

1. Choke – according to engine temperature
2. Pitch – minimal angle
3. Area around propeller – free
4. Magnetoes – both circuits (A+B)
5. Fuel pump – turn on
6. Press the starter
7. Engine speed after start up – 2500 ¹/min
8. Oil pressure, fuel pressure – check
9. Segmental switches – switch them on (transciever, beacon, ...)
10. deleted 01/2007

Warning: Max. Time period for engine start up is 10 sec. It is possible to repeat starting up process with 2min. Delay for starting gear cooling. Oil pressure must rise within 10 sec. Of start. When oil pressure is steady above 2 bars, it is possible to increase engine speed.

Electric fuel pump may not be switched on with empty fuel tanks and closed fuel cock! The pump must run for whole time period of flight! added 01/2007

4.4 Engine warm up and engine check

1. Brake the airplane (hand brake, chocks)
2. Control stick and pedals in neutral position
3. Pitch – min. angle
4. Engine speed - 2000 rpm and let run about 2 min., then warm up engine at 2500 rpm until oil temperature reaches 50°C
5. Gradually increase engine speed to maximum, hold about 5 sec., gradually back to idle, repeat twice or 3 times
6. Engine speed 4000 rpm, check alternately both magnetoes, engine speed should descend with one magneto off to max. 300 rpm

Difference between both magnetoes max. 120 rpm.

Warning:

- After engine warming up let the engine cool at idling engine speed
- Do not carry out the engine check and warming up on dusty terrain (danger of propeller or engine damage)

4.5 Procedures before taxiing

1. Emergency parachute system - unlock
2. Release gyroscopes (attitude indicator, turn and bank indicator, gyro compass, etc.)
3. Pitch – min. angle
4. Flaps – retracted
5. Report
6. Check hand brake and directional control range when taxiing
7. Adjust speed of taxiing to airfield surface condition and wind direction and speed

Warning: Max. taxiing speed is 8 kt.

4.6 Procedures on holding point

1. Brakes – brake on
2. Engine speed – idle
3. Controls – free movement
4. Trim – neutral position
5. Flaps – take off position
6. Fuel – quantity check, fuel tank with sufficient quantity
7. Fuel pump – fuel pressure check **changed 01/2007**
8. Propeller – minimum start angle
9. Magnetoes – both circles
10. Master switch – on
11. Engine instruments – check
12. Altimeter – setting
13. Safety belts – fasten, tighten
14. Canopy – close, lock
15. Traffic pattern area - free
16. Report

4.7 Start line procedures, take-off

1. RWY area - free
2. Clock – time, report
3. Release the brakes.
4. Throttle – gradually take-off power - rolling
5. At speed $V = 40$ km/h pull control stick and lift front wheel
(airplane will rise at $V = 60$ km/h)
6. Delay at 1 m above ground till reaching 90 km/h
7. Climbing at 90-95 km/h, engine speed max. 5800 ¹/min
8. Flaps up - height 50 m
9. Gear up - height 100 m
10. Engine instruments – check
11. Balancing – as needed

4.8 Down wind procedures

1. Landing gear - down (airspeed less than 150 km/h)
2. Fuel cock - check (fuel tank with sufficient fuel quantity)
3. Instruments - check **changed 01/2007**
4. Brakes – check
5. Seat belts - tighten
6. RWY, area of 3rd and 4th turn – check
7. Report

4.9 Baseleg procedures

1. Speed 95 km/h, engine speed 3 500 rpm
2. Pitch - min. angle
3. Flaps – take-off position
4. Balancing – as needed
5. RWY, area of final turn – check

Note: If you need to extend an approach, use engine power or keep flaps retracted till final approach.