The New Piper Aircraft, Inc.
2926 Piper Drive
Vero Beach, Florida, U.S.A. 32960

SERVICE No. 1044 BULLETIN

PIPER CONSIDERS COMPLIANCE MANDATORY

Date: July 27, 2000 (S)

(This Service Bulletin is divided into TWO PARTS. Check each part for specific information.)

SUBJECT:

To provide inspection access for the lift strut attachment fitting on the forward side of the front spar and to provide details for the inspection of wing components for corrosion.

MODELS AFFECTED:	SERIAL NUMBERS AFFECTED:
E-2, F-2	All
TG-8	G-1 through G-253
J-2	500 through 1975
J-3 series	All
J-4 series	400 through 1649
J-5 series	1 through 3014
PA-11	11-1 through 11-1678
PA-12 series	12-1 through 12-4036
PA-14	14-1 through 14-523
PA-15	15-1 through 15-388
PA-16 series	16-1 through 16-736
PA-17	17-1 through 17-215
PA-18 series	18-1 through 18-9004, 18-7309016 through 18-8309025, 1809001 through 1809113
PA-19 series	19-1 through 19-3
PA-20 series	20-1 through 20-1121
PA-22 series	22-1 through 22-9848

Caution:

Failure to comply with the inspection, per Part I, for corrosion and the refinish or replacement of the corroded subject fittings, could result in the loss of structural integrity of the lift strut and affect safety of flight.

COMPLIANCE TIME: **PART I and PART II:** At the next annual inspection, or aircraft recovering, whichever comes first, but not to exceed the next one hundred (100) hours time in service.

APPROVAL: The installation of access holes and cover plates specified in Part I of the instructions has been shown to comply with the applicable Federal Aviation Regulations and is FAA approved.

(OVER)

ATA: 5701

INSTRUCTIONS: (Continued)

PART II

FAA Advisory Circular AC43.13-1b states that it is very important to thoroughly protect the structure from deterioration before covering and provide adequate inspection access to all areas of fabric covered components to allow for inspection for corrosion, wood rot, and mice infestation.

In addition to requirements of FAA Advisory Circular AC43.13-1b, Part II of this Service Bulletin highlights specific areas in the wing structure that should be inspected for corrosion before covering. These areas are listed below.

1. Lift strut attachment fittings at the front and rear wing spars.
2. Aileron hinge brackets and flap hinge brackets (if installed): Check for corrosion, drain openings are clear, and rework (if required) to incorporate a 0.191 inch drain hole in the aft bottom surface of the channel adjacent to the hinge block. (Exception would be with those aircraft with the plain aileron hinges.)
3. Fittings used for attachment of the drag wire to the wing spars: The majority of the fittings have been manufactured with stainless steel, but Piper records indicate that some were manufactured with carbon steel.
4. Steel fittings that are used for the attachment of the front and rear jury strut attachment to the front and rear spars (except short wing Pipers).
5. Steel fittings that are used for the attachment of the wing bow to the front and rear spars.
6. Make an appropriate logbook entry indicating compliance with Part II of this Service Bulletin.

MATERIAL REQUIRED:

PART I: Two (2) each, Cover Plate, *Piper Code 481-096 or Tinnerman Products A6914-1024-1.*

PART II: N/A

AVAILABILITY OF PARTS: Your Piper Field Service Facility or local vendor.

EFFECTIVITY DATE: *This Service Bulletin is effective upon receipt.*

SUMMARY:

NOTE: If you are no longer in possession of this aircraft, please forward this information to the present owner/operator and notify the factory of address/ownership corrections. Changes should include aircraft model, serial number, current owner's name and address.

Corrections/changes should be directed to:

THE NEW PIPER AIRCRAFT, INC.
Attn: Customer Services
2926 Piper Drive
Vero Beach, FL 32960

PURPOSE: A recent report of corrosion on the lift strut attachment fittings on a Piper high wing, fabric covered aircraft has prompted the creation of additional inspection criteria beyond that existing in current Service and Inspection manuals. This Service Bulletin addresses inspection of the lift strut attachment fittings and other areas of the wing structure for corrosion.

PART I

Piper has received a request from the FAA and the NTSB to provide details for the addition of an access opening to allow for the inspection for corrosion of the front lift strut attachment fitting on the forward side of the front spar.

PART II

Part II of this Service Bulletin provides details for the inspection of other areas of the wing structure that, per service reports, are subject to corrosion and should be checked during normal inspection periods or during the replacement of the wing fabric.

INSTRUCTIONS:

PART I

Piper's recommendation for the location of the inspection opening is on the wing bottom surface, forward of the front spar. This recommendation is based on the research of different models of Piper aircraft and the production drawings associated with these aircraft.

Alternate locations for the inspection opening may be required to eliminate an internal interference problem with the configuration of your particular aircraft.

Generally there are two different types of wing construction in the area of the front lift structure attachment fittings that will dictate the type and location of the openings. (See Instructions 1 and 2 below.)

1. On earlier aircraft, the leading edge skin starts on the top wing surface, wraps around the leading edge and continues aft until it terminates approximately 5 inches forward of the front spar. Consequently, the only option is to cut an access opening in the fabric. (A 1.38 inch diameter opening would be minimum size to allow access for an inspection mirror. See FAA Advisory Circular AC43.13-1b for guidelines.) Locate the opening 3 inches forward of the centerline of the front spar, and 3 inches outboard of the first full length rib, outboard of where the strut attach fitting penetrates the wing surface.

2. On later models, from the inboard end of the wing to the first full length rib outboard of the attachment fittings, the skin starts on the top surface at the front spar, wraps around the leading edge, continues aft along the bottom surface and terminates at the bottom surface of the front spar. Outboard of the subject full length rib, the leading edge construction is similar for all models. This type of construction will allow for two options for an inspection opening:

   Option 1: Cut an opening in the fabric as described in Instruction 1 above.

   Option 2: Add a 1.38 inch diameter hole in the bottom surface of the leading edge skin, 5 inches forward of the centerline of the front spar, centered spanwise between the first nose rib and the first full length rib, outboard of the attachment fittings. Piper recommends the use of a 1.38 inch diameter spotface tool in thin metal.

   Note:

   There is available in the commercial market, a cover plate that is made by Tinnerman Products (Tinnerman A6914-1024-1) that could be used for the opening in the leading edge skin or in fabric with a reinforcement ring. This same cover plate is also available from Piper under Piper Code 481-096.

3. Make an appropriate logbook entry indicating compliance with Part I of this Service Bulletin.