



General Limitations

This section provides operating limitations and instrument markings necessary for the operation of the airplane and its systems.

Airspeed Limitations

CAUTION

Maneuvering speed decreases at lighter weight as the effects of aerodynamic forces become more pronounced. Linear interpolation may be used for intermediate gross weights. Maneuvering speed should not be exceeded while operating in rough air.

Speed Condition	KIAS	KCAS
Never Exceed Speed (VNE) – Do not exceed this speed in any operation.	204	203
Maximum Structural Cruising Speed (VNO)- Do not exceed this speed except in smooth air and then only with caution.	164	165
Design Maneuvering Speed (VA) – Do not make full or abrupt control movements above this speed. 4750 lbs. 3205 lbs.	139 113	140 115
Maximum Gear Extended Speed (VLE) – Do not exceed this speed with landing gear extended.	128	130
Maximum Landing Gear Operating Speed (VLO) – Do not extend or retract landing gear above these speeds. Extension Retraction	128 107	130 109
Maximum Flaps Extended Speed (VFE)- Do not exceed this speed with the flaps extended.	113	113
One Engine Inoperative Best Rate of Climb Speed. (VYSE)	88	91
Air Minimum Control Speed (VMCA)- Lowest airspeed at which airplane is controllable with one engine operating at takeoff power and no flaps.	66	67

Airspeed Indicator Markings

Marking	KIAS
Red Radial Line (Never Exceed)	204
Caution Range - Smooth Air Only - Yellow Arc	164 to 204
Normal Operating Range – Green Arc	67 to 164
Flap Down - White Arc	61 to 113
One Engine Inoperative Best Rate of Climb - Blue Radial Line	88
One Engine Inoperative Air Minimum Control Speed- Red Radial Line	66



Power Plant Limitations

Number of Engines	2
Engine Manufacturer	Teledyne Continental
Engine Operating Limits	
Rated Horsepower (BHP)	220
Max. Rotational Speed	2600 RPM
Max. Manifold Pressure	38 In. Hg.
Max. Cylinder Head Temperature	460 °F
Max. Oil Temperature	240 °F
Oil Pressure	
Minimum (red line)	10 PSI
Maximum (red line)	100 PSI
Tachometer	
Green Arc (Normal Operating Range)	600-2600 RPM
Red Line (Maximum)	2600 RPM
Cylinder Head Temperature	
Green Arc (Normal Range)	240-460 °F
Red Line (Maximum)	460 °F
Oil Temperature	
Green Arc (Normal Operating Range)	100-240 °F
Red Line (Maximum)	240 °F
Oil Pressure	
Red Line (Minimum)	10 PSI
Yellow Arc (Caution - Ground Operation Only)	10-30 PSI
Green Arc (Normal Operating Range)	30-80 PSI
Red Line (Maximum)	100 PSI
Manifold Pressure	
Green Arc (Normal Operating Range)	10-38 In. Hg.
Red Line (Maximum)	38 In. Hg.
Turbine Inlet Temperature	
Green Arc (Normal Operating Range)	1200-1650 °F
Red Line (Maximum)	1650 °F