



PA28-161 CHEROKEE WARRIOR III CHECKLIST - AVIDYNE DISPLAY

ALL GREY SHADED AREAS ARE MEMORY ITEMS

Normal Procedures

PREFLIGHT CHECK

Control Wheel RELEASE BELTS
Avionics OFF
Parking brake Set
Electric switches OFF
Magneto switch OFF
Mixture idle cut-off
Master Switch ON
Fuel Quantity Gauges check
Annunciator panel check
Master Switch OFF
Flight controls check
Flaps check
Trim check, set neutral
Pitot drain DRAIN, close
Static drain DRAIN, close
Windows check, clean
Tow bar stow
Baggage secure
Baggage door close, secure

RIGHT WING

Wings free of ice, snow, frost
Control Surfaces check for interference -
free of ice, snow, frost
Hinges check for interference
Static wicks check
Wing tip and lights check
Fuel tank check supply visually - secure caps
Fuel tank sump drain, check for water,
sediment and proper fuel
Fuel vent clear
Tie down and chock remove
Main Gear Strut proper inflation (4.50 in.)

Tire check
Brake and block discs check
Fresh air inlet clear

NOSE SECTION

Fuel & Oil check for leaks
Cowling secure
Windshield clean (inside & out)
Propeller & Spinner check
Air Inlets clear
Alternator Belt check tension
Landing light check
Nose chock remove
Nose Gear Strut proper inflation (3.25in.)
Nose Wheel Tire check
Oil check level
Dipstick properly seated
Fuel Strainer drain
Check for water, sediment and proper fuel

LEFT WING

Wings free of ice, snow, frost
Fresh air inlet clear
Main Gear Strut proper inflation (4.50 in.)
Tire check
Brake and block discs check
Fuel tank check supply visually - secure caps
Fuel tank sump drain, check for water,
sediment and proper fuel
Fuel Vents open
Tie down and chock remove
Pitot Head remove cover & holes clear
Wing tip and lights check
Control Surfaces check for interference -
free of ice, snow, frost
Hinges check for interference
Static wicks check

FUSELAGE

- Antennas..... check
- Empennage..... free of ice, snow and frost
- Fresh air inletclear
- Stabilator and trim tab..... check for interference
- Tie Down..... remove
- Master SwitchON
- Cockpit lighting..... check
- Navigation & strobe lights..... check
- Stall Warning..... check
- Pitot heat check
- All switches..... OFF
- Passengers..... board
- Cabin Door close & secure
- Seat Belts & Harness fasten/adjust & check inertia reel

BEFORE START

Brakes SET
Flight authorisation..... complete
Maintenance release check and sign (RPL or higher)
Alternate static source OFF
Circuit breakers Check IN
Carburettor Heat Full OFF
Fuel Selector desired tank (LEFT OR LEAST)
Radios/Avionics OFF

STARTING ENGINE WHEN COLD

Throttle ¼ "OPEN
Battery Master Switch ON
Alternator switch ON
Primary Flight Display (PFD) Verify correct aircraft model software
Electric Fuel Pump ON
Primer 1-3 SECONDS
Electric Fuel Pump OFF
Standby Alternator Switch (As Applicable) ON
Mixture full RICH
Propeller CLEAR
Starter ENGAGE
Throttle ADJUST
Oil Pressure CHECK

STARTING ENGINE WHEN HOT

Throttle ½" OPEN
Battery Master Switch ON
Primary Flight Display (PFD) Verify correct aircraft model software
Alternator switch ON
Standby Alternator Switch (As Applicable) ON
Electric Fuel Pump ON
Fuel Flow CHECKED
Electric Fuel Pump OFF
Mixture full RICH
Propeller CLEAR
Starter ENGAGE
Throttle ADJUST
Oil Pressure CHECK

FLOODED ENGINE START

Throttle Open full
Battery Master Switch ON
Primary Flight Display (PFD) Verify correct aircraft model software
Alternator switch ON
Standby Alternator Switch (As Applicable) ON
Electric Fuel Pump OFF
Mixture ICO
Propeller CLEAR
Starter ENGAGE
Mixture ADVANCE
Throttle RETARD
Oil Pressure CHECK

STARTING WITH EXTERNAL POWER SOURCE

Battery Master Switch..... OFF
Alternator switch..... OFF
Standby Alternator Switch (As Applicable) OFF
All Electrical Equipment OFF
External Power Plug Insert in fuselage

»Proceed with normal start checklist«

Throttle Lowest possible RPM
External Power Plug DISCONNECT FROM FUSELAGE
Master and Alternator Switches ON

»Proceed with normal checklist«

AFTER START / WARM UP

Throttle 800 to 1200 RPM
Oil Pressure GREEN
Mixture..... LEANED A/R
Alternator..... CHARGING
Avionics and Intercom ON / SET / CHECKED
Lights TAXI ON
Flaps..... RETRACTED
Mixture..... LEANED

TAXI CHECKS

Brakes CHECKED
Flight Instruments..... CHECKED

GROUND CHECKS (RUN UPS)

- Park BrakeON
- Fuel Selector RIGHT or FULLEST TANK
- Engine Instruments CHECKED GREEN
- Throttle 2000 RPM
- Magnetos MAX DROP 175 RPM
MAX DIFF. 50 RPM

- Carburettor Heat CHECK
- Annunciator Panel PRESS-TO-TEST
- Fuel Pressure CHECK
- Oil Temp & Pressure CHECKED GREEN
- *Throttle maximum power/RPM
- *ALTR switch OFF
- *STBY ALTR annunciator verify ON
- *Increase electrical load >20 amps check
- *STBY ALTR ON annunciator verify flashing
- *Decrease electrical load < 20 amps check
(Note: *As Applicable)
- *STBY ALTR ON annunciator verify ON (steady)
- *Throttle 1000 RPM
- *ALTR switch ON
- Normal amperage indication verify
- *STBY ALTR ON annunciator verify extinguished
- Throttle RETARD >600 RPM
- Throttle 1000 RPM
(Note: *As Applicable)

BEFORE TAKE OFF

- Master and Alternator SwitchON
- STBY ALTR switchON
- Magnetos BOTH
- Flight Instruments check
- Fuel Selector proper tank (FULLEST)
- Electric Fuel PumpON
- Engine Gauges check
- Carburettor Heat OFF
- Seat Backs erect

Mixture..... set
Primer Covered
Throttle Friction set
Belts/Harnesses fastened/check
Empty Seats seat belts snugly fastened
Flaps set a/r
Trim Tab set
Controls full, free & correct
Door latched
Departure Brief..... Completed
Take Off Safety Brief..... Completed

LINE UP

Pitot Heat A/R
Instruments CHECK ALIGNMENT
Switches LIGHTS/PUMPS A/R
Transponder/Trim..... ALT/TAKE OFF
Altimeter WITHIN TOLERANCE

AFTER TAKE OFF

Gear Up
Flaps RETRACTED
Power Set
Temperature and Pressure Indicators Checked
Switches Off
Mixture..... Leaned A/R
Centreline Checked

Top of Climb

Fuel Log COMPLETE / CORRECT TANK
Mixture LEANED (AS PER POH)
QNH..... AREA
DI/Compass ALIGNED
Cowl Flaps AS REQUIRED
Aids/Audio..... TUNED/IDENTIFIED/TESTED
Radios SET/CHECKED

Top of DESCENT

Fuel Log COMPLETE
Mixture AS REQUIRED
QNH..... LOCAL
DI/Compass ALIGNED
Cowl Flaps AS REQUIRED
Aids/Audio..... TUNED/IDENTIFIED/TESTED
Radios SET/CHECKED

PRELANDING CHECKS

BrakesPRESSURE CHECKED & OFF
UndercarriageDOWN AND LOCKED
Mixture.....RICH
Fuel ON & QUANTITY CHECKED
Instruments ALIGNED/WITHIN TOLERANCES
Switches LIGHTS/PUMPS A/R
Hatches & Harnesses SECURE
Pilot Activated Lighting..... A/R

FINAL CHECKS

Pitch A/R
Undercarriage DOWN AND LOCKED (3 GREENS)
Flaps A/R
Carburettor Heat COLD
Check Windsock CHECKED
ClearanceOBTAINED

AFTER LANDING

Flapsretracted
Electric Fuel Pump..... OFF
Strobes & Landing light OFF
Taxi Light.....ON
TransponderSTBY
Trims neutral
Mixture.....LEANED

STOPPING ENGINE

Flaps retract
Electric Fuel Pump OFF
Radios /Avionics..... OFF
STBY ALTR..... OFF
Throttle800-1000 rpm
Magnetos check

Mixture.....ICO
Magnetos OFF
Master Switch OFF
ALTR OFF

SECURING AEROPLANE

Parking brake set
Control Wheelsecure with belts
Flaps up
Wheel Chocks in place
Tie Downs & Covers secure

AIRCRAFT SUMMARY

For full details refer to the aircraft Flight Manual and/or the Pilot's Operating Handbook for the specific aircraft.

Engine O-320-D3G
160HP @ 2700 RPM

Oil Capacity 8 Quarts maximum
6 Quarts minimum for flight

Grade of Fuel 100/130 (green) or 100LL (blue)
Total Capacity 189 litres
Useable Fuel 181 litres
Fuel to Tabs 129 litres

Best Angle of climb (V_x) 63 KIAS
Best Rate of climb (V_y) 79 KIAS
Maximum Demonstrated Crosswind 17 KIAS
Best Glide Speed 73 KIAS
Maximum Flap Extension Speed (V_{FE}) 103 KIAS
Never Exceed Speed (V_{NE}) 160 KIAS

Emergency Procedures

ENGINE FIRE DURING START

Starter CRANK ENGINE
MixtureIDLE CUT-OFF
Throttle OPEN
Electric Fuel Pump OFF
Fuel Selector OFF
Abandon if fire continues

ENGINE POWER LOSS DURING TAKE OFF

If sufficient runway remains for a normal landing:

Land straight ahead

If insufficient runway remains:

Maintain Safe Airspeed
Make only shallow turn to avoid obstructions
Flaps as situation requires

If sufficient altitude has been gained to attempt a restart:

Maintain safe airspeed
Fuel Selector SWITCH TO TANK CONTAINING FUEL
Fuel Pump ON
MixtureRICH
Carburetor Heat ON
Engine Gauges CHECK FOR INDICATION OF
CAUSE OF POWER LOSS
Primer IN & LOCKED
If power is not regained, proceed with power off landing.

ENGINE POWER LOSS IN FLIGHT

Fuel Selector SWITCH TO TANK CONTAINING FUEL
Electric Fuel Pump ON
Mixture RICH
Carburetor Heat ON
Engine Gauges CHECKED FOR INDICATION OF PWR LOSS
If no fuel pressure indicated, check tank selector position 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 prepare for power off landing & trim for 73 KIAS

Power Off Landing: (Once committed to landing)

Ignition OFF
Master Switch OFF
Fuel Selector OFF
Mixture ICO
Seatbelts and Harnesses TIGHT

FIRE IN FLIGHT

Source of fire.....CHECK

ELECTRICAL FIRE (smoke in cabin):

Master Switch OFF

ALTR Switch..... OFF

Standby Attitude GyroVERIFY ON and flag is pulled on gyro

Air Vents OPEN

Cabin Heat..... OFF

Ground Clearance Switch (if installed)..... ON

Land as soon as practicable

ENGINE FIRE:

Fuel Selector OFF

Throttle CLOSED

Mixture ICO

Electric fuel pump CHECK OFF

Heater and Defroster OFF

Proceed with power off landing procedure

LOSS OF OIL PRESSURE / HIGH OIL TEMP

Land as soon as possible and investigate cause.

Prepare for power off landing.

LOSS OF FUEL PRESSURE

Electric Fuel Pump..... ON

Fuel Selector CHECK ON FULLEST TANK

ELECTRICAL FAILURE

ALT Annunciator Light Illuminated:

Verify Failurecheck ammeter

Anytime bus voltage < 25 Vdc, low bus voltage annunciator will illuminate

If Ammeter Shows Zero:

ALT SwitchOFF

Reduce electrical loads to a minimum:

ALT Circuit Breaker CHECK & RESET AS REQUIRED

ALT SwitchON

CAUTION

Any power interruption will result in loss of attitude information from the PDF until the unit can be reinstated on the ground

WARNING

Compass error may exceed 10 degrees with alternator inoperative

If power not restored:

ALT SwitchOFF

Reduce electrical loads by switching OFF or pulling circuit breakers for all non-essential equipment to include the following

- Reduce PFD & MFD brightness
- Pitot heat (unless required)
- Airconditioner and ventilation fan
- Landing light
- Strobe lights
- Recognition light
- Cabin/flood lights

- No. 2 nav/com/gps
- Autopilot (if installed)
- Electric trim (if installed)
- DME (if installed)
- Stormscope (if installed)
- Skywatch (if installed)

If alternator output cannot be restored, reduce electrical load and land as soon as practicable.

COMPLETE ELECTRICAL FAILURE

Standby Attitude GyroSELECT STBY power button
Standby Attitude GyroVerify ON and flag is pulled

Maintain control of aircraft with reference to standby airspeed, altimeter and gyro indicators

Battery Switch OFF
Ground Clearance Switch (if installed) ON

LAND AS SOON AS POSSIBLE!

WARNING

Compass error may exceed 10 degrees with alternator inoperative

ELECTRICAL OVERLOAD

(ALT OVER 20 AMPS ABOVE KNOWN ELECTRICAL LOAD)

ALT Switch..... ON
BATT Switch OFF

If alternator loads are reduced:

Electrical loads..... REDUCE TO MINIMUM
Land as soon as practical.

If alternator loads are not reduced:

ALT Switch..... OFF
BATT SwitchAS REQUIRED

SPIN RECOVERY

Throttle IDLE
Ailerons NEUTRAL
Rudder..... FULL OPPOSITE TO DIRECTION OF ROTATION
Control Wheel FULL FORWARD
Rudder..... NEUTRAL (when rotation stops)
Wing Flaps..... Up (if extended)
Control Wheel AS REQUIRED TO SMOOTHLY
REGAIN LEVEL FLIGHT

OPEN DOOR

To close door in flight:

Slow aeroplane to 89 KIAS

Cabin ventsCLOSED

Storm Window.....OPEN

If upper latch is open LATCH

If side latch is open PULL ON ARMREST WHILE MOVING
LATCH HANDLE TO LATCHED POSITION

If both latches are open LATCH SIDE, then LATCH TOP

ENGINE ROUGHNESS

Carburetor Heat ON

If roughness continues for 1 minute:

Carburetor Heat OFF

Mixture ADJUST FOR MAX SMOOTHNESS

Electric Fuel Pump ON

Fuel SelectorSWITCH 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.*

Prepare for power off landing.

CARBURETOR ICING

Carburetor Heat ON

Mixture ADJUST FOR MAX SMOOTHNESS