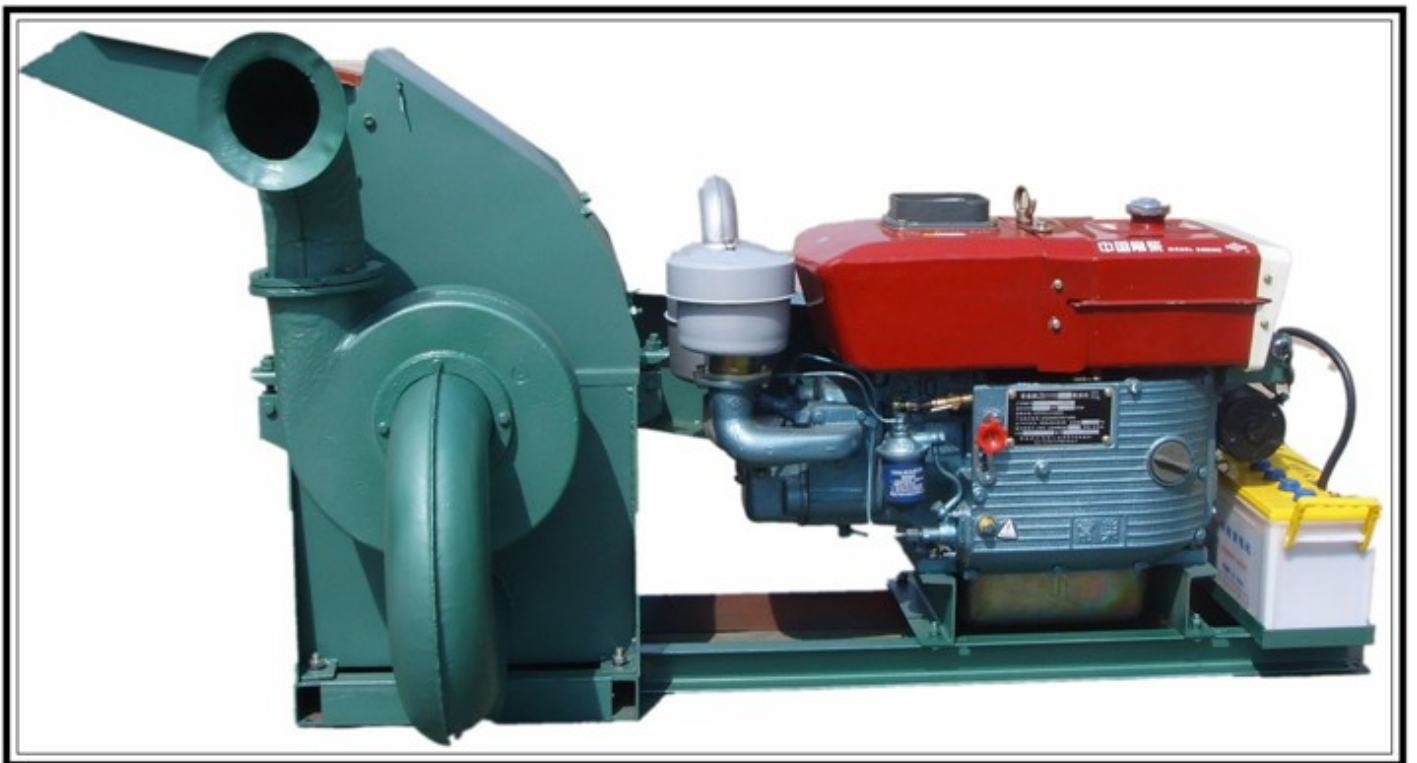
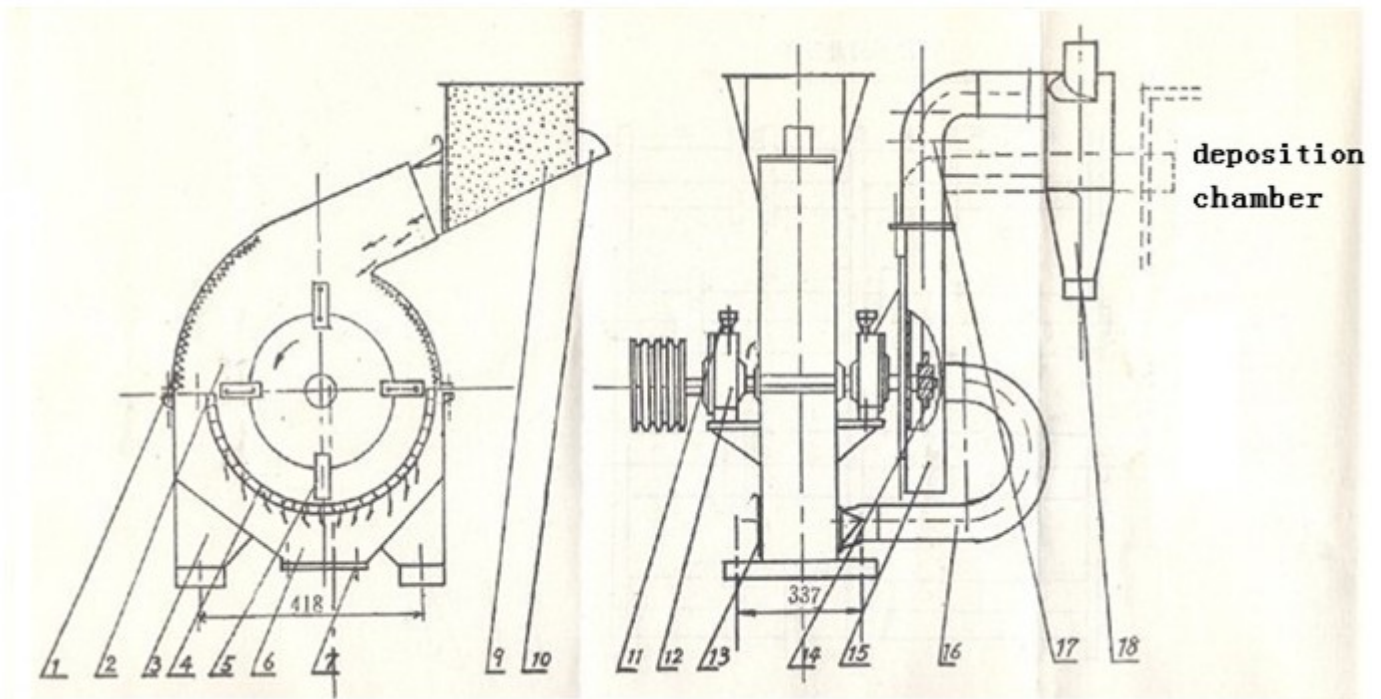


CF 420A HAMMER MILL INSTRUCTION MANUAL



1. Knowing your machine



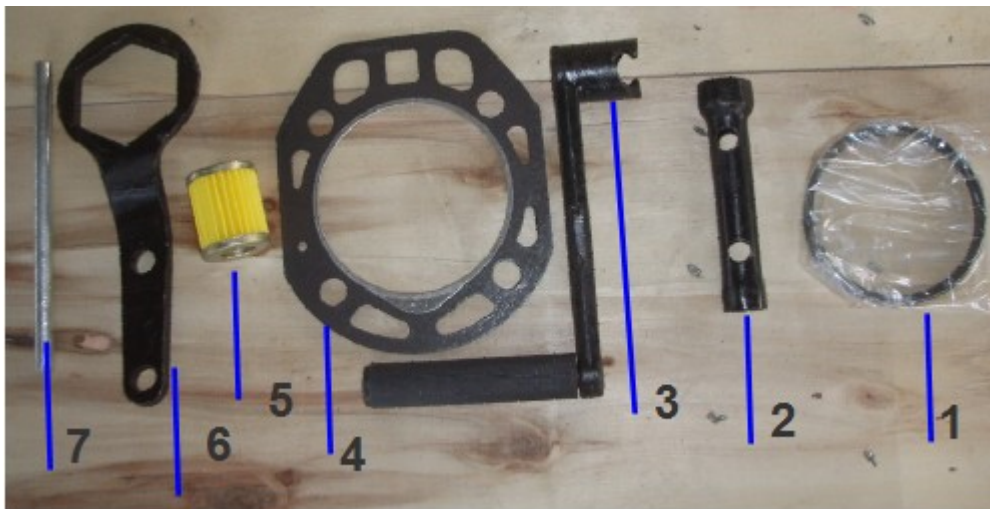
-
- | | |
|------------------|-----------------------------------|
| 1. Toothed plate | 11. Oil cup |
| 2. Upper box | 12. Bearing block |
| 3. Lower box | 13. ventilation door |
| 4. Hammer sheet | 14. Impeller |
| 5. Sieve | 15. Fan cabinet |
| 6. Lower cavity | 16. Suction tubes |
| 7. Bottom door | 17. Output tube |
| 9. Feed hopper | 18. Separator centrifuge (outlet) |

Feeding part contain 9 and 10. The 9 is installed on the 10.
Crushing chamber contain 1, 2, 3, 4 and rotor.
Convey system contain 14, 15, 16, 17 and 18.

Functioning

The hammer mill is fixed with an engine with a power of RP-driven all kinds of different power. Its working principle is: after the raw materials were put into crushing chamber, the high-speed operated hammer sheets will impact the raw materials over and over again, then the raw materials will be crushed into pre-set size step-by-step. The sieve have the following size: 1.5mm, 2mm, 4mm and 6mm. Then the crushed materials will leak out from the sieve. The draught fan will convey the leaked materials into separator centrifuge, finally, the powder will be discharged down below, and the air will be discharged upper.

Tools



1. Piston-ring kit
2. Box spanner
3. Handle for start
4. Gasket for cylinder cover
5. Diesel Filter element
6. Flywheel nut spanner
7. Box spanner set

Check whether all tools which come with the pellet mill.
Keep tools for future use.

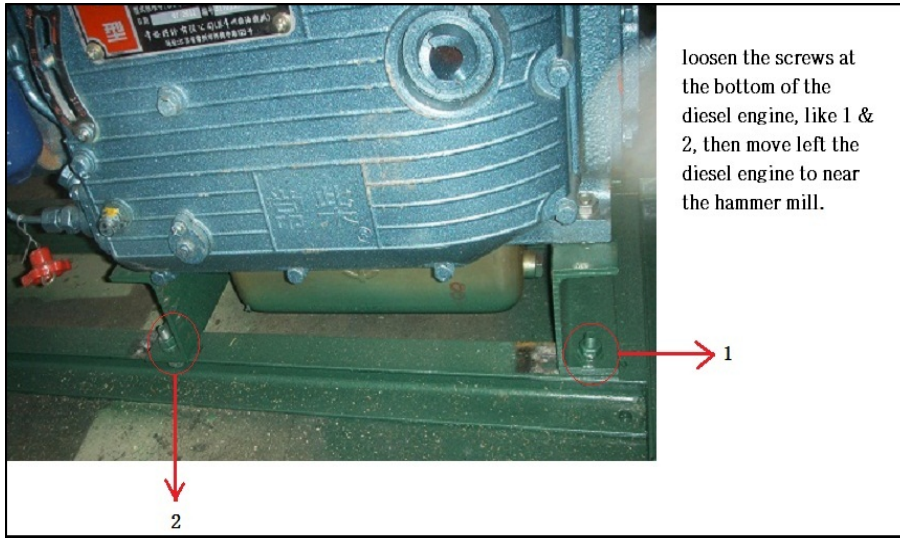
2. Commissioning

2.1 Connection and location of the hammer mill

2.1.1 Connect the diesel engine

1. Place the machine under a solid, safe and well-dry location. Keep the machine away from unauthorized person.
Do not operate the machine under the temperature of 10 °C.
Detached the cover of the belt. Loosen the screws (see following picture 1 & 2) at the bottom of the diesel engine,

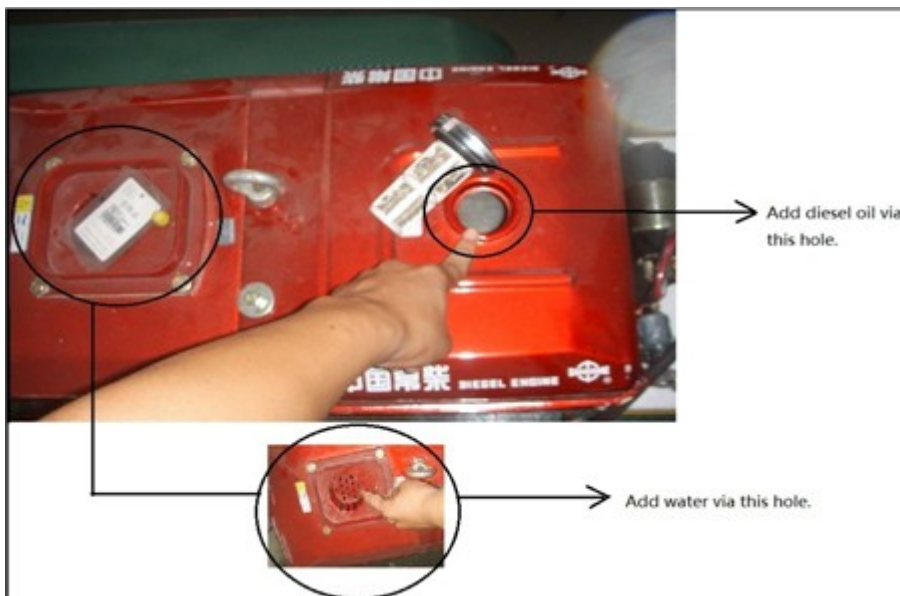
then move left the diesel engine to make it near to hammer mill.



2. Install the belt. After install the belt, you need to move right the diesel engine, adjust the gap to tighten the belt. Then tighten the screws.

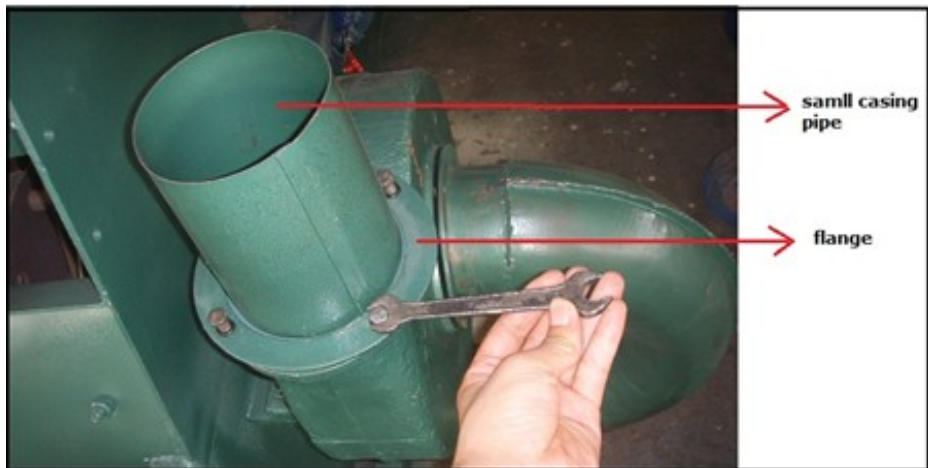


3. Install the silencer and filter, install the cover of the belt finally.
4. Open the tool case, you will find the instructions for diesel engine. Please read the instructions carefully firstly. Then fill the diesel oil into the diesel engine; fill the water into the water tank of the diesel engine.



2.1.2 Install the cyclone

1. Install the small casing pipe with flange



2. Install the big bend pipe

Connect the materials classifier and big bend pipe together firstly.

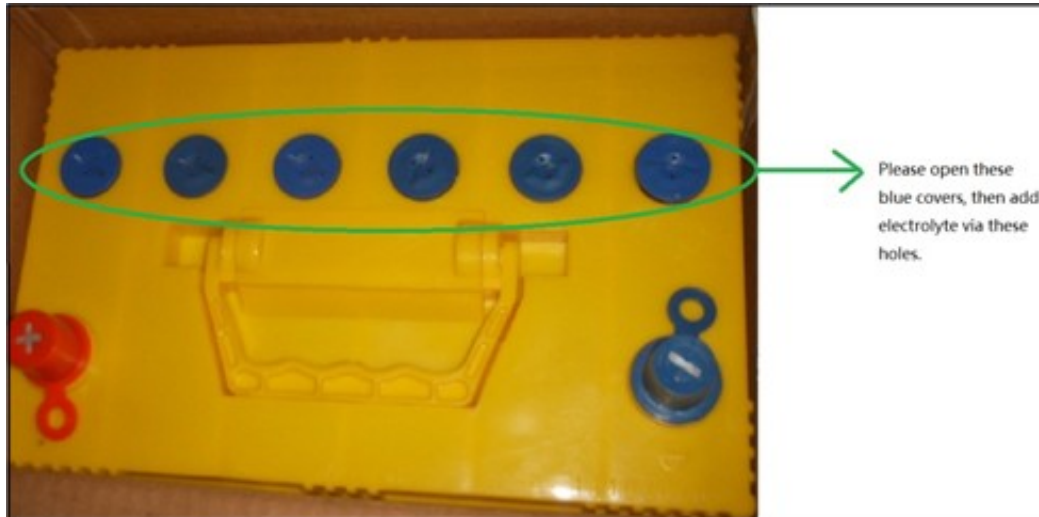


At last cover the big bend pipe on the small casing pipe.



2.1.3 Add electrolyte into the storage battery

CF420A is driven by diesel engine with electrical start. Storage battery is one part of the electrical start. You need to buy electrolyte for lead storage battery. Then add the electrolyte into the storage battery.



3. Operation of the hammer mill

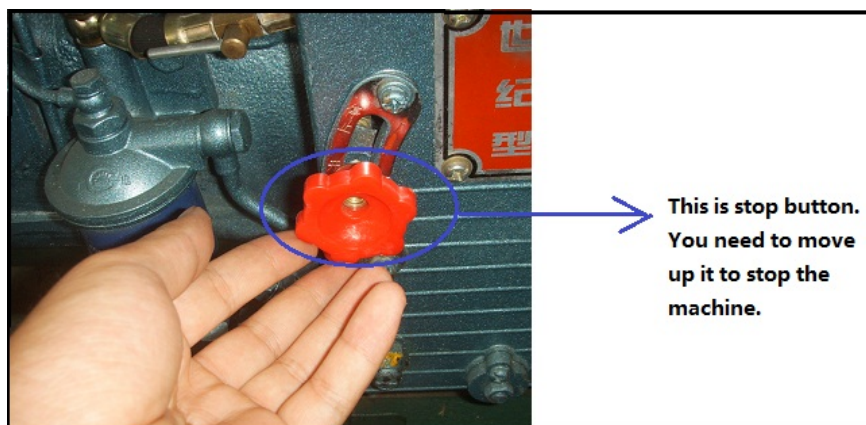
3.1 WARNING

The following safety rules must be reserved during operation of the hammer mill:

1. Always wear appropriate personal protection equipment. Wear hearing protection, eye protection, non-slip shoes, and tighten clothing. Never operate the machine with long hair.
2. Do not mix very hard objects with the raw materials, for example: metals, stones and so on..
3. Be sure not to get the machine or the connections in contact with water.
4. Be away from open fire during operation.

3.2 SETTING THE MACHINE

- 1 Stop the diesel engine.

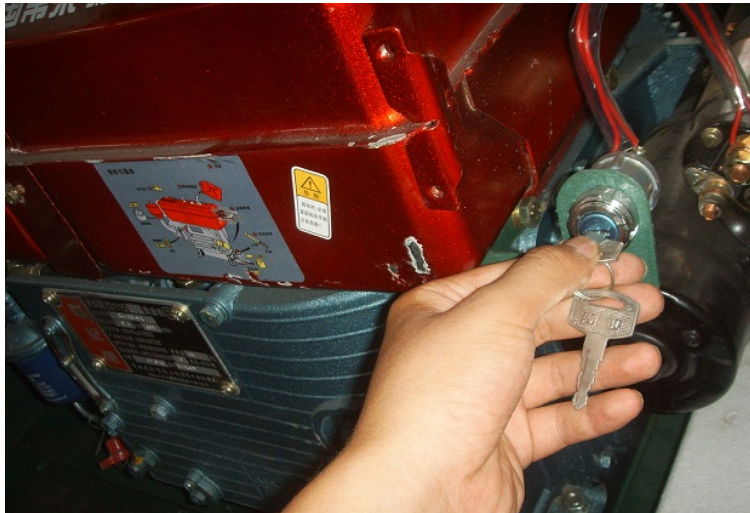


2. Check whether all bolts and screws are properly secured.
3. Lubricate all bearing before first operation with wheel bearing grease. Perform lubrication at least 10 hours operation.

3.3 CRUSHING THE RAW MATERIALS

Check whether the raw materials' size is suitable. Please note that the max diameter of the raw materials is 50mm. Be sure not mix the metal and stone in it in order not to damage the machine

- 1 Insert the key of the electrical start of the diesel engine to start the machine. The diesel engine should start and the hammer sheets turns. If the diesel engine does not turn, immediately press the stop button, and check or investigate the cause of the problems.



- 2 Place a container (eg bucket) in the output of the cyclone.
- 3 Put a little source material into the feed hopper. Be sure not to fill too much material at once, as the machine can be clogged.
- 4 After a short time the crushed raw materials will come from the cyclone and collect them.
- 5 Put the remaining material and change the container of the crushed raw materials when it is full.
- 6 Do not stop the machine during raw materials crushing operation (except for emergency), otherwise the machine will be clogged for re-starting.
- 7 Stop the machine by pressing the stop button.

3.4 Malfunctions and Maintenance

Troubles	Reasons	Methods
The machine vibrates seriously with loud noises	1. The machine isn't installed firmly on the ground or the bolt is loose.	Install it firmly
	2.The main shaft is bent.	Mend or replace the shaft
	3.The rotors aren't in the state of balance. The weight of the symmetry hammer is not same.	Adjust them in balance.
	4.The flake-hammers aren't in correct order	Adjust the order correctly
	5. The bearing is born.	Clean and replace the bearings.
The productivity is low	1.The flake-hammers are worn seriously.	Turn over them and fix again, or replace them.
	2.The tooth-like plate is worn seriously	Replace it.
	3.The raw feed is too big.	Cut it to small pcs.
The temperature of bearings is over hot.	1.The raw feed is too wet	Dry them firstly
	2.The flow of the raw feed is too fast.	Control the flow properly
	3.The gaps are not correct between the bearings and bearing bases.	Make them correctly
	4.There is dirt in the bearings	Clean by petrol.
	5.The amount of the lubricating oil is not suitable.	Control the oil properly
	6.speed is too high	Use with the suitable motor and pulley
	7.the bearing is worn	Replace bearing
The feed is out of wind inlet.	1. The feed flow is too fast or not equal	Control feeding speed
	2.The voltage and speed of motor is low	Regulate the speed of motor or feeding speed

	3.The transmit pipe is jammed	Dredge the pipe
	4.the wind inlet is too big or small	Regulate the wind inlet

ATTENTION!

Be away from moving parts. Failure to do this will result in serious injury. Disconnect the power supply before maintenance or repair.

Regularly check and re-tighten the screws and nut due to vibration.

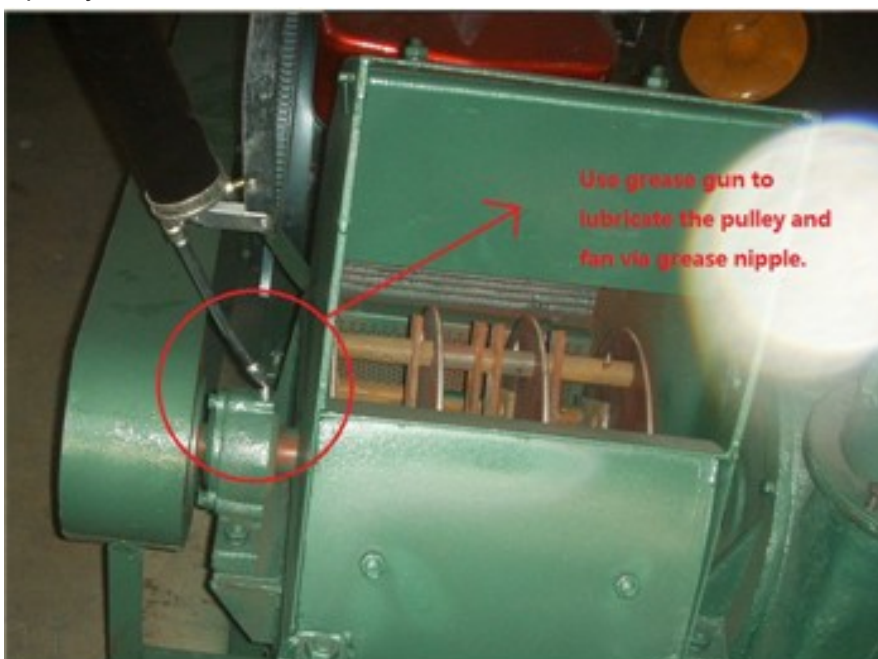
4. GREASE

Be lubricated after each use or after 8 hours operation.

- 1 Lubricate the main shaft.



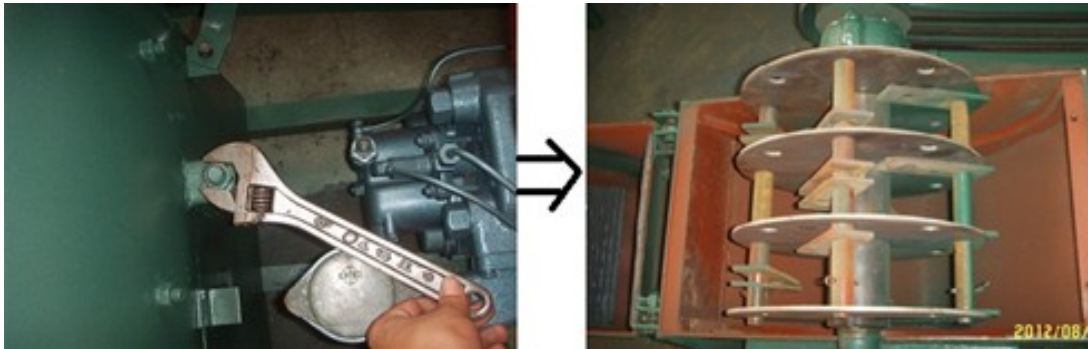
- 2 Lubricate the pulley and fan.



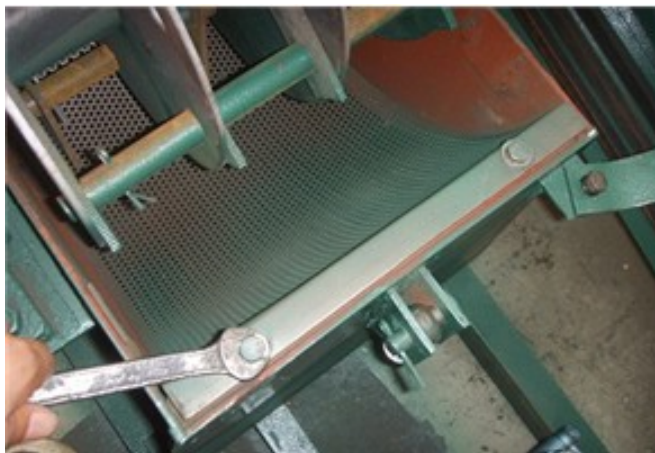
5. To replace the hammer sheets and sieve

5.1 Replace the sieve.

Open the machine, then you can see the hammer sheets and sieve clearly.



Remove the sieve, then replace a new one.



5.2 Replace the hammer sheets

Take down the old hammer sheets.



Install the new hammer sheets according to the original order.

They are 4 hammer sheets on every shaft. And they are 4 shafts totally.

