

WARNING

Before starting work on the engine it is recommended that the engine starter be disabled (via disconnecting the starter solenoid or similar) to reduce the risk of injury from inadvertent engine start.

Table 13 – Engine Inspection Chart

| | | Annual Inspection | | | | |
|---|--|-------------------|---|---|---|---|
| | | Each 200 Hours | | | | |
| | | Each 100 Hours | | | | |
| | | Each 50 Hours | | | | |
| | | Each 25 Hours | | | | |
| PROPELLER | | | | | | |
| 1. | Spinner | * | * | * | * | |
| 2. | Spinner Mount Plates | * | * | * | * | |
| 3. | Spinner Screws | * | * | * | * | |
| 4. | Propeller | * | * | * | * | |
| 5. | Prop Tracking | * | * | * | * | |
| 6. | Propeller bolts/nuts – Tension | * | * | * | * | |
| 7. | Spinner Tracking | * | * | * | * | |
| ENGINE & ENGINE COMPARTMENT | | | | | | |
| Check for oil, fuel exhaust & induction leaks then clean entire engine & compartment before inspection. | | | | | | |
| 1. | Engine Pre-Inspection Test Run | * | * | * | * | |
| 2. | Engine Cowlings | * | * | * | * | |
| 3. | Inspection of Engine & Compartment – Pre Cleaning | * | * | * | * | * |
| 4. | Clean Engine & Compartment | | * | * | * | |
| 5. | Inspection of Engine Compartment – Clean. (Includes Torque-Seal check on through-bolts) | | * | * | * | |
| 6. | Perform Basic Visual Inspection of Flywheel Screws | * | * | * | * | |
| 7. | Check flywheel screw tensions | | * | * | * | |
| 8. | Carburettor air filter – Check & replace if required | * | * | * | * | |

| | | Annual Inspection | | | | |
|-----|--|-------------------|---|---|---|---|
| | | Each 200 Hours | | | | |
| | | Each 100 Hours | | | | |
| | | Each 50 Hours | | | | |
| | | Each 25 Hours | | | | |
| | | | | | | |
| 9. | Carburettor air filter – mandatory replacement | | | * | * | * |
| 10. | Engine baffles and air ducts | | * | * | * | * |
| 11. | Cylinders | | * | * | * | * |
| 12. | Crankcase & front crankcase seal | | * | * | * | * |
| 13. | Fuel hoses, lines and fittings | | * | * | * | * |
| 14. | Intake and exhaust systems | * | * | * | * | * |
| 15. | Ignition harness, distributor caps & rotors | | | * | * | * |
| 16. | Check Spark Plug Gaps | | * | * | * | * |
| 17. | Replace Spark Plugs | | | * | * | * |
| 18. | Compression check or leak-down check | | * | * | * | * |
| 19. | Electrical wiring | * | * | * | * | * |
| 20. | Engine-Driven Fuel pump | * | * | * | * | * |
| 21. | Engine controls and linkages | | * | * | * | * |
| 22. | Engine mounts, mount structure | | * | * | * | * |
| 23. | Safety Wires | | * | * | * | * |
| 24. | Starter, solenoid and electrical connections | * | * | * | * | * |
| 25. | Coils and electrical connections | | * | * | * | * |
| 26. | Carburettor heat system | | * | * | * | * |
| 27. | Throttle and linkage | | * | * | * | * |
| 28. | Carburettor | | * | * | * | * |
| 29. | Oil system tubes and hoses | | * | * | * | * |
| 30. | Firewall | | * | * | * | * |
| 31. | Oil Collector Bottle on Firewall | * | * | * | * | * |

| | | Annual Inspection | | | | |
|--------------------|---|-------------------|---|---|---|---|
| | | Each 200 Hours | | | | |
| | | Each 100 Hours | | | | |
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| | | Each 25 Hours | | | | |
| 32. | Exhaust system – including muffler | * | * | * | * | |
| 33. | Cylinder Head bolt tension | * | * | * | * | |
| 34. | Inspect valve springs & rockers | | * | * | * | |
| 35. | Valve Clearance Check (solid lifter engines only) | * | * | * | * | |
| 36. | Hydraulic Lifter & Rocker Inspection | | * | * | * | |
| 37. | Oil & filter change | * | * | * | * | * |
| 38. | SCAT hose condition | | * | * | * | * |
| 39. | Engine Post-Inspection Test Run | | * | * | * | * |
| Fuel System | | | | | | |
| 1 | Replace fuel filter(s) | | * | * | * | |
| 2 | Drain valves, carburettor bowl | * | * | * | * | |
| 3 | Electronic fuel boost pump and fittings | | * | * | * | |
| 4 | Fuel lines, taps and connectors | | * | * | * | |
| 5 | Fire sleeves | | * | * | * | |
| 6 | Fuel Flow Rate | | | | | * |

8.6 Pre-Maintenance Inspections:

- As all possible circumstances cannot be listed here, the following is provided as guidance only. A critical, trained eye is required and inspections should include, but not be limited to, the following:
- Carry out a walk-around visual inspection of the aircraft, engine & propeller.
- When indicated in Table 13 carry out an engine test run as detailed in Section 9.1 to determine any abnormalities before maintenance.
- When indicated in Table 13 an engine run-up must be performed after completing maintenance to determine that any discrepancies or abnormalities have been corrected. Test run to be carried out as detailed in Section 9.1

WARNING

Engine runs on the ground must be short to avoid over-heating engine. Monitor engine temperatures carefully during ground test runs.