

# ANNUAL AIRCRAFT CONDITION INSPECTION

Condition Inspection Checklist Compiled from FAR 43, Appendix D

Inspection Date:

IDENTIFICATION	
Aircraft Make & Model:	
Registration Number:	
Engine Make & Model:	
Total Time Airframe Hours:	
Total Time Engine Hours:	
Identification Plate:	
Owner / Builder Name:	

PLACARDS & PLATES	PASS	FAIL
Registration/Airworthiness/Operation Limitations		
Aircraft Identification Plates Installed		
Experimental Placard Installed		
Passenger Warning for Non-Certified Aircraft		

WINGS & TAIL	PASS	FAIL
General Inspection of the Exterior/Interior Wing		
Flight Controls Proper Attachment (No Slop)		
Flight Control Hinges/Rod End Bearings Serviceability		
Flight Controls Properly Rigged/Proper Tension		
Inspect All Control Stops for Security		
Trim Control Properly Rigged		
Trim Control Surfaces/Hinges/Rod End Bearings Service		
Frayed Cables or Cracked/Frozen Pulleys		
Fabric/Rib Stitching/Tape Condition		
Lubrication		
Wing Attach Points		
Flying/Landing Wires/Struts for Security		
Corrosion		
Flight Control Bolts/Pins for Safety and Condition		
Wing/Strut/Cable Attachments and Hardware for Safety and Condition		
Inspect Vertical Fin Attach Points		
Inspect Elevators/Stabilizer Attach Points		
Inspect Hinges/Trim Tabs/Rod Ends for Attachment and Free Play (Slop)		

LANDING GEAR	PASS	FAIL
Inspect Struts/Torque Links for Attachment		
Check All Bushings for Wear/Free play		
Check Lubrication		
Wheel/Tires for Cracks and Serviceability		
Wheel Bearings for Lubrication		
Inspect for Corrosion		
Inspect Nose Gear for Cracks and Travel		
Check Tire Pressure		
Brake Lining Within Limits		
Safety Wiring on Wheel Attachment		

<b>COCKPIT</b>	<b>PASS</b>	<b>FAIL</b>
Inspect Windshield for Cracks and Fit		
Inspect Rudder Pedals and Brakes for Operation and Security		
Check Control Stick/Yoke for Freedom of Movement		
Check Cable and Pulleys for Attachment and Operation		
Ensure Cockpit Instruments Are Properly Marked		
Inspect Instruments, Lines, for Security		
Inspect Seats, Seat Belts/Shoulder Harness for Security and Attachment		
Corrosion		
Inspect All Control Stops		

<b>FUSELAGE</b>	<b>PASS</b>	<b>FAIL</b>
Check Ballistic Chute Installation Per Manufacturer Recommendations		
Inspect All Control Cables, Hinges and Pulleys		

<b>ELECTRICAL</b>	<b>PASS</b>	<b>FAIL</b>
Battery Serviced and Free from Corrosion		
Battery Box Free from Corrosion		
ELT Battery Free from Corrosion and Current Battery		
Check Anti Collision Light for Operation		
Inspect All Antenna Mounts and Wiring for Security		
Check All Grounding Wires (Engine to Airframe, Wing to Aileron/Flap, etc.)		
Inspect Radios/Leads/Wires for Attachment & Security		

<b>FUEL SYSTEM</b>	<b>PASS</b>	<b>FAIL</b>
Corrosion		
Fuel Lines for Chafing/Leaks/Security/Condition		
Fuel Caps for Security		
Fuel Placard		
Fuel Valve/Cross Feed/for Operation and Security		
Clean/Replace Fuel Filters		
Inspect Fuel Tank Vent System		

<b>PROPELLER</b>	<b>PASS</b>	<b>FAIL</b>
Check Spinner and Back Plate for Cracks		
Inspect for Cracks/Stone Damage/Nicks		
Check for Delamination (Wood/Composite Blades)		
Check Prop Bolts Torque/Safety Wire		
Check for Oil Leaks (Crankcase Nose Seal)		

<b>ENGINE</b>	<b>PASS</b>	<b>FAIL</b>
<b>Engine Mounting</b>		
Engine Mount: Are there any cracks, corrosion, or damage?		
Rubber Mounts: Are there any cracks, drying, deformation, or wear?		
Attaching Hardware: Are all the nuts, washers, and bolts present, tight, and not corroded?		
<b>Air Filter</b>		
Air Filter: Is it the proper type, clean, correctly oiled, and correctly secured?		
<b>Carburetors</b>		
Angle: Are they correctly angled out of the engine and at a right angle to the crankcase?		
Rubber Caps: Are they present, are they cracked?		
Vent Lines: Are they the right length, right sized holes, in good condition without obstructions?		

<b>Rubber Sockets:</b> Are they showing any cracks, are they correctly tightened?		
<b>Float Bowls:</b> Are the clips too easy to undo? Any water, varnish, dirt, or corrosion?		
<b>Float Level:</b> Are the floats floating at the proper levels? Is the float bracket adjusted correctly?		
<b>Liquid Cooling</b>		
<b>Radiators:</b> Are they showing damage, leaks, and properly secured?		
<b>Radiator Brackets:</b> Are they loose or cracked?		
<b>Radiator Cap:</b> Is it secure, showing any leaks or wear?		
<b>Hoses:</b> Are they showing any damage, wear, or leaks? Are the clamps secure?		
<b>Hose Sleeves:</b> Are they in the proper position? Do they show heavy wear?		
<b>Vents &amp; Bleeding Ports:</b> Are they in the right locations, in good condition, and secure?		
<b>Liquid Chambers:</b> Are there any leaks at the cylinder head, cylinder base, and liquid pump?		
<b>Liquid Level:</b> Is it at the proper levels?		
<b>Rotary Valve System</b>		
<b>Rotary Valve Cover:</b> Any signs of damage, cracks, or leaks? Are all fasteners present and secured?		
<b>Rotary Valve Oil Tank:</b> Any signs of damage or leaks? Correct oil levels? Is the cap secure?		
<b>Rotary Valve Hoses:</b> Any signs of damage or wear? Are all clamps present and tight?		
<b>Exhaust</b>		
<b>Surface:</b> Any cracks, damage, discoloration, bulges, or excessive corrosion?		
<b>Mounting &amp; Arrangement:</b> Is the mounting hardware secure?		
<b>Flexibility:</b> Can the exhaust components move freely and absorb vibration?		
<b>Springs:</b> Are they all present and secured with safety wire? Are they coated with red high temperature silicone?		
<b>Ignition</b>		
<b>Ignition Wiring:</b> Any damage or wear? All connections secure? Are rubber boots in good condition?		
<b>Spark Plug Caps:</b> Are they secured? Are they showing any cracks or damage?		
<b>Spark Plugs:</b> Are they the right type? Any signs of damage, or excessive oil or heat? Is the gap set correctly?		
<b>Electrical Wiring:</b> Any signs of damage or wear? Are they all secured?		
<b>Electric Starter</b>		
<b>Motor Casing:</b> Any damage? All fasteners present and tight?		
<b>Electrical Connection:</b> Is the connection secured? Is it insulated correctly?		
<b>Starter Supports/Adapter:</b> Are the parts showing any cracks or damage? Are all fasteners present and tight?		
<b>Gearbox</b>		
<b>Casing:</b> Any damage, cracks, or leaks? Are all fasteners present and tight?		
<b>Plugs:</b> Magnetic plug, vent plug? 2 level check plugs: Are they correctly secured and safety wired?		
<b>Propeller Shaft and Flange:</b> Any damage, excessive corrosion or excessive play?		
<b>Rubber Coupling:</b> Any damage or cracks? Any debris visible through the side vent holes?		
<b>General Condition</b>		
<b>Oil Leaks:</b> Any traces of oil leaks at the spark plugs, cylinder heads, cooling shroud edges, propeller side oil seal, crankcase to gearbox mating line, crankcase to fan tower line, crankcase to starter casing mating line, or crankcase halves mating line?		
<b>Engine Block:</b> Any surface damage, cracks, or excessive corrosion?		
<b>Engine Block Fasteners:</b> Are they all present, tight, and secured?		
<b>Engine Revolution:</b> When the propeller is spun by hand (with ignition off), can normal resistance and compression be felt? Are there abnormal noises? When engine is shaken back and forth, can normal springiness be felt, are there abnormal noises?		