

Condition Inspection Checklist

page 1

Aircraft: VAN'S RV6A
 Serial Number: 20437 Registration Number: 715PA

Aircraft Owner: Lee Archambault Blue Hanger I
 Date of Inspection: 2024 Location of Inspection: LWA

Total Airframe Hours:	
Total Engine Hours:	
Total Propeller Hours:	

Inspection Performed By: Lee Archambault Certificate: [REDACTED]

Preparation — Inspection Consumables

Oil	
Oil filter	
Oil sample kit	
Spark plugs	
ELT batteries	
ELT remote battery	
Air filter recharge kit	
Brakes	
Tires/tubes	
Wheel bearing grease	
Gasket lube	
Light lubricant	

Time-limited items

Item	Last inst. date	Last inst. HOBBS
ELT batteries (replace every 2 years)		
ELT remote battery (replace every 2 years)		
Altitude encoder & transponder certification		

Empennage & Fuselage Group

- ☒ 1) Remove empennage fairing, fuselage inspection covers, wing root fairings, seats, baggage panels f/r, front floorboard
- ☒ 2) Inspect vertical stabilizer and horizontal stabilizer spar attach points
- ☒ 3) Inspect elevator horns and attachments, and rear fuse bulkheads area, lubricate rod end bearings
- ☒ 4) Inspect rudder and vertical stabilizer for corrosion and condition
- ☒ 5) Inspect rudder attach bearings for condition/security, lubricate
- ☒ 6) Inspect rudder control stops and cable attachments for security and cotter pin
- ☒ 7) Inspect rudder light wire for chafing
- ☒ 8) Inspect horizontal stabilizer and elevators for corrosion and condition
- ☒ 9) Inspect elevator attach bearings for condition/security, lubricate
- ☒ 10) Inspect elevator counterbalance weights for security
- ☒ 11) Inspect elevator trim tab, arm, and actuator rod
- ☒ 12) Inspect static ports are clear
- ☒ 13) Inspect rear fuselage interior: check skin/bulkheads for cracking, damage, or corrosion, inspect all wiring & plumbing
- ☒ 14) Inspect elevator bellcrank assembly, lubricate rod end bearings

- ☐ 15) Re-install rear baggage panels
- ☐ 16) Reinstall empennage fairing and rear inspection plates

Landing Gear Group

- ☐ 17) Remove wheel pants, upper intersection fairings, gear attach covers
- ☐ 18) Inspect wheel pants and fairings for cracks, wear, loose or missing fasteners
- ☐ 19) Jack plane at tiedown points
- ☐ 20) Remove brake assemblies and wheels
- ☐ 21) Inspect tires for wear and cracks, rotate if indicated, replace if necessary
- ☐ 22) Check brake cylinders for condition and leaks
- ☐ 23) Check brake lines for security and chafing
- ☐ 24) Inspect brake linings for wear and condition, re-line if necessary
- ☐ 25) Re-pack wheel bearings (hi-temp disc brake grease)
- ☐ 26) Clean axle/brake area
- ☐ 27) Clean and re-mount wheels and brake assemblies including cotter pin
- ☐ 28) Check/set tire air pressure: 26-33 psi
- ☐ 29) Clean wheel pants and re-install
- ☐ 30) Inspect gear attach bolts for proper torque
- ☐ 31) Inspect fuel vent ports for security and condition
- ☐ 32) Re-install gear attach covers, upper intersection fairings, wheel pants

Wing Group

- ☒ 33) Remove wing inspection plates
- ☒ 34) Inspect entire wing structure internally for cracks and corrosion including fuel tank attach bolts
- ☒ 35) Inspect aileron control mechanism (push tubes, rod end bearings, bellcrank) for condition/security, lubricate rod end bearings
- ☐ 36) Inspect wing root area including electrical connections and plumbing
- ☒ 37) Inspect entire wing structure externally for cracks and condition
- ☐ 38) Inspect fuel cap and O ring condition
- ☒ 39) Inspect aileron attach bolts/brackets for security, lubricate rod end bearings
- ☒ 40) Inspect aileron control stops for security
- ☐ 41) Inspect pitot tube and plumbing for security and blockage
- ☒ 42) Extend flaps, inspect flap actuator rods and attachment hinge for operation and security, lubricate rod end bearings
- ☐ 43) Inspect strobe/nav lights for security and operation
- ☐ 44) Inspect landing lights for security and operation
- ☒ 45) Reinstall inspection plates and wing root fairings

Cabin Group

- ☒ 46) Check/change ELT batteries, verify operation, armed
- ☒ 47) Inspect ELT antenna
- ☒ 48) Inspect flap motor mechanism & wiring for damage and proper operation, lubricate rod end bearing
- ☒ 49) Inspect condition of seat harnesses and attachments
- ☒ 50) Inspect rear flight controls, lubricate rod end bearings
- ☐ 51) Inspect rear pax footwell area including spar bolts, antennas, wing wiring connections
- ☒ 52) Inspect fuel selector valve, fittings, fuel lines
- ☒ 53) Inspect fwd flight control mechanism, lubricate rod end bearings
- ☒ 54) Inspect landing gear mounts and mounting hardware
- ☒ 55) Check general condition under panel for loose wires, chafing, etc.
- ☐ 56) Check all avionics and instruments for mounting security
- ☒ 57) Check cabin heater and controls
- ☐ 58) Check rudder pedals and brake cylinders for operation and leaks
- ☒ 59) Check battery well area: battery cables and all wires
- ☐ 60) Inspect left fwd footwell area: aux fuel pump, firewall penetrations, wire bundles, fuel lines, vent tubes
- ☒ 61) Inspect canopy structure and mechanism for security and wear
- ☒ 62) Inspect canopy and windshield for cracks
- ☒ 63) Check fire extinguisher condition
- ☒ 64) Verify spare fuses available in pilot storage bin
- ☐ 65) Re-install interior floor panels, seats, flap covers, and seat cushions

Propeller Group

- ☐ 66) Remove spinner noting orientation
- ☐ 67) Inspect spinner and backplate for cracks or damaged
- ☐ 68) Inspect prop hub for cracks or leaks
- ☐ 69) Inspect crankcase nose seal for oil leaks
- ☐ 70) Inspect blades for nicks, cracks and/or surface erosion, repair as necessary
- ☐ 71) Re-install spinner

Engine Group

Service items:

- ☐ 72) Remove engine cowl
- ☐ 73) Clean cowling interior and inspect for cracks, distortion, loose or missing fasteners, heat damage
- ☐ 74) Drain engine oil
- ☐ 75) Remove spin-on oil filter, replace and safety wire
- ☐ 76) Cut open oil filter, inspect for particles
- ☐ 77) Refill engine with oil per lubrication chart
- ☐ 78) Remove plugs noting current installed location
- ☐ 79) Inspect spark plug condition, clean, re-gap to .018"
- ☐ 80) Perform leakdown compression test:
#1 _____ #2 _____ #3 _____ #4 _____
- ☐ 81) Rotate spark plug position/polarity, apply anti-seize, reinstall, torque to 35 ft. lbs.
- ☐ 82) Remove carburetor air box and carburetor heat attachments
- ☐ 83) Service K&N air filter element
- ☐ 84) Reinstall air box and all attachments

- ___ 85) Remove and clean carburetor inlet strainer
- ___ 86) Inspect carburetor mounting nuts for security
- ___ 87) Check engine controls for proper movement and security
- ___ 88) Check exhaust system and mounting brackets for cracks
- ___ 89) Retorque exhaust mounting nuts

Inspection items:

- ___ 90) Inspect accessories on rear engine case for security and leaks including: oil temp sender, oil pressure sender, magnetos, vacuum pump pad, oil lines & fittings, crankcase breather
- ___ 91) Inspect oil cooler condition including fins for damage or blocking, lines for leaks and/or chafing
- ___ 92) Inspect ignition harness, springs and insulators for condition
- ___ 93) Inspect starter: pinion & ring gears, mounts, connections, lubricate w/grease
- ___ 94) Inspect alternator: mounts, lead connections, belt condition and tension
- ___ 95) Inspect plenum/baffle for damage and air leaks
- ___ 96) Inspect engine mount system for damage and attachment security
- ___ 97) Inspect all firewall penetration seals
- ___ 98) Inspect fuel lines for condition, chafing, and signs of leaks
- ___ 99) Inspect all wire bundles for security and chafing
- ___ 100) Inspect all lines, hoses, and clamps for leaks, improper condition, looseness, and chafing

Operational Inspection

- ___ 101) Verify all inspection panels and fairings secure
- ___ 102) Brake system check

Test run engine:

- ___ 103) Check oil pressure/temperature within limits
- ___ 104) Check aux fuel pump for proper fuel pressure
- ___ 105) Check ignition switch, both magnetos grounded check
- ___ 106) Check alternator shut off operation
- ___ 107) Check fuel gauges for operation
- ___ 108) Magneto check
- ___ 109) Check static run up
- ___ 110) Check for proper idle RPM
- ___ 111) Check RPM rise upon leaning mixture
- ___ 112) Check fuel selector for engine shutoff

After shutdown:

- ___ 113) Inspect f/w area for fuel, oil, and hydraulic systems for leaks
- ___ 114) Re-install cowling

