



Gear Ratio

One must ensure that they choose the correct gear ratio or they will be very fast down a long straight away or have more than sufficient power out of the corners at the bottom to mid range of the power band. In the latter case, one will almost certainly risk over revving their engine which can cause extensive damage. A lap timing system with a tachometer is extremely useful in helping determine ones RPMS as well as lap times.

A karter should first ask a dealer or engine tuner what the maximum RPMS should be for the engine that they are running. Once this is determined, you do not want your engine to rev over this. Most of the reed valve engines these days have a maximum rpm of 16,000 - 17,500 with the maximum power band @ 14,500 - 16,000.

Each track that you visit will almost certainly require different gearing than the one before. It is important to choose a compromise between power out of the corners and top end speed.