

EMERGENCY PROCEDURES

PIPER CHEROKEE ARCHER II

PA28-181

This is not an FAA Approved Checklist and is to be used for General Purposes Only

ENGINE FAILURE

IMMEDIATELY AFTER TAKEOFF

1. Airspeed - MAINTAIN SAFE AIRSPEED
2. Fuel Selector Valve - OFF
3. Fuel Pump - OFF
4. Mixture - IDLE CUT-OFF

DURING FLIGHT

1. Airspeed - 87mph
2. Fuel Selector - SWITCH TO OTHER TANK
3. Mags - BOTH
4. Fuel Pump - ON
5. Alternate Air - ON
6. Engine Gauges - CHECK

FORCED LANDINGS

EMERGENCY LANDINGS W/OUT ENGINE POWER

1. Airspeed - 87mph
2. Mixture - IDLE CUT-OFF
3. Fuel Selector Valve - OFF
4. Mags - OFF
5. Flaps - AS REQUIRED
6. Doors - UNLATCH PRIOR TO TOUCHDOWN
7. Master Switch - OFF
8. Touchdown - SLIGHTLY TAIL LOW
9. Brakes - APPLY HEAVILY

PRECAUTIONARY LANDING WITH ENGINE POWER

1. Airspeed - 87mph
2. Flaps - 25°
3. Select Field - FLY OVER, noting terrain and obstructions.
4. Electrical Switches - OFF
5. Flaps - 40° (on final approach)
6. Airspeed - 76mph

Vso - 61 mph	Vfe - 115
Vs - 68	Va - 124
Vx - 74	Vno - 140
Vy - 87	Vne - 171

Best Glide - 87

BEFORE STARTING ENGINE

1. Preflight Inspection - COMPLETE
2. Seats, Belts, Shoulder Harnesses - ADJUST and LOCK
3. Fuel Selector Valve - ON FULLEST TANK
4. Avionics Power Switch - OFF
5. Autopilot - OFF
6. Electrical Equipment - OFF
7. Brakes - TEST and SET
8. Flaps - RETRACTED
9. Circuit Breakers - ✓

STARTING ENGINE - NORMAL

1. Carburetor Heat - OFF
2. Mixture - RICH
3. Throttle - OPEN 1/2"
4. Prime - As Required (Skip when HOT)
5. Master - ON
6. Rotating Beacon - ON
7. Fuel Pump - ON
8. Starter - ENGAGE
9. Throttle - 1000 RPM warm up
10. Oil Pressure - ✓ within Green arc
11. Fuel Pump - OFF

AFTER START

1. Lights - As Required
2. Radios - SET
3. Transponder - SBY, 1200
4. DG - SET
5. Mixture - LEAN for Taxi
6. Parking Brake - Release
7. Brakes & Steering - ✓

WHILE TAXING (IFR ✓)

1. Attitude indicator - ERRECT & STABLE, TURN TIP ≤ 5°?
2. Turn coordinator - SKIDDING TURNS

BEFORE TAKE OFF - (IFR ✓)

1. IFR Clearance? - AS NEEDED
2. Clock - SET
3. Magnetic compass - KNOWN HEADING
4. DG - ✓ SET
5. Marker beacon - TEST then LOW
6. VOR - IDENT, if Possible
7. Airspeed - ZERO
8. Altimeter - SET ± 75 FEET
9. Vertical speed - ZERO

BEFORE TAKEOFF - RUN UP

1. Cabin Doors and windows - CLOSED and LOCKED
2. Parking Brake - SET
3. Flight Controls - FREE and CORRECT
4. Flight Instruments - SET
5. Fuel Selector Valve - ON FULLEST TANK
6. Elevator Trim - TAKEOFF
7. Mixture - RICH or As Required
8. Throttle - 2000 RPM
 - a. Magnets - ✓
 - b. Carburetor Heat - ✓
 - c. Engine Instruments and Ammeter - ✓
 - d. Suction Gauge - ✓ 5"±/.1
9. Throttle - ✓ IDLE, then 1000 RPM
10. Annunciator Panel - TEST
11. Radios - SET
12. Transponder - SET then ALT
13. Autopilot - OFF
14. Throttle Friction Lock - ADJUST
15. Fuel Pump - ON
16. Lights - As Required
17. Parking Brake - RELEASE

TAKEOFF - NORMAL

1. Flaps - 0-10°
2. Power - FULL THROTTLE
3. Elevator Control - LIFT NOSE WHEEL at 60-70mph
4. Climb Speed - 87mph
5. Flaps - RETRACT

SHORT FIELD TAKEOFF

1. Flaps - 25°
2. Power - FULL THROTTLE
3. Elevator Control - LIFT NOSE WHEEL at 47-56mph
4. Climb Speed - Vx 74mph, climb past obstacle
5. Climb Speed - Vy 87mph
6. Flaps - RETRACT

EN ROUTE CLIMB (500-1000'AGL)

1. Airspeed - 100mph
2. Mixture - FULL RICH (below 3000 feet)
3. Fuel Pump - OFF

CRUISE

1. Power - SET
2. Elevator and Rudder Trim - ADJUST
3. Mixture - LEAN above 3000'
4. Engine Instruments - ✓
5. Landing Light - OFF

DESCENT

1. Power - AS DESIRED
2. Mixture - ENRICH as required

BEFORE LANDING

1. Seats, Belts, Shoulder Harnesses - ADJUST and LOCK
2. Fuel Selector Valve - PROPER TANK
3. Mixture - RICH below 3000'
4. Fuel Pump - ON
5. Landing Light - ON
6. Autopilot - OFF

LANDING - NORMAL

1. Airspeed - 86mph
2. Flaps - AS DESIRED (below 125mph)
3. Airspeed - 76mph w/ 40° flaps

SHORT FIELD LANDING

1. Airspeed - 86mph
2. Flaps - 40° (below 125mph)
3. Airspeed - 76mph
4. Trim - ADJUST
5. Power - REDUCE to idle as obstacle is cleared.
6. Touchdown - MAIN WHEELS FIRST
7. Brakes - APPLY HEAVILY
8. Wing Flaps - RETRACT for maximum braking

AFTER LANDING

1. Flaps - RETRACT
2. Electric Fuel Pump - OFF
3. Transponder - SBY
4. Lights - As Required
5. Mixture - LEAN for taxi

SECURING AIRPLANE

1. Parking Brake - SET
2. Throttle - IDLE 1000 RPM
3. Avionics Power Switch - OFF
4. Electrical Equipment - OFF, except Beacon
5. Mixture - IDLE CUT-OFF
6. Beacon - OFF
7. Ignition Switch - OFF
8. Master Switch - OFF
9. Control Lock - INSTALL