

Solberg Aviation Cessna 172 Checklist

REVISED 16 NOV 2014

PREFLIGHT INSPECTION

Cabin

1. AROW
2. Aircraft Inspections - CHECKED
3. Control Wheel Lock- REMOVE
4. Ignition Switch- OFF
5. Avionics Master Switch- OFF
6. Master Switch- ON (listen for electric gyro)
7. Fuel Quantity Indicators- CHECK OPERATION
8. Flaps- 30° (10° when below 32°F/0°C)
9. Avionics Master Switch – ON, CHECK Cooling fan operation then OFF
10. Aircraft Lights – CHECK OPERATION
11. Master Switch - OFF
9. Fuel selector valve – CHECK OPERATION then BOTH

Empennage

1. General Condition - CHECK
2. Horizontal Stabilizer- CHECK for security
3. Elevator- CHECK for free movement + attachment points
4. Tail Tie-Down-DISCONNECT
5. Vertical Stabilizer- CHECK for security
6. Rudder- CHECK for free movement + attachment points
7. Trim Tab- CHECK for neutral alignment + attachment

Right Wing

1. Flaps- CHECK tracks + push rod
2. Aileron- CHECK for free movement, push rod and hinges
3. NAV/Strobe Lights- Check
4. Wing Tie Down- DISCONNECT
5. Main Wheel Tire- Check for inflation (21 psi) + wear
6. Brakes- CHECK pad wear + leaking fluid
7. Fuel- **SUMP and VISUALLY CHECK TANKS- SECURE Cap**

Nose

1. Windshield- CHECK and clean if required
2. Oil Level- CHECK (Min 5qt)
3. Fuel Strainer- PULL check for water + contaminants
4. Belly Drain- DRAIN first flight of the day
5. Nose Wheel Assembly- CHECK for pressure (30psi) + attachment pts
6. Propeller + Spinner- CHECK for nicks and security
7. Air Filter- Check for dirt, obstructions
8. Landing light- Check condition + cleanliness
9. Nose Wheel Strut- Check for proper inflation approx. 4 fingers inflated
10. Static Source Opening- CHECK for stoppage

Left Wing

1. Main Wheel Tire- Check for inflation (21 psi) + wear
2. Brakes- CHECK for pad wear + leaking fluid
3. Fuel- DRAIN and **VISUALLY CHECK TANKS-** cap secure
4. Pitot Tube Cover- REMOVE
5. Stall Warning Opening- Check for stoppage
6. Fuel Tank Vent Opening- CHECK for stoppage
7. Wing Tie Down- DISCONNECT
8. NAV/Strobe Lights- Check
9. Aileron- CHECK for free movement, push rod and hinges
10. Flaps- CHECK tracks + push rod

ASSURE ALL- TIE DOWNS, COVERS, AND PLUGS ARE REMOVED!

BEFORE STARTING ENGINE

1. Preflight Inspection- COMPLETE
 2. Passenger Briefing- COMPLETE
 3. Seats, Belts, Shoulder Harness- ADJUST and LOCK
 4. Fuel Selector Valve - BOTH
 5. Avionics Power Master Switch- OFF
 6. Circuit Breakers- IN
 7. Brakes- TEST and SET
 8. Fuel Selector Valve - BOTH
- Before Start Engine Checklist Complete**

START ENGINE

1. Prime- AS REQUIRED (3 to 6 pumps)
2. Mixture- RICH
3. Throttle- CHECK TRAVEL then OPEN ½ inch
4. Carburetor Heat- COLD
5. Master Switch- ON
6. Rotating Beacon- ON
7. Propeller Area- CLEAR (Audibly)
8. Ignition Switch- START
9. Throttle- adjust for 1,000 RPM
10. Oil Pressure- Check (<30 seconds)
11. Starter – Check Disengaged
12. Avionics Master Switch - ON
13. Flaps- UP and verify
14. Mixture – Lean for Ground Ops
15. Exterior Lights – As Required

Start Engine Checklist Complete

BEFORE TAXI

1. Weather – OBTAIN
2. Radios- SET AND CHECK
3. Brakes – Roll Forward & CHECK

BEFORE TAKEOFF “Run up”

1. Nosewheel - Straight
2. Brakes- SET
3. Cabin Doors/ Windows- Closed and Latched
4. Flight Controls- FREE and CORRECT
5. Flight Instruments- CHECK and SET
6. Fuel Selector Valve - BOTH
7. Mixture- RICH (below 3,000’)
8. Elevator trim- TAKEOFF and verify
9. Primer- Verify IN & LOCKED
10. Throttle- 1700 RPM
 - a. Magnetos- CHECK (RPM drop not to exceed 125RPM or 50 RPM between)
 - b. Carb Heat- CHECK (for RPM Drop)
 - c. Engine Instruments and Ammeter- CHECK
 - d. Suction Gage- CHECK (4.5-5.4)
11. Throttle- IDLE, Carb. Heat ON Check smooth operation then 1000RPM
12. Mixture – Lean for ground ops

*******Line Items*******

(Prior to taxing onto runway)

1. Takeoff Brief – VSPEEDS/EMER. procedures
2. Flaps – SET for type of takeoff
3. Mixture – RICH prior to takeoff
4. Landing, Nav & Strobe light – As Required
5. Transponder – 1200(VFR) and ALT
6. Flight Instruments - RECHECK
7. Final Leg – Check for Traffic
8. Radio – Call

CRUISE

1. Power – Set (as per P.O.H)
2. Elevator Trim – Adjust
3. Mixture – Lean (above 3000 feet)
4. Landing Light – Off (if used)

Cruise Checklist Complete

BEFORE LANDING

1. Seats, Seatbelts – Adjust & Locked
2. Mixture – Rich
3. Carb Heat – On
4. Landing Light – On (if used)

Before landing checklist Complete

AFTER LANDING

1. Wing Flaps- UP
2. Carb Heat- COLD
3. Trim- NEUTRAL
4. Landing Light/ Strobe – OFF (if used)
5. Mixture – LEAN for ground ops

After landing checklist complete

SECURING AIRPLANE

1. Brakes- SET
2. Avionics Master Switch- OFF
3. Mixture- IDLE CUT- OFF
4. Electrical Equipment Except Beacon- OFF
5. Ignition Switch- OFF & remove key
6. Master Switch- OFF
7. Control Wheel Lock- Installed

**ENSURE ALL TIE DOWNS, COVERS,
AND PLUGS ARE IN
PLACE**

EMERGENCY PROCEDURES

ENGINE FAILURES DURING FLIGHT

(RESTART PROCEDURE)

1. Airspeed – 65 KIAS (Best Glide)
2. Carburetor Heat – ON
3. Fuel Selector Valve - BOTH
4. Mixture – RICH
5. Ignition Switch – BOTH or START if prop is stopped
6. Primer – IN an LOCKED
7. EMERGENCY- DECLARE

(FORCED LANDING/SECURE)

1. Seats, Seat Belt, Shoulder Harnesses – SECURE
2. Airspeed - 65KIAS (Flaps UP)
60KIAS (Flaps DOWN)
3. Mixture – IDLE CUT-OFF
4. Fuel Selector Valve- PUSH DOWN AND OFF
5. Ignition Switch – OFF
6. Wing Flaps – AS REQUIRED
7. Master Switch – OFF
8. Doors – UNLATCH PRIOR TO TOUCHDOWN
9. Touchdown – SLIGHTLY TAIL LOW
10. Brakes – APPLY HEAVILY

ENGINE FIRE IN FLIGHT

1. Mixture - IDLE CUT-OFF
2. Fuel Selector Valve- PUSH DOWN AND OFF
3. Master Switch – OFF
4. Cabin Heat and Air – OFF
5. Airspeed - 100KIAS (adjust glide speed to provide incombustible mixture for fire)
6. FORCED LANDING CHECK – EXECUTE

ENGINE FIRE DURING START ON GROUND

1. Cranking – CONTINUE
2. If Started – RPM 1700
3. If Start Fails:
4. Throttle – FULL OPEN
5. Mixture – IDLE CUT-OFF
6. Cranking – CONTINUE
7. SECURE CHECKLIST – COMPLETE
8. Fire Extinguisher – OBTAIN AND EXTINGUISH FIRE
9. Fire Damage – INSPECT AND REPAIR BEFORE FLIGHT