

Service Letter

FAA-DER APPROVED

Service Letter: No. 343

Subject: Modification to Bell 407 Air Conditioner Belt Tensioning Collar in conjunction with Bell Helicopter Technical Bulletin No. 407-02-35.

Date: 12 December , 2002

Applicability: Bell Helicopter Model 407 equipped with Air Comm Corporation Air Conditioner System.

Reference: F.A.A. / S.T.C. SR00222DE
Drawing # 407EC-300 Rev U

Compliance: Mandatory on compliance with Bell Helicopter Technical Bulletin No. 407-02-35.

Background: Bell Helicopter has introduced improved blower shaft bearing hangers, hanger brackets, and links that have tighter tolerance for attachment hardware.

These changes in hardware subsequently reduce the spacing between the aft portion of the air conditioner drive pulley, and the fasteners that secure the air conditioner belt tensioning collar to the aft engine firewall structure.

It is therefore necessary to modify the existing belt tensioning collar to accommodate countersunk screws, thus maintaining the necessary clearance between the air conditioner drive pulley and the belt tensioning collar assembly.

Approval: The Technical aspects of this Service Letter are FAA / DER approved.

Bill of Materials:

Items to be removed:

Item	Part Number	Description	Quantity
1	AN525-10R8	Screw	8

NOTE

Due to the location of the S-3010EC-5 Belt Tensioning Collar it maybe necessary to remove, and re-install this part from/to the aircraft to complete the requirements of this Service Letter.

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Bill of Materials (continued):

Items to be installed:

Item	Part Number	Description	Quantity
1	MS24693-S-272	Screw	8

NOTE

The modification to the S-3010EC-5 Belt Tensioning Collar should be accomplished during **“Part I: Installation of improved bearing hangers and brackets”** of the Accomplishment Instructions from Bell Helicopter Technical Bulletin 407-02-35. As the Tail Rotor Driveshaft, and Compressor Drive Pulley will have to be removed to access the fasteners that attach the Belt Tensioning Collar to the aft Firewall.

Removal:

1. Remove the eight (8) AN525-10R8 Screws that attach the S-3010EC-5 Collar to the Aft Firewall and discard screws.
2. Cut Safety wire from AN4H-6A Bolt and loosen the Jam Nuts on the 206HP-816-1 Belt tension link Assy. Loosen the Belt Tension link enough to reduce the compressor belt tension.
3. Remove the AN4H-6A Bolt & AN960-416L Washers that attach the 206HP-816-1 Belt Tensioning Link to the S-3010EC-5 Belt Tensioning Collar.
4. Remove S-3010EC-5 from Aft Firewall.

Modification: (See Figure 1-1.)

1. Insure all surfaces of the S-3010EC-5 Belt Tensioning Collar are clean and free of Pro-Seal.
2. Using an $\text{Ø} .350 \times 100^\circ$ Counter Sink Tool, or Equivalent. Countersink all eight (8) existing mounting holes in the forward facing side of the S-3010EC-5 Belt Tensioning Collar.

Installation: (See Figure 1-2)

1. Reinstall the modified S-3010EC-5 Belt Tensioning Collar using eight (8) MS24693-S-272 Screws (See Note 12)
2. Reinstall the AN4H-6A Bolt, AN960-416L Washer(s) (See Note 5) & 206HP-816-1 Belt Tension Link, Torque AN4H-6A Bolt 50 to 70 inch lbs.
3. On completion of Bell Helicopter Technical Bulletin 407-02-35, reinstall Compressor Drive Belt between the Compressor, and the Compressor Drive Pulley. Tension the belt using the 206HP-816-1 Belt Tensioning Link to a static belt tension of 52 lbs.
4. Safety AN4H-6A Bolt and 206HP-816 Belt Tension Link (See Note 2).

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Notes:



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



Stack washers in this location to insure alignment and clearance. Belt tension link should be approximately parallel to the Firewall and minimum bolt head clearance of .05" with Firewall.



Apply Mil-S-38249 Sealant (Pro-Seal 890 or eq.) to all faying surfaces of components mounted to the aft firewall.

Weight and Balance:

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

Parts:

If parts are not locally available they maybe obtained from the Air Comm Corporation Service Department at:

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

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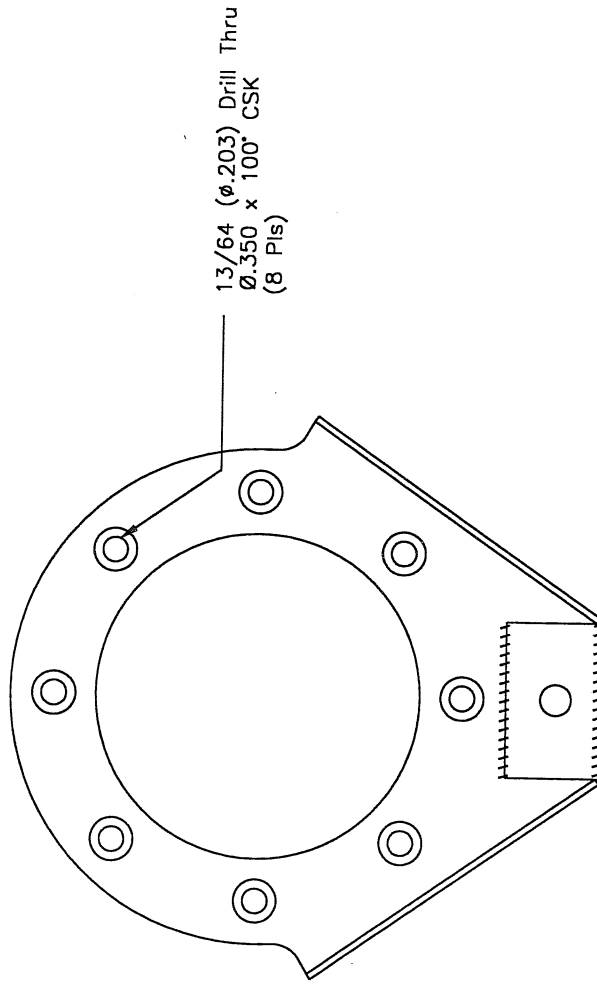


Figure 1-1, Modification of S-3010EC-5 Belt Tensoning Collar. View Looking Forward

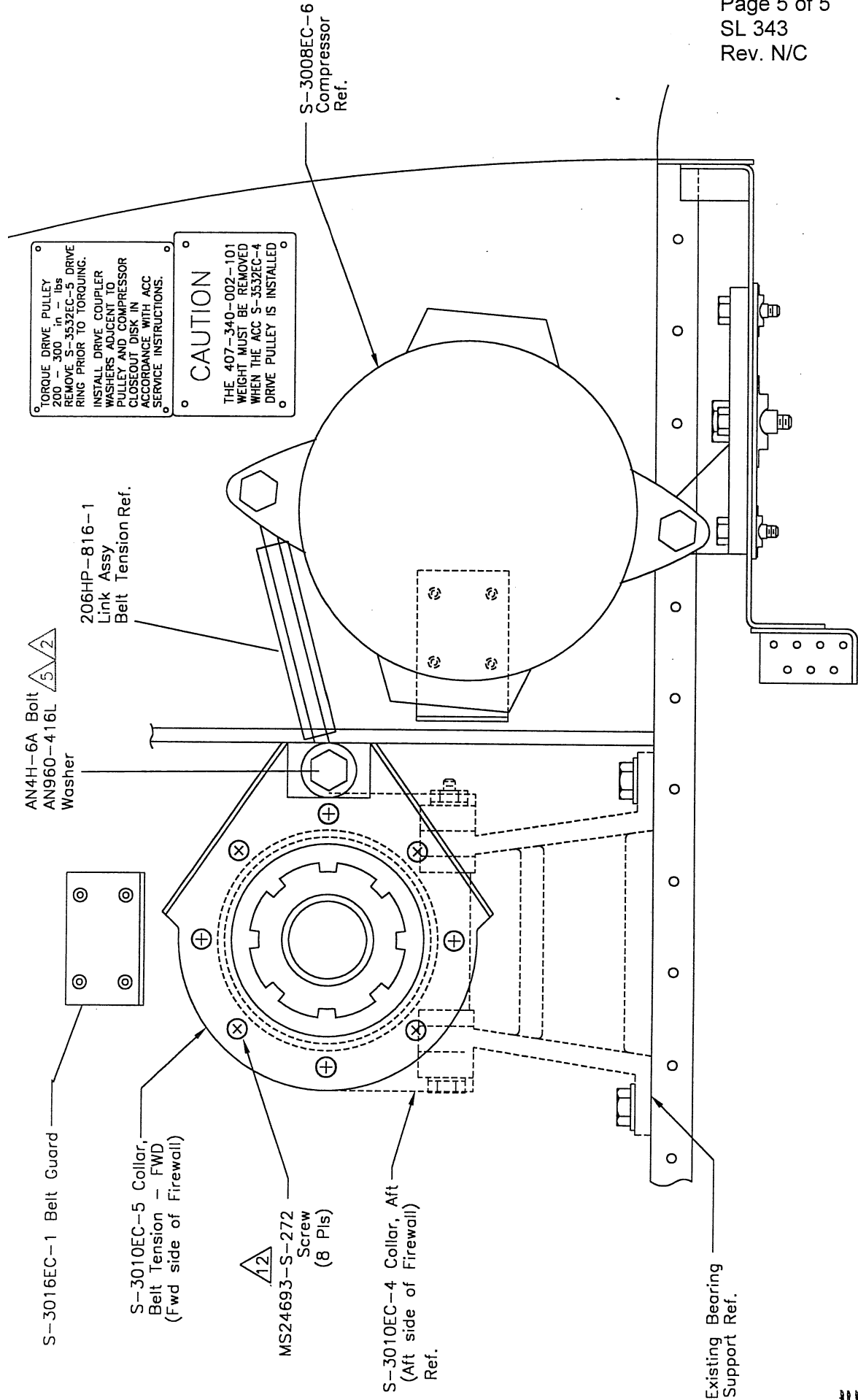


Figure 1-2, Installation of Modified S-3010EC-5 Belt Tensioning Collar. View looking Aft.

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