DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

TYPE CERTIFICATE DATA SHEET NO. E2CE

Engines of models described herein conforming with this data sheet (which is part of type certificate No. E2CE) and other approved data on file with the Federal Aviation Agency, meet the minimum standards for use in certificated aircraft in accordance with pertinent aircraft data sheets and applicable portions of the Civil Air Regulations provided they are installed, operated and maintained as prescribed by the approved manufacturer's manuals and other approved instructions.

Type Certificate Holder	Continental Motors P. O. Box 90 Mobile, Alabama 36601
Type Certificate Holder Record	Teledyne Continental Motors Ownership & name change as of April 19, 2011 (Continental Motors, Inc.)

Model	**GIO-470-A**
Type, 6HOA, reduction gear ratio	.750:1
Rating, standard atmosphere	
Max. continuous hp., r.p.m., full throttle at sea level pressure altitude	310-3200
Takeoff hp., 5 min., r.p.m., full throttle at sea level pressure altitude	310-3200
Fuel, aviation gasoline (min. grade)	100/130
Lubricating oil	Lubricating oils qualified under SAE-J1899 or J1966 are considered qualified under CMI Spec MHS-24
Bore and stroke, in.	5.00 x 4.00
Displacement, cu.in.	471
Compression ratio	8.6:1
Weight (dry), lb.	461
C.G. location (basic engine)	
Fwd. of rear face accessory case, in.	13.73
Below crankshaft centerline, in.	.29
Beside crankshaft centerline toward 1-3-5 side, in.	.63
Propeller shaft	Special integral flange 4-7/8 in. O.D. with six 1/2 in. bolt holes in 4 in. diameter circle
Fuel injection	CMI Injection system (Eq. #5865A) or latest FAA approcved version
Ignition, dual magnetos	One CMI/TCM/Scintilla S6LN-201 and one S6LN-205
Timing, °BTC	24
Spark plugs	See NOTE 5
Oil sump capacity, qt.	16; 14 usable at 21° noseup and 21° nosedown altitudes

Certification basis	CAR 13 effective June 15, 1956, and amendments 13-1 effective August 12, 1957, 13-2 effective May 17, 1958 and 13-3 effective October 1, 1959. Type Certificate No. E2CE issued April 30, 1962 Date of Application for Type Certificate May 13, 1960
Production basis	Production Certificate No. 7. Production Certificate No. 508.

NOTE 1. Maximum permissible temperatures: cylinder head bayonet thermocouple 460°F., cylinder barrel 290°F., oil inlet 240°F.

NOTE 2. Fuel pressure limits:

Inlet to injection pump,	min. -	minus	2 p.s.i.
	max. -	plus	10 p.s.i.
Outlet to vapor return line		plus	3.5 p.s.i.

NOTE 3. Oil pressure limits:

2-4-6 side - Normal - Normal 30-60 p.s.i.
Idle 10 p.s.i. min.
Maximum (cold oil) 100 p.s.i.

NOTE 4. The following accessory drive or mounting provisions are available:

Original Accessory	Direction of Rotation*	Speed Ratio to Crankshaft	Max. Torque Continuous	(In.-lb.) Static	Maximum Overhang Moment (in.-lb.)
**Propeller governor	C	.809:1	29	825	50
Tachometer	C	.5:1	7	50	25
***Optional (2) Left and right-hand side	CC	1.5:1	100	800	40
****Generator or alternator	C	3:1	150	800	180
Fuel pump	CC	1:1	25	680	60
Oil cooler	-	-	-	-	65
Starter	CC	32:1	200	400	60

"-" indicates "does not apply".
*C - Clockwise viewing drive pad; CC- Counterclockwise.
**Modified AND 20010 pad.
***One drive eligible at 160 in.-lb. continuous torque load provided the other drive does not exceed 100 in.-lb. continuous torque load.
**** P/N 630414 (Delco 1117086) eligible.

NOTE 5. The following spark plugs and/or those listed in CMI Service Information Letter SIL03-2 are approved on this engine:

AC	271, 273, 281, 281IR, 283, 283IR
Auto Lite	SL350
Champion	RHB32N, RHB33E, RHB36P
Red Seal	LJ360

...END...