

MODELS: Universal Monocoupe D-145, 2 PCLM

T.C. NUMBER: ATC 529

Engine	Warner Super Scarab Series 40, 50 or 50A 145 hp
Fuel	34 gallons (three tanks - one 4 gallon tank in fuselage and two 15 gallon tanks in wings) (See NOTES 3 and 4)
Cil	4-1/2 gallons
No. passengers	1
Baggage	50 lbs. (aft of cabin) (See NOTE 3)
Standard weight	1860 lbs.
C.G. limits	(+14.6) and (+18.35)
Specification basis	Approved Type Certificate No. 529
Serial numbers	D-103 to D-123, D-128 and D-129 eligible. (See NOTES 3 and 4)

EQUIPMENT:

(Datum is wing leading edge) (* Means net increase)

Class I:

101.	Engine ring cowl (NACA type)	19 lbs.
102.	Wheel streamlines	18 lbs.
103.	Battery (in engine compartment)	20 lbs.
104.	Starter	22 lbs.
105.	Heater	5 lbs.
106.	6.50-10 wheels with brakes	
107.	8 inch streamline tail wheel	
108.	Propeller - Hamilton Standard adjustable metal -	
	(a) For Series 40 or 50 engines - hub 7056, blades 19B-1/2-16 or -17. Diameter 86 inches maximum, 84 inches minimum.	
	(b) For Series 50 A engine - hub 5131, blades 1221-14. Diameter 88 inches.	

Class II:

200. Miscellaneous items as noted in approved weight and balance report.

Class III:

301.	Engine ring cowl (tunnel type with baffles)	Net decrease 3 lbs.
302.	21 inch streamline wheels with brakes	Net decrease 6 lbs.
303.	Battery (aft of cabin)	41 lbs.
304.	Flares	16 lbs.
305.	Radio (aft of cabin)	24 lbs.
306.	Radio mast	4 lbs.
307.	Landing lights	11 lbs.
308.	Generator and control box	24 lbs.
309.	Oil radiator	5 lbs.
310.	6 gallon fuselage fuel tank replacing 4 gallon tank (total capacity 36 gallons) (See NOTE 3)	

NOTE 1. Serial numbers D-103 thru D-113 and D-123 eligible with birch plywood under wing fuel tanks. All others must have mahogany or spruce plywood.

NOTE 2. Serial numbers D-103, D-104 and D-105 have elevator trim tab control lever with ball locking device. Serial number D-108 has elevator trim tab control lever with pin locking device. Serial numbers D-107, D-123 and D-129 must have Ford Model T window lift mechanism.

NOTE 3. The following applies to serial numbers D-106 and D-109 to D-122 only:

- (a) Fuel installation consists of two 18 gallon capacity fuel tanks in wings. Actual capacity is 33 gallons due to the fact that 1-1/2 gallons in each tank cannot be used (but may be drained). Certificate with 33 gallons capacity and include 3 gallons (18 lbs.) in empty weight. Fuel indicator must read zero with 1-1/2 gallons fuel in each tank.
- (b) Oil tank mounted on top of engine mount (not round or elliptical as on other serial numbers). Item 309 must be installed.
- (c) Oleo unit must have provision for adding fluid.
- (d) Landing gear must have cross brace struts instead of streamline tie rods.
- (e) Item 303 must be installed and completely enclosed.
- (f) Elevator trim tab must be removed and bungee device for trimming installed.
- (g) Connecting tube between control sticks must be 7/16 inches instead of 3/8 inches x .065 as on other serial numbers.
- (h) Aileron control system must have 1/2 inch diameter tube between bell cranks in fuselage aft of cabin instead of tie rod as on other serial numbers.
- (i) Item 301 must be installed.
- (j) Maximum baggage is 99 lbs.

NOTE 4. For serial number D-128, fuel installation is same as in NOTE 3 (a).