

Piper Addendum

The Piper Warrior/PA-28-151 has a few key differences when compared to the C172N. The Operations Manual will remain unchanged except for key differences outlined here.

All radio calls should be made with the callsign "Warrior" instead of "Skyhawk"

The Warrior has an engine driven fuel pump and an electric fuel pump. Normal procedures include the use of the electric pump. The fuel selector includes 3 settings: Left Tank, Right Tank, and Off. Tanks should be rotated every hour to maintain balanced fuel levels. During takeoff and landing, and when switching fuel tanks, the electric fuel pump must be turned on.

Aircraft Operations / Fuel Management:

Piper holds 50 gallons with 48 usable.

Leaning of the mixture should always be accomplished on the ground, and in the air if in straight and level cruise using 75% power or less, and above 5,000' MSL.

Leaning Procedure: Pull mixture control until engine becomes rough. Then enrich mixture by pushing lever forward until engine runs smooth (POH 4.27)

Ground and Departure Procedures

Preflight:

Desired tire pressure is 24psi for the main wheels and 30psi for the nose. (POH 7.7)

Engine Run-Up Flow (POH 4.5)

1. Electric Fuel Pump: OFF
2. Throttle set 2000RPM
3. Annunciator Pannel: Press to test

Before Takeoff Flow (POH 4.5)

3. Action: Verify Mixture is set to full rich, Carb Heat is OFF, Fuel is on proper tank, and electric fuel pump is ON.

Takeoff Procedure:

4. Increase throttle to full power. Verbalize "2300RPM" (2275-2375) (POH 2.7)

Normal Takeoff:

3. Accelerate to 75 KIAS on climb
4. At 1000 feet AGL transition to 87 KIAS cruise climb. (POH 4.25)

Short Field Takeoff (Flaps 0°) [POH 4.23]

4. Start slow rotation at 50 KIAS and accelerate to 75 KIAS
5. With obstacle, extend flaps to 25° and rotate at 52 KIAS
6. Once clear of obstacle accelerate to 75 KIAS
8. Transition to cruise climb at 87 KIAS

Soft Field Takeoff (Flaps 25°) [POH 4.23]

4. In ground effect, accelerate to 52 KIAS
5. With an obstacle, maintain 52 KIAS climb, without obstacle maintain 75 KIAS climb
6. Once clear of obstacle (or at 200') accelerate to 75 KIAS
8. Transition to cruise climb at 87 KIAS

Arrival and Landing Procedures

Max Crosswind Component: 17Kts

Standard Full-Flap Approach and Landing (POH 4.29)

4. E. "Below 103 ,Flaps 10," Verify Proper Tank, Fuel Pump ON
5. A. "Below 103, Flaps 25"
6. A. "Below 103, Flaps 40"

B. Initial approach speed 70 KIAS

Final approach speed for all landings: 63 KIAS

After Landing Flow: "Reverse Lights Camera Action"

3. Action: Fuel Pump OFF (POH 4.31)

Emergency Engine Out Flow ABCDEF (POH 3.3)

A. Airspeed:

- ii. Slow to best glide (Vg - 73 KIAS)

C. Checklist **Engine Restart Floor-to-Door**

- i. Fuel selector: Switch to tank containing fuel
- ii. Fuel Pump: ON
- iii. When power is restored, fuel pump and carb heat: OFF

Speeds:

Vne - 160 KIAS

Vno – 126 KIAS (Max in Emergency Descent)

Va - 111 KIAS (Max GW)

Vy - 75 KIAS

Vx - 63 KIAS

Vg - 73 KIAS

Following are computed at our normal GW, ie 2200 (Full fuel and two 200lb pilots)

Va – 108KIAS

Fly maneuvers (steep turns, chandelles, Lazy 8s) – 105 KIAS

Flaps 40: Vs0 - 43 KIAS; 60° Bank - 60 KIAS

Flaps Up: Vs1 - 48 KIAS; 60° Bank - 68 KIAS