

- ELECTRICAL POWER SUPPLY SYSTEM MALFUNCTIONS -

- AMMETER SHOWS EXCESSIVE RATE OF CHARGE (Full Scale Deflection) -

Alternator OFF
Alternator Circuit Breaker PULL
Nonessential Electrical Equipment OFF
Flight..... LAND ASAP

- LOW-VOLT LIGHT ILLUMINATES DURING FLIGHT (Ammeter shows discharge) -

Avionics Power Switch OFF
Alternator Circuit Breaker CHECK IN
Master Switch OFF
Master Switch OFF
Low-Voltage Light..... CHECK OFF
Avionics Power Switch..... ON

If low-voltage light illuminates again

Alternator OFF
Nonessential Radio & Electrical Equip..... OFF
LAND..... ASAP

NOTE: Illumination of low-voltage light may occur during low RPM conditions with an electrical load on the system such as during a low RPM taxi. Under these conditions, the light will go out at higher RPM.

The master switch need not be recycled since an over-voltage condition has not occurred to de-activate the alternator system.

- STATIC SOURCE BLOCKAGE -

Static Pressure Alt Source Valve FULL ON
Cabin Heat & Air..... ON
Vents CLOSED
AirspeedCONSULT CALIBRATION TABLES

- SPIN RECOVERY -

Power IDLE
Ailerons NEUTRAL
Rudder FULL OPPOSITE
Elevator BRISKLY FORWARD
Return to desired altitude, attitude, airspeed, & heading

Vr: 60 kts
Vx: 65 kts
Vy: 75 kts
Vg: 70-75 kts
Va @2550lbs: 105 kts
Va @1750lbs: 87 kts
Vs₀: 53 kts
Vs₁: 46 kts
Vno: 129 kts
Vne: 163 kts
Vfe: 85 kts

*This checklist is only for training purposes and is not intended to replace the POH.
Revised 30 September 2020*

SPRINGS AVIATION

CESSNA 172R 180HP
N1025V
EMERGENCY PROCEDURES CHECKLIST

- ENGINE FAILURES -

- DURING TAKEOFF ROLL -

Throttle..... IDLE
BrakesAPPLY
Wing Flaps RETRACT
MixtureIDLE CUTOFF
Ignition Switch OFF
Master Switch OFF

- IMMEDIATELY AFTER TAKEOFF -

Airspeed.....70 KIAS (flaps up)
.....65 KIAS (flaps down)
MixtureIDLE CUTOFF
Fuel SelectorFUEL SHUTOFF
Ignition Switch OFF
Wing FlapsAS REQUIRED
Master Switch OFF

- DURING FLIGHT (RESTART PROCEDURES) -

Airspeed..... 75 KIAS
Primer IN and LOCKED
Fuel Shutoff Valve..... ON (push full in)
Fuel Selector Valve..... BOTH
Mixture RICH (or set for alt)
Throttle 1/2 OPEN
Aux Fuel Pump..... LOW for 3-5 secs then OFF
Ignition Switch...BOTH (or start if prop is stopped)

- FORCED LANDINGS -

- EMERGENCY LANDING WITHOUT ENGINE POWER -

Airspeed 70 KIAS (flaps up)
..... 65 KIAS (flaps down)
Seats, Seat Belts/Harness SECURE
Mixture IDLE CUTOFF
Fuel Shutoff Valve OFF
All Switches (except MASTER) OFF
Wing Flaps AS REQ. (full recommended)
Master Switch OFF
Doors UNLATCH prior to touchdown
Touchdown SLIGHTLY TAIL LOW
Brakes AS REQUIRED

- PRECAUTIONARY LANDING WITH ENGINE POWER -

Seats, Seat Belts/Harness SECURE
Wing Flaps 20°
Airspeed 65 KIAS
Selected Field FLY OVER
(noting terrain & obstructions retract flaps upon reaching safe altitude & airspeed)
Avionics Power Switch OFF
Electrical Switches OFF
Wing Flaps FULL (on final app)
Airspeed 65 KIAS
Master Switch OFF
Doors UNLATCH prior to touchdown
Touchdown SLIGHTLY TAIL LOW
Ignition Switch OFF
Brakes AS REQUIRED

- FIRES -

- DURING START ON GROUND -

Cranking CONTINUE
(a start can suck the flames and accumulated fuel into the engine)

If engine starts:

Power 1700 RPM for a few mins
Engine SHUTDOWN & inspect for damage

If engine fails to start:

Fuel Pump OFF
Throttle FULL OPEN
Mixture IDLE CUTOFF
Cranking CONTINUE
Fire Extinguisher OBTAIN
Engine SECURE
Master Switch OFF
Ignition Switch OFF
Fuel Selector Valve OFF
Fire EXTINGUISH
Fire Damage INSPECT

- ENGINE FIRE IN FLIGHT -

THROTTLE IDLE
Mixture IDLE CUTOFF
Fuel Selector OFF
Master Switch OFF
Cabin Heat & Air OFF (except overhead vents)
Airspeed 105 KIAS
(if fire doesn't extinguish, increase speed until it does extinguish)
Forced Landing EXECUTE (do no restart)

- CABIN FIRE -

Master Switch OFF
Vents/Cabin Air & Heat CLOSED
Fire Extinguisher ACTIVATE
When Fire Extinguished VENTILATE
Land ASAP

- FIRES -

- ELECTRICAL FIRE IN FLIGHT -

Master Switch OFF
All Other Switches (except ignition) OFF
Avionics Power Switch OFF
Radio Switches OFF
Vents/Cabin Air & Heat CLOSED
Fire Extinguisher ACTIVATE
When Fire Extinguished VENTILATE
Master Switch ON
Circuit Breakers CHECK (do NOT reset)
Avionics Power Switch ON
Radio/Electrical Switches ON
(one at a time, with delay after each until short circuit is localized)
Vents/Cabin Air/Heat OPEN
(when sure fire is extinguished)

- WING FIRE -

Landing/Taxi Light OFF
Pitot Heat Switch OFF
Navigation Light OFF
Strobe Light OFF
Perform sideslip to keep flames away from fuel tank and cabin. Land ASAP. Use flaps only as required for final approach and touchdown.

- CLEANING FOULED SPARK PLUGS -

Magnetos BOTH
Throttle 1700 RPM
Mixture LEAN
Run at lean/hot mixture for 30-60 seconds. Test magnetos again. If drop is still too high, cancel flight and squawk issue.