

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

E-303
Revision 4
Continental
GSO-526-A

November 2, 2011

TYPE CERTIFICATE DATA SHEET NO. E-303

Engines of models described herein conforming with this data sheet (which is part of type certificate No. E-303) and other approved data on file with the Federal Aviation Administration 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	GSO-526-A
Type	6HOA
Reduction gear ratio	.688:1
Rating ICAO or ARDC, standard atmosphere	
Max. continuous hp, rpm in. Hg. at:	
Critical altitude, ft.	300-3000-36.0-14,700
Sea level pressure altitude	300-3000-45.0
Takeoff hp, 5 min, rpm, full throttle at sea level pressure altitude	340-3100-51.5
Fuel (aviation gasoline, minimum grade)	100/130
Lubricating oil	
Ambient air temperature	Oil grade
Above 40°F.	SAE 50
Below 40°F.	SAE 30
Bore and stroke, in.	5.125 X 4.25
Displacement, cu. in.	526
Supercharger gear ratio	12.88:1
Compression ratio	6.0:1
Weight (dry) lb.	556
C.G. location	
Fwd. of rear face engine accessory case, in.	12.16
From crankshaft centerline, in.	.64 (below)
Beside crankshaft centerline, toward 1-3-5 side, in.	.14
Propeller shaft	Special integral flange 4-7/8 in. o.d. with six 1/2 in. bolt holes in 4 in. diameter circle.
Carburetion	Bendix-Stromberg model PSH-7DF (CMI No. 538810)
Ignition, dual magnetos	Bendix-Scintilla S6LN-62 (CMI/TCM No. 626323)
Timing, °BTC	Right 24.5°, Left 24.5°
Spark plugs	Champion RHA37N, RHB37E, RHB37N, R115
Oil sump capacity (qt.)	20, 13 usable with 11° nose-down attitude, and 14.5 usable with 11° nose-up attitude
Applicable NOTES	1, 2, 3, 4, 5
Certification basis	CAR 13 effective June 15, 1956 Type Certificate No. 303 issued June 12, 1958
Production basis	None

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NOTE 1. Maximum permissible temperatures:
 Cylinder head (bayonet thermocouple) 470°F.
 Cylinder barrel 290°F.
 Oil inlet 225°F.

NOTE 2. Fuel inlet pressure limits - min. - 10 p.s.i.
 max. - 15 p.s.i.
 Oil pressure limits (2-4-6 side) - 40 - 60 p.s.i.
 at idle- min. - 10 p.s.i.

NOTE 3. The following accessory drive or mounting provisions are available:

Original Accessory	Direction of Rotation*	Speed Ratio to Crankshaft	Max. Torque (in.-lb.)		Maximum Overhang Moment (in.)lb.)
			Continuous	Static	
Tachometer	CC	.5:1	7	50	25
Governor	C	.825:1	125	825	50
Governor**	C	2.60:1	500	2200	400
Fuel Pump	C	.91:1	25	680	60
Left Side					
Acc. Dr.	CC	1.5:1	250	1650	40
Right Side					
Acc. Dr.	CC	1.5:1	100	800	40
Starter	Delco-Remy CMC P/N 537241 eligible.				

*C - Clockwise viewing drive pad, CC - Counter-clockwise.

**Bendix generator type 30B24 is not eligible for installation on this drive until suitable generator provisions are made to prevent seizure to engine drive.

NOTE 4. Crankshaft is equipped with five third order and three sixth order dampers.

NOTE 5. This engine is not eligible for installation in certificated aircraft until the Instruction Manual specified in CAR 13.21 is made available. Exception to this restriction may be granted when authorized by special flight permits or by experimental certificates.

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