

AIRWORTHINESS DIRECTIVE: 101

DATE: 07-01-92

SUBJECT: S-14 U-BRACKET SU-218

COMPLIANCE: MANDATORY

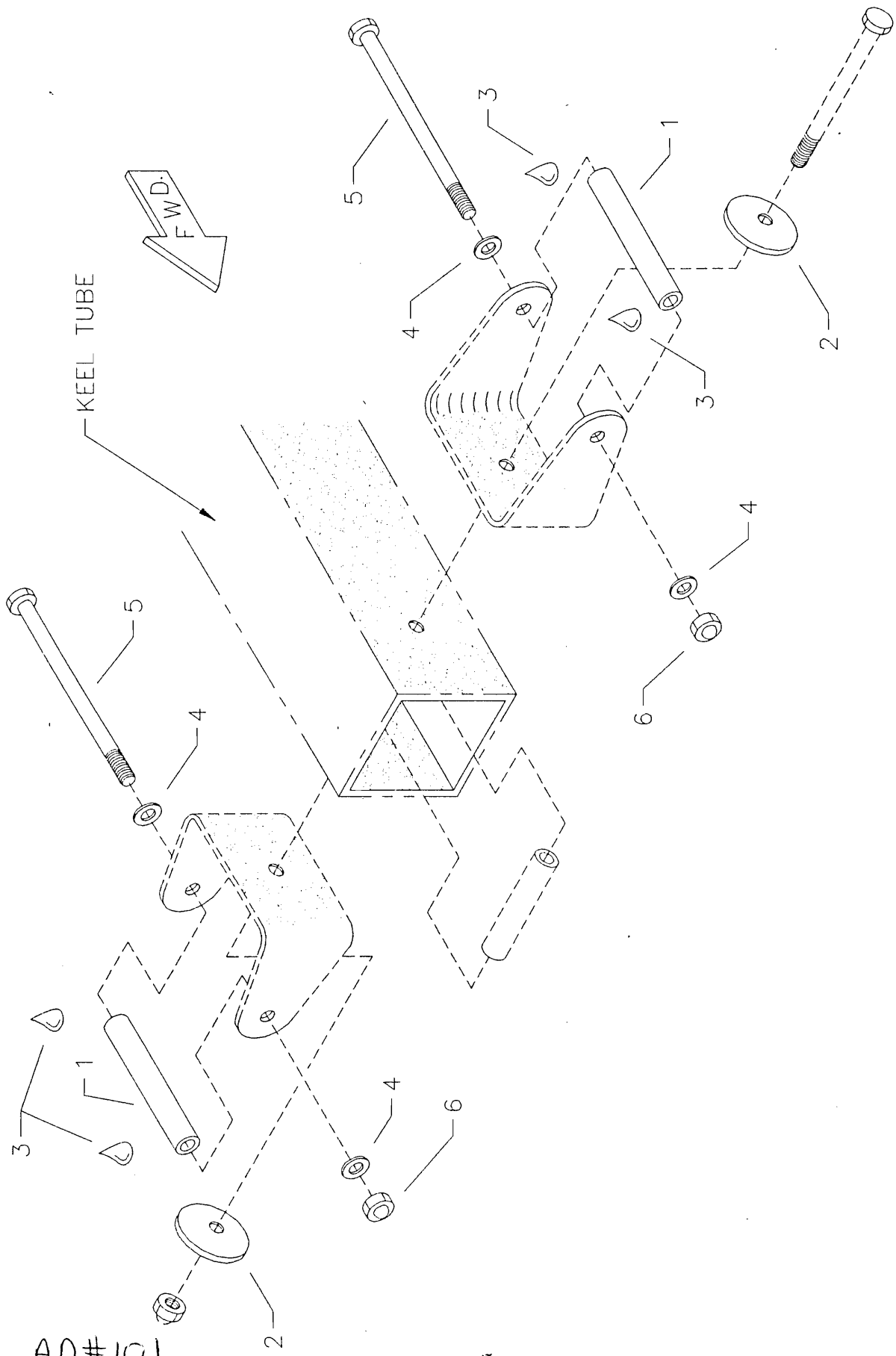
COST: TIME TO INSTALL

MODELS EFFECTED: S-14 AIRAILE

Static load testing has revealed that deformation will occur in the leading edge U brackets on the S-12 Airaile. Other RANS aircraft such as the RANS S-14 Airaile are also constructed in a like manner. This deformation could occur to the S-14 Airaile if over 2.0 negative Gs have been applied at a Gross Weight of 750 lbs. This is possible but unlikely in actual flight. Therefore a simple bushing fix kit is being supplied to eliminate the potential for deformation. Please install this kit before your next Airaile flight. Thank you for your attention to this matter.

SUPERSTRUCTURE REINFORCEMENT

1. Remove the leading edge spar clevis pins and fold both wings away from the keel tube.
2. Remove the 1/4" bolt retaining the (2) U-Brackets.
3. Reassemble the U-Brackets using the EG-AW aluminum washers on the inside of the U-brackets under the head of the AN4-26A bolt and nut. Torque to 10 foot pounds. (Do not forget to **replace** the anti crush bushing removed when this project was started).
4. Fit the W-UBKBU bushings into the U brackets use J&B Weld Epoxy to fasten the bushing to the bracket, using a nut and bolt to hold the assembly together until the epoxy hardens. Do this for both left and right wing U-brackets.
5. Included in this kit are the AN4-33A bolts, 1/4" nuts and washers. These replace the 1/4" clevis bolts and lock rings currently in use on the S-14 Airaile. Use the nuts on the **Forward** holes in the spars.



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RRFANS S-14 AIRRAILE
 WING BRACKET INSTALLATION

S14 AIRAILE (FIELD SUPERSTRUCTURE REINFORCEMENT)

<u>#</u>	<u>PART NAME</u>	<u>PART NO.</u>	<u>QTY</u>	<u>PRICE</u>
1.	U-Bracket Bushing	W-UBKBU	2	1.00
2.	Aluminum Washer	EG-AW	2	.85
3.	J&B WELD Epoxy	J&B	*	----
4.	1/4"Washer	AN960-416A	4	.10
5.	1/4" Bolt	AN4-33A	2	.80
6.	1/4" Tensil Nut	AN365-428A	2	.50

* Builder Supplies J & B Epoxy.

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