



WARRIOR

PA-28-161

PILOT'S CHECKLIST

2025

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 (SAFETY).....COMPLETE
 Battery Master.....ON

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

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

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

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 Selector.....OFF

ABANDON IF FIRE CONTINUES

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

TAXI

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

RUN UP

Brakes/Parking Brake.....HOLD AND SET
 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

- Heading left, right, center and overpower
- Altitude climb, descent, level and overpower
- Check auto trim can be turned off
- AP disconnect trigger

 Controls.....FREE
 TrimNEUTRAL
 Crew Takeoff Briefing.....COMPLETE

BEFORE TAKEOFF

Flight Instruments (standby).....CHECK/SET
 Radios and Avionics.....SET
 Transponder.....SET
 Engine Gauges.....CHECK
 Fuel Quantity.....SUFFICIENT
 Fuel SelectorFULLEST TANK
 BATT MASTR / ALTR Switch.....ON
 FUEL PUMP.....ON
 LEFT/RIGHT Magneton.....ON
 Landing Light.....ON
 Strobe LightON
 Carburetor Heat/Alternate Air.....OFF
 Friction Handle.....SET
 Mixture.....SET
 FlapsSET
 TrimNEUTRAL
 Warning Lights.....CHECK
 SeatADJUST/SECURE
 Belts/Harnesses.....FASTENED
 Crew Takeoff Briefing.....AS REQUIRED
 Air Conditioner (if installed).....OFF
 Doors and Windows.....CLOSED & LATCHED

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

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

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

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)

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

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
Electric 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