

USER MANUAL RCCRAWLER BRUSHED MOTOR 540 PLUS V2

PRECAUTIONS AND WARNINGS

- ◆ Avoid operating temperatures exceeding 65°C(150°F)
- ◆ Never touch the motor after use as it may be EXTREMELY hot.
- ◆ Allow the motor to cool completely between uses.
- ◆ Be sure to use the proper size motor mounting screws.
- ◆ Do not over-tighten the motor mounting screws.

CAUTION

When switching to a higher voltage battery from a lower one (to 11.1V from 7.4V, for example), a change in gear ratio or a lower KV rated motor might be necessary. Otherwise, the motor or ESC may overheat and sustain permanent damage.

INSTALLATION AND MAINTENANCE

- ◆ If replacing the motor mounting screws, use the same type and size that your vehicle was equipped with originally.
- ◆ Do not over-tighten the motor mounting screws. Doing so may strip the mounting hole threads.
- igspace Connect the + and-motor leads to the corresponding leads on your Electronic Speed Control (ESC).
- ◆ To adjust timing, loosen the main screws slightly and twist the endbell until the desired setting is reached, retighten the screws. The factory setting of 0° is suggested. NEVER exceed +/-20°.
- To clean your motor, lightly brush dirt away on a regular basis paying particularly close attention to the areas around the ball bearings. DO NOT spray cleaners or solvents into the motor.
- ◆ On a regular basis, inspect the brushes to be sure they move freely within their hoods.
- ◆ When the brushes become worn, or if they display signs of color change, replace them.



SAFETY PRECAUTIONS

This product is a sophisticated hobby product and not a toy. It must be operated with caution and common sense and requires some basic mechanical ability. Failure to operate this product in a safe and responsible manner could result in injury or damage to the product or property. This product is not inteded to be used by children without direct adult supervision. It is essential to read and follow all instructions and warning found in this manual prior to installation, set up, and use for the product to operate properly and to avoid damage or injury.

PROBLEM	CAUSE	SOLUTION				
Motor overheats	Incorrect gear ratio/final drive ratio (FDR)	Verify that the gear ratio is the same as supplied when new				
	Drivetrain binding	Check all potential binds including bad bearings, gear mesh, dirty components, etc.				
Poor speed/performance	Incorrect final drive ratio (FDR)	Change final drive ratio (FDR)				
	Transmitter settings changed	Verify correct transmitter ATV and D/R settings				
	Incorrect ESC settings	Consult ESC manual for correct settings				
	Motor damaged or defective	Inspect and repair necessary components				
	Damaged ESC	ReturnESCforrepair				
Vehicle runs backwards	Motor plugged in incorrectly Verify connections are correct					

WARRANTY

your motor is warranted to the original purchaser for 30 days from the date of purchase against defects in material and workmanship. Motors that have been mishandled, abused, used incorrectly, used for an application other than intended or damaged by the user are not covered under warranty. SURPASS-HOBBY is not liable for any loss or damage, whether direct or indirect, incidental or consequential, or from any special situation, arising from the use, misuse, or abuse of this product.



MOTOR SPECIFICATIONS

Product	Voltage(Lipo)	No-load current	No-load RPM	Plugging current	Torsion	Turn	Weight (g)	Shaft (mm)	Turns
540PLUS V2 11T	7.4V	<3.2A	17000±12%RPM	16-90A	≥3619 g.cm	CCW	187	Ø3.175	11
540PLUS V2 13T	7.4V	<2.9A	15000±12%RPM	13-78A	≥3566 g.cm	CCW	187	Ø3.175	13
540PLUS V2 16T	7.4V	<2.5A	12500±12%RPM	10.9-59A	≥3390 g.cm	CCW	187	Ø3.175	16
540PLUS V2 20T	7.4V	<1.9A	9500±12%RPM	8.5-48A	≥3365 g.cm	CCW	187	Ø3.175	20









