



## Shop Visit History Report

IIN: Z3311

Serial Number:

13-182449-08502

Part Number: 3822611-1

| Item No | Part No   | Part TSN | Part CSN | Part TSO | Part CSO | Part TSR | Part CSR | Fitment/Removal | Date        | Parent Serial Number | Parent TSN | Parent CSN | Visit Remarks          |
|---------|-----------|----------|----------|----------|----------|----------|----------|-----------------|-------------|----------------------|------------|------------|------------------------|
| 1       | 3822611-1 | 0        | 0        | 0        | 0        | 0        | 0        | FITMENT         | 28-Jun-2013 | P2273                | 0          | 0          |                        |
| 2       | 3822611-1 | 7184     | 4819     | 7184     | 4819     | 7184     | 4819     | REMOVAL         | 16-Sep-2017 | P2273                | 7184       | 4819       | OVERHAUL               |
| 3       | 3822611-1 | 7184     | 4819     | 0        | 0        | 0        | 0        | FITMENT         | 17-Oct-2017 | P2273                | 7184       | 4819       | OVERHAUL-ARC 330055685 |

\*\*\* End Of Report \*\*\*





## Shop Visit History Report

IIN: Z0000

Serial Number: P2273

Part Number: 3800550-1

| Item No | Part No   | Part TSN | Part CSN | Part TSO | Part CSO | Fitment/Removal | Date        | A/C Regn | Position | TSN   | CSN  | Visit No.   | Visit Remarks                                    |
|---------|-----------|----------|----------|----------|----------|-----------------|-------------|----------|----------|-------|------|-------------|--|
| 1       | 3800550-1 | 0        | 0        | 0        | 0        | FITMENT         | 28-Jun-2013 | SWU      | APU      | 0     | 0    | 20131009001 |  |
| 2       | 3800550-1 | 7184     | 4819     | 7184     | 4819     | REMOVAL         | 16-Sep-2017 | SWU      | APU      | 19991 | 2377 | 20171101001 | OVERHAUL   |
| 3       | 3800550-1 | 7184     | 4819     | 0        | 0        | FITMENT         | 17-Oct-2017 | -        |          | 0     | 0    | 20171101001 | OVERHAULED BY HONEYWELL<br>W/O 5011527375        |
| 4       | 3800550-1 | 7186     | 4825     | 2        | 6        | REMOVAL         | 17-Oct-2017 | -        |          | 2     | 6    | 20171101002 | DMM HRS/CYCS RELEASED<br>AFTER APU FINAL TESTING |
| 5       | 3800550-1 | 7186     | 4825     | 2        | 6        | FITMENT         | 15-Nov-2017 | SNB      | APU      | 11340 | 1341 | 20171101002 | -  |

\*\*\* End Of Report \*\*\*



# LIFE LIMITED PART REPAIR RECORD

| DATE | MAINTENANCE PERFORMED | AUTHORIZED SIGNATURE |
|------|-----------------------|----------------------|
|      |                       |                      |
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# LIFE LIMITED PART CARD

| PART NAME     | Impeller Compressor 1st Stage |            | PART NUMBER       | 3822346-1                         |       |                            |       |         |  |  |
|---------------|-------------------------------|------------|-------------------|-----------------------------------|-------|----------------------------|-------|---------|--|--|
| SERIAL NUMBER | 13-182449-08502               |            | ASSY. PART NUMBER | 3822611-1                         |       |                            |       |         |  |  |
| DATE          |                               | ENGINE     | AIRCRAFT          | TIME ON PART THIS<br>INSTALLATION |       | TOTAL TIME ON THIS<br>PART |       | REMARKS |  |  |
| INSTALLED     | REMOVED                       | SERIAL NO. | SERIAL NO.        | CYCLE                             | HOURS | CYCLE                      | HOURS |         |  |  |
| Jun-13        |                               | P-2273     |                   | 00:00                             | 00:00 | 00:00                      | 00:00 |         |  |  |
|               |                               |            |                   |                                   |       |                            |       |         |  |  |
|               |                               |            |                   |                                   |       |                            |       |         |  |  |
|               |                               |            |                   |                                   |       |                            |       |         |  |  |
|               |                               |            |                   |                                   |       |                            |       |         |  |  |
|               |                               |            |                   |                                   |       |                            |       |         |  |  |
|               |                               |            |                   |                                   |       |                            |       |         |  |  |
|               |                               |            |                   |                                   |       |                            |       |         |  |  |
|               |                               |            |                   |                                   |       |                            |       |         |  |  |
|               |                               |            |                   |                                   |       |                            |       |         |  |  |
|               |                               |            |                   |                                   |       |                            |       |         |  |  |
|               |                               |            |                   |                                   |       |                            |       |         |  |  |
|               |                               |            |                   |                                   |       |                            |       |         |  |  |
|               |                               |            |                   |                                   |       |                            |       |         |  |  |
|               |                               |            |                   |                                   |       |                            |       |         |  |  |
|               |                               |            |                   |                                   |       |                            |       |         |  |  |

**Honeywell**

Honeywell International Inc.  
Engines & Systems  
P.O. Box 52181  
Phoenix, Arizona 85072-2181

AX6167

## Configuration Report

| Material Number | 3800550-1                  | Serial Number                            | P-2273 | ESS - Engines - Phoenix   |               |       |         |          |
|-----------------|----------------------------|--|--------|---|---------------|-------|---------|----------|
| Material Desc   | ENGINE OUTLINE GAS TURBINE | Mfg. Revision                            | AC     | Honeywell International Inc<br>111 South 34th Street<br>PHOENIX AZ 85072<br>USA |               |       |         |          |
| <hr/>           |                            |  |        |   |               |       |         |          |
| BOM             | Material                   | Material Description                     | Rev    | Serial Number   | Lot Number    | Batch | Ref.Des | Quantity |
| 1               | 3826980-13                 | ENGINE COMPRESSOR MODULE                 | AM     | P-1394  |               |       |         | 1,0      |
| 2               | 3840124-3                  | BEARING SET, THRUST BALL, SPLIT INNER RI |        | 13-162255-10955   |               |       |         | 1,0      |
| 2               | 3844488-3                  | SEAL INTSTG                              |        |   | 13-150609-007 |       |         | 1,0      |
| 2               | 3822341-5                  | IMPELLER, COMPRESSOR, SECOND STAGE       | B      | 13-182449-08511   | 131034133     |       |         | 1,0      |
| 3               | 3822347-1                  | FORGING COMPRESSOR                       | -      | 13-182449-08511   |               |       |         | 1,0      |
| 2               | 3822611-1                  | IMPELLER, COMPRESSOR FIRST STAGE         | G      | 13-182449-08502   | 131034137     |       |         | 1,0      |
| 3               | S9008BT45                  | PIN, STRAIGHT, HEADLESS                  | PY     |   |               |       |         | 1,0      |
| 3               | 3822482-1                  | SEAL, AIR ROTATING                       | -      |   |               |       |         | 1,0      |
| 3               | 3822346-1                  | FORGING COMPRESSOR FIRST STAGE           | -      | 13-182449-08502   |               |       |         | 1,0      |
| 2               | 3827191-1                  | HOUSING, CENTRIFUGAL COMPRESSOR, STAGE 1 |        |   | 13-3300-036   |       |         | 1,0      |
| 2               | 3826919-5                  | HOUSING, ENGINE COMP - 2ND STG           |        |   | 12-162053-972 |       |         | 1,0      |
| 1               | 3883499-3                  | ACTUATOR, INLET GUIDE VANE               |        | 1552  |               |       |         | 1,0      |
| 1               | 3805034-10                 | GEARBOX ASSEMBLY                         | A      | P-1401  |               |       |         | 1,0      |
| 2               | 3860835-2                  | BEARING, ROLLER, CYLINDRICAL             |        | 13-162255-17733   |               |       |         | 1,0      |
| 2               | 3503876-6                  | DRIVESHAFT ASSY                          | J      | 1734  | 1             |       |         | 1,0      |
| 2               | 3860832-2                  | BEARING SET, ROLLER, CYLINDRICAL, MATCHE |        | 13-162255-12612   |               |       |         | 1,0      |
| 2               | 3860832-2                  | BEARING SET, ROLLER, CYLINDRICAL, MATCHE |        | 13-162255-12641   |               |       |         | 1,0      |
| 2               | 3860836-2                  | BEARING SET, ROLLER, CYLINDRICAL, MATCHE |        | 13-162255-15519   |               |       |         | 1,0      |
| 2               | 3860836-2                  | BEARING SET, ROLLER, CYLINDRICAL, MATCHE |        | 13-162255-15523   |               |       |         | 1,0      |
| 2               | 3860836-2                  | BEARING SET, ROLLER, CYLINDRICAL, MATCHE |        | 13-162255-16604   |               |       |         | 1,0      |
| 2               | 3860839-2                  | BEARING SET, ROLLER, CYLINDRICAL, MATCHE |        | 13-162370-03173   |               |       |         | 1,0      |
| 2               | 3863163-8                  | HOUSING ASSEMBLY, MATCHED SET            | AC     | 13-1034-38578   |               |       |         | 1,0      |
| 3               | 3863096-1                  | CARRIER, BEARING                         | H      |   |               |       |         | 1,0      |
| 3               | 3863162-117                | CASTING, HOUSING, GEARBOX                | H      |   |               |       |         | 1,0      |
| 3               | 3863094-911                | BUSHING SLEEVE                           | -      |   |               |       |         | 1,0      |

Subject to U.S. Export Regulations

**Due A/F hours/cycles for APU life limited parts at installation 0 / 0**
**APU Description**

: AUXILIARY POWER UNIT

**Part Number**

: 3800550-1

**Serial number**

P2273

**IIN**

: Z0000

**Aircraft Reg**

: SWU

**Position**

: APU

**Date Installed**

: 28-Jun-2013

**TSN / CSN(at installation)**

: 0 / 0

**TSLV / CSLV**

: - / -

**Remarks**

:

| Item No | ATA Chapter | Position | IIN   | Part Number | Part Description              | Serial Number   | TSO# LL(HR) | CSO# LL(CYC) | TSN | CSN | Airframe due Hours | Cycles |
|---------|-------------|----------|-------|-------------|-------------------------------|-----------------|-------------|--------------|-----|-----|--------------------|--------|
| 1       | 49-00-00    | APU      | Z0000 | 3800550-1   | AUXILIARY POWER UNIT          | P2273           | 0           | 0            | 0   | 0   | NA                 | NA     |
| 2       | 49-23-00    |          | Z3311 | 3822611-1   | IMPELLER COMPRESSOR 1ST STAGE | 13-182449-08502 | 27000 *     |              | 0   | 0   |                    | 27000  |
| 3       | 49-23-00    |          | Z3312 | 3822341-5   | IMPELLER, COMPRESSOR 2ND STG  | 13-182449-08511 | 27000 *     |              | 0   | 0   |                    | 27000  |
| 4       | 49-23-00    |          | Z3313 | 3822612-1   | IMPELLER COMPRESSOR LOAD      | 13-182449-08188 | 27000 *     |              | 0   | 0   |                    | 27000  |
| 5       | 49-25-00    |          | Z3511 | 3842151-3   | ROTOR ASSEMBLY, 1ST STAGE     | 12-168522-01537 | 27000 *     |              | 0   | 0   |                    | 27000  |
| 6       | 49-25-00    |          | Z3512 | 3842155-4   | ROTOR ASSEMBLY, 2ND STAGE     | 12-168522-01912 | 27000 *     |              | 0   | 0   |                    | 27000  |
| 7       | 49-25-00    |          | Z3513 | 3842160-6   | ROTOR ASSEMBLY, 3RD STAGE     | 12-156101-09303 | 27000 *     |              | 0   | 0   |                    | 27000  |

\*\*\* End Of Report \*\*\*



Note : # - TSO/CSO only applicable to Module and Non-Life Limited Parts.

\*\*\* - Life Calculation on Revised Life-Limit \*\* - Life Calculation on Soft Life Limit \* - Life Calculation on Hard Life Limit

**Available hours/cycles for APU life limited parts at removal**

**APU Description** : AUXILIARY POWER UNIT  
**Part Number** : 3800550-1      **Serial number** : P2273      **IIN** : Z0000  
**Ex Aircraft Reg** : SWU      **Position** : APU      **Date Removed** : 16-Sep-2017  
**TSN / CSN(at removal)** : 7184 / 4819      **TSLV / CSLV** : 7184 / 4819  
**Remarks** : OVERHAUL

| Item No | ATA Chapter | Position | IIN       | Part Number                   | Part Description     | Serial Number | TSO# LL(HR) | CSO# LL(CYC) | TSN  | CSN  | Available Hours | Cycles |
|---------|-------------|----------|-----------|-------------------------------|----------------------|---------------|-------------|--------------|------|------|-----------------|--------|
| 1       | 49-00-00    | APU      | Z0000     | 3800550-1                     | AUXILIARY POWER UNIT | P2273         | 7184        | 4819         | 7184 | 4819 | NA              | NA     |
| 2       | 49-23-00    | Z3311    | 3822611-1 | IMPELLER COMPRESSOR 1ST STAGE | 13-182449-08502      |               | 27000*      |              | 7184 | 4819 |                 | 22181  |
| 3       | 49-23-00    | Z3312    | 3822341-5 | IMPELLER, COMPRESSOR 2ND STG  | 13-182449-08511      |               | 27000*      |              | 7184 | 4819 |                 | 22181  |
| 4       | 49-23-00    | Z3313    | 3822612-1 | IMPELLER COMPRESSOR LOAD      | 13-182449-08188      |               | 27000*      |              | 7184 | 4819 |                 | 22181  |
| 5       | 49-25-00    | Z3511    | 3842151-3 | ROTOR ASSEMBLY, 1ST STAGE     | 12-168522-01537      |               | 27000*      |              | 7184 | 4819 |                 | 22181  |
| 6       | 49-25-00    | Z3512    | 3842155-4 | ROTOR ASSEMBLY, 2ND STAGE     | 12-168522-01912      |               | 27000*      |              | 7184 | 4819 |                 | 22181  |
| 7       | 49-25-00    | Z3513    | 3842160-6 | ROTOR ASSEMBLY, 3RD STAGE     | 12-156101-09303      |               | 27000*      |              | 7184 | 4819 |                 | 22181  |

**\*\*\* End Of Report \*\*\***

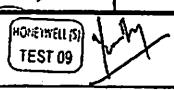

Note : # - TSO/CSO only applicable to Module and Non-Life Limited Parts.

\*\*\* - Life Calculation on Revised Life Limit \*\* - Life Calculation on Soft Life Limit \* - Life Calculation on Hard Life Limit

Honeywell Aerospace Singapore Pte Ltd

## GTCP 331-500[B] PERFORMANCE DATA SHEET

| NOTIFICATION NUMBER                        | 330005518                      |                    | SERVICE ORDER   | 5011527375       |                  |
|--|--------------------------------|--------------------|-----------------|------------------|------------------|
| APU MODEL                                  | GTCP331-500[B]                 |                    | PART NUMBER     | 3800550-1        |                  |
| OPERATION TEXT                             | LAB TEST                       |                    | MANUAL          | EM 49-26-57      |                  |
| OPERATION NO                               | 0220                           |                    | REVISION        | 20               |                  |
| QUANTITY                                   | UNITS                          | NO LOAD            | 103°F ECS MODE  | 103°F MES MODE   |                  |
| BAROMETRIC PRESSURE                        | PSIA                           | 14.59              | 14.59           | 14.59            |                  |
| FUEL INLET PRESSURE                        | PSIG                           | 25.5               | 20.8            | 20.3             |                  |
| OIL PUMP DISCHARGE PRESSURE                | PSIG                           | 64.6               | 63.5            | 63.4             |                  |
| OIL PUMP DISCHARGE TEMPERATURE             | °F                             | 160                | 163             | 162              |                  |
| GEARBOX PRESSURE                           | PSIA                           | 14.96              | 14.89           | 14.86            |                  |
| COMPRESSOR INLET TEMPERATURE               | MEASURED                       | °F                 | 96.5            | 99.2             | 98.5             |
| APU INLET TEMPERATURE (T2) (ARINC)         |                                | °F                 | 101.5           | 103.7            | 101.8            |
| TURBINE DISCHARGE TEMPERATURE (UNIT RAKES) | UPPER (EGT 1)<br>LOWER (EGT 2) | °F                 | 717.4<br>725.3  | 1063.9<br>1076.7 | 1087.6<br>1112.1 |
| EXHAUST GAS TOTAL TEMPERATURE (LA)         | MEASURED<br>CORRECTED          | °F                 | 739.3           | 1075.6<br>1100.6 | 1103.4<br>1097.3 |
| ORIFICE INLET AIR PRESSURE                 |                                | " Hg               |                 | 75.6             | 86.5             |
| ORIFICE INLET TEMPERATURE                  |                                | °F                 |                 | 410.5            | 420.1            |
| ORIFICE DELTA PRESSURE                     |                                | " H <sub>2</sub> O |                 | 59.92            | 24.48            |
| IGV POSITION** (IGVPOS)                    |                                | DEGREES            |                 | 12.5             | 5.0              |
| IGV PERFORMANCE ADJ (IGVPERADJ)            |                                | DEGREES            |                 | 5.0              |                  |
| BLEED AIRFLOW                              | ACTUAL<br>CORRECTED            | LBS/MIN            |                 | 474.86<br>470.8  | 320.04<br>299.2  |
| RESTRICTED AIRFLOW (DISC. CORR. FLOW)      |                                | LBS/MIN            |                 | 166.88           | 106.02           |
| BLEED AIR TOTAL PRESSURE                   | INDICATED<br>CORRECTED         | PSIA               |                 | 54.5<br>54.2     | 58.2<br>54.3     |
| BLEED AIR TOTAL TEMPERATURE                | INDICATED<br>CORRECTED         | °F                 |                 | 420.7<br>424.6   | 430.9<br>427.7   |
| UNIT VIBRATION                             | ACCESSORY<br>TURBINE           | IN/SEC             | 0.23<br>0.34    | 0.14<br>0.36     | 0.15<br>0.39     |
| TURBINE WHEEL SPEED                        |                                | RPM                | 39041           | 39041            | 39038            |
| SHAFT LOAD                                 | APPLIED<br>CORRECTED           | SHP                |                 | 179.3<br>180.7   | 179.4<br>180.7   |
| FUEL CONSUMPTION                           | INDICATED<br>CORRECTED         | LBS/HR             | 336.8<br>628.00 | 626<br>627.24    | 653              |

TEST TECHNICIAN :   
Stamp & Sign  
DATE : 16-Oct-2017

QUALITY CONTROL :   
Stamp & Sign  
DATE : 17 OCT 2017

**TURBINE ACCEPTANCE TAG AND TRACEABILITY INPUT LIFE LIMITED PARTS RECORD/TRACE INPUT PAGE**

PART NO: 3800550-1

SERIAL NO: P-2273

CUSTOMER: SINGAPORE AIRLINES LTD

MODEL: GTCP331-500B

SERIES: 62

DATE: 17-Oct-17

S/O NO: 5011527375

TSN: 7184:03

CSN: 4819

TSR: NA

CSR: NA

TSO: 0:00

CSO: 0

NOTIFICATION NO: 330005518

| DESCRIPTION      | PART NO   | SERIAL NO       | LOT NO | TSN     | CSN  | LIFE LIMITS (CYCLES) | REMARKS    |
|------------------|-----------|-----------------|--------|---------|------|----------------------|------------|
| D/COMP IMPELLER  | 3822612-1 | 13-182449-08188 | -      | 7184:03 | 4819 | 27000                | OVERHAULED |
| 1ST STG IMPELLER | 3822611-1 | 13-182449-08502 | -      | 7184:03 | 4819 | 27000                | OVERHAULED |
| 2ND STG IMPELLER | 3822341-5 | 1618244923700   | -      | 00      | 00   | 27000                | NEW        |
| 1ST T-WHEEL ASSY | 3842151-3 |                 |        |         |      |                      |            |
| DISK PART NO     | 3842152-1 | 12-168522-01537 | -      | 7184:03 | 4819 | 27000                | OVERHAULED |
| 2ND T-WHEEL ASSY | 3842155-4 | 12-168522-01912 |        |         |      |                      |            |
| DISK PART NO     | 3842156-1 |                 | -      | 7184:03 | 4819 | 27000                | OVERHAULED |
| 3RD T-WHEEL ASSY | 3842160-6 | 12-156101-09303 | -      | 7184:03 | 4819 | 27000                | OVERHAULED |

**APU ACCESSORIES RECORD/NDC**

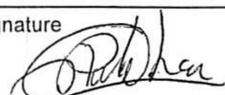
| DESCRIPTION       | PART NO.   | SERIAL NO.  | SERIES | CHG NOS | REMARKS   |
|-------------------|------------|-------------|--------|---------|---|
| STARTER CTRL VLV  | 3283076-5  | 1578        | 1      | -       | REPAIRED  |
| AIR TURB STARTER  | 3505814-3  | 1541        | 1      | -       | OVERHAULED UNIT TRANSFERRED FROM SINGAPORE AIRLINES LTD APU S/N: P-2290 |
| STARTER MOTOR     | 2704442-5  | 1234        | 2      | -       | OVERHAULED  |
| FUEL CLUSTER      | 3879008-1  | CUA11725    | -      | -       | VISUAL INSPECTED / TESTED   |
| IGV ACTUATOR      | 3883499-3  | 1552        | -      | -       | VISUAL INSPECTED / TESTED   |
| PNEU CLUSTER      | 3884863-7  | P-1525      | 1      | -       | REPAIRED  |
| CHECK VALVE       | 3202854-1  | 1401        | 1      | -       | REPAIRED  |
| SURGE CTRL VALVE  | 3290814-5  | 3290814/888 | 1      | -       | OVERHAULED  |
| LUBE CLUSTER      | 4131000-6  | 1668        | 2      | -       | REPAIRED  |
| AIR OIL COOLER    | 160488-2   | 1664        | 2      | -       | CLEANED & FLUSHED / VISUAL INSPECTED / TESTED                           |
| TEMP CTRL VALVE   | 160536-1   | 1508        | 2      | -       | VISUAL INSPECTED / TESTED   |
| IGNITION UNIT     | 3876195-9  | J17340052   | -      | -       | NEW   |
| IGNITION SYS ASSY | 3888275-10 | -           | -      | -       | REPAIRED (ALTERNATE OUTGOING S/N: J17340052 )                           |
| G/BOX ASSY        | 3805034-11 | P-1401      | -      | -       | MODIFIED / REPAIRED   |
| DRIVEN COMP       | 3804011-10 | P-1398      | -      | -       | OVERHAULED  |
| COMP MODULE       | 3826980-13 | P-1394      | -      | -       | OVERHAULED  |
| TURB MODULE       | 3844517-7  | P-1393      | -      | -       | OVERHAULED  |
| OIL LEVEL SENSOR  | 3876211-3  | -           | -      | -       | VISUAL INSPECTED / TESTED (ALTERNATE OUTGOING S/N: 97424-DT1471)        |
| DMM               | 304643-2   | GE12119     | 1      | -       | VISUAL INSPECTED  |

REMARKS: APU HOURS AND CYCLES ARE BASED AT THE POINT OF ASSEMBLY AND OBTAINED FROM THE DMM.

INSPECTOR SIGNATURE & STAMP:



**HONEYWELL QC IS**  
16

|   |  |   |  |  |  |
|---|--|---|--|--|--|
| 1. Approving Competent Authority/Country<br><br>EASA  |  | 2.<br><b>AUTHORISED RELEASE CERTIFICATE</b><br><b>EASA FORM 1</b> |  |  | 3. Form Tracking Number<br>20170003746072Y02<br>330055685              |
| 4. Organisation Name and Address: Honeywell Aerospace Singapore Pte Ltd<br>(Gul Circle)<br>161 Gul Circle<br>Singapore 629619   |  |   |  |  | 5. Work Order/Contract/Invoice<br>10453748<br>330006248<br>Page 1 of 1 |
| 6. Item<br>001  | 7. Description<br>IMPELLER, COMPRESSOR FIRST STAGE | 8. Part No<br>3822611-1   | 9. Qty<br>1  | 10. Serial No.<br>13-182449-08502                  | 11. Status/Work<br>OVERHAULED  |
| <b>12. Remarks</b><br>THE SERVICE SPECIFIED HAS BEEN ACCOMPLISHED IN ACCORDANCE WITH:<br>IRM 49-24-79 Rev 9, APR/29/2016  |  |   |  |  |  |
| TSN<br>CSN<br>TSO<br>CSO  | HH.DD<br>7184.05<br>4819.00<br>0.00<br>0.00        | (HH:MM)<br>(7184:03)<br>(0:00)                                    |  |  |  |
| 13a. Certifies that the items identified above were manufactured in conformity to:<br><input type="checkbox"/> approved design data and are in condition for safe operation<br><input type="checkbox"/> non-approved design data specified in block 12  |  |   | 14a <input checked="" type="checkbox"/> Part-145.A.50 Release to Service <input type="checkbox"/> Other regulation specified in block 12<br>Certificates that unless otherwise specified in block 12, the work identified in block 11 and described in block 12, was accomplished in accordance with Part-145 and in respect to that work the items are considered ready for release to service. |  |  |
| 13b. Authorised Signature   |  | 13c. Approval/Authorisation Number                                | 14b. Authorised Signature<br>   | 14c. Certificate/Approval Ref. No<br>EASA.145.0076 |  |
| 13d. Name   |  | 13e. Date (dd mmm yyyy)   | 14d. Name<br>Chou Nyee Hoong   | 14e. Date (dd mmm yyyy)<br>09 OCT 2017             |  |
| <b>USER/INSTALLER RESPONSIBILITIES</b><br>This certificate does not automatically constitute authority to install the item(s).<br>Where the user/installer performs work in accordance with regulation of an airworthiness authority different than the airworthiness authority specified in block 1, it is essential that the user/installer ensures that his/her airworthiness authority accepts items from the airworthiness authority specified in block 1.<br>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. |  |   |  |  |  |



|   |  |                                     |  |  |
|---|--|-------------------------------------|--|--|
| 1. Approving Civil Aviation Authority/Country:<br><b>FAA/United States</b>  | 2. <b>AUTHORIZED RELEASE CERTIFICATE</b><br><b>FAA Form 8130-3, AIRWORTHINESS APPROVAL TAG</b> |                                     |  | 3. Form Tracking Number:<br>20170003746076Y03<br>330055685 |
| 4. Organization Name and Address: Honeywell Aerospace Singapore Pte Ltd<br>(Gul Circle)<br>161 Gul Circle<br>Singapore 629619 |  | Repair Station<br>FT4Y192M          | 5. Work Order/Contract/Invoice Number:<br>10453748<br>330006248<br>Page 1 of 1 |  |
| 6.Item:   | 7. Description:<br><b>001 IMPELLER, COMPRESSOR FIRST STAGE</b>                                 | 8. Part Number:<br><b>3822611-1</b> | 9. Quantity:<br><b>1</b>   | 10. Serial Number:<br><b>13-182449-08502</b>               |
| 11. Status / Work:<br><b>OVERHAULED</b>   |  |                                     |  |  |

12. Remarks:

THE SERVICE SPECIFIED HAS BEEN ACCOMPLISHED IN ACCORDANCE WITH:  
IRM 49-24-79 Rev 9, APR/29/2016

|     | HH.DD   | (HH:MM)   |
|-----|---------|-----------|
| TSN | 7184.05 | (7184:03) |
| CSN | 4819.00 |           |
| TSO | 0.00    | (0:00)    |
| CSO | 0.00    |           |

SEE ATTACHED DOCUMENTS AS APPLICABLE FOR WORK PERFORMED

|   |   |
|---|---|
| 13a. Certifies the items identified above were manufactured in conformity to:<br><input type="checkbox"/> Approved design data and are in a condition for safe operation.<br><input type="checkbox"/> Non-approved design data specified in Block 12. | 14a. <input checked="" type="checkbox"/> 14 CFR 43.9 Return to Service <input type="checkbox"/> Other regulation specified in Block 12<br>Certificates 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.:  |
| 13d. Name (Typed or Printed):   | 13e. Date(dd/mmm/yyyy):   |
| User / Installer Responsibilities   |   |

It is important to understand that the existence of this document alone does not automatically constitute authority to install the aircraft engine/propeller/article. Where the user/installer performs work in accordance with the national regulations of an airworthiness authority different than the airworthiness authority of the country specified in Block 1, it is essential that the user/installer ensures that his/her airworthiness authority accepts aircraft engine(s)/propeller(s)/article(s) from the airworthiness authority of the country specified in Block 1. Statements in 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.

|  |  |  |   |                    |  |
|--|--|--|---|--------------------|--|
| 1. Country<br><b>SINGAPORE</b>   | 2. CIVIL AVIATION AUTHORITY OF SINGAPORE<br><b>AUTHORIZED RELEASE CERTIFICATE</b><br><b>CAAS(AW)95</b> |  |   |                    | 3. Form Tracking Number:<br>20170003746071Y06<br>330055685 |
| 4. Organization Name and Address: Honeywell Aerospace Singapore Pte Ltd<br>(Gul Circle)<br>161 Gul Circle<br>Singapore 629619  |  | Repair Station<br>AWI/38                               | 5. Work Order/Contract/Invoice Number:<br>10453748<br>330006248<br>Page 1 of 1  |                    |  |
| 6.Item:<br>001   | 7. Description:<br>IMPELLER, COMPRESSOR FIRST STAGE  | 8. Part Number:<br>3822611-1                           | 9. Eligibility:<br>N/A  | 10. Quantity:<br>1 | 11. Serial / Batch Number:<br><b>13-182449-08502</b>       |
| 12. Status / Work:<br>OVERHAULED   |  |  |   |                    |  |
| 13. Remarks :<br>THE SERVICE SPECIFIED HAS BEEN ACCOMPLISHED IN ACCORDANCE WITH:<br>IRM 49-24-79 Rev 9, APR/29/2016  |  |  |   |                    |  |
| TSN<br>7184.05   | HH.DD (HH:MM)<br>(7184:03)   | CSN<br>4819.00   | TSO<br>0.00   | CSO<br>0.00        | (0:00)   |
| SEE ATTACHED DOCUMENTS AS APPLICABLE FOR WORK PERFORMED  |  |  |   |                    |  |
| 14. NEW PARTS<br>Certificates the items identified above were manufactured in conformity to:<br><input type="checkbox"/> Approved design data and are in condition for safe operation<br><input type="checkbox"/> Non-approved design data specified in Block 13   |  |  | 19. USED PARTS<br><input checked="" type="checkbox"/> SAR-145.50 Release to Service <input type="checkbox"/> Other regulation specified in Block 13.<br>Certificates that unless otherwise specified in Block 13, the work identified in Block 12 and described in Block 13 was accomplished in accordance with SAR 145 and the Air Navigation Order and in respect to that work the items are considered ready for release to service. |                    |  |
| 15. Authorized Signature:  | 16. CAAS Approval No.:   | 20. Authorized Signature:                              | 21. CAAS Approval No.:<br><b>AWI/38</b>   |                    |  |
| 17. Name (Typed or Printed):   | 18. Date (dd mmm yyyy):  | 22. Name (Typed or Printed):<br><b>Chou Nyee Hoong</b> | 23. Date (dd mmm yyyy):<br><b>09 OCT 2017</b>   |                    |  |
| <b>User / Installer Responsibilities</b>   |  |  |   |                    |  |
| 1. It is important to understand that the existence of the Certificate alone does not automatically constitute authority to install the part/component/assembly.<br>2. Where the user/installer works in accordance with the national regulations of an Airworthiness Authority different from the Civil Aviation Authority of Singapore(CAAS), it is essential that the user/installer ensures that his/her Airworthiness Authority accepts parts/components/assemblies from the CAAS.<br>3. Statements 14 and 19 do not constitute installation certification. In all cases, the aircraft maintenance record must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown. |  |  |   |                    |  |

## Available hours/cycles for APU life limited parts

APU Description

: AUXILIARY POWER UNIT

Part Number

: 3800550-1

Serial number

P2273

IIN

: Z0000

Aircraft Reg

: -

Position

:

Date Installed

: 17-Oct-2017

TSN / CSN

: 7184 / 4819

TSLV / CSLV

: 0 / 0

Remarks

: OVERHAULED BY HONEYWELL W/O 5011527375

| Item No | ATA Chapter | Position | IIN   | Part Number | Part Description              | Serial Number   | TSO# LL(HR) | CSO# LL(CYC) | TSN  | CSN  | Available Hours | Cycles |
|---------|-------------|----------|-------|-------------|-------------------------------|-----------------|-------------|--------------|------|------|-----------------|--------|
| 1       | 49-00-00    |          | Z0000 | 3800550-1   | AUXILIARY POWER UNIT          | P2273           | 0           | 0            | 7184 | 4819 | NA              | NA     |
| 2       | 49-23-00    |          | Z3311 | 3822611-1   | IMPELLER COMPRESSOR 1ST STAGE | 13-182449-08502 | 27000*      | 27000*       | 7184 | 4819 | 22181           |        |
| 3       | 49-23-00    |          | Z3312 | 3822341-5   | IMPELLER, COMPRESSOR 2ND STG  | 1618244923700   |             | 27000*       | 0    | 0    | 27000           |        |
| 4       | 49-23-00    |          | Z3313 | 3822612-1   | IMPELLER COMPRESSOR LOAD      | 13-182449-08188 | 27000*      | 27000*       | 7184 | 4819 | 22181           |        |
| 5       | 49-25-00    |          | Z3511 | 3842151-3   | ROTOR ASSEMBLY, 1ST STAGE     | 12-168522-01537 | 27000*      | 27000*       | 7184 | 4819 | 22181           |        |
| 6       | 49-25-00    |          | Z3512 | 3842155-4   | ROTOR ASSEMBLY, 2ND STAGE     | 12-168522-01912 | 27000*      | 27000*       | 7184 | 4819 | 22181           |        |
| 7       | 49-25-00    |          | Z3513 | 3842160-6   | ROTOR ASSEMBLY, 3RD STAGE     | 12-156101-09303 | 27000*      | 27000*       | 7184 | 4819 | 22181           |        |

\*\*\* End Of Report \*\*\*



Note : # - TSO/CSO only applicable to Module and Non-Life Limited Parts.

\*\*\* - Life Calculation on Revised Life Limit \*\* - Life Calculation on Soft Life Limit \* - Life Calculation on Hard Life Limit



## Available hours/cycles for APU life limited parts

APU Description : AUXILIARY POWER UNIT

Part Number : 3800550-1

Serial number

P2273

IIN

Z0000

Aircraft Reg : SNB

Position

APU

Date Installed

15-Nov-2017

TSN / CSN : 10878 / 7124

TSLV / CSLV

3694 / 2305

Remarks : AT REMOVAL DATED 23NOV2019

| Item No | ATA Chapter | Position | IIN   | Part Number | Part Description              | Serial Number   | TSO# LL(HR) | CSO# LL(CYC) | TSN   | CSN  | Available Hours | Cycles |
|---------|-------------|----------|-------|-------------|-------------------------------|-----------------|-------------|--------------|-------|------|-----------------|--------|
| 1       | 49-00-00    | APU      | Z0000 | 3800550-1   | AUXILIARY POWER UNIT          | P2273           | 3694        | 2305         | 10878 | 7124 | NA              | NA     |
| 2       | 49-23-00    |          | Z3311 | 3822611-1   | IMPELLER COMPRESSOR 1ST STAGE | 13-182449-08502 | 27000 *     |              | 10878 | 7124 |                 | 19876  |
| 3       | 49-23-00    |          | Z3312 | 3822341-5   | IMPELLER, COMPRESSOR 2ND STG  | 1618244923700   | 27000 *     | 3694         | 2305  |      |                 | 24695  |
| 4       | 49-23-00    |          | Z3313 | 3822612-1   | IMPELLER COMPRESSOR LOAD      | 13-182449-08188 | 27000 *     |              | 10878 | 7124 |                 | 19876  |
| 5       | 49-25-00    |          | Z3511 | 3842151-3   | ROTOR ASSEMBLY, 1ST STAGE     | 12-168522-01537 | 27000 *     |              | 10878 | 7124 |                 | 19876  |
| 6       | 49-25-00    |          | Z3512 | 3842155-4   | ROTOR ASSEMBLY, 2ND STAGE     | 12-168522-01912 | 27000 *     |              | 10878 | 7124 |                 | 19876  |
| 7       | 49-25-00    |          | Z3513 | 3842160-6   | ROTOR ASSEMBLY, 3RD STAGE     | 12-156101-09303 | 27000 *     |              | 10878 | 7124 |                 | 19876  |

\*\*\* End Of Report \*\*\*



Note : #-TSO/CSO only applicable to Module and Non-Life Limited Parts.

\*\*\* - Life Calculation on Revised Life Limit \*\* - Life Calculation on Soft Life Limit \* - Life Calculation on Hard Life Limit