

Manufacturer's Serial Numbers 28-7415001 through 28-7715314. The manufacturer is authorized to issue airworthiness certificates for airplanes serial numbers 28-7415001 through 28-7715314 under the delegation option provisions of FAR 21.

XV - A.- Model PA-28-181 (Archer II), 4 PCLM (Normal Category), 2 PCLM (Utility Category), Approved July 8, 1975, for S/N 28-7690001 through 28-8690056; 28-8690061; 28-8690062; and 2890001 through 2890205.

<u>Engine</u>	Lycoming O-360-A4M with carburetor settings 10-3878 or 10-5193 or Lycoming O-360-A4A with carburetor setting 10-5193.																														
<u>Fuel</u>	100/130 minimum grade aviation gasoline																														
<u>Engine Limits</u>	Applicable to S/N 28-7690001 through 28-7990589: For all operations, 2700 r.p.m. (180 hp) Applicable to S/N 28-8090001 through 28-8690056; 28-8690061; 28-8690062; and 2890001 through 2890205: For takeoff 5 minutes at 2700 r.p.m. (180 hp) For maximum continuous operation, 2650 r.p.m. (178 hp)																														
<u>Propeller and Propeller Limits</u>	Sensenich 76EM8S5 For S/N 28-7690001 through 28-7790607: Static r.p.m. at maximum permissible throttle setting, not over 2425 r.p.m., not under 2325 r.p.m. at sea level, ISA conditions. (Reference aircraft Maintenance Manual for test procedure to determine approved static r.p.m. under nonstandard conditions.) No additional tolerance permitted. Diameter: Not over or under 76". For S/N 28-7890001 through 28-8690056; 28-8690061; 28-8690062; and 2890001 through 2890205: Static r.p.m. at maximum permissible throttle setting, not over 2340 r.p.m., not under 2240 r.p.m. at sea level, ISA conditions. (Reference aircraft Maintenance Manual for test procedure to determine approved static r.p.m. under nonstandard conditions.) No additional tolerance permitted. Diameter: Not over or under 76".																														
<u>Propeller Spinner</u>	Piper P/N 65805-00. See NOTE 11.																														
<u>Airspeed Limits</u>	<table> <tr> <td>Never exceed</td><td>171 mph</td><td>(148 knots)</td><td>CAS</td></tr> <tr> <td>Maximum structural cruising</td><td>140 mph</td><td>(121 knots)</td><td>CAS</td></tr> <tr> <td colspan="4">For S/N 28-7690001 thru 28-7690467:</td></tr> <tr> <td>Maneuvering</td><td>124 mph</td><td>(108 knots)</td><td>CAS</td></tr> <tr> <td colspan="4">For S/N 28-7790001 thru 28-7990589, 28-8090001 through 28-8690056, 28-8690061, 28-8690062, and 2890001 through 2890205:</td></tr> <tr> <td>Maneuvering @ 2550 lbs.</td><td>128 mph</td><td>(111 knots)</td><td>CAS</td></tr> <tr> <td>Maneuvering @ 1634 lbs.</td><td>102 mph</td><td>(89 knots)</td><td>CAS</td></tr> </table>			Never exceed	171 mph	(148 knots)	CAS	Maximum structural cruising	140 mph	(121 knots)	CAS	For S/N 28-7690001 thru 28-7690467:				Maneuvering	124 mph	(108 knots)	CAS	For S/N 28-7790001 thru 28-7990589, 28-8090001 through 28-8690056, 28-8690061, 28-8690062, and 2890001 through 2890205:				Maneuvering @ 2550 lbs.	128 mph	(111 knots)	CAS	Maneuvering @ 1634 lbs.	102 mph	(89 knots)	CAS
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Maneuvering @ 2550 lbs.	128 mph	(111 knots)	CAS																												
Maneuvering @ 1634 lbs.	102 mph	(89 knots)	CAS																												
<u>Center of Gravity Range</u>	<u>Normal Category</u> (+82.0) to (+93.0) at 2050 lb. or less (+88.6) to (+93.0) at 2550 lb. <u>Utility Category</u> (+82.0) to (+93.0) at 2050 lb. or less (+83.0) to (+93.0) at 2130 lb. Straight line variation between points given.																														
<u>Empty Weight C. G. Range</u>	None																														
<u>Maximum Weight</u>	Normal Category: Ramp - 2558 lb. *																														

	Takeoff - 2550 lb.																														
Utility Category:	Ramp - 2138 lb. *																														
	Takeoff - 2130 lb.																														
	* - Ramp weights for S/N 28-8090001 through 28-8690056; 28-8690061; 28-8690062; and 2890001 through 2890205 only.																														
<u>No. of Seats</u>	Normal Category: 4 (2 at +80.5, 2 at +118.1) Utility Category: 2 (2 at +80.5)																														
<u>Maximum Baggage</u>	200 lb. at (+142.8)																														
<u>Fuel Capacity</u>	50 gallons at (+95)(2 wing tanks) See NOTE 1 for data on system fuel.																														
<u>Oil Capacity</u>	8 quarts at (+27.5) (6 quarts usable) See NOTE 1 for data on system oil.																														
<u>Control Surface Movements</u>	<table><tr><td>Wing flaps</td><td>(±2°)</td><td>Up</td><td>0°</td><td>Down</td><td>40°</td></tr><tr><td>Ailerons</td><td>(±2°)</td><td>Up</td><td>25°</td><td>Down</td><td>12.5°</td></tr><tr><td>Rudder</td><td>(±2°)</td><td>Left</td><td>27°</td><td>Right</td><td>27°</td></tr><tr><td>Stabilator</td><td>(±1°)</td><td>Up</td><td>14°</td><td>Down</td><td>2°</td></tr><tr><td>Stabilator Tab</td><td>(±1°)</td><td>Up</td><td>3°</td><td>Down</td><td>12°</td></tr></table>	Wing flaps	(±2°)	Up	0°	Down	40°	Ailerons	(±2°)	Up	25°	Down	12.5°	Rudder	(±2°)	Left	27°	Right	27°	Stabilator	(±1°)	Up	14°	Down	2°	Stabilator Tab	(±1°)	Up	3°	Down	12°
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Stabilator	(±1°)	Up	14°	Down	2°																										
Stabilator Tab	(±1°)	Up	3°	Down	12°																										
<u>Nose Wheel Travel</u>	(±2°) Left 30° Right 30°																														
<u>Manufacturer's Serial Numbers</u>	28-7690001 through 28-8690056; 28-8690061; 28-8690062; and 2890001 through 2890205. The manufacturer is authorized to issue airworthiness certificates for airplane serial numbers 28-7690001 through 28-8690056; 28-8690061; 28-8690062; and 2890001 through 2890205 under the delegation option provisions of FAR 21. See NOTE 20.																														

XV - B.- Model PA-28-181 (Archer III), 4 PCLM (Normal Category), 2 PCLM (Utility Category), Approved August 30, 1994, for S/N 2890206 through 2890231, and 2843001 and up.

<u>Engine</u>	Lycoming O-360-A4M with carburetor settings 10-6102 or 10-5193 for aircraft prior to S/N 2843501			
<u>Fuel</u>	100 or 100LL aviation grade fuel			
<u>Engine Limits</u>	For all operations, 2700 r.p.m. (180 hp)			
<u>Propeller and Propeller Limits</u>	Sensenich 76EM8S14-0-62 Static r.p.m. at maximum permissible throttle setting, not over 2340 r.p.m., not under 2240 r.p.m. at sea level, ISA conditions. (Reference aircraft Maintenance Manual for test procedure to determine approved static r.p.m. under nonstandard conditions.) No additional tolerance permitted. Diameter: Not over or under 76".			
<u>Propeller Spinner</u>	Piper P/N 83349-12			
<u>Airspeed Limits</u>	Never exceed	171 mph	(148 knots)	CAS
	Maximum structural cruising	140 mph	(121 knots)	CAS
	Maneuvering @ 2550 lbs.	128 mph	(111 knots)	CAS
	Maneuvering @ 1634 lbs.	102 mph	(89 knots)	CAS
	Flaps Extended	115 mph	(100 knots)	CAS

<u>Center of Gravity Range</u>	<u>Normal Category</u> (+82.0) to (+93.0) at 2050 lb. or less (+88.6) to (+93.0) at 2550 lb.				
	<u>Utility Category</u> (+82.0) to (+93.0) at 2050 lb. or less (+83.0) to (+93.0) at 2130 lb. Straight line variation between points given.				
<u>Empty Weight C. G. Range</u>	None				
<u>Maximum Weight</u>	Normal Category: Ramp - 2558 lb. Takeoff - 2550 lb. Utility Category: Ramp - 2138 lb. Takeoff - 2130 lb.				
<u>No. of Seats</u>	Normal Category: 4 (2 at +80.5, 2 at +118.1) Utility Category: 2 (2 at +80.5)				
<u>Maximum Baggage</u>	200 lb. at (+142.8)				
<u>Fuel Capacity</u>	50 gallons at (+95) (2 wing tanks) See NOTE 1 for data on system fuel.				
<u>Oil Capacity</u>	8 quarts at (+27.5) (6 quarts usable) See NOTE 1 for data on system oil.				
<u>Control Surface Movements</u>	Wing flaps	Up	0° (±1°)	Down	10°, 25°, 40° (±2°)
	Ailerons (±2°)	Up	25°	Down	12.5°
	Rudder (±1°)	Left	28°	Right	28°
	Stabilator (±1°)	Up	14°	Down	2°
	Stabilator Tab (±1°)	Up	3°	Down	12°
<u>Nose Wheel Travel</u>	(±2°)	Left	30°	Right	30°
			(S/N 2890206 through 2890231)		
	(±1°)	Left	20°	Right	20°
			(S/N 2843001 & up)		
<u>Manufacturer's Serial Numbers</u>	2890206 through 2890231, and 2843001 and up. The manufacturer is authorized to issue airworthiness certificates for airplane serial numbers 2890206 through 2890231, and 2843001 and up under the delegation option provisions of FAR 21.				

XVI - A. - Model PA-28-161 (Warrior II), 4 PCLM (Normal Category), 2 PCLM (Utility Category), Approved November 2, 1976, for S/N 28-7716001 through 28-8216300, and 2841001 through 2841365 (Cadet only)

<u>Engine</u>	Lycoming O-320-D3G with carburetor setting 10-5135, 10-5009 or 10-5217, or Lycoming O-320-D2A with carburetor setting 10-5135 or 10-5217.
<u>Fuel</u>	100 octane minimum grade aviation gasoline
<u>Engine Limits</u>	For all operations, 2700 r.p.m. (160 hp)
<u>Propeller and Propeller Limits</u>	Sensenich 74DM6-0-60
	Static r.p.m. at maximum permissible throttle setting not over 2430 r.p.m., not under 2330 r.p.m., at sea level, ISA conditions. (Reference aircraft Maintenance Manual for test procedure to determine approved static r.p.m. under nonstandard conditions.)
	No additional tolerance permitted.
	Diameter: Not over 74", not under 72".