TRA3785

Generic Traxxas Titan 12 Turn Brushed 550 Motor with 16 Tooth Pinion Gear User Manual

Model: TRA3785

Introduction

This manual provides essential instructions for the proper setup, operation, and maintenance of your Generic Traxxas Titan 12 Turn Brushed 550 Motor with 16 Tooth Pinion Gear. Please read this manual thoroughly before installation and use to ensure optimal performance and longevity of your product.

Setup

Proper installation is crucial for the performance and durability of your motor and pinion gear. Follow these steps carefully.

1. Motor Installation

Ensure your vehicle is powered off and the battery is disconnected before beginning installation. The Titan 12 Turn 550 motor is compatible with various Traxxas models, including SLASH, RUSTLER, BANDIT, and STAMPEDE. Refer to your vehicle's specific manual for detailed motor removal and installation procedures.

- Carefully remove the old motor from the motor mount.
- Install the new Titan 12 Turn 550 motor into the motor mount, ensuring it is securely fastened.
- Connect the motor wires to your Electronic Speed Control (ESC) according to the ESC's instructions. Typically, the motor wires are color-coded or marked for positive and negative connections.

2. Pinion Gear Installation

The included 16 Tooth Pinion Gear must be installed correctly to ensure proper gear mesh and prevent damage to your vehicle's drivetrain.

- Slide the 16 Tooth Pinion Gear onto the motor shaft.
- Position the pinion gear so that it aligns with the spur gear.
- Tighten the grub screw on the pinion gear to secure it to the motor shaft. Ensure it is tight enough to prevent slipping but do not overtighten.
- Adjust the motor position to achieve the correct gear mesh between the pinion and spur gear. There should be a small amount of play (approximately the thickness of a piece of paper) between the teeth. Refer to your vehicle's manual for precise gear mesh adjustment.

Image: The Traxxas Titan 12 Turn Brushed 550 Motor shown with the 16 Tooth Pinion Gear attached to the motor shaft. This image illustrates the primary components of the bundle.

Operating

Before operating your vehicle with the new motor, it is recommended to perform a motor break-in procedure to optimize performance and extend motor life.

Motor Break-in Procedure

A water break-in procedure is often recommended for brushed motors to properly seat the brushes. This process helps to ensure maximum power and efficiency from the start.

- **Preparation:** Disconnect the motor from the ESC. Submerge only the motor's can (the main body, not the wires or connectors) in distilled water. Ensure the motor is fully submerged but avoid getting water into the electrical connections.
- **Power Application:** Connect the motor directly to a low-voltage power source (e.g., a 1.5V or 3V battery) for approximately 5-10 minutes. The motor should run slowly in the water. This process helps to wear the carbon brushes to the commutator's shape.
- **Drying:** After the break-in, remove the motor from the water and thoroughly dry it. Use compressed air to remove any remaining moisture from inside the motor. Allow it to air dry completely before

reconnecting to the ESC.

- **Lubrication:** Apply a small drop of motor bearing oil to the motor's bushings or bearings (if accessible) after drying.

For visual guidance, numerous videos demonstrating the water break-in procedure are available on online video platforms.

Maintenance

Regular maintenance will help preserve the performance and extend the lifespan of your motor.

- **Cleaning:** After each use, especially in dusty or dirty conditions, clean the exterior of the motor to remove debris. Use compressed air to clear any dust or dirt from the motor's vents.
- **Inspection:** Periodically inspect the motor wires for any signs of damage, fraying, or loose connections. Check the pinion gear for wear or damage.
- **Brush and Commutator Inspection:** For brushed motors, the carbon brushes and commutator will wear over time. If performance degrades significantly, the motor may require servicing or replacement of brushes (if serviceable).
- **Bearing/Bushing Lubrication:** Apply a small amount of RC motor bearing oil to the motor's bushings or bearings every few operating hours to reduce friction and wear.

Troubleshooting

If you encounter issues with your motor, consider the following common troubleshooting steps:

- **Motor Not Running:**
  - Check all electrical connections between the motor, ESC, and battery.
  - Ensure the battery is fully charged.
  - Verify the ESC is properly calibrated and functioning.
- **Motor Overheating:**
  - Check for proper gear mesh; too tight a mesh can cause excessive load.
  - Ensure the pinion and spur gear ratio is appropriate for your vehicle and driving conditions.
  - Verify there are no obstructions preventing the motor from spinning freely.
  - Consider using a motor heat sink if overheating persists.
- **Reduced Performance:**
  - Inspect the motor brushes and commutator for wear.
  - Ensure the motor bearings/bushings are clean and lubricated.
  - Check for any binding in the drivetrain.

If these steps do not resolve the issue, contact the manufacturer or seller for further assistance.

Specifications

Key specifications for the Generic Traxxas Titan 12 Turn Brushed 550 Motor with 16 Tooth Pinion Gear:

Feature	Specification

Feature	Specification
Brand	Generic
Model Name	TITAN
Model Number	TRA3785
Voltage	8.4 Volts
Horsepower	550 Watts
Material	Metal
Item Weight	0.6 Pounds
UPC	746591987091

Warranty Information

Warranty coverage for this product is provided by the manufacturer or seller. Please retain your proof of purchase. For specific details regarding warranty terms, duration, and claims procedures, refer to the documentation included with your purchase or contact the seller directly.

Support

For technical assistance, troubleshooting beyond the scope of this manual, or inquiries regarding parts and service, please contact the seller or the manufacturer, Generic. Contact information can typically be found on the product packaging or the retailer's website where the item was purchased.