SERVICE BULLETIN #48

DATE: 13 January 1986

TO: R22 Owners and Operators

SUBJECT: A723 Oil Cooler Lines

ROTORCRAFT AFFECTED: S/N 0002 thru S/N 0500 unless protective

sleeves are already on the A723 oil cooler lines.

TIME OF COMPLIANCE: Within the next 50 flight hours or by 15 March

1986, whichever occurs first.

BACKGROUND: Cracking and chafing of A723 oil cooler lines have been reported, in three areas:

1. At or near the oil line flare fittings.

2. Underneath the MS21919DG8 clamps.

3. At the baffling that wraps underneath the #2 and #4 cylinder head. This baffling can contact the oil line if the A487-1 retainer hook fails or the baffling breaks loose.

METHOD OF COMPLIANCE:

- 1. Remove the exhaust system per section 6.510 of the R22 Maintenance Manual.
- 2. Remove all the clamps, tyraps, or other items secured to the oil cooler lines.
- 3. Clean and inspectthe oil lines for nicks, gouges, scratches or abrasive wear. Any damage greater than .010 inch deep is cause for rejection of the oil line. Pay particular attention to those areas referred to in background above.
- 4. Place an oil drip pan or suitable container under the oil cooler. Disconnect the inboard line from the oil cooler. Slip one 3.5 inch piece of heat shrink on, then one 1.5 inch piece. Disconnect the outboard line from the oil cooler. Slip one 3.5 inch piece of heat shrink on first, then two 1.5 inch pieces onto the line.
- 5. Reconnect the oil lines to the cooler. Check for possible preloading in the oil line. Replace any oil line that has been bent and can not be reshaped to align without preloading. Torque the flare fitting nut to 216 inch/pounds.
- 6. Clean the protective sleeves and oil lines of any residual engine oil. Position the sleeves per figure 1. Apply heat with a heat shrink gun or suitable heat source. Reposition the sleeves as required while they are shrinking.

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- 7. Install the new MS21919DG24 clamps onto the intake tubes. Install the new MS21919DG8 clamps over the protective sleeves on the oil lines. Secure the clamps per figure 1 without stressing or preloading the oil lines.
- 8. Secure the two ignition leads to the inboard oil line with a MS21919DG6 and a MS21919DG8 clamp, per figure 1. Do not secure any other items to the oil cooler lines. Reroute and resecure any items away from the oil lines.
- 9. Inspect the condition of the A487-1 retainer hook and cooling baffling for damage. Repair or replace parts as required.
- 10. Inspect the condition of the four exhaust gaskets, replace as required. Reinstall the exhaust system and torque the nuts to 170 inch/pounds. Install the Pal nuts and torque to 50 inch/pounds.

APPROXIMATE COST

Installation Labor:

3.5 Manhours

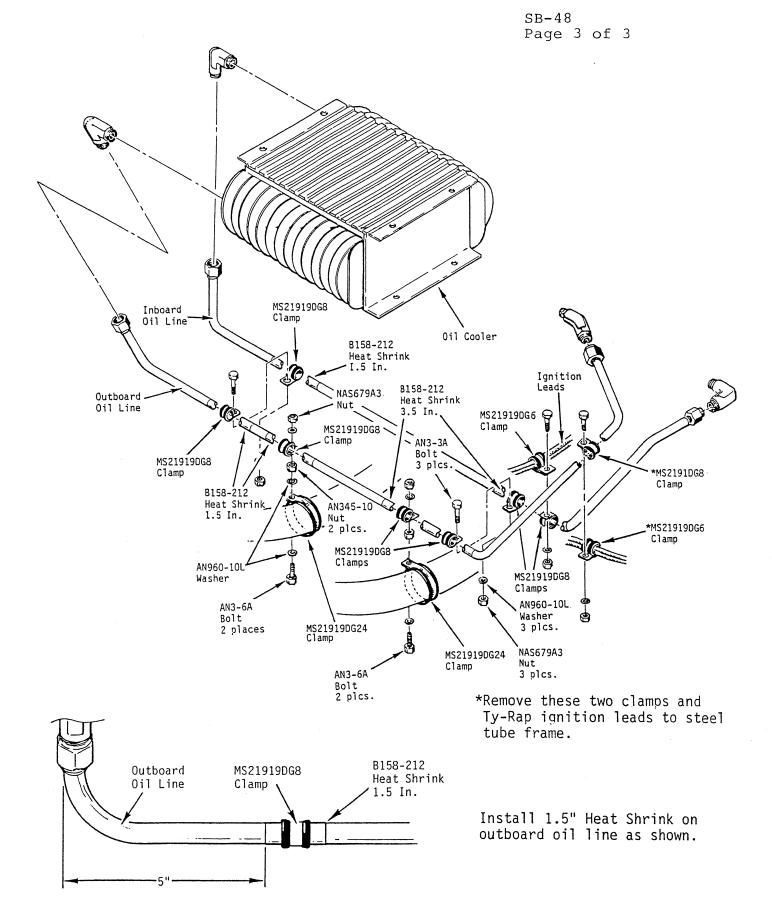


Figure 1