

Titan 12T 550 Brushed Motor Warranty

This motor is used in several of the lower end RC Vehicles, such as the Bandit, Stampede, Rustler and Monster Jam series. Extensive testing has proven that you can have a long life with this motor if it is taken care of.

The XL-5 and the Titan 12 turn motor are designed to operate reliably with standard battery packs, stock gearing for "most running". But like any power system (brushed, brushless, or even nitro) it can be overloaded if over geared, or operated in high-load conditions—even with proper gearing, and especially if over-geared.

Most Running

Note that "most running" covers the driveway, R/C tracks, BMX tracks, hard-packed dirt, trails in the woods...basically conditions that allow the truck to roll easily. If you're climbing hills, running in mud or sand, or running on grass, you will be putting significantly more load on the power system. Briefly running in these conditions with the stock gearing is OK, but if you're running the entire pack in a high-load environment, the speed control could thermal or the motor could be damaged

Overloading

Even if you're running on smooth pavement, you can overload the power system (any system, not just Traxxas') if you perform repeated hard accelerations (again and again and again, without letting the truck build speed and "stretch its legs), or slam the truck from forward to reverse over and over again. Abusive driving like this will lead to thermal shut down or motor failure regardless of gearing or operating conditions.

Speed Gear

The XL-5 kit also includes a "speed gear," that is provided for high-speed running on smooth surfaces. This gear is not recommended for off-road use or repetitive starting and stopping. So, if you've installed this gear and are using it for general play driving, and you're having overheating issues with any type of battery, there's your problem. Use the standard pinion or a smaller pinion.

Further Guidelines for long motor life

- Reduce gearing see below.
- Run motor in; Drive smoothly on a flat, paved surface. Accelerate smoothly (avoiding full throttle starts), with most of the driving being done at higher speeds. Do not use the brake or put the model into reverse during this time.
- Ensure slipper clutch is as loose as possible.
- Do not let motor get too hot, if it's hot to touch it is too hot.
- The motor is cooled by running (motor spinning), if the motor is hot then run the car/truck gently around until motor cools down.

Motor Installation

When installing the motor you must check the drive line; this is done by removing the motor, holding the truck in the air and spinning the spur gear by hand. The rear wheels should turn with no resistance at all. Spin the front wheels to make sure they also spin with no resistance. If you find resistance you must locate the source and eliminate it.

If you are regularly burning out the motor, the best suggestion is to upgrade to a brushless motor, they are much stronger and can take a lot more abuse. If you wish to stick with the motor then we suggest de-gearing your model, please see gearing recommendations below

Reduced Load Gearing Recommendations

- Bandit: 19 Tooth Pinion, 90 Tooth Spur (Stock is 2012 - 21/87, 2009 - 21/83, 2007 - 26/76)
- Rustler: 19 Tooth Pinion, 90 Tooth Spur (Stock is 19/86)
- Stampede: 16 Tooth Pinion, 90 Tooth Spur (Stock is 19/90)
- Monster Jam: No change stock is 16/90

Part Numbers:

- 16 Tooth Pinion #2416
- 19 Tooth Pinion #2419
- 76 Tooth Spur #4676
- 83 Tooth Spur #4683
- 86 Tooth Spur #4686
- 90 Tooth Spur #4690