



ARCHER III

W / G 1000

PA-28-181

PILOT'S CHECKLIST

2024

PIPER ARCHER PA-28-181

TAKEOFF

Normal Rotation60 KIAS
Normal Climb-Out.76 KIAS

CRUISE CLIMB

(Vy).....76 KIAS
(Vx).....64 KIAS
En Route Climb.....87 KIAS

BALKED LANDING

Maximum Power, Flaps 25°.....64 KIAS

MANEUVERING SPEED

(Max. Recommended. Turbulent Air
Penetration Speed)
2550 LBS.....113 KIAS
1917 LBS.....98 KIAS
MAX DEMONSTRATED CROSSWIND
Takeoff or Landing.....17 KTS
(Vfe).....102 KIAS

PREFLIGHT INTERIOR

ARROW DOCS.....ON BOARD
Control Wheel.....FREE
Parking Brake.....SET
All Instrument Panel and Overhead
switches.....OFF
Mixture.....IDLE CUT-OFF
LEFT/RIGHT Mag Switches.....OFF
Batt Master Switch.....ON
Interior Lighting (Night).....CHECK
Pitot Heat.....ON
FUEL QTY Indications.....CHECK
Exterior Lighting Switches.....ON/CHECKED
Pitot/Static Head.....CHECK – WARM
Stall Warning Horn.....CHECK
PITOT HEAT Switch.....OFF
PITOT HT OFF Message.....CHECK
BATT Master Switch.....OFF
Flaps.....EXTEND
Primary Flight Controls.....FREE AND CORRECT
Trim.....SET NEUTRAL
Pitot and Static Drains.....DRAIN, CLOSE
Window.....CHECK, CLEAN
Baggage Door.....CLOSE & SECURE

PREFLIGHT EXTERIOR

RIGHT WING

Surface Condition.....FREE OF ICE, FROST, SNOW
Flaps, Ailerons.....CHECK MOVEMENT, SECURITY
Hinges.....CHECK FOR INTERFERENCE
Static WicksCHECK (3)
Wing Tip and Lights.....CHECK
Fuel Tank.....CHECK SUPPLY VISUALLY, SECURE CAP
Fuel Tank sump.....DRAIN
(Check for WATER, SEDIMENT, & PROPER FUEL TYPE)
Fuel Vent.....CLEAR
Wing Tie Down and/or Chocks.....REMOVE
Main Gear Strut.....CHECK (4.5 in)
Tire.....CHECK
Brake Block and Discs.....CHECK
Fresh Air Inlet.....CLEAR

NOSE SECTION

General Condition.....CHECK
Engine Cowling.....SECURE
Windshield.....CLEAN
Engine Oil.....CHECK LEVEL (MIN 6 QTS)
Dipstick.....PROPERLY SEATED
Oil Filler Inspection Door.....SECURE
Propeller and Spinner.....CHECK
Air Inlets.....CLEAR
Chock.....REMOVE
Nose Gear Strut.....CHECK (3.25 in.)
Nose Wheel Tire.....CHECK
Fuel Strainer.....DRAIN
(Check for WATER, SEDIMENT, & PROPER FUEL TYPE)

LEFT WING

Surface Conditions.....FREE OF ICE, FROST, SNOW
Fresh Air Inlet.....CLEAR
Main Gear Strut.....CHECK (4.5 in.)
Tire.....CHECK
Brake Block and Discs.....CHECK
Fuel Tank Sump.....DRAIN
(Check for WATER, SEDIMENT, & PROPER FUEL TYPE)
Fuel Vent.....CLEAR
Tie Down and Chock.....REMOVE
Fuel Tank.....CHECK VISUALLY, SECURE CAP
Pitot Mast.....REMOVE COVER, HOLES CLEAR
Wingtip and Light.....CHECK
Flaps, Ailerons.....CHECK MOVEMENT, SECURITY
Hinges.....CHECK FOR INTERFERENCE
Static WicksCHECK (3)

FUSELAGE

Antennas.....CHECK
Empennage.....FREE OF ICE, FROST, SNOW
Stabilator and Trim Tab.....CHECK FOR INTERFERENCE
Rudder.....NO DAMAGE or INTERFERENCE
Static WicksCHECK (3)
Tail Tie Down.....REMOVE
Final Walk Around.....COMPLETE

BEFORE START

Preflight Inspection.....COMPLETE
Flaps.....RETRACT
Cabin Door.....CLOSE AND SECURE
Seat Belts and Harnesses.....FASTEN, CHECK
Fuel Selector.....ON DESIRED TANK
Brakes.....SET
Circuit BreakersIN
Alternate Static Source.....OFF
Carburetor Heat/Alternate Air.....OFF
All Electrical Switches.....OFF
Passenger Briefing (SAFETY).....COMPLETE
BATT MASTER.....OFF
AVIONICS MASTER.....OFF
EMERG BATT Switch.....ARM
Standby Instruments and PFD operate....VERIFY
E VOLTS Indication.....23.3 VOLTS (Min)
BATT MASTR Switch.....ON

STARTING ENGINE

Alternator Switch.....ON
Electric Fuel Pump..... ON
Magneto Switches.....ON
Strobe Lights.....ON
Propeller Area.....CLEAR

CARBURETED:

Throttle..... 1/4" OPEN
Mixture.....FULL RICH
Primer.....AS REQUIRED
Starter.....ENGAGE

FUEL INJECTED: COLD ENGINE

Throttle..... 1/4" OPEN
Mixture.....PRIME THEN CUT OFF
Starter.....ENGAGE
Mixture.....ADVANCE

FUEL INJECTED: HOT ENGINE

Throttle..... 1/2" OPEN
Mixture.....CUTOFF
Starter.....ENGAGE
Mixture.....ADVANCE
IF ENGINE DOES NOT START.....PRIME

Throttle.....ADJUST TO 1000RPM
Oil Pressure.....CHECK
Ammeter..... CHECK

STARTING ENGINE WHEN FLOODED

ThrottleOPEN FULL
Alternator switch.....ON
Electric Fuel Pump.....OFF
Magneto switches.....ON
Strobe Lights.....ON
Mixture.....IDLE CUT-OFF
Propeller Area.....CLEAR
Starter.....ENGAGE
Mixture (when engine starts).....ADVANCE
Throttle.....REDUCE TO 1000 RPM
Oil PressureCHECK
Ammeter.....CHECK

ENGINE FIRE DURING START

Starter..... CONTINUE TO CRANK ENGINE
Mixture.....IDLE CUT-OFF
ThrottleOPEN
Electric Fuel Pump.....OFF
Fuel SelectorOFF
ABANDON IF FIRE CONTINUES

AFTER STARTING ENGINE

Throttle.....800-1200 RPM
Avionics Master Switch.....ON
Strobe Lights.....FIN
NAV Lights.....ON (night)
Fuel Pump.....OFF
Mixture.....FULL RICH BELOW 5000FT.
Flaps.....UP
RadiosSET AND TEST
Flight InstrumentsCHECK/SET
 a. Set fuel level on MFD
 b. Check engine gauges on engine page on MFD
Transponder.....GROUND
Fuel SelectorSWITCH TANKS
Dispatch......RAMP OUT

TAXI

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

RUNUP

Brakes.....HOLD AND SET
Mixture.....FULL RICH
Throttle.....2000 RPM
Magnetos.....CHECK
(max drop 175 rpm, max difference 50 rpm)
Ammeter.....CHECK
Oil Temperature.....CHECK
Oil Pressure.....CHECK
Fuel Pressure/Flow.....CHECK
Carburetor Heat/Alternate Air.....CHECK
(CH-75 RPM/AA-40 RPM drop)
Throttle..... IDLE CHECK THEN 1000 RPM
Auto-PilotCHECK
a. Heading left, right, center
b. Altitude climb, descent, level, and overpower
c. Check auto trim can be turned off
d. AP disconnect

BEFORE TAKEOFF

BATT MASTR / ALTR Switch.....ON
FUEL PUMP.....ON
LEFT/RIGHT Magnetos.....ON
Flight Instruments.....CHECK/SET
Standby Flight Instruments.....CHECK/SET
Fuel SelectorFULLEST TANK
Engine Gauges.....ALL IN GREEN
Carburetor Heat/Alternate
Air.....OFF
Mixture.....SET
Belts/Harnesses.....FASTENED
SeatADJUST/SECURE
FlapsSET
TrimNEUTRAL
Controls.....FREE
Crew Takeoff Briefing.....COMPLETE
Landing Light.....ON
Strobe LightON
Air Conditioner (if installed).....OFF
Parking Brake.....RELEASE
Doors and Windows.....CLOSED & LATCHED

ENGINE FAILURE DURING TAKEOFF

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 to attempt a restart:

Airspeed.....76 KIAS
Fuel Selector.....SWITCH to FULLEST TANK
Electric Fuel Pump.....ON
Mixture.....RICH
If power is not regained, proceed with power-off landing.

NORMAL TAKEOFF

Flaps.....0°
Throttle.....FULL
Rotate60 KIAS
Climb Speed.....76 KIAS

SHORT FIELD TAKEOFF 25° FLAPS

Flaps.....25°
Brakes.....APPLY & HOLD
Throttle.....FULL POWER
Engine_Gauges.....CHECK
Brakes.....RELEASE
Rotate55 KIAS
Climb Speed over Obstacle.....64 KIAS
Climb_Speed.....76 KIAS
Flaps.....SLOWLY RETRACT
Climb Speed.....76 KIAS

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.....64 KIAS
Climb Speed without Obstacle.....76 KIAS
Flaps.....SLOWLY RETRACT

ENROUTE CLIMB

Airspeed.....87 KIAS
Throttle.....FULL OPEN
Landing Light.....OFF
Flaps.....UP

CRUISE

PowerSET
Trim.....SET
Mixture.....FULL RICH BELOW 5000ft.
Electric Fuel Pump.....OFF
Fuel Pressure.....CHECK
Engine Gauges.....CHECK

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

DESCENT NORMAL

Throttle..... AS REQUIRED.(2500 RPM MAX)
Airspeed..... AS REQUIRED (122 KIAS MAX)
Mixture.....RICH
Carburetor Heat.....AS REQUIRED

DESCENT POWER OFF

Throttle.....CLOSE
Airspeed.....AS REQUIRED
Mixture.....AS REQUIRED
Power.....VERIFY WITH THROTTLE EVERY 30 SECONDS
Carburetor Heat.....AS REQUIRED

BEFORE LANDING

SeatADJUST/SECURE
Belts/Harnesses.....FASTEN/CHECK
Electric Fuel Pump.....ON
Fuel SelectorFULLEST TANK
Mixture.....RICH
Landing Light.....ON
Carburetor Heat/Alternate Air.....AS REQUIRED
Air Conditioning (if installed).....OFF

NORMAL LANDING

PowerAS REQUIRED
Flaps.....BELOW 102 KIAS
Airspeed.... 70 KIAS ON FINAL (65 for Short/ Soft Field)
Braking.....AS REQUIRED

BALKED LANDING

Throttle.....FULL POWER
Flaps.....RETRACT TO 25°
Airspeed.....64 KIAS
Climb Speed.....76 KIAS AFTER OBSTACLE CLEARED
Flaps.....SLOWLY RETRACT

AFTER LANDING

Flaps.....UP
Transponder.....GROUND
Fuel Pump.....OFF
Landing Lights.....OFF (Except at Night)
Strobe LightsFIN STROBE
Mixture.....FULL RICH BELOW 5000ft.
Ailerons.....SET TO WIND CONDITIONS

SECURING AIRCRAFT

Strobe and Nav Lights.....OFF
Electrical Equipment (Fans, AC, Pitot Heat, etc.).....OFF
Avionics Master Switch.....OFF
Throttle.....1000 RPM
Mixture.....IDLE CUT-OFF
WAIT FOR PROP TO STOP COMPLETELY
MagnetosOFF
Alternator Switch.....OFF
Master Switch.....OFF
EMERG BATT.....OFF
Parking Brake.....OFF
Tiedowns or Chocks.....SECURE
Trash.....REMOVE

EMERGENCY PROCEDURES

ENGINE FIRE DURING START

Starter.....CONTINUE to CRANK ENGINE
Mixture.....IDLE CUT-OFF
Throttle.....OPEN
Electric Fuel Pump OFF
Fuel Selector.....OFF

ABANDON IF FIRE CONTINUES

ENGINE FAILURE DURING TAKEOFF

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:
Airspeed.....76 KIAS
Fuel Selector.....SWITCH to tank containing fuel
Electric Fuel Pump.....ON
Mixture.....RICH
If power is not regained, proceed with power-off landing.

EMERGENCY PROCEDURES CONT'D

ENGINE FAILURE DURING FLIGHT

RESTART PROCEDURES

Airspeed.....76 KIAS
Fuel SelectorSWITCH TANKS
Electric Fuel Pump.....ON
Mixture.....RICH
Carburetor Heat/Alternate Air.....ON
LEFT/RIGHT MAG Switches..... OFF then ON
one at a time

**IF POWER IS NOT RESTORED, PREPARE FOR
POWER OFF LANDING**

POWER OFF LANDING

Airspeed.....MAINTAIN 76 KIAS
Air Conditioning (if installed).....OFF
Landing Pattern.....ESTABLISH
When committed to landing:
Airspeed.....66 KIAS
Flaps.....AS DESIRED
THROTTLE.....CLOSE
MIXTURE.....IDLE CUT-OFF
LEFT/RIGHT MAG Switches.....OFF
BATT MASTR Switch.....OFF
ALTR Switch.....OFF
FUEL Selector.....OFF

FIRE IN FLIGHT

ELECTRICAL FIRE (Smoke in Cabin)

EMERG BATT Switch.....VERIFY ARM
Master Switch.....OFF
Alternator Switch.....OFF
Vents.....OPEN
Cabin Heat.....OFF
Fire.....EXTINGUISH.

LAND AS SOON AS PRACTICAL

ENGINE FIRE

Fuel SelectorOFF
Throttle.....CLOSED
Mixture.....IDLE CUT-OFF
Electric Fuel Pump.....CHECK OFF
Heater.....OFF
Defroster.....OFF

**PROCEED WITH POWER OFF LANDING
PROCEDURE**

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.

LAND AS SOON AS PRACTICAL

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 POSSIBLE.

ANTICIPATE COMPLETE ELECTRICAL FAILURE.

EMERGENCY PROCEDURES CONT'D

ENGINE ROUGHNESS

Carburetor Heat/Alternate Air.....ON

IF ROUGHNESS CONTINUES >1 MIN:

Carburetor Heat/Alternate Air.....OFF

Mixture.....ADJUST 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

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.....87 KIAS

Cabin Vents.....CLOSE

Storm Window.....OPEN

If Top Latch is open.....LATCH

If Side Latches Are Open.....PULL ON ARM

REST WHILE MOVING LATCH HANDLE TO LATCHED POSITION

If Both Latches Are OpenLATCH SIDE LATCH THEN TOP

LOSS OF OIL PRESSURE

Land as Soon as Practical and Investigate the Cause.

Prepare for Power off Landing

LOSS OF FUEL PRESSURE

Electric Fuel Pump.....ON

Fuel SelectorSWITCH

SPIN RECOVERY

Throttle.....IDLE

Control Wheel.....FULL FORWARD

Ailerons.....NEUTRAL

Rudder.....FULL OPPOSITE TO DIRECTION OF ROTATION

Rudder.....NEUTRAL WHEN ROTATION STOPS

Control Wheel.....SMOOTHLY REGAIN LEVEL FLIGHT ATTITUDE

HIGH OIL TEMPERATURE

Land at Nearest Airport and Investigate the Problem

Prepare For Power Off Landing

CARBURETOR ICING (If Equipped)

Carburetor Heat.....ON

Mixture.....ADJUST FOR MAX SMOOTHNESS