



PT. SMART CAKRAWALA AVIATION

WORK ORDER

Form: SCA/MTC/030

Subject : 200 Hours & Add. Task Inspection	No.	WO/070-SNS/X/2023
	Date	16 Oct 2023
	A/C Reg.	PK-SNS C208B-2341
Reference : Maintenance Program C208/208B Issued 01 Rev. 01	Prepared By	TS
	Checked By	CI
	Approved By	TM
To : Engineer In Charge		
Description : 1. Perform 200 Hours and Additional Task Inspection 2. Make an entry in Maintenance Log. 3. Return the Completed Work Order and Form to PPC. #If any finding, please close the routine card, and transferred to inspection card.		
Additional Work :		
Compliance Statement CARRIED OUT	Sign & Date Company Lic. No.: 23/10/2023 SCA.36 (Engineer In Charge)	Signature (Technical Manager)

AIRCRAFT CHECK WORK SUMMARY
(Form: SCA/MTC/051)

DATE OF ISSUED		JO/WO #	TYPE OF MAINTENANCE	DATE OF ACCOMPLISHED	
16 Oct 2023		WON70-SNS/X/2023	200 Hours&Add.Task	23-Oct-2023	
A/C Type		Mfg. Serial Number		A/C Registration	
C208B		C208B-2341		PK-SNS	
AIRCRAFT DATA					
Subject	Pos #	Serial Number (SN)		TTSN/TCSN	
Engine	#1	PCE-PC1308		888-28 / 1000	
	#2	-			
Propeller/Rotor	#1	081043		1437:08	
	#2	-			
Landing Gear	NLG			7386-54 / 8383	
	LH MLG			7386-54 / 8383	
	RH MLG			7386-54 / 8383	
PACKAGE COVERED					
No	Subject		Qty	Remark	
1	Non-Routine Card		-		
2	Inspection Card		1	✓	
3	Work Order		1	✓	
4	Summary Inspection List		1	✓	
5	Material and Tool List		1	✓	
6	Escalation form		-		
7	CRS (SML / Unscheduled Maintenance)		1	✓	
INSPECTION CARD (IC) LIST (Finding during maintenance)					
No	Taskcard Ref	Subject	Status		Name/ Sign & Stamp
			Open	Close	
IC-001	0121001	RH BRAKE LINING ON PRESSURE PLATE FOUND WORN OUT		✓	CEP/NANA 
IC-002					
IC-003					

Prepared by :
Technical Support

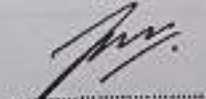
Checked by :
Chief Maintenance

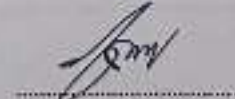
Verified by :
Chief Inspector

Approved by :
Technical Manager


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		INSPECTION CARD (Form: SCA/MTC/048)		TECHNICAL DEPARTMENT	
---	--	---	--	-------------------------	--

1. CARD #	2. JO/WD #	3. ORIGINATOR	4. CARD REF	5. DATE	
IC-001	W01030-SWS/4/2023		D121001	22-10-2023	
8. A/C REG/MSN	7. A/C TYPE	8. TRADE	12. VENDOR ORDER #		
PK-SWS/2083234	C-208 B				
9. ZONE	10. STA	11. MTC TYPE			
04 MLC					

13. DESCRIPTION/DEFECT-IF FINDING OF CPOI INSPECTION, PLEASE COMPLETE SET. 20	14 PPC/ENG	15 DATE
RA BRAKE LINING ON PRESSURE PLATE FOUND WORN OUT.		22/10-2023

16. CORRECTIVE ACTION	17 MECH	18 ENG. LIC	19 DATE
REPLACED BRAKE LINING ON PRESSURE PLATE WITH NEW PARTS. Performed at A/C TT: 3386:54..... A/C TC/LDG: 8383.....			22/10-2023

20. CORROSION INFORMATION			
LOCATION	CAUSE OF DAMAGE		
	☐ Environment ☐ Internal Leakage ☐ Chemical Spill ☐ LAV/Galley Spill ☐ Blocked Drain ☐ Wet Insulation Blanket ☐ Other		
CORROSION ☐ Isolated ☐ Widespread CORROSION LVL ☐ 1 ☐ 2 ☐ 3 PROPOSED ACTION ☐ Doublers ☐ Others			

21. If the defect is RII, Please Sign this card finally by RII Inspector	INSP	DATE
NOTICE OF INSPECTOR		

22. PARTS REQUIRED						
PART DESCRIPTION	PART NO	QTY	SERIAL NO		STATUS	
			ON	OFF	CLOSE	OPEN
BRAKE LINING		4	NSN	NSN	✓	

23. TOOLS REQUIRED			
DESCRIPTION	PART NO. / MODEL	NEXT CALIBRATION DATE	STATUS
TORQUE WRENCH		NOV 2023	SERVICEABLE
GENERAL TOOLS	NPV	O/C	SERVICEABLE



SUMMARY INSPECTION ITEMS
(Form: SCA/MTC/050)

WD Ref: WO/070-SNS/X/2023

NO.	TASK CARD NO.	DESCRIPTION	DATE	EST MHR	NAME	STAMP
1	APPENDIX B07	PT6A-114A ENGINE GROUND RUN	23/ 10-2023		CEP NANA	
2	APPENDIX C05	200 HRS/12 MTHS INSPECTION	22/ 10-2023		CEP NANA	
3	APPENDIX D01	PT6A-114A 100 HRS/MINOR INSPECTION	23/ 10-2023		CEP NANA	
4	EO-018	100 HOURS BORESCOPE INSPECTION AFTER DEFECT FOUND	22/ 10-2023		CEP NANA	
5	SCA/MTC/023	EMERGENCY EQUIPMENT CHECKLIST	23/ 10-2023		CEP NANA	

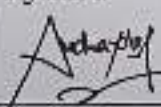
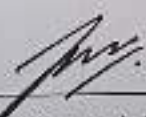
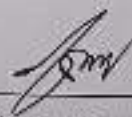
	TECHNICAL SUPPORT TECHNICAL DEPARTMENT ENGINEERING ORDER		016/EO/TEK-TS/X/2023
			Rev. No ORIGINAL
			Rev. Date 3/10/2023

ENGINEERING ORDER

016/EO/TEK-TS/X/2023

100HRS BORESCOPE INSPECTION AFTER DEFECT FOUND ON PK-SNS
ENGINE PT6A-114A

PT. SMART CAKRAWALA AVIATION

Prepared	Checked	Approved
Technical Support	Chief Inspector	Technical Manager
Signature: 	Signature: 	Signature: 
Name: Dwi Mahanani	Name: Yanuar A. Fatah	Name: Istiono
Date: 3 Oct 2023	Date: 3 Oct 2023	Date: 3 Oct 2023

	TECHNICAL SUPPORT TECHNICAL DEPARTMENT ENGINEERING ORDER	016/EO/TEK-TS/X/2023	
		Rev. No	ORIGINAL
		Rev. Date	3/10/2023

SMART AVIATION ENGINEERING ORDER			
Aircraft Reg.: PK-SNS (2088-2341)	Make/Model: C208B	No. E: 016/EO/TEK-TS/X/2023	Rev. No.: ORIGINAL
Total Flight Hours:	Total Flight Cycle:	Date Issued: October 3, 2023	
Task Description :		Data Reference :	
100 Hours Borescope Inspection		- EMM PT6A-114/114A CURRENT REVISION	
Aircraft Type :			
C208B Grand Caravan			



TECHNICAL SUPPORT
TECHNICAL DEPARTMENT
ENGINEERING ORDER

016/EO/TEK-TS/X/2023

Rev. No

ORIGINAL

Rev. Date

3/10/2023

SMART AVIATION
ENGINEERING ORDER

1. Description.

This EO is issued to perform engine borescope every 100 Hours in PK-SNS with engine installed serial number PCE-PC1306, regarding defect found on 400 Hours Interval borescope inspection by total hours on sequence 800 Hours of engine total time.

2. Aircraft Effectivity.

REGISTRATION	SERIAL NUMBER
PK-SNS PT6A-114A	208B 2341 PCE-PC1306

3. Compliance

Do the borescope inspection on 100 Hrs interval after finding defect on Power Turbine Stator section that is installed in PK-SNS with ESN PCE-PC1306. The inspection is for examining the defect found that exists on second sequence of borescope inspection (400 Hrs Interval) by 800 Hours engine total time.

Focus of the inspection in power turbine area to identify the crack must be not expanded and/or extended. The inspection should be strictly also performed to ensure there is no metal or particle debris found on engine related area.

4. Distribution.

TECHNICAL MANAGER	[V]	MATERIAL SUPPORT	[V]
SAFETY & QUALITY MANAGER	[V]	TECHNICAL SUPPORT	[V]
CHIEF INSPECTOR	[V]	FILE	[V]

5. Manhours

5.0 man hours

6. Material.

NIL

7. Special Tool Required.

Borescope Tool

8. Publication Affected.

None.



TECHNICAL SUPPORT
TECHNICAL DEPARTMENT
ENGINEERING ORDER

016/EO/TEK-TS/X/2023

Rev. No

ORIGINAL

Rev. Date

3/10/2023

SMART AVIATION
ENGINEERING ORDER

9. Accomplishment Instructions.

Description	Eng.	R/I	Remarks
(1) Do the borescope inspection* NOTE: Inspection of Power Turbine Stator 72-00-00 CAUTION: Inspection of the PT stator is recommended when upstream component damage does not explain performance loss or when secondary damage is suspected. Damage on the vanes may produce an increase in flow area which will increase Ng and T5 Cracks on the inner and outer rings and vanes are repairable. Keeping the engine in service, the defects will progress until the stator becomes unrepairable. This will increase the cost of the subsequent HSI. Inspect the damaged area within 100 hours. Subsequent inspections must not exceed 400 hours. An HSI is recommended when the defects are still repairable. If the defects are not repairable, replace PT stator at the next power section repair. Providing Ng and T5 are within limits, there is no need for power section repair and PT stator change, regardless of the amount of damage, unless structural integrity of the vanes are affected (e.g. wide open cracks, excessive foreign object damage (FOD) and missing or burnt material are unacceptable). *Attach the Borescope Result on Borescope Inspection Form			

*** END OF THE TASK ***

RETURN TO SERVICE

I hereby certify that the aircraft has been modified in accordance with the Aircraft Maintenance Manual C208/208B Grand Caravan and EMM P16A-114/114A with applicable Approved Data and met the requirements as set forth with the Indonesia Civil Aviation Safety Regulation and it is approved for return to service.

Name

: COP NANA P

Place & Date

: 23-OCTOBER-2023

Sign & Stamp

	TECHNICAL SUPPORT TECHNICAL DEPARTMENT ENGINEERING ORDER		016/EQ/TEK-TS/X/2023	
			Rev. No	ORIGINAL
			Rev. Date	3/10/2023

Additional Remark:

FOUND FOUR SMALL CRACK ON THREE TRAILING EDGES VANE RING.
 QUOTE MM LIMITATION AND REFERENCES:
 PTGA-114 EMM 72-SO-03 PARA. 6.8

Other Attachment:



MAINTENANCE PROGRAM CESSNA 208/208B

Appendix B07 – PT6A-114A Engine Run Performance Sheet

Reg. Mark

: PK-SNS

WO/FML No. : WO/070-SNS/4/2023

PRE – INSPECTION	
Location	
Date	
Cycle	
Filled Barometric	
OAT	
Altitude	

POST – INSPECTION	
Location	MALINA
Date	23-oct-2023
Cycle	-
Filled Barometric	1011
OAT	40
Altitude	20 ft

PRE – INSPECTION		
	Target	Actual
Tq		
Np		
ITT	°C	°C
Ng	%	%
Wf		
Oil Press		°C
Oil Temp		°C
Start Temp		°C

POST – INSPECTION		
	Target	Actual
Tq	1865	1865
Np	1900	1890
ITT	805 °C	285 °C
Ng	100.7 %	99.3 %
Wf	448	484
Oil Press		90 °C
Oil Temp		91 °C
Start Temp		71 °C

Engine Run Up Checks

Inertial ☒ EPL ☒ OVG ☒ Stby Alt ☒ BOV ☒ Brake ☒ Random ☒

NOTE:

1. Brake system at Torque 1500 ft-lbs.
2. Inertial Separator at Torque 400 ft-lbs.
3. EPL check can't exceed 4% Ng per second.
4. Standby Alt at 80% Ng.
5. Low idle at 52.5 – 53.5% 40Amps.
6. High idle at 64 – 66% Ng 40Amps.

Engine Performance Target Table Cessna C208

OAT (°C)	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Tq (ft-lbs)	1865	1865	1865	1865	1865	1865	1865	1865	1865	1865	1865	1865	1865	1865	1865
Np	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
ITT (°C)	772	775	778	780	785	790	793	795	797	800	800	800	802	805	810
Ng (%)	98.5	98.5	99	99	99.1	99.2	99.4	99.5	99.5	100	100	100.2	100.5	100.7	100.9
WF (PPH)	450	450	450	450	450	450	450	450	450	450	450	450	448	448	446

Note:

1. Make sure that inertial separator in normal condition, no bleed air extracted from the engine and air condition OFF.
2. This table only applies to altitude 0-500 feet MSL. For higher altitude, refer to EMM 72-00-00.
3. Max fuel flow is 465 lb/hr fuel flow is not more than 15 lbs/hr higher than the value shown in table.
4. If parameters are outside the target performance table to EMM chapter 71-00-00.

REMARKS:

ENGINE PARAMETER WITHIN
LIMIT.

PERFORMED BY

Name	Sign & Stamp	Date	Location
Cop Nara P		23 oct 23	LNU



PT. SMART CAKRAWALA AVIATION

CERTIFICATE RETURN TO SERVICE
SCHEDULED MAINTENANCE INSPECTION
(CRS-SMI)

A/C TYPE : CESSNA 208B
A/C REG : PK-SNS
MSN : C208B-2341
TTSN : 7386:54
TCSN : 8383
DATE : 23-10-2023

TYPE OF INSPECTION : 200 HOURS & ADDITIONAL TASK INSPECTION
DUE AT : 7378:00 HOURS
REF : MAINTENANCE PROGRAM ISSUED 01 REV. 01
EXCEPTION

- NO EXCEPTION -

AUTHORIZED PERSON

I hereby certify that this aircraft has been maintained accordance with CASR and Maintenance Program.
Aircraft safe and airworthy for flight

NAME	CAT	AMEL/OTR NO	SIGN&STAMP	DATE
CEP NANA P	AIRFRAME & POWER PLANT	1514 / SCA-36		23 /
	EIRA			10-2023

THE NEXT DUE TYPE OF INSPECTION : 1000:00 HOURS INSPECTION

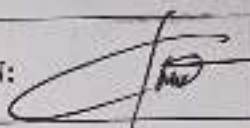
DUE AT : 7478:42

Form: SCA/MTC/049



**EMERGENCY EQUIPMENT
LIST
INSPECTION & MONITOR**

**PT. SMART CAKRAWALA
AVIATION
DEPARTMENT TEKNIK
Form: SCA/MTC/023**

DATE : 23 OCT 2023	A/C REG : PK-SNS
A/C TYPE : C208B	CHECKER : CEP NANA SIGN: 

No.	Description	P/N	S/N	Next Insp.	Remarks
1	Pilot Life Vest	PO 1202-201	1904166004	Apr 2029	S/S
2	Co-Pilot Life Vest	PO 1202-201	2103109006	March 2030	S/S
3	Pax Life Vest				
4	Pax Life Vest				
5	Pax Life Vest				
6	Pax Life Vest				
7	Pax Life Vest				
8	Pax Life Vest				
9	Pax Life Vest				
10	Pax Life Vest				
11	Pax Life Vest				
12	Pax Life Vest				
13	Flt Aid Kit	FL-220	0721-2119	Jul 2024	S/S
14	Crash Axe Installed	LOCAL	-	O/C	S/S
15	Fire Extinguisher	C352	X690527	OCT 2024	S/S
16	Life Raft (If Installed)				
17	Survival Kit (If Installed)				
OTHERS					
18	FLASH LIGHT	LOCAL	-	O/C	S/S



Additional Work Sheet
200 HOURS&ADD.TASK

Aircraft Registration: **PK-SNS**

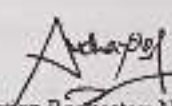
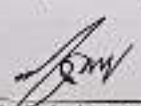
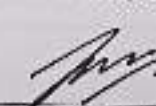
WO# Nr: **WO/070-SNS/X/2023**

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APPLICATION AND APPROVAL FORM SHORT TERM ESCALATION AND DEFERRED RECTIFICATION INTERVAL (D76)

Form: SCA/MTC/007

Applicant No. : 009/STE/TM/X/2023	Date : 19 Oct 2023
Aircraft Type : C208B	Aircraft Registration : PK-SNS
Component / Inspection / Technical Directive / Work Requiring Escalation: WO-070-SNS-X-2023_200HRS INSP.&ADD.TASK	
Part Name / Subject : C208	Position : PKY
Part No. / Models : Inspection	TSN/TSO : 7369:25 Hrs
Serial No. : 208B-2341	CSN/CSO : 8365 Ldg
Total Time : 7369:25 Hrs	Approved TBO : 200 Hours
Escalation : 1 / #	Approved Deferment Interval : 10 Hours
	Due at : 200 FH
Escalation Required: 10 Hours Due at AFIT 7388:42 FH	
Reason for Escalation: Waiting for hangar availability	
Special Action / Attention / Instruction Incorporated: N/A	
Enclosed:	 Escalation Requestor: Name & Sign
APPROVAL NO. 009 / PK-SNS / STE / SCA / X / 2023	
Remark:	
I hereby certify that aircraft / component / part bearing this escalation has been inspected and safe for flight	
Date: 19 Oct 2023	Preparation by:  Technical Manager
	Reviewed & Approved by:  Chief Inspector
	Escalation II - Approved by N/A PAI / DGCA Inspector
ESCALATION CLOSING - Close / Accomplishment Date : 23-OCTOBER-2023 - At Aircraft Total Time : 7386:59 - Short Brief / Explanation of Closure : HANGAR AVAILABLE 200 HRS INSPECTION CARRIED OUT.	
 CEB MANA (Name & Sign)	

Rev. 00, August 2020

Form: SCA/MTC/007

Rev. 00, Aug 2020

SHORT TERM ESCALATION FORM FILLING OUT PROCEDURES		
1.	APPLICANT NO	Enter applicant number of STE,
2.	REQUESTOR BY	Enter name and sign of person who request the STE
		Enter the title of person who request the STE
3.	ITEM TO BE ESCALATED : Component / Inspection / Technical Directive / Work	Select item to escalated, Component or inspection or Technical Directive or Work?
4.	ESCALATION	Enter Type/Sequence of Escalation
5.	PART NUMBER / MODEL	Enter Part Number and Model of part to be escalated
6.	SERIAL NUMBER	Enter Serial Number of part to be escalated
7.	AIRCRAFT REGISTRATION	Enter Aircraft registration Mark of part to be escalated
8.	TYPE OF INSPECTION	Enter Type of inspection to escalated. Example: A, B, C Check
9.	APPROVED TBO	Enter current interval of inspection to be escalated.
10.	APPROVED DEFERMENT INTERVAL	Enter additional time requested for the escalation. Example: 20 Hours
11.	REASON FOR ESCALATION	Enter the reason of escalation. Example: Waiting for slot, waiting for spare part
12.	PREPARATION BY	Enter name of person who request the escalation (Technical Manager)
13.	REVIEW AND APPROVED BY	Enter name of person who Review and Approved the escalation (Chief Inspector)
14.	ESCALATION II – APPROVED BY	Enter name of DGCA – PAI as approved of escalation issued.
15.	REMARKS	Enter Hours / Cycles escalation approved by Chief Inspector.



DOCUMENT FORM BORESCOPE INSPECTION FORM

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Engine Borescope Inspection

Job No: **WO/070-SNS/X/2023**

<u>Engine Serial Number</u> PCE-PC1306	<u>Date</u> 22 OCT 2023	<u>Base / Location</u> MALINAU	<u>Aircraft Registration</u> PK-SNS
<u>Aircraft Total Time</u> 7386:54 Hours	<u>Aircraft Total Cycle</u> 8383 Cycle	<u>Reason For Borescope</u> ENGINEERING ORDER 016/EO/TEK-TS/X/2023	

Note:

Record any discrepancies found during inspection, and/or take photographic evidence.

If None, then write No Findings. If you find defects, please quote EMM (Engine Maintenance Manual) Reference and Limitations.

Item	Work Description	SIGN	STAMP
1	Remove fuel manifold adapter as necessary (Ref. 73-10-05).		
2	Perform inspection of the First Stage Compressor. Defects: RESULT SATISFACTORY FOUND NO DEFECT <u>If defects found, quote MM Limitation and References :</u>		

Photo of First Stage Compressor 1st Quadrant



Photo of First Stage Compressor 2nd Quadrant



Photo of First Stage Compressor 3rd Quadrant

Photo of First Stage Compressor 4th Quadrant



3

Perform inspection of Combustion Chamber Liner Assembly.
Defects:
Localized burning and carbon build up of the cooling ring

If defects found, quote MM Limitation and References :
PT6A-114 EMM 72-40-01 Para. 6.8 (Acceptable Conditions, Repair Unnecessary)

SIGN

STAMP




Photo of Combustion Chamber 1st Quadrant



Photo of Combustion Chamber 2nd Quadrant



Photo of Combustion Chamber 3rd Quadrant



Photo of Combustion Chamber 4th Quadrant



4

Perform Inspection of CT-Stator assembly
Defects:

**RESULT FOUND INITIAL COATING DETERIORATION
(SULFIDATION)**

If defects found, quote MM Limitation and References :
PT6A-114 EMM 72-50-01 Para. 6.A (Acceptable Conditions)

SIGN

STAMP

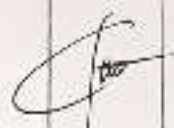


Photo of CT Stator 1st Quadrant

Photo of CT Stator 2nd Quadrant

Photo of CT Stator 3rd Quadrant

Photo of CT Stator 4th Quadrant


5

Perform inspection of CT-Blades and shroud segments.
Defects:

**RESULT FOUND INITIAL COATING DETERIORATION
(SULFIDATION)**

If defects found, quote MM Limitation and References :
PT6A-114 EMM 72-50-02 Para. 6.B (Acceptable Conditions)

SIGN

STAMP



Photo of Leading Edge CT-Blades 1st Quadrant

Photo of Leading Edge CT-Blades 2nd Q

Photo of Leading Edge CT-Blades 1st Quadrant



Photo of Leading Edge CT-Blades 2nd Q



Photo of Leading Edge CT-Blades 3rd Quadrant



Photo of Leading Edge CT-Blades 4th Quadrant



6

Perform inspection CT-Blades Trailing Edge

Defects:

RESULT FOUND INITIAL COATING DETERIORATION (SULFIDATION)

If defects found, quote MM Limitation and References:

PT6A-114 FMM 72-50-02 Para. 6.B (Acceptable Conditions)

SIGN

STAMP




Photo of CT-Blades Trailing Edge 1st

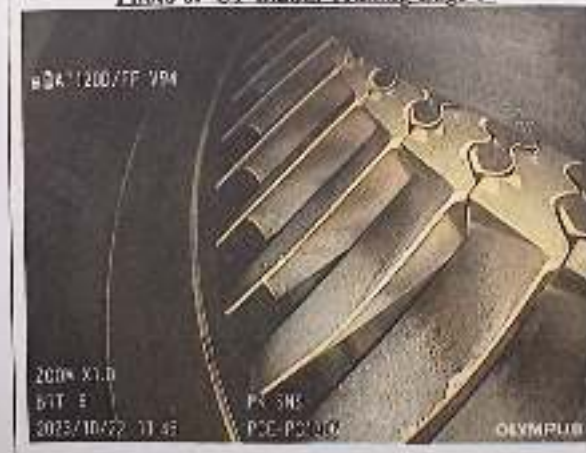


Photo of CT-B



Photo of CT-Blades Trailing Edge 3rd Q



**Index Trailing Edge 2nd Q
Photo of CT-Blades Trailing Edge 4th Q**



7

Perform inspection of PT Stator
Defects:

**FOUND FOUR SMALL CRACK ON THREE TRAILING EDGES
VANE RING**

If defects found, quote MM Limitation and References :
PT6A-114 EMM 72-50-03 Para. 6.B

SIGN

STAMP

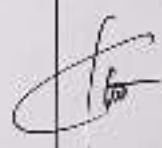



Photo of PT-Blades 1st Q



Photo of PT-Blades 2nd Q



Photo of PT-Blades 3rd Q

Photo of PT-Blades 4th Q



DOCUMENT FORM BORESCOPE INSPECTION FORM

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Photo of PT-Blades 3rd Q



Photo of PT-Blades 4th Q



8

Perform inspection of PT-Blades Defects:

RESULT SATISFACTORY FOUND NO DEFECT

If defects found, quote MM Limitation and References :

SIGN

STAMP



Photo of PT-Blades 1st Q



Photo of PT-Blades 2nd Q



Photo of PT-Blades 3rd Q

Photo of PT-Blades 4th Q



DOCUMENT FORM BORESCOPE INSPECTION FORM

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Photo of PT-Blades 3rd Q



Photo of PT-Blades 4th Q



		SIGN	STAMP
8	Install fuel manifold adapter(s) (Ref: 73-10-05).		
9	Perform fuel leak check post fuel nozzle installation		

BORESCOPE PERFORMED BY

Name: CFP NANA.P

Signature :

Stamp :

