

Emergency Procedures

ENGINE FAILURE

During Takeoff Roll?

- ① Throttle....IDLE ④ MAGs.....OFF
- ② Brakes....Apply ⑤ Mixture...LEAN
- ③ Flaps....Retract ⑥ Master.....OFF

After Takeoff (Insufficient Alt.)?

- ① Airspeed.....65 (KIAS) if Flaps Up
60 (KIAS) if/when Down
- ② Mixture.....**CUT OFF** (pull out)
- ③ Fuel SHUTOFF.....**OFF** (pull out)
- ④ MAGNETOS.....**OFF**
- ⑤ Flaps.....Full (recommended)
- ⑥ MASTER.....**OFF**
- ⑦ Doors.....UNLATCH
- ⑧ LAND.....STRAIGHT AHEAD

Sufficient Altitude for Restart?

YES : Attempt Restart

- ① Airspeed.....65 kts
- ② Best Landing Site.....Selected
- ③ Mixture.....RICH
- ④ Fuel Pump.....ON
- ⑤ Fuel Selector.....BOTH
- ⑥ Fuel Shutoff Valve.....ON (push in)
- ⑦ Carb Heat.....ON
- ⑧ MAGNETOS.....BOTH

If the propeller is windmilling, engine will restart automatically within a few seconds. If propeller has stopped (possible at low speeds), press **START** switch, advance throttle slowly from idle and lean the mixture from full rich until smooth operation.

Did Engine Restart?

Yes: Land as Soon as Practical

No: Prepare for a Forced Landing

ENGINE FIRE

ENGINE FIRE DURING FLIGHT

- Mixture....IDLE CUT OFF (pull out)
- Fuel Shutoff Valve & Pump.....**OFF**
- Throttle.....**FULL OPEN**
- Airspeed.....**100 kts+**
(If not extinguished, increase glide speed within limitations until extinguished)
- Airspeed.....65 kts, **Proceed To:**

FIRE DURING ENGINE START

***Keep Cranking Until Engine Starts ***

- Power.....1800 RPM for 2 Minutes
- Mixture....IDLE CUT OFF (pull out)
- Fuel Shutoff Valve & Pump.....**OFF**
- MAGs.....**OFF**.....EVACUATE Aircraft

ELECTRICAL FIRE

- MASTER.....**OFF**
- Cabin Vents/Heat.....CLOSED/OFF
- Fire Extinguisher.....ACTIVATE
After flames have been extinguished,
ventilate cabin as necessary.
- LAND AS SOON AS PRACTICAL

SECURING ENGINE

- Best Landing Site.....Selected
- MayDay.....Transmit (121.5)
- Transponder.....7700
- Mixture.....Idle Cut **OFF**
- Fuel Shutoff Valve & Pump.....**OFF**
- MAGNETOS (Keys).....**OFF**
- Seatbelts Secure & Passengers Briefed
- Vg.....65 kts...(Until Landing Assured)
- Flaps.....Full (recommended)
- Airspeed.....60 kts (with full flaps)
- Master Switch.....**OFF**
- ELT.....Activate
- Door(s).....AJAR
- Touchdown.....SLIGHTLY TAIL LOW
- Brakes.....APPLY HEAVILY
- Aircraft.....EVACUATE



Cessna 172 | N6523D

PREFLIGHT

When departing from CFI RAMP, perform initial visual check of Fuel & Oil levels.

USE LADDER - SunAir (805) 389-9301

COCKPIT

- Hobbs/Tach.....Verify
- Certs/Documents.....Check
- Control Lock.....Remove
- Master (BAT).....ON
- Flaps.....Extend
- LightsON & Check.....OFF
- Master (BAT).....OFF

FUSELAGE & TAIL

- Antennas.....Check
- Elevator.....Check
- Rudder.....Check

RIGHT WING

- Flap Hinges.....Check
- Aileron.....Check
- Leading Edge.....Check
- Strut.....Check
- Tie Down/Chocks.....Removed
- Tire & Brake.....Check
- Fuel Strainer.....Sample & Check
- Fuel Level.....(USE LADDER).....Check

NOSE

- Oil Quantity.....4-6 qts
- Fuel Strainer.....Drain & Check
- Prop Blades and Spinner.....Check

- Air Intake and Filter.....Clear
- Nose Gear Strut & Tire.....Check
- Static Source.....Clear

LEFT WING

- Strut.....Check
- Tie Down/Chocks.....Removed
- Tire & Brake.....Check
- Fuel Strainer.....Sample & Check
- Fuel Level.....(USE LADDER).....Check

ENGINE START

BEFORE ENGINE START

- Seats & Seat Belts.....Adjusted / ON
- Headsets & Keys.....Plugged In
(To prevent damage to magnetic compass and scratches to windshield, ABSOLUTELY NOTHING is PERMITTED to be placed above panel on glare shield)
- Circuit Breakers.....Check
- Avionics Master.....Verify OFF
- Master (ALT & BAT).....ON
- Flaps.....Retract
- AntiCollision Lights.....ON
- Nav Lights (night).....(If Required)
- Fuel Selector.....Both

ENGINE START (Cold)

- Mixture.....Rich
- Throttle....Pump 2X...then 1/4" Open
- Brakes.....Engaged
- Prop Area.....Clear
- Starter (Keys).....START**
- Throttle....Pump 1x or 2x as Needed
- Throttle 1000RPM & Oil Pres Check**
- Mixture.....Lean 50%
- Avionics Master.....ON
- Database.....Confirm
(Continue to Pre-Taxi, Next Page)

LEFT WING (continued)

- Pitot Tube.....Clear
- Stall Indicator.....Check
- Fuel Vent.....Clear
- Leading Edge.....Check
- Aileron.....Check
- Flaps.....Check

FINAL RAMP CHECK

- Ramp/TieDown/Chocks.....All Clear



v.07/2025

PreTaxi / Taxi

PRE-TAXI

Brakes.....Check
ATIS/ASOS (if available).....Listen

TAXI (IFR)

Heading Indicator.....Turns
Turn Coordinator...Turns & Ball Skids

RUN UP

ENGINE RUN UP

Brakes.....Engaged
Mixture.....Rich (or As Required)
Throttle.....1700 RPM
Eng. Instruments.....Check
Magnetos.....Check (KEYS)

RIGHT MAG.....<175 RPM drop

Back to BOTH

LEFT MAG.....<175 RPM drop

Back to BOTH

Vacuum Gage.....Within Limits

Low Voltage Light.....Check
AMP Meter.....Check
Carb Heat.....Cycle & Check
Throttle.....Idle Check
Throttle.....1000 RPM
Mixture.....Lean 50%

Flight Controls.....Free and Correct

Flaps & Trim.....Set

AVONICS & INSTRUMENTS

Flight Instruments.....Set

GPS, COMMs & Fuel Timer.....Set

TAKEOFF

BEFORE TAKEOFF

Doors/Windows.....Secured
Aircraft Lights.....As Required
DG.....Set and Check
Mixture.....Rich (As Required)

TAKEOFF

Rotate.....Vr = 55 kts
Climb.....Vy = 75 kts
Flaps.....UP
Mixture.....Lean at 3,000ft

CLIMB / CRUISE

CRUISE-CLIMB

Climb Speed.....70-85 kts
Mixture.....Lean As Required

CRUISE

Power.....2200 to 2400 RPM
Mixture.....Lean (Rich of Peak)

APPROACH

DESCENT

Power.....Reduce as Required
Mixture.....Enrichen as Needed
ATIS/ASOS.....Listen
Flight Instruments.....Check / Set
Lights / Carb Heat.....As Required

Final Approach

Mixture.....Set for "Go-Around" Power
Flaps.....Extend as Needed
Airspeed.....65 - 75 KIAS
Seat Belts.....Secure
Touchdown.....60 KIAS (30°)

AFTER LANDING

EXITING RUNWAY

Mixture.....Lean 50%
Flaps.....Retract
Lights.....As Required
Carb Heat.....OFF
Transponder.....VFR/1200

ENGINE SHUTDOWN

Avionics Master.....ALL OFF
Mixture.....LEAN / CUT OFF
Throttle.....Idle
Ignition Key.....OFF and OUT
Master (ALT & BAT).....OFF



Special Start Procedures



ENGINE START - (HOT)

Brakes.....Engaged
Throttle.....1/4 " Open
Mixture.....RICH
Fuel Pump.....OFF
Master (ALT & BAT).....ON
Aircraft Lights.....As Required
Prop Area.....Clear

Starter.....START

Mixture.....Advance Smoothly At Engine Start
Oil Pressure.....Check
Mixture.....Lean 50%

ENGINE START - (FLOODED)

Master (ALT & BAT).....OFF
Wait.....5 Minutes
Master (ALT & BAT).....ON
Mixture.....Idle Cut Off
Throttle.....Full Open
Breaks.....Engaged
Prop Area.....Clear
Ignition.....START
Mixture.....Advance Smoothly At Engine Start
Throttle.....Below 1000 RPM
Oil Pressure.....Check

SECURING AIRCRAFT

INSIDE

Strobe Lights.....LEAVE SWITCH ON
To prevent damage to battery, it is requested that the ANTICOLLISION switch be left in the "ON" position, and pilot to confirm MASTER SWITCH is OFF

Control Lock.....Installed
Fuel Selector.....L or R (not Both)
Tach & Hobbs.....Record
Windows.....Closed & Latched
Sun Reflectors.....Installed

EXTERNAL

Baggage & Doors.....Locked
Tiedown/Chocks.....Installed



Unusual Procedures



LOSS OF OIL PRESSURE

LAND AS SOON AS PRACTICAL
Prepare for Imminent Engine Failure

Engine Roughness

Carb Heat.....ON
Mixture.....Adjust As Needed
Throttle.....Adjust As Needed

If Roughness Continues

Engine Instruments.....Check
Magnetos.....Switch to Left/Right
If either Mag is Satisfactory
Continue on that Mag
Throttle.....Reduce Power
LAND AS SOON AS PRACTICAL

Electrical Overload

Alternator.....OFF
REDUCE ELECTRICAL LOAD
LAND AS SOON AS PRACTICAL

SPIN RECOVERY (PARE)

Power.....Idle
Ailerons.....Neutral
Rudder.....Opposite of Rotation
Elevator.....Forward / Break Stall

V-Speeds (KIAS)

Vr - 55	Vg - 65
Vx - 60	Vne - 160
Vy - 75	Vno - 128
Vso - 33	Va - 97 (2300 lbs)
Vfe - 110 (10°)	- 89 (1950 lbs)
- 85 (10°-40°)	- 80 (1600 lbs)