

PA28-151 – Warrior PREFLIGHT CHECKLIST

Revision 1-10-2021

DISPATCH CHECK

1. Weather & Notams.....Obtained.
2. Squawks.....Binder reviewed.
3. Inspections....Binder dates reviewed.
4. Sick sacks.....Two in binder.

ARRIVAL

1. Baggage Door.....Opened.
2. Fuel Quantity.....Checked.
3. Fuel Sumped...Wings & Gascolator.
4. Tiedowns, Chocks, Plugs, Covers
.....Removed.
5. Oil Level.....6 to 7 Quarts.

INTERIOR PREFLIGHT

1. Flaps.....Cycled & TAKE OFF Set.
2. Parking Brake.....As Needed.
3. Control Lock.....Removed.
4. Flight Controls.....Freed /
.....full/correct travel Checked.
5. Mixture.....Idle cut off.
6. Friction lock.....Set desired.
7. Carb Heat.....OFF.
8. Hobbsmeter.....Recorded.
9. Circuit Breakers.....All in.
10. Switch BreakersAll OFF.
11. Battery Master.....ON.
12. Panel Light Rheostat....Set as desired.
13. Fuel Gages...Compared to visual Qty.
14. (Voltmeter.....Checked /TO BE INSTALLED.)
15. Fuel PumpON /OFF
.....Positive Pressure Tests.
16. Annunciators.....Tested.
17. Pitot Heat/External Lights, Stall Bell.
.....Checked (Exit & enter cabin).
18. SwitchesAll OFF.
19. Battery Master.....OFF.

20. Magnetos/Ignition Switch.....OFF.
26. Fuel Selector.....Set to least full.
27. Alternate Static.....Tested as needed.
28. Pitot Static.....Purged. As needed.
29. Heating and Cooling Vents.....Set.
30. Compass Card.....Installed.
31. Altimeters.....Field Elevation Set.
32. Documentation...AR(R)OW Checked.
33. Passenger Brief Cards.....Located.
34. Fire Extinguisher...Checked integrity.

EXTERIOR PREFLIGHT

1. Cabin RoofAntennas inspected.
2. Right Main Landing Gear.....Rear
Inspected. (Tread, Scissor hinge)
3. Right Flap.....Secure.
.....Only has up/down play.
4. Right Aileron.....Secure.
.....Free & correct travel.
.....Only has up/down play. Actuator.
5. Right Wing Tip..Undamaged/secured.
6. Right Wing Surface & Lead edge.....
.....Undamaged.
7. Right Wing Tie Down.....Untied.
8. Inspection Panels.....Closed.
.....Screws flush.
9. Right Fuel Vent.....Clear.
10. Fuel Cap.....Secured.
11. Main LDG Gear.....Front inspected.
(Tread Inflation, hub, cotter pin, disk,
pads, lines, absorber).
12. Nose Landing Gear..... Inspected.
.....Crank Case Oil Breather,
.....Tow limits, Spring, Actuators,
13. Engine Intakes.....Clear.
14. Propeller.....Inspected.
15. Spinner.....Inspected.
16. Alternator Belt.....Secured.
17. Engine Compartments...Inspected.
18. Left Cowl Hardware.....Inspected.
19. Left MLG.....As per Right side.
20. Stall Vane.....Inspected.

21. Pitot Static Mast.....Inspected.
22. Left Underside, Tiedown, Fuel
Drain, Fuel Vent, Sump, Tank, Cap,
Wing Surface, Lead edge, Wingtip,
Aileron, Flap.....As per Right side.
23. Transponder Antenna.....Inspected.
24. Left Fuselage.....Inspected.
25. Vertical Stabilizer.....Secured.
26. Rudder.....Undamaged. Has play.
27. Tail Cone.....Screws secure.
28. Tail.....Untied.
29. Stabilator & Actuator.....Free
.....travel, undamaged. Recess
.....unobstructed.
30. Stabilator TabSecure
.....Vertical play only.
31. Right Fuselage.....Inspected.
32. Windshield.....Clean?
.....(Use Pledge & diaper rags).
33. Shock Struts.....Clean?
.....(Spray clean with brake cleaner.)

PREFLIGHT COMPLETION

1. Oil Cans & Shop towels in Trash Box
Only.
2. Wash hands after handling fuel, oil,
or chemicals!
3. Loose Baggage.....Secured.
4. Baggage door.....Locked shut.
5. WALK AROUNDChocks, tiedowns,
cowl plugs, towbars.....Removed.
Fuel and oil caps.....Secured.

REFERENCE CARD

Revision 9-20-2021

PASSENGER BRIEFING

1. **Seat belt operation.**
2. **Cabin Doors & Window Operation.**
3. **No smoking.**
4. **Moving Switches & Controls –**
Obtain Permission from PIC and use Positive Exchange.
5. **Passenger Illness:**
 - a. Sick sack location.
 - b. Informing crew early.
 - c. Air vent function.
6. **Forced landing:**
 - a. Seats back, glasses off.
 - b. Loose Items - Stow
 - c. Assume Brace position.
 - d. Cushioning – Obtain.
 - e. Unlatch doors only on PIC's cue.
 - f. Exit 45 degrees to rear after landing.
7. **Safety Equipment Location/Use:**
 - a. Fire Extinguisher & Smoke Masks.
 - b. Egress Hammer & First Aid Kit.
 - c. Forest Extraction Kit.
 - d. Flotation Devices.
 - e. EFB Fire Containment Bag.
8. **Unnecessary conversion** - Avoid during critical phases.
9. **Passengers assist in locating traffic.**

AUTOPILOT CHECK

1. **HDG Bug**12:00.
2. **"TEST"**Press.
3. **HDG & ALT MODE**.....Push.
.....Modes Annunciated.
.....Controls stiffen & follow Bug.
4. **"UP & "DOWN"**.....TEST.
5. **YOKE AP DISCONNECT**.....Depress.
.....Controls Released.

DEPARTURE BRIEFING

(Accomplish by Before Engine Start Flow)
DOCUMENT REVISION: 9-24-2021

ROUTE WEATHER & NOTAMS...(As Needed.)

WE HAVE ____ GALLONS PER SIDE & ____QTS OF OIL. (SQUAWKS REVIEWED.) I AM (Pilot Flying /Training /Monitoring). YOU ARE (PF/PT/PM). ____ AM/ARE PIC.

WE ARE DEPARTING RUNWAY _____. TAXI ROUTE IS _____. NOTAMS / HOTSPOTS (SPECIFY AS NEEDED). RUNWAY IS _____ FEET LONG WITH (LEFT/RIGHT) TRAFFIC. WIND WILL MOSTLY BE ON THE (LEFT/RIGHT) SIDE OF THE RUNWAY. BY ABOUT TWO STRIPES DOWN THE RUNWAY WE SHOULD BE AT 40 KNOTS. WE'LL CONFIRM GOOD ACCELERATION MIDWAY IN THE TAKE OFF ROLL. WE SHOULD ROTATE AT ABOUT (____ FEET OF GROUND ROLL / NEAR TAXIWAY ____)

ROTATE AT ____ KNOTS & PITCH FOR ____ KNOTS. PASSING ____ FEET, (FLY HEADING / TURN CROSSWIND) _____. TOP OF CLIMB IS _____ FEET. WE WILL BE CLOSED TRAFFIC (or) PRIMARY NAVIGATION WILL BE [VISUAL, LOOKING FOR _____ (LANDMARK) / (GPS TO ____ / THE ____ VOR)].

IN THE EVENT OF AN EMERGENCY, ____ WILL FLY THE AIRPLANE, AND

____ WILL DECLARE THE EMERGENCY & RUN THE CHECKLIST BY "CHALLENGE & RESPONSE RESPONSE" ____ WILL TRANSFER THE AIRPLANE IF ____ CALL FOR IT. (Insure PM can locate key Emergency checklists.)

DEPARTURE ENGINE OUT BRIEF

(Accomplish by Final Items Flow)

WITH RUNWAY.....STOP.
NO RUNWAY OR ALTITUDE
.....GLIDE AHEAD & SECURE.
(Securing: Mix OFF. Flaps SET. Main OFF)
.....APPROACH BEST SURFACE.
.....and TURN INTO WIND.

LOW ALTITUDE
....TROUBLE SHOOT BEFORE SECURE.
(Troubleshooting: Mix Rich. Pump ON. Primer Locked. Check Oil & Fuel Gages. Change Tanks. Mags BOTH)

UNDER PARTIAL POWER LOSS.....
TURN BACK ONLY AVAILABLE FROM
LOW ALTITUDE OR HIGHER.

GIVEN CURRENT LOCAL WINDS &
TERRAIN WE WILL CALL LOW
ALTITUDE _____ FEET.

OTHERWISE FIRST CHANCE TO
CONSIDER ENGINE OUT TURN BACK
IS WHEN RUNWAY VISIBLE ON
WINGTIP.
Airplane glides (Approx) 1½ -1¾ NM
"Clean" from 1000 AGL at 73 kts, including turns.

PA28-151 – Warrior OPERATING CHECKLIST

Revision 9-20-2021

Underlined Items are minimum ground repo tasks.

Bold items are checklist items to be verbalized.

(Parentheses) items provide expansion.

Attempted Flow precedes Check.

PRESTART Check

1. **Passengers / Emergencies**.....Briefed.
2. **Departure Procedures**.....Reviewed.
3. **Belts, Harnesses**.....Secured.
4. **Brakes**.....Tested / Set.
5. **Battery Switch**.....ON.
6. **Nav Lights**.....ON.
7. **Voltmeter (To be Installed)**.....>12 Volts.

Defer to AFTERSTART #11 if 12 Volts.

CRAFT.....Loaded.
(Cleared Route & CDI, Altimeter,
Frequencies, Transponder
Code/Mode & Reply)

8. **Avionics Master**.....OFF.
9. **ANTICOL**.....As Needed.
(Proximity Safe/OFF, Warning/ON)
10. **Door**.....Secured.
11. **Ignition**.....Keyed.
12. **Fuel Selector**.....Set least full.
13. **Mixture**.....2/3rds.**RICH**.

-----Start-----

Reference & Flow

14. **Primer** (1-3 Shots)As Needed.
15. **Fuel Pump**.....ON.
16. **Throttle**.....Set.
Cold / Cool / WarmStart: ¼ Inch Open.
HOT Start: ½ Inch Open.
Pump Throttle Once/ Twice if cool/cold.
17. **Prop Area**.....Visually clear.
18. **Ignition**.....**START** as Required.

AFTER START Check

1. **RPM**(Cold / Warm) **800 /1200**.
2. **Oil Pressure**..... (In 30 sec) **Green**.
3. **Alternator Switch**.....ON.
4. **Fuel Pump**...OFF / **Positive Pressure**.
5. **Annunciators**.....Unlit.
6. **Flight Instruments**..... Checked / Set.
7. **Headsets & Radios**.....ON / Checked.
8. **CRAFT**.....Checked / Set.
9. **ADSB**.....Connected.
10. **Bugs**.....Set.
11. **Trims**.....Tested / TAKE OFF.
12. **Mixture**..... (½ travel) **Lean** for Taxi.
13. **Fuel Selector**.....**Fullest**.
14. **Fan & Pitot Heat**Cycled /
.....**Amp Load Supported**.
15. **Time**.....Noted.
16. **Parking Brake**.....OFF.
17. **Taxi Light** (LANDING)..... ON.

TAXI Check

1. **Oil Stains**.....(Pivot) **Checked**.
2. **Turn Coordinator**.....Actuates.
3. **Flight Controls**.....Free.

At Runup Spot:

4. **Taxi Light** (LANDING)..... OFF.
5. **ANTICOL**.....OFF.
6. **Nose wheel**.....**Straight**.
7. **Parking Brake**.....Set (45 Degrees).
8. **Doors**.....Secured.
(Tailwind, Rear Prop/Rotor/Jet Wash.)
9. **Mixture**.....**Rich**.
10. **Oil Temp**.....**Green**.
(Warm oil at 1500)

RUNUP & BEFORE TAKE OFF

Check

(Runup power 2000 RPM)

1. **Magneto Check**.....(L/Both, R/Both.)
.....<175 RPM drop/50 between.
 2. **Magnetos**.....**BOTH**.
 3. **Carb Heat**.....Checked / OFF.
 4. **Fuel Pump**.....Press. Rise Checked.
 5. **Engine Instruments**...Normal Range.
 6. **Annunciators**.....Unlit.
 7. **Idle RPM**.....Steady.
 8. **Throttle**.....1200 RPM.
 9. **Breakers**.....In & cool.
 10. **Brake**.....Released.
- Before Take Off-----
11. **Trim**.....TAKE OFF.
 12. **Flaps** (0 to 25. As Needed).....Set.
 13. **Carb Heat**.....OFF.
 14. **Mixture**.....Forward.
 15. **Primer**.....In / Locked.
 16. **Fuel Pump**.....ON.
 17. **Fuel Selector**.....Fullest.
 18. **Departure Brief**.....As Needed.
(Speeds, Courses, Altitudes,
Emergency, Take Off & Climb Flows)

VR	55 KIAS.
VR Short Field.....	52 KIAS.
VY	75 KIAS.
VC.....	87 KIAS.
VG	73 KIAS.
Power Off Short Final.....	63 KIAS.

-----Final Items-----

18. **Autopilot**.....Disengaged.
19. **Doors**.....Latched.
20. **External Lights****ALL ON**.
21. **Pitot Heat**.....Set (As Required.)

TAKE OFF Reference & Flow

1. "Approach & Departure..... Clear."
2. Max Power – (Set / Check RPM, Oil Temp & Press,, Fuel Press). "2300 RPM, Engine Inst. Green."
3. "Brakes..... Released"
4. "40 kts (Speed alive by 2nd Centerline Stripe.)..... Continue / Stop."
5. "Good Acceleration (by 4th Centerline Stripe.)Continue / Stop."
6. "55 kts (VR).....Rotate."
7. 60 kts (Lift Off)

Attitude: 5-7 degrees >VY / 7-10 deg. @VY

CLMB Check

1. Flaps (400 AGL) Retracted.
2. Cruise Climb(700 AGL) Set.

Exiting Pattern:

3. Fuel Pump OFF
4. Fuel Pressure Checked.
5. Timer Started.

Attitude: 3-5 Degrees / Min 500FPM

CRUISE POWER CHART

Density Altitude	RPM	% BHP	Best Power GPH/TAS
2,000	2500	75	9.2/108kt
	2370	65	8.0/100kt
4,000	2560	75	9.2/109kt
	2420	65	8.0/102kt
6,000	2640	75	9.2/111kt
	2430	65	8.0/104kt
8,000	2700	75	9.2/113kt
	2520	65	8.0/104kt
10,000	2560	65	8.0/105kt

CRUISE Check

1. RPM (See Chart)..... Set.
2. Trim.....Neutral.
3. Recognition Light (LANDING).....ON.
4. System Indications.....Green.
5. Fuel Tanks.....Selected.
(Switch every 30 min with Pump ON.)
6. Mixture(Max CHT 400 F) Reset.
(Set EGT 100F ROP time permitting.)
7. Trend Data.....Verified. (Monitor)

DESCENT Check

1. Altimeter.....Set.
(G5 Indication.....Slaved to Analog.)
2. CDISelected.
3. Autopilot.....Mode verified.
4. LANDING Light.....ON.
5. System Indications/Trends..Checked.
6. Brakes.....(Resistance) Checked.

APPROACH TO LAND Check

1. Belts, Harnesses, Loose Items.....
.....Secured.
2. Fuel Pump.....ON.
3. Fuel Selector.....Fullest L / R.
4. Mixture.....Rich.
5. Flaps.....Set.

SPEEDS Quick Reference

1. Approach - Flaps 10.....75 KIAS.
2. Approach - Flaps 2570 KIAS.
3. Approach - Flaps 40.....65 KIAS.
4. No wind, short field, TCH.....63 KIAS.
5. VX.....63 KIAS.

AFTERLANDING Check

1. Flaps..... Retracted.
2. Mixture.....Lean for taxi.
3. Fuel Pump.....OFF.
4. Strobes.....OFF.
5. Pitot Heat.....OFF.
6. Carb Heat.....OFF.

SHUT DOWN Check

1. Taxi Light (LANDING)OFF.
2. Plug Cleaning.....1000-1200 RPM.
3. ELT.....(121.5) Quiet.

-----Reference & Do-----

4. ALL Avionics Units OFF.
5. Power..... Idle.
6. Magnetos.....Idle Ground Tested.
(L,R OFF,R, L BOTH)
7. Mixture.....Cut off.
8. Magnetos.....OFF. Key out.
9. Master SwitchOFF.
10. Brake.....Set IF REQUIRED.
11. Night /Overhead Lights.....OFF.
12. Hobbs/Tach..... Noted.

POST FLIGHT Reference & Flow

1. Flight Plan.....CLOSED.
2. Squawks.....Record.
3. Control Lock.....Installed.
4. Trash.....Removed.
5. Towbar.....Secured.
6. Cowl plugs.....Install.
7. Pitot cover.....Install.
8. Cabin cover.....Install.
9. Tiedowns.....Secure.
10. Tire condition.....Verify.
11. Bugs.....Washed off.
12. Doors.....Latch cabin & cargo.

EMERGENCY PROCEDURES

PA28-151 Revision 1-21-2021

ENGINE PROBLEMS

ENGINE FAILURE ON THE ROLL

1. Brakes.....Max.
1. Mixture..... Idle Cut Off.

ENGINE FAILS DURING TAKE OFF

2. Speed....73 /63 kts, gentle banks only.
3. Mixture.....RICH.
4. Electric Fuel Pump.....ON.
5. Fuel Selector.....Switch tank.
6. Carb Heat.....ON.
7. If engine does not restart.....
.....Go to **Power Off Landing**

ENGINE FAILURE IN FLIGHT

1. Fuel Selector.....Switch Tank.
2. Electric Fuel Pump.....ON.
3. Mixture.....RICH.
4. Carb HeatON.
7. Primer.....Locked.
8. Engine Indications.....Check.
9. Magnetos.....L / R / BOTH.
10. If engine does not restart.....
.....Trim for 73 Kts.
.....Go to **Power Off Landing**

LOW OIL PRESSURE / HIGH OIL TEMP

1. Oil Press Low & Oil Press Light ON.
OR Oil Temp High Red
.....Reduce Power.
2. Power off Landing.....Anticipate.
.....Go to **Power Off Landing**

LOW FUEL FLOW (Verify fuel Qty gages)

1. Electric Fuel Pump.....ON.
2. Fuel Selector.....Switch Tank.

ENGINE ROUGHNESS

1. Carb Heat.....Full ON 1 Minute.
2. Mixture.....Adjust.
3. RPM.....Adjust for minimum vibration.
4. Carb Heat.....ON.
5. Electric Fuel Pump.....ON.
6. Magneto Switch.....L / R / Both.
7. Problem Persists
.....Declare Emergency. Land.

POWER OFF LANDING

1. Speed.....73 kts.
2. Radio.....Mayday call. 121.5 or ATC.
3. Transponder.....7700.
4. Mixture.....Idle Cut OFF.
5. Main switch.....OFF.
6. Magnetos.....OFF.
7. Fuel selectorOFF.
8. Seats, Belts, Harnesses....Secured.
9. Speed.....63 field made.
10. Flaps.....L.ANDING prior touchdown.

PRECAUTIONARY LANDING

1. Radio.....Mayday call. 121.5 or ATC.
2. Speed.....73 / 63 kts.
3. Field.....Fly over prior to approach.
4. Seats, Belts, Harnesses.....Secured.
5. Main Switch.....OFF.
6. Landing.....Full Flaps. Nose high.
7. Mixture.....OFF during flare.
8. Brakes.....Apply.

DITCHING

1. Seats, Belts, Harnesses.....Secured.
2. Speed.....63 kts.
3. Door.....Ajar.
4. Touch Down...No flare / parallel swells.

EMERGENCY DESCENT

- 1 Throttle..... Reduce as needed.
2. Airspeed.....129 kts.

FIRES

ENGINE FIRE DURING START

1. Ignition....."Start".
2. Mixture.....Idle Cut-Off.
3. Throttle.....Full forward.
4. Fuel Selector.....OFF.
5. Fuel Pump.....OFF.
6. Fire Continues
a. Master Switch.....OFF.
b. Evacuate & extinguish.

CABIN / ELECTRICAL FIRE

1. Master Switch.....OFF.
2. Cabin Heat.....OFF.
3. Extinguisher.....Activate.
4. Cabin Air.....Partial open as needed.
5. Land.....As Soon As Possible.
6. If Fire Out-
a. All Electrical Switches.....OFF
b. Divert to Nearest Suitable Airport.
c. Electrical Units.....
...ON one at a time if required only.

AIRBORNE ENGINE FIRE

1. Smoke/Flames Visually Detected.....
2. Dive.....Suffocate Fire.
.....(Altitude Permitting)
3. Fuel Selector.....OFF.
4. Throttle.....CLOSED.
5. Mixture.....OFF.
6. Fuel Pump.....OFF.
7. Heater/Defroster.....OFF.
8. Go to **Power Off Landing**

WING FIRE

1. Pitot Heat and Lights.....OFF.
2. Slip...Keep flames off fuel tank and tail.
4. Dive.....Suffocate Fire (If Alt. Permits).
5. Emergency.....Declare.
6. Land.....As soon as possible.

SYSTEM FAILURES

DOOR OPEN IN FLIGHT

1. **FLY THE PLANE FIRST.**
2. **CRM / Autopilot.....As Needed.**
3. **Speed.....Slow to 89 Kts.**
4. Cabin Vents.....Close.
5. Storm Window.....Open.
6. Flaps & TrimDo not change.
7. If Upper Latch Open.....Latch.
8. If Side Latch Open.....
...Pull armrest while move latch handle.
9. If Both Latches Open.....
.....Latch side latch, then top latch.

AIRSPEED INDICATOR FAILURE

1. Pitot Heat.....ON.
2. **GPS Ground Speed....Cross check.**
3. **Alternate Static.....Pull.**
4. Cabin Air.....Open.
5. IAS still Erratic...Approach 1300 RPM.

VACUUM PUMP FAILURE

GPS.....Cross check for track readout.

STATIC SYSTEM FAILURE

1. **Alternate Air.....Pull.**
2. **GPS.....Cross check Alt, GS, VS info.**

SINGLE BRAKE FAILURE - LANDING

(Aircraft pulling to side at application, not decelerating)

1. **Rudder.....Heavy opposite to yaw.**
2. **Brakes.....Pump.**
3. **Wing Flaps.....Retract.**
4. **Stabilator.....Full back.**

FLAT MAIN TIRE – LANDING

(Aircraft pulling to side without brakes applied)

1. **Aileron & Rudder..... Opposite yaw.**
2. **Brake - Gradual increase opposite yaw.**

STABILATOR FAILURE

1. **Trim.....73 Kts.**
2. **Power**
 - a. **For 500 FPM descent.**
 - b. **Carry into the landing flare.**
3. **Flare.....With trim.**

AILERON FAILURE

1. **Rudder.....For Lateral control.**
2. **Flaps.....Retract.**

INVOLUNTARY SPIN

1. **Rudder.....Full & opposite rotation.**
2. **Control Wheel.....Full forward.**
3. **Ailerons.....Neutral.**
4. **Throttle.....Idle.**
5. Rudder... Neutral when rotation stops.
6. Flaps.....Retracted.
7. Control Wheel.....
.....As required to regain level flight.

WEATHER

INADVERTANT ICING

1. **Heading.....Turn around.**
2. **Altitude.....Change.**
3. **Alternate Air.....ON.**
4. **Pitot Heat.....ON.**
5. **Demisting & Heating..... Max.**
6. **RPM.....High.**
6. **Stall speed.....Expect increase.**

ELECTRICAL

ELECTRICAL EQUIPMENT FAILURE

CB Popped...Only reset Once if urgent.

ALTERNATOR FAILURE

1. Electrical Load.....
.....Reduce as much as possible.
2. Alternator CB.....Check.
3. Alternator Switch.....OFF.
4. Alternator Switch.....ON (1 sec. later).
5. If No Output.....
 - a. Alternator SwitchOFF
 - b. Electrical load...Reduce/Minimize.
 - c. Divert.

COMMUNICATIONS FAILURE

1. **Radios.....Check Volume.**
2. **PTT.....Test Pilot/Copilot.**
3. **Audio Panel.....Check.**
.....Transmitter, Receiver.
4. **Intercom.....Check.**
.....Muting, Crew Isolation.
5. **Nav Audio.....Select if IFR.**
.....Monitor nearest VOR.
6. **Headset Jacks.....Swap.**
7. **CB Panel.....Check.**
8. **Radios.....Transmit in Blind.**
9. **Squawk.....7600.**

Bold Items are 1WA Memory Items.

Italicized items are suggested by 1World Aero, and are not specified by Piper AFM.