

VENDOR SERVICE PUBLICATION

TO:  All Piper Distributors  
 All Piper CORPAC's  
 Affected Aircraft Owners/Operators  
 All of the above

SUBJECT: Goodyear Aerospace Service Bulletin No. FT-77-1 Rev. B dated August 31, 1977; Recommended inspection of (Goodyear) fuel tanks, etc.

Models Affected:

Serial Numbers Affected:

Refer to Goodyear S.B. # FT-77-1 Section I. A. EFFECTIVITY for determination of affected aircraft.

Purpose: To provide distribution of the attached Service Publication (identified in SUBJECT, above) to Piper Field Service Facilities and, if applicable, to affected Piper owners/operators.

Detailed instructions relative to compliance action are specified on the attached Service Publication; any additional/supplemental data, if necessary, is contained in the following "Special Instructions" section.

Special Instructions:

Make appropriate aircraft log book entry relative to Goodyear Service Bulletin No. FT-77-1 (Rev. B) subsequent to applicable compliance action.



# SERVICE BULLETIN

SUBJECT: FUEL SYSTEMS - RECOMMENDED INSPECTION FOR POSSIBLE FUEL SEEPAGE FROM RUBBER-TYPE FUEL TANKS INCLUDING INSPECTION FOR POSSIBLE DETERIORATED OR SOFT RUBBER NIPPLE FITTINGS.

## SECTION I - PLANNING INFORMATION

A. EFFECTIVITY:

This Service Bulletin affects the following list of Models of Aircraft and which are equipped with Goodyear Fuel Tanks.

<u>BEECH</u>	<u>CESSNA - SINGLE</u>
35-33	180
35	182
36	185
45 (T34A)	205
B45	206
D45 (T34B)	207
50	210
95-55	A188
56TC	U206
58	P206
60	
65-88	
65	<u>CESSNA - TWIN</u>
70	310
65-80	T310
65-90	320
95	340
99	401
100	402
200	411
	414
<u>ROCKWELL INTERNATIONAL</u>	404
<u>GENERAL AVIATION DIVN</u>	421
500	
560	<u>PIPER</u>
680	PA25
681	PA31-310
720	PA31-325
685	PA31P
690A	PA31T
	PA34

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A.	<u>EFFECTIVITY:</u> (cont'd)	<u>ROCKWELL INTERNATIONAL SABRELINER DIVN.</u>	<u>ISRAEL AIRCRAFT</u>
		40	1121
		60	1122
		75	1123
			1124

AAR OF OKLAHOMA, INC.

680 Extended Range

- B. REASON: To inspect for possible deterioration and fuel seepage from rubber fuel tanks manufactured by Goodyear Aerospace or The Goodyear Tire & Rubber Co.
- C. DESCRIPTION: Aircraft bladder fuel tanks are an assembly of items made up of age sensitive rubbers. These rubbers are subject to deterioration by oxygen, ozone, sunlight, humidity and high temperature conditions that may be experienced in the course of storage or use. Therefore, a regular inspection of this type of fuel tank is warranted.
- D. COMPLIANCE: For aircraft affected, which incorporate Goodyear fuel cells or tanks that are five years old or older, Goodyear recommends a preflight inspection for signs of fuel seepage. Seepage due to tank leakage is usually found around drains and vent lines. If tank leakage is found, perform the inspection in Section II.
- E. APPROVAL: This bulletin has FAA approval.
- F. REFERENCE: Goodyear Aerospace Corporation  
Fuel Tank Repair Manual AP 368

## SECTION II - ACCOMPLISHMENT INSTRUCTIONS

### A. INSPECTION AND/OR CHECK:

#### Inspection

1. Drain fuel tank and remove access plates.
2. Inspect the interior of each tank where seepage is suspected for cracking, porosity, or other signs of deterioration. Repair or replace fuel tank as necessary.
3. Ascertain that the tank retaining fasteners are properly positioned and fastened.
4. Inspect vent, drain and interconnect nipples. These may be inspected by the fingernail test to give an indication of the condition of the nipple.

The fingernail test consists of using the fingernail to attempt to scrape the rubber off the nipple fitting (see Figure 1). If the rubber has not degraded, the fingernail will glide across the rubber without damage to the rubber. If an unsatisfactory condition exists, the fingernail will dig into the rubber. The rubber will have a consistency of either art gum or chewing gum. Usually the deteriorated rubber will have changed from a light tan color to a dark reddish-brown or greenish color depending upon color of fuel used.

5. Any fuel tank found seeping or with soft nipples should be replaced.
6. Reinstall fuel tank, fuel system and access plate and functionally check the fuel system.

NOTE: Advisory circular AC 43.13-1A, Page 282, also gives information concerning fuel cell inspection.

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A. INSPECTION AND/OR  
CHECK: (cont'd)



FIGURE 1

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