SCHWEIZER 300C

SCHWEIZER SERVICE NOTICE

MANDATORY MANDATORY MANDATORY

SUBJECT: IDENTIFICATION AND POSSIBLE REPLACEMENT OF COLLECTIVE PITCH MIXER BELLCRANK.

MODELS AFFECTED:
- All Model 269A, 269(TH-55A), 269A-1, 269B Helicopters.
- All Model 269C Helicopters having a serial number prior to 1274.
- All 269A7522 Collective Pitch Mixer Bellcranks in spares inventory.

TIME OF COMPLIANCE:
- Shall be accomplished on all installed 269A7522 bellcranks, within next 200 hours of helicopter operation or next three months, whichever occurs first.
- Shall be accomplished on all 269A7522 bellcranks in spares inventory, within 90 days of issue date of this Notice, or prior to placement into service, whichever occurs first.

REFERENCE: 269 Series Basic HMI, Reissued 15 March 1982.

PREFACE: A possibility exists that some 269 Series Helicopters may be equipped with an incorrect collective pitch mixer bellcrank. The incorrect bellcrank incorporates a flange on the aft lug bearing bore ID (Figure 1, Detail A). The correct bellcrank possesses the flange on the fore lug bearing bore ID (Figure 1, Detail B). In addition to this flange (on the fore lug bearing bore ID), the collective pitch mixer bellcrank should incorporate a rounded edge (.12 inch radius) on the lower right-hand edge of the bellcrank aft arm (Figure 3). Bellcranks which do not incorporate this rounded edge may cause damage to the bellcrank support mast lug if the aft arm is allowed to swing down and hit the lug (when the controls are disconnected).

This Service Information Notice provides instructions for a one-time check and possible modification of the affected bellcranks. A dye-penetrant inspection of the bellcrank support mast lug is also required for all helicopters which are equipped with a collective pitch mixer bellcrank that does not have a round corner on the lower right-hand edge of the bellcrank aft arm. Incorrect collective pitch mixer bellcranks must be removed from service and/or stock, as applicable. Correct bellcranks which do not incorporate the rounded corner (on the lower right-hand edge of aft arm) must be modified in accordance with the instructions provided in the below procedure.

PARTS LIST

NOMENCLATURE	PART NO.	QTY	SOURCE
Bellcrank, Collective Pitch Mixer	269A7522	1 (A/R)	SAC

MATERIALS

DESCRIPTION	SPECIFICATION	SOURCE
Adhesive	1300L	Commercial
Abrasive Paper	P-P-101	Commercial
Dye-penetrant kit	MIL-I-25135	Commercial
Dow #19	MIL-M-3171, TYPE VI	Commercial

PROCEDURE

a. Check collective pitch mixer bellcranks (PN 269A7522) in spares inventory as follows:

NOTE

The incorrect collective pitch mixer bellcrank incorporates a flange on the aft lug bearing bore ID (Figure 1, Detail A). The correct bellcrank possesses the flange on the fore lug bearing bore ID (Figure 1, Detail B).

(1) Using a suitable measuring device, determine the ID at the aft edge of the aft lug bearing bore and the ID at the fwd edge of the fore lug bearing bore. (Refer to Figure 2, Section A-A for measurement locations and requirements.)

(2) Remove from stock all 269A7522 bellcranks which do not meet the dimensional requirements of Figure 2, Section A-A. (Contact your SAC Customer Service Center or Distributor for disposition of incorrect bellcranks.)

NOTE

Warranty claims must be filed with SAC Warranty Department by an authorized SAC Distributor or Service Center within 90 days of issue date of this Notice.

NOTE

If the lower right-hand edge of the bellcrank aft arm is not round, it is possible (when control rods are disconnected) for the bellcrank aft arm to swing down and nick the bellcrank support mast lug. Bellcranks that do not possess a rounded corner at the lower right-hand edge of the aft arm, must be modified in accordance with step e.

(3) If the bellcrank meets the dimensional requirements of Figure 2, check that the lower right-hand edge of the bellcrank aft arm is round. (Refer to Figure 3.) If this edge is not round, modify the bellcrank in accordance with step e. (below).

b. Gain access and check fwd edge of the fore lug bearing bore on installed bellcranks as follows:
   (1) Remove center cover between pilot and copilot seats.
   (2) Remove plastic boot from seat structure panel between pilot and copilot seats.
   (3) Using a suitable measuring device, determine the ID at the fwd edge of the fore lug bearing bore. (Refer to Figure 2, Section A-A.)
   (4) If the dimension measured in the previous step is not within the required limits (0.750 $\pm$0.001-inch), remove and replace the bellcrank (PN 269A7522) in accordance with step d below.

c. If ID at fwd edge of fore lug bearing bore is within required limits (as determined in step b), gain access and check aft edge of aft bearing bore ID as follows:

NOTE

Ensure that the collective stick is full down before disconnecting lower collective control rod in next step.

(1) Remove cotter pin, nut, and washer from bolt attaching lower collective control rod to collective pitch mixer bellcrank. (Refer to Figure 1.)
(2) Remove bolt attaching lower collective control rod to collective pitch mixer bellcrank. (Refer to Figure 2.) Do not remove slotted bushing.

NOTE

Do not adjust length of lower collective control rod. If the length of the control rod is disturbed and cannot be reset (by trammeling) to original dimension, the collective control rigging must be checked and adjusted (if required) in accordance with Basic HMI, Section 8.

NOTE

It will be necessary to push downwards on the forward arm of the collective pitch mixer bellcrank to gain access to the aft bearing bore. Pushing downwards on the forward arm (shown in Figure 1) will move the aft portion of the bellcrank (and connecting flight controls) upwards and allow adequate clearance to measure the aft bearing bore (at aft edge). Two people will be required to perform this sequence of steps.

(3) Push downwards on the forward arm of the collective pitch mixer bellcrank. (Refer to Figure 1.)

(4) Using a suitable measuring device, determine the ID at the aft edge of aft lug bearing bore. (Refer to Figure 2, Section A-A.)

(5) If the dimension measured in previous step is not within the required limits (.875 to .876-inch), remove and replace bellcrank in accordance with step d (below).

d. If either the fore lug bearing bore ID or the aft lug bearing bore ID is not within the required limits (as determined in steps b and c, respectively), remove and replace bellcrank as follows:

(1) Remove collective pitch mixer bellcrank in accordance with Basic HMI, paragraph 8-105. (Contact your SAC Distributor or Service Center for disposition of removed bellcrank.)

NOTE

Warranty claims must be filed with SAC Warranty Department by an authorized SAC Distributor or Service Center within 90 days of issue date of this Notice.

(2) Using a correct collective pitch mixer bellcrank (Figure 1, Detail B), reassemble components in accordance with Basic HMI, paragraph 8-109.

e. Check the lower right-hand edge of the bellcrank aft arm (for a rounded corner) as follows:

(1) If installed, remove right-hand side fuel tank in accordance with Basic HMI, Section 5 to gain access to bellcrank aft arm.

(2) Check the lower right-hand edge of the bellcrank aft arm for a round corner. (Refer to Figure 3.)

NOTE

When performing modification specified in next step, be sure to use progressively finer grades of abrasive materials to make edge smooth and round. Avoid structural damage to the bellcrank arm by ensuring that edge is free of nicks, gouges, and scratches. Polish edge smooth with abrasive paper, not coarser than 360 grit.

(3) If lower right-hand edge is not round, use progressively finer grades of abrasive materials to make edge round. (Refer to Figure 3.) Polish smooth with abrasive paper, not coarser than 360 grit.
(4) Check right mast lug for nicks (caused by bellcrank). (Refer to Figure 4.)
(5) If any nicks are found in mast lug, feather out nicks with a fine file. Polish smooth with abrasive paper.
(6) If nicks are found, strip paint and dye-penetrant inspect mast lugs for cracks in accordance with Basic HMI, Section 13. If cracks are found, replace mast. If mast is still serviceable, treat lug with Dow #19 and repaint in accordance with Basic HMI, Section 2.
(7) Repaint collective pitch mixer bellcrank (aft arm) in accordance with Basic HMI, Section 2.

f. If correct bellcrank is installed and main rotor mast is still serviceable (step e), reassemble components as follows:
(1) If removed, reinstall right-hand side fuel tank in accordance with Basic HMI, Section 5.

NOTE

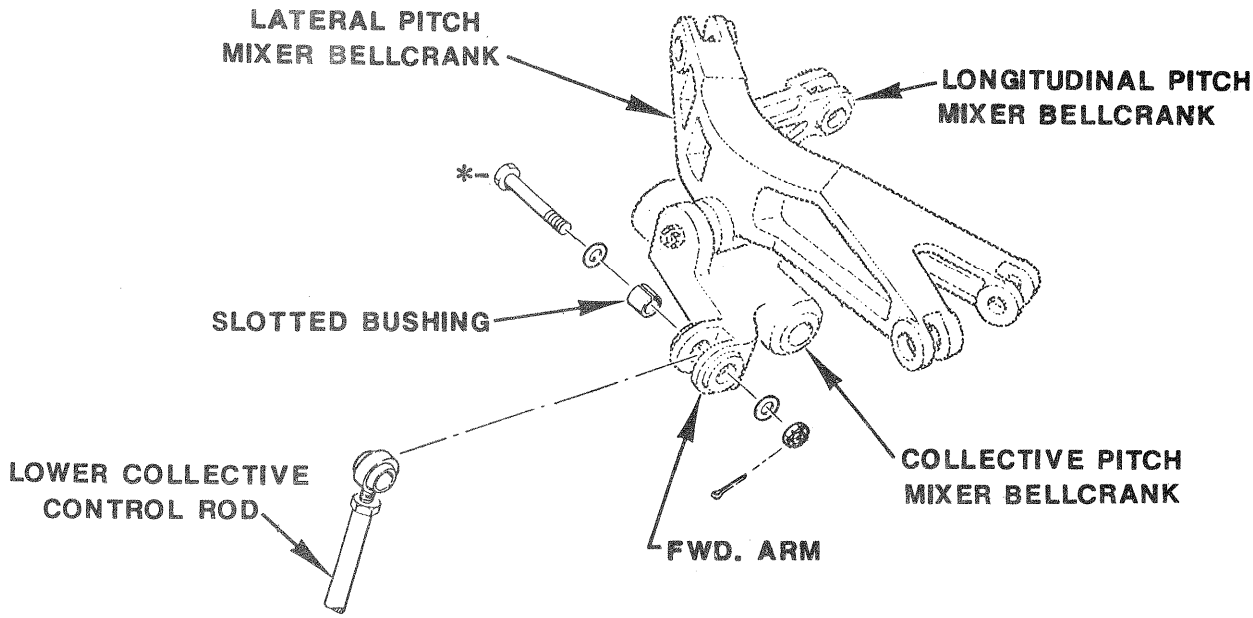
Ensure that the slotted bushing shown in Figure 1 is installed before installing bolt in next step.

(1) With one washer installed on bolt, reattach control rod to bellcrank by inserting bolt through bellcrank and control rod. (Refer to Figure 1.)
(2) Secure bolt with washer, nut and cotter pin. (Refer to Figure 1.)
(3) Use glue to reinstall plastic boot between pilot and copilot seats.
(4) Reinstall center cover.

g. Check and adjust rigging as required in accordance with Basic HMI, Section 8.
h. Record compliance with this Service Information Notice in Compliance Record of Helicopter Log Book.

WEIGHT AND BALANCE DATA

Weight and balance not affected.



*-ATTACHES LOWER COLLECTIVE CONTROL ROD TO COLLECTIVE PITCH MIXER BELLCRANK

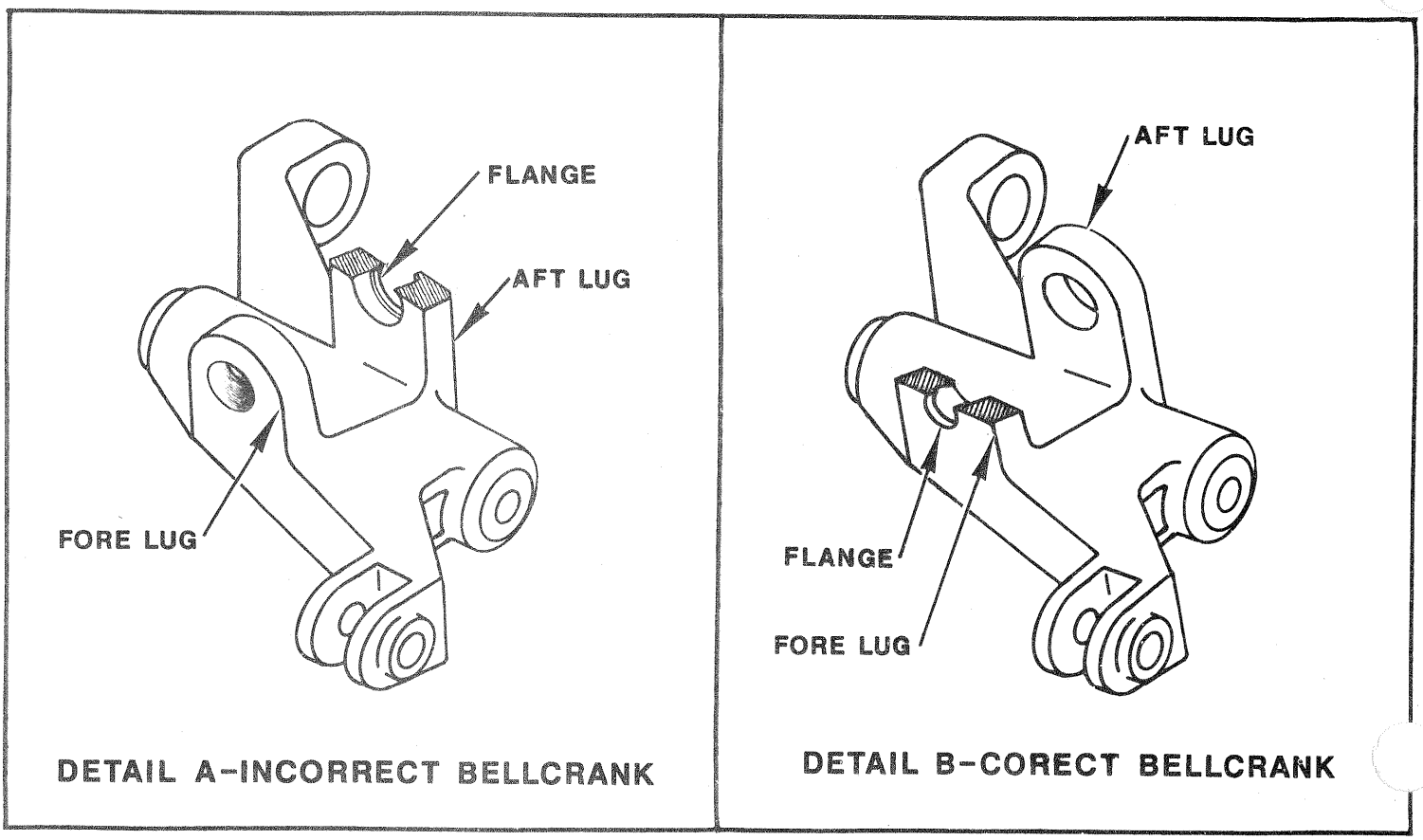


FIGURE 1. COLLECTIVE PITCH MIXER BELLCRANK

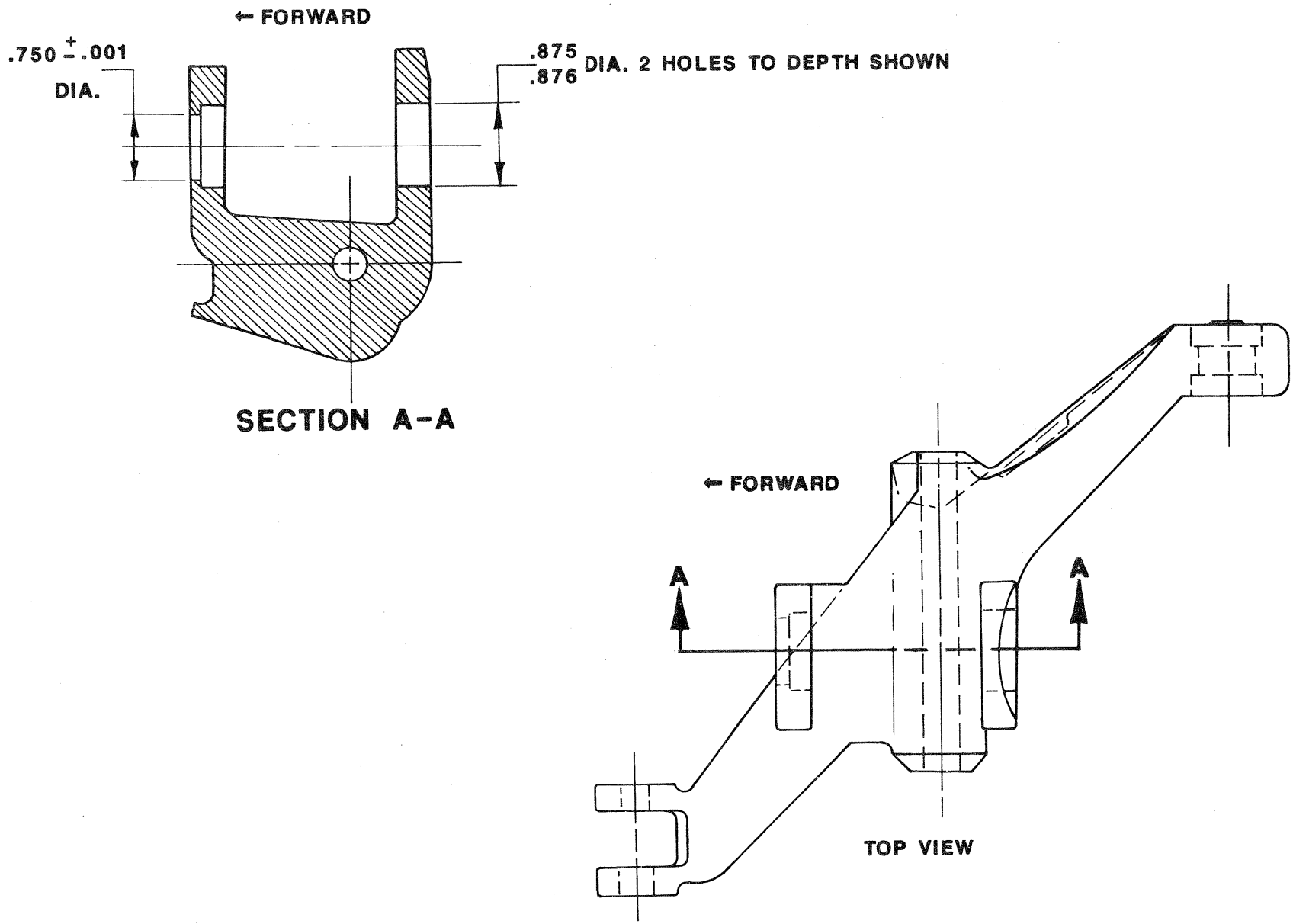
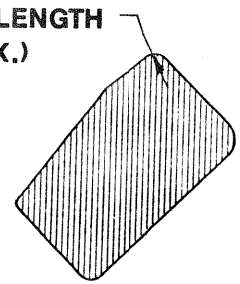


FIGURE 2. COLLECTIVE PITCH MIXER BELLCRANK DIMENSIONAL REQUIREMENTS

NOTE 1. CHECK THAT LOWER R.H. EDGE OF BELLCRANK ARM IS ROUND. IF EDGE IS NOT ROUND, USE FILE TO INSTALL A .12 INCH RADIUS (APPROX.).



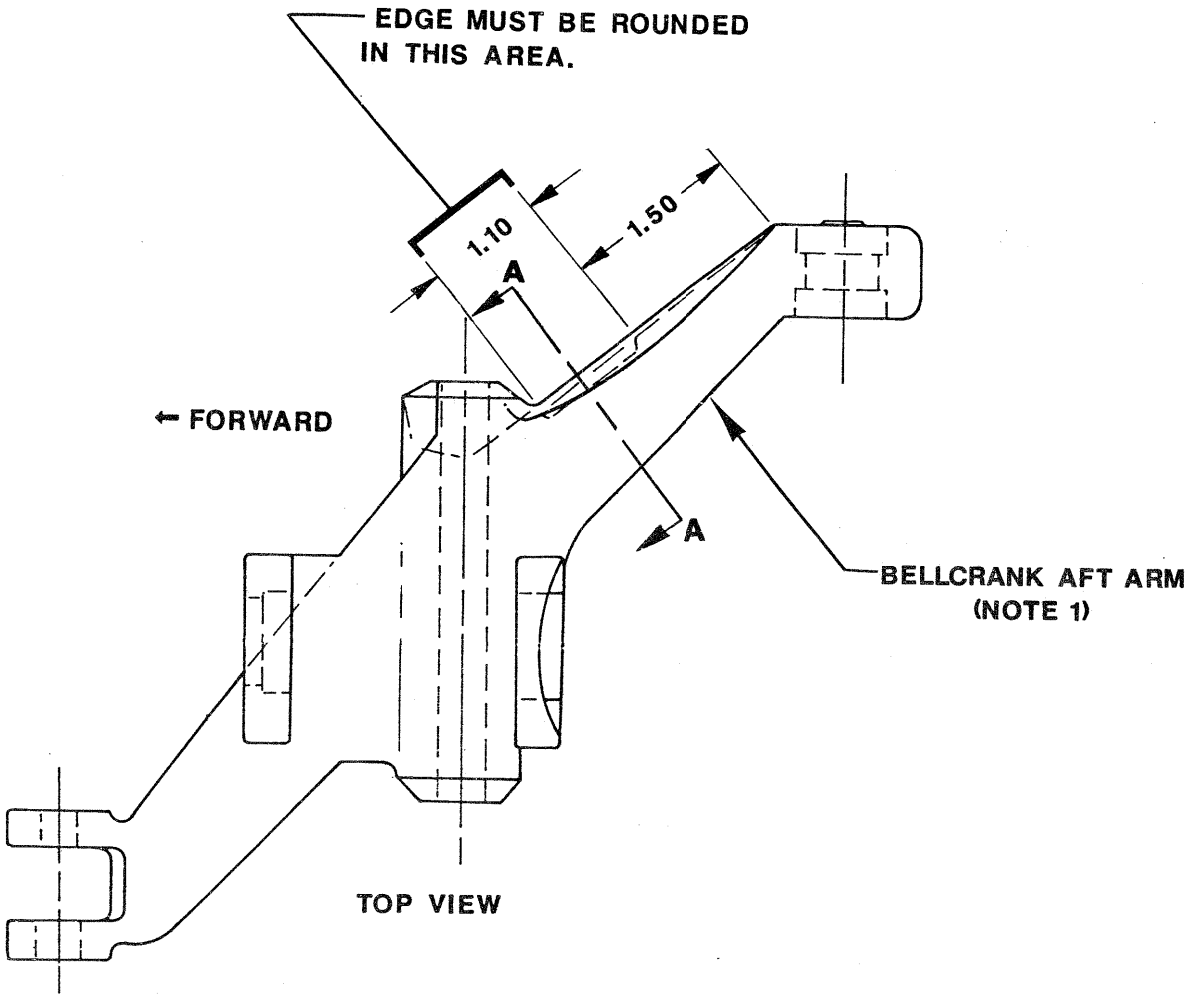


FIGURE 3. COLLECTIVE PITCH MIXER BELLCRANK

NOTE 1. DYE-PENETRANT INSPECT
SHADED AREA FOR CRACKS.

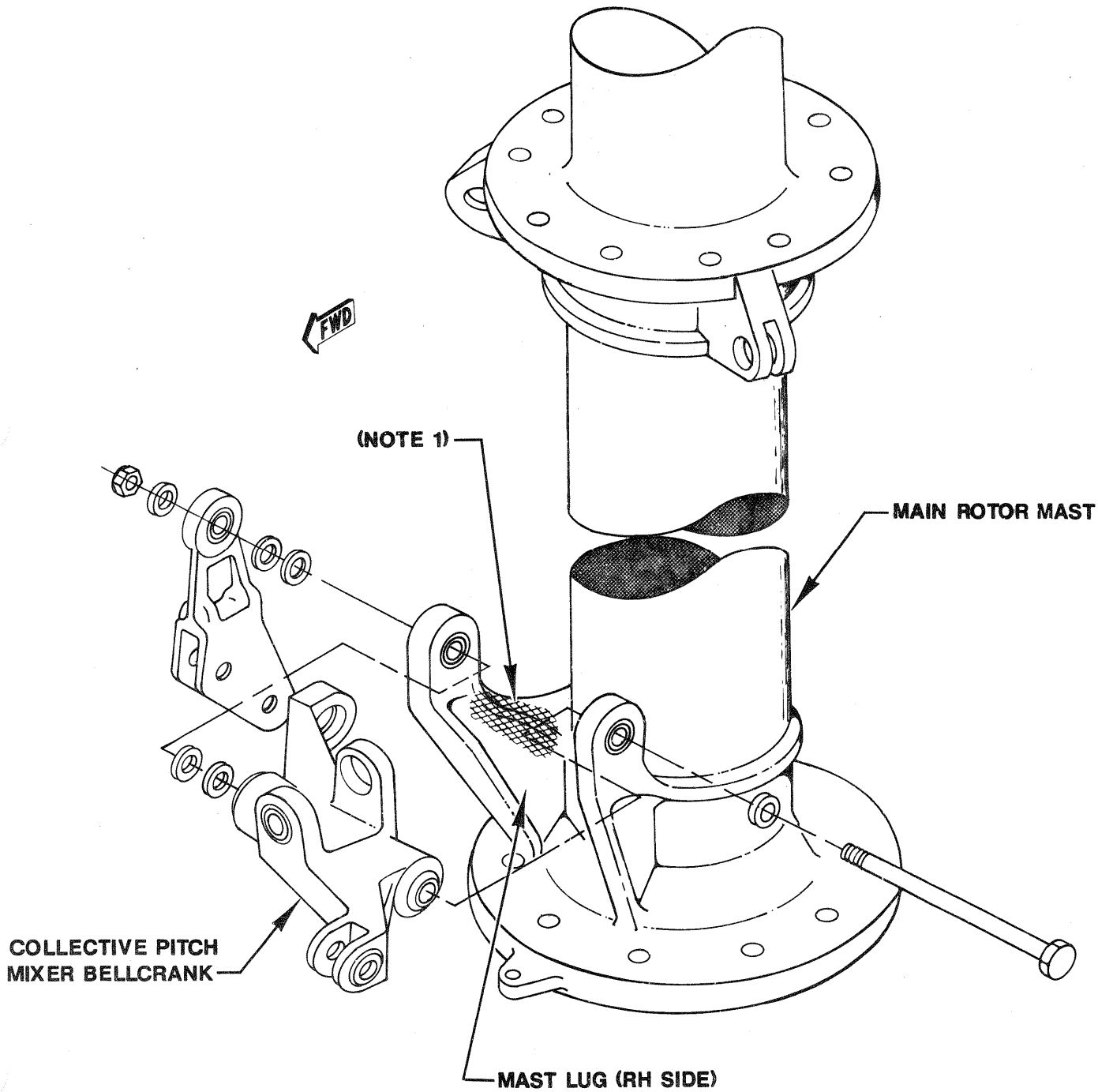


FIGURE 4. DYE-PENETRANT INSPECTION OF MAST LUG