



ARROW

PA-28R-201

PILOT'S CHECKLIST

2023

**ARROW PA28R-201
SPEEDS FOR OPERATION**

*Speeds are for maximum weight.
To achieve the performance
specified for takeoff distance, the
speed appropriate to weight
must be used.*

TAKEOFF

Normal Rotation.....65-75 KIAS
Normal Climb Out.....90 KIAS
(GEAR UP)

CLIMB

Best Rate of Climb(Vy).....90 KIAS
(GEAR UP)
Best Angle of Climb (Vx).....78 KIAS
(GEAR UP)
Best Angle of Climb(Vx).....72 KIAS
(GEAR DOWN)
En Route Climb.....104 KIAS

GEAR SPEEDS

Maximum Landing Gear Operating
Speed.....129 KIAS
Maximum Landing Gear
Retraction Speed.....107 KIAS

MANEUVERING SPEED

(Max. Rec. Turbulent Air
Penetration Speed)
2750 LBS.....118 KIAS
1865 LBS.....96 KIAS

MAXIMUM DEMONSTRATED

CROSSWIND

Takeoff or Landing.....17 KTS

**PREFLIGHT INSPECTION
PREPARATION**

Weather.....SUITABLE
Weight/C.G.....WITHIN LIMITS
Navigation.....PLANNED
Charts and Navigation
Equipment.....ON BOARD
Performance and
Range.....COMPUTED AND SAFE
Baggage.....WEIGHED, STOWED
& TIED

COCKPIT

Aircraft Documents.....ON BOARD
& VISIBLE
Control Wheel.....RELEASE BELTS
Landing Gear Emergency Release.....UP
Gear Handle.....DOWN
Parking Brake.....SET
Radio Master Switch.....OFF
Electrical Switches (Fans, Pitot Heat,
AP/FD, AC, etc).....OFF
Ignition Switch.....OFF
Magnetos.....OFF
Mixture.....IDLE CUT-OFF
Master Switch.....ON
Fuel Quantity Gauges.....CHECK
Annunciator Panel.....CHECK
Interior and Exterior Lights.....CHECK
Stall Warning.....CHECK
Pitot Heat.....CHECK
Master Switch.....OFF
Flight Controls.....FREE & CORRECT
Flaps.....EXTEND
Trim.....CHECK, SET NEUTRAL
Pitot & Static Drain.....DRAIN, CLOSE
Windows.....CHECK, CLEAN
Baggage, Empty Seats.....SECURE
Baggage Door.....CLOSE, SECURE

RIGHT WING

Wing Surface.....FREE OF
ICE, SNOW, FROST
Flaps and AileronsCHECK
MOVEMENT, SECURITY
Static Wicks.....CHECK
Wing Tip and Lights.....CHECK
Fuel Tank.....CHECK
SUPPLY & SECURE CAP
Fuel Tank Vent.....CLEAR
Fuel Tank Sump.....DRAIN
Wing Tie Down/Chocks.....REMOVE
Main Gear Strut...CHECK (approx. 2 in.)
Tire.....CHECK
Brake Block and Discs.....CHECK
Switches and Gear Well.....CHECK
Fresh Air Inlet.....CLEAR

NOSE SECTION

Fuel and Oil.....CHECK FOR LEAKS
General Condition.....CHECK
Cowling.....SECURE
Oil.....CHECK QUANTITY
(6 to 8 qts)
Dipstick.....PROPERLY SEATED
Oil Filler Inspection Door...SECURE
Air Inlets...CLEAR, REMOVE COVER
Engine Baffle Seals.....CHECK
Alternator Belt.....CHECK TENSION
Windshield.....CLEAN
Propeller and Spinner.....CHECK
Landing Light.....CHECK
Chock.....REMOVE
Nose Gear Strut.....CHECK
(approx. 2.75 in)
Nose Wheel Tire.....CHECK
Switches and Gear Well.....CHECK
Fuel Strainer.....DRAIN

FUSELAGE

Antenna.....CHECK
Left Static Vent.....CLEAR
Fresh Air Inlet.....CLEAR
Empennage.....FREE OF ICE, FROST
Stabilator.....CHECK FOR INTERFERENCE
Tail Tie Down.....DISCONNECT
Right Static Vent.....CLEAR
Final Walk Around.....COMPLETE
Baggage Door.....SECURE

LEFT WING

Wing.....FREE
OF ICE, SNOW, FROST
Fresh Air Inlet.....CLEAR
Main Gear Strut.....CHECK
(approx. 2 in.)
Tire.....CHECK
Brake Block and Discs.....CHECK
Switches and Gear Well.....CHECK
Fuel Tank.....CHECK
SUPPLY & SECURE CAP
Fuel Tank Sump.....DRAIN
Fuel Vent.....CLEAR
Wing Tie Down and/or
Chocks.....REMOVE
Pitot Mast.....REMOVE COVER,
HOLES CLEAR
Stall Warning Vane.....CHECK
Wing Tip and Lights.....CHECK
Aileron and FlapsCHECK
MOVEMENT, SECURITY
Static Wicks.....CHECK

BEFORE STARTING ENGINE

Preflight Inspection.....COMPLETE
Seat Belts and Harnesses....FASTEN, CHECK
Brakes.....SET
Circuit Breakers.....IN
Alternate Air.....OFF
Propeller.....FULL FORWARD
Radio Master Switch.....OFF
Fuel SelectorDESIRED TANK
Passenger Briefing.....COMPLETE

NORMAL START – COLD ENGINE

Throttle.....1/2" OPEN
BATT MASTER Switch.....ON
ALTR Switch.....ON
Electric Fuel Pump.....ON
Strobes (Fin Strobes if equipped).....ON
Mixture.....RICH, THEN IDLE CUTOFF
Propeller Area.....CLEAR
Starter.....ENGAGE
Mixture.....ADVANCE
Throttle.....ADJUST TO 1000
Oil Pressure.....CHECK
Ammeter.....CHECK

NORMAL START – HOT ENGINE

Throttle.....1/2" OPEN
BATT MASTER Switch.....ON
ALTR Switch.....ON
Electric Fuel Pump.....ON
Strobes (Fin Strobes if equipped).....ON
Mixture.....IDLE CUT-OFF
Propeller Area.....CLEAR
Starter.....ENGAGE
Mixture.....ADVANCE
Throttle.....ADJUST TO 1000 RPM
Oil Pressure.....CHECK
Ammeter.....CHECK

STARTING ENGINE WHEN FLOODED

Throttle.....OPEN FULL
BATT MASTER Switch.....ON
ALTR Switch.....ON
Electric Fuel Pump.....OFF
Strobes (Fin Strobes if equipped).....ON
Mixture.....IDLE CUT-OFF
Propeller Area.....CLEAR
Starter.....ENGAGE
Mixture.....ADVANCE
Throttle.....REDUCE TO 1000 RPM
Oil Pressure.....CHECK
Ammeter.....CHECK

ENGINE START WITH EXTERNAL POWER

REFER TO POH

ENGINE FIRE DURING START

Starter.....CRANK ENGINE
Mixture.....IDLE CUT-OFF
Throttle.....OPEN
Electric Fuel Pump.....OFF
Fuel SelectorOFF

ABANDON IF FIRE CONTINUES

AFTER STARTING ENGINE

Throttle.....1000 to 1200 RPM
Radio Master Switch.....ON
Strobes.....(FIN if equipped).....OFF
Electric Fuel Pump.....OFF
Mixture.....FULL RICH
BELOW 5000ft.
Flaps..... 0°
Engine Gauges.....CHECK
Flight Instruments.....SET
Radios.....SET AND TEST
Transponder.....GROUND
Fuel SelectorSWITCH TANK
Dispatch.....RAMP OUT

TAXI

Taxi Area.....CLEAR
Parking Brake.....RELEASE
Propeller.....FULL FORWARD
Throttle.....APPLY SLOWLY
Brakes.....CHECK
Steering.....CHECK
Flight Instruments.....CHECK

RUN UP

Parking Brake.....HOLD AND SET
Propeller.....FULL INCREASE
Mixture.....FULL RICH
Throttle.....2000 RPM
Magnetos.....CHECK
(Max Drop 175 RPM...Max Diff. 50
RPM between each)
Oil Temperature.....CHECK
Oil Pressure.....CHECK
Fuel Pressure.....CHECK
Ammeter.....CHECK
Annunciator Panel.....PRESS TO TEST
Propeller.....EXERCISE
Propeller.....GOVERNOR CHECK
Alternate Air.....CHECK
*Engine is warm for takeoff when
throttle can be opened
without engine faltering.*
Throttle.....IDLE CHECK
(500-600RPM)
Throttle..... 1000 RPM

BEFORE TAKEOFF

BATT MASTER Switch.....ON
ALTR Switch.....ON
Flight Instruments.....CHECK
Fuel Selector.....PROPER TANK
Electric Fuel Pump.....ON
Engine Gauges.....CHECK
Alternate Air.....CLOSED
Mixture.....SET
Propeller.....FULL INCREASE
Belts/Harnesses....FASTENED/CHECK
Seats.....ADJUST/SECURE
Flaps.....SET
Trim.....SET
Emergency Gear Extension lever..UP
Controls.....FREE AND CORRECT
Crew Takeoff Briefing.....COMPLETE
Transponder.....CHECK
Landing/Recog Light.....ON
Strobes (Wing tip).....ON
Cabin Door and Window.....LATCHED

ENGINE POWER LOSS DURING TAKEOFF

*If sufficient runway remains for a
normal landing, leave gear down and
land straight ahead.*

*If area is rough, or it is necessary to
clear obstructions:*

Gear Selector Switch.....UP

*If sufficient altitude has been gained to
attempt a restart:*

Maintain safe airspeed.....79 KIAS

Fuel Selector.....SWITCH

Electric Fuel Pump.....CHECK ON

Mixture.....CHECK RICH

Alternate Air.....OPEN

**IF POWER IS NOT REGAINED, PROCEED
WITH POWER OFF LANDING**

NORMAL TAKEOFF

Flaps.....UP

Throttle.....FULL

Rotate65-75 KIAS

*After a positive rate of climb is achieved
and no runway is remaining to land on
safelyGEAR UP*

Climb Speed.....90 KIAS

SHORT FIELD TAKEOFF 25° FLAPS

Flaps.....25°

Brakes.....HOLD

Throttle.....FULL INCREASE

Engine Gauges.....CHECK

Brakes.....RELEASE

Rotate.....60 KIAS

*After breaking ground, accelerate to
72KIAS Gear down Vx and climb
past the obstacle.*

After positive rate of Climb.....GEAR UP

Accelerate to Gear up Vx.....78 KIAS

Flaps.....SLOWLY RETRACT

Accelerate to Gear up Vy.....90 KIAS

SOFT FIELD TAKEOFF 25° FLAPS

Flaps.....25°

Control Wheel.....TAIL LOW ATTITUDE

*After breaking ground, accelerate in
ground effect to the best gear
down angle of climb speed 72 KIAS.
Clear any obstacles.*

After positive rate of Climb.....GEAR UP

Accelerate to Gear up Vx.....78 KIAS

Flaps.....SLOWLY RETRACT

Accelerate to Gear up Vy.....90 KIAS

ENROUTE CLIMB (at 1000 AGL)

Airspeed.....104 KIAS
Throttle.....25"
Propeller.....2500 RPM
Landing Light.....OFF
Flaps.....0°

ENGINE POWER LOSS DURING FLIGHT

If at low altitude:

Airspeed.....MAINTAIN 79 KIAS min.

PREPARE FOR POWER OFF LANDING.

If altitude permits:

Fuel Selector.....SWITCH
to tank containing fuel
Electric Fuel Pump.....ON
Mixture.....RICH
Alternate Air.....OPEN
Engine Gauges.....CHECK
for cause of power loss
If no fuel flow/pressure is indicated,
check tank selector position to be sure
it is on a tank containing fuel.

If power is not restored:

PREPARE FOR A POWER OFF LANDING
Trim For 79 KIAS

CRUISE

Power.....SET
Mixture.....FULL RICH
BELOW 5000ft.
Trim.....SET
Electric Fuel Pump.....OFF
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

Propeller.....AS REQUIRED
Throttle.....AS REQUIRED
Airspeed.....AS REQUIRED
Mixture.....ENRICH, as needed

BEFORE LANDING

Fuel Selector.....PROPER TANK
Seats.....ADJUST/SECURE
Belts/Harnesses.....FASTEN/CHECK
Electric Fuel Pump.....ON
Mixture.....RICH
Propeller.....FULL INCREASE
Gear.....DOWN – 129 KIAS MAX
Gear Indicator Lights.....3 GREEN
Flaps.....SET – 103 KIAS MAX
Landing Light.....ON
Trim.....75 KIAS ON FINAL

GO AROUND

Propeller.....FULL FORWARD
Throttle.....FULL POWER
Flaps.....RETRACT TO 25°
Airspeed.....78 KIAS
After Positive Rate of Climb..GEAR UP
Flaps.....SLOWLY RETRACT

AFTER LANDING

Flaps.....0°
Strobe Lights FIN STROBES
Landing/Recog Lights...OFF (Except at Night)
Electric Fuel Pump.....OFF
Transponder.....GROUND
Mixture.....FULL RICH BELOW 5000ft.
Elevator Trim.....NEUTRAL
Ailerons.....SET TO WIND CONDITIONS

SECURING AIRCRAFT

Radio Master Switch.....OFF
Electrical Equipment (Fans, Pitot Heat,
AC, etc).....OFF
Strobes.....OFF
Navigation Lights.....OFF
Propeller.....FULL INCREASE
Throttle.....1000 RPM
Mixture.....IDLE CUT-OFF
Ignition Switch.....OFF, KEY OUT
Alternator Switch.....OFF
BATT MASTER Switch.....OFF
Parking Brake.....OFF
Tiedowns or Chocks.....SECURE
Trash.....REMOVE

EMERGENCY PROCEDURES

ENGINE FIRE DURING START

Starter.....CRANK ENGINE
Mixture.....IDLE CUT-OFF
Throttle.....OPEN
Electric Fuel Pump.....OFF
Fuel SelectorOFF

ABANDON IF FIRE CONTINUES

ENGINE POWER LOSS DURING TAKEOFF

If sufficient runway remains for a normal landing, leave gear down and land straight ahead.

If area is rough, or it is necessary to clear obstructions:

Gear Selector Switch.....UP

If sufficient altitude has been gained to attempt a restart:

Maintain safe airspeed.....79 KIAS
Fuel Selector.....SWITCH
Electric Fuel Pump.....CHECK ON
Mixture.....CHECK RICH
Alternate Air.....OPEN

IF POWER IS NOT REGAINED, PROCEED WITH POWER OFF LANDING

ENGINE POWER LOSS DURING FLIGHT

If at low altitude:

Airspeed.....MAINTAIN 79 KIAS min.

PREPARE FOR POWER OFF LANDING.

If altitude permits:

Fuel Selector.....SWITCH to tank containing fuel
Electric Fuel Pump.....ON
Mixture.....RICH
Alternate Air.....OPEN
Engine Gauges.....CHECK for cause of power loss

If no fuel flow/pressure is indicated, check tank selector position to be sure it is on a tank containing fuel.

If power is not restored, prepare for power off landing.

Trim For 79 KIAS

POWER OFF LANDING

Airspeed.....MAINTAIN 79 KIAS

Landing Pattern.....ESTABLISH

Seatbelts.....TIGHT

When committed to landing:

Landing Gear Selector.....AS REQUIRED

Flaps.....AS DESIRED

Throttle.....CLOSE

Mixture.....IDLE CUT-OFF

Ignition.....OFF

BATT MASTER Switch.....OFF

ALTR SwitchOFF

Fuel SelectorOFF

Passenger Door.....PROP OPEN

Contact surface at minimum possible airspeed.

FIRE IN FLIGHT

Don smoke mask provided.

Source of Fire.....CHECK

ELECTRICAL FIRE

(Smoke in Cabin)

Master Switch.....OFF

Alternator Switch.....OFF

Vents.....OPEN

Cabin Heat.....OFF

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

LOSS OF OIL PRESSURE

Land as Soon as Possible And Investigate The Cause.

PREPARE FOR A POWER OFF LANDING

LOSS OF FUEL PRESSURE

Electric Fuel Pump.....ON
Fuel SelectorCHECK on proper tank

HIGH OIL TEMPERATURE

Land at Nearest Airport and Investigate the Problem

PREPARE FOR A POWER OFF LANDING

PROPELLER OVERSPEED

Throttle..... REDUCE
Oil Pressure.....CHECK
Propeller Control.....FULL DECREASE
Airspeed.....REDUCE
Throttle.....BELOW 2700 RPM

ELECTRICAL FAILURES

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
Alternator Switch.....ON

IF POWER NOT RESTORED:

Alternator Switch.....OFF
Electrical Load.....REDUCE
*If alternator output cannot be restored,
reduce electrical loads and land as soon
as practical. The battery is the only
remaining source of electrical power.*

ELECTRICAL OVERLOAD

**(Alternator over 20 amps above known
electrical load)**

Battery Master Switch.....OFF

If ammeter reading does NOT decrease:

Alternator Switch.....OFF

LAND AS SOON AS PRACTICAL.

**Use Emergency Landing Gear Extension to
lower landing gear.**

If ammeter reading DOES decrease:

BATT MASTER Switch.....ON

Ammeter.....MONITOR

**If ammeter reading does NOT begin to
decrease within five minutes:**

BATT MASTER Switch.....OFF

LAND AS SOON AS PRACTICAL.

**If ammeter reading DOES begin to decrease
within five minutes:**

Proceed with flight.

Ammeter.....MONITOR

ENGINE ROUGHNESS

Mixture.....ADJUST
for smooth operation

Alternate Air.....OPEN

Electric Fuel Pump.....ON

Fuel SelectorSWITCH
TANKS

Engine Gauges.....CHECK

Magneto Switch...L then R then

BOTH

***If operation is satisfactory on
either magneto, proceed on
that magneto at reduced
power, with full RICH mixture,
to a landing at the first
available airport.***

**IF ROUGHNESS PERSISTS,
PREPARE FOR A POWER OFF
LANDING**

EMERGENCY LANDING GEAR EXTENSION

Prior to emergency extension procedure:

BATT MASTER Switch.....CHECK ON
ALTR Switch.....CHECK ON
Circuit Breakers.....CHECK
NAV LIGHT Switch.....OFF(Daytime)
Gear Indicator Bulbs.....CHECK

If landing gear does not check down and locked:

Airspeed.....REDUCE BELOW 87 KIAS
Landing Gear Selector Switch...DOWN
POSITION

If gear has still failed to lock down,

Move and hold the emergency lever down to the Emergency Down Position.



If gear has still failed to lock down,
yaw the airplane abruptly from side to side with the rudder.

.....
If the nose gear will not lock down,
using the above procedure, slow the aircraft to the lowest safe airspeed attainable using the lowest power setting required for safe operation and accomplish the following:

Landing Gear Selector Switch.....RECYCLE
THROUGH UP POSITION AND THEN SELECT
GEAR DOWN

SPIN RECOVERY

Throttle.....IDLE
Control Wheel.....FULL FORWARD
WHILE NEUTRALIZING AILERONS
RudderFULL OPPOSITE TO
DIRECTION OF ROTATION
Rudder.....NEUTRAL WHEN
ROTATION STOPS
Control Wheel.....AS
REQUIRED TO SMOOTHLY
REGAIN LEVEL FLIGHT ATTITUDE

OPEN DOOR IN FLIGHT

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:

SLOW AIRPLANE TO 87 KIAS.
Cabin Vents.....CLOSE
Storm Window.....OPEN
If upper Latch is Open.....LATCH
If Side Latch is Open
.....PULL ON ARMREST
WHILE MOVING LATCH HANDLE
TO LATCH POSITION
If both latches are open...LATCH
SIDE LATCH THEN TOP LATCH

TAWS WARNING

Autopilot.....DISCONNECT
Initiate a maximum performance climb:

Airspeed.....78 KIAS

After warning ceases:

Power.....MAX CONTINUOUS
Airspeed.....90 KIAS
Climb to safe altitude and report to ATC if applicable.

GPS Loss of Integrity

DR=Dead Reckoning

LOI=Loss of Integrity

DR means the GPS is estimating your position from your last known location. LOI means the data has become inaccurate and the signal is lost.

Navigation.....USE ALTERNATE SOURCES

If no alternate navigation means are available:

DR Mode.....USE GTN

Note: GPS Position information will get worse over time.

LOI Mode.....FLY TO NEAREST VFR CONDITIONS

Note: Only your last known position will be shown on the map. "GPS SIGNAL LOST" will be superimposed over it.

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