

MODELS: Beechcraft D17R (Army UC-43A), 5 PCLB

T.C. NUMBER: 638 (Approved 5/20/37)

(Same as D17A, T.C. 713 and D17S, T.C. 649, except for engine installation)

Engine	Wright R-975E-3 or Military R-975-11
Fuel	80 min. octane aviation gasoline
Engine limits	Maximum, except take-off (Sea level) 34.8 in.Hg., 2200 rpm (420 hp) (Straight line manifold pressure variation with altitude to 1400 ft.) 34.5 in.Hg., 2200 rpm (420 hp) Take-off (one minute) 36.5 in.Hg., 2250 rpm (450 hp)
Airspeed limits	Level flight or climb - 211 mph

(T.I.A.S.)

Glide or dive - 240 mph
 Flaps extended - 115 mph

Propeller limits Maximum permissible diameter 107 in.
 (for clearance)

C.G. range (+16.4) (6.7 percent MAC) to (+26.0) (23.4 percent
 MAC) (See NOTE 3)

Datum Leading edge of lower wing

MAC 57.2 inches (L.E. of MAC at +12.6)

Leveling means Airplane is level when stagger (horizontal distar
 between wing trailing edges near fuselage) is
 25.6 in.

Maximum weight 4250 lbs.

No. seats 5 (two at +18 and three at +62)

Maximum baggage 125 lbs. (+88) (See Item 216)

Fuel capacity 102 gallons (one fuselage tank, 29 gallons at +32
 one fuselage tank, 49 gallons at +55, one lower
 right wing tank, 24 gallons at +24)
 (See Item 314)

Oil capacity 6-1/2 gallons (-17)

Control surface movements

Elevators	30 degrees up	28 degrees down
Elevator tab	14.5 degrees up	14.5 degrees down
Ailerons	33 degrees up	25 degrees down
Rudder	28 degrees right	28 degrees left
Rudder tab	20 degrees right	20 degrees left
Flaps	43 degrees down	

Serial Nos. eligible D17R-136 and up and all AAF Nos.

Required equipment Items 101, 102, 103, 104, 105, 106, 107, 108, 109,
 110, 111, 112, 113, and 114

Specifications Pertinent to All Models:

Certification basis Type Certificate No. 638 (Aero Bulletin No. 7A
 requirements)

Production basis None (See NOTE A)

Export eligibility Eligible for export as follows, subject to
 provisions of MOP 2-4:

(a) Canada
 Landplane - eligible
 Skiplane - not eligible. However, structure
 complies with Canadian requirements for
 ski gear when item 310 is installed.
 Maximum pedestal height is 17 inches.
 Tread is same as landplane.

(b) All other countries except New Zealand

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

114.	Propeller - Hamilton Standard hub 2D30; blades 6095A-15, 6095A-16, 6167A-15 or 6167A-16, 157 lbs. or blades 6101A-21T or 6101A-22T, 163 lbs. Diameter 8' 3-18" maximum, 8' 7/8" minimum.	(-59)
218.	Constant speed governor (Hamilton Standard type 1A1)	5 lbs. (-52)
223.	Spartan propeller spinner	10-1/2 lbs. (-60)

Engines and Engine Accessories - Fuel and Oil System

101.	Engine ring cowling (NACA type)	39 lbs. (-44)
102.	Carburetor air heater (muff type)	6 lbs. (-30)
103.	Starter (Eclipse E80)	20 lbs. (-26)
109.	Oil radiator (Drawing D17R9850 or Harrison 3074410)	8 lbs. (-32)
110.	Wobble pump (type D-2)	4 lbs. (+12)
111.	Engine driven fuel pump (Pesco 400 series or Romec RD-3080)	5 lbs. (-27)
204.	Oil tanks - 8, 9-1/2 or 11 gallons	+5 lbs. (-17)
205.	Auxiliary fuel tanks	
	(a) One 23 or 24 gallon tank, upper right wing	20 lbs. (+47)
	(b) One 23 or 24 gallon tank, upper left wing	20 lbs. (+47)
	(c) One 23 or 24 gallon tank, lower left wing	20 lbs. (+24)
	(May replace lower right wing tank and/or 29 gallon fuselage tank (17 lbs.))	
207.	Ignition shielding	
	(a) (Breeze)	15 lbs. (-45)
	(b) (Packard)	10 lbs. (-45)
219.	Special oil drain and oil radiator	

	by-pass valve	2.5 lbs.	(-28)
220.	Fuel analyzer (Breeze or Cambridge)	5 lbs.	(-8)
314.	One 23 gallon fuel tank (replacing standard 24 gallon tank)	Neglect weight change	
Landing Gear and Floats			
106.	7.50-10 wheels (Goodyear 10HBM) with 7.50-10 6-ply tires (wheels must be placarded for these tires)	75 lbs.	(+5)
107.	10x3 tail wheel	5 lbs.	(+205)
305.	Dual brakes (copilot)	+2 lbs.	(-8)
306.	Hand operated parking brake	2 lbs.	(-4)
307.	Emergency wood landing skids (Drawing E170140)	16 lbs.	(+22)
308.	Puncture proof tubes	+8 lbs.	(+5)
310.	Skiplane landing gear (Drawings D17820 and D17840)	+3 lbs.	(+20)
311.	10 in. smooth contour tail wheel assembly with 6-ply tire	+1 lb.	(+205)
Electrical Equipment			
104.	Generator 15 amp (Eclipse LV-180)	15 lbs.	(-24)
105.	Battery (Exide 6TS-13-1)	36 lbs.	(-21) or (-)
112.	Landing gear motor (Dumore D5, 40 amp fuse required)	3 lbs.	(+7)
113.	Flap motor (Dumore KL, 30 amp fuse required)	8 lbs.	(+45)
201.	Generator		
	(a) 25 amp (Eclipse D)	20 lbs.	(-23)
	(b) 50 amp (Eclipse E)	25 lbs.	(-23)
217.	Landing lights		
	(a) 1 or 2 (Hall A-6)	3.5 lbs. each	(+35)
	(b) 1 or 2 (Grimes ST250)	3.5 lbs. each	(+21)
	(c) 1 or 2 (Grimes ST-1000 or ST-1220)	4 lbs. each	(+21)
312.	Flap motor (Dumore K special 4253, flexible drive) (30 amp fuse required)	5 lbs.	(+45)
313.	Cannon plug (for electric starter)	3 lbs.	(-2) or (-)
Interior Equipment			
108.	Swing-over control column	11 lbs.	(+6)
202.	Cabin heater (muff type)	3 lbs.	(-30)
203.	Fire extinguisher (pressure type)		
	(a) (Lux - 2 lbs.)	12 lbs.	(-3)
	(b) (Lux - 5 lbs.)	17 lbs.	(-13)
	(c) (Pyrene No. 5C)	12 lbs.	(-10)
	(d) (Ace)	10 lbs.	(-10)
	(e) (Lux - 5 lbs.) (Drawing I-170555)	21 lbs.	(+60)
206.	Parachute flares		
	(a) 3 or 4 -- 1-1/2 minute (International MK-1)	6 lbs. each	(+80) or (+103)
	(b) 1 or 2 -- 3 minutes (Wiley A-8)	18 lbs. each	(+105)
208.	Golf bag compartment (Drawing I-17006) (Maximum capacity 70 lbs. included in baggage allowance)	9 lbs.	(+100)
209.	Parachutes or parachute type chairs, or parachute hammock in rear seat back		
211.	Vacuum equipment		
	(a) Pump (Pesco 194, Romec RD-2112)	4 lbs.	(-26)
	(b) Venturi tubes	1 lb.	(-4)
213.	Fuselage alterations for special purpose equipment		
	(a) Photographic version (Item 214) Includes front and rear floor windows, camera and viewfinder wells, and change in location of rudder cables. Drawings D17015 and D170160	+13 lbs.	(+33)
	(b) Ambulance version (Item 215) Includes rear seat center support and litter floor attachments. (Drawings I-17073 and I-17077)	+2 lbs.	(+53)
	(c) Mailplane version (Item 216) Includes rear seat center support and metal lined baggage compartment and right rear of cabin. (Drawings I-170812 and I-170813)	+15 lbs.	(+73)
214.	Photographic version (See Item 213(a))		
	(a) Camera and viewfinder	110 lbs. max.	(+51)
	(b) Photographers stool	4 lbs.	(+65)
	(These items (a and b) may be installed after fuselage alterations (Item 213(a))		

have been made, and standard rear seat, 31 lbs. (+67), camera and viewfinder cover plates, 3 lbs. (+51), have been removed.)

	(c) Oxygen tank installation	150 lbs. max.	(+73)
215.	Ambulance version (See Item 213(b))		
	(a) Special right or left half rear seat (Drawing I-17073) (May replace standard rear seat, 31 lbs. (+67), if fuselage alterations (Item 213(b)) have been made)	17 lbs. each	(+67)
	(b) First aid box installation	7 lbs.	(+48)
	(c) Ambulance litter (may be installed after fuselage alteration (213(b)) and removal of right half rear seat, 16 lbs. (+21))	14 lbs.	(+42)
216.	Mailplane version (See Item 213(c))		
	(a) Same as 215(a) except Drawing I-170812		
	(b) Removable front and inner sides of forward mail compartment (see (c))	10 lbs.	(+52)
	(c) Mail compartments and capacities:		
	1. Front	200 lbs. max.	(+54)
	2. Rear	150 lbs. max.	(+88)
222.	Package drop (under baggage compartment)	+8 lbs.	(+84)
301.	Control column ("T" type)	No weight change	
303.	Deleted		
309.	Folding back seat (may replace standard front seats)	16 lbs.	(+21)
315.	Utility case	4 lbs.	(+77)
Miscellaneous (not listed above)			
212.	Extra cabin door on right side	+5 lbs.	(+42)
221.	Ballast at tail post (Drawing I-17007)	Max. 25 lbs.	(+224)
302.	Metal cover for lower wing fuel tank	3 lbs.	(+24)
304.	Quick door release	1 lb.	(+25)

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).

NOTE 2. Fuel restriction placard must state: "Use fuselage tank for take-off and landing. Fill fuselage tanks before filling wing tanks. Use wing tanks before using fuselage tanks." When upper wing fuel tanks are installed, add, "Fill lower wing tanks before filling upper wing tanks. Use upper wing tanks before using lower wing tanks."

NOTE 3. Eligible with rear C.G. limit of (+27) when elevator trim tabs with a rounded nose section in accordance with Beech project sketch 6826 against Drawing No. D-176110 are installed.

NOTE A. Prior to original certification, each aircraft manufactured subsequent to August 7, 1945, must satisfactorily pass:

- (a) An inspection for workmanship, materials and conformity before covering, metal priming or final finish is applied.
- (b) A final inspection of the completed aircraft.
- (c) A check of the flight characteristics.