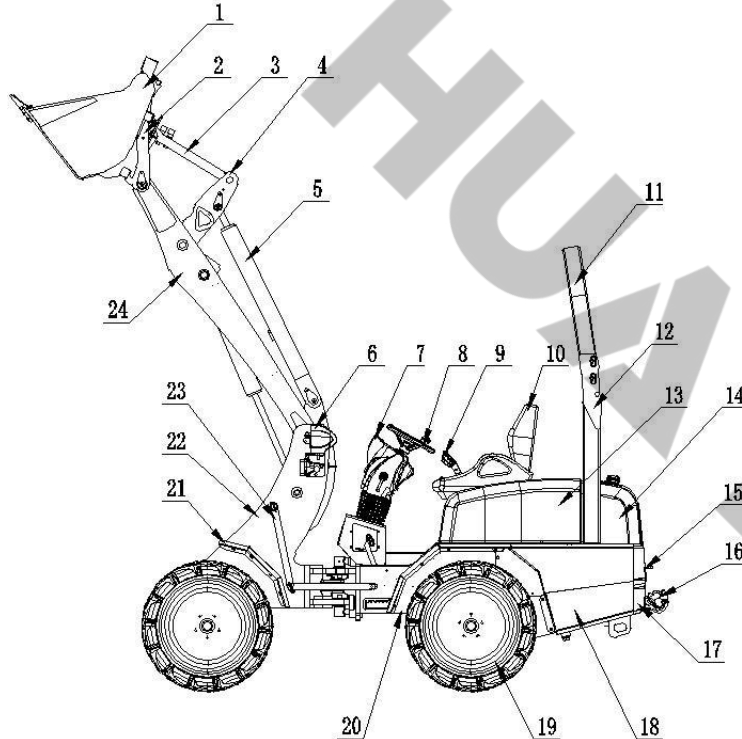


## Name of each part of the machine

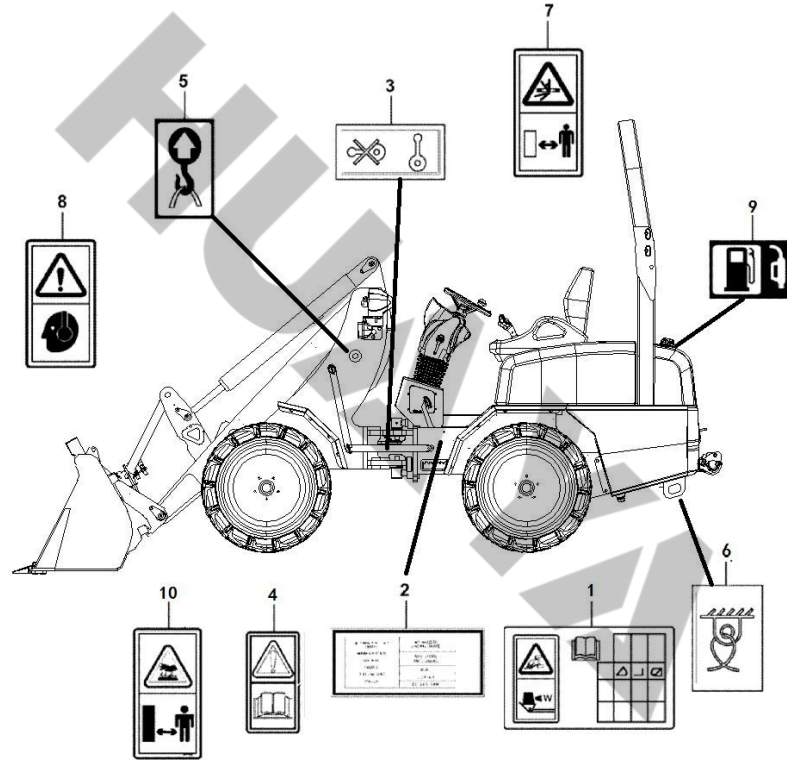


3

- 1. Bucket
- 2. Quick change
- 3. Connecting rod
- 4. Double link lever
- 5. Double link lever
- 6. Headlight
- 7. Instrument shell
- 8. The steering wheel
- 9. Pilot handle
- 10. The seat
- 11. Security frame
- 12. Safety support
- 13. Front cover
- 14. decoration
- 15. After the hood
- 16. Towing hook
- 17. weight
- 18. The hydraulic oil tank
- 19. tire
- 20. After the frame
- 21. Block masonry
- 22. Before the frame
- 23. To lock
- 24. big arm

# Safety Precautions

5



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## 1 General precautions for safety

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All fuel, most lubricants and mixed solution of some coolants are combustible. Fuel leakage to hot surfaces or electrical components may cause a fire.

Do not smoke when refueling or servicing the fuel system. Do not refuel or maintain near flames or spark areas. The engine must be switched off before refueling, and it shall fill fuel out of doors.

Clean and tighten all electrode connections. Check whether there is loose or worn wire every day. Tighten loose wires, repair or replace worn wires before starting up.

Store fuel and lubricants in containers marked with the appropriate labels to prevent non-personnel use.

Place oil wiping cloth or other combustible material in a protective container and in a safe place.

Do not conduct welding or flame cutting of pipes that contain flammable liquids.

Do not operate the machine near open flame.

Make sure the battery is away from open flames or sparks. Do not smoke in places where the battery is charging.

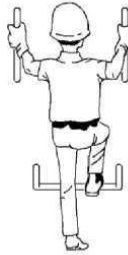
When using the normal machine of negative grounding system to start the machine, you must follow the correct procedures for operation, or it may cause an explosion, resulting in personal injury.

Do not charge the frozen battery to avoid causing an explosion.

## 3 Operation Manual

### Before operating the machine Climb up and down the machine

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Please clean the oil stains or sludge on the handrails or ladder before climbing up and down the machine. In addition, please repair the damaged parts and tighten the loose bolts.

You can only climb up and down the machine in the areas with staircases or handrails.

Please face the machine when climbing up and down the machine. Use your hands to hold the handrail, use your feet to

step on stair to maintain three-point contacts (two feet or one hand or two hands one foot).

Do not jump off the machine.

Do not climb up and down the machine during the operation of machine.

Don't take any joystick as a handrail when climbing up and down the machine.

Do not climb up or climb down the machine while carrying tools or other items. Please use the rope to lift the required tools to the operation platform.

### Daily inspection

To ensure safety and proper performance of the loader, make a complete visual check of the machine everytime the machine is to be started for operation.

Make sure of no loose nuts over and under the machine, no debris stuck on the moving parts ,no leaking and no worn or damaged parts.

Check the condition of the working device and the condition of the hydraulic components.

Check all oil levels.

## Machine control and instrumentation

### Starting switch

Starting switch (also known as electric lock) is located on the right side of the cab, and it can be divided into four gears along clockwise direction.

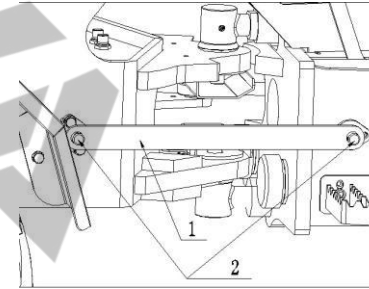
1. Auxiliary --- The gear that rotates along counterclockwise after inserting the starting switch key. The gear is automatically reset (it will automatically turn back to OFF when it is released.) This gear is not currently used.
2. OFF--When this gear, the engine shut down because the oil circuit is cut off, and the machine's power control circuit is cut off.
- 3.ON—The first gear that rotates along clockwise direction after inserting the starting switch key. Electrical system of the machine work properly due to the recovery of power supply when in this gear.

4. START----The second gear that rotates along clockwise direction after inserting the starting switch key. In this gear, the starting dynamo work so that starts the engine. Please the starting switch key immediately after successfully starting the engine, this gear can not be maintained automatically. After releasing, the starting switch key will automatically back to the routine inspection that turns to the ON gear of starting switch.

### Steering lock frame



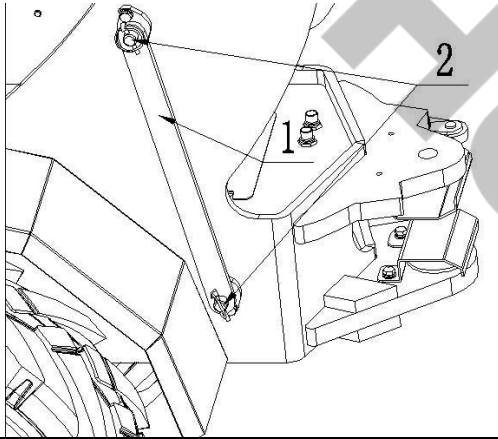
Do not stand in this area. Do not place any objects, or it may cause property damage or serious injury or death.



#### 40 Position of steering lock frame

Steering lock frame 1 is the locked position

Steering lock frame 2 is the connected position

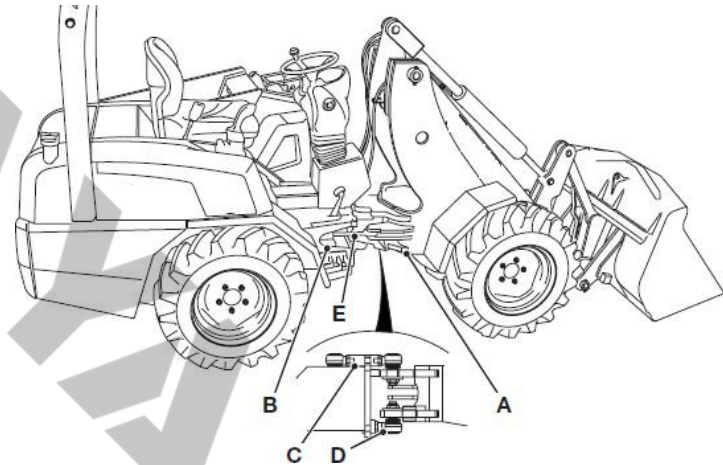


Installation position of steering lock frame

The device must be disconnected from the steering lock before operating the equipment, or it may cause equipment damages. The disconnected position is shown as the figure

**Caution: Operating the equipment can damage the frame**

**when the steering lock frame is locked.**





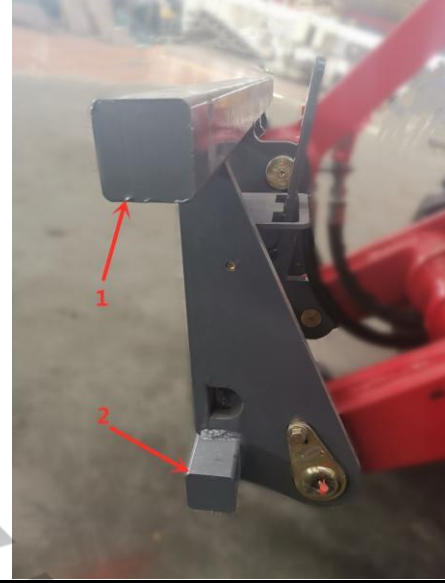
1. Headlamp near-light  
far-light
2. Cornering lamp
3. High and low speed
4. Parking Brake
5. Engine preheating
6. Horn

High and low speed

Turtle - Low speed    Rabbit - High speed



Third way hydraulic system.



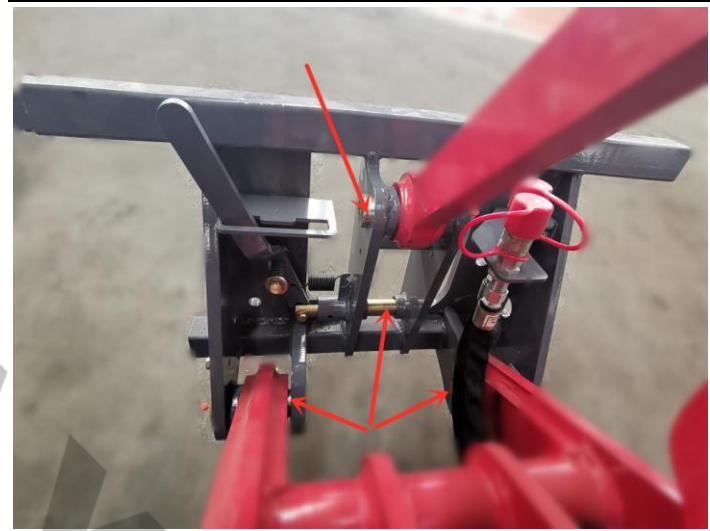
1. Tilt forward the quick change.
2. Align the upper connecting shaft of the quick change with the upper hole of the upper ear plate of the machine tool, as shown in Figure 1. Close the quick-change, and align the lower connection hole of the quick change with the lower hole of the machine tool, as shown in Figure 2.





1. Rotate the mechanical control valve handle to the horizontal position.

2. The lower pin of quick-change should pass through the working position of the tool hole.



3. Lift the big arm: When lifting the big arm, observe whether the quick change is firmly connected with the machine.

accordance with the following specifications :

1) Select 7ampere charge current.

2) Congruent relationship between recharge time and battery voltage.

Battery voltage	Recharge time
12.55-12.45V	2 hours
12.45-12.35V	3 hours
12.35-12.20V	4 hours
12.20-12.05V	5 hours
12.05-11.95V	6 hours
11.95-11.80V	7 hours
11.80-11.65V	8 hours
11.65-11.50V	9 hours
11.50-11.30V	10 hours
11.30-11.00V	12 hours
Below 11.00V	14 hours

6. For battery voltage less than 11.0 volts, it may show no discharging of battery during first phase of recharging. Because of the serious power-lack of the battery, the proportion of sulfuric acid in the battery is close to pure water, the battery internal resistance is great, while with the battery charging process, the proportion of sulfuric acid in the battery will increase, and the battery charging current can gradually return to normal.

7. If the battery temperature exceeds 45 ° C during the charging period, stop charging until the battery temperature drops to room temperature. Then halve the charging current and continue the charging.

8. The battery voltage should be checked once per hour during the recharge process of the battery. If the battery charge voltage is greater than 16.0 volts with the voltage difference is less than 0.05 volts within 1 hour, indicating that the battery is fully charged, then you should stop charging.

**Note: If the electric eye is black, check that whether the charging connection is secure, whether the connection point is clean and whether the charging voltage reaches 16 volts. If the electric eye is transparent and bright, there may be bubbles in the electric eye. You should replace the**

### **battery if it shows white after gently shaking.**

After charging the battery, brush Vaseline in the end post to prevent the electric erosion.

### **The maintenance of the storage battery during the machine storage.**

1. If the machine is stored for more than 15 days, please disconnect the negative battery cable.
2. Check the battery every three months for the state of charge. Batteries voltage that greater than 12.4 volts are normally charged batteries. Batteries voltage that less than 12.4 volts are power-lack batteries.
3. You should make recharging in case of power-lack batteries. The recharging shall be implemented according to recharging procedures.
3. For vehicles that don't disconnect battery connection, you should check the battery voltage status once a month. For batteries with a voltage less than 12.4 volts shall be recharged

in accordance with the recharging procedure.

4. For battery in the vehicle that stored for more than one year, if it's not recharged according to the above requirements, you should replace the battery and dispose it as scrap.

### **Scrap of the battery**

During the scrap process of the batteries, their internal lead plate, acid materials, plastic shell will cause different degrees of environmental pollution due to the external structural damages or other reasons, Therefore, you can not arbitrarily discard discarded batteries, and you should send them to a professional battery processing station or a local recycle bin set by battery manufacturer (if any) for processing.

### **Air Conditioning System Detection of air conditioners**

Warning: Inhalation of the refrigerant gas from the air conditioner through the lit cigarettes or other smoking

methods, or inhalation of smoke emitted from a flame in contact with the air conditioner refrigerant, it can result in personal injury or death. Do not smoke when servicing the air conditioner or where refrigerant gas may be present.

1. Start the engine and let the engine run at high idle speed.
2. Allow the air conditioning system to keep stable running for 2 minutes.
3. Check the refrigerant in the system, touch the suction pipe and the exhaust pipe. If the system contains refrigerant, the exhaust pipe is warmer than the suction duct. If the system does not contain refrigerant or the system has a very small amount of refrigerant, the cooling effect will be poor.

## Check the refrigerant in the fluid reservoir

When opening air conditioning, you can check whether the refrigerant is sufficient by observing whether there are bubbles of refrigerant in the fluid reservoir through the sight glasses in the fluid reservoir. If there are a large number of bubbles, the refrigerant is insufficient; If there is only a very small amount of bubbles or no bubbles but with flowing refrigerant, the refrigerant is sufficient.

## Other maintenance

### Check and replace the bucket and bucket teeth

**Warning: Bucket falling will cause casualties, please fix the bucket before replacing the bucket teeth**

Check the bucket teeth and side buckets for wear and damage, and take the following procedure to maintain bucket and side buckets if necessary.

1. Lift the bucket and place the cushion block under the bucket
2. Lower the bucket to the cushion block and turn off the engine.
3. Remove bolts, bucket teeth and side buckets.
4. Clean all contact surfaces.
5. If the reverse side of the teeth is not worn, you can use the reverse side of the teeth. Side buckets can not be flipped.
6. Tighten the bolts to the specified torque. Start the engine.
7. Raise the bucket and remove the cushion block. Lower the bucket to the ground.
8. After operation for a few hours, check whether the bolt torque is appropriate.