

**Service Kit**

**FAA/DER APPROVED**

**Service Kit:** SK-427H-200-1

**Title:** Bell 427 Heater System Improvement Up-grade.

**Date:** March 14, 2007

**Applicability:** Bell Model 427 equipped with Air Comm Corporation Heater System 427H-200.

**Reference:** STC SR00221DE; Bell Model 427 Heater System.  
Drawing 427H-200, General Arrangement  
Drawing 427H-900, Heater Ejector Installation  
Drawing 427H-960, Defroster Ejector Installation  
Drawing S-9736EC, Cabin Heater Assembly

**Compliance:** Optional, at the discretion of the operator.

**Purpose:** To increase the airflow and temperatures of the Windshield Defroster, and the forward & aft cabin heater ejectors.

**Discussion:** This change is intended to increase the volume of heat provided to the Bell 427 cabin heater, and windshield defroster system.

**Weight and Balance:**

There is no weight change to system, and therefore no adjustment to the weight and balance is required.

**Installation Instructions:**

Remove and replace those components listed in the Bill of Materials section of this document using the reference documents listed above, and the removal & installation section of this document.

**Bill of Materials**

Item	Qty.	Description	Part Number to be <b>Removed</b>	Part Number to be <b>Installed</b>
1	2	Heater Ejector Assy. Fwd.	S-6454EC-5	S-6454EC-2
2	2	Heater Ejector Assy. Aft.	S-6454EC-6	S-6454EC-4
3	2	Defroster Ejector Assy.	S-6406EC-2	S-6406EC-3

**Contact Air Comm Customer Service Department for the current price and availability of this kit. Phone 303-440-4075, Fax 303-440-6355, E-mail, [info@aircommcorp.com](mailto:info@aircommcorp.com)**

**Removal & Installation:**

**Forward Ejectors**

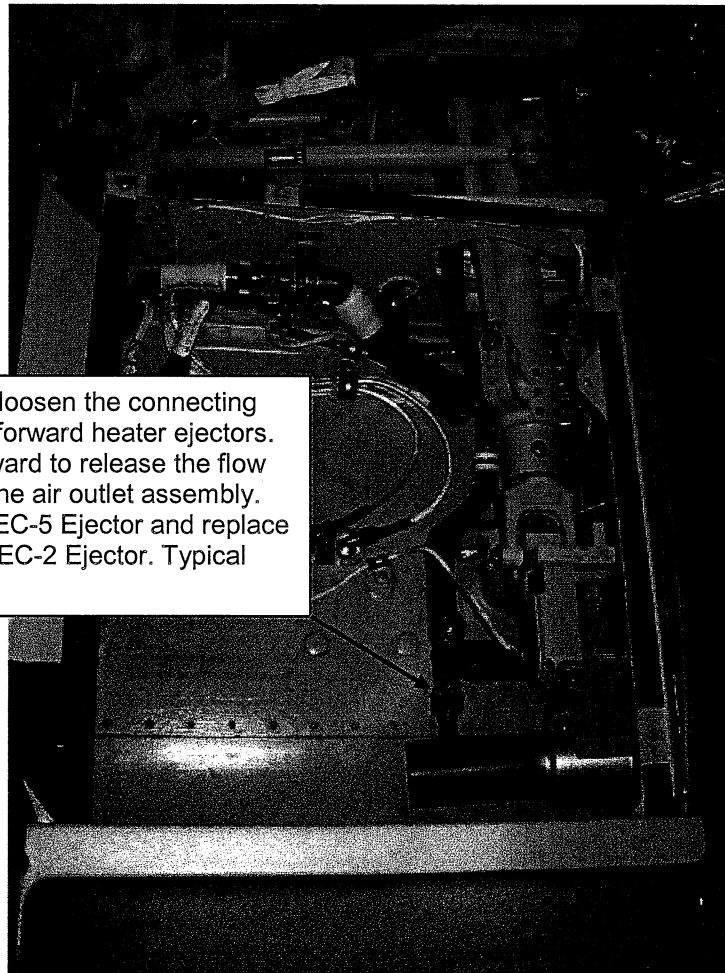
**CAUTION**

Disconnect the aircraft battery and external power supply prior to starting work.

**NOTE**

It will be necessary to remove both the pilots and co-pilots seats, as well as the seat box cover panel to access the forward heater ejectors.

Cut safety wire, and loosen the connecting B-nut at each of the forward heater ejectors. Slide the ejector forward to release the flow control "hook" from the air outlet assembly. Remove the S-6454EC-5 Ejector and replace with the new S-6454EC-2 Ejector. Typical both sides.



**View looking inboard at the pilot & co-pilots seat box area from aircraft right.**

Continued

Removal & Installation continued:

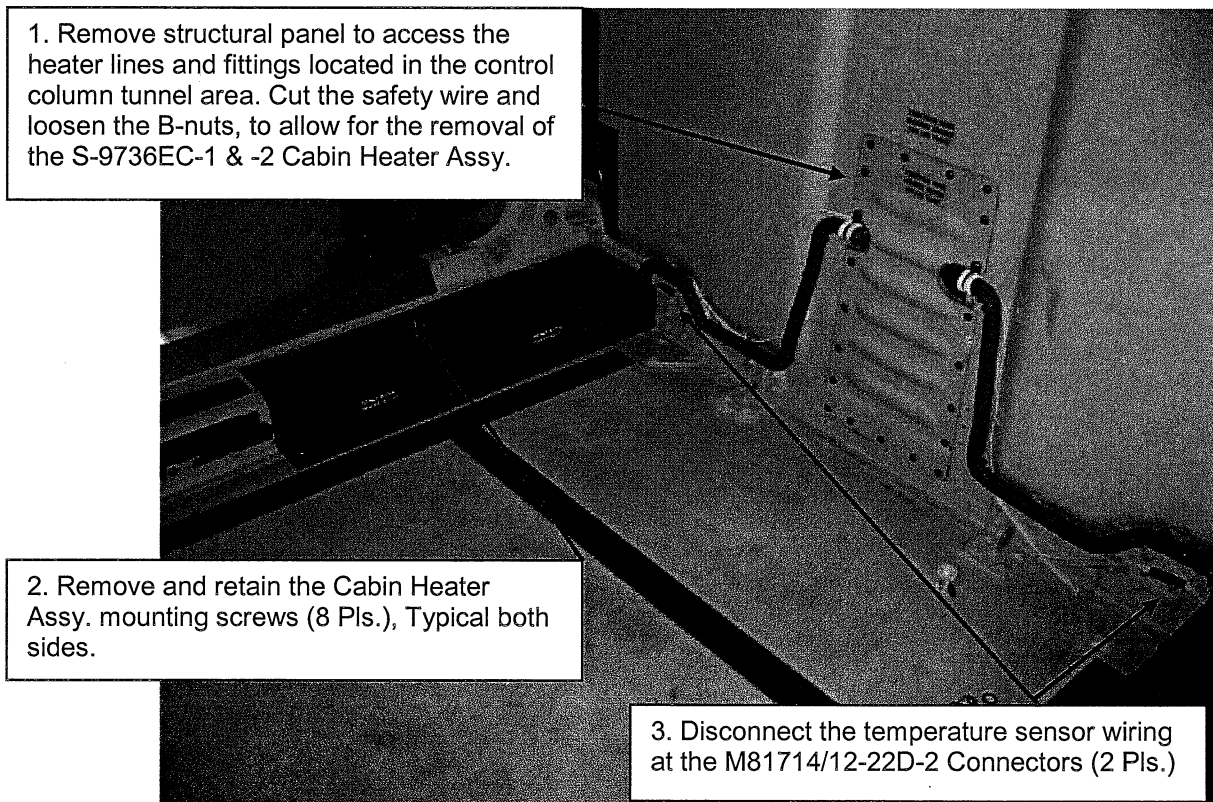
### Aft Ejectors

#### **NOTE**

It will be necessary to remove the aft facing cabin seating to access the Aft Heater Ejector assemblies.

#### **NOTE**

It will be necessary to remove the Structural Panel located at the base of the control column tunnel to access the heater line fittings to the aft heater assemblies.

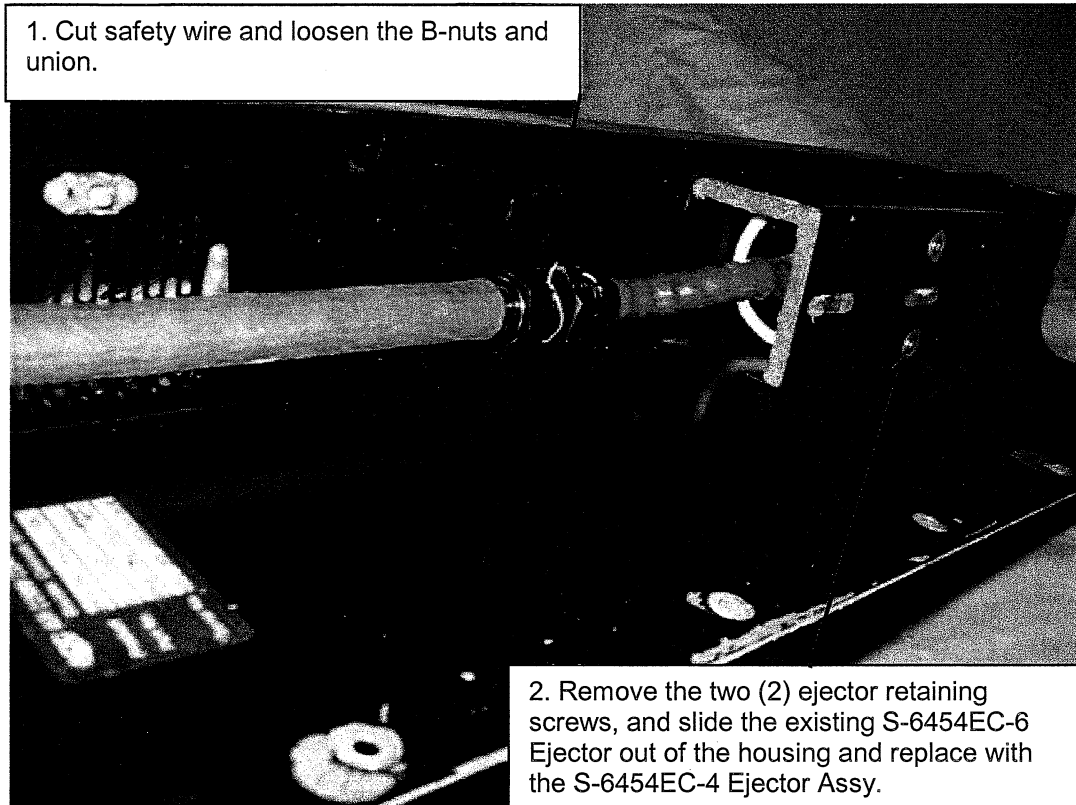


**View looking forward in the aft cabin area from aircraft right.**

Remove the flow control adjustment knob from the ejector control rod, and retain the knob and mounting hardware for reinstallation on the new ejector assembly.

Continued

Removal & Installation continued:



**View looking at the bottom of the S-9736EC aft ejector assembly.**

Reinstall the Heater Ejectors, and Cabin Heater Assemblies in the reverse order of removal.

Reinstall the heater control knob on to the new ejector control rod.

Reinstall the existing Cabin Heater Screws "wet" with MIL-S-8802 sealant, and safety wire all fittings per MIL QQ-W-423B Cond. A, using MS20995C-32 safety wire or equivalent.

Reconnect the temperature sensor wiring at the M81714/12/22D-2 Connectors (2 Pls.)

Reinstall the structural panel at the base of the control column tunnel per BHT service instructions.

Reinstall all interior provisions and seating per BHT service instructions.

Continued:

Removal & Installation continued:

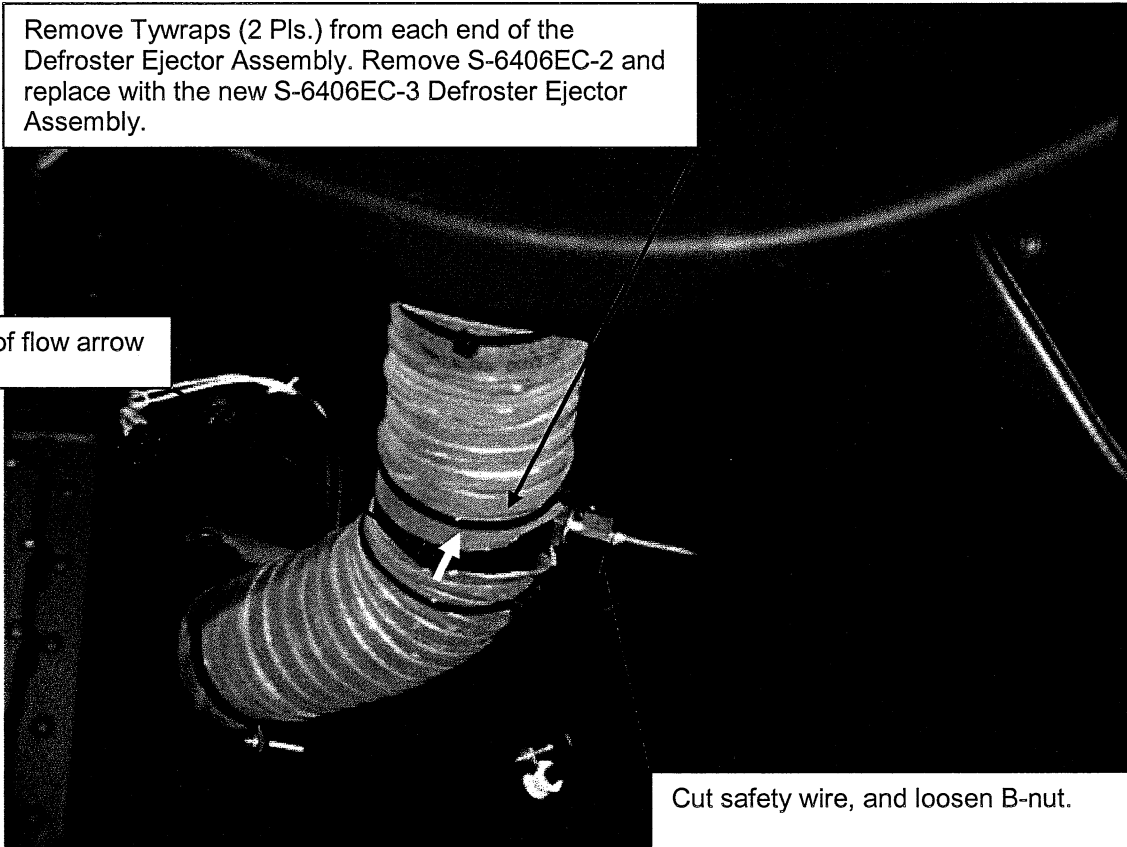
## Defroster Ejectors

### NOTE

The windshield defroster ejectors are located below the glare shield / windshield defroster diffuser assembly.

Remove Tywraps (2 Pls.) from each end of the Defroster Ejector Assembly. Remove S-6406EC-2 and replace with the new S-6406EC-3 Defroster Ejector Assembly.

Direction of flow arrow



Cut safety wire, and loosen B-nut.

**View looking up at the bottom of the pilots windshield defroster diffuser (typical both sides).**

Insure the new S-6406EC-3 Defroster Ejector is installed with the direction of flow arrow pointed towards the defroster diffuser.

Safety wire all fittings per MIL QQ-W-423B Cond. A, using MS20995C-32 safety wire or equivalent.

Replace CT11B Tywraps (2 Pls.)

Return heater and defroster system to service.