



## **SERVICE BULLETIN**

**TO** : All Civil Rotorcraft Owner / Operators, see effectivity  
**FROM** : FDC/aerofilter Engineering  
**SB NUMBER** : SB.FDC.ALL.0005 Rev A  
**ORIGINAL SB NO.** : SB FDC-ALL-A001  
**CATEGORY** : Mandatory Service Bulletin  
**EFFECTIVITY** : Inlet Barrier Filter systems installed, **prior to 07/18/2005**, on the following aircraft in accordance with the following FDC/aerofilter STCs:  
**Eurocopter** - AS350D, D1, BA – STC SR01049SE  
AS350B, B1, B2, B3 – STC SR00811SE  
EC120B – STC SR01191SE  
EC130B4 – STC SR1373SE  
**Bell Helicopter Textron** - 206L, L1, L3, L4, 407 – STC SR00180SE.  
**MD Helicopters** - 369HE, 369HM, 369HS, 369D, 369E, 369FF – STC SR00877SE  
**DATE** : October 22, 2010

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### **FILTER ELEMENT D-SEAL INSPECTION**

#### **1.0 BACKGROUND**

This Service Bulletin addresses a possible unsafe condition by performing an inspection process of the element seal(s). Further, this Service Bulletin will allow for a repair procedure to ensure the security of the element seal(s).

A recent investigation revealed un-bonding of the aft filter element plenum seal attached to the upper plenum housing on a Eurocopter EC130B4. Total time since new on the affected unit was approx. 1300 hours time in service. It is not clear what caused the seal to de-bond. If the element seals detach from the duct, they may be ingested into the engine causing damage and possible engine failure.

#### **2.0 COMPLIANCE**

Mandatory Service Bulletin

### **3.0 COMPLIANCE TIME**

Installation Instructions, Section 9, Part A –  
INSPECTION OF SEALS – Before Next Flight

Installation Instructions, Section 9, Part B –  
REPAIR PROCEDURE – As Required

### **4.0 SPARES KIT AVAILABILITY**

Seal material available from FDC/aerofilter.

Adhesives/Sealants available procure locally.

### **5.0 INSTALLATION TIME**

Inspection/removal: Est. 1 man-hour.

Repair: Est. 1.5 man-hours.

Disposition of Removed Parts: To be re-used unless further directed in repair procedure.

### **6.0 WEIGHT & BALANCE**

Not affected

### **7.0 FLIGHT MANUAL REVISION**

None

### **8.0 DOCUMENTS**

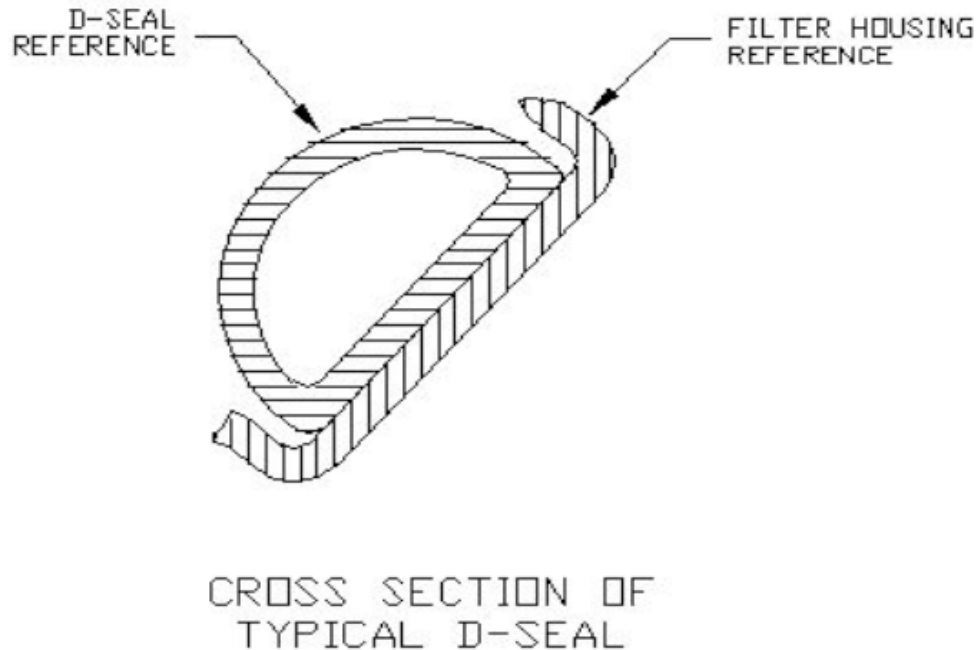
None

### **9.0 INSTALLATION INSTRUCTIONS**

Refer to the Rotorcraft Manufacturers' applicable Maintenance Manual for the basic helicopter, and Instructions for Continued Airworthiness for the specific model & type helicopter fitted with applicable STC.

## A. INSPECTION OF SEALS

- (1) Remove the filter element(s).
- (2) Cover the engine to prevent debris from falling into engine inlet.
- (3) Carefully inspect the D-seals (refer to Figure 1) for adhesion to mating surfaces, check for cracks, tears, or abnormal wear.



**Figure 1 – D-Seal (Reference only)**

- (4) Note any areas of de-bonding, cracking or wear.
- (5) If de-bonding or looseness of seals is evident, refer to REPAIR PROCEDURE (Part B).
- (6) Job close-up.

## B. REPAIR PROCEDURE

- (1) Carefully peel the suspect seal(s) from the plenum housing.
- (2) Remove any debris/residue from the seal and/or mating surfaces.
- (3) Clean affected area of plenum housing and seal with Acetone (Federal Specification number O-A-51G) or Methyl Ethyl Ketone (MEK) (Federal Specification TT-M-261B).
- (4) Scuff defective mating surfaces of plenum housing with 200 grit aluminum oxide sand paper, taking care to ensure debris from cleaning and sanding do not enter the engine compressor inlet. Use vacuum or compressed air to remove sanding debris from surface.
- (5) Apply the following applicable adhesive to prepared plenum housing surface:
  - EC130 / AS350B3 (equipped with Dual Hydraulics): RTV108
  - All other models: 3M p/n DP420
- (6) Re-bond seal to plenum housing taking care to ensure a positive mating of the seal to plenum housing is accomplished.
- (7) Allow sealant to cure to adhesive manufacturer's requirements.
- (8) Job close-up.

## C. RETURN TO SERVICE

- (1) Reinstall all removed items including filter element(s).
- (2) Ensure positive latching of all affected fasteners.

## D. LOG BOOK ENTRY

- (1) Upon completion of any part of this Service Bulletin, make an appropriate maintenance entry in the log book similar to "Accomplished FDC Service Bulletin No. SB.FDC.ALL.0005 Rev A, Part (A or B) per the text of the SB, on (date) by (name), (number / stamp)."



## SERVICE BULLETIN COMPLIANCE NOTIFICATION

**SB.FDC.ALL.0005 Rev A**

**TO** : FDC/aerofilter Technical Support  
**FROM** :  
**COMPANY** :  
**AIRCRAFT** : S/N(s)  
**PHONE** :  
**FAX** :  
**EMAIL** :  
**DATE** :

**I have fully complied with FDC SB.FDC.ALL.0005 Rev A**

**NAME** :  
**POSITION** :  
**A&P NO** :  
**DATE** :

**SIGNED** : .....

**MAIL TO** : FDC/aerofilter Technical Support  
3920 Sandstone Drive  
El Dorado Hills, CA 95762

**OR EMAIL** : [support@fdcaerofilter.com](mailto:support@fdcaerofilter.com)

**OR FAX** : 415-884-0505