

R44

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SERVICE BULLETIN SB-44

DATE: 01 August 2001

TO: All R44 Owners, Operators, and Service Centers

SUBJECT: Hydraulic Pump Lines and Fittings

ROTORCRAFT AFFECTED: **Part A:** R44 Helicopters S/N 0002 thru 1102 with hydraulically-boosted main rotor flight controls.
Part B: R44 Helicopters S/N 0611, 0653, 0655, 0661, and 0663 thru 0693 except 0666 and 0679.

TIME OF COMPLIANCE: **Part A:** Within next 25 flight hours or by 15 September 2001, whichever occurs first.
Part B: Within next 100 flight hours or by 31 October 2001, whichever occurs first.

BACKGROUND: RHC has received one report of a loose tee fitting at the hydraulic pump which allowed a line to contact and chafe the auxiliary fuel tank. Part A of this service bulletin requires a one-time inspection to verify proper clearance between the auxiliary fuel tank and hydraulic pump lines and installation of spiral wrap tubing. In addition, RHC has determined that earlier hydraulically-equipped R44s incorporate a jam nut design at the pump fittings that is susceptible to loosening in service. Part B of this service bulletin requires that blue AN6289D jam nuts at pump fittings be upgraded to gray RHC jam nuts.

COMPLIANCE PROCEDURE:

NOTE: Use R44 Maintenance Manual (MM) change 8 dated 31 Jan 00 or later.

Part A: (Applies to all R44s with hydraulic controls)

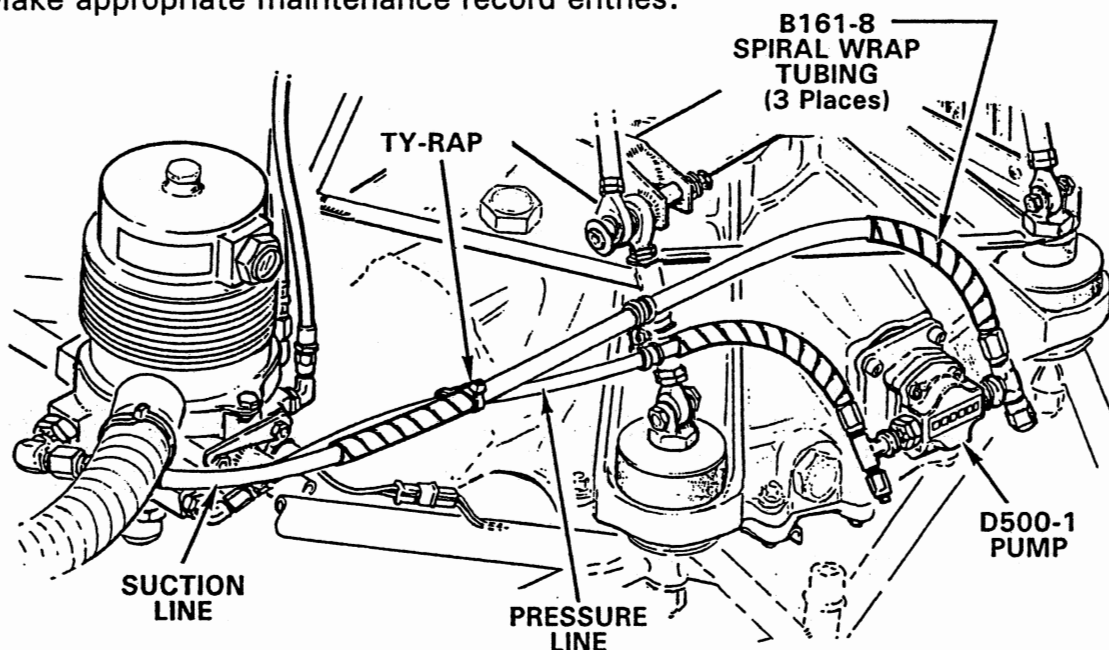
1. Verify 0.25 inch minimum clearance between auxiliary fuel tank and both hydraulic pump lines.
2. If clearance is less than 0.25 inch, inspect fuel tank for chafing. If tank has not been chafed, reposition lines and fittings as required to obtain 0.25 inch clearance. Torque line and fitting nuts per R44 MM Section 1.330 and torque stripe. If torquing suction line B-nuts, use 200 inch-pounds to avoid stripping fittings.

(OVER)

3. If fuel tank has been chafed, remove tank per R44 MM section 12.140 and measure depth of damage. Contact RHC Technical Support for repair instructions.
4. Install 6-inch sections of B161-8 spiral wrap tubing on hydraulic lines as shown below. (Spiral wrap tubing is enclosed. Additional tubing may be ordered from RHC Customer Service.)
5. Make appropriate maintenance record entries.

Part B: (Applies only to those R44s listed by serial number above)

1. Reference helicopter serial number and order KI-157 kit.
2. Replace hardware at hydraulic pump fittings per kit instructions.
3. Verify pump lines and fittings are adjusted for 0.25 inch minimum clearance from auxiliary fuel tank.
4. Make appropriate maintenance record entries.



Approximate Cost:

Part A: Parts: No charge.
Labor: 0.2 man-hour.

Part B: Parts: No charge.
Labor: 0.6 man-hour.

THE DESIGN ENGINEERING ASPECTS OF THIS BULLETIN HAVE BEEN SHOWN TO COMPLY WITH APPLICABLE FEDERAL AVIATION REGULATIONS AND ARE FAA APPROVED.