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SERVICE LETTER

SERVICE LETTER No. 099

Exhaust Bypass Valve FAA PMA Replacement Part

1. Planning Information

A. Effectivity

- (1) Aeroforce turbocharger exhaust bypass valve P/N 470842-0009 manufactured by Hartzell Engine Tech LLC (HET) is affected by this Service Letter (SL).
- (2) Continental Aerospace Technologies' turbocharger exhaust bypass valve P/N 649006-9 is affected by this SL.

WARNING: DO NOT USE OBSOLETE OR OUTDATED INFORMATION. PERFORM ALL INSPECTIONS OR WORK IN ACCORDANCE WITH THE MOST RECENT REVISION OF THIS SERVICE LETTER. INFORMATION CONTAINED HEREIN MAY BE SIGNIFICANTLY CHANGED FROM EARLIER REVISIONS.

B. Concurrent Requirements

- (1) None.

C. Reason

- (1) Hartzell Engine Tech LLC is issuing this Service Letter as a notice that FAA PMA has been obtained for exhaust bypass valve P/N 470842-0009.
- (2) This Service Letter serves to inform customers of PMA status and as a notice to HET authorized repair facilities that repair and overhaul of exhaust bypass valve P/N 470842-0009 may be accomplished through references found herein.
- (3) This Service Letter will remain in effect until HET Manual 400999-0000 Rev. C is revised to include exhaust bypass valve P/N 470842-0009.

D. Description

- (1) It is permissible to use exhaust bypass valve P/N 470842-0009 as a direct replacement for Continental Aerospace Technologies' exhaust bypass valve P/N 649006-9
- (2) Exhaust bypass valve P/N 470842-0009 is identical in form, fit, and function with Continental Aerospace Technologies' exhaust bypass valve 649006-9.

E. Approval

- (1) This technical document is approved by Hartzell Engine Tech LLC.

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F. References

- (1) HET Manual 400999-0000 Rev. C or later FAA approved revision.

G. Weight and Balance

- (1) No Change.

2. Materials Required

- A. Refer to HET Manual 400999-0000, Rev. C, page 7-460-01 for replacement items, same as P/N 470842-0008, with the following changes for exhaust bypass valve P/N 470842-0009.

- (1) Add Fitting, Elbow (1) P/N MS51527B4, 1 ea.
- (2) Add O-Ring (2) (not shown) P/N 60003. Used with Fitting, Elbow (1). 1 ea., Replace whenever Fitting, Elbow (1) is removed.

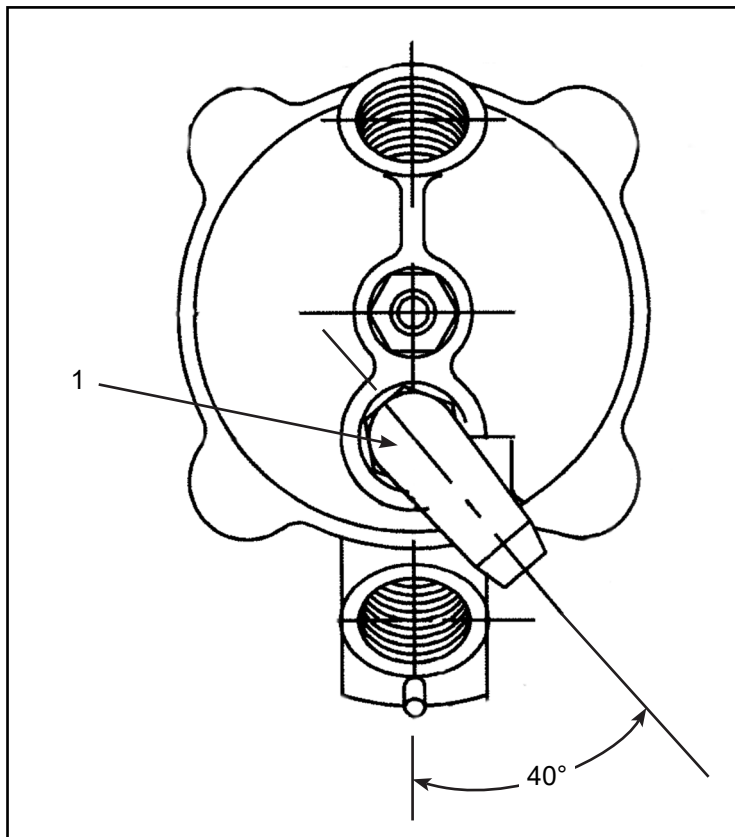


Figure 1 - Exhaust Bypass Valve P/N 470842-0009

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3. Accomplishment Instructions

WARNING: THIS PROCEDURE MUST BE PERFORMED BY COMPETENT AND QUALIFIED PERSONNEL WHO UNDERSTAND THE BYPASS VALVE OVERHAUL PROCEDURE. FAILURE TO DO SO MAY RESULT IN PHYSICAL INJURY, EQUIPMENT DAMAGE AND/OR ECONOMIC LOSS.

NOTE: Overhaul the Exhaust Bypass Valve P/N 470842-0009 in accordance with all requirements defined in HET 400999-0000, Rev. C or later FAA approved revision, Chapter 3 for 470842 series bypass valves with the following additions.

Disassembly

- (1) Add the following steps for exhaust bypass valve P/N 470842-0009:
 - (a) Pg. 3-250-01, between steps l. and m., add:
 - 1) Remove elbow fitting (1), if present, from the cylinder assembly.
 - 2) Remove and discard the O-ring (2) from the elbow fitting (1).
 - 3) Inspect fitting for damaged threads and ensure fitting is free of any blockage.

A. Service Limits

- (1) Add the following steps for exhaust bypass valve P/N 470842-0009:
 - (a) Pg. 3-100-01, Add the following to the Table found under Figure 3.6:
 - 1) Under the heading HET Valve Ass'y Part No., add 470842-9.
 - 2) Under the heading Groove Max. D In/cm, add 0.680/1.727 adjacent to 470842-9.
 - 3) **NOTE:** 4. Typo correction: Change 470233 to 477233.

B. Assembly

- (1) Add the following steps for exhaust bypass valve P/N 470842-0009:
 - (a) Pg. 3-310-01, between steps s. and t., add:
 - 1) Install the O-ring (2) onto the elbow fitting (1), careful not to cut or nick the O-ring (2).
 - 2) Apply a thin coat of engine oil to the O-ring (2) and install the elbow fitting (1) with O-ring (2) into the oil inlet port.
 - 3) Orient the elbow fitting (2) at 40 degrees as shown in Fig. 1 and torque to 7-9 ft-lbs.

C. Testing

- (a) Follow test procedures outlined in Chapter 5, same as exhaust bypass valve P/N 470842-0008.

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4. Contact Information

A. Contact HET Product Support for all communications regarding the technical content of this Service Letter.

- (1) Phone +1.334.386.5400 (Option 2)
- (2) Fax +1.334.386.5450
- (3) E-mail at techsupport@hartzell.aero
- (4) Address

Hartzell Engine Tech LLC - ATTN: Product Support
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