

Service Letter

FAA-DER APPROVED

Service Letter: No. 349

Subject: Inspection of the Bell 407 Air Conditioner Driveshaft Mounted Pulley and Drive Ring Assembly.

Date: 29 January 2007

Applicability: Bell Helicopter Model 407 Equipped with the Air Comm Air Conditioning system, Serial Numbers AC407-80 and subsequent.

Reference: F.A.A./ S.T.C. # SR0022DE, Bell 407 Air Conditioner System Dwg. 407EC-300 Revision AE.

Compliance: At the discretion of the operator

Background:

During the pre-flight of a Bell 407 Helicopter, the crew discovered that the compressor drive pulley which is mounted to the Oil Cooler Blower Shaft Assembly showed signs of wear. On closer inspection the S-3532EC-4 Pulley, S-3532EC-5 Drive Ring, and S-3532EC-11 Bolts were all found to have sustained extensive damage.

On disassembly of the oil cooler blower shaft and the pulley assembly, damage was also noted to the blower shaft splines and the aft section of the drive shaft coupler (406-040-316), as well as the threaded portion of the -4 Pulley and to the spline portion of the -5 Drive Ring.

Subsequent inspection of these parts indicates that the S-3532EC-5 Drive Ring was not installed in accordance with the 407EC-300 drawing & Instructions for Continued Airworthiness (ICA) requirements. This drawing requires that a "Minimum clearance between Drive Coupler & Drive Ring of .05" inch be maintained during installation of these parts. Reversal of the Drive Ring will not permit the required gap to be achieved.

Failure to install the S-3532EC-4 Pulley and or, S-3532EC-5 Drive Ring I/A/W all of the ACC drawings, service instructions, and placards may result in damage to these components or other related aircraft parts and assemblies.

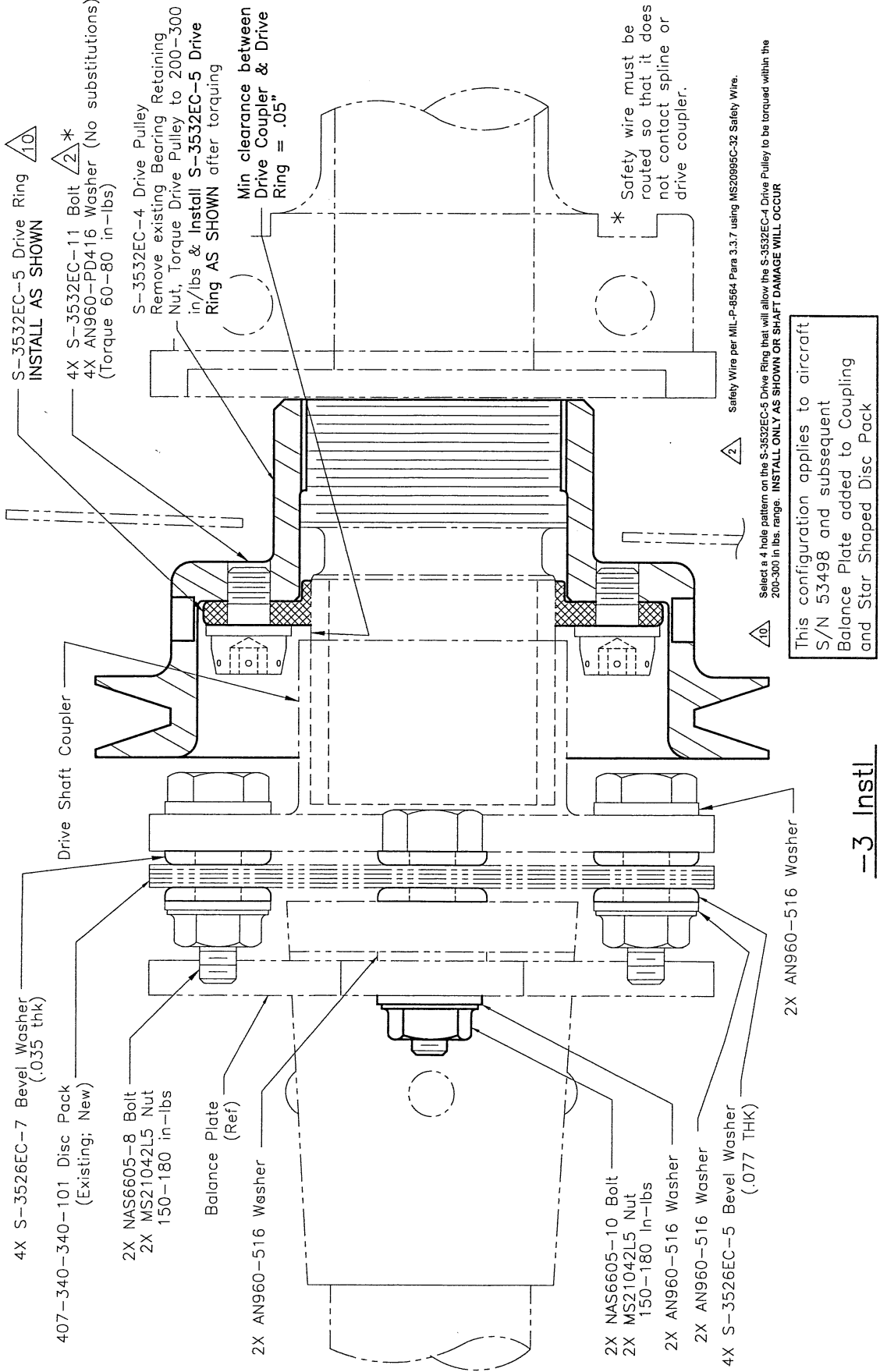
Inspection:

We highly recommend that all operators inspect the installation of the S-3532EC-4 Pulley & S-3532EC-5 Drive Ring assembly on helicopters equipped with the Air Comm Corporation air conditioning system, to insure that the S-3532EC-5 Drive Ring is installed as shown on Pages 2 thru 5 of this Service Letter. **The splined leg of the Drive Ring must be oriented aft to insure the .05 inch clearance with the drive shaft coupler.**

It maybe necessary to disassemble the drive shaft coupling and slide the drive shaft adapter forward to verify the correct installation of the S3532EC-5 Drive Ring assembly.

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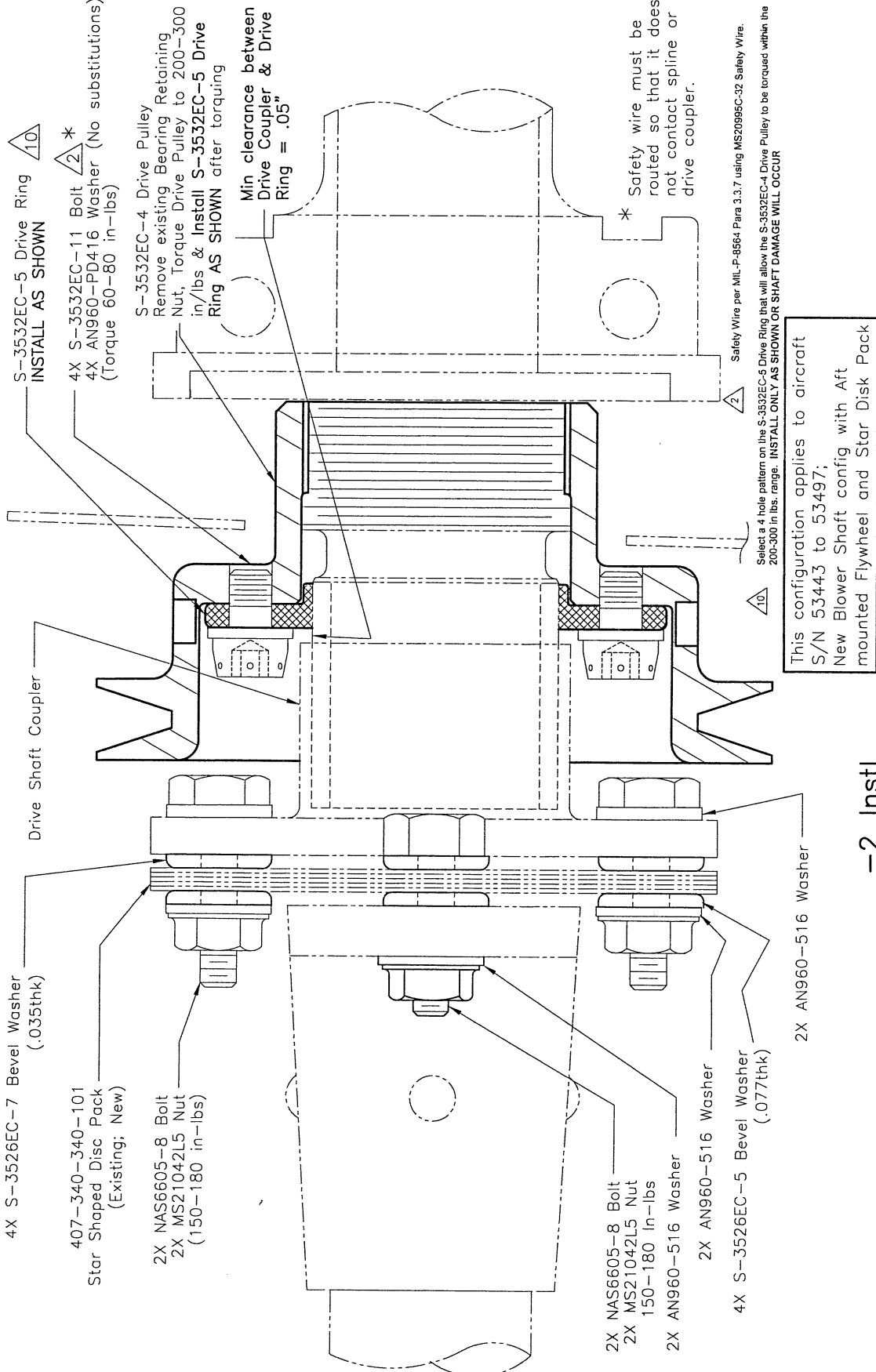
Inspection continued:



-3 Instl

S-3532EC-4 Pulley & S-3532EC-5 Drive Ring Installation (-3 Installation)

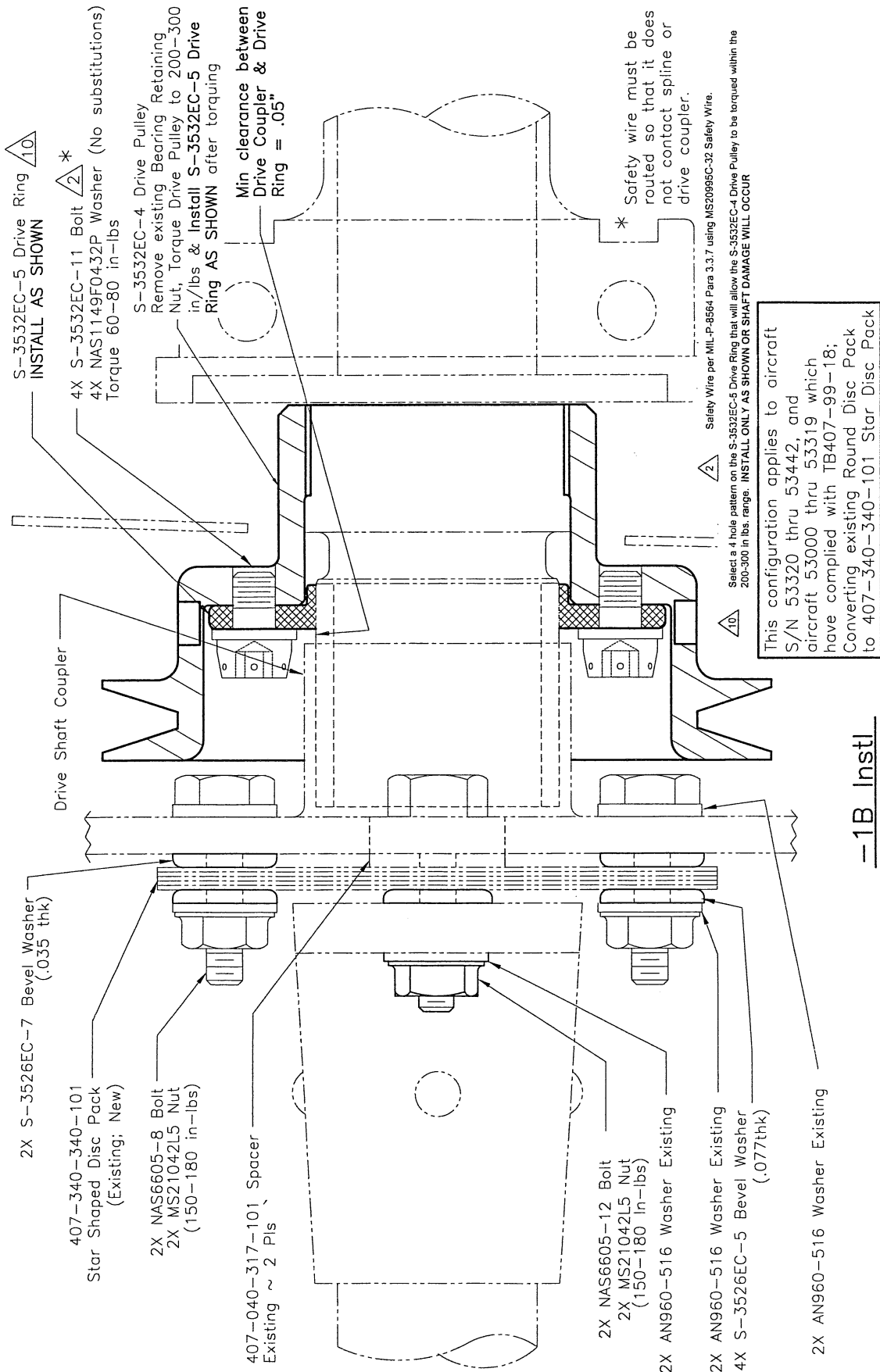
Inspection continued:



-2 Instl

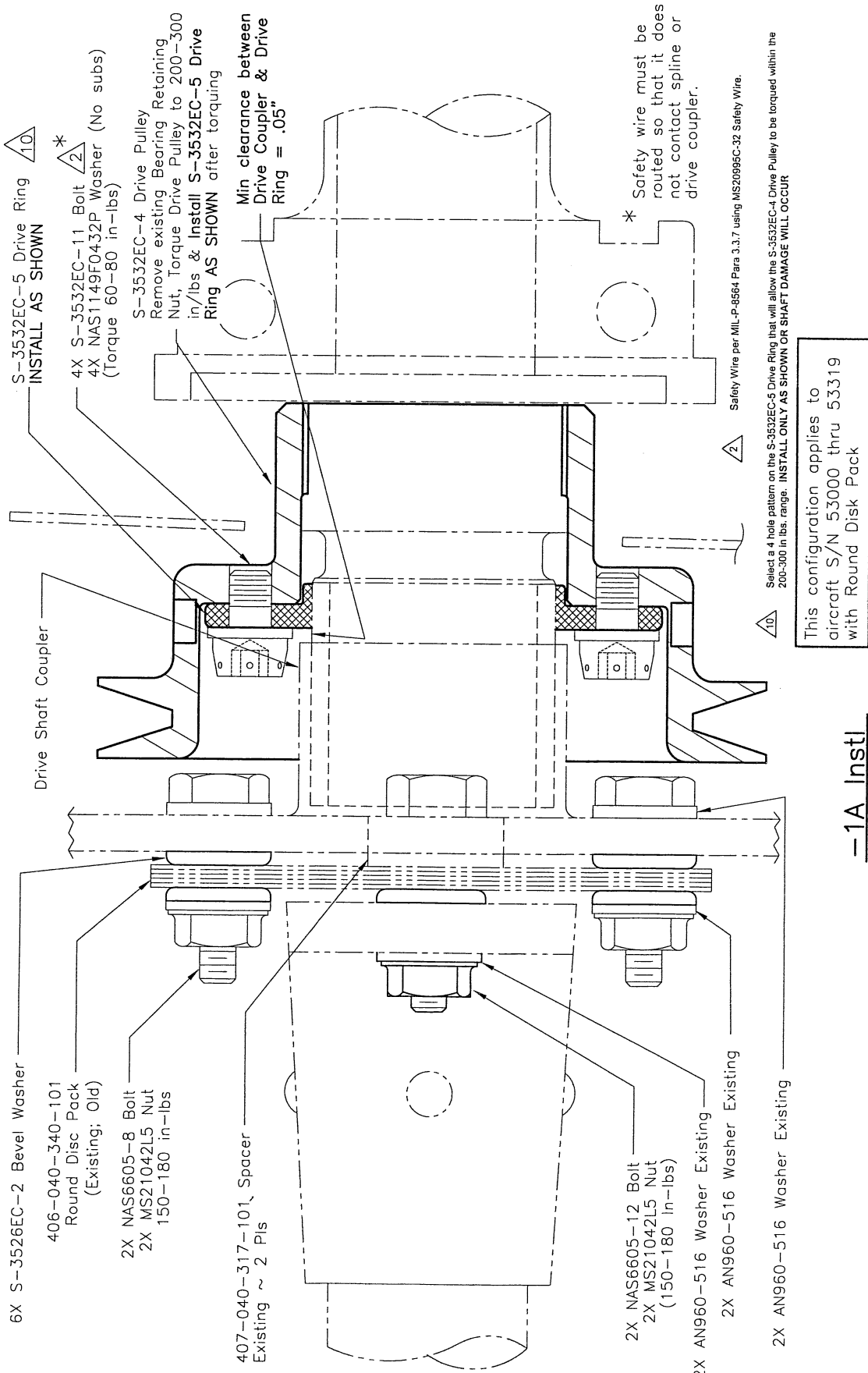
S-3532EC-4 Pulley & S-3532EC-5 Drive Ring Installation (-2 Installation)

Inspection continued:



S-3532EC-4 Pulley & S-3532EC-5 Drive Ring Installation (-1B Installation)

Inspection continued:



-1A Instl

S-3532EC-4 Pulley & S-3532EC-5 Drive Ring Installation (-1A Installation)