

Piper Arrow – PA28-R201	Pre-Start (Cont'd)	Pre-Takeoff - RUNUP	A/P on Climb
190FT – Main Checklist	<input type="checkbox"/> Gear Down Lights – 3 GREEN <input type="checkbox"/> Fuel - CHECK QUANTITY <input type="checkbox"/> Beacon – ON <input type="checkbox"/> Strobes – OFF	<input type="checkbox"/> Parking Brake – SET <input type="checkbox"/> Pax Seats - UPRIGHT <input type="checkbox"/> Seats/Belts/Harness - SECURE <input type="checkbox"/> Cabin Doors - CLOSE/LATCH <input type="checkbox"/> Flight Controls - FREE/CORRECT <input type="checkbox"/> Flight Inst – CHECK / SET <input type="checkbox"/> Radios/Xpdr/Avionics - SET <input type="checkbox"/> Flight Plan - PROGRAMMED <input type="checkbox"/> Fuel Qty – CHECK <input type="checkbox"/> Mixture - RICH (< 3K) <input type="checkbox"/> Fuel Selector - RECHECK FULL <input type="checkbox"/> ELECT Fuel Pump – ON <input type="checkbox"/> Elevator / Rudder Trim – SET <input type="checkbox"/> Throttle - 2000 RPM <input type="checkbox"/> Magnetos-R/L < 175 & 50 diff <input type="checkbox"/> Exercise Prop 2x - 300 rpm drop <input type="checkbox"/> Suction Gauge – 4.8-5.1 <input type="checkbox"/> Engine Inst/Ammeter - CHECK <input type="checkbox"/> Throttle - Check Idle @700, set 1000 <input type="checkbox"/> Throttle Friction Lock – ADJUST <input type="checkbox"/> Nav Lights - AS NEEDED <input type="checkbox"/> Radio Lights/Dimmer – SET <input type="checkbox"/> Annunciator Panel – TEST <input type="checkbox"/> Autopilot - OFF <input type="checkbox"/> Air Cond/Fans – OFF <input type="checkbox"/> Flaps - SET FOR TAKEOFF <input type="checkbox"/> Windows - CLOSED <input type="checkbox"/> Door – Recheck CLOSED <input type="checkbox"/> Parking Brake - RELEASE	<input type="checkbox"/> N/A at present
Preflight	Engine Start (Cold)	Takeoff (Normal)	Short Field Takeoff
<input type="checkbox"/> Operating Handbook - AVAIL <input type="checkbox"/> Weight & Balance - CHECKED <input type="checkbox"/> Parking Brake - SET <input type="checkbox"/> Control Wheel Lock - REMOVE <input type="checkbox"/> Ignition Switch - OFF <input type="checkbox"/> Avionics Power - OFF <input type="checkbox"/> Flaps - UP <input type="checkbox"/> Master/Battery Switch - ON <input type="checkbox"/> Fuel Quantity – CHECK (verify visual) <input type="checkbox"/> Low Vacuum Warn Light - CHECK <input type="checkbox"/> Avionics Power – ON / check Fan <input type="checkbox"/> Avionics Power - OFF <input type="checkbox"/> Master/Battery Switch - OFF <input type="checkbox"/> Fuel Selector - SELECT TANK <input type="checkbox"/> Baggage Door - CLOSE/LATCH <input type="checkbox"/> Gust Lock(s) - REMOVE <input type="checkbox"/> Tie Downs - DISCONNECT <input type="checkbox"/> Control Surfaces - MOVEMENT <input type="checkbox"/> Undercarriage/Antennas - CHECK <input type="checkbox"/> Tail Light / Wicks – CHECK <input type="checkbox"/> Aileron - MOVEMENT / SECURE <input type="checkbox"/> Main Wheel Tire - => 30 PSI / 2.5” <input type="checkbox"/> Fuel Sump Drains - CHECK <input type="checkbox"/> Fuel Qty - CHECK VISUALLY <input type="checkbox"/> Fuel Filler Cap - SECURE <input type="checkbox"/> Left Wing - PITOT / STALL VANE <input type="checkbox"/> Engine Oil - > 5QT / 7 for X-C <input type="checkbox"/> Cowling - Secure <input type="checkbox"/> Prop & Spinner - NICKS/SECURE <input type="checkbox"/> Engine/Oil Inlets - UNRESTRICTED <input type="checkbox"/> Nose Wheel/Strut - => 30 PSI <input type="checkbox"/> Static Source Opening - CLEAR	<input type="checkbox"/> Mixture - FULL RICH <input type="checkbox"/> Prop - FULL FORWARD (hi rpm) <input type="checkbox"/> Throttle - PUSH OPEN 2” <input type="checkbox"/> ELECT Fuel Pump – ON (until FLOW PEAKS, then OFF) <input type="checkbox"/> Throttle - OPEN ½” <input type="checkbox"/> Mixture – IDLE CUTOFF <input type="checkbox"/> Ignition Switch – Call CLEAR / START As Engine Starts – MIXTURE FULL <input type="checkbox"/> Throttle - ADJUST 1000 RPM <input type="checkbox"/> Oil Pressure – CHECK <input type="checkbox"/> Alternator Switch - ON <input type="checkbox"/> Voltmeter - VERIFY > 13.5 <input type="checkbox"/> Starter – Check disengaged <input type="checkbox"/> Avionics Pwr Switch(es) – ON <input type="checkbox"/> JPI Fuel Flow – AUTO/FULL or STEP <input type="checkbox"/> Nav Lights - As needed	<input type="checkbox"/> On Runway Checklist <input type="checkbox"/> Time - NOTE <input type="checkbox"/> Landing Light – AS NEEDED <input type="checkbox"/> DG - Check ok on Rwy Hdg <input type="checkbox"/> Flaps - 0 DEGREES <input type="checkbox"/> Carb Heat - COLD <input type="checkbox"/> Brakes – RELEASE <input type="checkbox"/> Throttle – FULL OPEN 2700 <input type="checkbox"/> Engine Instruments – CHECK Oil Prsr/RPM/GPH/IAS <input type="checkbox"/> Rotate – 65-70 KTS <input type="checkbox"/> Positive Rate of Climb - CONFIRM <input type="checkbox"/> Landing Gear – TAP/RETRACT <input type="checkbox"/> Climb Speed - Vy - 90 KTS <input type="checkbox"/> Elect Fuel Pump – OFF AT ALT <input type="checkbox"/> Landing Light - OFF	<input type="checkbox"/> Flaps - 25 DEGREES (2nd notch) <input type="checkbox"/> Carb Heat - COLD <input type="checkbox"/> Brakes - APPLY <input type="checkbox"/> Mixture - FULL RICH < 3000 <input type="checkbox"/> Throttle - FULL OPEN <input type="checkbox"/> Brakes - RELEASE <input type="checkbox"/> Elevator - TAIL LOW <input type="checkbox"/> Accelerate – 50 - 60 KTS <input type="checkbox"/> Elevator - BACK PRESSURE <input type="checkbox"/> Rotate - CLIMB ATTITUDE <input type="checkbox"/> Accelerate – 55 - 65 KTS <input type="checkbox"/> Positive Climb – TAP/GEAR UP <input type="checkbox"/> Accelerate – Vx 78 KTS <input type="checkbox"/> Obstacles - CLEARED <input type="checkbox"/> Flaps - RETRACT SLOWLY
Pre-Start	Engine Start (Hot)		Normal Landing
<input type="checkbox"/> Seats/Belts/Harness – SECURE <input type="checkbox"/> Gear Handle – DOWN <input type="checkbox"/> Gear Override Lever – NEUTRAL <input type="checkbox"/> Flaps – UP <input type="checkbox"/> Brakes - SET <input type="checkbox"/> Avionics Pwr Switch(es) - OFF <input type="checkbox"/> Panel Lights – OFF (daytime) <input type="checkbox"/> Circuit Breakers - CHECK IN <input type="checkbox"/> Electrical Equip / A/P – OFF <input type="checkbox"/> Radios – OFF <input type="checkbox"/> Fuel Selector – FULLEST <input type="checkbox"/> Battery / Alt Switches - ON	<input type="checkbox"/> Fuel Pump – OFF / NONE <input type="checkbox"/> Mixture – IDLE / CUTOFF <input type="checkbox"/> Throttle – full open <input type="checkbox"/> Ignition Switch – Call CLEAR / START As Engine Starts – MIXTURE FULL <input type="checkbox"/> Throttle - ADJUST 1000 RPM <input type="checkbox"/> Oil Pressure – CHECK <input type="checkbox"/> Voltmeter - VERIFY > 13.5	<input type="checkbox"/> Seatbelts, Etc. – SECURE <input type="checkbox"/> Landing Light – ON <input type="checkbox"/> Mixture - FULL RICH <input type="checkbox"/> Fuel; PUMP ON – FULLEST TANK <input type="checkbox"/> Gear – DOWN < 129 KTS <input type="checkbox"/> Airspeed – (flaps up) 82 – 90 KTS <input type="checkbox"/> Flaps – As desired < 103 KTS <input type="checkbox"/> Airspeed – (flaps down) 75 KTS <input type="checkbox"/> Prop – SET – (forward when short) <input type="checkbox"/> Airspeed – 75 KTS	Short Field Landing
Pre-Start	Pre-Taxi	Takeoff (Normal)	<input type="checkbox"/> Same as Normal, thence... <input type="checkbox"/> Low Safe Airspeed 69kt / 79mph <input type="checkbox"/> Braking - APPLY HEAVILY
<input type="checkbox"/> Avionics Master - ON <input type="checkbox"/> ATIS – TUNE; set RWY HDG, BARO <input type="checkbox"/> Transponder – VFR or assigned code <input type="checkbox"/> If IFR – Pick up Flight Plan <input type="checkbox"/> Nav Lights – OFF day, ON night <input type="checkbox"/> Mixture – FULL RICH (no lean for taxi) <input type="checkbox"/> Brakes – RELEASE & TEST Warnings: - Engine < 1200 RPM until temp > 75 F (in green)	<input type="checkbox"/> Avionics Master - ON <input type="checkbox"/> ATIS – TUNE; set RWY HDG, BARO <input type="checkbox"/> Transponder – VFR or assigned code <input type="checkbox"/> If IFR – Pick up Flight Plan <input type="checkbox"/> Nav Lights – OFF day, ON night <input type="checkbox"/> Mixture – FULL RICH (no lean for taxi) <input type="checkbox"/> Brakes – RELEASE & TEST Warnings: - Engine < 1200 RPM until temp > 75 F (in green)	Post Landing	<input type="checkbox"/> EXIT RUNWAY <input type="checkbox"/> Flaps - UP <input type="checkbox"/> Landing Light - OFF <input type="checkbox"/> Transponder - OFF <input type="checkbox"/> Contact Ground Control

Beach Bonanza – V35
275BM – Procedures
ENGINE FAILURE - TAKEOFF
<input type="checkbox"/> Throttle - IDLE <input type="checkbox"/> Brakes - APPLY <input type="checkbox"/> Flaps - RETRACT <input type="checkbox"/> Mixture - IDLE / CUTOFF <input type="checkbox"/> Ignition Switch - OFF <input type="checkbox"/> Avionics Switch(es) - OFF <input type="checkbox"/> Master Switch - OFF <input type="checkbox"/> Fuel Selector - OFF
ENGINE FAILURE - CLIMB
<input type="checkbox"/> Airspeed - 66 KTS <input type="checkbox"/> Mixture - IDLE / CUTOFF <input type="checkbox"/> Fuel Shutoff Valve - OFF <input type="checkbox"/> Ignition Switch - OFF <input type="checkbox"/> Flaps - AS REQUIRED <input type="checkbox"/> Master Switch - OFF <input type="checkbox"/> Land - LOWEST SAFE SPEED
ENGINE RESTART
<input type="checkbox"/> Airspeed - BEST GLIDE 76 KTS <input type="checkbox"/> Fuel Selector - SWITCH <input type="checkbox"/> Mixture - FULL RICH <input type="checkbox"/> Fuel Pump - ON <input type="checkbox"/> Ignition Switch - START (Check left/right/both)
FORCED LANDING – NO ENGINE
<input type="checkbox"/> Belts, Etc. - SECURE <input type="checkbox"/> Airspeed – 65 KTS (flaps up) <input type="checkbox"/> Airspeed – 60 KTS (flaps down) <input type="checkbox"/> Mixture - IDLE / CUTOFF <input type="checkbox"/> Fuel Selector Valve - OFF <input type="checkbox"/> Ignition Switch - OFF <input type="checkbox"/> Flaps - AS REQUIRED <input type="checkbox"/> Gear - AS NEEDED <input type="checkbox"/> Master Switch - OFF <input type="checkbox"/> Doors - UNLATCH <input type="checkbox"/> Touchdown - SLIGHTLY TAIL LOW <input type="checkbox"/> Brakes - APPLY HEAVILY

ENGINE FIRE
<input type="checkbox"/> Mixture - IDLE / CUTOFF <input type="checkbox"/> Fuel Selector Valve - OFF <input type="checkbox"/> Master Switch - OFF <input type="checkbox"/> Cabin Heat/Air - OFF <input type="checkbox"/> Airspeed – 85 KTS - INCREASE AS NECESSARY TO EXTINGUISH <input type="checkbox"/> Forced Landing - EXECUTE
SPIN RECOVERY
<input type="checkbox"/> AILERONS - NEUTRAL <input type="checkbox"/> THROTTLE CLOSED <input type="checkbox"/> OPPOSITE RUDDER <input type="checkbox"/> STICK FORWARD-BREAK STALL <input type="checkbox"/> RUDDER NEUTRAL <input type="checkbox"/> RECOVER FROM DIVE
GEAR TROUBLESHOOTING
<input type="checkbox"/> Verify Gear Handle - DOWN <input type="checkbox"/> Gear Light Mechanical Iris - OPEN <input type="checkbox"/> Check Circuit Breaker - IN <input type="checkbox"/> Swap "down" lamp Assemblies
EMERGENCY GEAR EXTENSION
<input type="checkbox"/> Gear handle - DOWN <input type="checkbox"/> Landing Gear Circuit Bkr – PULL OFF <input type="checkbox"/> Override pin – CONFIRM NOT IN <input type="checkbox"/> Override Lever – HOLD DOWN <input type="checkbox"/> Fishtail and positive Gs to free drop gear <input type="checkbox"/> Verify down w/light and indicator <input type="checkbox"/> When down, leave lever until repaired
Operational Info
Fuel: 77 gal / 72 Usable Filler Neck is at 25gal Max Xwind - 17 KTS JPI Flow - Cruise: ≈ 9.2-10gph Best Glide Max Dist 1.6mi/1000'

Takeoff & Climb

- Time: Note
- Fuel Pump: ON
- Lights – AS NEC
- DG – Check to Mag
- Throttle - FULL
- Airspeed - ALIVE
- Rotate – 65-70 KTS

Cruise

- 24"-25" MP or WOT
- 2200-2500 RPM
- Lean per JPI / EGT
- 104 Kts

C-Climb

- 104 Kts

Descent

- Plan 5mi/1K'
- Reduce MP 1" / 1K
- Mixture - Per EGT
- Pitch 500-100 FPM

Init Appr

- Fuel Pump: ON
- To LOC - 22"/2400
- At LOC – 18"/2400

Intercept & Final Appr

- At GS, Gear Down
- Flaps – 1st Notch
- 75 KTS
- Flaps – FULL
- Prop: FWD, Power: Out

Downwind

- 20" MP
- 2400 RPM
- Gear < 128 MPH
- 10° Flaps
- Mixture - Rich
- 90 KTS

Base

- 15" / 2400
- 25° Flaps
- 80 KTS

Final

- 12" – 15" / 2400 RPM
- 75 – 80 KTS over fence
- Full flaps (optional)
- Prop full in
- Power out

Speed	Kts
Vr	65 - 75
Vy	90
Vx	78
Cruise	130
Va	96 - 118
Vno	146
Vne	183
Appr	75
Vle	129
Vfe	103
Vs	60
Vso	55
C-Climb	104
E-Desc	129
Glide	79
E-Appr	70