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MODEL Bell 206B (AM) : REPORT NO. 206-0100-3M  
Installation Instructions and Service Manual for  
Bleed Air Heater Install with Ducting  
(thru S/N 3566)

REPORT DATE: 10/21/83

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206B (AM)

REV

REV.	DATE	DESCRIPTION OF REVISION	BY	APPROVAL
A	10/27/83	Kit List Revised to Rev A, Added Inst'l Req'd to Inst'l Instructions	REH	REH
B	1/11/84	Kit list revised to Rev. B	REH	REH
C	3-21-84	Kit list revised to Rev. C	DMB	DMB
D	3-29-84	Kit list revised to Rev. D; Deleted 206-0612-1 Installation Instructions; Added 206-0616-1 Installation Instructions.	DMB	DMB
E	4-3-84	Kit list revised to Rev E	DMB	DMB
F	4-6-84	Rev Flight Manual Supplement to Rev 3	KS	KS
G	5/11/84	Kit List Revised to Rev F		REH
H	10-26-84	Kit List Raised to Rev G. Kit List Removed From Install Inst. Aircraft Document Index added to Section VI. Included Drawing Index added to Section III.	JRS	JRS
J	12-17-84	Included Drawing Index revised to include all pages of 206-0700.	KS	
K	3-1-85	Installation instructions 206-0700 shts 1,2,& 4 revised was 206-0700 shts 1,3, & 4.	SER	REH
L	4-23-85	Revised Part A of Routine Maintenance Page 4 of 4, to remove the 100 hour disassembly instructions & add engine washing recommendations	JRS	JRS
M	12-9-85	Reformatted Manual for modular configuration	REH	REH
N	8-13-87	Revised Installation Instructions and WT & BAL for added heater scoop parts.	REH	REH
O	4/3/92	Deleted warranty information	KS	

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I. INTRODUCTION:

This manual contains information and documents necessary to accomplish the installation, maintenance, and repair of Keith Products systems. Use of this manual in conjunction with the installation drawings provided will result in the best possible installation of the system with the minimum expenditure of labor.

This system reflects the technical expertise of the world leader in vapor cycle air conditioning systems for aircraft. The system components have been carefully matched, resulting in optimum performance and minimum weight. The system is only as good as it's installation, however, so it is extremely important that the installer READ AND UNDERSTAND THESE INSTRUCTIONS COMPLETELY PRIOR TO STARTING INSTALLATION WORK.

Upon completion of the installation, the Kit List and Installation Instruction of this manual may be discarded. The Airplane Flight Manual Supplement and Weight and Balance Revision should be inserted into the Airplane Flight Manual. The service and maintenance information should be inserted into the permanent aircraft file. Any special installation tools furnished with the kit are to be passed on to the customer for future maintenance.

BLEED AIR HEATER SYSTEM DESCRIPTION AND OPERATION:

The bleed air heater system consists of the following components:

1. Control Valve - The control valve is located on the pilot's overhead panel. Rotate the control knob clockwise to turn heat on and counter-clockwise to turn heat off.
2. Regulator Valve - The regulator valve is located just aft of the hat shelf. The valve delivers bleed air as directed by the control valve to the ejector nozzle located internally in the heater silencer via flex duct.
3. Heater Silencer - The heater silencer is located just above the access panel in the baggage compartment. Bleed air delivered to the nozzle creates a positive hot air flow to the cabin ducting. A duct temperature switch, when activated, illuminates a light on the instrument annunciator panel labeled "DUCT TEMP HIGH".

DRAWING AND INSTALLATION MANUAL SYSTEM

1. Take the 206-0100 General Arrangement drawings from the drawing package.
2. Locate the sheets that list all the General Arrangements covered by this drawing.
3. Locate the dash number of the kit you are installing (listed in the part number column).
4. Move to the left until you reach the sloping line crossing this same dash number that is listed to the left of the part number column at the bottom of the page.
5. All of the individual installations you will be doing are listed in this dash number column.
6. For example: You are installing a 206-0100-24 kit. Proceed up the part number column to -24. Then go to the left to the sloping line. Down at the bottom of the page you should see another -24. Then going up this column you will see the first installation listed is 206-0202-4 Blower Installation. The next installation you will see is 206-0203-1 Evaporator Installation. The other installations can be located similarly.
7. As you identify each of these individual installations, look to the far left of the page for any flag notes that apply to your installation. They may be found on page 1 of 206-0100.
8. Next, select any one of the Installation Drawings such as the Evaporator Installation.
9. Then select the Installation Manual carrying the same number. This manual will also have one (or more) dash number(s) after the basic number.
10. Refer back to the Installation Drawing and locate this (these) dash number(s) (located to the left of the column marked "Part Number")
11. When the Installation Drawing refers to several dash numbers, look at the remarks column for notes which refer to the models of the helicopter to which each dash number applies.
12. After having determined the dash number applicable to your particular installation, proceed vertically up that column to determine the quantity and part number of each to be installed.
13. In the field of the drawing (The views, sections and details illustrations) some of them may say (-1 only) or (-2 only) etc. Only those views, sections or details carrying the dash numbers you located in step 5 apply to your installation.
14. If no dash number appears in a view, section or detail, then that view, section or detail applies to all installations on your drawing.

GENERAL INSTRUCTIONS

1. These instructions are intended only to sequence and to clarify the installation drawings. In the case of a discrepancy, the drawing shall be the authority.
2. All references are to the following drawings unless otherwise specified:  
206-0100.
3. For removal of the seats, interior trim panels, and general preparation of the aircraft for installation of the air conditioner, see the appropriate aircraft service manual.
4. This kit has been designed around an aircraft with standard factory installed hardware. It should be determined at an early stage of the installation if any deviations need to be made from this outline in order to facilitate individual hardware and equipment installations.
5. Prior to commencement of installation, all parts should be checked against the kit list to aid in identification and to insure that proper quantities have been supplied.
6. Standard aircraft practices should be adhered to as outlined by FAA Advisory Circular 43.13-1A and 43.13-2A.