

1. Approving Civil Aviation  
Authority/Country:  
FAA United States

2.

**AUTHORIZED RELEASE CERTIFICATE**  
**FAA Form 8130-3, AIRWORTHINESS APPROVAL TAG**

3. Form Tracking Number:  
**Q.A.-1694-628-2018**

4. Organization Name and Address:

5. Work Order/ Contract/ Invoice  
Number:  
**2018E-628**

6. Item:	7. Description:	8. Part Number:	9. Quantity:	10. Serial Number:	11. Status/Work:
<b>1.</b>	<b>ENGINE</b>	<b>CFM56-5B2/P</b>	<b>1</b>	<b>575212</b>	<b>REPAIRED</b>

12. Remarks: **ENGINE: T.T. : 38616      T.C. : 24996**

1. CUSTOMER [REDACTED] RO: R2610917 (ETR 315 REV 1).
2. REMOVED FROM A/C I-BIKC POS 1.
3. ENGINE RECEIVED FOR PERFORMANCE RESTORATION AND LLP's REPLACEMENT.
4. ENGINE WAS INSPECTED, REPAIRED AND TESTED AS REQUIRED IN ACCORDANCE WITH ENGINE SHOP MANUAL P/N: CFMI-TP.SM.9 REV.72 MAR 15, 2018.
5. ENGINE WAS CONVERTED FROM -5B4/P ENGINE DASH TO -5B2/P ENGINE DASH I.A.W CFMI SB 72-0625R2.
6. FOR DETAILS OF MAINTENANCE REFER TO MAINTENANCE RELEASE FORM APP. 2
7. FOR AD's INCORPORATED REFER TO APP. 6.
8. FOR SB's INCORPORATED REFER TO MAINTENANCE RELEASE FORM APP. 2
9. FOR TEST SUMMARY SHEET REFER TO APP. 12
10. FOR ENGINE BORESCOPE CHECK REFER TO APP. 13
11. ENGINE OIL AND FUEL SYSTEMS PRESERVED FOR 365 DAYS I.A.W ESM ESM TASK 72-00-00-500-001-0. EXPIRY DATE APR 10, 2019.
12. OPEN ACTION ITEMS MUST BE CLOSED BY THE CUSTOMER PRIOR TO INSTALLATION ENGINE ON A/C.

13a. Certifies the items identified above were manufactured in conformity to:		14a <input checked="" type="checkbox"/> 14 CFR 43.9 Return to Service <input type="checkbox"/> 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.	
13b. Authorized Signature:	13c. Approval/Authorization No:	14b. Authorized Signature: [REDACTED]	14c. Approval Certificate No.: [REDACTED]
13d. name (Typed or Printed):	13e. Date (dd/mmm/yyyy):	14d. Name (Typed or Printed): [REDACTED]	14e. Date (dd/mmm/yyyy): <b>16 APR 2018</b>

**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 Block 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.

FAA CRS No.MK1Y325K  
 EASA APPROVAL No. 145.0029  
 C.A.A.I-01

Life Limited Parts for: CFM56-5B2/P

Eng s/n: 575212

Customer: [REDACTED]

TSN: 38616.00

CSN: 24996

Cycles remaining:

CFM56-5B2/P : 9086 CFM56-5B4/P : 9086

ENG. WORK RECORD NO.: 2018E628

Description	P/N	S/N	TSN	CSN	Total Cycles			Cycles Limit		Remaining Cycles		Remarks
					5B3/P	5B5/P	5B2/P	5B4/P	5B2/P	5B4/P	5B2/P	
<b>FAN &amp; BOOSTER MODULE</b>	<b>SMDL1/P</b>	<b>21X75212</b>	<b>38616</b>	<b>24996</b>								
FAN DISK	338-001-504-0	BA989279-D	45876	18860	18860	0	0	0	30000	30000	11140	11140
BOOSTER SPOOL	338-001-906-0	DY913055	0	0	0	0	0	0	30000	30000	30000	30000
<b>NO.1 &amp; NO.2 BRG. SUPPORT</b>	<b>SMDL2</b>	<b>22X75212</b>	<b>38616</b>	<b>24996</b>								
FAN SHAFT ASSY.	338-010-601-0	DC902481	29306	19998	0	19998	0	0	30000	30000	10002	10002
<b>HPC ROTOR MODULE</b>	<b>SMDL5/P</b>	<b>31X75212</b>	<b>38616</b>	<b>24996</b>								
HPC FRONT SHAFT	1386M56P03	GWN0MW4D	14417	10914	0	0	4041	6873	20000	20000	9086	9086
SPOOL C.STG. 1-2	1558M31G07	GWN0N2RM	14417	10914	0	0	4041	6873	20000	20000	9086	9086
COMP. DISK STG.3	2116M23P01	XAES6944	14417	10914	0	0	4041	6873	20000	20000	9086	9086
SPOOL C.STG. 4-9	2048M20G03	GWN0MTHW	14417	10914	0	0	4041	6873	20000	20000	9086	9086
CDP ROT. AIR SEAL	2116M25P01	GFF5FC87	14417	10914	0	0	4041	6873	20000	20000	9086	9086
<b>HPT ROTOR MODULE</b>	<b>SMDL11/P</b>	<b>52X75212</b>	<b>38616</b>	<b>24996</b>								
HPT FRONT SHAFT	2048M21P03	XAES8246	14417	10914	0	0	4041	6873	20000	20000	9086	9086
HPT FRONT AIR SEAL	2116M20P02	TMT5CP31	14417	10914	0	0	4041	6873	20000	20000	9086	9086
HPT DISK	1498M43P07	GWN0MK17	14417	10914	0	0	4041	6873	20000	20000	9086	9086
HPT REAR SHAFT	1864M90P04	TMT7U389	14417	10914	0	0	4041	6873	20000	20000	9086	9086
<b>LPT ROTOR MODULE</b>	<b>SMDL13/P</b>	<b>54X75212</b>	<b>38616</b>	<b>24996</b>								
LPT CASE	338-117-455-0	DB675043	38616	24996	0	0	4041	20955	N/L	N/L	N/L	SB.72-0706 CW
LPT DISK STG.1	336-001-804-0	PC657242	0	0	0	0	0	0	25000	25000	25000	25000
LPT DISK STG.2	336-001-909-0	PC703907	0	0	0	0	0	0	25000	25000	25000	25000
LPT DISK STG.3	336-002-006-0	PC665440	0	0	0	0	0	0	25000	25000	25000	25000
LPT DISK STG.4	336-002-105-0	PC665015	0	0	0	0	0	0	25000	25000	25000	25000
LPT ROTOR SUPPORT	340-301-702-0	DY287965	0	0	0	0	0	0	25000	25000	25000	25000
<b>LPT SHAFT MODULE</b>	<b>SMDL14</b>	<b>55X75212</b>	<b>38616</b>	<b>24996</b>								SB.72-0814 CW
LPT SHAFT	338-010-005-0	PC604090	0	0	0	0	0	0	25000	25000	25000	25000
<b>TURBINE FRAME ASSY</b>	<b>SMDL15/P</b>	<b>56X75212</b>	<b>38616</b>	<b>24996</b>								
FRAME ASSY. LPT	338-171-703-0	LA084672	38616	24996	0	0	4041	20955	29696	29696	4700	4700

Remarks: ENGINE WORK RECORD NO. 2018E628 REPAIRED AND TESTED AT ENGINE T.S.N.: 38616 C.S.N.: 24996; LLP'S REPLACED AT THIS SHOP VISIT:  
 FAN DISK, FAN SHAFT {O/H}; BOOSTER SPOOL & LPT MAJOR MODULE LLP'S {NEW}

\* THIS LIMIT IS FOR INSPECTION ONLY

Date: 10 Apr. 2018

CUSTOMER  
ENGINE Type  
S/N

CFM56-5 B2/P  
575212

T. TIME

24199

T. CYCLES

14082

Date  
W.O.

25-gen-11  
000013850

Production Quality Control Department

LIFE LIMITED PARTS STATUS

ITEM	DESCRIPTION	P/N	S/N	TOTAL		LIMITS - CYCLES						RESIDUAL LIFE - CYCLES								
				HRS	CYS	B6/3	B2/P	B4/P	B6/P	B non/P	B6/3	B2/P	B4/P	B6/P	B non/P	B6/3	B2/P	B4/P	B6/P	B non/P
SMDL 1	21x FAN and BOOSTER	SMDL1	21X 75700																	
211	BOOSTER SPOOL	338-001-906-0	B8443969	24199	14082	0	0	14082	0	0	30.000	30.000	30.000	30.000	30.000	15.918	15.918	15.918	15.918	15.918
213	FAN DISK STG 1	338-001-504-0	BB459750	24199	14082	0	0	14082	0	0	30.000	30.000	30.000	30.000	30.000	15.918	15.918	15.918	15.918	15.918
SMDL 2	22x #1 & 2 BRG SUPPORT	SMDL2	22X 75212																	
221	FAN SHAFT	338-010-601-0	DB688143	24199	14082	0	0	14082	0	0	30.000	30.000	30.000	30.000	30.000	15.918	15.918	15.918	15.918	15.918
SMDL 5	31x HPC ROTOR ASSY	SMDL5/P	31X 75212																	
312	HPC SHAFT	1386M56P03	GWN0MW4D	0	0	0	0	0	0	0	20.000	20.000	20.000	20.000	20.000	20.000	20.000	20.000	20.000	20.000
313	SPOOL STG 1 - 2	1558M31G07	GWN0N2RM	0	0	0	0	0	0	0	20.000	20.000	20.000	20.000	N/A	20.000	20.000	20.000	20.000	N/A
314	HPC DISK STG 3	2116M23P01	XAES6944	0	0	0	0	0	0	0	20.000	20.000	20.000	20.000	N/A	20.000	20.000	20.000	20.000	N/A
315	SPOOL STG 4 - 9	2048M20G03	GWN0MTHW	0	0	0	0	0	0	0	20.000	20.000	20.000	20.000	N/A	20.000	20.000	20.000	20.000	N/A
316	CDP ROT AIR SEAL	2116M25P01	GFF5FC87	0	0	0	0	0	0	0	20.000	20.000	20.000	20.000	N/A	20.000	20.000	20.000	20.000	N/A
SMDL 11	52x HPT ROTOR ASSY	SMDL11/P	52X 75212																	
521	FRONT SHAFT	2048M21P03	XAES8246	0	0	0	0	0	0	0	20.000	20.000	20.000	20.000	N/A	20.000	20.000	20.000	20.000	N/A
522	FRONT AIR SEAL	2116M20P02	TMT5CP31	0	0	0	0	0	0	0	20.000	20.000	20.000	20.000	N/A	20.000	20.000	20.000	20.000	N/A
525	HPT DISK	1498M43P07	GWN0MK17	0	0	0	0	0	0	0	20.000	20.000	20.000	20.000	N/A	20.000	20.000	20.000	20.000	N/A
526	HPT REAR SHAFT	1864M90P04	TMT7U389	0	0	0	0	0	0	0	20.000	20.000	20.000	20.000	N/A	20.000	20.000	20.000	20.000	N/A
SMDL 13	54x LOW PRESS TURBINE	SMDL13/P	54X 75212																	
541	LPT CASE	338-117-452-0	DB675043	24199	14082	0	0	14082	0	0	N/L	N/L	N/L	N/L	N/A	N/L	N/L	N/L	N/L	N/A
542	LPT STG 1 DISK	336-001-804-0	BB580951	24199	14082	0	0	14082	0	0	25.000	25.000	25.000	25.000	25.000	10.918	10.918	10.918	10.918	10.918
543	LPT STG 2 DISK	336-001-909-0	BB587164	24199	14082	0	0	14082	0	0	25.000	25.000	25.000	25.000	25.000	10.918	10.918	10.918	10.918	10.918
544	LPT STG 3 DISK	336-002-006-0	BB587291	24199	14082	0	0	14082	0	0	25.000	25.000	25.000	25.000	25.000	10.918	10.918	10.918	10.918	10.918
545	LPT STG 4 DISK	336-002-105-0	DB688224	24199	14082	0	0	14082	0	0	25.000	25.000	25.000	25.000	25.000	10.918	10.918	10.918	10.918	10.918
546	LPT CONICAL SUPPT	338-077-502-0	BB474879	24199	14082	0	0	14082	0	0	25.000	25.000	25.000	25.000	25.000	10.918	10.918	10.918	10.918	10.918
SMDL 14	55x LPT SHAFT	SMDL14	55X 75212																	
551	LPT SHAFT	338-010-005-0	BB528706	24199	14082	0	0	14082	0	0	25.000	25.000	25.000	25.000	25.000	10.918	10.918	10.918	10.918	10.918
SMDL 15	56x LPT FRAME	SMDL15	56X 75212																	
561	TURBINE REAR FRAME	338-171-703-0	LA084672	24199	14082	0	0	14082	0	0	Refer to 05-21-03					N/A				

1. Approving National Aviation Authority/Country: FAA/United States	2.	<b>AUTHORIZED RELEASE CERTIFICATE</b> FAA Form 8130-3 . AIRWORTHINESS APPROVAL TAG				3. Form Tracking Number: 10-E00258
4. Organization Name and Address:					5. Work Order/Contract/Invoice Number:  LGM 002  E00258	
6. Item:	7. Description:	8. Part Number	9. Eligibility:	10. Quantity:	11. Serial/Batch Number:	12. Status/Work:
1	SHAFT-CPRSR ROTOR	1386M56P03	N/A	1	GWN0MW4D	NEW
13. Remarks: EXPORT - THIS PART MEETS THE SPECIAL REQUIREMENTS OF FRENCH REPUBLIC  OL 4038						
14. Certifies the items identified above were manufactured in conformity to:			19. <input type="checkbox"/> 14 CFR 43.9 Return to Service <input type="checkbox"/> Other regulation specified in Block 13  Certified that unless otherwise specified in Block 13, the work identified in Block 12 and described in Block 13 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.			
15. Authorized Signature:		16. Approval/Authorization No.:  E	20. Authorized Signature:		21. Approval/Certificate No.:	
17. Name (Typed or Printed):  M		18. Date  Aug. 23, 2010	22. Name (Typed or Printed):		23. Date	
<b>User/Installer Responsibilities</b>						
<p>It is important to understand that the existence of this document alone does not automatically constitute authority to install the part/component/assembly.  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 parts/assemblies from the airworthiness authority of the country specified in Block 1.  Statements in block 14 and 19 do not constitute certification. In all cases, aircraft maintenance records must contain an certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.</p>						