

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

E-269 Revision 15
CONTINENTAL
0-470-4, 0-470-11, 11B, 11-CI (see NOTE 5), 11B-CI 0-470-13, 0470-13A 0-470-15
June 1, 1973

TYPE CERTIFICATE DATA SHEET NO. E-269

Engines of models described herein conforming with this data sheet (which is part of type certificate No. 269) 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 Federal Aviation Regulations provided they are installed, operated and maintained as prescribed by the approved manufacturer's manuals and other approved instructions.

Type Certificate Holder Teledyne Continental Motors
Mobile, Alabama 36601

Model	0-470-11, -11B	0-470-13, -13A	0-470-4	0-470-15
Type	6HOA	---	---	---
Rating, ICAO or ARDC standard atmosphere				
Max. continuous hp., rpm, full throttle, at sea level pressure altitude	190-2300	225-2600	---	190-2300
Takeoff hp., 5 min., rpm, full throttle, at sea level pressure altitude	213-2600	225-2600	---	213-2600
Fuel (min. grade) aviation gasoline	80/87	---	---	---
Lubricating oil				
Ambient air temperature	Oil grade			
Above 40° F.	SAE 50	---	---	---
Below 40° F.	SAE 30	---	---	---
Bore and stroke, in.	5.00 x 4.00	---	---	---
Displacement, cu. in.	471	---	---	---
Compression ratio	7:1	---	---	---
Weight (dry), lb.	391	415	---	405

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Model (Continued)	0-470-11, -11B	0-470-13, -13A	0-470-4	0-470-15
C.G. location (with starter, generator and fuel pump)				
Fwd. or rear face, engine crankcase, in.	8.8	9.8	---	---
Below crankshaft, centerline, in.	.8	.2	---	---
Beside crankshaft, centerline toward 1-3-5 side, in.	—	.1	---	---
Propeller shaft, SAE No.	4 flange	Special integral flange 4-7/8 in. O.D. with six 1/2 in. bolt holes in 4 in. dia. circle	---	---
Carburetion	Bendix-Stromberg Model PS-5C (CMC No. 531857)	---	Bendix-Stromberg Model PS-5CD (CMC No. 538685)	Bendix-Stromberg Model PS-5C (CMC No. 625098)
Ignition, dual magnetos	Scintilla S6LN-21 (CMC NO. 531676)	Scintilla S6LN-23 (CMC No. 533173)	---	Scintilla S7LN-21 (CMC No. 531676)
Timing, °BTC	Right 26, Left 26	---	---	---
Spark plugs	(See NOTE 6)	---	---	---
Oil sump capacity, qt.	10; 7 usable	Dry	---	10; 7 usable
NOTES	1, 2, 3, 4, 5, 6	1, 2, 3, 4, 6	1, 2, 3, 4, 6	1, 2, 3, 4, 6

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

"—" indicates "does not apply"

Certification Basis

Part 13 of the Civil Air Regulations effective August 1, 1949 as amended by 13-1.
Type Certificate No. 269 issued January 19, 1951
Application for Type Certificate dated October 23, 1950

Production Basis

P.C. 7 (All models except 0-470-11B and -11B-C1)
P.C. 508 (All models with "R" suffix on serial number except 0-470-11B and -11B-C1)

NOTE 1.

Maximum permissible temperatures:

Cylinder head 0-470-11, -11B, -15
 325° F. (spark plug gasket)
 450° F. (bayonet thermocouple downdraft cooling)
0-470-4, -13, -13A
 465° F. (bayonet thermocouple downdraft cooling)

Cylinder barrel 315° F.
Oil inlet 225° F.

NOTE 2.

0470-11, -11B, -13, -13A, -4, -15

Fuel inlet pressure limits:
 9 to 15 p.s.i.g.

Oil pressure limits:
 30 to 60 p.s.i.a.

0-470-11-CI, -11B-CI

Fuel inlet pressure limits:
 Min. minus 2.25 p.s.i.g.
 Max. plus 10 p.s.i.g.

Oil pressure limits:
 30 to 60 p.s.i.a.

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

Original Accessory	Type	Dwg. No.	Direction of Rotation*	Speed Ratio to Crankshaft	Maximum Torque (in.-lb.)		Max. Overhang Moment (in.-lb.)
					Continuous	Static	
Starter	XIV-A	AND 20004	C	1.0	—	3600	300
Generator							
(0-470-11 -11B, -15	XII-A	AND 20002	C	2.37	500	2200	400
(0-470-13, -13A, -4)	XII-A	AND 20002	C	3.094	350	1000	400
Fuel Pump	XIII-A	AND 20003	CC	.94	25	450	—
Tachometer	XV-A	AND 20005	CC	.50	7	50	—
Fluid P Pump	X	AND 20000	C	1.43	100	800	25
Fluid P Pump	XI-A	AND 20001	C	1.45	250	1650	75
Spare	XV-A	AND 20005	CC	.50	7	50	—
Governor	XX	AND 20010	C	1.03	125	825	—

*C - Clockwise viewing drive pad;
CC - Counterclockwise

NOTE 4. Model 0-470-11B is identical to the 0-470-11 except that it incorporates the model 0-470-15 cylinder and piston assemblies.

Model 0-470-11 incorporates two 6th order dampers.

Model 0-470-13A is identical to the 0-470-13 except that an additional tachometer drive is provided through the camshaft gear and incorporates one 5th and one 6th order crankshaft damper.

Model 0-470-15 is identical to the 0-470-11 except that a four 6th order damper crankshaft is used with the same size propeller flange specified on the model 0-470-13. Model 0-470-15 incorporates propeller control provisions. Also, revised engine mount brackets and long skirt pistons are used with this engine.

0-470-13 engines incorporating crankshaft with one 5th and one 6th order dampers have the numeral 5 stamped on the outer circumference of the crankshaft propeller flange. 0-470-13 engines with two 6th order dampers have no numeral stamped on the flange.

Model 0-470-4 which was previously designated as 0-470-13B is identical to the Model 0-470-13A except for the carburetor.

NOTE 5. Models 0-470-11 and -11B are eligible for incorporation of CMC continuous flow fuel injection equipment No. 5843 replacing carburetion system, with a weight increase of approximately 3 lb. When this modification is accomplished the suffix letters "CI" are to be added to the model designation.

NOTE 6. The following spark plugs are approved for use in these engines:

AC: SR83P, HSR83P, S88D, HS88, HSR88, SR88D
 Auto Lite: SH2M, SH15, SH15R, SH20, SH20A, SH200A
 BG: RB485S, 706S, 706SR, 919SR, 919SR5, RB955S, RB963S, HRB963S
 Champion: RC26S, C27S, REM38P, RHM38P, RED39N, REM39N, RHD39N, RHM39N, RED40E, REM40E, RHM40E, ED41N, EM41N, EM42E
 Red Seal: SE190, SJ190, SE230, SJ230

NOTE 7. Model 0-470-11 engines which have been modified in accordance with U.S. Army Aviation and Surface Material Command Work Requirement No. WR-55-2810-112-B(1) issued 5 April 1963 and revised 13 February 1964, and designated Model 0-470-11A, are considered to be equivalent to and interchangeable with Model 0-470-11.

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