

**Subject:** Check list engine installation

**Affected engines:** All engines of the following types:

- L 1700**
- L 2000**
- L 2400**

**Aircraft:** \_\_\_\_\_ **Registration:** \_\_\_\_\_

**Propeller:** \_\_\_\_\_ **Serial no.:** \_\_\_\_\_

**Engine:** \_\_\_\_\_ **Serial no.:** \_\_\_\_\_

**Running time:** Engine \_\_\_\_\_ hours

Propeller \_\_\_\_\_ hours

Airframe \_\_\_\_\_ hours

**Operator:** \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Place of change:** \_\_\_\_\_

**Date:** \_\_\_\_\_



**Note:** Mark checked inspection items with your name. In case of a negative result (defect) or if an inspection still has to be done, mark the appropriate item and explain at the end of the check list (item: objections and comments).

**IN ADVANCE OF ASSEMBLY:**

1. Check engine baffles for cracks, deformations or missing fastening parts. \_\_\_\_\_
2. Check condition of muffler and check for deformation. \_\_\_\_\_
3. Check engine mount for cracks, deformations or missing fastening parts. \_\_\_\_\_
4. Check rubber parts of engine mount for deformation or brittleness, replace if necessary. \_\_\_\_\_
5. Check firewall holes for general condition and leaks. \_\_\_\_\_
6. Check operation of throttle actuator. \_\_\_\_\_
7. Check operation of cold start actuator. \_\_\_\_\_
8. Check operation of starter (mechanical actuator). \_\_\_\_\_
9. Check fuel hose from firewall to engine (note expiration date). \_\_\_\_\_
10. Check operation of carburetor pre-heat actuator. \_\_\_\_\_
11. Check operation of heating actuator. \_\_\_\_\_
12. Check operation of variable pitch airscrew actuator. \_\_\_\_\_
13. Clean fuel filter. \_\_\_\_\_
14. Check battery carrier and acid level of battery. \_\_\_\_\_

**ASSEMBLY - MOUNTING**

15. Fit engine mount according to the instructions of the aircraft manufacturer and secure it - note torque. \_\_\_\_\_
16. Fit baffles, secure tightening screws. \_\_\_\_\_
17. Fit muffler, use new gaskets and self-locking nuts. \_\_\_\_\_
18. Connect fuel pipe to the pump and secure it. \_\_\_\_\_
19. Fit push-pull cables, levers and electric leads. \_\_\_\_\_



**PROPELLER**

- 20. Check spinner for cracks, dents and impact. \_\_\_\_\_
- 21. Check propeller blades for damage. \_\_\_\_\_
- 22. Check variable-pitch device of propeller for function, backlash, wear and lubrication. \_\_\_\_\_
- 23. Fit propeller according to the instructions of the manufacturer, note torque and use new self-locking nuts (variable-pitch propeller). \_\_\_\_\_
- 24. Check tracking of propeller blades. \_\_\_\_\_

**CHECKING THE ASSEMBLY**

- 25. Engine mount tightened and secured. \_\_\_\_\_
- 26. Short-circuit lead of magneto tightened and secured. \_\_\_\_\_
- 27. Generator terminal(s) connected and tightened. \_\_\_\_\_
- 28. Starter terminal(s) connected and tightened. \_\_\_\_\_
- 29. Terminal of oil-pressure sender connected, tightened. \_\_\_\_\_
- 30. Terminal of oil-temperature sender connected, tightened. \_\_\_\_\_
- 31. Tachometer drive cable connected and tightened. \_\_\_\_\_
- 32. Thermocouple(s) for cylinder head temperature connected. \_\_\_\_\_
- 33. Muffler connected and tightened. \_\_\_\_\_
- 34. Throttle lever connected and secured. \_\_\_\_\_
- 35. Idle stop checked. \_\_\_\_\_
- 36. Full load stop checked. \_\_\_\_\_
- 37. Choke lever connected and secured. \_\_\_\_\_
- 38. Carburetor pre-heating lever connected and secured. \_\_\_\_\_
- 39. Heating hoses mounted, hose band clips tightened. \_\_\_\_\_
- 40. Pre-heating hose mounted, hose band clips tightened. \_\_\_\_\_
- 41. Propeller adjustment lever connected and secured. \_\_\_\_\_
- 42. Bearings for propeller thrust collar do not touch. \_\_\_\_\_
- 43. Engine filled with oil. \_\_\_\_\_





## OPERATIONAL TEST

- 44. Engine compartment checked for foreign objects.
- 45. Engine cowling filled, missing or loose connections replaced.

Pressure reading manifold pressure indicator in advance of testing operation is \_\_\_\_\_ InHg.

Tighten brakes, pull elevator, check if propeller is cleared, open fuel shut-off, turn on main switch, turn out radio and avionics, put propeller controller in starting position, turn on electric fuel pump and ignition.

Start engine. Turn off electric fuel pump after start.

Check indicators for oil pressure, engine speed, charging voltage and charging current.

Adjust engine speed to 1500 min.<sup>-1</sup>, until engine is running true without choke.

Adjust lever to idle speed, engine speed about 800 min.<sup>-1</sup>.

Read and log the following values:

Oil pressure	_____	bar
Oil temperature	_____	°C
Engine speed	_____	min. <sup>-1</sup>
Cylinder head temp.	_____	°C

Warm up engine until oil temperature is more than 60° C. Then read and log the following values:

Oil pressure at 1000 min. <sup>-1</sup>	_____	bar
Oil pressure at 2500 min. <sup>-1</sup>	_____	bar
Oil temperature at 2500 min. <sup>-1</sup>	_____	°C
Cylinder head temp.	Cyl. 1 _____	°C
	Cyl. 2 _____	°C
	Cyl. 3 _____	°C
	Cyl. 4 _____	°C



Check engine speed indication with calibrated tachometer.

Speed indication

motor glider	calibrated tachometer
1500 min. <sup>-1</sup>	_____ min. <sup>-1</sup>
2500 min. <sup>-1</sup>	_____ min. <sup>-1</sup>
2800 min. <sup>-1</sup>	_____ min. <sup>-1</sup>
full speed _____ min. <sup>-1</sup>	_____ min. <sup>-1</sup>

Manifold pressure indication at full speed is \_\_\_\_\_ InHg.

Idle speed is \_\_\_\_\_ min.<sup>-1</sup>.

Perform cooling run (about 2 min. at a speed of 1500 min.<sup>-1</sup>).

Turn off engine - turn off ignition and main switch.

Remove engine cowling. Check engine for foreign objects and mount engine cowling.

Perform check flight.

Engine oil used \_\_\_\_\_  
 Viscosity class \_\_\_\_\_  
 Fuel used \_\_\_\_\_

I hereby certify that the operational test has been effected according to the above mentioned specifications.

Place \_\_\_\_\_ Date \_\_\_\_\_

Name of mechanic \_\_\_\_\_

Signature \_\_\_\_\_



