

Service Letter

FAA-DER APPROVED

Service Letter: No. 329

Subject: Condenser Scoop Bellcrank Replacement & Adjustment Procedure.

Date: 30 May 1997
10 Oct 2001 Rev A
8 July 2004 Rev B

Applicability: Bell Helicopter Model,407,427 Equipped with the Air Comm Air Conditioning system.

Reference: F.A.A./ S.T.C. # SR0022DE, Bell 407 & #SR00418DE, Bell 427 Air Conditioning System.
S-7058EC 427 Condenser Blower drawing
S-7062EC 407 Condenser Blower drawing
407EC-700 Condenser Installation drawing 407
427EC-700 Condenser Installation drawing 427

Compliance: At the discretion of the operator, or failure of the scoop bellcrank assy.

Background: Air Comm Engineering has re-designed the Bellcrank to incorporate a stronger shaft section, and actuator clevis rod assy. S-7036EC-3 /-9. This part is designed to be a "drop in replacement" for the old Bellcrank assy. S- 7037EC-1.

Bill of Materials:

Item	Part Number	Description	Qty.
1	S-7037EC-1	Bellcrank assy.	1
2	S-7036EC-41	Clevis End	3
3	AN24-15	Bolt	3

CAUTION

Disconnect Battery and External Power from aircraft before starting work!

Replacement of Condenser Scoop Bellcrank assy.

1. Remove Screws holding the Condenser Scoop assy. to the belly of the aircraft, to allow access to the electrical connection of the Condenser blower / actuator assy.
2. Disconnect Condenser blower / actuator electrical connector, and remove Condenser Scoop and blower assy. from aircraft.

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Continued:

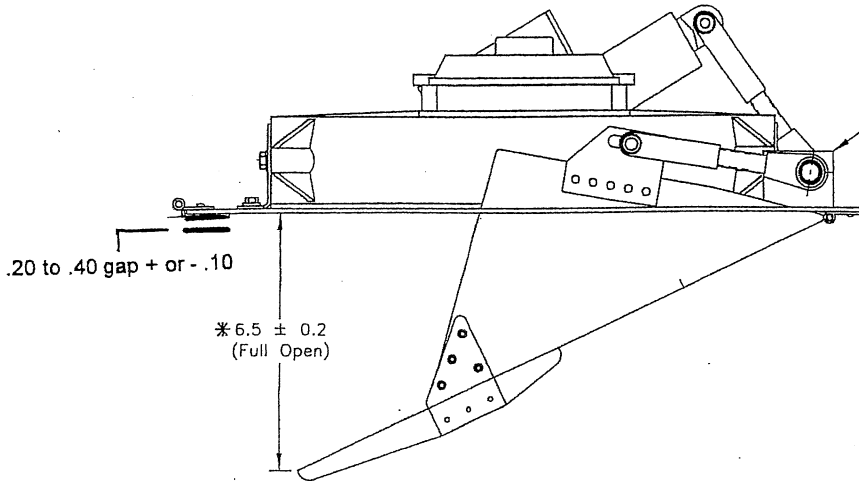
4. Remove hardware from the three clevis / fork ends that attach the bellcrank to the scoop and actuator assemblies.
5. Remove bolts from the bellcrank retaining blocks, remove the old bellcrank S-7036EC-7 and discard. (If applicable).
6. Install new bellcrank assy. S-7037EC-1 in to existing retaining blocks and torque existing nuts to 20 to 30 inch lbs.
7. Install new Clevis ends (S-7036EC-41) on the new bellcrank assy., and temporarily install existing hardware, attaching the actuator arm assy.
NOTE: It maybe necessary to remove a small amount of material from the sides of the actuator attaching point, to allow the free movement of the Clevis end on the actuator arm.
8. Reinstall existing Fork ends on the new bellcrank rod ends and temporarily attach the scoop door using existing hardware. Fork ends will need to be adjusted so there is a gap of approximately .20 to .40 inch between the scoop plate assy. and the scoop door. See drawing on page 3 of 3.
NOTE: This gap is necessary prevent the bottoming out of scoop door before the limit switch has turned the actuator motor off.
9. Once the gaping procedure is completed, Torque the attaching hardware at the clevis and fork ends to 20 to 25 inch lbs., and cotter pin the nut in place.
10. Reattach the electrical connection, and re-attach the hinged side of the condenser scoop assy. to the aircraft. Re-connect the battery, or external power to the aircraft, and perform a maintenance operational check of the scoop door assy. (This is accomplished by turning the air conditioner power switch to the on position).
NOTE: Insure that the scoop door is not binding, or rubbing on the scoop plate, or blower housing.

CAUTION

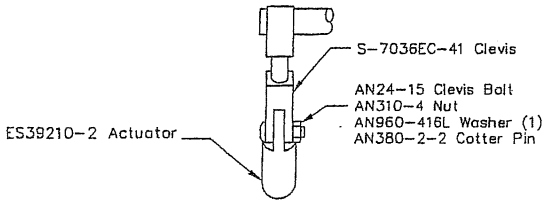
Keep fingers, and tools clear of the condenser blower, and scoop actuator assy. once the power has been restored to the aircraft systems.

11. Once the maintenance operational check of the condenser blower assy. has been completed. Swing the condenser scoop assy. into position, and re-install the panel screws.

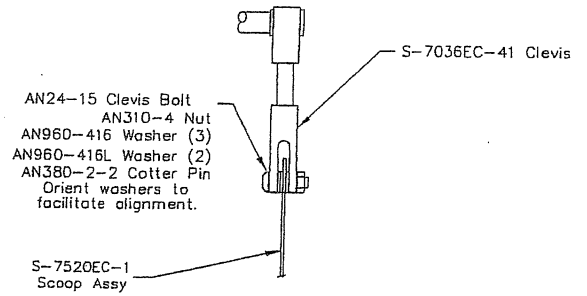
Side View



- S-7036EC-35 Block
- S-7036EC-34 Block
- AN24693-5-281 Screw
- AN960-10L Washer
- AN364-1032 Nut (2 pls)



View B



View C

Top View

