

ROBINSON HELICOPTER COMPANY
24747 CRENSHAW BLVD.
TORRANCE, CA 90505

SERVICE LETTER #2

DATE: July 22, 1980

SUBJECT: Tail rotor control push-pull tube A121-13

ROTORCRAFT AFFECTED: Model R22 S/N 0025 through 0027

TIME OF COMPLIANCE: Immediately

MATERIALS REQUIRED: One each A121-13 control tube assembly
pop rivets and set
magic marker
mechanics hand tools

INSTALLATION PROCEDURE:

Remove the affected push-pull (p-p) tube for return to RHC and install the A121-13 control tube as per the following:

1. Remove the landing light cover and inner bracket. The inner bracket is removed by drilling out the four(4) flush pop rivets that hold it to the fiberglass chin.
2. Remove the access panels between the seats, the throttle cover and center belly panel. Place the left pedal fully forward against the stop using the method pictured in Fig. 11-6 on page 11.8. Measure the distance between the tail cone closure casting machined surface and the center of the rod end. You will use this dimension as a check on your rigging when the replacement A121-13 p-p tube is installed.
3. With the left pedal in the full forward position, disconnect the A121-11 p-p tube from the right pedal assembly.
4. Pull the left pedal assembly full aft and disconnect the A121-9 p-p tube from the left pedal assembly.
5. Disconnect the cyclic bungee at the hook mount on the forward end.
6. Remove the four (4) NAS 1304-2 that hold the A315-1 bellcrank support and rotate it forward until the low A121-13 push rod end clears the control tunnel in the vertical firewall.
7. Remove the NAS 1304-13 bolt that holds the lower rod end of the -13 p-p tube to the A317-1 bellcrank assembly.
8. Very accurately measure the distance between the rod ends using trammel point or some other suitable measuring device.

9. Loosen the upper rod end jam nuts and unscrew the p-p tube from the upper rod ends. Carefully count the number of turns required to remove the -13 p-p tube from the upper rod end. (This will be a secondary measurement) Mark this number 14, 14½, etc. on the tube with a magic marker.
10. Remove one rod end from the replacement A121-13 p-p tube. Using a square, adjust the rod end on the replacement tube to match the height of the rod end on the tube removed from the ship. NOTE: Check rod end witness holes per the maintenance manual Section 2, page 2.6.
11. Tighten jam nuts and torque stripes.
12. Install the replacement A121-13 p-p tube and count the number of turns as marked on the tube removed.
13. Check the measurement taken in step #8.
14. Reassemble using the reverse of the above procedure in steps 1-7. Recheck dimensions as described in step 2.
15. Check clearances, torque jam nuts, and safety per maintenance manual before closing panels.

DISPOSITION OF REMOVED PARTS: Return to factory.

