

Condition Inspection Checklist

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Aircraft: **RV-8** (Van's RV-8)

Serial Number: **82137** Registration Number: **N114NH**

Aircraft Owner: John Davis

Date of Inspection: November 2016

Location of Inspection: KSEE

Total Airframe Hours:	316.1
Total Engine Hours:	316.1
Total Propeller Hours:	316.1

Inspection Performed By: John Davis Certificate: 3349989

JD Davis

Preparation — Inspection Consumables

Oil	7 pts. Aero Shell 50W	11/26/16
Oil filter	Champion CH48110	11/26/16
Spark plugs	8 - Unison UREM37BY	11/26/16
ELT batteries	New 2013	2016
ELT remote battery	1 - Duracell DL 1/3 NB lithium (every 8 years)	2016
Air filter recharge kit	K&N 99-5000	Cleaned
Brakes	Brake lining replacement kit	Inspected 11/26/16
Tires/tubes	2 - 5:00x5-6 ply, as needed	✓ 11/26/16
Wheel bearing grease	Hi-temp disc brake grease or Aero shell 5	✓ 11/26/16
Gasket lube	Dow DC-4	✓
Light lubricant	LPS-2	✓

Time-limited items

upgrade

Item	Last change	Next due
ELT batteries	2016	2018
ELT remote battery	2016	2024
Altitude encoder & transponder certification		

Empennage & Fuselage Group

11/26/16

- JD* 1) Remove empennage fairing, fuselage inspection covers
- JD* 2) Inspect vertical and horizontal stabilizer spar attach points
- JD* 3) Inspect elevator horns and attachments, and rear fuselage bulkhead interior including tailwheel mount for integrity
- JD* 4) Inspect all empennage structures for corrosion and condition
- JD* 5) Inspect all empennage attach bearings for condition/security, lubricate
- JD* 6) Inspect rudder control stops and cable attachments for security and cotter pin, rudder light wire for chafing
- JD* 7) Inspect elevator trim tab, arm, and actuator rod
- JD* 8) Inspect static ports, verify clear
- JD* 9) Inspect rear fuselage interior: check skin/bulkheads for cracking, damage, or corrosion, inspect all wiring & plumbing, clean as necessary
- JD* 10) Inspect midship elevator bellcrank assembly, lubricate rod end bearings
- JD* 11) Re-install rear baggage panels, rear fuse inspection plates, empennage fairing

photo

New fillings 11/26/16

add AP Servo

PN

1602

10" Touch Ser 021519 -

(425) 402 0433

Landing Gear Group

- 11/26/16
- gr 12) Remove tail wheel and tailwheel yoke, clean all parts, and assess wheel bearings, yoke bearings, and tire
 - gr 13) Clean & oil yoke bushing, re-install yoke and wheel replacing wheel and/or bearings as necessary *Sealed bearing*
 - gr 14) Inspect tail wheel steering mechanism for security and proper movement
 - gr 15) Re-install tail wheel, replace as necessary
 - gr 16) Remove wheel pants, upper intersection fairings, gear attach covers
 - gr 17) Inspect wheel pants and fairings for cracks, wear, loose or missing fasteners
 - gr 18) Jack plane at tiedown points
 - gr 19) Remove brake assemblies and wheels
 - gr 20) Inspect tires for wear and cracks, rotate if indicated, replace if necessary
 - gr 21) Check brake cylinders for condition/leaks, brake lines for security and chafing, inspect brake linings for wear and condition, replace as necessary
 - gr 22) Re-pack wheel bearings (hi-temp disc brake grease) every other year
 - gr 23) Rotate or replace tires as necessary *NA*
 - gr 24) Clean and re-mount wheels and brake assemblies including cotter pin
 - gr 25) Check/set tire air pressure: 28-34 psi
 - gr 26) Clean wheel pants and re-install
 - gr 27) Inspect gear/fuselage attach bolts for security and tightness
 - gr 28) Inspect fuel vent ports for security and condition
 - gr 29) Re-install gear attach covers, upper intersection fairings, wheel pants

Wing Group

- 11/26/16
- gr 30) Remove wing inspection plates
 - gr 31) Inspect entire wing structure internally for cracks and corrosion including fuel tank attach bolts, special attention to main spar
 - gr 32) Inspect aileron control mechanism (push tubes, rod end bearings, bellcrank) for condition/security, lubricate rod end bearings
 - gr 33) Inspect wing root area including electrical connections and plumbing
 - gr 34) Inspect fuel cap and O ring condition
 - gr 35) Inspect aileron attach bolts/brackets for security, aileron control stops for security, lubricate rod end bearings
 - gr 36) Inspect pitot tube and plumbing for security and blockage
 - gr 37) Extend flaps, inspect flap actuator rods and attachment hinge for operation and security, lubricate rod end bearings
 - gr 38) Inspect strobe/navigation lights for security and operation
 - gr 39) Inspect landing lights for security and operation
 - gr 40) Reinstall inspection plates and wing root fairings

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Cabin Group

- 12/3/16
- OK 41) Remove flap motor cover, inspect flap motor mechanism & wiring for damage and proper operation, lubricate rod end bearing
 - OK 42) Inspect rear flight controls, lubricate rod end bearings
 - OK 43) Inspect condition of seat harnesses, mounts, and attachments
 - OK 44) Inspect rear passenger foot well area including spar bolts, antennas, wing wiring connections
 - OK 45) Inspect mid-cabin console area including: fuel selector valve, fittings, fuel lines, Navaid servo and linkage
 - OK 46) Inspect fwd flight control mechanism, lubricate rod end bearings
 - OK 47) Inspect interior of gear towers for leaks or chafing
 - OK 48) Check general condition under panel for loose wires, chafing, etc.
 - OK 49) Check all avionics and instruments for mounting security *New Inst panel*
 - OK 50) Check cabin heater and controls
 - OK 51) Check rudder pedals and brake cylinders for operation and leaks
 - OK 52) Check battery well area: battery cables and all wires
 - OK 53) Inspect left fwd footwell area: aux fuel pump, firewall penetrations, wire bundles, fuel lines, vent tubes
 - OK 54) Inspect canopy structure and mechanism for security and wear
 - OK 55) Inspect canopy and windshield for cracks *New Wind Screen*
 - OK 56) Check fire extinguisher condition
 - OK 57) Re-install interior floor panels, seats, flap covers, and seat cushions

Propeller Group

- 12/3/16
- OK 58) Remove spinner noting orientation for replacement
 - OK 59) Inspect spinner and backplate for cracks or damage
 - OK 60) Inspect prop hub for cracks or leaks
 - OK 61) Inspect crankcase nose seal for oil leaks – Grease the Hub ✓
 - OK 62) Inspect propeller blades for nicks, cracks and/or surface erosion
 - OK 63) Re-install spinner

Engine Group

Service items:

- 12/10/16
- OK 64) Remove engine cowl
 - OK 65) Clean cowling interior and inspect for cracks, distortion, loose or missing fasteners, heat damage
 - OK 66) Drain engine oil, remove spin-on oil filter, replace and safety wire, refill engine oil per lubrication chart
 - OK 67) Cut open oil filter, inspect for particles ✓ *none*
 - OK 68) Remove plugs noting current installed location *Clean dry*
 - OK 69) Inspect spark plug condition, clean, re-gap to .016-.022"
 - OK 70) Perform leakdown compression test, note compression:
#1 78 #2 78 #3 78 #4 78 ✓
 - OK 71) Reinstall spark plugs rotating top to bottom, apply anti-seize paste, torque to 400 in.lbs.
 - OK 72) Remove carburetor air box and carburetor heat attachments
 - OK 73) Service K&N air filter element every other year
 - OK 74) Reinstall air box and all attachments
 - OK 75) Inspect mounting nuts for security
 - OK 76) Check engine controls for proper movement and security
 - OK 77) Check exhaust system and mounting brackets for cracks
 - OK 78) Re-torque exhaust mounting nuts

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Inspection items:

- 12/10/16
- ☒ 79) Inspect accessories on rear engine case for security and leaks including: oil temp sender, oil pressure sender, magnetos, fuel pump, vacuum pump pad, oil lines & fittings, crankcase breather
 - ☒ 80) Inspect oil cooler condition including fins for damage or blocking, lines for leaks and/or chafing
 - ☒ 81) Inspect ignition harness, springs and insulators for condition
 - ☒ 82) Inspect starter: pinion & ring gears, mounts, wiring connections
 - ☒ 83) Inspect alternator: mounts, lead connections, belt condition and tension
 - ☒ 84) Inspect plenum/baffle for damage and air leaks
 - ☒ 85) Inspect engine mount system for damage and attachment security
 - ☒ 86) Inspect all firewall penetration seals
 - ☒ 87) Inspect fuel lines for condition, chafing, and signs of leaks
 - ☒ 88) Inspect all wire bundles for security and chafing
 - ☒ 89) Inspect all lines, hoses, and clamps for leaks, improper condition, looseness, and chafing

Operational Inspection

- 12/16/16
- ☒ 90) Verify all inspection panels and fairings secure
 - ☒ 91) Brake system check

Test run engine:

- ☒ 92) Check oil pressure/temperature within limits
- ☒ 93) Check aux fuel pump for proper fuel pressure
- ☒ 94) Check ignition switch, both magnetos grounded check
- ☒ 95) Check alternator shut off operation
- ☒ 96) Check fuel gauges for operation *Calibration*
- ☒ 97) Check static run up
- ☒ 98) Magneto check
- ☒ 99) Check for proper idle RPM
- ☒ 100) Check RPM rise upon leaning mixture (idle mixture)
- ☒ 101) Check fuel selector for engine shutoff

After shutdown:

- ☒ 102) Inspect fwf area for fuel, oil, and hydraulic systems for leaks
- ☒ 103) Re-install cowlings

Documentation

- 104) Verify equipment list up to date
- 105) Verify Registration, Airworthiness Certificate, and Operating Limitations are current and in aircraft
- 106) Verify external data plate secure and installed
- 107) Verify EXPERIMENTAL placard installed in cockpit
- 108) Verify PASSENGER WARNING placard installed in cockpit
- 109) Verify cockpit checklists and Pilot's Operating Handbook in aircraft
- 110) Review Airworthiness Directives for applicability and compliance
- 111) Review Service Bulletins/Letters for compliance
- 112) Check altitude encoder & transponder certification (every 24 months) 0
- 113) Document Condition Inspection and record maintenance performed in airframe and engine logs

NOTES: SB 16-03-28 inspection Complete no cracks
SB 14-02-05 inspection Complete no cracks
SB 14-01-31 inspection Complete no cracks
SB 12-08-14 AN-4 wing attach bolts in place
SB 11-9-13 no Slogh Compound ✓
SB Electric Flap wiring ✓
SB 7/2/16 sticks Attached ✓
SB 06/2/23 Fuel No Flop pickups ✓
SB 4/3/1 (NA) Lock Tight
SB 4/2/1 (NA)
SB 02-12-1 Inspected → 96-10-2 (NA)
SB 96-10-1 ✓

J. Mancini

SB 16-12-16 inspection Complete - Bolts in place
JMD

Left wing interior 10/27/2016 Service Bulletin 16-03-28



A photograph of a metallic aircraft wing component, likely a fuselage or wing section, showing a service bulletin label. The label is printed in black text on a light-colored background. The component has several circular holes and a vertical slot on the right side. The text on the label reads:

Right Wing 2 November 2016
SERVICE BULLETIN 16-03-28