

P.O. BOX 3090 ONE AYRES WAY ALBANY, GEORGIA 31706-3090 PHONE 229/883-1440 FAX 229/439-9790

Service Bulletin No. SB-AG-23

July 11, 1989

Revised 04-23-91

### WING SPAR INSPECTION

MODELS AFFECTED:	<u>Model</u>	<u>Serial Numbers</u>
	S2R-T34	6000-6049
	S2D	All
	S2R	1416R thru 2582R, 5000-5099
	S2R-R3S	R3S-001 thru R3S-010 R3S-001DC thru R3S-010DC
	S2R-R1340	R1340-001 thru R1340-020 R1340-001DC thru R1340-020DC
	S2R-R1820	R1820-001DC thru R1820-032DC R1820-033, R1820-034
	S2R-T11	T11-001 thru T11-005 T11-001DC thru T11-005DC
	S2R-T15	T15-001 thru T15-024 T15-001DC thru T15-024DC
	S2R-T34	T34-001 thru T34-139 T34-001DC thru T34-139DC T34-140 thru T34-144 T34-140DC thru T34-144DC

REASON FOR PUBLICATION: This Service Bulletin is being issued to provide for periodic inspection of the wing main spar fatigue cracks and loose fasteners.

COMPLIANCE: At 500 hours time in service and every 500 hours thereafter.

BY WHOM WORK WILL BE ACCOMPLISHED: A & P mechanic or equivalent

APPROVAL: FAA Approved

ESTIMATED MAN HOURS: 3 to 4 hours

SPECIAL TOOLS: NONE

ACCOMPLISHMENT  
INSTRUCTIONS:

1. Remove left and right belly skins located just aft of the firewall. Remove the wing root fairing strips: forward, upper and lower.
2. Remove the fuselage side skins at the wing root area.
3. Inspect the rear wing attach bolts (1 per side, AN7-21A) for proper torque (450-500 inch pounds). See (3) on Figure A.
4. Inspect the fuselage to wing attach angle bolts (4 per side, AN5-27A) for proper torque (100-140 inch pounds). See (4) on Figure A.
5. Inspect the wing spar to wing attach angle bolts (12 per side, AN4-13A) for proper torque (50-70 inch pounds). See (5) on Figure A.

NOTE

IF ANY BOLTS ARE LOOSE IN THEIR HOLES, REMOVE THE BOLT AND CHECK THE BOLT FOR WEAR AND THE HOLE FOR ELONGATION. IF ANY DAMAGE IS FOUND, CONTACT YOUR NEAREST DEALER OR THE AYRES FACTORY WITH DETAILS. TELEPHONE 229-883-1440 OR FAX 229-439-9790.

6. Inspect for cracks in the wing spar web flanges at the locations shown in Note (6) on Figure A. This area is the web flange just inboard of the inboard wing attach angles. Inspect the web flange at 4 places, upper and lower, left and right. If cracks are found that do not extend out of sight behind the steel spar cap, stop drill the crack (No. 40). The repair is then complete. If cracks are found that extend into the sandwich formed by the layers of spar material, the wing must be repaired using Ayres Kit No. S2R-FF-002. Contact your nearest dealer or the Ayres factory.
7. After the initial inspection and any necessary repairs are completed, fill out and return the enclosed compliance card indicating the results of the inspection. Reinspect the aircraft every 500 hours thereafter and record the inspection with a log book entry.

**RECORD COMPLIANCE:**

Make appropriate entry in aircraft maintenance records as follows: Service Bulletin No. SB-AG-23 dated July 11, 1989, entitled "Wing Spar Inspection" accomplished \_\_\_\_\_ (date) \_\_\_\_\_.

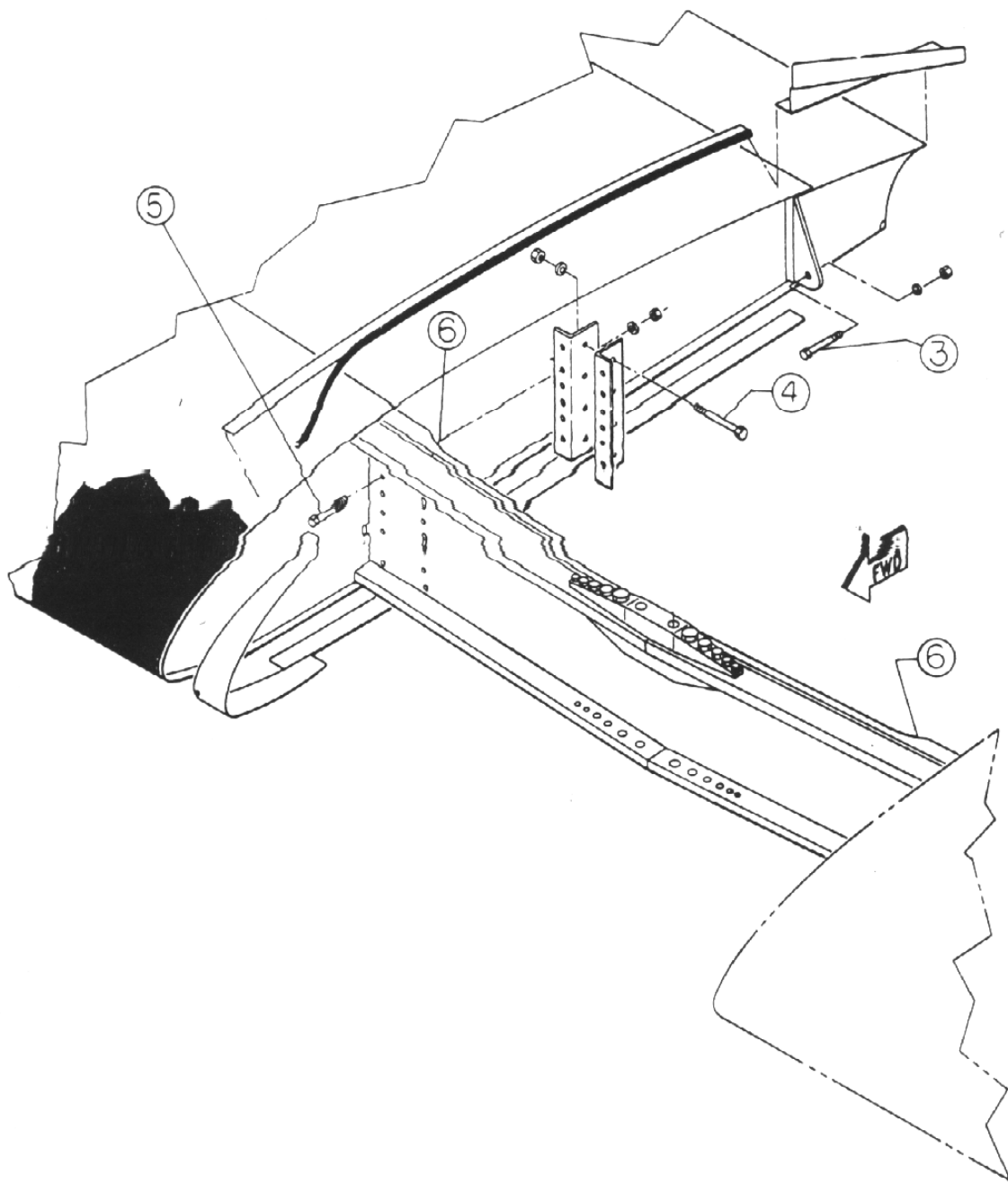


FIGURE A