



WARRIOR

PA-28-161

PILOT'S CHECKLIST

2024

WARRIOR PA28-161

Speeds for Operation

Speeds are for maximum weight. To achieve the performance specified for takeoff distance, the speed appropriate to weight must be used.

TAKEOFF

Normal Rotation.....45-55 KIAS

Normal Climb-Out.....79 KIAS

CRUISE CLIMB

Best Rate of Climb(Vy).....79 KIAS

Best Angle of Climb(Vx).....63 KIAS

En Route Climb.....87 KIAS

BALKED LANDING, GO AROUND

Maximum Power, Flaps 25°63 KIAS

MANEUVERING SPEED

(Max. Recommended. Turbulent Air Penetration Speed)

2440 LBS.....111 KIAS

1531 LBS.....88 KIAS

MAXIMUM DEMONSTRATED CROSSWIND

Takeoff or Landing.....17 KTS

PREFLIGHT INSPECTION PREPARATION

Airplane Status.....AIRWORTHY, PAPERS ON BOARD

Weather.....SUITABLE

Weight and C.G.....WITHIN LIMITS

Charts and Navigation Equipment.....ON BOARD

Performance and Range.....COMPUTED AND SAFE

Baggage.....WEIGHED, STOWED, TIED

COCKPIT

Control Wheel.....RELEASE BELTS

Parking Brake.....SET

Radio Master Switch.....OFF

Electrical Switches (Fans, Pitot Heat, etc.)....OFF

Ignition.....OFF

Mixture.....IDLE CUT-OFF

Master Switch.....ON

Fuel Quantity Gauges.....CHECK

Annunciator Panel.....CHECK

Interior and Exterior Lights.....CHECK

Stall Warning.....CHECK

Pitot Heat.....CHECK

Master Switch.....OFF

Flight Controls.....FREE AND CORRECT

Flaps.....EXTEND

Trim.....CHECK, SET NEUTRAL

Pitot and Static Drains.....DRAIN, CLOSE

Window.....CHECK, CLEAN

Baggage, Empty Seats.....SECURE

Baggage Door.....CLOSE, SECURE

RIGHT WING

Wing.....FREE OF ICE, SNOW, FROST

Ailerons and Flaps.....CHECK MOVEMENT, SECURITY

Hinges.....CHECK FOR INTERFERENCE

Static Wicks.....CHECK

Wing Tip and Lights.....CHECK

Fuel Tank.....CHECK SUPPLY VISUALLY, SECURE CAP

Fuel Tank sump.....DRAIN

Fuel Vent.....CLEAR

Wing Tie Down and Chocks.....REMOVE

Main Gear Strut.....CHECK (4.5 in)

Tire.....CHECK

Brake Block and Discs.....CHECK.

Fresh Air Inlet.....CLEAR

NOSE SECTION

Fuel and Oil.....CHECK FOR LEAKS

Engine Oil.....CHECK LEVEL (MIN 6 QTS)

Dipstick.....PROPERLY SEATED

Cowling.....SECURE

Propeller and Spinner.....CHECK

Air Inlets.....CLEAR, REMOVE COVER

Alternator Belt.....CHECK TENSION

Landing Light.....CHECK

Nose Gear Strut.....CHECK (3.25 in)

Nose Wheel Tire.....CHECK

Fuel Strainer.....DRAIN

LEFT WING

Wing.....FREE OF ICE, SNOW, FROST

Fresh Air Inlet.....CLEAR

Main Gear Strut.....CHECK (4.5 in)

Tire.....CHECK

Brake Block and Discs.....CHECK

Fuel Tank.....CHECK VISUALLY, SECURE CAP

Fuel Tank Sump.....DRAIN

Fuel Vent.....CLEAR

Wing Tie Down and Chocks.....REMOVE

Pitot Head.....REMOVE COVER, HOLES CLEAR

Wingtip and Light.....CHECK

Aileron and Flaps.....CHECK MOVEMENT, SECURITY

Hinges.....CHECK FOR INTERFERENCE

Static Wicks.....CHECK

FUSELAGE

Antennas.....CHECK

Empennage.....FREE OF ICE, SNOW, FROST

Stabilator and Trim Tab.....CHECK FOR INTERFERENCE

Tail Tie Down.....REMOVE

Final Walk Around.....COMPLETE

BEFORE START

Preflight Inspection.....COMPLETE
Cabin Door.....CLOSE AND SECURE
Seat Belts & Harnesses..FASTEN, CHECK INERTIA
Brakes.....SET
Circuit BreakersIN
Carburetor Heat.....OFF
Fuel Selector.....ON DESIRED TANK
Flaps.....UP
Radio Master Switch.....OFF
Passenger Briefing.....COMPLETE
Battery Master.....ON

STARTING ENGINE WITH EXTERNAL POWER

REFER TO POH

ENGINE FIRE DURING START

Starter.....CRANK ENGINE
Mixture.....IDLE CUT-OFF
Throttle.....OPEN
Electric Fuel Pump.....OFF
Fuel SelectorOFF

ABANDON IF FIRE CONTINUES

STARTING ENGINE WHEN COLD

Throttle.....1/4" OPEN
Strobe Lights.....ON
Master Switch.....ON
Alternator Switch.....ON
Electric Fuel Pump.....ON
PrimeAS REQUIRED
Mixture.....FULL RICH
Propeller Area.....CLEAR
Starter.....ENGAGE
ThrottleADJUST TO 1000 RPM
Oil
Pressure.....CHECK

AFTER STARTING ENGINE

Strobe LightsOFF
Navigation Lights.....ON (night only)
Radio Master Switch.....ON
Fuel Pump.....OFF
Mixture.....RICH BELOW 5000'
Flaps.....UP
Radios.....SET AND TEST
Flight Instruments.....SET
Transponder.....STANDBY
Fuel Selector.....SWITCH TANKS
Dispatch.....RAMP OUT

STARTING ENGINE WHEN HOT

Throttle.....1/2" OPEN
Strobe Lights.....ON
Master Switch.....ON
Alternator Switch.....ON
Electric Fuel Pump.....ON
Mixture.....FULL RICH
Propeller Area.....CLEAR
Starter.....ENGAGE
ThrottleADJUST TO 1000 RPM
Oil Pressure.....CHECK
Ammeter.....CHECK

TAXI

Transponder.....ALT
Taxi Area.....CLEAR
Parking Brake.....RELEASE
Throttle.....APPLY SLOWLY
Brakes.....CHECK
Steering.....CHECK
Ailerons.....SET TO WIND CONDITIONS

STARTING ENGINE WHEN FLOODED

Throttle.....OPEN FULL
Master Switch.....ON
Alternator Switch.....ON
Electric Fuel Pump.....OFF
Mixture.....IDLE CUT-OFF
Propeller Area.....CLEAR
Starter.....ENGAGE
Mixture.....ADVANCE
ThrottleRETARD TO 1000 RPM
Oil Pressure.....CHECK
Ammeter.....CHECK

RUN UP

Brakes..... SET & HOLD
Mixture.....FULL RICH
Throttle.....2000 RPM
Magnetos.....CHECK (max drop 175 rpm, max difference 50 rpm)
Vacuum.....4.8" TO 5.2" Hg
Ammeter.....CHECK
Oil Temperature.....CHECK
Oil Pressure.....CHECK
Fuel Pressure.....CHECK
Annunciator Panel.....PRESS-TO-TEST
Carburetor Heat.....CHECK (approx. 75 RPM drop)
Throttle..... CHECK IDLE-THEN 1000 RPM
Auto-Pilot.....CHECK
a) Heading left, right, center and overpower
b) Altitude climb, descent, level and overpower
c) Check auto trim can be turned off
d) AP disconnect trigger

BEFORE TAKEOFF

Alternator and Master Switches.....ON
Flight Instruments.....CHECK
Fuel Selector.....FULLEST TANK
Electric Fuel Pump.....ON
Engine Gauges.....ALL IN GREEN
Carburetor Heat.....OFF
Mixture.....SET
Belts/Harnesses.....FASTENED/CHECK
Seat Backs.....ERECT
Flaps.....SET
Trim Tabs.....SET
Controls.....FREE AND
CORRECT
Crew Takeoff Briefing.....COMPLETE
Landing Light.....ON
Strobe Light.....ON
Parking

NORMAL TAKEOFF

Flaps.....UP
Throttle.....FULL
Rotate45-55 KIAS
Climb Speed.....79 KIAS

SHORT FIELD TAKEOFF 25° FLAPS

Flaps.....25°
Brakes.....HOLD
Throttle.....FULL INCREASE
Engine Gauges.....CHECK
Brakes.....RELEASE
Rotate.....52 KIAS
Climb Speed over Obstacle.....63 KIAS
Climb Speed.....79 KIAS
Flaps.....SLOWLY RETRACT

SOFT FIELD TAKEOFF 25° FLAPS

Flaps.....25°
Elevator Control.....TAIL LOW
Throttle.....ADVANCE SLOWLY
Engine Gauges.....CHECK
Accelerate.....IN GROUND EFFECT TO CLIMB
SPEED
Climb Speed with Obstacle.....63 KIAS
Climb Speed without Obstacle.....79 KIAS
Flaps.....SLOWLY RETRACT

ENGINE FAILURE DURING TAKE OFF

If sufficient runway remains for a complete stop:

Airspeed.....MAINTAIN SAFE AIRSPEED
Landing.....LAND AND STOP STRAIGHT AHEAD
Brakes.....AS REQUIRED

If Insufficient runway remains:

Airspeed.....MAINTAIN SAFE AIRSPEED
Flaps.....AS REQUIRED
(Make only shallow turns to avoid obstructions)

If sufficient altitude has been gained to attempt a restart:

Airspeed73 KIAS
Fuel Selector.....SWITCH to tank containing fuel
Elector Fuel pump.....ON
Mixture.....RICH
If power is not regained, proceed with power off landing

ENROUTE CLIMB (at 1000 AGL)

Airspeed.....87 KIAS
Throttle.....FULL OPEN
Landing Light.....OFF
Flaps.....UP

ENGINE FAILURE AFTER TAKEOFF

Airspeed.....73 KIAS
Mixture.....IDLE CUT-OFF
Fuel Selector.....OFF
Electric Fuel Pump.....OFF
Ignition Switch.....OFF
Alternator Switch.....OFF
Master Switch.....OFF
Flaps.....AS REQUIRED
MAKE ONLY SHALLOW TURNS TO AVOID OBSTRUCTIONS

CRUISE

PowerSET
Trim.....SET
Mixture.....RICH BELOW 5000 ft.
Electric Fuel Pump.....OFF
Engine Gauges.....CHECK

ENGINE FAILURE DURING FLIGHT

RESTART PROCEDURES

Airspeed.....73 KIAS
Fuel SelectorSWITCH TANKS
Electric Fuel Pump.....ON
Mixture.....RICH
Carburetor Heat.....ON

**IF POWER IS NOT RESTORED, PREPARE FOR POWER OFF
LANDING**

APPROACH

ATIS/AWOS.....CHECK
Altimeter.....SET
Nav Instruments..... SET
Stations.....IDENTIFY
HSI.....SET
Mode.....VLOC or GPS
Comm Radios.....SET
Approach Briefing.....COMPLETE
Before Landing Checklist.....COMPLETE
Backup Nav & Radios.....AS DESIRED

DESCENT NORMAL

Throttle.....AS REQUIRED (2500 RPM MAX)
Airspeed.....AS REQUIRED (126 KIAS MAX)
Mixture.....ENRICHEN
Carburetor Heat.....AS REQUIRED

DESCENT POWER OFF

Carburetor Heat.....AS REQUIRED
Mixture.....AS REQUIRED
Throttle.....CLOSE
Airspeed.....AS REQUIRED
Power.....VERIFY WITH THROTTLE EVERY 30 SECONDS

BEFORE LANDING

Seats.....ADJUST/SECURE
Belts/Harnesses.....FASTEN/CHECK
Electric Fuel Pump.....ON
Fuel SelectorFULLEST TANK
Mixture.....RICH
Landing Light.....ON
Carburetor Heat.....AS REQUIRED

LANDING

PowerAS REQUIRED
Flaps.....BELOW 103 KIAS
Airspeed.....70 ON FINAL, 63 KIAS ON FLARE

GO AROUND

Throttle.....FULL POWER
Flaps.....RETRACT TO 25°
Airspeed.....63 KIAS
Climb Speed.....79 KIAS AFTER OBSTACLE CLEARED
Flaps.....SLOWLY RETRACT

AFTER LANDING

Flaps.....0°
Transponder.....STANDBY
Electric Fuel Pump.....OFF
Landing Lights.....OFF (Except at Night)
Strobe LightsFIN
Mixture.....RICH BELOW 5000ft.
Flaps.....UP
Ailerons.....SET TO WIND CONDITIONS

SECURING AIRCRAFT

Transponder.....STANDBY
Electrical Equipment (Fans, Pitot Heat, etc.).....OFF
Radio Master Switch.....OFF
Throttle.....1000 RPM
Mixture.....IDLE CUT-OFF
Strobe Lights.....OFF
Navigation Lights.....OFF
Alternator Switch.....OFF
Master Switch.....OFF
Ignition Switch.....OFF AND REMOVE KEY
Parking Brake.....OFF
Tiedowns or chocks.....SECURE
Trash.....REMOVE

(If in windy conditions, secure control wheel with seatbelts)

EMERGENCY PROCEDURES

ENGINE FIRE DURING START

Starter.....CRANK ENGINE
Mixture.....IDLE CUT-OFF
Throttle.....OPEN
Electric Fuel Pump.....OFF
Fuel Selector OFF

ABANDON IF FIRE CONTINUES

ENGINE FAILURE DURING TAKE OFF

If sufficient runway remains for a complete stop:

Airspeed.....MAINTAIN SAFE AIRSPEED
Landing.....LAND AND STOP STRAIGHT AHEAD
Brakes.....AS REQUIRED

If Insufficient runway remains:

Airspeed.....MAINTAIN SAFE AIRSPEED
Flaps.....AS REQUIRED
(Make only shallow turns to avoid obstructions)

If sufficient altitude has been gained to attempt a restart:

Airspeed76 KIAS
Fuel Selector.....SWITCH to tank containing fuel
Elector Fuel pump.....ON
Mixture.....RICH

If power is not regained, proceed with power off landing

ENGINE FAILURE AFTER TAKEOFF

Airspeed.....73 KIAS
Mixture.....IDLE CUT-OFF
Fuel Selector.....OFF
Electric Fuel Pump.....OFF
Ignition Switch.....OFF
Alternator Switch.....OFF
Master Switch.....OFF
Flaps.....AS REQUIRED

MAKE ONLY SHALLOW TURNS TO AVOID OBSTRUCTIONS

ENGINE FAILURE DURING FLIGHT

RESTART PROCEDURES

Airspeed.....73 KIAS
Fuel SelectorSWITCH TANKS
Electric Fuel Pump.....ON
Mixture.....RICH
Carburetor Heat.....ON

IF POWER IS NOT RESTORED, PREPARE FOR POWER OFF LANDING

POWER OFF LANDING (Off Airport)

LOCATE SUITABLE FIELD, ESTABLISH BEST GLIDE
Seatbelts and Harnesses.....SECURE AND TIGHT
Airspeed.....63 KIAS, FLAPS DOWN
Ignition Switch.....OFF
Master Switch.....OFF
Alternator Switch.....OFF
Fuel Selector.....OFF
Electric Fuel Pump.....OFF
Mixture.....IDLE CUT-OFF
Door.....UNLATCH PRIOR TO TOUCHDOWN

FIRE IN FLIGHT

Source of Fire.....CHECK

ELECTRICAL FIRE
(Smoke in Cabin)

Master Switch.....OFF
Alternator Switch.....OFF
Vents.....OPEN
Cabin Heat.....OFF

LAND AS SOON AS PRACTICAL
ENGINE FIRE

Fuel Selector.....OFF
Throttle.....CLOSED
Mixture.....IDLE CUT-OFF
Electric Fuel Pump.....CHECK OFF
Heater.....OFF
Defroster.....OFF

PROCEED WITH POWER OFF LANDING PROCEDURE

LOSS OF OIL PRESSURE

LAND AS SOON AS POSSIBLE, INVESTIGATE CAUSE.
PREPARE FOR POWER OFF LANDING

LOSS OF FUEL PRESSURE

Electric Fuel Pump.....ON
Fuel Selector.....SWITCH

HIGH OIL TEMPERATURE

LAND AT NEAREST AIRPORT, INVESTIGATE THE CAUSE
PREPARE FOR POWER OFF LANDING

EMERGENCY PROCEDURES CONT'D

ELECTRICAL FAILURES

NOTE: Anytime the bus voltage is below 25 Vdc, the low bus voltage Annunciator will be illuminated.

ALT ANNUNCIATOR LIGHT ILLUMINATED:

Ammeter.....CHECK TO VERIFY INOP. ALTERNATOR

IF AMMETER SHOWS ZERO:

Alternator Switch.....OFF
Electrical Load.....REDUCE TO MINIMUM
Alternator Circuit Breaker.....CHECK and RESET AS REQUIRED
Alternator Switch.....ON

IF POWER NOT RESTORED:

Alternator Switch.....OFF
Electrical Load..... REDUCE

ELECTRICAL OVERLOAD

(Alternator over 20 amps above known electrical load)

Alternator Switch.....ON
Master Switch.....OFF

IF ALTERNATOR LOADS ARE REDUCED:

Electrical Load.....REDUCE TO MINIMUM

LAND AS SOON AS PRACTICAL

NOTE: Due to increased system voltage and radio frequency noise, operation with ALT switch ON and BATT switch OFF should be made only when required by an electrical system failure.

IF ALTERNATOR LOADS ARE NOT REDUCED:

Alternator Switch.....OFF
Master Switch.....AS REQUIRED

**LAND AS SOON AS PRACTICAL.
ANTICIPATE COMPLETE ELECTRICAL FAILURE.**

SPIN RECOVERY

Throttle.....IDLE
Control Wheel.....FULL FORWARD WHEN NEUTRALIZING AILERONS
Rudder.....FULL OPPOSITE TO DIRECTION OF ROTATION
Rudder.....NEUTRAL WHEN ROTATION STOPS
Control Wheel.....AS REQUIRED TO SMOOTHLY REGAIN LEVEL FLIGHT ATTITUDE

OPEN DOOR

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

TO CLOSE DOOR IN FLIGHT:

Airspeed.....89 KIAS
Cabin Vents.....CLOSE
Storm Window.....OPEN
If Top Latch is Open.....LATCH
If Side Latch is Open.....PULL ON ARM REST WHILE MOVING LATCH HANDLE TO LATCHED POSITION
If Both Latches Are OpenLATCH SIDE LATCH THEN TOP

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 magneto, continue on that magneto at reduced power and full RICH mixture to first airport.

PREPARE FOR POWER OFF LANDING

CARBURETOR ICING

Carburetor Heat.....ON
Mixture.....ADJUST FOR MAX SMOOTHNESS