

**ALERT SERVICE BULLETIN**  
REVISION NOTICE

DATE Oct, 29, 2009



**TO: All Owners/Operators of Bell 412 / 412EP Helicopters**

**SUBJECT: REVISION B TO ALERT SERVICE BULLETIN 412-08-131;  
SWASHPLATE OUTER RING ASSEMBLY P/N 412-010-407-105,  
REDUCTION OF RETIREMENT LIFE.**

Revision B to this bulletin incorporates changes to the compliance date and clarifies the compliance requirements for swashplate outer ring assemblies that have accumulated more than 2500 flight hours in service.

AN APPROPRIATE ENTRY SHOULD BE MADE IN THE AIRCRAFT LOGBOOK UPON ACCOMPLISHMENT  
IF OWNERSHIP OF AIRCRAFT HAS CHANGED PLEASE FORWARD TO NEW OWNER

**ALERT SERVICE BULLETIN**



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DATE	10-22-09
REV	B

**MODEL AFFECTED:** 412, 412EP

**SUBJECT:** SWASHPLATE OUTER RING ASSEMBLY P/N 412-010-407-105, REDUCTION OF RETIREMENT LIFE.

**HELICOPTERS AFFECTED:** Model 412 helicopters serial number 33001 through 33213, S/N 34001 through 34024 and S/N 36001 through 36048.

[Model 412 helicopters serial numbers 34025 and subsequent, and S/N 36049 and subsequent will have outer ring P/N 412-010-407-117 installed prior to delivery.]

**COMPLIANCE:** Upon reaching 2500 flight hours or no later than April 30, 2010.

Outer Ring Assemblies in excess of 2500 flight hours shall be removed within 300 hours of receipt of this bulletin, or no later than April 30, 2010.

**DESCRIPTION:**

Bell Helicopter's continuing component evaluation program has established a reduction of retirement life of the Swashplate Outer Ring Assembly P/N: 412-010-407-105. Swashplate Outer Ring Assembly P/N 412-010-407-117 replaces the -105 and has a retirement life of 10,000 hours.

**APPROVAL:**

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

**MANPOWER:**

Approximately 26.0 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:**

Owners / Operators of Bell Helicopters who comply with the instructions in of this Bulletin will be eligible to receive a pro-rated credit for the replacement swashplate outer ring assembly part number 412-010-407-117, and Cap 540-011-434-111 outlined under the required material section of this bulletin, together with the labor cost to cover the replacement on bench and on the aircraft.

To receive this credit:

- Purchase the required 412-010-407-117 outer ring assembly and cap 540-011-434-111 from a BHT supply source.
- Comply with the instructions contained in this Bulletin no later than the applicable hours in the “compliance section” of this ASB, or before April 30<sup>th</sup> 2010.
- Labor cost provided for a replacement an on bench assembly will be \$400.00 USD and \$800 USD for an on aircraft assembly.
- Submit an MMIR to the Bell Warranty Department for the replacement parts and the appropriate labor cost.

**MATERIAL:**

**Required Material:**

The following material is required for the accomplishment of this bulletin and may be obtained through your Bell Helicopter Textron Supply Center.

<u>Part Number</u>	<u>Nomenclature</u>	<u>Quantity</u>
412-010-407-117	Outer Ring Assembly	1
412-010-404-101	Shim	1
204-011-429-001	Seal	2
540-011-434-111	Cap Assembly	1
140-007-21S18C6	Washer	4
MS21042L5	Nut	4
MS21250-05022	Bolt	4
NAS1149F0563P	Washer	4

**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.

<u>Part Number</u>	<u>Nomenclature</u>	<u>Quantity</u>	<u>Reference</u>
MIL-R-46082, TY I	Loctite RC/40	As Req'd	C-352
Denatured Alcohol	Denatured Alcohol	As Req'd	C-326
AS100028	Lockwire	As Req'd	C-405
P-C-451	Aluminum Oxide Cloth	As Req'd	C-406
L-P-0050	Abrasive Pad	As Req'd	C-407
PD680	Drycleaning Solvent	As Req'd	C-304
MIL-PRF-16173ECLASS1	Corrosion Preventive Comp'd	As Req'd	C-101
MIL-PRF-16173 GR2	Corrosion Preventive Comp'd	As Req'd	C-104
MILS29574TYI CLB 6OZ	Sealant	As Req'd	C-396
AS100029 1LB ROLL	Lockwire	As Req'd	C-447
THIXOGREASE	Grease	As Req'd	C-561
METHYL ETHYL KETONE	MEK	As Req'd	C-309
299-947-107 TY2CL5PT	Adhesive	As Req'd	C-325
ABRASIVE 240 GRIT	Abrasive	As Req'd	C-423
MIL-PRF-81322 GRADE A	Grease	As Req'd	C-001

**SPECIAL TOOLS:**

<u>Part Number</u>	<u>Nomenclature</u>	<u>Quantity</u>	<u>Note</u>
T101266	Blade Bolt Tool	1	
T101626	Sling	1	
214-782-003-1	Support Assembly	1	
NAS6208-9	Bolt	1	
(Part of T101263-101)			
SWE138-75	Transportation Stand	1	
SWE 13875-30	Adapter	1	
T1011263-105	Adapter	1	
(Part of T101263-101)			
T-101308	Jackscrew	3	
	Work Aid, Pitch Link Tool.	1	1

Note 1: Refer to BHT-412-MM, Figure 62-9.

**WEIGHT AND BALANCE:**

Not affected

**ELECTRICAL LOAD DATA:**

Not affected

**REFERENCES:**

BHT-412-IPB Illustrated Parts Breakdown

BHT-412-MM Maintenance Manual

BHT-412-CR&O Component Repair and Overhaul Manual

TB 412-05-201 Bearing and Liner Assemblies P/N 204-010-433-001 & P/N 204-011-443-001: Installation Improvements.

**PUBLICATIONS AFFECTED:**

BHT-412-MM Maintenance Manual, Chapter 4.

**ACCOMPLISHMENT INSTRUCTIONS:**

1. For Swashplate Outer Ring Assembly P/N: 412-010-407-105, annotate the Historical Service Record with a new retirement life of 2,500 hours.
2. Once the retirement life is reached or exceeded, remove and replace the Swashplate Outer Ring Assembly in accordance with the instructions specified in the BHT-412-MM and BHT-412-CR&O manual.

**-NOTE-**

Upon re-assembly of the Swashplate and the Hub & Sleeve Assembly, it is highly recommend that the TB 412-05-201 be incorporated.

3. After re-assembly and installation of all components, the main rotor assembly shall be tracked and balanced.
4. Upon completion, make an entry in the helicopter historical records indicating compliance with this Alert Service bulletin.