

**DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

A-740
Revision 4
PIPER
J4E (ARMY L-4E)

July 31, 1995

AIRCRAFT SPECIFICATION A-740

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

I - Model J4E (Army L-4E), 2 PCLM, Approved April 28, 1941

<u>Engine</u>	Continental A-75-9 (See Item 301 for optional engines)
<u>Fuel</u>	73 min. octane aviation gasoline
<u>Engine Limits</u>	For all operations, 2600 r.p.m. (75 hp.)
<u>Airspeed Limits</u>	Level flight or climb 100 mph (87 Knots) Glide or dive 135 mph (117 Knots)
<u>Propeller Limits</u> (With Item 101)	<u>Range 1</u> Static r.p.m. at maximum permissible throttle setting: Not over 2500, not under 2070. No additional tolerance permitted. Diameter: Not over 72 in., not under 70 in.
	<u>Range 2</u> Static r.p.m. at maximum permissible throttle setting: Not over 2500, not under 2300. No additional tolerance permitted. Diameter: Not over 70 in., not under 68 in.
<u>C. G. Range</u>	(+12.9) to (+21.0)
<u>Empty Weight C. G. Range</u>	(+13.3) to (+20.4) When empty weight C. G. falls within this range, computation of critical fore and aft C. G. positions is unnecessary. Range is not valid for non-standard arrangements.
<u>Datum</u>	Leading edge of wing
<u>Leveling Means</u>	Level with 30 inch level (front end 9 in. aft of wing leading edge) against bottom of second rib out with backend blocked down ¼ in.
<u>Maximum Weight</u>	1400 lbs.
<u>Number of Seats</u>	2 (+19.5)
<u>Maximum Baggage</u>	105 lbs. (+43.5)
<u>Fuel Capacity</u>	25 gallons: Header tank - 7 gallons (-10.5) and Wing tank - 18 gallons (+23)
<u>Oil Capacity</u>	5 quarts (-30)

Page No.	1	2	3
Rev. No.	4	4	2

I - Model J4E (cont'd)

<u>Control Surface Movements</u>	Elevators	40.5°	Up	26.5°	Down
	Elevator Tab	28°	Up	40°	Down
	Ailerons	29.5°	Up	25.5°	Down
	Rudder	33°	Right	32°	Left

Serial Numbers Eligible 4-1378, 4-1385 and up and all AAF Nos.
Use manufacturers' number when available.

Required Equipment In addition to the pertinent required basic equipment specified in CAR 4a, the following items of equipment must be installed:
Items 101, 102, 103, 104 and 105.

Specifications Pertinent to All Models

Certification Basis Type Certificate No. 740 (CAR 4a)

Production Basis Approved for manufacture of spare parts only under Production Certificate No. 206.

Export Eligibility Deleted as of - July 31, 1995

Equipment A plus (+) or minus (-) sign preceding the weight of an item of equipment indicates net weight change when that item is installed.

Approval for the installation of all items of equipment listed herein has been obtained by the aircraft manufacturer except those items preceded by an asterisk (*). The asterisk denotes that approval has been obtained by someone other than the aircraft manufacturer. An item marked with an asterisk may not have been manufactured under an FAA monitored or approved quality control system, and therefore attention should be paid to workmanship and conformity with pertinent data called for in this specification.

Propellers and Propeller Accessories

- *1. Propeller - McCauley 1A90 (with A-75 series engines) +9 lbs. (-50)
Static r.p.m. at maximum permissible throttle setting:
Not over 2440, not under 2340. No additional tolerance permitted.
Diameter: Not over 70 in., not under 68.5 in.
Placard required: "Avoid continuous engine operation between 2030 and 2270 r.p.m."
- *2. Propeller - McCauley 1A90 (with C-75 series engines) +9 lbs. (-50)
Static r.p.m. at maximum permissible throttle setting:
Not over 2275, not under 2200. No additional tolerance permitted.
Diameter: Not over 71 in., not under 69.5 in.
- *3. Propeller Sensenich M74CK-2, fixed pitch metal (with A-75 series engines) +21 lbs. (-50)
Static r.p.m. at maximum permissible throttle setting:
Not over 2440, not under 2340. No additional tolerance permitted.
Diameter: Not over 72 in., not under 70 in.
- *4. Propeller Sensenich M76AK-2, fixed pitch metal (with C-75 series engines) +24 lbs. (-50)
Static r.p.m. at maximum permissible throttle setting:
Not over 2275, not under 2100. No additional tolerance permitted.
Diameter: Not over 74 in., not under 72 in.
- 101. Propeller - wood (fixed or adjustable pitch) +12 lbs. (-50)

Engines and Engine Accessories -- Fuel and Oil Systems

- 104. Cabin and carburetor heater (Dwg. C-700)
- 105. Enclosed type engine cowling with muffler type exhaust system +29 lbs. (-29)
- 106. Starter, Delco-Remy No. 50309 (C-75-12 engine) +17 lbs. (-25)
- 107. Oil cooler, Harrison - 12 plate type (C-75-12 engine) +4 lbs. (-28)
- 108. Carburetor air filter and scoop assembly (C-75-12 engine) +3 lbs.

- *301. Engines
- (a) Continental A-75-8 -3 lbs. (-27)
Engine and propeller limits as for A-75-9
 - (b) Continental C-75-12 +12 lbs. (-27)
Engine Limits
For all operations, 2275 r.p.m. (75 hp.)
Propeller Limits
Static r.p.m. at maximum permissible throttle setting:
Not over 2160, not under 2060. No additional tolerance permitted.
Diameter: Not over 72 in., not under 70 in.
Oil Capacity: 4 quarts
303. Hummer starter installation, Model X +11 lbs. (-8)

Landing Gear and Floats

- 102. 8.00-4 wheels with brakes Goodrich (formerly Hayes) +31 lbs. (+5)
841, 4-ply tires
- 103. Full swiveling tail wheel, Uniloy GC-15 +4 lbs. (+176)
- 306. Full swiveling steerable tail wheel, Uniloy GC-158 Neglect weight change
- 307. Wheel streamlines +8 lbs. (+7)
- 310. Parking brake +3 lbs. (-5)
- *312. Skis (Eligible on any airplane of this model provided the propeller installation meets the minimum ground clearance. The maximum weight for the skiplane will be the same as for the corresponding landplane or that shown in parenthesis after ski model, whichever is less). Use actual weight change
 - (a) Marston MFS-1600 (maximum 1600 lbs.)
 - (b) Federal SA-2 (maximum 1400 lbs.)
 - (c) Federal SC-1 (maximum 1400 lbs.)
 - (d) Federal SC-2 (maximum 1650 lbs.)
 - (e) Air Transport 1460-580 (maximum 1460 lbs.)
 - (f) Heath 725 (maximum 1450 lbs.)
 - (g) Wesco per Western Aircraft Equipment Company Dwgs. Nos. 12 and 148:
 - (1) A-15 (maximum 1500 lbs.)
 - (2) A-20 or AS-2 (maximum 2000 lbs.)
 - (3) A-25, AS-2A or AS-2B (maximum 2500 lbs.)

Electrical Equipment

- 302. Generator installations, wind-driven
 - (a) General Armature AG-40A (6 volts) or AG-42A (12 volts) +11 lbs. (+5)
 - (b) Air Associates No. GE-20 (12 volts) +7 lbs. (+5)
- 313. Battery
 - (a) 6 volt, Reading 324LD or 333 LD (non spillable) +15 lbs. (+16)
 - (b) 12 volt, Willard SYR-7-6 (with box) +15 lbs. (+16)
 - (c) 12 volt, Exide +15 lbs. (+16)
- 314. Landing light, Grimes retractable +4 lbs. (+15)
- 316. Generator, Delco-Remy No. A-40099 +10 lbs. (-25)

Interior Equipment

- 304. Miscellaneous instruments +10 lbs. (-1)
- 315. Flares +9 lbs. (+31)

Miscellaneous (not listed above)

- 309. Corrosion proofing +7 lbs.

NOTE 1. Current weight and balance report including list of equipment included in certificated empty weight, and loading instructions when necessary, must be in each aircraft at the time of original certification and at all times thereafter (except in the case of air carrier operators having an approved weight control system).

NOTE 2. The leading edge of the stabilizer must be set so that the bolts in the stabilizer yoke attachment fitting are located in the next to the lowest hole.

....END....