

# CONSOLIDATED AIRCRAFT CORPORATION

San Diego, California

April 15, 1942

## OPERATING LIMITS FOR R-1830-43 ENGINES (Turbo Supercharger)

Condition	BHP/Eng.	RPM	Man. Pr. Man. Hg.	Alt. Ft.	Mixt.	Max. Cyl. Head Temp. °C.	Max. Oil in Temp. °C.	Required Oil Pres. #/sq in.
Take-Off (5 Minutes Duration)	1200	2700	49	S. L.	Auto Rich	260	95	80-100
Military (5 Minutes Duration)	1200	2700	49	S. L. to 23400	Auto Rich	260	95	80-100
Normal (Continuous)	1100	2550	45.5	S. L. to 25000	Auto Rich	260 (One hr.) 232 (Continuous)	95	80-100
Maximum Cruising (Continuous)	700	2150	29.5	Any	Auto Lean	232	85 (Auto Rich) 75 (Auto Lean)	65-100

Maximum cylinder barrel temperature	168° C.
Maximum air temperature at carburetor	38° C.
Maximum exhaust temperature at turbo	788° C.
Maximum temperature of ignition system	115° C.
Maximum turbo RPM	21,100
Required fuel pressure	14-17 lb./sq. in.
Maximum dive RPM of engine	3,060 (30 seconds duration)