

PIPER ARCHER II PA-28-181 N9513C

Vso -----	49 KIAS
Vs -----	55 KIAS
Vx—Flaps 25° -----	64 KIAS
Vy -----	76 KIAS
Vfe -----	102 KIAS
Va—1634 lbs. Gross Weight -----	89 KIAS
Va—2550 lbs. Gross Weight -----	113 KIAS
Vno -----	125 KIAS
Vne -----	154 KIAS
Vg---Best Glide-----	76 KIAS
Landing Final Appch Speed (Flaps 40°)-	70 KIAS

BEFORE TAXI -Lights as req. / AWOS / Brakes Test

BEFORE TAKE-OFF CHECKLIST

Brakes----- Set
 Door / Window -----Closed / Locked
 Flight Controls -----Free and Correct
 Flight Instruments -----Check and Set
 Fuel Selector -----Fullest Tank
 Mixture -----Full Rich
 Primer----- In and Locked
 Throttle (If oil temp allows) ----- 1800 RPM
 Magnetos--- Max. Drop 175 RPM—Max. Difference 50 RPM
 Carburetor Heat -----Check
 Vacuum----- 5.0” Hg. +/- .1
 Annunciator Panel ----- Press-to-Test
 Oil Pressure/Temperature-----Check
 Loadmeter -----Check
 Electric Fuel Pump (Off)----- Check Fuel PSI
 Throttle -----Idle, Then 1000 RPM
 Trim----- Set
 Autopilot ----- Off
 Transponder-----Squawk Code & Altitude
 Radios / GPS ----- Set
 Seat / Seat Belts -----Secure / Fastened
 Takeoff Checklist -----Choose & Complete

PRE-FLIGHT INSPECTION

COCKPIT CHECKLIST

Master Switch----- On
 Fuel Gauges & Lights----- Check
 Master Switch----- Off
 Flaps ----- Extend
 Required Papers (A.R.O.W.) ----- Check on Board

EXTERIOR INSPECTION

Right Wing ----- Check
 (Control Surfaces/hinges, Fuel qty/sump, Gear strut/tire/brakes)
 Nose Section----- Check
 (Clean, Oil Qty/leaks, Fuel drain, Propeller/Spinner, Alternator belt tension,
 Gear strut/tire, Engine baffle seals)
 Left Wing ----- Check
 (Control Surfaces/hinges, Fuel qty/sump, Gear strut/tire/brakes,
 Pitot/static head)
 Left Fuselage Condition ----- Check
 Tail Section ----- Check
 (Stabilator/trim tab/hinges, Fresh air inlet)
 Right Fuselage Condition ----- Check

STARTING ENGINE CHECKLIST

Passenger Briefing----- Complete
 Seats / Seat Belts ----- Secure
 Electrical Equipment ----- Off
 Circuit Breakers----- In
 Brakes -----Set
 Fuel Selector----- Fullest Tank
 Master Switch----- On
 Electric Fuel Pump ----- On
 Beacon / Strobe Lights ----- On
 Carburetor Heat----- Off
 Mixture----- Full Rich
Cold Start ----- Pump Throttle 2-3 Times
 Throttle-----CRACKED Open
 Area ----- Clear
 Starter ----- Engage/ release when fires
 Throttle----- 1000- 1100 RPM
 Oil Pressure----- Check
 Avionics / Aspen (EHSI) ----- On
 Mixture -----Lean for Taxi

NORMAL TAKEOFF

Mixture -----Full Rich
 Fuel Pump / Landing Light ----- On
 Flaps -----Retracted
 Rotate ----- 55 KIAS
 Climb Speed (Vy) - ----- 76 KIAS
 Enroute Climb ----- 87 KIAS

SHORT FIELD TAKEOFF

Mixture -----Full Rich
 Fuel Pump / Landing Light ----- On
 Flaps (Second Notch)----- 25°
 Rotate ----- 50 KIAS
 Climb at Vx ----- 64 KIAS
 Accelerate to Vy----- 76 KIAS
 Flaps ----- Retract Slowly

SOFT FIELD TAKEOFF

Mixture -----Full Rich
 Fuel Pump / Landing Light ----- On
 Flaps (Second Notch)----- 25°
 Elevator----- Full Back Pressure
 Elevator-----Release as airspeed builds
 Rotate----- STAY IN GROUND EFFECT
 Accelerate to Vx then initial climb ----- 64 KIAS
 Accelerate to Vy Climb Speed) ----- 76 KIAS
 Flaps ----- Retract Slowly

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CRUISE

Fuel Pump / Landing Light----- Off
Power----- 2300-2400 RPM
Mixture----- Adjust (50-75° rich of peak)
Fuel Selector-----Switch tanks every 30 min.

BEFORE DESCENT

Flight Instruments -----Set
Seats & Seat Belts -----Check
Mixture----- Enrichen as needed

BEFORE LANDING

Fuel Pump / Landing Light----- On
Fuel Selector----- Fulllest Tank
Mixture----- Full Rich
Autopilot ----- Off

NORMAL LANDING

Power-----1500-1600 RPM (as needed)
Flaps----- set – 102 KIAS Max.
Trimmed Airspeed (Flaps Up)-----75 KIAS
Final Approach Speed (Flaps Down)-----70 KIAS

SHORT FIELD LANDING

Approach Speed-----66 KIAS
Flaps-----Full
Throttle----- Idle
Touchdown ----- Brakes Firm
Flaps-----Retract
Controls -----Full Back Pressure

BALKED LANDING PROCEDURES

Throttle-----Full
Flaps-----25°
Climb Speed (Vx)----- 64 KIAS
Positive Rate of Climb ----- Check
Flaps----- Retract Slowly

AFTER LANDING

Clear of Runway----- Radio Call
Flaps ----- Retracted
Fuel Pump / Landing Light----- Off
Mixture-----Lean for Taxi

SHUT DOWN

Avionics / Aspen (EHSI) ----- Off
Throttle----- Idle
Mixture-----Idle Cut-Off
Elec Switches / Master Switch----- Off
Magnetos----- Off
Aircraft----- Secure

ENGINE FAILURE DURING TAKE-OFF

Airspeed / Trim (Vg) ----- 76 KIAS
Best Place to Land ----- Determine
Carburetor Heat ----- On
--IF TIME & ALTITUDE PERMIT--

Electric Fuel Pump ----- On
Mixture ----- Rich
Throttle ----- Cycle
Primer----- In and Locked
Magnetos ----- Cycle, Ensure on 'Both'
Fuel Selector ----- Switch Tanks
Proceed with 'Securing Engine' and 'Emergency Landing Checklist' if no power is regained.

ENGINE FAILURE IN FLIGHT

Airspeed / Trim----- 76 KIAS
Best Place to Land ----- Determine
Carburetor Heat ----- On
Electric Fuel Pump ----- On
Mixture ----- Rich
Throttle ----- Cycle
Primer----- In and Locked
Magnetos ----- Cycle, Ensure on 'Both'
Fuel Selector ----- Switch Tanks
Communicate ----- Squawk 7700/Mayday 121.5

SECURING ENGINE / EMERG LANDING

Airspeed when field can be reached ----- 66 KIAS
Mixture ----- Idle/Cutoff
Throttle ----- Closed
Master Switch----- Off
Magnetos ----- Off
Fuel Selector ----- Off
Seats / Seat Belts ----- Tight
Doors ----- Ajar
Passengers----- Brief

ENGINE FIRE DURING START UP

Cranking-----Continue
If Engine Starts:
Throttle ----- 1800 RPM
Engine ----- Shutdown and Inspect
If Engine Fails to Restart:
Throttle ----- Full Open
Mixture ----- Idle Cut-Off
Cranking-----Continue
Master, Mags, & Fuel ----- Off