

DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION
WASHINGTON

E-205-4
CONTINENTAL

A-65-1
A-65-3
A-65-6, -6J
A-65-7
A-65-8 (O-170-3), -8J, -8F, -8FJ
A-65-9 (O-170-5), -9J, -9F, -9FJ
A-65-12, -12J, -12F, -12FJ
A-65-14, -14J, -14F, -14FJ
May 1, 1946

AIRCRAFT ENGINE SPECIFICATION

Engines of models described herein conforming with this specification and approved data on file with the Civil Aeronautics Administration are rated as airworthy for use in certificated aircraft in accordance with pertinent aircraft specifications.

Manufacturer	Continental Motors Corporation, Muskegon, Michigan						
Model	A-65	-1	-3, -6	-7	-8, -9	-12	-14
Type		4HOA	--	--	--	--	--
Rating:							
Max., except take-off, hp, rpm, at sea level							
pressure altitude		65-2360-S.L.	65-2300-S.L.	--	--	--	--
Take-off hp, rpm, at full throttle		65-2350	65-2300	--	--	--	75-2675
Fuel (Minimum octane aviation gasoline)		73	--	--	--	--	80
Bore and stroke, in.		3.875 x 5.625	--	--	--	--	--
Displacement, cu. in.		171	--	--	--	--	--
Compression ratio		6.5:1	--	--	--	--	--
Weight (dry), lbs. (See NOTE 3)		165	173, 176	163	173, 176	171	170
C.G. location							
Fwd. of mounting face, in.		6.8	6.2	6.8	6.2	--	--
Below prop. shaft, in.		1.2	1.5	1.2	1.5	--	--
Propeller shaft, (See NOTE 2 for flanged type) SAE No.		O (Taper)	--	--	--	--	--
Carburetor (See NOTE 2 for injectors)		Strömberg MA-35A1 or MA-35B carburetor with 1-1/4 in. venturi or Marvel MA-3-PA carburetor with 1-7/32 in. venturi	--	--	--	--	--
Ignition		Single Scintilla SF-4L or Eisemann AM-4 magneto	Dual Scintilla SF-4R or Eisemann AM-4 magnetos	Single Scintilla SF-4L or Eisemann AM-4 magnetos	Dual Scintilla SF-4R, Eisemann AM-4 magnetos, or Case 4-CAMA magnetos with impulse coupling (25° retard)	--	--
Ignition timing, °BTC		30	Right 30 Left 30	30	Right 30 Left 30	--	--
Spark plugs		EG-482, S, 417, S Champion LM-318; M-31A; M-26; C-26, S, 625 Auto-Lite 18A-1	--	--	--	--	--
Oil sump, capacity (qts.)		Wet - 4 1/2	--	--	--	--	--
Exhaust port		Up	--	Down	--	--	--
NOTES		1,3,6,6	1,2,3,5,6	1,3,5,6	1,2,3,4,5,7,8	1,2,3,5,8	1,2,3,5,7

"--" indicates "same as preceding model."

Certification basis Type Certificate No. 205
Production basis Production Certificate No. 7

NOTE 1. Maximum permissible cylinder head, barrel and oil inlet temperatures, 550°F, 350°F and 220°F, respectively

NOTE 2. The following additional models of A-65 series engines are also eligible:

Engine Model	Characteristic Component	Dry weight increase, lbs.
A-65-6J, -8J, -9J	High Model A Fuel Injector or Exello Model A42	3
A-65-12J, -14J	Exello Model A-42 Fuel Injector	4
A-65-8F, -9F, -12F, -14F	Flanged propeller shaft	1
A-65-8FJ, -9FJ, -12FJ, -14FJ	Flanged propeller shaft and fuel injector as above	4 or 5

NOTE 3. Engine serial Nos. lower than 340793 incorporate a modified crankcase not suitable for use with rubber shock mountings and a modified engine mount-deduct 3 lbs. from engine dry weight above. With Eisemann Magnetos, deduct 5 lbs. from engine dry weight above. With Case magnetos deduct 2 lbs. from engine dry weight above.

NOTE 4. Military models O-170-3 and O-170-5 are identical to models A-65-8 and A-65-9 respectively. When these engines are installed in certificated aircraft, the designation A-65-8 or A-65-9 and T.C. No. 205 should be included on the engine nameplate.