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

IDENTIFICAÇÃO | *IDENTIFICATION*

TÍTULO *TITLE* **FICHA PARA REGISTROS DE TESTE DA FUEL CONTROL UNIT** *FUEL CONTROL UNIT TEST SHEET*

PUBLICAÇÃO | *PUBLICATION*	**REFERÊNCIA** | *REFERENCE*	**TLN**	**DATA** | *DATE*
COMPONENT MAINTENANCE MANUAL WITH ILLUSTRATED PARTS LIST	73-20-08	TLN02349	June 23/2020 Revision 14

CONJUNTO MAIOR | *MAIN PART*	
PN	**SN**

TESTE APLICÁVEL AOS PART NUMBERS | *TEST APPLICABLE TO PART NUMBERS*			
3244755-13	3244755-14	3244755-15	3244755-16

TESTE DA UNIDADE DE CONTROLE DE COMBUSTÍVEL | *FUEL CONTROL UNIT TEST*

ITEM *Item*	**PROCEDIMENTOS | TOLERÂNCIAS** *Procedures | Serviceable limits*	**Resultado** *Result*	**Data** *Date*	**Executante** *Performed by*
A	Monte a FCU na bancada de teste, usando o adaptador estriado e o adaptador de montagem. *Assemble the Main Fuel Control Unit to the test stand, using spline adapter and mounting adapter, or equivalent.*			
B	Remova o plugue e instale o acessório especial de teste. Remova o plugue e instale um adaptador padrão nas portas. *Remove plug and assemble, special testing fixture. Remove plug and install a standard adapter into ports.*			
C	Remova o contra pino, porca e espaçador do eixo de aceleração. Instale o Quadrante de Aceleração na extremidade do eixo de aceleração e torqueie de 40-45 lb.in. *Remove cotter pin, nut, and spacer from throttle shaft. Assemble throttle quadrant and pointer on the end of throttle shaft and tighten to 40-45 lb.in.*			
D	Mantenha uma pressão Po de 30-50 psig na conexão de Po, exceto quando houver outra especificação. Mantenha a pressão P2 dentro de ± 10 psi do valor especificado em pressões abaixo de 200 psig e dentro de ± 25 psig em pressões mais altas, usando a válvula reguladora de contrapressão Pn. *Maintain a Po pressure of 30-50 psig on Po pressure gage, except where otherwise specified.* *Maintain P2 pressure within ± 10 psi of the value specified at pressures below 200 pph and within ± 25 psig at higher pressures, using Pn back pressure regulator valve.*			
E	Ajuste o parafuso de pressão diferencial P1-P2 para uma pressão de 30 - 42 in.Hg. Ajuste o orifício da *sleeve* da *metering valve* até a pressão diferencial P1-P2 e o fluxo de injeção estarem de acordo com os limites especificados. *Adjust P1-P2 pressure differential adjustment screw for a pressure of 30 - 42 in.Hg. Adjust metering valve sleeve assembly orifice until P1-P2 pressure differential and nozzle flow are within the limits specified.*			

TESTE DA UNIDADE DE CONTROLE DE COMBUSTÍVEL | *FUEL CONTROL UNIT TEST*

ITEM *Item*	PROCEDIMENTOS | TOLERÂNCIAS *Procedures | Serviceable limits*	Resultado *Result*	Data *Date*	Executante *Performed by*
F	Torqueie as porcas de 35-40 lb.in e 25-35 lb.in respectivamente. Registre todas as pressões diferenciais de P1-P2 e o fluxo de injeção e adicionalmente, as pressões diferenciais de Pc-Px e Px-PY. *Torque nuts to 35-40 lb.in and 25-35 lb.in respectively. Record all P1-P2 differential pressures and nozzle flows and additionally, Pc-Px and Px-Py differential pressures.*			
G	Ajuste a porca até que o fluxo de injeção leia 9-13 pph. *Adjust nut until the nozzle flow reads 9-13 pph.*			
H	Se o fluxo do injetor não estiver de acordo com os limites especificados, troque o fluxo de ar Py. Torqueie o fluxo de ar Py de 9 – 11 lb.in. *If the nozzle flow is not within the specified limits, change Py air flow jet. Torque air flow jet to 9 – 11 lb.in.*			
I	Após ajustar o parafuso de ajuste da velocidade de marcha lenta, torqueie a porca de 20 – 25 lb.in. *After adjustment of idle speed adjustment screw, torque nut to 20 – 25 lb.in.*			

CALIBRAÇÃO E LIMITAÇÕES DO TESTE | *CALIBRATION AND TEST LIMITATIONS*

Calibration and Test Limitations For Units P/N 3244755-13 through 3244755-16

TEST POINT	SPEED (rpm)	FUEL SUPPLY (pph)	THROTTLE ANGLE (deg.)	Pc AIR SUPPLY (psia)	NOZZLE FLOW (pph) Min.	Recorded	Max.	P1-P2 (in. Hg.)	P2 (psig)	MISCELLANEOUS	NOTES
Relief Valve Opening Check											
SEQ.	1	4	2	3							
1.01	0	200/275	MAX.	120						P1-Po(psi) 1000 [ ] 1050	1.
Pressure Valve Opening Check											
SEQ.	1		2	3							
1.02	0	-	MAX.	120						P1-Po(psi) 55 [ ] 68	2.
Metering Valve Orifice and Bypass Valve Differential Pressure Setting									Pn (psig)		
SEQ.	2	3,6	1	4					5		
* 2.01	5800	1300	MAX.	40.0	223	[ ]	233	[ ]	160		3.
* 2.02	2900	660	28-30	40.0	90	[ ]	93	[ ]	35		3.
									P2 (psig)		
* 2.03	5800	1300	MAX.	90.0	503	[ ]	523	[ ]	650	Pc-Py [ ]	3,4.
* 2.04	5800	1300	MAX.	120.0	662	[ ]	705	[ ]	950		3.
2.05	5800	1300	MAX.	135.0	700	[ ]	X	[ ]	950		3.

NOTES

1. Record relief valve opening pressure.
2. Record pressurizing valve opening pressure.
3. Set P1-P2 to between 30 and 42 inches Hg and record.
4. Record Pc-Py pressure. Max. 3.9 inches Hg.

Calibration and Test Limitations For Units P/N 3244755-13 through 3244755-16

TEST POINT	SPEED (rpm)	FUEL SUPPLY (pph)	THROTTLE ANGLE (deg.)	Pc AIR SUPPLY (psia)	NOZZLE FLOW (pph) Min.	Recorded	Max.	P1-P2 (in. Hg.)	P2 (psig)	MISCELLANEOUS	NOTES
Metering Valve Orifice and Bypass Valve Differential Pressure Setting (Cont'd)											
SEQ.	2	3,6	1	4					5		
* 2.06	5800	1300	MAX.	135.0	578		593		870		3,5.
									Pn (psig)		
2.07	5800	1300	MAX.	40.0	-10		+10		160		6.
Governor Spring Setting											
									P2 (psig)		
SEQ.	4	3,7	1	2,5					6		
* 4.01	6487	1450		95	492		504		625		
4.01A		1450	90	95		481			590		7.
4.02		1450	90	95	371		391		410	Bleed Size	8.
4.03		1450	90	95		481			590	Hysteresis	9.

NOTES

5. Set maximum metering valve stop.
6. Hysteresis from Test Point 2.01. Set governor break throttle angle to between 92.5 and 94.5 degrees. [To avoid possible fouling of throttle lever assembly (485, IPL Fig. 1) against thorttle stop (550) gap between trim stop (545) and machined surface of throttle stop lever (495) must be 0.030 inch minimum (Ref. Fig. 513)]
8. Record (Py) air flow jet (115, IPL Fig. 1) size finally installed (size 58D to 62D).
9. Hysteresis from Test Point 4.01A. Observe that speed is not more than -50 rpm of that at T.P. 4.01A and record.

Calibration and Test Limitations For Units P/N 3244755-13 through 3244755-16

TEST POINT	SPEED (rpm)	FUEL SUPPLY (pph)	THROTTLE ANGLE (deg.)	Pc AIR SUPPLY (psia)	NOZZLE FLOW (pph) Min.	Recorded	Max.	P1-P2 (in. Hg.)	P2 (psig)	MISCELLANEOUS	NOTES
Idle Speed Stop Setting and Throttle Pick-up Angle											
									Pn (psig)		
SEQ.	4	1,7	5	2,6					3,8		
5.01	3250	740	28-30	30.0	115		125		42		
5.02	3250	740		30.0	X		X			pph Incr.	10.
Low End Acceleration and Throttle Movement Effect											
SEQ.	2	5	3	1					4,6		
6.01	815	200	40	Ambient	85		X		25		
6.02	1700	400	40	25.0	138		146		60	pph Decr.	11.
Maximum Idle Reset Stop Adjustment											
									P2 (psig)		
SEQ.	1	3,5		2					4		
7.01	4380	990		70	262		274		210		12.
Cut-off Modulation and Cut-off Leakage											
									Pn (psig)		
SEQ.	2	3,6	1	4					5,7		
8.01	2000	500	20	A.R.	160		170		60	pph Incr.	13,15.
8.02	2000	500	8-10	A.R.	0		0.5 c.c./min.			Pl pressure	14,15.

NOTES

10. Move throttle angle to between 31 and 35 degrees. Observe nozzle flow increase is not more than 4 pph from Test Point 5.01 and record. Record throttle angle.
11. Move throttle angle to 30 degrees. Observe that maximum nozzle flow decrease is not more than 5 pph and record.
12. Record throttle angle.
13. Move throttle angle to 30 degrees. Observe that maximum nozzle flow increase is not more than 2 pph and record.
14. Record P1-P2 pressure.
15. Observe Pl pressure does not exceed 250 psig and record.

Calibration and Test Limitations For Units P/N 3244755-13 through 3244755-16

TEST POINT	SPEED (rpm)	FUEL SUPPLY (pph)	THROTTLE ANGLE (deg.)	Pc AIR SUPPLY (psia)	NOZZLE FLOW (pph) Min.	Recorded	Max.	P1-P2 (In. Hg)	P2 (psig)	MISCELLANEOUS	NOTES
Cut-off Modulation and Cut-off Leakage (Cont'd)											
SEQ.	2	3,5	1	4							
8.03	2000	500	-5	A.R.	-			-	-	P1 pressure [ ]	16.
8.04	2000	500	0-MAX-0	Ambient	-			-	-	Throttle Torque [ ]	17.
8.05	2000	500	8-10	Ambient	0	[ ]	20.0 cc/min.	-	-	P1 pressure [ ]	15.
8.06	6487	1450	MAX.	135.0	OK	[ ]	REJ.	-	-	Min. 0.300 Inch [ ]	18.
Spill Valve Setting				Py (psig)					Pn (psig)		
SEQ.	1	3	2	4					5		
9.01	1530	370	28-30	1.0	X	[ ]	X	-	32	-	19.
9.02	1530	370	28-30	1.0	79	[ ]	83	-	25	-	19.
9.03	2400	550	28-30	9.0	X	[ ]	X	-	60	-	19.
9.04	2400	550	28-30	9.0	X	[ ]	X	-		pph Diff. 0 [ ] 1	19,20.
9.05	Check spill valve Pa port			-	-			-	-	OK [ ] REJ.	21.
Detent Cup Dimension											
10.01	-	-	-	-	-			-	-	Dim. 'X' [ ]	22.

NOTES

16. (P2) pressure to be equal to, or less than, (P1) at test Point 8.02. Record (P1).
17. Observe that throttle torque does not exceed 15 In. lb. and record.
18. Set throttle angle to -5°. Distance between centres of pin (695) and throttle lever link (660) must be 0.300 Inch minimum (Ref. Fig. 513A). Observe and record nozzle flow, which must be less than 85 pph.
19. Record nozzle flow.
20. Record difference in flow from Test Point 9.03.
21. Part may be wet but no measurable leakage permitted.
22. Measure dimension 'X' as per Figure 704 and record.

Observações *Remarks*	

Aprovação *Approval*	**Nome** *Name*	**Data** *Date*	**Assinatura** *Signature*