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STL Flight Maintenance · 2500 Vector Dr · Cahokia, IL 62206 · 618-332-3661

N118SG CESSNA, R182, S/N: R18200115 January 05, 2024

TACH: 6997.0

- 1. Annual Inspection Due Performed Annual Airframe inspection referencing aircraft M.M. and 14 CFR 43 appendix D as a guide. Verified proper movement, security and operation of cables, turnbuckles and pulleys and lubricated where required. Inspected flight controls for freedom of movement, security and proper operation and lubricated where required. Verified all required placards. Inspected landing gears.
- 2. ELT Check Removed and tested battery per CFR 91.207 (d). No defects noted. Battery replacement overdue Dec 2023. Owner elected not to work.

 3. Cabin heat inop. – Sprayed cabin heat cable with Kroil and cycled many times, ops checks good.
- Multiple cowling screws stripped Removed stripped screw with extractor and replaced.
- 5. Standby vacuum cable inop. Removed standby cable and replaced standby vacuum cable. P/N MC0411090-
- Tinnerman nutplates broken (two on each wing) Found and replaced bad nutplates. Flap chafe button missing right side. Replaced 5 buttons. (5 EA) P/N S1093-1.

- Glove box door cracked Cleaned off old adhesive and resecured with 1300L. RH NLG door linkage bearing worn. Replaced NLG door linkage bearing. P/N S2321L3.
- 10. RH cowl flap door has excessive play. Removed RH cowl flap and found RH cowl flap support bracket worn beyond repair. Drilled and removed outboard RH cowl flap support bracket. Fitted new bracket, enlarged and countersunk holes due to wear. Riveted new cowl flap support bracket in place. Inspected cowl flaps and mounting areas, acquired bushings and drilled cowl flap and mounting hardware to accommodate new bushings. Installed LH cowl flap and performed operational checks. Removed RH cowl flap, removed and replaced cowl flap support bracket and replaced two bushings. Installed cowl flap, ops checks good. (2) P/N NAS74-3E002P, P/N 2252010-14, (4) P/N S1450-6-14-063, (8) P/N S1450-3-063, (4) P/N ms20364-1032c.
- 11. LH cowl flap door has excessive play. Removed LH cowl flap and found cowl flap support bracket worn beyond repair. Drilled and removed outboard LH cowl flap support bracket. Fitted new bracket, Enlarged and countersunk holes due to wear. Riveted new cowl flap support bracket in place. Drilled new holes for bushing in cowl flaps and mounting areas and installed LH cowl flap to aircraft. Ops checks good. Removed LH cowl flap, removed and replaced cowl flap support bracket and replaced two bushings. Installed cowl flap, ops checks good. (2) P/N NAS74-3E002P, P/N 2252010-13, P/N NAS74A3-004.
- 12. Two cracks just outbd and forward of LH cowl flap need repaired or stop drilled. Stop drilled holes. drilled rivets, planned scab patch repair. Fabricated Scab patch, marked out and drilled holes for scab patch, countersunk holes and primed. Back drilled holes in patch from new cowl support bracket. Riveted patch in place. Stop drilled and patched cracks.
- 13. 2 each rivets need replaced outbd aft end of right cowl flap. Drilled rivets. Cleaned up surface area,
- re-drilled holes. Secured with two machine screws.

 14. Carburetor heat air door linkage worn. Removed airbox from aircraft, drilled and removed worn bushings, inspected alt air door, located part numbers for replacement parts. Installed new bushings, installed control cable attach arm. Reinstalled air box. (2) P/N 0750113-6.
- 15. Alternator belt cracked in numerous places. Loosened alternator and removed prop, cleaned and replaced O-ring installed belt and reinstalled prop, torqued to 56 FT*LB and safetied. Removed #1 plug for timing and reinstalled. P/N S1597-1-37.5, P/N A1633-11, P/N MS28775-228.



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- 16. Replace Aux fuel pump filter. Removed and replaced filter and gasket. P/N FEP42370.
- 17. Clean fuel strainer screen. Cleaned and inspected fuel strainer screen and replaced gaskets. P/N FS-KT-
- 18. NLG strut low. Check fluid level and service with nitrogen. Serviced NLG strut with 5606 fluid and serviced with nitrogen.
- 19. Antenna by beacon blades loose. screwed blades in and secured with locking screw.
- 20. **Pilot door hinge pins worn.** Removed and replaced both pilots door hinge pins. Operation checks good. (2) P/N 0711038-1.
- 21. Behind induction filter a blue elbow fitting needs capped or removed and plugged. Installed cap on elbow (2)nP/N AN929-3D.
- 22. **Fuel strainer frozen/corroded in place** Disassembled, cleaned corrosion in fuel bowl replaced standpipe. Reassembled. Leak checked good. P/N 0756011-1.
- 23. #4 spark plug lead broken Installed new spark plug end pin. 10-720641-41.
- 24. RH wing fuel cap access panel leaking fuel Retorqued wing bladder access panels. Topped fuel off on wing. Found fuel cap gasket leaking. Removed and replaced gasket. Ops checked good. P/N B100142-1
- 25. Wrist filter needs replaced. replace filter PN RA-B3-5-1.
- 26. Central air filter needs replaced. Replaced filter PN RA-D9-18-1.2
- 27. **LH wing fuel cap access panel leaking fuel** Retorqued wing bladder access panels. Topped fuel off on wing. No leaks noted.
- 28. **LH wing fuel access panel leaking fuel.** Retorqued wing bladder access panels. Topped fuel off on wing. No leaks noted.
- 29. **Right brake line cracked at caliper** Cut plastic coating off line. Made up new line with B nuts and sleeves. Joined all together with a coupling and bled brakes. ops checked good. Right brake bleeder stripped at caliper. Replaced bleeder. (2 EA) P/N AN818-3D, (2 EA) P/N AN819-3D, P/N AN815-3D.
- 30. **Left brake disk .273 (Min. thickness .330)** Replaced brake disc with new, cleaned wheel under brake disc and retorqued tire and serviced up to 68 psi. P/N 164-30615-4.
- 31. **Right brake disk** .275 (Min thickness .330) Replaced brake disc with new, cleaned wheel under brake disc and retorqued tire and serviced up to 68 psi. P/N 164-30615-4.
- 32. Mud dobbers nest in wing Removed mud dobbers nest.
- 33. Emergency extension hand pump boot torn and leaking hydraulic fluid. Replaced pump boot and removed pump and resealed. Sealed top fitting with loctite 545 and reinstalled. Swung gear 3 cycles and emergency extend gear. No leaks or defects noted. P/N MS28775-012, (3) P/N S1628-114, MS28775-008, P/N MS28775-114, 1280119-1, P/N MS28775-114.
- 34. RH brake master cylinder rubber hose deteriorated. Replaced with new hose. S2178-3-0074
- 35. LH brake master cylinder rubber hose deteriorated. Replaced with new hose. S2178C3-0083
- 36. Elevator and rudder cable pulleys frozen just forward of bench seat-underfloor area. Lubricated and operated pulleys until they were free.
- 37. Pullys for elevator trim tab frozen just aft of hand pump. Lubricated and operated pulleys until they were free.
- 38. Fuel selector will not shut off fuel Removed shaft assembly. Verified fuel selector hits all detents. Resqueezed rivets on universal swivel points. Reinstalled shaft assembly and cotter pinned referencing Cessna R182 Service Manual Chapter 12, page 21. Ops checked good.



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- 39. **Nose gear will not center.** Removed panel under pedestal to access steering bungee. Removed bungee assembly and installed customer supplied 8130 bungee referencing Cessna R182 Service Manual Chapter 5, pages 72-74. Checked rigging. Taxied aircraft. Ops checked good.
- 40. **Nose gear axle bolt wrong part.** Replaced with new bolt, nut, and cotter pinned, referencing Cessna R182 Service Manual Chapter 5 page 78. P/N AN5-47
- 41. RH fuel cap chain missing. Installed RH wing fuel cap chain. P/N C156001-0104
- 42. **Broken Vacuum line connector on DG.** Removed broken DG m/n: 4000D-1 p/n: IU262-005-20 s/n: 68190F and installed customer supplied 8130 overhauled DG PN 1U262-005-20 SN98666G. taxied aircraft and ops checked good on the ground.
- 43. Battery Disconnected for other maintenance. Battery reconnected.
- 44. Emergency gear handle will not stow Repositioned handle, ops checked good.
- 45. AD Search Due. Researched ADs. All ADs have been complied with as outlined in the Airworthiness Directive Report dated January 2024.
- 46. Comply with AD 20-18-01 Forward Cabin Door Post Bulkhead cracking. Recurring: Due every 1000 hours or 36 months which ever occurs first, not due at this time. Due November 2024 or at Tach 7987.3.
- 47. Comply with AD 2011-10-09 Seat & Rail Inspection.. Complied with AD tracks passed, washers worn on both seats next to rollers. Next due 7097.0 or January 2025. Replaced plastic washers on pilots and copilots seat rollers. Installed (16) P/N MCS1554-1 Cessna Seat Washers.
- 48. Comply with AD 83-13-01 Fuel Cap Sealing. C/W visual inspection of LH and RH wing fuel caps. Found RH wing cap needed gasket replaced P/N: B100142-1. Removed and replaced, leak checks good. Next Due January 2025.
- 49. Comply with AD 84-10-01 R1 Bladder Fuel Cells& Quick Drains. Complied with by visual inspection, no defects noted. Next due January 2025.
- 50. Comply with AD 99-24-10 Standby Vacuum System (SVS III) Due Removed standby shuttle valve. Inspected flapper valves. Reinstalled shuttle valve. Shuttle valve cable binding, replaced cable. Next Due January 2025 Precise Flight Instructions for continued airworthiness (Section 3.3 of installation report 50050). Shuttle valve test Biannual, next due January 2026.
- 51. Comply with AD 93-05-06 Ignition Switch Not due at this time. Due at Tach 8992.2.
- 52. No current sign off for 91.411 or 91.413. Owner elected not to work.
- 53. Fire bottle out of weight (4.5 and min. is 4.8lbs) and out of date (12/03). Owner elected not to work.
- 54. **ELT battery expired Dec 2023.** Owner elected not to work.

I certify that this airframe has been inspected IAW an Annual inspection and found to be in an airworthy condition. With respect to the work performed, this airframe is approved for return to service. Details of work performed are on file with STL Flight Maintenance under work order: WO-2310-013.

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