Annual or 100-Hour Inspection Guide
For Jabiru J170, J230, and J250 Models

A&P or LSA Repairman with Maintenance Rating Required

Owner's Name: _____

Address: _____

City/State/Zip: _____

Registration Number: _____

Airframe Serial Number: _____

Engine Serial Number: _____

Hours: _____

Date Inspection Completed: _____

Servicing Agency: _____

Address: _____

City/State/Zip: _____

Phone Number: _____

A&P/Repairman Name: _____

Inspection Intervals: The time periods for the inspections noted in this schedule are based on normal usage under average environmental conditions. Airplanes operated in humid tropics, 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 undil the owner or operator can set his or her own inspection periods based on the contingencies of experience.

The 100-hour inspection is required ONLY for aircraft used in commercial operations. Airplanes operated commercially less than 100 hours per year must have a 100-hour inspection performed no later than 12 months following the date of the preceeding 100-hour inspection. The 100--hour interval between performances of the procedures specified herein should NEVER be exceeded by more than 10 hours which can be used only if the additional time is required to reach a place where the inspection can be satisfactorily accomplished. However, any extension of the 100-hour interval must be subtracted from the following 100-hour interval, with no time extension permitted. For example, if an inspection is done at 110 hours, the next In addition to the inspections prescribed by this schedule, the ATC transponder must be tested and inspected at 24-month intervals in compliance with the requirements specified in FAR Part 91.

Placards: Ensure 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.

Airworthiness Responsibility: Jabiru USA Sport Aircraft's recommended inspection program in accordance to FAR Parts 43 and 91 consists of, but is not limited to, inspection items listed in this Inspection Guide, any applicable Service Bulletins or Air Safety Alerts issued against the airframe or any equipment installed therein.

The owner or operator is primarily responsible for maintaining the aircraft in an airworthy condition, including compliance with all applicable Service Bulletins and Air Safety Alerts issued by the manufacturer. It is further the responsibility of the owner or operator to ensure that the airplane is inspected in conformity with the requirements of Parts 43 and 91 of the Federal Aviation Regulations. Jabiru USA Sport Aircraft, LLC, has prepared this inspection guide to assist the owner or operator in meeting the foregoing responsibilities. This inspection guide is not intended to be all-inclusive, for no such guide can replace the good judgment of a certified airframe and powerplant mechanic in the performance of his or her duties. As the one pimarily responsible for the airworthiness of the airplane, the owner or operator should select only qualified personnel

Jabiru USA Sport Aircraft, LLC issues service and safety information for the benefit of owners and operators. It is the responsibility of the owner/operator to review and comply with each Service Bulletin and Air Safety Alert.

While this guide may be used as an outline, detailed information of the many systems and components in the airplane will be in the various section chapters of its service manual and the pertinent vendor publications. It is also recommended that reference be made to the applicable airframe and engine service manuals, previously issued Service Instructions, Jabiru Service Bulletins, applicable FAA regulations and publications, Vendors Bulletins and specifications for torque values, clearances, settings, tolerances, and other requirements. It is the responsibility of the owner or operator to ensure that the airframe and powerplant mechanic inspecting the airplane has access to the previously noted documents as well as this inspection guide. These documents may be downloaded from the manufactuer's website, www.usjabiru.com.

1. Operational Inspection

		Starter – Check for proper operation, unusual noises and dragging.
Pass	**Fail**	**Comments:**
❑	❑	

		Fuel Pressure or Flow – Check within normal limits (if installed).
Pass	**Fail**	**Comments:**
❑	❑	

		Cylinder Head Temperature – Check for proper operation, temperature and fluctuations.
Pass	**Fail**	**Comments:**
❑	❑	

		Alternator – Check for proper output and unusual noises.
Pass	**Fail**	**Comments:**
❑	❑	

		Propeller – Check for smoothness of operation.
Pass	**Fail**	**Comments:**
❑	❑	

		Oil Pressure and Temperature – Check for proper pressure, temperature limits and unusual fluctuations.
Pass	**Fail**	**Comments:**
❑	❑	

		Magnetos – Check the performance of the magneto as outlined under the heading NORMAL PROCEDURES in the appropriate Pilot's Operating Handbook.
Pass	**Fail**	**Comments:**
❑	❑	

		Power Check – Refer to NORMAL PROCEDURES in the appropriate Pilot's Operating Handbook.
Pass	**Fail**	**Comments:**
❑	❑	

		Voltmeter – Check for proper indication and unusual fluctuations.
Pass	**Fail**	**Comments:**
❑	❑	

		Heating and Ventilating System – Check for proper operation, heat and airflow output. Check controls for freedom of operation.
Pass	**Fail**	**Comments:**
❑	❑	

		Front Console Main Fuel Shutoff Valve – Check for proper operation and freedom of movement.
Pass	**Fail**	**Comments:**
❑	❑	

		Induction Airbox, Valve, Doors, and Controls – Remove air filter and inspect hinges, doors, seals, and attaching parts for wear and security. Check operation.
Pass	**Fail**	**Comments:**
❑	❑	

		Oil Cooler - Check for obstructions, leaks, and security of attachment.
Pass	**Fail**	**Comments:**
❑	❑	

		Doors--Check latches, hinges, and seals for condition, operation, and security of attachment.
Pass	**Fail**	**Comments:**
❑	❑	

		Idle RPM and Mixture Settings – Check for both proper RPM and mixture settings. Check controls for freedom of operation.
Pass	**Fail**	**Comments:**
❑	❑	

		Ignition switch-- Rotate the ignition switch through the OFF position to the extreme limit of switch travel. If the engine stops firing, the switch is normal. If the engine continues to run with the switch held in the past OFF position, it is an indication that the magneto is still "hot" or ungrounded. When the switch is released from the past OFF position, it should automatically return to normal OFF and the engine should stop running. However, any ignition switch exhibiting this abnormal condition should be replaced.
Pass	**Fail**	**Comments:**
❑	❑	

		All Engine Controls--With the engine running, check for proper operational limits, engine response and rigging. Check friction locks for proper operation.
Pass	**Fail**	**Comments:**
❑	❑	

		Fuel Quantity Gauges--Check for proper operation and unusual fluctuation.
Pass	**Fail**	**Comments:**
❑	❑	

		Auxilliary Fuel Pump-- Check for proper operation, unusual noise and fluctuations.
Pass	**Fail**	**Comments:**
❑	❑	

		Fuel Tank Selector Valves--Check for smooth operation and proper placarding.
Pass	**Fail**	**Comments:**
❑	❑	

		All Lights--Check function, condition, attachment, cracked or broken lenses. Check switches, knobs and circuit breakers for looseness and operation.
Pass	**Fail**	**Comments:**
❑	❑	

		Stall Warning System--Check for proper operation.
Pass	**Fail**	**Comments:**
❑	❑	

		Radio Operation-- Check for proper operation, security of switches and knobs.
Pass	**Fail**	**Comments:**
❑	❑	

		Flaps--check for noisy operation, full travel and proper installation.
Pass	**Fail**	**Comments:**
❑	❑	

		Flight Instruments--Check for condition and proper operation.
Pass	**Fail**	**Comments:**
❑	❑	

		Brakes--Check for condition and wear, ease of operation and proper release of parking brake. Check for unusual brake chatter.
Pass	**Fail**	**Comments:**
❑	❑	

		Emergency Locator Transmiter--Check for proper operation and ensure the ELT is armed when the airplane is returned to service. Check ELT battery expiration date and replace batteries if necessary.
Pass	**Fail**	**Comments:**
❑	❑	

		Switches, Circuit Breakers--Check for proper operation.
Pass	**Fail**	**Comments:**
❑	❑	

		Flight and Trim Controls--Check freedom of movement and proper operation through full travel with and without flaps extended. Check trim controls for proper operation.
Pass	**Fail**	**Comments:**
❑	❑	

2. Powerplant: Refer to *Instruction & Maintenance Manual for Jabiru 3300 Aircraft Engine.*

		Spinner and Spinner Flange: Check for deformation, security and cracks.
Pass	**Fail**	**Comments:**
❑	❑	

		Propeller and mounting bolts: Check tension on all propeller bolts. Check propeller for condition and security. Inspect blades for cracks, dents, nicks, scratches, erosion, delamination (in the case of fiberglass sheathed propellers), security and movement in hub.
Pass	**Fail**	**Comments:**
❑	❑	

		Spinner/Propeller Tracking: Check that propeller blade and spinner tracking is in alignment.
Pass	**Fail**	**Comments:**
❑	❑	

		Propeller Hub Flange: Check for cracks and condition.
Pass	**Fail**	**Comments:**
❑	❑	

		Leak Check: Check for oil, fuel and induction leaks, then clean entire engine and compartment before inspection.
Pass	**Fail**	**Comments:**
❑	❑	

		Flywheel Screw Tension: Check 24 ft-lbs.
Pass	**Fail**	**Comments:**
❑	❑	

		Induction Air Filter: Check for condition, cleanliness and security. Replace if necessary.
Pass	**Fail**	**Comments:**
❑	❑	

		Induction System: Check the SCAT hose for damage and wear. Check the carburetor heat box for blockage, security, cracks, operation and wear.
Pass	**Fail**	**Comments:**
❑	❑	

		Cooling Baffles: Check for cracks, worn areas and security.
Pass	**Fail**	**Comments:**
❑	❑	

		Cylinders: Check cylinders and exhaust manifold for obvious leaks, security and cracks. Check cylinders for broken cooling fins and loose or missing base nuts.
Pass	**Fail**	**Comments:**
❑	❑	

		Crankcase: Check for security of crankcase half bolts. Check front seal for leaks.
Pass	**Fail**	**Comments:**
❑	❑	
		Hoses and Ducts: Check all fuel, oil and SCAT hose or duct for leakage, cracks, deterioration and damage. Check fittings for security.
Pass	**Fail**	**Comments:**
❑	❑	

		Intake and Exhaust: Check for deformation, security, cracks, leaks, loose or missing nuts and clamps. Check for thin wall condition which may occur due to normal internal erosion on exhaust stacks which have long service time.
Pass	**Fail**	**Comments:**
❑	❑	

		Ignition: Check for proper connection, security and fraying. Check gap between coil and flywheel magnets--should not exceed .010"
Pass	**Fail**	**Comments:**
❑	❑	

		Distributor Caps & Rotors: Check for wear at the contact points. Replace every 200 hours.
Pass	**Fail**	**Comments:**
❑	❑	

		Spark Plugs & Ignition Leads: Clean, inspect, regap, test and replace spark plugs as necessary. Tighten spark plugs to proper torque. Check ignition harness condition and for proper attachment.
Pass	**Fail**	**Comments:**
❑	❑	

		Compression: Perform differential compression test.
Pass	**Fail**	**Comments:**
❑	❑	

		Electrical Wiring and Equipment: Inspect electrical wiring and associated equipment and accessories for fraying and attachment.
Pass	**Fail**	**Comments:**
❑	❑	

		Battery: Inspect, clean and tighten connections. Check for security and proper attachment. Check for corrosion. Make certain battery is clean. Water or dirt on battery surfaces can cause battery to discharge.
Pass	**Fail**	**Comments:**
❑	❑	

		Fuel Pump: Inspect fittings and pump for leaks.
Pass	**Fail**	**Comments:**
❑	❑	

		Engine Controls and Linkages: Check controls and associated equipment for condition, attachment, alignment and rigging. Check control operation.
Pass	**Fail**	**Comments:**
❑	❑	

		Engine Mounts: Check for cracks, corrosion and security. Inspect rubber cushions, mount bolts and nuts and grounding straps for condition and security.
Pass	**Fail**	**Comments:**
❑	❑	

		Starter and Solenoid: Check for condition, attachment and chafed or loose wires.
Pass	**Fail**	**Comments:**
❑	❑	

		Alternator and Electrical Connections: Check for condition and attachment. Check wiring for proper attachment and possible chafing. Check for unsusual noise.
Pass	**Fail**	**Comments:**
❑	❑	

		Carburetor Heat System: Check for blockage, security, operation and wear.
Pass	**Fail**	**Comments:**
❑	❑	

		Carburetor: Check overall condition. Inspect for leaks. Remove bowl and check for sediment. Check condition of floats.
Pass	**Fail**	**Comments:**
❑	❑	

		Plumbing: Inspectall hoses, lines and clamps for condition and attachment. Check plumbing clearance and secure against possible chafing.
Pass	**Fail**	**Comments:**
❑	❑	

		Engine Sump: Check for cracks, leaks, proper fluid level, and security.
Pass	**Fail**	**Comments:**
❑	❑	

		Oil Service: Remove oil filter. Inspect oil sump drain and install new filter. Drain and replace crankcase oil. Empty oil overflow bottle.
Pass	**Fail**	**Comments:**
❑	❑	

		Oil Cooler: Check oil cooler, lines and fittings for condition, security, chafing and leaks.
Pass	**Fail**	**Comments:**
❑	❑	

		Firewall: Check for wrinkles, damage or cracks. Check all electrical and control access holes for proper sealing.
Pass	**Fail**	**Comments:**
❑	❑	

		Engine Accessories: Check for condition, security and leaks. Check wiring, hoses and tubes for chafing, security and leaks.
Pass	**Fail**	**Comments:**
❑	❑	

		Cabin Heat System: Check for cracks, distortion, corrosion, leaks and obstructions.
Pass	**Fail**	**Comments:**
❑	❑	

		All Drains and Plugs: Check for condition, cleanliness and security. Check for leaks and correct tension.
Pass	**Fail**	
❑	❑	

		Cowling skin: Check for deformation, delamination and obvious damage or cracks. Check for rub points on the interior surfaces.
Pass	**Fail**	**Comments:**
❑	❑	

		Cowling structure: Check for cracks and delamination. Check hinge pin structure for loose rivets or deformation.
Pass	**Fail**	**Comments:**
❑	❑	

		Head Bolt Tension: Torque head bolts to proper tension.
Pass	**Fail**	**Comments:**
❑	❑	

3. Cabin and Baggage Compartment

		Skin: Inspect skins for deformation or cracks. If damage is found, check adjacent structure.
Pass	**Fail**	**Comments:**
❑	❑	

		Structure: Check for cracks and deformation. Check for concealed damage.
Pass	**Fail**	**Comments:**
❑	❑	

		Teleflex cables: Check the flight control components. Replace control system components that have bulges, splits, bends or cracks. Check control cables and associated equipment for condition, attachment, alignment, clearance and proper operation.
Pass	**Fail**	**Comments:**
❑	❑	

		Aileron Quadrant: Inspect for condition, attachment and proper operation. Check for binding.
Pass	**Fail**	**Comments:**
❑	❑	

		Flap Motor and Shafts: Check for condition, security and wear at all points.
Pass	**Fail**	**Comments:**
❑	❑	

		Brake Master Cylinder: Check for condition, security and leaks. Check lines for signs of chafing or cracks.
Pass	**Fail**	**Comments:**
❑	❑	

		Rudder Pedals: Check for freedom of movement. Check push/pull cables for proper routing, condition and security. Check rudder pedal springs for condition and correct placement. Check pedal extensions for security if installed.
Pass	**Fail**	**Comments:**
❑	❑	

		Control Column: Check for freedom of movement. Inspect rod ends for condition, security and operation.
Pass	**Fail**	**Comments:**
❑	❑	

		Trim Control: Check for freedom of movement. Inspect rod ends for condition, security and operation.
Pass	**Fail**	**Comments:**
❑	❑	

		Engine Controls: Check for ease of operation through full travel.
Pass	**Fail**	**Comments:**
❑	❑	

		Plumbing: Check all plumbing and connections for security, leakage and general condition.
Pass	**Fail**	**Comments:**
❑	❑	

		Windows and Doors: Inspect windows for scratches, crazing and general condition. Inspect doors for security and attachment. Check latching mechanism for proper engagement and ease of operation.
Pass	**Fail**	**Comments:**
❑	❑	

		Seats, Seat Belts and Shoulder Harnesses: Inspect cabin seats, seat belts, and shoulder harnesses for proper operations, condition, and security of attachment.
Pass	**Fail**	**Comments:**
❑	❑	

		Ventilation System: Check all fresh air vents for obstructions, proper movement and operation.
Pass	**Fail**	**Comments:**
❑	❑	

		Fuel System: Inspect for leakage, security, freedom of movement, and condition. Inspect fuel filter and replace if necessary. Check security of all fuel line hose clamps. Check for proper placarding.
Pass	**Fail**	**Comments:**
❑	❑	

		Headset Jacks: Inspect for cleanliness, security, and evidence of damage.
Pass	**Fail**	**Comments:**
❑	❑	

4. Wings and Carry-Through Structure

		Skin: Check for deformation and obvious damage. Check for cracks. If damage is found, check adjacent structure. Check for indications of excessive flight loading.
Pass	**Fail**	**Comments:**
❑	❑	

		Access Panels: Inspect for cracks, proper fit and attachment.
Pass	**Fail**	**Comments:**
❑	❑	

		Control Cables: Check aileron controls for smoothness and ease of operation. Check aileron cable clamps for security and proper placement. Check control cable ends for security, alignment, corrosion, and binding.
Pass	**Fail**	**Comments:**
❑	❑	

		Ailerons: Check control surfaces for proper clearance and freedom of movement. Check hinges and hinge pins for security. Check aileron skin and visible structure for cracks.
Pass	**Fail**	**Comments:**
❑	❑	

		Fuel Tanks, Caps and Vents: Inspect bottom of wing for evidence of fuel tank leakage. Inspect vents for blockages. Check filler caps for ease of operation.
Pass	**Fail**	**Comments:**
❑	❑	

		Plumbing: Check for leakage, chafing, condition and security.
Pass	**Fail**	**Comments:**
❑	❑	

		Electrical Wiring and Equipment: Inspect for chafing, damage, security and attachment.
Pass	**Fail**	**Comments:**
❑	❑	

		Flaps and Actuators: Check for condition, security, binding or chafing of actuator rods. Check flap skin and visible structure for cracks.
Pass	**Fail**	**Comments:**
❑	❑	

		Flap Position Indicator: Check for security and operation.
Pass	**Fail**	**Comments:**
❑	❑	

		Wing Bolts: Check wing bolts for security. DO NOT overtighten.
Pass	**Fail**	**Comments:**
❑	❑	

		Fuel Vents, Pitot Tube, and Stall Warning: Check for condition and obstructions.
Pass	**Fail**	**Comments:**
❑	❑	

		Drain Ports: Check drain holes in wing and surfaces to assure they are free of obstructions.
Pass	**Fail**	
❑	❑	

5. Nose Gear

		Wheel and Tire: Check wheel for cracks and tire for wear, damage, condition and proper inflation. Check sealed bearings for condition and wear.
Pass	**Fail**	
❑	❑	

		Landing gear strut: Inspect rubber shock strut and components for cracks, wear and attachment. Inspect wheel yoke and strut for straightness and security.
Pass	**Fail**	**Comments:**
❑	❑	

		Actuating Linkages: Check for wear at attach points. Check for cracks and security.
Pass	**Fail**	**Comments:**
❑	❑	

		Nose Gear Steering Linkage: Inspect linkages for tightness, condition and security.
Pass	**Fail**	**Comments:**
❑	❑	

		Nose Gear Operation: Check for condition, smooth operation, and security.
Pass	**Fail**	**Comments:**
❑	❑	

6. Main Gear and Brakes

		Brakes, Lines, Lining and Discs: Check for condition, wear and security. Check lines for chafing and signs of leakage and cracks. Check brake discs for cracks.
Pass	**Fail**	**Comments:**
❑	❑	

		Wheels and Tires: Check wheels for cracks and tires for wear, damage, condition and proper inflation. Check and repack wheel bearings.
Pass	**Fail**	**Comments:**
❑	❑	

		Landing Gear Legs: Inspect legs for cracks, overextension or signs of delamination.
Pass	**Fail**	**Comments:**
❑	❑	

7. Rear Fuselage and Empennage

		Skin: Check for deformation, cracks and obvious damage. If damage is found, check adjacent structure.
Pass	**Fail**	**Comments:**
❑	❑	

		Internal Fuselage Structure: Check for cracks and deformation. Check bulkheads, door posts, and center tunnel for cracks or delamination.
Pass	**Fail**	**Comments:**
❑	❑	

		Control Cables: Check elevator and rudder push-pull cables for condition, attachment, alignment, clearance and proper operation. Check cable clamps on both ends for proper attachment and placement. Check rod ends for security and freedom of motion.
Pass	**Fail**	**Comments:**
❑	❑	

		Control Surfaces: Check for deformation, cracks, security of hinges, freedom of movement and travel limits.
Pass	**Fail**	**Comments:**
❑	❑	

		Fixed Trim Tabs: Check for security and obvious damage.
Pass	**Fail**	**Comments:**
❑	❑	

		Static Port: Check for blockages. Check static probe for condition.
Pass	**Fail**	**Comments:**
❑	❑	

		Antennas: Check for condition and security.
Pass	**Fail**	**Comments:**
❑	❑	

8. General

		Airplane cleaned and serviced.
Pass	**Fail**	**Comments:**
❑	❑	

		Inspect all placards to assure they are easily readable and securely attached.
Pass	**Fail**	**Comments:**
❑	❑	

		Ensure that all Service Bulletins, Air Safety Alerts, and previously issued Service Instructions are reviewed and complied with as required.
Pass	**Fail**	**Comments:**
❑	❑	

		For a complete annual or 100-hour inspection of the airplane, all items on the airplane that are noted in this guide must be inspected.
Pass	**Fail**	**Comments:**
❑	❑	