

Piper PA-28R Arrow III Model Guide

The Piper PA-28R Arrow III is a four-seat, single-engine piston airplane with retractable gear, built from 1977 to 1982. The PA-28R-201 handbook lists a 200 hp Lycoming IO-360-C1C6, a 2750 lb maximum weight and a 200 lb baggage limit. The source documents mix Arrow II and Arrow III data, so match any figure to the specific airframe's own POH.

KEY TAKEAWAYS

- Handbook limits: 2750 lb max weight, 200 lb baggage, 200 hp at 2700 RPM from a fuel-injected Lycoming IO-360-C1C6.
- Gear speeds: extend at or below 129 KIAS, retract at or below 107 KIAS. Flaps limit is 103 KIAS.
- One owner spec sheet quotes cruise of about 135 kts at roughly 10.5 gph, with a 500 nm range including reserves.
- Confirm the POH matches the airframe serial number. The copies in circulation cover different Arrow models.

LOADING AND FUEL

Maximum weight is 2750 lb, with up to 200 lb in the baggage area. CG limits run from 88.9 in aft of datum (forward limit at 2750 lb) to 91.5 in aft. At 2375 lb and below the forward limit is 82.0 in. One owner spec sheet gives 50 gal total fuel and 48 gal usable. Oil capacity is 8 qt maximum.

TAKEOFF AND CLIMB EXAMPLES

The Operating Data Manual's example is 2600 lb, 1900 ft pressure altitude, 20°C and a 4 kt headwind. With 25° flaps it needs 1850 ft to clear 50 ft, with a 1125 ft ground roll. With 0° flaps it needs 2550 ft. Gear-up climb at 90 KIAS gave 510 fpm at 6000 ft, 10°C and 2750 lb. Best glide is 79 KIAS.

WHAT TO CHECK WHEN BUYING

Check the engine: oil pressure green arc is 60 to 90 PSI and the oil temperature red line is 245°F. Check the gear: 3 green lights, a working emergency gear extension, and the squat switch. Also check the alternator belt, and drain the fuel sumps and strainer. Confirm which propeller (McCauley or Hartzell) is fitted.

SPECIFICATIONS

Engine Power Hp	200
Max Takeoff Weight Lbs	2750
Max Baggage Weight Lbs	200
Total Fuel Gal	50
Usable Fuel Gal	48

PERFORMANCE

Cruise Speed Kt	135
Range Nm	500
Cruise Fuel Burn Gph	10.5
Example Takeoff Distance Over 50ft 25 Flap Ft	1850
Example Takeoff Ground Roll 25 Flap Ft	1125
Example Climb Rate Gear Up Fpm	510

V-SPEEDS

Vne Kts	183
Vno Kts	146
Va At 2750 Lbs Kts	118
Vfe Kts	103
Vle Extend Kts	129
Gear Retract Max Kts	107
Vso Kts	55
Best Glide Kts	79

WEIGHT & BALANCE

Max Takeoff Weight Lbs	2750
Max Baggage Weight Lbs	200
Cg Forward Limit At 2750 Lbs Inches	88.9
Cg Forward Limit At 2375 Lbs Inches	82
Cg Aft Limit Inches	91.5

SAFETY NOTES

- No acrobatic maneuvers including spins. With the McCauley propeller, avoid continuous operation between 1500 and 1950 rpm below 15 inches manifold pressure.
- Emergency gear extension: slow to 87 KIAS or below, selector DOWN, use the emergency gear lever as required, and fishtail the airplane.
- Maneuvering speed drops from 118 KIAS at 2750 lb to 96 KIAS at 1865 lb. Avoid full or abrupt control movements above it.