

Introduction

The annual/100 hr inspection checklist, as dictated by the FAR 43, Appendix D —Scope and Detail of Items (as Applicable to the Particular Aircraft) To Be Included in Annual and 100-Hour Inspections

Source: <http://www.redriveraviation.com/maintenancerepair/annual--inspection-checklist.html>

(a) Cleaning

☐ Each person performing an annual or 100-hour inspection shall, before that inspection, remove or open all necessary inspection plates, access doors, fairing, and cowlings. He shall thoroughly clean the aircraft and aircraft engine.

(b) Fuselage and Hull Group

Each person performing an annual or 100-hour inspection shall inspect (where applicable) the following components of the fuselage and hull group:

- ☐ Fabric and skin—for deterioration, distortion, other evidence of failure, and defective or insecure attachment of fittings.
- ☐ Systems and components—for improper installation, apparent defects, and unsatisfactory operation.
- ☐ Envelope, gas bags, ballast tanks, and related parts—for poor condition.

(c) Cabin and Cockpit Group

Each person performing an annual or 100-hour inspection shall inspect (where applicable) the following components of the cabin and cockpit group:

- ☐ Generally—for uncleanness and loose equipment that might foul the controls.
- ☐ Seats and safety belts—for poor condition & apparent defects.
- ☐ Windows and windshields—for deterioration & breakage.
- ☐ Instruments—for poor condition, mounting, marking, & (where practicable) improper operation.
- ☐ Flight and engine controls—for improper installation & improper operation.
- ☐ Batteries—for improper installation & improper charge.
- ☐ All systems—for improper installation, poor general condition, apparent and obvious defects, and insecurity of attachment.

(d) Engine and Nacelle group

Each person performing an annual or 100-hour inspection shall inspect (where applicable) components of the engine and nacelle group as follows:

- ☐ Engine section—for visual evidence of excessive oil, fuel, or hydraulic leaks, and sources of such leaks.
- ☐ Studs and nuts—for improper torquing and obvious defects.
- ☐ Internal engine—for cylinder compression and for metal particles or foreign matter on screens and sump drain plugs. If there is weak cylinder compression, for improper internal condition and improper internal tolerances.
- ☐ Engine mount—for cracks, looseness of mounting, and looseness of engine to mount.
- ☐ Flexible vibration dampeners—for poor condition and deterioration.
- ☐ Engine controls—for defects, improper travel, and improper safetying.
- ☐ Lines, hoses, and clamps—for leaks, improper condition and looseness.
- ☐ Exhaust stacks—for cracks, defects, and improper attachment.
- ☐ Accessories—for apparent defects in security of mounting.
- ☐ All systems—for improper installation, poor general condition, defects, and insecure attachment.
- ☐ Cowling—for cracks, and defects.

(e) Landing Gear group

Each person performing an annual or 100-hour inspection shall inspect (where applicable) the following components of the landing gear group:

- ☐ All units—for poor condition and insecurity of attachment.
- ☐ Shock absorbing devices—for improper oleo fluid level.
- ☐ Linkages, trusses, and members—for undue or excessive wear fatigue, and distortion.
- ☐ Retracting and locking mechanism—for improper operation.
- ☐ Hydraulic lines—for leakage.
- ☐ Electrical system—for chafing and improper operation of switches.
- ☐ Wheels—for cracks, defects, and condition of bearings.
- ☐ Tires—for wear and cuts.
- ☐ Brakes—for improper adjustment.
- ☐ Floats and skis—for insecure attachment and obvious or apparent defects.

(f) Wing and Center section assembly

☐ Each person performing an annual or 100-hour inspection shall inspect (where applicable) all components of the wing and center section assembly for poor general condition, fabric or skin deterioration, distortion, evidence of failure, and insecurity of attachment.

(g) The Complete Empennage assembly

☐ Each person performing an annual or 100-hour inspection shall inspect (where applicable) all components and systems that make up the complete empennage assembly for poor general condition, fabric or skin deterioration, distortion, evidence of failure, insecure attachment, improper component installation, and improper component operation.

(h) Propeller group

Each person performing an annual or 100-hour inspection shall inspect (where applicable) the following components of the propeller group:

- ☐ Propeller assembly—for cracks, nicks, binds, and oil leakage.
- ☐ Bolts—for improper torquing and lack of safetying.
- ☐ Anti-icing devices—for improper operations and obvious defects.
- ☐ Control mechanisms—for improper operation, insecure mounting, and restricted travel.

(i) Radio group

Each person performing an annual or 100-hour inspection shall inspect (where applicable) the following components of the radio group:

- ☐ Radio and electronic equipment—for improper installation and insecure mounting.
- ☐ Wiring and conduits—for improper routing, insecure mounting, and obvious defects.
- ☐ Bonding and shielding—for improper installation and poor condition.
- ☐ Antenna including trailing antenna—for poor condition, insecure mounting, and improper operation.

(j) Installed miscellaneous items

☐ Each person performing an annual or 100-hour inspection shall inspect (where applicable) each installed miscellaneous item that is not otherwise covered by this listing for improper installation and improper operation.