# N318DN 1981 Citation I/SP

# Engine #2 PCE-77129 Overhaul & HSI Records

Aircraft S/N: 501-0184



Prepared by the worldwide aviation specialists at RidgeAire, Inc.

# ENGINE ( RVICE AND MAINTENANCE RECORD

			ENG. MODEL NO.		ENG. SERIAL NO.		ENG. #	E1 ENG. #2	CHECK					
2) A/C SERIAL NO.	A/C UN	IT NO.	VC REGISTRATION NO.	DATE (MoDay-Y	IDENTIFIER	TOTAL A/C HOUR	S TOTA	AL A/C LANDINGS	s TO	TAL ENGINE HOU	JRS	TOTAL E	ENGINE CYCLI	ES
3	TRANSACTION NO. TYPE	Г	TEM NAME	POSITION	OMPONENT CHANGES / INSPE	T NUMBER	MOD IN	ISTALLED AL NUMBER	REMOVAL REASON STATE	L- RT ( TBO ENTER IF CHANGE DESIRED )	HOURS	CYCLES	MATERIAL COSTS	MAN IUOH
	1			Physical Property of the Party										
DO NOT	2													
WRITE	3		Pratt & Whitney 1525 Midway Pa		rices, Inc.	但 Pi	alte	3 W h	itne	V				-
IN THIS	4		Bridgeport, WV	26330		All lines	nited Tech			800				
SPACE	5		Certificate Numb	er LM1R30	1K Description	Model/Ty	pe	Serial Nun	nber					
	6							DC E 771	120					
	7		PRATT & W Time Since	HITNEY	ENGINE, TURBOFAN Cycles Since	JT15D-1. Time Since		PC-E 771 Cycles Sin		-				
	8		New		New	Overhaul		Overhaul		_	_	<b>A</b> 00	101.50	
<b>4</b>		TYPE T	6964.	0	4901	-0	-	-	-0-		ноц	IRS TO	CLES TAL CYCLES SINCI	E NEW
Constitution of the second		2. INSPE	⊠ Overhaul	☐ Repair		1					UMBERS	TIME SINCE NE	- SERVICABLE	
(S)		THIS SPACE FO	Manual P/N	3017543 Re -1A-78 and	94 I/8 22	Crown Progr	ram "PLA (% (% (L	%/CL)	-1A Over	haul				
☐ FEDE	: RMED BY		and is approved f  No. <u>479270</u> PWV-3096 (MA	een overhaule or return to se 8 Y 98)	ed and inspected in accordance wit rvice. Pertinent details of the work Date <u>16 June, 2000</u>	h current regul r performed are Approved	ation of the F	Federal Aviat is agency und ESU	tion Administ der work orde Motor at Q. J. Coord	PWV	ey A d.	ircraf	BOO	OK F
☐ OTHE	FR (SPECIFY)		and the engine identified a	bove is presentl	y airworthy and approved for return to	service.								

DATE .

CEDTIEICATE NO

Darmanant Engine Decord

	)	· · · · · · · · · · · · · · · · · · ·		<b>)</b>	_ 1					
1. UNITED STATES	2.		FAA FORM 81:	30-3	3. SYS	. NO.				
		A	IRWORTHINESS AF	PROVAL TAG	4792708					
			rtment of Transporta Aviation Administra							
4. ORGANIZATION:	1525 MIDWAY	Y PARK RI		No. TW1D2017	5. W/O, CONTRACT OR INVOICE 4792708					
c	BRIDGEPORT			T			10/			
6. ITEM	7. DESCRIPT	TON	8. PART NO.	9. ELIGIBILITY*	10.	11. SERIAL/BATCH	12. STATUS/ WORK			
					QTY.	NUMBER				
ONE	ENGINE, TU	RBOFAN	3018700	JT15D-1A	ONE	PC-E 77129	OVERHAULED			
13. REMARKS: TTS	13. REMARKS: TTSN: 6964.0 TCSN: 4901 TTSO: -0- TCSO: -0-									
P/N 301754:	THE ENGINE IDENTIFIED HEREON WAS REPAIRED, INSPECTED AND OVERHAULED IN ACCORDANCE WITH JT15D-1A OVERHAUL MANUAL P/N 3017543 REV.15 AND OTHER APPROVED DOCUMENTS. PERTINENT DETAILS OF THE WORK PERFORMED ARE ON FILE AT THIS REPAIR STATION UNDER THE ABOVE WORK ORDER NUMBER.									
Limited life parts	must normal	lly be a	ccompanied by mainte	enance history including to	tal tim	e/total cycles/ti	me since			
14. New	Newly Overh	nauled		19. Return to Service in Accordance with FAR 43.9						
Certifies that the				Certifies that the work specified in block 13 (or						
identified above, block 13 was (were	except as ot ) manufactu	cherwise ced in ac	specified in ccordance with FAA	attached) above was carried out in accordance with						
approved design da	ta and airwo	orthines	regulation.	FAA airworthiness regulati work performed the part(s)		_	ne			
			d, the special ry have been met.	return to service.	15 (41	ic, approved for				
15. Signature	1	6. FAA A	uthorization No:	20. Authorized Signature:		21. Certificate	Number:			
		_		ESAMOR		LM1R	301K			
17. Name (type or	print): 1	8. Date:		22. Name (type of print):		23. Date:				
				E.L.WRIGHT Q.A. COORDINATOR		16-Jun	-00			

### USER/INSTALLER RESPONSIBILITIES

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 work in accordance with the national regulations of an Airworthiness Authority different that 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/components/assemblies from the Airworthiness Authority of the country specified in block 1. Statements in block 14 and 19 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. The FAA Form 8130-3 and JAA Form One are equivalent. Other countries such as Canada also have equivalent acceptable documents.

<sup>\*</sup>Optional installer must cross check eligibility with applicable technical data.

# PRATT & WHITNEY ENGINE SERVICES, INC. JT15D ENGINE TEST CERTIFICATE

WORK ORDER NUMBER

ENGINE MODEL

MAINTENANCE CATAGORY

4792708

JT15D-1A

**OVERHAUL** 

ENGINE SERIAL NUMBERS

PC-E 77129

TURBINE VANE CLASSES

2ND STAGE VANE: 39.50

CORRECTED PERFORMANCE

RATING: TAKEOFF

THRUST LB: 2200

N1/RTHO: 15290

N2/RTHO: 30945

SFC @ 2200 LBS. : .541

T5/THO °R (REF T5 °C): 1685°R ( 659°C)

DELTA PSD: 5.15

TRIM PLATE INFORMATION

DATA PLATE SPEED N1 %: 95.56

DATA PLATE SPEED N2 %: 94.46

T5 TRIM RESISTANCE OHMS: 21.2

NOZZLE CLASS: A

THIS ENGINE HAS BEEN TESTED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND REQUIREMENTS.

DATE

16 Jun. 2000

APPROVED INSPECTOR

E I WETCHT

E.L. WRIGHT, QA COORDINATOR

# PRATT & WHITNEY ENGINE SERVICES, INC. INSPECTION RECORD LIFE LIMITED PARTS LOG JT15D

DATE	engine serial number				CUSTOMER								
16 Jun. 2000	47927	'08	PC-E 77129				CESSNA - SMF						
REFERENCE:			ENGINE STATUS				SALES ORDER						
S/B 7002	REV 35			OVERH	AUL					70	77927		
ENGINE TTS	N 6964	.0	TCSN	4901		TTS	0	-0	)-	TC	so -0-		
							1	REMA	INING	}	MAX	LIFE	
PART NAME	P/N	s	/N	TSN	C	SN	TI	ME	CYCI	Œ	TIME	CYCLE	
COMP HUB 1	3018018	6C	748	6964.0	98	802	XX	ХХ	1769	98	XXXX	27500	
COMP HUB	N/A	XX	СХХ	xxxx	XX	XX	xx	ХХ	xxxx		xxxx	xxxx	
IMPELLER	3032070	2B706		2493.0	25	667	xx	ХХ	5833		xxxx	8400	
HIGH TURB	3023411	8C647		6964.0	49	01	xxxx		9099		xxxx	14000	
LP TURB 1	3022212	7C	013	6964.0	49	01	XX	xx	909	9	xxxx	14000	
LP TURB 2	3036113	7C	994	6964.0	49	01	XX	ХХ	909	9	xxxx	14000	
HT BLADES	3028601	XX	CXX	-0-	-	0-	350	0	XXX	x	3500	xxxx	
REMARKS:				<u> </u>			<u> </u>	J					
								•					
COMPLETED BY:	ELU/ E.L. WE	LOCHT		COORDINAT	OR			DAT	'E: 1	6 J	un. 200	0	

### PRATT & WHITNEY ENGINE SERVICES, INC.

### JT15D LOW COMPRESSOR BLADE HISTORY CARD

7337 Frial Number Record

Date:		Model:			s/n:		Reference to the second			
16 June, 2	000	JT15D-:	1A		PC-E 77129					
Work Order:					Insp	. Stamp:				
4'	792708									
T.S.N.:			C.S	.N.:	T.S.O.:			C.S.O:		
6964.0			4901		-0-			-0-		
Part Number	Serial	Number	Pa	art Number	Serial Number	Part 1	Number	Serial Number		
3019801	PV001	L1901		3019801	PV0011915					
3019801	10	70		3019801	PV0011916					
3019801	PV001	1903		3019801	PV0011917					
3019801	12	75	<del></del>	3019801	1324					
3019801	PV001	.1905		3019801	PV0011919					
3019801	PV001	.1906		3019801	PV0011920					
3019801	PV001	.1907		3019801	PV0011921					
3019801	PV001	.1908		3019801	1605					
3019801	PV001	1909		3019801	A0090					
3019801	PV001	1910		3019801	A9980		·			
3019801	PV001	1911		3019801	B9942					
3019801	PV001	1912		3019801	PV9706406					
3019801	PV001	1913		3019801	PV9706417					
3019801	PV001	1914	-	3038301	PV0002703					

### PRATT WHITNEY ENGINE SERVICES, INC.

### ENGINE MODIFICATION LOG

	WORK ORDER NUMBER	ENGINE MODEL	SERIAL NUMBER
<u>.</u>	4792708	JT15D-1A	PC-E 77129
٠.			

THE FOLLOWING SERVICE BULLETINS WERE FOUND PREVIOUSLY EMBODIED: 7027, 7075, 7093, 7101, 7103, 7106, 7110, 7111, 7112, 7114, 7115, 7116, 7117, 7119, 7121, 7123, 7124, 7125, 7128, 7129, 7130, 7132, 7133, 7134, 7136, 7137, 7138, 7139, 7143, 7146, 7147, 7149, 7150, 7152, 7153, 7161, 7163, 7168, 7182, 7183, 7191, 7193, 7197, 7199, 7203, 7206, 7212, 7215, 7220, 7226, 7229, 7238, 7252, 7253, 7269, 7288, 7292, 7294, 7306, 7307, 7309, 7310, 7317, 7322, 7432

THE FOLLOWING SERVICE BULLETINS WERE EMBODIED THIS VISIT: 7002, 7165, 7172, 7180, 7181, 7192, 7207, 7244, 7257, 7318, 7321, 7324, 7328, 7330, 7337, 7338, 7347, 7351, 7376, 7384, 7392, 7394, 7395, 7408, 7409, 7421, 7428, 7484, 7507, 7522, 7541, 7549

THE FOLLOWING AIRWORTHINESS DIRECTIVES WERE CHECKED FOR PREVIOUS COMPLIANCE OR COMPLIED WITH THIS VISIT: AD(CF-80-26R1), AD(CF-87-05R1), AD(CF-91-18), AD(CF-91-28), AD(CF-91-37R1) PART A&B, AD(87-10-01), AD(93-18-08)

I HEREBY CERTIFY THAT THE ABOVE MODIFICATIONS HAVE BEEN INCORPORATED IN THIS ENGINE PER THE MANUFACTURER'S RECOMMENDATIONS.

DATE	APPROVED INSPECTOR
16 Jun. 2000	E.L. WRIGHT, QA COORDINATOR

ORM PWV 3018 (REV. FEB 95)

## PRATT & WHITNEY ENGINE SERVICES, INC. LOG OF MAJOR PARTS REPLACED

		WORK ORDER NUMBE	ER	ENGINE MODEL			SERIAL NUMBER			
		4792708		JT15	D-1A			PC-E 77129		
	QTY	PART NUMBER	DE	SCRIPTION	QTY	PART	NUMBER	DESCRIPTION		
		NEW	PARTS		1	3119630	-01	RING		
<b>-</b>	. 5	3017244	PLAIN B	EARING	9	3119631-01		DEFLECTOR		
1	10	3020703	LT BLAD	E	1	3119762	-01	HOUSING		
	61	3022202	LT BLAD	E						
	71	3028601	HT BLAD	E			EXCHANGE	PARTS		
	1	3028789	STRAINE	R	1	3041661		STATOR		
	1	3029255	RING		12	3100713	-01	FUEL NOZZLE		
	3	3030835CL12	SHROUD	SEGMENT						
	12	3030835CL14	SHROUD	SEGMENT		USEI	SERVICE	ABLE PARTS		
	3	3040676	SPACER		3	3019801		LC BLADE		
	10	3041668-01	DUCT		1	3027285		PUMP ELEMENT		
	1	3100596-01	SEAL		1	3027289		PUMP ELEMENT		
	1	3100653-01	RING		1	3027294		PUMP ELEMENT		
1	1	3104389-01	TURBINE	BOLT	1	3029065		LARGE EXIT DUCT		
1	2	3107371-01	IGNITIO	N CABLE	1	3029070		SEAL		
	1	3108677-01	RETAINI	NG PLATE	1	3032070		IMPELLER		
L	1	3114741-01	INTERME	DIATE CASE	_ 1	3038301		LC BLADE		
	1	3117079-01	BRACKET		1	3109322	-01	SHAFT		
	1	3117271-01	NOZZLE	SEAL HOUSING	_ 1	3114605	-01	LC SHAFT		
	2	3117273-01	GROMMET	HOUSING						
	1	3117494-01	SEAL RI	NG						
	1	3118294-01	HT SHAF	Т						
	2	3119442-01	CHECK V	ALVE						
II.	1	3119579-01	BEARING							
	10	3119625-01	CLAMP							
lî										

THE ABOVE LIST OF MAJOR ENGINE PARTS REPLACED DURING THIS SHOP VISIT IS ONLY A SUMMARY AND IS LISTED AS AN AID TO IDENTIFICATION OF PARTS REPLACED. FOR A COMPLETE LIST OF PARTS REPLACED AND ACTUAL PART NUMBERS INSTALLED, PLEASE REFER TO THE P&WES INVOICE.

DATE	APPROVED INSPECTOR
16 June, 2000	E.L. WRIGHT, QA COORDINATOR

# PRATT & WHITNEY ENGINE SERVICES, INC. ENGINE CHECK LIST

JT15D SHIPPING CHECK LIST									
CUSTOMER: CESSNA –	SMF	SALES ORDER: 0V7927							
ENGINE MODEL	SERIAL NUMBER	BUILD SPEC	WORK ORDER						
JT15D-1A	PC- E 77129	503	4792708						

SERIALIZED ACCESSORIES	MFG. PART NUMBER	SERIAL NUMBER	REMARKS
FUEL CONTROL	3244763-2	A60171W N	TSO: -0-
FUEL PUMP	025493-402-05	1812	TSO: -0-
MOTIVE FLOW VALVE	2524995-1	A90389	TSO: -0-
FUEL TO OIL COOLER	UA530768-4	3066	TSO: -0-
FLOW DIVIDER	25607-2	1681	TSO: -0-
IGNITION EXCITER	10-381550-22	99409776	TSO: -0-
IGNITION EXCITER	N/A		
SCHEDULE MODULATOR	3244758-1	PWC00A060	TSO: -0-
BLEED VALVE ACTUATOR	N/A		
SOLENOID VALVE ANTI-ICE	KW15632	1198	TSO: -0-
ELECTRIC ENGINE CONTROL	N/A		
BLEED VALVE CONTROL	N/A		
FAULT MONITOR & RECORDER	N/A		
LOG BOOK	ТҮРЕ	COLOR	QUANTITY
	P&WC	YELLOW	TWO
CONTAINER TYPECARDBOACCONDITION SERVICEABLE	SERIAL NUMB	ER <u>N/A</u>	
	(PMV)	I B ARRE	
INSPECTOR: E.L. WRIGHT QAC	OORDINATOR	DATE: 16 June, 20	000

N/R = NOT RECEIVED

N/A = NOT APPLICABLE

S/L = SHIP LESS

Maintenance 1 saction Record MTR ID: 043693 Page 1 of 1

Citation Customer Service The Cessna Aircraft Company Post Office Box 7706 Wichita, KS 67277

Phone: 316-517-6291 / Fax: 316-517-8500

Airframe Entries

Eng. #1 Serial No. ✓ Eng. #2 Serial No. PCE-77129

This Maintenance Report is To Be Used Solely For (Check One)

APU Serial No. Freon Serial No.

### Aircraft Identification and Status A/C Serial # A/C Unit # A/C Registration # City ID Total A/C Hours Total A/C Landings Engine 1 Total Hrs Engine 2 Total Hrs Engine 1 Ttl Cycles Engine 2 Ttl Cycles Date APU Hrs APU Events Freon Hrs 501-0184 0575 N318DN Oct-30-2008 SAT 8288.4 5905 8501.5 8149.9 6460 5825

Component Changes, Inspections, Service Bulletins, or Airworthiness Directives Accomplished											
Item	Transaction No. Type	Item Name	Position	Part Number / Alternate Part Number	Mod Level	Part Serial	Removal	Installed Part Status	TSO Installed Part	Material Costs	Man Hours
43693001	1 1 E	ENGINE, JT15D-1A	E2**R 3018	8700	PC	E-77129		R			

Comments: INSTALLED JT15D-1A ENGINE S/N PCE-77129 REPAIRED BY PRATT & WHITNEY SERVICES, INC. FAA #LM1R301K WITH TTSN: 8149.9 TCSN: 5825, SERVICED WITH BP 2380 OIL AND PERFORMED REQUIRED ENGINE OPS & LEAK CHECKS.

Trans. Type: 1 - Component, 2 - Inspection, 3 - SB, 4 - AD, Misc.	Removal Reasons: W - Worn to Limits, S - Scheduled, U - Unscheduled, C - Convenience, N - Other(note in comments)	Installed Part Status: N - New, R - Repaired/Rebuilt, S - Serviceable, O - Overhaule

Repair Facility SAN ANTONIO CITATION SERVICE CENTER	Certified Repair Station Number CNQ5918C	Work Order No.	1-18357
Work Performed By SAN ANTONIO CITATION SERVICE CENTER	Certificate No. CNQ5918C		Date Oct-30-2008
I certify that the above stated maintenance and/or inspection was performed	in accordance with the current regulations of the		-
✓ Federal Aviation Administration	and		
the aircraft identified above is presently approved for return to service			
Work Inspected by PATRICK WRIGHT	Certificate No. CNQ5918C		Date Oct-30-2008
Pertinent details of this maintenance are on file at our facility under the above War	d/Service Order Number as applicable.		

Maintenance Log Section Page 8

CSNA-1023-W-R-2003-11-07



Cess	CITATION
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### Maintenance Transaction Record

MTR ID: 607655

Page 1 of 1

Citation Customer Service The Cessna Aircraft Company Post Office Box 7706 Wichita, KS 67277 Phone: 316-517-6291 / Fax: 316-517-8500

Airframe Eng. #1 Entries Serial No. This Maintenance Report is To Be Used Solely For (Check One) ✓ Eng. #2 Serial No. PCE-77129

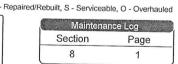
APU Serial No.

Freon Serial No.

	Transaction	103 103 House	Aug-25-2008 Cor	SAT	8248.3 anges, Inspections	5881 s, Service Bulletin	s, or Airworthines	8149.9 s Directives Accom	plished	5825			
Item 07659001	No. Type  1 1 ENGINE	Item Name E-JT15D-1A	Po	osition	Part Nun	nber / Alternate	Part Number	Mod Level	Part S	erial Remo	TSO Installed Part	Material Costs	Man Hours

Comments: Removed Part No: JT15D-1A Removed Serial No: PC-E77129 DUE TO ITT TEMP LIMITED AT POWER OF THE DAY. BOROSCOPED ENGINE FOUND DAMAGE TO HPT BLADES. DRAINED ALL FLUIDS AND CAPPED, ENG TAGGED WITH "NO OIL" TAG. CRATED ENGINE FOR SHIPMENT FOR EVALUATION. ENGINE REMOVED WITH TSN:8149.9

SAN ANTONIO CITATION SERVICE CENTER	Certified Repair Station Number	CNQ5918C	Work Order No.	estalled Part Status: N - Ne
Work Performed By SAN ANTONIO CITATION SERVICE CENTER	Ce	rtificate No. CNOFO400	-	
I certify that the above stated maintenance and/or inspection was performed in a	ccordance with the	current regulations of the		Date Aug-25-2008
Other (Specify)				
is NOT approved for return to service. Pertinent details of the work are on file at the	his agency	and		
Work Inspected by RICHARD GONZALES		differente No. CNOSO400		
ertinent details of this maintenance are on file at our facility under the above Work/Ser	Nice Order Number	race applicable		Date <u>Aug-25-2008</u>
Pertinent details of this maintenance are on file at our facility under the above Work/Ser	Cervice Order Numbe	r as applicable.		Date Aug-2



CSNA-1023-W-R-2003-11-07



		MODEL NO.	a dilangan mengang di marapatan pada bangan saga	BH BB	h some	e i managana ya marangan		(OHEO	(ONE)					
A/C Serial No.	A/C Unit No. A/C	C Registration No.	Date (MoDay-Yr.)	activities are not required to the control of the c		and Status Total A/C Hours	Total A/0	C Landings		Total Engine	Hours	То	otal Engine C	cycles
	ersaction Type	m Name	Position		ges Inspec Installed r Part Nu		hed Installed rial Numbe	Removal Reason	Install- ed Parl Status	(TBO Enter if Change Desired	Hours	Cycles	Material Costs	Man Age Hours Coo
Do Not 2 Write 3 In This 4 Space 5 6 7	DESCRIPTION OF VITHIS ENGINE HAS ENGINE HAS ENCORDANCE WITH DOCUMENTATION AN H.S.I. WAS ACCORDATED 08 AUG 2008	Road 330 LM1R301K  Description TNEY ENGINE Landings Sir  Repair  WORK ACCOMPLISI BEEN INSPECTED AND H P&WC OVERHAUL AND/OR ENGINEERIN DMPLISHED IN ACCO 3. Class 94.9 / AA	H.S.I. HED AND REFERIOR MANUAL P/N 3017 RD DOCUMENTATI RD ANCE WITH P8	A United Technology  A United Technology  Model/Type  JT15D-1  Time Since Overl  1185.9  ENCE DOCUMENT HIGH TURBINE B 7543, REV 26, DAT TION ACCEPTABL	A haul  NTATION BLADE DI FED 13 M LE TO TH NCE MAN	Serial Number PCE-771 Landings Since O 924 N: ISTRESS IN AY 2005, AND A IE ADMINISTRA	29  Overhaul  PPROVED FOR.		Ins		Hours Repaired 0 - Overh	ime Since New Or	les il Cycles Si O/H	
	approved for return to s details of the work perf	94.2 2200 20.3 epaired and inspected in a service. This engine has formed are on file at this a EMBER 26, 2008	(LBS) HP (Ohms) LP accordance with current been determined to be agency under sales or Signed:	P Rear RE5 P Front NIL ent regulations of the e airworthy with res	RF12  Federal A  pect to the	RF13  Aviation Administrative work performed.	Pertinent							
Federal Avia Ministry of T				o. urrent regulations of th	ne	Work Order No. Date		- 1	Of C	anada	gueuil,			ВООК РАС
Other (Speci		_ and the engine identified	d above is presently air	rworthy and approved		o service. ate		Pe	rman	ent Enai	ine Reco	rd		

HEED-THURS



Pratt & Whiteny Canada Corp.

1000, Marie-Victorine

Longueuil, Quebec, Canada, J4G 1A1

### Turbofan Engine Calibration Run Data Sheet

P&WC 9936 (1999-10)

Date	24-Oct-08	A/C Reg. No.	N318DN	Engine S/N.	PCE-77129	<b>Engine Position</b>	E2**R						
Engine TTSN.	8149.9	Wind Dir./Velo.	300@4	Press. Alt.	530	Engine Model	JT15D-1A						
OAT (Deg. C)	<b>6</b>	Theta	0.9688	Root Theta	0.9843	D	8.8066						
Max N1 for Ambient cond	ditions per A/C Flig	ht Manuals (N1 %):			96.1								
wax wi for Ambient con	ditions per A/C ring	iit Mariuais (NT 70).											
Observed		Sync. off / Bleed off/Anti-ice off											
Engine Parameter (A/C Indicator)	Normal Take-off	Take-off - 2%	Take-off - 4%	Take off - 6%	Take-off - 10%		Ground Idle						
N1 (%)	96.1	94.1	92.1	90.1	86.1	* *	32.4						
N2(%)	93.1	93.1	92	90	-89		49						
ITT (Deg. C)	640	620	610	580	550		380						
Fuel Flow (pph)	1190	1100	1050	990	880		180						
Oil Press (psia)	78	78	78	78	78		68						
Oil Temp. (deg. F)	69	73	78	78	78		78						
		Corrected Engine F	arameters Calculat	ion									
N1 (%)	97.6	95.6	93.6	91.5	87.5		32						
N2(%)	94.6	94.6	93.5	91.4	90.4		49						
T45 or T5 (Deg. C)	669	649	638	608	577		40						
	1	Run Down Time											
N1 : (seconds)	90		N2: (seconds)	60									



### Turbofan Engine Installation Calibration and Performance Check Curves,

Corrected N1 vs. N2 and N1 vs. T4.5

1000, Marie-Victorin Longueuil, Quebec Canada, J4G 1A1

Canada, J4G 1A1 P&WC 9935 (1999-10) 24-Oct-08 A/C Reg. No.: Engine S/N: **Engine Position:** 1185.9 Engine Model Engine Total Time since New: 8149.9 Engine Total time Since Ovhl: 900 850 800 T45 or T5 (Deg. N2 (%) 100 N1 (%) N1 (%) ☐ Final Cal. ▲ Initial Cal. — Max Limit — Final Cal. — Initial Cal. Final Cal. A Initial Cal. —Linear (Max Limit) —Linear (Final Cal.) —Linear (Initial Cal.)

Rev. 5, BB. Patel, Aug. 12, 2003

	ing National Aviation hority/Country:	2.	······································				-		3. Fo	rm Tracki	ng Number:	
	NITED STATES		AUTHORIZE FAA Form 81			CERTIF		ATE		15	4806	
4. Organiz	zation Name and Address:		TT & WHITNEY ENGINE SER		THE TENED TO	I I I I I I I I I I I I I I I I I I I					Contract/Invoice	
			MIDWAY PARK RD GEPORT, WV 26330 CE	RTIFICATE NO:	D: LM1R301K					Number: 154806		
6. Item:	7. Description:		8. Part Number:	9. Eligibi	ility: *	10. Quantity:	11.	Serial/Batch Nun	ıber:	12.	Status/Work:	
ONE	ENGINE, TURBOF JT15D-1A	AN	3018700	N/A		ONE		PCE-77129		RI	EPAIRED	
13. Rem					CSO: 924							
			ECTED AND REPAIRED 1									
			543, REV 26, DATED 13 M BLE TO THE ADMINISTE		J APPROV	ED DOCUME.	NIAI	ION AND/OR	ENG	INEERI	NG	
			O IN ACCORDANCE WIT		INTENAN	CE MANUAL	P/N 30	17542, REV 3	8, DA	TED 08	AUG 2008.	
			MITED PARTS LOG, STATUS OF . ATTACHED TO THE LOGBOOK.									
	LES ORDER NUMBER.	1 AIGE	ATTACHED TO THE LOGDOOK.		AILS OF THE	······································	CD AIG		ILLI A.		· ONDER THE	
14. Certifi	es the items identified abo	e wer	e manufactured in conformity to:		19. 🛛 14 (	CFR 43.9 Return to	o Servic	e 🗆 Oth	er regi	ılation spec	cified in Block 13	
						s that unless other			_	=		
	Approved design data and Non-approved design data		a condition for safe operation.		and des	cribed in Block 13	was acc	omplished in acco	rdance	with Title	14, Code of	
7.4	von-approved ucsign data	specii	icu-iii-biock 15.		1	Regulations, part to service.	45 and	n respect to that	work, t	ne items ar	e approved for	
15. Author	ized Signature:		I6. Approval/Au	thorization No.:	20. Authori:	zed Signature:			2	1. Approva	al/Certificate No.:	
					1/					T.M	I1R301K	
					Lei	PD	_					
17. Name (	Typed or Printed):		18. Date (m/d/y):		22. Name (T	yped or Printed):			2	3. Date (n	n/d/y):	
					KEVIN P.	DYER, AUTHO	RIZED	INSPECTOR		SEPTEM	1BER 26, 2008	
				User/Installer	Responsibili	ties						
It is import	ant to understand that the	existe	nce of this document alone does n	iot automatically (	constitute auth	ority to install the	part/con	nponent/assembly		-		
			accordance with the national regu ensures that his/her airworthines									
			itute installation certification. In fore the aircraft may be flown.	all cases, aircraft	maintenance r	ecords must conta	in an in:	stallation certifica	tion iss	ued in acco	ordance with the	

NSN: 0052-00-012-9005

# PRATT & WHITNEY ENGINE SERVICES, INC. JT15D LIFE LIMITED PARTS LOG INSPECTION RECORD

OVERHAUL	⊠ REPAIR ⊠	H.S.I.										
SALES ORDER	SERIAL NUMBER	ENGINE MOD	EL			CUS	STOMER					
154806	PCE-77129	JT15D-1A			Cessna	Citati	on Service Ce	nter				
C				1	1							
REFERENCE: SB	7002 REV 40	TTS	N	TCSN		TTSO		TCSO				
		8149.	9	58	325		1185.9	924				
PART NAME	P/N	S/N		rsn	CSN		REMAINING CYCLES	MAXIMUM CYCLES				
LOW COMPRESSOR H	ub N/D											
CENTRIFUGAL IMPELLER	3032070			3678.9 3491		4909		8400				
I TURBINE ROTO	R 3023411	A002ARP6			-0-		14000	14000				
LOW TURBINE ROTOL DISK (2 <sup>ND</sup> )	TURBINE ROTOR		81	149.9	5825		8175	14000				
LOW TURBINE ROTOL DISK (3 <sup>RD</sup> )	R 3036113	7C994	81	149.9	5825		8175	14000				
HIGH TURBINE BLAD	ES 3070381-01		_	0.0-		.		NO LIFE LIMIT				

**REMARKS:** 

KEVIN P! DYER, AUTHORIZED INSPECTOR

DATE: SEPTEMBER 26, 2008

N/D: NOT DISASSEMBLED N/A: NOT APPLICABLE

NOTE: Cycle life remaining is based I/A/W Service Bulletin 7002 as referenced above.

Service Centre - PL81 - WV FAA ARS, No. LM1R301K

Pratt & Whitney Engine Service Inc. 1525 Midway Park Road Bridgeport, West Virginia United States, 26330 FAA ARS, No. LM1R301K

Status of Airworthiness Directives for This Shop Visit

Sales Order: 154806 Customer: Cessna Citation Service Center

Description: NON-MODULAR MODULE Print Date: 26-SEP-2008
Model: JT15D-1A Page: 001 of 001

Serial Number: 77129

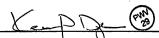
Document No. Revision No. Status

Description

Embodied AWD CF-2003-17 000 00 BORESCOPE INSPECTION OF IMPELLER Embodied AWD CF-80-26 000 01 BEVEL GEAR FATIGUE FAILURE AWD CF-87-05 000 01 Embodied FAN BLADE ROOT 00 Embodied AWD CF-91-18 002 HIGH PRESSURE TUR BLADE BOROSCOPE INSP. Embodied AWD CF-91-28 000 00 HIGH PRESSURE TUR BLADES Embodied 01 AWD CF-91-37 001 EMERGENCY FUEL SHUTOFF LINKAGE. PART A Embodied 01 AWD CF-91-37 002 EMERGENCY FUEL SHUTOFF LINKAGE. PART B AWD CF-91-37 003 01 Embodied EMERGENCY FUEL SHUTOFF LINKAGE. PART C FAA 2004-04-09 000 00 Embodied IMPELLER BORESCOPE INSPECTION FAA 87-10-01 000 Embodied 00 FAN BLADE MACHINING STRIATIONS FAA 93-18-08 000 00 Embodied HIGH PRESSURE TURBINE ASSEMBLY

I hereby certify that the above airworthiness directives with status "EMBODIED" have been incorporated or found embodied in this engine as per the jufacturer's recommendations.

Authorized Inspector:



Service Centre - PL81 - WV FAA ARS, No. LM1R301K

Pratt & Whitney Engine Service Inc. 1525 Midway Park Road Bridgeport, West Virginia United States, 26330 FAA ARS, No. LM1R301K

List of Service Bulletins Incorporated This Visit

Sales Order: 154806 Customer: Cessna Citation Service Center

Module Name: NON-MODULAR MODULE Print Date: 26-SEP-2008

Model: JT15D-1A Page: 001 of 001

Serial Number: 77129

Document No.	Revision #	Class	Description
SB 7321 000	02	6	2ND STAGE TURB. STATOR - REPL. OF
SB 7426 000	02	8	LT STATOR INTRO./MODIF. OF
SB 7531 000	01	7	T6 IMMERSION THERMOCOUPLE
SB 7604 000	02	4	NEW HIGH TURBINE BLADES - INTRODUCTION O

I hereby certify that the above modifications have been incorporated in this jine as per the manufacturer's recommendations.

Authorized Inspector:



Pratt & Whitney Engine Services, Inc 1525 Midway Park Road Bridgeport, West Virginia 26330 USA Phone: 304-842-5421 Fax : 304-842-4933

Page 1

Date 2008.09.26

# l iste des pièces remplacées st of Parts Replaced

Dossier qualité - Quality Record

P&WC JR3\_6934\_E [6934] (2004-10)

Nº de série	Module	Modèle	Bulletin de vente	Client			
Serial No.		Model	Sales Order No.	Customer			
77129	NM	JT15D-1A	154806	Cessna Citation Service Center			

№ de la pièce Part No.	Designation de la pièce Part Description	Qté Qty	Non Fact. Not Chrg.	Sub. S. Flag
EXCHANGE				
3019390	SPACER-IMPELLER CLEARANCE	1		
3021156	ADAPTER ASSY-FUEL MANIFOLD	11		
3021157	ADAPTER ASSY-FUEL MANIFOLD INLET	1		
3031463	DUCT-COMB CHMB EXIT,SMALL,ASYO	1		
3039063	STATOR	1		
3041219	LINER-COMBUSTION CHAMBER,ASSY OF	1		
NEW				
3013832	BOLT-MACH,.250-28UNJFX.700,SLAB	1		
<sub>/</sub> 16993	COVER-PLAIN,4 HOLE	1		
3019012	PIN-GRVD,HDLS,.374X5.900	2		
3019360	PIN-SUPPORT COMB.CHAMBER LINER	2		
3020703	BLADE-Turbine, 3rd stage, low pressure	25		
3022202	BLADE-LOW TURBINE ROTOR	61		
3023411	DISC-HIGH TURBINE ROTOR	1		
3024315	COVER-PLAIN,3.400 BOLT CIR,4 HOLES	2		
3029070	SEAL-AIR,NO.3 1/2 BEARING, REAR	1		
3030835CL10	SHROUD SEGMENT-HIGH TURBINE ROTOR	7		
3030835CL12	SHROUD SEGMENT-HIGH TURBINE ROTOR	8		
3032650	BEARING (IC) - #3 1/2	1		
3041592CL3900	TURBINE STATOR,LOW ASYO.	1		
3041661	TURBINE STATOR-HIGH,ASSY OF	1		
3070381-01	BLADE-HIGH TURBINE ROTOR	71		
3111843-01	FILTER ELEMENT - OIL	1		
3117494-01	SEAL RING METAL	1		
3118727-01	NUT-PLAIN ROUND	1		
^119093-01	WIRING HARNESS-T6 THERMOCOUPLE	1		
3120096-01	THERMOCOUPLE-IMMERSION T6	1		
3120096-01	THERMOCOUPLE-IMMERSION T6	4		
AK-1A1STVANE	KIT - 1ST STAGE VANE	1		



Pratt & Whitney Engine Services, Inc 1525 Midway Park Road Bridgeport, West Virginia 26330 USA Phone: 304-842-5421 Fax: 304-842-4933

### Page 2

# Liste des pièces remplacées \_st of Parts Replaced

Dossier qualité - Quality Record

P&WC JR3\_6934\_E [6934] (2004-10)

PK576

ST3387-01

Date 2008.09.26

Nº de série Module Modèle Serial No. Module Modèle				Bulletin de vente Sales Order No.	Client Customer							
77129	· NM	JT15D-1A		154806	Cessna Citation	on Service Center						
Nº de	e la pièce art No.			Designation de la p Part Description	Qté Qty	Non Fact. Not Chrg.	Sub. S. Flag					
AK-1ABRGFS			KIT	- FANSHAFT		1						
AK-1ACCLINER		'	KIT	- CC LINER		1						
AK-1ACHVALVE			KIT	- CHECK VALVE		1						
AK-1AEXT1			KIT	- EXT1 (BYPASS DUCT)		1						
AK-1AEXT2			KIT	- EXT2		1						
AK-1AEXT3			KIT	- EXT3		1						
AK-1AGG1			KIT	- GAS GEN 1		1						
AK-1AGG2			KIT	- GAS GEN 2	1							
AK-1AHSI1			KIT	- HOT SECTION 1 (#4 BRG	AREA)	1						
AK-1AHSI2			KIT	- HOT SECTION 2		1						
-1AHTROTOR			KIT	- HTROTOR ASSY		1						
AK-1ALTROTOR			KIT	- LTROTOR ASSY		1						
AK-1AMAINENG1			KIT	- MAIN ENG 1	1							
AK-1AMAINENG2			KIT	- MAIN ENG 2	1							
AK-1APKG1			KIT	- PACKING 1	1		į					
AK-1APKG2			KIT	- PACKING 2		1						
AK-1APKG3			KIT	- PACKING 3		1						
AK-1ASPK			KIT	- SHIPPING		1						
MS9389-82			PIN	I-STRAIGHT,HDLS,.1875 X.	500	1						
PK3002			EN	VELOPE-ENGINE PROTECT	1							
PK423			DE	SSICANT-8 UNIT,BAGGED	12							

INDICATOR-HUMIDITY (SCD)

COVER-PLAIN,5.000 BOLT CIRCLE,4

J 2008-09-26 10:35:50 R3 2008.09.26 10:35:37 PR1 400 PW41603 /opt/uniq/queue/tmp/plt81am0926103549B

Fin du document End-of-document

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# PRATT & WHITNEY ENGINE SERVICES, INC. JT15D ACCESSORY CHECK LIST

CUSTOMER	SALES ORDER	SERIAL NUMBER	ENGINE MODEL
Cessna Citation Service Center	154806	PCE-77129	JT15D-1A

SERIALIZED ACCESSORIES	MFG. NUM	PART BER	SERIAL NUMBE	R	REMARKS			
FUEL CONTROL/ HMU	32447	63-2	A60171					
FUEL PUMP	025493-	402-05	1812					
MOTIVE FLOW VALVE	N/	'D						
FUEL TO OIL COOLER	UA530	768-4	3838					
FUEL SURGE ACCUMULATOR	N/	'A						
FLOW DIVIDER	2560	7-2	1681					
IGNITION EXCITER	N,	/L						
IGNITION EXCITER	N/	'A						
SCHEDULE MODULATOR	N,	/L						
BLEED VALVE ACTUATOR	N,	/A						
SOLENOID VALVE ANTI-ICE	KW1	5632	3340					
BLEED VALVE CONTROL	N,	/A						
ELECTRIC ENGINE CONTROL	N.	/A						
FAULT MONITOR & RECORDER	N.	/A						
ROSEMONT SENSOR	N	/A						
OIL PUMP ASSY	301′	7774	PWC9107946					
OIL LEVEL INDICATOR	N	/A						
REMOTE OIL LEVEL INDICATOR	N	/A						
N1 SPEED SENSOR	N	/A						
N2 SPEED SENSORS	N	/A						
ELECTRICAL WIRING HARNESS	N	/A						
LOGBOOK: CANADIAN		COLOR:	YELLOW	QUANTITY: TWO				
CONTAINER TYPE: CARDBOARD	)	SERIAL NUMBER: N/A CONDITION: SERV						

KEVIN P. DYER, AUTHORIZED INSPECTOR

DATE: SEPTEMBER 26, 2008

N/R = NOT RECEIVED

N/A = NOT APPLICABLE

S/L = SHIP LESS

TSI = TIME SINCE INSPECTED

# PRATT & WHITNEY ENGINE SERVICES, INC. JT15D ENGINE TEST CERTIFICATE

SALES ORDER	ENGINE MODEL			MAINTENANCE CATEGORY							
154806		JT15D-1	A	REPAIR							
ENGINE SERIAL NUMBER											
PCE-77129											
	TURBINE VANE CLASS										
2ND STAG	E VANE:	39.01									
CC	RRECTE	D PERF	ORMANCE								
	RATING:	TAKEO	FF								
THR	UST LB:	2200									
N	1/RTHO:	15190									
N	2/RTHO:	30852									
SFC @ 22	200 LBS:	0.537									
T5/THO °R (REI	T5 °C):	1687°R	(655°C)								
TI	TRIM PLATE INFORMATION										
DATA PLATE SPEE	ED N1 %:	94.9									
DATA PLATE SPEE	ED N2 %:	94.2									
T5 TRIM RESISTANC	E OHMS:	20.3									
NOZZLE	CLASS:	AA	<u> </u>								
	TRI	M WEIG	HT								
HT FROI	NT: F	E5	FF12	FF13							
HT RE.	AR: R	E5	RF12	RF13							
FAN FROI	NT: N	IL									
THIS ENGINE HAS BEEN TESTED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND REQUIREMENTS.											
DATE			APPR	ROVED INSPECTOR							
SEPTEMBER 26, 2008		KE	VÎN P. DYE	 R, AUTHORIZED INSPECTOR							

### cessna

Citation Customer Service

### Maintenance Transaction Record

MTR ID: 619019

Page 1 of 1

This Maintenance Report is To Be Used Solely For (Check One) The Cessna Aircraft Company ✓ Airframe Eng. #1 Eng. #2 APU Freon Post Office Box 7706 Entries Serial No Serial No. Serial No. Serial No. Wichita, KS 67277 Phone: 316-517-6291 / Fax: 316-517-8500

A/C Ser	ial#	A/C Unit #	A/C Registration #	Date	City ID	Total A/C Hours	Total A/C Landings	Engine 1 Total Hrs	Engine 2 Total Hrs	Engine 1 Ttl Cycles	Engine 2 Ttl Cycle	s Al	PU Hrs	APU Eve	nts Freo	n Hrs
501-01	84	0575	N318DN	Sep-16-2008	SAT	8248	5881	8460	8023.7	6436	7749					
				Comp	onent Ch	anges, Inspections	s, Service Bulletin:	s, or Airworthiness	s Directives Accom	plished						
Item		saction Type	Item Name	Posi	tion	Part Nun	nber / Alternate	Part Number	Mod Level	Part S			Installed Part Status	TSO Installed Part	Material Costs	Man Hours
710001	1 1 ENGINE E2**R JT15D-1B / 3018700									PCE-76655		U	S			
	Comments: Removed Part No: JT15D-1A Removed Serial No: 77129 Due To ITT Temp Limited At Power Of The Day. Installed Inspected Unit From Dallas Airmotive FAA#QT2R121L As Rental Engine With TTSN:8023.7 TCSN:7749 I.A.W. 500 MM Ch. 71-00-00. Serviced With 2380 Engine Oil. Ops Check/Leak Check Good.													Engine		
793006	2	1 SW-LO	W OIL PRESSURE		L 110	03P89-1 / 991	2178-2			2130		U	N			
	Comments: Removed Part No: 8130059 Removed Serial No: 569 Due To Broken Wire. Installed New Unit I.A.W. 500 MM Ch. 79-30-02. Ops Check Good.															
732002	3	1 ENGIN	E SYNC CONTROL		213	3723				1290836		U	0	00		
	DED CESON MM															

Comments: Removed failed Part No: 213723 Removed failed Serial No: 17310J. Installed a overhauled unit by Ontic Engineering Inc. FAA # OE6R225J. Installed unit ops check good PER CE500 M.M. CH. 76-11-00.

Installed Part Status: N - New, R - Repaired/Rebuilt, S - Serviceable, O - Overhauled Trans. Type: 1 - Component, 2 - Inspection, 3 - SB, 4 - AD, - - Misc. Removal Reasons: W - Worn to Limits, S - Scheduled, U - Unscheduled, C - Convenience, N - Other(note in comments) Work Repair Certified Repair Order No. 1-18024 Facility San Antonio Citation Service Center Station Number CRS# CNQ5918C Date Sep-16-2008 Work Performed By San Antonio Citation Service Center Certificate No. CNQ5918C I certify that the above stated maintenance and/or inspection was performed in accordance with the current regulations of the Federal Aviation Administration Other (Specify)

CSNA-1023-W-R-2003-11-07

Maintenance Log

Page

COLOR DE LA MANTENANCIA RESIDENTA SANTINE COLOR DE LA CAR

Section

the aircraft identified above is presently approved for return to service

Work Inspected by Robert W. Westphal

Data Sa Certificate No. CNQ5918C

Date Sep-16-2008

Rertinent details of this maintenance are on file at our facility under the above Work/Service Order Number as applicable.