



Service Instruction

ENGINE COMPONENTS, INC.

S.I. No.: 00-2

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Title: USE OF LOWER SPRING SEAT AEL13323 IN PARALLEL HEAD ASSEMBLIES

Issued: 04/18/98

Revision: 1 (09/01/01)

Technical Portions are FAA DER Approved.

- 1.0 PURPOSE:** This service instruction provides installation eligibility for the lower spring seat AEL13323 in both the intake and exhaust sides of parallel valve assemblies.
- 2.0 SCOPE:** Engine Components, Inc. (ECi) has obtained FAA Engineering Design Approval for new lower spring seats including AEL13323, which are used on Lycoming parallel head cylinder assemblies. During this approval process, ECi tested an alternate configuration using AEL13323 in place of Lycoming part 65441. Based upon these data, the FAA has granted approval for the alternate configuration in all engines listed below.
- 3.0 COMPLIANCE:** Any time cylinders are installed or removed repair.
- 4.0 IDENTIFICATION:** N/A
- 5.0 MODELS AFFECTED:** The following Lycoming engines are approved for this alternate configuration.
 O-290-D, D2, D2B, D2C
 O-320-A2B, A2C, A2D, A3B, A3C, B1A, B1B, B2A, B2B, B2C, B3A, B3B, B3C, C1A, C1B, C2A, C2B, C2C, C3A, C3B, C3C, D1A, D1AD, D1B, D1C, D1D, D1F, D2A, D2B, D2C, D2D, D2F, D2G, D2H, D2J, D3G, E1A, E1B, E1C, E1F, E1J, E2A, E2B, E2C, E2D, E2E, E2F, E2G, E2H, E3D, E3H, H2AD
 IO-320-B1A, B1B, B1C, C1A, D1A, D1B, D1C, E1A, E1B, E2A, E2B, F1A
 AIO-320-B1B, C1B
 LIO-320-B1A, C1A
 AEIO-320-D1B, D2B, E1A, E1B, E2A, E2B
 O-340-A, B
 O-360-A1A, A1AD, A1C, A1D, A1F, A1F6, A1F6D, A1G, A1G6, A1G6D, A1H, A1H6, A1J, A1LD, A2A, A2D, A2E, A2F, A2G, A2H, A3A, A3AD, A3D, A4A, A4AD, A4D, A4G, A4J, A4JD, A4K, A4M, A4N, A5AD, B1A, B2A, B2B, C1A, C1C, C1E, C1F, C1G, C2A, C2B, C2C, C2D, C2E, D1A, D2A, D2B, E1A6D, F1A6, G1A6
 HO-360-A1A, B1A
 IO-360-B1A, B1B, B1BD, B1C, B1D, B1E, B1F, B1F6, B2E, B2F, B2F6, B4A, E4A, F1A
 LO-360-A1G6D, A1H6, E1A6D



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TO-360-A1G6D

VO-360-A1A, A1B, B1A

HIO-360-A1A, B1A, C1A, C1B, D1A, E1AD, E1BD

IVO-360-A1A

LTO-360-A1G6D

AEIO-360-B1B, B1D, B1F, B1G6, B2F, B4A, H1A

O-435-A, A2

O-540-A1A, A1A5, A1B5, A1C5, A1D, A1D5, A2B, A3D5, A4A5, A4B5, A4D5, B1A5, B1B5, B2B5, B2C5D, B4B5, B4B5D, E1A, E4A5, E4B5, E4C5, F1A5, F1B5, G1A5, G1A5D, G2A5, H1B5D, H2B5D, J1A5D, J1C5D, J2A5D, J3A5, J3A5D, J3C5D, L3C5D

IO-540-C1B5, C1C5, C2C, C4B5, C4B5D, C4C5, D4A5, D4B5, D4C5, J4A5, N1A5, N1A5D, R1A5, T4A5D, T4C5D, V4A5D, W1A5D, W3A5D

TIO-540-AA1AD, AB1AD, AF1A, C1A, G1A, C1AD, E1A, H1A, K1AD

AEIO-540-D4A5, D4B5

- 6.0** **CONFIGURATION DESCRIPTION:** AEL13323 differs from Lycoming part 65441 only in the inner diameter of the seat. This dimension serves no practical function in most cylinder assemblies since the seat rests on the outer diameter in the machined seat of the cylinder head and not on the guide. The position of the spring wear surfaces between AEL13323 and 65441 are identical. Therefore, the FAA has granted approval, based upon these data and upon the approval for said parts per FAR Part 33, for the use of AEL13323 in place of 65441 (or equivalent PMA-approved part) in the engine models listed above.