

SPECIAL AIRWORTHINESS INFORMATION BULLETIN

SAIB: CE-18-32

SUBJ: Engine Oil System (Airframe Furnished): Flapper Check Valve Failure Date: November 28, 2018

This is information only. Recommendations aren't mandatory.

Introduction

This Special Airworthiness Information Bulletin is to alert owners, operators, and maintenance technicians of Textron Aviation Inc. (Textron) Model 208B airplanes of failure of the oil system "Valve – Flap Check" on serial numbers 208B2197 and 208B5000 and on. These airplanes are commonly referred to as "208B EX" or "EX" and incorporate the Textron PT6A-140 engine installation.

At this time, the airworthiness concern is not an unsafe condition that would warrant any additional airworthiness directive (AD) action under Title 14 of the Code of Federal Regulations (14 CFR) part 39.

Background

The FAA is aware of three events involving failure of check valve part number C100490-1, Item No. 82 of Figure 03 in the Illustrated Parts Catalog Rev. 23. We found no other reports of this type of event in the accident/incident databases. All failures resulted in parts of the check valve assembly being liberated and entering the engine oil system. The failure of the oil system check valve is a latent failure condition which may exist on any airplane. Indications the failure has occurred are increasing oil temperatures in to the caution and warning range due to blockage in the oil system. Please note; the check valve is shown in the 208/208B Maintenance Manual, Rev. 34, Chapter 79-20-05 Figure 202, Sheet 1, View BB, however it is misidentified as the "OIL TUBE UNION" which is located in the upper center of View B-B.

Recommendations

The FAA recommends the following:

- a. Be aware of this failure which may be indicated by higher than normal oil temperatures, steadily increasing oil temperatures, or operation into the yellow caution advisory and red warning ranges of the oil temperature indicator.
- b. Replace any P/N C100490-1 check valve with 1800 hr. time in service or greater, on any engine, until further investigation has been conducted.
- c. Return any check valve removed for any cause to Textron Aviation Customer Service to the address below.

For Further Information, Contact

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For Return of Parts or Related Service Information Contact

Textron Aviation, Inc. Textron Aviation Customer Service, One Cessna Blvd. Wichita, Kansas 67215; telephone (316) 517-5800; email: <u>customercare@txtav.com</u> internet <u>www.txtav.com</u>