

**HUGHES  
SERVICE INFORMATION  
NOTICE**

NOTICE NO. HN-80

DATE 18 November 1974

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**SUBJECT:** BENDIX SERVICE BULLETIN NO. 109, DATED 10/22/74  
INSPECTION, FLEXIBLE COUPLING LOCKNUTS

**MODELS AFFECTED:** 369HS Helicopter Serial No. 0544S and 0545S, 0566S through 0604S, 0606S through 0608S and 0610S.  
369HM Helicopter Serial No. 0244M through 0248M.

**TIME OF COMPLIANCE:** In accordance with Bendix Service Bulletin No. 109,  
dated 10/22/74

**PREFACE:** The information in this Service Information Notice is a reprint of Bendix Service Bulletin No. 109. The bulletin gives a procedure for inspection, and if required, replacement of the nut plates on the couplings. Instances of cracked nuts have occurred.

The condition is limited to certain serial numbered couplings installed on specific helicopters. Owners and operators having the rotor brake installed, are advised to disregard the helicopter serial numbers listed and inspect in relation to the coupling serial number only, unless their aircrafts serial number is listed and the rotor brake is also installed. In this particular case the inspection should be conducted for both aircraft and couplings affected.

The data plate on the coupling contains the Bendix and Hughes part numbers, and the assembly serial number.

**REFERENCE**

Hughes 500 Series Basic HMI, Issued 1 October 1972; Revision No. 3, 1 Jan 1974

Customer Service Department - Hughes Helicopters - Culver City, California

## PROCEDURE

a. Comply with terms, conditions, and procedures in Bendix Bulletin No. 109 reprinted as a part of this notice.

## GENERAL NOTES

The following typographical errors have been noted in the subject Bendix Bulletin:

- (1) Page 1. IS: 19E110-1A-CL61 S/Ns:  
(Hughes P/N 369A5512)

SHOULD BE: (Hughes P/N 369A5510)

- (2) Page 2. IS: Hughes 359H Series Helicopters utilizes a total of four couplings; two (2) each 369A45501 thru point attachment at opposite ends of the tail rotor drive shaft; two (2) each 369A5512 four point ---- etc.

SHOULD BE: Hughes 369H Series ----; two (2) each 369A5501 ----; two (2) each 369A5510 ----.

b. To install new rivets, use Cherry G-11 or G-55 hand gun set-up, to be used with serrated or knob stem rivets.

c. Accomplish removal and installation of main and tail rotor drive shaft in accordance with Hughes Basic HMI.

d. Record compliance with this Service Information Notice in compliance section of Helicopter Log Book.

WEIGHT AND BALANCE NOT AFFECTED

# Service Bulletin No. 109

Pub. No. 36U-4-7410B

The Bendix Corporation - Utica, New York

SUBJECT:

Inspection of Floating Lock Nut, P/N NAS 1068A4

EQUIPMENT AFFECTED:

Bendix Electric & Fluid Power Division -

19E110-1A-CL61 S/Ns:  
( Hughes P/N 369A45512)

3827U	3838U	3849U
3828	3839	3854
3829	3844	3857
3830	3845	3860
3833	3846	3862
3834	3848	3869

19E111-1A S/Ns:  
( Hughes P/N 369A5501)

7710U  
7719  
7723  
7730  
7738  
7744

19E149 -1A S/Ns:  
( Hughes P/N 369H92564)

383U	395U	405U
384	396	406
385	398	407
386	400	408
387	401	409
389	402	410
390	403	411
392	404	412
414U	422U	430U
415	423	431
416	424	432
417	425	433
418	426	434
419	427	435
420	428	436
421	429	

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**Electric &  
Fluid Power  
Division**

**REASON FOR BULLETIN:**

To provide procedures for inspection and replacement of Floating Lock Nuts.

Investigation revealed a condition wherein the locking nut was noted to crack in the clinched area, which can result in the loss of the locking feature of the unit.

Research of records indicate receipt of one lot of floating nuts as depicted in "B", Figure 1. It is recommended the nuts illustrated in "B", be replaced to preclude cracking. Floating nuts as illustrated in "A", Figure 1, are acceptable and do not require replacing.

**ACCOMPLISHMENT:**

A) Inspection, as soon as practical but not more than seven (7) days after receipt of this bulletin.

B) Replace at once any floating nuts which are cracked or have indication of crack.

C) Floating nuts which do not indicate cracks, replace as soon as practical but no later than twenty (20) days after receipt of parts.

**PARTS REQUIRED:**

Service Kit 211, consisting of:

4- NAS 1068A4	Nut, Floating
8- MS20605MP 3K3	Rivet, Flat Head
4- MS21042-4	Nut, Self- Locking

Hughes 359H Series Helicopters utilize a total of four couplings; two (2) each 369A45501 three point attachment at opposite ends of the tail rotor drive shaft; two (2) each 369A5512 four point attachment at opposite ends of the main transmission drive shaft. Please note that one (1) 369H92564 coupling is used when the rotor brake is installed.

**PROCEDURE:**

Inspect subject shafts and couplings to determine type floating nuts installed. Parts conforming to floating nuts illustrated in "A", Figure 1, do not require replacing.

Parts conforming to "B", Figure 1, inspect for any cracks or indication of cracks in the clinched area of nut.

Shaft must be removed from helicopter to perform following rework procedure.

NOTE: EXERCISE EXTREME CAUTION TO PRECLUDE DAMAGE TO DIAPHRAGM ASSEMBLY.

Remove rivets by drilling out rivet head. Use a No. 34 drill (.111 inch diameter). Use care when rivet head breaks loose not to drill into or damage area around rivet hole in coupling flange. Replace coupling if drill contacts diaphragm.

#### REASSEMBLY:

When practical and with availability of riveting tool, reinstall Nut, NAS1068A4, with rivets using proper riveting tool. Rivet heads must be flush or below flange surface. Reference Figure 2.

If riveting tool is not available, reinstall shaft using Nuts, MS21042-4.

NOTE: DO NOT SCRATCH OR DAMAGE DIAPHRAGMS WITH TOOLS WHEN INSTALLING NUT. PROTECT DIAPHRAGM ASSEMBLY FROM ANY DAMAGE.

Locking Nuts, MS2104204 should be replaced with NAS 1068A4, Floating Nuts when riveting tool is available.

Service Kits are available through The Bendix Corporation, Electric & Fluid Power Division - Fluid Power Facility -

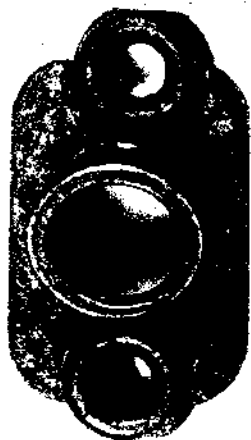
211 Seward Avenue  
Utica, New York 13503

Phone: 315-797-2500

Request for Kits should be directed to the Product Support Department. Kits will be furnished at no charge for accomplishment of this bulletin.



**B**



**A**

FIGURE 1

MS 20605MP3K3  
RIVET HEAD MUST BE  
FLUSH OR BELOW FACE  
OF MOUNTING FLANGE

NAS 106844

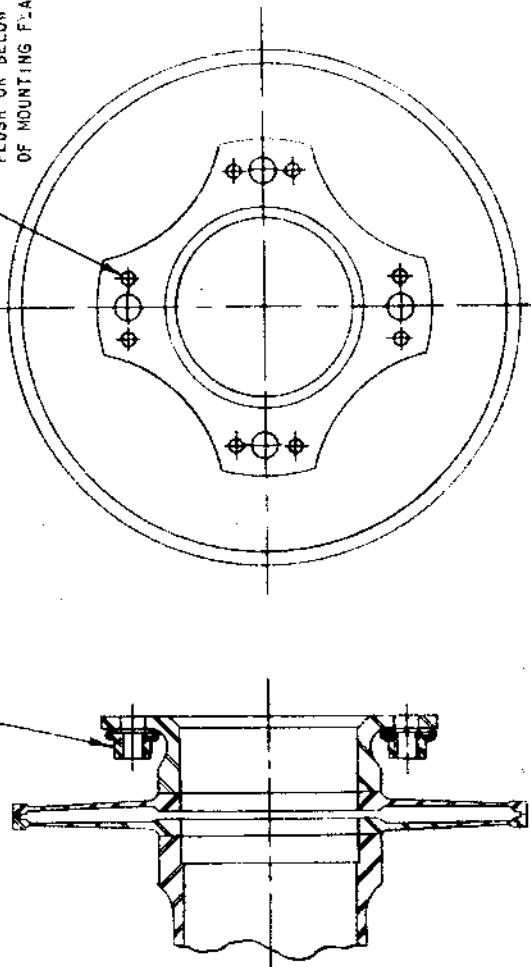


FIGURE 2