

CONTINENTAL MOTORS® AIRCRAFT ENGINE
SERVICE INFORMATION LETTER

CATEGORY 5
SIL03-2C

Contains Useful Information Pertaining To Your Aircraft Engine

Supersedes SIL03-2B
TECHNICAL PORTIONS
FAA APPROVED

SUBJECT: Currently Active Approved Spark Plug Application
PURPOSE: Provide list of approved spark plugs for CMI engines
COMPLIANCE: As required, when replacing spark plugs
MODELS
AFFECTED: ALL

GENERAL INFORMATION:

Table 3, commencing on page 3, lists currently available spark plugs by engine model. Additional approved spark plugs may be found in the engine's FAA Type Certificate Data Sheet and the spark plug manufacturer's data. Inactive products were omitted from this document revision.

Refer to the spark plug manufacturer's data for spark plug servicing information and required specialized tools. Spark plugs must be removed, cleaned, inspected, gapped and position rotated every 100 hours. Refer to Table 2, Figure 1 and Figure 2 for spark plug rotation sequence. Always install a new spark plug gasket when servicing spark plugs or installing new spark plugs.

CAUTION: Failure to install a new spark plug gasket on each spark plug may result in incomplete sealing of the combustion chamber, loss of spark plug heat transfer, spark plug overheating, possible pre-ignition / detonation and internal engine damage.

SPARK PLUG INSTALLATION INSTRUCTIONS

Install spark plugs as follows, in addition to the instructions provided by the spark plug manufacturer.

1. Handle spark plug leads with clean, dry hands.
2. Adjust the spark plug electrode to the gap recommended by the manufacturer in Table 3.
3. Always install spark plugs with new copper gasket.
4. Sparingly apply anti-seize to the spark plug threads. **DO NOT APPLY ANTI-SEIZE TO THE FIRST ROW OF THREADS.**
5. Always use a six point deep well socket to install spark plugs.
6. Thread spark plug by hand into cylinder to within one or two threads of the gasket. If this is not possible, cylinder head threads or spark plug threads need to be cleaned.
7. Torque spark plugs to 300 - 360 in. lbs using a calibrated torque wrench.
8. Before installing the spark plug lead terminal, wipe it clean using a lint-free cloth moistened with isopropyl alcohol. Once dry, apply CMI Part Number 10-400533 (Miller-Stephenson MS-122AD) to the terminal insulator.
9. Ensure the inside of spark plug barrel is clean and dry.

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10. Insert spark plug lead connector into the spark plug barrel with fingers in a straight line with the spark plug.
11. Screw B-nut into place until finger tight.
12. Tighten the B-nut to the torque specified in Table 1 while holding the spark plug lead ferrule stationary.

Table 1. Spark Plug B-Nut Torque

THREAD	WRENCH	TORQUE
5/8"-24	3/4"	90-95 in. lbs.
3/4"-20	7/8"	110-120 in. lbs.

WARNING

Do not install or use any spark plug that has been dropped or exhibits mechanical damage.

**Table 2. Spark Plug Rotation
(viewed from above)**

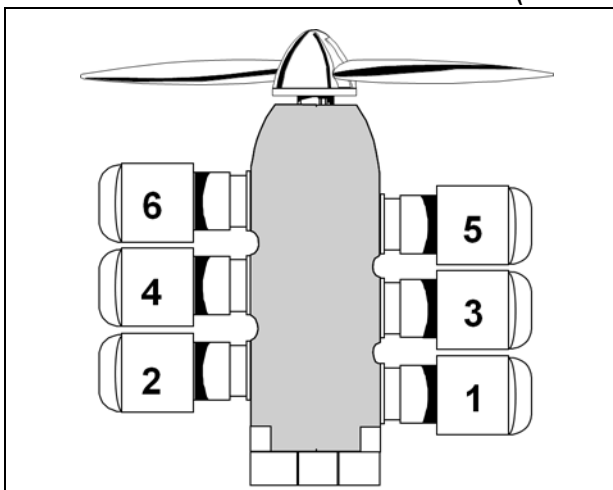


Figure 1. Six Cylinder Engine

FROM CYLINDER NUMBER	TO CYLINDER NUMBER
1 TOP	6 BOTTOM
1 BOTTOM	6 TOP
2 TOP	5 BOTTOM
2 BOTTOM	5 TOP
3 TOP	4 BOTTOM
3 BOTTOM	4 TOP
4 TOP	3 BOTTOM
4 BOTTOM	3 TOP
5 TOP	2 BOTTOM
5 BOTTOM	2 TOP
6 TOP	1 BOTTOM
6 BOTTOM	1 TOP

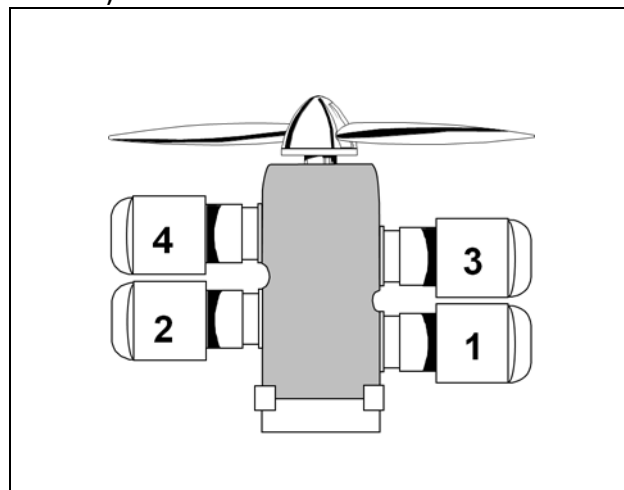


Figure 2. Four Cylinder Engine

FROM CYLINDER NUMBER	TO CYLINDER NUMBER
1 TOP	4 BOTTOM
1 BOTTOM	4 TOP
2 TOP	3 BOTTOM
2 BOTTOM	3 TOP
3 TOP	2 BOTTOM
3 BOTTOM	2 TOP
4 TOP	1 BOTTOM
4 BOTTOM	1 TOP

Table 3. Spark Plug Application Chart

	Tempest Aviation							Champion Aerospace															
	Manufacturer Part Number	UREM37BY	UREM38E	UREM40E	URHM38E	URHM38S	URHM40E	URHB32S	URHB32E	M41E	REM37BY	REM38E	REM38S	REM40E	RHM38E	RHM38S	RHM40E	RHB32E	RHB32S	RHB36S	RHU27E	RHU32E	RHU32S
	CMI Part Number	656082	655902	655899	655915	658475	655914	658474	655908	635149	655707	628325	646629	627643	630049	646630	629978	634675	646632	646631	636344	654708	654709
	Barrel Size/Reach ¹	5/8-24S	5/8-24S	5/8-24S	3/4-20S	3/4-20S	3/4-20S	3/4-20L	3/4-20L	UNSHLD	5/8-24S	5/8-24S	5/8-24S	5/8-24S	3/4-20S	3/4-20S	3/4-20S	3/4-20L	3/4-20L	3/4-20L	3/4-20XL	3/4-20XL	3/4-20XL
	Electrode Gap (recommended)	.016-.021	.016-.021	.016-.021	.016-.021	.017-.020	.016-.021	.017-.020	.016-.021	.016-.021	.016-.021	.016-.021	.016-.021	.016-.021	.016-.021	.016-.021	.016-.021	.016-.021	.016-.021	.016-.021	.016-.021	.016-.021	.016-.021
Engine Model																							
A-40; A-50		X		X			X			X	X			X			X						
A-65; A-75		X		X		X	X			X	X		X	X		X	X						
A-80		X		X			X			X	X			X			X						
A-100										X													
C-75; C-85; C-90		X	X	X	X	X	X			X	X		X	X		X	X						
O-200-A,B,C,D,X		X	X	X	X	X	X			X	X		X	X		X	X						
C-115; C-125		X		X		X	X			X	X		X	X		X	X						
C-145; O-300-A,B,C,D			X	X	X	X	X			X	X	X	X	X		X	X						
GO-300-A,B,C,D,E,F		X	X	X	X	X	X				X	X	X	X	X	X	X						
IO-240-A,B; IOF-240-B			X		X							X		X									
IO-346-A			X	X	X	X	X					X	X	X	X	X	X						
IO360-A,AB,C,CB,D,DB,E,ES,G,GB,H,HB,J,JB,K,KB			X		X	X						X	X		X	X							
L/TSIO-360-A,AB,B,BB,C,CB,D,DB,E,EB,F,FB,G,GB,H,HB,JB,KB,LB,MB,RB,SB			X		X	X						X	X		X	X							
E-165; E-185		X	X	X	X	X	X			X	X	X	X	X	X	X	X						
E-225		X	X	X	X	X	X			X	X		X	X		X	X						
O-470-2			X		X	X						X	X		X	X							
O-470-4,11,13,13A,15			X	X	X	X	X					X	X	X	X	X							
O-470-A,E,J,K,L,R,S			X	X	X	X	X					X	X		X	X							

