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# **TECHNICAL BULLETIN**

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### INSTALLATION -- TAIL ROTOR PITCH CONTROL LINKS PN 369A1807-5

#### 1. PLANNING INFORMATION:

#### A. <u>Models Affected:</u>

The following helicopters equipped with PN 369A1807 Tail Rotor Pitch Control Links:

Model 369H Helicopter Serial No. 0001H through 0005H Model 369HS Helicopter Serial No. 0001S through 0830S Model 369HM Helicopter Serial No. 0001 through 0004 0005M through 0292M Model 369HE Helicopter Serial No. 0101E through 0215E

#### B. <u>Time of Compliance:</u>

At owners and operators discretion

#### C. Preface:

The information given in this Service Information Notice lists a procedure for removal of existing PN 369A1807 tail rotor pitch control links where installed on the above affected helicopters, and replacement with new PN 369A1807-5 pitch control link assemblies. The new -5 links incorporate new type bearings which provide increased angular throw between the link and swashplate, and the link and blade control arm, when blades are in high pitch angles.

It is to be noted that, for PN 369A1500 Series fiberglass tail rotor blade assemblies only, instructions are also provided for replacement of the blade control arm bushing, to accommodate the new -5 pitch control link assemblies.

#### D. <u>Weight and Balance:</u>

Weight and Balance data not affected.

#### E. <u>Reference Publications:</u>

REPLACEMENT PARTS/SUPPLIES				
Nomenclature	Part No.	Qty.	Source	
Link assembly	369A1807-5 (Alt.: 269A6091-5)	3	НН	
Washer	269A6095-9	2	нн	
**Bolt	369H1602	3	нн	
*Bushing	269A6059-3	3	НН	

500 Series - Basic HMI, Issued I October 1972; Revision No. 7, 15 October 1976

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REPLACEMENT PARTS/SUPPLIES (Cont.)				
Nomenclature	Part No.	Qty.	Source	
**Nut	MS17836-4 (Alt.: AN320-4)	3	Commercial	
Pin, cotter	MS24665-151	2	Commercial	
Washer, tang	HS1551-S290	1	НН	

\*Required for PN 369A1600 Series fiberglass tail rotor assemblies only.

\*\*Not required if presently installed on helicopter.

MATERIAL			
Nomenclature	Source		
Primer, zinc chromate	W.P. Fuller Co. or Commercial		

TOOLS AND EQUIPMENT			
Nomenclature	Source		
Wrench, torque	Commercial		
Bushing - 0.257 ID x 0.360 OD x 4.5 Length	Field Fabricate		
Bushing - 0.50 ID x 0.75 OD x 0.70 Length	Field Fabricate		
Bolt - 0.25 Die x 1.75 length (threaded 1.30 from end)	Commercial		
Washer - 0.25 ID x 0.75 OD x 0.06 thick	Commercial		
Washer - 0.25 ID x 0.50 OD x 0.06 thick	Commercial		

#### 2. PROCEDURE

- (1). Remove tail rotor assembly, per Basic HMI.
- (2). Disconnect ends of pitch control links at swashplate and at pitch control arms. Identify and retain dished washers for reinstallation in original location.
- **NOTE:** Replacement of bushing in pitch control arms per step 3. below not required for 369A1620 aluminum rotor blade assembly.
  - (3). Replace existing 369A1707 bushing in each pitch control as follows:
    - (a). Assemble bolt. bushings, washer and nut on pitch control arm as shown in Figure 1; tighten bolt to remove 369A1707 bushing
    - (b). Assemble bolt, washer, new 269A6059-3 bushing, washer and nut, as shown in Figure 1; tighten nut to seat bushing in arm. Install bushing with wet zinc chromate primer.





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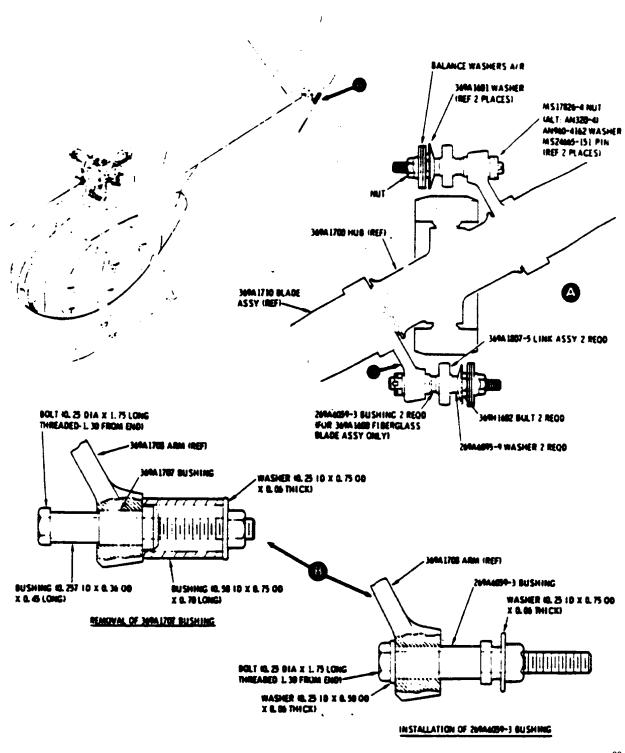
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- (4). Install new 369A1807-5 link assembly between tugs of swashplate..
- (5). Install bolt, two washers and nut; torque nut to 50 to 80 inch-pounds anti install new cotter pin.
- (6). Pull pitch control assembly inboard or outboard as required to align pitch control link bearing with pitch control arm bushing.
- (7). Place existing spring tension washer on bolt so that concave (dished) surface is against bolt head; install new 269A6095-9 washer on bolt and insert bolt through bearing of pitch control link and bushing in pitch control arm.
- (8). Install washer and nut.
- (9). Torque nut to 50 to 80 inch-pounds and install new cotter pin.
- (10). Repeat steps 4 through 9 for remaining link assembly.
- (11). Reinstall tail rotor assembly, per Basic
- (12). Check installation of pitch link assemblies for discrepancies; check tail rotor controls for full travel and freedom of movement.
- (13). Check tail rotor balance; adjust tail rotor balace as required per Basic HMI.



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#### Figure 1. Replacement - Tail Rotor Link Assemblies

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