

U. S. DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION

A-764
Revision 2
STINSON
L-5
L-5B
L-5C
L-5D
L-5E
L-5E-1
L-5G

October 26, 1951

AIRCRAFT SPECIFICATION NO. A-764

Manufacturer Consolidated Vultee Aircraft Corporation
Stinson Division
Wayne, Michigan

I - Models L-5, L-5B, L-5C, L-5D, L-5E, L-5E-1, Approved December 17, 1945
L-5G, Approved July 3, 1946

Engine	Lycoming O-435-C (See Item 104 for optional engines).		
Fuel	73 minimum octane aviation gasoline		
Engine limits	For all operations, 2550 rpm (190 hp)		
Airspeed limits	Level flight or climb	140 mph True Ind.	
	Glide or dive	168 mph True Ind.	
	Flaps deflected	90 mph True Ind.	
	Ailerons drooped	81 mph True Ind.	(L-5E, L-5E-1 and L-5G only)
Propeller limits	Static rpm at maximum permissible throttle setting: Not over 2100, not under 2000. No additional tolerance permitted.		
	Diameter: Not over 85 in., not under 83 in.		
C.G. range	(+13.0) to (+18.2). See NOTE 2(n) for wider limits when plastic elevator trim tab is installed.		
Empty weight C.G. range	None		
Datum	Wing leading edge.		
Leveling means	Lugs on left upper longeron in rear cockpit.		
Maximum weight	2250 lbs.		
No. seats	2 (one at +14 and one at +50).		
Maximum baggage	L-5 and L-5D: None All models except L-5 and L-5D: 200 lbs. (150 lbs. at +50 and 50 lbs. at +106).		
Fuel capacity	36 gals. (+22) (one 18 gal. tank in each wing panel).		
Oil capacity	3 gals. (-45)		
Control surface movements	Elevator	24° up	24° down
	Elevator tab	12° up	19° down
	Rudder	20° right	20° left
	Aileron	26° up	13° down
	Ailerons drooped		15° down (L-5E, L-5E-1 and L-5G only)
	Flap		45° down
	Stabilizer	Fixed	
Serial Nos. eligible	All AF Serial Numbers. Use manufacturer's serial number if available.		

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Required equipment	Landplane (All models eligible): Items 1, 102, 103, 201(a) or (b) and 202. Seaplane (All models except L-5 eligible): Items 1, 102, 103, 203 and 204
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SPECIFICATIONS PERTINENT TO ALL MODELS

Certification basis	Type Certificate No. 764 (CAR 4a).
Export eligibility	Eligible for export to all countries except as follows, subject to the provisions of ASR 312 (MOP 2-4 contains the same information); Canada - landplane eligible. skiplane not eligible.

EQUIPMENT: A plus (+) or minus (-) sign preceding the weight of an optional item indicates the net weight change between that item and the equivalent required item.

Propellers and Propeller Accessories

1. Propeller - Fahlin 44K15005 or any other fixed pitch wood propeller eligible for the engine speed and power and which meets the static rpm and diameter limits. 35 lbs. (-67)
2. Propeller - Koppers Aeromatic 220 with 0-85 blades 53 lbs. (-67)
Static rpm - 2500
Diameter - 85 inches
Pitch settings at 30 in. station -
Low 9.5°, high 27.5°
Items 105 and 106 are required with this propeller.
3. Propeller - Hartzell Controllable Model HC12x20-4/8628 62 lbs. (-67)
(reduced to 85 inch diameter - not over 85, not under 83).
Static rpm at maximum permissible throttle setting:
not over 2400, not under 2300. (Propeller in low pitch).
No additional tolerance permitted.
Blade angle settings at 30 in. sta: low 11.5°, high 25.5°.
Installations of this propeller may be approved subject to a satisfactory conformity inspection to details contained on Form ACA 337, dated February 22, 1948 and drawing dated January 12, 1948 submitted by D.C. Spaulding, 3622 Beechway Blvd., Toledo 9, Ohio. Forms ACA 337 for this propeller installation, not in conformance with the above, are subject to individual CAA engineering approval.

Engine and Engine Accessories - Fuel and Oil System

101. Starter
 - (a) Eclipse Type 397 Model 50 (All Models except L-5G) 19 lbs. (-28)
 - (b) Eclipse Type 756 (Model L-5G only) 19 lbs. (-28)
102. Oil Cooler (G & O Mfg. Co. B-3678) 8 lbs. (-56)
103. Carburetor Air Heater and Control 4 lbs. (-42)
104. Engines
 - (a) Lycoming O-435-1
This is a military engine. The commercial model designation O-435-C should be added to the engine nameplate not later than the time of first major overhaul of the engine.
 - (b) Lycoming O-435-11

105. Head temperature gauge
(Red lined at 525° F.)
106. Special engine cooling baffling Drawing No. 11, Sheets 1 and 2
Furlong Aviation Company, 2801 East Spring St., Long Beach, Calif.

Landing Gear and Floats

201. Main Landing Gear Wheels
- (a) 6.00-6 wheels and brakes (Goodrich, formerly Hayes 601M, 601MD or 605M) with 7.00-6 4-ply tires. 32 lbs. (+0.5)
(Except Model L-5E-1)
- (b) 8.50-6 wheels and brakes (Goodrich, formerly Hayes) with 8.50-6 4-ply tires (Model L-5E-1 and L-5G only) 49 lbs. (+0.5)
202. Tail wheel - 8" smooth contour with 4-ply tire 3 lbs. (+183.5)
203. Edo 44-2425 floats (Edo Drawing No. 44-S-009)
204. Auxiliary fin (Stinson Drawing No. 76-00316)

Electrical Equipment

301. Generator
- (a) Eclipse Type 307 Model 8 (12 volt) (All models except L-5G) 15 lbs. (-29)
- (b) Leece Neville Type M-2 (24 volt) (Model L-5G only) 20 lbs. (-29)
302. Battery
- (a) 12 volt - 34 amp. hr. (All models except L-5G) 39 lbs. (+31)
- (b) 24 volt - 11 amp. hr. (Model L-5G only) 33 lbs. (-17.5)
303. Wing Position lights (AN 3033-1 thru 4) ----- (+24)
See NOTE 2(f) regarding surplus AN Position lights.
304. Landing light, Type A-11 6 lbs. (+19)

Interior Equipment

401. Safety Belt
- (a) Type B-11 (All models except L-5G) 3 lbs. ea. (+16)
and (+50)
- (b) Type B-14 (Model L-5G only) 3 lbs. ea. (+16)
and (+50)
- (c) Shoulder Harness Type B-15 (L-5G only) 1.5 lbs. ea. (+28)
and (+60)
- (d) Harness reel (L-5G only) 2 lbs. ea. (+19)
and (+51)
402. Litter (Except Model L-5 and L-5B) 20 lbs. (+75)
(Horizontal arm of patient in litter at +69)
403. Camera (except Model L-5 and L-5B) 11 lbs. (+70)

NOTE 1. Weight and balance report including list of equipment included in certificated weight empty must be submitted for each aircraft with original agent's report and each subsequent report covering change in equipment.

NOTE 2. The following must be accomplished prior to certification of the airplane: (These modifications are also covered in Stinson Service Information Letter No. 3.)

- (a) Placard rear seat, "Solo Flying From Front Seat Only".
- (b) Deleted April 26, 1948.
- (c) Placard Maximum allowable baggage:
Front Platform - 150 lbs.
Rear Platform - 50 lbs. maximum or as determined by weight and balance (See NOTE 1)
(Applies to L-5B and subsequent except L-5D)
Adequate tie down straps or equivalent such as canvas or plywood compartments must be provided before baggage can be carried on platforms.

- (d) Install nameplate, if none is installed containing the model designation, serial number, and date of manufacture.
- (e) For day operation, all fuses or circuit breakers to electric equipment used during such operation must be accessible to the pilot in flight.
- (f) To make airplane eligible for night operation:
 - (1) Type A-9 wing position lights (AN 3033-5 through -8) should have the frosted area on the inside of the glass cover painted black.
 - (2) Replace Type D2 tail position light with certificated light.
 - (3) Remove position light resistors.
 - (4) Install 15 ampere fuse or trip-free circuit breaker in landing light motor circuits independent of the 35 ampere circuit protector in the filament circuit if landing lights are to be used, otherwise the landing lights shall be made inoperative.
 - (5) All fuse and circuit breakers must be accessible to the pilot in flight for replacement or resetting respectively.
- (g) A battery switch shall be installed to disconnect battery circuit within distance not exceeding two feet of the battery. (Applies to L-5, L-5D, Serial Nos. 1 to 276, inclusive only). (Stinson Drawing No. 76-74001).
- (h) Battery switch control circuits shall be removed from the ignition switch.
(Applies to L-5, L-5D, Serial Nos. 277 and up)
(Stinson Drawing No. 76-64101)
(Applies to L-5B, L-5C, up to Serial No. 1901) (Stinson Dwg. No. 76-64201)
- (i) A generator switch shall be installed.
(Applies to L-5, L-5D, Serial Nos. 1 to 276) (Stinson Drawing No. 76-64001)
- (j) Install a 35 amp fuse or trip-free circuit breaker in the generator circuit in all models except L-5G.
(Applies to L-5, L-5D, Serial No. 1 to 276 inclusive)
(Stinson Drawing No. 76-64001)
(Applies to L-5C, Serial Nos. up to 1901)
(Stinson Drawing No. 76-64201)
(L-5B, L-5C, L-5E, L-5E-1, Serial Nos. 1901 and up)
Stinson Drawing No. 76-74210
For Model L-5G, install a 50 amp fuse or trip-free circuit breaker in the generator circuit.
- (k) If recognition light circuits are retained, the 35 ampere fuse shall be replaced with a 15 ampere circuit protector or such protectors installed in the individual circuits at the bus bar in the recognition light control box.
- (l) If non-trip-free circuit breakers are installed in electrical circuits, they should either be replaced with fuses prior to certification or with trip free breakers as soon as the latter become generally available.
- (m) Mark instruments for approved operating limits.
- (n) Plastic type elevator trim tab, if installed, must be replaced by a metal type tab. Airplanes now equipped with the standard metal trim tab in use on most L-5 series airplanes need not be revised provided the C.G. limits listed under Part I are maintained. In the event the plastic tab must be replaced or if wider C.G. limits are desired, a larger metal tab, Stinson Part No. 76-22169 is available. The following C.G. limits are approved when the larger tab is installed:
 - (+10.8) to (+18.2)
 - No empty weight C.G. range exists.

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