



REV. 4/10/2021

**Piper Arrow N872WL
PA-28R-200 (P28R)**

Preflight Inspection

CABIN

- Documents (ARROW).....ON BOARD
- Next Maintenance.....CHECK
- Control Wheel Lock.....REMOVE
- Gear Selector.....CHECK DOWN
- Ignition Switch.....OFF
- Avionics Master.....OFF
- Master Switch.....ON
- Gear Lights.....CHECK **3 GREEN**
- Fuel Quantity.....CHECK
- Electric Trim.....CHECK / NEUTRAL
- Lights.....CHECK
- Pitot Heat.....CHECK
- Stall Warning.....CHECK
- Master Switch.....OFF
- Wing Flaps.....DOWN

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 (27 PSI) / Brake.....CHECK
- Main Gear Strut (2") / Well.....CHECK
- Gear Position Switch.....CHECK
- Fuel Sump.....DRAIN / CHECK
- Fuel Quantity / Cap.....CHECK / SECURE

NOSE

- Windshield.....INSPECT / CLEAN
- Engine Oil.....6-8 Quarts
- Exhaust Stack.....INSPECT / SECURE
- Cowl Scoop.....CHECK
- Propeller / Spinner.....CHECK
- Alternator Belt.....CHECK
- Landing Light.....CHECK
- Induction Inlet.....CLEAR
- Nose Gear / Tire (30 PSI).....CHECK
- Strut (2.75") / Gear Well.....CHECK
- Gear Position Switches.....CHECK
- Fuel Sump.....DRAIN / CHECK

LEFT WING

- Cabin Air Inlet.....CHECK
- Main Tire (27 PSI) / Brake.....CHECK
- Main Gear Strut (2") / Well.....CHECK
- Squat / Position Switches.....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
- Baggage Door.....SECURE

**This checklist is not a substitute for the Piper Cherokee Arrow 200 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 / Shoulder 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

- Throttle.....OPEN 1/2 INCH
- Propeller.....FULL FORWARD
- Rotating Beacon.....ON
- Master Switch.....ON
- Fuel Pump.....ON
- Mixture.....FULL RICH (3 sec.)
- Mixture.....IDLE CUT-OFF
- Propeller Area.....CLEAR
- Ignition Switch.....START (turn then push)
- Mixture.....FULL RICH
- Throttle.....800-1200 RPM

Oil Pressure.....CHECK

- NAV Lights.....ON
- Avionics Master.....ON

HOT START

- Throttle.....OPEN 1/2 INCH
- Propeller.....FULL FORWARD
- Mixture.....IDLE CUT-OFF
- Rotating Beacon.....ON
- Master Switch.....ON
- Fuel Pump.....ON
- Propeller Area.....CLEAR
- Ignition Switch.....START (turn and push)
- Mixture.....ADVANCE TO 3/4 RICH
- Throttle.....800-1200 RPM

Oil Pressure.....CHECK

- Avionics Master.....ON
- NAV Lights.....ON

(For FLOODED START: Throttle FULL, Fuel pump OFF, Mixture IDLE CUT-OFF then 3/4 RICH when engine fires.)

Engine Start / Taxi

Before Taxi

- Mixture.....LEAN for Taxi
- Wing Flaps.....RETRACT
- 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
- Alternate Air.....OFF / CLOSED

RUNUP

- Mixture.....RICH
- Throttle.....2000 RPM
- Magnetos.....CHECK RPM DROP
- Max drop: 175, Difference: 50
- Prop Cycle 3 Times: DROP RPM.....
- INCREASE MP....
- DROP Oil Press....

- Prop.....FULL FORWARD
- Engine Gauges.....CHECK
- Ammeter.....CHECK LOAD
- Suction.....CHECK 4.8-5.2
- Flight Instruments.....SET / CHECK
- Throttle.....IDLE / 1000 RPM
- Quadrant Friction Lock.....SET
- Autopilot.....CHECK / OFF
- Radios / GPS.....SET / CHECK
- Transponder.....ALT/AS REQUIRED
- Fuel Pump.....ON
- Takeoff Procedure.....BRIEFED
- Takeoff Time.....RECORD
- Clearance.....OBTAINED
- Lights.....ALL ON (Wing / Anti-Collision)
- Brakes.....RELEASE

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

Normal Takeoff

Trim.....SLIGHTLY AFT
Wing Flaps.....UP (Soft - 25°)
Fuel Pump.....ON
Mixture.....RICH
Power.....FULL THROTTLE / 2700 RPM
Rotate.....60-70 MPH
Climb.....**Vy 85 MPH (95 MPH gear UP)**
Positive Rate of Climb
Gear Selector.....UP
Wing Flaps.....RETRACT through 95 MPH

Short Field Takeoff

Trim.....SLIGHTLY AFT
Wing Flaps.....25°
Fuel Pump.....ON
Brakes.....HOLD
Power.....FULL THROTTLE / 2700 RPM
Mixture.....SET for maximum power
Brakes.....RELEASE
Rotate.....60-65 MPH
Climb.....**Vx 80 MPH**
Gear Selector.....UP*
WHEN CLEAR OF OBSTACLE
Airspeed.....**Vy 95 MPH**
Wing Flaps.....RETRACT SLOWLY

Normal Climb

Wing Flaps.....UP / VERIFIED
Airspeed.....110 MPH
Power.....25 in. / 2500 RPM
Mixture.....LEAN As Required (12-14 GPH)
Fuel Pump.....OFF Above 1000' AGL
Fuel Pressure.....CHECK
Wing Lights.....OFF
Engine Gauges.....CHECK / MONITOR

** During climb below speeds of 85 MPH hold the emergency gear lever in the "override up" position until the back-up extender system no longer commands the gear down. This will occur at approximate airspeeds of 85 MPH IAS at sea level to 100 MPH IAS at 10,000 feet, with a straight line variation between.*

Takeoff / Enroute / Before Landing

Max Performance Climb

Wing Flaps.....UP / VERIFIED
Airspeed.....**Vy 95 MPH**
Power.....FULL THROTTLE / 2700 RPM
Mixture.....LEAN As Required
Fuel Pump.....OFF Above 1000' AGL
Fuel Pressure.....CHECK
Wing Lights.....OFF
Engine Gauges.....CHECK / MONITOR

Cruise

Power.....18-26 in. / 2000 or 2400 RPM
(75% or less).....*Avoid continuous 2000-2350 RPM*
Mixture.....LEAN 50° rich of peak EGT
Stabilator / Rudder Trim.....ADJUST
Heading Indicator.....SET
Lights.....AS DESIRED
Autopilot.....AS DESIRED
Switching Fuel Tanks
Fuel Pump.....ON
Switch Tanks.....Check Fuel Pressure
Fuel Pump.....OFF

Descent

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

Before Landing

Fuel Selector Valve.....FULLEST TANK
Fuel Pump.....ON
GEAR.....DOWN Check **3 GREEN**
(Below 150 MPH, 125 MPH preferred)
Mixture.....RICH
Propeller.....FULL FORWARD
Seat Belts / Shoulder Harness.....ON
Wing Flaps.....AS DESIRED
(Below 125 MPH)
Lights.....ALL ON
Autopilot.....OFF

Normal Landing

Airspeed.....90-100 MPH (Flaps UP)
Wing Flaps.....AS DESIRED
(Below 125 MPH)
Airspeed.....83-90 MPH (Flaps DOWN)

Short Field Landing

Airspeed.....90 MPH
Wing Flaps.....40°
(Below 125 MPH)
Airspeed.....83 MPH
Power.....AS REQUIRED
HOLD NOSE Off.....Then Ease Down
Wing Flaps.....RETRACT
Brakes.....APPLY

Go-Around

Power.....FULL THROTTLE / 2700 RPM
Airspeed.....**Vy 85 MPH (95 MPH gear UP)**
Gear Selector.....UP*
Wing Flaps.....RETRACT SLOWLY

After Landing

Wing Flaps.....RETRACT
Fuel Pump.....OFF
Wing / Anti-Collision Lights.....OFF
Mixture.....LEAN for Taxi
Transponder.....ALT / As Required
Radios / Clearance.....SET / OBTAIN

Shutdown / Secure

Transponder.....STBY
Flight Plan.....CLOSED
Avionics Master.....OFF
Autopilot / Electrical.....OFF
Throttle.....IDLE
Mixture.....IDLE CUT-OFF
Ignition Switch.....OFF
Master Switch.....OFF
Control Lock.....INSTALL
SPOT Unit.....OFF
Pitot Cover.....INSTALL
Aircraft Hobbs / Tach / Chocks / Tie-down
Post-Flight Walk-Around

Landing Gear Emergencies

Emergency Gear Extension

Master Switch.....ON
Circuit Breakers.....CHECK
Panel Lights.....OFF in daytime
Check Lights / Bulbs.....**3 GREEN**
Gear Selector.....CYCLE / DOWN
Airspeed.....100 MPH
Emergency Gear Lever.....HOLD DOWN
Fishtail aircraft if necessary to lock gear
IF GEAR IS NOT DOWN & LOCKED:
Emergency Gear Lever.....HOLD UP
Fishtail aircraft if necessary to lock gear

Gear Up Emergency Landing

Airspeed.....110 MPH
Wing Flaps.....UP / AS NECESSARY
Throttle.....CLOSE
Ignition / Master Switches.....OFF
Fuel Selector.....OFF
Mixture.....IDLE CUT-OFF
Seat Belts.....SECURE
Emergency Gear Lever.....HOLD UP

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 (smoke in Cabin)

Master Switch.....OFF
 Vents.....OPEN
 Cabin Heat.....OFF
 ACTIVATE FIRE EXTINGUISHER
 Cabin.....VENTILATE

LAND as soon as practicable

Power Off Landing

Airspeed.....105 MPH
 Landing Location.....SELECT
 Radio.....ANNOUNCE POSITION
 Seat Belts / Shoulder Harness....SECURE
 Fuel Selector Valve.....OFF
 Mixture.....IDLE CUT-OFF
 Ignition Switch / Master Switch.....OFF
 Wing Flaps.....AS REQUIRED
 Door.....UNLATCHED
 Airspeed.....90 MPH for Landing
 Landing Gear.....AS DESIRED

Gear Up Landing Procedure on Previous Page

Emergency Procedures

Engine Failures

Take-Off Roll

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

Immediately After Take-Off

Airspeed.....105 MPH
 Fuel Selector Valve.....SWITCH TANKS
 Fuel Pump.....ON
 Mixture.....RICH
 Alternate Air.....ON
 Emergency Gear Lever.....AS REQUIRED
 If power is not restored, proceed with
 POWER OFF LANDING procedure

During Flight

Airspeed.....105 MPH
 Fuel Selector Valve.....SWITCH TANKS
 Fuel Pump.....ON
 Mixture.....RICH
 Alternate Air.....ON
 Throttle.....1/2 OPEN
 Ignition Switch.....L / R / BOTH
 (START if Prop has stopped)

Power Restored - Alternate Air.....OFF
 Fuel Pump.....OFF

Gear Emergencies

Emergency Gear Extension

Master Switch.....ON
 Circuit Breakers.....CHECK
 Panel Lights.....OFF in daytime
 Check Lights / Bulbs.....3 GREEN
 Gear Selector.....CYCLE / DOWN
 Airspeed.....100 MPH
 Emergency Gear Lever.....HOLD DOWN
 Fishtail aircraft if necessary to lock gear
IF GEAR IS NOT DOWN & LOCKED:
 Emergency Gear Lever.....HOLD UP
 Fishtail aircraft if necessary to lock gear

V Speeds

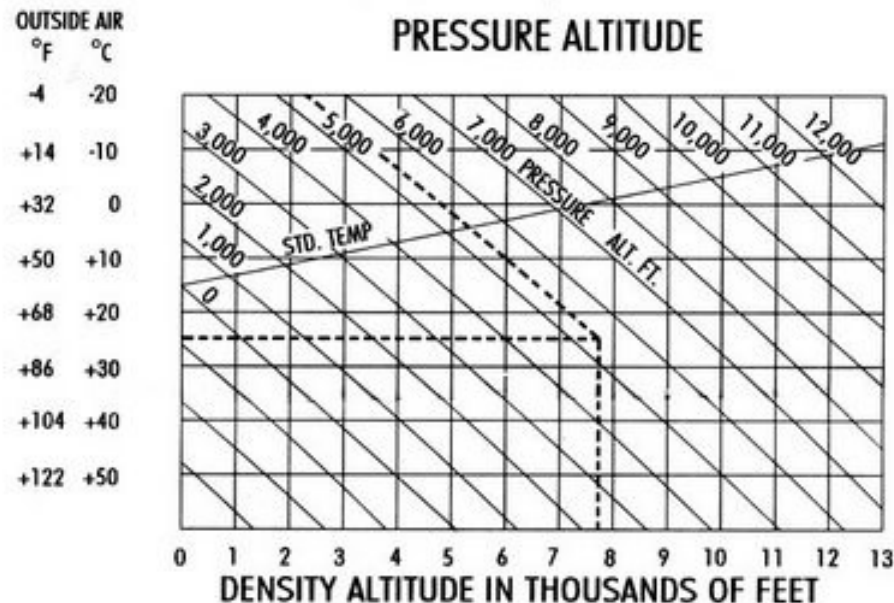
PA-28R-200 B Arrow Airspeeds

| V Speed | MPH |
|--------------------|-------------|
| V _{GLIDE} | 105 |
| V _{SO} | 64 |
| V _S | 70 |
| V _R | 65 |
| V _X | 81-91 |
| V _Y | 85-95 |
| V _{FE} | 125 |
| V _{NO} | 170 |
| V _{NE} | 214 |
| Max X-wind | 20 (17 KTS) |
| V _A | 134 |
| V _{LE} | 150 |
| V _{LO} | 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



V-Speeds / Light Gun Signals / Density Altitude Chart