

DART AIRCRAFT CORPORATION

MODELS: Dart G, GC, GK, GW

T.C. NUMBER: 674

I - Model G, 2 PCLM (Approved 4/19/38)

Engine	Lambert R-266
Engine limits	For all operations, 2375 rpm (90 hp)
Airspeed limits	Level flight or climb - 122 mph True Ind. Glide or dive - 160 mph True Ind.
Propeller limits	Maximum permissible diameter 80 in.
C.G. range	(+16.2) to (+20.4)
Maximum weight	1550 lbs.
No. seats	2 (+24)
Maximum baggage	40 lbs. (+37)
Fuel capacity	25 gallons (two tanks in wing at 12-1/2 gallons each) (+29)
Oil capacity	2 gallons (-13)
Serial Nos. eligible	G-2 and up per NOTE A (Also see NOTE 2)
Required equipment	Items 101(a), 102(a), 103, 104, 105, 106 and 107(a)

II - Model GK, 2 PCLM (Approved 12/14/38)

Engine	LeBlond 90 5F
Engine limits	For all operations, 2250 rpm (90 hp)
Airspeed limits	Level flight or climb - 122 mph True Ind. Glide or dive - 160 mph True Ind.
Propeller limits	Maximum permissible diameter 80 in.
C.G. range	(+16.2) to (+20.4)
Maximum weight	1550 lbs.
No. seats	2 (+24)
Maximum baggage	40 lbs. (+37)
Fuel capacity	25 gallons (two tanks in wing at 12-1/2 gallons each) (+29)
Oil capacity	2-1/2 gallons (-13)
Serial Nos. eligible	GK-8 and up per NOTE A
Required equipment	Items 101(a), 102(a), 103, 104, 105, 106, 107(a)

III - Model GW, 2 PCLM (Approved 5/16/39) (See NOTE 3)

Engine	Warner Scarab Jr.
Engine limits	For all operations 2025 rpm (90 hp)
Airspeed limits	Level flight or climb - 122 mph True Ind. Glide or dive - 160 mph True Ind.
Propeller limits	Maximum permissible diameter 78 in.
C.G. range	(+15.6) to (+17.6)
Maximum weight	1650 lbs.
No. seats	2 (+24)
Maximum baggage	None
Fuel capacity	25 gallons (two tanks in wing at 12-1/2 gallons each) (+29)
Oil capacity	2-1/2 gallons (-13)
Serial Nos. eligible	GW-20 and up per NOTE A
Required equipment	Items 101(a), 102(a), 103, 104, 105, 106, 107(b) and 108

IV - Model GC, 2 PCLM (Approved 7/30/46)

Engine	Continental A-100-1
Fuel	73 minimum octane aviation gasoline
Engine limits	For all operations, 2350 rpm (100 hp)
Airspeed limits	Level flight or climb - 122 mph True Ind. Glide or dive - 160 mph True Ind.
Propeller limits	Static rpm at maximum permissible throttle setting - not over 2030, not under 1930. No additional tolerance permitted. Diameter - not over 76 in., not under 74.5 in.
C.G. range	(+16.2) to (+20.4)
Maximum weight	1550 lbs.
No. seats	2 (+24)
Maximum baggage	None
Fuel capacity	25 gallons (two tanks in wing at 12-1/2 gallons each) (+29)
Oil capacity	6 quarts (-31)
Serial Nos. eligible	GC-60 and up per NOTE A
Required equipment	Items 101(b), 102(b), 103, 104, 105, 106 and 107(a)

Specifications Pertinent to All Models:

Datum	Leading edge of wing at fuselage
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Leveling means	Left window sill is horizontal when airplane level.
Certification basis	Type Certificate No. 674 (Aero. Bulletin 7A)
Production basis	None (See NOTE A)
Export eligibility	Eligible for export to all countries except Australia, Great Britain and New Zealand

EQUIPMENT:

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

Propeller and Propeller Accessories:

107. Propeller			
(a) Wood (fixed pitch)	22 lbs.		(-41)
(b) Adj. metal (Hamilton Standard hub 7005, 7019 or 7029, blades 25V2-6) (Model GW only)	35 lbs.		(-41)

Engine and Engine Accessories - Fuel and Oil System

101. Engine cowl			
(a) Ring cowl NACA smooth type (Models G, GK and GW)	17 lbs.		(-28)
(b) Engine cowl (Model GC)	16 lbs.		(-24)
102. Exhaust components			
(a) Collector ring with carburetor air heater (Models G, GK and GW)			
(b) Carburetor heater and cabin heater (Model GC)	10 lbs.		(-30)
106. Engine driven fuel pump (AC)			
108. Hand pump AC No. 1523197 (Model G only)	4 lbs.		(-12.5)
109. Strainer - Tillotson Imperial No. 41775 (Model GC only)	2 lbs.		(-12.5)
304. Starter			
(a) Eclipse Y-150 (Models G and GK)	17 lbs.		(-17)
(b) Eclipse Y-150 (Model GW)	18 lbs.		(-14)
(c) Delco-Remy CEX 40194 (Model GC)	15 lbs.		
306. Generator			
(a) Air driven (Air Associates)	7 lbs.		(+12)
(b) Engine driven (Denco-Remy KX-33371)	10 lbs.		
308. Cabin heater (Models G, GK and GW)	2 lbs.		
309. Dual throttle	+1 lb.		(-3)
311. Engine ring cowl (with projections) (Model G only)	-4 lbs.		(-28)

Landing Gear

103. 18x8-3 wheels (Goodyear 3LMBM)	33 lbs.		(+5)
104. 3-3/8 in. solid rubber tail wheel (Goodyear 95-042)	3 lbs.		(+163)
105. Landing gear strut fairing	8 lbs.		(+6)
307. Wheel streamlines (Hill)	12 lbs.		(-17)
310. Dual brake pedals	+2 lbs.		(-41)
312. 6x2.00 tail wheel and tire	7 lbs.		(+161)
313. Scott tail wheel 3-245, General tire 6x2	5 lbs.		(+164)

Electrical Equipment

305. Battery and container			
(a) Exide 6AC-7-1 (Models G, GK, and GW)	19 lbs.		(-3) or (-13)
(b) Rending Type R33L (Model GC)	30 lbs.		(+37)

Interior Equipment:

302. Miscellaneous extra instruments	10 lbs.		(+4)
303. Two parachutes at 20 lbs. each	40 lbs.		(+24)

NOTE A. Prior to original certification, each aircraft must 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.

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. Serial Nos. G-2, G-3 and G-4 were manufactured by Monocoupe Corp.

under Approval No. 2-541. Serial No. G-1 manufactured by Monocoupe, also eligible with the following changes:

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| 1. Propeller (maximum permissible diameter 78 in.) | | (-40) |
| (a) Adj. metal | 35 lbs. | |
| (b) Wood | 22 lbs. | |
| 2. Tail skis | | |
| 3. Wheel streamlines | 20 lbs. | |
| 4. Seat location | | (+28) |
| 5. Baggage | 34 lbs. | |
| 6. 6.50-10 wheels and brakes (Ebbert Hatch) | | |
| 7. Exhaust collector ring | | |
| 8. Carburetor air heater | | |

NOTE 3. Model GW airplanes must have elevator up travel restricted to 19 degrees and aileron bell crank (part 13-9) installed restricting down aileron travel.