

Sonex Serial Number 1102 Maintenance Schedule Check List

To be done at 25 hour Intervals:

	Check	Signature
(a) Change Engine Oil, Brad Penn Racing 20W50 or Valvoline Racing 20W50		

To be done at 50 hour Intervals:

(a) Change Engine Oil and Wash the oil screen.		
(b) Check engine air filter and replace as needed (AeroVee Part ACV-C10-33 or K&N Part E-3120).		
(c) Adjust valves as per Areovee recommendations		

To be done at Intervals of the lessor of 6 months or 50 hours.

Propeller Group

(a) Propeller - Inspect for:		
(i) Inspect for cracks, bruises, scars, warping, evidence of glue failure and delamination.		
(ii) Check for correct track, excessive rotational and end play.		
(iii) correct track.		
(b) Bolts and nuts - inspect for improper bolt torque and safety wire.		
(c) Spinner assembly - Inspect for cracks and wear.		

To be done at intervals of the lessor of 12 months or 100 hours.

(1) Aircraft Generally

(a) Remove or open all necessary inspection plates, fairings and cowlings. Thoroughly clean the aircraft and engine.		
(b) Inspect panel, canopy and cowling closing and locking mechanisms for improper installation and function.		
(c) Lubricate canopy hinge		

(2) Fuselage and Hull Group

(a) Structure - inspect for deterioration, distortion, evidence of failure and defective or insecure attachment of fittings.		
(b) Systems and components - inspect for improper installation, apparent defects and unsatisfactory operation.		

(3) Cockpit Group

(a) Generally - inspect for dirt and loose equipment that might foul the controls.		
(b) Seats and safety belts - inspect for poor condition, fraying, and any other apparent defects.		
(c) Windshield and canopy - inspect for deterioration and breakage		
(d) Instruments - inspect for poor condition, mounting, marking and, where practicable for improper operation.		
(e) Flight and engine controls - inspect for improper installation and improper operation.		
(f) Batteries - inspect Enigma backup battery for improper installation and improper charge.		
(g) All systems - inspect for improper installation, poor general condition, apparent and obvious defects and insecurity of attachment.		
(h) Placards - inspect for missing and illegible mandatory placards.		

(4) Engine and Nacelle Group

(a) Leaks - inspect for oil or fuel leaks.		
(b) Studs and nuts - inspect for defects, evidence of improper torque and safety locking.		
(c) Cylinder compression - check; if compression test indicates problems, check internal condition and tolerances.		
(d) Oil screen and Gascolator - check for foreign matter.		
(e) Engine mount - inspect for cracks, looseness of mounting and looseness of engine to mount.		
(f) Flexible vibration dampeners - inspect for poor condition and deterioration.		
(g) Engine controls - inspect for defects, improper travel and improper safety locking.		
(h) Lines, hoses and clamps - inspect for leaks, improper condition and looseness.		
(i) Exhaust stacks - inspect for cracks, defects and improper attachment.		
(j) Accessories - inspect for apparent defects in security of mounting.		
(k) All systems - inspect for improper installation, poor general condition, defects and insecure attachment.		
(l) Cowlings - inspect for cracks and other defects.		
(m) Internal corrosion - inspect the engine if it has not been inhibited and has been out of service in excess of 12 months.		
(n) Engine performance - during the ground run, run the engine in accordance with the manufacturer's recommendation to determine satisfactory performance of the following:		

(i) Idle and maximum RPM		
(ii) magneto and electronic ignition RPM drop.		
(iii) oil pressure		
(iv) cylinder and oil temperatures		
(o) check reference RPM		

(5) Landing Gear Group

(a) All units - inspect for condition and security of attachment.		
(b) Tail wheel linkage and members - inspect for excessive wear, fatigue and distortion.		
(c) Brake lines - inspect for leakage.		
(d) Wheels - inspect for cracks, defects and condition of bearings.		
(e) Tires - inspect for wear, cuts and incorrect inflation; inspect for improper installation and improper operation.		
(f) Brakes - inspect pucks and disks for wear.		

(6) Wing and Centre Section Assembly

Inspect structure for general condition, deterioration, distortion, evidence of failure and insecurity of attachment.		
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(7) Empennage Assembly

Inspect structure for general condition, deterioration, distortion, evidence of failure, insecurity of attachment, improper component installation and improper operation.		
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(8) Propeller Group

(a) Propeller - inspect for:		
(i) inspect for cracks, bruises, scars, warping, evidence of glue failure and delamination.		
(ii) Check for correct track, excessive rotational and end play.		
(iii) correct track.		
(b) Bolts and nuts - inspect for improper bolt torque and safety wire.		
(c) Spinner assembly - inspect for cracks and wear.		

(9) Radio Group

(a) Radio and electronic equipment - inspect for improper installation and insecure mounting.		
(b) Emergency Locator Transmitters - test performance in accordance with the procedure specified in Appendix G of Chapter 571 of the Airworthiness Manual.		
(c) Wiring and conduits - inspect for improper routing, insecure mounting and apparent defects.		
(d) Bonding and shielding - inspect for improper installation and poor condition.		
(e) Antennas - inspect for poor condition, insecure mounting and improper operation.		

(10) Aircraft Generally, Including Technical Records

(a) Enter details of all deficiencies found during the inspection in the aircraft technical records.		
(b) Upon completion of the inspection, replace or close all inspection plates, access doors, fairings and cowlings.		