

The best rate of climb airspeed at gross weight is 84 MPH. At lighter weights the best climbing airspeed is reduced somewhat. A climbing speed of 100 MPH is recommended for climbs to cruising altitudes, in order that a good forward speed may be maintained while reaching the desired altitude efficiently.

The gross weight power-off stalling speed with full flaps is 49 MPH; with flaps up the stalling speed increases about 4 MPH.

Visibility and control in taxiing the Tri-Pacer is so improved that the usual tendency is to taxi at excessive speeds. The apparent speed of the plane on the ground is deceiving, so that on a hard surface a ground speed of 60 MPH can easily be reached at about 1500 RPM, with the pilot under the impression that he is traveling much more slowly. 1000 RPM will eventually give a ground speed of about 40 MPH, and even a high idling RPM may result in excessive taxi speeds.

Considerable care should therefore be taken during taxiing to hold down engine RPM and to maintain reasonably low taxi speeds. High speed taxiing causes undue wear and strain on tires, brakes, and landing gear, and may result in damage from collision, upsetting, or other accidents. **DO NOT TAXI FAST.**

A limited amount of directional control during taxiing can be effected with the control wheel. If gradual turns are to be made during taxiing, or during the landing roll or take-off run, steering with the wheel may frequently be desirable.

V. Cruising:

The cruising speed of the Tri-Pacer is determined by many factors including power setting, altitude, temperature, and equipment on the airplane such as antennas, venturi tubes and fenders.

The normal cruising power is 75% of the rated horsepower of the engine or 120 HP for the O-320-B and 112.5 HP for the O-320 engine. The specification cruising speed at 75% of power at sea level, under standard conditions, are 125 MPH and 123 MPH respectively. For altitude cruising speeds and power curves see pages 25 and 26.

Maintaining 75% of power at altitudes up to 7,000 feet, above which this power setting can no longer be obtained, results in an increase in true air speed of about 1.3 MPH per thousand feet of altitude over sea level. Indicated airspeed will normally decrease about 1 MPH per thousand feet if 75% power is maintained. If the True Air Speed at sea level at 75% of power is 123 MPH therefore, at