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## **Service Bulletin**

Title:	AS350 Air Conditioner Compressor / Transmission Strut Interference. (Flat Belt Configuration)
Subject:	This service bulletin addresses the upgrade of existing AS350 Air Comm Corporation compressor drive installations to preclude contact between the air conditioning compressor pulley and the L/H aft transmission support tube.
Date:	2 April 2009
Applicability:	Eurocopter Model AS350 B, B1, B2, BA, B3, C, D, and D1 equipped with Air Comm Corporation air conditioning. (Flat Belt Configuration) Air Comm Corporation Serial number AS350-001 through AS350-043
Reference:	<ol> <li>STC. Number SR00643DE, AS350 Cabin Air Conditioner</li> <li>ACC Drawing Number AS350-300 Compressor Installation Rev L</li> <li>ACC Drawing Number AS350-200 Air Conditioner General Arrangement Rev D</li> </ol>
Compliance:	Mandatory within 100 hours of receipt of this bulletin.
I Discussion:	Air Comm Corporation has received reports of damage caused by contact between the L/H aft transmission support tube and the pulley on the air conditioner compressor. This service bulletin provides a new drive belt and strut protection clamps to prevent possible damage to the strut.

## <u>NOTE</u>

If the compressor strut clearance shown on page 3 exists, a new drive belt is not required

**II Approval:** Technical aspects of this service bulletin are FAA-DER approved.

#### **IV Bill Of Materials:**

Parts to be removed after failure of inspection:

ITEM	DESCRIPTION	PART NUMBER	QTY
1	Drive Belt	ES35350-1	2

Parts to be installed after inspection:

ITEM	DESCRIPTION	PART NUMBER	QTY
1	Drive Belt	ES35350-3	2
2	Clamp	S-3542EC-2	2
3	Rubber Sheet	S-3544EC-2	1

Reference Documents

ITEM	DESCRIPTION	DOCUMENT NUMBER	QTY
1	AS350 Air Conditioner ICA	AS350-200M-1 Rev 2	1

Please contact the Air Comm Corporation service department to obtain these parts at no charge.

Rev A: Revised clamp and rubber sheet to fit strut. Date: 19 August 2009

## A. Inspection

- 1. Locate the S-3048EC-1 compressor assembly and inspect for a minimum of 0.3" (7.62 mm) clearance between the L/H transmission support tube and the face of the S-3048EC-1 Compressor Pulley (See fig 1).
  - a. If 0.3"(7.62 mm) of clearance is observed DO NOT perform steps 5 and 6 of the accomplishment instructions.
  - b. If 0.3"(7.62 mm) of clearance is not observed proceed to step 2 of the removal instructions.

## B. Removal

- 2. Loosen the compressor pivot bolts (QTY 2) located on the inboard side of the compressor mount assembly. Do not remove the compressor pivot bolts.
- 3. Remove the safety wire from the S-3018EC-5 link assembly and loosen the corresponding jam nuts. Relieve the belt tension by adjusting the belt tension link assembly and remove the drive belt from the compressor pulley.
- 4. With the drive belt removed rotate the compressor outward until the compressor pulley comes within 0.06"(1.52mm) of the transmission support tube and mark at the point of potential contact using a non destructive method.
- 5. Disassemble the tail rotor drive shaft in accordance with the applicable AS350 maintenance manual and remove the existing ES35350-1 air conditioner drive belt.

# <u>NOTE</u>

The air conditioner compressor installation allows for the installation and storage of an extra drive belt. Both drive belts must be removed and discarded.

### C. Installation

- 6. Install the new ES35350-3 drive belts onto the tail rotor drive shaft. Stow QTY 1 in accordance with the AS350-200M-1 air conditioner ICA and reassemble the tail rotor drive shaft in accordance with applicable AS350 maintenance manual.
- 7. Install the ES35350-3 drive belt onto the air conditioning compressor assembly and adjust belt tension in accordance with the AS350-200M-1 air conditioner ICA. Torque the compressor pivot bolts (QTY 2) to 160-190 in.lbs (18.07-21.46 nm)
- 8. Replace the safety wire removed in step 3 using MS20995 C32 safety wire in accordance with NASM33540 or equivalent.
- Using the mark from step 5 center the S-3542EC-2 rubber sheet and install using QTY 2 S-3542EC-2 clamps. (Ref Fig 2) Safety wire the S-3542EC-2 clamps using MS20995 safety wire in accordance with NASM33540
- 10. Return air conditioner to service

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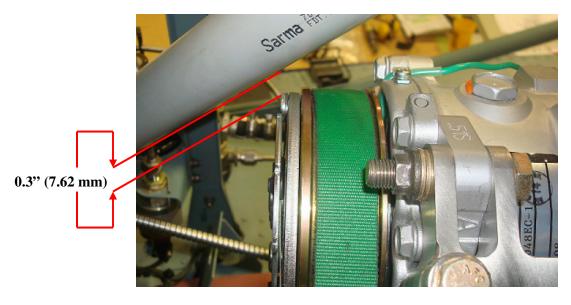


Figure 1 Compressor to Transmission Support Tube Clearance

