

RECOIL UPGRADE SET FOR TIGER I

Read instructions carefully before assembly

Tools Required

1. Small Phillips tip screw driver
2. Small hand file
3. Liquid thread lock

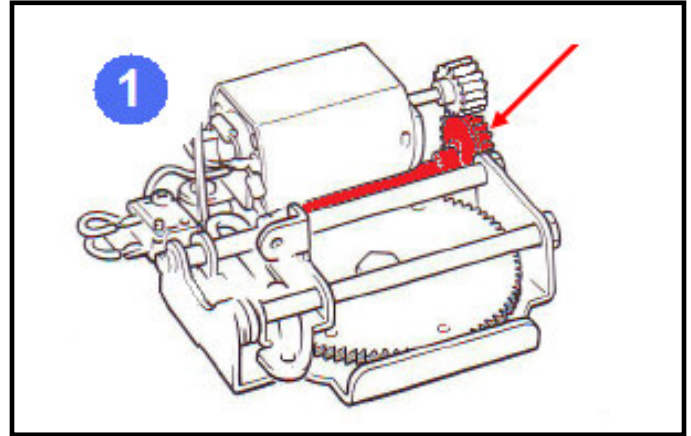
- ★ This kit is not for beginners.
- ★ This kit works only for Tamiya Tiger I recoil unit.

Unit Set Part Number

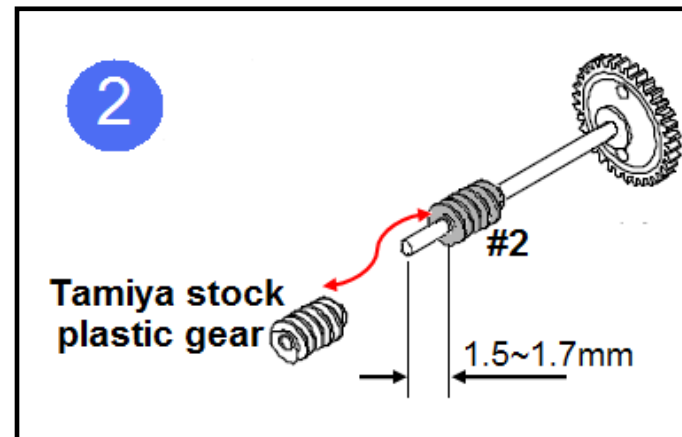


- #1 – cam gear for barrel recoil x 1
- #2 – connecting spiral gear to #1 x 1
- #3 – spring x 1
- #4 – spring hold plate x 1
- #5 - screw x 1, O-ring x 2, washer x 2, nut x 2
- #6 - Adjustable voltage regulator

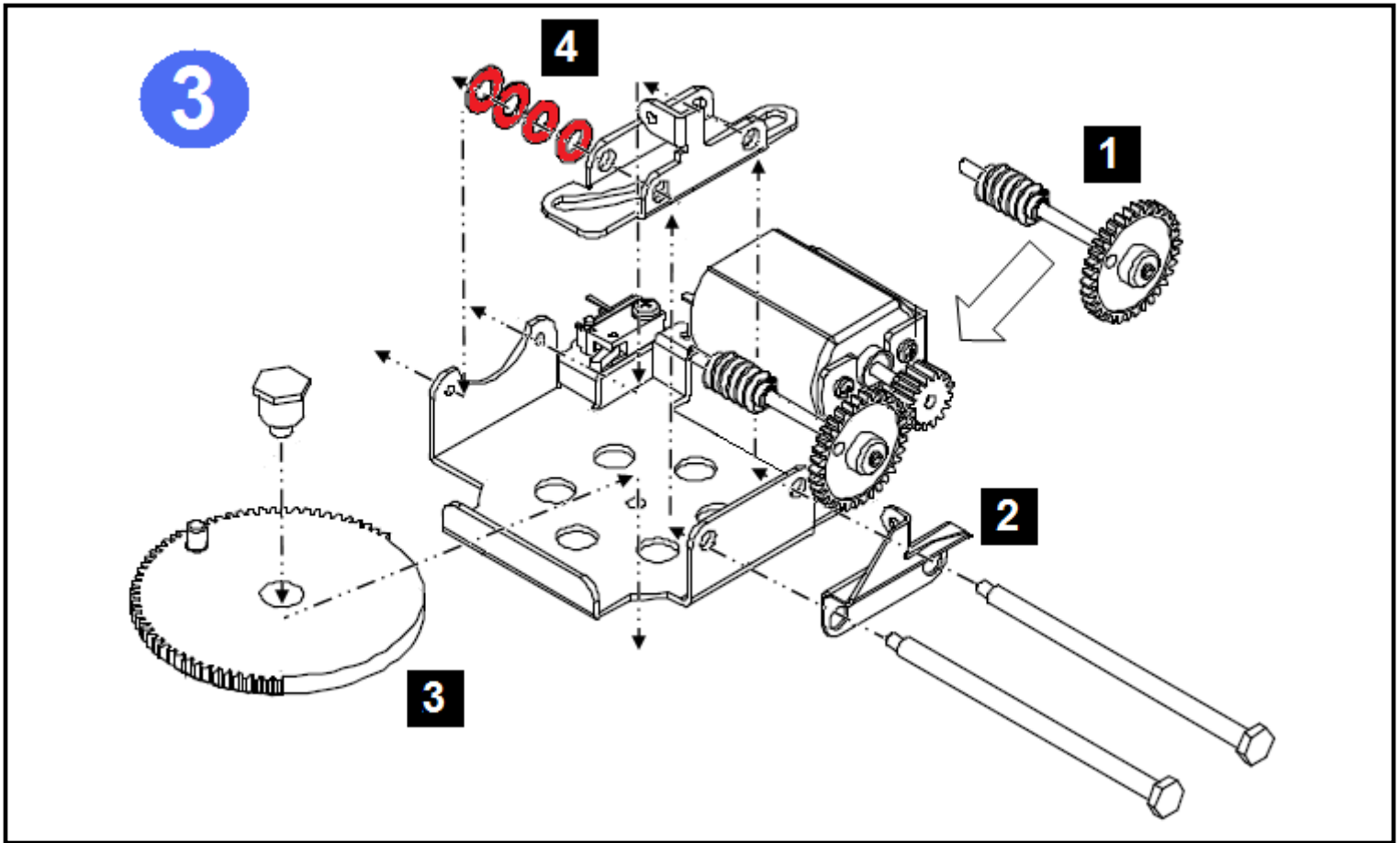
- 1** Carefully unassembled Tamiya Tiger I Recoil Unit.
Work on the gear assembly, marked **red**.



- 2** Remove the stock plastic gear and replace with metal gear IMPACT part #2.
Ensure that the position of #2 as 1.5~1.7mm, for best meshing with motor's pinion gear.
IMPACT #2 is designed to have a very tight fit into the shaft. If needed, file/sand the shaft for #2 to fit in. But maintain a good tight fitting.
The reason to have this gear in metal is because when the spring is pulling #1, the force is very great.
Metal #2 will not wear out during this movement.



Use thread lock if necessary.



3

1 Install back the modified gear assembly from step 2.

2 Fit in IMPACT part #4.

3 Replace stock plastic gear with IMPACT part #1.

4 Use your fingers to move the gears and check if that moving part is able to activate the microswitch.

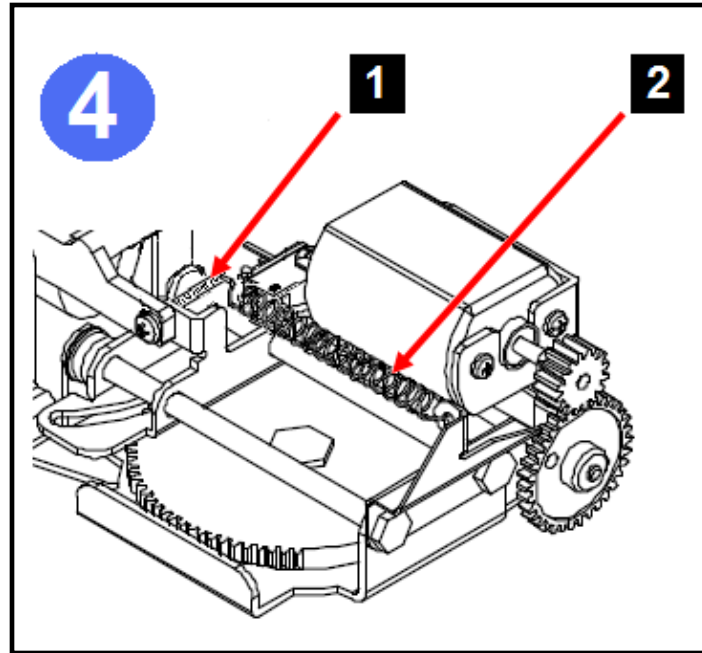
If additional spacing is needed, use O-rings from IMPACT part #5.

4 Assemble the Upgraded Recoil Unit back to Tiger I barrel.

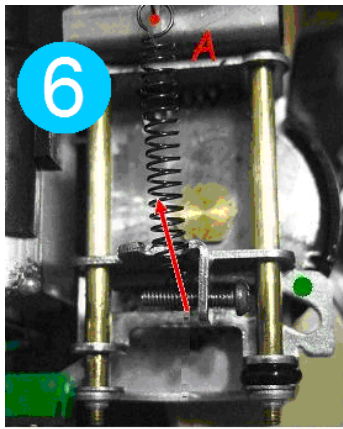
1 Replace screw MC2 (Tamiya Manual pg 24) with IMPACT part #5 screw.
Use one nut to lock #5 screw in place first.

2 Hook IMPACT part #3 (one end of the spring) to part #4.
Hook the other end of spring (part #3) to screw (part #5).

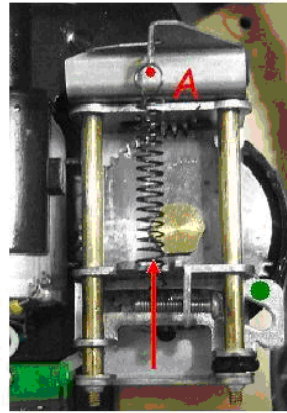
Use another nut (part #5) to lock the spring (part #3).
Apply thread lock to the nut.



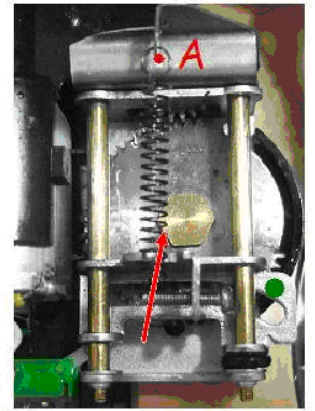
5 Apply a good amount of grease onto all gears and moving parts.



spring hooked too left reference from A



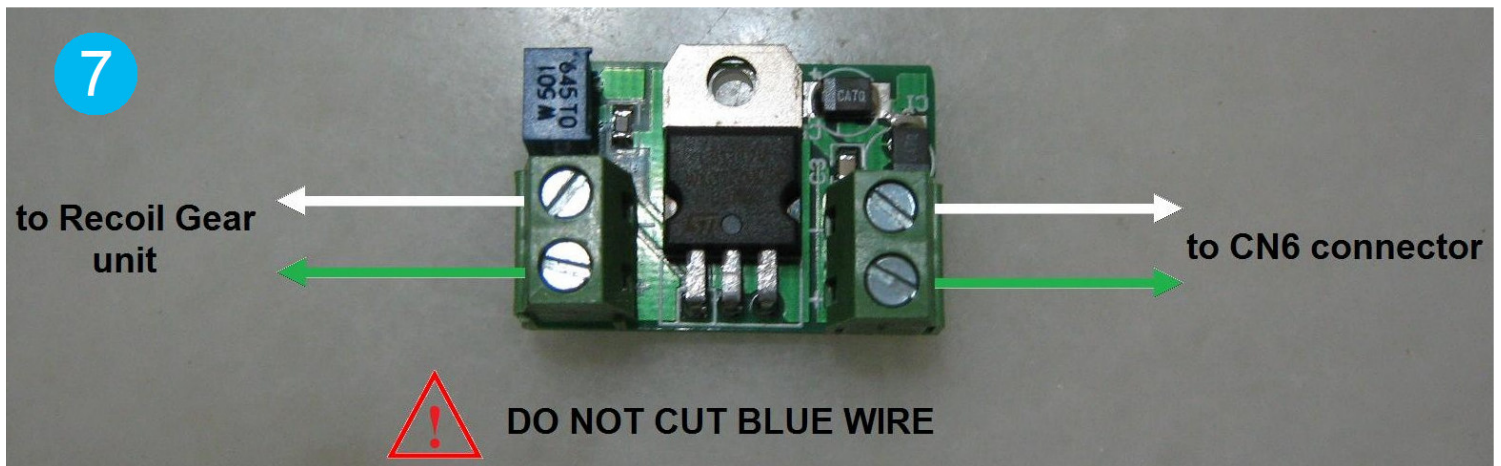
spring hooked in line reference to A

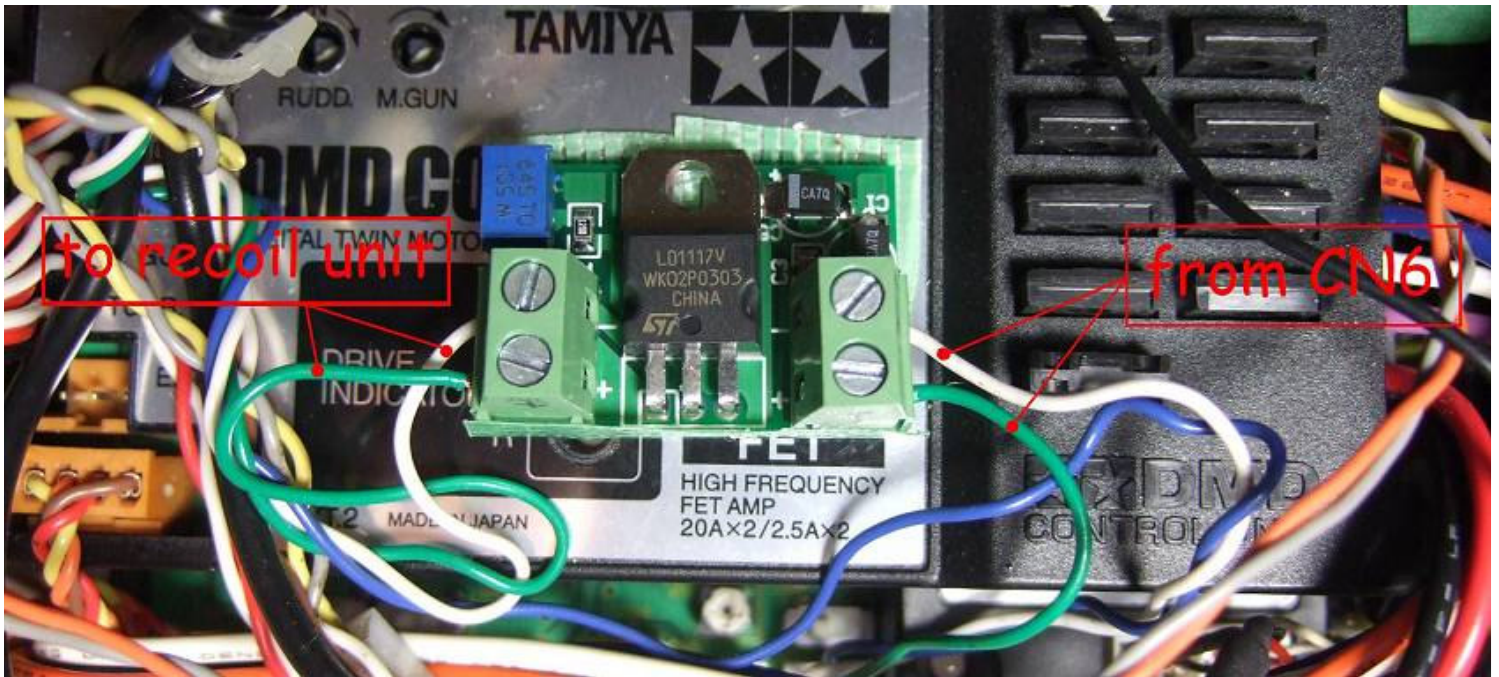


spring hooked too right reference from A

If spring is not hooked in line with A, the carriage ● will experience binding in the up/down motion

6 ★ ALIGNMENT OF THE SPRING (#3) IS VERY IMPORTANT
The spring must be aligned as in-line as possible for a smooth operation.
(pictures shown are from Panther's Upgraded Recoil Unit)





7 Reference to the colors, cut **ONLY** the GREEN and WHITE wires.

DO NOT CUT THE BLUE WIRE

The bottom of this circuitry must be insulated. Else, touching any metal material will short circuit the components. Use the insulation tape provided.

8 Before the recoil unit can be fully installed back into the tank. It must be tested to ensure the action is smooth.

- a. Tidied up your work area first.
- b. Connect the tank's battery and power it up with its radio controller.
- c. Fire the tank to see if the recoil unit is working smoothly.
- d. If there is any jam, check and align any parts and redo the installation again.
- e. Fire and cycle the recoil unit at least 50times for a zero jam operation.
- f. The speed of barrel's movement back to original its original position can be adjusted at the Voltage Regulator.
- g. After testing and satisfied that there is no jam, apply sufficient lubricant to all moving parts.
- h. The unit can now be fully installed into the tank.

SPECIFICATIONS OF VOLTAGE REGULATOR



IMPACT

p/n 70004

INPUT (V)	OUTPUT(V) @ max	OUTPUT(V) @ min
0.60V	0V	0V
2.00V	1.20V	1.14V
3.00V	2.19V	1.25V
5.00V	4.16V	1.25V
7.35V	6.45V	1.25V
15.00V	6.45V	1.25V

