

Williamsport, PA 17701 U.S.A.

Tel. 1-800-258-3279 (U.S. and Canada) Tel. 1-570-323-6181 (International)

Fax. 1-570-327-7101 www.lycoming.com

MANDATORY SERVICE BULLETIN

DATE: November 21, 2012

Service Bulletin No. 604 Engineering Aspects are FAA Approved

SUBJECT: Compliance with Hartzell Engine Technologies (HET), LLC (Previously

Kelly Aerospace) Alert Service Bulletin No. 048 dated 11/16/2012, Turbocharger model TAO411, P/N 410188-0019 Turbine Wheel Replacement

MODELS AFFECTED: New, rebuilt, or overhauled Lycoming TIO-540-AK1A engine models in

Table 1

Lycoming engine models field-overhauled or repaired with model TAO411,

P/N 410188-019 turbocharger turbine wheel

TIME OF COMPLIANCE: Before further flight

NOTE

Incomplete review of all the information in this document can cause errors. Read the **entire** Service Bulletin to make sure you have a complete understanding of the requirements.

Hartzell Engine Technologies Alert Service Bulletin No. 048 dated 11/16/2012 is reprinted in its entirety as follows and is current at the time Lycoming Service Bulletin No. 604 is issued. However, compliance with this Service Bulletin is to be in accordance with the latest revision of the Hartzell Engine Technologies Alert Service Bulletin No. 048.

This Service Bulletin is notification for **mandatory compliance** with HET's Alert Service Bulletin No. 048 dated 11/16/2012, Turbocharger HET model TAO411, P/N 410188-0019 Turbine Wheel Replacement.

This Service Bulletin applies to new turbochargers, Lycoming P/N 46C22924, shipped from Lycoming as spares and Lycoming TIO-540-AK1A engine models identified in Table 1 that have new turbocharger P/N 46C22924 (HET model TAO411) made by HET with suspect turbine wheel (HET P/N 410188-0019 with serial numbers H120716 through H121988).

NOTE

If your engine has an overhauled or rebuilt turbocharger, refer to the attached HET Alert Service Bulletin No. 048 dated 11/16/2012.

The suspect turbine wheel could have a deficient shaft-to-wheel head weld which is why the turbine wheel must be removed and replaced with a turbine wheel not affected by this Service Bulletin.

Required Action

1. Identify if any of the TIO-540-AK1A engine serial numbers from Table 1 are in your fleet or inventory.



REVISION	PAGE NO.	ED	REVIS		ISSUED				
	1 of 12	YEAR	DAY	MO	YEAR	DAY	MO		
	1 of 13				12	21	11		

- 2. Refer to the turbocharger data plate (Figure 1) and Table 1 for affected turbocharger serial numbers. If the serial number on the turbocharger data plate matches a serial number on Table 1, remove the turbocharger from the engine. Order a replacement turbocharger.
- 3. If an engine is identified on Table 1 of this Service Bulletin and is within the Lycoming Engine warranty period, order a replacement turbocharger, file a warranty claim and return the Service Bulletin affected turbocharger through an authorized Lycoming distributor. The warranty claim is to include the replacement turbocharger, freight, and R&I labor in accordance with Lycoming's current Removal and Installation Labor and Allowance Guidebook.
- 4. Review your spare parts inventory and any engines that use the turbochargers with any of the serial numbers identified in Table 1. Return any affected, uninstalled turbochargers for credit through your Lycoming distributor.
- 5. If a turbocharger with a serial number identified in Table 1 of this Service Bulletin has been installed and is within the Lycoming Spare Parts warranty period, order a replacement turbocharger, file a warranty claim and return the Service Bulletin affected turbocharger through an authorized Lycoming distributor. The warranty claim is to include the replacement turbocharger, freight, and R&I labor in accordance with Lycoming's current Removal and Installation Labor and Allowance Guidebook.
- 6. Record compliance with this Service Bulletin and HET's Alert Service Bulletin No. 048 in your engine logbook.

TABLE 1 Lycoming P/N 46C22924 Turbocharger

Turbocharger Serial Number	Engine S/N	Engine Model					
H-PFL00330	L-13889-61A	TIO-540-AK1A					
H-PFL00331	L-13887-61A	TIO-540-AK1A					
H-PFL00414	L-13890-61A	TIO-540-AK1A					
H-PFL00415	L-13877-61A	TIO-540-AK1A					
H-PFL00416	L-13875-61A	TIO-540-AK1A					
H-PGL00150	RL-11103-61A	TIO-540-AK1A					
H-PGL00151	RL-11115-61A	TIO-540-AK1A					
H-PGL00152	RL-10981-61A	TIO-540-AK1A					
H-PFL00417	Shipped	as Spare					
H-PFL00418	Shipped	as Spare					
H-PFL00523	Shipped	as Spare					
H-PFL00524	Shipped	as Spare					
H-PGL00149	Shipped	as Spare					
H-PGL00153	Shipped	as Spare					
H-PGL00154	Shipped	as Spare					
H-PGL00155	Shipped as Spare						
H-PHL00005	Shipped as Spare						
H-PHL00006	Shipped	as Spare					

	ISSUE	ED		REVIS	ED	PAGE NO.	REVISION	
MO	DAY	YEAR	MO	DAY	YEAR	2 of 12		S.B. 604
11	21	12				2 of 13		5.D. 004





Figure 1 Turbocharger Data Plate

	ISSUE	ED		REVIS	ED	PAGE NO.	REVISION	
MO	DAY	YEAR	MO	DAY	YEAR	2 of 12		S.B. 604
11	21	12				3 of 13		5.D. 004



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

Alert Service Bulletin

Bulletin No. 048

Turbocharger TA0411 P/N 410188-0019 Turbine Wheel Replacement

1. Planning Information

A. Effectivity

- (1) Hartzell Engine Technologies LLC (HET) P/N 410188-0019 turbine wheels with serial numbers **H120716 through H121988** are affected by this Alert Service Bulletin (ASB).
- (2) HET model TAO411 turbochargers with part number and serial number listed in Table 1 and Table 2 are affected by this ASB.
- (3) HET model TAO411 turbochargers overhauled or repaired since August 29, 2012using P/N 410188-0019 T-wheel with serial numbers **H120716 through H121988** are affected by this ASB.

TABLE 1 - Turbocharger Part Numbers Affected * (Field Repairs)

466642-0001	466642-9001
466642-0002	466642-9002
466642-0006	466642-9006

^{*} For aid in identifying engine or aircraft model, see Table 3 Reference Guide.

TABLE 2 - Turbocharger Serial Numbers Affected (Factory Shipped)

		Turboch	arger P/N 4666	642-0001										
H-PGL00031	H-PGL00090													
	Turbocharger P/N 466642-0002													
H-PFL00404	H-PFL00405	H-PFL00406	H-PFL00407	H-PFL00408	H-PFL00409	H-PFL00410								
H-PFL00411	H-PFL00412	H-PFL00413	H-PGL00178	H-P.GL00179	H-PHL00003	H-PHL00004								
H-PHL00058	H-PHL00059	H-PHL00061	H-PHL00063	H-PHL00064	A 100 100									
		Turboch	narger P/N 466	642-9002										
H-PFR00525	H-PFR00526	H-PFR00527	H-PGR00175	H-PGR00176	H-PGR00177	H-PIR00109								
H-PIR00110	H-PIR00111	H-PIR00112	H-PIR00113	H-PIR00114										
		Turboch	narger P/N 466	642-0006										
H-PFL00330	H-PFL00331	H-PFL00332	H-PFL00414	H-PFL00415	H-PFL00416	H-PFL00417								
H-PFL00418	H-PFL00523	H-PFL00524	H-PGL00149	H-PGL00150	H-PGL00151	H-PGL00152								
H-PGL00153	H-PGL00154	H-PGL00155	H-PHL00005	H-PHL00006	H-PIL00132	H-PIL00133								
H-PIL00134														
		Turboch	narger P/N 466	642-9006										
H-PFR00533														

Rev. New November 16/12 © 2012 - Hartzell Engine Technologies. - All rights reserved **ASB 048** Page 1 of 8

	ISSUE	ED .		REVIS	ED	PAGE NO.	REVISION	
MO	DAY	YEAR	MO	DAY	YEAR	4 of 12		S.B. 604
11	21	12				4 of 13		5.D. 004

Bulletin No. 048

Turbocharger TA0411 - P/N 410188-0019 Turbine Wheel Replacement

CAUTION: DO NOT USE OBSOLETE OR OUTDATED INFORMATION. PERFORM ALL INSPECTIONS OR WORK IN ACCORDANCE WITH THE MOST RECENT REVISION OF THIS ALERT SERVICE BULLETIN (ASB). INFORMATION CONTAINED IN THIS ASB MAY BE SIGNIFICANTLY CHANGED FROM EARLIER REVISIONS. FAILURE TO COMPLY WITH THIS ASB 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 HET WEBSITE FOR THE MOST RECENT REVISION LEVEL OF THIS ASB.

B. Concurrent Requirements

(1) None

C. Reason

- (1) Hartzell Engine Technologies has discovered the potential for a compromised shaft to wheel head weld for HET P/N 410188-0019 T-wheel.
- (2) This condition may allow the turbocharger turbine head to separate from the shaft. This may result in rapid reduction in or complete loss of engine power. Additionally there is the possibility of the loss of engine oil and fire.
- (3) The affected turbocharger T-wheel must be removed from service and replaced with T-wheels outside of the affected serial number range.
- (4) Regulatory action is expected.

D. Description

(1) This Alert Service Bulletin requires the removal from service of all affected HET P/N 410188-0019 turbocharger turbine wheel assemblies.

E. Compliance

- (1) For turbochargers in service with affected T-wheels, compliance is required before further flight.
- (2) This Alert Service Bulletin requires the replacement of all existing inventory of affected T-wheels. Compliance is required before installation and no later than Dec. 31, 2012.
- (3) Compliance with the Accomplishment Instructions is the terminating action for this Alert Service Bulletin.

F. Approval

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

ASB 048 Page 2 of 8

	ISSUE	D		REVIS	ED	PAGE NO.	REVISION	
MO	DAY	YEAR	MO	DAY	YEAR	5 of 12		S.B. 604
11	21	12				5 of 13		5.D. 00 1

Bulletin No. 048

Turbocharger TA0411 - P/N 410188-0019 Turbine Wheel Replacement

G. Manpower

- (1) Refer to aircraft or engine labor time or service manuals for estimates regarding labor requirements. Refer to Appendix I.
- (2) Negligible for return of parts in inventory.
- (3) Four (4.0) man hours of labor are required for removal and replacement of an affected T-wheel from a turbocharger.

H. References

CAUTION: DO NOT USE OBSOLETE OR OUTDATED INFORMATION. PERFORM ALL INSPECTIONS OR WORK IN ACCORDANCE WITH THE MOST RECENT REVISION OF A DOCUMENT.

- (1) HET 400600-0000 Turbocharger Overhaul & Maintenance Manual
- (2) Applicable Continental Motors or Lycoming engine maintenance manuals
- (3) Applicable aircraft maintenance manuals
- Other Publications Affected
 - (1) None
- J. Weight and Balance
 - (1) Not affected

2. Material Information

- (1) One each, repaired or replacement turbocharger shown in Table 1 as applicable to your turbocharger.
- (2) One each, replacement Turbocharger T-wheel, HET P/N 410188-0019.

Rev. New November 16/12
© 2012 - Hartzell Engine Technologies. - All rights reserved

ASB 048 Page 3 of 8

	ISSUE	ED .		REVIS	ED	PAGE NO.	REVISION	
MO	DAY	YEAR	MO	DAY	YEAR	6 of 12		S.B. 604
11	21	12				6 of 13		5.D. 004

Bulletin No. 048

Turbocharger TA0411 - P/N 410188-0019 Turbine Wheel Replacement

3. <u>Accomplishment Instructions</u>

WARNING:

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

CAUTION:

DO NOT USE OBSOLETE OR OUTDATED INFORMATION. PERFORM ALL INSPECTIONS OR WORK IN ACCORDANCE WITH THE MOST RECENT REVISION OF THIS ALERT SERVICE BULLETIN (ASB) AND THE APPLICABLE AIRCRAFT, ENGINE AND/OR HET 400600-0000 MAINTENANCE MANUAL. INFORMATION CONTAINED IN THESE MANUALS OR THIS ASB MAY BE SIGNIFICANTLY CHANGED FROM EARLIER REVISIONS. FAILURE TO COMPLY WITH THIS ASB OR THE USE OF OBSOLETE INFORMATION MAY CREATE AN UNSAFE CONDITION THAT MAY RESULT IN DEATH, SERIOUS BODILY INJURY, AND SUBSTANTIAL PROPERTY DAMAGE. REFER TO THE APPLICABLE AIRCRAFT, ENGINE, AND/OR THE HET 400600-0000 MAINTENANCE MANUAL INDEX FOR THE MOST RECENT REVISION LEVEL OF THE PUBLICATION.

A. Inspection

CAUTION: DO NOT RELY ON THE AIRCRAFT OR THE ENGINE PAPERWORK ALONE WHEN IDENTIFYING THE TURBOCHARGER SERIAL NUMBER.

- If needed, access the aircraft turbocharger in accordance with the instructions contained in the aircraft maintenance manual.
- (2) Locate the turbocharger part number and serial number found on the data plate and determine if it is an affected part number and/or serial number. Refer to Table 1 & 2.
 - (a) If the turbocharger serial number **is not listed** in Table 2 and an overhaul or repair has **not** been performed since August 29, 2012, proceed to "Return to Service" 3.C.(3).
 - (b) If the serial number is listed in Table 2, continue with Corrective Action 3.B(1).
 - (c) If the turbocharger was overhauled or repaired between August 29, 2012 and November 16, 2012 and the HET P/N 410188-0019 T-wheel was replaced, then determine if the serial number etched on the T-wheel shaft is affected. This may be done by removing the oil drain fitting and with adequate lighting, observing the shaft. (see Fig. 1).
 - (i) If an affected serial number is found, continue with Corrective Action 3.B(1).
 - (ii) If an affected serial number **is not** found, reconnect the oil drain fitting per applicable aircraft and/or engine manufacturer's maintenance manuals or service instructions. Proceed to "Return to Service" 3.C.(3).
- (3) Identify affected T-wheel Piece Part
 - (a) Examine the turbocharger T-wheel by observing serial number etched on the T-wheel shaft. If a serial number is found in the range of **H120716 through H121988**, the T-wheel is affected. If found in inventory as piece part or as part of a complete turbocharger assembly, continue with Corrective Action 3.B(3).

ASB 048 Page 4 of 8

	ISSUE	D		REVIS	ED	PAGE NO.	REVISION	
MO	DAY	YEAR	MO	DAY	YEAR	7 of 12		S.B. 604
11	21	12				7 of 13		5.D. 004

Bulletin No. 048

Turbocharger TA0411 - P/N 410188-0019 Turbine Wheel Replacement

B. Corrective Action:

- (1) If it has been determined that an affected T-wheel is installed:
 - (a) The turbocharger must be removed and suitable arrangements made to replace the T-wheel or turbocharger. Remove in accordance with the applicable aircraft and/or engine manufacturer's maintenance manuals or service instructions. *If returning the turbocharger to HET, do not send with fittings, oil reservoir, or other engine or airframe parts as they cannot be returned.*
- (2) Return any affected turbocharger T-wheel HET P/N 410188-0019 within thirty (30) days from the date of this Alert Service Bulletin. Refer to 1.A.(1).
- (3) Prior to installation of a repaired turbocharger, please check that the unit is received in undamaged condition with proper paperwork.
- (4) Utilizing the applicable aircraft and/or engine manufacturer's maintenance manuals or service instructions, re-install the turbocharger assembly and proceed to "Return to Service".

C. Return to Service

- (1) After the turbocharger has been properly installed, the aircraft will be ready for "return to service".
- (2) Perform the recommended turbocharger operational tests in accordance with Hartzell Engine Technologies Service Bulletin 023.
 - (a) The operational tests consist of turbocharger pre-lubrication, ground running tests, and operational flight test.
 - (b) Make sure air, exhaust, or oil leaks are not present.
- (3) Using the applicable aircraft and engine manufacturer's maintenance manuals of the latest revision, install any portion of the aircraft that was removed to gain access.
- D. Upon successful completion of this Alert Service Bulletin per the applicable compliance listed, make an appropriate log book entry noting compliance with this Alert Service Bulletin as terminating action.

Rev. New November 16/12 © 2012 - Hartzell Engine Technologies. - All rights reserved

ASB 048 Page 5 of 8

	ISSUE	ED .		REVIS	ED	PAGE NO.	REVISION	
MO	DAY	YEAR	MO	DAY	YEAR	9 af 12		S.B. 604
11	21	12	1			8 of 13		5.D. 00 1

Bulletin No. 048

Turbocharger TAO411 - P/N 410188-0019 Turbine Wheel Replacement

4. Contact Information:

- A. All communications regarding this ASB, must be placed either through Hartzell Engine Technologies Technical Support at (334-386-5441 or (888) 461-6077, for international calling +1 (334-386-5441. If by Fax use (334) 386-5450.
- B. Written communications must be placed through Hartzell Engine Technologies Technical Support, 2900 Selma Highway, Montgomery, AL 36108, USA.
- C. If E-mail communication is desired, go to our website:http://www.hartzellenginetech.com and select "contact" and follow the instructions.
- D. If returning the T-wheel or turbocharger for repair or replacement, refer to Appendix 1.

ASB 048 Page 6 of 8

ĺ		ISSUE	D		REVIS	ED	PAGE NO.	REVISION	
	MO	DAY	YEAR	MO	DAY	YEAR	0 of 12		S.B. 604
	11	21	12				9 of 13		S.D. 004

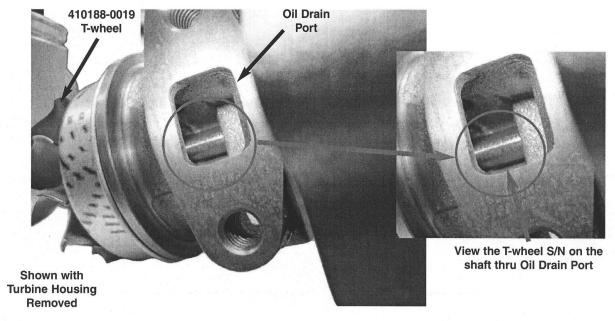
Bulletin No. 048

Turbocharger TA0411 - P/N 410188-0019 Turbine Wheel Replacement

Table 3 - Aircraft / Engine Reference Guide*

Turbocharger P/N	Engine Model	Engine P/N	Aircraft Models
466642-0001	TSIO-360-MB, -SB	649151-1 (CMI)	Mooney Encore
466642-9001	TSIO-360-MB, -SB	649151-1 (CMI)	Mooney Encore
466642-0002	TSIO-360-RB	649151-2 (CMI)	Piper Seneca V - PA34-220T
466642-9002	TSIO-360-RB	649151-2 (CMI)	Piper Seneca V - PA34-220T
466642-0006	TIO-540-AK1A (LYC)	46C22924 (LYC)	Cessna T182T
466642-9006	TIO-540-AK1A (LYC)	46C22924 (LYC)	Cessna T182T

^{*} Use for reference purposes only. Aircraft/engines listed are inclusive of but not limited to these models.



Note:Affected HET P/N T-wheels have S/N on the shaft.

Figure 1 - Typical View of T-wheel S/N Through Turbocharger Oil Drain Port

ASB 048 Page 7 of 8

	ISSUED			REVIS	ED	PAGE NO.	REVISION	
MO	DAY	YEAR	MO	DAY	YEAR	10 of 12		S.B. 604
11	21	12				10 of 13		5.D. 00 4

Bulletin No. 048

Turbocharger TAO411 - P/N 410188-0019 Turbine Wheel Replacement

Intentionally Left Blank

Rev. New November 16/12 © 2012 - Hartzell Engine Technologies. - All rights reserved **ASB 048** Page 8 of 8

	ISSUED			REVIS	ED	PAGE NO.	REVISION	
MO	DAY	YEAR	MO	DAY	YEAR	11 of 12		S.B. 604
11	21	12				11 of 13		5.D. 004

APPENDIX I - ASB 048

COMMERCIAL ASSISTANCE:

In addition to warranty coverage provided by the HET Limited Warranty, HET will provide additional commercial assistance to comply with ASB 048 under the terms outlined in this Appendix.

Commercial Assistance: The following will be provided with the submission of a completed PPCR (Attachment A, Sections I, II and III), copies of invoices showing breakdown of labor charges and log book entries and affected parts. This will serve as a claim form when received by HET's warranty department. Any commercial assistance or other consideration shall expire three (3) calender months from the original published date of ASB 048.

If the affected turbocharger or T-wheel is returned to HET, it will be repaired or replaced at HET option and may qualify for commercial assistance per the terms herein.

If the affected turbocharger is not returned to HET for repair, commercial assistance will be provided as specified once the completed PPCR and affected T-wheel has been returned to HET.

Identification: Labor is negligible.

Removal & Installation: For affected turbocharger, up to four (4) hours @ \$75 per hour (up to \$300 max). (includes gaining access)

Replacement of T-wheel: For affected T-wheel replacement, up to four (4) hours @ \$75 per hour (up to \$300 max). in turbocharger

WARRANTY STATEMENT:

- A. The sole warranty for the actions within this Service Bulletin are contained in the HET Limited Warranty Policy issued with the purchase of each new or rebuilt turbocharger (see terms and conditions therein).
- B. Commercial assistance may apply as stated in Appendix 1. Attachment A of ASB 048 is required.
- C. Issuance of this Alert Service Bulletin 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 outside of HET performing work or maintenance on the engine or aircraft turbocharging system.

SHIPPING INFORMATION: (when returning to HET)

The affected turbocharger must be securely packed and packaged so no damage will occur. A copy of "Attachment A" must have "Sections I, II and III" filled out completely and placed inside the shipping container. The turbocharger must be received assembled and undamaged to qualify for repair. If returning the turbocharger to HET, do not send with fittings, oil reservoir, or other engine or airframe parts as they cannot be returned.

Address package to Hartzell Engine Technologies LLC, Warranty Department, 2900 Selma Highway, Montgomery, AL 36108, USA. Also mark "WARRANTY DEPT / ASB 048" clearly on the outside of the shipping container. *HET will only pay for return shipping by the same method as received. (next day, ground, etc.)*

CONTACT INFORMATION:

All communications regarding this service bulletin, must be placed either through Hartzell Engine Technologies Technical Support at (334-386-5441 or (888) 461-6077, for international calling +1 (334-386-5441. If by Fax use (334) 386-5450. Written communications must be placed through Hartzell Engine Technologies Technical Support, 2900 Selma Highway, Montgomery, AL 36108, USA.

If e-mail communication is desired, submit e-mail to: warranty@hartzellenginetech.com.

Rev. New November 16/12 © 2012 - Hartzell Engine Technologies. - All rights reserved ASB 048 Appendix 1

	ISSUED			REVIS	ED	PAGE NO.	REVISION	
MO	DAY	YEAR	MO	DAY	YEAR	12 of 12		S.B. 604
11	21	12				12 of 13		5.D. 00 1



PPCR

Publication Product Condition Report

(To validate warranty or commercial assistance, all information MUST be filled out.)

ame:	1	Date of F	Report:			Tel: _		2	
ompany Name:	7				E-mail:				
ddress:									
rcraft Mfg: Time	g: Time in Service:			n Service: Mod			_ S/N: _		
	(6	as may be	applicable	e)					
ECTION II: Product or Compo	nent Infor	mation	(Comp	leted	by End	User)			
omenclature: Turbocharger or T-wircle one)	heel (part)		Part Nu (Write	umber: in)					
				_					
erial Number:			Batch/[Date C	ode:				
art Time in Service:	,	New:	YES			Rebuil	:: YES		
art Time in Service:	,	New:	YES			Rebuil			
art Time in Service: ECTION III: Compliance Infor	mation: (C	New:	YES			Rebuil			
ECTION III: Compliance Infor	mation: (C	New:	YES	□ Repai		Rebuil			
ECTION III: Compliance Infor Compliance with ASB 048: Turbocharger returned to HET:	mation: (C YES YES	New:	YES ed by I	□ Repai		Rebuil			
ECTION III: Compliance Information Compliance with ASB 048: Turbocharger returned to HET: T-wheel returned to HET:	mation: (C YES YES YES	New:	YES ed by I	□ Repai		Rebuil		·	
ECTION III: Compliance Infor Compliance with ASB 048: Turbocharger returned to HET:	mation: (C YES YES YES	New:	YES ed by I NO NO	□ Repai	r Facility	Rebuil	: YES	,-	
ECTION III: Compliance Information Compliance with ASB 048: Turbocharger returned to HET: T-wheel returned to HET:	mation: (C YES YES YES	New:	YES ed by I NO NO	□ Repai	r Facility	Rebuil ^l	: YES	,	
ECTION III: Compliance Information Compliance with ASB 048: Turbocharger returned to HET: T-wheel returned to HET:	mation: (C YES YES YES	New:	YES ed by I NO NO	□ Repai	r Facility	Rebuil ^l	: YES		

To be eligible for any commercial assistance, this form must be completed as instructed above and will serve as a claim form. NO reimbursement will be made without completing this form and return of affected T-wheel or turbocharger. All commercial assistance shall end three (3) calendar months from the original published date of ASB 048.

For further information contact Hartzell Engine Technologies LLC at: 2900 Selma Highway, Montgomery, AL 36108 USA or FAX to HET Customer Service, 334-386-5450. The complete service bulletin is available to you online via our website at http://www.HartzellEngineTech.com.

	ISSUED			REVIS	ED	PAGE NO.	REVISION	
MO	DAY	YEAR	MO	DAY	YEAR	12 of 12		S.B. 604
11	21	12				13 of 13		S.D. 004