

Velineon 3500 Brushless Motor Instructions

Covers Part #3351



Thank you for purchasing the Velineon™ 3500 sensorless brushless motor.

The Velineon 3500 brushless motor is precision-matched for use in 1/10th scale Traxxas models, delivering the perfect balance of brutal horsepower and long run times. Smooth-running performance

is built in with ultra high-temperature sintered Neodymium magnets, high-speed ball bearings, and a precision balanced rotor. The solder tabs for the motor wires are protected from damage by a unique composite end cap.

The Velineon 3500 can be used with many after-market brushless electronic speed controls, but is designed to work with the Traxxas VXL-3s Electronic Speed Control for optimal speed and efficiency. The key to the Velineon's extreme power output is total system optimization. Each component is carefully engineered to work with the other system components to eliminate restriction and allow maximum power flow.

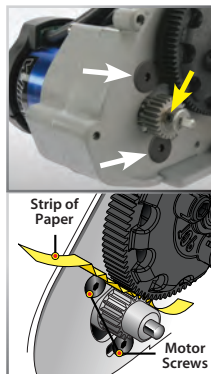
Velineon 3500 Specifications:

Type	Sensorless brushless
RPM/volt	3500 (10-turn)
Magnet type.....	Ultra High-Temperature Sintered Neodymium
Connection type	TRX 3.5mm bullet connectors
Wire size	12-gauge Maxx® Cable
Current Ratings.....	65A constant; 100A peak/burst
Max RPM	50,000
Diameter.....	36mm (1.42") (540 size)
Length.....	55mm (2.165")
Weight	262g (9.24oz)

Installation

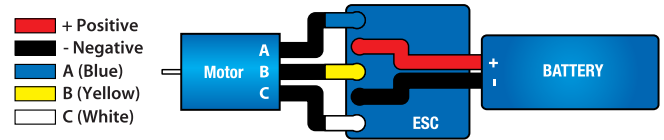
(Traxxas Rustler shown, Bandit and Stampede are similar.)

1. Mount the Velineon Motor to the gearbox using 3x8mm screws and tighten finger tight (*white arrows*).
2. Mount the motor pinion to the motor shaft, make sure to tighten set screw against the flat portion of the shaft.
3. Set the gear mesh by running a narrow strip of notebook paper between the pinion and spur gears. Loosen the motor screws and slide the motor and pinion gear into the spur gear. Retighten the motor screws and then remove the strip of paper.

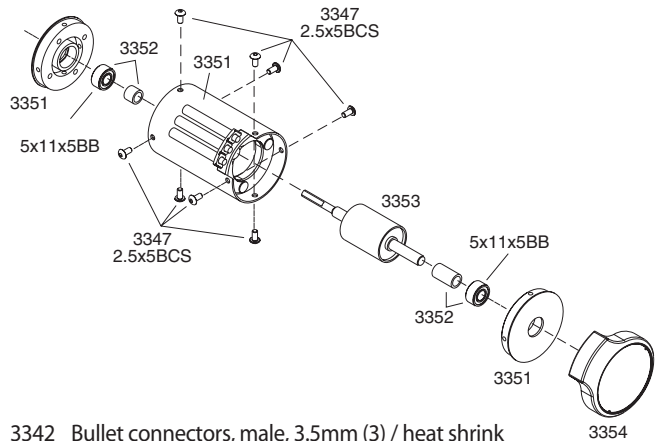


Wiring Diagram

Follow the wiring diagram below for installing the Velineon 3500 with a VXL-3s Electronic Speed Control. For other speed controls, consult the manufacturer's instructions.



Exploded View



- 3342 Bullet connectors, male, 3.5mm (3) / heat shrink
- 3354 Motor cover, endbell (Velineon 3500)
- 3352 Rebuild kit, Velineon 3500 (includes 5x11x5mm ball bearings (2), 2.5x5mm BCS (2), front and rear bushings)
- 3353 Rotor, Velineon 3500
- 3347 Screws, 2.5x5mm button-head machine (hex drive) (6)
- 3931 Screws, 3x8mm flat-head machine (hex drive) (6)
- 3355 VXL-3s Electronic Speed Control (brushless) (fwd/rev/brake)
- 3343 Wire, 12-gauge, silicone (Maxx Cable) (650mm or 26 inches)

If you are planning to operate the motor at the higher limits of its capabilities, cut ventilation holes into your model's Lexan® body. Monitoring temperatures will extend the lives of the batteries and motors. An on-board temperature gauge such as the Traxxas part #4091 can aid you in monitoring your motor temperature. Generally, try to keep your motor below 200° F.



If you have questions or need technical assistance, call Traxxas at

1-888-TRAXXAS

(1-888-872-9927) (U.S. residents only)