

**ENGINE POWER LOSS DURING TAKEOFF**

If sufficient altitude for restart  
**REFER TO POH FOR DETAILS**  
**MAINTAIN SAFE AIRSPEED**

1. FUEL SELECTOR  
 SWITCH TO TANK CONTAINING FUEL
2. ELECTRIC FUEL PUMP.....ON
3. MIXTURE.....RICH
4. CARBURETOR HEAT.....ON
5. PRIMER.....CHECK LOCKED
6. IF POWER IS NOT RESTORED:
  - a. PREPARE FOR POWER OFF LANDING

**ENGINE POWER LOSS IN FLIGHT**

1. FUEL SELECTOR .....SWITCH TO TANK CONTAINING FUEL
2. ELECTRIC FUEL PUMP.....ON
3. MIXTURE.....RICH
4. CARBURETOR HEAT.....ON
5. ENGINE GAUGES.....CHECK FOR INDICATION OF CAUSE OF POWER LOSS
6. PRIMER.....CHECKED LOCKED

If no fuel pressure is indicated, check tank selector position  
 to be sure it is on a tank containing fuel

When Power Restored

7. CARBURETOR HEAT.....OFF
8. ELECTRIC FUEL PUMP.....OFF
- If power is not restored prepare for power off landing.
9. Trim for 73KIAS.

**FIRE IN FLIGHT**

1. SOURCE OF THE FIRE.....CHECK

**ELECTRICAL FIRE (SMOKE IN CABIN)**

2. MASTER SWITCH.....OFF
3. VENTS.....OPEN
4. CABIN HEAT.....OFF
5. LAND AS SOON AS PRACTICAL

**ENGINE FIRE**

1. FUEL SELECTOR.....OFF
2. THROTTLE.....CLOSED
3. MIXTURE.....IDLE CUT OFF
4. ELECTRIC FUEL PUMP.....OFF
5. HEATER.....OFF
6. DEFROSTER.....OFF
7. PROCEED WITH POWER LANDING PROCEDURE

**CABIN FIRE**

1. MASTER SWITCH.....OFF
2. VENTS/CABIN AIR/HEAT.....CLOSED
3. FIRE EXTINGUISHER.....ACTIVATE  
*ONCE FIRE IS OUT – VENTILATE CABIN*
4. VENTS/CABIN AIR/HEAT.....OPEN
5. LAND THE AIRPLANE AS SOON AS POSSIBLE

**ENGINE FIRE DURING START ON THE GROUND**

1. IGNITION SWITCH START - CONTINUE CRANKING  
 to get a start which would suck the flames and accumulated fuel into the engine.

If engine starts:

2. POWER.....1800 rpm (for a few minutes)
3. ENGINE.....SHUTDOWN (and inspect for damage)

If engine fails to start:

4. THROTTLE.....FULL OPEN
5. MIXTURE.....IDLE CUT OFF
6. CRANKING.....CONTINUE
7. FUEL SHUTOFF VALVE.....OFF (pull full out)
8. AUX FUEL PUMP.....OFF
9. FIRE EXTINGUISHER.....ACTIVATE
10. ENGINE.....SECURE
  - a. MASTER SWITCH.....OFF
  - b. IGNITION SWITCH.....OFF
11. PARKING BRAKE.....RELEASE
12. AIRPLANE.....EVACUATE
13. FIRE.....EXTINGUISH
14. FIRE DAMAGE.....INSPECT

**WING FIRE**

1. LANDING/TAXI LIGHT SWITCHES.....OFF
2. NAVIGATION LIGHT SWITCH.....OFF
3. STROBE LIGHT SWITCH.....OFF
4. PITOT HEAT SWITCH.....OFF

Perform a sideslip to keep the flames away from the fuel tank and cabin. Land as soon as possible using flaps only as required for final approach and touchdown

**FORCED LANDING EMERGENCY****WITHOUT ENGINE POWER**

1. PASSENGER SEAT BACKS.....MOST UPRIGHT
2. SEAT BELTS/SHOULDER HARNESSSES...SECURE
3. AIRSPEED....70KIAS (flaps up) 65KIAS (flaps down)
4. MIXTURE.....IDLE/CUTOFF
5. FUEL SELECTOR VALVE.....OFF
6. IGNITION SWITCH.....OFF
7. WING FLAPS.....AS REQ.....(FULL recommended)
8. MASTER SWITCH.....OFF (landing assured)
9. DOORS.....UNLATCHED (prior to landing)
10. TOUCHDOWN.....SLIGHTLY TAIL LOW
11. BRAKES.....APPLY HEAVILY

**LOW OIL PRESSURE****1. IF COMPLETE OIL PRESSURE LOSS****a. LAND AS SOON AS POSSIBLE****b. PREPARE FOR POWER OFF LANDING**

IF A TOTAL LOSS OF OIL PRESSURE IS ACCOMPANIED BY A RISE IN OIL TEMPERATURE, THERE IS GOOD REASON TO SUSPECT AN ENGINE FAILURE IS IMMINENT.

2. REDUCE ENGINE POWER IMMEDIATELY AND SELECT A SUITABLE FORCED LANDING FIELD. USE ONLY THE MINIMUM POWER REQUIRED TO REACH THE DESIRED TOUCHDOWN SPOT

**ENGINE ROUGHNESS**

1. CARBURETOR HEAT.....ON  
if roughness continues after 1 minute
2. CARBURETOR HEAT.....OFF
3. MIXTURE.....ADJUST FOR MAX SMOOTHNESS
4. ELECTRIC FUEL PUMP.....ON
5. FUEL SELECTOR.....SWITCH TANKS
6. ENGINE GAUGES.....CHECK
7. MAGNETO SWITCH SELECT L THEN R THEN **BOTH**  
If operation is satisfactory on either one, continue on that magneto at reduced power and full "RICH" mixture to first airport.
8. PREPARE FOR POWER OFF LANDING.

**CARBURETOR ICING**

1. CARBURETOR HEAT.....ON
2. MIXTURE.....ADJUST FOR MAX SMOOTHNESS

**LOSS OF FUEL PRESSURE**

1. ELECTRIC PUMP.....ON
2. FUEL SELECTOR.....CHECK ON FULL TANK

**ELECTRICAL OVERLOAD**

(alt over 20amps above known electric load)

1. ALTERNATOR SWITCH.....OFF
2. NON-ESSENTIAL EQUIPMENT.....OFF
3. **LAND AS SOON AS PRACTICABLE.**

If SEPARATE **ALT** and **BATT** SWITCH

- a. ALT SWITCH.....ON
- b. BATT SWITCH.....OFF

If alternator loads are reduced

4. ELECTRICAL LOAD.....REDUCE TO MINIMUM
5. LAND AS SOON AS PRACTICAL.

If alternator loads are not reduced

6. ALT SWITCH.....OFF
7. BATT SWITCH.....AS REQUIRED
8. LAND AS SOON AS POSSIBLE. ANTICIPATE COMPLETE ELECTRICAL FAILURE

**ELECTRICAL FAILURES**

Illumination of the low voltage (VOLTS) annunciator  
In flight

1. AMMETER.....CHECK TO VERIFY INOP ALTERNATOR

If ammeter shows zero

2. ALTERNATOR SWITCH.....OFF
3. REDUCE ELECTRICAL LOADS TO MINIMUM
4. ALT CIRCUIT BREAKER...CHECK AND RESET AS REQUIRED
5. ALT SWITCH .....ON  
if power not restored
6. ALT SWITCH .....OFF  
If alternator output cannot be restored, reduce electrical loads and land as soon as practical. The battery is the only remaining source of electrical power.

**AIRSPEEDS**

- BEST GLIDE (Vg).....73KIAS  
Maneuvering Speed.....111KIAS  
MAX XWIND COMPONENT.....17KIAS

**NOTE – INTENTIONAL SPINS PROHIBITED**