



Normal/Abnormal/Emergency Checklists

Revision 08 – 05/10/2023

PIPER WARRIOR II PA-28-161

PREFLIGHT

Pitot Mast Cover Removed

Cabin:

- Documents Checked
- Control Locks Removed
- Parking Brake Set
- Avionics & Aspen Master OFF
- Master Switch ON
- Electric Fuel Pump Check
- Fuel Quantity Gauges Check
- Magneto Switch OFF
- Pitot Heat (IFR) ON
- Aircraft Lights ON

Exit Aircraft and Quickly Complete:

- Stall Warning Horn Check
- Pitot Heat (IFR) Check
- Aircraft Lights Check
- Pitot Heat OFF
- Aircraft Lights OFF
- Master Switch OFF
- Flaps Extended Full
- Pitch Trim Control Takeoff

Right Wing:

- Flaps Check
- Aileron Check
- Surface Condition Check
- Wing Tie Down Disconnect
- Main Wheel Tire Check
- Brake Pad/Disc Check
- Fuel Quantity Check
- Fuel Tank Sump Drains Drain
- Fuel Filler Cap Secure

THIS CHECKLIST MUST REMAIN IN AIRPLANE

ENGINE START

Cold:

- Throttle ¼ Inch Open
- Anti-Collision Switch ON
- Battery Master ON
- Electric Fuel Pump ON
- Mixture Rich
- Prime As Required
- Propeller Area Clear
- Magneto/Starter Engage



CAUTION: If engine does not start within 10 seconds, follow Starter Limits, and wait 20 seconds. Restart procedure at “Mixture”

Hot:

- Throttle ½ Inch Open
- Anti-Collision Switch ON
- Battery Master ON
- Electric Fuel Pump ON
- Mixture Rich
- Propeller Area Clear
- Magneto/Starter Engage



CAUTION: If engine does not start within 10 seconds, follow Starter Limits, and wait 20 seconds. Restart procedure at “Mixture”

Flooded:

- Throttle Full Open
- Anti-Collision Switch ON
- Batter Master ON
- Electric Fuel Pump OFF
- Mixture Idle Cut-Off
- Propeller Area Clear
- Magneto/Starter Engage
- Mixture (When Engine Starts) .. Smoothly Advance
- Throttle Reduce

CAUTION: If engine does not start within 10 seconds, follow Starter Limits, and wait 20 seconds. Proceed to Hot or Cold Start procedure; Attempt a start with minimum prime to avoid re-flooding the engine

AFTER START

- Tachometer 1000RPM
- Oil Pressure Check
- Electric Fuel Pump OFF
- Mixture As Required
- NAV Light As Required
- Primer Check Locked
- Avionics & Aspen Master ON
- Fuel Selector Switch Tank
- Transponder ALT and “SET”

BEFORE TAXI

ATIS/AWOS/ASOS.....Obtain
Altimeter(s).....Set
Heading Indicator Match Compass
Radio Check..... Completed
Aircraft LightsAs Required
Seat and Seatbelts Secure
Taxi Briefing Completed
Parking Brake..... Release
Brakes..... Checked

RUN-UP

Parking Brake.....Set
Flight Controls Free and Correct
Flight Instruments Check
Annunciator Panel Check
Fuel Selector Fullest Tank
Pitch Trim Control..... Takeoff
Primer..... In & Locked
Mixture Rich
Throttle 2000RPM
Magnetos Check L & R
Oil Pressure/Temperature Check
Fuel Pressure Check
Carburetor Heat..... Check
Suction Gauge..... Check
Circuit Breakers..... Check
Ammeter Check
Throttle Check Full Idle
Throttle 1000RPM
Throttle Friction Lock..... Adjust

BEFORE TAKEOFF

FlapsAs Required
Mixture Rich or As Required
Electric Fuel PumpON
Pitot HeatAs Required
COM/NAV Frequency.....Set
Transponder.....Set
Cabin Door/Windows.....Closed/Locked
Takeoff Briefing/Time Reviewed
Brakes Release
Landing Light.....ON

CLIMB

Airspeed 79 KIAS (87 KIAS En-Route)
MixtureAs Required
Flaps UP
Engine Gauges..... Checked

Nose:

Surface Condition..... Check
Engine Oil (*Minimum 6 Quarts*) Check
Engine Cooling Air Inlets Check
Propeller and Spinner..... Check
Nosewheel Strut and Tire Check
Chocks Removed

Left Wing:

Fuel Quantity..... Check
Fuel Filler Cap..... Secure
Fuel Tank Vent Tab..... Check
Main Wheel Tire Check
Brake Pad/Disc Check
Fuel Tank Sump Drains..... Drain
Wing Tiedown Disconnect
Stall Warning Opening..... Check
Pitot Mast Check
Static Source..... Check
Aileron..... Check
Flaps Check
Surface Condition..... Check

Empennage:

Surface Condition..... Check
Tail Tiedown..... Disconnect
Control Surfaces..... Check
Stabilator Anti-Servo Tab Check
Antennas..... Check
Baggage Compartment Door..... Locked

Final Walk Around:

Chocks Removed
Fuel Caps..... Secure
Engine Air Inlet Covers..... Removed
Pitot Mast Cover..... Removed
Baggage Door Closed and Locked

BEFORE START

Passenger Briefing Completed
Seat and Seatbelts Adjust and Lock
Hobbs and Tach Time Verify
Brakes..... Test
Circuit Breakers..... Check In
Avionics & Aspen Master..... OFF
Carburetor Heat..... OFF
Flaps Up
Parking Brake..... Set
Alternate Static..... Closed
Fuel Selector Desired Tank

CRUISE

Throttle 2000-2700 RPM
Mixture As Required
Electric Fuel Pump OFF
Engine Gauges Check
Landing Light OFF

DESCENT

Throttle As Required
Mixture Adjust
Landing Light ON
ATIS/AWOS/ASOS Obtain
Altimeter(s) Set

BEFORE LANDING

Seat and Seatbelts Check Secure
Fuel Selector Fullest Tank
Mixture Rich
Electric Fuel Pump ON
Carburetor Heat As Required
Approach Briefing Complete

AFTER LANDING

Flaps Retracted
Mixture As Required
Electric Fuel Pump OFF
Aircraft Lights As Required
Pitot Heat OFF
Carburetor Heat OFF
Pitch Trim Control Takeoff

SHUTDOWN

Parking Brake On
Throttle 1000RPM
ELT Silent on 121.500MHz
Transponder ALT and "1200"
Avionics & Aspen Master OFF
Mixture Idle Cut-Off
Magneto Switch Off and Key Removed
Master Switch OFF
Hobbs and Tach Time Record

Final Walk-Around:

Control Lock Install
Engine Air Inlet Covers Install
Pitot Tube Cover Install
Chocks Install
Parking Brake Release

REMOVE ALL PERSONAL BELONGINGS

Ensure the aircraft is left in a clean manner for the next pilot. Debris left can cause major damage.

DO NOT RUSH

ENGINE POWER LOSS DURING TAKEOFF

Throttle Closed
Land Straight Ahead
Brakes Apply

ATC/CTAF Notify

ENGINE POWER LOSS DURING FLIGHT

Airspeed 73 KIAS
Suitable Place to Land Identify

If Altitude Permits:

Fuel Selector Switch to Tank Containing Fuel
Electric Fuel Pump ON
Mixture Rich
Carburetor Heat ON
Engine Gauges Check
Primer Check Locked
Magnetos Both

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

If Power is Restored:

Carburetor Heat Off
Electric Fuel Pump Off

If Power is NOT Restored:

Trim 73 KIAS
Land Proceed to Power Off Landing Procedure

POWER OFF LANDING

Suitable Place to Land Identify
Ignition OFF
Master Switch OFF
Fuel Selector OF
Mixture Idle Cut-Off
Seatbelt and Harness Tight
Transponder 7700
Door Open
Radio Transmit
Flaps As Desired
Passengers Briefed
Airspeed (Upon Landing) 63 KIAS

FLY THE AIRPLANE

OPEN DOOR

If both upper and lower latches are open, the door will trail slightly open, and airspeeds will be reduced slightly

To close the door in flight:

Airspeed 89 KIAS
Cabin vents Close
Strom window Close
If upper latch is open Latch
If side latch is open Pull arm rest, move
Handle to the latched position
If both latches are open Latch side, then top

HIGH OIL TEMPERATURE

Land at nearest airport and investigate the problem. Prepare for power off landing.

ENGINE ROUGHNESS

Carburetor Heat ON

If roughness continues after one minute:

Carburetor Heat OFF
Mixture Adjust for Max Smoothness
Electric Fuel Pump ON
Fuel Selector Switch Tanks
Engine Gauges Check
Magneto Switch "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

ELECTRICAL OVERLOAD

Alternator over 20 AMPS above known load:

ALT Switch ON
BATT Switch OFF

If Alternator Load Reduced:

Electrical Load Reduce to Minimum

If Alternator Load is NOT Reduced:

ALT Switch OFF
BATT Switch As Required

DO NOT RUSH

ENGINE FIRE DURING START

Ignition/Starter Continue to Crank Engine
Mixture Idle Cut-Off
Throttle Open
Electric Fuel Pump OFF
Fuel Selector OFF

If Fire continues Abandon Aircraft

ENGINE FIRE IN FLIGHT

Fuel Selector OFF
Throttle Closed
Mixture Idle Cut-Off
Electric Fuel Pump OFF
Heater and Defroster OFF

If Fire continues:

Airspeed Increase
Land ... Proceed to Power-Off Landing Procedure

ELECTRICAL FIRE (SMOKE IN CABIN)

Master Switch OFF
Vents Open
Heater and Defroster OFF

Fire Extinguisher Use As Needed
Emergency Descent Complete as Needed
Land As Soon As Practical

SPIN RECOVERY

Throttle Closed
Ailerons Neutral
Rudder Full opposite to Direction of Spin
Control Wheel Full forward
Rudder Neutral (When Rotation Stops)
Control Wheel As required for level flight

CARBURETOR ICING

Carburetor Heat ON
Mixture Adjust for max smoothness

LOSS OF FUEL PRESSURE

Electric Fuel Pump ON
Fuel Selector Check on Full Tank

FLY THE AIRPLANE

ELECTRICAL FAILURE

“ALT” Annunciator Light Illuminated:

Ammeter..... Check to Verify INOP

If Ammeter Shows Zero:

ALT Switch OFF

Electrical Load..... Reduce to Minimum

Alternator Circuit Breaker Check and Reset

ALT Switch ON

If Electrical Power is NOT Restored:

ALT Switch OFF

CAUTION: 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. Land as soon as practical.

ASPEN EFD1000 AHRS FAIL

“CROSS CHECK ATTITUDE” Annunciator or Red “X” over Attitude indicator:

Maintain Flight..... Straight and Level

Menu Key Press

Right Knob..... Rotate Counterclockwise to Page 1

AHRS Menu Key (Key 5) Push to request

AHRS Menu Key (Key 5) Push to confirm

Menu Key Press

If annunciators or red “X” remains:

Standby Attitude Indicator..... Monitor

ASPEN EFD1000 ADC FAIL

No Pitot Static information is displayed:

Alternate Static ON

Pitot Heat ON

Standby Instruments..... Monitor

ASPEN EFD1000 EXTERNAL POWER LOSS

Red “ON BAT XY% REM” is displayed.

Electrical Load..... Monitor

CAUTION: The EFD1000 internal battery will provide approximately 30 minutes of operation for the AHRS and display following loss of aircraft power. If aircraft power cannot be restored, the pilot should follow the electrical failure checklist.

IMPORTANT SPEEDS:

V _G	73 KIAS
V _R	55 KIAS
V _Y	79 KIAS
V _X	63 KIAS
V _S	50 KIAS
V _{SO}	44 KIAS
V _{FE}	103 KIAS
V _{NO}	126 KIAS
V _{NE}	160 KIAS
V _A	88-111 KIAS

PASSENGER BRIEFING:

Seatbelts/Harness

- Operation and Adjustment
- Fastened for Taxi, Takeoff, and Landing

Emergency Exits

- Location and Operation

Fire Extinguisher

- Location and Operation

Sterile Cockpit

Flight Controls

- Do not Block or Interfere

Emergency Procedures

TAXI BRIEFING:

Departure Runway

Anticipate Taxi Route

- Taxiways to be use
- Intersecting Runways
- Run-Up area
- Hotspots

TAKEOFF BRIEFING:

Departure Runway

- Length/Distance Available
- Surface Condition
- Wind Direction/Speed

Lift-Off Speed/ Initial Climb Speed

Emergency Procedures

- On-Ground
- In-Air

Normal Departure Procedures

CAUTION: Always ensure that you have the most recent revision of this checklist. Always refer to the pilots operating handbook for specific procedures. Always choose the safest course of action.

THIS CHECKLIST MUST REMAIN IN AIRPLANE