

Piper Arrow Emergency Procedures Checklist

5/20/2002

FIRES

ENGINE FIRE DURING START ON GROUND

- | | |
|-------------|-------------------|
| 1. Starter | Continue Cranking |
| 2. Mixture | IDLE CUT-OFF |
| 3. Throttle | Full OPEN |

If Fire Continues or Engine Fails to Start

- | | |
|---|-----|
| 4. Fuel Pump | OFF |
| 5. Fuel Selector | OFF |
| 6. Ignition Switch | OFF |
| 7. Master Switch | OFF |
| 8. Abandon Aircraft and Use Fire Extinguisher | |

If Engine Starts

- | | |
|-------------|-----------------------|
| 1. Throttle | 2000 RPM for 1 Minute |
| 2. Engine | Shutdown and Inspect |

ENGINE FIRE ON GROUND

- | | |
|---|--------------|
| 1. Fuel Selector | OFF |
| 2. Fuel Pump | OFF |
| 3. Mixture | IDLE CUT-OFF |
| 4. Ignition Switch | OFF |
| 5. Master Switch | OFF |
| 6. Abandon Aircraft and Use Fire Extinguisher | |

ENGINE FIRE IN FLIGHT

- | | |
|-----------------------|----------------|
| 1. Fuel Selector | OFF |
| 2. Throttle | Closed |
| 3. Mixture | IDLE CUT – OFF |
| 4. Fuel Pump | OFF |
| 5. Cabin Heat/Defrost | OFF |
| 6. Ignition Switch | OFF |
| 7. Master Switch | OFF |

FIRES

WING FIRE

- | | |
|---|-----------------------------|
| 1. Master Switch | OFF |
| 2. Airspeed | Increase to Extinguish Fire |
| 3. Slip to Keep Flames Away From Fuel Tanks and Cabin | |

CABIN OR ELECTRICAL FIRE IN FLIGHT

- | | |
|--------------------------------|-------------------------|
| 1. Master Switch | OFF |
| 2. Storm Window | CLOSED |
| 3. Floor Vents | CLOSED |
| 4. Cabin Heat & Defrost | OFF |
| 5. Fire Extinguisher | As Required |
| 6. Floor Vents | OPEN (When Fire is Out) |
| 7. Land as Soon as Practicable | |

If Fire Appears Out and Electrical Power is Necessary Continued Flight

- | | |
|------------------------------|-------------------------------|
| 1. All Switches But Ignition | OFF |
| 2. Circuit Breakers | Check (Do NOT Reset) |
| 3. Master Switch | ON |
| 4. Electrical Switches | ON One at a Time |

ENGINE FAILURES

ENGINE FAILURE DURING TAKEOFF ROLL

- | | |
|------------------------|--------------|
| 1. Throttle | IDLE |
| 2. Brakes | As Required |
| 3. Fuel Selector Valve | OFF |
| 4. Mixture | IDLE CUT-OFF |
| 5. Ignition Switch | OFF |
| 6. Master Switch | OFF |

ENGINE FAILURE IMMEDIATELY AFTER TAKEOFF

- | | |
|--------------------|------------------------|
| 1. Airspeed | 79 KIAS |
| 2. Gear | As Situation Dictates |
| 3. Flaps | As Required |
| 4. Fuel Selector | OFF |
| 5. Mixture | IDLE CUT-OFF |
| 6. Ignition Switch | OFF |
| 7. Master Switch | OFF (Before Touchdown) |

ENGINE FAILURE / POWER LOSS DURING FLIGHT (RESTART PROCEDURE)

- | | |
|-----------------------|-------------------------|
| 1. Airspeed | 79 KIAS |
| 2. Fuel Selector | Switch to Opposite Tank |
| 3. Fuel Pump | ON |
| 4. Mixture | Full RICH |
| 5. Alternate Air | OPEN |
| 6. Engine Instruments | Check |

ONCE POWER IS RESTORED

- | | |
|------------------|------------|
| 1. Alternate Air | CLOSED |
| 2. Fuel Pump | OFF |
| 3. Propeller | Adjust RPM |

FORCED LANDINGS

EMERGENCY LANDING WITHOUT ENGINE POWER

- | | |
|---|--|
| 1. Airspeed | 79 KIAS (1.5 NM/1000') |
| 2. Propeller | Full LOW RPM (Aft) |
| 3. Fuel Selector | OFF |
| 4. Fuel Pump | OFF |
| 5. Mixture | IDLE CUT-OFF |
| 6. Ignition Switch | OFF |
| 7. Seat Belts | Tighten |
| 8. Cabin Door | Unlatch Top and Bottom
Prior to Touchdown |
| 9. Squawk 7700 and Make a MAYDAY Call if Time Permits | |
| 10. Gear | As Situation Dictates |
| 11. Flaps | 40° Recommended
once Landing Assured |
| 12. Final Approach Speed | 79 KIAS |
| 13. Master Switch | OFF Prior to Touchdown |

PRECAUTIONARY LANDING WITH ENGINE POWER

- | | |
|---|--|
| 1. Squawk 7700 and Make a MAYDAY Call if Time Permits | |
| 2. ELT Remote Switch | ON |
| 3. Airspeed | 79 KIAS (best glide) |
| 4. Selected Field | Over-fly and Investigate |
| 5. Seat Belts & Harnesses | Tighten |
| 6. Cabin Door | Unlatch Top and Bottom
Prior to Touchdown |
| 7. Gear | As Situation Dictates |
| 8. Flaps | 40° On Final Approach |
| 9. Final Approach Speed | 79 KIAS |
| 10. Master Switch | OFF Prior to Touchdown |

FORCED LANDINGS

DITCHING

- | | |
|---|-----------------------------|
| 1. Squawk 7700 and make a MAYDAY call if time permits | |
| 2. ELT Remote Switch | ON |
| 3. Loose Objects | Secure or Jettison |
| 4. Seat Belts and Harnesses | Tighten |
| 5. Cabin Doors | Unlatch (top and bottom) |
| 6. Approach | |
| High Winds, Heavy Seas | Into the Wind |
| Light Winds, Heavy Swells | Parallel to Swells |
| 7. Gear | UP |
| 8. Flaps | 25 or 40 degrees |
| 9. Throttle / Propeller | 300 Ft./Min. @ 79 KIAS |
| 10. Touchdown | Level Attitude @ 300 Ft/Min |

FUEL SYSTEM MALFUNCTIONS

FUEL PRESSURE DROP

- | | |
|------------------|-----------------------|
| 1. Fuel Pump | ON |
| 2. Mixture | Full RICH |
| 3. Fuel Selector | Check on Fullest Tank |

If Fuel Pressure Not Restored

1. Land as Soon as Practicable

OIL SYSTEM MALFUNCTIONS

LOW OIL PRESSURE WITH NORMAL OIL TEMPERATURE

1. Throttle / Propeller Make Minimum Power Changes
2. Conserve Altitude Until Landing is Assured
3. Land as Soon as Practicable

ZERO OIL PRESSURE WITH HIGH OIL TEMPERATURE

1. Throttle / Propeller Minimum Power Changes
2. Execute PRECAUTIONARY LANDING

ELECTRICAL SYSTEM MALFUNCTIONS

ALTERNATOR FAILURE (Ammeter Reads Zero)

1. Confirm by Activating Landing Light or Other Equipment
2. Avionics Master Switch OFF
3. Nonessential Equipment OFF
4. Alternator Circuit Breakers Check *
5. Master Switch OFF for 30 Sec Then ON
6. Ammeter Check for Positive Load

If Alternator Does Not Reset

1. Alternator Switch OFF (Right Half of Master Switch)
2. Electrical Load Minimize
3. Land as Soon as Practicable

* Allow circuit breaker to cool 3 minutes before resetting

NOTE: If the battery discharges completely, the gear must be lowered using the emergency landing gear extension procedure and the landing gear position lights will be inoperative.

LANDING GEAR FAILURES

FOR ALL LANDINGS WITH A GEAR MALFUNCTION

1. Reduce Fuel Load to a Minimum
2. Divert to a Field With Adequate Crash Response
3. Seat Belts and Harnesses Tighten
4. Cabin Door Unlatch Prior to Touchdown
5. Abandon Aircraft Immediately Once Stopped

LANDING GEAR FAILS TO EXTEND

- | | |
|---|--------------------------|
| 1. Gear Switch | Check DOWN |
| 2. Master Switch | Check ON |
| 3. Gear Pump & Indicator
Lights Circuit Breakers | Check * |
| 4. Panel Lights | Check OFF (Daytime) |
| 5. Indicator Bulbs | Check (Try Another Bulb) |
| 6. Gear Position | Check with an Observer |
| 7. Gear | Recycle If Appropriate |

If Gear Still Fails to Extend **

1. Emergency Gear Lever EMERGENCY DOWN and Hold Until Gear Lock Down

If Gear Still Fails to Extend **

1. Yaw Aircraft Abruptly With Rudder

* Allow circuit breaker to cool 3 minutes before resetting

** If electrical power has been lost the landing gear position indicator lights will be inoperative.

GEAR-UP LANDING

- | | |
|-------------------------|---------|
| 1. Flaps | 40° |
| 2. Final Approach Speed | 79 KIAS |

When Landing is Assured

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|--------------------|--------------|
| 1. Mixtures | IDLE CUT-OFF |
| 2. Ignition Switch | OFF |
| 3. Master Switch | OFF |
| 4. Fuel Selector | OFF |

LANDING WITH ONE MAIN GEAR UP OR UNSAFE

- | | |
|-------------------------|-----------------------|
| 1. Indicator bulbs | CHECK WITH OTHER BULB |
| 2. Final Approach Speed | 79 KIAS |
| 3. Master Switch | OFF |

At Touchdown or When Landing is Assured

- | | |
|---|--------------|
| 1. Mixtures | IDLE CUT-OFF |
| 2. Ignition Switch | OFF |
| 3. Touchdown on the Side of the Runway of Extended Gear | |
| 4. Fuel Selector | OFF |
| 5. Master Switch | OFF |

LANDING WITH NOSE GEAR UP OR UNSAFE

- | | |
|-------------------------|---------|
| 1. Final Approach Speed | 90 KIAS |
|-------------------------|---------|

At Touchdown or When Landing is Assured

- | | |
|--|--------------|
| 1. Mixtures | IDLE CUT-OFF |
| 2. Ignition Switch | OFF |
| 3. Master Switch | OFF |
| 4. Fuel Selector | OFF |
| 5. Lower Nose Gently as Aircraft Slows | |

LANDING WITH A FLAT NOSE TIRE

- | | |
|--|---|
| 1. Flaps | 40° (Full DOWN) |
| 2. Touchdown on the Center of the Runway | |
| 3. Control Wheel | Full Aft to Minimize Weight on the Nose Wheel |
| 4. Braking | Minimum Required |

TIRE BLOW OUT ON TAKEOFF

1. Do Not Retract Gear

AFTER EMERGENCY LANDING

1. Master Switch Confirm OFF
2. Abandon Aircraft Until All Danger of Fire has passed

When it is safe to return to the aircraft

1. ELT ON

If Radio is Still Operative

1. Make Periodic Mayday Call and Monitor 121.5 for Instructions

OTHERS

EMERGENCY DESCENT

1. Throttle IDLE
2. Propeller Full HIGH RPM (Forward)
3. Mixture Full RICH
4. Gear DOWN (<130 KIAS)
5. Flaps 40° (Full DOWN)

PROPELLER OVERSPEED

1. Airspeed Reduce
2. Throttle Reduce
3. Propeller Retard to LOW RPM Then Set if any Control Available
4. Oil Pressure Check
5. Throttle As Required Below 2700 RPM
6. Land as Soon as Practicable

SPIN

1. Throttle Idle
2. Ailerons Neutral
3. Rudder Full Opposite Direction of Spin
4. Control Wheel Forward
5. Rudder Neutral When Rotation Stops
6. Recover Smoothly From Ensuing Dive

CABIN DOOR OPEN INFLIGHT

1. Airspeed 79 KIAS
2. Floor Vents CLOSED
3. Storm Window OPEN
4. Push Door Open Against Slipstream Then Slam it Closed

Note: A slip in the direction of the open door will assist in latching.

PITOT-STATIC SYSTEM FAILURE

1. Pitot Heat ON
2. Alternate Static Source ON
3. Consult POH for Airspeed & Altitude Corrections

RADIO FAILURE

1. Audio Controls Check volume
2. Headset Jacks Check for connection
3. Circuit Breakers Check in
4. Speaker ON
5. Attempt Contact on Another Frequency
6. Attempt Contact Using Hand Held Microphone

If Radio Contact Cannot Be Established and is Required (Class B, C, and D Airspace)

1. Transponder 7600
2. Continue Transmissions (Only Receiver May Be Inop)
3. Monitor Nav-aids For Voice Transmissions