

Service Bulletin

- Service Bulletin:** SB 206-3010; Bell Helicopter Model 206 Air Conditioner Compressor Belt Tensioning Collar replacement
- Subject:** Removal & Replacement of the Compressor Belt Tensioning Collar.
- Date:** 30 August, 2004, Rev N/C
- Applicability:** Bell 206 Helicopter, Equipped with the Air Comm Corporation 206EC-201, 206EC-203, & 206EC-206 Air Conditioning System, Kit Numbers: AC206-62 Through AC206-80 & NTH-001 Through NTH-036.
- Reference:**
1. FAA / STC # SH2750NM, Bell Helicopter 206 & TH-67 (NTH) Air Conditioning System.
 2. Compressor Installation Drawing 206EC-304 Rev T.
 3. Collar Assy. Belt Tension Drawing S-3010EC-2 Rev M
- Compliance:** At the discretion of the operator.

I. Background:

Field reports have indicated that cracks in the welds attaching the S-3010EC-13 Block to the S-3010EC-12 Plate have occurred on some S-3010EC-2 Collar Assemblies. These parts have been identified as having come from a particular lot of parts which were shipped in kits between 10/08/03 to 07/12/04.

The air conditioner kit serial numbers which are affected by this Service Bulletin are **only** those kits who's numbers fall between **AC206-62** through **AC206-80 & NTH-001** Through **NTH-036**.

The kit serial number can be found on the top of the S-3005EC-1 Compressor Mount at the base of the air conditioner compressor assembly.

II. Approval:

Technical aspects of this Service Bulletin are FAA / DER approved.

III. Purpose:

To replace the existing air conditioner Compressor Belt Tensioning Collar, P/N S-3010EC-2 Rev L, with P/N S-3010EC-2 Rev M, for the above listed Kit Numbers.

IV. Bill of Materials:

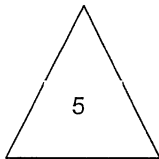
1. Items to be removed:

Item	Part Number	Description	Quantity
1	S-3010EC-2 Rev. L Kits Numbers: AC206-62 Thru. AC206-80 & NTH-001 Thru NTH-036 Only.	Compressor Belt Tensioning Collar	1

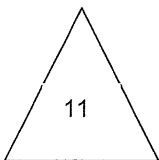
2. Items to be Installed:

Item	Part Number	Description	Quantity
1	S-3010EC-2 Rev. M	Compressor Belt Tensioning Collar	1

V. Notes:



Safety wire per MIL-P-8564 Para 3.3.7 using MS20995C-32 Safety Wire.



Apply MIL-S-38249 Sealant (Pro-Seal 890 or eq.) to all faying surfaces of components mounted to the engine pan or aft firewall. Install all fasteners with wet coating of sealant.

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VI. Weight and Balance:

There is no change to the Weight and Balance to the aircraft, as the weight difference is negligible.

VII. Parts:

Parts associated with this Service Bulletin maybe obtained from the Air Comm Corporation Service Department at no charge:

Air Comm Corporation
Attn: Service Department
3300 Airport Road
Boulder, CO. 80301

Phone: 303-440-4075
Fax: 303-440-6355
E-mail: info@aircommcorp.com

NOTE

No warranty labor will be provided for the replacement of this part.

VIII. Accomplishment Instructions:

1. Removal of the Compressor Pulley and Drive Ring Assembly:

- A. Remove Compressor Drive Belt by loosening the Compressor Belt Tensioning Link.

CAUTION

Insure that the driveshaft assembly is supported prior to the removal of the retaining bolts to prevent damage to the driveshaft, and the driveshaft coupling.

- B. Remove the four Bolts from the tailrotor driveshaft coupling forward of the compressor drive pulley installation. (See Figure 1-1)
- C. Remove the forward section of the #1 tail rotor drive shaft, and compressor drive belt.
- D. Remove the AN380-3-3 Cotter Pin, and AN320-6 Nut from the oil cooler drive shaft segment and remove the S-3520EC-1 Pulley from the forward section of the shaft.

CAUTION

As the driveshaft will need to be held during the removal of the Compressor Drive Pulley, care should be taken not to damage the driveshaft, or other drive train components.

Continued

2. Removal / Installation of Compressor Belt Tensioning Collar.

- A. Cut the safety wire and remove the AN4H-6A Bolt from the top half of the Belt Tensioning link.
- B. Remove all eight (8) of the existing Screws from the S-3010EC-2 Belt Tensioning Collar and remove the Collar from the aircraft.

NOTE

It will be necessary to match drill four of the holes in the new S-3010EC-2 Collar, and Pro-seal per Note 12.

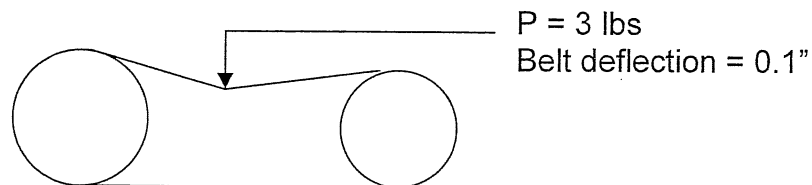
- C. Install new S-3010EC-2 Belt Tensioning Collar In reverse order of its removal.
 - D. Reinstall the AN4H-6A Bolt in the top half of the Belt Tensioning link, safety wire bolt using MS20995C-32 Safety Wire per MIL-P-8564 Paragraph 3.3.7.
3. Installation / Replacement of the Compressor Pulley and Drive Ring.

- A. Reinstall the Compressor Drive Pulley S-3520EC-1 on the Tail Rotor Driveshaft, installing the pulley tightly against the face of the Driveshaft Hanger Bearing Retainer. Reinstall the existing hardware per figure 1-2, and torque AN320-6 Nut to 40 to 60 inch pounds.
- B. Reinstall the pulley attaching hardware per figure 1-1, and torque nuts to 50 to 70 inch pounds.

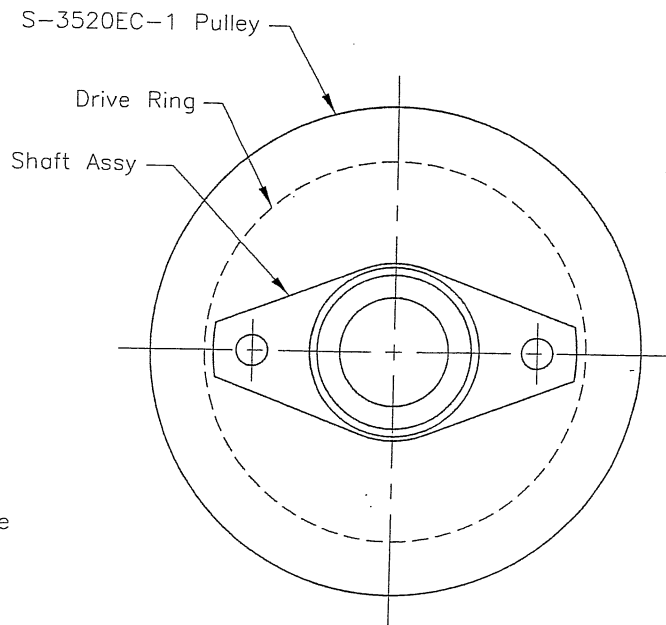
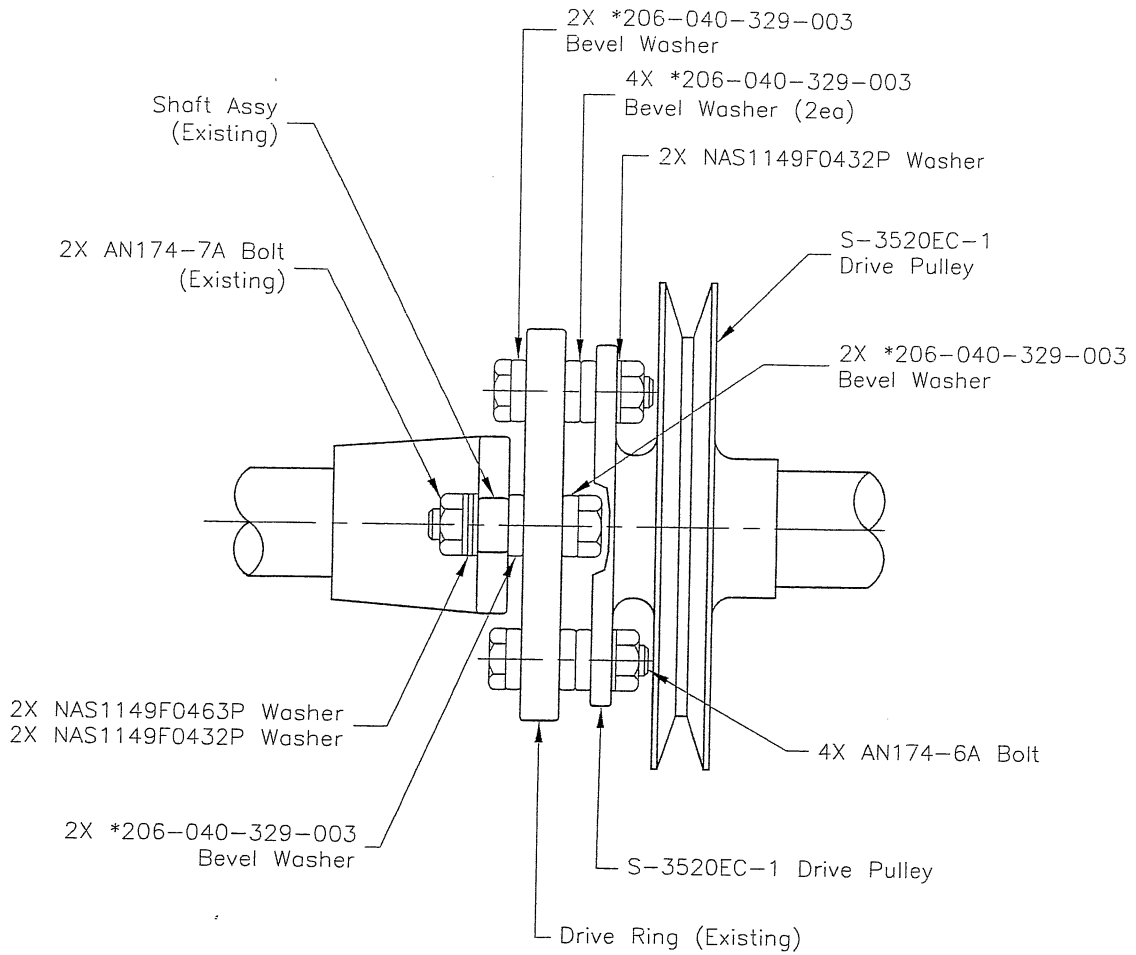
CAUTION

As the driveshaft will need to be held during the installation of the Compressor Drive Pulley, care should be taken not to damage the driveshaft, or other drive train components.

- C. Reinstall the Compressor drive belt and tension belt using the Belt Tensioning Link. Tension belt to 52 in lbs. A properly tensioned drive belt will have a 0.1" deflection when 3 lbs of force is applied to the mid span of the belt.



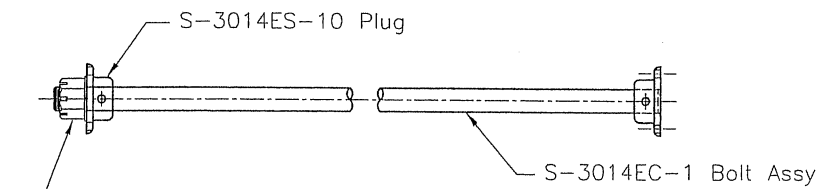
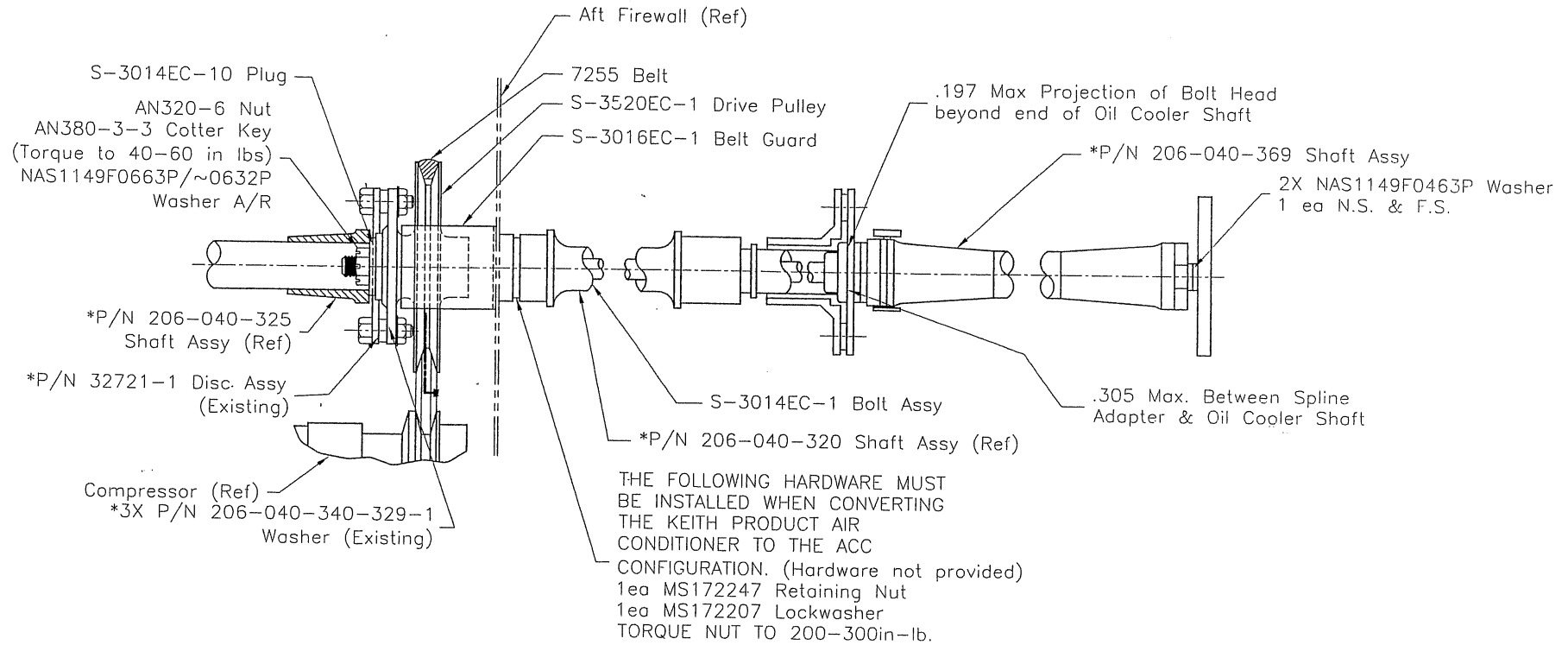
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* Existing Hardware

Figure 1-1 Installation of Compressor Drive Pulley

Figure 1-2 Installation of Compressor Drive Pulley and Drive Shaft Assembly



Use one (1) NAS1149F0663P & one (1) NAS1149F0632P Washer between nut and S-3014EC-10 Plug to allow cotter key alignment. Substitution of ~0663P & ~0632P is allowed to achieve correct alignment.

Figure 1-3 Installation of Compressor Collar Installation view looking Down.

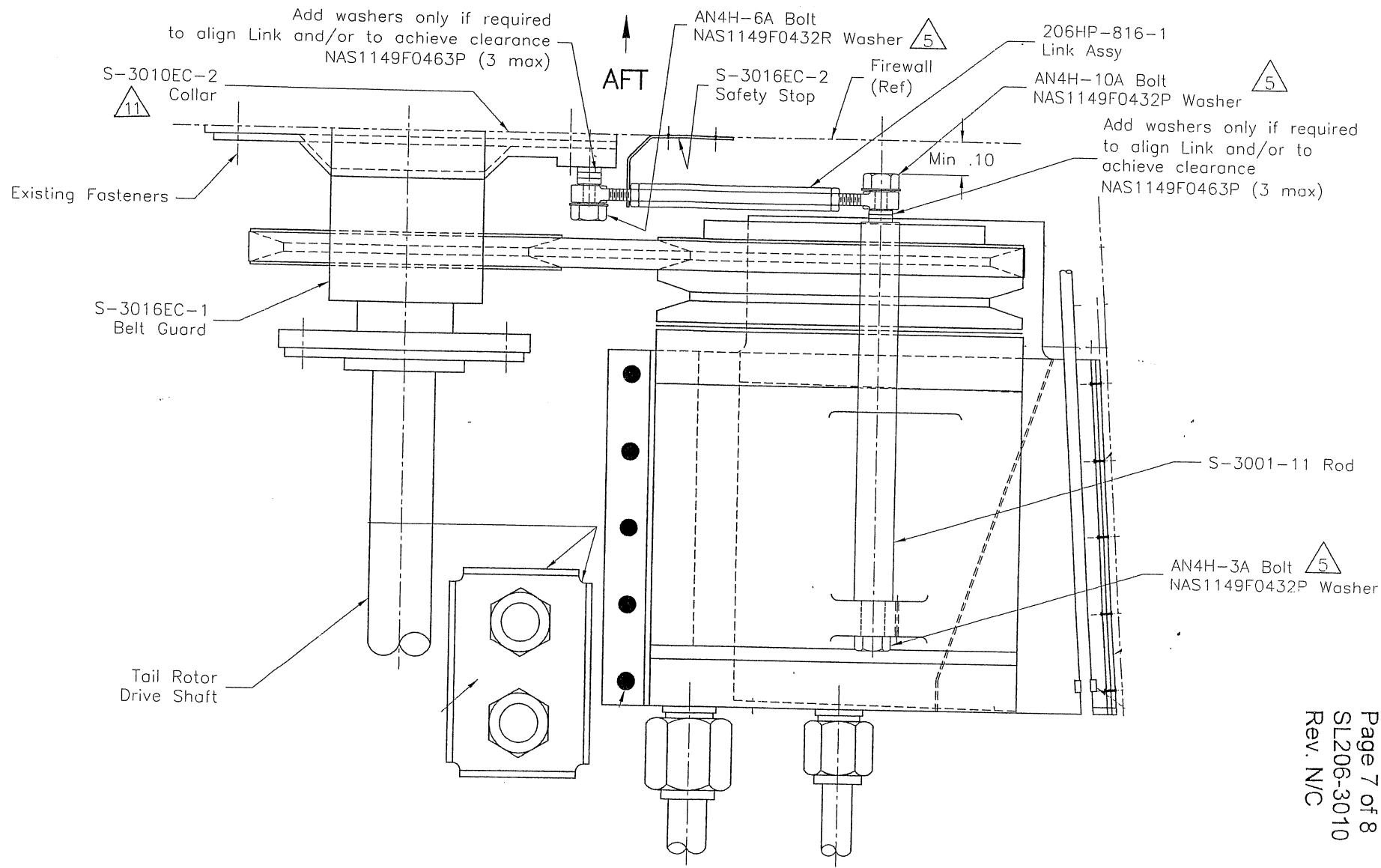


Figure 1-4 Installation of Compressor Collar Installation view looking Aft.

