

1. Approving Civil Aviation Authority / Country: FAA / UNITED STATES		2. AUTHORIZED RELEASE CERTIFICATE FAA FORM 8130-3, AIRWORTHINESS APPROVAL TAG			3. Form Tracking Number: 00000000000010133703 33715993 Page 1 of 1	
4. Organization Name and Address: Hamilton Sundstrand Worldwide Repair 1 Hamilton Road, Dock W Windsor Locks CT 06096 SI3R842L		5. Work Order/Contract/Invoice Number: 45312455				
6. Item:	7. Description:	8. Part Number:	9. Quantity:	10. Serial Number:	11. Status/Work:	
01	B787-8 AIR CYCLE MACHINE	7010121H03	1	3362305	REPAIRED	
12. Remarks: Unit was REPAIRED IAW CMM 21-52-55 Rev. 36 Dated 09/22/22 CSN: 3209, TSN: 13912.55, CSO: UNK, CSR: 0, TSO: UNK, TSR: 0.00 Pertinent details of the workscope identified in the Status/Work block are on file under the work order identified in Block 5.						
Certifies that the work specified in block 11/12 was carried out in accordance with EASA Part 145 and in respect to that work the [product/article] is considered ready for release to service under EASA Part 145 Approval No. EASA145.4983						
13a. Certifies the items identified above were manufactured in conformity to: ☐ Approved design data and are in a condition for safe operation. ☐ Non-approved design data specified in Block 12.						
13b. Authorized Signature:		13c. Approval / Authorization No.:		14a. ☒ 14 CFR 43.9 Return to Service ☐ Other regulation specified in Block 12 Certifies that unless otherwise specified in Block 12, the work identified in Block 11 and described in Block 12 was accomplished in accordance with Title 14, Code of Federal Regulations, Part 43 and in respect to that work, the items are approved for return to service.		
13d. Name (Typed or Printed):		13e. Date (dd/mm/yyyy):		14b. Authorized Signature: <i>Bozena Bak</i>		
				14c. Approval / Certificate No.: SI3R842L		
				14d. Name (Typed or Printed): BOZENA BAK		
				14e. Date (dd/mm/yyyy): 28 MAR 2023		
User / Installer Responsibilities						
It is important to understand that the existence of this document alone does not automatically constitute authority to install the aircraft engine/propeller/article.						
Where the user/installer performs work in accordance with the national regulations of an airworthiness authority different than the airworthiness authority of the country specified in Block 1, it is essential that the user/installer ensures that his/her airworthiness authority accepts aircraft engine(s)/propeller(s)/article(s) from the airworthiness authority of the country specified in Block 1.						
Statements in Blocks 13a and 14a do not constitute installation certification. In all cases, aircraft maintenance records must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.						

1. 国家 Country 中国 CHINA		2. 中国民用航空总局 CAAC ☐ 符合性Conformity ☒ 适航性 Airworthiness 批准放行证书/适航批准标签 AUTHORIZED RELEASE CERTIFICATE/AIRWORTHINESS APPROVAL TAG		3. 证书编号 Certificate Ref. No. 00000000000010133704 33715993		
4. 单位 Organization Hamilton Sundstrand Worldwide Repair 1 Hamilton Road Windsor Locks CT 06096		5. 工作单/合同单/货单 Work Order/Contract/Invoice 45312455				
6. 序号 Item	7. 内容 Description	8. 件号 Part No.	9. 适用性 Eligibility *	10. 数量 Qty	11. 系列号/批号 Serial/Batch No.	12. 产品状态 Status/Work
01	B787-8 AIR CYCLE MACHINE	7010121H03	NOT KNOWN	1	3362305	REPAIRED
13. 备注 Remarks Unit was REPAIRED IAW CMM 21-52-55 Rev. 36 Dated 09/22/22 CSN: 3209, TSN: 13912.55, CSO: UNK, CSR: 0, TSO: UNK, TSR: 0.00 Pertinent details of the workscope identified in the Status/Work block are on file under the work order identified in Block 5.						
14. 新产品 New Parts 兹声明上述产品除第13项的其它规定以外，已按照上述国家适航条例进行制造/检查，并且该产品（出口产品）符合经批准的型号设计资料和进口国提出的专用要求。 Certifies that the part(s) identified above except as otherwise specified in block 13 was (were) manufactured/inspected in accordance with the airworthiness regulations of the stated country and/or in the case of parts to be exported with the approved design data and with the notified special requirements of the importing country.		15. 使用过的产品 Used Parts 兹声明上述产品除第13项的其它规定以外，已按照上述国家适航条例和进口国通知的特殊要求进行了工作，该产品处于安全可用状态可以批准放行使用。 Certifies that the work specified above except as specified in block 13 was carried out in accordance with the airworthiness regulations of the stated country and the notified special requirements of the importing country and in respect to that work, the part(s) is (are) in condition for safe operation and considered ready for release to service. (over)				
16. 批准人签名 Signature 		18. 批准日期 Date 28/MAR/2023		19. 中国民航总局授权 Issued by or on behalf of the CAAC F00100007		
17. 批准人姓名（打印的） Name(Printed) BOZENA BAK						

FINAL TEARDOWN REPORT

Hamilton Sundstrand
One Hamilton Road
BLDG 2, DOCK J
WINDSOR LOCKS CT 06096-1000
USA
Repair Station SI3R842L



UTC Aerospace Systems

Customer	BOEING COMMERCIAL AVIATION SERVICES EUROPE LTD		Cust PO	2305062-0001		Operator PO		
Input Part	7010121H03		Input Serial	3362305		Qty	1.000	
Output Part	7010121H03		Output Serial	3362305		Workscope	REPAIR	
Cust Part	N/A		Cust Serial	3362305		Status/Work	REPAIRED	
Description	B787-8 AIR CYCLE MACHINE		Removal Code	FUNF		Failure Date		
Aircraft	B787		Engine Type	ACS PCK Packs				
Incoming NSN	N/A		Outgoing NSN	N/A		Tail No	ET-AUO	
Date Rec'd	08/11/2022		Quote Date			Accept Date		
Ship Date	01/26/2023		DOM			Last Order Date		
Sales Order	120394109		Work Order	45312455		Notification	305015170	

Measuring Point:													
	Serial #	CSN	TSN	CSO	CSR	TSO	TSR	TSI	CSI	TSMI	CSMI	CSCPI	TSCPI
OUT	3362305	3209	13912.55	UNKNOWN	0	UNKNOWN	0.00	13912.55	3209	UNKNOWN	UNKNOWN	UNKNOWN	UNKNOWN

Engine Serial Number : UNK

Conditions	service wear
Customer Reason for Return	REASON FOR REMOVAL OR FAILURE DETAILS: INSPECT & TEST/REPAIR Removal Cause: MESSAGE 21-65211 LEFT AIR CYCLE MACHINE IS FAILED. (LATCHED) CUSTOMER DOCUMENTS: n/a
Certification Type	8130-3 dual
Configuration IN	L5
Configuration OUT	L8
Customer Reference	Cust. PN Out: N/A

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UTC Aerospace Systems

Work Order	45312455	Description	B787-8 AIR CYCLE MACHINE	Date Rec'd	08/11/2022
Input Part	7010121H03	Input Serial	3362305		
Cust Part	N/A	Cust Serial	3362305		
Preliminary Inspection SEIZED					
CMM Reference CMM 21-52-55 REV 36 DATED 09/22/22					
Incoming Functional Test Performed?(Y/N) N					
Incoming Functional Test Failed? (Y/N) N					
Removal Scheduled? (S/U/O) U					
Removal Induced Flag? (Y/N) N					
Removal Reason Confirmed? (Y/N) Y					
Work Performed REPAIR					
Customer Reference N/A					
Engine Serial Number UNK					
Primary Findings 2ND STAGE TURBINE COMPONENTS JOURNAL BEARING ASSEMBLY- TOP FOILS WORN TO BASE MATERIAL					
Resultant Findings 1ST STAGE TURBINE COMPONENTS JOURNAL BEARING ASSEMBLY- TOP FOILS WORN TO BASE MATERIAL					
Resultant Findings 2ND STAGE TURBINE COMPONENTS TURBINE SHROUD- CONTOUR ROTOR RUB					

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Form No. GR001171-0513

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UTC Aerospace Systems

Work Order	45312455	Description	B787-8 AIR CYCLE MACHINE	Date Rec'd	08/11/2022
Input Part	7010121H03	Input Serial	3362305		
Cust Part	N/A	Cust Serial	3362305		

Resultant Findings

2ND STAGE TURBINE COMPONENTS 2ND STAGE ROTOR- ROTOR BLADE CONTOUR AXIAL RUB

Resultant Findings

COMPRESSOR STAGE COMPONENTS AIR BEARING SHAFT - 2ND STAGE END- JOURNAL BEARING SURFACE FINISH FINISH EXCEEDS LIMITS

Components :

Order	Material	Description	Req Qty	Issued	Reason Code	Stor Loc
45312455	7101531-1	NUT, BALANCE	2	2	SEIZED	NEW1
45312455	7000336-3	BEARING, THRUST	1	1	WEAR	NEW1
45312455	7000335-3	BEARING, THRUST	1	1	WEAR	NEW1
45312455	7000332-2	JOURNAL BEARING, ASSY	2	2	WEAR	NEW1
45312455	7000330-2	SHAFT, AIR BEARING	1	1	OVERHEATED	NEW1
45312455	7000329-2	SHROUD, TURBINE	1	1	GOUGED/PUNCTURED/SCORED /S	NEW1
45312455	7000328-2	PLATE, NOZZLE	1	1	ERODED	NEW1
45312455	7000320-1	PLATE, NOZZLE	1	1	ERODED	NEW1
45312455	7000319-2	SHROUD, TURBINE	1	1	GOUGED/PUNCTURED/SCORED /S	NEW1
45312455	7000318-1	PLATE, SEAL	1	1	WEAR	NEW1
45312455	7000317-1	ROTOR, TURBINE	1	1	WEAR	NEW1
45312455	A526	787 ACM O/H KIT	1	1	100% REPLACEMENT	NEW1
45312455	NAS1802-4-13	BOLT, HEX	1	1	MISSING WHEN RECEIVED	NEW1
45312455	NAS620C416L	WASH, FLAT, .255ID, .483OD, .032THK, SST/PSV	1	1	MISSING WHEN RECEIVED	NEW1
45312455	7002235-1	BRACKET, WIRE HARNESS	1	1	BENT	NEW1
45312455	7003925-1	HOUSING	1	1	WEAR	ROT2
45312455	7002482-1	HOUSING, COMPRESSOR	1	1	WEAR	ROT2

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Cust Part	N/A	Cust Serial	3362305		

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PACKING LIST
Hamilton Sundstrand Corporation
Customer Service
One Hamilton Road, Dock W
Windsor Locks, CT 06096-1000
(860) 654-6000



Sold To: 1624

A J WALTER AVIATION
THE HEADQUARTERS
MAYDWELL AVENUE
SLINFOLD
West Sussex RH13 0AS
United Kingdom

Ship To: 1624

A J WALTER AVIATION
THE HEADQUARTERS
MAYDWELL AVENUE
SLINFOLD
West Sussex RH13 0AS
United Kingdom

Transportation Details

Carrier: FXINPF
Waybill #: 187131761762
Incoterms: EXW FACTORY
Payment Terms: Net 30 Days

Package ID # 1023515752 **Dimensions** 39 IN X 32 IN X 36 IN **Gross Weight** 145.0 LB(s).

Shipment Text:

Shipment #

10854007

Item #	Material Number	P.O. / Item#	Customer Material	S.O. / Item #	Qty	Description	Batch	Serial #	Delivery #
1	7010121H03		NONE		1	B787-8 AIR CYCLE MACHINE	0035345340		33938495



R414333 / 000001

120873978 / 1200

EA

Serial numbers:
3362305



Export Control# 9A991.d

Export License# NLR

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Hazardous Material Warning: Before you work with any component, assembly or product referred to in this document, read, understand and obey all safety instructions and take all appropriate safety precautions. These instructions include instructions from the manufacturer, the material safety data sheet (MSDS), the component maintenance manual, service information letters, all operators letters, and government regulations. An MSDS gives instructions on how you must safely use, keep and discard chemicals. Get instructions from your employer on how you must safely use, keep and discard chemicals. Chemicals may cause injuries to you or make you sick. Personal injury or disease may result if safety instructions are not obeyed.

PACKING LIST
Hamilton Sundstrand Corporation
Customer Service
One Hamilton Road, Dock W
Windsor Locks, CT 06096-1000
(860) 654-6000

Shipment #



10854007

Package ID# 1023515752

Substance Declaration and Safe Use Instructions

REACH Article 33 - Regulation (EC) No. 1907/2006

Parts or assemblies may contain:

7010121H03	B787-8 AIR CYCLE MACHINE
10588-01-9	SODIUM DICHROMATE, ANHYDROUS
12141-20-7	TRILEAD DIOXIDE PHOSPHONATE
1333-82-0	Chromium trioxide
7439-92-1	Lead
7440-43-9	Cadmium
7789-06-2	Strontium Chromate
7789-12-0	Sodium Dichromate, Dihydrate

in excess of 0.1% by weight.

Safe use instructions are available at <https://www.collinsaerospace.com/REACH-Compliance/>

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