



2010 Tamiya 540-J Motor RPM and Amp Draw Rules for Regional races

The Tamiya 540-J motor is the spec motor for the GT-3, Mini and F-1 classes. The idea behind this spec motor is simple. The TCS Series wants to offer the least expensive way to race in a fun, fair and competitive racing environment. Racing with the 540-J is supposed to be simple and free of VODOO magic to go faster. The magic should come in your car set up and driving skill. As with all racing series, everyone is looking for the edge. The new 2010 RPM rules for regional races are in place to remove the VODOO.

Using the Much More motor checker the RPM and Amp draw of the 540-J motor will be measured using two values, 5.0 volts and 7.2 volts.

5.0 Volts

The 540-J motor may not exceed 12,500 rpm and 1.2 amps

7.2 Volts

The 540-J motor may not exceed 18,000 rpm and 1.2 amps

Our tests have shown that motors exceeding these values in either test have been clearly tampered with beyond breaking in the bushings and brushes. **Your motor must pass both tests in order for it to pass and be legal.**

The above numbers are meant to encourage running the motor right out of the box. The above numbers also take into consideration the motor brushes will eventually seat in and its rpm and amp draw will increase. RPM and AMP draw numbers exceeding these ranges are clearly suspect, as they may only be obtained using rare earth magnets and fancy jigs to alter the motors magnetic field. In essence you're advancing the motors timing, which is not legal for TCS competition. This voodoo magic is what we want out of the TCS series in order to promote a fair environment for everyone.

Note: Lubing the bushings and even using Comm drops is legal. It is up to the racer to make sure their motor won't fail the RPM tests if their motor is inspected and tested after a race.

TCS host sites may use the TCS motor RPM and Amp draw rules at their respective regional event. It is up to the host site to supply the TECH officials a Much More motor checker to inspect faster drivers' right after a heat or main race. The host site may use different numbers if it deems it necessary for their respective event, but the above numbers must be used as the bare minimum.

Version: 2/17/10