This data sheet, which is a part of Type Certificate 2A13, prescribes conditions and limitations under which the product for which the type certificate was issued meets the airworthiness requirements of the Federal Aviation Regulations.

Type Certificate Holder: Piper Aircraft, Inc.
2926 Piper Drive
Vero Beach, Florida 32960

Type Certificate Holder Record: The New Piper Aircraft, Inc transferred TC 2A13 to Piper Aircraft, Inc on August 7, 2006.

I - Model PA-28-160 (Cherokee), 4 PCLM (Normal Category), Approved October 31, 1960, for S/N 28-03- 28-1 through 28-4377; and 28-1760A.

Engine
Lycoming O-320-B2B or O-320-D2A with carburetor setting 10-3678-32

Fuel
91/96 minimum grade aviation gasoline

Engine Limits
For all operations, 2700 r.p.m. (160 hp)

Propeller and Propeller Limits
Sensenich M74DM or 74DM6 on S/N 28-1 through 28-1760, and 28-1760A.
Sensenich M74DMS or 74D6S5 on S/N 28-1761 through 28-4377.
Static r.p.m. at maximum permission throttle setting not over 2425 r.p.m., not under 2325 r.p.m.
No additional tolerance permitted.
Diameter: Not over 74", not under 72.5".

Propeller Spinner
Piper P/N 14422-00 on S/N 28-1 through 28-1760, and 28-1760A.
Piper P/N 63760-04 or P/N 65805-00 on S/N 28-1761 through 28-4377.
See NOTE 11.

Airspeed Limits
Never exceed 171 mph (148 knots) CAS
Maximum structural cruising 140 mph (121 knots) CAS
Maneuvering 129 mph (112 knots) CAS
Flaps Extended 115 mph (100 knots) CAS
Center of Gravity Range

(+84.0) to (+95.9) at 1650 lb. or less
(+85.9) to (+95.9) at 1975 lb.
(+89.2) to (+95.9) at 2200 lb.

Straight line variation between points given.

Empty Weight C. G. Range
None

Maximum Weight
2200 lb.

No. of Seats
4 (2 at +85.5, 2 at +118.1)

Maximum Baggage
125 lb. at (+142.8) on S/N 28-1 through 28-1760, and 28-1760A. See NOTE 8.
200 lb. at (+142.8) on S/N 28-1761 through 28-4377.

Fuel Capacity
50 gallons at (+95) (2 wing tanks)
See NOTE 1 for data on system fuel.

Oil Capacity
8 quarts at (+32.5), 6 quarts usable
See NOTE 1 for data on system oil.

Control Surface Movements

Wing flaps
(± 2°) Up 0° Down 40°

Ailerons
(± 2°) Up 30° Down 15°

Rudder
(± 2°) Left 27° Right 27°

Stabilator
(± 2°) Up 18° Down 2°

Stabilator Tab
(± 1°) Up 3° Down 12°

Nose Wheel Travel

(±1°) Left 30° Right 30°
(Effective on S/N 28-1 through 28-3377, and 28-1760A)
(±1°) Left 22° Right 22°
(Effective S/N 28-3378 through 28-4377)

Manufacturer's Serial Nos.
28-03; 28-1 through 28-4377; and 28-1760A.

II - Model PA-28-150 (Cherokee), 4 PCLM (Normal Category), Approved June 2, 1961, for S/N 28-03; 28-1 through 28-4377; and 28-1760A.

Engine
Lycoming O-320-A2B or O-320-E2A with carburetor setting 10-3678-32

Fuel
80/87 minimum grade aviation gasoline

Engine Limits
For all operations, 2700 r.p.m. (150 hp)

Propeller and Propeller Limits
Sensenich M74DM or 74DM6 on S/N 28-1 through 28-1760, and 28-1760A.
Sensenich M74DMS or 74DM6S5 on S/N 28-1761 through 28-4377.
Static r.p.m. at maximum permissible throttle setting not over 2375 r.p.m.,
not under 2275 r.p.m.
No additional tolerance permitted.
Diameter: Not over 74", not under 72.5".

Propeller Spinner
Piper P/N 14422-00 on S/N 28-1 through 28-1760, and 28-1760A.
Piper P/N 63760-04 or 65805-00 on S/N 28-1761 through 28-4377.
See NOTE 11.

Airspeed Limits
Never exceed 171 mph (148 knots) CAS
Maximum structural cruising 140 mph (121 knots) CAS
Maneuvering 129 mph (112 knots) CAS
Flaps Extended 115 mph (100 knots) CAS
Center of Gravity Range
(+84.0) to (+95.9) at 1650 lb. or less
(+85.9) to (+95.9) at 1975 lb.
(+88.4) to (+95.9) at 2150 lb.
Straight line variation between points given.

Empty Wt. C. G. Range
None

Maximum Weight
2150 lb.

No. of Seats
4 (2 at +85.5, 2 at +118.1)

Maximum Baggage
125 lb. at (+142.8) on S/N 28-1 through 28-1760, and 28-1760A. See NOTE 8.
200 lb. at (+142.8) on S/N 28-1761 through 28-4377.

Fuel Capacity
50 gallons at (+95) (2 wing tanks)
See NOTE 1 for data on system fuel.

Oil Capacity
8 quarts at (+32.5) (6 quarts usable)
See NOTE 1 for data on system oil.

Control Surface Movements
Wing flaps
(+2°) Up 0° Down 40°
Ailerons
(+2°) Up 30° Down 15°
Rudder
(+2°) Left 27° Right 27°
Stabilator
(+1°) Up 18° Down 2°
Stabilator Tab
(+1°) Up 3° Down 12°

Nose Wheel Travel
(+2°) Left 30° Right 30°
(Effective on S/N 28-03; 28-1 through 28-3377; and 28-1760A)
(+2°) Left 22° Right 22°
(Effective on S/N 28-3378 through 28-4377)

Manufacturer's Serial Nos.
28-03; 28-1 through 28-4377; and 28-1760A.

III - Model PA-28-180 (Cherokee), 4 PCLM (Normal Category), Approved August 3, 1962; 2 PCLM (Utility Category), Approved December 6, 1966, for S/N 28-03; 28-671 through 28-5859; and 28-7105001 through 28-7205318.

Engine
Lycoming O-360-A3A or 0-360-A4A with carburetor setting 10-3878 or 10-4164-1

Fuel
91/96 minimum grade aviation gasoline

Engine Limits
(See NOTE 4):
Maximum permissible takeoff, 2475 r.p.m.
For all other operations, 2700 r.p.m. (180 hp)
S/N 28-1571; 28-1573; 28-1761 through 28-5859; and 28-7105001 through 28-7205318:
For all operations, 2700 r.p.m. (180 hp)

Propeller and Propeller Limits
Sensenich M76EMMS or 76EM8S5 on S/N 28-1571, 28-1573; 28-1761 through 28-5859; and 28-7105001 through 28-7205318.
Static r.p.m. at maximum permissible throttle setting not over 2450 r.p.m., not under 2275 r.p.m.
No additional tolerance permitted.
Diameter: Not over or under 76".
See NOTE 10.
Propeller Spinner

Piper P/N 14422-00 on S/N 28-671 through 28-1760, and 28-1760A.
Piper P/N 63760-04 or 65805-00 on S/N 28-1761 through 28-5859; and 28-7105001 through 28-7205318.
See NOTE 11.

Airspeed Limits

<table>
<thead>
<tr>
<th>Condition</th>
<th>CAS Limit</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never exceed</td>
<td>171 mph (148 knots)</td>
<td>CAS</td>
</tr>
<tr>
<td>Maximum structural</td>
<td>140 mph (121 knots)</td>
<td>CAS</td>
</tr>
<tr>
<td>Maneuvering</td>
<td>129 mph (112 knots)</td>
<td>CAS</td>
</tr>
<tr>
<td>Flaps Extended</td>
<td>115 mph (100 knots)</td>
<td>CAS</td>
</tr>
</tbody>
</table>

Center of Gravity Range

<table>
<thead>
<tr>
<th>Utility Category (See NOTE 9)</th>
<th>Normal &amp; Utility</th>
<th>Aft Limit Normal</th>
</tr>
</thead>
<tbody>
<tr>
<td>(+84.0) to (+86.5) at 1650 lb. or less</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(+85.8) to (+86.5) at 1950 lb.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Normal Category (See NOTE 15)

<table>
<thead>
<tr>
<th>Normal Category (S/N 28-671 through 28-5859)</th>
<th>Normal &amp; Utility</th>
<th>Aft Limit Normal</th>
</tr>
</thead>
<tbody>
<tr>
<td>(+84.0) to (+95.9) at 1650 lb. or less</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(+85.9) to (+95.9) at 1975 lb.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(+89.2) to (+95.9) at 2200 lb.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(+92.1) to (+94.5) at 2400 lb.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Normal Category (S/N 28-7105001 through 28-7205318)</th>
<th>Normal &amp; Utility</th>
<th>Aft Limit Normal</th>
</tr>
</thead>
<tbody>
<tr>
<td>(+84.0) to (+95.9) at 1650 lb. or less</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(+87.0) to (+95.9) at 2150 lb.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(+87.8) to (+95.9) at 2200 lb.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(+91.0) to (+94.5) at 2400 lb.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Straight Line Variation Between Points Given

Empty Weight C. G. Range

None
Maximum Weight
Normal Category: 2400 lb.
Utility Category: 1950 lb.

No. of Seats
Normal Category: 4 (2 at +85.5, 2 at +118.1)
Utility Category: 2 (2 at +85.5)

Maximum Baggage
Eligible Normal Category Only:
125 lb. at (+142.8) on S/N 28-671 through 28-1760, and 28-1760A. See NOTE 8.
200 lb. at (+142.8) on S/N 28-1761 through 28-5859, and 28-7105001 through 28-7205318.

Fuel Capacity
50 gallons at (+95) (2 wing tanks)
See NOTE 1 for data on system fuel.

Oil Capacity
8 quarts at (+32.5) (6 quarts usable)
See NOTE 1 for data on system oil.

Control Surface Movements

<table>
<thead>
<tr>
<th>Surface</th>
<th>Movement Range</th>
<th>Up</th>
<th>Down</th>
<th>Up</th>
<th>Down</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wing flaps</td>
<td>± 2°</td>
<td>0°</td>
<td>40°</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ailerons</td>
<td>± 2°</td>
<td>30°</td>
<td>15°</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rudder</td>
<td>± 2°</td>
<td>27°</td>
<td>27°</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stabilator</td>
<td>± 1°</td>
<td>18°</td>
<td>2°</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stabilator Tab</td>
<td>± 1°</td>
<td>3°</td>
<td>12°</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Nose Wheel Travel

<table>
<thead>
<tr>
<th>Movement Range</th>
<th>Left</th>
<th>Right</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Effective on S/N 28-671 through 28-3377)</td>
<td>30°</td>
<td>30°</td>
</tr>
<tr>
<td>(Effective on S/N 28-3378 through 28-5859, and 28-7105001 through 28-7205318)</td>
<td>22°</td>
<td>22°</td>
</tr>
</tbody>
</table>

Manufacturer's Serial Nos.
28-03; 28-671 through 28-5859; and 28-7105001 through 28-7205318.
The manufacturer is authorized to issue airworthiness certificates for airplane serial numbers:

- 28-4704
- 28-4791
- 28-4875
- 28-4922
- 28-4955
- 28-4968
- 28-4995
- 28-5017
- 28-5026
- 28-5041
- 28-5060

IV - Model PA-28S-160 (Cherokee), 4 PCSM (Normal Category), Approved February 25, 1963, for S/N 28-1 through 28-1760; and S/N 28-1760A.

Engine
Lycoming O-320-D2A with carburetor setting 10-3678-32 (See NOTE 18)

Fuel
100/130 minimum grade aviation gasoline

Engine Limits
For all operations, 2700 r.p.m. (160 hp)

Propeller and Propeller Limits
McCauley 1A175-GM
Static r.p.m. at maximum permissible throttle setting not over 2360 r.p.m., not under 2260 r.p.m.
No additional tolerance permitted.
Diameter: Not over 79", not under 78".

The manufacturer is authorized to issue airworthiness certificates for airplane serial numbers:

- 28-4704
- 28-4791
- 28-4875
- 28-4922
- 28-4955
- 28-4968
- 28-4995
- 28-5017
- 28-5026
- 28-5041
- 28-5060

28-5066 through 28-5859, and 28-7105001 through 28-7205318 under the delegation option provisions of FAR 21. See NOTE 17 and 20.
Propeller Spinner  | Piper P/N 14422-00 spinner required.
Airspeed Limits  | Never exceed 153 mph (133 knots) CAS
                 | Maximum structural cruising 140 mph (121 knots) CAS
                 | Maneuvering 129 mph (112 knots) CAS
                 | Flaps Extended 115 mph (100 knots) CAS
Center of Gravity | (+85.1) to (+93.5) at 1850 lb. or less
                 | (+87.0) to (+93.5) at 2100 lb.
                 | (+87.9) to (+93.5) at 2140 lb.
                 | Straight line variation between points given.
Empty Weight C. G. Range | None
Maximum Weight   | 2140 lb.
No. of Seats      | 4 (2 at +85.5, 2 at +118.1)
Maximum Baggage   | 125 lb. at (+142.8)
Fuel Capacity     | 50 gallons at (+95) (2 wing tanks)
                 | See NOTE 1 for data on system fuel.
Oil Capacity      | 8 quarts at (+32.5) (6 quarts usable)
                 | See NOTE 1 for data on system oil.
Control Surface Movements | Wing flaps (±2°) Up 0° Down 40°
                          | Ailerons (±2°) Up 30° Down 15°
                          | Rudder (±2°) Left 27° Right 27°
                          | Stabilator (±1°) Up 18° Down 2°
                          | Stabilator Tab (±1°) Up 3° Down 12°
Manufacturer's Serial Nos. | 28-03; 28-1 through 28-1760; and 28-1760A.

**V - Model PA-28S-180 (Cherokee), 4 PCSM (Normal Category), Approved May 10, 1963, for S/N 28-671 through 28-5859, and 28-7105001 through 28-7105234.**

**Engine**  | Lycoming O-360-A3A or O-360-A4A with carburetor setting 10-4164-1
            | See NOTE 19.
**Fuel**    | 100/130 minimum grade aviation gasoline

**Engine Limits**
Maximum permissible takeoff, 2350 r.p.m.
For all other operations, 2700 r.p.m. (180 hp)
See NOTE 4.
S/N 28-1571; 28-1573; 28-1761 through 28-5859; and 28-7105001 through 28-7105234:
For all operations, 2700 r.p.m. (180 hp)

**Propeller and Propeller Limits**
McCuauley 1A200-FA8248 on S/N 28-671 to 28-1760, and 28-1760A.
McCuauley 1A200- DFA8248 on S/N 28-1761 through 28-5859, and 28-7105001 through 28-7105234.
Static r.p.m. at maximum permissible throttle setting not over 2190 r.p.m.,
not under 2140 r.p.m.
No additional tolerance permitted.
Diameter: Not over 82", not under 81".
Propeller Spinner

Spinner required.
Piper P/N 14422-00 on S/N 28-671 through 28-1760, and 28-1760A.
Piper P/N 63760-04 or 65805-00 on S/N 28-1761 through 28-5859, and 28-7105001 through 28-7105234.

Airspeed Limits

Never exceed 153 mph (133 knots) CAS
Maximum structural cruising 140 mph (121 knots) CAS
Maneuvering 129 mph (112 knots) CAS
Flaps Extended 115 mph (100 knots) CAS

Center of Gravity

(+85.1) to (+92.5) at 1850 lb. or less
(+87.0) to (+92.5) at 2100 lb.
(+89.8) to (+92.5) at 2222 lb.
Straight line variation between points given.

Empty Weight C. G. Range

None

Maximum Weight

2222 lb.

No. of Seats

4 (2 at +85.5, 2 at +118.1)

Maximum Baggage

125 lb. at (+142.8)

Fuel Capacity

50 gallons at (+95) (2 wing tanks)
See NOTE 1 for data on system fuel.

Oil Capacity

8 quarts at (+32.5) (6 quarts usable)
See NOTE 1 for data on system oil.

Control Surface Movements

Wing flaps (+2°) Up 0° Down 40°
Ailerons (+2°) Up 30° Down 15°
Rudder (+2°) Left 27° Right 27°
Stabilator (+1°) Up 18° Down 2°
Stabilator Tab (+1°) Up 3° Down 12°

Manufacturer's Serial Nos.

28-671 through 28-5859, and 28-7105001 through 28-7105234. See NOTE 3. The manufacturer is authorized to issue airworthiness certificates for airplane serial numbers:

28-4704 28-4745 28-4754 28-4763 28-4776
28-4791 28-4795 28-4826 28-4834 28-4859
28-4875 28-4879 28-4891 28-4907 28-4919
28-4922 28-4935 28-4945 28-4946 28-4947
28-4955 28-4959 28-4961 28-4964 28-4967
28-4968 28-4971 28-4975 28-4977 28-4985
28-4995 28-4999 28-5004 28-5007 28-5015
28-5017 28-5018 28-5019 28-5020 28-5023
28-5026 28-5027 28-5028 28-5031 28-5039
28-5041 28-5046 28-5051 28-5053 28-5057
28-5060 28-5061 28-5062 28-5063 28-5064
28-5066 through 28-5859, and 28-7105001 through 28-7105234 under the delegation option provisions of FAR 21. See NOTE 17 and 20.

**Engine**

Lycoming O-540-B2B5, O-540-B1B5, or O-540-B4B5 with carburetor setting 10-4404, 10-5042, or 10-5054. (Baffle P/N 68759 required with 10-5054 setting.)

**Fuel**

80/87 minimum grade aviation gasoline

**Engine Limits**

For all operations, 2575 r.p.m. (235 hp)

**Propeller and Propeller Limits**

McCauley 1P235PFA80

Static r.p.m. at maximum permissible throttle setting not over 2300 r.p.m., not under 2125 r.p.m.

No additional tolerance permitted.

Diameter: Not over 80", not under 78.5".

or

Hartzell HC-C2YK-1/8468A-4 or HC-C2YK-1( )F/F8468A-4

Pitch: High 27° ± 2°, Low 13.5° ± .2° at 30" station.

Diameter: Not over 80", not under 80".

Governor assembly: Hartzell F-4-3 ( ) or F-4-13 See NOTE 21.

or Approved for Use with O-540-B4B5 Engine Only:

Sensenich M80BMM or 80BM8

Pitch from 69" to 71".

Static r.p.m. at maximum permissible throttle setting not over 2300 r.p.m., not under 2150 r.p.m.

No additional tolerances permitted.

Diameter: Not over 80", not under 78.5".

**Propeller Spinner**

Piper P/N 65209-00 or P/N 63760-03 with fixed pitch propeller. Spinner required.

Piper P/N 65435-0 or P/N 68713 or P/N 66785 spinner tip and P/N 66786 spinner shell or P/N 67790-0 spinner, P/N 67791-0 bulkhead, P/N 67793-0 bulkhead and P/N 99499-0 plate. Two each P/N 67794-0 cuff, or Kit 760 452V with constant speed propeller.

See NOTE 14.

**Airspeed Limits**

<table>
<thead>
<tr>
<th>Condition</th>
<th>Speed (mph)</th>
<th>Equivalent Speed (knots)</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never exceed</td>
<td>197</td>
<td>171</td>
<td>CAS</td>
</tr>
<tr>
<td>Maximum structural cruising</td>
<td>156</td>
<td>136</td>
<td>CAS</td>
</tr>
<tr>
<td>Maneuvering</td>
<td>138</td>
<td>120</td>
<td>CAS</td>
</tr>
<tr>
<td>Flaps Extended</td>
<td>115</td>
<td>100</td>
<td>CAS</td>
</tr>
</tbody>
</table>

**Center of Gravity Range**

S/N 28-10001 through 28-11378 (See NOTE 16):

(+81.5) to (+93.5) at 2100 lb. or less

(+91.5) to (+93.5) at 2900 lb.

S/N 28-7110001 through 28-7210023:

(+85.1) to (+93.5) at 2100 lb. or less

(+86.0) to (+93.5) at 2600 lb.

(+91.5) to (+93.5) at 2900 lb.

Straight line variation between points given.

**Empty Weight C. G. Range**

None

**Maximum Weight**

2900 lb.

**No. of Seats**

4 (2 at +85.5, 2 at +118.1)

**Maximum Baggage**

200 lb. at (+142.8)
Fuel Capacity
84 gallons at (+95) (50 gallons in 2 wing tanks, 34 gallons in 2 tip tanks).
See NOTE 1 for data on system fuel.

Oil Capacity
12 quarts at (+34.1) (9 ¼ quarts usable)
See NOTE 1 for data on system oil.

Control Surface Movements

<table>
<thead>
<tr>
<th>Control Surface</th>
<th>Movement</th>
<th>Up</th>
<th>Down</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wing flaps</td>
<td>(+2°)</td>
<td>0°</td>
<td>40°</td>
</tr>
<tr>
<td>Ailerons</td>
<td>(+2°)</td>
<td>30°</td>
<td>15°</td>
</tr>
<tr>
<td>Rudder</td>
<td>(+2°)</td>
<td>Left 27°</td>
<td>Right 27°</td>
</tr>
<tr>
<td>Stabilator</td>
<td>(+1°)</td>
<td>18°</td>
<td>2°</td>
</tr>
<tr>
<td>Stabilator Tab</td>
<td>(+1°)</td>
<td>3°</td>
<td>12°</td>
</tr>
</tbody>
</table>

Nose Wheel Travel

<table>
<thead>
<tr>
<th>Nose Wheel Travel</th>
<th>Movement</th>
<th>Left</th>
<th>Right</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wing flaps</td>
<td>(+2°)</td>
<td>30°</td>
<td>30°</td>
</tr>
<tr>
<td>Ailerons</td>
<td>(+2°)</td>
<td>Left 22°</td>
<td>Right 22°</td>
</tr>
</tbody>
</table>

Manufacturer's Serial Nos.
28-10001 through 28-11378, and 28-7110001 through 28-7210023. The manufacturer is authorized to issue airworthiness certificates for airplane serial numbers 28-11063, 28-11064, 28-11070, 28-11072 through 28-11378, and 28-7110001 through 28-7210023 under the delegation option provisions of FAR 21. See NOTE 17 and 20.


Engine
Lycoming O-320-E2A with carburetor setting 10-3678-32 or O-320-E3D with carburetor setting 10-5009

Fuel
80/87 minimum grade aviation gasoline

Engine Limits
For all operations 2700 r.p.m  (150 hp)

Propeller and Propeller Limits
For 1950 lb. maximum weight - Normal Category; S/N 28-20001 through 28-20939; or Utility Category, S/N 28-20001 through 28-26946, and 28-7125001 through 28-7725290:
Sensenich M74DM or 74DM6
Static r.p.m. at maximum permissible throttle setting not over 2425 r.p.m., not under 2150 r.p.m.
No additional tolerance permitted.
Diameter: Not over 74", not under 72.5".

For 2150 lb. maximum weight - Normal Category; S/N 28-20940 through 28-26946, and 28-7125001 through 28-7725290:
Sensenich M74DM or 74DM6
Static r.p.m. at maximum permissible throttle setting not over 2425 r.p.m., not under 2275 r.p.m.
No additional tolerance permitted.
Diameter: Not over 74", not under 72.5".

Propeller Spinner
Piper P/N 14422-00.
See NOTE 11.

Airspeed Limits
Never exceed 171 mph (148 knots) CAS
Maximum structural cruising 140 mph (121 knots) CAS
Maneuvering 129 mph (112 knots) CAS
Flaps Extended 115 mph (100 knots) CAS
Center of Gravity Range

<table>
<thead>
<tr>
<th>Category</th>
<th>Range</th>
<th>Weight Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utility</td>
<td>(+84.0) to (+86.5) at 1650 lb. or less</td>
<td>1650 lb. or less</td>
</tr>
<tr>
<td></td>
<td>(+85.8) to (+86.5) at 1950 lb.</td>
<td>1950 lb.</td>
</tr>
<tr>
<td>Normal</td>
<td>(+84.0) to (+95.9) at 1650 lb. or less</td>
<td>1650 lb. or less</td>
</tr>
<tr>
<td></td>
<td>(+85.9) to (+95.9) at 1975 lb.</td>
<td>1975 lb.</td>
</tr>
<tr>
<td></td>
<td>(+88.4) to (+95.9) at 2150 lb.</td>
<td>2150 lb.</td>
</tr>
</tbody>
</table>

Straight line variation between points given.

Empty Weight C. G. Range
None

Maximum Weight
Normal Category: 1950 lb. on S/N 28-20001 through 28-20939 (See NOTE 6).
2150 lb. on S/N 28-20940 through 28-26946, and 28-7125001 through 28-7725290.

No. of Seats
2 at (+85.5)

Maximum Baggage
Eligible Normal Category Only:
100 lb. at (+117) on S/N 28-20001 through 28-20939 (See NOTE 12).
200 lb. at (+117) on S/N 28-20940 through 28-26946, and 28-7125001 through 28-7725290.
300 lb. at (+117 and +133) on S/N 28-20940 through 28-26946, and 28-7125001 through 28-7725290 (See NOTE 13).

Fuel Capacity
50 gallon at (+95) (2 wing tanks)
See NOTE 1 for data on system fuel.

Oil Capacity
8 quarts at (+32.5) (6 quarts usable)
See NOTE 1 for data on system oil.

Control Surface Movements
- Wing flaps: ±2°
- Ailerons: ±2°
- Rudder: ±2°
- Stabilator: ±1°
- Stabilator Tab: ±1°

Nose Wheel Travel
- Left: 30°
- Right: 30°
(Effective on S/N 28-20001 through 28-21845; 28-21931 through 28-21934; and 28-7425001 through 28-7725290)
- Left: 22°
- Right: 22°
(Effective on S/N 28-21846 through 28-21930; 28-21935 through 28-26946; and 28-7125001 through 28-7325674)


Engine Lycoming O-320-E2A with carburetor setting 10-3678-32 or 10-5009 or O-320-E3D with carburetor setting 10-5009

Fuel 80/87 minimum grade aviation gasoline

Engine Limits For all operations 2700 r.p.m. (150 hp)

Propeller and Propeller Limits Sensenich M74DM or 74DM6
Static r.p.m. at maximum permissible throttle setting not over 2425 r.p.m., not under 2275 r.p.m.
No additional tolerance permitted.
Diameter: Not over 74", not under 72.5".

Propeller Spinner Piper P/N 14422-00.
See NOTE 11.

Airspeed Limits
Never exceed 171 mph (148 knots) CAS
Maximum structural cruising 140 mph (121 knots) CAS
Maneuvering 129 mph (112 knots) CAS
Flaps Extended 115 mph (100 knots) CAS

Center of Gravity Range Utility Category
(+84.0) to (+86.5) at 1650 lb. or less
(+85.8) to (+86.5) at 1950 lb.

Normal Category
(+84.0) to (+95.9) at 1650 lb. or less
(+85.9) to (+95.9) at 1975 lb.
(+88.4) to (+95.9) at 2150 lb.
Straight line variation between points given.

![Diagram of center of gravity range](image-url)
Empty Weight C. G. Range  None

Maximum Weight  
- Normal Category: 2150 lb.
- Utility Category: 1950 lb.

No. of Seats  
- Normal Category: 4 (2 at +85.5, 2 at +117)
- Utility Category: 2 (2 at +85.5)

Maximum Baggage  
Eligible Normal Category only:
- 100 lb. at (+117) on S/N 28-20001 through 28-20939 (See NOTE 12).
- 200 lb. at (+117) on S/N 28-20940 through 28-26946; and 28-7125001 through 28-7725290.
- 300 lb. at (+117 and +133) on S/N 28-20940 through 28-26946; and 28-7125001 through 28-7725290 (See NOTE 13).

Fuel Capacity  50 gallons at (+95) (2 wing tanks)
See NOTE 1 for data on system fuel.

Oil Capacity  8 quarts at (+32.5) (6 quarts usable)
See NOTE 1 for data on system oil.

Control Surface Movements  
- Wing flaps: (±2°) Up 0° Down 40°
- Ailerons: (±2°) Up 30° Down 15°
- Rudder: (±2°) Left 27° Right 27°
- Stabilator: (±1°) Up 18° Down 2°
- Stabilator Tab: (±1°) Up 3° Down 12°

Nose Wheel Travel  
- (±2°) Left 30° Right 30°
- (Effective on S/N 28-20940 through 28-21845; 28-21931 through 28-21934; and 28-7125001 through 28-7725290)
- (± 2°) Left 22° Right 22°
- (Effective on S/N 28-21846 through 28-21930; 28-21935 through 28-26946; and 28-7125001 through 28-7325674)

Manufacturer's Serial Nos.  
See NOTE 17 and 20.


Engine  Lycoming IO-360-B1E
Injector  Bendix type RSA-5ADI Parts List No. 2524297
Fuel  100/130 minimum grade aviation gasoline
Engine limits  For all operations, 2700 r.p.m. (180 hp)
Propeller and Propeller Limits  
- Hartzell constant speed Model HC-C2YK-( )/7666A-0 or HC-C2YK-1( )F/F7666A
- Pitch: High 29.0° ± 1°, Low 13.0° ± .2° at 30° Station.
- Diameter: Not over 76", not under 74.5".
- Governor Assembly: Hartzell F-2-2 ( ) or F-2-7 ( )
- Avoid continuous operation between 2000 - 2200 r.p.m.
Propeller Spinner

Piper P/N 68713 or P/N 66785 spinner tip and P/N 66786 spinner shell, or
P/N 67790-0 spinner, P/N 67791-0 bulkhead, P/N 67793-0 bulkhead, and P/N 99499-0
plate. Two each P/N 67794-0 cuff or Kit 760 410V.
See NOTE 11.

Airspeed Limits

Never exceed 214 mph (186 knots) CAS
Maximum structural cruising 170 mph (148 knots) CAS
Maneuvering 134 mph (116 knots) CAS
Flaps extended 125 mph (109 knots) CAS
Maximum gear extension 150 mph (130 knots) CAS
Maximum gear retraction 125 mph (109 knots) CAS

Center of Gravity Range
(+81.0) to (+95.9) at 1925 lb. or less
(+91.0) to (+95.9) at 2500 lb.
Straight line variation between points given.
Moment due to retracting of landing gear (+819 in-lb.)

Empty Weight C. G. Range
None

Maximum Weight
2500 lb.

No. of Seats
4 (2 at +85.5, 2 at +118.1)

Maximum Baggage
200 lb. at (+142.8)

Fuel Capacity
50 gallons at (+95) (2 wing tanks)
See NOTE 1 for data on system fuel.

Oil Capacity
8 quarts at (+29.5) (6 quarts usable)
See NOTE 1 for data on system oil.

Control Surface Movements

Wing flaps (±2°) Up 0° Down 40°
Ailerons (±2°) Up 30° Down 15°
Rudder (±2°) Left 27° Right 27°
Stabilator (±1°) Up 18° Down 2°
Stabilator Tab (±1°) Up 3° Down 12°

Nose Wheel Travel
(±2°) Left 30° Right 30°

Manufacturer's Serial Nos.
28R-30002 through 28R-31270, and 28R-7130001 through 28R-7130013. The
manufacturer is authorized to issue airworthiness certificates for airplane serial numbers:
28R-30538 28R-30546 28R-30559 28R-30586 28R-30587
28R-30602 28R-30603 28R-30605 28R-30624 28R-30627
28R-30638 28R-30639 28R-30642 28R-30684 28R-30697
28R-30708 28R-30726 28R-30739 28R-30740 28R-30747
28R-30750 28R-30752 28R-30759 28R-30760 28R-30766
28R-30776 28R-30779 28R-30785 28R-30787 28R-30795
28R-30801 28R-30809 28R-30815 28R-30819 28R-30821
28R-30824 28R-30827 28R-30832 28R-30835 28R-30838
28R-30842 28R-30845 28R-30849 28R-30853 28R-30857
28R-30860 28R-30865 28R-30866 28R-30867 28R-30868
28R-30869 28R-30872 28R-30874 28R-30875 28R-30877
through 28R-31270, and 28R-7130001 through 28R-7130013 under the delegation
option provisions of FAR 21. See NOTE 17 and 20.

**Engine**
Lycoming IO-360-C1C

**Injector**
Bendix Type RSA-5AD1, Parts List Number 2524450

**Fuel**
100/130 minimum grade aviation gasoline

**Engine Limits**
For all operations, 2700 r.p.m. (200 hp)

**Propeller and Propeller Limits**
Hartzell constant speed Model HC-C2YK-1 (/)7666A-2 or HC-C2YK-1 ( )F/F7666A
Pitch: High 29.0° ±2°, Low 14.0° ±2° at 30 ° Station
Diameter: Not over 74", not under 72.5"
Governor Assembly: Hartzell F-2-7 ( )
Avoid continuous operation between 2000 - 2350 r.p.m.

**Propeller Spinner**
Piper P/N 66785 spinner tip and P/N 66786 spinner shell or P/N 67790-0 spinner, P/N 67791-0 bulkhead, P/N 67793-0 bulkhead, and P/N 99499-0 plate. Two each P/N 67794-0 cuff or Kit 760 410V.
See NOTE 11.

**Airspeed Limits**
- Never exceed 214 mph (186 knots) CAS
- Maximum structural cruising 170 mph (148 knots) CAS
- Maneuvering 134 mph (116 knots) CAS
- Flaps Extended 125 mph (109 knots) CAS
- Maximum gear extension 150 mph (130 knots) CAS
- Maximum gear retraction 125 mph (109 knots) CAS

**Center of Gravity Range**
(+81.0) to (+95.9) at 1925 lb. or less
(+90.0) to (+95.9) at 2600 lb.
Straight line variation between points given.
Moment due to retracting of landing gear (+819 in-lb.)

**Empty Weight C. G. Range**
None

**Maximum Weight**
2600 lb.

**No. of Seats**
4 (2 at +85.5, 2 at +118.1)

**Maximum Cargo**
200 lb. (at +142.8)

**Fuel Capacity**
50 gallons at (+95) (2 wing tanks)
See NOTE 1 for data on system fuel.

**Oil Capacity**
8 quarts at (+29.5) (6 quarts usable)
See NOTE 1 for data on system oil.

**Control Surface Movements**

<table>
<thead>
<tr>
<th>Control Surface</th>
<th>+/-°</th>
<th>Up</th>
<th>Down</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wing flaps</td>
<td>+/-2°</td>
<td>Up 0°</td>
<td>Down 40°</td>
</tr>
<tr>
<td>Ailerons</td>
<td>+/-2°</td>
<td>Up 30°</td>
<td>Down 15°</td>
</tr>
<tr>
<td>Rudder</td>
<td>+/-2°</td>
<td>Left 27°</td>
<td>Right 27°</td>
</tr>
<tr>
<td>Stabilator</td>
<td>+/-1°</td>
<td>Up 18°</td>
<td>Down 2°</td>
</tr>
<tr>
<td>Stabilator Tab</td>
<td>+/-1°</td>
<td>Up 3°</td>
<td>Down 12°</td>
</tr>
</tbody>
</table>

**Nose Wheel Travel**
(+2°) Left 30° Right 30°

**Manufacturer's Serial Numbers**
28R-35001 through 28R-35820, and 28R-7135001 through 28R-7135229. The manufacturer is authorized to issue airworthiness certificates for airplanes serial numbers 28R-35001 through 28R-35820, and 28R-7135001 through 28R-7135229 under the delegation option provisions of FAR 21.

This series differs from the basic PA-28R-200 (Item X) by the addition of a five-inch fuselage extension, larger horizontal tail, wing span increase, gross weight increase, and other minor changes.

**Engine**
Lycoming IO-360-C1C  (See NOTE 22)
Lycoming IO-360-C1C6  (See NOTE 23)

**Injector**
Bendix Type RSA-5AD1, Part List Number 2524450

**Fuel**
100/130 minimum grade aviation gasoline

**Engine Limits**
For all operations, 2700 r.p.m.  (200 hp)

**Propeller and Propeller Limits**
Hartzell Constant Speed Model HC-C2YK-1 ( ) or HC-C2YK-1( ) F
Blade Model 7666A-2 or F7666A-2  (See NOTE 22)
Pitch:  High 29.0° ± 2°, Low 14.0° ± .2° at 30" Station.
Diameter:  Not over 74", not under 72.5".
Governor Assembly:  Hartzell F-2-7( )
Avoid continuous operation between 2000 - 2350 r.p.m.
or McCauley Constant Speed Model B2D34C213, Blade Model 90DHA-16 (See NOTE 23)
Pitch:  High 27.5° ± .5°;  Low 12.5° ± .2° at 30" Station.
Diameter:  Not over 74", not under 73".
Governor Assembly:  Hartzell F-2-7 ( )
Avoid continuous operation between 1500 and 1950 r.p.m. below 15" manifold pressure.

**Propeller Spinner**
For the Hartzell Propeller:  Piper P/N 66785-00 spinner tip, P/N 66786 spinner shell and P/N 68734-0 bulkhead or P/N 99374-0 spinner installation (same as Kit No. 760 410V).  See NOTE 11.
For the McCauley Propeller:  Piper P/N 66785 spinner tip and P/N 66786 spinner shell or P/N 67790-0 spinner, P/N 67791-0 bulkhead, P/N 67793-0 bulkhead, and P/N 99499-0 plate.  Two each P/N 67794-0 cuff, or Kit 760 410V. Spinner and attachment plate installation P/N 35828-2.  See NOTES 11 and 23.

**Airspeed Limits**
Never exceed 214 mph (186 knots) CAS
Maximum structural cruising 170 mph (148 knots) CAS
Maneuvering 131 mph (114 knots) CAS
Flaps Extended 125 mph (109 knots) CAS
Maximum gear extension 150 mph (130 knots) CAS
Maximum gear retraction 125 mph (109 knots) CAS

**Center of Gravity Range**
(+80.0) to (+93.0) at 1800 lb. or less
(+82.0) to (+93.0) at 2300 lb.
(+87.3) to (+93.0) at 2650 lb.

**Empty Weight C. G. Range**
None

**Maximum Weight**
2650 lb.

**No. of Seats**
4  (2 at +80.5, 2 at +118.1)

**Maximum Cargo**
200 lb.  (at +142.8)

**Fuel Capacity**
50 gallons at (+95) (2 wing tanks)
See NOTE 1 for data on system fuel.

**Oil Capacity**
8 quarts at (+24.5) (6 quarts usable)
See NOTE 1 for data on system oil.
### Control Surface Movements

<table>
<thead>
<tr>
<th>Surface</th>
<th>Movement</th>
<th>Up</th>
<th>Down</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wing flaps</td>
<td>±2°</td>
<td>0°</td>
<td>40°</td>
</tr>
<tr>
<td>Ailerons</td>
<td>±2°</td>
<td>30°</td>
<td>15°</td>
</tr>
<tr>
<td>Rudder</td>
<td>±2°</td>
<td>27°</td>
<td>27°</td>
</tr>
<tr>
<td>Stabilator</td>
<td>±1°</td>
<td>16°</td>
<td>2°</td>
</tr>
<tr>
<td>Stabilator Tab</td>
<td>±1°</td>
<td>3°</td>
<td>12°</td>
</tr>
</tbody>
</table>

### Nose Wheel Travel

<table>
<thead>
<tr>
<th>Movement</th>
<th>Left</th>
<th>Right</th>
</tr>
</thead>
<tbody>
<tr>
<td>+2°</td>
<td>30°</td>
<td>30°</td>
</tr>
</tbody>
</table>

**Manufacturer's Serial Numbers** 28R-7235001 through 28R-7635545. The manufacturer is authorized to issue airworthiness certificates for airplane serial numbers 28R-7235001 through 28R-7635545 under the delegation option provisions of FAR 21. See NOTE 20.

### XII - Model PA-28-180 (Archer), 4 PCLM (Normal Category), 2 PCLM (Utility Category), Approved May 22, 1972, for S/N 28- E13, and 28-7305001 through 28-7505260.

This series differs from the basic PA-28-180 (Item III) by the addition of a five inch fuselage extension, wing span increase, larger horizontal tail, gross weight increase and other minor changes.

<table>
<thead>
<tr>
<th>Engine</th>
<th>Lycoming O-360-A4A or O-360-A4M with carburetor settings 10-3878 or 10-5193</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuel</td>
<td>100/130 minimum grade aviation gasoline</td>
</tr>
<tr>
<td>Engine Limits</td>
<td>For all operations, 2700 r.p.m. (180 hp)</td>
</tr>
</tbody>
</table>
| Propeller and Propeller Limits | Sensenich or 76EM8S5 or M76EMMS  
Static r.p.m. at maximum permissible throttle setting not over 2425 r.p.m.,  
not under 2325 r.p.m.  
No additional tolerance permitted.  
Diameter: Not over or under 76". |
| Propeller Spinner | Piper P/N 65805-00.  
See NOTE 11. |
| Airspeed Limits | Never exceed 171 mph (148 knots) CAS  
Maximum structural cruising 140 mph (121 knots) CAS  
Maneuvering 127 mph (110 knots) CAS  
Flaps Extended 115 mph (100 knots) CAS |
| Center of Gravity Range | Normal Category  
(+82.0) to (+93.0) at 2050 lb. or less  
(+87.4) to (+93.0) at 2450 lb.  
Utility Category  
(+82.0) to (+86.5) at 1950 lb. or less  
Straight line variation between points given. |
Empty Weight C. G. Range

None

Maximum Weight

Normal Category: 2450 lb.
Utility Category: 1950 lb.

No. of Seats

Normal Category: 4 (2 at +80.5 2 at +118.1)
Utility Category: 2 (2 at +80.5)

Maximum Baggage

200 lb. at (+142.8)

Fuel Capacity

50 gallons at (+95) (2 wing tanks)
See NOTE 1 for data on system fuel.

Oil Capacity

8 quarts at (+27.5) (6 quarts usable)
See NOTE 1 for data on system oil.

Control Surface Movements

<table>
<thead>
<tr>
<th>Surface</th>
<th>Range</th>
<th>Up</th>
<th>Down</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wing flaps</td>
<td>±2°</td>
<td>0°</td>
<td>40°</td>
</tr>
<tr>
<td>Ailerons</td>
<td>±2°</td>
<td>30°</td>
<td>15°</td>
</tr>
<tr>
<td>Rudder</td>
<td>±2°</td>
<td>27°</td>
<td>27°</td>
</tr>
<tr>
<td>Stabilator</td>
<td>±1°</td>
<td>14°</td>
<td>2°</td>
</tr>
<tr>
<td>Stabilator Tab</td>
<td>±1°</td>
<td>3°</td>
<td>12°</td>
</tr>
</tbody>
</table>

Nose Wheel Travel

(±2°) Left 22° Right 22°
(S/N 28-E13, 28-7305001 through 28-7305601)
(±2°) Left 30° Right 30°
(S/N 28-7405001 through 28-7505260)

Manufacturer's Serial Numbers

28-E13, and 28-7305001 through 28-7505260. The manufacturer is authorized to issue airworthiness certificates for airplanes serial numbers 28-7305001 through 28-7505260 under the delegation option provisions of FAR 21. See NOTE 20.


This series differs from the basic PA-28-235 (Item VI) by the addition of a five inch fuselage extension, larger horizontal tail, gross weight increase, and other minor changes.

Engine

Lycoming O-540-B4B5 with carburetor setting 10-5404

Fuel

80/87 minimum grade aviation gasoline
<table>
<thead>
<tr>
<th>Engine Limits</th>
<th>For all operations, 2575 r.p.m. (235 hp)</th>
</tr>
</thead>
</table>
| Propeller and Propeller Limits | Hartzell HC-C2YK-1( )F/F 8468A-4  
Pitch: High 27° ± 2°, Low 13.5° ± 2° at 30” station.  
Diameter: Not over 80", not under 80”.  
Governor Assembly: Hartzell F-4-3( ) or F-4-13( ).  
See NOTE 21. |
| Propeller Spinner | P/N 99374 Spinner Installation.  
Spinner required. |
| Airspeed Limits | Never exceed 197 mph (171 knots) CAS  
Maximum structural cruising 156 mph (135 knots) CAS  
Maneuvering 138 mph (119 knots) CAS  
Flaps Extended 115 mph (99 knots) CAS |
| Center of Gravity Range | (+79.0) to (+91.5) at 1900 lb. or less  
(+82.0) to (+91.5) at 2500 lb.  
(+88.0) to (+91.5) at 3000 lb.  
Straight line variation between points given. |
| Empty Weight C. G. Range | None |
| Maximum Weight | 3000 lb. |
| No. of Seats | 4 (2 at +80.5, 2 at +118.1) |
| Maximum Baggage | 200 lb. at (+142.8) |
| Fuel Capacity | 84 gallons (50 gallons in 2 wing tanks at (+95) and 34 gallons in 2 tip tanks at (+95))  
See NOTE 1 for data on system fuel. |
| Oil Capacity | 12 quarts at(+29.1) (9¾ quarts usable)  
See NOTE 1 for data on system oil. |
| Control Surface Movements | Wing flaps (+2°) Up 0° Down 40°  
Ailerons (+2°) Up 30° Down 15°  
Rudder (+2°) Left 27° Right 27°  
Stabilator (+2°) Up 16° Down 2°  
Stabilator Tab (+1°) Up 3° Down 12° |
| Nose Wheel Travel | (+2°) Left 22° Right 22°  
(S/N 28-E11, 28-7310001 through 28-7310176)  
(+2°) Left 30° Right 30°  
(S/N 28-7410001 through 28-7710089) |
| Manufacturer's Serial Numbers | 28-E11, and 28-7310001 through 28-7710089. The manufacturer is authorized to issue airworthiness certificates for airplane serial numbers 28-E11, and 28-7310001 through 28-7710089 under the delegation option provisions of FAR 21. See NOTE 20. |

XIV - Model PA-28-151 (Cherokee Warrior), 4 PCLM (Normal Category), 2 PCLM (Utility Category),  
Approved August 9, 1973, for S/N 28-7415001 through 28-7715314.  

| Engine | Lycoming O-320-E3D with carburetor setting 10-5009, or 10-5009N, or 10-5135 |
| Fuel | 80/87 minimum grade aviation gasoline |
| Engine Limits | For all operations, 2700 r.p.m. (150 hp) |
Propeller and Propeller Limits

Sensenich M74DM6
Static r.p.m. at maximum permissible throttle setting not over 2375 r.p.m.,
not under 2275 r.p.m.
No additional tolerance permitted.
Diameter: Not over 74", not under 72".
or
McCаuley 1C160 EGM 7653
Static r.p.m. at maximum permissible throttle setting not over 2400 r.p.m.,
not under 2300 r.p.m.
No additional tolerance permitted.
Diameter: Not over 76", not under 74.5".

Propeller Spinner
Piper P/N 35323.
See NOTE 11.

Airspeed Limits
Never exceed 176 mph (153 knots) CAS
Maximum structural cruising 140 mph (122 knots) CAS
Maneuvering 111 mph (108 knots) CAS

Flaps Extended 125 mph (109 knots) CAS
(S/N 28-7415001 through 28-7515449)

Flaps Extended 115 mph (100 knots) CAS
(S/N 28-7615001 through 28-7715314)

Center of Gravity Range

Normal Category
(+83.0) to (+93.0) at 1950 lb. or less
(+87.0) to (+93.0) at 2325 lb.

Utility Category
(+83.0) to (+86.5) at 1950 lb. or less
Straight line variation between points given.

Empty Weight C. G. Range
None

Maximum Weight
Normal Category: 2325 lb.
Utility Category: 1950 lb.

No. of Seats
Normal Category: 4 (2 at +80.5, 2 at +118.1)
Utility Category: 2 (2 at +80.5)

Maximum Baggage
Eligible Normal Category only:
200 lb. at (+142.8)

Fuel Capacity
50 gallons at (+95) (2 wing tanks)
See NOTE 1 for data on system fuel.

Oil Capacity
8 quarts at (+27.5) (6 quarts usable)
See NOTE 1 for data on system oil.

Control Surface Movements

Wing Flaps  (+2°) Up  0° Down 40°
Ailerons  (+2°) Up  23° Down 17°
(S/N 28-7415001 through 28-7515449)
Ailerons  (+2°) Up  25° Down 12.5°
(S/N 28-7615001 through 28-7715314)
Rudder  (+2°) Left  27° Right  27°
Stabilator  (+1°) Up  14° Down  2°
Stabilator Tab  (+1°) Up  3° Down  12°

Nose Wheel Travel
(+1°) Left  30° Right  30°
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.

| Engine | Lycoming O-360-A4M with carburetor settings 10-3878 or 10-5193 or Lycoming O-360-A4A with carburetor setting 10-5193. |
| Fuel | 100/130 minimum grade aviation gasoline |
| Engine Limits | 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) |
| Propeller and Propeller Limits | Sensenich 76EM885  
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". |
| Propeller Spinner | Piper P/N 65805-00. See NOTE 11. |
| Airspeed Limits | 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 28-7790589, 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  
Flaps Extended 115 mph (100 knots) CAS |
| Center of Gravity Range | Normal Category  
(+82.0) to (+93.0) at 2050 lb. or less  
(+88.6) to (+93.0) at 2550 lb. |
| Utility Category | (+82.0) to (+93.0) at 2050 lb. or less  
(+83.0) to (+93.0) at 2130 lb.  
Straight line variation between points given. |
| Empty Weight C. G. Range | None |
Maximum Weight

|----------------|-----------------------|-------------|------------------|----------------|-------------------|

* - Ramp weights for S/N 28-8090001 through 28-8690056; 28-8690061; 28-8690062; and 2890001 through 2890205 only.

No. of Seats

| Category       | Normal: 4 (2 at +80.5, 2 at +118.1) | Utility: 2 (2 at +80.5) |

Maximum Baggage

200 lb. at (+142.8)

Fuel Capacity

50 gallons at (+95) (2 wing tanks)
See NOTE 1 for data on system fuel.

Oil Capacity

8 quarts at (+27.5) (6 quarts usable)
See NOTE 1 for data on system oil.

Control Surface Movements

<table>
<thead>
<tr>
<th>Surface</th>
<th>Range (±°)</th>
<th>Up</th>
<th>0°</th>
<th>Down</th>
<th>40°</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wing flaps</td>
<td>±2°</td>
<td>0°</td>
<td>0°</td>
<td>0°</td>
<td>0°</td>
</tr>
<tr>
<td>Ailerons</td>
<td>±2°</td>
<td>25°</td>
<td>25°</td>
<td>25°</td>
<td>25°</td>
</tr>
<tr>
<td>Rudder</td>
<td>±2°</td>
<td>27°</td>
<td>27°</td>
<td>27°</td>
<td>27°</td>
</tr>
<tr>
<td>Stabilator</td>
<td>±1°</td>
<td>14°</td>
<td>14°</td>
<td>14°</td>
<td>14°</td>
</tr>
<tr>
<td>Stabilator Tab</td>
<td>±1°</td>
<td>3°</td>
<td>3°</td>
<td>3°</td>
<td>3°</td>
</tr>
</tbody>
</table>

Nose Wheel Travel

(±2°) Left 30° Right 30°

Manufacturer's Serial Numbers

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.

Engine

Lycoming O-360-A4M with carburetor settings 10-6102 or 10-5193 for aircraft prior to S/N 2843501

Fuel

100 or 100LL aviation grade fuel

Engine Limits

For all operations, 2700 r.p.m. (180 hp)

Propeller and Propeller Limits

Sensenich 76EM8514-0-62
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".

Propeller Spinner

Piper P/N 83349-12

Airspeed Limits

<table>
<thead>
<tr>
<th>Category</th>
<th>Speed</th>
<th>CAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never exceed</td>
<td>171</td>
<td></td>
</tr>
<tr>
<td>Maximum structural cruising</td>
<td>140</td>
<td></td>
</tr>
<tr>
<td>Maneuvering @ 2550 lbs.</td>
<td>128</td>
<td></td>
</tr>
<tr>
<td>Maneuvering @ 1634 lbs.</td>
<td>102</td>
<td></td>
</tr>
<tr>
<td>Flaps Extended</td>
<td>115</td>
<td></td>
</tr>
</tbody>
</table>
Center of Gravity Range

**Normal Category**
(+82.0) to (+93.0) at 2050 lb. or less
(+88.6) to (+93.0) at 2550 lb.

**Utility Category**
(+82.0) to (+93.0) at 2050 lb. or less
(+83.0) to (+93.0) at 2130 lb.

Straight line variation between points given.

Empty Weight C. G. Range
None

Maximum Weight

**Normal Category**
- Ramp: 2558 lb.
- Takeoff: 2550 lb.

**Utility Category**
- Ramp: 2138 lb.
- Takeoff: 2130 lb.

No. of Seats

**Normal Category**: 4 (2 at +80.5, 2 at +118.1)
**Utility Category**: 2 (2 at +80.5)

Maximum Baggage
200 lb. at (+142.8)

Fuel Capacity
50 gallons at (+95) (2 wing tanks)
See NOTE 1 for data on system fuel.

Oil Capacity
8 quarts at (+27.5) (6 quarts usable)
See NOTE 1 for data on system oil.

Control Surface Movements

- **Wing flaps**
  - Up: 0° (+1°)
  - Down: 10°, 25°, 40° (+2°)

- **Ailerons**
  - Up: 25°
  - Down: 12.5°

- **Rudder**
  - Left: 28°
  - Right: 28°

- **Stabilator**
  - Up: 14°
  - Down: 2°

- **Stabilator Tab**
  - Up: 3°
  - Down: 12°

Nose Wheel Travel

- (-2°) Left: 30° Right: 30°
  (S/N 2890206 through 2890231)
- (+1°) Left: 20° Right: 20°
  (S/N 2843001 & up)

Manufacturer's Serial Numbers
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)

Engine
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.

Fuel
100 octane minimum grade aviation gasoline

Engine Limits
For all operations, 2700 r.p.m. (160 hp)

Propeller and Propeller Limits
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".
Propeller and Propeller Limits

or

Sensenich 74DM6-0-58

Static r.p.m. at maximum permissible throttle setting not over 2465 r.p.m.,
not under 2365 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".

Propeller Spinner

Piper P/N 35323 or P/N 36850.

See NOTE 11.

Airspeed Limits

Never exceed

160 KIAS

Maximum structural cruising

126 KIAS

Maneuvering at 2325 lb. gross weight

111 KIAS

Maneuvering at 1531 lb. gross weight

88 KIAS

Flaps Extended

103 KIAS

Center of Gravity Range

Normal Category

(+83.0) to (+93.0) at 1950 lb. or less
(+87.0) to (+93.0) at 2325 lb.

See NOTE 27.

Utility Category

(+83.0) to (+93.0) at 1950 lb. or less
(+83.8) to (+93.0) at 2020 lb.

Straight line variation between points given.

Empty Weight C.G. Range

None

Maximum Weight

Normal Category: 2325 lb.

Utility Category: 2020 lb.

Ramp: 2332 lb. (Cadet only) See NOTE 27.

No. of Seats

Normal Category: 4 (2 at +80.5, 2 at +118.1)

Utility Category: 2 (+2 at +80.5)

Maximum Baggage

Eligible Normal Category only:

200 lb. at (+142.8)

50 lb. (Cadet only)

Fuel Capacity

50 gallons at (+95) (2 wing tanks)

See NOTE 1 for data on system fuel.

Oil Capacity

8 quarts at (+7.5) (6 quarts usable)

See NOTE 1 for data system oil.

Control Surface Movements

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°

Nose Wheel Travel

(±1°) Left 30° Right 30°

S/N 28-7716001 thru 28-8216300

(±1°) Left 20° Right 20°

S/N 2841001 thru 2841365 (See Note 29)

Manufacturer's Serial Numbers

28-7716001 through 28-8216300, and 2841001 through 2841365 (Cadet only). The
manufacturer is authorized to issue airworthiness certificates for airplane serial numbers
28-7716001 through 28-8216300, and 2841001 through 2841365 under the delegation
option provisions of FAR 21. See NOTE 20.
XVI - B. Model PA-28-161 (Warrior II), 4 PCLM (Normal Category), 2 PCLM (Utility Category), Approved
July 1, 1982, for S/N 28-8316001 through 28-8616057, and 2816001 through 2816109.

Engine
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.

Fuel
100 octane minimum grade aviation gasoline

Engine Limits
For all operations, 2700 r.p.m. (160 hp)

Propeller and Propeller Limits
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".
or Sensenich 74DM6-0-58
Static r.p.m. at maximum permissible throttle setting not over 2465 r.p.m.,
not under 2365 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".

Propeller Spinner
Piper P/N 36850.
See NOTE 11.

Airspeed Limits
Never exceed 160 KIAS
Maximum structural cruising 126 KIAS
Maneuvering at 2440 lb. gross weight 111 KIAS  See NOTE 26.
Maneuvering at 1531 lb. gross weight 88 KIAS
Flaps Extended 103 KIAS

Center of Gravity Range
Normal Category
(+83.0) to (+93.0) at 1950 lb. or less
(+88.3) to (+93.0) at 2440 lb.
See NOTE 26.

Utility Category
(+83.0) to (+93.0) at 1950 lb. or less
(+83.8) to (+93.0) at 2020 lb.
Straight line variation between points given

Empty Weight C.G. Range
None

Maximum Weight
Normal Category: Ramp - 2447 lb.
Takeoff - 2440 lb.  See NOTE 26.

Utility Category: Ramp - 2027 lb.
Takeoff - 2020 lb.

No. of Seats
Normal Category: 4 (2 at +80.5, 2 at +118.1)
Utility Category: 2 (2 at +80.5)

Maximum Baggage
Eligible Normal Category only: 200 lb. at (+142.8)

Fuel Capacity
50 gallons at (+95) (2 wing tanks)
See NOTE 1 for data on system fuel.
Oil Capacity  
8 quarts at (+27.5) (6 quarts usable)  
See NOTE 1 for data on system oil.

Control Surface Movements  

<table>
<thead>
<tr>
<th>Surface</th>
<th>Movement</th>
<th>Up</th>
<th>Down</th>
<th>(±1°)</th>
<th>Down</th>
<th>(±1°)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wing flaps</td>
<td></td>
<td></td>
<td>0° (±1°)</td>
<td></td>
<td>40°</td>
<td></td>
</tr>
<tr>
<td>Ailerons</td>
<td></td>
<td></td>
<td>25°</td>
<td></td>
<td>12.5°</td>
<td></td>
</tr>
<tr>
<td>(±2°) Left</td>
<td>27°</td>
<td></td>
<td>27°</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rudder</td>
<td>S/N 28-8316001 thru 28-8416095</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Rudder</td>
<td>S/N 28-8416096 &amp; Up, 2816001 thru 2816109</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rudder</td>
<td>(±1°)</td>
<td>28°</td>
<td>Right</td>
<td>28°</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rudder</td>
<td>Left</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rudder</td>
<td>(±1°)</td>
<td>28°</td>
<td>Left</td>
<td>28°</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rudder</td>
<td>(±1°)</td>
<td>28°</td>
<td>Right</td>
<td>28°</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rudder</td>
<td>Left</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rudder</td>
<td>(±1°)</td>
<td>28°</td>
<td>Left</td>
<td>28°</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stabilator</td>
<td>(±1°)</td>
<td>14°</td>
<td>Down</td>
<td>2°</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stabilator Tab</td>
<td>(±1°)</td>
<td>3°</td>
<td>Down</td>
<td>12°</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Nose Wheel Travel  
| Movement | Up  | Down       | (±1°) | Down       | (±1°) |
| Left         | 30°   | Right      | 30°   |            |       |
| S/N 28-8316001 thru 28-8416095 |     |            |       |            |       |
| Right        | 20°    | Right      | 20°   |            |       |
| S/N 28-8416096 & Up, 2816001 thru 2816109 |     |            |       |            |       |

Manufacturer's Serial Nos.  
28-8316001 through 28-8616057, and 2816001 through 2816109. The manufacturer is authorized to issue airworthiness certificates for airplane serial numbers 28-8316001 through 28-8616057, and 2816001 through 2816109 under the delegation option provisions of FAR 21. See NOTE 20.

XVI - C. Model PA-28-161 (Warrior III), 4 PCLM (Normal Category), 2 PCLM (Utility Category), Approved July 1, 1994, for S/N 2816110 through 2816119, and 2842001 and up.

Engine  
Lycoming O-320-D3G with carburetor setting 10-5135, 10-5009 or 10-5217

Fuel  
100 or 100LL aviation grade gasoline

Engine Limits  
For all operations, 2700 r.p.m. (160 hp)

Propeller and Propeller Limits  
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".

Propeller Spinner  
Piper P/N 36850.  
See NOTE 11.

Airspeed Limits  
Never exceed 160 KIAS
Maximum structural cruising 126 KIAS  
Maneuvering at 2440 lb. gross weight 111 KIAS See NOTE 26.
Maneuvering at 1531 lb. gross weight 88 KIAS
Flaps Extended 103 KIAS

Center of Gravity Range  
Normal Category  
(±83.0) to (±93.0) at 1950 lb. or less
(±88.3) to (±93.0) at 2440 lb.
See NOTE 26.

Utility Category  
(±83.0) to (±93.0) at 1950 lb. or less
(±83.8) to (±93.0) at 2020 lb.

Straight line variation between points given
Empty Weight C.G. Range: None

Maximum Weight
- Utility Category: Ramp - 2027 lb. Takeoff - 2020 lb.

No. of Seats
- Normal Category: 4 (2 at +80.5, 2 at +118.1)
- Utility Category: 2 (2 at +80.5)

Maximum Baggage: Eligible Normal Category only: 200 lb. at (+142.8)

Fuel Capacity: 50 gallons at (+95) (2 wing tanks)
See NOTE 1 for data on system fuel.

Oil Capacity: 8 quarts at (+27.5) (6 quarts usable)
See NOTE 1 for data on system oil.

Control Surface Movements
- Wing flaps: Up 0° (±1°) Down 10°, 25°, 40° (±2°)
- Ailerons: Up 25° Down 12.5°
- Rudder: Left 28° Right 28°
- Stabilator: Up 14° Down 2°
- Stabilator Tab: Up 3° Down 12°
- Nose Wheel Travel: Left 20° Right 20°

Manufacturer's Serial Nos: 2816110 through 2816119, and 2842001 and up. The manufacturer is authorized to issue airworthiness certificates for airplane serial numbers 2816110 through 2816119, and 2842001 and up under the delegation option provisions of FAR 21.

XVII - Model PA-28R-201 (Arrow III), 4 PCLM (Normal Category), Approved November 2, 1976, for S/N 28R-7737002 through 28R-7837317; 2837001 through 2837061; and 2844001 and up.

Engine: Lycoming IO-360-C1C6

Injector: Bendix Type RSA-5AD1, Part List Number 2524450
Precision Airmotive (PAC) formerly Bendix: Part List Number PAM 2524450-9

Fuel: 100 or 100LL aviation grade gasoline

Engine Limits: For all operations, 2700 r.p.m. (200 hp)

Propeller and Propeller Limits
- McCauley Constant Speed Hub Model B2D34C213, Blade Model 90 DHA-16
  Pitch: High 27.5° ± .5°, Low 12.5° ± .2° at 30" station.
  Diameter: Not over 74", not under 73".
  Governor Assembly: Hartzell Model F-2-7 ( )
  Avoid continuous operation between 1500 and 1950 r.p.m. below 15" manifold pressure.
  or
  Hartzell Constant Speed Hub Model HC-C2YK-1( )F, Blade Model F7666A-2R
  Pitch: High 29.0° ± 2°, Low 14.0° ± .2° at 30" station.
  Diameter: Not over 74", not under 72".
  Governor Assembly: F-2-7 ( )

Propeller Spinner: For McCauley propeller: Piper P/N 35828-2
For Hartzell propeller: Piper P/N 99374
See NOTE 11.

Airspeed Limits: Never exceed 183 KIAS
  Maximum structural cruising 146 KIAS
  Maneuvering 118 KIAS
Flaps Extended  103 KIAS  
Maximum Gear Extension  129 KIAS  
Maximum Gear Retraction  107 KIAS  

Center of Gravity Range  
(+82.0) to (+91.5) at  2375 lb. or less  
(+88.9) to (+91.5) at  2750 lb.  
Straight line variation between points given.  
Moment due to retraction of gear  (+819 in-lb.)  

Empty Weight C.G. Range  
None  

Maximum Weight  
2750 lb.  

No. of Seats  
4  (2 at +80.5, 2 at +118.1)  

Maximum Baggage  
200 lb. at (+142.8)  

Fuel Capacity  
77 gallons at (+95) (2 wing tanks)  
See NOTE 1 for data on system fuel.  

Oil Capacity  
8 quarts at (+24.5) (6 quarts usable)  
See NOTE 1 for data on system oil.  

Control Surface Movements  
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  16°  Down  2°  
Stabilator Tab  
(±1°)  Up  3°  Down  12°  

Nose Wheel Travel  
(±2°)  Left  30°  Right  30°  

Manufacturer's Serial Numbers  
28R-7737002 through 28-7837317; 2837001 through 2837061; and 2844001 and up.  
The manufacturer is authorized to issue airworthiness certificates for airplanes serial numbers 28R-7737002 through 28-7837317; 2837001 through 2837061; and 2844001 and up under the delegation option provisions of FAR 21.  See NOTE 20.  

XVIII - Model PA-28R-201T (Turbo Arrow III), 4 PCLM (Normal Category), Approved November 2, 1976, for S/N 28R-7703001 through 28R-7803373, and 2803001 through 2803012.  

Engine  
Continental TSIO-360-F or TSIO-360-FB  

Fuel  
100/130 minimum grade aviation gasoline  

Engine Limits  
For all operations, 2575 r.p.m. at 41” Hg. manifold pressure  (200 hp)  

Propeller and Propeller Limits  
1 Hartzell Hub Model BHC-C2YF-1BF, Blade Model F8459A-8R  
Pitch Setting at 30” Station:  High:  29° ± 1.0°, Low:  14.4° ± 0.2°.  
Diameter:  Not over 76", not under 75".  
Governor:  Hartzell E-5 or Woodward G210681  
Avoid continuous operation between 2000 and 2200 r.p.m. with engine manifold pressure above 32” Hg.  
Avoid continuous ground operation in cross and tail winds of over 10 knots between 1700 and 2100 r.p.m.  

Propeller Spinner  
Hartzell P/N C3568 Spinner Assembly.  
See NOTE 11.
Airspeed Limits

<table>
<thead>
<tr>
<th>Condition</th>
<th>Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never exceed</td>
<td>183 KIAS</td>
</tr>
<tr>
<td>Maximum structural cruising</td>
<td>146 KIAS</td>
</tr>
<tr>
<td>Maneuvering</td>
<td>119 KIAS</td>
</tr>
<tr>
<td>Flaps Extended</td>
<td>103 KIAS</td>
</tr>
<tr>
<td>Maximum Gear Retraction</td>
<td>107 KIAS</td>
</tr>
<tr>
<td>Maximum Gear Extension</td>
<td>129 KIAS</td>
</tr>
<tr>
<td>Maximum Gear Extended</td>
<td>129 KIAS</td>
</tr>
</tbody>
</table>

Center of Gravity Range

(+86.0) to (+90.0) at 2900 lb.
(+78.0) to (+90.0) at 2240 lb. or less

Straight line variation between points given.
Moment due to retraction of landing gear (+819 in-lb.)

Empty Weight C. G. Range

None

Maximum Weight

<table>
<thead>
<tr>
<th>Condition</th>
<th>Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ramp</td>
<td>2912 lb.</td>
</tr>
<tr>
<td>Takeoff</td>
<td>2900 lb.</td>
</tr>
</tbody>
</table>

No. of Seats

4 (2 at +80.5, 2 at +118.1)

Maximum Baggage

200 lb. at (+142.8)

Fuel Capacity

77 gallons at (+95) (2 wing tanks)
See NOTE 1 for data on system fuel.

Oil Capacity

8 quarts at (+13.5) (5 quarts usable)
See NOTE 1 for data on system oil.

Maximum Operating Altitude

20,000 feet

Control Surface Movements

<table>
<thead>
<tr>
<th>Surface</th>
<th>Movement</th>
<th>Up</th>
<th>Down</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wing flaps</td>
<td>±2°</td>
<td>0°</td>
<td>40°</td>
</tr>
<tr>
<td>Ailerons</td>
<td>±2°</td>
<td>25°</td>
<td>12.5°</td>
</tr>
<tr>
<td>Rudder</td>
<td>±1°</td>
<td>Left 28°</td>
<td>Right 28°</td>
</tr>
<tr>
<td>Stabilator</td>
<td>±1°</td>
<td>Up 16°</td>
<td>Down 2°</td>
</tr>
<tr>
<td>Stabilator Tab</td>
<td>±1°</td>
<td>Up 3°</td>
<td>Down 12°</td>
</tr>
</tbody>
</table>

Nose Wheel Travel

(±2°) (±2°) Left 30° Right 30°

Manufacturer's Serial Numbers

28R-7703001 through 28R-7803373, and 2803001 through 2803012. The manufacturer is authorized to issue airworthiness certificates for airplanes serial numbers 28R-7703001 through 28R-7803373, and 2803001 through 2803012 under the delegation option provisions of FAR 21. See NOTE 20.

XIX - Model PA-28-236 (Dakota), 4 PCLM (Normal Category), Approved June 1, 1978, for S/N 28-7911001 through 28-8611008; 2811001 through 2811050; and 2845001 and up.

<table>
<thead>
<tr>
<th>Component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engine</td>
<td>Lycoming O-540-J3A5D with carburetor setting 10-5054</td>
</tr>
<tr>
<td>Fuel</td>
<td>100/130 minimum grade aviation gasoline</td>
</tr>
<tr>
<td>Engine Limits</td>
<td>For all operations, 2400 r.p.m. (235 hp)</td>
</tr>
<tr>
<td>Propeller and Propeller Limits</td>
<td>Hartzell HC-F2YR-1( )F/F 8468A-4R Pitch: High 32° ±2°, Low 16.25° ± ¼°. Diameter: Not over 80&quot;, not under 78&quot;. Governor Assembly: Hartzell F-4-21( )</td>
</tr>
</tbody>
</table>
Propeller Spinner  
Hartzell P/N C3568 Spinner Assembly.  
See NOTE 11.

Airspeed Limits  
Never exceed 197 mph (171 knots) CAS  
Maximum structural cruising 156 mph (135 knots) CAS  
Maneuvering at 3000 lb. 140 mph (122 knots) CAS  
Maneuvering at 1761 lb. 108 mph (94 knots) CAS  
Flaps Extended 115 mph (100 knots) CAS

Center of Gravity Range  
(+79.8) to (+92.0) at 1900 lb. or less  
(+82.5) to (+92.0) at 2500 lb.  
(+88.5) to (+92.0) at 3000 lb.  
Straight line variation between points given.

Empty Weight C. G. Range  
None

Maximum Weight  
3000 lb.

Number of Seats  
4 (2 at +80.5, 2 at +118.1)

Maximum Baggage  
200 lb. at (+142.8)

Fuel Capacity  
77 gallons at (+95) (2 wing tanks)  
See NOTE 1 for data on system fuel.

Oil Capacity  
12 quarts at (+29.1) (9 1/2 quarts usable)  
See NOTE 1 for data on system oil.

Control Surface Movements  
Wing flaps (+2°) Up 0° Down 40°
Ailerons (+2°) Up 25° Down 12.5°
Rudder (+1°) Left 28° Right 28°
Stabilator (+1°) Up 16° Down 2°
Stabilator Tab (+1°) Up 3° Down 12°

Nose Wheel Travel  
(+1°) Left 30° Right 30°

Manufacturer's Serial Numbers  
28-7911001 through 28-8611008; 2811001 through 2811050; and 2845001 and up. The manufacturer is authorized to issue airworthiness certificates for airplane serial numbers 28-7911001 through 28-8611008; 2811001 through 2811050; and 2845001 and up under the delegation option provisions of FAR 21. See NOTE 20.


Engine  
Lycoming IO-360-C1C6

Injector  
Bendix Type RSA-5AD1, Part List Number 2524450

Fuel  
100/130 minimum grade aviation gasoline

Engine Limits  
For all operations, 2700 r.p.m. (200 hp)

Propeller and Propeller Limits  
McCauley Constant Speed Hub Model B2D34C213, Blade Model 90 DHA-16 Pitch: High 27.5° ±.5°, Low 12.5° ±.2° at 30" station. Diameter: Not over 74", not under 73". Governor Assembly: Hartzell Model F-2-7 ( ) Avoid continuous operation between 1500 and 1950 r.p.m. below 15" manifold pressure.
Propeller and Propeller Limits
Hartzell Constant Speed Hub Model HC-C2YK-1(F), Blade Model F7666A-2R
Pitch: High 29.0° ± 2°, Low 14.0° ± .2° at 30" station.
Diameter: Not over 74", not under 72".
Governor Assembly: Hartzell Model F-2-7

Propeller Spinner
For the McCauley propeller: Piper P/N 35828-2
For the Hartzell propeller: Piper P/N 99374
See NOTE 11.

Airspeed Limits
Never exceed 190 KIAS
Maximum structural cruising 149 KIAS
Flaps extended 108 KIAS
Maximum gear extension 130 KIAS
Maximum gear retraction 109 KIAS
Maximum gear extended 130 KIAS
Maneuvering at 2750 lb. 121 KIAS
Maneuvering at 1863 lb. 96 KIAS

Center of Gravity Range
(+85.5) to (+93.0) at 2400 lb. or less
(+90.0) to (+93.0) at 2750 lb.
Straight line variation between points given.
Moment due to retraction of gear (+819 in-lb.)

Empty Weight C. G. Range
None

Maximum Weight
2750 lb.

No. of Seats
4 (2 at +80.5, 2 at +118.1)

Maximum Baggage
200 lb. at (+142.8)

Fuel Capacity
77 gallons at (+95) (2 wing tanks)
See NOTE 1 for data on system fuel.

Oil Capacity
8 quarts at (+24.5) 6 quarts usable
See NOTE 1 for data on system oil.

Control Surface Movements
Wing flaps (+2°) Up 0° Down 40°
Ailerons (+2°) Up 25° Down 12.5°
Rudder (+1°) Left 33° Right 33°
Stabilator (+1°) Up 14° Down 10°
Stabilator Tab Up 2.5° (±1°) Down 10° (±.5°)

Nose Wheel Travel
(+2°) Left 30° Right 30°

Manufacturer's Serial Numbers
28R-7918001 through 28R-7918267. The manufacturer is authorized to issue airworthiness certificates for airplane serial numbers 28R-7918001 through 28R-7918267 under the delegation option provisions of FAR 21.


Engine
Lycoming IO-360-C1C6

Injector
Bendix Type RSA-5AD1, Part List Number 2524450

Fuel
100/130 minimum grade aviation gasoline
Engine Limits

For 5-minute takeoff, 2700 r.p.m. (200 hp)
For maximum continuous operation, 2650 r.p.m. (196 hp)

Propeller and Propeller Limits

McCauley Constant Speed Hub Model 2D34C215, Blade Model 90 DJA-14E
Pitch: High 27.5° ± .5°; Low 12.5° ± 2° at 30° station.
Diameter: Not over 76", not under 75".
Governor Assembly: Hartzell Model F-2-7 ( )
Avoid continuous operation between 1400 and 1750 r.p.m. below 15" manifold pressure.

Propeller Spinner

Piper P/N 35828-2.
See NOTE 11.

Airspeed Limits

Never exceed 190 KIAS
Maximum structural cruising 149 KIAS
Flaps Extended 108 KIAS
Maximum gear extension 130 KIAS
Maximum gear retraction 109 KIAS
Maximum gear extended 130 KIAS
Maneuvering at 2750 lb. gross weight 121 KIAS
Maneuvering at 1863 lb. gross weight 96 KIAS

Center of Gravity Range

(+85.5) to (+93.0) at 2400 lb. or less
(+90.0) to (+93.0) at 2750 lb.
Straight line variation between points given.
Moment due to retraction of gear (+819 in-lb.)

Empty Weight C. G. Range

None

Maximum Weight

2750 lb.

Number of Seats

4 (2 at +80.5, 2 at +118.1)

Maximum Baggage

200 lb. at (+142.8)

Fuel Capacity

77 gallons at (+95) (2 wing tanks)
See NOTE 1 for data on system fuel.

Oil Capacity

8 quarts at (+24.5) (6 quarts usable)
See NOTE 1 for data on system oil.

Control Surface Movements

Wing flaps (±2°) Up 0° Down 40°
Ailerons (±2°) Up 25° Down 12.5°
Rudder (±1°) Left 33° Right 33°
Stabilator (±1°) Up 14° Down 10°
Stabilator Tab Up 2.5° (±1°) Down 10° (±.5°)

Nose Wheel Travel

(±2°) Left 30° Right 30°

Manufacturer's Serial Numbers

28R-8018001 through 28R-8218026. The manufacturer is authorized to issue airworthiness certificates for airplane serial numbers 28R-8018001 through 28R-8218026 under the delegation option provisions of FAR 21. See NOTE 20.

XXI - Model PA-28RT-201T (Turbo Arrow IV), 4 PCLM (Normal Category), Approved November 13, 1978, for S/N 28R-7931001 through 28R-8631005, and 2831001 through 2831038.

Engine

Continental TSIO-360-FB

Fuel

100/130 minimum grade aviation gasoline
<table>
<thead>
<tr>
<th>Engine Limits</th>
<th>For all operations, 2575 r.p.m., 41&quot; Hg. manifold pressure  (200 hp)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propeller and Propeller Limits</td>
<td>1 Hartzell Hub Model BHC-C2YF-1( )F, Blade Model F8459A-8R Pitch: High 29° ± 1.0°, Low 14.4° ± .2° at 30&quot; station. Diameter: Not over 76&quot;, not under 75&quot;. Governor: Hartzell E-5 or Woodward G210681 Avoid continuous operation between 2000 and 2200 r.p.m. with engine manifold pressure above 32&quot; Hg. Avoid continuous ground operation in cross and tail winds of over 10 knots between 1700 and 2100 r.p.m. or 1 Hartzell Hub Model PHC-C3YF-1( )F, Blade Model F7663-2R Pitch: High 33° ± 1°, Low 13.2° ± .2°. Diameter: Not over 76&quot;, not under 72&quot;. Governor: Hartzell E-5, Woodward G210681 or G210776</td>
</tr>
<tr>
<td>Propeller Spinner</td>
<td>For the Hartzell Hub Model BHC-C2YF-1( )F: Hartzell P/N C3568 Spinner Assembly For the Hartzell Hub Model PHC-C3YF-1( )F: Piper PS50077-80 Spinner Assembly (Hartzell C3570)</td>
</tr>
<tr>
<td>See NOTE 11.</td>
<td></td>
</tr>
<tr>
<td>Airspeed Limits</td>
<td>Never exceed 193 KIAS Maximum structural cruising 152 KIAS Maneuvering at 2900 lb. 124 KIAS Maneuvering at 1893 lb. 97 KIAS Flaps Extended 108 KIAS Maximum Gear Retraction 111 KIAS Maximum Gear Extension 133 KIAS Maximum Gear Extended 133 KIAS</td>
</tr>
<tr>
<td>Center of Gravity Range</td>
<td>(+89.0) to (+93.0) at 2900 lb. (+85.0) to (+93.0) at 2240 lb. or less Straight line variation between points given. Moment due to retraction of landing gear (+819 in-lb.)</td>
</tr>
<tr>
<td>Empty Weight C. G. Range</td>
<td>None</td>
</tr>
<tr>
<td>No. of Seats</td>
<td>4 (2 at +80.5, 2 at +118.1)</td>
</tr>
<tr>
<td>Maximum Baggage</td>
<td>200 lb. at (+142.8)</td>
</tr>
<tr>
<td>Fuel Capacity</td>
<td>77 gallons at (+95) (2 wing tanks) See NOTE 1 for data on system fuel.</td>
</tr>
<tr>
<td>Oil Capacity</td>
<td>8 quarts at (+13.5) (5 quarts usable) See NOTE 1 for data on system oil.</td>
</tr>
<tr>
<td>Maximum Operation Altitude</td>
<td>20,000 feet</td>
</tr>
<tr>
<td>Control Surface Movements</td>
<td>Wing flaps (+2°) Up 0° Down 40° Ailerons (+2°) Up 25° Down 12.5° Rudder (+1°) Left 33° Right 33° Stabilator (+1°) Up 14° Down 10° Stabilator Tab Up 2.5° (+1°) Down 10° (+.5°)</td>
</tr>
<tr>
<td>Nose Wheel Travel</td>
<td>(+2°) Left 30° Right 30°</td>
</tr>
</tbody>
</table>
Manufacturer's Serial Numbers 28R-7931001 through 28R-8631005, and 2831001 through 2831038. The manufacturer is authorized to issue airworthiness certificates for airplane serial numbers 28R-7931001 through 28R-8631005, and 2831001 through 2831038 under the delegation option provisions of FAR 21. See NOTE 20.


Engine Continental TSIO-360-FB

Fuel 100/130 minimum grade aviation gasoline

Engine Limits For all operations, 2575 r.p.m., 41" Hg. manifold pressure (200 hp)

Propeller and Propeller Limits 1 Hartzell Hub Model BHC-C2YF-1(F), Blade Model F8459A-8R
Pitch: High 29° ± 1.0°, Low 14.4° ± .2° at 30" station.
Diameter: Not over 76", not under 75".
Governor: Hartzell E-5 or Woodward G210681
Avoid continuous operation between 2000 and 2200 r.p.m. with engine manifold pressure above 32" Hg.
Avoid continuous ground operation in cross and tail winds of over 10 knots between 1700 and 2100 r.p.m.

Propeller Spinner Hartzell P/N C3568 Spinner Assembly.
See NOTE 11.

Airspeed Limits Never exceed 169 KIAS
Maximum structural cruising 140 KIAS
Maneuvering at 2900 lb. 122 KIAS
Maneuvering at 1841 lb. 96 KIAS
Flaps Extended 102 KIAS

Center of Gravity Range (+86.0) to (+90.0) at 2900 lb.
(+78.0) to (+90.0) at 2240 lb. or less
Straight line variation between points given.

Empty Weight C. G. Range None

Maximum Weight 2900 lb.

No. of Seats 4 (2 at +80.5, 2 at +118.1)

Maximum Baggage 200 lb. at (+142.8)

Fuel Capacity 77 gallons at (+95)(2 wing tanks)
See NOTE 1 for data on system fuel.

Oil Capacity 8 quarts at (+13.5) (5 quarts usable)
See NOTE 1 for data on system oil.

Maximum Operation Altitude 20,000 feet

Control Surface Movements Wing flaps (+2°) Up 0° Down 40°
Ailerons (+2°) Up 25° Down 12.5°
Rudder (+2°) Left 27° Right 27°
Stabilator (+1°) Up 16° Down 2°
Stabilator Tab (+1°) Up 3° Down 12°

Nose Wheel Travel (+1°) Left 30° Right 30°
Manufacturer's Serial Numbers 28-7921001 through 28-7921095. The manufacturer is authorized to issue airworthiness certificates for airplane serial numbers 28-7921001 through 28-7921095 under the delegation option provisions of FAR 21. See NOTE 20.

DATA PERTINENT TO ALL MODELS
Datum 78.4" forward of wing leading edge (straight wing only).
78.4" forward of inboard intersection of straight and tapered sections (semi-tapered wings).

Leveling Means Two screws left side fuselage below window.

Certification Basis Type Certificate No. 2A13 issued October 31, 1960.
Date of Application for Type Certificate, February 14, 1958.

Delegation Option Authorization granted per FAR 21, Subpart J, July 17, 1968.

PA-28-140 and PA-28-151: CAR 3 effective May 15, 1956, including Amendments 3-1, 3-2, and 3-4, paragraphs 3.304 and 3.705 of Amendment 3-7 effective May 3, 1962; FAR 23.955 and 23.959 as amended by Amendment 23-7 effective September 14, 1969; and FAR 23.1327 and 23.1547 as amended by Amendment 23-20 effective September 1, 1977.


PA-28-161: CAR 3 effective May 15, 1956, including Amendments 3-1 and 3-2, paragraph 3.387(d) of Amendment 3-4, paragraphs 3.304 and 3.705 of Amendment 3-7 effective May 3, 1962; FAR 23.955 and 23.959 as amended by Amendment 23-7 effective September 14, 1969; FAR 23.1557(c)(1) as amended by Amendment 23-18 effective May 2, 1977; FAR 23.1327 and 23.1547 as amended by Amendment 23-20 effective September 1, 1977; and FAR 36 effective December 1, 1969, through Amendment 36-4.

PA-28-181: CAR 3 effective May 15, 1956, including Amendments 3-2 and 3-4; paragraphs 3.304 and 3.705 of Amendment 3-7 effective May 3, 1962; FAR 23.207, 23.221, 23.955 and 23.959 as amended by Amendment 23-7 effective September 14, 1969; FAR 23.1557(c)(1) as amended by Amendment 23-18 effective May 2, 1977; and FAR 23.1327 and 23.1547 as amended by Amendment 23-20 effective September 1, 1977. FAR 36, Appendix G, Amendment 36-16 for the PA-28-181 (Archer III), S/N 2890206 through 2890231, and 2843001 and up.


PA-28-181: CAR 3 effective May 15, 1956, including Amendments 3-2 and 3-4; paragraphs 3.304 and 3.705 of Amendment 3-7 effective May 3, 1962; FAR 23.207, 23.221, 23.955 and 23.959 as amended by Amendment 23-7 effective September 14, 1969; FAR 23.1557(c)(1) as amended by Amendment 23-18 effective May 2, 1977; and FAR 23.1327 and 23.1547 as amended by Amendment 23-20 effective September 1, 1977. FAR 36, Appendix G, Amendment 36-16 for the PA-28-181 (Archer III), S/N 2890206 through 2890231, and 2843001 and up.


PA-28R-201: CAR 3 effective May 15, 1956, including Amendments 3-1 and 3-2; paragraphs 3.304 and 3.705 of Amendment 3-7 effective May 3, 1962; FAR 23.965 of FAR 23 effective February 1, 1965; FAR 23.221, 23.955, 23.959, and 23.1091 as amended by Amendment 23-7 effective September 14, 1969; FAR 23.967(e)(2) as amended by Amendment 23-14 effective December 20, 1973; FAR 23.1093 as amended by Amendment 23-15 effective October 31, 1974; FAR 23.1327 and 23.1547 as amended by Amendment 23-20 effective September 1, 1977; and FAR 36 effective December 1, 1969, through Amendment 36-4 (no acoustical change).


PA-28-236: CAR 3 effective May 15, 1956, through Amendment 3-2; paragraphs 3.84a of Amendment 3-4 effective January 15, 1951, 3.304 and 3.705 of Amendment 3-7 effective May 3, 1962; FAR 23.221, 23.955, 23.959 and 23.1091 as amended by Amendment 23-7 effective September 14, 1969; FAR 23.1093 as amended by Amendment 23-17 effective February 1, 1977; FAR 23.1557(c)(1) as amended by Amendment 23-18 effective May 2, 1977; FAR 23.1327 and 23.1547 as amended by Amendment 23-20 effective September 1, 1977; FAR 23-21 effective March 1, 1978; and applicable portions of FAR 36 as amended by Amendment 36-9 effective April 3, 1978.

PA-28RT-201: CAR 3, effective May 15, 1956, through Amendment 3-2; paragraphs 3.304 and 3.705 of Amendment 3-7 effective May 3, 1962; FAR 23.965 of FAR 23 effective February 1, 1965; FAR 23.207, 23.221, 23.901, 23.909, 23.955, 23.959, and 23.1091 as amended by Amendment 23-7 effective September 14, 1969; FAR 23.201, 23.203, 23.427(c), and 23.967(e)(2) as amended by Amendment 23-14 effective December 20, 1973; FAR 23.1093 as amended by Amendment 23-15 effective October 31, 1974; FAR 23.1557(c)(1) as amended by Amendment 23-18 effective May 2, 1977; FAR 23.1327 and 23.1547 as amended by Amendment 23-20 effective September 1, 1977; FAR 23.1581(b)(2) as amended by Amendment 23-21 effective March 1, 1978; and applicable portions of FAR 36 as amended by Amendment 36-10 effective July 31, 1978.


Compliance with FAR 23.1441 as amended by Amendment 23-9 effective June 17, 1970, will be established with optional oxygen equipment.


Compliance with FAR 23.1441 as amended by Amendment 23-9 effective June 17, 1970, will be established with optional oxygen equipment.

Production Basis

Production Certificate No. 206 issued and the manufacturer authorized to issue airworthiness certificates under the delegation option provisions of FAR 21.

Equipment

The basic required equipment as prescribed in the applicable airworthiness regulation (see Certification Basis) must be installed in the aircraft for certification. In addition, the following documents are required:
<table>
<thead>
<tr>
<th>MODEL</th>
<th>AFM/POH</th>
<th>REPORT NO.</th>
<th>APPROVED</th>
<th>SERIAL EFFECTIVITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>PA-28-140</td>
<td>AFM</td>
<td>VB-160</td>
<td>2/14/64</td>
<td>28-20001 through 28-26946, and 28-7125001 through 28-7125641</td>
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<tr>
<td></td>
<td>AFM</td>
<td>VB-339</td>
<td>7/21/71</td>
<td>28-7225001 through 28-7325674</td>
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<tr>
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<td>AFM</td>
<td>VB-557</td>
<td>5/14/73</td>
<td>28-7425001 through 28-7625275</td>
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<tr>
<td></td>
<td>POH</td>
<td>VB-770</td>
<td>6/16/76</td>
<td>28-7725001 through 28-7725290</td>
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<tr>
<td>PA-28-150</td>
<td>AFM</td>
<td>VB-166</td>
<td>6/2/61</td>
<td>28-1 through 28-4377</td>
</tr>
<tr>
<td>PA-28-151</td>
<td>AFM</td>
<td>VB-573</td>
<td>7/25/73</td>
<td>28-7415001 through 28-7615435</td>
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<tr>
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<td>POH</td>
<td>VB-780</td>
<td>6/18/80</td>
<td>28-7715001 through 28-7715314</td>
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<tr>
<td>PA-28-160</td>
<td>AFM</td>
<td>VB-168</td>
<td>10/25/60</td>
<td>28-1 through 28-4377, and 28-1760A</td>
</tr>
<tr>
<td>PA-28-160</td>
<td>AFM</td>
<td>VB-177</td>
<td>2/25/63</td>
<td>28-1 through 28-1760, and 28-1760A</td>
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<tr>
<td>PA-28-161</td>
<td>POH</td>
<td>VB-880</td>
<td>12/16/76</td>
<td>28-7716001 through 28-8216300</td>
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<tr>
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<td>POH</td>
<td>VB-1180</td>
<td>7/1/82</td>
<td>28-8316001 through 28-8616057, and 2816001 through 2816119</td>
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<tr>
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<td>POH Supp.</td>
<td>VB-1610</td>
<td>7/12/95</td>
<td>2842001 and up</td>
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<tr>
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<td>POH Supp.</td>
<td>VB-1546</td>
<td>6/30/92</td>
<td>28-8316001 through 28-8616057, and 2816001 through 2816119 (See NOTE 28)</td>
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<tr>
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<td>POH</td>
<td>VB-1360</td>
<td>9/9/88</td>
<td>2841001 through 2841365</td>
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<tr>
<td></td>
<td>POH Supp.</td>
<td>VB-1545</td>
<td>5/29/92</td>
<td>2841001 through 2841365 (See NOTE 28)</td>
</tr>
<tr>
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<td>POH</td>
<td>VB-1565</td>
<td>7/1/94</td>
<td>2816110 through 2816119</td>
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<td>AFM</td>
<td>VB-210</td>
<td>4/22/69</td>
<td>28-5601 through 28-5859, and 28-7105001 through 28-7205091</td>
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<td>AFM</td>
<td>VB-355</td>
<td>9/1/71</td>
<td>28-7205092 through 28-7205318</td>
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<td>AFM</td>
<td>VB-437</td>
<td>5/22/72</td>
<td>28-7305001 through 28-7305601 and 28-E13</td>
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<td>AFM</td>
<td>VB-558</td>
<td>5/14/73</td>
<td>28-7405001 through 28-7505260</td>
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<tr>
<td>PA-28-180</td>
<td>AFM</td>
<td>VB-179</td>
<td>5/10/63</td>
<td>28-671 through 28-5859, and 28-7105001 through 28-7105234</td>
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<tr>
<td>PA-28-181</td>
<td>POH</td>
<td>VB-760</td>
<td>8/15/75</td>
<td>28-7690001 through 28-7690467</td>
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<tr>
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<td>VB-790</td>
<td>6/18/76</td>
<td>28-7790001 through 28-7990589</td>
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<td>POH</td>
<td>VB-1120</td>
<td>7/2/79</td>
<td>28-8090001 through 28-8690056, 28-8690061, 28-8690062, and 2890001 through 2890205</td>
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<tr>
<td></td>
<td>POH</td>
<td>VB-1611</td>
<td>7/12/95</td>
<td>2843001 and up</td>
</tr>
<tr>
<td></td>
<td>POH</td>
<td>VB-1563</td>
<td>8/19/94</td>
<td>2890206 through 2890231</td>
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<tr>
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<td>POH</td>
<td>VB-2266</td>
<td>4/16/2013</td>
<td>2843701, 2843703 and up</td>
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<tr>
<td>PA-28R-200</td>
<td>AFM</td>
<td>VB-175</td>
<td>1/9/69</td>
<td>28R-35001 through 28R-35820, and 28R-7135001 through 28R-7135229</td>
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<td>VB-343</td>
<td>10/14/71</td>
<td>28R-7235001 through 28R-7335446</td>
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<td>VB-560</td>
<td>5/14/73</td>
<td>28R-7435001 through 28R-7635545</td>
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<tr>
<td>PA-28R-201</td>
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<td>VB-870</td>
<td>12/21/76</td>
<td>28R-7737001 through 28R-7837317</td>
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<td>POH</td>
<td>VB-1365</td>
<td>9/15/88</td>
<td>2837001 through 2837061</td>
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<tr>
<td></td>
<td>POH</td>
<td>VB-1612</td>
<td>7/12/95</td>
<td>2844001 and up</td>
</tr>
</tbody>
</table>
NOTE 1: Current weight and balance report, including list of equipment included in certification empty weight and loading instructions, when necessary, must be provided for each aircraft at the same time of original certification.

The certificated empty weight and corresponding center of gravity location must include undrainable system oil (not included in the oil capacity) and unusable fuel as noted below.

<table>
<thead>
<tr>
<th>Unusable Fuel and Oil Quantity</th>
<th>Applicable Models and Serial Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuel 12.0 lb. at (+103.0)</td>
<td>PA-28R-180, PA-28R-200: all Serial Nos.</td>
</tr>
<tr>
<td></td>
<td>PA-28-180: S/N 28-7505001 through 28-7505260</td>
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<tr>
<td>Fuel 12.0 lb. at (+103.0)</td>
<td>PA-28-235: S/N 28-710001 through 28-7100089</td>
</tr>
<tr>
<td>Fuel 12.0 lb. at (+103.0)</td>
<td>PA-28-151: S/N 28-7415001 through 28-7715314</td>
</tr>
<tr>
<td>Fuel 2.2 lb. at (+103.0)</td>
<td>PA-28-140, PA-28-150, PA-28-160: all Serial Nos.</td>
</tr>
<tr>
<td>Fuel 2.2 lb. at (+103.0)</td>
<td>PA-28-180: S/N 28-705001 through 28-7205318</td>
</tr>
<tr>
<td>Oil 1.8 lb. at (+27.5)</td>
<td>PA-28-140, PA-28-150, PA-28-160, PA-28-180: S/N 28-03, 28-7 through 28-1760, and 28-1760A</td>
</tr>
<tr>
<td>Oil 1.8 lb. at (+27.5)</td>
<td>PA-28-151: S/N 28-7415001 through 28-7715314</td>
</tr>
<tr>
<td><strong>Unusable Fuel and Oil Quantity</strong></td>
<td><strong>Applicable Models and Serial Numbers</strong></td>
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<tr>
<td>----------------------------------</td>
<td>----------------------------------------</td>
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<tr>
<td>Oil 1.8 lb. at (+40.5)</td>
<td>PA-28-150, PA-28-160: S/N 28-1761 through 28-4377 PA-28-180: S/N 28-1761 through 28-5859, and 28-7105001 through 28-7205318</td>
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<tr>
<td>Oil 1.8 lb. at (+35.5)</td>
<td>PA-28-180: S/N 28-E13, 28-7305001 through 28-7505260</td>
</tr>
<tr>
<td>Oil 1.8 lb. at (+36.5)</td>
<td>PA-28R-180: all Serial Nos.</td>
</tr>
<tr>
<td>Oil 3.9 lb. at (+35.6)</td>
<td>PA-28R-200: S/N 28R-35001 through 28R-35820, and 28R-7135001 through 28R-7135229</td>
</tr>
<tr>
<td>Fuel 2.3 lb. at (+103.0)</td>
<td>PA-28R-200: S/N 28R-7235001 through 28R-7635545</td>
</tr>
<tr>
<td>Oil 2.4 lb. at (+41.0)</td>
<td>PA-28-235: S/N 28-10001 through 28-11378, and 28-7110001 through 28-7210023</td>
</tr>
<tr>
<td>Oil 2.4 lb. at (+36.0)</td>
<td>PA-28-235: S/N 28-E11, and 28-7310001 through 28-7710089</td>
</tr>
<tr>
<td>Oil 3.9 lb. at (+30.6)</td>
<td>PA-28-181: S/N 28-7690001 through 28-8690056, 28-8690061, 28-8690062, and 2890001 through 2890231, and 2843001 and up</td>
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<tr>
<td>Oil 1.8 lb. at (+35.5)</td>
<td>Oil 3.9 lb. at (+30.6)</td>
</tr>
<tr>
<td>Fuel 12.0 lb. at (+103.0)</td>
<td>Fuel 2.3 lb. at (+103.0)</td>
</tr>
<tr>
<td>Oil 3.9 lb. at (+30.6)</td>
<td>Oil 2.4 lb. at (+41.0)</td>
</tr>
<tr>
<td>Fuel 30.0 lb. at (+103.0)</td>
<td>Fuel 2.3 lb. at (+103.0)</td>
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<tr>
<td>Oil 3.9 lb. at (+30.6)</td>
<td>Oil 2.4 lb. at (+41.0)</td>
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<tr>
<td>Fuel 30.0 lb. at (+103.0)</td>
<td>Oil 2.4 lb. at (+41.0)</td>
</tr>
<tr>
<td>Oil 6.0 lb. at (+19.1)</td>
<td>Oil 2.4 lb. at (+41.0)</td>
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<tr>
<td>Fuel 12.0 lb. at (+103.0)</td>
<td>Oil 2.4 lb. at (+41.0)</td>
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<tr>
<td>Fuel 30.0 lb. at (+103.0)</td>
<td>Oil 2.4 lb. at (+41.0)</td>
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<tr>
<td>Oil 5.2 lb. at (+36.0)</td>
<td>Oil 2.4 lb. at (+41.0)</td>
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<td>Fuel 30.0 lb. at (+103.0)</td>
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</tr>
<tr>
<td>Oil 6.0 lb. at (+19.1)</td>
<td>Oil 2.4 lb. at (+41.0)</td>
</tr>
</tbody>
</table>

**NOTE 2** The following placards must be displayed in clear view of the pilot:

In Normal Category Aircraft

In aircraft certificated in both Normal and Utility Categories

Reference AFM for additional required placards.

The Model PA-28-180, S/N 28-1761 through 28-5859, and 28-7105001 through 28-7205318, may be converted to the seaplane configuration, PA-28S-180, in accordance with Piper Drawing No. 65680.

NOTE 4 Takeoff r.p.m. for Models PA-28-180 and PA-28S-180, S/N 28-671 through 28-1760, and 28-1760A, restricted due to fuel flow capability of the emergency pump.


The Model PA-28-140 may be operated with the door removed in accordance with the FAA approved Airplane Flight Manual Supplement dated August 12, 1965.

NOTE 6 The Model PA-28-140, 2 PCLM (Normal Category Only), S/N 28-20001 through 28-20939 may be converted:
(a) To a maximum weight of 2150 lb. by the installation of Piper Kit 756 962 and Sensenich propeller M74DM58.
(b) To the four place, 4 PCLM (See Item VIII), configuration in accordance with Piper Drawing 65599.

NOTE 7 The Model PA-28-140, 2 PCLM, S/N 28-20940 through 28-26946, and 28-7125001 through 28-7725290, may be converted to the four place, 4 PCLM (See Item VIII), configuration by the installation of Piper Kit 756 941 and appropriate seats.

NOTE 8 The maximum cargo allowable of 125 lb. for S/N 28-1 through 28-1760, and 28-1760A may be increased to 200 lb. in accordance with Piper Service Spares Letter No. 242.

NOTE 9 The Model PA-28-180 (Normal Category), S/N 28-671 through 28-3832, may be operated in Utility Category in accordance with Service Spares Letter No. 258.

NOTE 10 All PA-28 models with Lycoming O-360-A3A engine and Sensenich propeller Model M76EMM-0, M76EMMS-0, 76EM8S5-0, or 76EM8-0 must avoid continuous operation between 2150 and 2350 r.p.m. placards must be installed in accordance with Piper Service Letter No. 526, and Airplane Flight Manual Supplement No. 1, dated April 22, 1969.

NOTE 11 The Models PA-28-140, PA-28-150, PA-28-151, PA-28-160, PA-28-180; S/N 28-03, 28-1 through 28-5859, and 28-7105001 through 28-7205318; PA-28R-180 and PA-28R-200 may be operated with the spinner dome removed, or with the spinner dome and rear bulkhead removed. The PA-28-151, S/N 28-7415001 through 28-7715314, may be operated with the spinner dome removed, or with the spinner dome and front and rear bulkheads removed. The PA-28-180, S/N 28-7305001 through 28-7505260, and the PA-28-181; S/N 28-7690001 through 28-8690062, and 2890001 through 2890205, may be operated with the spinner dome removed. The PA-28R-201; S/N 28R-7737002 through 28R-7837317, 2837001 through 2837061, and 2844001 and up, may be operated with the spinner dome removed. The PA-28R-201T; S/N 28R-7703001 through 28R-7803373, and 2803001 through 2803012, may be operated with the spinner dome removed. The PA-28-161, S/N 28-7716001 through 28-8216300 may be operated with the spinner dome and front and rear bulkheads removed. The PA-28-161; S/N 28-8316001 through 28-8616057, 2816001 through 2816119, and PA-28-161 (Cadet), S/N 2841001 through 2841365, may be operated with the spinner dome removed, or with the spinner dome and front and rear bulkheads removed. The PA-28-236; S/N 28-7911001 through 28-8611008, 2811001 through 2811050, and 2845001 and up, may be operated with the spinner dome removed. The PA-28RT-201, S/N 28R-7918001 through 28R-8218026, may be operated with the spinner dome removed. The PA-28RT-201T; S/N 28R-7931001 through 28R-8631005, and 2831001 through 2831013, may be operated with the spinner dome removed. The PA-28-201T, S/N 28-7921001 through 28-7921095, may be operated with the spinner dome removed.
NOTE 12 Maximum baggage may be increased to 200 lb. at (+117) by the installation of Piper Kit 756 962 and Sensenich propeller M74DM-58 or 74DM6-0-58. Maximum baggage may be increased to 300 lb. (200 lb. at +117 and 100 lb. at +133) by the installation of Piper Kit 756 962, Sensenich propeller M74DM-58 or 74DM6-0-58 and when modified in accordance with Piper Drawing 66671.

NOTE 13 Maximum baggage may be increased to 300 lb. (200 lb. at +117 and 100 lb. at +133) when modified in accordance with Piper Drawing 66671.

NOTE 14 The Model PA-28-235; S/N 28-10001 through 28-11378, and 28-7110001 through 28-7210023, may be operated with the spinner dome removed, or with the spinner dome and rear bulkhead removed on the constant speed propeller installation only.

NOTE 15 The Model PA-28-180, S/N 28-671 through 28-5859, may be operated to the expanded C.G. envelope:


NOTE 18 Two propeller flange bushings must be replaced with Lycoming #72068S bushings at propeller blade positions corresponding to noncounterbored bolt holes in order to use the McCauley propeller.

NOTE 19 Two propeller flange bushings must be replaced with Lycoming #72068S index bushing and Lycoming #721061S bushing, at flange index mark and opposite, in order to use the McCauley propellers. A spacer, Piper P/N 79528-0, is also required between propeller and engine flange.

NOTE 20 The following model and serial number aircraft are not eligible for import certification to the U.S.: PA-28-140:

PA-28-161:

PA-28-180:
NOTE 20 PA-28-181:

PA-28-201T:
28-7921085

PA-28-235:

PA-28-236:

PA-28R-180:
28R-31091

PA-28R-200:

PA-28R-201:

PA-28R-201T:

PA-28RT-201:

PA-28RT-201T:

In addition, aircraft having the following serial number are not eligible for import certification to the U.S.:


NOTE 21 Engines with serial numbers ending with "A" require the F-4-13 propeller governor assembly. Other engines require the F-4-3( ) propeller governor assembly.

NOTE 22 Hartzell Propeller HC-C2YK-1( )/7666A-2 or HC-C2YK-1( )F/F7666A-2 approved with IO-360-C1C engine only (S/N 28R-7235001 through S/N 28R-7635516).
NOTE 23  McCauley Propeller B2D34C213/90DHA-16 approved with IO-360-C1C6 engine only (S/N 28R-7635517 through 28R-7635545).

NOTE 24  On Models PA-28-161; S/N 28-7816001 through 28-8616057, and S/N 2816001 through 2816109, and PA-28-181; S/N 28-7890001 through 28-8690056, 28-8690061, 28-8690062, 2890001 through 2890231, and 2843001 and up, the wheel fairings but not the landing gear strut fairings may be removed.

NOTE 25  On Models PA-28-201T; S/N 28-7921001 through 28-7921095, and PA-28-236; S/N 28-7911001 through 28-791108, 2811001 through 2811050, and 2845001 and up, the wheel fairings alone or the wheel fairings but not the landing gear strut fairings may be removed.

NOTE 26  With installation of Piper Kit 88050, PA-28-161 2325 lb. Maximum Gross Weight Modification, the following weights apply:

Normal Category:  
- Ramp - 2332 lb.
- Takeoff - 2325 lb.

Utility Category:  
- Ramp - 2027 lb.
- Takeoff - 2020 lb.

(See POH VB-1180 Supplement dated October 5, 1985.)

NOTE 27  With installation of Piper Kit 88168, PA-28-161 Cadet 2202 lb. Maximum Gross Weight Modification, the following weights apply:

Normal Category:  
- Ramp - 2209 lb.
- Takeoff - 2202 lb.

Utility Category:  
- Ramp - 2027 lb.
- Takeoff - 2020 lb.

(See POH VB-1410 dated March 14, 1990.)

NOTE 28  POH Supplement VB-1546 is applicable to POH VB-1180. POH Supplement VB-1545 is applicable to POH VB-1360. Supplements VB-1545 and VB-1546 restrict maximum r.p.m. limitation to 2600 r.p.m. for foreign countries requiring reduced noise level operation (Piper Kit No. 766 277 for PA-28-161 (Cadet) and Piper Kit No. 766 278 for PA-28-161 (Warrior II)).

NOTE 29  If S/N 28-7716001 thru 28-8416095 has kit Piper P/N 764-975 removing bungee steering and installing solid rod steering, rig nose wheel travel (±1°) 20° left 20° right.

...END...