

MA00134

FUSION MICRO  
MODIFIED - HS

FUSION MICRO  
MODIFIED - HT

## 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 speed-control 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!
- 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 long gear ratios.

### GEARING

Always check, that your cars drivetrain runs free and doesn't stuck. Never overgear your motor, as a too long 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 models, tracks and batteries.

We recommend the following gear ratios:

**LRP Fusion Micro Modified - HS (High Speed):** Original pinion minus 3 teeth  
**LRP Fusion Micro Modified - HT (High Torque):** Original pinion minus 2 teeth

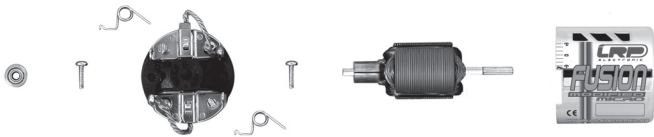
Always let the motor cool down after usage. Never run several battery packs in a row!

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

### MAINTENANCE

All LRP Fusion Micro Modified motors come with the new LRP Micro Modified brushes (#65801) and hard LRP Micro Modified springs (#61801). This combination offers maximum performance and very good lifetime!

We recommend to check your motor every 15 - 20 runs 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. 2,5mm) immediately! Also use some LRP Ball Bearing Oil 2 (#65430) on the ball bearings inside the can and the endbell.



### 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 Micro Modified motor. This motor is full of new design features, such as:

- Fusion Modified technology
- Adjustable timing
- Rebuildable
- VTEC R3-370 teardown
- Laydown brushes
- Additional cooling slots

Please read the following instructions to ensure, that your LRP Fusion Micro Modified 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 Fusion Micro Modified - HS	LRP Fusion Micro Modified - HT
<b>Order#</b>	52019	52025
<b>Weight</b>	43g	43g
<b>Input voltage</b>	4 - 7 cells (4.8 - 8.4V)	4 - 7 cells (4.8 - 8.4V)
<b>Ball Bearings</b>	2 pcs.	2 pcs.
<b>Size (Length without flange x diameter)</b>	34.3 x 24.4mm	34.3 x 24.4mm
<b>Characteristic</b>	HS = High Speed maximum speed	HT = High Torque maximum torque

Specifications subject to change without notice.

### TIMING

You can change the timing on all LRP Fusion Micro Modified motors.

To change the timing, you have to loosen the two screws on the endbell. After that, you can adjust the timing by turning the endbell. Directly on top of the timing scale, there is a small notch in the endbell, which helps to adjust the correct timing.

- Timing 0 is the standard setting, which is perfect for most of the applications.

- Timing range 0 to +3 (turn the endbell to the +3 mark) is meant for applications, which require more rpm and power.

- Timing range 0 to -3 (turn the endbell to the -3 mark) is meant for applications, which require the motor to run in left-hand motion.

**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 0.

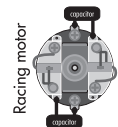


### RACING TIPS

- Be sure to run-in your LRP Fusion Micro Modified motor before you use it the first time. The motor run-in function of our LRP Pulsar Competition 2 (#41551) does this job perfectly. We recommend to run-in the motor for about 5 minutes at 4 volts with no load.
- All LRP Fusion Micro Modified motors can be adjusted to either right-hand or left-hand motion (right-hand motion is standard). A normal Micro car like the HPI Micro RS4 or the Associated RC18T require a right-hand motion motor. For left-hand motion, you need to change the polarity of the motor wires.
- Always use a smaller pinion, when using more timing on the motor. If you hit full throttle, the motor should reach it's maximum rpm after about 10m.

### MOTOR SUPPRESSION

The LRP Fusion Micro Modified motor does not need to have a suppression in order for the motor and the speed-control to work properly. However, if you experience any problems, we recommend our #6141 LRP suppression kit. Solder the capacitors to your motor, as shown in the picture.



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.