

DATED: April 19, 1999

(S/M)

VENDOR SERVICE PUBLICATION

TO: All Piper Domestic and International Distributors, Authorized Piper Service Centers and publication subscribers.

SUBJECT: Distribution of: **TEXTRON LYCOMING SB 480C, "I. Oil and Filter Change and Screen Cleaning, II. Oil Filter/Screen Content Inspection"**

MODELS AFFECTED:

All

SERIAL NUMBERS AFFECTED:

All aircraft with Textron Lycoming Piston Engines

Note:

A guide to the Models and Serial Numbers Affected is listed on the next few pages. This should be used as a reference to determine applicability, however, if your serial number or model is not listed here, consult with Textron Lycoming using the model and serial number of the engine.

COMPLIANCE TIME: In accordance with the attached TEXTRON LYCOMING Service Bulletin SB 480C, "I. Oil and Filter Change and Screen Cleaning, II. Oil Filter/Screen Content Inspection". *Check the attached publication for compliance time.*

PURPOSE: To provide distribution of TEXTRON LYCOMING Service Bulletin SB 480C, "I. Oil and Filter Change and Screen Cleaning, II. Oil Filter/Screen Content Inspection".

Caution:

Failure to comply with Textron Lycoming Service Bulletin SB 480C may result in the failure to detect engine oil contamination of a detrimental nature. Significant engine oil contamination may lead to premature failure or wear of engine components.

(over)
ATA: 7250

Effectivity Reference Guide

MODELS AFFECTED:

E-2 Cub
 J-2 Cub
 J-3 Cub

 J-4 Cub Coupe
 J-5 Cub Cruiser
 PA-11- Cub Special
 PA-12 Super Cruiser
 PA-14 Family Cruiser
 PA-15 Vagabond
 PA-16 Clipper
 PA-17 Vagabond
 PA-18/18-150 Super Cub

 PA-18-150 Super Cub
 PA-20 Pacer
 PA-22-125/135 Tripacer
 PA-22-108 Colt
 PA-23 Apache
 PA-23 235 Aztec
 PA-23-250 Aztec

 PA-24-180/250 Comanche
 PA-24-260 Comanche
 PA-24-400 Comanche
 PA-28-140 Cherokee
 PA-28-150/160/180 Cherokee
 PA-28-151 Warrior
 PA-28-161 Warrior II

 PA-28-161 Warrior III

 PA-28-161 Cadet
 PA-28-181 Archer II

 PA-28-181 Archer III

 PA-28-235 Cherokee
 PA-28-236 Dakota

 PA-28R-180 Arrow
 PA-28R-200 Arrow/Arrow II
 PA-28R-201 Arrow III
 PA-28R-201 Arrow

 PA-28RT-201 Arrow IV
 PA-30-Twin Comanche

SERIAL NUMBERS AFFECTED:

11 through 363
 500 through 1206
 1125 through 23180, G-1 through G-253,
 2356A through 2370A, and 101C through 250C
 4-400 through 4-1649
 5-1 through 5-3014
 11-1 through 11-1353
 12-1 through 12-4036
 14-1 through 14-523
 15-1 through 15-388
 16-1 through 16-736
 17-1 through 17-215
 18-1 through 18-9004
 18- 7309016 through 18-8309025
 1809001 through 1809113
 20-1 through 20-1121
 22-1 through 22-2424
 22-8000 through 22-9848
 23-1 through 23-2046
 27-505 through 27-622
 27-1 through 27-4866
 27-7304917 through 27-8154030
 24-1 through 24-3687
 24-3642, 24-4000 through 24-5028
 26-2 through 26-148
 28-20000 through 28-7725290
 28-1 through 28-7505259 & 28-E13
 28-7415001 through 28-7715314
 28-7716002 through 28-8616057
 2816001 through 2816109
 2816110 through 2816119,
 2842001 and up
 2841001 through 2841365
 28-7690001 through 28-8690056
 2890001 through 2890205
 2890206 through 2890231
 2843001 and up
 28-10001 through 28-7710089 & 28-E11
 28-7911001 through 28-8611008
 2811001 through 2811050
 28R-30001 through 28R-7130013
 28R-35001 through 28R-7635545
 28R-7737002 through 28R-7837317
 2837001 through 2837061
 2844001 and up
 28R-7918001 through 28R-8218026
 30-1 through 30-2000

Effectivity Reference Guide (Cont'd)

MODELS AFFECTED:

PA-31/300/325 Navajo/Navajo CR

PA-31-350 Chieftain

PA-31-350 T1020

PA-32-260 Cherokee Six

PA-32-300 Cherokee Six

PA-32-301 Saratoga

PA-32RT-300T Turbo Lance II

PA-32R-300 Lance

PA-32RT-300 Lance II

PA-32R-301 Saratoga SP

PA-32R-301 Saratoga II HP

PA-32R-301T Turbo Saratoga SP

PA-32R-301T Saratoga II TC

PA-34-200 Seneca

PA-38-112 Tomahawk

PA-39-Twin Comanche

PA-44-180 Seminole

PA-44-180T Seminole

PA-46-350P Malibu Mirage

SERIAL NUMBERS AFFECTED:

31-2 through 31-861

31-7300901 through 31-8312019

31-5001 through 31-5004

31-7305005 through 31-8452021

31-8253001 through 31-8553002

32-1 through 32-7800008

32-40000 through 32-7940290

32-8006001 through 32-8606023

3206001 through 3206019

32R-7787001 through 32R-7987126

32R-7680001 through 32R-7880068

32R-7885001 through 32R-7985105

32R-8013001 through 32R-8613006

3213001 through 3213041

3213029, 3213042 through 3213103

3246001 and up

32R-8029001 through 32R-8629006

3229001 through 3229003

3257001 and up

34-7250001 through 34-7450220

38-78A0002 through 38-82A0124

39-1 through 39-155

44-7995001 through 44-8195026, 4495001

through 4495013, 4496001 through 4496020,

44-8107001 through 44-8207020

4622001 through 4622200, 4636001 and up

MANDATORY
SERVICE BULLETIN

DATE: February 26, 1999

Service Bulletin No. 480C
(Supersedes Service Bulletin No. 480B)
Engineering Aspects are
FAA ApprovedSUBJECT: I. Oil and Filter Change and Screen Cleaning
II. Oil Filter/Screen Content Inspection

MODELS AFFECTED: All Textron Lycoming direct drive and TIGO-541 piston engines.

TIME OF COMPLIANCE: As required by subject bulletin.

Textron Lycoming recommends the following:

I. Oil and Filter Change and Screen Cleaning.

- A. Within 10 hours of operation – filter replacement or pressure screen cleaning for new, remanufactured, or newly overhaul engines and for engines with any newly installed cylinders.
- B. At 25 hours after the first filter replacement/screen cleaning – oil change, filter replacement or pressure screen cleaning for new, remanufactured or newly overhauled engines and for engines with any newly installed cylinders.
- C. 50-Hour interval – oil change and filter replacement for all engines using full-flow filtration system (except for engine models TIO-540-AF1A and -AF1B, which require 25 hour interval changes).
- D. 25-Hour interval – oil change and screen cleaning for all engines employing a pressure screen system.
- E. A total of four (4) months maximum between changes for systems listed under “A”, “B” and “C”.
- F. All turbocharged engines must be broken-in and operated with ashless dispersant oil. (Refer to latest edition of Service Instruction No. 1014.)

II. Oil Filter/Screen Content Inspection.

- A. Using the following methods, check for premature or excessive engine component wear, indicated by the presence of metal particles, shavings, or flakes in the oil filter element or screens.

1. Oil Filter.

- a. Using approved method (eg., for full flow , spin-on filters, use Champion Tool CT-475 or Airwolf Cutter AFC-470), open the filter.
- b. Check condition of the oil from the filter for signs of metal contamination.
- c. Remove the paper element from the filter.
- d. Carefully unfold the paper element and examine the material trapped in the filter.

2. Pressure Screen.

If engine employs a pressure screen system, check the screen for metal particles.

3. Oil Sump Suction Screen.

After draining oil, remove the suction screen from the oil sump and check for metal particles..

B. If examination of the used oil filter or pressure screen and the oil sump suction screen indicates abnormal metal content, additional service may be required to determine the source and possible need for corrective maintenance.

NOTE

Textron Lycoming encourages the use of spectrograph oil analysis to monitor engine component wear rates. Refer to the latest edition of Service Letter No. L171.