

NATIONAL TRANSPORTATION SAFETY BOARD

Office of Aviation Safety
Washington, D.C. 20594

September 22, 2021

Attachment 5 –No. 2 Engine (P36235C) Propeller Governor Test Report

POWERPLANTS

CEN20LA215

WOODWARD, Inc.
Rockford, Illinois
CAGE 66503

AS RECEIVED

TSP-1674
Page 9
Rev. AD

TEST REPORT for 8210-104, 8210-262

☐ Woodward I/N: 8210-104

☒ Woodward I/N: 8210-262

Woodward Sales Order No. 3751845

S/N 1806734

Oil Inlet Temp. 140 +/- 5 deg. F

Customer P/N: 897410-4, -8

Customer P/N: 897410-10, -15

Customer P.O. No. N/A

Technician Matt L. L...

Oil Inlet Pressure: 95 +/- 10 PSIG

Customer Spec. PSC 897410

Customer Spec. PSC 897410

Date 07/27/2021

PT	Section No.	DESCRIPTION	SPEED RPM		OIL PRESSURE PSIG		OIL FLOW QPM			
			REQUIRED	ACTUAL	REQUIRED		ACTUAL	REQUIRED	ACTUAL	
1	3.1	Check Valve	0	0	15 Max.		13	Start Flow	Start Flow	
2	3.2	Relief Valve	3400 +/- 15	3400	485 +/- 15		490	0	0	
3	3.2.1	Back Pressure	3400 +/- 15	3400	545 Max.		525	0	0	
4	3.3	Maximum Speed	3754 +/- 10	3842	150 +/- 5		150	Use Bleed Orifice		
5	3.4	Minimum Speed	3604 +/- 10	3536	150 +/- 5		150			
6	3.5	Control Lever at Max. 84 +/- 5 deg.			PT 4 to PT 5 10 +/- 2 deg					
7	3.6	Overspeed(Check/Sec. 3.6)	4017 +/- 40	4098	150 +/- 5		150			
8	3.7	Increase Speed to Obtain		3822	350 +/- 5		350			
9	3.7	Increase Speed to Obtain		3842	50 +/- 5		50			
10	3.7	Pressure Gain = PT 9 - PT 8	60 +/- 20	840						
11	3.8	Decrease speed to obtain		3822	350 +/- 5		350			
12	3.8	Speed Hysteresis = PT 8 - PT 11	-15 to +40	0						
13	3.9	Pump Capacity	3400 +/- 15	3400	150 +/- 20		150	10.9 QPM Min. 12.4		
14	3.10	Internal Leak	As Required	3549	150 +/- 5		150	New 2.0 QPM Max. 4.4 Repair 2.4 QPM Max. 12		
15	3.11	Magnetic Pickup Voltage	3700 +/- 10	3700	4.5 volts +/- 4.5 Peak to Peak		5	Volts		
16			375 +/- 10	375	0.4 volts Peak-to-Peak Min.		.9	Volts		
17		Frequency	3700 +/- 10	3700	925 +/- 3 Counter Reading		925	Hz		
18	3.12	Electrical Speed Change	3.12.1	3547	3.12.3	3598	3.12.4, 50 +/- 5 RPM		51	RPM
19		Electrical Hang-up	3.12.3	3598	3.12.6	3608	3.12.7, 25 RPM Max.		10	RPM
20	3.13	External Leakage	3000 +/- 50	3000	100 +/- 10		100	0	0	
21	3.14	Total Leak	0	0	200 +/- 10		200	.5 QPM Max.	.2	

AS RECEIVED