# 191114 The motor



HOP-UP OPTIONS NO.983

The Lightly-Tuned Motor (28T) is a high performance electric motor featuring replaceable brushes (standard type) to ensure a long running life. The end bell features special vents for maximum motor cooling and incorporates a detachable inboard capacitor.

Break-in new brushes by running motor without loads on a 3V power source for 5-10 minutes. After installing into chassis, warming-up motor by running on a 3V power source for about 5 minutes is recommended to extend motor life.

#### 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.



#### RFPI ACING BRUSHES

If the brushes are worn as shown, replace them.

★Check brushes after use of 5 - 10 full battery packs.

Commutator

Brush

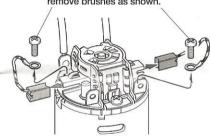
GEAR RATIO M-chassis 5.52~6.44

Touring car 6.5~7.5

(1) Remove brush springs. Then remove brushes from the end hell.

★For replacement brushes, use 53581 Racing Motor Brush Set (Standard Type).

### 2 Loosen screws remove brushes as shown.



★Reverse the procedure for installation.

When replacing brushes, make sure to inspect the commutators as well. For cleaning commutators, 53486 Commutator Cleaning Brush Set is recommended for convenient and thorough cleaning.

## CAUTIONS WITH RUNNING THE MOTOR

Make sure to replace plastic bearings with ball bearings. Plastic bearings cannot endure motor rotation.

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.

To fully realize motor performance, grease motor pivots with metal oil.

Never cover the motor. Covering will hinder

heat dissipation resulting in damage.

Olf motor gets damaged or over-heats, performance will deteriorate.

Periodically clean and maintain motor after runnina it.

Use only genuine Tamiya spare parts.

Brush Spring (2 pcs.): 7405079

Racing Motor Brush Set (Standard Type): 53581

