



PT. SMART CAKRAWALA AVIATION

**WORK ORDER**

Form: SCA/MTC/030

|  |             |                   |
|--|-------------|-------------------|
| Subject :  | No.         | WO/078-SNK/V/2022 |
| <b>Engine Assy Replacement Due to Timex</b>                    | Date        | 10-May-2022       |
|  | A/C Reg.    | PK-SNK C208-00658 |
| Reference :<br>MP C208B Rev. 10<br>EI NO. 001/EO/TEK-TS/V/2022 | Prepared By | TS                |
|  | Checked By  | CI                |
|  | Approved By | TM                |

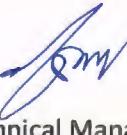
To : Engineer In Charge

**Description :**

1. Perform Engine Assy Replacement Due to Timex.
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<br>Company Lic. No.:<br><br><br>27 May 2022<br>(Engineer In Charge)<br>Dodit Supriyanto | Signature<br><br><br>(Technical Manager) |
|----------------------|--|---|

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

| DATE OF ISSUED         | JO/WO #                             | TYPE OF MAINTENANCE              | DATE OF ACCOMPLISHED       |
|------------------------|-------------------------------------|----------------------------------|----------------------------|
| 10-May-2022            | WO/078-SNK/V/2022                   | Engine Assy Replacement          |                            |
| A/C Type<br>C208       |                                     | Mfg. Serial Number<br>C208-00658 | A/C Registration<br>PK-SNK |
| <b>AIRCRAFT DATA</b>   |                                     |                                  |                            |
| Subject                | Pos #                               | Serial Number (SN)               | TTSN/TCSN                  |
| Engine                 | #1                                  | PCE-PC2327                       | 3599:32 / 5232             |
|                        | #2                                  | -                                |                            |
| Propeller/Rotor        | #1                                  | 190345                           | 3599:32 / 5232             |
|                        | #2                                  | -                                |                            |
| Landing Gear           | NLG                                 |                                  | 3599:32 / 5232             |
|                        | LH MLG                              |                                  | 3599:32 / 5232             |
|                        | RH MLG                              |                                  | 3599:32 / 5232             |
| <b>PACKAGE COVERED</b> |                                     |                                  |                            |
| No                     | Subject                             | Qty                              | Remark                     |
| 1                      | Non-Routine Card                    |                                  |                            |
| 2                      | Inspection Card                     |                                  |                            |
| 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/<br>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



Dwi M.

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/078-SNK/V/2022

| NO. | TASK CARD NO. | DESCRIPTION   | DATE        | EST MHR | NAME    | STAMP |
|-----|---------------|---|-------------|---------|---------|-------|
| 1   | NRC-001       | REMOVAL OF ENGINE ASSY PT6A-114A<br>REF EO NO. 001/EO/TEK-TSV/2022      | 19 May 2022 |         | Dodit's |       |
| 2   | NRC-001       | INSTALLATION OF ENGINE ASSY PT6A-114A<br>REF EO NO. 001/EO/TEK-TSV/2022 | 23 May 2022 |         | Dodit's |       |



PT. SMART CAKRAWALA AVIATION

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

|          |              |      |               |
|----------|--------------|------|---------------|
| A/C TYPE | : CESSNA 208 | TTSN | : 3599:32     |
| A/C REG  | : PK-SNK     | TCSN | : 5232        |
| MSN      | : C208-00658 | DATE | : 27 May 2022 |

|                    |                              |
|--------------------|------------------------------|
| TYPE OF INSPECTION | : ENGINE ASSY REPLACEMENT    |
| DUE AT             | :                            |
| REF                | : EO NO. 001/EO/TEK-TSV/2022 |

**EXCEPTION**

Ref. to Application and Approval Form Short term Escalation and Deferred Rectification interval (D76) with no 001/STE/TM/2022  
Escalation for Pln. 3244897-4 serial F66983 for Next 100 Hrs  
and will due at 3700:00 Hrs.

**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        |
|-------------------|------------------------|-------------|---|-------------|
| Dodit. Supriyanto | AIRFRAME & POWER PLANT | 4857 /SCA05 | <br>05 | 27 May 2022 |
|                   | EIRA                   |             |   |             |

THE NEXT DUE TYPE OF INSPECTION : ~

DUE AT : 7200 Hrs.

Form: SCA/MTC/049



**INSPECTION CARD**  
(Form: SCA/MTC/ 048)

TECHNICAL  
DEPARTMENT

|                |  |               |                    |         |
|----------------|--|---------------|--------------------|---------|
| 1. CARD #      | 2. JO/WO #                                       | 3. ORIGINATOR | 4. CARD REF        | 5. DATE |
|                | WO-078-SNK-V-<br>2022_Replacement<br>Engine Assy |               |                    |         |
| 6. A/C REG/MSN | 7. A/C TYPE                                      | 8. TRADE      | 12. VENDOR ORDER # |         |
| PK-SNK/00658   | C208   |               |                    |         |
| 9. ZONE        | 10. STA  | 11. MTC TYPE  |                    |         |
|                |  |               |                    |         |

|   |               |            |
|---|---------------|------------|
| 13. DESCRIPTION/DEFECT-IF FINDING OF CPCP INSPECTION, PLEASE COMPLETE SET. 20 | 14<br>PPC/ENG | 15<br>DATE |
|   |               |            |
|   |               |            |

|  |   |                |            |
|--|---|----------------|------------|
| 16. CORRECTIVE ACTION  | 17<br>MECH                                      | 18<br>ENG. LIC | 19<br>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       |
| NOTICE OF INSPECTOR  |   |                | DATE       |

|                    |                  |                       |           |        |        |      |
|--------------------|------------------|-----------------------|-----------|--------|--------|------|
| 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/078-SNK/V/2022 | 10-May-2022 | REPLACEMENT | PK-SNK         |
| 5. CARD #         | 6. ATA SPEC | 7. TRADE    | 8. STA         |
| #001              | 71          |             |                |
| 9. ZONE           | 10. PANEL   |             |                |
| FRONT             |             |             |                |

**11. DESCRIPTION**

PERFORM ENGINE ASSY REPLACEMENT MODEL PT6A-114A  
REF EO NO. 001/EO/TEK-TS/V/2022

S/N OFF: \_\_\_\_\_ S/N ON: \_\_\_\_\_

|           |  |                                 |                                |
|-----------|--|---------------------------------|--------------------------------|
| REFERENCE | <input checked="" type="checkbox"/> 001/EO/TEK-TS/V/2020 | <input type="checkbox"/> EMM 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 |
|-------------|-----------------|-----------------------|--------|
|             |                 |                       |        |
|             |                 |                       |        |
|             |                 |                       |        |
|             |                 |                       |        |
|             |                 |                       |        |
|             |                 |                       |        |
|             |                 |                       |        |



TECHNICAL SUPPORT  
TECHNICAL DEPARTMENT  
**ENGINEERING ORDER**

001/EO/TEK-TS/V/2022  
Rev. No 01  
Rev. Date 13/04/2022

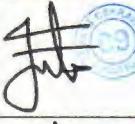
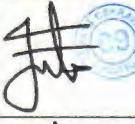
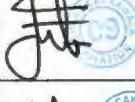
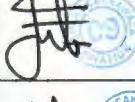
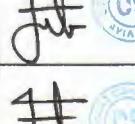
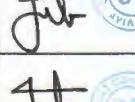
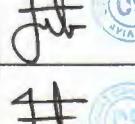
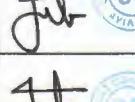
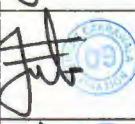
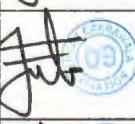
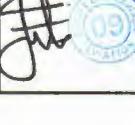
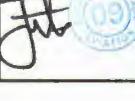
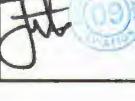
**SMART AVIATION**

**ENGINEERING ORDER**

**C208B ENGINE INSTALLATION**

Date : 23 May 2022 Work Number : WO/078-SNK/V/2022  
Part No. Engine : PT6A-114A A/C Total Hours : 3599:32  
Ser. No. Engine : PCE-PC1988 A/C Total Landings : 5232  
Engine Time TSN: 6437.2 TSO: 2910.6  
CSN: 9884 CSO: 5176

Installed on A/C Reg. : PK-SNK

| Description   | Eng.   | RII  | Remarks |
|---|--|--|---------|
| <b>B. INSTALL ENGINE (Refer to Figure 01 and Figure 02).</b>  |  |  |         |
| 1. 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)              | <br> | <br> | -       |
| 2. Install engine mount brackets, elastomers, and engine mount ring. Refer to Chapter 71, Engine mount - Maintenance Practices.   | <br> | <br> | -       |
| 3. Connect lifting hoist sling to forward and aft lifting brackets on engine and lift engine into position forward of engine mount truss.                               | <br> | <br> | -       |
| 4. Make sure that all engine lines and equipment are clear.   | <br> | <br> | -       |
| 5. Lubricate the engine mount bolts with MIL-PRF-81322G Grease, before you install them to prevent corrosion.   | <br> | <br> | -       |
| 6. Make sure that the threads of bolts are covered during application of grease. Lubrication on threads can alter the torque reading.                                   | <br> | <br> | -       |
| 7. Move the hoist and engine aft to align the engine mount ring holes with the holes in the engine mount truss.   | <br> | <br> | -       |
| 8. Install the mount bolts (engine mount truss to engine mount ring) and torque the bolt/nuts to 450 to 500 inch-pounds (50.8 to 56.4 N-m). Remove the hoist and sling. | <br> |  | -       |



TECHNICAL SUPPORT

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**SMART AVIATION****ENGINEERING ORDER**

|  |  |  |  |
|--|--|--|--|
| 9. Connect torque meter pressure and vent lines at upper left firewall.<br>Bleed torque meter indicating system.   | <br>     | <br>     |  |
| 10. Connect engine power controls at fuel control unit. Rig controls.  | <br>     | <br>   |  |
| 11. Connect the electrical leads of the following items of electrical equipment:<br>i) Ignition exciter high tension leads at ignition exciter (right engine mount truss). | <br>     | <br>     |  |
| ii) Starter/generator (center top of engine accessory case).   | <br>     | <br>     |  |
| iii) Gas generator section tachometer generator (lower right side of engine).  | <br>     | <br>   |  |
| iv) Fuel control heater (right rear of engine).  | <br> | <br> |  |
| v) Oil temperature sensor (right rear of engine).  | <br> | <br> |  |
| vi) Cabin bleed air heater flow control valve (lower right side of engine).  | <br> | <br> |  |
| vii) All engine to engine mount ground straps.   | <br> | <br> |  |
| viii) Propeller overspeed governor and ITT harness (left front of engine).   | <br> | <br> |  |
| ix) Propeller tachometer generator (right front of engine).  | <br> | <br> |  |
| 12. Install engine fire detector warning harness.  | <br> | <br> |  |
| 13. Connect starter/generator cooling air hose to starter/generator.   | <br> | <br> |  |



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|  |  |  |   |   |
|--|--|--|---|---|
| 14. Connect engine bleed air line to cabin bleed air heater flow control valve. Connect engine bleed air hose to cabin bleed air heater mixing air valve.  | <br>     | <br>       | <br><br><br> | - |
| 15. Install left nose cap/induction air duct/inertial air separator, if not previously installed.  | <br>     | <br>     | <br>  | - |
| 16. Install propeller, if not previously installed.  | <br>     | <br>     | <br>  | - |
| 17. Install and connect propeller governor control cable.  | <br>     | <br>     | <br>  | - |
| 18. Install left and right nose cap bulkhead assemblies and top cowling center panel.  | <br>   | <br>   | <br>  | - |
| 19. Install oil cooler and right nose cap.   | <br> | <br> | <br>  | - |
| 20. Connect fuel supply hose at fuel heater and fuel motive flow hose at fuel control unit.  | <br> | <br> | <br>  | - |
| 21. Push fuel firewall shutoff control fully in.   | <br> | <br> | <br>  | - |
| 22. With fuel line disconnected at fuel manifold below engine, motor engine with starter to purge fuel lines.  | <br> | <br> | <br>  | - |
| 23. Perform RII Dual Inspection <b>before</b> to first engine start.   | <br> | <br> | <br>  | - |
| 24. Start engine and perform operational check. Refer to Pilot's Operating Handbook and FAA-Approved Airplane Flight Manual.   | <br> | <br> | <br>  | - |
| 25. Perform Ground Run, Use the Pratt and Whitney PT6A-114/-114A/-135/-135A Engine Maintenance Manual with the Pilot's Operating Handbook and FAA-Approved Airplane Flight Manual to do the operational check of the different components on the engine. | <br> | <br> | <br>  | - |
| 26. Shut down engine and check for fluid leaks, connections or hardware, etc.  | <br> | <br> | <br>  | - |
| 27. Perform RII inspection if any controls have been disturbed or adjusted.  | <br> | <br> | <br>  | - |



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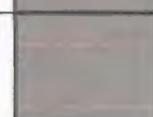
**SMART AVIATION****ENGINEERING ORDER**

28. Install engine cowling.



-

29. 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 : Dodit Supriyanto Stamp : 

Signature :

Place/Date : Nbx 27 May 2022



TECHNICAL SUPPORT  
TECHNICAL DEPARTMENT  
**ENGINEERING ORDER**

001/EO/TEK-TS/V/2022  
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Rev. Date 13/04/2022

**ENGINE CHANGE - Major Component Inventory Record**

|               |              |                   |                     |
|---------------|--------------|-------------------|---------------------|
| Registration  | : PK-SNK     | Work Order Number | : WO/078-SNK/V/2022 |
| Airframe Time | : 3599 : 32. | Airframe Landings | : 5232.             |
| Engine Time   | : 3599 : 32  | Engine Cycle      | : 5232.             |

| Description                  | Engine OFF      |               |                | Engine ON       |               |                |
|------------------------------|-----------------|---------------|----------------|-----------------|---------------|----------------|
|                              | Part Number     | Serial Number | Time Remaining | Part Number     | Serial Number | Time Remaining |
| Engine Assembly              | PT6A - 114A     | PCE PC 2327   | 00 : 28        | PT6A - 114A     | PCE PC 1988   | 689 : 00       |
| Propeller Assembly           | 36FR34C703      | 190345        | 400 : 28       | 36FR34C703      | 190345        | 400 : 28       |
| Compressor Bleed Valve       |                 |               |                |                 |               |                |
| Fuel Control Unit            | 32A4897-4       | F66983        | 00 : 28        | 32A4897-4       | F66983        | 00 : 28        |
| Oil Fuel Heater              | 10552E          | WA58723       |                | 10552E          | WA34378       |                |
| Igniter Exciter              | 30358896        | NNA19130180   |                | 30358896        | NNA19130180   |                |
| Flow Divider                 |                 |               |                |                 |               |                |
| Oil Cooler                   | 10751B          | 2570          |                | 10751B          | 2570          |                |
| Starter Generator            | 300S6L145QXL    | \$00716       |                | 300S6L145QXL    | \$00716       |                |
| Alternator                   | 9910592-2       | HT031771      |                | 9910592-2       | HT031771      |                |
| Fuel Pump                    | 702800          | 004367        |                | 702800          | 003253        |                |
| Propeller Governor           | 8210 - 002 - 01 | 216033165A    |                | 8210 - 002 - 01 | 10042883      |                |
| Propeller Overspeed Governor | 66503 - 210792  | 2160559A      |                | 66503 - 210792  | 2160559A      |                |
| Fuel Nozzle                  |                 |               |                |                 |               |                |

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



PT. SMART CAKRAWALA AVIATION

## COMPASS SWING FORM

Form: SCA/MTC/026

DATE : 26-06-2022 A/C REGN : PK-SNK  
 PLACE : NABIRE A/C MSN : 208 00658  
 OWNER : PT. SMART COMPASS TYPE NO : STBY (C660501-0103)  
 REASON : CHECK AFTER VALID UNTIL : MAY 2027  
 ENGINE REPLACEMENT

ADJUSTED BY

1. Wahyono  
 2.  
 3.

## CORRECTING SWING

| REFERENCE            | ACTUAL COURSE | AIRCRAFT COMPASS | DEVIATION | CO - EFFICIENTS   |       |
|----------------------|---------------|------------------|-----------|---|-------|
| N. 000               | 001           | 360              | +1        | $\begin{aligned} "C" &= \frac{\text{DEV. N} - \text{DEV. S}}{2} \\ &= \frac{(+1) - (-1)}{2} \\ &= +1 \end{aligned}$ |       |
| E. 090               | 092           | 090              | +2        | $\begin{aligned} "B" &= \frac{\text{DEV. E} - \text{DEV. W}}{2} \\ &= \frac{(+2) - (-2)}{2} \\ &= +2 \end{aligned}$ |       |
| S. 180               | 179           | 180              | -1        |   |       |
| CO - EFFICIENT "C"   |               |                  |           |   |       |
| CORRECTED (PLEASE ✓) |               | YES              | NO        |   |       |
| MAKE COMPASS READ    |               |                  | ✓         |   |       |
| W. 270               | 268           | 270              | -2        |   |       |
| CO - EFFICIENT "B"   |               |                  |           |   |       |
| CORRECTED (PLEASE ✓) |               | YES              | NO        |   |       |
| MAKE COMPASS READ    |               |                  | ✓         |   |       |
| CHECK SWING          |               |                  | DEV       | FOR   | STEER |
| 300                  | 300           | 300              | 0         | 300   | 300   |
| 330                  | 329           | 330              | -1        | 330   | 331   |
| N                    | 001           | 360              | +1        | 360   | 359   |
| 030                  | 033           | 030              | +3        | 030   | 027   |
| 060                  | 062           | 060              | +2        | 060   | 058   |
| E                    | 092           | 090              | +2        | 090   | 088   |
| 120                  | 122           | 120              | +2        | 120   | 118   |
| 150                  | 149           | 150              | -1        | 150   | 151   |
| S                    | 177           | 180              | -3        | 180   | 183   |
| 210                  | 208           | 210              | -2        | 210   | 212   |
| 240                  | 238           | 240              | -2        | 240   | 242   |
| W                    | 268           | 270              | -2        | 270   | 272   |
| TOTAL DEV.           |               |                  |           |   |       |

$$\begin{aligned} "A" &= \text{TOTAL} \\ &= \frac{-1}{12} \\ &= -0,08 \end{aligned}$$

| CO-EFFICIENT "A"     | - 0,08 |    |
|----------------------|--------|----|
| CORRECTED (PLEASE ✓) | YES    | NO |
|                      |        | ✓  |

NOTE : ENGINE : ON / OFF  
 RADIO : ON / OFF

JAKARTA.....

APPROVED BY

(CHIEF INSPECTOR)



## MAINTENANCE PROGRAM

### CESSNA C208/C208B

#### Appendix B04 – Magnetic Compass Calibration

|           |                    |         |                     |
|-----------|--------------------|---------|---------------------|
| Reg. Mark | : PK-SNK           | Date    | : 26-05-2022        |
| MSN       | : 208 00658        | Station | : N8X               |
| TSN / CSN | : 3599 : 32 / 5232 | WO No.  | : WO/078-SNK/V/2022 |

| NO.                               | TASK  | SIGNATURE |       |
|-----------------------------------|---|-----------|-------|
|                                   |   | SIGN      | STAMP |
| 01                                | Magnetic Compass Functional Check.<br>Refer to AMM 34-21-00.  |           |       |
| 02                                | Record the Magnetic Compass functional check result, calculate and make an entry in form SCA/MTC/026. |           |       |
| *** End of Appendix B04 Items *** |   |           |       |

| PERSONNEL PRTICIPATING IN THIS INSPECTION |          |           |                |
|---|----------|-----------|----------------|
| NAME                                      | POSITION | SIGNATURE | LICENSE NUMBER |
| Wahyono                                   | Engineer |           |                |
| Dodit                                     | Engineer |           | A857           |
|   |          |           |                |
|   |          |           |                |

#### RETURN TO SERVICE

The work recorded above has been carried out in accordance with the requirements of the Civil Aviation Safety Regulation for the time being in force and in that respect the aircraft is consider fit for Release to Service.

|           |           |            |              |
|-----------|-----------|------------|--------------|
| Name      | : Wahyono | Stamp      | :            |
| Signature | :         | Place/Date | : 26-05-2022 |



TECHNICAL SUPPORT  
TECHNICAL DEPARTMENT  
**ENGINEERING ORDER**

001/EO/TEK-TS/V/2022  
Rev. No 01  
Rev. Date 13/04/2022

**ENGINEERING ORDER**

**001/EO/TEK-TS/V/2022**

**REMOVAL & INSTALLATION OF ENGINE ASSY**

**PT6A-114A ON CESSNA C208B**

**PT. SMART CAKRAWALA AVIATION**

| Prepared           | Checked                  | Approved          |
|--------------------|--------------------------|-------------------|
| Technical Support  | Chief Inspector          | Technical Manager |
| Signature:<br>     | Signature:<br>           | Signature:<br>    |
| Name: Dwi Mahanani | Name: Yanuar Abdul Fatah | Name: Istiono     |
| Date: 10 May 2022  | Date: 11 May 2022        | Date: 11 May 2022 |



TECHNICAL SUPPORT  
TECHNICAL DEPARTMENT  
**ENGINEERING ORDER**

001/EO/TEK-TS/V/2022  
Rev. No 01  
Rev. Date 13/04/2022

## SMART AVIATION

### ENGINEERING ORDER

|   |  |                                 |
|---|--|---------------------------------|
|   | <p>No. EI:<br/><b>001/EO/TEK-TS/V/2020</b></p> <p>Date Issued :<br/><b>May 10, 2022</b></p>  | <p>Rev. No. :<br/><b>01</b></p> |
| <p>Task Description :</p> <p><b>TO REMOVAL &amp; INSTALLATION OF ENGINE ASSY PT6A-114A<br/>ON CESSNA C208</b></p> | <p>Data Reference :</p> <ul style="list-style-type: none"><li><b>Model 208 Series Maintenance Manual<br/>Revision 37, Revision Date Mar 1, 2020<br/>Chapter 71 Power Plant – Maintenance<br/>Practices</b></li></ul> |                                 |
| <p>Aircraft Type :</p> <p><b>CESSNA C208B WITH ENGINE MODEL PT6A-<br/>114A / PT6A114</b></p>                      |  |                                 |



TECHNICAL SUPPORT  
TECHNICAL DEPARTMENT  
**ENGINEERING ORDER**

001/EO/TEK-TS/V/2022

|           |            |
|-----------|------------|
| Rev. No   | 01         |
| Rev. Date | 13/04/2022 |

## SMART AVIATION

### ENGINEERING ORDER

#### 1. Description.

This EO is issued, to perform removal & installation checklist powerplant maintenance practices the PT6A-114/PT6A-114A engine on Cessna C208.

#### 2. Aircraft Effectivity.

| REGISTRATION | SERIAL NUMBER |
|--------------|---------------|
| PK-SNK       | C208-00658    |

#### 3. Compliance

The Engine model PT6A-114A have TBO 3600 Hours, do a removal the engine installed on airframe refer to accomplishment instruction task card, and install the overhauled/new engine on the aircraft refer to accomplishment instruction task card.

#### 4. Distribution.

|                          |                          |                   |                          |
|--------------------------|--------------------------|-------------------|--------------------------|
| TECHNICAL MANAGER        | <input type="checkbox"/> | MATERIAL SUPPORT  | <input type="checkbox"/> |
| SAFETY & QUALITY MANAGER | <input type="checkbox"/> | TECHNICAL SUPPORT | <input type="checkbox"/> |
| CHIEF INSPECTOR          | <input type="checkbox"/> | FILE              | <input type="checkbox"/> |

#### 5. Manhours

32.0 man-hour to do the inspection.



TECHNICAL SUPPORT  
TECHNICAL DEPARTMENT  
**ENGINEERING ORDER**

|                      |            |
|----------------------|------------|
| 001/EO/TEK-TS/V/2022 |            |
| Rev. No              | 01         |
| Rev. Date            | 13/04/2022 |

**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

MS206685 GASKET PROPELLER OVER SPEED GOVERNOR

206684G/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

**AS REQ:**

MIL PRF 83483C LUBRICANT FOR THREAD PROPELLER



TECHNICAL SUPPORT  
TECHNICAL DEPARTMENT  
**ENGINEERING ORDER**

|                      |            |
|----------------------|------------|
| 001/EO/TEK-TS/V/2022 |            |
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## SMART AVIATION

### ENGINEERING ORDER

MIL W-G-632 LUBRICANT FOR COMPRESSOR DRIVE UNIT, PLASTILUBE

Lockwire 0.020", 0.025", 0.032"

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.



TECHNICAL SUPPORT  
TECHNICAL DEPARTMENT  
**ENGINEERING ORDER**

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**SMART AVIATION**

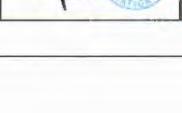
**ENGINEERING ORDER**

**9. Accomplishment Instructions.**

**C208B ENGINE REMOVAL**

|                 |               |                    |                     |
|-----------------|---------------|--------------------|---------------------|
| Date            | : 19 May 2022 | Work Number        | : WO/078-SNK/V/2022 |
| Part No. Engine | : PT6A-114A   | A/C Total Hours    | : 3599:32           |
| Ser. No. Engine | : PCE-PC2327  | A/C Total Landings | : 5232              |
| Engine Time     | TSN: 3599:32  | TSO: _____         |                     |
|                 | CSN: 5232     | CSO: _____         |                     |

Removed from A/C Reg. : PK-SNK

| Description  | Eng.   | RII  | Remarks |
|--|--|--|---------|
| <b>A. REMOVE ENGINE (Refer to Figure 01 and Figure 02)</b>   |  |  |         |
| <b>CAUTION:</b> Chock main wheels and place a tailstand under tailcone before attempting engine removal.   |  |  |         |
| 1. Turn electrical power off.  |  |  | —       |
| 2. Pull fuel firewall shutoff control out (off).   |  |  | —       |
| 3. Remove upper cowling doors and lower cowling panels.  |  |  | —       |
| 4. Drain residual fuel from lines and fuel filter using filter drain. Remove fuel supply hose at fuel heater. Remove fuel motive flow hose at fuel control unit. |  |  | —       |
| 5. Remove right nose cap and oil cooler.   |  |  | —       |
| 6. Remove top cowl center panel assembly and nose cap.   |  |  | —       |

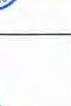
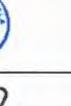
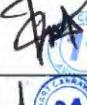
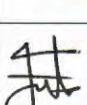


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**ENGINEERING ORDER**

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**SMART AVIATION**

**ENGINEERING ORDER**

|  |   |   |   |
|--|---|---|---|
| 7. Remove propeller.   | <br>     | <br>     | — |
| 8. Disconnect and remove propeller speed control cable.  | <br>     | <br>     | — |
| 9. Remove the left nose cap/induction air duct/inertial air separator.                                   | <br>     | <br>     | — |
| 10. Disconnect cabin heater bleed air line at flow control valve and bleed air hose at mixing air valve. | <br>     | <br>   | — |
| 11. Remove starter/generator cooling air hose from starter/generator.                                    | <br> | <br> | — |
| 12. Remove engine fire detector wiring harness.  | <br> | <br> | — |
| 13. Disconnect electrical wiring connectors and ground wires at the following equipment locations:       |   |   |   |
| i) Propeller overspeed governor and ITT harness (left front of engine).                                  | <br> | <br> | — |
| ii) Propeller tachometer generator (right front of engine)   | <br> | <br> | — |
| iii) Cabin bleed air heater flow control valve (lower right side of engine).                             | <br> | <br> | — |
| iv) Oil temperature sensor (right side of engine).   | <br> | <br> | — |
| v) Fuel control heater (right rear of engine).   | <br> | <br> | — |
| vi) Gas generator section tachometer generator (lower right side of engine).                             | <br> | <br> | — |
| vii) Starter/generator (center top of engine accessory case).  | <br> | <br> | — |



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**SMART AVIATION**

**ENGINEERING ORDER**

|   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| viii) Ignition exciter high tension leads at ignition exciter (right engine mount truss).                                   | <br>     | <br>     | <br>     | <br>     | <br>   | <br> | <br> | <br> | <br> | <br> | <br> | <br> |
| 14. Disconnect engine power control cables at fuel control unit.  | <br>     | <br>     | <br>     | <br>   | <br> | <br> | <br> | <br> | <br> | <br> | <br> | <br> |
| 15. Remove torquemeter pressure and vent lines at forward upper right side of engine mount truss.                           | <br>     | <br>     | <br>   | <br> | <br> | <br> | <br> | <br> | <br> | <br> | <br> | <br> |
| 16. Connect hoist sling to forward and aft lifting brackets and connect sling to engine hoist.                              | <br>     | <br>   | <br> | <br> | <br> | <br> | <br> | <br> | <br> | <br> | <br> | <br> |
| 17. Raise hoist to just support weight of engine and remove nuts and bolts at each of four corners of engine mounting ring. | <br>   | <br> | <br> | <br> | <br> | <br> | <br> | <br> | <br> | <br> | <br> | <br> |
| 18. Ensure all wiring and lines are free, then carefully move hoist and engine forward to clear engine mount truss.         | <br> | <br> | <br> | <br> | <br> | <br> | <br> | <br> | <br> | <br> | <br> | <br> |
| 19. If engine is to be returned for overhaul or replaced, remove the following items:                                       | <br> | <br> | <br> | <br> | <br> | <br> | <br> | <br> | <br> | <br> | <br> | <br> |
| i) Engine induction air plenum. Refer to Chapter 71, Engine cowling and Nose Cap - Maintenance Practices.                   | <br> | <br> | <br> | <br> | <br> | <br> | <br> | <br> | <br> | <br> | <br> | <br> |
| ii) Engine mount ring, elastomers, and engine mount brackets. Refer to Chapter 71, Engine mount - Maintenance Practices.    | <br> | <br> | <br> | <br> | <br> | <br> | <br> | <br> | <br> | <br> | <br> | <br> |
| iii) Propeller overspeed governor. Refer to Chapter 61, Propeller Control - Maintenance Practices.                          | <br> | <br> | <br> | <br> | <br> | <br> |
| iv) Propeller tachometer generator. Refer to Chapter 77, Propeller RPM Indicator - Maintenance Practices.                   | <br> | <br> | <br> | <br> | <br> |
| v) Oil temperature sensing sensor. Refer to Chapter 79, Oil Indicating - Maintenance Practices.                             | <br> | <br> | <br> | <br> |



TECHNICAL SUPPORT  
TECHNICAL DEPARTMENT  
**ENGINEERING ORDER**

001/EO/TEK-TS/V/2022

Rev. No 01  
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**SMART AVIATION**

**ENGINEERING ORDER**

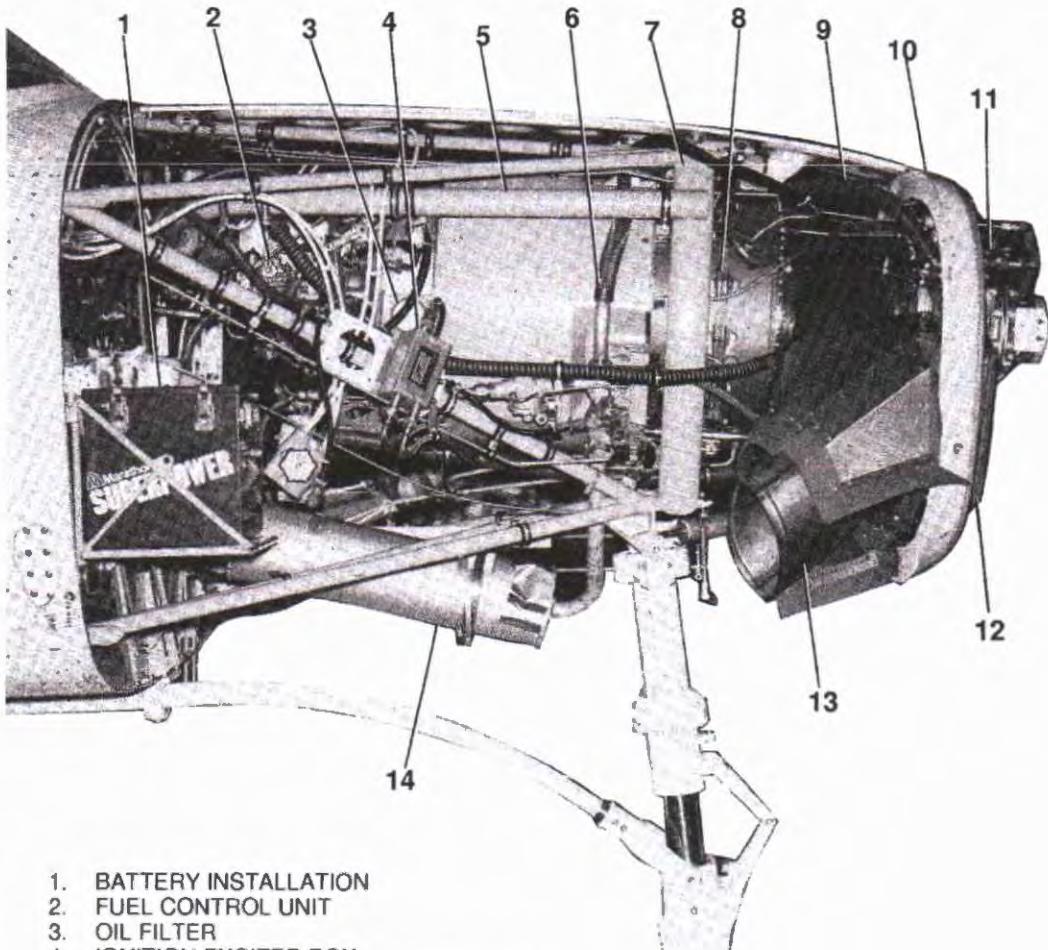
|  |  |  |  |
|--|--|--|--|
| vi) Oil cooler bracket and pressure/return hoses. Refer to Chapter 79, Oil Distribution - Maintenance Practices.   |  |  |  |
| vii) Standby alternator (if equipped). Refer to Chapter 24, Standby Electrical System - Maintenance Practices.   |  |  |  |
| viii) Torque sensing line and fittings.  |  |  |  |
| 20. Make and inventory record P/N and S/N of the engine and its accessories from the engine that removed, fill out into the List (Form Engine Change – Major Component Inventory Record) |  |  |  |
| 21. Make an appropriate entry in Work Order (WO) and Aircraft Flight Maintenance Log (AFML)  |  |  |  |

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

**SMART AVIATION**

**ENGINEERING ORDER**

A21758



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

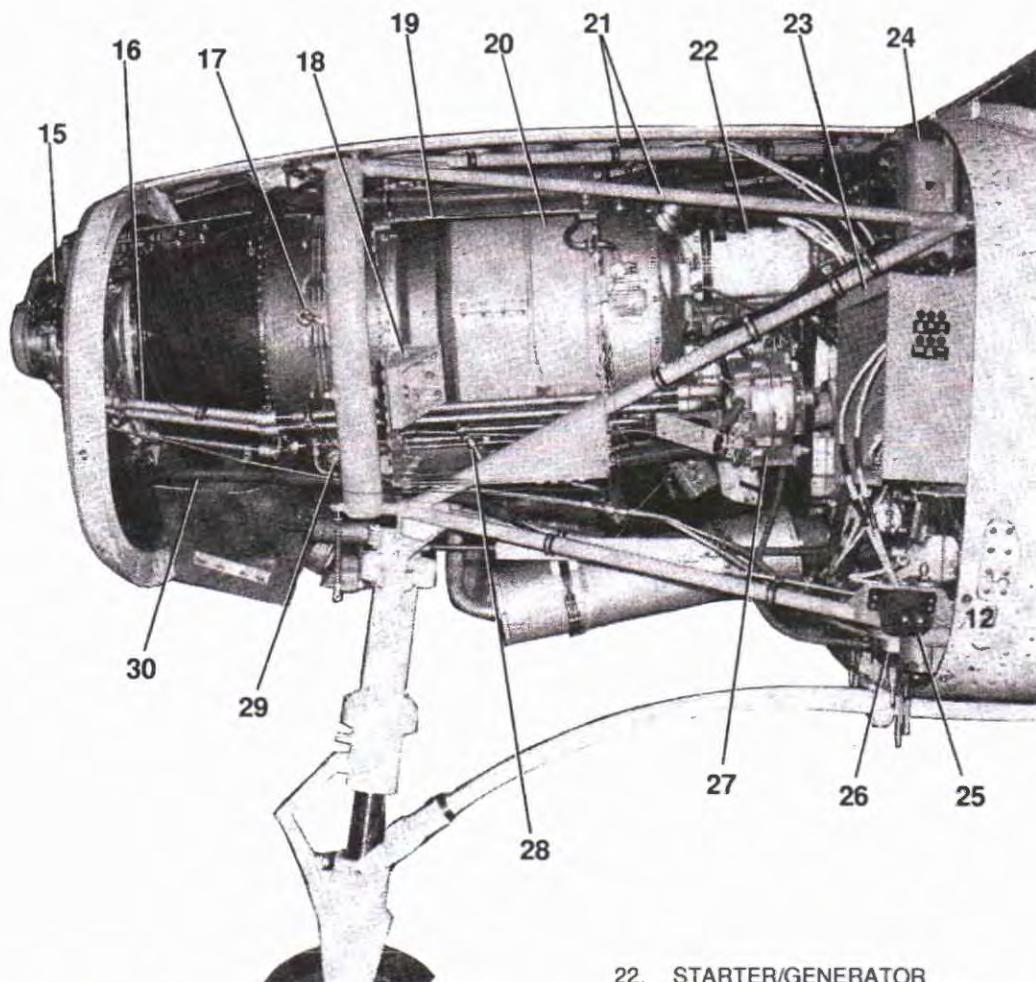
2650X1002

**Figure 01 Sheet 1**

## SMART AVIATION

### ENGINEERING ORDER

A21759



|                                  |                                |
|----------------------------------|--------------------------------|
| 15. PROPELLER OVERSPEED GOVERNOR | 22. STARTER/GENERATOR          |
| 16. REDUCTION GEARBOX            | 23. POWER DISTRIBUTION BOX     |
| OIL LINES                        | 24. STANDBY ALTERNATOR         |
| 17. SPARK IGNITER                | CONTROL UNIT                   |
| 18. ENGINE MOUNT BRACKET         | 25. AUXILIARY POWER RECEPTACLE |
| 19. INDUCTION AIR PLENUM         | 26. FUEL FILTER                |
| 20. COMPRESSOR INLET             | 27. STANDBY ALTERNATOR         |
| 21. ENGINE MOUNT TRUSS           | 28. COMPRESSOR DRAIN LINE      |
|                                  | 29. FUEL MANIFOLD DUMP VALVE   |
|                                  | 30. OIL COOLER PRESSURE HOSE   |

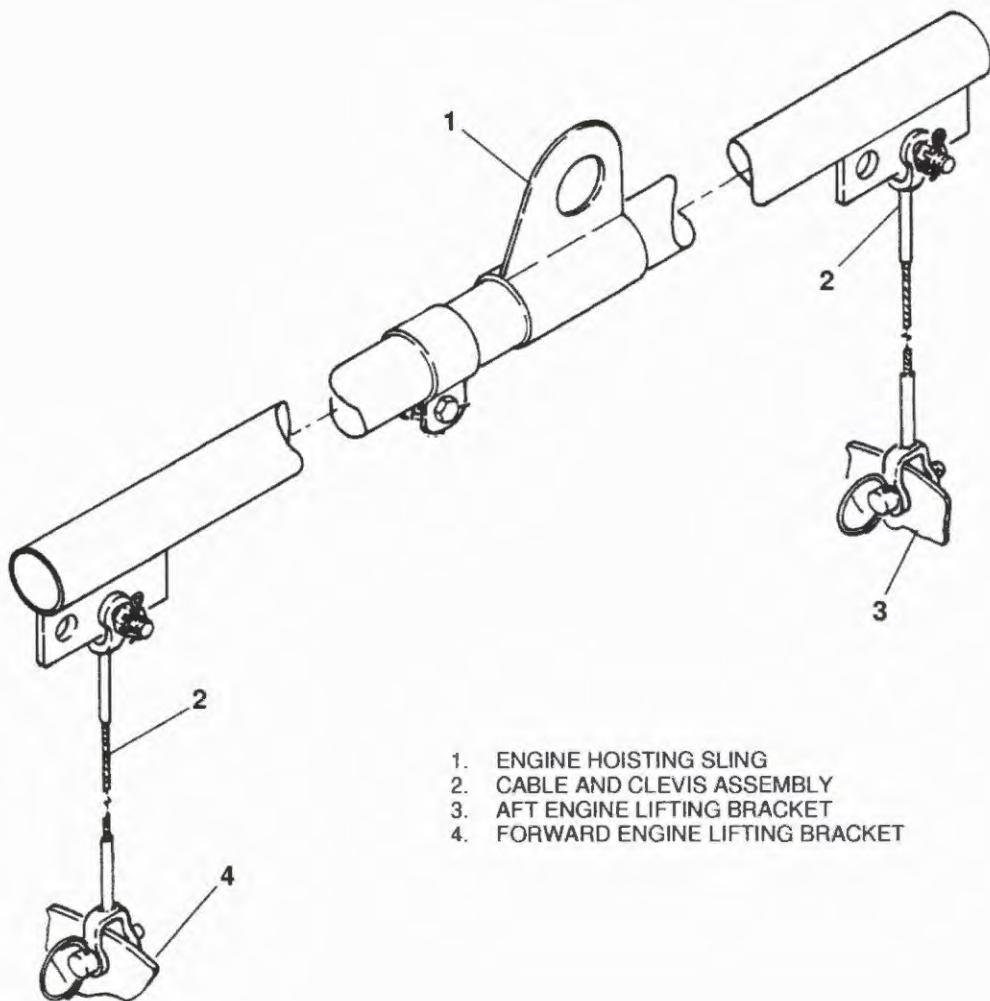
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**Figure 1 Sheet 2**



**SMART AVIATION**  
**ENGINEERING ORDER**

A21750



2680X1044

**Figure 02**



# MAINTENANCE PROGRAM

## CESSNA C208/C208B

### Appendix B02 – PT6A-114A Engine Run Performance Sheet

Reg. Mark : PK - SNK

WO/FML No. : 078-SNK/V/2022

| PRE - INSPECTION |  |
|------------------|--|
| Location         |  |
| Date             |  |
| Cycle            |  |
| Filed Barometric |  |
| OAT              |  |
| Altitude         |  |

| POST - INSPECTION |             |
|-------------------|-------------|
| Location          | Nbx         |
| Date              | 27 May 2022 |
| Cycle             | 5232        |
| Filed Barometric  | 92.921      |
| OAT               | 31          |
| Altitude          | 180         |

| 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   | 1900   |
| ITT               | 785 °C | 707 °C |
| Ng                | 99.1 % | 98.2 % |
| Wf                | 450    | 450    |
| Oil Press         |        | 88 °C  |
| Oil Temp          |        | 67 °C  |
| Start Temp        |        | 716 °C |

| Engine Run Up Checks                        |                                     |   |                                     |                                     |                                     |          |                                     |     |                                     |       |                                     |         |                                     |
|---|-------------------------------------|---|-------------------------------------|-------------------------------------|-------------------------------------|----------|-------------------------------------|-----|-------------------------------------|-------|-------------------------------------|---------|-------------------------------------|
| Inertial                                    | <input checked="" type="checkbox"/> | EPL   | <input checked="" type="checkbox"/> | OVG                                 | <input checked="" type="checkbox"/> | Stby Alt | <input checked="" type="checkbox"/> | BOV | <input checked="" type="checkbox"/> | Brake | <input checked="" type="checkbox"/> | Randown | <input checked="" type="checkbox"/> |
| NOTE:                                       |                                     |   |                                     |                                     |                                     |          |                                     |     |                                     |       |                                     |         |                                     |
| 1. Brake system at Torque 1500 ft-lbs.      |                                     | 3. EPL check can't exceed 4% Ng per second. |                                     | 5. Low idle at 52.5 – 53.5% 40Amps. |                                     |          |                                     |     |                                     |       |                                     |         |                                     |
| 2. Inertial Separator at Torque 400 ft-lbs. |                                     | 4. Standby Alt at 80% Ng.                   |                                     | 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:**

| PERFORMED BY    |  |             |          |
|-----------------|--|-------------|----------|
| Name            | Sign & Stamp   | Date        | Location |
| Dodit Supriyadi |  | 27 May 2022 | Nbx      |



## Additional Work Shee

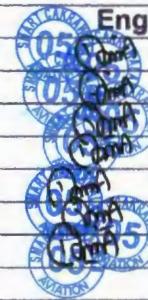
Aircraft Registration: **PK-SNK**

WO# Nr: **WO/078-SNK/V/2022**

## Parts Used Sheet

### Special Tool Used

## Engineering





## Additional Work Sheet

Aircraft Registration: **PK-SNK**

WO# Nr: WO/078-SNK/V/2022

## Parts Used Sheet

### Part Used

| Date | Part Nr.      | Serial Nr. | Description  | Quantity | Engineer |
|------|---------------|------------|--------------|----------|----------|
|      | A691633-72.   |            | "O" Ring.    | 1        | 05       |
|      | A 1639 - 32   |            | NUT          | 8        | 05       |
|      | B 5096        |            | Spacer       | 8        | 05       |
|      | M9206685      |            | Gasket       | 1        | 05       |
|      | 2066846       |            | Gasket       | 1        | 05       |
|      | AN 4044 - 1   |            | Gasket       | 1        | 05       |
|      | S 3346 - 1    |            | Gasket       | 4        | 05       |
|      | AN 363 - 720  |            | Nut          | 4        | 05       |
|      | M924665 - 302 |            | Cotter pin   | 10       | 05       |
|      | VSF1015N12B   |            | Seal conical | 2        | 05       |
|      | 9910333-1     |            | Elas former  | 6        | 05       |
|      | M924665 - 302 |            | Cotter pin.  | 10       | 05       |
|      | M924665 - 139 |            | Cotter pin.  | 15       | 05       |
|      | M924665 - 85  |            | Cotter pin.  | 9        | 05       |
|      | 3007342       |            | Gasket       | 2        | 05       |
|      | S 2808        |            | Float oil.   | 1        | 05       |
|      | CH 3405       |            | igniter      | 2        | 05       |
|      | 8010880       |            | Gasket.      | 2        | 05       |
|      | 3029268       |            | Filter       | 1        | 05       |