

GT-3 TURBO  
MOTOR-SERIESV10 SPEC.4  
MOTOR-SERIESSPECIAL  
MOTOR-SERIES

## USER GUIDE



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**WARNING NOTES**

• **IMPORTANT:** Never leave your RC model unsupervised when the battery is plugged in. If a defect occurs, it could set fire to the model or the surroundings.

**IMPORTANT: Pay close attention** to the following points, as they will destroy the motor and void your warranty:

- Avoid soldering longer than 5sec per soldering joint when replacing the power wires or the brushes to prevent possible damage to the motor due to overheating!
- Never connect the motor incorrectly or with reversed polarity.
- All wires and connections have to be well insulated. Short-circuits can destroy the motor.
- Avoid overtightening the motor screws. Damaged threads are not covered by warranty!
- Avoid overheating the motor due to wrong or too high gear ratios.
- Pay attention to the stated operating voltage range of the motors

**GEARING**

Always check, that your cars drivetrain runs free and doesn't stuck.  
Never overgear your motor, as a too high gear ratio causes excessive motor wear. Take your kits instruction manual to find the correct pinion. The following recommendations are a good starting point but may vary due to different tracks, models and batteries. These gear ratios are meant for 6-cell 7.2V battery use:

	V10 Spec.4 9x2	GT-3 Turbo / V10 Spec.4					GT-3 Turbo 21x2	GT-3 Turbo 23x2
		10x2	12x2	14x2	17x2	19x2		
Touring Car	9.5 : 1	9.0 : 1	8.0 : 1	7.4 : 1	7.0 : 1	6.6 : 1	6.3 : 1	6.0 : 1
Off Road	12.5 : 1	12.0 : 1	10.4 : 1	9.4 : 1	8.2 : 1	7.7 : 1	7.3 : 1	6.8 : 1

	Runner Special 2	Buggy Special 2	F1 Special Pro	Touring Car Special 2	Rally Special 2	Truck Puller	Big Block Special
	Touring Car	5.9 : 1	6.1 : 1	7.2 : 1	6.8 : 1	6.9 : 1	--
Off Road	6.7 : 1	6.9 : 1	8.9 : 1	7.9 : 1	8.1 : 1	--	8.9 : 1

Always let the motor cool down after usage. Never run several battery packs in a row!

**CAUTION:** If the brushes get unsoldered during your run or the endbell melts, the motor is overloaded.

**TUNING**

LRP offers many accessories to maintain your motor and to obtain maximum performance with your LRP motor. Of course you can also use these accessories for other electric motors. The following table will give you some information about the differences of the available accessories:

Racer	Order#	Type	Runs	Power
Street	65931	Motor-Brushes Super-Longlife	40-60	0
Street	65901	Motor-Brushes Sagami-2 „L“, Longlife	30-50	00
Hobby	65921	Motor-Brushes Allround, Hard	15-30	000
Sport	65941	Motor-Brushes Hyper-T7, Medium	5-10	0000
Professional	65911	Silver Motor-Brushes, P-Brush	40-60	0000
Professional	65961	Motor-Brushes Xmax-T7, Soft	3-5	00000
All	61301	Motor-Springs Medium (Rot)		000
All	61302	Motor-Springs Hard (Purple)		0000
All	61304	Motor-Springs Extra-Hard (Chrom)		00000

**CAUTION:** Harder motor-springs increase power but will create higher motor wear!

**REPAIR PROCEDURES/LIMITED WARRANTY**

All products from LRP electronic (hereinafter called "LRP") are manufactured according to the highest quality standards. LRP guarantees this product to be free from defects in materials or workmanship for 90 days from the original date of purchase verified by sales receipt. This limited warranty doesn't cover defects, which are a result of normal wear, misuse or improper maintenance. This applies among other things on:

- Overload (for example: melted endbell, unsoldered brushes)
- Excessive wear of brushes/commutator due to lack of maintenance
- Excessive amounts of dirt inside the motor
- Damaged winding due to dirt inside the motor
- Mechanical damage due to external causes
- Not rebuildable motors, which are disassembled by the customer
- Rust

To eliminate all other possibilities or improper handling, first check all other components before you send in this product for repair or warranty. Products sent in for repair, that operate perfect have to be charged with a service fee.

By sending in this product, you assign LRP to repair the product, if it is no warranty case. The original sales receipt including date of purchase needs to be included. Otherwise, no warranty can be granted. For quick repair- and return service, add your address and detailed description of the malfunction.

Dear Customer,  
thank you for your trust in this LRP product. By purchasing this LRP motor, you have chosen a high-performance motor. All motors have been specially designed and extensively tested for the different applications.

Please read the following instructions to ensure, that your LRP motor always works up to your full satisfaction.

Please read and understand these instructions completely before you use this product!  
With operating this product, you accept the LRP warranty terms.

**SPECIFICATIONS****LRP GT-3 Turbo:**

Type	Order#	RPM*	Power*	Operating voltage
10x2	58103	42.800	182W	4.8 - 8.4V
12x2	58123	38.000	170W	4.8 - 8.4V
14x2	58143	33.500	162W	4.8 - 8.4V
17x2	58173	28.100	152W	4.8 - 8.4V
19x2	58193	25.300	144W	4.8 - 9.6V
21x2	58213	23.200	137W	4.8 - 9.6V
23x2	58233	21.800	129W	4.8 - 9.6V

**LRP V10 Spec.4:**

Type	Order#	RPM*	Power*	Operating voltage
9x2	57093	46.900	201W	4.8 - 8.4V
10x2	57103	45.100	194W	4.8 - 8.4V
12x2	57123	41.100	179W	4.8 - 8.4V
14x2	57143	36.500	170W	4.8 - 8.4V
17x2	57173	29.200	161W	4.8 - 9.6V
19x2	57193	26.900	155W	4.8 - 9.6V

**LRP Special motors:**

Type	Order#	RPM*	Power*	Operating voltage
Runner Special 2	58261	21.800	128W	4.8 - 9.6V
Buggy Special 2	58271	21.500	126W	4.8 - 9.6V
F1 Special Pro - 16T	57161	31.500	162W	4.8 - 8.4V
Touring Car Special 2 - 18T	57181	27.300	154W	4.8 - 8.4V
Rally Special 2 - 17T	57671	28.500	158W	4.8 - 8.4V
Big Block Special	57800	32.000	172W	4.8 - 8.4V
Truck Puller 2 7.2V	57361	6.500	228Nmm	7.2V
Truck Puller 2 12V	57461	6.100**	361Nmm**	12V

\*Measured at 7.2V  
\*\*Measured at 12V  
Specifications subject to change without notice.

**TIMING**

You can adjust the timing on all LRP V10 Spec.4, F1 Special Pro 2, Touring Car Special 2, Rally Special 2, Big Block Special and Truck Puller 2 motors.

The GT-3 Turbo, Runner Special 2 and Buggy Special 2 motors has a fixed timing, which can not be adjusted.

To adjust the timing, you have to loosen the screws on the endbell. After that, you can adjust the timing by turning the endbell. The timing mark on the can helps you to find the exact timing settings. The recommended range for the timing is 3 to 6.

If you use a higher timing on the motor, be sure to run a shorter gearing (a pinion with 1 or 2 teeth less).

**CAUTION:** Higher timing will give higher RPM and power but the downside is shorter runtime and higher wear. We recommend to always start with the standard Timing setting 3.

**MAINTENANCE**

We recommend to check your motor every 10-15th run for excessive wear. Remove the motor from your car, pull out the springs and brushes and clean the commutator and brushes with a cotton stick and LRP Xtra Cleaner 2 (#65120). Replace brushes which are discolored or too short (min. 5mm) immediately! Also use some LRP Ball Bearing Oil 2 (#65430) on the ball bearings inside the can and the endbell respectively some LRP Bushing Oil (#6544) on the bushings inside the can and the endbell.

We recommend to cut the commutator when replacing the brushes in order to obtain best performance. Be sure to cut the commutator at least after 30 runs. Ask your local hobby shop if you don't have a commutator-lathe or send your motor to your countries LRP-distributor for maintenance.

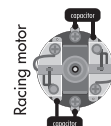
All LRP V10 Spec.4, F1 Special Pro, Touring Car Special 2 and Rally Special 2 motors come with the LRP Allround brush (#65921) and extra-hard springs (#61304). This combination offers maximum performance and very good lifetime!

All LRP GT-3 Turbo, Runner Special 2, Buggy Special 2 and Truck Puller 2 motors come with the LRP Super-Longlife brush (#65931) and extra-hard springs (#61304). This combination offers optimum performance with high lifetime and low current consumption.

**MOTOR SUPPRESSION**

All electric motors need to have a suppression in order for the motor and the speed-control to work properly. Motors with no capacitors or not enough capacitors may interfere with the speed-control. To avoid this, solder the supplied capacitors to your motor (see picture).

**NOTE:** All LRP motors are already factory equipped with high-performance capacitors.



Our limited warranty liability shall be limited to repairing the unit to our original specifications. In no case shall our liability exceed the original cost of this unit. Because we don't have control over the installation or use of this product, we can't accept any liability for any damages resulting from using this product. By installing or operating this product, the user accepts all resulting liability.

The specifications like weight, size and others should be seen as guide values. Due to ongoing technical improvements, which are done in the interest of the product, LRP does not take any responsibility for the accuracy of these specs.

**LRP-Distributor-Service:**

- Package your product carefully and include sales receipt and detailed description of malfunction.
- Send parcel to your national LRP distributor.
- Distributor repairs or exchanges the product.
- Shipment back to you usually by COD (cash on delivery), but this is subject to your national LRP distributor's general policy.