ALERT SERVICE BULLETIN

Bell Helicopter TEXTRON
A Subsidiary of Textron Inc.

DATE	
REV	

NO. 214ST-01-83
DATE 01-19-01

MODEL AFFECTED: **214ST**

SUBJECT: **MAGNETIC BRAKE P/N 204-001-376-103, ONE TIME INSPECTION OF.**

HELICOPTERS AFFECTED: **Model 214ST helicopters and all delivered spare Magnetic Brakes P/N 204-001-376-103.**

[Model 214ST helicopters serial numbers 28201 and subsequent will have the intent of this bulletin accomplished prior to delivery.]

COMPLIANCE: Within the next 300 hours of operation after receipt of bulletin but no later than August 1, 2001.

DESCRIPTION:

Bell Helicopter has recently received a report that magnetic brake P/N 204-001-376-003 adjustable stop screws P/N MS51959-3 had backed out which limited the travel of the arm assembly. Investigation revealed the stop screws had been installed without the proper adhesive. A similar design, 204-001-376-103, is used on Model 214ST helicopters. These Magnetic Brakes were manufactured by Memcor Truohm, Inc. under their P/N MP498-103. P/N 204-001-376-103 Magnetic Brake made by other manufacturers are not affected by this bulletin.

This Alert Service Bulletin (ASB) is issued to impose a one-time inspection to verify the installation of the adjustable stop screws of magnetic brake P/N 204-001-376-103.

APPROVAL:

The engineering design aspects of this bulletin are FAA/DER approved.

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MANPOWER:

Approximately 1.0 man-hour is required to complete this bulletin. Man-hours are based on hands-on time, and may vary with personnel and facilities available.

MATERIAL:

Required Material:
None required.

Consumable Material:
The following material is required to accomplish this bulletin, but may not require ordering, depending on the operator's consumable material stock levels. This material may be obtained through your Bell Helicopter Textron Supply Center.

Part Number	Nomenclature	Quantity	Reference
MILS22473 GR AA 50cc	Adhesive/Sealant	A/R	C-320
F900, Yellow	Torque Seal (Inspection Ink)	A/R	N/A

SPECIAL TOOLS:

None required.

WEIGHT AND BALANCE:

Not affected.

ELECTRICAL LOAD DATA:

Not affected.

REFERENCES:

BHT-214ST-IPB Illustrated Parts Breakdown, Chapter 67
BHT-214ST-MM Maintenance Manual, Chapter 67
BHT-ALL-SPM Standard Practice Manual

PUBLICATIONS AFFECTED:

None affected.

ACCOMPLISHMENT INSTRUCTIONS:

1. Magnetic Brake P/N 204-001-376-103 may be installed on aircraft or may be held as a spare part. If a spare magnetic brake is manufactured by Memcor Truohm under P/N MP498-103, comply with steps 5 through 11 and then return magnetic brake to spare stock. If magnetic brake is installed on aircraft, proceed to step 2.

2. Disconnect battery.

3. Gain access to the anti-torque flight control system magnetic brake (4, figure 1).

-NOTE-

Anti-torque magnetic brake does not have to be removed from aircraft to perform the following check.

4. Using a mirror and a flashlight, inspect the Magnetic Brake installed to determine if it is manufactured by Memcor Truohm, Inc. by identifying P/N MP498-103. If the Magnetic Brake is P/N MP498-103, continue with step five (5) of this Alert Service Bulletin. If the Magnetic Brake is not manufactured by Memcor Truohm, Inc. proceed to step 12 of this Alert Service Bulletin.

5. Using a suitable torque wrench and screw driver bit apply 10 inch/lbs(1.12 Nm) force to screw(s) (1 figure 1) in a counterclockwise direction. If screw(s) (1) does not move, proceed to step 11. If any movement is found on screw(s) (1) proceed to the following steps.

-NOTE-

If the inspection reveals that screw(s) (1) has disengaged, inspect arm assembly (4) for mechanical damage created by screw(s) (1). If mechanical damage is found, the depth shall not exceed 0.030 inch (0.762 mm). Acceptable damage may be smoothed and treated in accordance with the Standard Practice Manual Chapter 3 for Chemical Film. If damage is greater than 0.030 inch (0.762 mm) contact Product Support Engineering.

6. Remove screw(s) (1) and stop limit(s) (2) from magnetic brake (4).

7. Clean dried adhesive from magnetic brake (4) screw holes and screw(s) (1) with compressed air.

8. Apply adhesive (C-320) to screw(s) (1) threads and install in magnetic brake (4) hand tight.

9. Adjust the stop limit(s) (3) to achieve the arm assembly shaft travel as per dimension in figure 1.

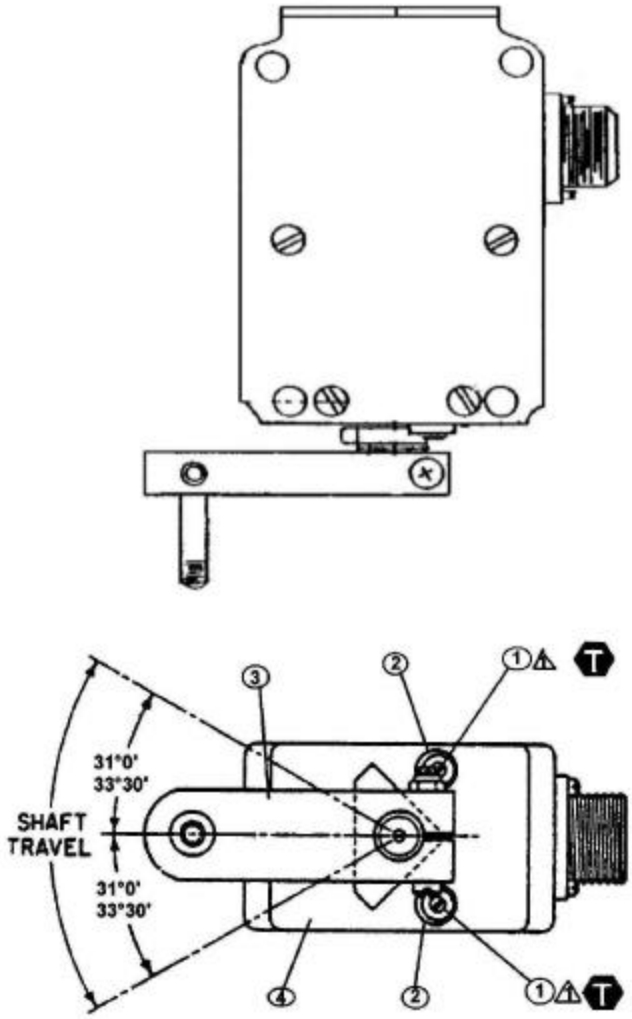
10. Once shaft travel is obtained, torque screw(s) (1) 5 to 10 in-lbs (0.56 to 1.12 mm).

11. Apply torque seal inspection ink to screws (1) and to stop limits (2).

12. Re-install anti-torque magnetic brake access panel.

13. Connect battery.

14. Make an entry in the helicopter historical records indicating compliance with this Alert Service Bulletin.



MAGNETIC BRAKE ASSEMBLY P/N 204-001-376-003

(Stop Mechanism for -103 Identical to -003)

LEGEND

1. Screw MS51959-3
2. Stop Limit
3. Arm Assembly
4. Brake Assembly

NOTE

⚠ Bond screw with adhesive C-320

T 5 to 10 IN-LBS (0.56 TO 1.12 Nm)

FIGURE 1