



OM-603 OPERATING MANUAL

This manual applies to 8KCAB aircraft
serial numbers 934-2003 and up

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SECTION III
NORMAL OPERATING PROCEDURES

AMERICAN CHAMPION AIRCRAFT
SUPER DECATHLON (8KCAB)

CLIMB

- 1) Throttle - FULL OPEN.
- 2) Propeller Control - FULL INCREASE.
- 3) Mixture - lean only as required to maintain smooth engine operation.
- 4) Airspeed - 75 - 80 MPH.
- 5) Electric Fuel Pump - OFF after safe altitude has been obtained.

For maximum performance climbs, use full throttle and the following speeds.

Model	Super Decathlon (mph IAS)
Best Rate of Climb (V_Y)	82
Best Angle of Climb (V_X)	58

If best rate of climb (or best angle of climb) is not required, a climb speed between 80 and 90 MPH will provide good forward visibility (and engine cooling in a warm climate). The mixture should be full rich; lean only as required to maintain smooth engine operation.

NOTE

Monitor fuel pressure gauge when switching electric fuel pump off to insure continuous fuel pressure "in the green" with electric fuel pump off.

TIME, FUEL AND DISTANCE TO CLIMB

CONDITIONS

1. Standard Temperature.
2. Data for 1800 lb Weight
3. Full Throttle, 2700 RPM.

PILOT TECHNIQUE: Refer to "CLIMB" in Section III.

1. Maximum Rate of Climb.
2. Lean Only as Required to Maintain Smooth Engine Operation.

Pressure Altitude (ft)	Standard Temp (° C)	Climb Speed (mph-IAS)	Rate of Climb (fpm)	From Sea Level		
				Time (min)	Fuel (gal)	Distance (sm)
0	15	80	1230	0	1.0	0
1000	13	80	1160	1	1.2	1
2000	11	79	1090	2	1.4	2
3000	9	79	1020	3	1.7	4
4000	7	78	940	4	1.9	5
5000	5	78	880	5	2.2	7
6000	3	77	790	6	2.4	8
7000	1	77	730	7	2.7	10
8000	-1	76	660	9	3.0	12
9000	-3	75	590	10	3.3	14
10000	-5	75	520	12	3.7	17
11000	-7	74	440	14	4.0	20
12000	-9	74	370	17	4.5	24
13000	-11	73	300	20	5.0	28
14000	-13	73	230	23	5.6	34
15000	-15	72	160	29	6.4	42

NOTES

1. Data presented in this table represents maximum airplane capability at speeds shown and requires aircraft in good operating condition and a proficient pilot.
2. Distances shown are based on zero wind.
3. Allow one gallon fuel for engine start, taxi and takeoff.
4. Decrease distance for head wind or increase distance for tail wind with the following increment:
Time(min)/60 x wind component in the direction of flight (mph).