

**DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION**

E3CE  
Revision 8  
CONTINENTAL  
IO-346-A, -B  
November 2, 2011

**TYPE CERTIFICATE DATA SHEET NO. E3CE**

Engines of models described herein conforming with this data sheet (which is part of type certificate No. E3CE) 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**

**IO-346-A, -B**

Type	4H0A
Rating, ICAO or ARDC std. atmosphere	
Max. continuous hp., r.p.m., full throttle at sea level pressure alt.	165-2700
Takeoff hp., 5 min., r.p.m., full throttle at sea level pressure alt.	165-2700
Fuel (min. grade aviation gasoline)	91/96
Lubricating oil	Lubricating oils qualified under SAE- J1899 or J1966 are considered qualified under CMI Spec MHS-24
Ambient air temperature	Oil Grade
Above 40°F	SAE 50
Below 40°F	SAE 30
Bore and stroke, in.	5.25 x 4.00
Displacement, cu. in.	346
Compression ratio	7.5:1
Weight (dry), lb.	269.75
C.G. location (basic engine)	
Fwd. of rear face acc. case, in.	9.35
Below crankshaft centerline, in.	.29
Beside crankshaft centerline toward 1-3 side, in.	.62
Propeller shaft	Special integral flange 4-7/8 in. o.d. with six 1/2 in. bolt holes in 4 in. dia. circle
Fuel injection	CMI injection system (Eq. #5945) or latest FAA approved version
Ignition, dual magnetos	One CMI/TCM/Scintilla S4RN-201 and one S4RN-205 or two Slick Electro 449 or one S4RSC-201 and one S4RSC-205 24
Timing, °BTC	See NOTE 6.
Spark plugs	8, 7 usable at 17° noseup and 6.25 at 25° nosedown attitudes
Oil sump capacity, qt.	

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Certification basis CAR 13 effective June 15, 1956 as amended by 13-1 thru 13-4.  
Type Certificate No. E3CE issued July 27, 1962 for IO-346-A; IO-346-B added June 23, 1964.  
Date of Application for Type Certificate May 17, 1962.

Production basis Production Certificates Nos. 7 and 508.

NOTE 1. Maximum permissible temperatures:  
Cylinder head bayonet, thermocouple 460°F  
Cylinder barrel 310°F  
Oil inlet 225°F

NOTE 2. Fuel pressure limits:  
Inlet to injection pump, min. - minus 2 p.s.i.  
max. - plus 8 p.s.i.

NOTE 3. Oil pressure limits:  
2-4-6 side - 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 (in.-lb.)		Maximum Overhand Moment (in.-lb)
			Continuous	Static	
Tachometer Optional (2)	Optional	5:1	10	50	25
Left and Right hand side	CC	1:1	100**	800	25
Generator or Alternator	CC	3:1	90	800	70
**Governor, -B only	C	1:1	29	825	50
Fuel Pump	C	1:1	25	160	60
(Optional)	--	--	--	--	65
Starter	CC	48:1180	1000	1000	60

"- -" indicates does not apply.

\*Clockwise viewing drive pad; CC - Counterclockwise

\*\*One drive eligible at 160 in.-lb. continuous torque load provided the other drive does not exceed 100 in.-lb. continuous torque load.

\*\*\*This drive is a modified AND 20010.

NOTE 5. Model IO-346-B is identical to IO-346-A except it incorporates provisions for hydraulic propeller control.

NOTE 6. The following spark plugs and/or those listed in CMI Service Information Letter SIL03-2 are approved on this engine:

AC	HSR83IR, SR83IR, HSR83P, SR83P, HSR87, SR87
Auto Lite	SH20A, SH200A, SH26, SH260
Champion	REM38E, RHM38E, REM38P, RHM38P, REM40E, RHM40E
Red Seal	SE230, SJ230, SE270, SJ270

NOTE 7. Engine model numbers may include a suffix to define minor specification changes and/or accessory packages.  
Example: IO-346-A(10).

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