# How to adjust the meshing degree of gears and racks -Scout 2

➔ Problem : When cutting, the machine trembles or the cutting workpiece appears ripples, Or Large gap between gear and rack Check the meshing degree of gear and rack;

✵ Solution overview: 1. Check the meshing degree of gear and rack;

2. The gear is seriously damaged and needs to be replaced;

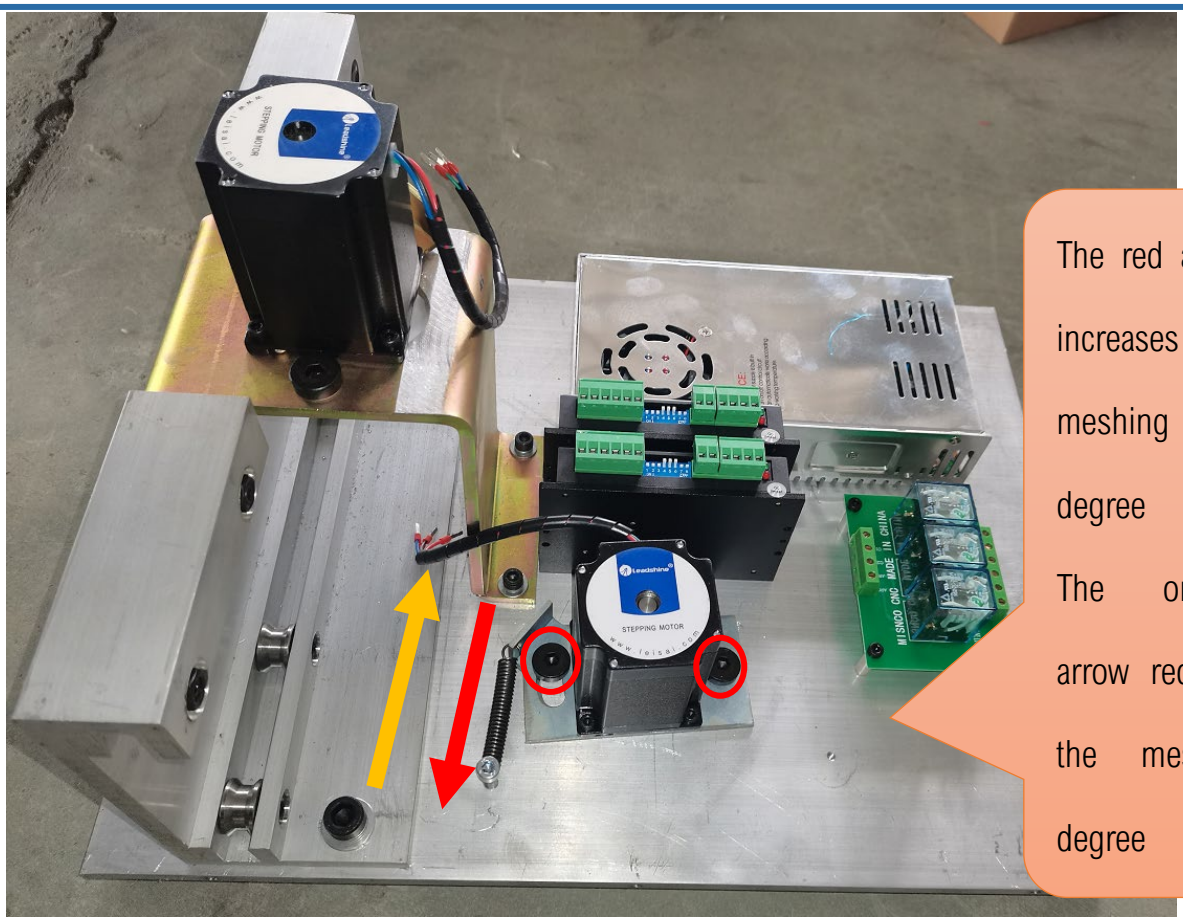
Problem analysis: As the machine is used for some time, the gears will abrasion or the bolts for installing the motor are loose; Need to check the motor installation position and the degree of meshing between gears and racks.

✵ Check the meshing degree of gear and rack

Solution：

Step1: Open the control system, the internal structure as shown in figure 2.


Pic1




1. When cutting, the machine trembles or the cutting workpiece appears ripples, Prove that the meshing degree of the gear and rack is too tight. Large gap between gear and rack Prove that the meshing degree of the gear and rack is too loose;

Loosen the two bolts on motor, But Dont be removing the bolts , Need to remove the spring and the bolt that installs the spring; Move the motor following the direction of orange arrow, The motor gear and rack detachment.

Reinstall and adjust the meshing degree of gear and rack, Then push the motor in the direction of the red arrow and make sure the rack and pinion mesh. The thrust to push the motor is not about 3-5kgf. Fix two bolts;

Test: Push the machine by hand. If the machine is intermittently stuck, it proves that the meshing degree is too tight and needs to be adjusted again;

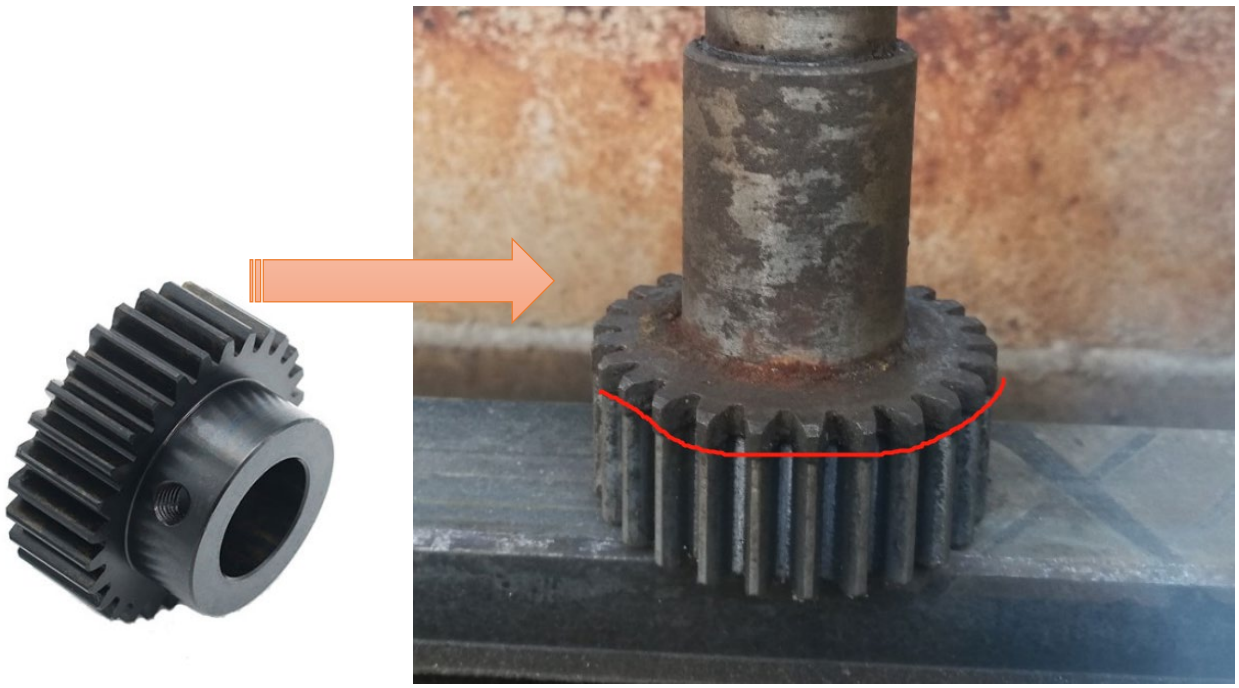
Finally install the spring, Restore the machine to use

- The gear is seriously damaged and needs to be replaced;

Solution：

Step1: There is serious abrasion on the gear surface as shown in figure 3. There is a circle of abrasion on the surface of the gear; such as the red line mark;

The service life of the gear is about 2-3 years;



Pic3