INJECTION CARBURETOR FLOW BENCH TEST

Engine Model: R-2800
Engine Mfgr.: Pratt & Whitney
Engine Mfgr. Setting: PR-58E2-2

Fuel Inlet Pressure: ~~13~~ psi 12
Nozzle Pressure: 11 ± 1/4 psi
Limits Based on .732 - .736 Specific Gravity at 70-80°F.

NAPHTHA

Parts List No.: 391399-2
Carb. Model: PR-58E2
Date Issued: 5-21-53

Test Point No.		1	2	3	4	5	6	7	8	9	10	111	12	13	14	15	16	17	18
Metering Suction Inches of Water		5.0	50.0	0.0	1.5	2.6	2.6	6.0	6.0	9.5	9.5	12.0	16.1	20.5	27.0	27.0	Hg 3.79	Hg 3.79	Hg 6.5
Corresponding Air Flow Lb./Hr.					3000	4000	4000	6000	6000	7500	7500	8400	9700	11000	12500	12500	17000 (51.4)	17000	22000
Mixture Control Lever Position		AR	AR	AR	ICO	AR	AL	AL	AR	AR	AL	AR	AR	AR	AR	AL	AR	AR	AR
Burette Time	Volume				50	2000	2000	2000	2000	3000	3000	3000	5000	5000	5000	5000	7000		
	Min.				48.5	35.1	41.9	29.0	23.9	28.6	34.5	25.2	34.1	28.7	23.7	26.0	22.1		
Limits In Seconds	Max.				NF	36.5	43.5	30.1	24.9	29.7	35.8	26.3	35.4	29.9	24.7	27.1	23.0		
	Obs.																		
Flowmeter Limits In Lbs./Hr.	Min.				NF	319	268	387	468	588	487	665	825	979	1184	1080	1777		
	Max.				6.0	332	278	402	487	611	507	692	858	1019	1232	1124	1848		
	Obs.			345	8	330	300	415	490	615	520	675	800	905 935	1090 1110	990 1020	1610 AL 1700 AR		
Metering Head Inches of Fuel	Min.	6.6	63.5	3.3					7.6	12.0					34.0				
	Max.	6.9	67.5	3.9					8.4	13.0					36.8				
	Obs.	6.9	66	3.9					8.1	12.3					33.7				

Test Point No.								
Metering Suction Inches of Water								
Corresponding Air Flow Lbs./Hr.								
Mixture Control Lever Position								
Burette Time	Volume							
	Min.							
Limits In Seconds	Max.							
	Obs.							
Flowmeter Limits In Lbs./Hr.	Min.							
	Max.							
	Obs.							
Metering	Min.							

Multi-Point Automatic Mixture Control Calibration Limits:

Flow Method: A-1

Date Issued: 8-10-55

Density:	0.0743	0.0611	0.0408	0.0286
Low (Rich) Limit:	26.95	31.8	35.3	37.0
High (Lean) Limit:	29.45	32.2	35.7	37.4
	28.20	31.8	35.5	N/A
			34.8	

Note No. 1. Maintain flow bench nozzle pressure at 11.0 ± 1/4 psi throughout test.

No. 2. Increase fuel inlet pressure to 28 psi for test point No. 4 only. (Idle Cut-off Check)

No. 3. Naphtha limits established by BuAer.

6200 PL

Flowed By [redacted]

Date: 02-15-2020

Serial# [redacted] W/O