



A Textron Company

TECHNICAL BULLETIN

412-10-223

30 September 2010

Revision A, 15 November 2011

**MODEL AFFECTED:** 412/412EP

**SUBJECT:** FUEL TRANSFER IMPROVEMENT

**HELICOPTERS AFFECTED:** Serial number 33108 through 33213, 34001 through 34036 and 36001 through 36359.

[Model 412 and 412EP helicopters serial number 33214 and subsequent, serial number 34037 and subsequent and serial number 36360 and subsequent will have the intent of this bulletin accomplished prior to delivery.]

**COMPLIANCE:** Customer's option

**DESCRIPTION:**

Revision A of this bulletin modifies P/N 412-066-011-103 to P/N 412-066-011-101 in Part B.

Part A of this bulletin is to reduce the amount of unusable fuel being trapped in the mid cell that occurs during shutdown sequence when the fuel transfer pump functions at very low fuel level. Bell helicopter has improved this by replacing ejector pump P/N 03-1001-05 by ejector pump P/N 03-1001-05-1 which incorporates a flapper valve that prevents fuel from leaking backwards into the mid cell.

Part B of this bulletin is to improve the fuel transfer thus providing a better weight distribution during the fuel burn sequence. This is achieved by replacing the existing fuel outlet cover assy (standpipe) P/N 412-066-011-101 in the forward center tank by cover assy P/N 412-066-011-105. 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/DER 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:**

Approximately 8.0 man-hours are required to complete both Part A and Part B of this bulletin if accomplished at the same time. This estimate is based on hands-on time, and may vary with personnel and facilities available.

**WARRANTY:**

There is no warranty credit applicable for parts or 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>
03-1001-05-1	Ejector Pump	2
412-066-011-105	Cover Assy	1

**Consumable Material:**

None required.

**SPECIAL TOOLS:**

None required.

**WEIGHT AND BALANCE:**

Not affected.

**ELECTRICAL LOAD DATA:**

Not affected.

## **REFERENCES:**

BHT-412-IPB Illustrated Parts Breakdown  
BHT-412-MM Maintenance Manual

## **PUBLICATIONS AFFECTED:**

BHT-412-IPB Illustrated Parts Breakdown  
BHT-412-MM Maintenance Manual

## **ACCOMPLISHMENT INSTRUCTIONS:**

### **Part A**

1. Defuel system in accordance with the BHT-412-MM chapter 12. Prepare helicopter for maintenance.
2. Removal of ejector pump P/N 03-1001-05 and installation of ejector pump P/N 03-1001-05-1 shall be accomplished in accordance with the BHT-412-MM chapter 28.
3. Make an entry in helicopter historical records indicating compliance with Part A of this technical bulletin.

### **Part B**

1. Defuel system in accordance with the BHT-412-MM chapter 12.
2. Removal of existing fuel outlet cover assy (standpipe) P/N 412-066-011-101 and installation of the upper forward center cell bottom cover (tall standpipe) assy P/N 412-066-011-105 shall be accomplished in accordance with the BHT-412-MM chapter 28.
3. Make an entry in helicopter historical records indicating compliance with Part B of this technical bulletin.