



FAA
Aviation Safety

SPECIAL AIRWORTHINESS INFORMATION BULLETIN

SUBJ: Wing, Attach Fittings (JASC 5740)

SAIB: AIR-21-10

Date: June 29, 2021

This is information only. Recommendations aren't mandatory.

Introduction

This Special Airworthiness Information Bulletin is to advise owners and operators of **Piper Aircraft, Inc. PA-28, PA-32, PA-34, and PA-44** (see list of specific models in "Background" section) airplanes of the potential for corrosion of the forward spar to fuselage attach fittings, in an area that may not be easily accessible for inspection

We have determined that no regulatory action is necessary at this time because the airworthiness concern is not an unsafe condition that would warrant an FAA AD under 14 CFR part 39.

Background

Piper Aircraft, Inc. issued Service Bulletins (SB) 789A, 977, and 1244B to inspect for corrosion on the aft wing spar to fuselage attach fittings. At the time the service bulletins were written, the corrosion was attributed to water intrusion, and forward attach fittings were not considered to be subject to the water intrusion issues affecting the aft attach fittings. Therefore, inspections of the forward attach fittings were not included in those service bulletins.

Since then, the FAA became aware of several cases of severe corrosion on the forward attach fittings from operators in Florida. While no evidence exists of water intrusion at the forward locations, the potential exists for galvanic corrosion between the dissimilar metals of the steel fittings and aluminum spar. Due to the restricted accessibility of the forward attach fittings in some airplanes, owners may be neglecting to have this area inspected. See Figures 1 through 3 depicting corrosion location and characteristics.

The specific Piper Aircraft, Inc. models affected are: PA-28-140, PA-28-150, PA-28-151, PA-28-160, PA-28-161, PA-28-180, PA-28-181, PA-28-201T, PA-28-235, PA-28-236, PA-28R-180, PA-28R-200, PA-28R-201, PA-28R-201T, PA-28RT-201, PA-28RT-201T, PA-28S-160, PA-28S-180, PA-32-260, PA-32-300, PA-32-301, PA-32-301FT, PA-32-301T, PA-32-301XTC, PA-32R-300; PA-32R-301 (HP), PA-32R-301 (SP), PA-32R-301T, PA-32RT-300, PA-32RT-300T, PA-32S-300, PA-34-200, PA-34-200T, PA-34-220T, PA-44-180, and PA-44-180T.

Recommendations

The FAA is recommending that owners take special care to ensure that the forward wing attach fittings are visually inspected during annual or 100-hour inspections in accordance with the applicable Piper Aircraft, Inc. Maintenance Manual. Some operators have had inspection panels or borescope inspection holes installed to facilitate inspection (contact Piper Aircraft, Inc. for acceptable options). "Powdery" rivets in the attach fitting are indicative of corrosion between the

steel and aluminum surfaces. Particularly susceptible are those airplanes operating in coastal or otherwise corrosive environments.

For Further Information Contact

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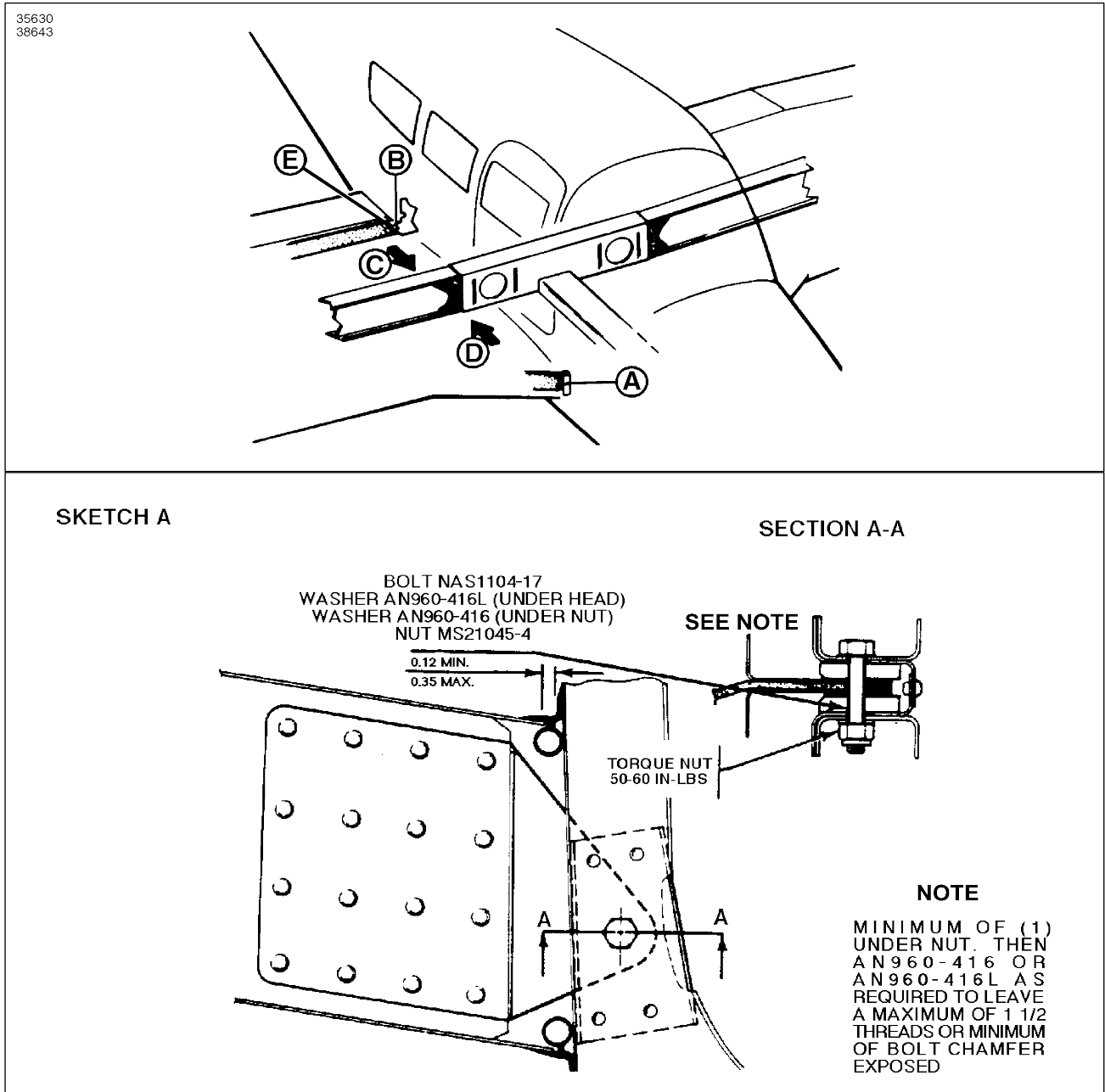


Figure 1. Forward Attach Fitting

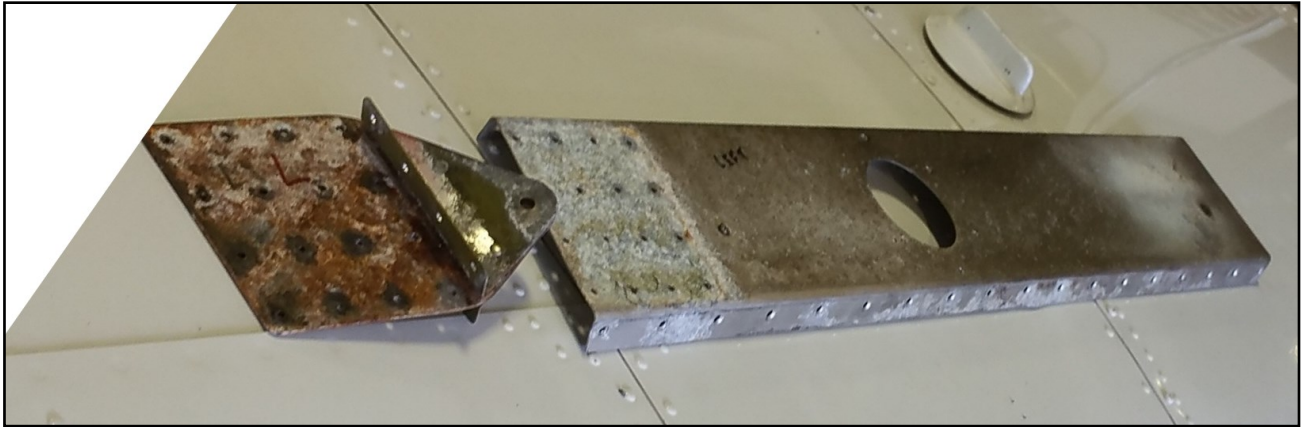


Figure 2. PA-28 Corroded Forward Attach Fitting and Spar Section (removed)

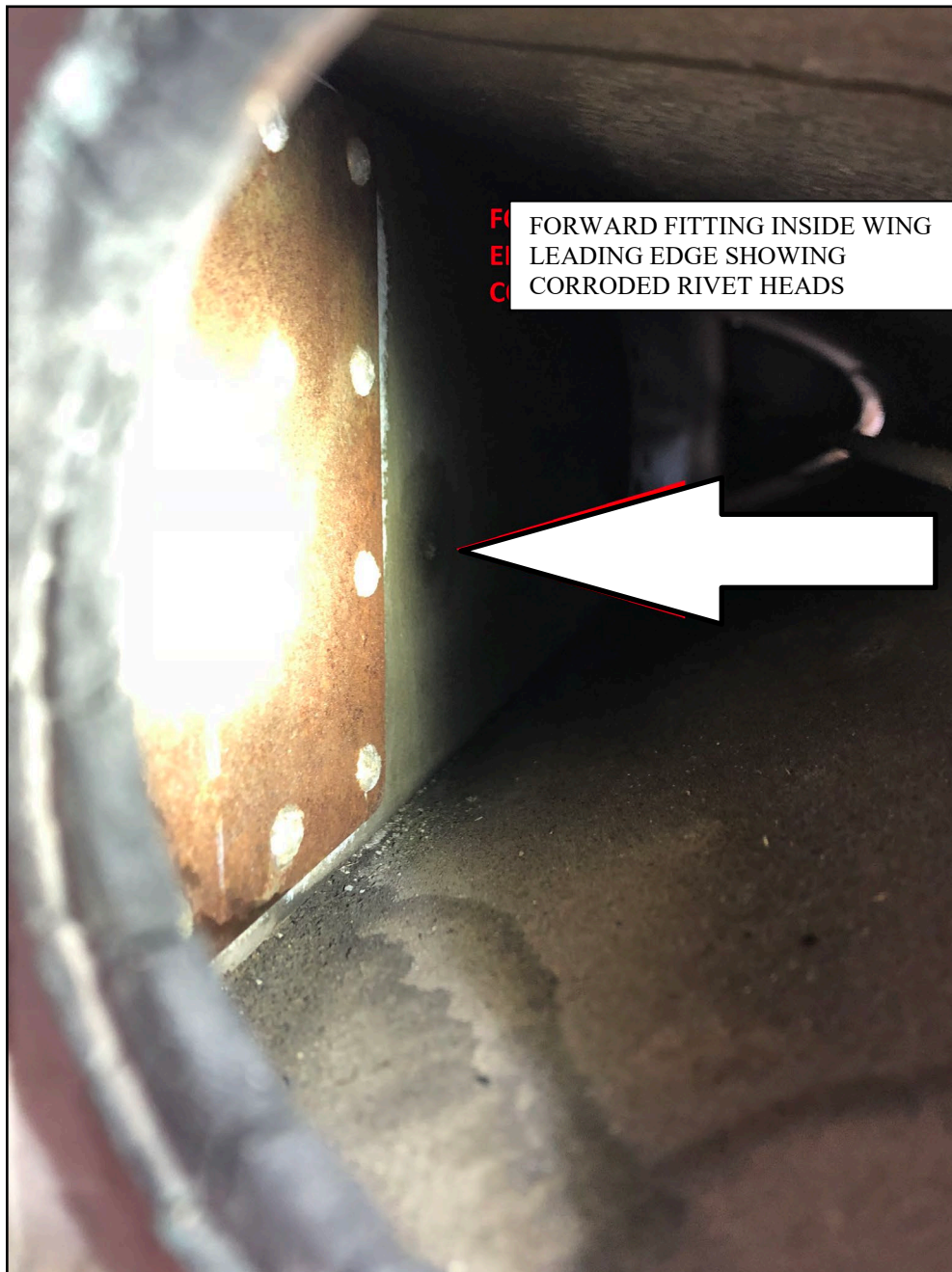


Figure 3. Wing Interior Showing Galvanic Corrosion