

RANS

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Airworthiness Directive: 129

Date: June 9, 2003

Subject: Engine Torsion Strut Bolt & Coolant Socket Tube Interference

Compliance: Mandatory

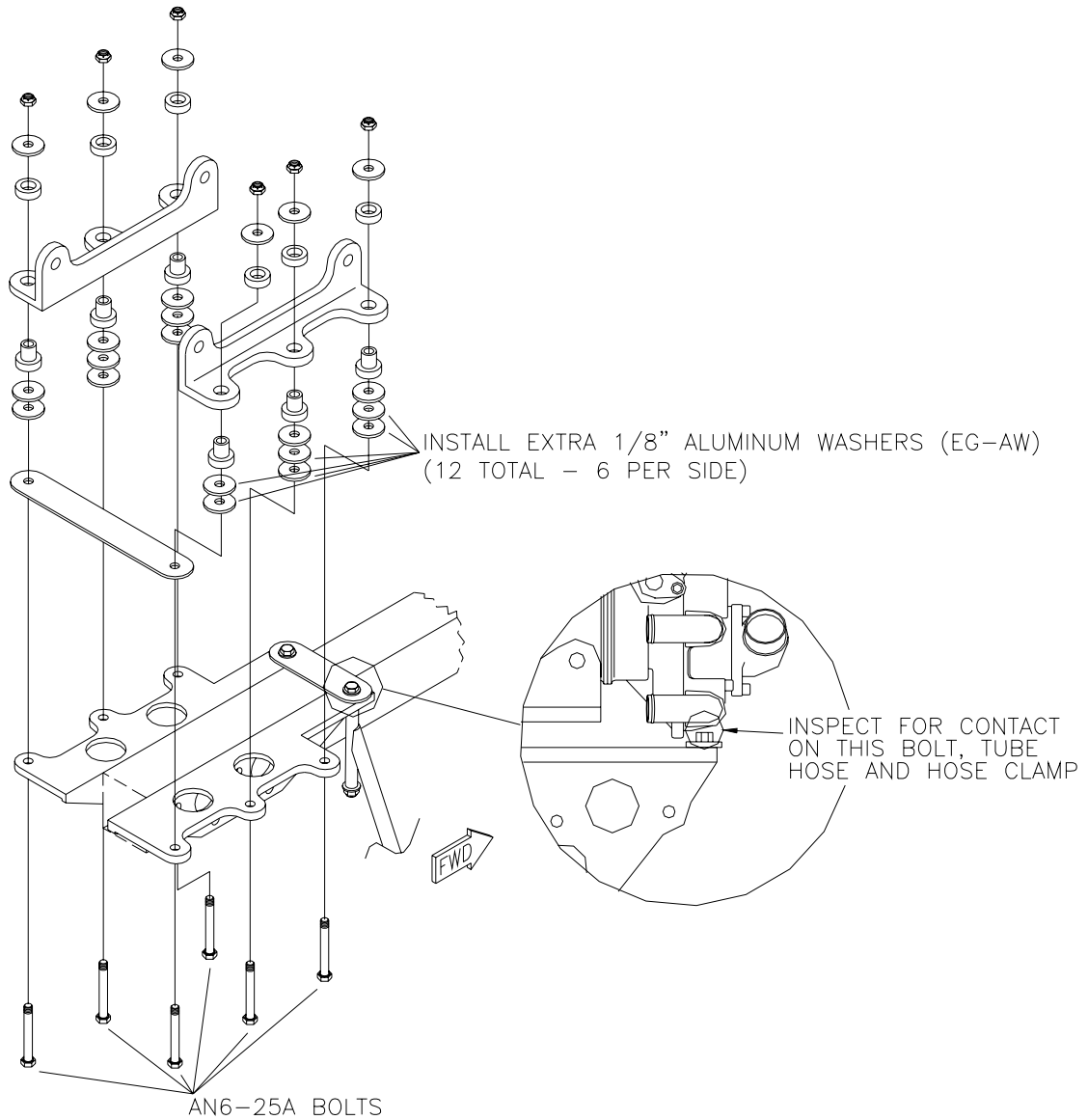
Models Effected: S-12, S-12XL, S-12S, S-14 with ROTAX 912/912S
(assembled or under construction)

Due to variations in water pump Bent Socket installation and vibration tendencies of some engines, aircraft have experienced minor to severe impacting of the Engine Torsion Strut Bolt on the Lower Right-Hand Water Pump Bent Socket Tube. This impaction has caused some hose clamps and socket tubes to be damaged or compromised. Loss of coolant may result. Also, rubbing of hose clamps on engine mounts or bolts may transmit unwanted vibration into airframe.

Before next flight or during assembly of unfinished airplanes:

1. **On flying aircraft:** Visually inspect for any rubbing of the bolt head on the water outlet socket, hose or hose clamp. Replace "S"-Shaped Hose (RANS part # KSPW0025), Bent Socket (ROTAX part # 922-232) and Hose Clamp (ROTAX part # 251875) as needed.
2. **All Aircraft:** Install two (2) extra 1/8" Aluminum washer (RANS part # EG-AW) under each Barry Mount. This will space the engine 1/4" higher for additional clearance. Six (6) AN6-25A bolts will be required. See **FIGURE 1-129** below for details. Check all hose clamps for engine mount clearance. Periodically check during operation for clearance. On S-12's and S-12XL's the front bolts will need to be Low-Profile. Refer to the removed Low-Profile Bolts and duplicate on the new bolts. Dip the heads in paint to corrosion proof.

FIGURE 1-129



The "S"-Shaped Hose and Aluminum Washers are available through our parts department.

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|--------------------|----|-------------------------------|--------------------------------|
| Order as required: | 1 | KSPW0025 - "S"-Shaped Hose" | \$16.50 each |
| | 12 | EG-AW - 1/8" Aluminum Washers | \$2.00 each |
| | 6 | AN6-25A - 3/8" Bolts | \$2.88 each |
| | | | prices do not include shipping |

ROTAX parts are available from Authorized ROTAX dealers.

Thank you for your attention to this matter. Hopefully we have not inconvenienced you to any great degree.

Fly safe.