Airworthiness Directive

Federal Register Information

Header Information

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

Docket No. 80-ASW-42; Amendment 39-3934; **AD 80-21-08**

Airworthiness Directives; Piper Model PA-25 Series Airplanes

PDF Copy (If Available):

Preamble Information

AGENCY: Federal Aviation Administration, DOT

DATES: Effective October 15, 1980.

Regulatory Information

80-21-08 PIPER: Amendment 39-3934. Applies to Model PA-25 series airplanes certificated in all categories which have incorporated STC SA501SW. (Docket No. 80-ASW-42.) Compliance required as indicated. For airplanes with forward wing spar(s) with 500 hours or more time in service since incorporation of STC SA501SW, compliance is required within 5 hours time in service after the effective date of this AD, unless already accomplished. For airplanes with forward wing spar(s) with less than 500 hours time in service since incorporation of STC SA501SW, compliance is required upon accumulation of 500 hours time in service since incorporation of STC SA501SW or within the next 5 hours time in service, whichever is later.

To detect cracks or other damage in the forward wing spar cap, accomplish the

following.

(a) Remove the wing walk lower rear and lower front (leading edge) skin panels from each wing.

(b) Detach the leading edge skin panel covering the wing strut attachment to the main spar sufficiently to allow inspection of the rear flange of the lower spar cap.

(c) Visually inspect the upright, bulbed flange on the aft side of the front and rear spars (upper and lower) of both wings for misdrilled holes common to the bulbed spar flange and skin attach angles. Conduct this inspection in the areas uncovered by (a) and (b).

(1) The center unit of each fastener hole must be between .18 and .34 inches from the free end of the bulbed spar flange.

(2) A gage fabricated as shown in figure number 1 may be used to check for misdrilled holes.

(3) Figures 2 and 3 show how the gage is used.

(d) Inspect the uncovered spar caps for cracks visually and with standard dye or fluorescent penetrant inspection procedures. Place special attention to the inboard 10 inches of the front spar aft, lower cap.

(e) If misdrilled holes or cracks are found in (c) or (d), parts must be replaced with serviceable parts of the same part number. Replace blind fasteners common to the spar cap and skin angles (if removal is necessary) with MS20600M4 rivets.

(f) Visually inspect the left and right lower spar web at the inboard end for installation of the fatigue resistant doubler plates, Piper P/N 60373 and Moore/Hutcherson P/N's SPD 20025-1 and -2. The fatigue resistant doublers extend outboard of the wing-fuselage attach lug 15 inches while the original single spar web doubler extends only 6 inches outboard of the attach lug. If the fatigue resistant doubler plates are not installed, accomplish the following within the next 100 hours time in service:

(1) Remove left and right wing from fuselage.

(2) Remove wing attach fitting located on each forward wing spar root.

(3) Using standard dye or fluorescent penetrant inspection procedures, inspect the inboard end of the forward spars for a distance of 24 inches outboard of the wing-fuselage attach lug for cracks. Inspect both the spar web and the spar cap with particular attention placed on the inboard 10 inches of the rear flange of the lower spar cap.

(4) If cracks are found, part must be replaced with serviceable parts of the same part number before further flight. Replace blind fasteners common to the spar cap and skin angles (if removal is necessary) with MS20600M4 rivets.

(5) After the inspections and repair of (f)(3) and (f)(4), respectively, install the doubler plates of Moore/Hutcherson drawing SPD 20025.

(6) Reinstall the wing attach fittings and the wings.

(g) Reinstall the leading edge skin covers and walkway lower skin panels.

(h) Aircraft may be flown in accordance with FAR 21.197 to a base where inspections can be accomplished.

(i) Equivalent methods of complying with this AD may be approved by the Chief, Engineering and Manufacturing Branch, FAA, Southwest Region. This supersedes Amendment 39-1755 (38 FR 34460), AD 73-26-02, as amended by Amendment 39-1792 (39 FR 7164).

This amendment becomes effective October 15, 1980.

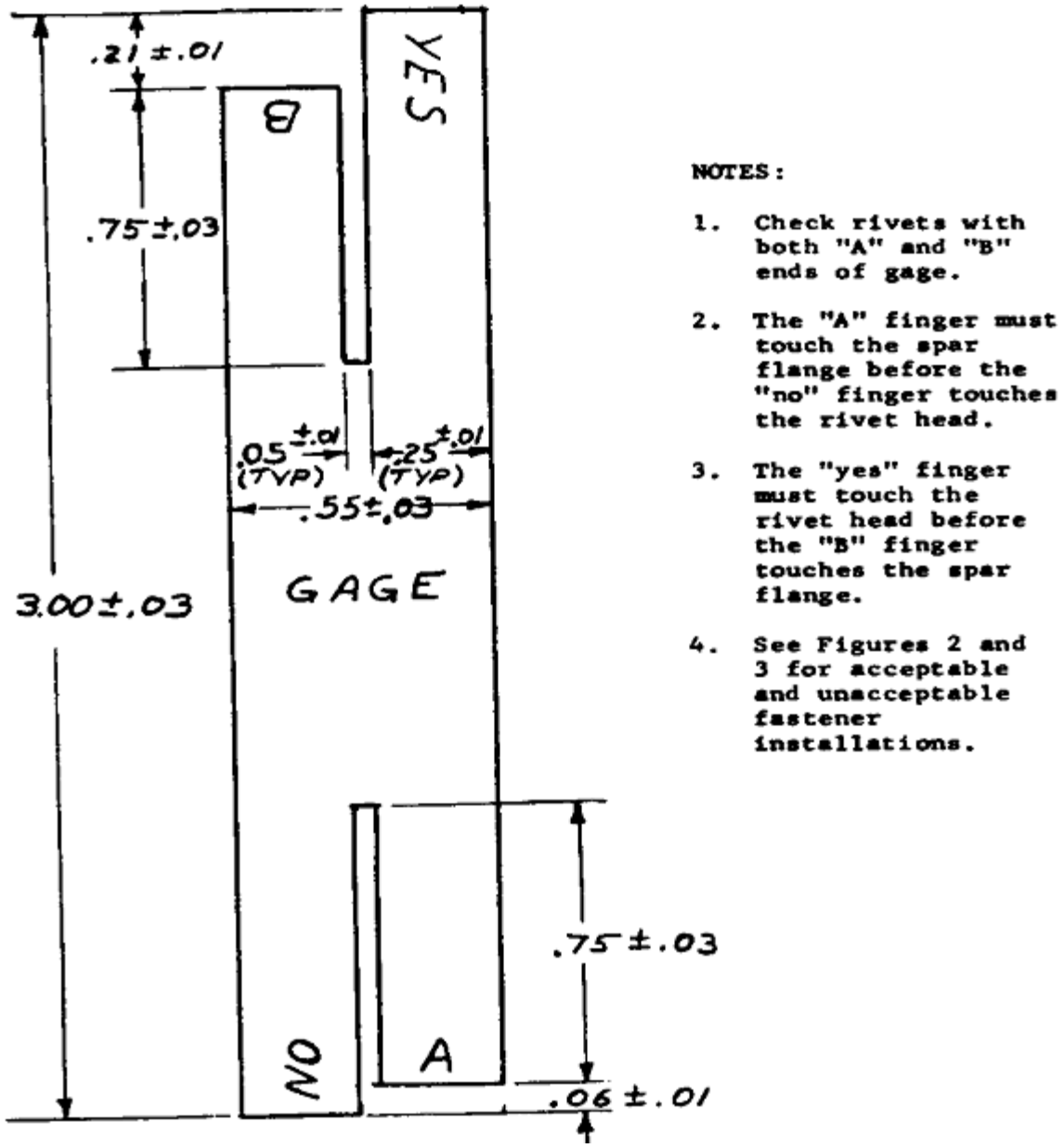

FIGURE NO. 1 GAGE (.06" ALUM. OR STL.)

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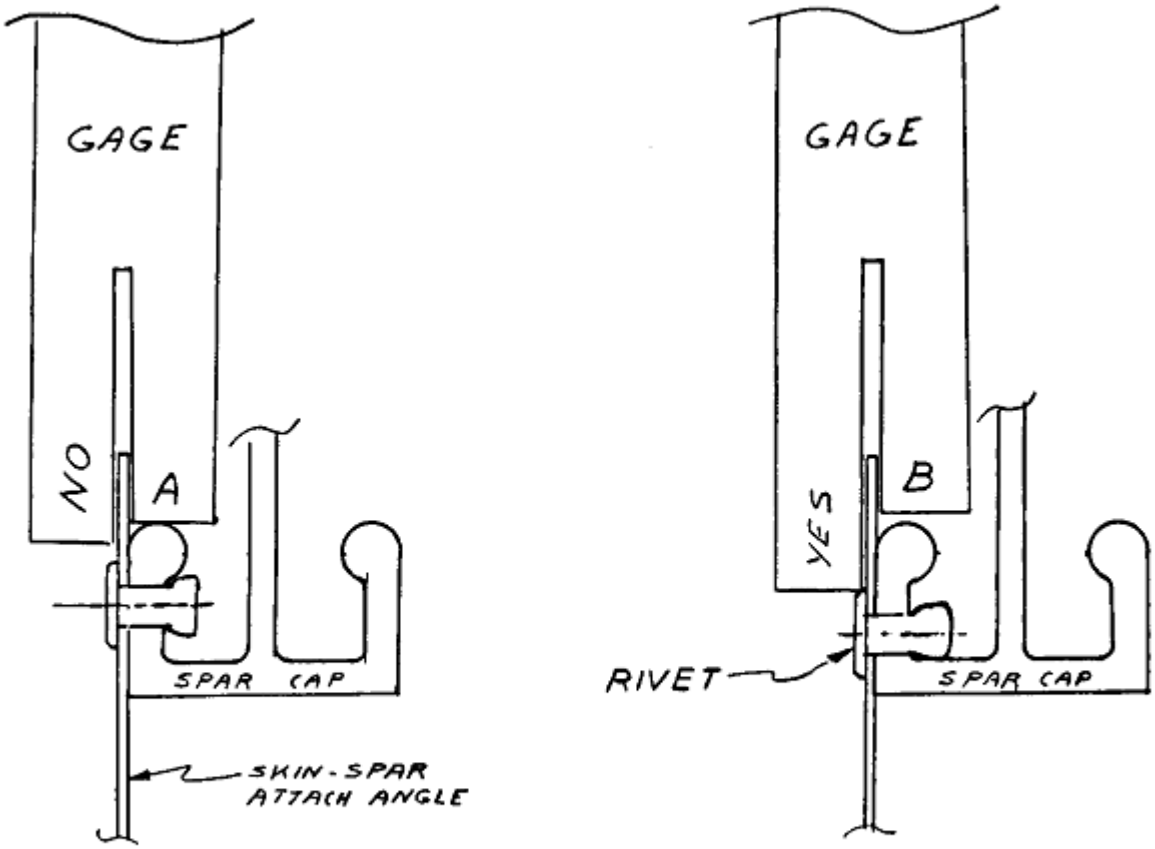

FIGURE NO. 2 ACCEPTABLE FASTENER INSTL.

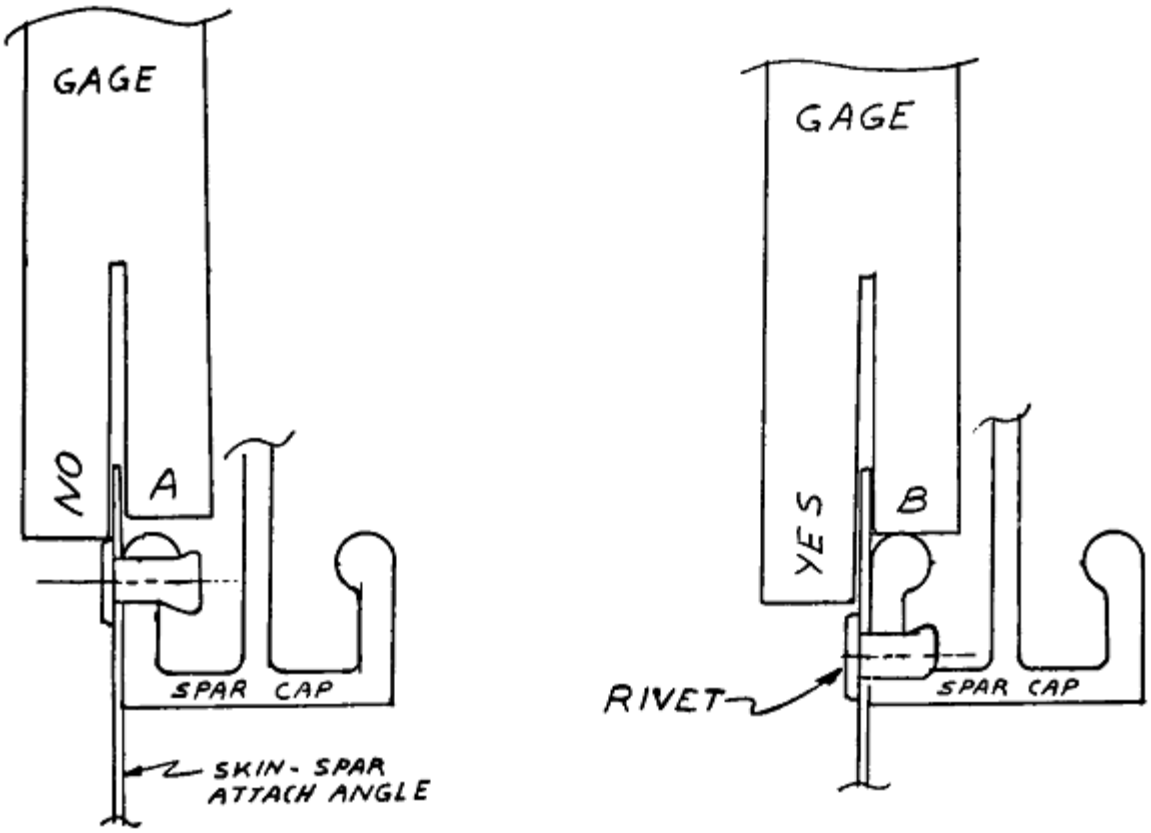

FIGURE NO.3 UNACCEPTABLE FASTENER INSTL.

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Footer Information

Comments