

R44

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SERVICE BULLETIN SB-4

DATE: 24 January 1995

TO: R44 Owners, Operators, and Service Centers

SUBJECT: Replacement of Guides for C121-7 Push-Pull Tubes

ROTORCRAFT AFFECTED: R44 Helicopters S/N 0001 thru 0150

TIME OF COMPLIANCE: Within the next 50 flight hours or by 31 March 1995, whichever occurs first.

BACKGROUND: Excessive wear at the guides for the C121-7 push-pull tubes has been found on several aircraft. A damaged guide or push-pull tube sleeve could cause binding in the control system. This Service Bulletin requires that the guides be replaced with roller guides which greatly reduce the wear rate.

COMPLIANCE PROCEDURE:

- 1) Order one KI-88 push-pull tube guide kit for each helicopter to be reworked. Order must include helicopter serial number.
- 2) Remove main and auxiliary fuel tanks per section 12.110 and 12.140 of R44 Maintenance Manual (MM). Support middle mast fairing rib to avoid damage to aft push-pull tube at guide when moving controls. Remove vertical and horizontal panels between rear seats and remove rear belly panel. Peel back interior foam on vertical bulkhead for access to rivets attaching push-pull tube guide. (Use putty knife or razor blade to reduce tearing of foam.)
- 3) Mark C121-7 push-pull tubes left and right for reference during reinstallation. Remove access hole plug in right rear baggage compartment and remove bolt through lower push-pull tube rod ends. Remove bolts through rod ends at swashplate and remove tubes. Do not adjust or remove rod ends from tubes to avoid re-rigging after assembly.
- 4) Remove rivets attaching push-pull tube guide to bulkhead and braces. Avoid kinking pitot line by sliding guide up to remove. To locate new guide, draw a line on bulkhead 0.50 inch above three rivet holes as shown in Figure 1. Position new guide with line on bulkhead centered on holes in guide flange and match drill three 0.128 inch diameter holes through bulkhead. Attach new guide using temporary fasteners.
- 5) Set guide at a 90 degree angle to bulkhead below guide (see figure 1). Using pilot holes in guide, match drill six 0.128 inch diameter holes through vertical braces. Remove guide assembly and de-burr holes. Rivet bulkhead three places at old guide location using supplied rivets. Insert pitot line through grommet in guide and rivet guide assembly to bulkhead and vertical braces using supplied rivets (9 places).

(OVER)

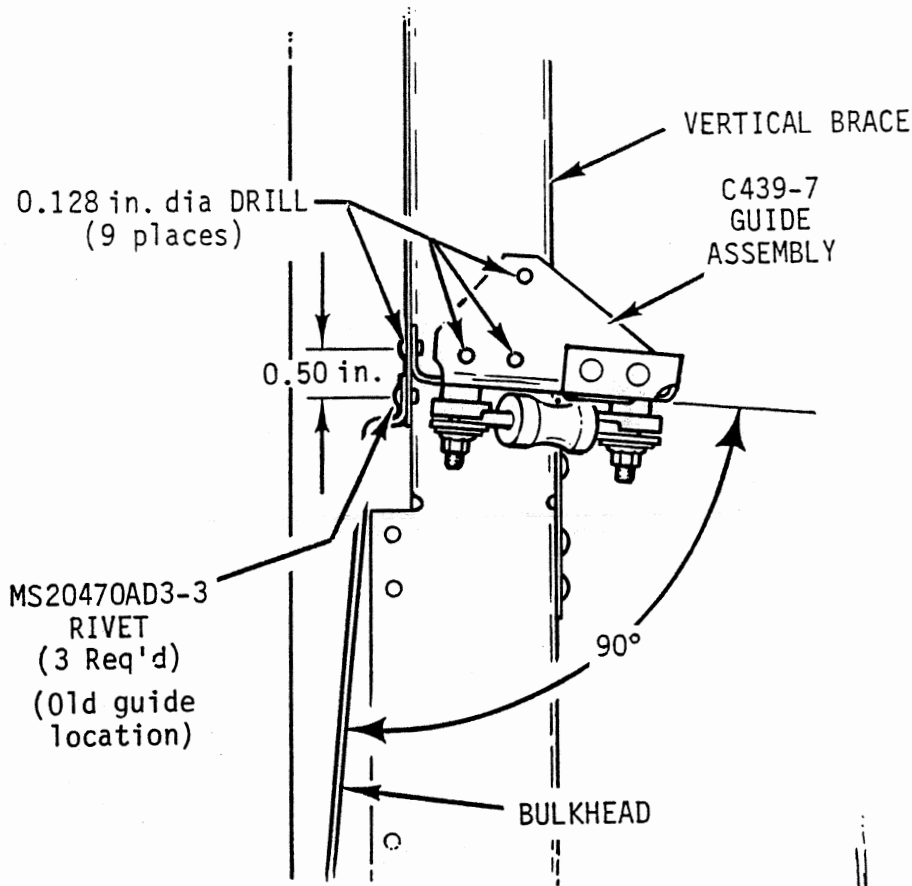


FIGURE 1

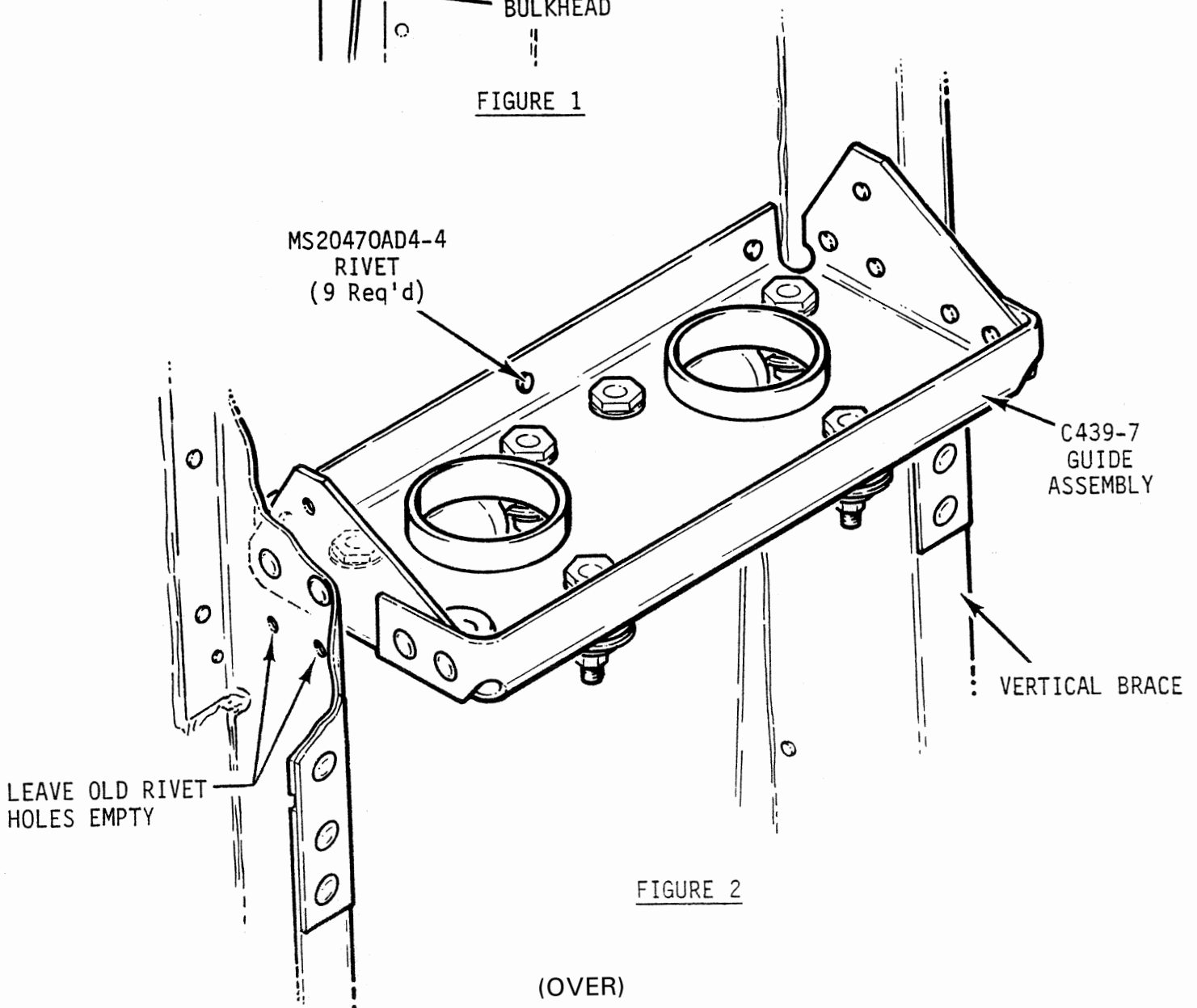


FIGURE 2

(OVER)

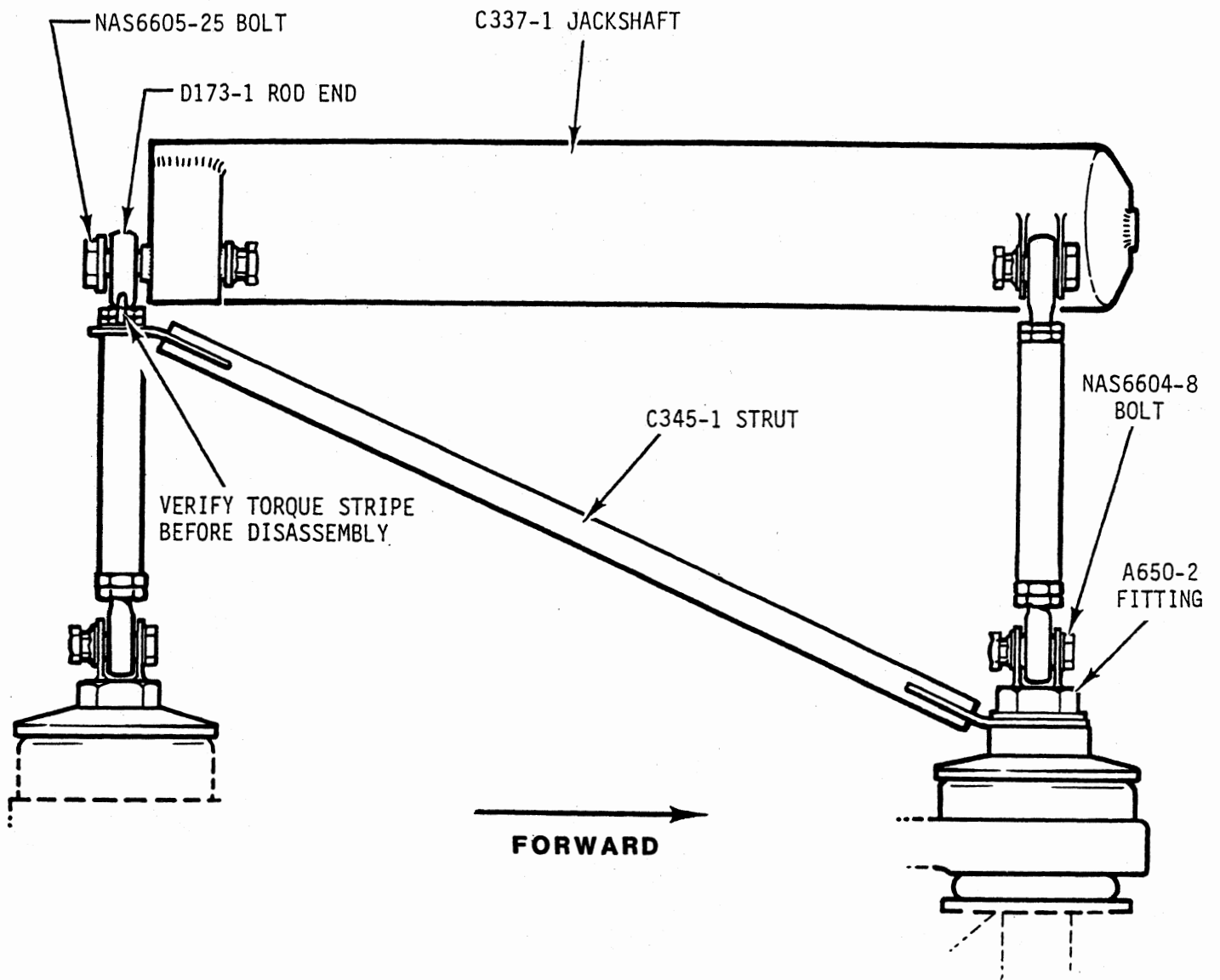


FIGURE 3