

ALERT SERVICE BULLETIN



A Textron Company

NO. 427-09-25

DATE April 07, 2009

PAGE 1 of 4

DATE
REV

MODEL AFFECTED: 427

SUBJECT: STAKED BEARINGS, ONE-TIME INSPECTION OF.

HELICOPTERS AFFECTED: Model 427 helicopters serial number 56001 through 56073, 58001, 58002 and all spares.

Model 427 helicopters serial numbers 56074, 58003 and subsequent will have the intent of this bulletin accomplished prior to delivery.

Spare parts delivered after the release of this bulletin are not affected.

COMPLIANCE: Within the next 10 flight-hours or 30 days, whichever comes first.

DESCRIPTION:

Bell Helicopter received two reports where a bearing had migrated out of a flight control lever. Investigation revealed that, although the inspection witness mark was applied to the part, the bearing had not been staked during manufacturing. Affected parts were associated with a single Bell Helicopter supplier. Review of the supplier's manufacturing and quality process indicates inspection of additional components is warranted.

Bell Helicopter issues this bulletin to accomplish a one-time inspection of various parts that could potentially exhibit the same defect. The affected parts are listed in Table 1. Parts in service and all spare parts are affected. When serialized, only parts with serial number prefix TI or TIFS are affected. However, affected part not serialized, may have Supplier marking as shown on Figure 1.

APPROVAL:

The engineering design aspects of this bulletin are Transport Canada Civil Aviation (TCCA) approved..

MANPOWER:

Approximately 4.0 man-hours are required to complete this bulletin. Man-hours are based on hands-on time, and may vary with personnel and facilities available.

WARRANTY:

There will be no warranty associated with this bulletin.

MATERIAL:

None required

SPECIAL TOOLS:

None required

WEIGHT AND BALANCE:

Not affected

ELECTRICAL LOAD DATA:

Not affected

REFERENCES:

BHT-427-IPB Illustrated Parts Breakdown
BHT-427-MM Maintenance Manual
BHT-427-CR&O Component Repair and Overhaul Manual
BHT-ALL-SPM Standard Practices Manual

PUBLICATIONS AFFECTED:

None affected

ACCOMPLISHMENT INSTRUCTIONS:**Inspection of parts in Table 1**

1. Gain access to the affected parts. See Table 1 for the list.
2. Using a 10X magnifying glass or other suitable means such as a boroscope, inspect parts for bearings that have not been staked. Refer to Standard Practices Manual (SPM). If a bearing is not visible, apply hand pressure to the part to detect any axial movement. If still in doubt, remove the part from the aircraft to inspect.
3. Should you find a part with a discrepant bearing, replace the bearing or the assembly and contact Product Support Engineering to report finding.
4. Make an entry in the helicopter historical records indicating compliance with this Alert Service Bulletin.

Table 1
Affected Parts

Part Number	Description
427-001-021-101	Swashplate lateral link assembly (upper and lower bearing)
427-001-022-101	Swashplate longitudinal link assembly (upper and lower bearing)
427-001-521-105/-109	Transmission mounted longitudinal bellcrank assembly (pivot bearing)
427-001-520-109/-113	Transmission mounted lateral bellcrank assembly (pivot bearing)
406-010-417-109	Bearing and liner (lower drive link bearing)
427-001-723-101	Tail rotor actuator output idler. Affectivity for this part is S/N 56001 thru 56066.

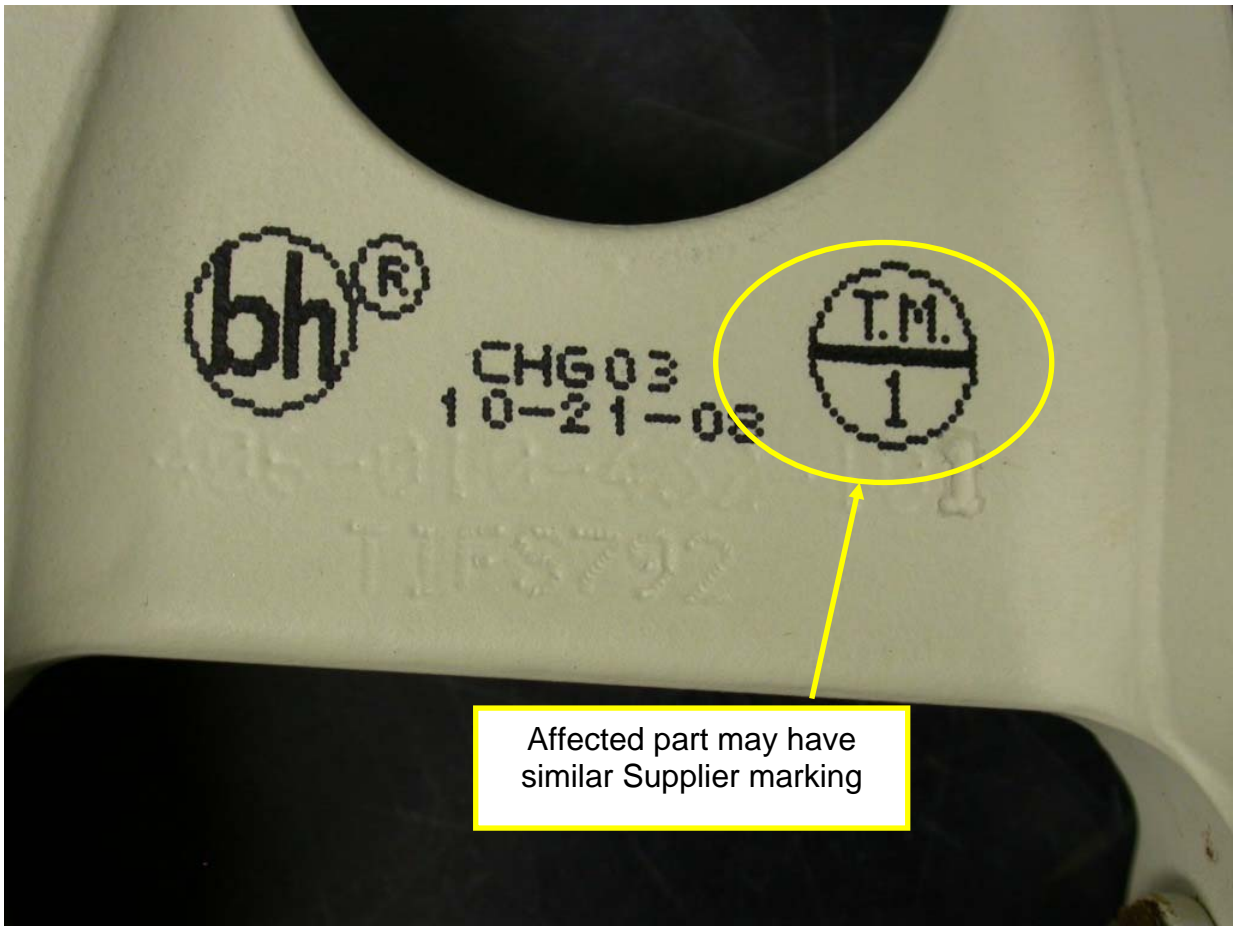


Figure 1. Affected part Supplier marking.