

SERVICE LETTER



SL 2005-004

MODIFICATION OF TANK HARDPOINTS AND STRUTS

Used On: 308 FIRE ATTACK SYSTEM S/N 002
FOR INSTALLATION ON
BELL HELICOPTER MODEL 407 ROTORCRAFT S/N 53650

Production: *Dilbert* Date: 12/28/05

Sales: *Matt Up* Date: 12/28/05

Engineering: *[Signature]* Date: 12/28/05

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Date: Dec.28, 2005

Revision:

PART NUMBERS AFFECTED: 308-303002-001 Shroud Assembly
308-302001-001 Hard Point Installation (Forward and Aft)
308-302021-001 Curved Link
308-302028-001 Clevis Bolt
308-302032-001 Support Assembly

SYSTEM MODEL: MODEL 308 Model 308 Fire Attack System s/n 002
FIRE ATTACK

COMPLIANCE: Required for Installation

DESCRIPTION: Due to interference caused by Aeronautical Accessories, Inc's forward cross tube the mounting hardware of the standard 308 Fire Attack System needs to be repositioned slightly inboard. This requires changes to the bill of materials and installation manual.

APPROVAL: This modification requires FAA Form 8110-3 Approval (Structural Only)

MANPOWER: Estimated 10 MHRS

IF APPLICABLE, AN APPROPRIATE ENTRY SHOULD BE MADE IN THE ROTOCRAFT LOGBOOK UPON ACCOMPLISHMENT.
IF OWNERSHIP OF SYSTEM HAS CHANGED, PLEASE FORWARD TO NEW OWNER.

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MATERIAL:

The following materials are required for the accomplishment of this bulletin and may be obtained through Simplex Manufacturing:

Quantity	Part Number	Description	Item No.
1	308-303002-001	Shroud Assembly (Existing Shroud to be modified on site)	1
1	308-302001-001	Hard Point Installation (Forward & Aft) (Existing Tank structure to be modified on site to accept hard point relocation)	2
2	308-302021-001	Curved link	3
2	308-302028-001	Clevis Bolt	4
2	000-114080-000	5/16-24 AN Eyebolt	5
2	308-302032-002	Support Strut	6
8	000-111075-000	5/16-24 S/S Lock-Nut	7
4	000-111045-000	1/4-28 S/S Lock-Nut	8
2	000-110210-000	S/S Bolt 1/4-28 x 2 17/32 Hex HD	9
8	000-112120-000	5/16" S/S Flat Washers	10
4	000-110279-000	S/S Bolt 5/16-24 x 25/32 Hex HD	11
4	000-112459-000	5/16 x 1 1/2 S/S Fender Washer	12

SPECIAL TOOLS:

1. Aircraft Jacks
2. Standard Hand Tools
3. Drill Bit .250 (1/4")
4. Drill Bit .313 (5/16")

WEIGHT AND BALANCE: Not affected

ELECTRICAL LOAD DATA: Not affected

REFERENCE:

PUBLICATIONS AFFECTED:

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ACCOMPLISHMENT INSTRUCTIONS

WARNING!

Ensure that aircraft main power is turned off prior to starting this procedure.

- 1) Locate the original Curved Link (p/n 308-302021-001) and Support Assembly's (p/n 308-302032-001). These items need to be destroyed prior to proceeding with the Model 308 Installation. The Curved Link (p/n 308302021-001) is being replaced with parts manufactured that use a high strength 7075-T6 Aluminum Alloy.
- 2) It may be necessary to lower the forward cross tube to give access for step (3).
- 3) At the forward cross tube of the helicopter remove the four (4) eye bolts from the two Plates (p/n 308-302026-001) located at BL's 10 and 12 (right and left). Once the four (4) Eyebolts are removed these items will need to be destroyed.
- 4) Replace the two most outboard at BL 12 (right and left side) with two (2) S/S Bolt ¼-28 x 2 17/32 Hex HD (p/n 000-110210-000). Replace the two (2) inboard eye bolts BL 10 (right and left) with the two (2) Clevis Bolts (p/n 308-302028-001). Using the washers removed earlier and new ¼-28 S/S Lock-Nuts (p/n 000-111045-000) tighten the two outboard fastners to 70-90 in.-lb. (8-10 N-m). Align the two lugs on the inboard eyebolts so that they are parallel to centerline of the helicopter and tighten nuts to 70-90 in.-lb. (8-10 N-m).
- 5) The main tank structure including the three forward hard points and shroud will be modified by Simplex Manufacturing personnel or designee as follows.
- 6) Remove the four (4) S/S Bolt ¼-28 x 2-17/32 Hex HD (p/n 000-110150-000) from Plate (p/n 308-203034-001). Ream or drill the holes to .313 to .316 inch (5/16") diameter and install four (4) S/S Bolt 5/16-24 x 25/32 Hex HD (p/n 000-110279-000) with four (4) 5/16 x 1 ½ S/S Fender Washers (p/n 000-112459-000) and four (4) 5/16 – 24 S/S Lock-Nuts (p/n 000-111075-000) provided. Use clear silicon sealant around bolt heads, washers and nuts.
- 7) Install two (2) new Brackets (p/n 308-302031-001) ten (10) inches each side of the center line and on the front of the tank. This will require some fiberglass modification and repair to be provided by Simplex personnel or designee. The brackets must be set at the same height as the existing brackets. This can be done by using the existing brackets and a straight edge. Use the mounting hardware provided. Use clear silicon sealant on the mounting hardware to seal the installation.
- 8) Use Support Assembly's (p/n 308-302032-002). These assemblies are shorter and have both a right and left hand jam nut. The left hand fork and nut are located on the end of the strut that has an annular groove near the end.
- 9) Mount the main tank as described in the 308 Installation Manual (document No. 308-102002-001) except for steps 2 through 6.

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- 10) Hang the main tank using a 5/16 x 1 Quick Release Pin (p/n 000-114441-000) at the lower end of the Curved Link (p/n 308-302021-001) at the front of the tank assembly. At the top end of the curve link use an 5/16 – 24 AN Eyebolt (p/n 000-114080-000) with the nut facing outboard. Loosely tighten using 5/16" Flat Washer (p/n 000-112120-000) and 5/16 – 24 S/S Lock-Nut (p/n 000-111075-000) provided.

- 11) Install the two (2) Support Assembly's (p/n 308-302032-002) using the quick release pins provided aligning both the eyebolts located at the top of the Curved Link and in the top tank skin Plate (p/n 308-302034-001). Some adjustment in length may be necessary. Tighten both the right and left hand jam nuts. Tighten the Eyebolts taking care not to torque against the quick release pins (remove the Support Assembly's and hold Eyebolt orientation with an adjustable wrench). Re-install the Quick Release Pins checking for fit and function. If the pins bind in the Eyebolt loosen the nut of the Eyebolt(s) and realign to the forked end of the support strut.

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