

	REGISTRO RECORD	REVISÃO REVISION 01
CODIGO CODE IAS-RG-0223	FICHA DE SERVIÇOS Service Sheet	PÁGINA PAGE 1/4

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

IDENTIFICAÇÃO IDENTIFICATION	
TÍTULO	FICHA PARA REGISTROS DE TESTE DA FUEL CONTROL UNIT
TITLE	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		
3244755-7	3244755-8	3244755-9
3244755-10	3244755-11	3244755-12

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. <i>Assemble the Main Fuel Control Unit to the test stand, using spline adapter and mounting adapter, or equivalent.</i>			
B	Remova o plugue e instale o acessório especial de teste. Remova o plugue e instale um adaptador padrão nas portas. <i>Remove plug and assemble, special testing fixture. Remove plug and install a standard adapter into ports.</i>			
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. <i>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.</i>			
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. <i>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.</i>			
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. <i>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.</i>			

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ITEM	PROCEDIMENTOS TOLERÂNCIAS	Resultado	Data	Executante
Item	Procedures Serviceable limits	Result	Date	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. <i>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.</i>			
G	Ajuste a porca até que o fluxo de injeção leia 9-13 pph. <i>Adjust nut until the nozzle flow reads 9-13 pph.</i>			
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. <i>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>			
I	Após ajustar o parafuso de ajuste da velocidade de marcha lenta, torqueie a porca de 20 – 25 lb.in. <i>After adjustment of idle speed adjustment screw, torque nut to 20 – 25 lb.in.</i>			

CALIBRAÇÃO E LIMITAÇÕES DO TESTE | CALIBRATION AND TEST LIMITATIONS

Calibration and Test Limitations For Units P/N 3244755-7 through 3244755-12											
TEST POINT	SPEED (rpm)	FUEL SUPPLY (pph)	THROTTLE ANGLE (deg.)	Pc AIR SUPPLY (psia)	NOZZLE FLOW (pph)	P1-P2 (in. Hg.)	P2 (psig)	MISCELLANEOUS	NOTES		NOTES
<u>Relief Valve Opening Check</u>											
SEQ.	1	4	2	3							
1.01	0	200/275	MAX.	120			1000	P1-Po(psi)	1050	1.	1. Record relief valve opening pressure.
<u>Pressure Valve Opening Check</u>											
SEQ.	1		2	3							
1.02	0	-	MAX.	120			50	P1-Po(psi)	68	2.	2. Record pressurizing valve opening pressure.
<u>Metering Valve Orifice and Bypass Valve Differential Pressure Setting</u>											
SEQ.	2	3,6	1	4				Pn (psig)			
2.01	5800	1300	MAX.	40.0	223		233		160	3.	
2.02	2900	660	28-30	40.0	90		93	35	Pn 35 psig	3.	
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.	

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Calibration and Test Limitations For Units P/N 3244755-7 through 3244755-12										
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	NOTES
<u>Metering Valve Orifice and Bypass Valve Differential Pressure Setting (Cont'd)</u>										
SEQ.	2	3,6	1	4			5			5. Set max. metering valve stop.
* 2.06	5800	1300	MAX.	135.0	578 593	-	870	-	5.	6. Hysteresis from Test Point 2.01.
							Pn (psig)			7. Set governor break throttle angle to between 89 and 91° [To avoid possible fouling of throttle lever assembly (485, IPL Fig. 1) against throttle stop (550), gap between throttle stop (550) and machined surface of throttle lever assembly (485) must be 0.005 inch minimum (Ref. ASSEMBLY, Fig. 513)].
2.07	5800	1300	MAX.	40.0	-10 +10	-	160	-	6.	8. Record air flow jet (11, IPL Fig. 1) size finally installed (size 580 to 62D).
<u>Governor Spring Setting</u>										
SEQ.	4	3,7	1	2,5			6			9. Hysteresis from Test Point 4.03. Observe that speed is not more than -50 rpm of that at P. 4.01A and record.
* 4.01	6360	1420		95	492 504	-	625	-	7.	
4.01A		1450		95	481	-	590	-	-	
4.02		1450		95	371 391	-	410	Bleed Size	8.	
4.03		1420		95	481	-	590	Hysteresis	9.	

Calibration and Test Limitations For Units P/N 3244755-7 through 3244755-12										
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	NOTES
<u>Idle Speed Stop Setting and Throttle Pick-up Angle</u>										
SEQ.	4	1,7	5	2,6			Pn (psig)			10. Move throttle angle to between 31 and 35 degrees. Observe that maximum nozzle flow increase is not more than 4 pph from Test Point 5.01 and record. Record throttle angle.
5.01	3250	740	28-30	30.0	115 125		42			
5.02	3250	740		30.0	X X			pph Incr.	10.	
<u>Low End Acceleration and Throttle Movement Effect</u>										
SEQ.	2	5	3	1			4,6			11. Move throttle angle to 30 degrees. Observe that maximum nozzle flow decrease is not more than 5 pph and record.
6.01	815	200	40	Ambient	85 X		25			
6.02	1700	400	40	25.0	138 146		60	pph Decr.	11.	
<u>Maximum Idle Reset Stop Adjustment</u>										
SEQ.	1	3,5		2			P2 (psig)			12. Record throttle angle.
7.01	4380	990		70	262 274		210		12.	13. Move throttle angle to 30 degrees. Observe that maximum nozzle flow increase is not more than 2 pph and record.
<u>Cut-off Modulation and Cut-off Leakage</u>										
SEQ.	2	3,6	1	4			Pn (psig)			14. Record P1-P2 pressure.
8.01	200	500	20	A.R.	160 170		60	pph Incr	13,14.	15. Observe that P1 pressure does not exceed 250 psig and record.
8.02	2000	500	8-10	A.R.	0 0.5 c.c./			P1 pressure	14,15.	

