

PA-28-181 ARCHER III

Vital Statistics

Engine

Engine Model: Lycoming O-360-A4M

Type: direct-drive, horizontally opposed, normally aspirated, four-cylinder, air cooled

Horsepower: 180

Maximum RPM: 2700

Features: carburetor heat

Operating Weights

Maximum Gross Ramp Weight: 2558 Lbs. Normal Category, 2138 Lbs. Utility Category

Maximum Gross Takeoff Weight: 2550 Lbs. Normal Category, 2130 Lbs. Utility Category

Maximum Gross Landing Weight: 2550 Lbs. Normal Category, 2130 Lbs. Utility Category

Baggage Compartment: 200 Lbs. Maximum Normal Category, 0 Lbs. Utility Category

Oil System

Type: wet sump

Minimum Operating Quantity: 2 quarts

Maximum Operating Quantity: 8 quarts

Normal Operating Quantity: 6-8 quarts

Fuel System

Fuel Grade: 100LL (100 minimum grade)

Total Capacity: 50 Gallons

Total Usable: 48 Gallons (24 each wing)

Total Unusable: 2 Gallons

Tanks: 2

Drains: 3

Pumps: one engine-driven; one electric auxiliary

Features: electric primer

Electrical System

Battery: one at 35 amperes, 24 volts

Alternators: one primary at 70 amperes, 28 volts; one standby

Features: external power source

Flap System

Type: single-slotted

Actuation: manual

Settings: 0°, 10°, 25°, 40°

Propeller System

Type: fixed-pitch

Landing Gear System

Type: fixed

Tire Size: 6.00 X 6, 4-ply for nose and mains

Tire Inflation: 24 psi nose and mains

Strut Inflation: 3.25 inches nose; 4.5 inches main

Brake System

Actuation: manual hydraulic

Features: disk brakes on main gear; parking brake

Pitot-Static System

Pitot Source: probe under left wing

Static Source: two static ports: one on each side of rear fuselage

Features: pitot and static drains; alternate static source; pitot heat

Cruise Performance (based on 5000 feet Pressure Alt., Standard OAT, No Wheel Fairings)

Average Cruise TAS: 122 KTS @ 75% power, Best Economy Leaning

114 KTS @ 65% power, Best Economy Leaning

105 KTS @ 55% power, Best Economy Leaning

Average Fuel Consumption: 11.0 GPH @ 75% power, Best Economy Leaning

9.5 GPH @ 65% power, Best Economy Leaning

8.2 GPH @ 55% power, Best Economy Leaning