

ALERT SERVICE BULLETIN

412-12-149
24 January 2012

MODEL AFFECTED: 412/412EP

SUBJECT: SIMPLE PENDULUM ABSORBER BRACKETS 412-010-264-101 / -105, INSPECTION AND REWORK OF

HELICOPTERS AFFECTED: Serial numbers 33001 through 33213, 34001 through 34036, 36001 through 36558, 36560, 36561, 36563 through 36567, 36569, 36570, 36572, 36573, 36581, 36582, 36583 and 36586.

[Serial numbers 36559, 36562, 36568, 36571, 36574 through 36580, 36584, 36585 and 36587 and subsequent will have the intent of this bulletin accomplished prior to delivery.]

COMPLIANCE: PART I: At the next scheduled inspection but no later than 30 days after release of this bulletin.

PART II: Within the next 200 flight hours but no later than 90 days after accomplishment of PART I.

DESCRIPTION:

Some Simple Pendulum Absorber (SPA) brackets 412-010-264-101 (trailing edge) and -105 (leading edge) may have been manufactured with an impression stamp marking that does not conform to the design requirements. PART I of this bulletin mandates a one-time inspection of SPA brackets and PART II provides rework instructions if required. Applicability of this bulletin to any spare part shall be determined prior to its installation on an affected aircraft.

APPROVAL:

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

CONTACT INFO:

For any questions regarding this bulletin, please contact:

Bell Helicopter Product Support Engineering - Medium Helicopters
Tel: 450-437-6201 / 1-800-363-8028 / psemedium@bellhelicopter.textron.com

MANPOWER:

Time required to accomplish PART I of this bulletin is negligible. Approximately 3 man-hours are required to complete PART II of this bulletin. This estimate is 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 this bulletin and find a part that is beyond the acceptable limits described in Section II 3.b will be eligible to receive a prorated credit for the replacement.

To receive this credit:

- Comply with the instructions contained in this bulletin no later than the applicable date in the "Compliance Section" of this bulletin.
- Purchase replacement parts as required in the materials section of this bulletin from a Bell approved source.
- Submit an MMIR to the Bell Warranty Department.

Customers who fail to comply with the instructions in this bulletin after 120 days from date of issue of this bulletin are not eligible for the special warranty credit listed above. There is no labor associated with this bulletin.

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>Qty</u>
412-010-264-101	Bracket (trailing edge)	Note
412-010-264-105	Bracket (leading edge)	Note

Note: Ordering will be required only if a crack is found or marking exceeds the 0.035 inch depth limit.

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>Qty</u>	<u>Reference</u> *
ABRASIVE 220 GRIT	Abrasive Cloth or paper	A/R	C-423
MIL-PRF-23377, TYPE I or II, CLASS C2	Primer, Epoxy Polyamide	A/R	C-204
MIL-L-PRF- 85285, TY I	Coating, Polyurethane (Gray, 36440)	A/R	C-245

* C-XXX numbers refer to the consumables list in BHT-ALL-SPM Standard Practices Manual.

SPECIAL TOOLS:

None required.

WEIGHT AND BALANCE:

Not affected.

ELECTRICAL LOAD DATA:

Not affected.

REFERENCES:

BHT-ALL-SPM

PUBLICATIONS AFFECTED:

None affected.

ACCOMPLISHMENT INSTRUCTIONS:

PART I. SPA bracket inspection.

1. Prepare helicopter for maintenance.
2. Gain access to SPA bracket.
3. Inspect both sides of SPA bracket for presence of impression stamp "SA" or "A" in the area of the lightning hole. Refer to Figure 1.
4. If no impression stamp is found, the part is serviceable. Make an entry in the helicopter records to indicate findings and compliance with this Alert Service Bulletin.
5. If impression stamp is found, accomplish PART II.

PART II. SPA bracket rework.

-NOTE-

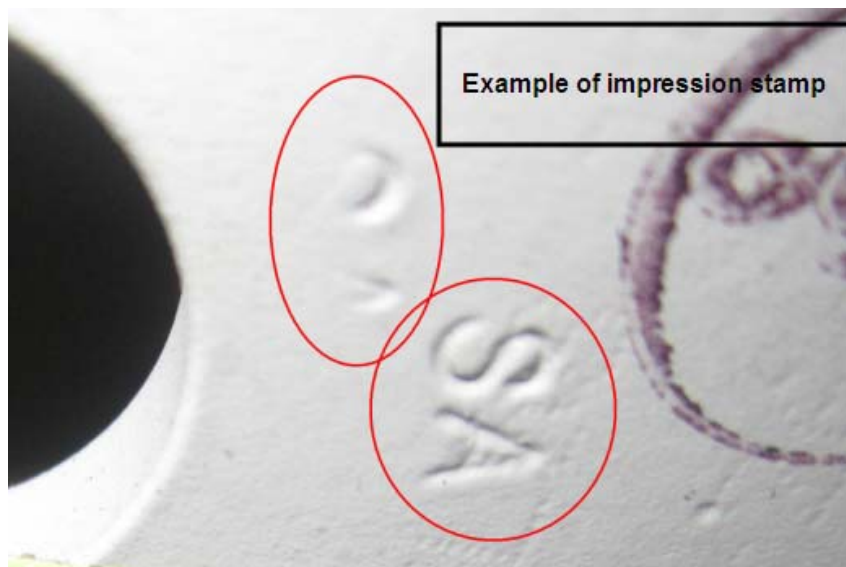
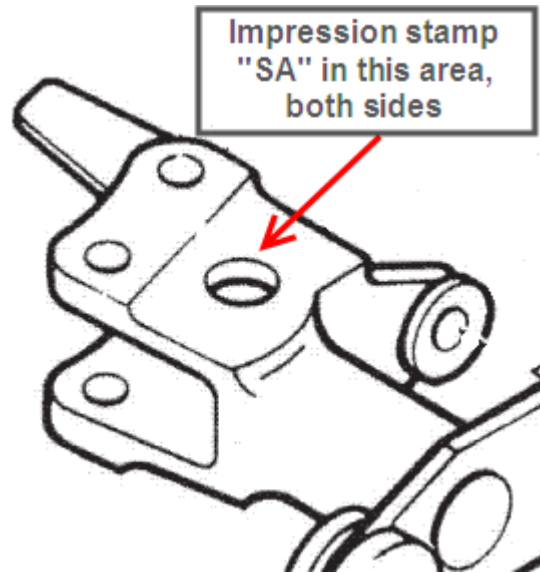
It is not necessary to remove the SPA bracket from the helicopter to accomplish the rework.

1. Prepare helicopter for maintenance.
2. Gain access to SPA bracket.
3. Strip the paint and primer in the area shown on Figure 1. Refer to the BHT-ALL-SPM.
4. Using Pin Mic gauge (or equivalent measuring device), measure the depth of the stamping.
 - a. If depth is at or less than 0.035 inch, the part can be reworked. Document the depth of the stamping and proceed with step 5.
 - b. If the depth exceeds 0.035 inch, replace the SPA bracket with a serviceable part. Make an entry in the helicopter records to indicate findings and compliance with this Alert Service Bulletin.

CAUTION

Power tools shall not be used. Power tools can overheat the material and cause damage.

5. Using a coarse grit aluminum oxide grinding stone or equivalent, hand remove all evidence of marking as shown on Figure 1. Maintain a minimum blend radius of 1 inch. If rework extends into lightening hole, blend edges with adjacent surfaces to maintain equal or larger edge radii.
6. Using abrasive cloth (C-423) of appropriate grit, polish the reworked area to obtain a surface finish of 63 RMS.
7. After the proper finish has been obtained, perform a Dye Penetrant inspection (per product manufacturer's instructions) of the reworked area and look for any presence of a crack.
 - a. If a crack is found, replace the SPA bracket with a serviceable part. Make an entry in the helicopter records to indicate findings and compliance with this bulletin.
 - b. If no crack is found, prime and paint the reworked area. Make an entry in the helicopter records to indicate findings and compliance with this bulletin.



Note: Impression stamp may be partial. The "S" or the "A" may have been removed when the lightning hole was made.

Figure 1. SPA bracket