



# SCHWEIZER SERVICE NOTICE

NOTICE NO. N-198

DATE: 28 FEB 86

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MANDATORY

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SUBJECT: INSPECTION AND REWORK OF TAIL ROTOR PITCH CONTROL LINK ASSEMBLY, P/N 269A6091-5 and 369A1807-7

MODELS AFFECTED: 1. All 269A, TH-55A, 269A-1, and Model 269C Helicopters

2. All 269A6091-5 and 369A1807-7 Tail Rotor Pitch Control Link Assemblies in spares inventory.

TIME OF COMPLIANCE: 1. Shall be accomplished within 50 hours of helicopter operations.

2. Shall be accomplished prior to installation of pitch control link on helicopter.

PREFACE: The information given in this Service Information Notice lists an inspection and rework procedure for proper clearance between tail rotor pitch links and pitch control housing assembly.

REFERENCE: 269 Series - Basic HMI (CSP-C-2), Re-issued 15 March 1982.

MATERIALS: Primer, Zinc Chromate - Commercial Source  
Alodine or Equivalent - Commercial Source  
Sandpaper - Commercial Source  
MS24665-151 Cotter Pin (4 required) - Commercial Source

#### INSPECTION & REWORK PROCEDURE:

1. Refer to Detail "A". Rotate Tail Rotor Assembly to align pitch link with lower boss on pitch control housing. Swash-plate will now be vertical.
2. Using feeler gauges check the clearance between the end of the pitch link assembly and pitch control housing. A minimum of .015 inches must exist or pitch link must be reworked per paragraph 5.
3. Rotate tail rotor 180° and check second pitch link assembly for proper clearance as stated in Paragraph 2.
4. Remove pitch links and reverse (switch end for end), reinstall and reinspect per paragraphs 1 thru 3. Refer to Basic HMI,

Section 9 and Caution after Paragraph 6 for removal, installation & rigging.

5. If both links are shown to provide adequate clearance then no further inspection or rework is required.
6. If adequate clearance is not found, remove pitch link or links per Basic HMI Section 9, Paragraph 9.

CAUTION
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Prior to removal of pitch control links color code the pitch control arms, the bolt and all washers used at each arm. The bolt, or an identical one, and the same combination of washers must be reassembled in the positions from which removed or tail rotor balance might be seriously affected. Installation of new links requires that both blades have pitch control arms with the current type bushing and that correct assembly hardware be used as shown in Basic HMI, Figure 9-6. The links to be used must both be the same. Do not allow blade pitch angles to exceed 30 degrees (approximately 1 inch) in each direction. Undetected damage to the internal tension-torsion strap assembly may occur.

- a. Inspect pitch link bearings per Basic HMI Section 9, Paragraph 8 for axial looseness for bearing. If bearings are not within tolerance, replace links with new units and inspect for adequate clearance.
- b. Inspect pitch link dimensions per Detail "B" for proper edge distance from center of bearing hole to edge of forging. This dimension is to be .47 radius  $\pm$  .03, including flashing area for a min. of 45° from center line, both ends. Links found to be in excess of this dimension may be disk-sanded to bring the dimension within tolerance. All sanding must blend smoothly with the radius contour of the link. All sanding must be polished to a smooth finish with 600 grit paper to remove all scratches.
- c. Touch up reworked areas with alodine, primer and paint per Basic HMI, Section 2-53 or equivalent.
- d. Reinstall pitch link per Basic HMI, Section 9, Paragraph 9.
- e. Check installation of pitch link assemblies for discrepancies and proper clearance with pitch housing; check tail rotor control for full travel and freedom of movement.

- f. Check tail rotor balance; adjust tail rotor balance, as required, per Section 9 of Basic HMI.

WEIGHT AND BALANCE DATA: Weight and Balance Data not affected.

The resultant alteration to the affected helicopters described by the inspection and rework procedures of this Notice has been shown to comply with the applicable Federal Aviation Regulations and is FAA Approved.

