

**AIRPLANE MODELS**  
**B-17 F**
**SPECIFIC ENGINE**  
**FLIGHT CHART**
**ENGINE MODELS**  
**R-1820-97**

CONDITION	FUEL PRESSURE (LB. SQ. IN.)	OIL PRESSURE (LB. SQ. IN.)	OIL TEMP.		COOLANT TEMP.					MAX. PERMISSIBLE DIVING RPM:..... 2760 .....	
			'C	'F	'C	'F				CONDITION	ALLOWABLE OIL CONSUMPTION
DESIRED	12-16	75	70	150						NORMAL RATED (MAX. CONT.)	14.5 U.S. QT./HR. ... 23 IMP. PT./HR
MAXIMUM	16	80	89	190						MAX. CRUISE	8.0 U.S. QT./HR. ... 13 IMP. PT./HR
MINIMUM	12	70								MIN. SPECIFIC	5 U.S. QT./HR. ... 8 IMP. PT./HR
IDLING		15								OIL GRADE: (S)..... 1120..... (W)..... 1100-A.....	

SUPERCHARGER TYPE: TURBO

FUEL GRADE: 100

OCTANE

OPERATING CONDITION	RPM	MANIFOLD PRESSURE (BOOST)	HORSE-POWER	CRITICAL ALTITUDE		BLOWER	USE LOW BLOWER BELOW:	MIXTURE CONTROL POSITION	FUEL FLOW (GAL./HR./ENG.)		MAXIMUM CYL. TEMP.		MAXIMUM DURATION (MINUTES)
				WITH RAM	NO RAM				U.S.	IMP.	'C	'F	
TAKE-OFF	2500	48	1200	27,000		-		A. R.	152	127	260	500	5
WAR EMERGENCY													
MILITARY	2500	46*	1200	27,000		-		A. R.	152	127	260	500	5
NORMAL RATED (MAX. CONT.)	2300	41.5*	1000	30,000		-		A. R.	103	86	232 CLIMB 218	450 CLIMB 424	
MAXIMUM CRUISE	2000	36.2*	750	35,000				A. L.	62.5	52	205	401	
MINIMUM SPECIFIC CONSUMPTION	2000 1940 1780 1700 1600 1400	34.7 33.0 36.0 35.5 34.8 32.5	670 800 650 600 550 450	SEE ENGINE CALIBRATION CURVE				A. L.	52 48 45.5 41.5 37.8 31.2	43 37 38 34.6 31.4 25	205	401	

REMARKS: AIR INTAKE FILTER MUST BE OFF ABOVE 8000 FEET OR DANGEROUS TURBO OVERSPEEDING WILL RESULT. FULL THROTTLE MUST BE USED ABOVE 15,000 FEET OR DANGEROUS TURBO OVERSPEEDING WILL RESULT. DO NOT MANUALLY LEAN. AUTO LEAN GIVES MAXIMUM RANGE. \*DECREASE MANIFOLD PRESSURES 1-1/2 INCH PER 1000 FEET ABOVE CRITICAL ALTITUDE.