

DEPARTAMENTO DE ENERGÍA Y MECÁNICA

**CARRERA DE TECNOLOGÍA EN MECÁNICA AERONÁUTICA
MENCION MOTORES**

**MONOGRAFÍA: PREVIO A LA OBTENCIÓN DEL TÍTULO DE
TECNÓLOGA EN MECÁNICA AERONÁUTICA MENCION
MOTORES**

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LATACUNGA 2020



TEMA:

**INSPECCIÓN DE 200 HORAS DEL MOTOR
CONTINENTAL O-200-A48B DE LA AERONAVE CESSNA
150M CON MATRÍCULA HC – CHR PERTENECIENTE A
LA ESCUELA DE AVIACIÓN PASTAZA**





ESPE

UNIVERSIDAD DE LAS FUERZAS ARMADAS
INNOVACIÓN PARA LA EXCELENCIA

UNIDAD DE GESTIÓN DE TECNOLOGÍAS

CARACTERÍSTICAS DEL MOTOR

CONTINENTAL O 200A

11-6. ENGINE.

11-7. An air-cooled, horizontal-opposed, low-compression, direct-drive, four-cylinder Continental O-200-A series engine driving a fixed-pitch propeller is used to power the aircraft. The cylinders, numbered from rear to front, are staggered to permit a separate throw on the crankshaft for each

11-8. ENGINE DATA.

Aircraft Model

MODEL (Continental)

Rated Horsepower at RPM

Number of Cylinders

Displacement
Bore
Stroke

Compression Ratio

Magnetos
Right Magneto
Left Magneto

Firing Order

Spark Plugs

Torque

Carburetor (Marvel-Schebler)

Alternator

Starter (12-Volt)

Tachometer

Oil Sump Capacity
With External Filter

Oil Pressure (psi)
Normal
Minimum Idling

Oil Temperature
Normal Operating
Maximum

Cylinder Head Temperature
Normal Operating
Maximum

Direction of Crankshaft
Rotation (viewed from rear)

Dry Weight - with Accessories

D971C3-13 Temporary Change 1
October 18, 1977

connecting rod. The right rear cylinder is number 1 and cylinders on the right side are identified by odd numbers 1 and 3. The left rear cylinder is number 2 and the cylinders on the left side are identified as 3 and 4. Refer to paragraph 11-8 for detailed engine data. For repair and overhaul of the engine, refer to the applicable publication issued by the engine manufacturer.

15QJ, K, L & M

O-200-A

100 at 2750

4 Horizontally-Opposed

200.91 Cubic Inches
4.0625 Inches
3.875 Inches

7.00:1

Slick No. 4001
Fires 24° (+1 -0°) BTC 1-3-2-4 Upper
Fires 24° (+1 -0°) BTC 1-3-2-4 Lower

1-3-2-4

18MM (Refer to current Continental active factory approved spark plug chart)
330-30 Lb.-In.

MA-3-SPA

14-Volt, 60-Ampere

Automatic Engagement

Mechanical

6 U. S. Quarts
7 U. S. Quarts

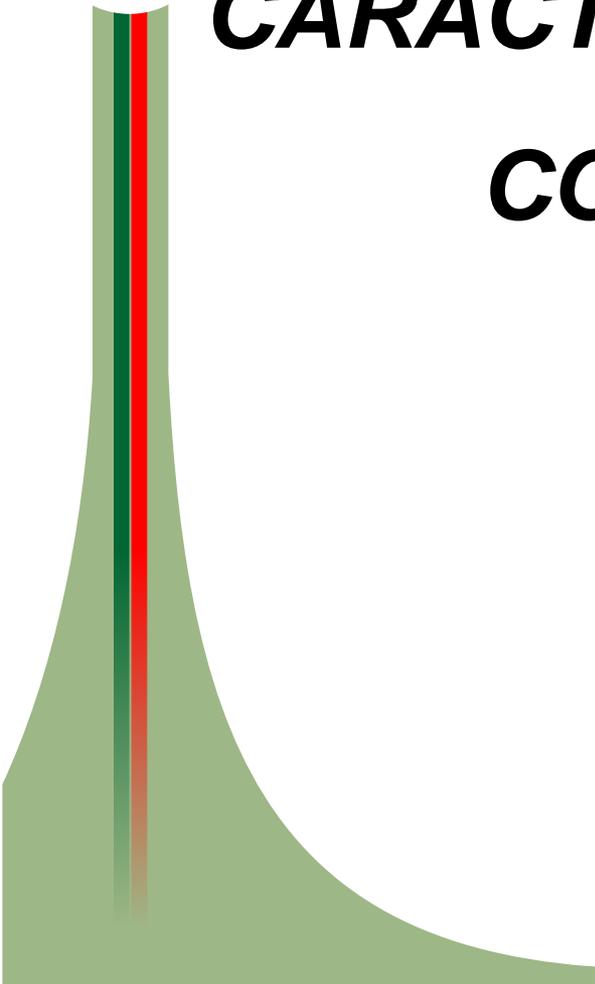
30-60
10

Within Green Arc
Red Line (225°F.)

Within Green Arc
Red Line

Clockwise

200 lb (Weight is approximate and will vary with optional accessories installed)



INSPECCIÓN DEL MOTOR CONTINETAL

O- 200-A

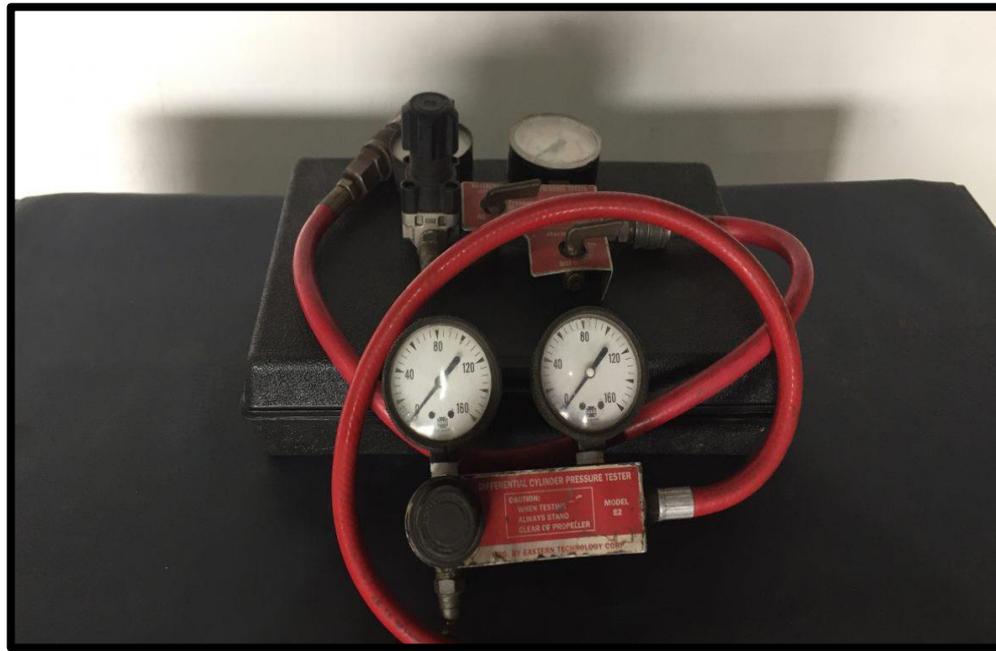
- **MANGUERAS DE AIRE FRÍAS Y CALIENTES**
- **COMPRESIÓN DE CILINDROS**
- **CARCASA DEL MOTOR Y LÍNEAS DE RESPIRACIÓN DEL SISTEMA DE VACÍO**
- **FILTRO DE LA VÁLVULA DE ALÍVIO**
- **AMORTIGUADORES DEL SOPORTE DEL MOTOR, SOPORTE Y CONEXIONES A TIERRA DEL MOTOR**
- **CONTROLES DEL MOTOR**
- **PARED DE FUEGO**



MANGUERAS DE AIRE FRÍAS Y CALIENTES



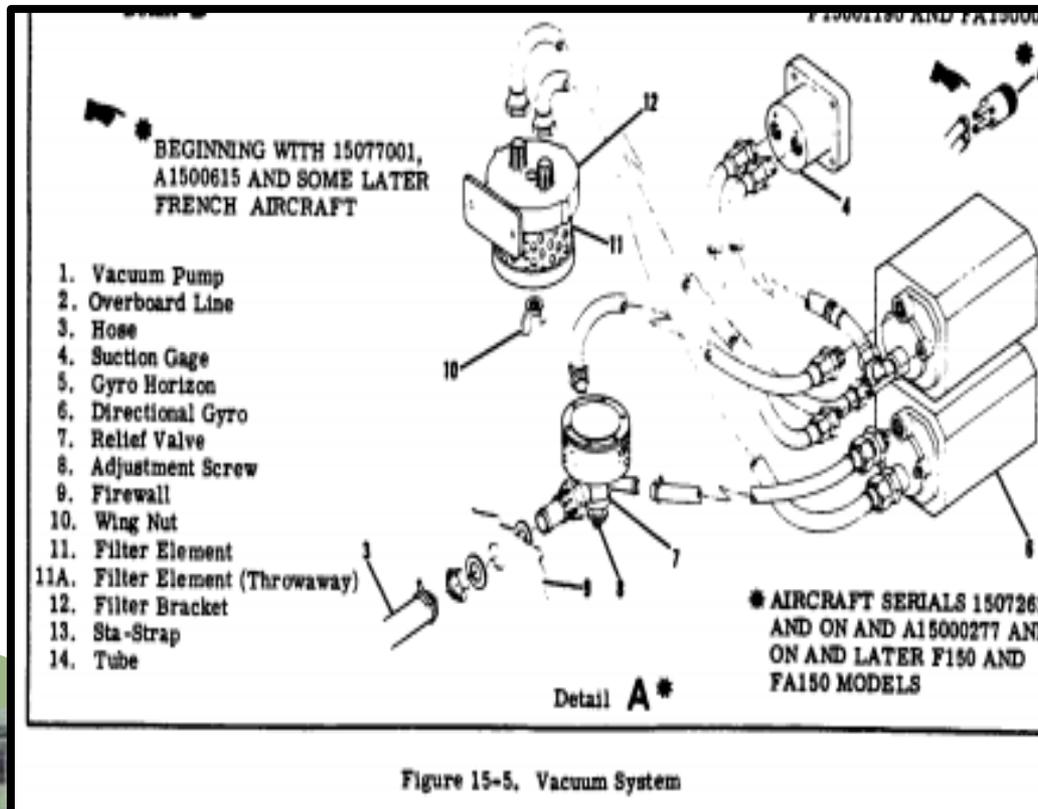
COMPRESIÓN DE CILINDROS



CARCASA DEL MOTOR Y LÍNEAS DE RESPIRACIÓN DEL SISTEMA DE VACÍO



FILTRO DE LA VÁLVULA DE ALÍVIO



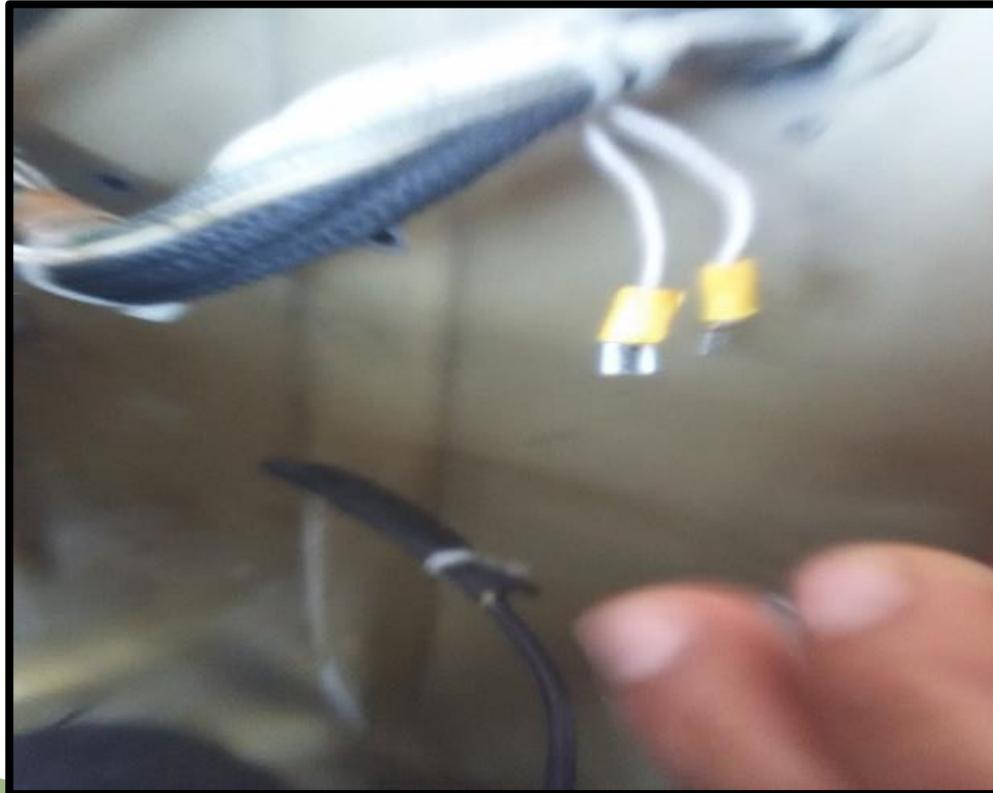
AMORTIGUADORES DEL SOPORTE DEL MOTOR, SOPORTE Y CONEXIONES A TIERRA DEL MOTOR



CONTROLES DEL MOTOR



PARED DE FUEGO



REMOCIÓN DEL MOTOR

II. ENGINE MODEL TIME BETWEEN OVERHAUL

TABLE 1. Engine Time Between Overhaul (TBO)

ENGINE MODEL	SEE NOTE	HOURS/YEARS	
		ENGINE S/N BEFORE 1006000	ENGINE S/N 1006000 AND LATER
A65, A75 and C75, C85, C90 Series	1	1800/12	
O-200-A, B	1, 2	1800/12	2000/12
O-200-D	1		
IO-240-A, B	1, 2	2000/12	2200/12
IOF-240-B	1, 2		
IOF-346-A	1	1500/12	
C125, C145 Series and O-300-A, B, C, D	1	1800/12	
GO-300-A, C, D, E	1	1200/12	
IO-360-A, AB, B, C, D, G, H, J, K	1	1500/12	
IO-360-CB, DB, GB, HB, JB	1, 2	1500/12	1700/12
IO-360-ES, KB	1, 2	2000/12	2200/12
TSIO-360-A, AB, B, C, D, E, F, H	1		
LTSIO-360-E	1	1400/12	
TSIO-360-CB, DB, HB, JB	1, 2	1400/12	1800/12
L/TSIO-360-EB, FB, GB, KB, LB, MB, RB, SB	1, 2	1800/12	2000/12
E165, E185, E225 Series	1		
O-470-A, B, E, G, N, P	1	1500/12	
O-470-J, K, L, M, R, S	1, 2	1500/12	1700/12
O-470-U	1, 2, 3	2000/12	2200/12
IO-470-C, D, E, F, G, H, J, K, L, M, N, P, R, S, U, V, VO	1, 2	1500/12	1700/12
TSIO-470-B, C, D	1	1400/12	
IO-520-B, BA, C, M	1	1700/12	
IO-520-A, BB, CB, D, E, F, J, K, L, MB	1, 2	1700/12	1900/12
L/IO-520-P	1, 2	2000/12	2200/12
GTSIO-520-F, K	1	1200/12	
GTSIO-520-C, D, H	1, 1		
GTSIO-520-L, M, N	1	1600/12	
TSIO-520-B, D, E, J, K, L, N	1	1400/12	
TSIO-520-BB, C, DB, EB, G, H, JB, KB, LB, M, P, R, T	1, 2	1400/12	1600/12
TSIO-520-NB	1, 2		
TSIO-520-M, P, R	1, 2, 5	1600/12	1800/12
TSIO-520-AF, CE, UB, VB, WB	1, 2		



ISSUED	REVISED		PAGE NO	REVISION
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INSTALACIÓN DEL MOTOR Y SERVICIO



***GRACIAS POR SU
ATENCIÓN***

