

Serial Nos. eligible	65 and up
Required equipment	In addition to the pertinent required basic equipment specified in CAR 4a, the following items of equipment must be installed: Items 101(b), 102, 104, 106, 107, 108 and 109.

III - Model B85C, 2 PCLM, Approved August 11, 1946

(Same as Model B75L except for engine installation, changes in equipment, and minor structural revisions).

Engine	Continental C-85-12 (See item 115 for C-90-12F engine installation).		
Fuel	73 min. octane aviation gasoline.		
Engine limits	For all operations, 2575 rpm (85 hp)		
Airspeed limits	Level flight or climb	112 mph (97 knots) True Ind.	
	Glide or dive	150 mph (131 knots) True Ind.	
Propeller limits (For item 1)	Static rpm at maximum permissible throttle setting: Not over 2400, not under 2050. No additional tolerance permitted.		
	Diameter: Not over 72 in., not under 70.5 in.		
C.G. range	(+10.0) to (+16.0)		
Empty weight C.G. range	(+9.7) to (+13.1) with standard fuel tank. (+10.2) to (+13.1) with 20 gal. fuel tank, item 114. When empty weight C.G. falls within pertinent range, computation of critical fore and aft C.G. positions is unnecessary. Ranges are not valid for non-standard arrangements except as noted.		
Maximum weight	1350 lbs.		
No. seats	2 (+22)		
Maximum baggage	50 lbs. (+48)		
Fuel capacity	16 gals. (-6). See item 114 for 20 gal. fuel capacity.		
Oil capacity	4.5 qts. (-28)		
Control surface movements	Elevators	25° up 25° down	
	Ailerons	33° up 17° down	
	Rudder	25° right 25° left	
	Stabilizer	- Fixed	
Serial Nos. eligible	223, 253 and up		
Required equipment	In addition to the pertinent required basic equipment specified in CAR 4a, the following items of equipment must be installed: Items 1, 103, 108, 109, 110, 111 and 314(b).		

SPECIFICATIONS PERTINENT TO ALL MODELS

Datum	Wing leading edge.		
Leveling means	Top edge of strut fittings at fuselage.		
Certification basis	Type Certificate No. 715 (CAR 4a).		
Production basis	None. Prior to original certification a CAA representative must perform a detailed inspection for workmanship, materials, and conformity with the approved technical data, and a check of the flight characteristics.		
Export eligibility	Eligible for export to all countries subject to the provisions of ASR 312 (MOP 2-4 contains the same information) except as follows: Canada - Landplane - eligible. Skiplane - not eligible.		
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>B</u>	<u>B75L</u>	<u>B85C</u>
1. Propeller - Lewis L55C-46 to L55C-40 or any other fixed pitch wood propeller meeting the diameter and static rpm limits given under "Propeller limits"	13 lbs.	-	(-47)
2. Propeller spinner	2 lbs.	-	(-47)

<u>Propellers and Propeller Accessories</u> (cont'd)		<u>B</u>	<u>B75L</u>	<u>B85C</u>
3. Propeller - McCauley fixed pitch metal, 1A90	22 lbs.	-	-	(-47)
Static rpm at maximum permissible throttle setting: not over 2310, not under 2120. No additional tolerance permitted.				
Diameter: Not over 71 in., not under 69.5 in.				
4. Propeller for C-90-12F engine installation:				
(a) Lewis L55CK43 or any other fixed pitch wood propeller eligible with the following limits: Static rpm at maximum permissible throttle setting: not over 2300, not under 2150. No additional tolerance permitted.	13 lbs.	-	-	(-47)
Diameter: Not over 73 in., not under 70.5 in.				
(b) McCauley 1A90 or 1B90 with the following limits: Static rpm at maximum permissible throttle setting: not over 2250, not under 2140. No additional tolerance permitted.	21 lbs.	-	-	(-47)
Diameter: Not over 71 in., not under 69.5 in.				
101. Propeller - Wood (fixed or adj. pitch)				
(a)	11 lbs.	(-45)	-	-
(b)	13 lbs.	-	(-49)	-
<u>Engine and Engine Accessories - Fuel and Oil System</u>				
105. Radiator (water) (10 qts. capacity)	21 lbs.	(-20.5)	-	-
107. Carburetor air heater		X	X	-
110. Carburetor air box (filter optional) (Continental Part #40599)	4 lbs.	-	-	(-37)
111. Exhaust manifold and heater assemblies (2)	15 lbs.	-	-	(-29)
112. Starter (Delco Remy 1109656)	15 lbs.	-	-	(-23)
114. 20 gal. fuel tank (replacing 16 gal. tank) (Drawing L1100 or C1100) L1100 +2 lbs., C1100 - 2 lbs.	-	(-6)	(-6)	
115. Continental C-90-12F engine is eligible for installation on the Model B85C with the following limits: Fuel 80 min. octane aviation gasoline Engine limits For all operations, 2475 rpm (90 hp) Oil capacity 5 or 6 qts. (Integral) Propeller limits See Item 4	+8 lbs.	-	-	(-32)
116. Fram PB5 oil filter, Kit No. 510, Fram Installation Dwg. No. 62865, Instruction Sheet No. 62864. (Weight includes 1 qt. oil)	4 lbs.	-	-	(-11.5)
301. Starter (Crank type) (Dwgs. E-170 to E-176)	4 lbs.	(-15)	-	-
302. Starter (Electric) (Eclipse 80-Model 2624AR)	19 lbs.	-	(-19)	-
<u>Landing Gear and Floats</u>		<u>B</u>	<u>B75L</u>	<u>B85C</u>
102. 6.00-6 wheels with brakes (Firestone 6C2B) (Formerly Shinn Devices) with 4 ply tires (wheels must be placarded for these tires)	26 lbs.	(-4)	(-4)	(-4)
103. 8x2.50 tail wheel (Firestone 264-8B) or (Geneva Metal Wheel D315-W75C) with 4 ply tire	4 lbs.	(+168)	(+168)	(+168)
104. Tail wheel assembly (Uniloy Accessories Corp. GA-16)	6 lbs.	-	(+168)	-
204. Steerable tail wheel installation (Firestone 264-8B) or (Geneva Metal Wheel D315-W75C) with 4 ply tire	4 lbs.	(+168)	(+168)	(+168)
205. Tail wheel assembly (Firestone A0200F)	3 lbs.	(+168)	(+168)	(+168)
206. Tail wheel assembly (Goodyear 800SCAM263)	3 lbs.	(+168)	(+168)	(+168)
308. Wheel streamlines (Lewis Metal Co.)	7 lbs.	(-4)	(-4)	(-4)

<u>Landing Gear and Floats</u> (cont'd)	<u>B</u>	<u>B75L</u>	<u>B85C</u>
314. Two main wheel-brake assemblies 6.00-6, Type III, with 6.00-6, 4 ply rating tires.			
(a) Firestone Model 6C2WFB	31 lbs.	(-4)	(-4)
(b) Firestone Model 6C2HB	28 lbs.	(-4)	(-4)
(c) Goodyear Model L6MBD: Wheel assembly No. 511413-M Brake Assembly No. 511254-A (1.25 in. dia. axles eligible with B306 and B307 spacers).	31 lbs.	(-4)	(-4)
(d) Goodyear Model L6HBD: Wheel assembly No. 511413-M Brake assembly No. 952098	43 lbs.	-	(-5)
315. Skis (Eligible on any airplane of these models 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 each ski model, whichever is less)			
(a) Federal SC-1 (Maximum 1400 lbs.) Use actual weight change			
(b) Federal A1500 (Federal Instal. Dwg. 11G254)		Use actual weight change	
(c) Federal A1500A (Federal Instal. Dwg. 11G254)		Use actual weight change	
(d) Federal A1850 (Federal Instal. Dwg. 11G254)		Use actual weight change	
(e) Federal A2000 (Federal Instal. Dwg. 11G254)		Use actual weight change	
(f) Federal A2000A (Federal Instal. Dwg. 11G254)		Use actual weight change	
(g) Federal CA1850-6 (Federal Instal. Dwg. 11G254)		Use actual weight change	
316. Dual brake installation	+2 lbs.	(-6)	(-6) (-6)
 <u>Electrical Equipment</u>			
106. Battery and case (Exide 4AC-7-1) (6-8 volt)	13 lbs.	(+42)	(-15)
113. Generator (Delco Remy 101876)	10 lbs.	-	(-23)
303. Generator (Air Assoc. G-6)	10 lbs.	(+3)	-
304. Generator (Eclipse LV180, Model 3771-L)	16 lbs.	-	(-21)
310. Battery and case (Min. 19 Amp. Hr.) Max.	36 lbs.	-	(-15)
313. Landing lights	8 lbs.	(+17)	(+17)
317. Landing lights (2) (Grimes D3150-2)	4 lbs.	-	(+12)
 <u>Interior Equipment</u>			
108. "T" Type control column		<u>B</u> X	<u>B75L</u> X
109. Bungee trim control (Drawing B200.3)	3 lbs.	(+73)	(+73)
305. Extra instruments (+2)		6 lbs.	(+2)
312. "Y" Type control column (neglect weight change)		X	X
401. Cabin heater valve	2 lbs.	-	(-14)
402. Robin seat installation and baggage compartment in accordance with Robin seat Dwg. 1A and installation instructions of Robert P. LAIBLE, Salina, Kansas		X	X
 <u>Miscellaneous (not listed above)</u>			
306. Extra door and window	6 lbs.	(+17)	(+17)

NOTE 1. Current weight and balance report including list of equipment included in certificated weight empty, 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).

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