

DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION

A-738
STINSON
10A (Army L-9B)
10B
May 13, 1949

AIRCRAFT SPECIFICATION NO. A-738

Manufacturer Consolidated Vultee Aircraft Corp.
Stinson Division
Wayne, Michigan

I - Model 10A (Army L-9B), 3 PCLM, Approved March 3, 1941

Engine	Franklin 4AC-199-E3 (See Item 305a for optional engine).
Fuel	80 min. octane aviation gasoline
Engine limits	For all operations, 2500 rpm (90 hp)
Airspeed limits	Level flight or climb 120 mph True Ind. Glide or dive 144 mph True Ind. Flaps extended 85 mph True Ind.
Propeller limits	Static rpm at maximum permissible throttle setting: Not over 2275, not under 2175. No additional tolerance permitted. Diameter: Not over 78 in., not under 70 in. (See NOTE 3 for Propeller limits with maximum weight of 1680 lbs.).
C.G. range	(+14.7) to (+19.0)
Empty weight C.G. range	(+14.6) to (+15.7) with standard fuel only. (+14.6) to (+15.3) when extra fuel tank (Item 205) is installed. Ranges are valid for either 1650 or 1680 lbs. maximum weight but not for non-standard arrangements except as noted. When empty weight C.G. falls within the pertinent range, computation of critical fore and aft C.G. positions is unnecessary.
Maximum weight	1650 lbs. (See NOTE 3 regarding 1680 lbs.)
No. seats	3 (two at +16 and one at +39)
Maximum baggage	24 lbs. (+39). Baggage may be increased to 194 lbs. when rear passenger is not carried.
Fuel capacity	20 gals. (right wing tank at +22). See Item 205 for auxiliary fuel tank.
Oil capacity	5 qts. (-41). See Item 206a for larger capacity.
Control surface movements	Not available.
Serial Nos. eligible	7761 and up and all AF nos. Use manufacturer's number when available.
Required equipment	Items 101, 102, 103, 104 and 105.

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

II - Model 10B, 3 PCLM, Approved March 3, 1941

Engine	Lycoming GO-145-C3 (See Item 305b for optional engine).
Fuel	73 min. octane aviation gasoline
Engine limits	For all operations, 3200 rpm (75 hp)
Airspeed limits	Level flight or climb 120 mph True Ind. Glide or dive 144 mph True Ind. Flaps extended 85 mph True Ind.
Propeller limits	Static rpm at maximum permissible throttle setting: Not over 2950, not under 2850. No additional tolerance permitted. Diameter: Not over 78 in., not under 76 in.
C.G. range	(+14.7) to (+19.0)
Empty weight C.G. range	(+14.6) to (+15.7) with standard fuel only. (+14.6) to (+15.3) when extra fuel tank (Item 205) is installed. Ranges are valid for non-standard arrangements except as noted. When empty weight C.G. falls within the pertinent range, computation of critical fore and aft C.G. positions is unnecessary.
Maximum weight	1600 lbs.
No. seats	3 (two at +16 and one at +39)
Maximum baggage	24 lbs. (+39). Baggage may be increased to 194 lbs. when rear passenger is not carried.
Fuel capacity	20 gals. (right wing tank at +22). See Item 205 for auxiliary fuel tank.
Oil capacity	4 qts. (-34). See Item 206b for larger capacity.
Control surface movements	Not available.
Serial Nos. eligible	7761 and up.
Required equipment	Items 101, 102, 103, 104 and 105.

SPECIFICATIONS PERTINENT TO ALL MODELS

Datum	Wing leading edge
Leveling means	Top of door frame
Certification basis	Type Certificate No. 738 (CAR 4a)
Production basis	None. Each aircraft manufactured for civil use subsequent to January 2, 1945, must, prior to original certification, satisfactorily pass: (a) An inspection for workmanship, materials and conformity before any covering, metal priming or final finish is applied. All woodwork may be varnished. (b) A final inspection of the completed aircraft. (c) A check of the flight characteristics.

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):

- (a) Canada - Landplane -eligible
 Skiplane - not eligible. However, structure complies with Canadian requirements for ski installation with a maximum ski height of 8-11/16 in. and a tread of 6 ft. 11-5/8 in. (center-line of ski 3-11/16 in. out from edge of torque plate).

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

Propellers and Propeller Accessories

		<u>10A</u>	<u>10B</u>
101. Propeller - wood (fixed pitch) with hub	12 lbs.	(-53)	(-57)

Engines and Engine Accessories - Fuel and Oil System

105. Carburetor air heater	3 lbs.	(-35)	(-35)
106. AC air filter 1529265 (Aircooled Motors Dwg. SK-534-2)	1 lb.	(-41)	----
107. Oil Filter, Fram PB-5, Kit No. 501 (Model 10A only)			
Weight includes one qt. of oil	4 lbs.	(-25)	----
(a) Fram installation dwg. 61068 (Oil return to fuel pump pad).			
(b) Fram installation dwg. 61566 (Oil return to drain plug)			
202. Starter, including wiring and switch (Item 203(a) or 301 required)			
(a) Autolite, less solenoid	21 lbs.	(-22)	----
(b) Eclipse	22 lbs.	----	(-24)
(c) Delco-Remy	21 lbs.	(-22)	----
205. Fuel tank - 20 gal. (in left wing) (Item 206(a) or (b) required)	15 lbs.	(+22)	(+22)
206. Oil pans			
(a) Franklin - 8 qt.	+2 lbs.	(-41)	----
(b) Lycoming - 8 qt.	+5 lbs.	----	(-34)
216. Shielding	4 lbs.	(-32)	----
305. Engines			
(a) Model 10A			
(1) Franklin 4AC-199E2	-7 lbs.	(-40)	----
(b) Model 10B			
(1) Lycoming GO-145-C2	-2 lbs.	----	(-41)

Landing Gear

102. 6.00-6 wheels with brakes (Hayes 600M) and 4 ply tires (wheels must be placarded for these tires)	28 lbs.	(+1)	(+1)
103. 6x2.00 solid tail wheel	2 lbs.	(+168)	(+168)
204. Wheel streamlines	6 lbs.	(+1)	(+1)
211. Puncture seal tubes	+1 lb.ea.	(+1)	(+1)
212. Steerable tail wheel unit	+1 lb.	(+155)	(+155)
214. Skis (Eligible provided the propeller installation meets the minimum 9 in. ground clearance. The maximum weight for the skiplane will be the same as for the corresponding landplane or that shown in parenthesis after each ski model, whichever is less)			
(a) Federal SC-2 (Maximum 1650 lbs.)			Use actual weight change
215. Dual brakes	+2 lbs.	(-6)	(-6)
216. Steerable tail wheel (Mack SFS-1) installed per wheel manufacturer's instructions	5 lbs.	(+168)	(+168)
303. Parking brake	3 lbs.	(+14)	(+14)
306. 8.00-4 wheels with brakes (Hayes 841) and 4 ply tires (Wheels must be placarded for these tires)			Neglect weight change

Electrical Equipment

		<u>10A</u>	<u>10B</u>
104. Battery - 6 volt, with box	14 lbs.	(+14)	(+14)
201. Generator			
(a) Engine driven (Autolite 12 volts)	12 lbs.	(-28)	-----
(b) Wind driven (Air Associates GE-20) (6 or 12 volts)	8 lbs.	(+12)	(+12)
203. Battery - 12 volt, with box and wiring, Dwg. No. 10-64111	40 lbs.	(+29)	(+29)
209. Landing lights (Grimes ST-250) - one or two	5 lbs.ea.	(+14)	(+14)
301. Battery - 12 volt with box and wiring (Dwg. No. 10-64111)	40 lbs.	(+15)	(+15)

Interior Equipment

207. Cabin heater	2 lbs.	(-32)	(-32)
208. Additional instruments	15 lbs.	(-4)	(-4)
213. Flares - three 1-minute (International)	8 lbs.	(+34)	(+34)
302. Carpet 5 lbs. (+17) (+17)			

NOTE 1. Weight and balance report, together with list of equipment included in certificated weight empty, must be submitted for each aircraft with original agent's report and each subsequent report showing changes in equipment.

NOTE 2. The following placard is to be conspicuously posted at each filler cap for Model 10A:

"Fill with 80 octane minimum."

NOTE 3. Model 10A also eligible at maximum weight of 1680 lbs. provided the propeller installed falls within the following limits:

Propeller Static rpm at maximum permissible throttle setting:

Not over 2350, not under 2250. No additional tolerance permitted.

Diameter: Not over 72 in., not under 70 in.

.....END.....