

→ BY HEART ITEM !

ENGINE POWER LOSS IN FLIGHT

Best glide speed..... fly, trim **73 KT**

Landing site..... determine

● If no time / low altitude: **PREPARE FOR POWER OFF LANDING!**

- if time / altitude permits:
 - Electrical fuel pump..... on
 - Fuel selector..... switch tank
 - Mixture control..... rich
 - Carburetor heat..... change
 - Engine instruments..... check for reason
 - Primer..... locked
 - Fuel quantity..... lh / rh checked
 - Magnetos / Ignition..... both / lh / rh
 - Throttle / mixture control..... different settings

If power restored:

- Carburetor heat..... off
- Electrical fuel pump..... off

If power not restored:

PREPARE FOR POWER OFF LANDING!

POWER OFF LANDING

EMERGENCY CALL 121.500 „MAYDAY MAYDAY MAYDAY, HB-XXX“

- Seatbelts / cabin + passengers..... fastened / secured
- Fuel selector..... off
- Magnetos / Ignition..... off
- Battery / alternator switches..... off (no stall warning!)
- Mixture control..... lean cutoff

When landing site can easily be reached:

- Flaps..... 40° (3)
- Speed..... final approach (65 KT)
- ELT..... consider on
- Door..... consider open / closed

ENGINE POWER LOSS SHORT AFTER T/O

Fly the aircraft..... nose down, safe speed immediately:

Flaps 25° (2): **65KT** Flaps 0° (up): **70KT**

At low altitude..... no turns

Flaps..... as required, if possible flaps 40° (3)

FIRE / SMOKE INFLIGHT

Source of fire/smoke..... identify

● **If electrical fire:**

Battery/alternator switches... off

Vents / stormwindow..... open

Cabinheat / defroster..... off

Land as soon as possible!

● **If engine fire:**

Fuel selector..... off

Throttle..... idle

Mixture control..... lean cutoff

electrical fuel pump..... off

Cabinheat / defroster..... off

PREPARE FOR POWER OFF LANDING!

FIRE DURING ENGINE START

Starter..... continue cranking

Fuel selector..... off

Mixture control..... lean cut off

Throttle..... full open

Electrical fuel pump..... off

If fire continues or if fire is out:

Battery / alternator switches..... off

Passengers / pilot..... evacuate

SPIN (VRILLE) RECOVERY

Throttle..... idle

Ailerons..... neutral

Rudder..... full opposite direction

Elevator..... full forward

When rotation stops:

Rudder..... neutral

Elevator..... recover attitude

LOSS OF OIL PRESSURE

Land as soon as possible and investigate cause.
BE PREPARED FOR POWER OFF LANDING!



OIL

LOSS OF FUEL PRESSURE

Electrical fuel pump.....on
 Fuel selector.....check on fullest tank
BE PREPARED FOR POWER OFF LANDING!

OPEN DOOR

If both (upper and side) latches are open, the door will trail slightly open and airspeed will be reduced slightly.

Speed.....reduce to 87 KT

Cabin vents (Cadet: 4, Archer: 5).....close

Storm windowopen

Side, then upper latches.....latch

ELECTRICAL OVERLOAD

(ALTERNATOR OUTPUT >20 AMPS ABOVE KNOWN ELECTRIC. LOAD)

● ARCHER HB-PBH / PBV:

Alternator switch.....off

● CADET HB-POE / POF:

Alternator switch.....on

Battery switch.....off

► *If alternator loads are reduced:*

Electrical load.....reduce to minimum

Land as soon as practical

► *If alternator loads are not reduced:*

Alternator switch.....off

Battery switch.....as required

Land as soon as possible and **anticipate complete electrical failure**, as **the battery is the only remaining source** for electrical power. Use minimum consumers.

ELECTRICAL FAILURES**ALT**

ALT-annunciator light..... check (and test)
 If light is out: change bulbs..... check again
 Ampèremeter output..... check (switch on consumers)

If ampèremeter **shows zero / no** output and/or ALT light is **on**: go to **1**

If ampèremeter **shows some** output: go to **2**

1 Alternator switch..... off
 Electrical load..... reduce to minimum
 „Altnr field“ circuit breaker..... check, reset (only 1 x)
 Alternator switch..... on

- ▶ If **no** Altn. output: Alternator switch..... off
 Electrical load..... use min. electrical equipment!

Land as soon as practical. **The battery is the only remaining source for electrical power.**

- ▶ If power restored: Continue flight, check system(s) after flight and use electrical consumers as necessary

2 Check circuit breakers of affected system(s), reset only 1 x

- ▶ If successful.....continue flight and check system(s) after flight
- ▶ If not successful.....switch off affected system(s) and evaluate, if destination can be reached or precautionary/alternate landing is necessary.

ON GROUND EMERGENCY / EVACUATION

Parkbrake..... set
 Mixture..... lean, cut off
 Magnetos / Ignition..... off
 Fuel selector..... closed
 Emergency call.....transmit
 Alternator + battery masterswitches..... off
 When engine has stopped..... evacuate aircraft

