

# Gokart Engineering Projects

There have been 3 gokart engineering projects to date:

- The Mk. I (completed in 2000)
- The Mk. II (completed in 2005)
- The Mk. III (completed in 2010)

Each gokart has a unique chassis design, constructed from low-cost 50x50mm x 1.5mm box section steel. The wheels, hubs, and various other parts were salvaged from small scrapped cars. The engines were salvaged from scrapped scooters / mopeds and rebuilt. The Mk. I & Mk. III gokarts employ 50cc moped engines, which is enough for their light-weight design. The slightly heavier and more complex Mk. II uses a 3-speed HONDA 90cc, 4-stroke engine.

The oldest of the 3; the Mk. I, was a prototype that underlined some of the weaknesses and issues with the original design. The Mk. I was built with speed in-mind, and so there were a few mechanical issues with mounting brackets due to their light-weight design. These problems were eliminated in the Mk. II.

The Mk. II features a roll-cage, front & rear hydraulic brakes and suspension, an electronic starter, and low-power headlights. The Mk. III is the lightest of the 3 gokarts, and was built to contend with the quick acceleration of the Mk. II, and the high top-speed of the original Mk. I

Photos of the gokarts are shown below.

