

	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		
3244755-17	3244755-18	3244755-19

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 3244755-17 through 3244755-19											
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
Relief Valve Opening Check											
SEQ.	1	4	2	3							
1.01	0	200/275	MAX.	120	-	-	-	1000	P1-Po(psi) 1050	1.	1. Record relief valve opening pressure.
Pressurizing Valve Opening Check											
SEQ.	1		2	3							
1.02	0	-	MAX.	120	-	-	-	55	P1-Po(psi) 68	2,3, 4.	2. Record pressurizing valve opening pressure.
Metering Valve Orifice and Bypass Valve Differential Pressure Setting											
SEQ.	2	3,6	1	4				Pn (psig) 5			
2.01	5800	1300	MAX.	40.0	223	233		160	-	5.	3. Adjust and maintain (Po) pressure at 40 ± 2 psig.
2.02	2900	660	28-30	40.0	90	93		35	-	5.	4. If cover (765J, IPL Fig. 1) has been removed and reassembled, torque screws (TORA) alternately to value specified (Ref. Table 604) in increments of 1 In. lb. maximum.
								P2 (psig)			
2.03	5800	1300	MAX.	90.0	503	523		650	Pc-Py 	5,6, 7.	5. Set P1-P2 to between 30 and 40 Inches Hg and record.
2.04	5800	1300	MAX.	120.0	662	705		950	-	5.	6. Record Pc-Py pressure. Max. 3.0 Inches Hg.
2.05	5800	1300	MAX.	135.0	700	X		950	-	5.	7. Check appropriate box: ☐ Original spacer ☐ Spacer replaced ☐ Spacer removed
2.06	5800	1300	MAX.	135.0	578	593		870	-	5,8.	8. Set maximum metering valve stop.

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Calibration and Test Limitations For Units P/N 3244755-17 through 3244755-19											
TEST POINT	SPEED (rpm)	FUEL SUPPLY (pph)	THROTTLE ANGLE (deg.)	Pc AIR SUPPLY (psia)	NOZZLE FLOW (pph) Min. Recorded	Max.	P1-P2 (In. Hg)	Pn (psig)	MISCELLANEOUS	NOTES	NOTES
<u>Metering Valve Orifice and Bypass Valve Differential Pressure Setting (Cont'd)</u>											
SEQ.	2	3,6	1	4				5			9. Hysteresis from Test Point 2.01.
2.07	5800	1300	MAX.	40.0	-10		+10	160	-	9.	10. 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 throttle stop (550), map between throttle stop (550) and machined surface of throttle lever assembly (485) must be 0.030 inch minimum (Ref. Fig. 503)].
<u>Governor Spring Setting</u>											
SEQ.	4	3,7	1	2,5				6			
4.01	6487	1450		95	492		504	-	625	-	10.
4.01A		1450	90	95	481			-	590	-	
4.02		1450	90	95	371		391	-	410	Bleed Size	11.
4.03		1450	90	95	481			-	590	Hysteresis	12.
4.04	6487	1450	30-35	95	X		225	-	160	-	13.

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<u>Idle Speed Stop Setting and Throttle Pick-up Angle</u>											
SEQ.	4	1,7	5	2,6				3,8			
5.01	3250	740	28-30	30.0	115		125	-	42	-	14.
5.02	3250	740		30.0	X		X	-		pph incr.	
<u>Low End Acceleration and Throttle Movement Effect</u>											
SEQ.	2	5	3	1				4,6			
6.01	815	200	40	Ambient	85		X	-	25	-	15.
6.02	1700	400	40	25.0	138		146	-	60	pph Decr.	
<u>Maximum Idle Reset Stop Adjustment</u>											
SEQ.	1	3,5		2				4			
7.01	4380	990		70	262		274	-	210	-	16.
<u>Cut-off Modulation and Cut-off Leakage</u>											
SEQ.	2	3,6	1	4				5,7			
8.01	2000	500	20	A.R.	160		170	60		pph Incr.	17,18.
8.02	2000	500	8-10	A.R.	0		0.5 cc/min.	-		P1 pressure	18,19, 20.

