

# RX-540VZ

## TECHNIGOLD MOTOR



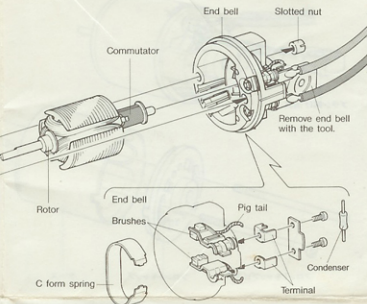
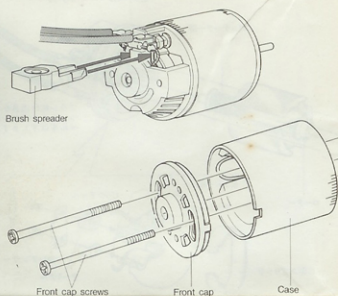
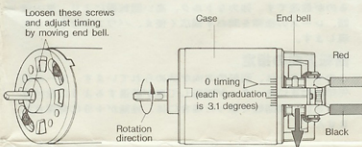
The RX-540VZ Technigold motor is a race oriented electric motor designed for 7.2V-8.4V and heavy current flow. Its high torque, and high rpm will please the most discriminating electric radio control car enthusiast. To insure that the motor will perform to its fullest potential, there are several guidelines that you should follow.

### ROTATION DIRECTION

Make sure the rotation direction of the motor is correct, according to the arrow indicated on the motor case sticker. Running the motor in the opposite direction will result in lower 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. 15 degrees (about 4-5 graduation on the scale) is the best all around balance point between power and battery consumption. An increase beyond 15 degrees will provide more power but greater battery consumption. A lesser number of degrees will provide longer running time, but also lesser power. Time the motor according to the track, gear ratio, tire size, etc.



### DISASSEMBLY OF MOTOR AND CHANGING ROTOR

Insert the brush spreading tool into the end bell, loosen and remove the two front cap screws and remove as shown.

### CAUTION

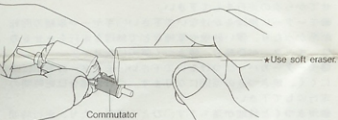
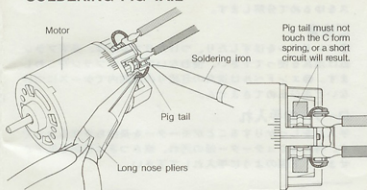
● Never attempt to remove or replace the end bell without using the brush spreader, or you will badly damage the brushes.

★ Reattach end bell within the range of degree graduations or the two screws will not line up for proper assembly.

### MAINTENANCE OF ROTOR

Disassemble, clean and maintain your motor periodically. A burnt and dirty commutator will lower your motors performance. It is therefore essential for the commutator to be kept clean.

### SOLDERING PIG TAIL



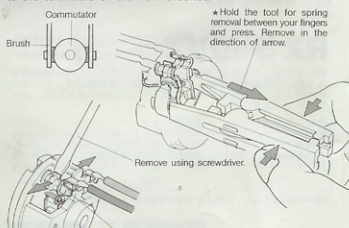
### CAUTION

● Do not use a file to attempt cleaning of the commutator.

● Change entire rotor to a new one if the commutator is badly burned or grooved.

### CHANGING BRUSHES

If the brushes are worn, as shown below, exchange them for new ones referring below. Make sure to solder pig tails to the terminals of the new brushes.



### CAUTIONS WHEN RUNNING THE MOTOR

- Continuous running will damage the motor. Let the motor cool off after each full battery run.
- Never overload the motor.
- Make sure that all the gears and rotating parts move smoothly to prevent motor to burn out.
- Never apply covers to motor. Covering the motor will hinder heat dissipation resulting in a burnt motor.
- A short running time indicates worn out commutator or brushes.
- Periodically disassemble, clean and maintain motor after running it.
- Use only genuine Tamiya spare parts. Using RX-540SD Technipower/Technituned rotors and brushes will lower the performance of the RX-540VZ Technigold motor.

### USING THE RX-540VZ MOTOR

There can be times when the full potential of this motor is not used. The state of the charge and discharge of the battery, size of the tires, gear ratios and road surfaces. Be sure to test the vehicle after each timing adjustment, and re-adjust for your driving and surface requirements.

#### <Specifications>

Usable voltage .....	7.2V~8.4V
Torque at best efficiency .....	430 g·cm (7.2V)
R.P.M. at best efficiency .....	19,000 rpm (7.2V)
Current drain at best efficiency .....	14 A (7.2V)

◆ Specifications subject to change without notice.

★ Major motor parts such as brushes, rotor, end bell, spring and brush removing tools, cap screws and front cap can be obtained from the Tamiya agent in your country.

### R/C GUIDE BOOK

Tamiya's newest R/C Guide Book has all of the latest information concerning the installation and operation of R/C equipment and helpful hints on the care of your R/C cars, buggies and tanks. English, German and Japanese versions available.

