

EMERGENCY PROCEDURES

NOTE: The **bold faced** steps are considered critical actions and must be memorized by the pilot. After completing the bold-faced steps, consult this checklist to complete all other necessary actions.

ENGINE FIRE DURING START

1. **If Engine Has Not Started. CONTINUE CRANKING**
 - a. **Throttle OPEN (Try to draw fire into engine.)**
 - b. **Mixture. IDLE CUT-OFF**
 - c. **Fuel pump. OFF**
 - d. **Fuel selector OFF**

NOTE: If fire is not extinguished, accomplish the following.

- e. Ignition OFF
 - f. Master switch OFF
 - g. Evacuate the aircraft
2. If Engine is running – continue operating a few seconds to try to pull fire into engine. If attempt is unsuccessful, shut down engine by completing steps **b.** through **g.** above.

WARNING: If the fire continues longer than a few seconds, the fire should be extinguished by any means available.

ENGINE FAILURE/FIRE DURING TAKE-OFF

NOTE: If landing is imminent, immediately complete steps 1 through 6.

1. Lower nose..... ESTABLISH GLIDE 105 MPH
2. Throttle CLOSED
3. Prop..... FULL DECREASE
4. Mixture IDLE CUT-OFF
5. Fuel pump..... OFF
6. Fuel selector OFF
7. Ignition OFF
8. Gear..... AS REQUIRED
9. Master switch..... OFF
10. Flaps AS REQUIRED

NOTE: If sufficient altitude is obtained to attempt a restart, complete the following.

11. Maintain at least 110 MPH.
12. Throttle OPEN 1/2 inch
13. Prop FULL INCREASE
14. Mixture..... RICH
15. Fuel pump. ON
16. Alternate Air..... ON
17. Ignition switch LEFT, RIGHT OR BOTH
18. Fuel selector. SWITCH TO TANK WITH FUEL
19. If propeller has stopped rotating, engage starter.

ENGINE FIRE IN FLIGHT

1. Throttle..... CLOSED
2. Mixture IDLE CUT-OFF
3. Fuel Selector. OFF
4. Heater & Defroster..... OFF
5. Ignition switch OFF
6. Land As Soon As Possible

ENGINE POWER LOSS IN FLIGHT

1. **Maintain airspeed. 110 MPH**
2. **Gear..... UP**
3. **Flaps. UP**
4. **Suitable field.. . . . LOCATE**

NOTE: If altitude permits, accomplish the following.

5. **Mixture. RICH**
6. **Fuel pump..... ON**
7. Alternate air ON
8. Fuel selector. SWITCH TANKS
9. Engine Instruments. . . CHECK CAUSE OF POWER LOSS

NOTE: If no fuel pressure is indicated – Check tank selector position to be sure it is on tank containing fuel.

If Power Is Restored

- 10. Alternate air. OFF
- 11. Fuel pump. OFF

NOTE: If the above procedure does not restore power, prepare for **Power off Landing.**

NOTE: If failure was from fuel exhaustion, it can take up to 10 seconds for fuel to fill lines and restore power.

POWER OFF LANDING

- 1. **Airspeed. Best Glide 105 MPH**
- 2. **Throttle. CLOSED**
- 3. **Propeller. FULL DECREASE RPM**
- 4. **Mixture. IDLE CUT-OFF**
- 5. **Fuel pump. OFF**
- 6. Fuel Selector. OFF
- 7. Ignition Switch. OFF
- 8. Suitable Landing Site. LOCATE
- 9. Landing Assured. MAINTAIN 90 MPH
- 10. Gear. AS DESIRED
- 11. Master Switch. OFF
- 12. Flaps. AS DESIRED
- 13. Seat Belts. TIGHT

PROPELLER OVERSPEED

NOTE: Governor malfunction or low oil pressure will cause propeller to go to low pitch / high rpm.

1. Throttle RETARD
2. Oil Pressure. CHECK
3. Propeller (if any control available) FULL DECREASE
4. Airspeed. REDUCE
5. Throttle. AS REQUIRED below 2700 RPM

ELECTRICAL FIRE IN FLIGHT

1. Master Switch. OFF
2. Vents OPEN
3. Heater & Defroster. OFF
4. Land as soon as possible.

ALTERNATOR FAILURE

NOTE: There will be zero indication on ammeter. Insure reading is actually zero by turning on electrical load such as the landing light. If no indication on ammeter assume failure.

1. Electrical load. REDUCE
2. Alternator circuit breakers. CHECK
3. Alternator switch. OFF (for one second) ON

EMERGENCY GEAR EXTENSION

NOTE: Accomplish the following prior to initiation of the emergency extension procedure:

1. Master Switch. ON
2. Circuit Breakers. CHECK
3. Panel Lights. OFF (in daytime)
4. Gear Indicator Bulbs CHECK

NOTE: For emergency gear extension training, pull the LANDING GEAR PUMP circuit breaker. Reset after emergency extension is complete.

WARNING: Position indicator lights will not work when the circuit breaker is pulled out.

5. Reduce airspeed BELOW 100 MPH
6. Gear selector switch. DOWN
7. Emergency Gear Lever. EMERGENCY DOWN POSITION
8. If gear has still failed to lock down, yaw the airplane abruptly from side to side with rudder.

WARNING: If all electrical power has been lost, the landing gear must be extended using the above emergency procedures.

CAUTION: The landing gear position indicator lights will be inoperative.