

Cessna 172 Skyhawk Checklist

PREFLIGHT INSPECTION

CABIN

Certificates/DocumentsIN AIRCRAFT
Airworthiness Certificate
Registration
Radio Operators/Station License
Operating Limitations / Airplane Flight Manual
Weight & Balance (current)

Parking Brake.....SET Control Wheel
Lock..... REMOVE
Ignition SwitchOFF
Master SwitchON
Fuel Quantity IndicatorsCHECK QUANTITY
Anti-collision / Strobe Lights.....CHECK OPERATION
FlapsINSPECT
LightsCHECK
Master SwitchOFF
Fuel SelectorBOTH
Baggage DoorCHECK SECURE

TAIL SECTION

Tail Tie-Down / Rudder Gust Lock.....REMOVE
Elevator & RudderCHECK FREEDOM & SECURE
Nav. LightsUNBROKEN (WHITE)

RIGHT WING

Flap Tracks & Actuator Rod.....CHECK
AileronCHECK FREEDOM & SECURE
Nav.LightUNBROKEN (GREEN)
Fuel QuantityCHECK VISUALLY
Fuel Filler CapSECURE
Wing Tie-downREMOVE
Fuel Tank Sump Quick-Drain ValveDRAIN
Main Wheel Tire.....CHECK WEAR & INFLATION (29 psi)

NOSE

WindshieldCHECK CLEAN Wheel
ChocksREMOVE
Engine Oil Dipstick.....CHECK (6-8 qt.)
Engine Fuel Strainer.....DRAIN 4 SECONDS
Nose WheelCHECK WEAR & INFLATION (31 psi)
Shock StrutCHECK PROPER INFLATION (45 psi)

Approx. 3.25 inches showing

Air Inlets.....CHECK FREE OF FOREIGN MATTER
Landing LightCHECK
Air Filter.....CHECK
Propeller & SpinnerCHECK
Tow BarREMOVE
Static Port.....CHECK

LEFT WING

Main Wheel TireCHECK WEAR & INFLATION (29 psi)
Fuel Tank Sump Quick-Drain ValveDRAIN
Wing Tie-downREMOVE
Fuel QuantityCHECK VISUALLY
Fuel Filler CapSECURE
Pitot Tube / Cover.....CHECK / REMOVE
Fuel Tank Vent OpeningCHECK
Stall Warning Vent.....CHECK
Nav. LightUNBROKEN (RED)
AileronCHECK FREEDOM & SECURE
Flap Tracks & Actuator Rod.....CHECK

BEFORE STARTING ENGINE

ChocksREMOVE
Preflight InspectionCOMPLETE
Passenger BriefingCOMPLETE
Seats, Seat Belts, HarnessADJUST & LOCK
BrakesTEST & SET
Circuit BreakersCHECK IN
Radios & Electrical Equipment.....OFF
Fuel Selector.....BOTH
Tow Bar.....REMOVE

STARTING ENGINE

MixtureRICH
Carburetor HeatCOLD
Prime(2-6 strokes) AS REQUIRED
Primer.....IN & LOCKED
ThrottleOPEN 1/8 inch
Master SwitchON
Anti-collision / Strobe Lights.....CHECK OPERATION
Propeller AreaCLEAR
Ignition SwitchSTART
Oil PressureCHECK
Engine Warm-up.....THROTTLE 800-1200 RPM
Fuel PumpOFF
MixtureLEAN FOR TAXI

BEFORE TAXI

Lights & StrobesAS REQUIRED
RadiosON-SET
TransponderSTANDBY
FlapsUP
Seats, Belts, HarnessesCHECK SECURE
BrakesTEST

BEFORE TAKEOFF

Parking BrakeSET
Seats, Belts, HarnessesCHECK SECURE
Cabin Doors & Windows.....CLOSED & LOCKED
Flight ControlsFREE & CORRECT
Fuel SelectorBOTH
Elevator TrimSET for takeoff
Fuel QuantityCHECK
MixtureRICH
Throttle1700 RPM
MagnetosCHECK

(125 max drop / 50 max diff.)

Carburetor HeatCHECK
Suction GageCHECK (4.6 to 5.4)
Engine Instruments & AmmeterCHECK
ThrottleCHECK IDLE LIMITS (650 RPM)

If holding for Takeoff IDLE at 1200 RPM
Throttle Friction LockADJUST
Flight InstrumentsCHECK & SET
RadiosSET
TransponderALTITUDE
Wing FlapsSET for takeoff
LightsAS DESIRED
BrakesRELEASE

*** (Note time of departure for fuel purposes.)

TAKEOFF

NORMAL TAKEOFF

Wing Flaps0 Degrees
Carburetor HeatCOLD
Throttle.....FULL OPEN Elevator
ControlLIFT NOSE WHEEL (60 MPH) Climb
Speed75- 85 MPH

ENROUTE CLIMB

Airspeed80-90 MPH
ThrottleFULL OPEN
MixtureRICH (until 3000 feet)

CRUISE

Power2200 – 2700 RPM
ElevatorADJUST
MixtureLEAN for max rpm

DESCENT

Fuel Selector.....BOTH
MixtureRICH
PowerAS DESIRED
Carburetor HeatAS REQUIRED

Cessna 172 Skyhawk Checklist

BEFORE LANDING

Seats, Belts, HarnessesSECURE
Fuel Selector.....BOTH
MixtureRICH
Carburetor HeatAPPLY FULL HEAT
Wing Flaps.....AS DESIRED
Airspeed.....70-80 MPH(flaps up), 65-75 MPH(flaps down)

BALKED LANDING (Go-Around)

Power.....FULL THROTTLE
Carburetor Heat.....COLD
Wing Flaps.....RETRACT to 20° POS. RATE

LANDING

NORMAL LANDING

Airspeed70-80 MPH (flaps up)
Wing Flaps.....AS DESIRED (below 100 MPH)
Airspeed65-75 MPH (flaps down)
TouchdownMAINS FIRST
Landing RollLOWER NOSE WHEEL GENTLY
BrakingMINIMUM REQUIRED

AFTER LANDING

Wing FlapsUP
Carburetor HeatCOLD
TransponderSTANDBY
LightsAS REQUIRED

*** (Note time of landing to compare against the Hobbs.)

SHUTDOWN

Parking BrakeSET
Radios & Electrical Equipment & LightsOFF
Throttle1000 RPM
MixtureIDLE CUT-OFF
Ignition SwitchOFF
MasterOFF
Control LockINSTALL
Hobbs & TachRECORD
AircraftSECURE

USEFUL INFORMATION

Aircraft V-Speeds:

Vr:	(Rotation Speed)	60 MPH
Vx:	(Best angle of climb)	68 MPH
Vy:	(Best rate of climb)	91 MPH
Va:	(Maneuvering Speed)	112 MPH
Vfe:	(Max flap extended speed)	100 MPH
Vno:	(Max structural cruising speed)	145 MPH
Vne:	(Never exceed speed)	182 MPH
Vs1:	(Stall Speed (clean))	57 MPH
Vso:	(Stall Speed (dirty))	49 MPH
Glide:	(clean)	80 MPH

Note: All Speeds are for Gross Weight (2300 lbs) aircraft.

Weight & Balance:

Max Gross Weight:	2300.00 lbs.
Basic Empty Weight:	1430.6 lbs.
Useful Load:	869.6 lbs.
Payload:	641.6 lbs.
Moment:	55535.892
Center of Gravity:	38.82 in.

Standard Fuel Loading:

42 Gallon Capacity	252 lbs
38 Gallons Usable	228 lbs
4 Gallons Unusable Fuel	24 lbs

EMERGENCY PROCEDURES

ENGINE FIRE DURING START (results from over priming)

Starter.....CONTINUE TO CRANK ENGINE
Throttle1700 RPM (if engine starts)
If engine start is unsuccessful, continue cranking for 2 or 3 minutes with throttle full open.
MixtureIDLE CUT-OFF
Fuel Selector.....OFF
Aircraft..... ABANDON IF FIRE CONTINUES

Smother flames with fire extinguisher, seat cushion, blanket, or loose dirt. If practical, remove carburetor air filter if it's ablaze. Make a thorough inspection of fire damage, and repair or replace damaged components before conducting flight.

ENGINE POWER LOSS DURING TAKE-OFF (Instructor Technique)

If sufficient runway remains for a normal landing land straight ahead.
If insufficient runway remains, maintain a safe airspeed and make only shallow turns to avoid obstructions.
If you have gained sufficient altitude to attempt a restart, proceed with next checklist.

ENGINE FAILURE DURING FLIGHT (restart) (Instructor Technique)

Airspeed80 MPH
Fuel SelectorSWITCH TANKS*
MixtureRICH
Carburetor Heat.....ON
Engine Gauges.....CHECK FOR CAUSE
PrimerIN & LOCKED
Ignition Switch "L" then "R" back to BOTH
Transponder7700
Radio121.5 MAYDAY**

* If engine failure was caused by fuel exhaustion, power will not be regained after tanks are switched until empty fuel lines are filled, which may require up to ten seconds.

** When calling on 121.5 say your last known position number of people on board, how much fuel, and what kind of emergency. It is recorded and they will be able to find you and take care of you faster.

EMERGENCY LANDING WITHOUT ENGINE POWER

Airspeed80 MPH
MixtureCUT—OFF
Fuel Selector.....OFF
Ignition SwitchOFF
Seat belt and harness.....TIGHT
Flaps.....AS REQUIRED WITHIN GLIDING DIST OF FIELD
(Full Flaps Down).....65-75 MPH
Master SwitchOFF
Cabin Doors.....UNLACH PRIOR TO FINAL APPROACH
TouchdownSLIGHTLY TAIL LOW(min. speed)
Apply heavy braking while holding full up elevator.

ELECTRICAL FIRE (smoke in cabin)

Master Switch.....OFF
All Electrical Switches (except ignition).....OFF
Vents / Windows.....OPEN TO VENT SMOKE
Cabin Heat.....OFF
Land as soon as Practical

ENGINE FIRE IN FLIGHT

MixtureCUT—OFF
Fuel Selector.....OFF
Master SwitchOFF
Glide Establish.....120 MPH
Cabin Heat.....OFF / CLOSED

If fire is not extinguished, increase glide speed in an attempt to find an airspeed that will provide incombustible mixture.

Magneto SwitchOFF

Proceed with EMERGENCY LANDING w/o POWER procedure.