

DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION

<p>A-703 Revision 4 PIPER</p> <p>J4 J4A J4A-S</p> <p>July 31, 1995</p>
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AIRCRAFT SPECIFICATION NO. A-703

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

**I - Model J4, 2 PCLM, Approved October 26, 1938**

<u>Engine</u>	Continental A-50-1 (See Item 301 for optional engines)
<u>Fuel</u>	73 min. octane aviation gasoline
<u>Engine Limits</u>	For all operations, 1900 r.p.m. (50 hp.)
<u>Airspeed Limits</u> (CAS)	Level flight or climb    100 mph True Ind. Glide or dive            135 mph True Ind.
<u>Propeller Limits</u> (with Item 101)	Maximum permissible diameter 84 in.
<u>C. G. Range</u>	(+12.9) to (+21.0). See NOTE 3(a) for restricted limits on Serial Nos. 4-400 through 4-410.
<u>Empty weight C. G. Range</u>	(+15.1) to (+19.6) when standard fuel tank only is installed. (+15.1) to (+16.6) when auxiliary fuel tank (Item 306) is installed. Ranges are not valid for non-standard arrangements or for restricted C. G. limits per NOTE 3(a). When empty weight C. G. falls within the pertinent range, computation of critical fore and aft C. G. positions is unnecessary.
<u>Maximum Weight</u>	1200 lbs.
<u>Number of Seats</u>	2 (+19.5)
<u>Maximum Baggage</u>	105 lbs. (+43.5)
<u>Fuel Capacity</u>	16 gallons (-10.5)
<u>Oil Capacity</u>	1 gallon (-30)
<u>Control Surface Movements</u>	Not available.
<u>Serial Numbers Eligible</u>	4-400 and up. (See NOTE 3 for additional limitations on Serial Nos. 4-400 through 4-452).
<u>Required Equipment</u>	Items 101, 102, 103, 105, 106, and 107.

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**II - Model J4A, 2 PCLM, Approved March 4, 1939 and Model J4A-S, 2 PCSM, Approved July 25, 1939**

<u>Engine</u>	Continental A-65-1 (See Item 301 for optional engines)		
<u>Fuel</u>	73 min. octane aviation gasoline		
<u>Engine Limits</u>	For all operations, 2350 r.p.m. (65 hp.)		
<u>Airspeed Limits</u>	Level flight or climb	100 mph True Ind.	
	Glide or dive	135 mph True Ind.	
<u>Propeller Limits</u> (with Item 101)	Maximum permissible diameter -	Landplane	84 in.
		Seaplane	91 in.
<u>C. G. Range</u>	Landplane	(+12.9) to (+21.0)	
	Seaplane	(+12.0) to (+20.0)	
<u>Empty Weight C. G. Range</u>	Landplane	( +14.9) to ( +19.8) with standard fuel tank only. ( +14.9) to ( +17.1) when auxiliary fuel tank (Item 306) is installed.	
	Seaplane	( +13.5) to ( +18.4) with standard fuel tank only. ( +13.5) to ( +16.0) when auxiliary fuel tank (Item 306) is installed.	
	When empty weight C. G. falls within the pertinent range, computation of critical fore and aft C. G. positions is unnecessary. Ranges are not valid for non-standard arrangements.		
<u>Maximum Weight</u>	Landplane	1200 lbs. (See NOTE 3 regarding approval for 1301 lbs.)	
	Seaplane	1350 lbs.	
<u>Number of Seats</u>	2 (+19.5)		
<u>Maximum Baggage</u>	105 lbs. (+43.5)		
<u>Fuel Capacity</u>	16 gallons (-10.5)		
<u>Oil Capacity</u>	1 gallon (-30)		
<u>Control Surface Movements</u>	Not available.		
<u>Serial Numbers Eligible</u>	4-400 and up. (See NOTE 3 for additional limitations on Serial Nos. 4-400 through 4-452).		
<u>Required Equipment</u>	Landplane	Items 101, 102, 103, 105, 106, and 107.	
	Seaplane	Items 101, 105, 106, 107, and 151.	

**Data Pertinent to All Models**

<u>Datum</u>	Leading edge of wing
<u>Leveling Means</u>	Level with 30 inch level (Front and 9 inches aft wing leading edge) against bottom of second rib out with back end blocked down ¼ inch.
<u>Certification Basis</u>	Type Certificate No. 703 (CAR 4a)
<u>Production Basis</u>	Approved for manufacture of spare parts only under Production Certificate No. 206.
<u>Export Eligibility</u>	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

101.	Propeller - wood (fixed pitch)	+12 lbs. (-50)
*1.	Propeller - Beech, Controllable, R002 or R003 with R002-205-72 blades including Beech Manual Control. For interchangeable blades see Prop. Spec. No. 804 (NOTE 6). Diameter: 72 in. Pitch settings at 24 in. station:       Low 12°,   High 19° Eligible on Model J4A only with Continental A-65 Series engine.	+32 lbs. (-50)
*2.	Propeller - McCauley Model 1A90 (Models J4A and J4A-S with Continental A-65 Series engine) Diameter: Not over 74 in., not under 72.5 in. Static r.p.m. at maximum permissible throttle setting: Not over 2250, not under 2060. No additional tolerance permitted.	+26 lbs. (-50)
3.	Propeller - Sensenich 74-FK-49 or any other fixed pitch wood propeller which is eligible for the engine power and speed and which meets the following limits: Diameter: Not over 74 in., not under 72.5 in. Static r.p.m. at maximum permissible throttle setting: Not over 2175, not under 2075. No additional tolerance permitted. Eligible with Item 301(b)(4) only.	+11 lbs. (-50)
*4.	Propeller - Sensenich M74CK fixed pitch metal (Models J4A and J4A-S with A65 engine) Static r.p.m. at maximum permissible throttle setting: Not over 2250, not under 2060. No additional tolerance permitted. Diameter: Not over 74 in., not under 72.5 in.	+21 lbs. (-50)

Engines and Engine Accessories - Fuel and Oil System

No aircraft of these models shall be eligible for original certification with single ignition engines after August 1, 1941. In addition, no aircraft of these models shall be eligible for recertification with single ignition engines unless such aircraft were either previously certificated with single ignition engines or were originally certificated prior to August 1, 1941.

106.	Carburetor heater (Dwg. D-722C)	
107.	Enclosed type engine cowling with revised exhaust system (Dwg. 659-C and D 7239-C) (Serial Nos. 4-828 and up only)	+29 lbs. (-29)
*108.	Oil filter, Fram Model PB-5, Kit No. 510, Dwg. No. 61542	+5 lbs. (-22.5)

*301.	Engines, Continental (See Engine Specification Nos. 190 and 205)	(-27)
	(a) <u>Model J4</u>	
	(1) A-50-2	+6 lbs.
	(2) A-50-3 or A-50-8	+10 lbs.
	(3) A-50-4	+3 lbs.
	(4) A-50-5 or A-50-9	+13 lbs.
	(5) A-50-6	+16 lbs.
	(6) A-50-7	No Weight Change
	(b) <u>Models J4A and J4A-S</u>	
	(1) A-65-3 or A-65-8 Engine limits: For all operations, 2300 r.p.m. (65 hp.)	+10 lbs.
	(2) A-65-6 or A-65-9 Engine limits: For all operations, 2300 r.p.m. (65 hp.)	+13 lbs.
	(3) A-65-7 Engine limits: For all operations, 2300 r.p.m. (65 hp.)	No Weight Change
	(4) C-85-12 (J4A with Item 3 propeller) Engine limits: For all operations, 2575 r.p.m. (85 hp.)	+17 lbs.
306.	(a) Auxiliary 9 gallon fuel tank installation Placard fuel selector valve: "Use main tank for takeoff and landing. In level flight, use auxiliary tank before using main."	+11 lbs. (+57)
	(b) 5 quart oil capacity	No Weight Change
309.	Revised engine mount (Dwg. D7060-E, Revision G) for engines incorporating integral rubber shocks.	Neglect Weight Change
318.	Oil cooler, Harrison Model He202	+5 lbs. (-42)
<u>Landing Gear and Floats</u>		
102.	8.00-4 wheels with brakes (Goodrich 841) and tires	+25 lbs. (+7)
103.	(a) Shock cord tail wheel installation, Dwg D311-E (Serial Nos. 4-400 to 4-827, inclusive)	+7 lbs. (+174)
	(b) Leaf spring tail wheel installation, Dwg. D395-E or D3010-E (Serial Nos. 4-828 and subsequent)	+10 lbs. (+176)
151.	Float installation, Edo 60-1320 (including one water rudder -165 lbs.)	+106 lbs. (+6)
303.	Wheel streamlines	+6 lbs. (+7)
305.	8.00-4 4-ply tires	
311.	Parking brake (Dwg. D4159-C)	+3 lbs. (-5)
313.	Skis (Eligible on any airplane of these models provided the propeller installation meets the minimum 9 inches 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) Piper S-1000 (maximum 1200 lbs.)	
	* (b) Fairbanks MF-5 (maximum 1310 lbs.)	
	* (c) Federal SA-1 or SA-2 (maximum 1200 lbs. and 1400 lbs., respectively)	
	* (d) Federal SC-1 or SC-2 (maximum 1400 lbs. and 1650 lbs., respectively)	
	* (e) Aviation Service B (maximum 1650 lbs.)	
	* (f) Air Transport 1220-480 (maximum 1220 lbs.)	
	* (g) Air Transport 1460-580 (maximum 1460 lbs.)	
	* (h) Marston MFS-1600 (maximum 1600 lbs.)	
	* (i) Heath 655 (maximum 1210 lbs.)	
	* (j) Heath 725 or 725A (maximum 1450 lbs.)	

- \*(k) Jack Carr Service 16 (maximum 1600 lbs.)
- \*(l) Federal A-1500 or A-1500A (maximum 1500 lbs.) per Federal Dwg. 11R262
- \*(m) Federal A-1850 (maximum 1850 lbs.) per Federal Dwg. 11R262
- \*(n) Federal A-2000 or A-2000A (maximum 2000 lbs.) per Federal Dwg. 11R262
- \*(o) Wesco per Western Aircraft Equipment Company Dwg. Nos. 12 and 148:
  - (1) A-15 (maximum 1500 lbs.)
  - (2) A-20 or AS-2 (maximum 200 lbs.)
  - (3) A-25, AS-2A or AS-2B (maximum 2500 lbs.)

#### Electrical Equipment

104.	Battery and box, Exide 3-AC-7 or Willard SYR-7-3	+9 lbs. (+16)
314.	Battery, 12V, Willard SYR-7-6	+15 lbs. (+16)
315.	Generator, Wind-driven, Air Associates No. GE20	+7 lbs. (+5)
317.	Landing light, Grimes retractable	+4 lbs. (+15)

#### Interior Equipment

302.	Miscellaneous instruments	+10 lbs. (-1)
304.	Cabin heater (D-722C)	
316.	Flares	+9 lbs. (+31)

#### Miscellaneous (Not listed above)

105.	Two cabin doors	
*307.	Stainless steel tail surfaces (Budd Dwg. Nos. 13-6200, 13-6600, 13-6500)	Neglect Weight Change
308.	Modified aileron leading edge (Dwg. D4113-C)	Neglect Weight Change
310.	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. Placard fuel selector valve as follows, when auxiliary tank (Item 306(a)) is installed:  
"Use main tank for takeoff and landing. In level flight, use auxiliary tank before using main."

- NOTE 3.
- (a) Model J4. Serial Nos. 4-400 to 4-410, inclusive, eligible with forward C. G. limit of only (+14.1) unless leading edge of stabilizer is set so that the bolts in the stabilizer yoke adjustment bracket are located in next to the bottom hole in the fitting as shown on Piper Dwg. D450-F. Executed Repair and Alteration Form required as evidence of compliance.
  - (b) Model J4A. Serial Nos. 4-400 to 4-501, inclusive, must have the leading edge of the stabilizer set so that the bolts in the stabilizer yoke attachment brackets are located in the top hole of the fitting as shown on Piper Dwg. D450-F. Serial Nos. 4-460, 4-481, 4-502 and up are eligible at maximum weight of 1301 lbs.
  - (c) Model J4A-S. Serial Nos. 4-460, 4-481, 4-502 and up eligible provided the leading edge of stabilizer yoke attachment brackets are located in next to the top hole of the fitting as shown on Piper Dwg. D450-F.

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