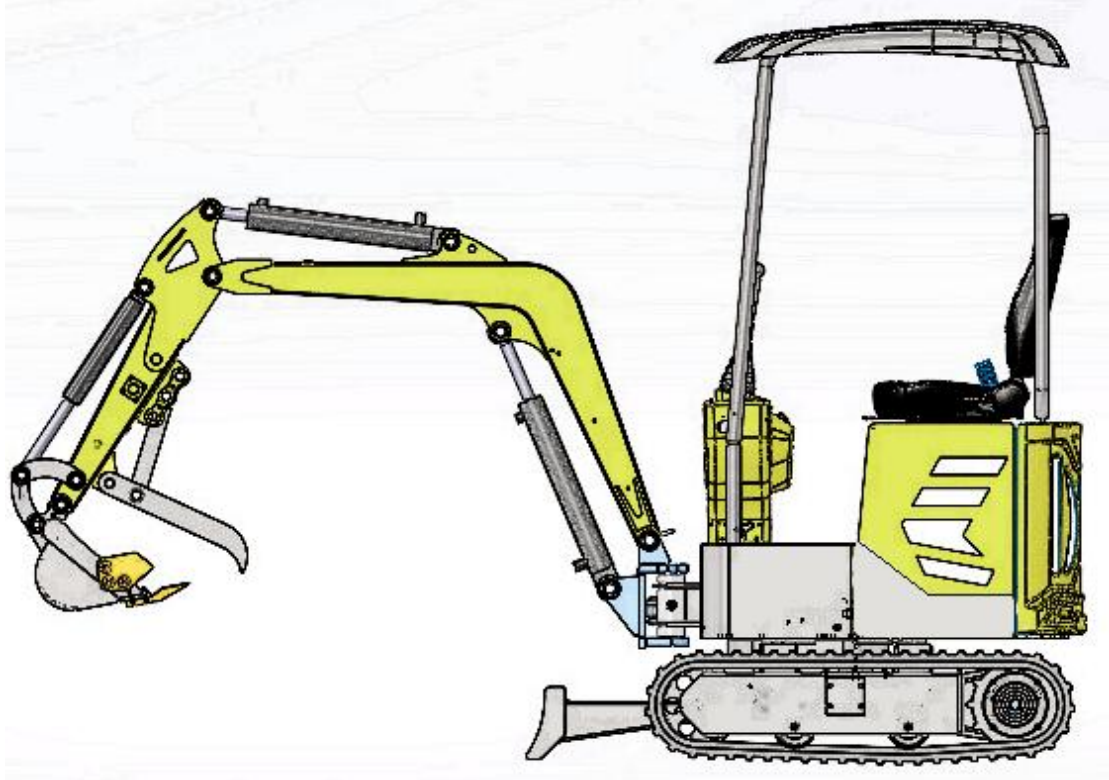


## Maintenance Instructions



Dear users:

Thank you for your trust and love for our products ! The mini-excavator manufactured by the Company is a small excavator which is mainly used for the excavation operation, hoisting as well as loading and unloading. The mini-excavator has compact design structure, proper power, good product stability and high-cost performance, and meets the requirements of excavation, loading and unloading under different operating conditions such as plains, hills and forest areas. The mini-excavator is suitable for use in brick and tile factories, kiln factories, river courses, buildings, as well as desilting and road construction, which is the most ideal construction mini-excavator for farmland operation and small projects.

This manual is a operating manual prepared for the safe and efficient operation of the machine.

Before operating this machine, always read this manual and fully understand the operation, inspection and maintenance until you have full knowledge. All data, charts and technical specifications in this manual use the latest product data available when this manual is published. The Company reserves the right to change at any time without further notice.

If accidentally operating the machine, it will result in serious injury or death.

Operators and maintenance personnel should carefully read this manual and fully understand its contents before performing the operation or maintenance of the machine.

For easy access, keep this manual properly for regular reading by qualified machine operators.

Please operate the machine after fully understanding the contents of this manual.

Please keep this manual within reach and read it repeatedly.

If this manual is lost or damaged, please order it immediately from us or our Agents.

When transferring this machine, please transfer this manual together to facilitate the proper use of the next owner.

For safety, please be sure to read the "safety-related precautions" described in this book.

### **Manufacturer's requirements**

Pledge

The quality assurance scope of this machine shall be subject to the quality warranty provided by the manufacturer. Where the failure of the machine is the responsibility of the manufacturer,

For example, loss of normal function and operation failure, repaired by the manufacturer free of charge. The Department is not responsible for the loss of normal function and machine failure due to user negligence or failure to follow the instructions of this manual.

If the user considers a problem in the service, please contact the company after Sale.

**User attention**

If the contents of this manual do not consistent with the machine you use or have any other questions please contact your company immediately after sale.

**Security related information**

Most of the accidents related to operation operations, inspection, maintenance, and repair operations are caused by basic negligent safety precautions and hazard forecasts.

Accidents can be prevented in the bud by predicting dangerous conditions. Therefore, attention must be paid to the location and type of danger. (To properly perform such operations, you must have the specified training, techniques, and tools.)

Improper operation operation and improper inspection and maintenance operations are very dangerous and will lead to personal injury accidents.

Please carefully read all the safety precautions, warnings and accident precautions documented in this manual and machine and understand the contents until fully mastered., otherwise absolutely not Ability of machine operation and inspection and maintenance operations. If these warnings will cause personal casualties, be attention.

The safety tips of this manual, the safety signs used on this machine, distinguish the extent of the possible hazards by the following warnings. Also includes

Prevention methods to avoid danger.

The Company cannot predict all hazards operation, inspection and maintenance in all environments. Therefore, the warnings indicated on this manual and this machine do not cover all cases. If the operation, inspection and maintenance are not involved in this manual, please consider the necessary safety precautions by themselves. Users are personally responsible to take the necessary safety measures.

Safety Regarding proper maintenance and maintenance of the machine. The recommendations are printed in the relevant sections of operation and maintenance in this manual. Poor maintenance or maintenance steps are dangerous and can lead to injury or death. Read and understand sections of operation and repair before any maintenance or repair.

Maintenance personnel or technicians may not be familiar with many systems of the machine. so special attention when performing services. When loading and unloading any part,

It is important to have the knowledge of the system and components

Many machines have parts size or weight, maintenance personnel or mechanics can find information in this manual, and suitable cranes should be used when removing any parts.

With.

The following are the basic things to note:

1. All warnings, notices, and signs shall be read before operation, maintenance. or repair.

2. Wear goggles and feet when working around any part of the machine or any accessory parts such as a crusher or a heavy hammer shoes. For welding work, wear

welding gloves, head covers, apron guards and other protective overalls as

## Create first-class brand

appropriate. Don't wear it loose or broken damaged clothes. Remove all of the rings while working off the machine.

3. Remove the battery negative line and hang the "Do not operate" sign in front of the cab before repairing the machine.

4. When repairing the machine, park the machine as hard as possible and fix the machine so that it is working above or below the machine will not slide.

**Do not operate the machine until you read and understand this manual. Because the incorrect operation of the machine is dangerous and can result in injury or death.**

5. During any decomposition, the machine does not work if it is simply suspended. The machine must be stably supported or fixed before being on the machine work.

6. Release the pressure (e. g, air, oil, cooling water system, etc.) before removing any line, plug, or related components.

7. Before doing any work on the machine, drop the ground. If some components cannot fall to the ground, determine whether they are properly fixed to avoid accidental falls.

8. Use the steps, railings, and walkways when going up and down the machine. To remove the above debris before use, and face the step stairs and walkway. If the designed auxiliary equipment cannot be used, please prepare an additional ladder, eagle frame or work platform for safe repair or operation

9. To avoid waist injury, use a sling for heavy parts of over 23 kg (50lbs). And determine whether all the chains, hooks, etc.. are in the normal use state.

10. Pay attention to the hot part of the machine to avoid burns.

11. Be careful when removing the cover plate. Gradually remove the last two bolts or caps, pay attention to the spring or other pressure components before complete removal.

12. Use special care when opening the water tank cap, oil cap, and other plugs. For example, avoid a liquid with pressure pouring out, because this condition is quite dangerous.

13. The tools should be kept in good condition. Know the tools for any work.

14. Reinstall the fixed clip with the same part number, and do not use secondary products if it must be replaced.

15. Appropriate reference materials shall be provided for welding and repair. Welding technicians shall have sufficient training and relevant knowledge.

16. Do not damage the wire when removing, and take careful not to damage the wire when reinstalling. Be careful not to touch the liquid when connecting the wire.

17. Before starting the repair, determine that all protective covers and other devices have been properly installed. Double down if the protection device must be removed during repair pay attention to.

18. During maintenance or repair, hold the arms, and place them on the ground.

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19. Relax or damaged fuel pipes, oil pipes and hydraulic pipes are dangerous. So you should wear work clothes at work, but do not wear loose or damaged clothes service, because the hydraulic oil pipe may cause a fire. Do not fold or tap the high pressure pipe, damaged pipe do not use again. Please do not measure the leak by hand. Because the very small pinhole can not be seen by the naked eye, and it may be injured by emitting high-pressure liquid at high speed. Use sheets of paper or splints to find out the location of the pinhole.

20. Each oil pipe joint shall be tightened with the correct torque wrench. Determine that all heat insulation plates, clamclips and covers are in safe condition. Avoid overheating, vibration, or friction with other components during operation.

21. If any rotating part is damaged or interfered with any other part, the machine operation must be stopped.

22. Special attention should be paid to crawler machines during repair or decomposition. Because plug pins or debris may fly out during loading and unloading. When the machine sprocket of the machine is removed, the machine. It may move unexpectedly. So place barriers to prevent the machine from moving and moving away from the front and rear of the machine.

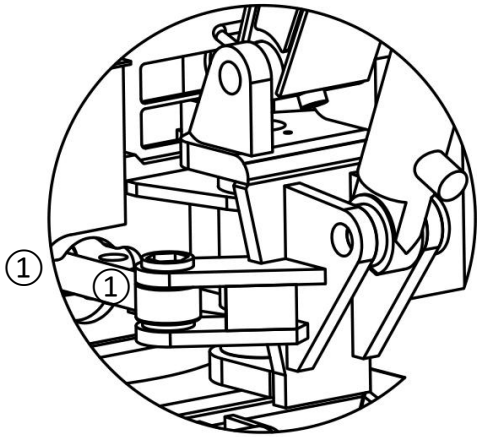
23. Special care should be taken when there are asbestos fibers on the parts. This dust will cause harm to the body if inhaled. If asbestos fibers are found in components, the following points must be noted:

- A. Do not use compressed air cleaning components.
- B. Avoid brushing grindstone cotton fiber materials
- C. Use wet cleaning or vacuum equipment with a hePA screen when cleaning
- D. Use exhaust fan when working for a long time
- E. Wear protective mask if there is no other way to control dust
- F. Comply with workplace rules
- G. Dispose of asbestos fibre waste in accordance with environmental regulations
- H. Avoid asbestos-prone areas, especially when filled with air

### Periodic checklist

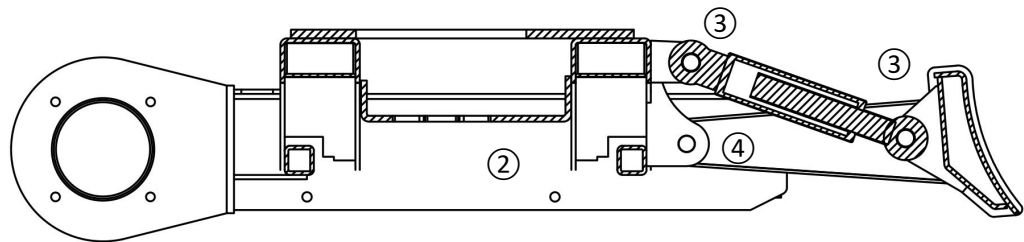
No.	project / period		The number The amount	The hour watch shows the time																Since then
				5	1	2	2	3	3	4	4	5	5	6	6	7	7	8		
				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1	Side swing fulcrum pin	grease up	2																Every day	
2	Working device	grease up	11																Every day	
3	chassis	grease up	4																Every day	
4	Oil-water separator	grease up	1	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	Every 50 hours	
5	Root surface of rotary bearing/ At inner ring of rotary bearing	grease up	1																Every day	
6	Side of the cylinder	grease up	1																Every day	
7	Fan belt	Check the adjustmen	1			○			○				○				○		Every 200 hours	
8	Air filter element	Clean the check	1			○			○				○				○		Every 200 hours	
		replace	1																Every 1000 hours Or every 1 year	
9	Radiator hoses and hoops	check	2 4			○			○				○				○		Every 200 hours	
		replace	2 4																Every 2 years	
10	Oil (CF grade)	replace	1	◎					○				○				○		Every 250 hours	
11	Oil filter	replace	1	◎					○				○				○		Every 250 hours	
12	Hydraulic oil return oil filter ☆	replace	1					◎											Every 500 hours	
13	Fuel filter element	replace	2										○						Every 500 hours	
14	The hydraulic oil being ☆	replace	1																Every 1000 hours	
15	Hydraulic oil suction filter element	replace	1																Every 2000 hours	
16	Tension part of guide wheel	replace	2																Every 2000 hours	
17	Ac engine、 starter motor	check	-																Every 2000 hours	
18	Use of electrical wiring and fuse	check	-																Every year	
19	Cooling fluid	replace	1																Every 2 years	

Note: 1. ◎ Symbol indicates only the first time.  
 2. Symbol indicates that the replacement time will be shorter when using hydraulic front working devices such as crushing hammers.  
 3. As the machine runs, the oil gradually consumes and decreases. The consumption varies depending on the operation, engine, etc. Before use, be sure to confirm whether the oil level is between the upper and lower limits of the oil mark, and then perform refueling and maintenance. Please comply with the prescribed replacement time.



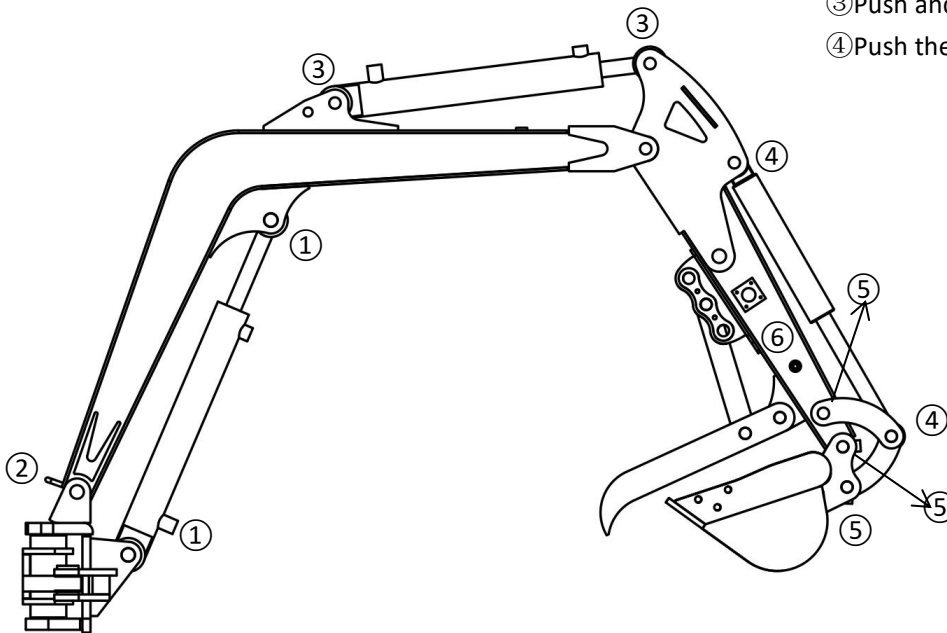
Note(grease up):

- ① Root surface of rotary bearing.
- At inner ring of rotary bearing.



Note (grease up):②chassis and guide wheel tension part.Chassis,such as:

- ③Push and shovel cylinder 2;
- ④Push the shovel 2。



Note (grease up): Lubricating grease is added to the working device as follows;

- (1)Big arm cylinder 2;
- (2)Big arm and side swing head 1;
- (3) Bucket rod cylinder 2;
- (4)Bucket cylinder 2;
- (5)Bucket connecting rod 3;
- (6)Boom bucket rod 1.