



# SCHWEIZER SERVICE BULLETIN

C1B-031  
24 Aug 2010

MANDATORY

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**SUBJECT:** INCORRECT BUSHING USED IN 269C-1 FLIGHT CONTROLS

**MODELS AFFECTED:** • All 269C-1 Model Helicopters

**TIME OF COMPLIANCE:** Upon receipt of this Service Bulletin.

**REFERENCE:** 269C-1 Model Basic HMI, Revised: 16 Jul 2010

**PREFACE:** • Schweizer Aircraft has received a report that a helicopter was delivered with the incorrect slotted bushing installed in the attachment of the top end of the collective control rod to the collective pitch mixer bellcrank. Investigation of the condition revealed that the stocks of SHS626-4-313 slotted bushings located on the assembly line had inadvertently been contaminated with SHS626-4-250 slotted bushings. This Service Bulletin is being issued for a one time inspection to assure the correct length bushings have been installed in the flight control system. Warehouse inventories of the subject bushing have not been contaminated and this Bulletin does not effect spares sales.

**CAUTION**

**Failure to comply with this service bulletin may allow undetected cracks to exist in magnesium bellcranks.**

**FAA APPROVAL:** The technical aspects of this Service Bulletin are FAA approved.

**PARTS REQUIRED:** SHS626-4-313 A/R by inspection

**PROCEDURE:**

- a. Review Figure C1B-031-1 and note locations of all SHS626-4-313 bushing installations.

**NOTE**

At installation, the SHS626-4-313 bushings are designed to be longer than the thickness of the bellcrank lug. When torqued, the bushing should contact the bearing rod end and extend above the bellcrank outside surface, keeping the washer from touching the bellcrank. If the washers on both sides of the fork are in contact with the fork, the incorrect bushing is installed.

- b. Gain access to all flight control rod connections containing SHS626-4-313 bushings and using a bright light and as required a mirror, inspect assemblies for installation of correct length slotted bushing.

**CAUTION**

**If the incorrect bushing has been installed when the hardware is torqued, the legs of the forks will be drawn to the inner race of the rod end bearing. This can cause permanent distortion of the fork legs that can lead to cracks at the root end of the legs.**

- c. If incorrect bushing is installed, remove bellcrank. Using Vernier calipers, check that the inside surfaces of the fork legs in two locations measure  $.603 \pm .002$  (Figure C1B-031-1) and are parallel to each other. If surfaces are parallel, perform a dye penetrant inspection in accordance with Basic HMI Section 2. Remove from service and destroy any bellcrank found to have distorted or cracked legs.
- d. If a dye penetrant inspection has been performed and the bellcrank is found to be acceptable within the design specifications specified in drawing number 269A7508, restore paint finish in accordance with HMI Appendix D, Corrosion Control Manual.
- e. Reinstall any removed flight control assemblies in accordance with appropriate paragraphs of Basic HMI Section 8 and reinstall fairings, panels and interior assemblies in accordance with appropriate Sections of Basic HMI.
- f. Record compliance with this Service Bulletin in the aircraft records.

#### WEIGHT AND BALANCE

Weight and Balance are not affected.

NOTE:  
INSPECT CONNECTIONS  
AT ARROW LOCATIONS

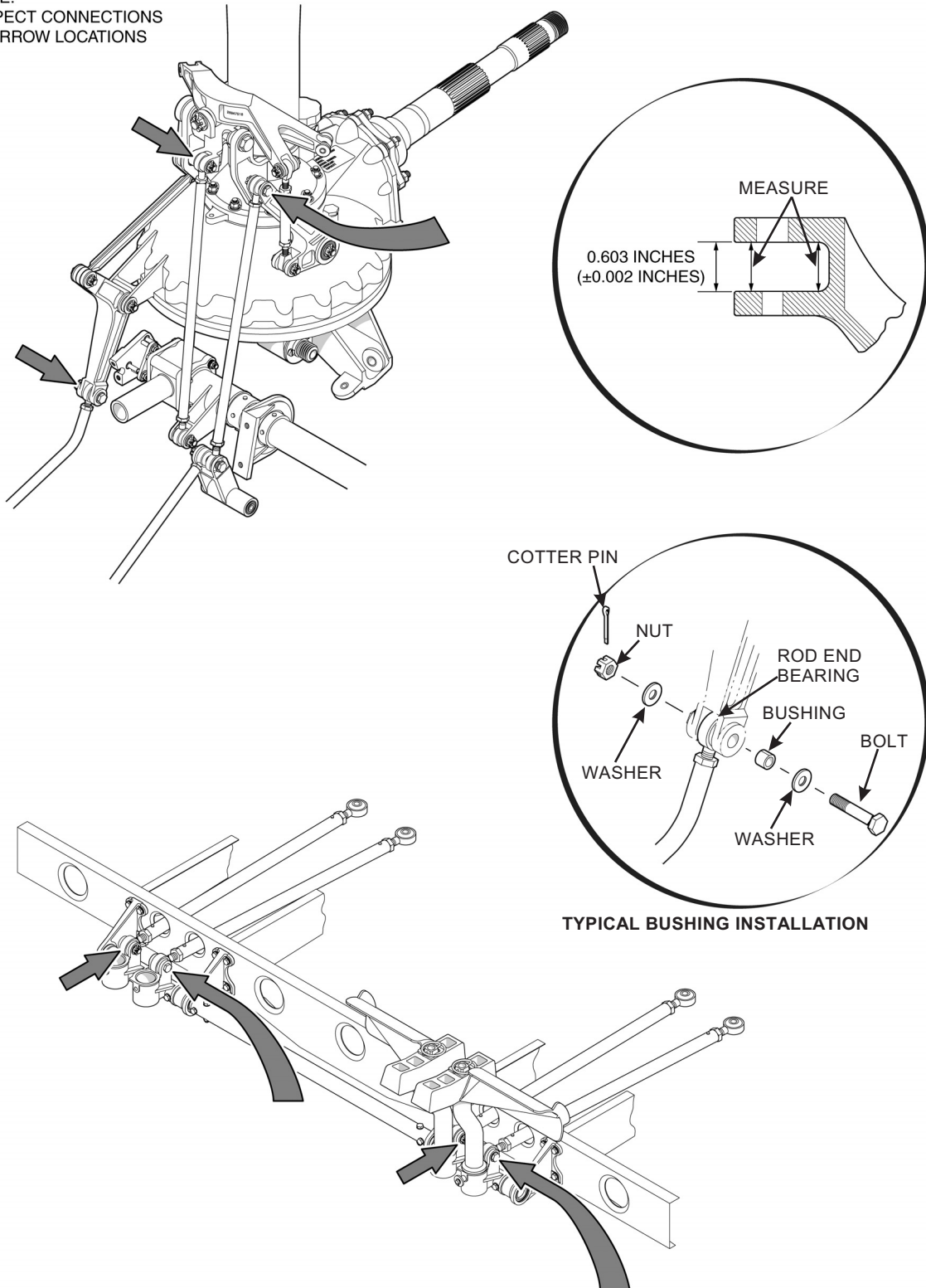


Figure C1B-031-1. Flight Control Inspection Points