

Oil Capacity 1 gallon (-39)

I - Model J3F-50 and Model J3F-50S (cont'd)

Control Surface Movements

Elevator	34°	Up	29°	Down
Aileron	18°	Up	18°	Down
Rudder	30°	Left	30°	Right
Stabilizer	2.5°	Up	4°	Down

Serial Numbers Eligible 2325, 2327, 2339, 2340, 2342, 2344, 2345, 2347, 2349, 2351, 2355 and up, 2356A, 2357A and up, and 8277-1 through 8277-40.

Required Equipment In addition to the pertinent required basic equipment specified in CAR 4a, the following items of equipment must be installed:

Landplane	Items 101, 102, 103, 104 and 105.
Seaplane	Items 101, 104 and 151(a)

II - Model J3F-60, 2 PCLM, Approved April 13, 1940 and Model J3F-60S, 2PCSM, Approved May 31, 1940

Same as Model J3F-50 and J3F-50S except engine installation.

Engine Franklin 4AC-150 Series A (See Item 315 for optional engines)

Fuel 70 minimum octane aviation gasoline

Engine Limits

Takeoff and climb	2400 rpm	(65 hp)
All other operations	2250 rpm	(50 hp)

Airspeed Limits
(CAS)

Level flight or climb	90 mph	(78 Knots)
Glide or dive	122 mph	(106 Knots)

Propeller Limits

Static r.p.m. at maximum permissible throttle setting:

Landplane	Not over 2385, not under 2150.
Seaplane	Not over 2385, not under 2150.

No additional tolerance permitted.

Diameter:	Landplane	Not over 81 inches, not under 68 inches.
	Seaplane	Not over 73 inches, not under 68 inches.

C. G. Range

Landplane	(+10.6)	to	(+22.7)
Seaplane	(+10.7)	to	(+19.8)

See NOTE 3 for restricted range for certain Serial Nos. between 4373 and 4502.

Empty Weight C. G. Range If placard "Solo flying in rear seat only" is installed (See NOTE 2):

Landplane	(+8.1)	to	(+20.7)
Seaplane	(+8.5)	to	(+17.2)

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.

Maximum Weight

Landplane	1100 lb.
Seaplane	1160 lb.

Number of Seats 2 (one at +9 and one at +36)

Maximum Baggage 20 lb. (+49)

Fuel Capacity 12 gallons (-18)

Oil Capacity 1 gallon (-39)

II - Model J3F-60 and Model J3F-60S (cont'd)

<u>Control Surface Movements</u>	Elevator	34°	Up	29°	Down
	Aileron	18°	Up	18°	Down
	Rudder	30°	Left	30°	Right
	Stabilizer	2.5°	Up	4°	Down
<u>Serial Numbers Eligible</u>	2325, 2327, 2339, 2340, 2342, 2344, 2345, 2347, 2349, 2351, 2355 and up, 2356A, 2357A and up, and 8277-1 through 8277-40.				
<u>Required Equipment</u>	In addition to the pertinent required basic equipment specified in CAR 4a, the following items of equipment must be installed:				
	Landplane	Items 101, 102, 103, and 105.			
	Seaplane	Items 101, 104 and 151(a).			

III - Model J3F-65 (Army L-4D), 2 PCLM, Approved August 7, 1940 and Model J3F-65S, 2 PCSM, Approved January 4, 1943

Same as Model J3F-50 and J3F-50S except engine installation.

<u>Engine</u>	Franklin 4AC-176-B2 (See Item 315 for optional engines)				
<u>Fuel</u>	73 minimum octane aviation gasoline				
<u>Engine Limits</u>	Takeoff and climb	2200 r.p.m.	(65 hp.)		
	All other operations	2020 r.p.m.	(50 hp.)		
<u>Airspeed Limits</u> (CAS)	Level flight or climb	90 mph	(78 Knots)		
	Glide or dive	122 mph	(106 Knots)		
<u>Propeller Limits</u>	Static r.p.m. at maximum permissible throttle setting:				
	Landplane	Not over 2250, not under 2050			
	Seaplane	Not over 2250, not under 2050.			
	No additional tolerance permitted.				
	Diameter:	Landplane	Not over 79 inches, not under 68 inches.		
		Seaplane	Not over 79 inches, not under 70 inches.		
<u>C. G. Range</u>	Landplane	(+10.6)	to	(+22.7)	
	Seaplane	(+10.7)	to	(+19.8) with Item 151 (a)	
		(+10.2)	to	(+17.1) with Item 151 (b)	
		(+12.0)	to	(+17.0) with Item 151 (c)	
	See NOTE 3 for restricted range for certain Serial Nos. between 4373 and 4502.				
<u>Empty Weight C. G. Range</u>	If placard "Solo flying in rear seat only" is installed (See NOTE 2):				
	Landplane	(+8.1)	to	(+20.7)	
	Seaplane	(+8.4)	to	(+17.4) with Item 151(a)	
		(+7.8)	to	(+14.0) with Item 151 (b)	
	(+10.0)	to	(+14.5) with Item 151 (c)		
	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	1100 lb. (See NOTE 4 for 1170 lb.)			
	Seaplane	1200 lb.			
<u>Number of Seats</u>	2 (one at +9 and one at +36)				
<u>Maximum Baggage</u>	20 lb. (+49)				

III - Model J3F-65 and Model J3F-65S (cont'd)

<u>Fuel Capacity</u>	12 gallons	(-18)		
<u>Oil Capacity</u>	5 gallon	(-39)		
<u>Control Surface Movements</u>	Elevator	34°	Up	29° Down
	Aileron	18°	Up	18° Down
	Rudder	30°	Left	30° Right
	Stabilizer	2.5°	Up	4° Down
<u>Serial Numbers Eligible</u>	2325, 2327, 2339, 2340, 2342, 2344, 2345, 2347, 2349, 2351, 2355 and up, 2356A, 2357A and up, and 8277-1 through 8277-40; and all AAF Nos. eligible. Use Manufacturers Serial No. if available.			
<u>Required Equipment</u>	In addition to the pertinent required basic equipment specified in CAR 4a, the following items of equipment must be installed:			
	Landplane	Items 101, 102 103, and 104.		
	Seaplane	Items 101, 104 and 151.		

Data Pertinent to all Models

<u>Datum</u>	Wing leading edge
<u>Leveling Means</u>	Left upper longeron at window
<u>Certification Basis</u>	Type Certificate No. 692 (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 - October 1, 1977
<u>Equipment</u>	A plus (+) or minus (-) sign preceding the weight of an item 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 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 or adjustable pitch)	+9 lbs. (-51)
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Engines and Engine Accessories - Fuel and Oil Systems

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.

104.	Carburetor air heater (Dwg. No. 744-C)	+1 lb. (-39)
105.	Single Wico or Eisemann Magneto (J3F-50, J3F-50S, J3F-60, J3F-60S only)	
106.	AC air filter 1529265 (Aircooled Motors Dwg. SK-534-1) (Model J3F-65 only)	+1 lb. (-39)
107.	Oil filter, Fram PB-5	
(a)	Kit No. K-500, Fram Installation Dwg. 61556 (For all models except J3F-65 and J3F-65S)	+5 lb. (-27)
(b)	Kit No. K-501, Fram Installation Dwg. 61558 (For J3F-6F and J3F-65S)	+6 lb. (-27.5)

108.	Alternate fuel gauge - Scott Model A-22P (Install per Scott Bulletin I-136)	Neglect Weight Change
*109.	Auxiliary Fuel Tank (6 gallon capacity) Installed in accordance with Kit and Dwg. Nos. P-18 and P-19 supplied by J. J. Villnave, 5607 Virginia, Kansas City, Missouri. (Eligible on land and seaplanes with wood spars).	+6 lb. (+24)
301.	Magnetos (J3F-50, J3F-50S, J3F-60, J3F-60S only)	
	(a) Single Bendix	+3 lb. (-39)
	(b) Dual Wico or Eisemann	+8 lb. (-39)
	(c) Dual Bendix	+14 lb. (-39)
303.	Carburetor heater, cabin heater and muffler combined (Required if Item 104 is removed).	+1 lb. (-39)
309.	Alternate fuel tank (9 gallon)	-3 lb. (-18)
314.	Revised fuel system (Dwg. D7203-C)	No Weight Change
315.	Engines	
	A. For Model J3F-60 and J3F-60S:	
	(1) Franklin 4AC-171	+7 lb. (-39)
	Engine limits:	
	Takeoff and climb, 2350 r.p.m. (60 hp.)	
	All other operations, 2200 r.p.m. (50 hp.)	
	Propeller static r.p.m. limits at maximum permissible throttle setting: (Landplane and seaplane) Not over 2350, not under 2050. No additional tolerance permitted.	
	B. For Model J3F-65 and J3F-65S:	
	(1) Franklin 4AC-176-BA2	No Weight Change
	Engine limits:	
	Takeoff and climb, 2300 r.p.m. (65 hp.)	
	All other operations, 2100 r.p.m. (50 hp.)	
	Propeller limits (Landplane, skiplane, and seaplane): Static r.p.m. limits at maximum permissible throttle setting: Not over 2300, not under 1950. No additional tolerance permitted. Diameter: Not over 76 in., not under 70 in.	
<u>Landing Gear and Floats</u>		
102.	8.00-4 wheels (Hayes 840) with tires	+20 lb. (+3)
103.	Tail skid	+4 lb. (+190)
151.	(a) Edo 54-1140 floats with water rudder (147 lb.)	+106 lb. (+18)
	(b) Heath 1460A float installation (Model J3F-65S only) (166 lb.) Bungee must be installed in the elevator control system per Piper Dwg. No. 80352.	+121 lb. (+14)
	(c) Edo 92-1400 float installation (Model J3F-65S only). Bungee must be installed in the elevator control system, per Piper Dwg. No. 83052.	+118 lb. (+1)
201.	Scott Aviation Corp. Model B-711 brake pressure unit	Neglect Weight Change
202.	Scott Model 4200-B1 Hydraulic parking brake valve (See Scott Bulletin I-116, parking brake installation instructions).	Neglect Weight Change
*203.	LCN shock strut per LCN Corp. Dwg. 11000 and Kit Installation instruction. Each shock strut must be identified with the symbol "FAA-PMA".	+7 lb. (+3)

*204.	Consolidair Model 17 wheel fenders installed per Dwg. 0041 of Consolidair Inc., Alliance, Ohio.	9 lb. (+3)
*205.	One nose wheel, 5.00-4, Type III, Firestone Model 5C2M-1, with 5.00-4 4-ply rating tire and tube. (Used with Testerman tricycle-type landing gear, Item 206.)	8 lb. (-31)
*206.	Tricycle landing gear - Testerman Model SPM-1 (J3F-65 only). Install in accordance with Stewart-Pearce Co., Tulsa, Oklahoma Installation Manual (Report No. SPR-6) dated July 9, 1949. Placard all airplanes "SOLO FROM REAR SEAT" and restrict C.G. Range to (+11.2) to (+18.3). Net weight change for SPM-1 installation (including Items 205 and 306c)	+17 lb.(-29.5)
207.	Shock strut - cord and hydraulics type, Piper P/N 12843, installed per Piper Dwg. 10534.	+4 lb. (+3)
305.	(a) 6x2.00 steerable tail wheel - Aircraft Assoc. (b) 6x2.00 steerable tail wheel - Scott Aviation Corp. (Model CST-12) (c) 6x2.00 steerable tail wheel - Scott Aviation Corp. (Model 3-21) *(d) Steerable tail wheel - Lang (formerly Decker) (Model D-501A)	+3 lb. (+197) +3 lb.(+197) +5 lb.(+197) +2 lb. (+197)
306.	Wheels (a) 18x8-3 (Goodyear 3LNBM) with tires (b) 7.00-4 (Shinn or Firestone 2A or 2AV) with tires (c) 8.00-4, Type III, wheel brake assemblies Goodrich Model 841; wheel assembly No. D-3-13, Brake assembly No. D-2-113, with 4-ply rating tires and tubes. When used with Item 206. (d) Goodyear Model CL6HBM, (7.00-6) (cross-wind wheel) Wheel Assembly No. 266AX36 Brake Assembly No. 266AX55 Wheel Installation No. 226AX54	-2 lb. (+3) -1 lb. (+3) +12 lb. (+3) +29 lb. (+3)
308.	Wheel streamlines	6 lb. (+3)
311.	Skis (Eligible on any airplane of these models provided 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). (a) Piper S-1000 (maximum 1200 lb.). *(b) Fairbanks MF-5 (maximum 1310 lb.). *(c) Federal SA-1 (maximum 1200 lb.). *(d) Federal SC-1 (maximum 1400 lb.). *(e) Aviation Service B (maximum 1100 lb.). *(f) Air Transport 1220-480 (maximum 1220 lb.). *(g) Air Transport 1460-580 (maximum 1460 lb.). *(h) Marston MFS-1600 (maximum 1600 lb.). *(i) Heath 655 (maximum 1310 lb.). *(j) Heath 725 (maximum 1450 lb.). *(k) Air Transport 1225-580-1 (maximum 1220 lb.). *(l) Marston MFS-1200 (maximum 1200 lb.). *(m) Wollam W-1650 (maximum 1650 lb.). *(n) Heath 725A (maximum 1450 lb.). *(o) Federal SKT-1 (maximum 1400 lb.). *(p) Federal SA-2 (maximum 1400 lb.). *(q) Federal SC-2 (maximum 1650 lb.). *(r) Washington Aircraft 1200 (maximum 1200 lb.). *(s) Troyer W-54 (maximum 1200 lb.). *(t) Call Model S1 (with 8.00-4 tires only) per Call Dwg. 1002 (maximum 1800 lb.).	Use Actual Weight Change

- * (u) Federal A-1500 or A-1500A (maximum 1500 lb.) per Federal Dwg. 11R262
- * (v) Federal A-1850 (maximum 1850 lb.) per Federal Dwg. 11R262
- * (w) Federal A-2000 or A-2000A (maximum 2000 lb.) per Federal Dwg. 11R262
- * (x) Federal AWB-2100 wheel-ski installed in accordance with Federal Aircraft Works, Minneapolis, Minn. Dwg. 11R1101
The following placards are required:
 - (a) "Do not extend or Retract skis while in motion on the ground."
 - (b) On the ski position selector box "Ski control." "Up-Neutral-Down."
- * (y) Wesco per Western Aircraft Equipment Company Dwgs. Nos. 12 and 148.
 - (1) A-15 (maximum 1500 lb.)
 - (2) A-20 or AS-2 (maximum 2000 lb.)
 - (3) A-25, AS-2A or AS-2B (maximum 2500 lb.)

312. Dual brake installation (Dwg. D4101-C) Neglect Weight Change

Electrical Equipment

304. Batteries
- (a) (Exide 3AC-7) +10 lb. (-19)
 - (b) (Willard SYR-7-3) +10 lb. (-19)
 - (c) (Reading 3-BRL-6) +8 lb. (+41)
316. Generator installations (wing-driven).
- (a) General Armature AG-40 +11 lb. (+3)
317. Landing lights in wing leading edge per Piper Dwg. 12534 +4 lb. (+5)

Interior Equipment

401. Windshield defroster +1 lb. (-17)
402. Slip-not stabilizer control Model 10-C +2 lb. (+72)
(Installed per Dwg. 1 and kit installation instructions of Westfield Industries, Salem, Illinois)

Miscellaneous (Not Listed Above)

307. Emergency exit Neglect Weight Change
310. Friese type ailerons replacing unbalanced type Neglect Weight Change
313. Two hinge tail surfaces (Dwgs. D-4152-C and D-4157-C) Neglect Weight Change

- *601. Wing tip spill plates (J3F-65 only) installed in accordance with Flo-Trol Splate Company, Wahpeton, North Dakota, Kit No. 100, dated September 1, 1949, for wings with wood spars and Kit No. 200, dated October 1, 1949 for wings with metal spars.
The following lower static r.p.m. propeller limits apply:
- (a) With the Franklin 4AC-176-B2 engine, not under 2100 r.p.m.
 - (b) With the Franklin 4AC-176 BA2 engine, not under 2200 r.p.m.

- *602. Brodie Suspending Gear
(Aircraft of 1220 lb. maximum weight, and 65 hp. min.)
Installed in accordance with Brodie Engineering Corporation
2107 Maryland Avenue, Baltimore, Maryland, Dwg. No. X46R6187.
- (a) Complete installation including fixed mount, hook, arm and cables. The following placards are required: +37 lb. (-2)
 - (1) "Intentional spins prohibited with Brodie Hook installed; (Spins permitted with fixed mount only installed)".
 - (2) At the release handle: "Warning - Suspending gear hook release."
 - (b) Installation of fixed mount only, in accordance with Dwgs. X45D17370, X45G17375, X45G17393 and X45B17394.
Aircraft incorporating Item (a) may be operated, in accordance with required operating instructions, on the Brodie Aerial Track Airport erected at Diffendall (Eastern) Airport, Baltimore, Maryland. These operating instructions are contained in the CAA approved Brodie pilot operating Manual entitled "Pilot Operating Instructions for Piper J3 and PA-11 Airplanes for Landing and Takeoff on Aerial Track Airports", which must remain in the airplane during such operation, and must retain its identity as an individual manual.

- 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 front cockpit, "Solo flying from rear seat only." Placard may be removed if individual aircraft actual weight and balance shows that the approved C. G. limits will not be exceeded under any loading condition. Manufacturer recommends that all J-3 airplanes be flown solo from the rear seat.
- NOTE 3 Serial Numbers 4373, 4419, 4435, 4438, 4445, 4446, 4447, 4449, 4450, 4451, 4452, 4457, 4458, 4459, 4460, 4464, 4466, 4467, 4469, 4471, 4473, 4474, 4475, 4477, 4478, 4495, and 4502 eligible with the following C. G. range:
- | | |
|-----------|------------------------------------|
| Landplane | (+10.6) to (+21.5) |
| Seaplane | (+10.7) to (+18.6) with Edo floats |
- Empty weight C. G. ranges (See also NOTE 2):
- | | |
|-----------|-----------------------------------|
| Landplane | (+8.1) to (+19.1) |
| Seaplane | (+8.5) to (+16.4) with Edo floats |
- NOTE 4 Serial Nos. 7842, 7845 to 7883 inclusive, 7912 and up of Model J3F-65 are eligible for 1170 lb. maximum weight with minimum propeller diameter of 70 inch. All other serial numbers of this model also eligible for 1170 lb. maximum weight with minimum propeller diameter of 70 in. provided lift strut end fittings and fuselage lift strut attachment fitting are revised in accordance with Piper Dwg. C-16 and C-22, respectively.
- NOTE 5 Army TG-8 gliders having Serial Nos. G-1 and up are eligible for certification as J3F Series airplanes under the provisions of this aircraft specification, provided that they have been converted to J3F airplanes and are in conformity with the approved Piper data. Conversion procedure is given in Safety Regulation Release No. 188.
- NOTE 6 The following parts from TG-8 gliders can be used directly on Piper J-3 series airplanes. The replacement of such complete component parts is considered a minor repair in accordance with FAA Advisory Circular 43.13-1.
- Tail surfaces; Landing gear tire and wheels; Tail wheel; Wing, provided the spoiler and spoiler controls are removed; The control system from (and including) the middle occupant aft; Wing struts; Instruments, same as or equivalent to those used on powered aircraft.
- The fuselage primary structure of the TG-8 glider aft of the main landing gear fittings can be used on Piper J-3 Series airplane; however, the use of such parts entails a major repair and must be handled as such in accordance with current Advisory Circulars.

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