

**SELAIR PILOTS ASSOCIATION  
CESSNA 172 P  
TRANSPORT CANADA P0099 APPROVED 100 HOUR INSPECTION**

DATE		A/C REG.		A/C TTSN	
NEXT INSP.		ENG TSO		PROP TSO	

	Completed by
<p><b>I. <u>DETAILED INSPECTION</u></b></p> <p><b>A. <u>ENGINE</u></b></p>	/
1. <b>PRE INSPECTION ENGINE RUN-UP</b> – perform engine Pre Start thru Run Up procedure as applicable in accordance with the on board Selkirk College Cessna 172P checklist.	
2. <b>Cylinder Compression</b> - perform differential pressure test on all cylinders. <sub>1/ /80      2/ /80      3/ /80      4/ /80</sub>	
3. <b>Engine</b> - inspect for evidence of oil and fuel leaks. Wash engine and check security of accessories	
4. <b>Engine Oil Change</b> - drain oil sump and oil cooler, inspect and clean screens, replace filter element and refill with proper grade aviation oil. ___Litres of _____ Added	
5. <b>Oil Cooler</b> - check for obstructions, leaks, and security of attachment.	
6. <b>Exhaust System</b> - inspect for cracks, security, and for evidence of leakage.	
7. <b>Engine Cylinders, Rocker Box Covers, and Push-Rod Housings</b> - check for fin damage, cracks, oil leakage, security of attachment, and general condition.	
8. <b>Engine Baffles and Seals</b> - check condition and security of attachment.	
9. <b>Crankcase, Oil Sump, and Accessory Section</b> - inspect for cracks and evidence of oil leakage. Check bolts and nuts for looseness and retorque as necessary. Check crankcase breather lines for obstructions, security, and general condition.	
10. <b>Induction System</b> - check security of clamps, tubes, and ducting. Inspect for evidence of leakage.	
11. <b>Induction Air Box, Valves, Doors, and Controls</b> - remove air filter and inspect hinges, doors, seals and attaching parts for wear and security. Check operation of carburettor heat valve. Inspect air filter and replace if flock-coated.	
12. <b>Cold and Hot Air Hoses</b> - check condition, routing, and security.	
13. <b>Engine Controls and Linkage</b> - check freedom of movement through full range. Check for proper travel, security of attachment, and for evidence of wear.	
14. <b>Carburettor</b> - drain and flush carburettor bowl and clean inlet strainer. Check general condition and security. Inspect throttle body screw torque as per Lycoming SB 366B.	
15. <b>Engine Primer</b> - check for leakage, operation, and security.	
16. <b>Hoses, Lines and Fittings</b> -Inspect for signs of fuel and oil leaks, chaffing, deterioration, security and routing.	

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17. <b>Fuel Strainer, Drain Valve, and Controls</b> - check freedom of movement, security, and proper operation. Disassemble, flush, and clean screen and bowl.	
18. <b>Vacuum Pump</b> - check condition and security.	
19. <b>Magnetos</b> - check external condition, security, and electrical leads and LASAR controller. Check timing to engine Using the T300 timing tool as per instructions contained in the L-1501 operation Manual. As per SLICK SB2-08, if timing is retarded more than 4° from normal manufacture's timing the cam must be replaced per the applicable Maintenance and Overhaul Manual.	
20. <b>Ignition Harness and Insulators</b> - check for proper routing, deterioration, and condition of terminals.	
21. <b>Spark Plugs</b> - remove, analyse, clean, gap, test, and rotate top plugs-to-bottom and bottom plugs-to-top.	
22. <b>Battery, Battery Box, and Cables</b> - check electrolyte level and inspect overboard drain tube. Clean and remove any corrosion. Check cables for routing, support, and security of connections.	
23. <b>Voltage Regulator, Alternator, and Electrical Connections</b> - check condition and security. Check alternator belt for condition and proper adjustment.	
24. <b>Starter, Starter Solenoid, and Electrical Connections</b> - check condition and security of attachment.	
25. <b>Engine Wire Bundle</b> - check for condition and security.	
26. <b>Cabin Heat Valves, Doors, and Controls</b> - check door operation, seal condition, and security of attachment.	
27. <b>Engine Tubular Mount</b> – inspect for cracks, corrosion and general condition and security.	
<b>B. Propeller</b>	/
1. <b>Spinner and Spinner Bulkhead</b> - remove spinner, wash, and inspect for cracks and fractures.	
2. <b>Propeller Mounting Bolts</b> - inspect mounting bolts and safety wire for signs of looseness. Retorque mounting bolts as required.	
3. <b>Propeller Hub</b> - inspect for cracks, dents, nicks, scratches, erosion, corrosion, or other damage.	
4. <b>Propeller Blades</b> - inspect for cracks, dents, nicks, scratches, erosion, corrosion, or other damage.	
5. <b>Aft Spinner Bulkhead</b> - check for cracks, condition and security	
<b>C. Fuselage</b>  (Remove inspection covers, fairings, instrument decorative panel, seats, floor panels, upholstery, trim, and head liner as necessary to gain access to and inspect the following items of the Fuselage and Cabin.)	/
1. <b>Fuselage Surface</b> - inspect for skin damage, loose rivets, condition of paint, and check pitot-static ports and drain holes for obstruction.	

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2. <b>Internal Fuselage Structure</b> - inspect bulkheads, doorposts, stringers, doublers, and skins for corrosion, cracks, buckles, loose rivets, bolts, and nuts.	
3. <b>Main Landing Gear Structure</b> - check gear springs for security of attachment and structure for cracks, loose rivets, bolts, and nuts, or other damage.	
4. <b>Flight and Trim Controls</b> - check cables, push-pull rods, bellcrank's, pulleys, turnbuckles, fairleads, rub strips, etc., for proper routing, condition, and security.	
5. <b>Portable Hand Fire Extinguisher</b> - inspect for proper operating pressure, condition, security of installation and servicing date.	
6. <b>Electrical Wiring</b> - inspect for proper routing, support, security of terminal connections, and condition of insulation.	
7. <b>Hoses, Metal Lines, And Fittings</b> - inspect for condition, leakage, proper routing, and support.	
8. <b>Fuselage Mounted Optional Equipment</b> - check for general condition and security of attachment.	
9. <b>Antennas and Cables</b> - inspect for security of attachment, connection, and condition.	
10. <b>Emergency Locator Transmitter</b> - inspect for security of attachment and check operation by verifying transmitter output.	
11. <b>Placards and Data Plates</b> - check for presence and legibility.	
12. <b>Elevator Trim Tab Stop Blocks</b> - inspect for damage and security.	
<b>D. Cabin</b>	
1. <b>Instrument, Cabin, Navigation, Beacon, Strobe, and Landing Lights</b> - check operation, condition of lens, and security of attachment.	
2. <b>Switches, Circuit Breakers</b> , check operation and condition.	
3. <b>Instruments</b> - check general condition and markings for legibility.	
4. <b>Magnetic Compass</b> - check general condition and presence of valid deviation correction card.	
5. <b>Instrument Panel Shock Mounts, Ground Straps, and Covers</b> - inspect for deterioration, cracks, and security of attachment.	
6. <b>Instrument Lines, Fittings, Ducting, and Instrument Panel Wiring</b> - check for proper routing, support, and security of attachment.	
7. <b>Vacuum System Air Filter</b> - inspect for cleanliness, deterioration and security of attachment.	
8. <b>Vacuum Relief Valve</b> - inspect for cleanliness, deterioration and security of attachment	
9. <b>Control Column</b> - inspect pulleys, cables, sprockets, bearings, chains, and turnbuckles for condition, security, and operation.	
10. <b>Trim Controls and Indicator</b> - check freedom of movement and proper operation through full travel. Check pulleys, cables, sprockets, bearings, chains, and turnbuckles for condition and security.	

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11. <b>Rudder Pedals and Linkage</b> - check for general condition, proper rigging, and operation. Check for security of attachment.	
12. <b>Brakes, Master Cylinders, and Parking Brake</b> - check master cylinders and parking brake mechanism for condition and security. Check fluid level and operation.	
13. <b>Alternate Static Source Drain</b> -open valve and drain condensate. Check for obstructions.	
14. <b>Fuel Selector Valve</b> - check control for detent in each position, security of attachment, and for proper placarding.	
15. <b>Seats, Seat Belts, and Shoulder Harness</b> - check seat structure, rollers, seat stops, and adjustment mechanism for condition, operation, and security of attachment. Inspect belts for condition and security.	
16. <b>Seat Tracks, Primary Stops &amp; Reel Type Secondary Seat Stops</b> - inspect seat tracks for condition and security of installation. Check seat track stops for damage and correct location. Check secondary seat stop reel installation for condition, security and operation.	
17. <b>Engine Controls, and Cabin Comfort Controls</b> - check freedom of movement through full travel. Check friction locks for proper operation.	
18. <b>Control Wheel and Control Lock</b> - check general condition and operation.	
19. <b>Flight Controls</b> - check freedom of movement and proper operation through full travel with and without flaps extended.	
20. <b>Wing Flap Control</b> - check operation through full travel and observe Flap Position Indicator for proper indication.	
21. <b>Cabin Decals, Labels, and Placards</b> - inspect for presence and legibility.	
22. <b>Upholstery, Head liner, Trim, and Carpeting</b> - check condition and clean as required.	
23. <b>Windows, Windshield, Doors, and Seals</b> - inspect general condition. Check latches, hinges, and seals for condition, operation, and security of attachment. Check windshield for distortion.	
<b>E Wings</b>  (Remove all wing inspection plates, covers, fairings and tips as necessary to gain access to and inspect the following.)	
1. <b>Wing Surfaces and Tips</b> - inspect for skin damage, loose rivets, and condition of paint.	
2. <b>Wing Struts and Strut Fairings</b> - check for dents, cracks, loose screws and rivets, and condition of paint.	
3. <b>Wing Spar and Wing Strut Fittings</b> - check for evidence of wear. Check attach bolts for indications of looseness and retorque as required.	
4. <b>Placards and Decals</b> - inspect presence, legibility and security. Reference Pilot Operating Handbook and Maintenance Manual for required placards.	
5. <b>Aileron Structure, Control Rods, Hinges, Balance Weights, Bellcrank's, Linkage, Bolts, Pulleys, and Pulley Brackets</b> - check condition, operation, and security of attachment.	
6. <b>Ailerons and Cables</b> - check operation and security of stops. Check cables for tension, routing, fraying, corrosion, and turnbuckle safety. Check fairleads and rub strips for condition. <u>Check travel if cable tension requires adjustment or if stops are damaged.</u> .	

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7. <b>Flap Structure, Control Rods, Tracks, Rollers, Linkage, Bellcrank's, Pulleys, and Pulley Brackets</b> - check for condition, operation, and security.	
8. <b>Flaps and Cables</b> - check cables for proper tension, routing, fraying, corrosion, and turnbarrel safety. <u>Check travel if cable tension requires adjustment.</u>	
9. <b>Flap Motor, Actuator, and Limit Switches</b> - check wiring and terminals for condition and security. Check actuator for condition and security.	
10. <b>Flap Actuator Threads</b> - clean, inspect and lubricate.	
11. <b>Wing Structure</b> - inspect spars, ribs, skins, and stringers for cracks, wrinkles, loose rivets, corrosion and general condition and security.	
12. <b>Metal Lines, Hoses, Clamps, and Fittings</b> - check for leaks, condition, security and proper routing.	
13. <b>Electrical Wiring</b> - check for proper routing, condition, and security.	
14. <b>Landing Lights</b> - check condition and security of attachment.	
15. <b>Fuel Tanks</b> - check for leaks and security. Check condition of fuel caps and placards.	
16. <b>Fuel Tank Sump Drains</b> - drain water and sediment.	
17. <b>Fuel Tank Vent Lines and Vent Valves</b> - check vents for obstruction and proper positioning. Check vent valves for operation.	
18. <b>Pitot Tube</b> - check for condition and obstructions. Check pitot heater operation.	
19. <b>Stall Warning</b> - check for condition and obstructions. Check reed operation.	
20. <b>Wing Tips</b> - check general condition. Check navigation and/or strobe lights for condition of wiring and security of attachment.	
<b>F. <u>Landing Gear</u></b>  (Remove all strut cuffs, fairings, and wheel fairings to gain access to and inspect the following.)	/
1. <b>Strut Fairings, and Cuffs</b> - inspect for cracks, dents, and condition of paint.	
2. <b>Main Gear Struts</b> - inspect for cracks, corrosion, general condition, and security of attachment.	
3. <b>Wheels, Brake Discs, and Linings</b> - inspect for cracks, warps, dents, or other damage. Check wheel through-bolts and nuts for evidence of looseness.	
4. <b>Tires</b> - check tread wear and general condition. Check for proper inflation.	
5. <b>Brake Lines, Hoses, Clamps, and Fittings</b> - check for leaks, condition, security and proper routing.	
6. <b>Nose Gear</b> - inspect torque links, steering rods and boots, for condition and security of attachment. Check strut for evidence of leakage and proper extension. Check strut barrel for corrosion, pitting, and cleanliness.	
7. <b>Nose Gear Fork</b> - inspect for cracks, corrosion, general condition, and security of attachment.	
8. <b>Nose Gear Steering Mechanism</b> - inspect for cracks, corrosion, general condition, and security of attachment.	
9. <b>Shimmy Dampener</b> - check for operation, leakage, and attach points for wear and security.	

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10. <b>Nose Gear Attachment Structure</b> inspect for cracks, corrosion, general condition, and security of attachment.	
<b>G. <u>Empennage</u></b>  (Remove all empennage inspection plates, covers, fairings, and tips as necessary to gain access to and inspect the following.)	/
1. <b>Vertical and Horizontal Stabilizers and Tail cone</b> - inspect externally for skin damage and condition of paint.	
2. <b>Elevator, Rudder, and Trim Tab</b> - check structure, hinges, balance weights, bolts, linkage, bellcrank's, pulleys, and pulley brackets for condition, operation, and security. Check cables for tension, routing, fraying, corrosion, and turnbuckle safety. <u>Check travels if cables require tension adjustment or if stops are damaged.</u>	
3. <b>Elevator Trim Tab Actuator</b> - inspect for condition and security. Check free play limits.	
4. <b>Vertical and Horizontal Stabilizers and Tail cone Structure</b> - inspect bulkheads, spars, ribs, and skins for cracks, wrinkles, loose rivets, corrosion, or other damage. Inspect vertical and horizontal stabilizer attach bolts for looseness. Retorque as necessary.	
5. <b>Electrical Wiring</b> - check for proper routing, condition, and security.	
6. <b>Tail Light and Rotating Beacon</b> - check security of attachment.	
7. <b>Tips</b> - check for condition and security.	
<b>II. <u>SPECIAL INSPECTION ITEMS</u></b>	/
1. Check 'OUT OF PHASE' sheet for Special Inspection Items due. Accomplish all applicable items.	
2. Check 'DEFERRED MAINTENANCE LIST' for outstanding maintenance items.	
3. Check for compliance with applicable Airworthiness Directives.	
<b>III. <u>POST INSPECTION</u></b>	/
1. <b>Lubrication and Servicing</b> - ensure all required items have been lubricated and serviced as per Cessna 172 Service Manual, section 2.	
2. <b>Panel Closure</b> - ensure all panels, fairings, loose equipment etc. are installed.	
3. <b>Discrepancies</b> - ensure that noted all defects are corrected or entered in the DEFERRED MAINTENANCE LIST.	
4. <b>Operation Check, Engine Run-Up</b> - perform engine Pre Start thru Runup procedure as applicable in accordance with the on board Selkirk College Cessna 172P checklist.	
5. <b>Leak Check</b> - inspect engine compartment for fuel and oil leaks and install cowlings.	
6. <b>Log Book Entries</b> - ensure that log book entries are complete and signed by an appropriately rated person and / or persons. Attach an unsigned 'FILE COPY' of the log book entry to this document.	