

PA28-181 Piper Cherokee Archer II N9341C

Run Up

Brakes	Set or Hold
Flight Control	Free and correct
Throttle	2000 RPMs
Carb Heat	Check for drop
Mags	Max drop 175 RPMs Max diff 50 RPMs
Vacuum	4.8" to 5.2"
Fuel Pressure	On - Check Press. - Off
Alternate Static Air	Open/Close (VSI Jump)
Oil temp and pressure	Check - green
Alternator output	Check - positive
Throttle	Idle/800-1000 RPMs
Annunciator Panel	Test (Vac-Alt-Oil)
Pitot Heat Test	On/Off - jump in amps
Throttle Friction Lock	Adjust

Instruments - SET/CHECK

- Magnetic compass	Fluid, ind. Known hdg
- Altimeter	Within 75' of field elev.
- Heading/DG	Set to mag compass
- Attitude indicator	Settled, set
- RADIOS	Set - Checked
- VORs	Set - Tuned
- DME	Set - Tuned
- Markers	Test
- CLOCK	Set

Before Takeoff:

Door	Latched/locked
Trim, Electric Trim	Set for takeoff/Neutral
Autopilot	OFF
Transponder	ALT - 1200
Carb Heat	OFF
Fuel Pump	ON
Mixture	Full Rich
Primer	In and Locked
Mags	Both
Fuel Selector	Desired Tank

Takeoff Normal Soft

Flaps	None or 10	25
Breaks	Release	Hold
Throttle	Full	Full
Rotate	55-65 kn	41-49 kn
Climb	79-87 kn	64 kn
Flaps	Retract slowly	

Cruise

Throttle	Reduce to desired st.
Fuel pump	OFF
Mixture	Lean as appropriate

Landing

BCGUMPS	
Boost pump	ON
Carb Heat	Check
Gas	Fulllest Tank
Undercarriage	Not applicable
Mixture	Full Rich
Prop	Not applicable
Seatbelts	ON

Clear of Runway

Flaps	Retract
Fuel Pump	OFF
Carb Heat	OFF
Mixture	Lean for taxi
Transponder	Standby

Shut Down

Radios/all electrical	OFF
Panel Light	OFF
Nav/Anti Collision	OFF
Throttle	1000 RPMs
Mixture	Idle/cut off
Mags	OFF
Master	OFF
Controls	Secure with belts

Important (V) Speeds (KIAS)

Vso	49
Vs1	55
Vr	46 (pref 55)
Vx	64
Vy	76
Best glide	74
Vfe	102
Va	105
Vno	119
Vne	150
Normal approach	64 (PREF 70-75)
Shortfield	58

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Preflight Inspection

Required documents	On board
Electrical equipment	OFF
Master Switch	On board
Fuel quantity	Check
Lights	ON - Check - Walk-OFF
Master Switch	OFF
Pitot Drain	Press (lower left floor)
Primary Flight Controls	Proper operation
Flaps	Extend
Right Wing:	
Flap Aileron	Check hinges/motion
Nav/anticollision lights	Check secure
Leading edge	Check for damage
Fuel caps and fuel qty	Check visually
Fuel sump	Drain
Main wheel/strut	Check, 4.5" min.
Brakes	Inspect
Nose:	
Windshield	Check clean
Oil	4 Quarts Min
Cowling	Secure
Alternator belt	Check tension
Prop & spinner	Check for damage
Nose wheel/strut	Check 3.5" min
Fuel sump	Drain
Left Wing:	
Fuel caps and fuel qty	Check visually
Fuel sump	Drain
Main wheel/strut	Check, 4.5" min.
Brakes	Inspect
Leading edge, stall horn	Check for damage
Pitot head	Check for blockage
Nav/anticollision lights	Check secure
Aileron	Check hinges/motion
Flap	Check hinges/motion
Fuselage/Tail:	
Antennas	Secure
Lights	Secure
Stabilator	Check
Tail and Rudder	Check

Before Starting

Preflight	Complete
Belts/harness	Secure
Circuit Breakers	Check in
Radios/electrical	OFF
Transponder	OFF - squawking 1200
Carb Heat	OFF
Fuel Selector	Fullest tank

Starting Engine

Brake	Set or Hold
Mixture	Rich
Throttle	1/4" open cold, 1/2" hot
Prime	As required (3-6)
Master Switch	ON
Beacon Light	ON
Fuel Pump	ON
Propellor Area	CLEAR!
Starter	Engage
Throttle	800-1000 RPMs
Oil Pressure	Check

Pre - taxi

Navigation/landing lights	ON (if night)
Fuel pump	OFF
Radios/electrical	ON (if night)
Transponder	Standby - 1200
Mixture	Lean for taxi
Brakes & Steering	Test
Instruments-SET/CHECK	
- Magnetic Compass	Filled w/fluid, indicating known direction
- Turn and Bank	Filled w/fluid, ball indicates skid in taxiing turns
- Altimeter	Within 75' of field elevation
- Heading DG	Set to mag compass
- Attitude indicator	Settles within 5 minutes (do not set until run up)