SERVICE BULLETIN

Compliance Will Enhance Safety

CATEGORY 3 SB21-03

TECHNICAL PORTIONS FAA APPROVED

SUBJECT: Potential Failure of Oil Temperature Control

Valve Part No. 657496

PURPOSE: Notify customers of nonconformity in Part No. 657496 Oil Temperature

Control Valve manufactured in Q4 (fourth quarter) of 2020.

COMPLIANCE: During the next scheduled oil change, or before next flight if experiencing oil

temperature indications near or greater than the specified operating limits.

MODELS

AFFECTED: Continental Aerospace Technologies new and rebuilt engine model specifications

(I0550N, TSI0550C, TSI0550K, TSI0550N, TSI0F550K) using Oil Temperature

Control Valve (Vernatherm) Part No. 657496.

I. GENERAL INFORMATION

The supplier of Continental Part No. 657496, Oil Temperature Control (Vernatherm) Valve Assembly, has identified a discrepancy in one lot of Part No. 657496. Affected units have a potential to leak internally and fail to actuate the piston assembly. Upon failing, these units will remain in the "cold" position, providing only limited oil flow through the engine oil cooler.

II. FAULTY UNIT IDENTIFICATION

The lot number is etched on the cap of the assembly below the part number in the location shown in Figure 1. Remove and replace affected Part No. 657496, Vernatherm Assembly marked with lot number **D20** (2020O4) with a serviceable unit.

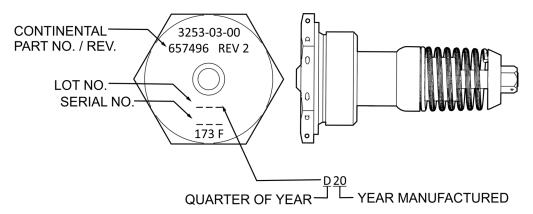


Figure 1. Oil Temperature Control Valve

III. AFFECTED ENGINE SERIAL NUMBERS

REVISED

The listed engine serial numbers in Table 1 may have been assembled using the faulty oil temperature control valve assemblies. Inspect the affected engine serial numbers according to the instructions in Section IV. Return spare parts exhibiting lot number **D20** to Continental for a serviceable replacement or refund. If Part No. 657496 was replaced between December 13, 2020 and March 11, 2021, your engine may also be affected - consult the engine log book.

SB21-03

Table 1. Engine Serial Numbers

Engine Model	Serial Number
R-I0550N7B ¹	1039897
R-I0550N43B ¹	1040063
R-I0550N68B ¹	1040095
R-I0550N68B ¹	1040096
R-I0550N68B ¹	1040120
R-I0550N41B ¹	1040143
R-TSI0550C20B ¹	1040157
R-I0550N68B ¹	1040161
R-I0550N43B ¹	1040174
I0550N70B	1040199
TSI0550K2B	1040200
TSI0550K2B	1040202

Table 1. Eligille Serial Nullibers		
Engine Model	Serial Number	
TSI0550K2B	1040214	
TSI0550K2B	1040219	
R-I0550N43B ¹	1040229	
I0550N70B	1040234	
TSI0550K2B	1040238	
I0550N47B	1040283	
I0550N70B	1040288	
TSI0550K2B	1040289	
R-I0550N7B ¹	1040368	
R-I0550N7B ¹	1040424	
TSI0550K2B	1040459	
I0550N43B	1040467	
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Engine Model	Serial Number
I0550N68B	1040479
I0550N68B	1040503
TSI0550K2B	1040509
I0550N70B	1040554
I0550N70B	1040557
TSI0550K2B	1040581
I0550N43B	1040597
TSI0550K2B	1040645
I0550N70B	1040651
TSI0550K2B	1040660
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IV. CORRECTIVE ACTION

Remove and replace the Oil Temperature Control Valve (Vernatherm) on affected engines according to the engine instructions for continued airworthiness. If oil temperature exceeds 240°F for more than 30 seconds, perform an oil change according to instructions in M-0, Standard Practice Maintenance Manual.

V. WARRANTY

The actions required to comply with this Service Document are covered, up to the Eligible Allowance provided for reimbursement, as shown below. Standard warranty practices apply. Visit the Continental web site at www.continental.aero to obtain copies of Continental Warranty Policies.

Complete and email a copy of the linked <u>Compliance Form</u>, along with a copy of the work invoice (and a copy of the repair agency's W-9 if the repairs are accomplished by a repair facility in the Continental United States) upon completion for reimbursement. Continental reserves the right to request copies of invoices and maintenance records to verify warranty applicability.

Allowances/Reimbursements

Eligible Allowances for Reimbursement		Labor Hours ¹
1	Inspect Part No. 657496 oil temperature control valve for applicability	0.25
2	Remove and replace installed oil temperature control valve	2.75

^{1.} at published shop rate

Contact Continental Technical Services at the phone numbers or email address listed below if you have any questions concerning the technical content of this Service Document.

1.888.826.5465 Toll Free in the United States

+1.251.436.8299 International Callers email: CMTechnical@continental.aero



^{1.} The R- prefix in the Engine Model indicates the engine is Rebuilt.