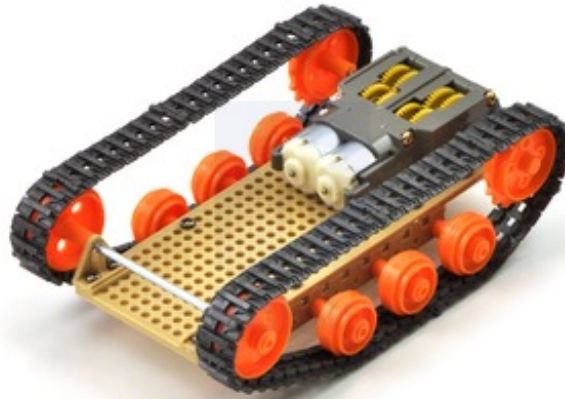


## Tamiya 70097 Twin-Motor Gearbox Kit



[www.pololu.com](http://www.pololu.com)

Tank-style chassis built using the Tamiya 70100 track and wheel set, Tamiya 70098 universal plate set, and Tamiya 70097 twin-motor gearbox kit.

### Overview

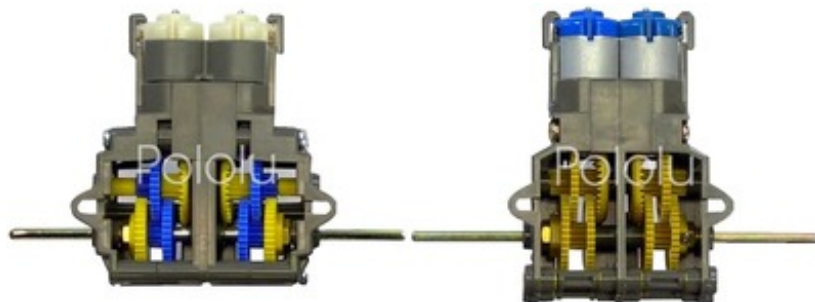
The Tamiya twin-motor gearbox is a small (3-inch long) plastic gearbox. It contains two small brushed DC motors that drive separate 3mm hexagonal output shafts. There are two ways to put the kit together: with a high-speed 58:1 gear ratio or with a slower 203:1 gear ratio. Either way, the motors provide plenty of power to drive any small robot. For a gearbox with a similar form factor and more gear ratio options, see the Tamiya double gearbox.

### Complementary products

The output shafts included in this kit are 3 mm hexagonal axles that are 10 cm (about four inches) from tip to tip. The axles work with any of the Tamiya wheels we carry, giving you many options for your robot speed. The two low-voltage motors run on 3-6 volts and draw up to a few amps, making them perfect candidates for the Pololu low-voltage dual serial motor controller and the DRV8833 motor driver carrier. Motor overheating can be caused by excessive stalling, even at very low voltages. We recommend that you use stall-detection sensors, or just watch your robot, to make sure that it doesn't stall for more than a few seconds at a time. For motor specs, see the Mabuchi motor FA-130 (#18100) data sheet (58k pdf).

Note that you can replace the motor in this kit with a lower-current, higher-voltage motor if you want to use this gearbox with controllers such as the qik 2s9v1 dual serial motor controller, TB6612FNG dual motor driver carrier, or Baby Orangutan B-328 robot controller.

### Comparison to the Tamiya double gearbox



The twin-motor gearbox is very similar to the Tamiya 70168 double gearbox, as shown in the picture to the right. The gear ratio options of the two products complement each other well, but the mounting holes and overall dimensions vary slightly. The double gearbox is shorter and wider than

the twin-motor gearbox, and the gears are a bit smaller and wider. This should make the double gearbox a bit more robust, though we have not heard any reports of the twin-motor gearbox gears breaking.

To compare all Tamiya gear box kits, see the [Tamiya Gearbox Gear Ratio Comparison](#).



Note: The twin-motor gearbox is a kit; assembly is required. To use the kit in robotics projects, you need to connect the motors to your own robot controller.

**[Documentation on producer website.](#)**