

2900 Selma Highway Montgomery, AL 36108 USA Tel: 334-386-5400 Fax: 334-386-5450

SERVICE BULLETIN

SERVICE BULLETIN No. 079

Turbocharger Wastegate and Valve Assembly Inspection

1. Planning Information

A. Effectivity

- (1) AeroForce turbocharger wastegate and valve assemblies P/N 470818-() and 470954-() manufactured by Hartzell Engine Technologies (HET) and shipped between November 05, 2018 and May 15, 2019 are affected by this Service Bulletin (SB).
- (2) Aircraft/Engines affected are found in Table 1 of this SB Wastegate & Valve Assy. Aircraft/Engine Effectivity.

NOTE: Table 1 is for reference only and is not an all-inclusive list of aircraft/engines affected by this SB. It is the responsibility of the owner/operator to verify whether an affected wastegate and valve assembly may be installed.

(3) Affected serial numbers are found found in Table 2 of this SB - Wastegate & Valve Assy. Serial Number Effectivity.

WARNING:

DO NOT USE OBSOLETE OR OUTDATED INFORMATION. PERFORM ALL INSPECTIONS OR WORK IN ACCORDANCE WITH THE MOST RECENT REVISION OF THIS SERVICE BULLETIN. INFORMATION CONTAINED HEREIN MAY BE SIGNIFICANTLY CHANGED FROM EARLIER REVISIONS. REFER TO THE AEROFORCE WEBSITE, WWW.AEROFORCE. AERO, FOR THE MOST RECENT REVISION LEVEL OF THIS SERVICE BULLETIN.

B. Concurrent Requirements

(1) None

C. Reason

- (1) HET has discovered that turbocharger wastegate valve assemblies listed in section 1.A. could contain an improperly formed port cavity that may not allow for proper swaging of the capillary assembly. This condition could result in a malfunction of the wastgate valve.
- (2) This SB is to advise the field of a known condition and to supply inspection criteria to identify affected turbocharger wastegate and valve assemblies.

D. Description

(1) This Service Bulletin provides Instructions for Continued Airworthiness (ICA).

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E. Compliance

- (1) Compliance with section 3.A is required no later than (NLT) fifty (50) hours time-in-service from the effective date of this SB or at the next regularly scheduled inspection, whichever occurs first.
- (2) Compliance with the Accomplishment Instructions is the terminating action for this SB.

F. Approval

(1) FAA acceptance has been obtained on the technical data in this publication that affects type design.

G. Manpower

(1) Up to two (2.0) hours labor for removal and replacement per affected turbocharger wastegate and valve assembly.

H. References

- (1) HET 400999-0000, *Overhaul Manual-Aircraft Valves & Controls, Rev. C* or later FAA approved revision.
- (2) Applicable Aircraft Service Instructions or Maintenance Manual.
- (3) Applicable Aircraft AFM or POH.

I. Weight and Balance

(1) No Change

2. Material Required

A. One (1) wastegate and valve assembly, per turbocharger, not affected by this SB.

3. Accomplishment Instructions

WARNING 1: THIS PROCEDURE MUST BE PERFORMED BY COMPETENT AND QUALIFIED PERSONNEL WHO ARE FAMILIAR WITH THE AIRFRAME AND ENGINE SYSTEM MAINTENANCE. FAILURE TO DO SO MAY RESULT IN PHYSICAL INJURY, EQUIPMENT DAMAGE AND/OR ECONOMIC LOSS.

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WARNING 2:

DO NOT USE OBSOLETE OR OUTDATED INFORMATION. PERFORM ALL INSPECTIONS OR WORK IN ACCORDANCE WITH THE MOST RECENT REVISION OF THIS SERVICE BULLETIN. INFORMATION CONTAINED HEREIN MAY BE SIGNIFICANTLY CHANGED FROM EARLIER REVISIONS. FAILURE TO COMPLY WITH THIS SERVICE BULLETIN OR THE USE OF OBSOLETE INFORMATION MAY CREATE AN UNSAFE CONDITION THAT MAY RESULT IN DEATH, SERIOUS BODILY INJURY, AND/OR SUBSTANTIAL PROPERTY DAMAGE. REFER TO THE PLANE-POWER WEBSITE FOR THE MOST RECENT REVISION LEVEL OF THIS SERVICE BULLETIN, WWW.AEROFORCE.AERO.

CAUTION:

REFER TO THE APPLICABLE MANUFACTURER'S MAINTENANCE MANUALS OR SERVICE INSTRUCTIONS TO GAIN ACCESS TO THE AIRFRAME OR TURBOCHARGER. IN ADDITION, ANY PREFLIGHT OR IN-FLIGHT OPERATIONAL CHECKS REQUIRE USE OF THE APPROPRIATE AFM OR POH.

A. Inspection

- (1) If previous compliance cannot be verified through aircraft or engine maintenance records, use the same references to determine if an affected wastegate and valve assembly has been installed. Refer to section 1.A, Effectivity.
- (2) If effectivity of the wastegate and valve assembly cannot be established using aircraft or engine maintenance records, utilize the applicable aircraft maintenance manual to gain access to the tubocharger and inspect the turbocharger wastegate and valve assembly serial number against the affected serial numbers found in Table 2 of this SB.
 - (a) If the wastegate and valve assembly serial number is affected per Table 2, continue to 3.B. -Corrective Action.
 - (b) If the wastegate and valve assembly serial number is not affected per Table 2, continue to 3.C. Return to Service.

B. Corrective Action

- (1) Remove the turbocharger wastegate and valve assembly from the turbocharger in accordance with the latest revision of the aircraft and/or engine manufacturer's maintenance manual.
- (2) Utilizing the applicable aircraft and/or engine manufacturer's maintenance manuals, install a turbocharger wastegate and valve assembly not affected by this SB and proceed to 3.C. Return to Service.

C. Return to Service

(1) Close all access doors and covers opened to gain access to the turbocharger in accordance with applicable airframe and/or engine maintenance manual.

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4. Contact Information

- A. Contact HET Product Support for all communications regarding the technical content of this Service Bulletin.
 - (1) Phone +1.334.386.5400 (Option 2)
 - (2) Fax +1.334.386.5450
 - (3) E-mail at techsupport@HartzellEngineTech.com
 - (4) Address

Hartzell Engine Technologies LLC - ATTN: Product Support 2900 Selma Highway
Montgomery, AL 36108
USA

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Turbocharger Wastegate and Valve Assembly Inspection

AeroForce Wastegate & Valve Assy. P/N	OE P/N	Aircraft Make	Aircraft Model	Engine Model/Series	
470818(-0 -9)003	LW-12778 LW-12778-85	CAIGA	HO300 Sea Gull	TIO-540-A2C	
		Piper Aircraft	PA23-250	TIO-540-C1A	
		Piper Aircraft	PA31-310	TIO-540-A1A, -A2A, -A2B, -A2C	
		Piper Aircraft	PA31-350	(L)TIO-540-J2BD	
	LW-10759 LW-10759-85	Beechcraft	B60 (73 & UP)	TIO-541-E1C4	
470818(-0 -9)005		Fuji Rockwell Fuji Heavy	710	TIGO-541-D1B	
		Piper Aircraft	PA31P	TIGO-541-E	
470818(-0, -9)010	LW-14283 LW-14283-85	Lycoming	Piper Aircraft	(L)TIO-540-F2BD	
470954(-0, -9)001	LW-12960 LW-12960-85	Fuji Rockwell		TIO-540-R2AD	
		Fuji Heavy Industires Ltd	700		
470954(-0 -9)003	C165006-0601	Cessna	T303	(L)TSIO-520-AE	
470954(-0, -9)005	LW-18861 LW-18861-85	Commander Aircraft Group	114TC	TIO-540-AG1A	
		Lake Aircraft	250 Renegade	TIO-540-AA1AD	
		Mooney International	M20M (TLS)	TIO-540-AF1A	
			M20M (TLS) Bravo	TIO-540-AF1B	
		Piper Aircraft	PA31P-350	TIO-540-V2AD	
		SOCATA	TB 21 Trinidad	TIO-540-AB1AD	
470954(-0, -9)007	47E21296	Piper Aircraft	PA46-350P	TIO-540-AE2A	
470954(-0, -9)009	47J22459 47J22459-85	Found Aircraft Canada	FBA-2C3T		
		GippsAero GA 8 Airvan Pty Ltd	GA8-TC	TIO-540-AH1A	
		Piper Aircraft	PA32-301T, Saratoga		

Table 1 - Wastegate & Valve Assy. Aircraft/Engine Effectivity

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H-VKN#	H-VKO#	H-VLO#	H-W	AN#	H-W	AO#	H-WBN#	H-WBO#
00147	00194	00055	00159	00243	00006	00254	00009	00020
	00195	00056	00179	00244	00007	00255	00010	00021
		00057	00180	00245	00008	00256	00011	00032
		00058	00181	00246	00009	00257	00039	00033
		00059	00182	00247	00160	00288	00040	00034
		00060	00239	00248	00161	00289	00042	00035
			00240	00249	00162	00290	00043	00036
			00241	00250	00163	00291	00165	00037
			00242	00296	00164	00292		00041
					00251	00293		
					00252	00294		
					00253	00295		
H-WCN#	H-WCO#	H-WDN#	H-WDO#	H-WEN#				
0004=	00004	00400	00001	00004				
00017	00021	00168	00001	0000 4			1	
00017	00021	00168	00001	00004				
00018	00022	00171	00002	00005				
00018 00019	00022 00023	00171 00172	00002 00003	00005 00006				
00018 00019 00020	00022 00023 00073	00171 00172	00002 00003 00004	00005 00006 00010				
00018 00019 00020 00084	00022 00023 00073	00171 00172	00002 00003 00004 00005	00005 00006 00010 00012				
00018 00019 00020 00084 00101	00022 00023 00073	00171 00172	00002 00003 00004 00005 00006	00005 00006 00010 00012 00013				
00018 00019 00020 00084 00101 00102	00022 00023 00073	00171 00172	00002 00003 00004 00005 00006	00005 00006 00010 00012 00013 00014				
00018 00019 00020 00084 00101 00102 00132	00022 00023 00073	00171 00172	00002 00003 00004 00005 00006 00007 00174	00005 00006 00010 00012 00013 00014 00015				
00018 00019 00020 00084 00101 00102 00132 00133	00022 00023 00073	00171 00172	00002 00003 00004 00005 00006 00007 00174 00175	00005 00006 00010 00012 00013 00014 00015 00021				
00018 00019 00020 00084 00101 00102 00132 00133	00022 00023 00073	00171 00172	00002 00003 00004 00005 00006 00007 00174 00175	00005 00006 00010 00012 00013 00014 00015 00021				

Table 2 - Wastegate & Valve Assy. Serial Number Effectivity

Service Bulletin Appendix

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Turbocharger Wastegate and Valve Assembly Inspection

1. ELIGIBILITY:

- A. AeroForce turbocharger wastegate and valve assemblies P/N 470818-() and 470954-() manufactured by Hartzell Engine Technologies (HET) and shipped between November 05, 2018 and May 15, 2019 are affected by Service Bulletin (SB) 079.
- B. Affected serial numbers are found in Table 2 of SB 079 Wastegate & Valve Assy. Serial Number Effectivity.

2. COMMERCIAL ASSISTANCE PROGRAM:

The following will be provided with the submission of a completed SB 079 Claim Form, copies of invoices showing breakdown of labor charges and log book entries. Any commercial assistance or other consideration shall expire twelve (12) calender months from the original published date of SB 079.

- A. Labor for removal and installation an eligible wastegate and valve assembly will be paid at a shop rate of up to US\$75 per hour, not to exceed hours specified below.
 - (1) Up to 1.0 hour labor allowance for removal and installation of the turbocharger wastegate and valve assembly per affected turbocharger.

3. COMMERCIAL ASSISTANCE ADMINISTRATION:

- A. Complete the Service Bulletin 079 Claim Form attached to this appendix per wastegate valve assembly affected.
 - (1) Mail, e-mail, or fax the SB 079 Claim Form(s) to the attention of Product Support as indicated on the Service Bulletin Claim Form.
- B. Upon receipt of the Service Bulletin Claim Form and affected wastegate and valve assembly, Hartzell Engine Technologies LLC will ship one replacement wastegate and valve assembly to the service provider indicated.
- C. For labor and material charges:
 - (1) Aircraft service facility to submit an invoice up to the amount specified in section 2.A.(1) and copies of logbook entries for reimbursement.

4. WARRANTY STATEMENT:

- A. The sole warranty for the actions of SB 079 is contained in the HET Limited Warranty Policy issued with the purchase of each new/rebuilt turbocharger or piece part (see terms and conditions therein).
- B. Commercial assistance may apply as stated in this Appendix.
- C. Issuance of SB 079 in no way constitutes an implied or expressed warranty of any kind.
- D. This publication does not imply or state any responsibility for the workmanship of any person or entity performing work or maintenance on the engine or aircraft turbocharging system.

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5. CONTACT INFORMATION:

- A. Contact HET Product Support for all communications regarding the technical content of this Service Bulletin.
 - (1) Phone +1.334.386.5441
 - (2) Fax +1.334.386.5410.
 - (3) E-mail at techsupport@HartzellEngineTech.com.
 - (4) Address

Hartzell Engine Technologies LLC 2900 Selma Highway Montgomery, AL 36108, USA.

6. SHIPPING INFORMATION:

If a turbocharger wastegate and valve assembly is being returned, the part must be securely packaged so damage will not occur in shipping. A copy of the properly completed SB 079 Claim Form for each affected part must be placed inside the shipping container. All parts must be received undamaged. Next day shipping of eligible product to HET will be reimbursed.

Ship To:

Hartzell Engine Technologies LLC 2900 Selma Highway Montgomery, AL 36108, USA.

Attn: PRODUCT SUPPORT DEPT / SB 079

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2900 Selma Highway Montgomery, AL 36108 USA Tel: 334-386-5400 Fax: 334-386-5450

SB 079 CLAIM FORM

Owner information				
Name:	Date:	Tel:	Fax:	
Company Name:		E-mail:		
Address:				
City:	State:	Postal Code:		
Country:				
Aircraft Service Facility in		Tol	Fov	
			Fax:	
Address:				
Country			C/NI:	
•			S/N:	
Engine:	iviodei:	Time in Service:	S/N:	
Turbocharger Service Fac	cility information			
		Tel:	Fax:	
Company Name:		E-mail:		
Address:				
City:	State:	Postal Code:		
Country:				
Product or Component In	formation			
Nomenclature: <u>Turbocharger / WG & Vlv Assy.</u>		Part Number:		
Serial Number:				
Part Time in Service:		Date Installed:	Date Removed:	
Tat time in ocivice.		Date installed:	Bate Removed.	
Send this SB 079 Claim Form	to:			
Hartzell Engine Technologies				
Fax: +1.334.386.5450				
E-mail: techsupport@hartzelle	enginetech.com			
Hartzell Use Only - do not w	rite below this line.			
Warranty No:		Authorized by:		