

Printable Engine Tables



Fiat BR.20M Cicogna

Settings for:	Radiators (cowling flaps/oil)	ATA mmHG	RPM
Cruise	50% / 50%	670	2100
Climb	100% / 50%	740 (30 min.)	2100
Highest speed	as required (check temp.)	820 (3 min.)	2200
Never exceed temperatures of 260 °C cylinder head and 100 °C for oil			

Fiat CR.42 Falco

Settings for:	Radiators (water/oil)	ATA mmHG	RPM
Cruise	75% / 75%	720	2200
Climb	100% / 100%	790	2400
Highest speed	50% / 50%	890 (*)	2520
Never exceed 260 °C engine temperature in position 2 and 100 °C for oil			

(*) with WEP enabled

Fiat G.50 Freccia

Settings for:	Radiators (water/oil)	ATA mmHG	RPM
Cruise	65% / 55%	720	2400
Climb	100% / 100%	790	2400
Highest speed	50% / 50%	890 (*)	2520
Never exceed 260 °C engine temperature in position 5 and 100 °C for oil			
(*) with MED anallad			

(*) with WEP enabled

Macchi C.202 Folgore III / VII

Settings for:	Radiators (water/oil)	ATA (III / VII)	Prop Pitch	RPM
Cruise	75% / 75%	1.23 / 1.23	А	2200
Climb	100% / 100%	1.3 / 1.35	S	2400
Highest speed	50% / 50%	1.4 / 1.45 (*)	S	2400
Never exceed a temperature of 100 °C for water and 105 °C for oil				



Heinkel He 111 P-2

Settings for:	Radiators (water/oil)	Time	АТА	RPM
Cruise	50% / 50%	No limit	1.15	2200
Climb	100% / 100%	30 min	1.23	2300
Highest speed	As required	5 min	1.3	2400
Never exceed temperature of 100 °C for water and 105 °C for oil				

Heinkel He 111 H-2

Settings for:	Radiators (water/oil)	Time	ATA	RPM
Cruise	50% / 50%	No limit	1.1	2200
Climb	100% / 100%	30 minutes	1.15	2300
Highest speed	As required	1 minute	1.35	2400
Never exceed temperature of 95 °C for water and 90 °C for oil				

Heinkel He 111 H-6

Settings for:	Radiators (water/oil)	Time	ATA	RPM
Cruise	50% / 50%	No limit	1.15	2200
Climb	100% / 100%	30 minutes	1.25	2400
Highest speed	As required	1 minute	1.4	2600
Never exceed temperature of 95 °C for water and 90 °C for oil				



unkers Ju 87 B-2					
Settings for:	Radiators	АТА	RPM		
Cruise	80%	1.0	2200 (up to 6000 m)		
Climb	100%	1.15	2300		
Highest speed	40%	1.35	2400 (1 min.)		
Never exceed 95 °C water and 90 °C oil temperature					

Junkers Ju 88 - Manual Prop Pitch (A-1, A-5, A-5/Trop, C-1, C-2, C-2, and their Trop variants)

Settings for:	Radiators (water/oil)	АТА	RPM
Cruise	40% / 40% (on deck) 75% / 75% (altitude)	1.1	2200 (no limit)
Climb	100% / 100%	1.15	2300 (30 min.)
Highest speed As required		1.35	2400 (1 min.)
Never exceed temperature of 95 °C for water and 90 °C for oil			

Junkers Ju 88 - Auto Prop Pitch (A-5 Late, C-4, C-4 Late, and their Trop variants)

Settings for:	Radiators	АТА	RPM
Cruise	40% (on deck) 75% (altitude)	1.15	2250 (no limit)
Climb	100%	1.25	2400 (30 min.)
Highest speed	As required	1.4	2600 (1 min.)
Never exceed temperature of 95 °C for water and 90 °C for oil			



Messerschmitt Bf 108 Taifun

Settings for:	RPM	Speed	
Cruise	1800	220 km/h	
Climb	1850	170 km/h	
Highest speed	2200	307 km/h	
Never exceed 350 kmh or 2300 rpm nor 85 ^o C oil temp			

Messerschmitt Bf 109 E-1 and E-3

Settings for:	Radiators (water/oil)	АТА	RPM	
Cruise	50% / 50%	1.15	2200	
Climb	100% / 100%	1.23	2300	
Highest speed	As required	1.40	2400 (1 min .)	
check temp. 1.30 2400 (5 min.)				
Never exceed 100 °C water and 105 °C oil temperature				

Messerschmitt Bf 109 E-1/B, E-3/B, E-4/B

Settings for:	Radiators (water/oil)	ATA	RPM	
Cruise	50% / 50%	1.15	2200	
Climb	100% / 100%	1.23	2300	
Highost spood	As required	1.45	2500 (1 min .)	
ingliest speed	check temp.	1.35	2400 (5 min .)	
Never exceed 100 °C water temperature and 105 °C oil temperature				

Messerschmitt Bf 109 E-4 and E-7

Settings for:	Radiators (water/oil)	ATA	RPM
Cruise	50% / 50%	1.15	2200
Climb	100% / 100%	1.23	2300
Highest speed	As required 1.40 250 check temp. 1.30 240		2500 (1 min.) 2400 (5 min.)
Never exceed 100 °C water temperature and 105 °C oil temperature			



Settings for:	Radiators (water/oil)	АТА	RPM
Cruise	50% / 50%	1.15	2200
Climb	100% / 100%	1.25	2400
Highest speed	As required check temp.	1.35	2600 (5 min.)
Never exceed 100 °C water temperature and 105 °C oil temperature			

Messerschmitt Bf 109 E-4/N and E-7/N

Messerschmitt Bf 109 F-1 and F-2

Settings for:	Radiators	ATA	RPM
Cruise	Automatic	1.15	2300
Climb	Automatic	1.25	2400
Highest speed	Automatic	1.35	2600 (1 min.)
Never exceed 110 °C water temperature and 80 °C oil temperature			

Messerschmitt Bf 109 F-4

Settings for:	Radiators	ATA	RPM		
Cruise	Automatic	1.15	2300		
Climb	Automatic	1.30	2500		
Highest speed	Automatic	utomatic 1.42 2700 (1 min			
Never exceed 115 °C water temperature and 85 °C oil temperature					

Messerschmitt Bf 109 F-4/Z and E-7/Z - Using the GM-1 $\,$

Settings for:	Radiators	ATA (E-7/Z)	ATA (F-4/Z)
Cruise	Automatic	1.15	1.15
Climb	Automatic	1.25	1.30
Highest speed	Automatic	1.35	1.42
Never exceed 115 °C water temperature and 85 °C oil temperature			



Messerschmitt Bf 110 C-2 & C-4

Settings for	Radiators (water/oil)	АТА	RPM
Cruise	50% / 50%	1.15	2200
Climb	100% / 100%	1.23	2300
Highest speed	As required (check temp.)	1.30	2400 (5 min.)
Never exceed temperature of 100 °C for water and 105 °C for oil (keep both below 95 °C recommended)			

Messerschmitt Bf 110 C-4/B (auto prop pitch)

Settings for	Radiators (water/oil)	АТА	RPM
Cruise	50% / 50%	1.15	2200 (auto pitch)
Climb	100% / 100%	1.23	2300 (auto pitch)
Highest speed	Adjust while watching temps	1.35 1.45	2400 (5 min.) 2500 (1 min.)
Never exceed temperature of 100 °C for water and 105 °C for oil (keep both below 95 °C recommended)			

Messerschmitt Bf 110 C-4/N, C-6, C-7 (auto prop pitch)

Settings for	Radiators (water/oil)	ATA	RPM	
Cruise	50% / 50%	1.15	2200 (auto pitch)	
Climb	100% / 100%	1.25	2400 (auto pitch)	
Highest speed	Adjust while watching temps	1.35	2600 (5 min.)	
Never exceed temperature of 100 °C for water and 105 °C for oil (keep both below 95 °C recommended)				



Bristol Beaufighter Mk IF

Settings for:	Radiators	Boost	RPM
Cruise	55%	+1.0	2400
Climb	75%	+2.5	2400
Highest speed	As necessary	+4.0	2800
Never exceed engine temperature of 260 °C, oil max. 90 °C			

Bristol Beaufighter Mk IF Late and Mk IC

Settings for:	Radiators	Boost	RPM
Cruise	55%	+2.5	2500
Climb	75%	+3.5	2500
Highest speed	As necessary	+6.75	2800
Never exceed engine temperature of 280 °C, oil max. 90 °C			

Bristol Blenheim

Settings for:	Radiators (Cylinder Head Temp)	Boost	Prop Pitch	RPM
Cruise	50%	+3.5	Coarse	2400
Climb	50%	+5	Coarse	2100 - 2400
Highest speed	35%	+9 (*)	Coarse	2750
Never exceed temperature of 235 °C for cylinder head temperature, 85 °C for oil				



De Havilland DH.82 Tiger Moth Variants

Settings for:	RPM	Speed	
Cruise	1900 - 2050	80 - 90 mph	
Climb	2100 (30 minutes)	60 mph	
Highest speed	2350 (5 minutes)	107 mph	
Never exceed 60 lb. per square inch oil pressure			

Dewoitine D.520

Settings for:	Radiator	АТА	RPM	
Cruise	60%	1.0	2200	
Climb	as required	1.17	2400	
Highest speed	as required	1.28	2520 (max.)	
Never exceed 125 °C water temperature, 100 °C oil For combat maneuvers never load more than 62% fuel!				

Gloster Gladiator Mk II and Mk II Trop

Settings for:	Oil radiator	Speed	Boost	RPM
Cruise	Open	170 mph	+3	2200
Climb	Open	170 mph	+5	2400
Highest speed	As necessary	243 mph	+5.75	2750
Never exceed engine temperature of 240 °C and oil temperature of 85 °C				

Hawker Hurricane Mk I DH5-20 (100 Octane)

Settings for:	Radiators	Boost	RPM	
Cruise	50%	+4	Prop Pitch Coarse	
Climb	100%	+6	Prop Pitch Coarse	
Highest speed	50%	+12 (*)	3000 (5 min.)	
Never exceed 110 °C water temperature, 90 °C oil				

(*) with Boost Cut-Out enabled



Hawker Hurricane Mk I Rotol (100 Octane)

Settings for:	Radiators	Boost	RPM
Cruise	50%	+3	2600
Climb	100%	+6	2600 (30 min.)
Highest speed	50%	+12 (*)	3000 (5 min.)
	2370		

Never exceed 115 °C water temperature, 95 °C oil

(*) with Boost Cut-Out enabled

Hawker Hurricane Mk II

Settings for:	Radiator	Boost	RPM	
Cruise	50%	+6	2700	
Climb	100%	+9	2850	
Highest speed	50%	+12 (*)	3000	
Never exceed 135 °C water temperature, 95 °C oil				

(*) with Boost Cut-Out enabled

Kittyhawk Mk Ia

Settings for:	Oil and coolant	Boost	RPM	
Cruise	75%	42 in	2600	
Climb	100% at 150 mph	42 in	2800	
Highest level speed (5 min. limit, 470 mph in dive)	Adjust accordingly	56 in	3000	
Never exceed 125 °C coolant temperature, 95 °C oil				

Martlet Mk III

Settings for:	Cowl Flaps	Boost	RPM	
Cruise	35%	32.5 in	2470	
Climb	As required	41 in	2550	
Highest speed	As required	48 in	2700 (5 min)	
Never exceed cyl. head temperature of 260 °C & oil temperature of 100 °C				



Supermarine Spitfire Mk I (100 Octane)

Settings for:	Radiator	Boost	RPM	
Cruise	55%	+3	Prop Pitch Coarse	
Climb	100%	+6	Prop Pitch Coarse (30 min.)	
Highest speed	50%	+12 (*)	3000 (5 min.)	
Never exceed 115 °C water temperature				

(*) with Boost Cut-Out enabled

Supermarine Spitfire Mk Ia (100 Octane)

Settings for:	Radiator	Boost	RPM
Cruise	55%	+3	2700
Climb	100%	+6	2750
Highest speed	50%	+12 (*)	3000
Never exceed 120 °C water temperature			

(*) with Boost Cut-Out enabled

Supermarine Spitfire Mk II

Settings for:	Radiator	Boost	RPM
Cruise	55%	+6	2700
Climb	100%	+9	2850
Highest speed	50%	+12 (*)	3000
Never exceed 135 °C water temperature			

(*) with Boost Cut-Out enabled

Supermarine Spitfire Mk V (Non-HF)

Settings for:	Radiator	Boost	RPM
Cruise	55%	+6	2760
Climb	100%	+9	2850
Highest speed	50%	+12 (*)	3000
Never exceed 135 °C water temperature			

(*) with Boost Cut-Out enabled



Supermarine Spitfire Mk V HF

Settings for:	Radiator	Boost	RPM			
Cruise	55%	+6	2760			
Climb	100%	+9	2850			
Highest speed	50%	+12 (*)	3000			
Nover exceed 125 °C water temperature						

Never exceed 135 °C water temperature

(*) with Boost Cut-Out enabled

Tomahawk Mk II

Settings for:	Oil and coolant	Boost	RPM			
Cruise	Adjust accordingly	ljust accordingly 37 in				
Climb	100% at 150 mph	42 in	2800			
ighest level speed (5 min.) o not exceed 470 mph in diveAdjust accordingly		48 in 54 in	3000 3120 in dive			

Never exceed 125 °C coolant temperature, 90 °C oil

Vickers Wellington Mk I

Settings for:	Cowl flaps	RPM	Boost	Mixture	
Take-off	Approx. 1/3 open	2600	6 ¾	Rich	
Climb	100% at 125 mph	2250	2 1⁄2	Rich	
Cruise	Closed at 130 mph	2250	2 1⁄2	Lean	
Highest Speed	As desired	2600	6 ¾	Rich	
Never exceed temperature of 240 °C for engine and 85 °C for oil					

