

## 25 and 50-Hour Inspection Guide For Jabiru J170, J230, and J250 Models

**The 25-hour service and inspection is done only one time, at the end of the engine break-in period at 25 hours total time.** The break-in oil and filter must be removed and replaced, head bolts torqued to proper tension (cold engine), and a general inspection logged.

**At each 50-hour interval after the initial 25-hour inspection, the oil must be changed and the 50-hour inspection must be completed and logged.** Owner/Operators of S-LSA aircraft that hold at least a Sport Pilot or Private Pilot Certificate may perform maintenance items listed in FAR Part 43, Appendix A - *Maintenance, Preventive Maintenance, Rebuilding and Alteration, Section C*. Owner/operators performing preventive maintenance must return the aircraft to service by endorsing the aircraft or engine logbook as specified in FAR 43.9. All other S-LSA maintenance tasks must be performed by an A&P, LSA Repairman with Maintenance Rating or FAA-certified repair station.

Owner/operators of E-LSA aircraft that hold a minimum maintenance certification of LSA Repairman with Inspection Rating are authorized under FAR 43.1(b)(2) to perform maintenance as permitted in the Aircraft Service Manual, JSA SM170SP, on E-LSA aircraft that they own and make the logbook endorsement for return to service as specified by FAR 43.9.

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: \_\_\_\_\_

Name of Repairman: \_\_\_\_\_

**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 until the owner or operator can set his or her own inspection periods based on the contingencies of experience.

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 inspection is due 90 hours later with no extension allowed.

In addition to the inspections prescribed by this schedule, the altimeter, static system and 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 primarily responsible for the airworthiness of the airplane, the owner or operator should select only qualified personnel to maintain the aircraft.

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 manufacturer's website, [www.usjabiru.com](http://www.usjabiru.com).

## 1. Operational Inspection

		<b>Starter</b> – Check for proper operation, unusual noises and dragging.
<b>Pass</b>	<b>Fail</b>	<b>Comments:</b>
<input type="checkbox"/>	<input type="checkbox"/>	

		<b>Fuel Pressure or Fuel Flow</b> – Check within normal limits (if installed).
<b>Pass</b>	<b>Fail</b>	<b>Comments:</b>
<input type="checkbox"/>	<input type="checkbox"/>	

		<b>Cylinder Head Temperature</b> – Check for proper operation, temperatures and fluctuations.
<b>Pass</b>	<b>Fail</b>	<b>Comments:</b>
<input type="checkbox"/>	<input type="checkbox"/>	

		<b>Alternator</b> – Check for proper output.
<b>Pass</b>	<b>Fail</b>	<b>Comments:</b>
<input type="checkbox"/>	<input type="checkbox"/>	

		<b>Propeller</b> – Check for smoothness of operation.
<b>Pass</b>	<b>Fail</b>	<b>Comments:</b>
<input type="checkbox"/>	<input type="checkbox"/>	

		<b>Oil Pressure and Temperature</b> – Check for proper pressure, temperature limits and unusual fluctuations.
<b>Pass</b>	<b>Fail</b>	<b>Comments:</b>
<input type="checkbox"/>	<input type="checkbox"/>	

		<b>Magnetos</b> – Check the performance of the magneto as outlined under the heading NORMAL PROCEDURES in the appropriate Pilot's Operating Handbook.
<b>Pass</b>	<b>Fail</b>	<b>Comments:</b>
<input type="checkbox"/>	<input type="checkbox"/>	

		<b>Auxiliary Fuel Pump</b> -- Check for proper operation, unusual noise and fluctuations.
<b>Pass</b>	<b>Fail</b>	<b>Comments:</b>
<input type="checkbox"/>	<input type="checkbox"/>	

		<b>All Lights</b> --Check function, condition, attachment, cracked or broken lenses. Check switches, knobs and circuit breakers for looseness and operation.
<b>Pass</b>	<b>Fail</b>	<b>Comments:</b>
<input type="checkbox"/>	<input type="checkbox"/>	

		<b>Brakes</b> --Check for condition and wear, ease of operation and proper release of parking brake. Check for unusual brake chatter.
<b>Pass</b>	<b>Fail</b>	<b>Comments:</b>
<input type="checkbox"/>	<input type="checkbox"/>	

		<b>Flight and Trim Controls</b> --Check freedom of movement and proper operation through full travel with and without flaps extended. Check trim controls for proper operation.
<b>Pass</b>	<b>Fail</b>	<b>Comments:</b>
<input type="checkbox"/>	<input type="checkbox"/>	

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

		<b>Spinner and Spinner Flange:</b> Check for deformation, security and cracks.
<b>Pass</b>	<b>Fail</b>	<b>Comments:</b>
<input type="checkbox"/>	<input type="checkbox"/>	

		<b>Propeller and mounting bolts:</b> 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.
<b>Pass</b>	<b>Fail</b>	<b>Comments:</b>
<input type="checkbox"/>	<input type="checkbox"/>	

		<b>Induction Air Filter:</b> Check for condition, cleanliness and security. Replace if necessary.
<b>Pass</b>	<b>Fail</b>	<b>Comments:</b>
<input type="checkbox"/>	<input type="checkbox"/>	

		<b>Induction System:</b> Check the SCAT hose for damage and wear. Check the carburetor heat box for blockage, security, cracks, operation and wear.
<b>Pass</b>	<b>Fail</b>	<b>Comments:</b>
<input type="checkbox"/>	<input type="checkbox"/>	

		<b>Cooling Baffles:</b> Check for cracks, worn areas and security.
<b>Pass</b>	<b>Fail</b>	<b>Comments:</b>
<input type="checkbox"/>	<input type="checkbox"/>	

		<b>Cylinders:</b> Check cylinders and exhaust manifold for obvious leaks, security and cracks. Check cylinders for broken cooling fins and loose or missing base nuts.
<b>Pass</b>	<b>Fail</b>	<b>Comments:</b>
<input type="checkbox"/>	<input type="checkbox"/>	

		<b>Exhaust:</b> Check for deformation, security, cracks, leaks, loose or missing nuts, springs and clamps. Check for thin wall condition which may occur due to normal internal erosion on stacks which have long service time.
<b>Pass</b>	<b>Fail</b>	<b>Comments:</b>
<input type="checkbox"/>	<input type="checkbox"/>	

		<b>Ignition System:</b> Clean, inspect, regap, test and replace spark plugs as necessary. Tighten spark plugs to proper torque. Check condition and attachment of all ignition leads at plug and distributor.
<b>Pass</b>	<b>Fail</b>	<b>Comments:</b>
<input type="checkbox"/>	<input type="checkbox"/>	

		<b>Battery:</b> 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.
<b>Pass</b>	<b>Fail</b>	<b>Comments:</b>
<input type="checkbox"/>	<input type="checkbox"/>	

		<b>Engine Controls and Linkages:</b> Check controls and associated equipment for condition, attachment, alignment and rigging. Check control operation.
<b>Pass</b>	<b>Fail</b>	<b>Comments:</b>
<input type="checkbox"/>	<input type="checkbox"/>	

		<b>Carburetor:</b> Check overall condition. Inspect for leaks.
<b>Pass</b>	<b>Fail</b>	<b>Comments:</b>
<input type="checkbox"/>	<input type="checkbox"/>	

		<b>Engine Sump:</b> Check for cracks, leaks, proper fluid level, and security.
<b>Pass</b>	<b>Fail</b>	<b>Comments:</b>
<input type="checkbox"/>	<input type="checkbox"/>	

		<b>Oil Service:</b> Remove and replace oil filter. Drain and replace engine oil. Empty the oil overflow bottle.
<b>Pass</b>	<b>Fail</b>	<b>Comments:</b>
<input type="checkbox"/>	<input type="checkbox"/>	

		<b>Oil Cooler:</b> Check oil cooler, lines and fittings for condition, security, chafing and leaks.
<b>Pass</b>	<b>Fail</b>	<b>Comments:</b>
<input type="checkbox"/>	<input type="checkbox"/>	

		<b>All Drains and Plugs:</b> Check for condition, cleanliness and security. Check for leaks and correct tension.
<b>Pass</b>	<b>Fail</b>	
<input type="checkbox"/>	<input type="checkbox"/>	

		<b>Cowling skin:</b> Check for deformation, delamination and obvious damage or cracks. Check for rub points on the interior surfaces.
<b>Pass</b>	<b>Fail</b>	<b>Comments:</b>
<input type="checkbox"/>	<input type="checkbox"/>	

		<b>Cowling structure:</b> Check for cracks and delamination. Check hinge pin structure for loose rivets or deformation.
<b>Pass</b>	<b>Fail</b>	<b>Comments:</b>
<input type="checkbox"/>	<input type="checkbox"/>	

		<b>Head Bolt Tension:</b> Torque head bolts to proper tension.
<b>Pass</b>	<b>Fail</b>	<b>Comments:</b>
<input type="checkbox"/>	<input type="checkbox"/>	

### 3. Cabin and Baggage Compartment

		<b>Rudder Pedals:</b> 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.
<b>Pass</b>	<b>Fail</b>	<b>Comments:</b>
<input type="checkbox"/>	<input type="checkbox"/>	

		<b>Instruments and Instrument Panel:</b> Inspect instrument panel, placards and instruments for condition and attachment. Check all knobs for security.
<b>Pass</b>	<b>Fail</b>	<b>Comments:</b>
<input type="checkbox"/>	<input type="checkbox"/>	

#### 4. Wings and Carry-Through Structure

		<b>Skin:</b> Check for deformation and obvious damage. Check for cracks. If damage is found, check adjacent structure. Check for indications of excessive flight loading.
<b>Pass</b>	<b>Fail</b>	<b>Comments:</b>
<input type="checkbox"/>	<input type="checkbox"/>	

		<b>Wing Bolts:</b> Check wing bolts for security. DO NOT overtighten.
<b>Pass</b>	<b>Fail</b>	<b>Comments:</b>
<input type="checkbox"/>	<input type="checkbox"/>	

		<b>Fuel Vents, Pitot Tube, and Stall Warning:</b> Check for condition and obstructions.
<b>Pass</b>	<b>Fail</b>	<b>Comments:</b>
<input type="checkbox"/>	<input type="checkbox"/>	

#### 5. Nose Gear

		<b>Wheel and Tire:</b> Check wheel for cracks and tire for wear, damage, condition and proper inflation. Check wheel bearings for condition and wear.
<b>Pass</b>	<b>Fail</b>	
<input type="checkbox"/>	<input type="checkbox"/>	

#### 6. Main Gear and Brakes

		<b>Wheels and Tires:</b> Check wheels for cracks and tires for wear, damage, condition and proper inflation. Check and repack wheel bearings.
<b>Pass</b>	<b>Fail</b>	<b>Comments:</b>
<input type="checkbox"/>	<input type="checkbox"/>	

		<b>Landing Gear Legs:</b> Inspect legs for cracks, overextension or signs of delamination.
<b>Pass</b>	<b>Fail</b>	<b>Comments:</b>
<input type="checkbox"/>	<input type="checkbox"/>	



## 7. Rear Fuselage and Empennage

		<b>Skin:</b> Check for deformation, cracks and obvious damage. If damage is found, check adjacent structure.
<b>Pass</b>	<b>Fail</b>	<b>Comments:</b>
<input type="checkbox"/>	<input type="checkbox"/>	

		<b>Control Surfaces:</b> Check for deformation, cracks, security of hinges, freedom of movement and travel limits.
<b>Pass</b>	<b>Fail</b>	<b>Comments:</b>
<input type="checkbox"/>	<input type="checkbox"/>	

		<b>Static Port:</b> Check for blockages. Check static probe for condition.
<b>Pass</b>	<b>Fail</b>	<b>Comments:</b>
<input type="checkbox"/>	<input type="checkbox"/>	

## 8. General

		Airplane cleaned and serviced.
<b>Pass</b>	<b>Fail</b>	<b>Comments:</b>
<input type="checkbox"/>	<input type="checkbox"/>	

		Inspect all placards to assure they are easily readable and securely attached.
<b>Pass</b>	<b>Fail</b>	<b>Comments:</b>
<input type="checkbox"/>	<input type="checkbox"/>	

		Ensure that all Service Bulletins, Air Safety Alerts and previously issued Service Instructions are reviewed and complied with as required.
<b>Pass</b>	<b>Fail</b>	<b>Comments:</b>
<input type="checkbox"/>	<input type="checkbox"/>	