

**DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

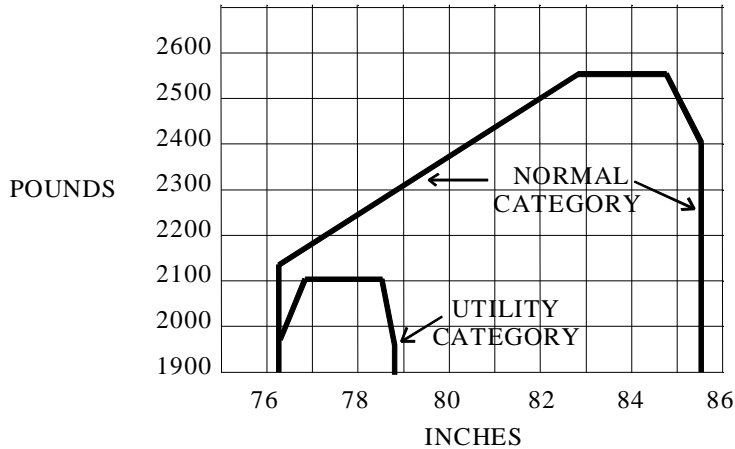
A-777
Revision 57
BEECH
35
A35 E35
B35 F35
C35 G35
D35 35R
April 15, 1996

AIRCRAFT SPECIFICATION NO. A-777

Type Certificate Holder Raytheon Aircraft Company
Wichita, Kansas 67201

I. Model 35, Bonanza, 4 PCLM (Normal Category), 2 PCLM (Utility Category), approved March 25, 1947

Engine	Continental E-185-1 (See Item 111 for optional engine.)		
Fuel	80 min. grade aviation gasoline		
Engine Limits	Takeoff (one minute)	2300 rpm	(185 hp)
	For all other operations	2050 rpm	(165 hp)
Airspeed Limits	Maneuvering	130 mph (113 knots)	True Ind.
	Maximum structural cruising	160 mph (139 knots)	True Ind.
	Never exceed	202 mph (176 knots)	True Ind.
	Flaps extended	100 mph (87 knots)	True Ind.
	Landing gear extended	100 mph (87 knots)	True Ind.
C.G. Range (landing gear extended)	Normal Category:	(+82.4) to (+84.8) at 2550 lb. (+80.2) to (+85.4) at 2405 lb. (+76.2) to (+85.4) at 2140 lb. or less	
	Utility Category:	(+76.8) to (+78.6) at 2100 lb. (+76.3) to (+78.8) at 1971 lb. (+76.3) to (+78.9) at 1938 lb. or less	
	Straight line variation between points given.		



Empty Weight C.G. Range None

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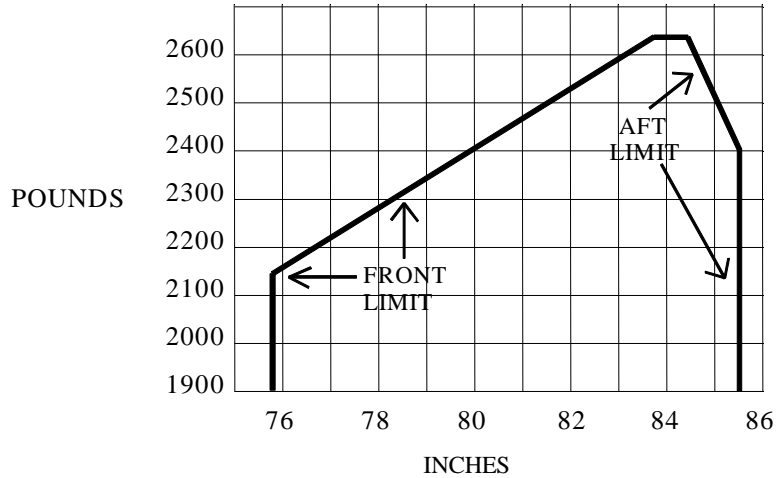
I. Model 35, Bonanza, 4 PCLM (Normal Category), 2 PCLM (Utility Category) (cont'd)

Maximum Weight	Normal Category: 2550 lbs. Utility Category: 2100 lbs.																												
No. of Seats	4 (2 at +86, 2 at +116)																												
Maximum Baggage	Normal Category: 120 lb. at +139. When Item 107 installed, baggage arm is +145 and total weight of fuel and baggage must not exceed 120 lb. Utility Category: None																												
Fuel Capacity	<table border="0"> <tr> <td><u>Tank</u></td> <td><u>Capacity Gal.</u></td> <td><u>Usable Gal.</u></td> <td><u>Arm</u></td> </tr> <tr> <td>L & R main</td> <td>20 ea.</td> <td>17 ea.</td> <td>(+75)</td> </tr> </table> <p style="text-align: center;">Optional Fuel System (Item 107)</p> <table border="0"> <tr> <td>Fuselage Aux. Systems</td> <td>20</td> <td>19.5</td> <td>(+132)</td> </tr> <tr> <td></td> <td></td> <td></td> <td>or (+133)</td> </tr> </table> <p><i>See NOTE 1 for data on unusable fuel.</i></p>	<u>Tank</u>	<u>Capacity Gal.</u>	<u>Usable Gal.</u>	<u>Arm</u>	L & R main	20 ea.	17 ea.	(+75)	Fuselage Aux. Systems	20	19.5	(+132)				or (+133)												
<u>Tank</u>	<u>Capacity Gal.</u>	<u>Usable Gal.</u>	<u>Arm</u>																										
L & R main	20 ea.	17 ea.	(+75)																										
Fuselage Aux. Systems	20	19.5	(+132)																										
			or (+133)																										
Oil Capacity	10 qt. (+45) See Items 106 and 108 for optional oil tanks and NOTE 1 for data on unusable oil.																												
Control Surface Movements	<table border="0"> <tr> <td>Wing flaps</td> <td></td> <td>Down</td> <td>20°</td> </tr> <tr> <td>Aileron tab</td> <td></td> <td>Fixed</td> <td></td> </tr> <tr> <td>Aileron</td> <td>Up</td> <td>20°</td> <td>Down 20°</td> </tr> <tr> <td>Elevator tab</td> <td>Up</td> <td>10°</td> <td>Down 30°</td> </tr> <tr> <td>"V" tail elevator action</td> <td>Up</td> <td>20°</td> <td>Down 30°</td> </tr> <tr> <td>"V" tail rudder action</td> <td>Up</td> <td>21°</td> <td>Down 21°</td> </tr> <tr> <td>"V" tail maximum combination rudder elevator action</td> <td>Up</td> <td>35°</td> <td>Down 35°</td> </tr> </table>	Wing flaps		Down	20°	Aileron tab		Fixed		Aileron	Up	20°	Down 20°	Elevator tab	Up	10°	Down 30°	"V" tail elevator action	Up	20°	Down 30°	"V" tail rudder action	Up	21°	Down 21°	"V" tail maximum combination rudder elevator action	Up	35°	Down 35°
Wing flaps		Down	20°																										
Aileron tab		Fixed																											
Aileron	Up	20°	Down 20°																										
Elevator tab	Up	10°	Down 30°																										
"V" tail elevator action	Up	20°	Down 30°																										
"V" tail rudder action	Up	21°	Down 21°																										
"V" tail maximum combination rudder elevator action	Up	35°	Down 35°																										
Serial Numbers Eligible	D1 through 1500																												
Required Equipment	Items 1, 101, 102, 103, 201, 202, 301, 302, 404(a) and (n) or 404(x), 601(a). Airplanes are eligible for certification with either fabric covered or magnesium flaps and ailerons provided they are installed in pairs, i.e., 2 fabric covered ailerons or 2 magnesium ailerons, etc.																												

II. Model A35, Bonanza, 4 PCLM (Utility Category), approved July 15, 1948

Engine	Continental E-185-1 (see Item 111 for optional engine)		
Fuel	80 min. grade aviation gasoline		
Engine Limits	Takeoff (one minute)	2300 rpm (185 hp)	
	For all other operations	2050 rpm (165 hp)	
Airspeed Limits	Maneuvering	130 mph (113 knots)	True Ind.
	Maximum structural cruising	160 mph (139 knots)	True Ind.
	Never exceed	202 mph (176 knots)	True Ind.
	Flaps extended	105 mph (91 knots)	True Ind.
	Landing gear extended	125 mph (109 knots)	True Ind.
C.G. Range (landing gear extended)	(+83.7) to (+84.4) at 2650 lb. (+80.0) to (+85.4) at 2405 lb. (+75.9) to (+85.4) at 2140 lb. or less Straight line variation between points given. The aft C.G. limit for all weights must be limited to (+84.4) unless the elevator cambered tabs, P/N 35-660040-52 and -53 are installed. (Refer to AD-50-42-1.		

II. Model A35, Bonanza, 4 PCLM (Utility Category) (cont'd)



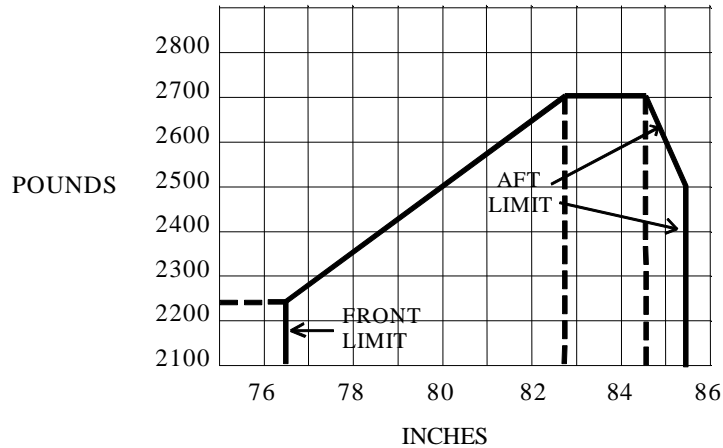
Empty Weight C.G. Range	None		
Maximum weight	2650 lbs.		
No. of seats	4 (2 at +86, 2 at +116)		
Maximum baggage	270 lb. (+139). For Model A35 refer to Loading Chart (included in the Airplane Flight Manual) for loading instructions. With rear seat removed for cargo, maximum baggage is as follows:		
	Aft of spar cover	270 lb. (+135)	
	On and forward of spar cover	200 lb. (+108)	
	Item 107, if installed, must also be removed.		
Fuel capacity	<u>Tank</u>	<u>Capacity Gal.</u>	<u>Usable Gal.</u> <u>Arm</u>
	L & R Main	20 ea.	17 ea. (+ 75)
	Optional Fuel System (Item 107)		
	Fuselage Aux. Sys.	20	19.5 (+132)
			or (+133)
	<i>See Note 1 for data on unusable fuel.</i>		
Oil capacity	10 qt. (+45). See Items 106 and 108 for optional oil tanks and Note 1 for data on unusable oil.		
Control surface movements	Wing flaps		Down 20°
	Aileron tab		Fixed
	Aileron	Up 20°	Down 20°
	Elevator tab	Up 10°	Down 30°
	"V" tail elevator action	Up 20°	Down 20°
	"V" tail rudder action	Up 21°	Down 21°
	"V" tail maximum combination rudder elevator action	Up 35°	Down 35°
Serial nos. eligible	D-1501 through D-2200 and D-15001		
Required equipment	Items 1, 101, 102, 103, 201, 202, 301, 302, 404(b) and (n) or 404(v), 601(a)		

III. Model B35, Bonanza, 4 PCLM (Utility Category), approved December 28, 1949

Engine	Continental E-185-8 with S/N 5122D and above (see Engine Spec. E-246) (See also Item 111 for optional engine.)			
Fuel	80 min. grade aviation gasoline			
Engine limits	Takeoff (one minute)	2450 rpm	(196 hp)	
	For all other operations	2050 rpm	(165 hp)	
Airspeed limits	Maneuvering	130 mph	(113 knots)	True Ind.
	Maximum structural cruising	160 mph	(139 knots)	True Ind.
	Never exceed	202 mph	(176 knots)	True Ind.
	Flaps extended	105 mph	(91 knots)	True Ind.
	Landing gear extended	125 mph	(109 knots)	True Ind.
C.G. Range (landing gear extended)	(+83.7) to (+84.4) at 2650 lb. (+80.0) to (+85.4) at 2405 lb. (+75.9) to (+85.4) at 2140 lb. or less <i>For diagram see Section II.</i>			
Empty weight C.G. range	None			
Maximum weight	2650 lb.			
No. of seats	4 (2 at +86, 2 at +116)			
Maximum baggage	270 lb. (+139). For Model B35 refer to Loading Chart (included in the Airplane Flight Manual) for loading instructions. With rear seat removed for cargo, maximum baggage is as follows:			
	Aft of spar cover	270 lb.	(+135)	
	On and forward of spar cover	200 lb.	(+108)	
	Item 107, if installed, must also be removed.			
Fuel capacity	<u>Tank</u>	<u>Capacity Gal.</u>	<u>Usable Gal.</u>	<u>Arm</u>
	L & R Main	20 ea.	17 ea.	(+ 75)
	Optional Fuel System (Item 107)			
	Fuselage Aux. Sys. 20		19.5	(+132)
				or (+133)
	<i>See Note 1 for data on unusable fuel.</i>			
Oil capacity	10 qt. (+36) <i>See Note 1 for data on unusable oil.</i>			
Control surface movements	Wing flaps		Down	30°
	Aileron tab		Fixed	
	Aileron	Up	20°	Down 20°
	Elevator tab	Up	10°	Down 31°
	"V" tail elevator action	Up	20°	Down 20°
	"V" tail rudder action	Up	21°	Down 21°
	"V" tail maximum combination rudder elevator action	Up	35°	Down 35°
Serial Nos. Eligible	D-2201 through D-2680			
Required Equipment	Items 1, 101, 103, 113, 201, 202, 301, 302, 404(c) and (n) or 404(v).			

IV. Model C35, Bonanza, 4 PCLM (Utility Category), approved January 16, 1951

Engine	Continental E-185-11 with S/N 5122D and above (see Engine Spec. E-246) (See also Item 111 for optional engine.)		
Fuel	80 min. grade aviation gasoline		
Engine limits	Takeoff (one minute)	2600 rpm	(205 hp)
	For all other operations	2300 rpm	(185 hp)
Airspeed limits	Maneuvering	130 mph (113 knots)	True Ind.
	Maximum structural cruising	160 mph (139 knots)	True Ind.
	Never exceed	202 mph (176 knots)	True Ind.
	Flaps extended	105 mph (91 knots)	True Ind.
	Landing gear extended	125 mph (109 knots)	True Ind.
C.G. Range (landing gear extended)	(+82.9) to (+84.4) at 2700 lb. (+80.1) to (+85.4) at 2500 lb. (+76.5) to (+85.4) at 2240 lb. or less		



Empty Weight C.G. Range	None		
Maximum Weight	2700 lb.		
No. of Seats	4 (2 at +86, 2 at +116)		
Maximum Baggage	270 lb. (+139). For Model C35 refer to Loading Chart (included in the Airplane Flight Manual) for loading instructions. With rear seat removed for cargo, maximum baggage is as follows:		
	Aft of spar cover	270 lb.	(+135)
	On and forward of spar cover	200 lb.	(+108)
	Item 107, if installed, must also be removed.		
Fuel Capacity	<u>Tank</u>	<u>Capacity Gal.</u>	<u>Usable Gal.</u> <u>Arm</u>
	L & R main	20 ea.	17 ea. (+75)
	Optional Fuel System (Item 107)		
	Fuselage Aux. System	20	19.5 (+132)
			or (+133)
	<i>See NOTE 1 for data on unusable fuel.</i>		
Oil Capacity	10 qt. (+36) NOTE 1 for data on unusable oil.		

IV. Model C35, Bonanza, 4 PCLM (Utility Category) (cont'd)

Control surface movements	Wing flaps		Down	30°
	Aileron tab		Fixed	
	Aileron	Up	20°	Down 20°
	Elevator tab	Up	8°	Down 31°
	"V" tail elevator action	Up	22.5°	Down 17.5°
	"V" tail rudder action	Up	21°	Down 21°
	"V" tail maximum combination rudder elevator action	Up	35°	Down 30°
	Serial Nos. Eligible	D-2681 through D-3400 (except D-3293)		
Required Equipment	Items 1, 101, 103, 113, 201, 202, 301, 302, 404(u), 601(b), 608.			

V. Model 35R, Bonanza, 4 PCLM (Utility Category), approved June 6, 1951

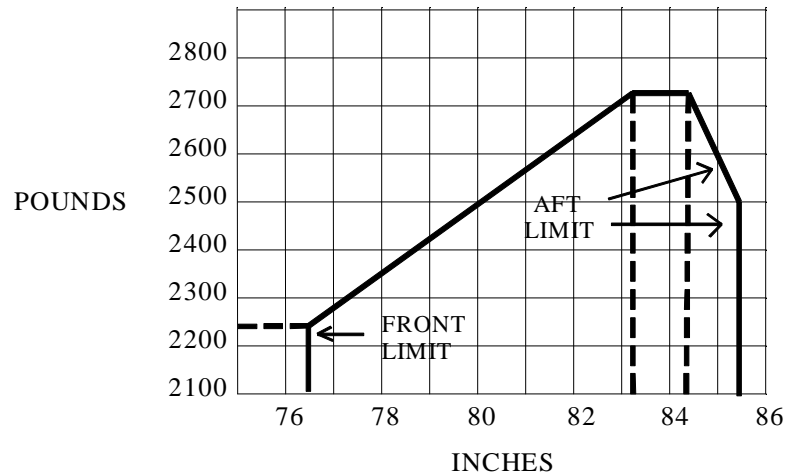
Engine	Continental E-185-8 with S/N 5122D and above (<i>see Engine Spec. E-246</i>). (<i>See also Item 111 for optional engine.</i>)			
Fuel	80 min. grade aviation gasoline			
Engine limits	Takeoff (one minute)	2450 rpm (196 hp)		
	For all other operations	2050 rpm (165 hp)		
Airspeed limits	Maneuvering	130 mph	(113 knots)	True Ind.
	Maximum structural cruising	160 mph	(139 knots)	True Ind.
	Never exceed	202 mph	(176 knots)	True Ind.
	Flaps extended	105 mph	(91 knots)	True Ind.
	Landing gear extended	125 mph	(109 knots)	True Ind.
C.G. Range (landing gear extended)	(+83.7) to (+84.4) at 2650 lb.			
	(+80.0) to (+85.4) at 2405 lb.			
	(+75.9) to (+85.4) at 2140 lb. or less <i>For diagram see Section II.</i>			
Empty Weight C.G. Range	None			
Maximum Weight	2650 lb.			
No. of Seats	4 (2 at +86, 2 at +116)			
Maximum Baggage	270 lb. (+139). Load in accordance with loading chart in Airplane Flight Manual.			
Fuel Capacity	<u>Tank</u>	<u>Capacity Gal.</u>	<u>Usable Gal.</u>	<u>Arm</u>
	L & R main	20 ea.	17 ea.	(+75)
	Optional Fuel System (Item 107)			
	Fuselage Aux. System	20	19.5	(+132) or (+133)
	<i>See NOTE 1 for data on unusable fuel.</i>			
Oil Capacity	10 qt. (+36)			
	<i>See NOTE 1 for data on unusable oil.</i>			
Control surface movements	Wing flaps		Down	30°
	Aileron tab		Fixed	
	Aileron	Up	20°	Down 20°
	Elevator tab	Up	10°	Down 31°
	"V" tail elevator action	Up	20°	Down 20°
	"V" tail rudder action	Up	21°	Down 21°
	"V" tail maximum combination rudder elevator action	Up	35°	Down 35°

V. Model 35R, Bonanza, 4 PCLM (Utility Category) (cont'd)

Serial numbers eligible	D-25R1 and up (note that the "D-25" is the retained original Model 35 S/N and the number following the "R" designation is the numerical order of modification. All Model 35 (Section I) S/N's are eligible for modification by Beech Aircraft Corporation in accordance with Beech Dwg. 35-000009.	
Required equipment	Items 1, 101, 103, 113, 201, 202, 301, 404(e) and (n) or 404(v) and (w), 601(b).	

VI. Model D35, Bonanza, 4 PCLM (Utility Category), approved January 5, 1953

Engine	Continental E-185-11 with S/N 5122D and above (see Engine Spec. E-246) (See also Item 111 for optional engine.)	
Fuel	80 min. grade aviation gasoline	
Engine limits	Takeoff (one minute)	2600 rpm (205 hp)
	For all other operations	2300 rpm (185 hp)
Airspeed limits	Maneuvering	130 mph (113 knots) True Ind.
	Maximum structural cruising	160 mph (139 knots) True Ind.
	Never exceed	202 mph (176 knots) True Ind.
	Flaps extended	105 mph (91 knots) True Ind.
	Landing gear extended	125 mph (109 knots) True Ind.
C.G. Range (landing gear extended)	(+83.2) to (+84.3) at 2725 lb. (+80.1) to (+85.4) at 2500 lb. (+76.5) to (+85.4) at 2240 lbs. or less	



Empty Weight C.G. Range	None
Maximum Weight	2725 lbs.
No. of Seats	4 (2 at +86, 2 at +116)
Maximum Baggage	270 lb. (+139). For Model D35 refer to the Loading Chart (included in Airplane Flight Manual) for loading instructions. With rear seat removed for cargo, maximum baggage is as follows:
	Aft of spar cover 270 lb. (+135)
	On and forward of spar cover 200 lb. (+108)
	Item 107, if installed, must also be removed.

VI. Model D35, Bonanza, 4 PCLM (Utility Category) (cont'd)

Fuel Capacity	Tank	Capacity Gal.	Usable Gal.	Arm
	L & R main	20 ea.	17 ea.	(+75)
	Optional Fuel System (Item 107)			
	Fuselage Aux. System	20	19.5	(+132)
				or (+133)

See NOTE 1 for data on unusable fuel.

Oil Capacity 10 qt. (+36)
See NOTE 1 for data on unusable oil.

Control surface movements	Wing flaps	Down	30°
	Aileron tab	Fixed	
	Aileron	Up	20°
		Down	20°
	Elevator tab	Up	8°
		Down	31°
	"V" tail elevator action	Up	22.5°
		Down	17.5°
	"V" tail rudder action	Up	21°
		Down	21°
	"V" tail maximum combination rudder elevator action	Up	35°
		Down	30°

Serial numbers eligible D3401 through D3698

Required equipment Items 1, 101, 103, 113, 201, 202, 301, 302, 404(t), 601(b), 608.

VII. Model E35, Bonanza, 4 PCLM (Utility Category), approved January 15, 1954

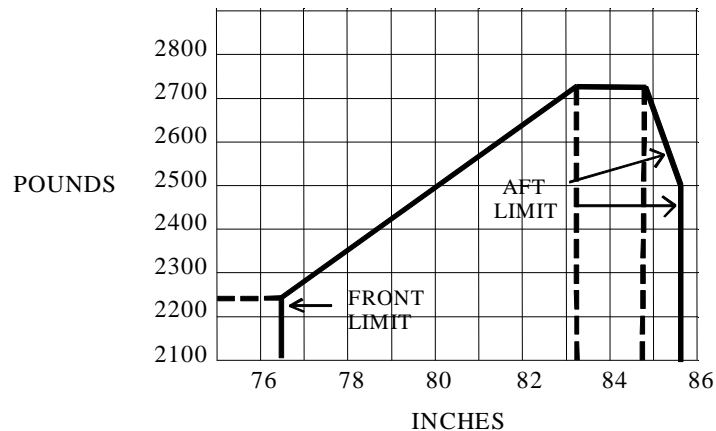
Engine Continental E-185-11 with S/N 5122D and above (see Engine Spec. E-246)
(See also Item 111 for optional engine.)

Fuel 80 min. grade aviation gasoline

Engine limits
Takeoff (one minute) 2600 rpm (205 hp)
For all other operations 2300 rpm (185 hp)

Airspeed limits
Maneuvering 130 mph (113 knots) True Ind.
Maximum structural cruising 175 mph (152 knots) True Ind.
Never exceed 202 mph (176 knots) True Ind.
Flaps extended 105 mph (91 knots) True Ind.
Landing gear extended 125 mph (109 knots) True Ind.

C.G. Range (landing gear extended)
(+83.2) to (+84.9) at 2725 lb.
(+80.1) to (+85.7) at 2500 lb.
(+76.5) to (+85.7) at 2240 lb. or less



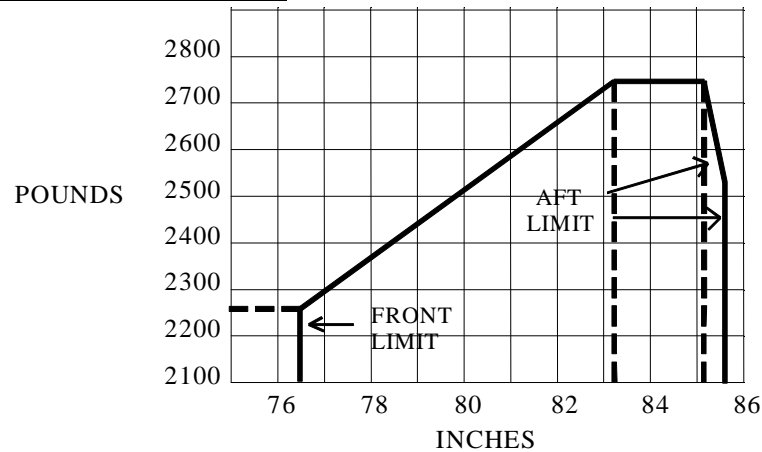
Empty Weight C.G. Range None

VII. Model E35, Bonanza, 4 PCLM (Utility Category) (cont'd)

Maximum Weight	2725 lb.			
Number of Seats	4 (2 at +86, 2 at +118)			
Maximum Baggage	270 lb. (+140). For Model E35 refer to the Loading Chart (included in the Airplane Flight Manual) for loading instructions. With rear seat removed for cargo, maximum baggage is as follows:			
	Aft of spar cover	270 lb.	(+135)	
	On and forward of spar cover	200 lb.	(+108)	
	Item 107, if installed, must also be removed.			
Fuel Capacity	<u>Tank</u>	<u>Capacity Gal.</u>	<u>Usable Gal.</u>	<u>Arm</u>
	L & R main	20 ea.	17 ea.	(+75)
	Optional Fuel System (Item 107)			
	Fuselage Aux. System	20	19.5	(+132)
			or	(+133)
	<i>See NOTE 1 for data on unusable fuel.</i>			
Oil Capacity	10 qt. (+36)			
	<i>See NOTE 1 for data on unusable oil.</i>			
Control surface movements	Wing flaps		Down	30°
	Aileron tab		Fixed	
	Aileron	Up	20°	Down 20°
	Elevator tab	Up	8°	Down 31°
	"V" tail elevator action	Up	22.5°	Down 17.5°
	"V" tail rudder action	Up	21°	Down 21°
	"V" tail maximum combination rudder elevator action	Up	35°	Down 30°
Serial numbers eligible	D-3293 and D-3699 through D-3998			
Required equipment	Items 1, 101, 103, 113, 201, 202, 301, 302, 404(r), 601(b), 608.			

VIII. Model F35, Bonanza, 4 PCLM (Utility Category), approved January 5, 1955

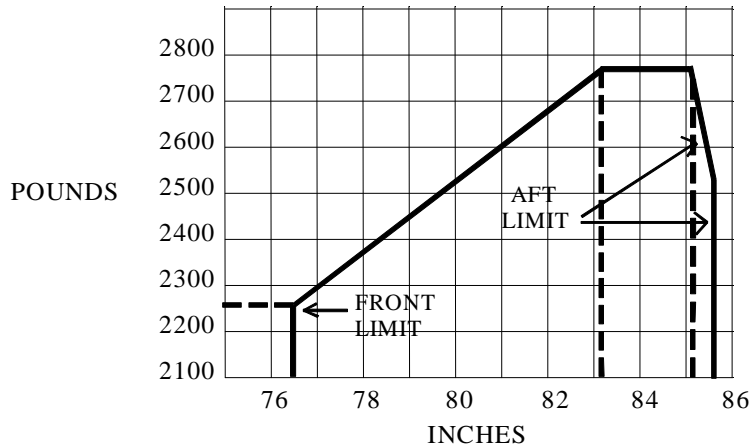
Engine	Continental E-185-11 with S/N 5122D and above (see Engine Spec. E-246) (See also Item 111 for optional engine.)			
Fuel	80 min. grade aviation gasoline			
Engine limits	Takeoff (one minute)	2600 rpm	(205 hp)	
	For all other operations	2300 rpm	(185 hp)	
Airspeed limits	Maneuvering	130 mph	(113 knots)	True Ind.
	Maximum structural cruising	175 mph	(152 knots)	True Ind.
	Never exceed	202 mph	(176 knots)	True Ind.
	Flaps extended (normal)	105 mph	(91 knots)	True Ind.
	Landing gear extended (normal)	125 mph	(109 knots)	True Ind.
C.G. Range (landing gear extended)	(+83.2) to (+85.1) at 2750 lbs. (+80.1) to (+85.7) at 2525 lbs. (+76.5) to (+85.7) at 2265 lbs. or less			

VIII. Model F35, Bonanza, 4 PCLM (Utility Category) (cont'd)

Empty Weight C.G. Range	None			
Maximum Weight	2750 lb.			
No. of Seats	4 (2 at +86, 2 at +118)			
Maximum Baggage	270 lb. (+140). For weight and balance information refer to FAA Approved Flight Manual. With rear seat removed for cargo, maximum baggage is as follows:			
	Aft of spar cover	270 lb. (+135)		
	On and forward of spar cover	200 lb. (+108)		
	Item 107, if installed, must also be removed.			
Fuel Capacity	<u>Tank</u>	<u>Capacity Gal.</u>	<u>Usable Gal.</u>	<u>Arm</u>
	L & R main	20 ea.	17 ea.	(+75)
	Optional Fuel System (Item 107 and 122)			
	Fuselage Aux. System	20	19.5	(+132)
				or (+133)
	Win Aux. System.	20	19	(+ 94)
	<i>See NOTE 1 for data on unusable fuel.</i>			
Oil Capacity	10 qt. (+36)			
	<i>See NOTE 1 for data on unusable oil.</i>			
Control surface movements	Wing flaps		Down	30°
	Aileron tab		Fixed	
	Aileron	Up 20°	Down	20°
	Elevator tab	Up 8°	Down	31°
	"V" tail elevator action	Up 22.5°	Down	17.5°
	"V" tail rudder action	Up 21°	Down	21°
	"V" tail maximum combination rudder elevator action	Up 35°	Down	30°
Serial numbers eligible	D-3999 through D-4391 (except D-4376)			
Required equipment	Items 1, 101, 103, 113, 201, 202, 301, 302, 404(s), 601(b), 608.			

IX. Model G35, Bonanza, 4 PCLM (Utility Category), approved December 1, 1955

Engine	Continental E-225-8 with S/N 30087 and above (see Engine Spec. E-246)	
Fuel	80 min. grade aviation gasoline	
Engine limits	Takeoff (one minute)	2650 rpm (225 hp)
	For all other operations	2300 rpm (185 hp)
Airspeed limits	Maneuvering	130 mph (113 knots) True Ind.
	Maximum structural cruising	175 mph (152 knots) True Ind.
	Never exceed	202 mph (176 knots) True Ind.
	Flaps extended (normal)	120 mph (104 knots) True Ind.
	Landing gear extended (normal)	140 mph (122 knots) True Ind.
C.G. Range (landing gear extended)	(+83.2) to (+85.1) at 2775 lb. (+79.9) to (+85.7) at 2525 lb. (+76.5) to (+85.7) at 2265 lb. or less	



Empty Weight C.G. Range	None
Maximum Weight	2775 lb.
No. of Seats	4 (2 at +86, 2 at +118)
Maximum Baggage	270 lb. (+140). For weight and balance information refer to FAA Approved Flight Manual. With rear seat removed for cargo, maximum baggage is as follows:

Aft of spar cover	270 lb. (+125)
On and forward of spar cover	200 lb. (+108)

Item 107, if installed, must also be removed.

Fuel Capacity	<u>Tank</u>	<u>Capacity Gal.</u>	<u>Usable Gal.</u>	<u>Arm</u>
	L & R Main	20 ea.	17 ea.	(+ 75)
	Optional Fuel System (Item 107 and 122)			
	Fuselage Aux. System	20	19.5	(+132)
				or (+133)
	Wing. Aux. System	20	19	(+ 94)

See Note 1 for data on unusable fuel.

Oil Capacity 10 qt. (+36)
See NOTE 1 for data on unusable oil.

IX. Model G35, Bonanza, 4 PCLM (Utility Category) (cont'd)

Control surface movements	Wing flaps		Down	30°
	Aileron tab		Fixed	
	Aileron	Up	20°	Down 20°
	Elevator tab	Up	8°	Down 31°
	"V" tail elevator action	Up	22.5°	Down 17.5°
	"V" tail rudder action	Up	21°	Down 21°
	"V" tail maximum combination rudder elevator action	Up	35°	Down 30°
Serial numbers eligible	D-15002, D-4376 and D-4392 through D-4865			
Required equipment	Items 1, 101, 103, 113, 201, 202, 301, 302, 404(q), 601(b), 608.			

Specifications Pertinent to All Models

Datum	83.1 inches forward of the jack pads on the front spars.
Leveling means	(Models 35, A35, B35, C35, 35R) Leveling plates inside baggage door. (Models D35, E35, F35, G35) Two external screws in bulkhead aft of baggage compartment on left side. (Use plumb bob).
Certification basis	Part 03 of the Civil Air Regulations effective November 13, 1945. Type Certificate No. 777 issued March 25, 1947. Application for Type Certificate dated June 20, 1945. Repair and alteration data may be approved under delegation option procedures of Federal Aviation Regulations 21.
Production basis (all models)	Production Certificate No. 8. Original airworthiness certificates for airplanes with S/N's D-3551 through D-4865 and D-15002 were issued under delegation option provisions of FAR 21.
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 (*). This symbol denotes that approval has been obtained by someone other than the aircraft manufacturer. An item so marked may not have been manufactured under an FAA monitored or approved quality control system. Conformity must be determined if the item is not identified by a Form FAA-186, PMA or other evidence of FAA production approval. An item preceded by two asterisks (**) indicates approval under delegation option provisions of Part 21 of the Federal Aviation Regulations.

Propeller and Propeller Accessories (excepting Deicing Equipment)

1. Beech controllable propeller
 - (a) Hub R203-100, blades B201-217-88 (eligible on Models 35, A35) 67 lb. (+ 2)
For interchangeable blade models, see Propeller Spec. P-807. (Note 6)
Diameter: not over 88 in., not under 86-1/4 in.
Static rpm at maximum permissible throttle setting (no additional tolerance permitted):
Not over 1925, not under 1825
Pitch settings at 33 in. sta.:
Low 13° high - not under 26°
 - or (d) Hub B200-100, blades B200-88 (eligible on Models 35, A35, B35, 35R) 56 lb. (+ 2)
For interchangeable blade models, see Propeller Spec. P-867 (Note 6)
Diameter: not over 88 in., not under 86-1/4 in.
Static rpm at maximum permissible throttle setting (no additional tolerance permitted):
Not over 1950, not under 1850, or not over 2020, not under 1920
Pitch settings at 33 in. sta.:
Low 13°, high - not under 26°, or low 12°, high not under 26°
Only airplanes with engines having S/N 5122D and above are eligible to use 12° low pitch and 2020-1920 static rpm range (see Engine Spec. E-246)

- or (e) Hub 215-109, blades 215-207-88 (eligible on Models 35, A35, B35, C35, D35, E35, F35, 35R). Also see Item 111(d) for E-225-8 engine eligibility). 67 lb. (+ 2)
 Diameter: (All models eligible except C35) not over 88 in., not under 86-1/4 in. (Model C35) not over 88 in., not under 86 in. with E185 engines having S/N below 22183 or not under 84 in. with E185 engines having S/N 22183 and above.
 Static rpm at max. permissible throttle setting (no additional tolerance permitted): Models 35, A35, B35, 35R) not over 2040, not under 1940 or not over 2165, not under 2065. (Models D35, E35, F35) not over 2230, not under 2130. (Model C35 with 88 in. prop.) not over 2230, not under 2130. (Model C35 with 84 in. prop.) not over 2250, not under 2150.
 Pitch settings at 33 in. sta.: (Models 35, A35, B35, 35R) low 16°, high - not under 30° or low 15°, high - not under 30°
 (Models D35, E35, F35) low 13°, high - not under 30°
 (Model C35 with 88 in. diam. prop.) low 13°, high - not under 30°
 (Model C35 with 84 in. diam. prop.) low 13-3/4°, high - not under 30°
 Only Models 35, A35, B35 and 35R airplanes with engines having S/N 5122D and above are eligible to use 15° low pitch and 2165-2065 rpm range (see Engine Spec. E-246).
- or (f) Hub 215-109, blades 215-213-84 (eligible on Models A35, B35, C35, D35, E35, F35 and G35 with E-225-8 engines having S/N 30087 and above) (See Items 111(b) and (d)). 67 lb. (+ 2)
 For interchangeable blade models, see Propeller Spec. P-873 (Note 6)
 Diameter: not over 84 in., not under 84 in. (Models C35, D35)
 not over 84 in., not under 82 in. (Models A35, B35, E35, F35, G35)
 Static rpm at max. permissible throttle setting (no additional tolerance permitted): not over 2380, not under 2280
 Pitch settings at 33 in. sta.: low 12-1/2°, high - not under 29-1/2°
- and (b) Pitch control motor installation 5 lb. (+23)
 or (+ 8)
- and (c) Propeller spinner 3 lb. (+ 0)
- or (g) Hub 215-109, blades 215-213-84 (eligible on Models C35, D35, and F35 with E-185-11 engines having S/N 22183 and above). For interchangeable blade models, see Propeller Spec. P-873 (Note 6) 67 lb. (+ 2)
 Diameter: not over 84 in., not under 82 in. (Model F35)
 not over 84 in., not under 84 in. (Models C35, D35)
 Static rpm at maximum permissible throttle setting: not over 2250, not under 2150.
 No additional tolerance permitted.
 Pitch settings at 33 in. sta.:
 Low 13-3/4°, high - not under 30°
2. Beech constant speed propeller (eligible on Models 35, A35, B35, C35, D35, E5, 35R) 58 lb. (+ 2)
- (a) Hub B200-105, blades B200-220-88 (includes Beech B200-236 hydraulic motor). 58 lb. (+ 2)
 For interchangeable blade models, see Propeller Spec. P-867 (Note 6).
 Diameter: not over 88 in., not under 86-1/4 in.
 Pitch settings at 33 in. sta.:
 Low 8.5°, high - not under 25°
- or (e) Hub 215-112, blades 215-207-88 (includes Beech B200-236 (hydraulic motor) 69 lb. (+ 2)
 Diameter: not over 88 in., not under 86 in. with E-185 engines having S/N below 22183 or not under 84 in. with E-185 engines having S/N 22183 and above.
 Pitch settings at 33 in. sta.:
 Low 12°, high - not under 30°
- and (b) Propeller governor installation (includes Beech B200-237 governor and B200-238 adapter or B200-239 governor (required with (e)). 7 lb. (+39)
- and (c) Propeller spinner (Beech 35-960026) 3 lb. (+ 0)

3. Constant speed propeller
- * (a) Hub B200-100, blades B200-220-88 (eligible on Models 35, A35, B35, 35R). 56 lb. (+ 2)
 For interchangeable blade models, see Propeller Spec. P-867 (Note 6).
 Diameter: not over 88 in., not under 86-1/4 in.
 Pitch settings at 33 in. sta.:
 Low 9.5°, high - not under 26° (Models 35, A35)
 Low 8-1/2°, high - not under 25° (Model B35)
 - or *(e) Hub R203-100, blades R201-217-88 (eligible on Models 35 and A35); 67 lb. (+ 2)
 For interchangeable blade models, see Propeller Spec. P-807 (Note 6).
 Diameter: not over 88 in., not under 86-1/4 in.
 Pitch settings at 33 in. sta.:
 Low 9.5°, high - not under 22.5°
 - or (f) Hub 215-107, blades 215-207-88 (eligible on Models 35, A35, B35, C35, D35, 67 lb. (+ 2)
 E35, F35, 35R and G35. (See also Item 111(d) for E-225-8 engine eligibility).
 Diameter: not over 88 in., not under 86 in. with E-225 engines with S/N 30087
 and above.
 Pitch settings at 33 in. sta.:
 Low 11°, high - not under 30°
 - or (g) Hub 215-107, blades 215-213-84 (eligible on Models A35, B35, C35, D35, E35, 67 lb. (+ 2)
 F35, G35 with E-225-8 engines having S/N 30087 and above - see Items 111(b) and
 (d), and on Models C35, D35, F35 with E-185-11 engines having S/N 22183 and above).
 For interchangeable blade models, see Propeller Spec. P-873 (Note 6)
 Diameter: not over 84 in., not under 82 in. (Models A35, B35, E35, F35, G35)
 Not over or under 84 in. (Models C35, D35)
 Pitch settings at 33 in. sta.:
 Low 11-1/2°, high not under 30°
 - and (b) Propeller governor (including Flight Research Engineering Corp. automatic propeller 7 lb. (+59)
 control Model 31A) installation to be accomplished per Flight Research Dwg. 31-175.
 - and (c) Propeller spinner 3 lb. (+ 0)
 - and (d) Pitch control motor installation 5 lb. (+23)
 or (+ 8)
 Approved Airplane Flight Manual, Item 404 dated October 11, 1950, required
 when Item 3(f) installed. Flight Research Airplane Flight Manual Supplement dated
 July 20, 1950, must be appended to Approved Airplane Flight Manual, Item 404 or
 Approved Airplane Flight Manual, Item 404 dated October 11, 1950, required when
 Items 3(a) or (e) installed.
- *4. Hartzell controllable propeller (eligible on Models 35, A35) 69 lb. (+ 2)
 (installation per Hartzell Dwg. B-1121)
 Hub HC-12x20-7B blades, 8433-0 (includes propeller control valve and installation components).
 Diameter: not over 84 in., not under 82-1/2 in.
 Static rpm at maximum permissible throttle setting: (no additional tolerance permitted):
 not over 2050, not under 2000
 Pitch settings at 30 in. sta.: Low 16-1/2°, high 27°
 Counterweight length, 4-1/8 in.
 Only airplanes with engines having silver main thrust bearings, CMC P/N 40644, eligible for
 this propeller installation. Hartzell Airplane Flight Manual Supplement dated July 1, 1949,
 must be appended to Approved Airplane Flight Manual , Item 404, when this propeller
 is installed.
- *5. Hartzell constant speed propeller (eligible on Models 35, A35, B35) (installation per Hartzell
 Installation Instruction No. 1 dated October 25, 1950, revised August 22, 1951, and Hartzell
 Dwg. B-161 and B-145)
- (a) Hub HC-12x20-7C, blades 8433-0 69 lb. (+ 2)
 Diameter: not over 84 in., not under 82-1/2 in.
 Pitch settings at 30 in. sta.:
 Low 11°, high 25°
 Counterweight length 4-1/8 in.
 Only airplanes with engines having silver main thrust bearings, CMC P/N 40644
 eligible for this propeller installation.

- and (b) Governor installation includes Hartzell Model A-1 governor and C-137-1 Tee drive. Hartzell Airplane Flight Manual Supplement dated August 22, 1951, must be appended to Approved Flight Manual, Item 404, when this propeller installed. 7 lb. (+ 42)
- *6. Hartzell constant speed propeller (eligible with Item 111(c) only)
- (a) Hub HC-12x20-1, blades 9333C-3 64 lb. (+ 0)
Diameter: not over 90 in., not under 88-1/8 in.
Pitch settings at 34 in. sta.:
Low 15°, high 35°
- (b) Propeller spinner, Hartzell 6 lb. (+ 9)
- and (c) Hamilton Standard 1Q12-G1 propeller governor 5 lb. (+ 9)

Engines and Engine Accessories - Fuel and Oil Systems

101. Fuel pumps
- (a) Deleted May 20, 1948
- (b) Engine-driven, Romec RD-7750, RD-7750-1, RD-7790, RD-7420, RD-7420B or RD-7420C 1 lb. (+40)
- or (c) Engine-driven, Thompson TF-1100-M2, TF-1100-2 or TF-1900 1 lb. (+40)
- and (c) Wobble-Saval No. 5262 2 lb. (+74)
- or (d) Wobble-Beech 35-921171 or 35-924065 or 35-924230, 35-924065 2 lb. (+74)
or 35-924230 required in Models A35, B35 and C35. 35-924230 required in Models D35, E35, F35, G35 and 35R. When 35-924230 installed, Beech Airplane Flight Manual Supplement No.1 dated July 28, 1951, must be appended to Approved Airplane Flight Manual, Item 404, if manual is dated earlier than May 2, 1951.
102. Oil radiator - Harrison 8513295 10 lb. (+37)
103. Carburetor air cleaner 1 lb. (+11)
104. Vacuum pump - ARO A51DA or A-513DB or Pesco 3P-194-F 4 lb. (+37)
105. Starter
- (a) Delco-Remy 1190658 (with CMC E-185-1 engine only) 15 lb. (+41)
- (b) Delco-Remy 1109660 (with CMC E-185-1 engine only) 21 lb. (+42)
- (c) Beech 35-369005 (with CMC E-185-8 or -11 engine only) 18 lb. (+42)
- *(d) Precision Machine Works E-80-1001 (with CMC-E-185-8 engine only) 18 lb. (+42)
- (e) Eclipse type 36E14 or 36E14-1-C (with CMC E-185-8 or -11 or E-225-8 engines only) 19 lb. (+42)
- *(f) Eclipse type E80-13B (with Item 111(c) only) 19 lb. (+43)
- (g) Eclipse E80 Type 397 Model 13 with mounting pad modified per Beech Dwg. 35-369005 and clutch setting 200 ft.-lb. (with CMC E-225-8 engine only) equivalent to CMC P/N 530983. Models 35, 35R, A35, B35, C35, D35 (S/N's D-3401 through D-3550)
106. Oil cooler tank (Beech 35-929013) replacing Item 102 and standard oil tank. Arm of oil is +43. See Note 1 for data on unusable oil. -9 lb. (+35)
107. 20 gal. auxiliary fuel tank. When this item is installed in Model 35, baggage arm is +145 and weight of baggage and fuel must not exceed 120 lb. See Note 1 for data on unusable fuel. 17 lb. (+132)
or (+133)
108. Oil cooler tank (Beech 35-929144, 35-939160, 35-939164 or 35-939172) replacing Item 102 and standard oil tank. Arm of oil is +36. See Note 1 for data on unusable oil. -10 lb. (+32)
109. Fuel booster pump installation - includes Adel 20653 (with suffix "H" or later revision letter in serial number or 1/8 red band around pump body) or Thompson TF-36700 electric fuel pump. (Thompson TF-1900 or Romec R-7420B engine-driven fuel pump required with this item.) 6 lb. (+57)
110. Winterization equipment
- (a) Engine cooling air inlet baffle, Beech 35-910277 (for airplanes with Item 108) 1 lb. (+10)
- (b) Oil cooler tank valve, Beech 35-090076 (for airplanes with Item 106) 2 lb. (+45)

111. Engine
- (a) VMV R-185-8 or -11 (same limits as for E-185-1 or -8 in specific airplane model). Use actual weight
Installation E-185-11 in Models 35 and A35 will require rework of engine mounts in accordance with Beech instructions.
- (b) Continental E-225-8 with S/N 30087 and up (see Engine Spec. E-267 replacing E-185-11 in Model E35 or F35 only.
Engine limits: Takeoff (one minute), 2650 rpm (225 hp)
For all other operations, 2300 rpm (185 hp)
Fuel: 80 min. grade aviation gasoline
One of the following propellers must be installed:
Beech controllable propeller
As listed under Item 1(e) or (f) whichever is applicable
Beech constant speed propeller
As listed under Item 3(f) or (g) whichever is applicable
- or *(c) Lycoming GO-435-D1 in Models C35 and D35 only. *See Note 4 for limitations.*
- or *(d) Continental E-225-8 replacing E-185 engine in Models 35, A35, B35, C35 and D35 with S/N's D-3698 and below, and 35R with S/N D-25R1 and up.
Engine limits: (Model 35)
Takeoff (one minute) 185 hp., 2300 rpm 26.5 in. Hg MP
For all other operations 165 hp, 2050 rpm, 27.5 in. Hg MP
(Models A35, B35, C35, D35, F35, 35R)
Takeoff (one minute) 225 hp, 2650 rpm, full throttle or 205 hp, 2600 rpm, 26.5 in. Hg. MP. For all other operations, 185 hp, 2300 rpm, 26.5 in. Hg MP
Fuel: 80 min. grade aviation gasoline
Propeller: Item 1(e) with 13° low pitch for Models A35, B35, C35, D35, and 15° low pitch for Model 35; or Item 1(f), 3(f), or 3(g)
Continental E-225-8 engine is mechanically interchangeable with the E-185 engine without major installation alterations. Use of E-185-11 engine mounts and revised airplane supporting brackets may be necessary to adapt the E-225 engine (see Item 111(a)). Beech 35-924230 hand fuel pump is required for 225 hp takeoff rating (see Item 101(d)). Engine tachometer and manifold pressure gauge markings are to agree with pertinent E-225 engine limits. Airplane Flight Manual Supplement covering revised engine operating limitations should be submitted to Regional Chief, Engineering and Manufacturing Branch, for approval before attachment to Airplane Flight Manual, Item 404.
- *112. Engine fire extinguisher system (Van's Air Service Dwg. 5-4 dated July 15, 1949, with operation instructions 5-4). 22 lb. (+75)
113. Oil cooler tank (Beech 35-939172). *See Note 1 for data on unusable oil.* 6 lb. (+39)
- *114. 10 gal. auxiliary fuel tank installed per Aircraftmen, Inc. (Oklahoma City, Oklahoma) installation instructions and Dwg. AT-A35 for Models A35, B35, C35, D35, E35, F35, G35 or AT-35 for Model 35. Approved Airplane Flight Manual (Item 404) Model 35 dated May 22, 1950, or later; Model A35 dated May 22, 1950, or later; Model B35 dated December 16, 1949, or later; Model C35 dated July 27, 1951, or later; Model D35 dated January 5, 1953, or later; Model E35 dated December 15, 1953, or later; Model F35 dated January 1, 1955, or later; or Model G35 dated November 18, 1955, or later is required with this installation. 12 lb. (+127)
- *115. Oil cooler shutter. Installed in accordance with Aircraftmen, Inc., Oklahoma City, Oklahoma, installation instructions and Dwg. AOS 35-1 and -2. (For airplanes with oil cooler tank mounted to engine, see Items 108 and 113). 1 lb. (+45)
- *116. Engine breather oil separator installed in accordance with Roscoe Turner Aeronautical Corporation, Indianapolis, Indiana, installation instructions dated July 20, 1951. (Eligible on airplanes having S/N 1885 and up and prior airplanes equipped with proper engine breather system). No weight change

- *117. 18 gal. auxiliary fuel tank installed in accordance with Remmert-Werner, Inc., St. Louis, Mo., Dwg. 35-01002, sheets 1 and 2, Models 35, A35, B35, C35, 35R. Remmert-Werner Airplane Flight Manual Supplement dated August 27, 1952, is required with this installation. Fuel arm at +135. 35 lb. (+133)
- *118. Fuel pumps (with Item 111(c) only)
 (a) Engine-driven - Thompson AN-4100TF 2 lb. (+41)
 and (b) Wobble-Beech 35-924230 2 lb. (+74)
 With 35-924230 pump installed, Beech Airplane Flight Manual Supplement No. 1 dated July 28, 1951, must be appended to Approved Airplane Flight Manual, Item 404, if manual is dated earlier than May 2, 1951.
- *119. Oil radiator, Heat Exchangers, Inc., Model 102-G (with Item 111(c) only) 8 lb. (+13)
- *120. Vacuum pump, Pesco B-11, 194-F (with Item 111(c) only) 4 lb. (+43)
- +121. 20 gal. auxiliary fuel tank installed in accordance with Santa Monica Aviation, Municipal Airport, Santa Monica, CA., Dwg 19543 and 19544 (Models D35 and E35) 17 lb. (+132)
122. Two 10 gal. auxiliary wing fuel tanks. See NOTE 1 for data on unusable fuel. 18 lb. (+ 94)
123. Heated fuel tank vents installed per Dwg. 35-001043, Models 35, A35, B35, C35, D35 (S/N D-3401 through D-3550) Neglect weight

Landing Gear

201. Main wheel-brake assemblies
- (a) Two 6.50-8, Type III with 6.50-8 4- or 6-ply rating tires and regular tubes
 (1) Goodyear Model L6.50-8HBM 44 lb. (+97)
 Wheel assembly 530869M or 9530949
 Brake assembly 517731M
- or (b) Two 7.00-8, Type III with 6.50-8 4-ply rating tires and regular tubes 48 lb. (+97)
 (1) Firestone Model DFA-234
 Wheel assembly DFA-233
 Brake assembly CFA-299
- or (c) Two 6.50-8, Type III with side inflatable 6.50-8 4- or 6-ply rating tubeless tires 49 lb. (+97)
 (1) Goodyear PD-931
 Wheel assembly 9532135
 Brake assembly 9532167
- (d) Goodyear 6.50-8, Type III, PD-931 25 lb. (+97)
 Wheel Assembly 9532135
 Brake assembly 9532412
 (Use on aircraft S/N D15002 only)
- or (e) Two Cleveland 6.00-6, No. 20-69, Type III with 7.00-6 6-ply rated tires and regular tubes. 43 lb. (+97)
 Wheel assembly 40-83
 Brake assembly 30-54
 (Use on aircraft modified per Beech Dwg. 35-8004)
202. Nose wheels
- (a) Goodyear L5NBM or L5NBD or Firestone DFA 531-1 with 5.00-5 4-ply tire and tube 10 lb. (+12)
 (b) Goodyear 9532102 with 5.00-5 side inflatable 4-ply rating tubeless tire 9 lb. (+12)
203. Co-pilot brakes 2 lb. (+54)

Electrical Equipment

301. Generator
- (a) 25 a. Delco-Remy P/N 1101879 or 1101886 14 lb. (+42)
 - or (b) 35 a. CMC P/N 533730 (includes CMC generator 532701 equivalent to Delco-Remy 1101887) 16 lb. (+42)
 - or (c) 50 a. CMC assy. P/N 539829 (includes CMC generator 539538 equivalent to Delco-Remy 1101888) or Delco-Remy P/N 1101908 16 lb. (+42)
Models 35 (S/N D-3351 through D-3698), E35, F35, G35
302. Battery
- (a) 12 v. 33 a. hr. 28 lb. (+44)
or (+54)
 - or (b) 12 v. 24 a. hr. Sonotone 22500 installed per Beech Dwg. 35-001040. Item 404(1) or (m) required with this installation. 28 lb. (+54)
 - (c) 12 v. 33 a. hr. (mounted forward of firewall in engine compartment) 28 lb. (+45)
per Beech Dwg. 35-3001.
303. Landing lights, General Electric 4522 1 lb. ea. +72)
- *304. Generator, 5 a. Lear Dwg. A43977 15 lb. (+42)
- *305. Voltage regulator, Delco-Remy 1118340 (with Item 301(a) only) Negligible weight
- *306. Generator, 35 a. Leece-Neville E7A (with Item 111(c) only) 22 lb. (+41)
307. Anti-collision light, lower, installed per Beech Dwg. 35-001031 2 lb. (+102)
- (a) Grimes D7080-1-12
 - or (b) Beech 33-3800001-3 (Whelen)

Interior Equipment

401. Three 1-1/2 min. parachute flares, International 15 lb. (+164)
402. Dual control column (T-Type) Beech 35-524575 3 lb. (+ 72)
403. Ballast
- (a) Beech 35-410236 (9 lb. max) Use actual weight change
(+270)
or (+271)
 - (b) Beech 35-410374 (15 lb. max.) Use actual weight change
(+ 11)
404. FAA Approved Airplane Flight Manual (Models 35, A35 and B35. Approved AFM's of previous dates also acceptable provided latest manual not required by optional equipment item).
- (a) Model 35 dated October 11, 1950, S/N D-1 through D-1500; or Item 404(x).
 - (b) Model A35 dated October 11, 1950, S/N D-1501 through D-2200 and D-15001; or Item 404(v).
 - (c) Model B35 dated October 11, 1950, S/N D-2201 through D-2680; or Item 404(v).
 - (d) Deleted.
 - (e) Model 35R dated May 2, 1951, S/N D-25R1 and up; or Item 404(v) and (w).
 - (f) Deleted.
 - (g) Deleted.
 - * (h) Rawdon Bros. FAA Approved Airplane Flight Manual Supplement dated September 24, 1954 (required with Item 111(c)).
 - (i) Deleted.
 - (j) Deleted.
 - (k) Deleted.
 - (l) FAA Approved Airplane Flight Manual Supplement dated November 20, 1959, required with Item 302(b), (35, A35, B35, C35, D35, S/N D-3401 through D-3550).
 - (m) DMCR Approved Airplane Flight Manual Supplement dated November 20, 1959, required with Item 302(b) (D35, S/N 3551 and up, E35, F35, G35).
 - (n) Airplane Flight Manual Supplement dated May 12, 1972.

- (o) FAA Approved Airplane Flight Manual Supplement dated June 14, 1972, required with Item 111(b) engine in Model F35 airplane with Item 3(f) propeller.
 - (p) FAA Approved Airplane Flight Manual Supplement dated January 9, 1973, required for Model G35 with Item 3(f) propeller.
 - (q) Model G35 Pilot's Operating Handbook and FAA Approved Airplane Flight Manual as revised March 1987 or later.
 - (r) Mode E35 Pilot's Operating Handbook and FAA Approved Airplane Flight Manual as revised March 1987 or later.
 - (s) Model F35 Pilot's Operating Handbook and FAA Approved Airplane Flight Manual as revised March 1987 or later.
 - (t) Model D35 Pilot's Operating Handbook and FAA Approved Airplane Flight Manual as revised March 1987 or later.
 - (u) Model C35 Pilot's Operating Handbook and FAA Approved Airplane Flight Manual as revised March 1987 or later.
 - (v) Model A35 and Model B35 Pilot's Operating Handbook and FAA Approved Airplane Flight Manual dated January 1977 or later.
 - (w) Model 35R Pilot's Operating Handbook and FAA Approved Airplane Flight Manual Supplement dated January 1977 or later, S/N D-25R1 and up.
 - (x) Model 35 Pilot's Operating Handbook and FAA Approved Airplane Flight Manual dated March 1977 or later.
405. Ambulance conversion installation (litter and attendant chair replace rear seat and copilot's seat back)
- (a) Model 35, A35 and B35 12 lb. (+102)
 - (b) Model C35, D35, E35, F35 and G35 No weight change
 - (c) Model 35, A35, B35 and 35R with shoulder harness installed 5 lb. (+85)
406. Air conditioner installation (including water) 16 lb. (+144)
- *407. Lear Model L-2B automatic pilot and 44 lb. (+119)
 Model 1404A altitude controller (optional equipment installed per Lear Dwg. 82861. 2 lb. (+176)
 Either Item 301(b) or 304 and 305 required with this installation.
 The following placard (required for aircraft having Manuals (a), (b) and (c) only) should be installed in a conspicuous place near the autopilot controller in full view of the pilot:
- "1. Do not use autopilot below 300 ft. above terrain except during approach or landing when autopilot not to be used below 100 ft. above terrain. Minimum altitudes do not override any higher minimum operational altitudes.
 2. Do not override autopilot to increase angle of bank."
- Servo slip clutch stall torque settings in in.-lb. \pm 10%; rudder 40; aileron 25; elevator 9.
 Servo drum pitch diameters for all three axes are 1.375 in.
- Lear Model 1350-A2 approach coupler 8 lb. (+144)
- and Lear Model 2203A altitude controller installed per Lear Dwg. 83861AB 3 lb. (+175)
- (a) FAA Approved Airplane Flight Manual Supplement dated April 6, 1951, required with Models 35, A35 and B35.
 - (b) FAA Approved Airplane Flight Manual Supplement dated March 29, 1951, required with Model C35 installation.
 - (c) FAA Approved Airplane Flight Manual Supplement (Lear Dwg. 96120) may be used in lieu of above supplements on all models. Revision dated September 3, 1952, required when altitude controller installed.
 - (d) FAA Approved Airplane Flight Manual Supplement dated November 24, 1954, required with 1350A-2 approach coupler and 2203A altitude controller.
 - (e) FAA Approved Airplane Flight Manual Supplement dated May 20, 1955, required with only autopilot. (Models 35 through F35)
 - (f) FAA Approved Airplane Flight Manual Supplement dated May 23, 1955, required with autopilot with approach coupler. (Models 35 through F35)
 - (g) FAA Approved Flight Manual Supplement dated September 24, 1956, required with autopilot with approach coupler (Models 35 through G35)
 - (h) FAA Approved Flight Manual Supplement dated September 25, 1956, required with autopilot only (Models 35 through G35)

- *408. Mitchell Co-pilot model AK-044 per Mitchell Bulletin 102 (1-655) 23 lb. (+67)
(Weight includes horizon and directional gyros, 8 lb. at +66)
Aileron slip clutch stall torque $20 \pm$ in.-lb.
Pilot overpower force at wheel rim 8 lb.
FAA Approved Airplane Flight Manual Supplement dated January 13, 1955, required.
- *409. Lear ARCON automatic rudder control per Lear Dw. 703088 including one servo 15 lb. (+152)
Model 3000A with capstan pulley (dia. 2.688 in.) and clutch slip torque $76 \pm$ in.-lb. FAA
Approved Lear Airplane Flight Manual Supplement dated February 15, 1955, or
March 31, 1955, required.
- *410. Tactair T-1 autopilot installed per Tactair instruction dated December 6, 1954. Maximum 10 lb. (+129)
servo cable forces: aileron 30 lb., elevator 30 lb. Item 104 (Pesco 3P-194F) vacuum pump
required. FAA Approved Tactair Airplane Flight Manual Supplement for the Model T-1
autopilot dated December 6, 1954, required.
- *411. Fedcal Telephone and Radio Co. Model F-200 autopilot installed per Manual of 19 lb. (+151)
Installation Instructions No. 105 dated December 15, 1955, applicable to autopilot S/N 1882,
1945, 1946, 1000 and 1001 (Model D35 only)
- *412. Federal Telephone and Radio Co. Model F-200 autopilot installed per Section 2 manual 19 lb. (+151)
110 dated July 27, 1956, applicable to autopilot S/N 2001 and up (Model C35, D35, E35,
F35, G35 only). Servo slip clutch torque aileron and elevator 35 in.-lb. \pm 10%. FAA
Approved Flight Manual Supplement dated March 21, 1956, required.
413. Beech Power Flite Control single axis autopilot.
(a) Basic autopilot system per Beech Dwg. 35-001062-1 (D35, S/N D-3551 through 6 lb. (+87)
D-3698, E35, F35, G35 only). Airplane Flight Manual Supplement P/N 33-500013-65
dated September 29, 1961, required.
(b) Autopilot system with course selector directional gyro per Beech Dwg. 35-001062-1,
-3, (D35, S/N D-3551 through D-3698, E35, F35, G35 only). Airplane Flight Manual 10 lb. (+ 79)
Supplement P/N 33-500013-65 dated September 29, 1961, required.
414. FAA Approved Flight Manual
(a) FAA Approved Airplane Flight Manual Supplement P/N 130472 dated June 4, 1965,
required with Item 606 (35, A35, B35, C35, D35 (S/N D-3401 through D-3550), and 35R.
(b) DOA Approved Airplane Flight Manual Supplement P/N 130471 dated June 7, 1965,
required with Item 606 (D35 (S/N D-3551 and up), E35, F35, and G35)
- Miscellaneous (Not listed above)
601. Stall warning indicator installation
(a) Beech Dwg. 35-361005
(b) Safe Flight, Beech Dwg. 35-361025
602. Heated pitot head installation, Beech Dwgs. 35-361100 1 lb. (+74)
- *603. Aileron trimmer control installation per Aircraftmen, Inc., Oklahoma City, Oklahoma,
Dwg. ATC-35.
604. Landing gear door modification installed per installation instructions and drawings as Use actual weight change
listed in Beech Installation Bulletins.
(a) 35-604 (Model 35)
(b) 35-603 (Models A35, B35, C35, D35 and E35)
605. Zep oxygen system per Beech Dwg. 35-001-55-1 or -3
and (1) Beech Dwg. 414-001058
or (2) Beech Dwg. 414-001059

606. Landing Gear Safety System per Beech Dwg. 35-8001
(Models 35R, 35, A35, B35, C35, D35 (S/N D-3401 through D-3550), E35, F35 and G35).
Item 414(a) or (b) required with this item.
607. Emergency Static Source Installation Negligible Weight
(a) Beech Drawing 35-5013 eligible on 35 through G35 and 35R.
Airplane Flight Manual Supplement 35-324428-13 dated January 4, 1965, or later
required D35 (D3551 and after), E35, F35 and G35. Airplane Flight Manual
35-324428-19 dated March 5, 1965, required 35R, 35 through D35 (through D3550).
608. Structural modification per Beech Drawing 35-4016. 3 lb. (+225)

NOTE 1. Current weight and balance report together with list of equipment included in certificated empty weight and loading instructions when necessary must be in each aircraft at the time of original certification.

The certificated empty weight and corresponding center of gravity locations must include system (undrainable) oil (not included in oil capacity) and unusable fuel (not included in usable fuel) as follows:

- With Item 102, unusable oil of 7 lb. at (+39).
- or With Item 106, 108, or 113, unusable oil of 3 lb. at (+37).
- or With Item 111(c) and 119, unusable oil of 2 lb. at (+20).
- With standard wing fuel tanks, unusable fuel of 36 lb. at (± 79).
- Installation of auxiliary fuel tank, Item 107, requires inclusion of additional unusable fuel of 3 lb. at (+132 or +133).
- Installation of auxiliary fuel tank, Item 122, requires inclusion of additional unusable fuel of 5 lb. at (+94).

NOTE 2. The following placards must be displayed in front of and in clear view of pilots:

Model 35:

"This airplane must be operated as a Normal or Utility Category airplane in compliance with the approved operating limitations applicable in each case. All markings and placards on this airplane apply to its operation as a Normal Category Airplane. For Utility Category operations, refer to the Airplane Flight Manual (or Approved Operating Limitations) document for airspeed, weight and maneuvering limitations. No acrobatic maneuvers (including spins) approved for Normal Category Operations."

Model A35, B35, C35, E35, F35, G35 or 35R:

"Utility Category Airplane. Operate in accordance with FAA Airplane Flight Manual. Intentional spins prohibited. No acrobatic maneuvers approved except those listed in the Airplane Flight Manual."

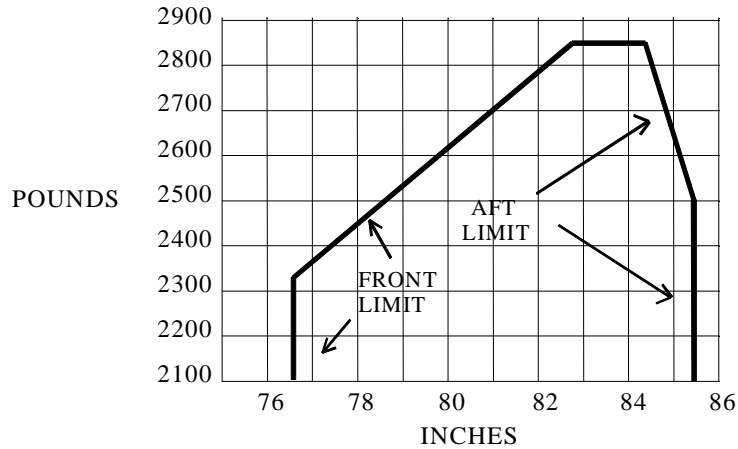
NOTE 3. Deleted January 12, 1950.

NOTE 4. Lycoming GO-435-D1 engine eligible for installation in Models C35 and D35 (Normal Category) as accomplished by Rawdon Bros. Aircraft, Inc., Wichita, Kansas, per approved technical data and the following limitations:

Engine	Lycoming GO-435-D1	
Fuel	80/87 minimum grade aviation gasoline	
Engine Limits	Takeoff (one minute)	3400 rpm (260 b. hp)
	Maximum continuous	3000 rpm (24p b. hp)

Airspeed Limits	Maneuvering	130 mph (113 knots)	True Ind.
	Max. structural cruising	160 mph (139 knots)	True Ind.
	Never exceed	202 mph (176 knots)	True Ind.
	Flaps extended	105 mph (91 knots)	True Ind.
	Landing gear extended	125 mph (109 knots)	True Ind.

C.G. Range (landing gear extended)	(+82.8) to (+84.4) at 2850 lb.
	(+78.6) to (+85.4) at 2500 lb.
	(+76.5) to (+85.4) at 2325 lb.



Maximum Weight	2850 lb.		
No. of Seats	4 (2 at +85, 2 at +116)		
Maximum Baggage	270 lb. (+139). Refer to loading chart revised September 10, 1954 (included in Rawdon Bros. Flight Manual Supplement) for loading instructions.		
Fuel Capacity	<u>Tank</u>	<u>Capacity Gal.</u>	<u>Usable Gal.</u>
	L & R Main	20 ea.	17 ea.
	Optional Fuel System (Item 107)		
	Fuselage Aux. Sys.	20	19.5
			<u>Arm</u>
			(+75)
			(+132)
			or (+133)
	See NOTE 1 for data on unusable fuel.		
Oil Capacity	4 gal. (+57)		
Control Surface Movements	Wing flaps		Down 30°
	Aileron tab	Fixed	
	Aileron	Up 20°	Down 20°
	Elevator tab	Up 10°	Down 31°
	"V" tail elevator action	Up 22.5°	Down 17.5°
	"V" tail rudder action	Up 21°	Down 21°
	"V" tail maximum combination rudder elevator action	Up 35°	Down 30°
Serial Nos. Eligible	D-2681 through D-3550		
Required Equipment	Items 4, 103, 118, 119, 201, 202, 302(a), 306, 307, 404(h), 601(b)		
Certification Basis	CAR 3 effective November 1, 1949, and 3.112C of Amendment 3-4 effective January 15, 1951.		

NOTE 5. When Item 604 installed, landing gear may be lowered at following airspeeds under emergency conditions:

<u>Model</u>	<u>Item</u>	<u>Airspeed</u>
35	604(a)	160 mph (139 knots) True Ind.
A35	604(b)	175 mph (152 knots) True Ind.
B35	604(b)	175 mph (152 knots) True Ind.
C35	604(b)	175 mph (152 knots) True Ind.
D35	604(b)	175 mph (152 knots) True Ind.
E35	604(b)	175 mph (152 knots) True Ind.

Contact Beech Aircraft Corporation as necessary to obtain availability information concerning the drawings which are referenced by this publication.

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