



REV. 4/10/2021

**Piper Cherokee N95203
PA-28-140 (P28A)**

Preflight Inspection

CABIN

Control Wheel Lock.....REMOVE
 Documents (ARROW).....ON BOARD
 Next Maintenance.....CHECK
 Alternate Static Source.....NORMAL
 Ignition Switch.....OFF
 Avionics Master.....OFF
 Master Switch.....ON
 Fuel Quantity.....CHECK
 Lights.....CHECK
 Pitot Heat.....CHECK
 Stall Warning.....CHECK
 Master Switch.....OFF
 Wing Flaps.....DOWN
 Trims.....NEUTRAL

RIGHT WING

Wing Flap.....SECURE
 Aileron.....FREE / SECURE
 Wing Tip / Lights.....CHECK
 Leading Edge.....INSPECT
 Cabin Air Inlet.....CHECK CLEAR
 Wing Tie-down.....REMOVE
 Fuel Vent.....CHECK CLEAR
 Main Tire (24 PSI) / Brake.....CHECK
 Main Gear Strut.....CHECK
 Fuel Sump.....DRAIN / CHECK
 Fuel Quantity / Cap.....CHECK / SECURE

NOSE

Windshield.....INSPECT / CLEAN
 Engine Oil.....6-8 Qts (7 min X-Country)
 ASK FOR ASSISTANCE TO FILL
 Exhaust Stack.....INSPECT / SECURE
 Propeller / Spinner.....CHECK
 Alternator Belt.....CHECK
 Landing Light / Air Filter.....CHECK
 Nose Strut / Tire (24 PSI).....CHECK
 Fuel Sump.....DRAIN / CHECK

LEFT WING

Cabin Air Inlet.....CHECK CLEAR
 Main Tire (24 PSI) / Brake.....CHECK
 Main Gear Strut.....CHECK
 Fuel Sump.....DRAIN / CHECK
 Fuel Vent.....CHECK CLEAR
 Wing Tie-down.....REMOVE
 Pitot / Static Port.....CHECK
 Fuel Quantity / Cap.....CHECK / SECURE
 Leading Edge / Stall Switch.....CHECK
 Wing Tip / Lights.....CHECK
 Aileron.....FREE / SECURE
 Wing Flap.....SECURE

FUSELAGE / EMPENNAGE

Fuselage.....INSPECT Rivets and Skin
 Stabilator / Anti-servo.....FREE / SECURE
 Vertical Stabilizer.....CHECK
 Rudder.....SECURE
 Tail Tie-Down.....REMOVE
 Chocks / Towbar.....REMOVE / STOWED
 Wing Flaps.....RETRACT

This checklist is not a substitute for the Piper Cherokee 140 B Owner's Handbook.
All information contained herein is deemed accurate but not guaranteed.

Preflight Inspection

Before Engine Start

Preflight Inspection.....COMPLETE
 Passenger Briefing.....COMPLETE
 SPOT Unit.....ON / TRACK
 Seats / Belts.....ADJUST
 Door.....SECURE
 Fuel Selector Valve.....FULLEST TANK
 Avionics Master.....OFF
 Autopilot & Electrical Equipment.....OFF
 Circuit Breakers.....CHECK IN
 Brakes.....SET / HOLD

Engine Start

COLD

Carburetor Heat.....OFF
 Mixture.....FULL RICH
 Throttle.....OPEN 1/4 INCH
 Prime.....3 Strokes
 Anti-Collision Light.....ON
 Master Switch.....ON
 Fuel Pump.....ON
 Propeller Area.....CLEAR
 Ignition Switch.....START (turn then push)
 Throttle.....800-1000 RPM
Oil Pressure.....CHECK
 NAV Lights.....ON

HOT START

Carburetor Heat.....OFF
 Mixture.....IDLE CUT-OFF
 Throttle.....OPEN 1/2 INCH
 Anti-Collision Light.....ON
 Master Switch.....ON
 Fuel Pump.....ON
 Propeller Area.....CLEAR
 Ignition Switch.....START (turn then push)
 Mixture.....3/4 RICH once engine fires
 Throttle.....800-1000 RPM
Oil Pressure.....CHECK
 NAV Lights.....ON
**(For FLOODED START: Throttle FULL,
 Master Switch ON, Fuel Pump OFF,
 Mixture IDLE CUT-OFF then 3/4 RICH
 when engine fires, Retard the Throttle.)**

Before Taxi

Avionics Master.....ON
 Mixture.....LEAN for Taxi
 Radios & GPS.....SET / VOLUME Adjust
 Transponder.....ALT / As Required
 Lights.....TAXI (Landing)
 Fuel Pump.....OFF
 Brakes.....RELEASE / CHECK
 ATIS and Clearance.....OBTAIN

Before Takeoff

Brakes.....SET / HOLD
 Door / Window.....CLOSED / LOCKED
 Seats / Belts.....SECURE / CHECK
 Flight Controls.....FREE / CORRECT
 Stabilator / Rudder Trim.....TAKEOFF
 Fuel Selector Valve.....FULLEST TANK

RUNUP

Mixture.....RICH
 Throttle.....1800 RPM
 Mixture.....SET for Density Alt
 Carburetor Heat.....CHECK RPM DROP
 Magnetos.....CHECK RPM DROP
 Max drop: 175, Difference: 50
 Engine Gauges.....CHECK
 Ammeter.....CHECK LOAD
 Suction.....CHECK 5"
 Flight Instruments.....SET / CHECK
 Throttle.....IDLE / 800-1000 RPM
 Quadrant Friction Lock.....SET
 Autopilot.....CHECK / OFF
 See Autopilot Preflight page if first flight
 of the day and/or autopilot is to be used
 Radios / GPS.....SET / CHECK
 Transponder.....ALT
 Fuel Pump.....ON
 Takeoff Procedure.....BRIEFED
 Takeoff Time.....RECORD
 Clearance.....OBTAINED
 Lights.....ALL ON (Strobe)
 Brakes.....RELEASE

Missoula ATIS.....126.65
 Missoula Ground.....121.90
 Missoula Tower.....118.40
 NorthStar Jet Unicom.....123.30

Start / Taxi / Before Takeoff

Normal Takeoff

Trim.....SLIGHTLY AFT
Wing Flaps.....UP (Soft Field 25°)
Carburetor Heat.....OFF
Mixture.....SET for Density Alt
Strobe Light.....ON
Fuel Pump.....ON
Power.....FULL THROTTLE
Rotate.....60 MPH
Climb.....**Vy 85 MPH**

Short Field Takeoff

Wing Flaps.....25°
Carburetor Heat.....OFF
Fuel Pump.....ON
Brakes.....HOLD
Power.....FULL THROTTLE
Mixture.....SET for maximum RPM
Brakes.....RELEASE
Rotate.....55-60 MPH
Climb.....**Vx 74 MPH**
WHEN CLEAR OF OBSTACLE
Wing Flaps.....RETRACT SLOWLY
Airspeed.....**Vy 85 MPH**

Normal Climb

Wing Flaps.....UP / VERIFIED
Airspeed.....100 MPH
Power.....FULL THROTTLE
Mixture.....LEAN As Required
Fuel Pump.....OFF above 1000' AGL
Fuel Pressure.....CHECK
Engine Gauges.....CHECK / MONITOR

Cruise

Power.....(75% or less) 2200-2700 RPM
Mixture.....LEAN 50° rich of peak EGT
Stabilator / Rudder Trim.....ADJUST
Heading Indicator.....SET
Landing Light.....OFF

Switching Fuel Tanks

Fuel Pump.....ON
Switch Tanks.....Check Fuel Pressure
Fuel Pump.....OFF

Takeoff / Climb / Cruise / Descent / Landing

Descent

Power.....AS DESIRED
Mixture.....ENRICH as required
Carburetor Heat.....AS REQUIRED
Landing Light.....ON
Radios / Weather.....SET / OBTAIN

Before Landing

Fuel Selector Valve.....FULLEST TANK
Fuel Pump.....ON
Mixture.....ADJUST for field elev.
Seats / Belts.....SECURE
Wing Flaps.....AS REQUIRED
(below 115 MPH)
Lights.....ALL ON
Autopilot.....OFF (Disengage)

Normal Landing

Airspeed.....85 MPH (Flaps UP)
Wing Flaps.....AS DESIRED
(below 115 MPH)
Reduce approach speed 3 MPH for each notch of flaps.

Short Field Landing

Airspeed.....85 MPH
Wing Flaps.....40°
(Below 115 MPH)
Airspeed.....76 MPH
(Reduce to 55-65 MPH in flare)
Landing.....LOWER NOSE GENTLY
Wing Flaps.....RETRACT
Brakes.....APPLY
(while holding yoke back)

Go-Around

Power.....FULL THROTTLE
Carburetor Heat.....OFF
Wing Flaps.....25°
Airspeed.....**Vy 85 MPH**
Wing Flaps.....RETRACT SLOWLY

After Landing

Wing Flaps.....RETRACT
Fuel Pump.....OFF
Strobe Light.....OFF
Pitot Heat.....OFF
Mixture.....LEAN for Taxi
Transponder.....ALT / As Required
Radios / Clearance.....SET / OBTAIN


Shutdown / Secure

Flight Plan.....CLOSED
Avionics Master.....OFF
Autopilot.....OFF
Lights.....OFF
Throttle.....IDLE
Mixture.....IDLE CUT-OFF
Ignition Switch.....OFF
Tach Time.....RECORD
Master Switch.....OFF
SPOT Unit.....OFF
Control Wheel.....SECURE with seat belt
Pitot Cover.....INSTALL
Aircraft Hobbs / Tach / Chocks / Tie-down
Post-Flight Walk-Around

After Landing / Shutdown


Fires

During Start on the GROUND

Starter.....CONTINUE TO CRANK 
Mixture.....IDLE CUT-OFF
Throttle.....OPEN
Fuel Pump.....OFF
Fuel Selector Valve.....OFF if time allows
Master Switch.....OFF


ABANDON AIRCRAFT if fire continues
ACTIVATE FIRE EXTINGUISHER

Engine Fire in Flight

Ignition Switch.....OFF 
Throttle.....CLOSE
Mixture.....IDLE CUT-OFF
Fuel Selector Valve.....OFF
Fuel Pump.....CHECK OFF
Master Switch.....OFF

DIVE to blow out fire (if altitude permits)
Proceed with POWER OFF LANDING

Electrical Fire in Flight

Master Switch.....OFF 
Avionics Switch.....OFF
All Switches except Ignition.....OFF
Cabin Heat / Air / Vent.....CLOSED
ACTIVATE FIRE EXTINGUISHER

If Fire is out:

Cabin Heat / Air / Vents.....OPEN
Master Switch.....ON
Circuit Breakers.....CHECK (do not reset)
Radio Switches.....OFF
Avionics Master.....ON
Radio Switches.....ON
(one at a time until short is found)

Engine Failures

Take-Off Roll

Throttle.....IDLE
Fuel Pump.....OFF
Brakes.....APPLY
Wing Flaps.....RETRACT
Mixture.....IDLE CUT-OFF

Immediately After Take-Off

Airspeed.....83 MPH
Fuel Pump.....OFF
Mixture.....IDLE CUT-OFF
Fuel Selector Valve.....OFF
Ignition Switch.....OFF
Wing Flaps.....AS REQUIRED
Master Switch.....OFF

During Flight

Airspeed.....83 MPH
Fuel Selector Valve.....SWITCH TANKS
Carburetor Heat.....ON
Mixture.....RICH
Fuel Pump.....ON
Throttle.....AS REQUIRED
Primer.....IN and Locked
Ignition Switch.....BOTH
(START if Prop has stopped)

Power Off Landing

Airspeed.....83 MPH
Landing Location.....SELECT
Radio.....ANNOUNCE POSITION
Seat Belts.....SECURE
Fuel Selector Valve.....OFF
Mixture.....IDLE CUT-OFF
Ignition Switch / Master Switch.....OFF
Wing Flaps.....AS REQUIRED
Door.....UNLATCHED
Airspeed.....76 MPH for Landing

Emergency Procedures

1. Set Autopilot Master Switch to ON position.

- A. RDY, ALT, ST, HD, LO TRK, HI TRK, TRIM UP, and TRIM DN lamps illuminate on AP display.
- B. TRIM UP lamp extinguishes after 2 seconds.
- C. RDY, ST, HD, LO TRK, HI TRK, and TRIM DN lamps extinguish after 7 seconds.
- D. ALT lamp extinguishes after 10 seconds.
- E. RDY lamp alone re-illuminates on AP display within 3 minutes.

2. Roll Axis Check

Move A/C Control Wheel left and right, to sense its freedom of movement about roll axis.

- A. Set L/R Turn Knob located on bezel under its index.
- B. Engage stabilizer mode. ST lamp alone is illuminated on AP display.
- C. Attempt movement of A/C Control Wheel left and right. A/C Control Wheel's reduced freedom of movement indicates that Roll Servo is engaged. Roll Servo can be overridden. If not, disconnect autopilot and do not use.
- D. Turn L/R Turn Knob to the left side of its index. A/C Control Wheel turns to the left.
- E. Turn L/R Turn Knob to the right side of its index. A/C Control Wheel turns to the right.
- F. Set L/R Turn Knob under its index. A/C Control Wheel stops.

3. Heading Check

Set Heading Bug under Lubber Line.

- A. Engage heading mode. HD lamp alone is illuminated on AP display.
- B. Turn Heading Bug to the left side of Lubber Line. A/C Control Wheel turns to the left.
- C. Turn Heading Bug to the right side of Lubber Line. A/C Control Wheel turns to the right.
- D. Set Heading Bug under Lubber Line. A/C Control Wheel stops.

Note: If it is not possible to select a local VOR frequency on Navigation Receiver, then proceed to step 5.

4. NAV Check

Select local VOR frequency on Navigation Receiver.

- A. Turn OBS until CDI needle is centered.
- B. Engage low track mode. LO TRK lamp alone is illuminated on AP display.
- C. Engage high track mode. HI TRK lamp alone is illuminated on AP display.
- D. Turn OBS until CDI needle deflection is 2 dots right of center. A/C Control Wheel turns to the right.
- E. Turn OBS until CDI needle deflection is 2 dots left of center. A/C Control Wheel turns to the left.
- F. Turn OBS until CDI needle is centered. A/C Control Wheel stops.

5. Pitch Axis Check

Move A/C Control Wheel forward and aft, to sense its freedom of movement about pitch axis.

- A. Engage altitude hold mode. ALT lamp is illuminated on AP display.
- B. Attempt movement of A/C Control Wheel forward and aft. A/C Control Wheel's reduced freedom of movement indicates that Pitch Servo is engaged. Pitch Servo can be overridden. If not, disconnect autopilot and do not use.
- C. Move A/C Control Wheel as far forward as possible. After 3 seconds, TRIM UP lamp becomes illuminated on AP display, and audible alert sounds a steady tone. After 7 seconds, TRIM UP lamp flashes and audible alert becomes periodic.
- D. Move A/C Control Wheel aft until TRIM UP lamp is extinguished. Audible alert is squelched.
- E. Move A/C Control Wheel as far aft as possible. After 3 seconds, TRIM DN lamp becomes illuminated on AP display, and audible alert sounds a steady tone. After 7 seconds, TRIM DN lamp flashes and audible alert becomes periodic.
- F. Move A/C Control Wheel forward until TRIM DN lamp is extinguished. Audible alert is squelched.
- G. Disconnect autopilot by any one of the following means:
 - a. Press optional AP DISC Switch typically located on Control Wheel.
 - b. Press/Hold optional MODE SEL Switch typically located on Control Wheel for 3 seconds.
 - c. Press/Hold PUSH MODE Switch located on bezel for 3 seconds.
- RDY lamp flashes and audible alert sounds a periodic tone, while all other lamps are extinguished. After 5 seconds, RDY lamp stops flashing but remains illuminated, and audible alert is squelched.
- H. Move A/C Control Wheel left and right. A/C Control Wheel's increased freedom of movement indicates that Roll Servo is disengaged.
- I. Move A/C Control Wheel forward and aft. A/C Control Wheel's increased freedom of movement indicates that Pitch Servo is disengaged.







Autopilot Preflight Inspection

V Speeds

Piper Cherokee 140 B Airspeeds

V Speed	MPH
V _{GLIDE}	83
V _{S0}	55
V _S	64
V _R	60
V _X	74
V _Y	85
V _{FE}	115
V _{NO}	140
V _{NE}	171
Max X-wind	20 (17 KTS)
V _A	125

Light Gun Signals

GROUND	SIGNAL	AIR
Cleared for Takeoff		Cleared to Land
Cleared to Taxi		Return for Landing
STOP		Give Way Continue Circling
Taxi Clear of Runway		Airport Unsafe DO NOT LAND
Return to Starting Point on Airport		Not Applicable
Exercise EXTREME CAUTION		Exercise EXTREME CAUTION

Density Altitude Chart

