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|-----------------------------------------------------------------------------------|-------------------------------------------|-------------------------------------|
|  | <b>REGISTRO</b><br>RECORD                 | <b>REVISÃO</b><br>REVISION <b>0</b> |
| <b>CÓDIGO   CODE</b><br>IAS-RG-0223                                               | <b>FICHA DE SERVIÇOS</b><br>Service Sheet | <b>PÁGINA</b><br>PAGE <b>1/3</b>    |

| COMPONENTE   Component | O.S   W.O | MODELO   Model               | PN | SN |
|------------------------|-----------|------------------------------|----|----|
| FUEL CONTROL UNIT      |           | DP-F2 Main Fuel Control Unit |    |    |

| IDENTIFICAÇÃO   IDENTIFICATION |                                                                                           |
|--------------------------------|-------------------------------------------------------------------------------------------|
| <b>TÍTULO</b><br>TITLE         | <b>FICHA PARA REGISTROS DE TESTE DA FUEL CONTROL UNIT</b><br>FUEL CONTROL UNIT TEST SHEET |

| PUBLICAÇÃO   PUBLICATION                                 | REFERÊNCIA   REFERENCE | TLN                        | DATA   DATE                 |
|----------------------------------------------------------|------------------------|----------------------------|-----------------------------|
| COMPONENT MAINTENANCE MANUAL WITH ILLUSTRATED PARTS LIST | 73-20-23               | TLN02408                   | Dec. 01,2021<br>Revision 06 |
|                                                          |                        | CONJUNTO MAIOR   MAIN PART |                             |
|                                                          |                        | PN                         | SN                          |
|                                                          |                        |                            |                             |

| Teste Aplicável aos Part Numbers   Test Applicable to Part Numbers |           |           |
|--------------------------------------------------------------------|-----------|-----------|
| 3244746-2                                                          | 3244746-3 | 3244746-4 |

| TESTE DA UNIDADE DE CONTROLE DE COMBUSTÍVEL   FUEL CONTROL UNIT TEST |                                                                                                                                                                                                                                                                                                                                                                                                                                            |                     |              |                            |
|----------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------|----------------------------|
| ITEM<br>Item                                                         | PROCEDIMENTOS   TOLERÂNCIAS<br>Procedures   Serviceable limits                                                                                                                                                                                                                                                                                                                                                                             | Resultado<br>Result | Data<br>Date | Executante<br>Performed by |
| <b>A</b>                                                             | Instale a MFCU na bancada de teste usando o adaptador estriado e adaptador de montagem, ou equivalente.<br><i>Assemble the MFCU to the test stand, using spline adapter and mounting adapter, or equivalent.</i>                                                                                                                                                                                                                           |                     |              |                            |
| <b>B</b>                                                             | Mantenha uma pressão Po de 10 a 30 psig dos limites especificados, usando uma válvula de controle Po.<br><i>Maintain Po pressure of 10 to 30 psig of specified limits, using Po control valve.</i>                                                                                                                                                                                                                                         |                     |              |                            |
| <b>C</b>                                                             | Mantenha uma pressão P2 dentro de $\pm 10$ psi do valor especificado nos injetores abaixo de 300 pph e dentro de $\pm 25$ psi dos fluxos mais altos, usando um regulador de pressão Pn.<br><i>Maintain the (P2) pressure within <math>\pm 10</math> psi of the value specified at nozzle flows below 300 pph and within <math>\pm 25</math> psi at higher flows, using (Pn) back pressure regulator valve.</i>                             |                     |              |                            |
| <b>D</b>                                                             | Ajuste a pressão diferencial P1-P2 para 26-42 in.Hg. Ajuste o orifício da válvula de medição usando a chave de regulagem até a pressão diferencial e o fluxo de injeção estiverem dentro dos limites especificados.<br><i>Adjust P1-P2 pressure differential to 26 to 42 in.Hg. Adjust metering valve orifice using metering valve orifice adjustment wrench, until pressure differential and nozzle flow are within specified limits.</i> |                     |              |                            |
| <b>E</b>                                                             | Defina os parâmetros conforme ponto de teste e com a cover removida, ajuste a porca até o fluxo de injeção ler de 13-17 pph.<br><i>Set parameters at test point and with cover removed, adjust nut, until nozzle flow reads 13 to 17 pph.</i>                                                                                                                                                                                              |                     |              |                            |
| <b>F</b>                                                             | Defina a pressão de combustível P1 em 1000 psig e observe se há vazamentos durante 2 a 3 minutos. Não é permitido nenhum tipo de vazamento.<br><i>Set P1 fuel pressure at 1000 psig and observe leakage for 2 to 3 minutes. No leakage permitted.</i>                                                                                                                                                                                      |                     |              |                            |

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|                                                                                   | <b>CÓDIGO   CODE</b><br>IAS-RG-0223 | <b>FICHA DE SERVIÇOS</b><br>Service Sheet | <b>PÁGINA</b><br>PAGE |

### CALIBRAÇÃO E LIMITAÇÃO DOS TESTES | CALIBRATION AND TEST LIMITATIONS

| Calibration and Test Limitations (Units 3244746-2, -3 and -4)                |             |                   |                       |          |                      |                   |                      |                          |                                             |       |                                                |
|------------------------------------------------------------------------------|-------------|-------------------|-----------------------|----------|----------------------|-------------------|----------------------|--------------------------|---------------------------------------------|-------|------------------------------------------------|
| TEST POINT                                                                   | SPEED (rpm) | FUEL SUPPLY (pph) | THROTTLE ANGLE (deg.) | TEMP. °F | Pc AIR SUPPLY (psia) | NOZZLE FLOW (pph) |                      | P1-P2 (in. Hg.)          | MISCELLANEOUS                               | NOTES | NOTES                                          |
|                                                                              |             |                   |                       |          |                      | Min.              | Recorded             | Max.                     |                                             |       |                                                |
| <u>Relief Valve Opening Check</u>                                            |             |                   |                       |          |                      |                   |                      |                          |                                             |       |                                                |
| SEQ.                                                                         | 1           | 5                 | 2                     | 3        | 4                    |                   |                      |                          |                                             |       |                                                |
| 1.01                                                                         | 0           | 200/275           | MAX.                  | 105      | 85.0                 |                   |                      |                          | P1-Po(psi)<br>950 <input type="text"/> 1000 | 1.    | 1. Record relief valve opening pressure.       |
| <u>Pressurizing Valve Opening Check</u>                                      |             |                   |                       |          |                      |                   |                      |                          |                                             |       |                                                |
| SEQ.                                                                         | 1           | 5                 | 2                     | 3        | 4                    |                   |                      |                          |                                             |       |                                                |
| 1.02                                                                         | 0           | 100               | MAX.                  | 105      | 85.0                 |                   |                      |                          | P1-Po(psi)<br>55 <input type="text"/> 68    | 2.    | 2. Record pressurizing valve opening pressure. |
| <u>Metering Valve Orifice and Bypass Valve Differential Pressure Setting</u> |             |                   |                       |          |                      |                   |                      |                          |                                             |       |                                                |
| SEQ.                                                                         | 3           | 4,6               | 1                     | 2        | 5                    |                   |                      |                          |                                             |       |                                                |
| *<br>2.01                                                                    | 5800        | 1350              | MAX.                  | 105      | 40.0                 | 194               | <input type="text"/> | 202 <input type="text"/> | P2(psig)<br>170 <input type="text"/> 190    | 3.    | 3. Set P1-P2 to 26 to 42 inches Hg and record. |
| *<br>2.02                                                                    | 2900        | 720               | 30-32                 | 105      | 40.0                 | 78                | <input type="text"/> | 82 <input type="text"/>  |                                             | 3.    | 4. Record Pc-Px pressure. Max. 1.0 inches Hg.  |
| *<br>2.03                                                                    | 5800        | 1350              | MAX.                  | 105      | 70.0                 | 348               | <input type="text"/> | 355 <input type="text"/> | P2(psig)<br>555 <input type="text"/> 605    | 3,4.  | 5. Set max. metering valve adjustment screw.   |
| *<br>2.04                                                                    | 5800        | 1350              | MAX.                  | 105      | 95.0                 | 417               | <input type="text"/> | 427 <input type="text"/> | Pc-Px                                       | 3,5.  | 6. Hysteresis from Test Point 2.01.            |
| 2.05                                                                         | 5800        | 1350              | MAX.                  | 105      | 40.0                 | -10               | <input type="text"/> | +10 <input type="text"/> |                                             | 3,6.  |                                                |

| Calibration and Test Limitations (Units 3244746-2, -3 and -4) |                      |                   |                       |          |                      |                   |                      |               |                                                                            |       |                                                                                                                                                                                                                                    |
|---------------------------------------------------------------|----------------------|-------------------|-----------------------|----------|----------------------|-------------------|----------------------|---------------|----------------------------------------------------------------------------|-------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TEST POINT                                                    | SPEED (rpm)          | FUEL SUPPLY (pph) | THROTTLE ANGLE (deg.) | TEMP. °F | Pc AIR SUPPLY (psia) | NOZZLE FLOW (pph) |                      | MISCELLANEOUS |                                                                            | NOTES | NOTES                                                                                                                                                                                                                              |
|                                                               |                      |                   |                       |          |                      | Min.              | Recorded             | Max.          |                                                                            |       |                                                                                                                                                                                                                                    |
| <u>Speed Bias Spring Setting</u>                              |                      |                   |                       |          |                      |                   |                      |               |                                                                            |       |                                                                                                                                                                                                                                    |
| SEQ.                                                          | 3,7                  | 4,6               | 1                     | 2        | 5                    |                   |                      |               |                                                                            |       |                                                                                                                                                                                                                                    |
| 3.01                                                          | 5800                 | 1350              | MAX                   | -50      | 55.0                 | X                 | <input type="text"/> | X             |                                                                            |       | 7. Record Pc-Px differential.                                                                                                                                                                                                      |
| 3.02                                                          | 5100                 | 1170              | MAX                   | -50      | 55.0                 | -13               | <input type="text"/> | -17           |                                                                            |       | 8. Record Px-Py differential.                                                                                                                                                                                                      |
| SEQ.                                                          | 3                    | 4,6               | 1                     | 2        | 5                    |                   |                      |               |                                                                            |       |                                                                                                                                                                                                                                    |
| 3.03                                                          | 5800                 | 1350              | MAX                   | -50      | 40.0                 | 190               | <input type="text"/> | 200           |                                                                            |       | 9. Set governor break throttle angle at 89 to 91 degrees (gap between throttle stop (480, IPL Fig. 1) and unmachined surface of throttle lever (430) must be 0.050 inch minimum, Ref. ASSEMBLY, Fig. 510)).                        |
| 3.04                                                          | 4000                 | 1000              | MAX                   | -50      | 40.0                 | 164               | <input type="text"/> | 175           | Pc-Px(in.Hg)<br>8.5 <input type="text"/> 11.5                              | 7.    |                                                                                                                                                                                                                                    |
| 3.05                                                          | 4000                 | 1000              | MAX                   | 105      | 40.0                 | 183               | <input type="text"/> | 195           | Pc-Px(in. Hg) <input type="text"/> Px-Py(in.Hg) 0 <input type="text"/> 1.0 | 7,8.  | 10. Record nozzle flow difference (105 to 125 pph) from Test Point 4.01.                                                                                                                                                           |
| 3.06                                                          | 4000                 | 1000              | MAX                   | 59       | 40.0                 | 179               | <input type="text"/> | 189           | Pc-Px(in. Hg) <input type="text"/>                                         | 7.    |                                                                                                                                                                                                                                    |
| <u>Governor Spring Setting</u>                                |                      |                   |                       |          |                      |                   |                      |               |                                                                            |       |                                                                                                                                                                                                                                    |
| SEQ.                                                          | 5                    | 4,7               | 1                     | 2        | 3,6                  |                   |                      |               |                                                                            |       |                                                                                                                                                                                                                                    |
| *<br>4.01                                                     | 6350                 | 1440              | <input type="text"/>  | 59       | 85.0                 | 335               | <input type="text"/> | 345           |                                                                            |       | 11. Record Py air flow jet (100, IPL Fig. 1) size finally installed (size 58 to 66).                                                                                                                                               |
| 4.02                                                          | 6500                 | 1530              | <input type="text"/>  | 59       | 85.0                 | X                 | <input type="text"/> | X             | pph diff. Bleed Size <input type="text"/> <input type="text"/>             | 9.    | 12. Observe that speed is not more than -50 rpm of that at TP. 4.01 and record.                                                                                                                                                    |
| 4.03                                                          | <input type="text"/> | 1440              | <input type="text"/>  | 59       | 85.0                 | X                 | <input type="text"/> | X             |                                                                            | 12.   | 13. Increase throttle angle until an increase of 4 pph maximum from that at TP. 5.01 is obtained. Record throttle angle and observe that throttle cam pick-up angle differential is within limits of 52 to 56 degrees of TP. 4.01. |
| <u>Idle Speed Stop Setting and Throttle Pick up Angle</u>     |                      |                   |                       |          |                      |                   |                      |               |                                                                            |       |                                                                                                                                                                                                                                    |
| SEQ.                                                          | 4                    | 1,7               | 5                     | 2        | 3,6                  |                   |                      |               |                                                                            |       |                                                                                                                                                                                                                                    |
| 5.01                                                          | 3200                 | 800               | 30-32                 | 59       | 30.0                 | 104               | <input type="text"/> | 112           |                                                                            |       |                                                                                                                                                                                                                                    |
| 5.02                                                          | 3200                 | 800               | <input type="text"/>  | 59       | 30.0                 | X                 | <input type="text"/> | X             |                                                                            | 13.   |                                                                                                                                                                                                                                    |

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| Calibration and Test Limitations (Units 3244746-2, -3 and -4) |             |                   |                       |          |                      |                   |               |                 |                                   |        |                                                                                                                     |
|---------------------------------------------------------------|-------------|-------------------|-----------------------|----------|----------------------|-------------------|---------------|-----------------|-----------------------------------|--------|---------------------------------------------------------------------------------------------------------------------|
| TEST POINT                                                    | SPEED (rpm) | FUEL SUPPLY (pph) | THROTTLE ANGLE (deg.) | TEMP. °F | Pc AIR SUPPLY (psia) | NOZZLE FLOW (pph) |               | P1-P2 (in. Hg.) | MISCELLANEOUS                     | NOTES  | NOTES                                                                                                               |
|                                                               |             |                   |                       |          |                      | Min.              | Recorded Max. |                 |                                   |        |                                                                                                                     |
| <u>Low End Acceleration and Throttle Movement Effect</u>      |             |                   |                       |          |                      |                   |               |                 |                                   |        |                                                                                                                     |
| SEQ.                                                          | 3           | 5                 | 4                     | 2        | 1                    |                   |               |                 |                                   |        |                                                                                                                     |
| 6.01                                                          | 815         | 200               | 40                    | 59       | Ambient              | 60                |               | X               |                                   |        | 14. Move throttle angle to 30 degrees. Observe that maximum nozzle flow decrease is not more than 5 pph and record. |
| 6.02                                                          | 2100        | 670               | 40                    | 59       | 25.0                 | 108               |               | 118             | pph Dec.                          | 14.    | 15. Record throttle angle.                                                                                          |
| <u>Maximum Idle Reset Stop Adjustment</u>                     |             |                   |                       |          |                      |                   |               |                 |                                   |        |                                                                                                                     |
| SEQ.                                                          | 1           | 4,6               | 5                     | 2        | 3,7                  |                   |               |                 |                                   |        |                                                                                                                     |
| 7.01                                                          | 5000        | 1170              |                       | 59       | 55.0                 | 188               |               | 197             |                                   | 15.    | 16. Move throttle angle to 30 degrees. Observe that maximum nozzle flow increase is not more than 4 pph and record. |
| <u>Cut-off Modulation and Cut-off Leakage</u>                 |             |                   |                       |          |                      |                   |               |                 |                                   |        |                                                                                                                     |
| SEQ.                                                          | 3           | 4,6               | 1                     | 5        |                      |                   |               | P1-P2 (in.Hg.)  |                                   |        | 17. Record P1-P2 pressure                                                                                           |
| 9.01                                                          | 2000        | 500               | 20                    | 105      | AR                   | 160               |               | 170             | pph Incr.                         | 16,17. | 18. Observe that P1 pressure does not exceed 250 psig and record.                                                   |
| 9.02                                                          | 2000        | 500               | 8-10                  | 105      | AR                   | 0                 |               | 0.5             | Cut-off Angle P1 pressure cc/min. | 18.    | 19. Observe that P1 pressure is same as or less than that at Test Point 9.02.                                       |
| 9.03                                                          | 2000        | 500               | -5                    | 105      | AR                   |                   |               |                 | P1 pressure                       | 19.    |                                                                                                                     |
| 9.04                                                          | 2000        | 0                 |                       | 105      | Ambient              |                   |               |                 | Throttle Torque                   | 20.    | 20. Observe that throttle torque does not exceed 15 lb. in. maximum and record.                                     |

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| <b>Observações</b><br>Remarks |                     |                     |                                |
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| <b>Aprovação</b><br>Approval  | <b>Nome</b><br>Name | <b>Data</b><br>Date | <b>Assinatura</b><br>Signature |
| FS.1105                       |                     |                     |                                |