

Service Letter

FAA-DER APPROVED

Service Letter: No. 342

Subject: Change of Heater Bleed Air Shutoff Valve Orientation.

Date: 24, July 2002

Applicability: Bell Helicopter Model 427 equipped with Air Comm Corporation Bleed Air Heater System.

Reference: F.A.A. / S.T.C. SR00419DE
Drawing # 427H-510 Rev. F

Compliance: At the discretion of the operator

Background: The Air Comm Corporation is offering this change as a product improvement to the Bell 427 Heater System.

We have found that by reversing the existing orientation of the Heater Shutoff Valve will help increase the service life expectancy of this part.

Following are the instructions for accomplishing this change to the heater system.

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	MS27039C1-15	Screw	2
2	NAS1149CO332R	Washer	2
3	MS21043-3	Nut	2
4	NAS1057W3-050	Spacer	2
5	S-9744EC-10	Collar	2
6	MS20470AD4-4.5	Rivet	4
7	S-9744EC-20	Bracket	1
8	S-9744EC-21	Bracket	1

NOTE

Due to the location of the S-9730EC-1 Shutoff Valve it will be 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	S-9744EC-22	Bracket	1
2	MS20470AD4-4.5	Rivet	2
3	MS20470AD4-3	Rivet	2
4	MS21919WCH21	Clamp	1
5	MS27039-1-07	Screw	1
6	NAS1149F0332P	Washer	1
7	MS21042L3	Nut	1

Removal: (Figure 1-1)

CAUTION

Disconnect aircraft battery and external power prior to starting work.

NOTE

It will be necessary to remove the forward transmission fairing to access this area prior to starting work.

1. Remove and discard the two (2) MS27039C-15 Screws, NAS1149CO332R Washers, MS21043-3 Nuts, and NAS1057W3-050 Spacers from the S-9744EC-10 Collar that supports the S-9730EC-1 Shutoff Valve. Remove and discard the inboard and outboard S-9744EC-10 Collar at this time as well.
2. Disconnect the S-9760EC-16 & -18 Tube assemblies from the fittings on the S-9730EC-1 Shutoff Valve Assembly, and remove the Shutoff Valve from between the tubes.

NOTE

It is not necessary to disconnect the electrical connections to the aircraft wiring, or remove the Shutoff Valve completely from the aircraft.

3. Remove the MS20470AD4-4.5 Rivets (2 Pls) from the S-9744EC-20 and S-9744EC-21 Brackets, and discard Brackets.

Installation: (Figure 1-2)

1. Install MS20470AD4-3 Rivets (2 Pls) in the holes left blank from the removal of the S-9744EC-21 Bracket. (See note 11)
2. Install the S-9744EC-22 Bracket using MS20470AD4-4.5 Rivets (2 Pls) using the existing holes from the removal of the S-9744EC-20 Bracket. (See note 11)
3. Reinstall the S-9730EC-1 Shutoff Valve with the valve body orientated as shown in Figure 1-2.
4. Install the MS21919WCH21 Clamp on the end cap of the S-9730EC-1 Shutoff Valve as shown in Figure 1-2.

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Installation continued:

5. Install attaching hardware MS27039-1-07 Screw, NAS1149F0332P Washer, and MS21042L3 Nut through the MS21919WCH21 Clamp and S-9744EC-22 Bracket.
(See note 9)
6. Reinstall the B-nuts on the fittings of the S-9730EC-1 Shutoff Valve and torque per MS21344.
7. Perform Maintenance Operational Check (MOC) on completion of this Service Letter as follows:
 - a. Disconnect the S-9460EC-1 Tube from the Engine Bleed system (See figure 1-3).
 - b. Close the heater and defroster control valves located in the cockpit.
 - c. Connect shop air (compressed air) to the S-9460EC-1 Tube.
 - d. Apply 80 to 100 psig air pressure to the system.
 - e. Operate the HTR-OFF-OVRD switch to HTR (note: Bleed line must be pressurized to open the Shutoff Valve).
 - f. Check fittings for audible leaks (Do Not use soap bubbles).

Notes:



Wet install with MIL-PRF-81733 sealant.



Unless otherwise noted. Drilled hole dims to be IAW AND10387.

Weight and Balance:

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

Parts:

To obtain the necessary parts for completion of this Service Letter contact 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

The parts listed in the Bill of Materials section of this document will be provided at no charge. The shipping and handling fees for these items will be the sole responsibility of the customer.

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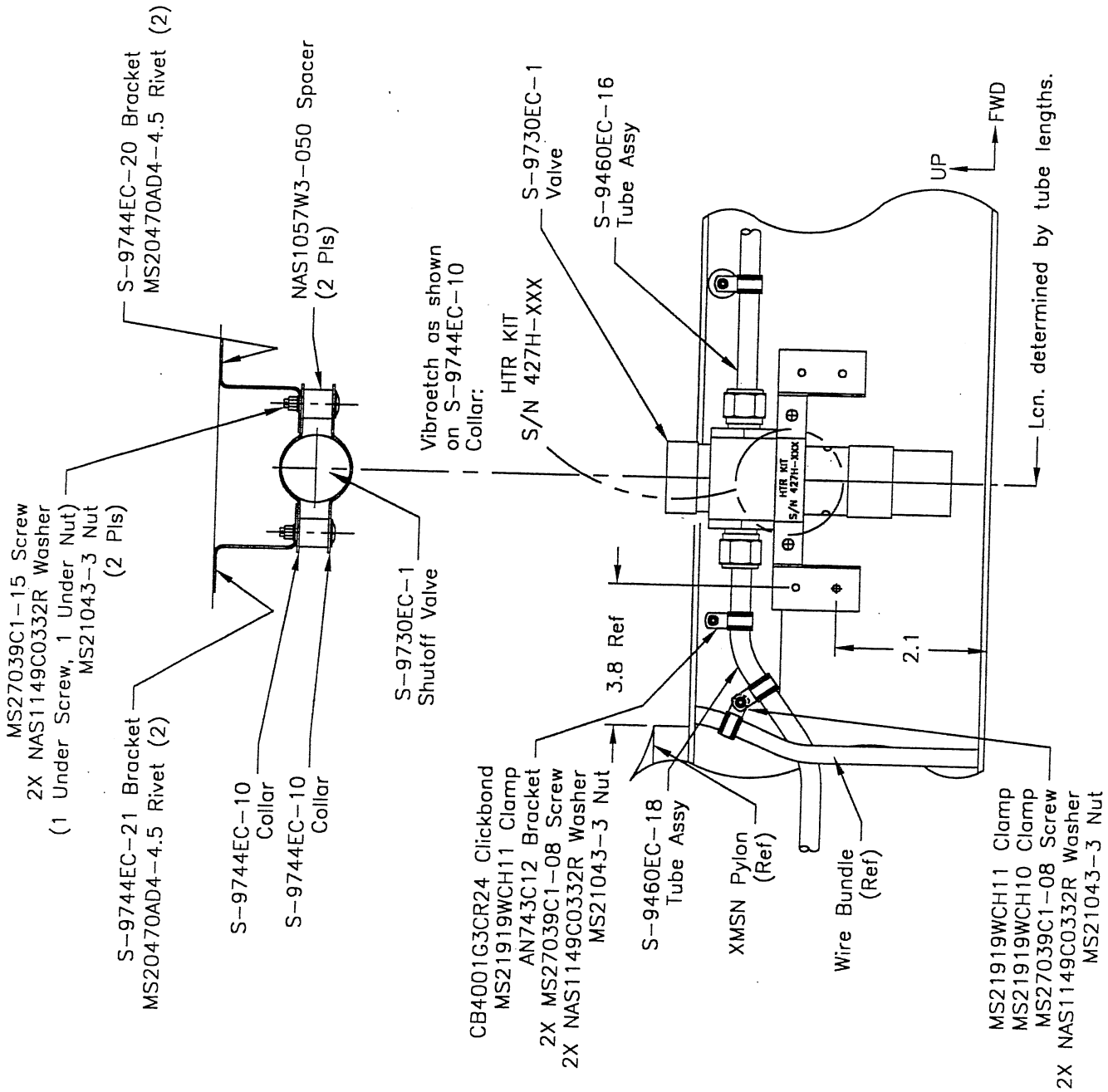


Figure 1-1, Existing S-9730EC-1 Shutoff Valve Mounting Configuration

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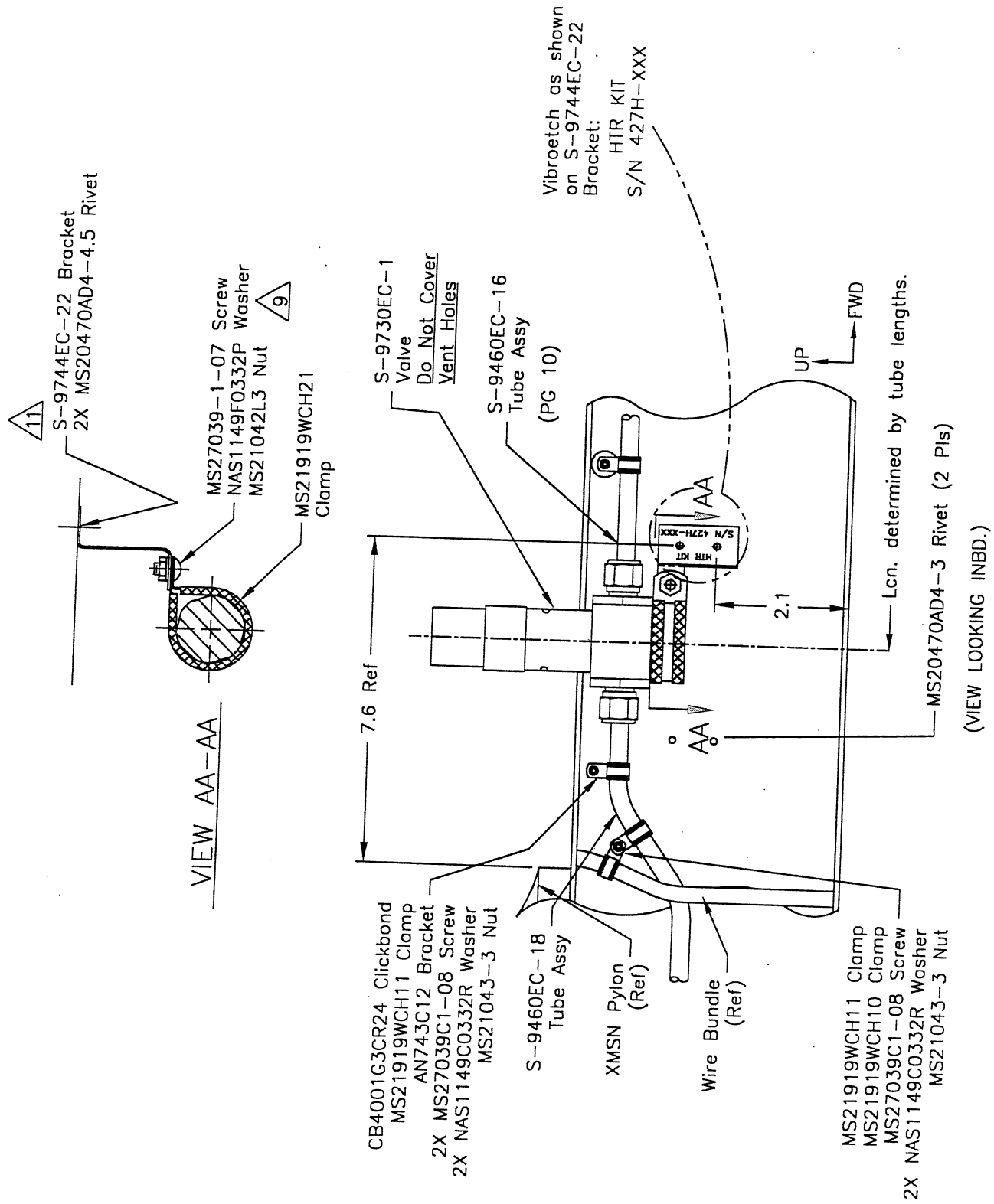


Figure 1-2, Revised S-9730EC-1 Shutoff Valve Mounting Configuration

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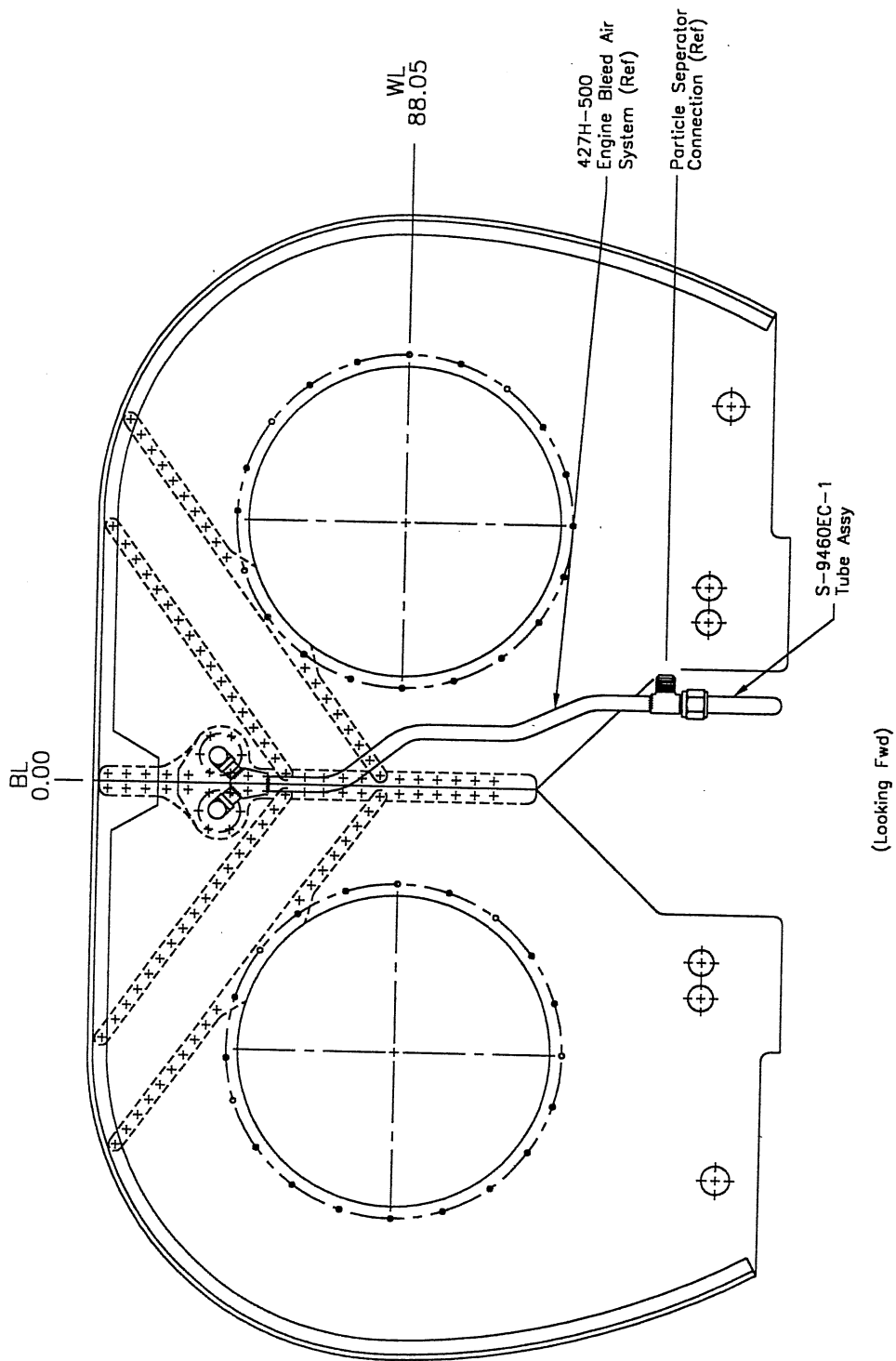


Figure 1-3, S-9460EC-1 Tube from the Engine Bleed System.

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