



VSP - 119

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

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.