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: ___________________________
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.


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.\(^{-1}\), until engine is running true without choke.

Adjust lever to idle speed, engine speed about 800 min.\(^{-1}\).

Read and log the following values:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oil pressure</td>
<td>_________ bar</td>
</tr>
<tr>
<td>Oil temperature</td>
<td>_________ °C</td>
</tr>
<tr>
<td>Engine speed</td>
<td>_________ min.(^{-1})</td>
</tr>
<tr>
<td>Cylinder head temp.</td>
<td>_________ °C</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oil pressure at 1000 min.(^{-1})</td>
<td>_________ bar</td>
</tr>
<tr>
<td>Oil pressure at 2600 min.(^{-1})</td>
<td>_________ bar</td>
</tr>
<tr>
<td>Oil temperature at 2500 min.(^{-1})</td>
<td>_________ °C</td>
</tr>
<tr>
<td>Cylinder head temp.</td>
<td></td>
</tr>
<tr>
<td>Cyl. 1</td>
<td>_________ °C</td>
</tr>
<tr>
<td>Cyl. 2</td>
<td>_________ °C</td>
</tr>
<tr>
<td>Cyl. 3</td>
<td>_________ °C</td>
</tr>
<tr>
<td>Cyl. 4</td>
<td>_________ °C</td>
</tr>
</tbody>
</table>
Check engine speed indication with calibrated tachometer.

Speed indication

<table>
<thead>
<tr>
<th>Speed</th>
<th>Motor Glider</th>
<th>Calibrated Tachometer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1500 min⁻¹</td>
<td></td>
<td>min⁻¹</td>
</tr>
<tr>
<td>2500 min⁻¹</td>
<td></td>
<td>min⁻¹</td>
</tr>
<tr>
<td>2800 min⁻¹</td>
<td></td>
<td>min⁻¹</td>
</tr>
<tr>
<td>Full Speed</td>
<td></td>
<td>min⁻¹</td>
</tr>
</tbody>
</table>

Manifold pressure indication at full speed is _____________ InHg.

Idle speed is _________________ min⁻¹.

Perform cooling run (about 2 min. at a speed of 1500 min⁻¹).

Turn off engine - turn off ignition and main switch.

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

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 ______________________
The inspector signing below has determined that the test and verification certificates are present and that the engine assembly has been noted in the log book.

This motor glider is airworthy.

Name

Signature

Approval stamp

Notice: This document has been translated to the best of our knowledge. In case of doubt, however, only the German original shall be considered as authoritative.