



PT. SMART CAKRAWALA AVIATION

**WORK ORDER**

Form: SCA/MTC/030

Subject :	No.	WO/058-SNV/X/2023
<b>Engine Replacement</b>	Date	12 Oct 2023
	A/C Reg.	PK-SNV C208B-5551
Reference :	Prepared By	TS
MP C208B Issued 01	Checked By	CI
	Approved By	TM

To : Engineer In Charge

**Description :**

1. Perform Engine Replacement
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	Sign & Date Company Lic. No.:  (Engineer In Charge)	Signature  (Technical Manager)
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**AIRCRAFT CHECK WORK SUMMARY**  
**(Form: SCA/MTC/051)**

DATE OF ISSUED	JO/WO #	TYPE OF MAINTENANCE	DATE OF ACCOMPLISHED
12 Oct 2023	WO/058-SNV/X/2023	Replacement	

A/C Type	Mfg. Serial Number	A/C Registration
C208B	C208B-5551	PK-SNV

**AIRCRAFT DATA**

Subject	Pos #	Serial Number (SN)	TTSN/TCSN
Engine	#1	PCE-VA0607	
	#2	-	
Propeller/Rotor	#1	181160	
	#2	-	
Landing Gear	NLG		
	LH MLG		
	RH MLG		

**PACKAGE COVERED**

No	Subject	Qty	Remark
1	Non-Routine Card	1	
2	Inspection Card	1	
3	Work Order	1	
4	Summary Inspection List	1	
5	Material and Tool List	-	
6	Escalation form	-	
7	CRS (SMI / Unscheduled Maintenance)	1	

**INSPECTION CARD (IC) LIST (Finding during maintenance)**

No	Taskcard Ref	Subject	Status		Name/ Sign & Stamp
			Open	Close	
IC-001					
IC-002					
IC-003					
IC-004					
IC-005					
IC-006					

<u>IC-007</u>					
<u>IC-008</u>					
<u>IC-009</u>					
<u>IC-010</u>					
<u>IC-011</u>					
<u>IC-012</u>					
<u>IC-013</u>					
<u>IC-014</u>					
<u>IC-015</u>					

Prepared by :  
Technical Support



Hani

Checked by :  
Chief Maintenance



Dodit

Verified by :  
Chief Inspector



Yanuar

Approved by :  
Technical Manager



Istiono



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

WO Ref: WO/058-SNV/X/2023

NO.	TASK CARD NO.	DESCRIPTION	DATE	EST MHR	NAME	STAMP
1	NRC-01	ENGINE ASSY REPLACEMENT REMOVED P/N: PT6A-140 S/N: PCE-VA0607 INSTALLED P/N: PT6A-140 S/N: PCE-VA0567				



PT. SMART CAKRAWALA AVIATION

# CERTIFICATE RETURN TO SERVICE

## SCHEDULED MAINTENANCE INSPECTION

### (CRS-SMI)

A/C TYPE	: CESSNA 208B			TTSN	:
A/C REG	: PK-SNV			TCSN	:
MSN	: C208B-5551			DATE	:
TYPE OF INSPECTION : ENGINE REPLACEMENT					
DUE AT : 4000 HOURS ON STE 4200 HOURS					
REFF : MP 208/208B ISSUED 01					
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
	AIRFRAME & POWER PLANT				
	EIRA				
THE NEXT DUE TYPE OF INSPECTION :					
DUE AT :					

	<b>INSPECTION CARD</b> <b>(Form: SCA/MTC/ 048)</b>				<b>TECHNICAL DEPARTMENT</b>		
1. CARD #	2. JO/WO #	3. ORIGINATOR	4. CARD REF	5. DATE			
6. A/C REG/MSN	7. A/C TYPE	8. TRADE	12. VENDOR ORDER #				
9. ZONE	10. STA	11. MTC TYPE					
13. DESCRIPTION/DEFECT-IF FINDING OF CPCP INSPECTION, PLEASE COMPLETE SET. 20					14 PPC/ENG	15 DATE	
16. CORRECTIVE ACTION					17 MECH	18 ENG. LIC	19 DATE
Performed at A/C TT : ..... A/C TC /LDG : .....							
20. CORROSION INFORMATION							
LOCATION		CAUSE OF DAMAGE					
		<input type="checkbox"/> Environment	<input type="checkbox"/> Internal Leakage				
CORROSION <input type="checkbox"/> Isolated <input type="checkbox"/> Widespread		<input type="checkbox"/> Chemical Spill					
CORROSION LVL <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3		<input type="checkbox"/> LAV/Galley Spill					
PROPOSED ACTION <input type="checkbox"/> Doublers		<input type="checkbox"/> Blocked Drain					
<input type="checkbox"/> Others		<input type="checkbox"/> Wet Insulation Blanket					
.....		<input type="checkbox"/> Other					
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	
23. TOOLS REQUIRED							
DESCRIPTION	PART NO. / MODEL		NEXT CALIBRATION DATE		STATUS		



**NON ROUTINE CARD**  
(Form: SCA/MTC/047)

1. JO/WO #	2. DATE	3. MTC TYPE	4. A/C REG/MSN
WO/058-SNV/X/2023		REPLACEMENT	PK-SNV/208B-5551
5. CARD #	6. ATA SPEC	7. TRADE	8. STA
#001	80		
9. ZONE	10. PANEL		
ENGINE			

11. DESCRIPTION

**ENGINE ASSY REPLACEMENT**

**REMOVED**

P/N: PT6A-140

S/N: PCE-VA0607

**INSTALLED**

P/N: PT6A-140

S/N: PCE-VA0567

REFERENCE	<input checked="" type="checkbox"/> EMM Ch. 72-00-00	<input type="checkbox"/> AMM Ch	<input type="checkbox"/> OTHER
RII (*)	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	MHR :

12. RESULT

MECH	ENG	INSP (*)

Performed at A/C TT : ..... A/C TC /LDG : .....

FINDING	<input type="checkbox"/> Y	<input type="checkbox"/> N	ACT MHR :	DATE/TIME (DD/MM/YY)
INSPECTION CARD (IC) #				

13. PARTS REQUIRED

DESCRIPTION	PART NO	QTY	REMARK	
			STOCK	STATUS

14. TOOLS REQUIRED

DESCRIPTION	PART NO / MODEL	NEXT CALIBRATION DATE	STATUS



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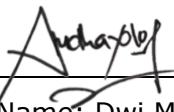
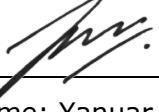
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## **ENGINEERING ORDER**

**015/EO/TEK-TS/X/2023**

### **REMOVAL & INSTALLATION OF ENGINE ASSY PT6A-140 ON CESSNA 208B**

**PT. SMART CAKRAWALA AVIATION**

Prepared	Checked	Approved
<b>Technical Support</b>	<b>Chief Inspector</b>	<b>Technical Manager</b>
Signature: 	Signature: 	Signature: 
Name: Dwi M.	Name: Yanuar A. Fatah	Name: Istiono
Date: 12 Oct 2023	Date: 12 Oct 2023	Date: 12 Oct 2023



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## SMART AVIATION ENGINEERING ORDER

No. EI:  
**015/EO/TEK-TS/X/2023**

Rev. No. :  
**ORIGINAL**

Date Issued :

**October 12, 2023**

Task Description :

**INSTALLATION OF ENGINE ASSY PT6A-140  
ON CESSNA 208B**

Data Reference :

- **Model 208 Series Maintenance Manual  
Revision 39, Revision Date Mar 1, 2023  
Chapter 71 Power Plant – Maintenance  
Practices**

Aircraft Type :

**CESSNA 208B WITH ENGINE MODEL PT6A-  
140**



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### 1. Description.

This EO is issued, to perform removal and installation checklist powerplant maintenance practices the PT6A-140 engine on Cessna 208B.

### 2. Aircraft Effectivity.

REGISTRATION	SERIAL NUMBER
PK-SNV	208B-5551

### 3. Compliance

The Engine model PT6A-140 have TBO 4000 Hours, do removal and installation the overhauled/new engine on the aircraft refer to accomplishment instruction task card.

### 4. Distribution.

TECHNICAL MANAGER	[ <input checked="" type="checkbox"/> ]	MATERIAL SUPPORT	[ <input checked="" type="checkbox"/> ]
SAFETY & QUALITY MANAGER	[ <input checked="" type="checkbox"/> ]	TECHNICAL SUPPORT	[ <input checked="" type="checkbox"/> ]
CHIEF INSPECTOR	[ <input checked="" type="checkbox"/> ]	FILE	[ <input checked="" type="checkbox"/> ]

### 5. Manhours

32.0 man-hour to do the inspection.



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### 6. Material.

3074153-01 PROPELLER GOVERNOR  
A 1633-72 O-RING HUB TO PROPELLER SHAFT  
A 1639-32 NUT  
B 5096 SPACER  
B 5121 FEEDBACK ASSY  
MS 206685 GASKET PROPELLER OVER SPEED GOVERNOR  
206684G or 303952 GASKET PROPELLER GOVERNOR  
AN 4044-1 GASKET STAR-GEN  
S 3346-1 GASKET PROPELLER TACHOMETER  
S 3346-1 GASKET NG TACHOMETER  
S 3346-1 GASKET STBY ALTERNATOR  
S 3346-1 GASKET AC COMPRESSOR DRIVE UNIT  
AN363-720 NUT  
MS24665-302 COTTER PIN MOUNT BRACKET TO MOUNT RING  
VSF1015N12B SEAL CONICAL  
9910333-1 ELASTOMER  
MS24665-302 COTTER PIN  
MS24665-134 COTTER PIN  
MS24665-86 COTTER PIN  
3007342 GASKET  
S2808/AE3663 HOSE OIL  
MIL PRF 83483C LUBRICANT FOR THREAD PROPELLER  
MIL W-G-632 LUBRICANT FOR COMPRESSOR DRIVE UNIT, PLASTILUBE  
2380 ENGINE OIL

### 7. Special Tool Required.

Propeller Special tool D-5945 1 SET  
7/8 inch special tool 1 SET  
MASTER COMPASS

### 8. Publication Affected.

None.



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### 9. Accomplishment Instructions.

#### C208B ENGINE REMOVAL

Date : _____	Work Number : _____
Part No. Engine : PT6A-140	A/C Total Hours : _____
Ser. No. Engine : PCE-VA0607	A/C Total Landings : _____
Engine Time TSN: _____	TSO:N/A
CSN: _____	CSO:N/A
Removed from A/C Reg. : PK-SNV	

Description	Eng.	RII	Remarks
<b>A. REMOVE ENGINE (Refer to Figure 201 and Figure 202)</b>			
<b>CAUTION:</b> Chock main wheels and place a tailstand under tailcone before attempting engine removal.			
1. Remove external electrical power from the airplane.			
2. Pull fuel firewall shutoff control out (off).			
3. Remove the cowling components as follows. Refer to Chapter 71, Engine Cowling and Nose Cap - Maintenance Practices: (a) The upper cowling doors. (b) The lower cowling panels. (c) The right nose cap.			
4. Use the filter drain to drain the residual fuel from lines and fuel filter. Refer to Chapter 28, Fuel Lines, Valves and Filters - Maintenance Practices.			
5. Remove the fuel supply hose at the fuel heater. Refer to Chapter 73, Oil-To-Fuel Heater - Maintenance Practice section of the Pratt and Whitney PT6A-140 Maintenance Manual P/N 3075742 found in the Introduction List of Publications.			
6. Remove the fuel motive flow hose at the motive flow shut-off valve. Refer to Chapter 73, Fuel Control Unit - Maintenance Practices section of the Pratt and Whitney PT6A-140 Maintenance Manual P/N 3075742 found in the Introduction List of Publications.			
7. Remove the oil cooler. Refer to Chapter 79, Oil Distribution - Maintenance Practices (PT6A-140).			



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8. Remove top cowl center panel assembly and nosecap. Refer to Chapter 71, Engine Cowling and Nose Cap - Maintenance Practices			
9. Remove the propeller. Refer to Chapter 61, Propeller (Hartzell) - Maintenance Practices.			
10. Disconnect and remove propeller speed control cable. Refer to Chapter 76, Quadrant Assembly And Controls - Maintenance Practices.			
11. Remove the left nose cap/induction air duct/inertial air separator. Refer to Chapter 71, Inertial Air Separator - Maintenance Practice			
13. Disconnect the cabin heater bleed air line at the flow control valve. Chapter 21, Compressor Bleed Air Heater - Maintenance Practices.			
14. Disconnect the bleed air hose at mixing air valve. Chapter 21, Compressor Bleed Air Heater - Maintenance Practices			
15. Remove the starter/generator cooling air hose from starter/generator. For the 300 Amp Starter/Generator refer to Chapter 80, 300 AMP Starter/Generator Cooling Air Duct - Maintenance Practices. For the 200 Amp Starter/Generator refer to Chapter 80, Starter/Generator Cooling Air Blast Tube - Maintenance Practices			
16. Remove the oil pressure switch supply hose. Refer to Chapter 79, Oil Pressure Switch - Maintenance Practices			
17. Remove engine fire detector wiring harness. Chapter 26, Fire Detection System - Maintenance Practices			
18. Disconnect electrical wiring connectors and ground wires at the following equipment locations: <ul style="list-style-type: none"><li>• Battery Connector (PN004) (aft right side of engine)</li><li>• Prop Overspeed Valve Connector (PN041) (left front of engine)</li><li>• NP Speed Tach (PN033) (right front of engine)</li><li>• Cabin Heat Bleed Air Valve connector (PN043) (lower right side of engine)</li><li>• Oil Pressure Switch (PN030) (right side on engine truss).</li><li>• Oil Temperature Sensor connector (PN031) (right rear of engine)</li><li>• NG Speed Tach (PN034) rear, (lower right side of engine)</li><li>• Starter Generator Connector (PN002) (center top of engine accessory case)</li><li>• Ignition Exciter Connector (PN040) (right engine mount truss)</li><li>• Fuel Flow Connector (PN032) (rear, lower right side of engine)</li><li>• Torque Transducer (PN038) (right engine mount truss)</li></ul>			



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- RGB Chip Detector (PN035) (right engine mount truss)
- Engine ground straps airplane frame connections.

19. Disconnect the engine power control cables at fuel control unit. Refer to Chapter 73, Fuel Control Unit - Maintenance Practices section of the Pratt and Whitney PT6A-140 Maintenance Manual P/N 3075742 found in the Introduction List of Publications.

20. Remove torque meter pressure and vent lines at forward upper right side of engine mount truss. Refer to Chapter 77, Wet Torque Indicating System - Maintenance Practices (PT6A-140).

21. Connect hoist sling to forward and aft lifting brackets and connect sling to engine hoist.

22. Raise hoist to just support weight of engine and remove nuts and bolts at each of four corners of engine mounting ring.

23. Make sure that all wiring and lines are free, then carefully move hoist and engine forward to clear engine mount truss.

24. If engine is to be returned for overhaul or replaced refer to Prepare Engine to Send for Service.

**\*\*\* END OF THE TASK \*\*\***



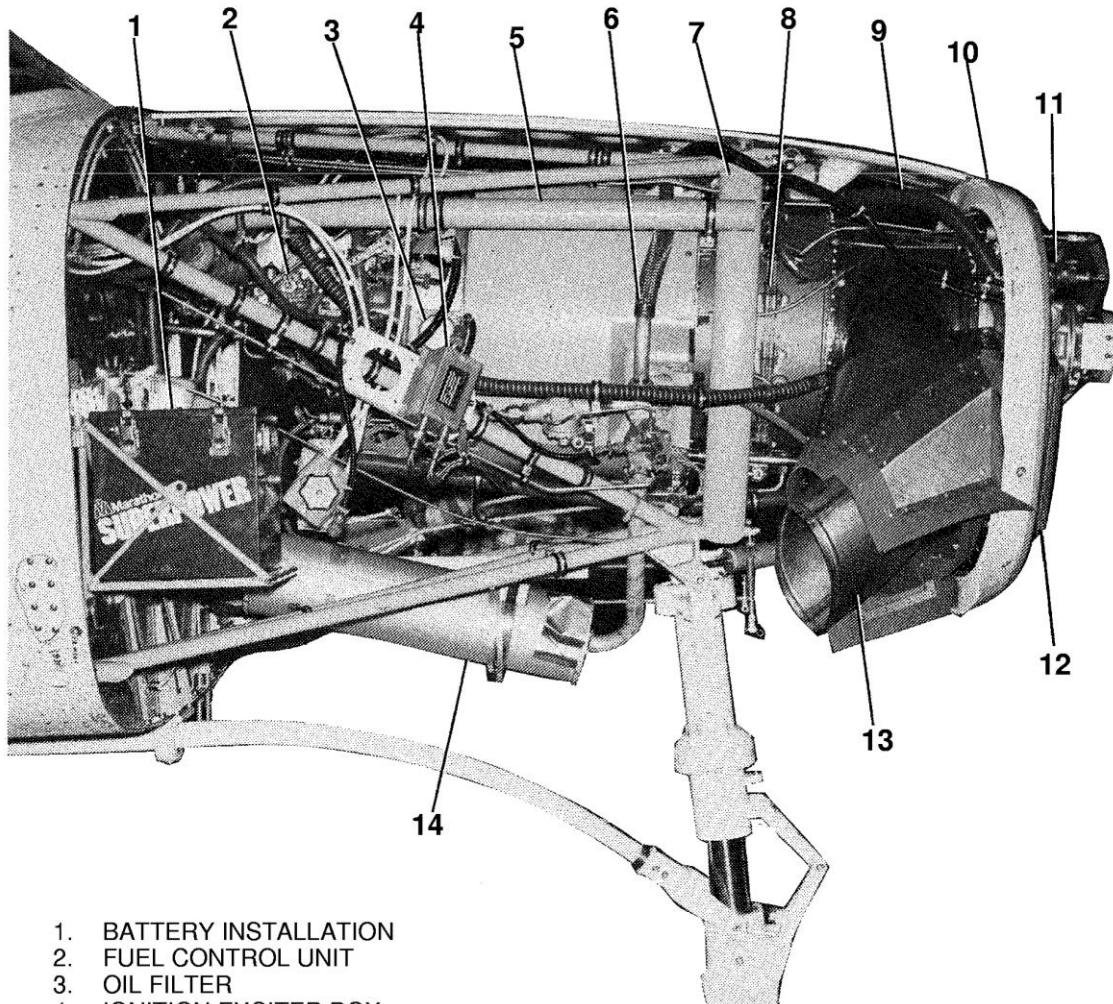
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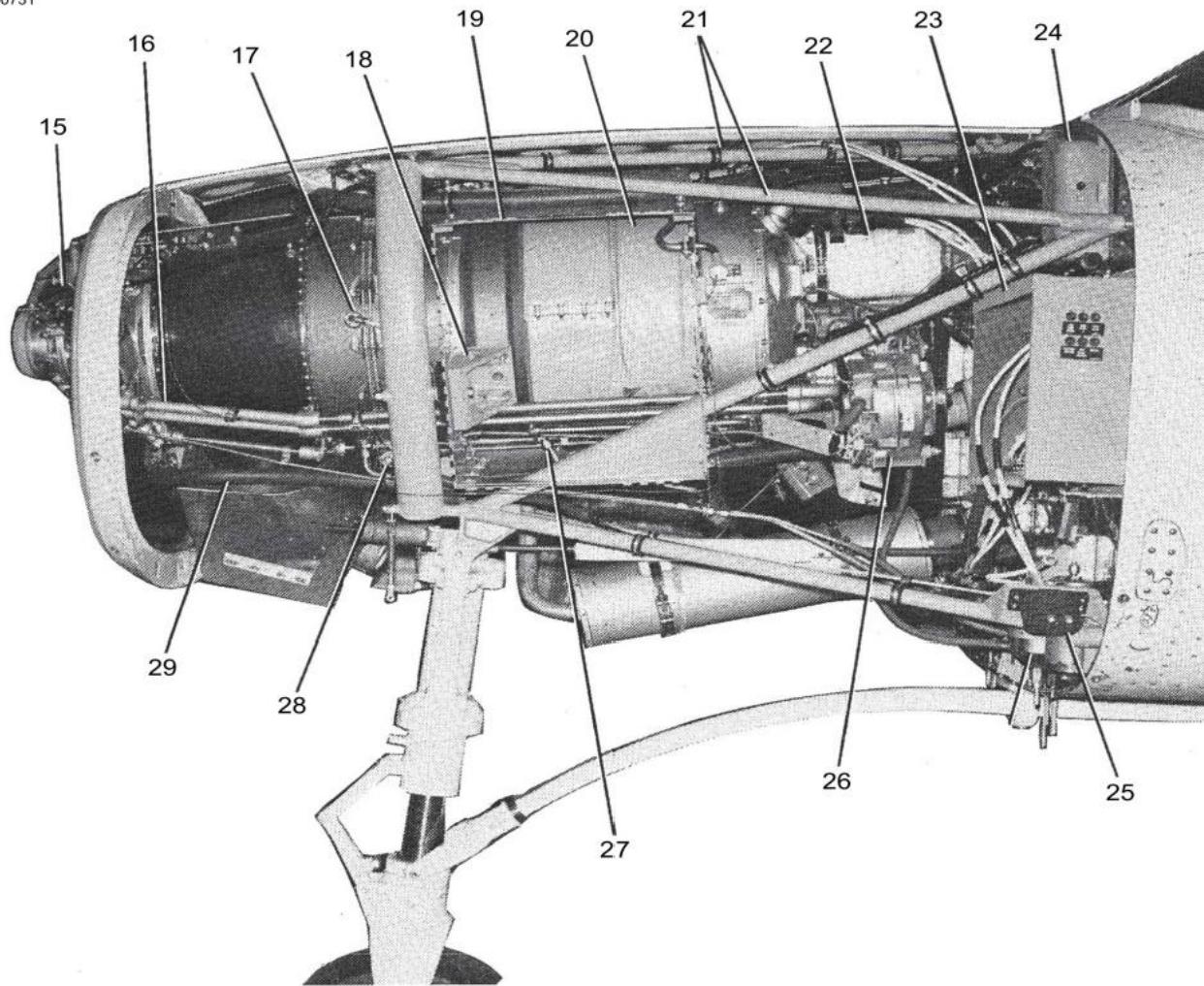
1. BATTERY INSTALLATION
2. FUEL CONTROL UNIT
3. OIL FILTER
4. IGNITION EXCITER BOX
5. STARTER/GENERATOR COOLING AIR BLAST TUBE
6. BLEED AIR PRESSURE LINE
7. ENGINE MOUNT RING
8. FUEL MANIFOLD
9. OIL RETURN FROM OIL COOLER
10. RIGHT COWLING BULKHEAD
11. PROPELLER GOVERNOR
12. OIL COOLER
13. PRIMARY EXHAUST STACK
14. BLEED AIR HEATER MUFFLER

2650X1002

**Figure 201 Sheet 1**

## SMART AVIATION ENGINEERING ORDER

A90731



15. PROPELLER OVERSPEED GOVERNOR	23. POWER DISTRIBUTION BOX
16. REDUCTION GEARBOX OIL LINES	24. STANDBY ALTERNATOR CONTROL UNIT
17. SPARK IGNITER	25. AUXILIARY POWER RECEPTACLE
18. ENGINE MOUNT BRACKET	26. STANDBY ALTERNATOR
19. INDUCTION AIR PLENUM	27. COMPRESSOR DRAIN LINE
20. COMPRESSOR INLET	28. FUEL MANIFOLD DUMP VALVE
21. ENGINE MOUNT TRUSS	29. OIL COOLER PRESSURE HOSE
22. STARTER/GENERATOR	

Figure 201 Sheet 2

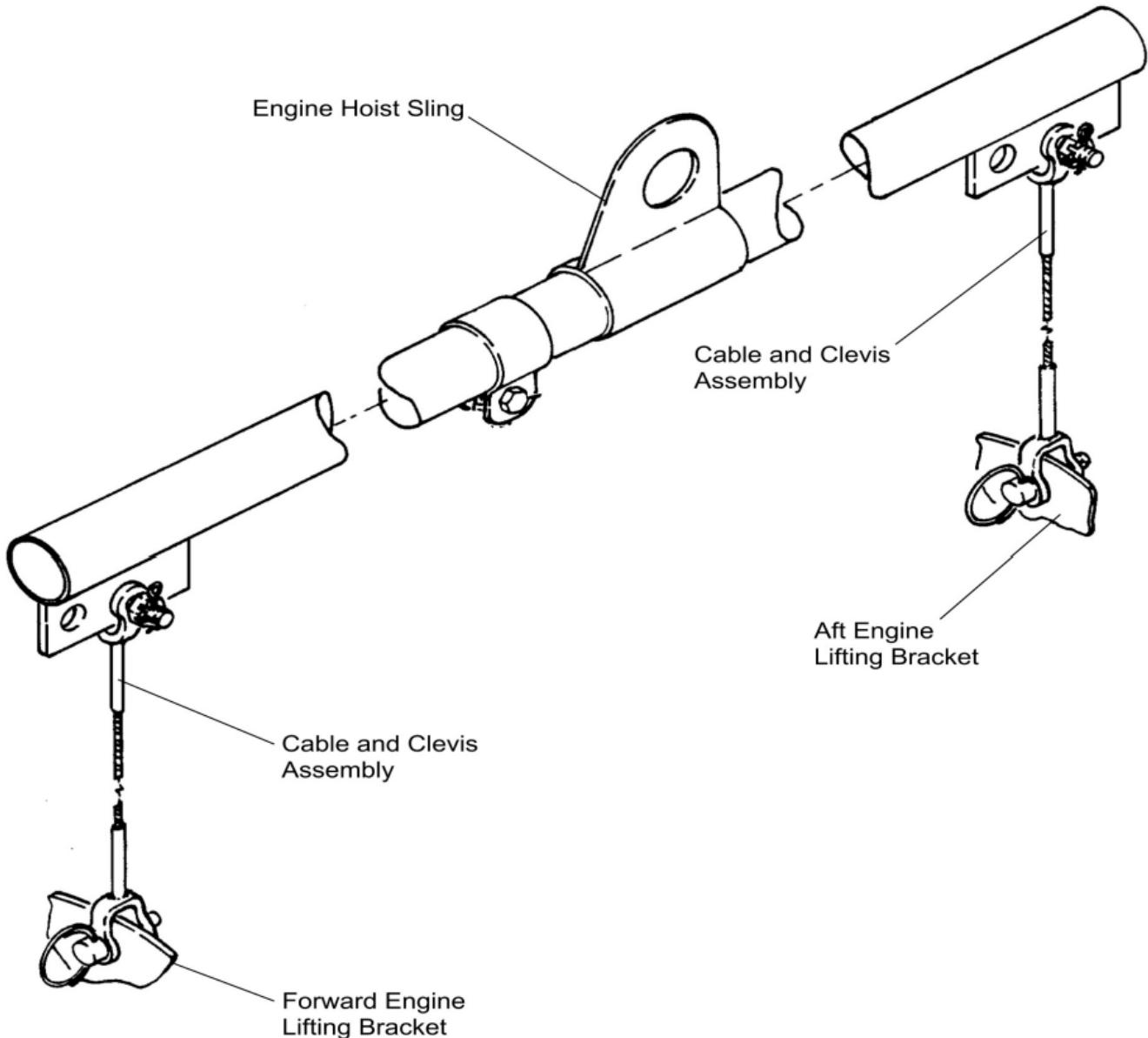


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## SMART AVIATION ENGINEERING ORDER



**Figure 202**



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### C208B ENGINE INSTALLATION

Date : \_\_\_\_\_ Work Number : \_\_\_\_\_  
Part No. Engine : PT6A-140 A/C Total Hours : \_\_\_\_\_  
Ser. No. Engine : PCE-VA0567 A/C Total Landings : \_\_\_\_\_  
Engine Time TSN: 2553:70 H TSO: N/A  
CSN:9386 CSO: N/A  
Installed on A/C Reg. : PK-SNV

Description	Eng.	RII	Remarks
<b>25. INSTALL ENGINE (Refer to Figure 201 and Figure 202).</b>			
1. If the engine is new or was at manufacturer for service, install engine components. Refer to Engine Build-Up.			
2. Make and inventory record P/N and S/N of the engine and its accessories. Fill out into the List (Form Engine Change – Major Component Inventory Record)			
3. Install engine mount brackets, elastomers, and engine mount ring. Refer to Chapter 71, Engine mount – Maintenance Practices.			
4. Connect the lifting hoist sling to forward and aft lifting brackets on engine and lift engine in its correct position forward of engine mount.			
5. Make sure that all engine lines and equipment are clear.			
6. Lubricate the engine mount bolts with MIL-PRF-81322G Grease, before you install them to prevent corrosion.			
7. Make sure that the threads of bolts are covered during application of grease. Lubrication on threads can alter the torque reading.			
8. Move the hoist and engine aft to align the engine mount ring holes with the holes in the engine mount truss.			
9. Install the mount bolts and torque the bolt/nuts to 480 to 690 inch-pounds. a. Remove the hoist and sling			
10. Connect torquemeter pressure and vent lines at upper left firewall (a) Do a leak test of the torquemeter pressure and vent lines. Refer to Chapter 77, Wet Torque indicating System - Maintenance Practices			



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11. Connect engine power controls at fuel control unit. (a) Rig the fuel controls. Refer to Chapter 76, PT6A-140 Engine Power Control Rigging - Adjustment/Test			
12. Connect the electrical wiring connectors and ground wires at the following equipment locations: <ul style="list-style-type: none"><li>• Battery Connector (PN004) (aft right side of engine)</li><li>• Prop Overspeed Valve Connector (PN041) (left front of engine)</li><li>• NP Speed Tach (PN033) (right front of engine)</li><li>• Cabin Heat Bleed Air Valve connector (PN043) (lower right side of engine)</li><li>• Oil Pressure Switch (PN030) (right side on engine truss).</li><li>• Oil Temperature Sensor connector (PN031) (right rear of engine)</li><li>• NG Speed Tach (PN034) rear, (lower right side of engine)</li><li>• Starter Generator connector (PN002) (center top of engine accessory case)</li><li>• Ignition Exciter Connector (PN040) (right engine mount truss)</li><li>• Fuel Flow connector (PN032) (rear, lower right side of engine)</li><li>• Torque Transducer (PN038) (right engine mount truss)</li><li>• RGB Chip Detector (PN035) (right engine mount truss)</li><li>• Engine groundstraps airplane frame connections.</li></ul>			
13. Install the oil pressure switch supply hose. Refer to Chapter 79, Oil Pressure Switch - Maintenance Practices			
14. Install the engine fire detector wiring harness. Chapter 26, Fire Detection System - Maintenance Practices			
15. Install the starter/generator cooling air hose to the starter/generator. For the 300 Amp Starter/Generator refer to Chapter 80, 300 AMP Starter/Generator Cooling Air Duct - Maintenance Practices. For the 200 Amp Starter/Generator refer to Chapter 80, Starter/Generator Cooling Air Blast Tube - Maintenance Practices.			
16. Connect the cabin heater bleed air line at the flow control valve. Chapter 21, Compressor Bleed Air Heater - Maintenance Practices.			
17. Connect the bleed air hose at mixing air valve. Chapter 21, Compressor Bleed Air Heater - Maintenance Practices			
18. If necessary, install the left nose cap/induction air duct/inertial air separator. Refer to Chapter 71, Inertial Air Separator - Maintenance Practices			
19. If necessary, install the propeller. Refer to Chapter 61, Propeller (Hartzell) - Maintenance Practices.			



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20. Install the propeller speed control cable. Refer to Chapter 76, Quadrant Assembly And Controls - Maintenance Practices.			
21. Install left and right nosecap bulkhead assemblies and top cowling center panel. Refer to Chapter 71, Engine Cowling and Nose Cap - Maintenance Practices			
22. Install the oil cooler. Refer to Chapter 79, Oil Distribution - Maintenance Practices (PT6A-140).			
23. Install the right nosecap. Refer to Chapter 71, Engine Cowling and Nose Cap - Maintenance Practices.			
24. Install the fuel supply hose at the fuel heater. Refer to Chapter 73, Oil-To-Fuel Heater Unit - Maintenance Practices section of the Pratt and Whitney PT6A-140 Maintenance Manual P/N 3075742 found in the Introduction List of Publications.			
25. Install the fuel motive flow hose at the motive flow shut-off valve (MFSOV). Refer to Chapter 73, Fuel Control - Maintenance Practices section of the Pratt and Whitney PT6A-140 Maintenance Manual P/N 3075742 found in the Introduction List of Publications.			
26. Purge the fuel lines as follows: (a) Push fuel firewall shutoff control fully in. (b) Disconnect the supply fuel line at fuel manifold below engine. 1 Cap down stream line. 2 Use correct shop practices to collect fuel from open supply line. (c) Use the starter to motor the engine. (d) When the purge is complete, connect the fuel line to the manifold. Use correct shop practices to discard purged fuel.			
27. Do an operational check of the different components on the engine. (a) Start the engine and do the operational check. Refer to Pilot's Operating Handbook and FAA-Approved Airplane Flight Manual and the Pratt and Whitney PT6A-140 Maintenance Manual P/N 3075742 found in the Introduction List of Publications. (b) Complete an Engine Performance Check. Refer to Chapter 71-00-05, Power Plant (PT6A-140) - Adjustment/Test, Engine Performance Check.			
28. Perform RII inspection if any controls have been disturbed or adjusted.			
29. Install engine cowling.			



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30. Make an appropriate entry in Work Order (WO) and Aircraft Flight Maintenance Log (AFML)

### MAINTENANCE RELEASE

I hereby certify that the above stated maintenance and/or inspection was performed in accordance with the approved Aircraft Maintenance Program and meets requirements of Civil Aviation Safety Regulations.

Name : \_\_\_\_\_ Stamp : \_\_\_\_\_

Signature : \_\_\_\_\_ Place/Date : \_\_\_\_\_



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**ENGINE CHANGE - Major Component Inventory Record**

<b>Registration</b>	:	<b>Work Order Number</b>	:
<b>Airframe Time</b>	:	<b>Airframe Landings</b>	:
<b>Engine Time</b>	:	<b>Engine Cycle</b>	:

<b>Description</b>	<b>Engine OFF</b>			<b>Engine ON</b>		
	<b>Part Number</b>	<b>Serial Number</b>	<b>Time Remaining</b>	<b>Part Number</b>	<b>Serial Number</b>	<b>Time Remaining</b>
Engine Assembly						
Propeller Assembly						
Compressor Bleed Valve						
Fuel Control Unit						
Oil Fuel Heater						
Igniter Exciter						
Flow Divider						
Oil Cooler						
Starter Generator						
Alternator						
Fuel Pump						
Propeller Governor						
Propeller Overspeed Governor						
Fuel Nozzle						

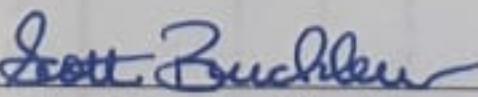
**NOTE: ANY OTHER COMPONENT CHANGES MUST BE FILLED ON INSPECTION CARD (SCA/MTC/048)**

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:  235344
4. Organization Name and Address: PRATT & WHITNEY ENGINE SERVICES, INC. 1525 MIDWAY PARK RD BRIDGEPORT, WV 26330 FAA CRS# LM1R301K					5. Work Order/Contract/Invoice Number:  235344
6. Item:  ONE	7. Description:  ENGINE, TURBOPROP PT6A-140	8. Part Number:  3076226-01	9. Quantity:  ONE	10. Serial/Batch Number:  PCE-VA0567	11. Status/Work:  TESTED
12. Remarks: TTSN: 2553.7 TCSN: 9386		TTSO: N/A		TCSO: N/A	

This engine has tested as received in accordance with P&WC Overhaul Manual P/N 3075743, Rev. 50, dated 24 October 2022; and other P&WC approved documentation and/or engineering documentation acceptable to the administrator.

Engine test certificate and list of parts replaced are attached to the logbook. Pertinent details of the work performed are on file at this repair station under the above sales order number.

Certifies that the work specified in block 11/12 was carried out in accordance with EASA part 145 and with respect to that work the aircraft engine is considered ready for release to service under EASA acceptance certificate number: EASA.145.4757.

Export classification: ECCN 9E991					
13a. Certifies the items identified above were manufactured in conformity to:  <input type="checkbox"/> Approved design data and are in a condition for safe operation. <input type="checkbox"/> Non-approved design data specified in Block 12.			14a. <input checked="" type="checkbox"/> 14 CFR 43.9 Return to Service <input checked="" 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:  		14c. Approval/Certificate No.:  LM1R301K
13d. Name (Typed or Printed):		13e. Date (dd/mmm/yyyy):	14d. Name (Typed or Printed):  Scott Bucklew, Authorized Inspector		14e. Date (dd/mmm/yyyy):  24/Jul/2023

#### 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 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/components/assemblies 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.

PT6A-140 S/N: PCE-VA0567 FINAL ACCEPTANCE TEST RECORD

2019 JAN 14 TEST CELL : 3202 BUILD SPEC.: 1294  
 ENGINE TESTED AND ACCEPTED IN ACCORDANCE WITH E&TI : 800  
 FINAL VANE FLOW AREAS FIRST STAGE : 29501 2S2 6.00  
 SECOND STAGE : 29501 3S3 16.07

## PERFORMANCE DATA

## TAKE-OFF

## SPEC ACTUAL

PROP SPEED	1900.	1900.
S.L.S. STD. DAY POWER	867.	867.
I.T.T. (T5A TRIMMED)	DEG R	1838. 1830.
T5D (DERIVED)	DEG R	1888. 1871.
GAS GEN. SPEED	RPM	36735 36400.
SFC @ 18400 BTU/LB	LB/SHP.HR	0.618 0.595
ENGINE TORQUE	PSI	40.17
PRESSURE RATIO @ 36000	RPM	7.38 7.27

## FUEL TYPE : CPW 204

TEST LHV : 18497. BTU/LB

S.G. : 0.822 @ 52. DEG F

OIL TYPE : PWA 521 TYPE II

OIL CONSUMPTION : 0.0 LB/HR

T.O. OIL PRESSURE : 90.8 PSI

OIL TEMPERATURE : 155.9 DEG F

I.T.T. TRIM DELTA T (UNTRIMMED-TRIMMED) : 117.0 DEG F

I.T.T. TRIM DELTA T (UNTRIMMED-TRIMMED) : 65.0 DEG C

I.T.T. TRIM CLASS : 25

TRIM RESISTANCE : 8.90 OHMS

COLD HARNESS RESISTANCE : 0.72 OHMS

## HANDLING AND CONTROL SETTINGS

TRIMMED MAX NG : N/A RPM

UNTRIMMED MAX NG : 38850 RPM

IDLE SPEED : 20861 RPM

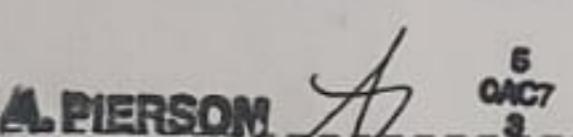
ACCEL. TIME F.I. TO MAX @ T1 : 2.72 SECS @ 46.9 DEGF

ENGINE DRY WEIGHT : 393.48 LBS.

PRODUCTION SIGNATURE :

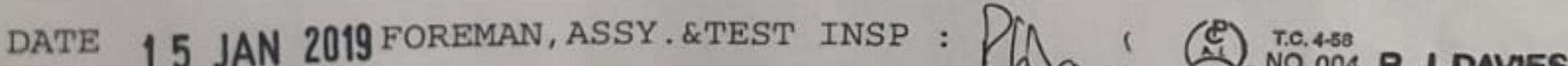
 N. VOLLO 0AC1

INSPECTION SIGNATURE :

 A. PIERSON 0AC7

GOVERNMENT INSPECTOR :

THE UNDERSIGNED CERTIFIES THAT THIS RECORD ACCURATELY SETS FORTH THE EVENTS DURING THE TEST MADE ON THE ENGINE THEREIN IDENTIFIED.

DATE 15 JAN 2019 FOREMAN, ASSY.&TEST INSP :  R.J. DAVIES

T.C. 4-58  
NO. 004

PRATT & WHITNEY CANADA CORP. P68 PROGRAM 4.4.50

PT6A-140 S/N: PCE-VA0567 FINAL ACCEPTANCE TEST RECORD

PRODUCTION SIGNATURE :  N. VOLLO 3  
OAC 7

INSPECTION SIGNATURE : **A. PIERSON**  5  
QAC7  
3

GOVERNMENT INSPECTOR : *(Signature)*

THE UNDERSIGNED CERTIFIES THAT THIS RECORD ACCURATELY SETS FORTH THE EVENTS DURING THE TEST MADE ON THE ENGINE THEREIN IDENTIFIED.

DATE 15 JAN 2019 FOREMAN, ASSY. & TEST INSP : *P. J. Davies* (C) T.C. 4-58  
NO. 004 P. J. DAVIES

**Liste des composants moteur à numéros de série**  
**Engine Serialized Component Summary**



**Pratt & Whitney Canada**

Une société de United Technologies / A United Technologies Company

Pratt & Whitney Canada Cie. /  
 Pratt & Whitney Canada Corp.  
 1000, Marie-Victorin  
 Longueuil, Québec, Canada  
 J4G 1A1  
 450-677-9411

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P&WC JR3-6830-E (2012-10)

Modèle Model	PT6A-140	Nº de série Serial No.	PCE-VA0567		Caract. de montage Build Spec NO.	BS1294
Nº du matériel Material Number	Désignation du matériel Material Name	Nº de série Serial No.	Code de trait. thermique Heat Code	Nº de série du matériel forgé Forging Serial No.	Nº de lot pour trait. thermique Heat Treat Batch No.	Nº de matériel du fournisseur Vendor Material No.
3011095	SHAFT-POWER TURBINE	RWA60F276	PXAHX			
3023670 ✓	FLOW DIVIDER AND DUMP VALVE	M1139				
3027629	BUS BAR-T5 THERMOCOUPLE,ASSY	HRA674346				
3027798 ✓	IMPELLER-CENTRIFUGAL	FRAEPWPE40	EPWPE	40		
3037603	TEMPERATURE SENSOR	NR06334				
3040213 ✓	DISC-COMPRESSOR	A004CBBC	KAXTT	390		
3040312 ✓	DISC-COMPRESSOR	A004CBBF	KAXTT	362		
3040760 ✓	PUMP-FUEL	016585				
3043937-06 ✓	EXCITER-IGNITION	182626				
3049038-03 ✓	VALVE-COMPRESSOR BLEED	9388				
3049382CL03	VANE RING-POWER TURBINE,ASSY	HLA447AC				
3054917-02	SENSOR-TEMPERATURE, OIL & FUEL	NR00718				
3055000-01 ✓	SHAFT-STUB,COMPRESSOR ROTOR	PKAAA801219	EPWUB	75		
3055649-01 ✓	SHAFT-STUB,COMPRESSOR,FRONT	RWA61F093	P4ARE			
3055738-01	TORQUE-LIMITER	F80361				
3055781CL02	VANE RING-TURBINE,ASSY OF	HLA231BB767				
3073900-01	BEARING-RLR,FLG 1.5748X2.6772X.5906	AEB0300235				
		AEB0300253				
3073901-01	BEARING-BALL,FLG,1.1810X2.8344X.745	AEB0299533				
3074154-01 ✓	GOVERNOR-PROPELLER	21549064				
3076290-01	BLADE-POWER TURBINE	YWAR37				
		YWAW57				
		YWAY25				
		YWBE38				
		YWBE56				
		YWBE82				
		YWBE94				
		YWBF09				
		YWBF82				
		YWBF84				
		YWBF99				
		YWBG24				
		YWBG25				
		YWBG38				
		YWBH64				
		YWBH66				
		YWBH73				
		YWBH77				

Cont'd



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P&WC JR3-6830-E (2012-10)

Modèle Model	PT6A-140	Nº de série Serial No.	PCE-VA0567		Caract. de montage Build Spec NO.	BS1294
Nº du matériel Material Number	Désignation du matériel Material Name	Nº de série Serial No.	Code de trait. thermique Heat Code	Nº de série du matériel forgé Forging Serial No.	Nº de lot pour trait. thermique Heat Treat Batch No.	Nº de matériel du fournisseur Vendor Material No.
3076608-01	GEARSHAFT-DRIVE,ACCESSORY GEARBOX	PKAAA798070				
3076621-01	BEARING-BALL,FLG,2.9528X5.1181X.9843	FCN501039				
3076655-01	BEARING-ROLLER,FLANGED	FAA1815861				
3076855-01✓	DISC-TURBINE	YUAB001M414	ZAFFU	418		
3076856-01✓	DISC-TURBINE	CRAZAFHL177	ZAFHL	177		
3076918-01	GEAR-RING SECOND STAGE REDUCTION	PKAAA798698				
3077325-01	CASE-COMPRESSOR INLET (MACH)	FWAA000A636				
3077326-01	CASE ASSY-COMPRESSOR INLET	FWAA000A636				
3077381-01	GEAR-RING,FIRST STAGE REDUCTION	PKAAA801180				
3077382-01	SHAFT-PROPELLER	EAAE000M218	P4AQE			
3077383-01	SHAFT ASSY-PROPELLER	EAAE000M218	P4AQE			
3077848-01	HOUSING-POWER TURBINE STATOR,ASYO	MDA18003666				
3077966-01	ADAPTER-SPINED,FIRST STAGE CARRIER	PKAAA679784				
3077973-01	GEAR-SUN,SECOND STAGE REDUCTION	PKAAA798866				

Cont'd

Liste des composants moteur à numéros de série  
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P&WC JR3-6830-E (2012-10)

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3076506-01	GEARSHAFT-STARTER GENERATOR DRIVE	PKAAA787402				
3076527-01	EJECTOR-FUEL WASTE	D0576				
3076545-01	COUPLING-POWER TURBINE SHAFT	PKAAA804926				
3076558-01	COUPLING-COMPRESSOR REAR HUB	PKAAA788923				
3076601-01	BLADE-TURBINE	HWXX6322				
		HWXX6328				
		HWXX6331				
		HWXX6341				
		HWXX6343				
		HWXX6405				
		HWXX6406				
		HWXX6709				
		HWXC0210				
		HWXC0214				
		HWXC0236				
		HWXC0310				
		HWXC1109				
		HWXC1529				
		HWXC2818				
		HWXC2825				
		HWXC2898				
		HWXC4150				
		HWXC4154				
		HWXC4167				
		HWXC4169				
		HWXC4181				
		HWXC4185				
		HWXC4190				
		HWXC4213				
		HWXC4218				
		HWXC7556				
		HWXC9762				
		HWXC9765				
		HWXC9789				
		HWXC9793				
		HWXC9797				
		HWXD7089				
		HWXD7096				

Cont'd

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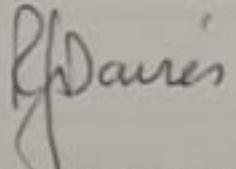
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P&WC JR3-6830-E ( 2012-10 )

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N° du matériel Material Number	Désignation du matériel Material Name	N° de série Serial No.	Code de trait. thermique Heat Code	N° de série du matériel forgé Forging Serial No.	N° de lot pour trait. thermique Heat Treat Batch No.	N° de matériel du fournisseur Vendor Material No.
3077979-01	CARRIER-SECOND STAGE REDUCTION	PKAAA802007				
3078325-01	CARRIER-FIRST STAGE REDUCTION	PKAAA686615				
3078326-01	CARRIER SET-FIRST STAGE REDUCTION	PKAAA700746				
3078330-01	COUPLING-REDUCTION GEARBOX	PKAAA792058				
3078381-01	VALVE-MOTIVE FLOW SOL	BCAAAA00856				
3079150-01 ✓	GOVERNOR-PROPELLER OVERSPEED	21552625				
3079349-01	HOUSING-RGB,REAR	RWA60F048				
3079433-01	HOUSING ASSY-PROP RDCN GBOX,FRONT	RWA61F548				
3079474-01	CASE-GAS GENERATOR,ASSY OF	RWA48F452				
3079564-01	HOUSING-POWER TURBINE SHAFT,ASYO	LPA000024087				
3079919-01	HOUSING ASSY-REDUCTION GEARBOX,REAR	RWA60F048				
3107449-01	BEARING-RLR,FLG,1.2206X2.047X.5881	FCN495940				
3112117-03	BEARING BALL	FCN502084				
3112368-01	BEARING-ROLLER FLANGED,.94X1.65X.47	FAA1812226				
		FAA1812249				
		FAA1812925				
		FAA1812926				
		FAA1812927				
		FAA1812928				
		FAA1812929				
		FAA1812943				
		FAA1812944				
		FAA1812951				
		FAA1812953				
3117924-01	WIRING HARNESS-T5 THERMOCOUPLE	NR36518				
3124864-01	DUCT-TURBINE EXHAUST,SGL PORT ASYO	RWA63F555				
3126114-01 ✓	LINER-COMBUSTION CHAMBER,ASSY OF	A004CDAA				

Approuvé par  
Approved By

  
R. J. DAVIES

T.C. 4-58  
NO. 004

Date 2019.01.15

Fin du document - End-of-document

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P&WC JR3-6830-E ( 2012-10 )

Modèle Model	PT6A-140	Nº de série Serial No.	PCE-VA0567		Caract. de montage Build Spec NO.	BS1294
Nº du matériel Material Number	Désignation du matériel Material Name	Nº de série Serial No.	Code de trait. thermique Heat Code	Nº de série du matériel forgé Forging Serial No.	Nº de lot pour trait. thermique Heat Treat Batch No.	Nº de matériel du fournisseur Vendor Material No.
3076329-01	DUCT-COMB CHMBR EXIT, LARGE, ASSY OF GEAR-PLANET,FIRST STAGE RDCN,41TEETH	YWBH89 YWBH91 YWBH92 YWBH95 YWBH05 YWBH11 YWBH21 YWBH32 YWBH38 YWBH56 YWBH70 YWBH94 YWBH96 YWBK02 YWBK07 YWBK11 YWBK35 YWBK37 YWBK39 YWBK50 YWBK60 YWBK70 YWBK73	RWA63F174 PKAAA802975 PKAAA802984 PKAAA802987 PKAAA806196 PKAAA806201 PKAAA806203 PKAAA806204 PKAAA806217			
3076360	GEAR-PLANET, SECOND STAGE RDCN	PKAAA802987 PKAAA806196 PKAAA806201 PKAAA806203 PKAAA806204 PKAAA806217				
3076363						
3076420-01 ✓	ROTOR-COMPRESSOR	EAAE000P437	WCBFY	206		
3076422-05 ✓	EXCHANGER-HEAT,FUEL/OIL	WA58660				
3076428-03 ✓	FUEL CONTROL-TURBOPROP	21559434				
3076454-01	GEAR-SUN,FIRST STAGE REDUCTION	PKAAA807283				
3076470-01	SHAFT & SLEEVE SET-PROPELLER	EAAE000M218	P4AQE			
3076505-01	SHAFT-COUPLING,ACCESSORY GEARBOX	PKAAA798505				

Cont'd



Aircraft Registration: **PK-SNV**

WO# Nr: **WO/058-SNV/X/2023**



# Additional Work Sheet

## Engine Replacement

## Parts Used Sheet

## Special Tool Used



## **Additional Work Sheet**

### **Engine Replacement**

Aircraft Registration: **PK-SNV**

WO# Nr: WO/058-SNV/X/2023

## Parts Used Sheet

## Part Used