ITEM 53154

ACTO-POWER FORMULA MOTOR

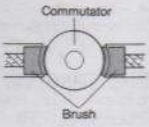
TAMIYA
Hop-up options

ACTO-POWER FORMULA MOTOR INSTRUCTION MANUAL

The Acto-Power Formula Motor is a race oriented electric motor designed for use with a Tamiya Ni-Cd Racing Pack battery and R/C Formula-One racing car. Its high torque and RPM will please the most discriminating electric radio control car enthusiast. To insure that the motor performs to its fullest potential, here are some guidelines you should follow.

REPLACING BRUSHES

If the brushes are worn, as shown, replace them.
★Check brushes after use of 10 - 15 full battery packs.



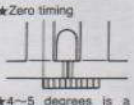
ROTATION DIRECTION

Make sure the rotation direction of the motor is correct. The rotation direction of the motor is counter-clockwise when viewed from the pinion gear end. Running the motor in the opposite direction will result in reduced performance.

TIMING ADJUSTMENTS

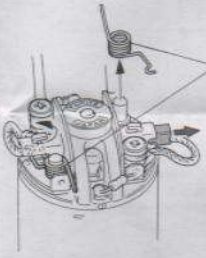
In timing the motor, you will alter the angular relationship of the brushes to the stationary magnets. This is done by moving the end bell in the opposite direction of rotation. Use the graduations on the motor case for settings. Increasing the number of graduation will provide more power but greater battery consumption. A lesser number of degrees will provide longer running time, but also less power. Time the motor according to the track, gear ratio, tire size, etc.

★Loosen end bell screws and adjust timing by moving end bell in the direction of the arrow.
★Zero timing



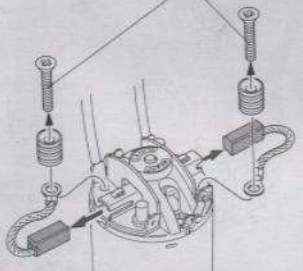
★4~5 degrees is a good starting position for racing.
(Battery consumption: approx. 2.5A)

GEAR RATIO
3.7~4.3:1



① Remove brush springs. Then remove brushes from the end bell.

② Loosen screws and remove brushes as shown.

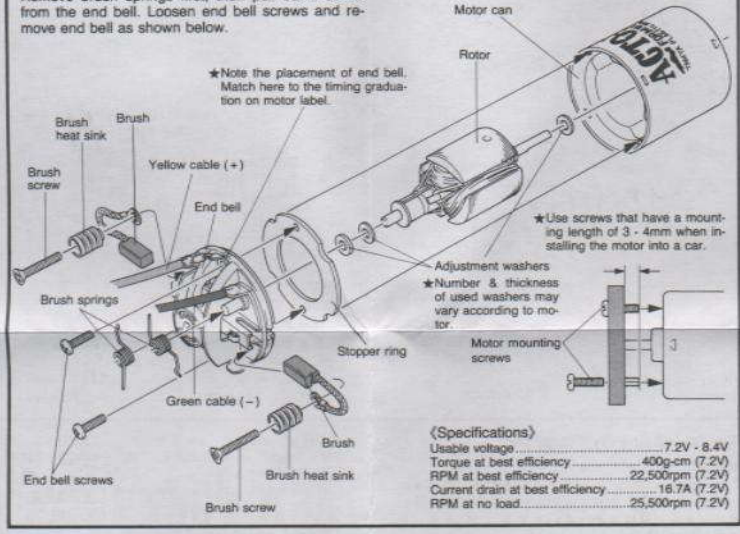


★Reverse the procedure for installation.

●When replacing brushes, make sure to inspect the commutator as well. Change the rotor to a new one if the commutator is badly burnt, scoured, or grooved.
●The motor should be run in after installing new brushes.

DISASSEMBLY OF MOTOR AND CHANGING ROTOR

Remove brush springs first, then pull out brushes from the end bell. Loosen end bell screws and remove end bell as shown below.



〈Specifications〉

Usable voltage	7.2V - 8.4V
Torque at best efficiency	400g-cm (7.2V)
RPM at best efficiency	22,500rpm (7.2V)
Current drain at best efficiency	16.7A (7.2V)
RPM at no load	25,500rpm (7.2V)

CAUTIONS WHEN RUNNING THE MOTOR

●Continuous running will damage the motor. Let the motor cool after each full battery run.
●Never overload the motor. Make sure that all the gears and rotating parts move smoothly to prevent motor burn out.
●Never cover the motor. Covering will hinder heat dissipation resulting in damage.
●A short running time indicates a worn commutator or brushes.
●Periodically disassemble, clean and maintain motor after running it.
●Use only genuine Tamiya spare parts.

58129 LOTUS 107B FORD (1/10 R/C)

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