

# **VENDOR SERVICE PUBLICATION**

Date: April 3, 2020

**TO**: All affected owners/operators

SUBJECT: CONTINENTAL AEROSPACE TECHNOLOGIES, SB20-01, 'FUEL SCREEN

ASSEMBLY, SCHEDULED MAINTENANCE'

MODELS AFFECTED: SERIAL NUMBERS AFFECTED:

PA-28-201T Turbo Dakota 28-7921001 through 28-7921095

PA-28R-201T Turbo Arrow III 28R-7703001 through 28R-7803374; 2803001 through

2803012

PA-28RT-201T Turbo Arrow IV 28R-7931001 through 28R-8631005; 2831001 through

2831038

PA-34-200 Seneca 34-E4; 34-7250001 through 34-7450220

PA-34-200T Seneca II 34-7570001 through 34-8170092

PA-34-220T Seneca III 34-8133001 through 34-8633031; 3433001 through

3433172; 3448001 through 3448037

PA-34-220T Seneca IV 3448038 through 3448079; 3447001 through 3447029

PA-46-310P Malibu 46-8408001 through 46-8608088; 4608001 through

4608140

**COMPLIANCE TIME:** As specified in the attached Continental Aerospace Technologies Service

Bulletin SB20-01

PURPOSE: Continental Aerospace Technologies has released a bulletin that announces

augmented fuel screen maintenance procedures for affected airplane models

with affected Continental engines installed.

**ACTION**: Comply with Continental Aerospace Technologies SB20-01.

ATA/JASC: 7322

# **SB20-01**

# SERVICE BULLETIN

Contains Useful Information Pertaining To Your Aircraft Engine

**SUBJECT:** Fuel Screen Assembly, Scheduled Maintenance

**PURPOSE:** Augment current scheduled maintenance instructions

**COMPLIANCE:** During the 100-Hour/Annual Inspection

**MODELS** 

**AFFECTED:** All Continental Aerospace Technologies new and rebuilt aviation gasoline

(AvGas) engines equipped with throttle and control assemblies (reference

Table 1).

## I. GENERAL INFORMATION

Continental Aerospace Technologies<sup>TM</sup> (Continental®) aircraft engine fuel injection systems equipped with throttle and control assemblies (see Figure 1 on page 3) feature a cleanable fuel screen assembly. The throttle and control assembly may be covered with a shroud.

This Service Document is provided to supplement and/or amplify Continental's Instructions for Continued Airworthiness (ICAs) as provided in the engine's Maintenance and Overhaul Manual and applicable Service Documents.

## II. SCOPE

Continental engines equipped with a throttle and control assembly (see Figure 2 on page 4) use a fuel screen assembly and are affected by this service document. Continental engines equipped with a metering assembly that is integral to the air throttle body (see Figure 3 on page 4) **do not** use a fuel screen and are not affected by this service document. In addition, these assemblies may have multiple part numbers due to configuration, however they may be identified by the rectangular base body that is distinctly separate from the air throttle body.

Table 1. Affected Engine Models and Technical Publications<sup>1</sup>

Engine Model	Document Number	Date
ALL Continental AvGas Engines	M-0	September 2019
O-470-GCI	X30586	October 2013
GTSIO-520-C, D, F, H, K, L, M, and N	X30045	October 2013
IO-470-C, D, E, F, G, H, J, K, L, M, N, P, R, S, U, V, and VO	X30588	March 2013
TSIO-470-B, C, and D	X30033	August 2011
IO-520-A, B, BA, BB, C, CB, D, E, F, J, K, L, M, and MB	X30039	October 2013
TSIO-520-A, C, G, H, M, P, R, and T	X30575	December 2012
TSIO-520-B, BB, D, DB, E, EB, J, JB, K, KB, L, LB, N, NB	X30574	October 2013
IO-550-A, B, C	M-16	July 2015
IO-550-D, E, F, L	X30605	October 2013
TSIOL-550-A	X30601	August 2011
TSIOL-550-C	OMI-15	October 2014

A copy of this bulletin must be inserted into the most current version of the applicable Maintenance and Overhaul manual (as listed); until the data is incorporated into the applicable Maintenance and Overhaul manual or M-0 (by revision) or the service document is retired.

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#### III. 100-HOUR/ANNUAL INSPECTION AND SCHEDULED MAINTENANCE

Complete the augmented fuel screen maintenance (listed below) after completing the tasks listed in M-0, Standard Practice Maintenance Manual, Section 6-4.7.2. "Maintenance Preflight Inspection, steps 1 through 5.

NOTE: Reference the current Illustrated Parts Catalog (IPC) for the most current replacement part (see Parts Supersedure History at: http://continental.aero/support/parts-supersedure-history.aspx).

### WARNING

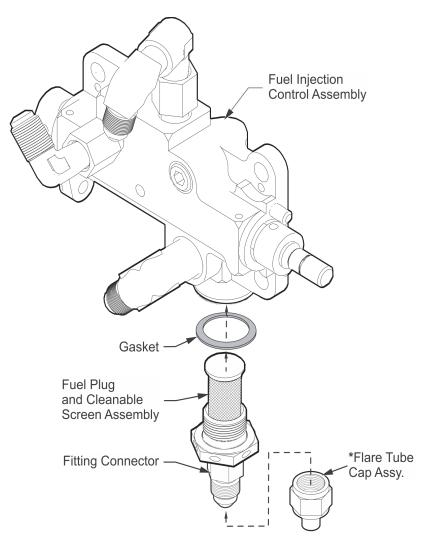
Wear eye protection when cutting safety wire to avoid injury from flying debris.

- 1. Cut, remove, and discard the safety wire from the fuel screen assembly.
- 2. Remove the fuel plug and screen assembly (with gasket) from the fuel injection control assembly housing; discard the gasket (see Figure 1). If equipped with a fitting connector and flare tube cap assembly, remove the flare tube cap assembly from the fuel plug and screen assembly (i.e. IO-520-D or IO-550-D). Inspect the fuel screen for damage.
  - a. If the screen or plug threads exhibit damage, replace the fuel plug and screen assembly.
  - b. If the fuel plug and screen assembly appears to be serviceable, clean the fuel screen according to the instructions in M-0, Standard Practice Maintenance Manual, Table 12-1. Repeat the cleaning process until no debris remains in the screen.
  - c. If the screen cannot be cleaned successfully, replace the fuel plug and screen assembly.
- 3. Apply anti-seize lubricant (P/N 646943) sparingly to the male threads of the fuel plug and screen assembly, ensuring the screen material does not become contaminated.
- 4. Install the fuel plug and screen assembly (with new gasket) into the fuel injection control assembly housing by hand. If a flare tube cap assembly was removed (reference step 2., above, (i.e. IO-520-D or IO-550-D)), install into the fuel plug and screen assembly according to the latest version of M-0, 3-3.1. General Sealant Application Instructions.
- 5. Torque the fuel plug and screen assembly (with new gasket and, if equipped with flare tube cap assembly) to 120 130 in-lbs according to the latest version of M-0, Appendix B.

CAUTION: Never reuse safety wire.

6. Using new 0.032" safety wire; safety wire the fuel screen assembly to the anchor point on the fuel control assembly housing according to instructions in M-0, "Standard Practice Maintenance Manual, Table 3-8 (wire size), and Appendix C-3 (method).





\*If equipped, remove flare tube cap assembly from the fitting connector (i.e. IO-520-D or IO-550-D)

Figure 1. Fuel Injection Control Assembly - Exploded View, typical (Shroud, levers, and hoses removed for clarity)

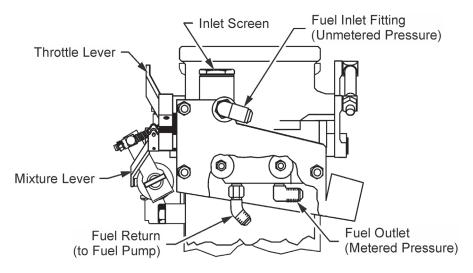


Figure 2. Affected Throttle and Control Assembly, typical

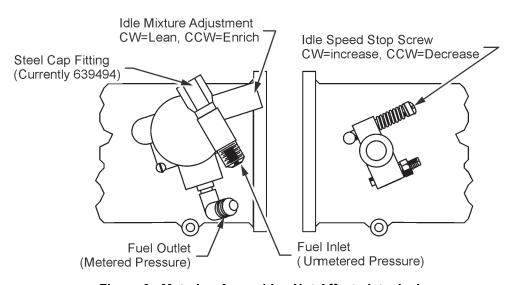


Figure 3. Metering Assembly - Not Affected, typical

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