of $\pm 10\%$ is allowed.

Note: Tolerances specified by supplier's, DOT regulations or FAA regulations take precedence over inspection intervals and tolerances authorized by Hawker Beechcraft Corporation.

PURPOSE AND USE

The Hawker Beechcraft Corporation-recommended Beech King Air 90 Inspection Program is provided to maintain the Beech King Air 90 airplanes that are utilized by owners and operators on a continuous basis. The complete program must be accomplished at least one time every 24 calendar months.

Note: Owners and operators wishing to utilize inspection intervals of less than 200 hours may do so without obtaining Hawker Beechcraft Corporation concurrence. Refer to the latest revision of this form for inspection procedure details to meet 14 CFR 91.409 (f) (3).

Inspection timetables are as follows:

Inspection Phase 1: To be performed at 200 hours and every 800 hours thereafter.

Inspection Phase 2: To be performed at 400 hours and every 800 hours thereafter.

Inspection Phase 3: To be performed at 600 hours and every 800 hours thereafter.

Inspection Phase 4: To be performed at 800 hours and every 800 hours thereafter.

Alternate Phase Inspection: If an aircraft is not flown at least 400 hours in 24 months, the owner/operator may perform scheduled phase inspections 1 and 2 together within 12 months after the last aircraft inspection; then the owner/operator may perform scheduled phase inspections 3 and 4 together within 12 months after completing the phase 1 and 2 inspections.

Note: Hawker Beechcraft Corporation recommends that no aircraft exceed 12 months without completing at least one phase inspection.

Special Inspections Although this inspection program is based on 200-hour intervals, there are items which require more, or less, frequent inspection or whose inspection interval is based on flight time, elapsed calendar time, or cycles. These unique inspection items and their time intervals are described under SPECIAL INSPECTIONS and should be reviewed prior to commencing any scheduled inspection.

A complete scheduled inspection (all Phase 1, 2, 3 and 4 Inspections) must be accomplished within a 24-calendar-month period. Any part of the inspection which has not been accomplished will become due immediately. Completion of the Phase 1, 2, 3 and 4 Inspections shall be considered as a complete inspection.

Note: Hawker Beechcraft Corporation's Recommended Inspection Program in accordance with 14 CFR 91.409 (f) (3) consists of, but is not limited to, inspection items listed in this Inspection Guide, any applicable Airworthiness Directives issued against the airframe or any equipment installed therein, conformity to Type Certificate Data Sheet as applicable.

Warning: Ascertain that all placards are in place and legible whenever the airplane has been repainted or touched up after repairs. Replace any placards that have been inadvertently defaced or removed.

While this guide may be used as an outline, detailed information of the many systems and components in the airplane will be found in the various sections/chapters of this Maintenance Manual and the Engine Maintenance Manual. Reference to the Engine Maintenance Manual is to the Pratt & Whitney Canada PT6A-21 Maintenance Manual. It is also recommended that reference be made to the applicable supplier maintenance handbooks, Hawker Beechcraft Corporation service bulletins, applicable FAA Regulations and supplier bulletins and specifications for torque values, clearances, settings, tolerances and other requirement. It is the responsibility of the owner or operator to ensure that the airframe and power plant mechanic inspecting the airplane has access to the previously noted documents as well as to this inspection

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guide.

Hawker Beechcraft Corporation issues service information for the benefit of owners and fixed-base operators in the form of two classes of service bulletins. The first class, MANDATORY Service Bulletins (red border) are changes, inspections and modifications that could affect safety or crashworthiness. Hawker Beechcraft Corporation considers compliance with these service bulletins to be mandatory. Hawker Beechcraft Corporation also issues a service bulletin having no border designated as either RECOMMENDED or OPTIONAL in the compliance section within the bulletin. In the case of a RECOMMENDED Service Bulletin, Hawker Beechcraft Corporation feels the changes, modifications, improvements or inspections will benefit the owner/operator and although highly recommended, they are not considered mandatory at the time of issuance. In the case of OPTIONAL Service Bulletins, compliance with the designated changes, modifications, improvements or inspections is at the owner/operator's discretion.

In the final analysis it is the responsibility of the owner/operator to ensure that all Hawker Beechcraft Corporation service bulletins which are pertinent to their particular operation are complied with.

INSPECTION SCHEDULE OUTLINE

A/C TIME (HOURS)	INSPECTION PHASE				TYPE OF INSPECTION
	1	2	3	4	
200	X				Nose Landing Gear Area, Nose Gear, Pilot's Compartment, Cabin Section, Rear Fuselage and Empennage, Wings, Main Gear Area, Engines, Landing Gear Retraction, Operational Inspection, Post Inspection.
400		X			Nose Section, Nose Avionics Compartment, Nose Landing Gear Area, Nose Gear, Pilot's Compartment, Cabin Section, Rear Fuselage and Empennage, Wings, Main Landing Gear Area, Engines, Landing Gear Retraction, Operational Inspection, Post Inspections.
600			X		Nose Landing Gear Area, Nose Gear, Pilot's Compartment, Cabin Section, Rear Fuselage and Empennage, Wings, Main Landing Gear Area, Engines, Landing Gear Retraction, Operational Inspection, Post Inspections.
800				X	Nose Section, Nose Avionics Compartment, Nose Landing Gear Area, Nose Gear, Pilot's Compartment, Cabin Section, Rear Fuselage and Empennage, Wings, Main Landing Gear Area, Engines, Landing Gear Retraction, Operational Inspection, Post Inspection.
AFTER THE "PHASE 4" INSPECTION IS COMPLETED, REPEAT THE INSPECTION SEQUENCE.					

DEFINITIONS

The terminology pertaining to the inspection procedures and their use is defined as follows:

Flight Time - Flight time shall mean the total time from the moment the airplane first moves under its own power for the purpose of flight until the moment it comes to rest at the next point of landing. ("Block-to-block" time).

Maintenance - Means inspection, overhaul, repair, preservations and the replacement of parts, but excludes preventive

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maintenance.

Pilot in Command - Pilot in command shall mean the pilot responsible for the operation and safety of the airplane during the time defined as flight time.

Preventive Maintenance - Means simple or minor preservative operations and the replacement of small standard parts not involving complex assembly operations.

Time in Service - Time in Service, as used in computing maintenance and inspection time records, is the time from the moment the airplane leaves the ground until it touches the ground at the end of the flight.

Flight Cycle - A flight cycle is defined as: Engine start-up and increase to full or partial power (as required during a normal flight), one landing gear retraction and extension and a complete shutdown.

Corrosion - Pitting, or a surface breakdown of a material due to chemical or electro-chemical attack by atmosphere, moisture or other agents.

Wear - Material or part consumed as a result of exposure to operation or usage.

Damaged - Rendered unusable for its intended purpose.

Calendar Time - The time from the date on the "ORIGINAL AIRWORTHINESS CERTIFICATE", FAA Form No. 8100-2, which is issued with each new airplane, to be used as the basis for all TBO or of replacement components.

Special Inspection - Inspections of components or systems based on calendar time, hours or cycles which do not coincide with the scheduled inspection.

Unscheduled Maintenance Checks - Inspections and checks for damage after operating the airplane in conditions which could require unscheduled maintenance, i.e. lightning strikes, hard landing, polluted atmospheric conditions, etc.

DISCREPANCIES

Discrepancies that affect the airworthiness of the airplane will require the necessary corrective action to be accomplished before the airplane is returned to service.

Discrepancies that do not affect the airworthiness of the airplane may, at the discretion of the owner/operator, be carried over to the next inspection period. All discrepancies thus carried over should be retained in the ship file until corrected.

Discrepancies which occur during flight should be entered on the "In-Flight Work Sheet" by the pilot in command or another responsible person.

Forms for the "In-Flight", "Scheduled Inspection Work Sheet", and "Overhaul and Replacement Work Sheet" are provided at the end of subchapter 5-00-00. These forms may be copied for use during each phase of the inspection.

Scheduled Inspection Program (Phase 2) - Maintenance Practices (LJ-1063 and After)

B. NOSE AVIONICS COMPARTMENT			
1. VACUUM REGULATOR VALVE FILTER - Inspect for blockage.	12-20-00		
2. INSTRUMENT AIR FILTER - Inspect for cleanliness.	12-20-00		
C. NOSE LANDING GEAR AREA			
1. ELECTRICAL WIRING and EQUIPMENT - Inspect all exposed electrical wiring and equipment for chafing, damage and security of attachment.	AC43.13-1B		
C. NOSE LANDING GEAR (Continued)	ATA/GAMA REFERENCE	MECH	INSP
2. FORWARD EVAPORATOR FILTER - Inspect for cleanliness.			
3. REFRIGERANT LINES, SERVICE VALVES and HIGH-PRESSURE RELIEF VALVES - Inspect lines and valves for leakage, damage, attachment and surface corrosion.	21-50-00		
D. NOSE GEAR			
1. WHEEL			
a. Inspect wheel for wear, damage and corrosion.	32-40-00 CMM		
b. Inspect wheel bearings and races for wear, pitting, cracks, discoloration, rust or other indications of damage.	32-40-00 CMM		
2. TIRE			
a. Inspect for wear and deterioration.	12-20-00 CMM		
b. Check for correct inflation.	12-20-00 CMM		
3. SHIMMY DAMPER - Inspect for leaks, security and attachment.	12-20-00 32-20-00		
4. NOSE GEAR BRACE STOP LUGS - Inspect for cracks, damage or distortion.			
5. NOSE GEAR STEERING STOP - Inspect steering stop for damage or distortion.			
6. LANDING and TAXI LIGHTS - Inspect the lights for broken lenses or bulbs.	33-40-00		

Scheduled Inspection Program (Phase 4) - Maintenance Practices (LJ-1063 and After)

a. Inspect for security of attachment and oil leaks.	21-50-00		
b. Inspect drive belt for deterioration, wear and proper tension.	21-50-00		
c. Check for proper compressor oil level if oil leak indications are present.	12-10-00		
4. ELECTRIC HEATER - Inspect the heater, heater elements, associated wiring and ducting for condition and attachment.	21-41-00		
B. NOSE AVIONICS COMPARTMENT	ATA/GAMA REFERENCE	MECH	INSP
1. VACUUM REGULATOR VALVE FILTER - Inspect for blockage.	12-20-00		
2. INSTRUMENT AIR FILTER - Inspect for cleanliness.	12-20-00		
3. AVIONICS EQUIPMENT and RACKS - Inspect for security of attachment.			
4. AVIONICS COMPARTMENT AREA - Inspect for corrosion, trapped water and indications of water leakage.			
5. ELECTRICAL WIRING and EQUIPMENT - Inspect for chafing, damage, proper routing of wire bundles and security of attachment.	AC43.13-1B		
6. DOORS, FASTENERS and SEAL - Inspect seal for deterioration and doors and latches for proper adjustment and fit.	52-30-00		
C. NOSE LANDING GEAR AREA			
1. ELECTRICAL WIRING and EQUIPMENT - Inspect all exposed electrical wiring and equipment for chafing, damage and security of attachment.	AC43.13-1B		
2. FORWARD EVAPORATOR FILTER - Inspect for cleanliness.			
3. REFRIGERANT LINES, SERVICE VALVES and HIGH-PRESSURE RELIEF VALVES - Inspect lines and valves for leakage, damage, attachment and surface corrosion.	21-50-00		
4. NOSE LANDING GEAR AREA - Inspect skin, structure and attaching hardware for wear, damage and corrosion. If damage or corrosion is found in a given area, check the adjacent area.			
D. NOSE GEAR			
1. WHEEL			