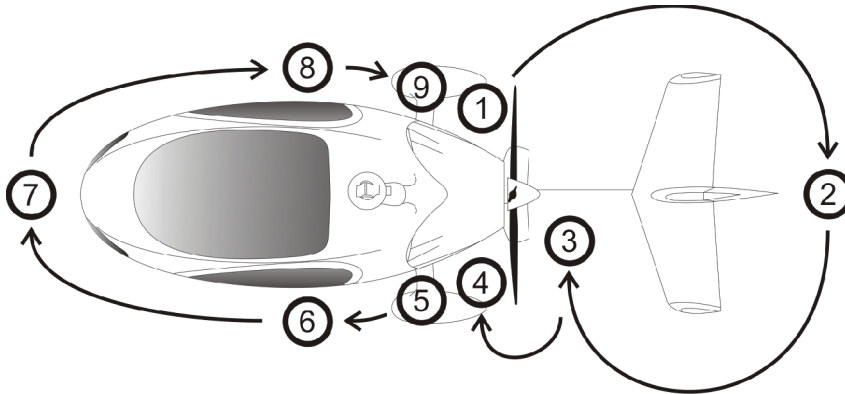


## Cavalon pro pre-flight checks - extract from POH, RSUK0334

All daily or pre-flight check list items consist of visual checks and do not replace professional mechanical inspection and maintenance. The following check list applies for the standard Cavalon gyroplane.

Note that depending on optional equipment installed the necessary checks may include additional items according to the flight manual supplement provided with the optional equipment. It is advisable for the owner/operator to compile his own check list suitable to his particular configuration.

The pre-flight check is structured into 9 stations which are organized as a clock-wise walk-around to provide a logical flow and sequential order, thus minimizing the risk of left-over or overlooked items.



The following checks must be carried out before each flight. However, if the gyroplane is operated by a single pilot or within an organization where the checks are performed by or under the supervision of qualified personnel, check list items marked with a preceding 'O' may be carried out daily, before the first flight of the day.

### Before exterior check

- Fuel tank drain(s)..... Sample
- Snow/ ice (if any) .....Removed
- Documents.....Check complete

### Exterior check

#### Station 1 (engine, RH side)

##### Open upper engine cowling

- Before turning prop: MAG switches ..... Check OFF
- Engine oil level.....Check
- Dip stick and oil cap..... Installed and secure
- Coolant level ..... Check
- Oil cooler and hoses ..... Clean, no leaks, fittings tight
- Exhaust system ..... No cracks
- External generator ..... Secure, V-belt in good condition
- Lower engine cowling ..... Properly installed, all fasteners locked

#### Station 2(stabilizer)

- Stabilizer general condition .....Check
- Stabilizer attachment.....Check
- Rudder control cable linkage.....Check
- Upper rudder bearing ..... Secure, no excessive play
- Rotor blades condition and cleanliness ..... Check
- Blade tips ..... Tight
- Aft keel tube protection pad..... No excessive wear

#### Station 3 (keel tube and propeller)

- Forward keel tube protection pad ..... No excessive wear
- Propeller condition and cleanliness ..... Check
- Propeller leading edge and tips..... No damage
- Spinner ..... Tight, no cracks
- CSP/VPP propeller ..... Check security

**Station 4 (engine, LH side)**

- Engine frame rear side / welded joints ..... No cracks, no deformation
- Oil cooler and hoses ..... Clean, no leaks, fittings tight
- Exhaust system ..... No cracks
- Lower engine cowling ..... Properly installed, all fasteners locked
- Close upper engine cowling*

**Station 5 (main gear spring spar, LH)**

- LH Main wheel running surface ..... Check
- Air pressure and slip mark ..... Visual check
- Brake, disc attachment (4 bolts) and wheel attachment ..... Check
- Wheel spat and attachment ..... Check
- Main gear spring spar attachment ..... Check
- Main gear spring spar ..... No cracks
- NAV light ..... Check
- Strobe light ..... Check
- Anti-collision beacon ..... Check
- Mast vibration decoupling element attachment (2x) ..... Check
- Rotor flight control ..... No excessive play and secure
- Teeter bolt (bolt end) ..... Free to turn
- Teeter bolt (nut end) ..... Split pin installed
- Fuel filler cap ..... Breather hole clear, and securely fitted

**Station 6 (passenger station, LH side)**

- LH control stick ..... Secure or removed
- Monocoque structure condition ..... Check
- Seat belts ..... Fastened and tight
- Door hinge/s ..... Quick pin installed, no cracks
- Door window ..... Check, no cracks
- Static port ..... Clean and open

**Station 7 (forward fuselage and windshield)**

- General appearance ..... OK
- Pitot cover (if installed) ..... Removed
- Pitot tube ..... Clean and open
- Rotor tie-down bag (if sufficient brake pressure) ..... Removed
- Windshield condition and cleanliness ..... Check, no cracks
- Nose wheel condition and air pressure ..... Check
- Landing light nose and underbody cleanliness/security ..... Check

**Station 8 (cabin, RH side)**

- Static port ..... Clean and open
- MAG switches ..... Check OFF
- Rotor brake pressure ..... min. 6 bar
- Throttle lever ..... Check function, full travel
- Brake lever and lock ..... Check function and condition
- Pedals and control cables ..... Check
- RH control stick bolts and nuts ..... Secured
- Monocoque structure condition ..... Check
- Loose objects ..... Removed/secured
- Door hinge/s ..... Quick pin installed, no cracks
- Door window ..... Check, no cracks

**Station 9 (main gear spring spar, RH)**

- Main wheel running surface ..... Check
- Air pressure and slip mark ..... Visual check
- Brake, disc attachment (4 bolts) and wheel attachment ..... Check
- Wheel spat and attachment ..... Check
- Main gear spring spar attachment ..... Check
- Main gear spring spar ..... No cracks
- NAV light ..... Check
- Strobe light, anti-collision light ..... Check
- Cooling air intake ..... No obstructions
- Mast vibration decoupling element attachment (2x) ..... Check
- Gimbal head bolts (2x) ..... Split pin installed
- Rotor flight control attachments ..... No excessive play and secure
- Main rotor bearing ..... Check condition
- Pre-rotator assembly and brake ..... Check condition

- Teeter bolt (bolt end) ..... Free to turn
- Teeter bolt (nut end) ..... Split pin installed
- Teeter stops ..... Check
- Rotor hub and blade clamping area ..... Check
- Blade attachment bolts ..... All installed and fastened
- Inner blade caps ..... Tight
- Rotor tie-down bag ..... As required

**CAUTION**

**Teeter bolt must be free to turn by hand!**

**1.1 Before Boarding**

- Fuel level and fuel cap ..... Check
- Passenger station:*
- Passenger ..... Briefed and secure
- Loose objects ..... Removed
- Items in storage compartment ..... Secure
- Seat belts ..... Fastened and tight
- Door ..... Closed and locked
- Rotor brake pressure ..... Check/set BRAKE min. 6 bar
- Rotor lash bag ..... Removed and stowed
- Pilot station:*
- Loose objects ..... Removed
- Items in storage compartment ..... Secure

**WARNING**

**There is no vertical restraint provided for baggage stowed behind the occupant seats unless a security net is fitted to the provided mounting points. Normally this baggage is restrained by the vertical tapering of the stowage area. It is the pilots responsibility to ensure any item stowed behind the seats, or anywhere else in the aircraft, is secure. If the stowed items could come free in the event of an accident, then suitable restraints must be fitted – for instance, anchored to the seat belt harness lap belt mounting lugs via a suitable strap.**

**1.2 Before Starting Engine**

- Pedals ..... Adjusted and locked
- Seat belts ..... Fastened
- Flight controls ..... Free
- Altimeter ..... Set to QFE or QNH as desired
- Doors ..... Check closed and locked

**1.3 Starting Engine**

- Fuel shut off valve ..... Open and guarded
- Parking brake ..... Set
- Cold engine:*
- Throttle ..... Idle
- Choke ..... Fully engaged
- Warm engine:*
- Throttle ..... Idle or slightly cracked
- Choke ..... Disengaged
- Master switch ..... ON

Note GEN indicator light ON (and GEN2 where fitted)  
 Note LOW VOLT flashing briefly

Note BOOST WARN light and BOOST CAUTION light ON for about 2 seconds and buzz of electrical fuel pump.

- Second fuel pump (Pump 2) ..... ON

Note (increased) fuel pump buzz.

- Variable pitch propeller ..... FINE
- ACL / Strobe ..... ON

Both MAG switches ..... ON  
Propeller and area ..... "Clear"  
Starter (with right hand, left hand on throttle/brake).....Engage

Hold starter until engine fires, but for a maximum of 10 seconds. Generally the engine fires immediately. In case of an unsuccessful starting attempt check all preconditions. Wait at least 20 seconds to allow cooling of battery and starter motor before repeated activation.

Oil pressure.....min. 1.5 bar  
Second fuel pump (Pump 2) (Confirms function of P1)..... OFF

When switching fuel pumps on and off, watch the fuel pressure gauge to ensure that the needle deflects to show the pressure change.

Avionics/Radio/Intercom..... ON  
Choke ..... slowly disengage

**WARNING**

**Never attempt to start the engine until the area around the propeller is completely clear of any persons or objects.**