Operation and maintenance instructions

Original instrutions

RS04

SKID STEER LOADER

Warming:Unsafe use of this machine may cause serious injury or death.Operation and maintenance personnel must read this manual before operating and maintaining this machine,This manual should be placed ncar the machine for timely reference and all personnel rclated with this machine should consult this manual regularty.

Name:Shandong Rippa Machinery Group Co.,Ltd.
Address:Rippa Group Co., Ltd., Guang'an Road, High-tech Zone, Jining City, Shandong Province

Operating and maintenance instructions

• RS04

skid steer loader

WARNING: Use of this machine contrary to the operating instructions may result in serious injury or death. Operators and maintenance personnel must read this manual before operating and maintaining the machine. This manual should be kept near the machine for prompt reference and should be consulted regularly by all persons associated with the machine.

preamble

Thank you very much for purchasing our products, please read the product manual carefully before using the product. This manual will provide you with an explanation of the product's performance, technical parameters, use and maintenance, and general precautions, which can help you use the equipment smoothly, safely and effectively.

In order to enable the user to correctly grasp the use of the machine, adjustment, maintenance, maintenance and other aspects of knowledge, give full play to the effectiveness of the excavator, please read this operation and maintenance manual carefully, and effectively implement the provisions of this operation and maintenance manual. For use and maintenance of the companion engine, refer to the Engine Instruction Manual prepared by the companion engine factory.

The operating section is a technical reference for the operator to use the machine, during which illustrations are used to guide the operator through the correct rocedures for checking, starting, operating and stopping the machine. The operating techniques outlined in the manuals are a basis on which the operator can improve his or her own

skills and techniques by acquiring knowledge of the machine and its functions.

The maintenance section is a guide for the user to carry out maintenance of the whole machine. Specific maintenance measures for the machine are detailed in the Excavator Maintenance Catalog. Users should follow the requirements in the Excavator Maintenance Catalog and perform maintenance items separately according to the different working hours of the machinery.

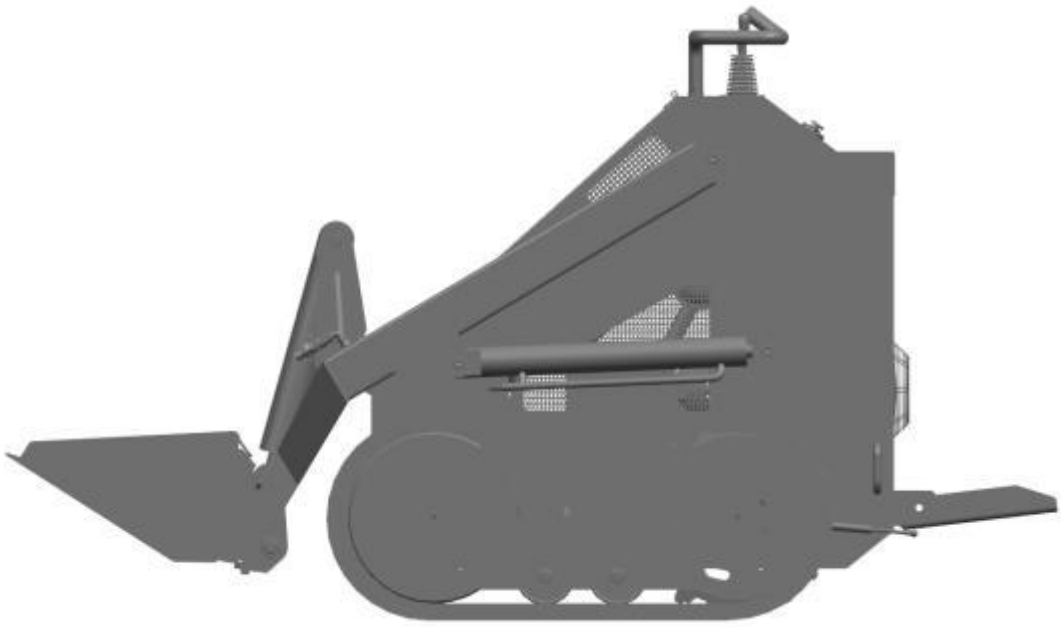
In extremely harsh, dusty or humid working conditions, increase the number of lubrication times as appropriate to the operation of the machine.

If the actual product differs from the pictures in this manual, the actual products hall prevail.

Catalogue

I. Machine number

The machine number is in the lower area, indicated by anarrow. Each machine has its own unique number; please provide its information. to the following form.



Model:	RS04
Series:	RS Series
Engine number:	Paragon 3864
Date of manufacture:	
Date of manufacture:	

II. Areas of application

The skid steer loader RS04is designed for compact construction work and is available in both tracked and wheeled forms. With a powerful gasoline engine featuring a quick coupler, it can be easily attached to a variety of accessories. Under normal circumstances, from small building works, ground care, home improvement, landscaping, agriculture to small moving works; it is skilled in any compact road or low space work. If necessary, such as working in extreme areas, please contact our company or local distributor, otherwise it will conflict with the application. The RS04 should be operated, serviced and maintained only by trained operators who are familiar with its special characteristics and familiar with safe operation.

III. Mechanical components

The machine is divided into crawler and wheeled two kinds of want to go, crawler can be applied to the road surface is more muddy road, wheeled application for more smooth road surface, according to the application of different environments to choose a different way of walking.

Wheeled:

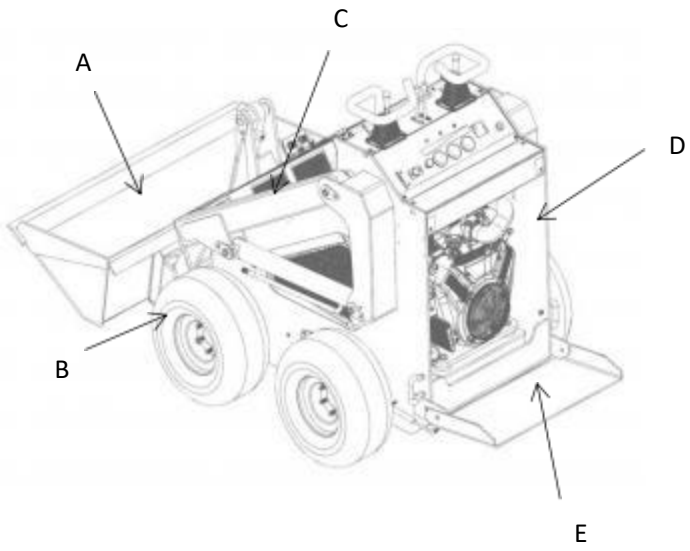
A 、bucket

B 、wheel

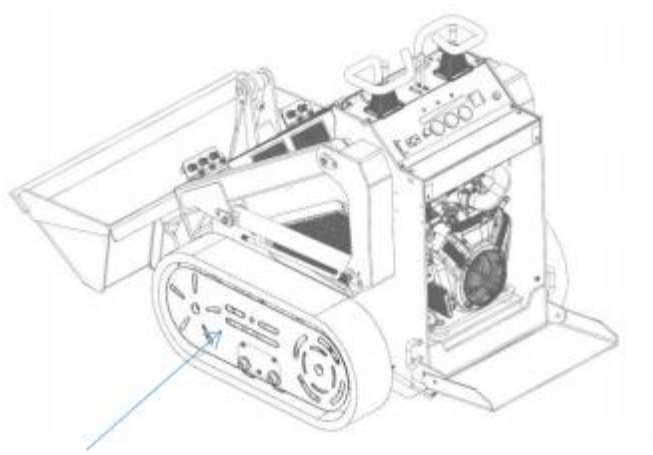
C 、boom

D、car body

E、pedal



Crawler:



Track components

Track mounted parts (left example)

Tracked and wheeled replacement methods:

Take the original machine wheeled as an example:

Step 1: First, loosen the six nuts that hold the hub in place in order to takeoff the four wheels

Step 2: Install the guide wheel, drive wheel, support wheel mounting bracket, and support wheel on the frame in turn, then loosen the tensioning bolts and move the guide wheel and drive wheel toward each other.

Step 3: Install the tracks on both sides, then tighten the rise bolts to raise the tracks.

Step 4: Install the track guards on both sides and bolt them on tight. finish installing

Take the original machine tracked as an example:

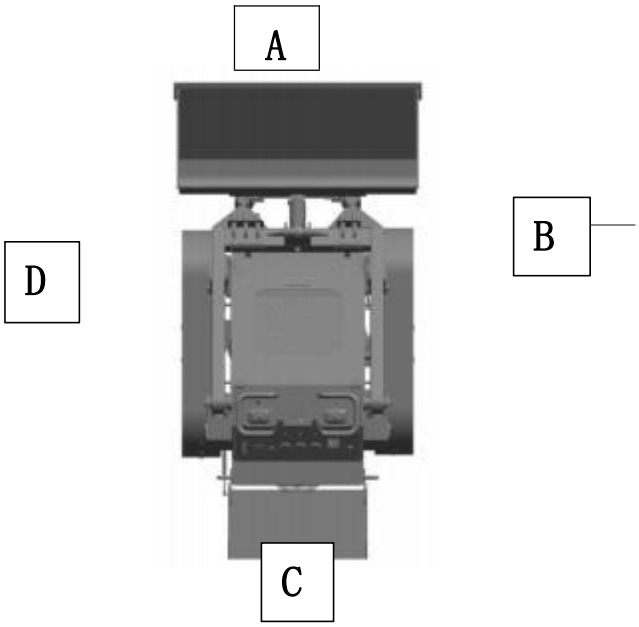
Step 1: Remove the track guard and loosen the tensioning bolt.

Step 2: Remove the tracks, then remove the guide wheel, drive wheel and support wheel mounting bracket in turn

Step 3: Tighten the tensioning bolts, install the wheel on the driveshaft assembly, and tighten the nuts ning in turn.

finish installing

schematic



Operating Direction

A、Frontend of the machine

B、Right end of the machine

C、Rear end of the machine

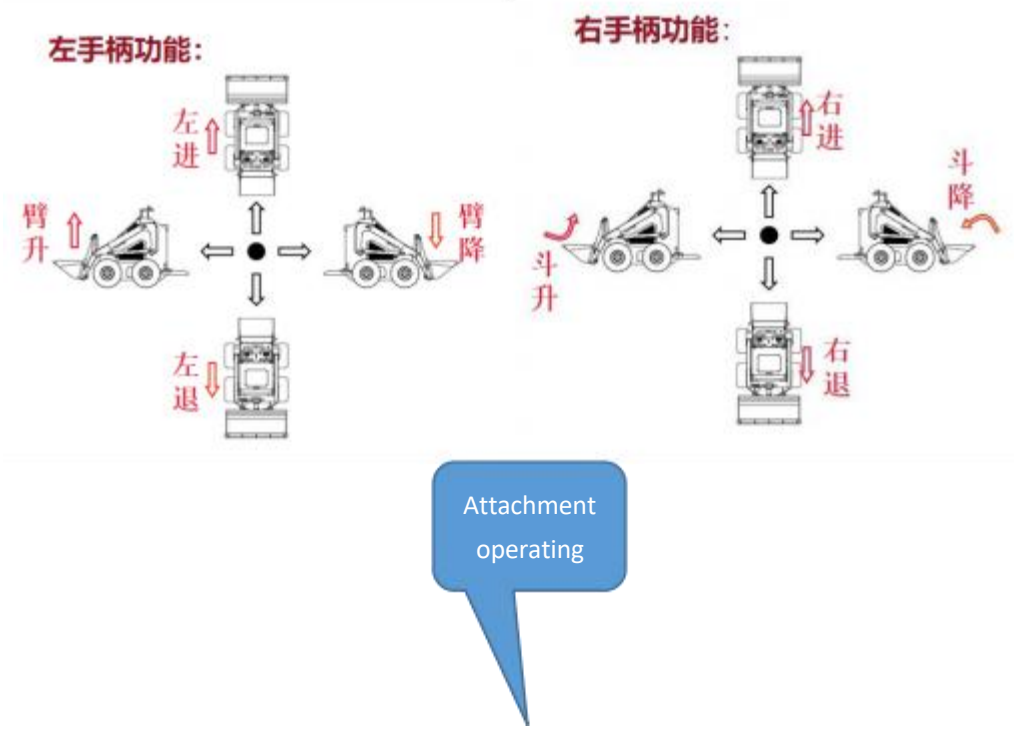
D、Left end of the machine

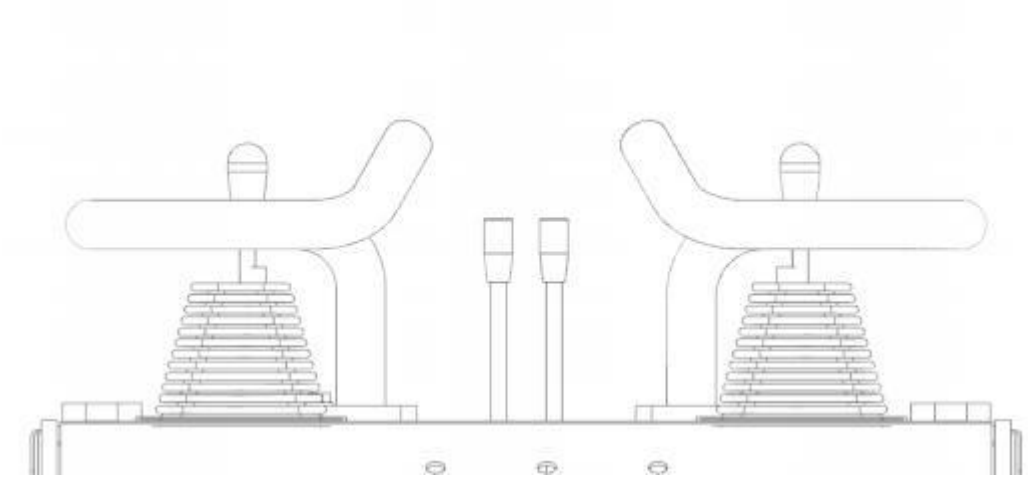
Schematic operation of the working device

The labeling is located on the control panel, check that the machine control mode matches the labeling. If different,

replace the label to match the mechanical control mode before operating the machine.

△Do not follow this operation





IV. Safety Precautions and Safety Signs

cautionary
Follow the safety instructions before using and maintaining the machine. Please read the operating manual and mark the machine. Perform repairs, adjustments and maintenance according to the markings in the manuals and instructions, then check for correctness. Failure to obey orders may result in death or injury.

Safety is the responsibility of the operator.

Most accidents involving machine operation and maintenance can be avoided by following basic safety rules and precautions. Before operating or servicing the machine, read and understand all safety information, safety practices and safety stickers in this manual.

! This symbol indicates to be careful, please pay attention to safety before operating the skid steer loader

!cautionary
The operator must fully understand the following operating instructions.

Every guideline and rule for operation and maintenance should be understood and followed.

!cautionary

All warnings are for your safety.

- When operating the machine, make sure to use the amount and type of hydraulic fluid. At the same time, it can cause dangerous or serious injuries.

l Please read this manual carefully. Make sure you understand fuel maintenance and refueling.

△This symbol indicates that you need to be careful; otherwise it could result in the death of the operator or bystanders. Stickers are applied to the machine

△! Safety stickers on the machine and warnings in the manual are especially for you to be aware of the dangers in order to avoid accidents.

Each loader is thoroughly tested and inspected before being delivered to the customer. You should operate it carefully for 100 hours so that all parts are in good condition. Rough handling can shorten service life or reduce the efficiency of use. For new equipment, you should be aware of the following:

l Run the machine idle for 5 minutes after startup.

lAvoid operating the loader at full speed.

l Avoid fast starts, rapid acceleration, unnecessary emergency stops or spins.

Clean dust and impurities when replacing fixtures.

If working in a hostile environment, check for all potential hazards.

Please check the working hours of the work timer.

Hold the handrail firmly with both hands when operating the machine to avoid causing injury when it is first started or during an emergency stop.

When a machine abnormality is detected:

If any abnormalities (noise, vibration, odor, oil leakage, false alarms, etc.) are detected during operation or inspection and maintenance of the machine, immediately notify the sales or service agent and take appropriate action. Do not operate the machine until the abnormality is removed.

Operating temperature range:

To maintain machine performance and avoid premature wear, observe the following operating conditions.

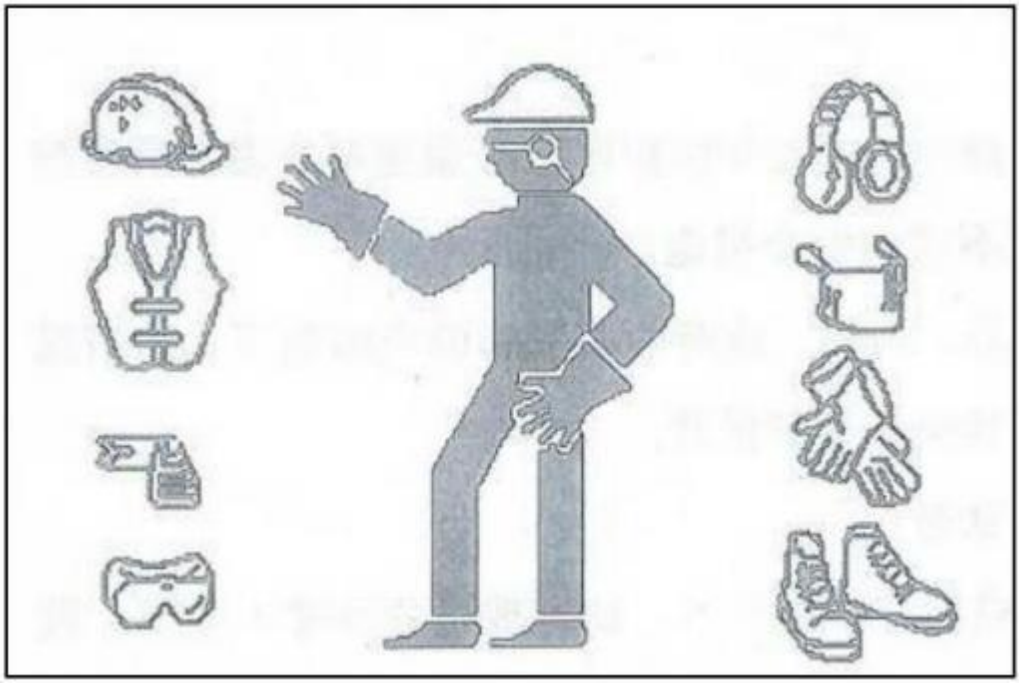
Do not operate the machine if the outdoor temperature exceeds+45°C or falls below-15°C.

If operated whenthe outdoor temperature exceeds+45°C, the engine may overheat, resulting in reduced engine oil performance. Also, the hydraulic fluid may become very hot and cause damage to the hydraulic equipment.

If the machine is operatedat outdoor temperatures below-15°C, rubber parts such as gaskets may harden, resulting in remature wear or damage to the machine.

If it is necessary to operate the machine outside the above outdoor temperature range, consult your sales or service agent.

Wear appropriate clothing and protective equipment:



Do not wear loose clothing or accessories that could hang up on the control levers or moving parts.

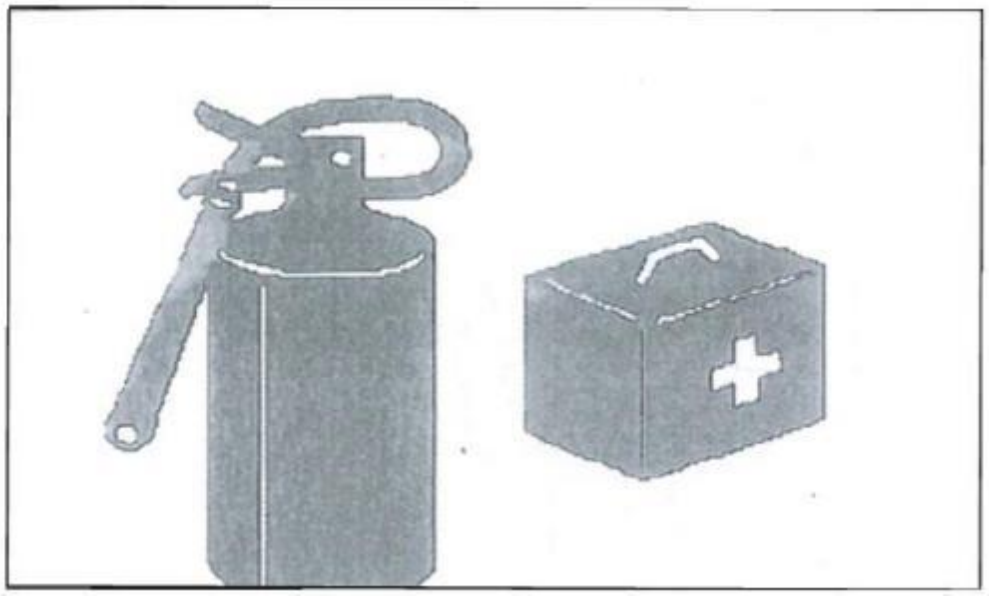
Do not wear clothing with oil or fuel stains that could easily catch fire.

Wear safety shoes, helmets, safety glasses, filtering masks, thick gloves, ear protection, and other protective equipment such as safety glasses and filtering masks as required by the work environment, as splashing of metal shavings or other objects may cause serious injury.

Use hearing protection when operating the machine.

Prolonged exposure to high levels of noise can result in hearing damage or even complete loss.

Installation of fire extinguishers and first aid kits.



Be prepared for fires and accidents.

Safety fire extinguishers and first aid kits and learn if to use them.

Learn how to put out fires and deal with accidents.

Know how to contact emergency assistance and make an emergency contact list.

Do not remove the safety device.

Make sure that all guard rails, etc. are in place and secure. Repair or replace damaged parts before operating the machine.

Never remove any safety device except for servicing. Keep all safety devices in good working condition at all times.

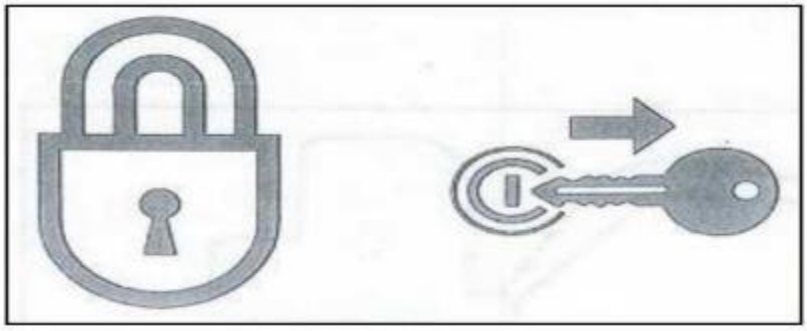
Learn how to use the hand signals required for a particular assignment and identify the person responsible for signing. All hand signals must be fully understood by all personnel.

The operator must respond only to gestures from the designated person, but must obey a stop gesture from anyone at any time.

Signalmen must stand in clear view when signaling.

Precautions when standing up or leaving the driver's seat.

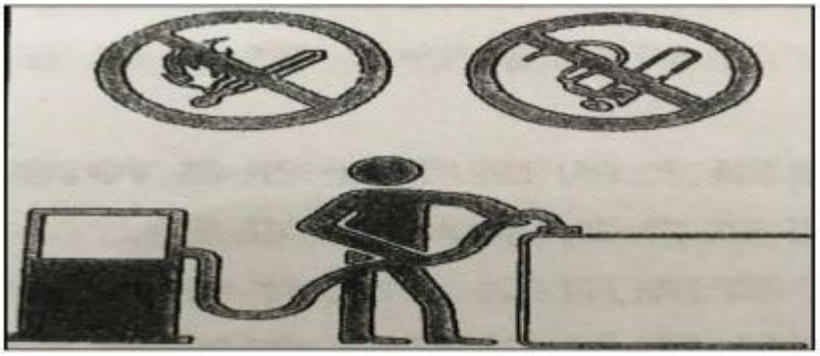
When leaving the driver's seat, lower the work unit to the ground and stop the engine. Accidentally touching any of the control handles can cause the machine to move and result in serious injury or death.



Please note:

Bucket, boom and auxiliary hydraulic controls, do not touch these controls. Before leaving the driver's seat, lower the work unit to the ground and turn off the engine. Also turn off the headlights, key switch and main power switch.

Avoiding fire and explosion hazards



Keep fuel, lubricants, grease and antifreeze away to avoid flames. Fuel is particularly flammable and dangerous.

Keep away from lit cigarettes, matches, lighters, and other sources of flame or ignition while handling these combustibles, and avoid static electricity.

Do not smoke or expose to open flame when handling fuel or working on the fuel system, and protect against static electricity.

Do not leave the job site while refilling fuel or lubricating oil.

Do not remove the gas cap or refuel while the engine is running or has not cooled down. Also, do not splash fuel onto hot surfaces of the machine or electronic system components.

Clean up any spilled fuel or lubricant immediately.

Check for fuel and lubricant leaks. Please eliminate leaks and clean the machine before operation.

Remove flammable materials to a safe place during polishing or welding operations.

Do not cut or weld on pipes or tubes that contain flammable liquids inside. Clean thoroughly with a non-flammable solvent before cutting or welding.

Remove all trash or debris from the machine. Ensure that no oily rags or other flammable materials are left on the machine.

Dispose of various solvents or dry chemicals (foam-type fire extinguishers) according to the procedures on the manufacturer's container. Do this in a well-ventilated area.

Never use fuel for cleaning purposes. Always use non-flammable solvents.

Keep all flammable liquids and materials in a safe and well-ventilated place.

A short circuit in the electronic system may cause a fire. Check for loose or damaged wire connections daily. Retighten loose connectors and cable clamps. Repair or replace damaged wiring.

Pipe-caused fires:

Ensure that hose and tube snaps, protectors and cushions are securely fastened. If loose, the hose or tube can be damaged by vibration or contact with other parts during operation. This could cause high-pressure oil to spray out, resulting in fire or injury.

Engine exhaust is toxic.

Do not operate the engine in an enclosed area with poor ventilation.

If natural ventilation is not possible, install ventilation fans, fans, extended exhaust pipes or other ventilation devices.

Handling of asbestos dust.

Inhalation of asbestos dust may cause lung cancer. When handling materials that may contain asbestos, take the following safety measures:

Never use compressed air for sweeping.

Avoid polishing or sanding parts that contain asbestos.

When cleaning, use a vacuum setting with a high-efficiency particulate air filter.

Wear a prescribed respirator if there is no other way to control dust. When working indoors, install a ventilation system with a polymer filter.

Do not allow unauthorized personnel to enter the work area during operation.

Please strictly adhere to the rules and environmental standards applicable to the area of operation.

Be careful not to squeeze:

Do not place hands, feet or other body parts between the upper and lower frames or between the tracks.,between the body and the work unit or between the cylinders and moving parts. When the machine is moved, the size of these

voids can change, which could cause serious injury or death.

Use of optional products.

Consult for review before installing options.

Depending on the type of attachment or their combination, the attachment may come into contact with the cab or other parts of the machine. Before use, make sure that the installed option does not come into contact with other parts.

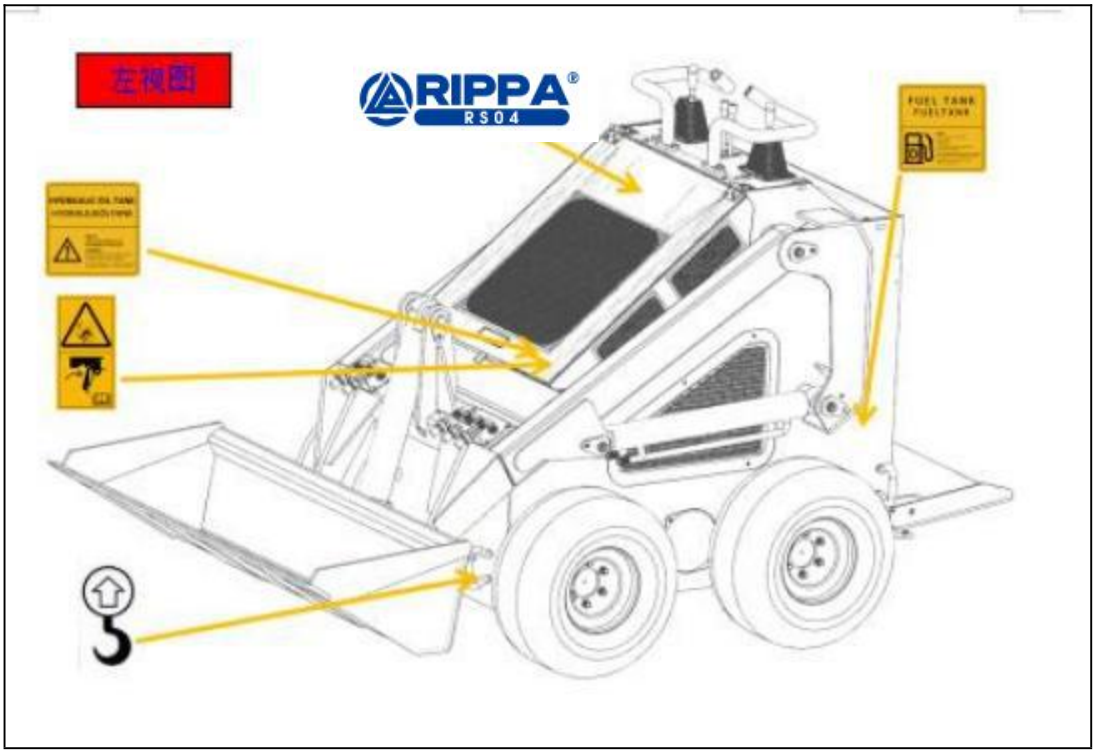
Do not use attachments that have not been reviewed and approved. Doing so may jeopardize safety or adversely affect the operation or service life of the machine.

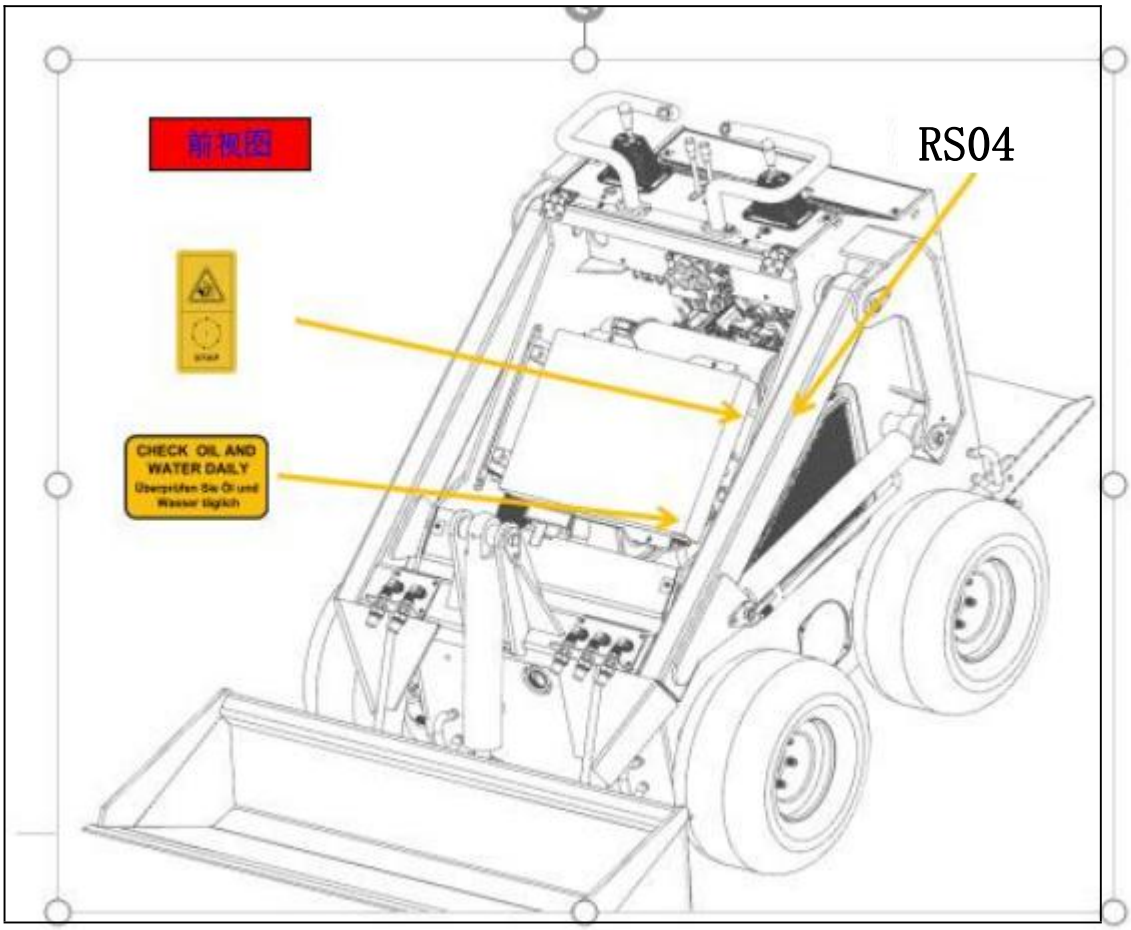
The company is not responsible for any injuries, accidents or damage to the product caused by the use of unauthorized accessories.

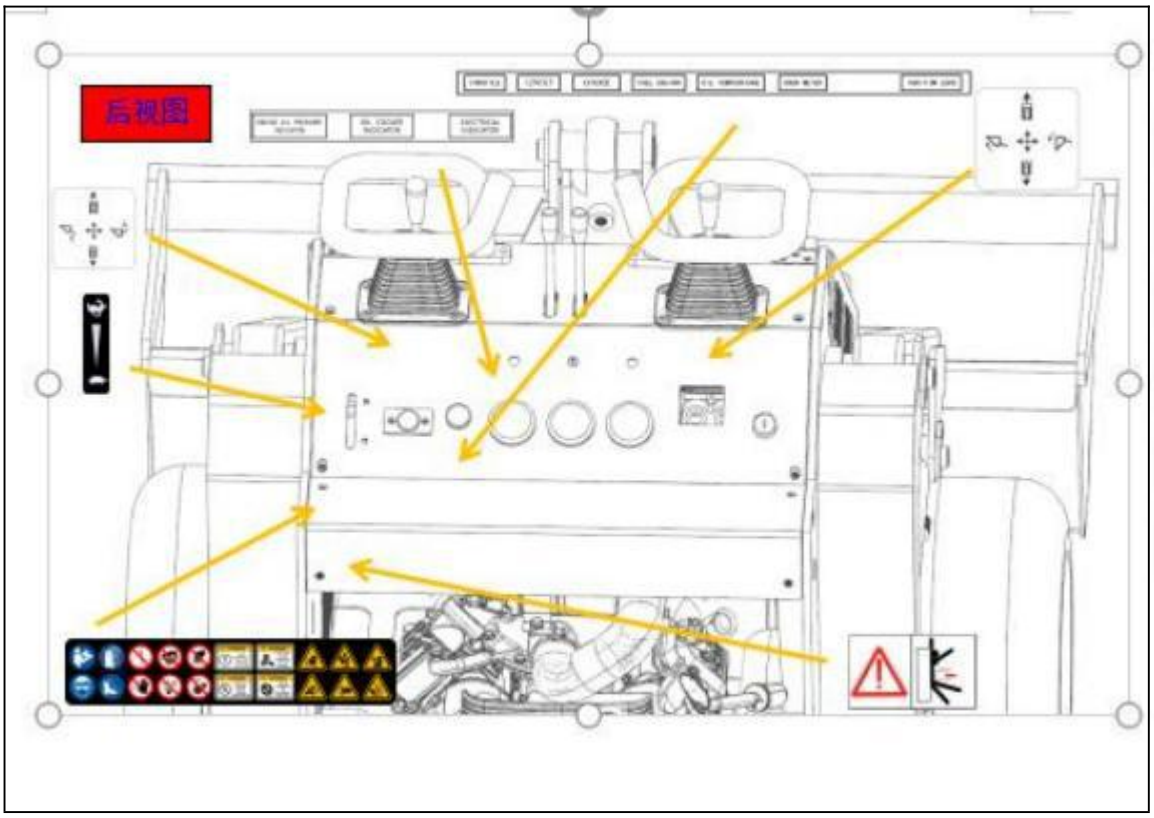
Do not modify the machine:

Unauthorized modifications to the machine can cause injury or death. Do not make unauthorized modifications to any part of the machine.

Labeling location map:




前视图
RS04
CHECK OIL AND
WATER DAILY


后视图

（1）Safety Warning Signs

1.Correctly labeled (Blue)

Read this manual carefully, you must wear protective gloves, you must wear protective footwear, and you must wear protective eyewear.

2.Prohibited signs (red)

No smoking, no disassembly, no turning, no operation, no stepping on.

Unauthorized entry is prohibited.

3.Warning Sign (White)

Pull the handbrake in case of emergency, warning precautions Beware of mechanical injuries, keep off in thunderstorms, please maintain the equipment.

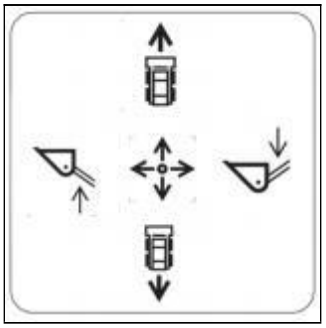
4.Warning Signs (yellow)

Watch out for crushing. Squeeze. Watch out for squished hands. Watch out for smashed feet.

Pay attention to the gears to squeeze your hand, pay attention to the up and down force to squeeze your hand, pay attention to be careful of the fan blade to hit your hand.

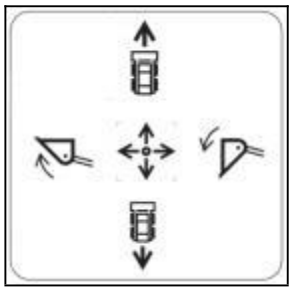
Note: Pay attention to safety matters and warning signs.

(2). Left operating handle labeling diagram



Attention.：Operate the machine according to the labeled illustrations

(3) Labeled diagram of the right operating handle.



CAUTION: Operate the machine in strict accordance with the labeled illustrations.

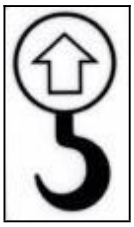
(4). Warning against working on the tail to avoid receiving a squeeze.

Note: It is prohibited to walkin the working range area of the machine to avoid receiving injuries in the blind zone.

(5). Throttle handle operation labeling diagram

CAUTION: Operate the machine in strict accordance with the labeled illustrations.

(6) Lifting position labeling diagram.



Note: Lifting is possible where the labeled locations are affixed.

(7) Check oil and water daily

NOTE: Ensure that the vehicle is in proper working order when checking its condition on a daily basis.

(8) Do not touch the fan blades.

Note: It is prohibited to touch the fan blade when the vehicle is in working condition to avoid injury or death.

(9) Company model stickers

NOTE: Company model labeling, tearing is prohibited.

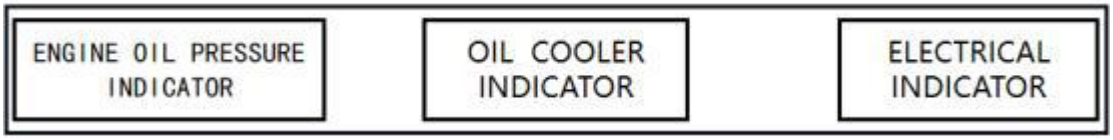
(10) Company Logo Label

Note: Company labeling, labeling prohibited to tear.

(11) Read this manual carefully, no standing under the movable arm, and fix the locking device.

NOTE: Read this manual carefully. Operate the machine in strict accordance with the manual operating instructions.

(12) English labeling diagram for control instruments



Note: Pay attention to the meter's display of temperature and oil level

(13) English diagram of control panel operation buttons

Note: Tearing of the label is prohibited

(14) Fuel tank fill position

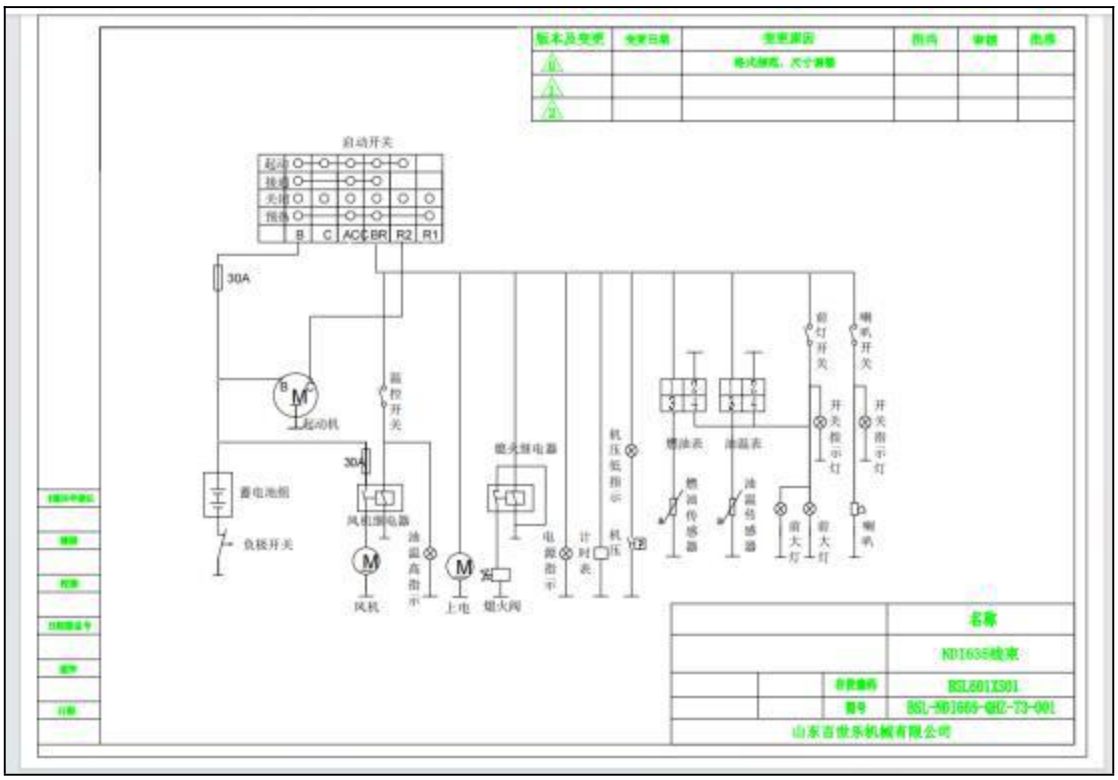
NOTE: Fill fuel capacity strictly according to regulations.

(15) Hydraulic oil tank

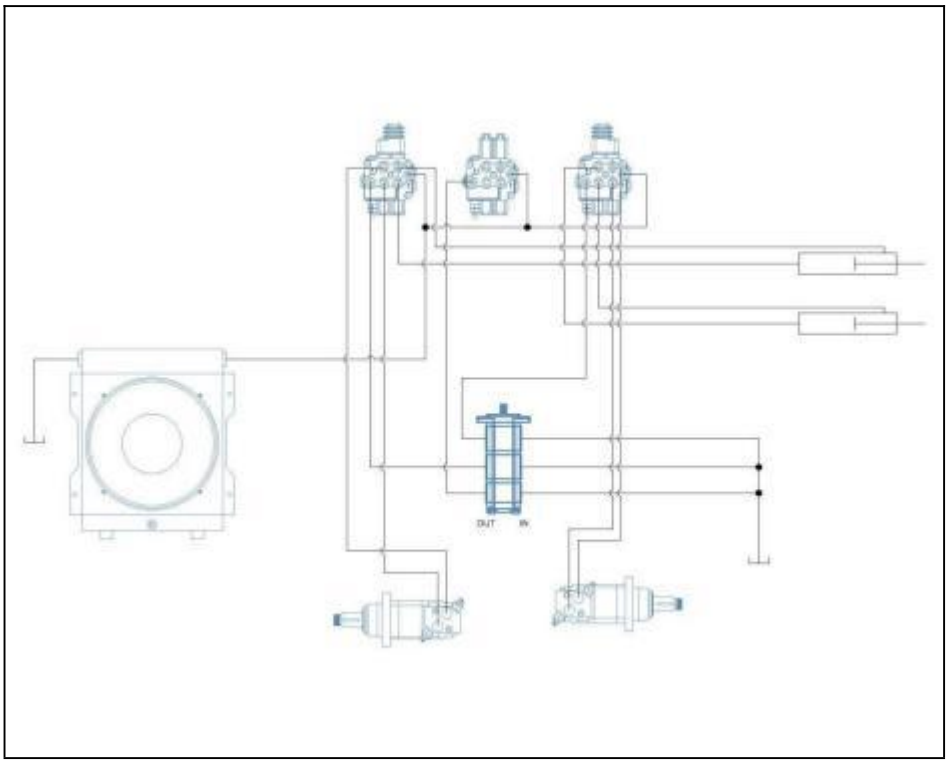
NOTE: Fill the hydraulic oil strictly according to the regulations.

(15)nameplate hole

Wiring Harness Schematic



electrical schematic



V. Pre-operational inspections

Before operation, you should fully understand the condition of the vehicle and the operation area to ensure safety.

5.1 Fuel oil level check

Fuel oil level check

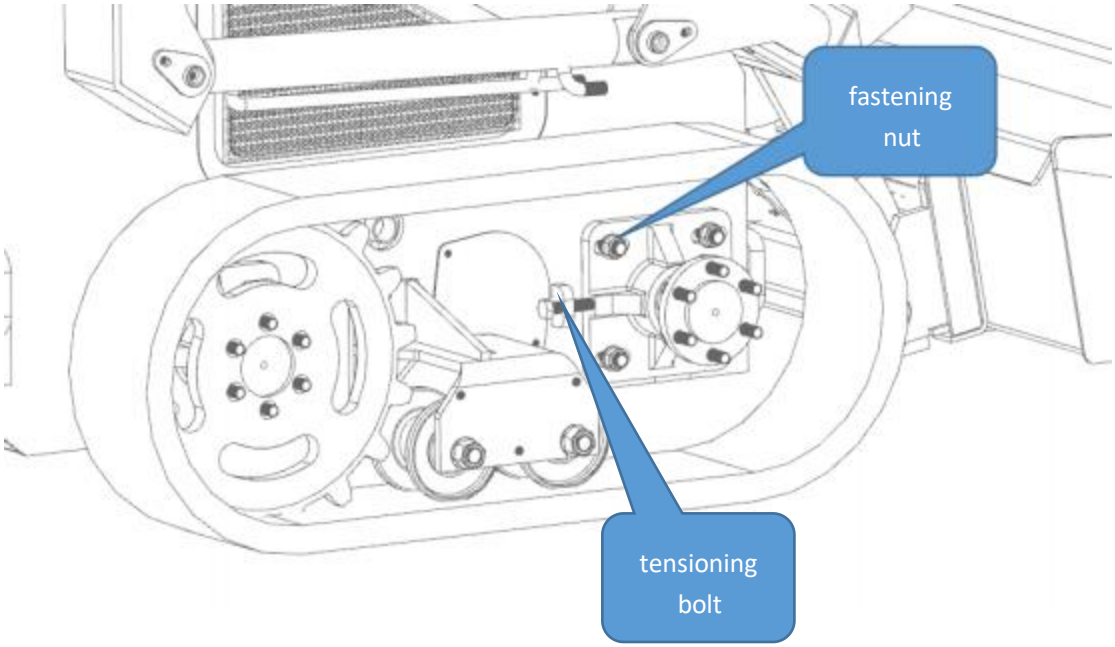
Before operation should check the fuel capacity of the vehicle, fuel should be replenished in a timely manner when fuel is insufficient, to avoid because of fuel

depletion pipeline into the air, refueling again after the machine may not be able to start the fire.

The treatment of failure to start a fire is detailed insection~.

5.2 Track and chain tensioning inspection

Before operation, check the tightening of the track and chain, if the track or chain is loose, it needs to be tightened, otherwise the track and chain will have the phenomenon of jumping teeth and can't walk. The tracks are too loose and can easily fall off when turning, turning around, or walking one way, and it is difficult to install the tracks once they fall off.



When tightening, tighten the tightening bolts first, then tighten the fastening bolts (the picture shows the track type tightening method,thewheeltypetightening method is the same)

5.3 Hydraulic fluid level check

Check the hydraulic oil level before operation, hydraulic oil level is too low when the body tilts the hydraulic oil in the tank to one side, which will lead to the oil pump can not suck oil and the whole car does nothaveanyaction(the action should be immediately turn off the engine, the oil pump pump can not pump the oil to continue to work will lead to serious wear and tear or even damage to the hydraulic pump)need to supplement the hydraulic oil or the body to cushion the body flat, such as no hydraulic oil or can not cushion the body, for some of the mechanical operating systems If there is no hydraulic oil or the body can not be padded, for some models of mechanical operating system, you can try to operate the working device of the machine to adjust the body to a flat state, or drive the car to a flat road surface, and then replenish the hydraulic oil. to ensure sufficient hydraulic fluid in the hydraulic tank.

Oil check:

The skid steer loader used hydraulic oil for46 #anti-wear hydraulic oil, due to the use of different regions with different climatic differences is

relatively large, the temperature is too low or too high will affect the viscosity of the hydraulic oil, resulting in insufficient system pressure or noise, and even

accelerate the oil pump wear. In special climatic areas (too cold or too hot), hydraulic fluids suitable for the local temperature should be selected according to the local climatic conditions.

5.4 Oil level check

Before operation, the engine oil should be checked to see if the oil is sufficient (due to the machine work there are climbing, downhill, tilting, and other situations, so the oil should be close to the upper limit of the oil dipstick position, to prevent the pump pump can not pump oil), insufficient to be timely eplenishment, (the oil will be slow with the engine, so it is necessary to egularly check the amount of oil), otherwise it will lead to engine wear or cylinder pulling due to the lack of oil caused by the engine anufacturers do not warranty. Otherwise, it will lead to cessive

engine wear or cylinder pulling, and the engine manufacturer will not warranty the cylinder pulling or other problems caused by the lack of oil.

5.5 Lubrication point inspection

Each lubrication point of the skid steer loader should be checked before operation, and the lubrication points should be greased once every 8 hours of work (see Chapter 10-10.2 for the number of greasing points and greasing locations). The amount of refueling should be sufficient, and the frequency of refueling should be increased when working conditions are severe.

5.6 Tightness check of fixing bolts of important parts

Important components include the travel motor, driveshaft assembly and engine. The fixing bolts of these parts shouldbe checkedforloosenessbeforeoperation,and if there are any loose bolts, they must be tightened

immediately. Check with the manufacturer if necessary. Failure to check or tighten loose bolts can cause serious problems such as the chain coming off or unscrewing and sprocket teeth coming off the engine.

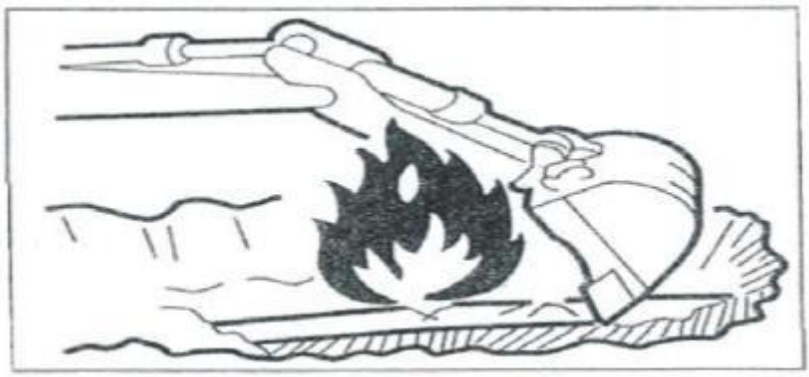
5.7 Oil Spill Check

Before operation, you should observe a circle around the vehicle and look at the chassis to check if there is any oil leakage from the skid steer loader, if there is any, it should be tightened or repaired in time.

5.8 Operational area inspections

Check the topography and ground conditions of the work area, and in the case of indoor work, the building structure, and take safety measures where necessary.

Be sure to avoid hazards and obstacles such as gullies, underground pipelines, trees, cliffs, overhead power lines, or areas where there is a danger of falling rocks or landslides.



Work with the superintendent to check the location of buried gas lines, water mains, and power cables. If necessary, consult with the administrator and identify specific security measures that must be employed to

ensure safety.

Always consider the safety of pedestrians and vehicles when working on the road, and use signalmenand/or signals. Isolate the operating area from unauthorized personnel.

When working in water or driving across shallow streams, the depth of the water, the solidity of the ground and the speed of the current should be checked beforehand.

VI. Precautions to betaken during operations

Before and after engine start

Before starting the engine, turn on the power switch, add oil in the right amount, twist the start switch, press the decompression switch when the engine speed reaches, release the start key immediately after the engine fires, and make sure the key pops back up at the same time.

※ It is strictly prohibited to turn the key again after the engine has been started. This operation may damage the starter motor and engine flywheel gears, or even destroy the starter housing and burn the starter coil. In addition, over-twisting the starter key will cause the key not to rebound, and the starter gear will not be able to separate from the engine after the engine is started, and in the case of high-speed engine drive, the current in the starter will rise rapidly, leading to coil burnout.

Start the key itself with a dust bubble, can effectively avoid dust water and other substances into the key inside, once water and other impurities into the key inside, will lead to the lock cylinder stuck not back or internal short circuit, damage to the starter, so in the rainy days or more humid, dusty environment to avoid a long time to pull out the key to park, such as the need to park must be done to protect the key port measures.

Special Note: If the gasoline engine still cannot start after the starter motor has been running for 10 seconds, please wait

15 seconds and start it again (long time continuous running of the starter motor will lead to a large amount of consumption of battery power, and may also burn out the starter).

The manufacturer's warranty does not cover starter damage caused by the above.

Winter start method: the model with start preheating function, the weather is too cold start must be reversed to twist the key switch, save 8~10 seconds (not long time preheating, otherwise it will lead to battery power loss), and then start the engine normally.

After starting the machine, make sure that the main power switch and the key 1st gear are turned on, otherwise the battery cannot be charged.

After starting the engine, perform the following operations and checks in an area free of people or obstacles. If any faults are found, shut down the machine as programmed and report the fault.

Warm up the engine and hydraulic fluid for 5 to 10 minutes.

Check that the gauges and alarm devices are working properly.

Check for noise.

Perform a test of the engine speed control.

Do not use ether or starting fluid on the engine. Starter fluid can cause explosions and serious injury or death.

Preheat the engine and hydraulic oil. If the lever is operated without warming up, the machine will not respond or move quickly or appropriately, causing an accident.

Before starting the engine each day, check the following items in this program

1. Check the working device, cylinder, connecting rod and hose for damage, wear or play.

Check that there are no cracks, excessive wear, or play in the work unit, cylinders, connecting rods, or hoses. If an abnormality is found, repair it.

2. Remove spoils and debris from around the engine, battery and radiator.

Check to see if any spoils have collected around the engine or radiator. Also check to see if any flammable materials (dead leaves, fine twigs, grass, etc.) have accumulated on the battery or on hot parts, such as around the engine muffler. To remove all stolen and flammable materials.

3, check the hydraulic device, hydraulic oil tank, hoses, fittings for oil leakage.

Inspection should be free of oil leaks. If an abnormality is found, repair the oil leak.

4. Check the lower body (tracks, sprockets, guide wheels, support wheel guards and wheels) for damage, wear, loose bolts or oil leakage from the wheels.

If a problem is found, repair it.

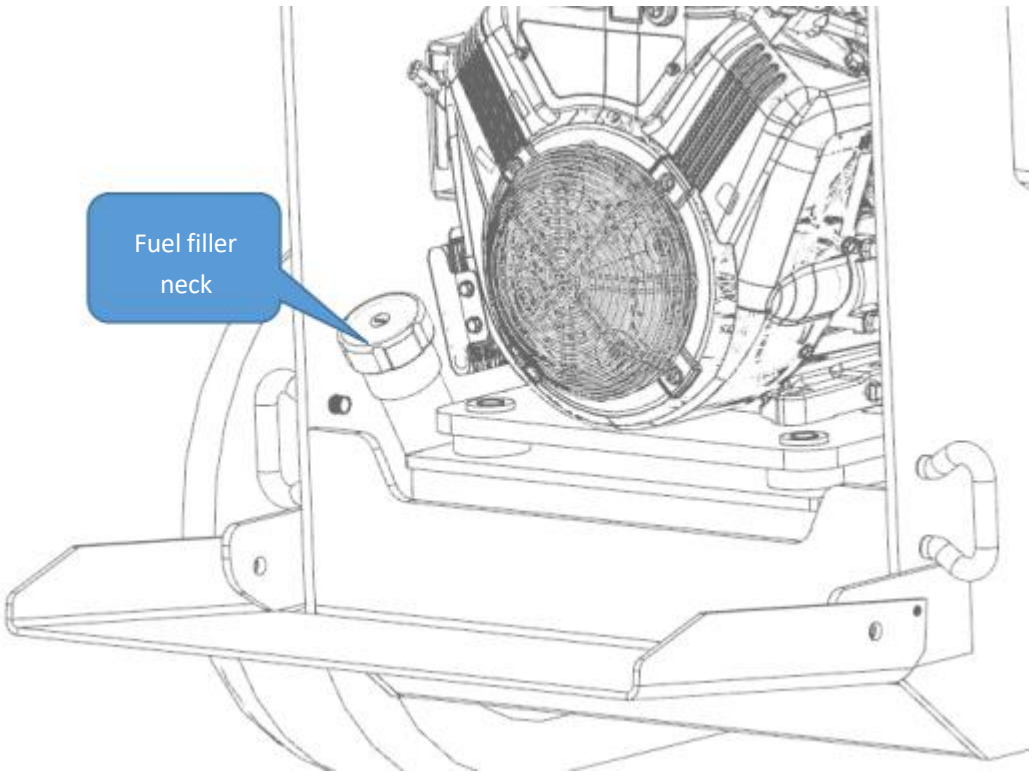
5. Check whether the handrails and footrests are damaged and whether the bolts are loose.

If problems are found, repair him and tighten loose bolts. 6. Check the meter for damage. If abnormalities are found, replace parts. To remove surface spoils.

7. Check the bucket for damage. Check whether the hook is damaged, if found damaged, please contact the

after-sales personnel for repair.

Check the oil level in the engine oil pan, refueling When the engine is turned off, the parts and oil are still at a high temperature that can cause severe burns. Wait for the oil temperature to drop before starting When checking the oil level after the engine has been running, turn off the engine and wait at least 15 minutes before checking. If the machine is slanted, level the machine before checking. Check fuel level, add fuel When adding fuel, do not allow fuel to spill or it will cause a fire. If fuel is spilled, wipe it up thoroughly. Since fuel oil is very flammable and dangerous, fireworks are strictly prohibited in the vicinity of fuel oil.



1、 Open the filler cap on the fuel tank.

2、 Check that the fuel tank is full when you open the filler cap, by looking into the tank and through the fuel level gauge.

3、 If the tank is not full, add oil through the filler neck until the oil level gauge needle rises to the highest position.

lFuel tank capacity: 20 liters

lFloat scale rises to maximum when tank is full

4、 After refueling, close the gas cap

Drain water and sediment from fuel tanks

1、 Raise the car to make it easier to remove the oil drain plug.

2、Use an allen wrench to unscrew the oil drain plug at the bottom of the tank to drain the sediment that has collected at the bottom of the tank along with the water.

3、 When clean fuel flows, screw on the drain plug and lower the car

Check electrical wiring

lIf the fuse blows frequently or there are signs of a short circuit in the circuit, find out the cause and repair it immediately or contact the after-sales
service for repair.

lKeep the upper surface of the battery clean, check the vent holes on the battery cover, if the vent holes are clogged with dirt or dust, flush the battery cover and clean the vent holes out.

Check for damaged fuses; use of fuses of specified capacity; signs of breaks or shorts in electrical wiring and damage to cladding. Also check for loose terminals. If there's screwing them up.

Also when checking the battery, engine starter motor and AC power generation, special attention should be paid to the electrical wiring.

Be sure to check for any flammable buildup around the battery. If flammable materials have accumulated, remove them as soon as possible.

lit. scatter heat device

The radiator fan does not work when it is first started, and after a period of time after starting the car, when the temperature of the hydraulic oil rises to 60℃~70℃, the fan starts to be energized and works, and will
automatically cut off when the temperature falls down to save electricity.

Check the function of the horn

1、 Turn the starter switch to the right.
2、 Confirm that the horn sounds immediately when the horn button is pressed.
If it doesn't ring check the connectors, or contact an after-sales person.

Inspection after switching off the transmitter

Check hydraulic oil cooling temperature, oil pressure and fuel level on the machine monitor.

Machine inspection after daily work

1、 Walk through the machine and check the working devices, the exterior of the machine and the lower traveling body, and also check for oil leaks. If any problems are found, they are to be repaired.

2、 Fill the fuel tank with fuel.

3、 Check the engine compartment for paper and debris. To avoid a fire hazard, remove any paper and debris.

4、 Remove soil attached to the lower traveling body.

lock up

To lock up these places.

1、 fuel cap

2、 hood

haulage

When transporting the machine observe all relevant laws and regulations and take care to ensure safety.

Lifting machines

△! warnings

lThe operator performing lifting operations with a crane must be a qualified crane operator.

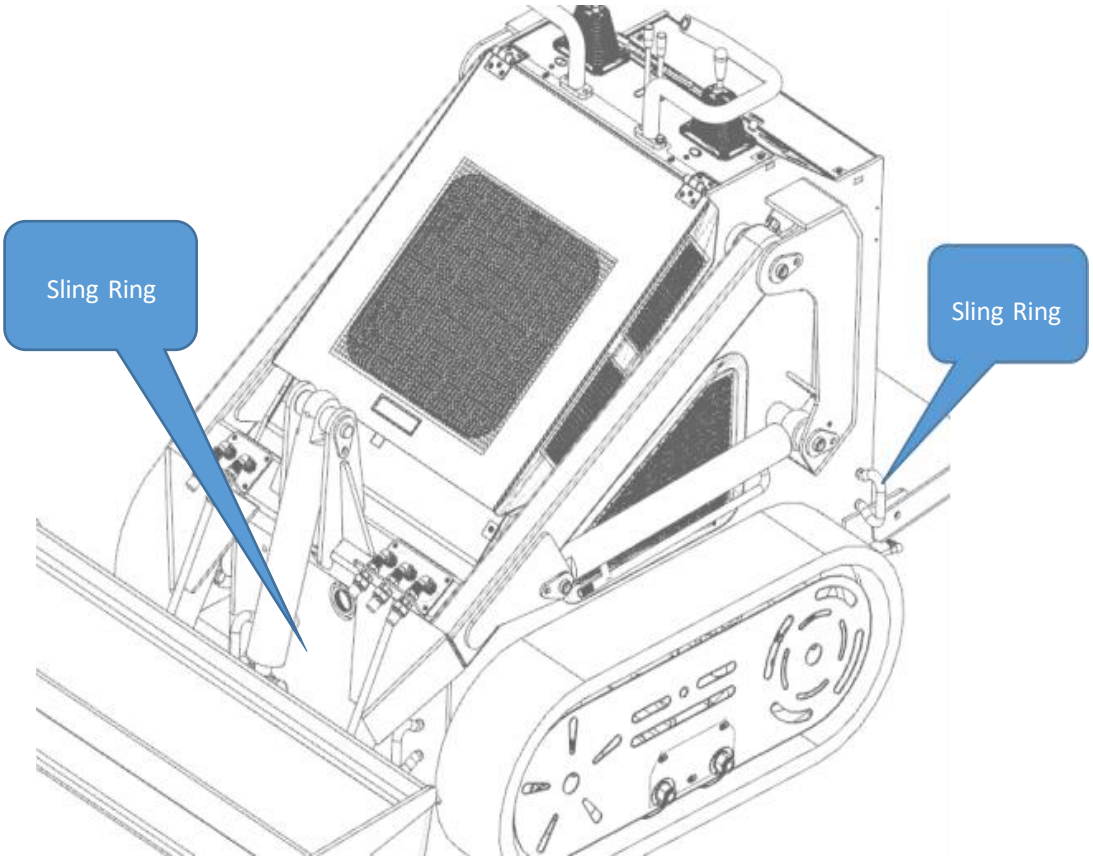
lDo not lift the machine when it is occupied.

lBe sure that the wire rope has sufficient strength to withstand the weight of the machine.

lWhen lifting, keep the machine level.

lDo not enter the area under or around the raised machine.

lThere are special lifting rings on the machine when lifting, which can be hooked to lift (there are four on each machine to ensure the stability of lifting)



Upon completion of daily assignments

△warnings

Track idling is dangerous, so stay away from the tracks. To prevent mud and water from freezing on the lower body and preventing the machine from being moved the following morning, observe the following precautions.

lRemove mud and water from the machine itself. In particular, the piston rod of the hydraulic cylinder should be wiped clean to prevent damage to the seal caused by dirt, spoils or water droplets on the piston rod entering the inside of the seal.

lAlways park the machine on a hard, dry surface. If possible, park the machine on a board. The boards keep the tracks or wheels from freezing to the ground, allowing the machine to be moved the next morning.

lOpen the drain plug to drain water that has collected in the fuel system to prevent freezing.

Fill up the fuel tank. This minimizes moisture condensation in the tank as the temperature drops.

Precautions for Driving Operation Essentials

一、set in motion

二、move

1、Raise the boom and turn the bucket upward so that the lower hinge point of the boom is 40 to 50 centimeters above the ground.

2. Observe the surroundings of the machine and sound the horn.

3. Graduallypush the forward handle tomakethe loaderstart smoothly

Loader Operating Essentials

When starting, listen to the sound of the engine, if the speed drops, the throttlehandleshould continue topush upward, increase the throttle, in order to increase the engine speed, inorder to facilitate thestart.

一、increase the specified cruising speed

二、(i) Steps

(1)Gradually increasethegaspedalto increasethespeed to a certain level.

2. Deceleration

(1) Decreasethe throttle and reduce the traveling speed. Loader forward and reverse interchanges should be

performed with the loader stopped.

(ii) Operational requirements

To accelerate, pushthe gas pedalhandleand then move quickly. Inaddition to slowing down the engine beforedeceleration, you can also usethe operating handleto slow down theengine. Plus, deceleratewhen both eyes should look ahead, maintain a correct driving posture, not to look down atthe operating handle; at the same time to grasp the steering wheel, not because ofswitching throttle, and make the loader run off, in order to prevent accidents.

III. Steering

(i) Steps

1. Holdthe direction operating handlewith one handandpush the steering handlewith the other.

2. Holdthe handrail withboth hands, andcorrect the driving directionbymanipulating thehandle according to the driving needs.

(ii) Operational requirements

1. Before steering, reduce the driving speed according to the road condition, reduce the throttle handleif necessary, and reduce the driving speed.

2, in a straight line driving to correct the direction of travel, to play a little back in time to play back in

time, do not hit hard back, resulting in the loader "dragon" driving. When making a turn, turnthe operating handleaccording to the curvature of the road,so that the front wheels(tracks)will travel according to the curve. Whenthe front wheel(track)approaches the new direction, start tooperate the handle to return to the right, the speed of the wheel should be suitable for the needs of the curve.

IV. Braking

Braking methods can be categorized into anticipatory braking and emergency braking. The operator should use the correct choice to ensure the safety of driving.

(i) Predictive braking

Loader traveling, the operator has found the terrain, pedestrians, vehicles and other changes in traffic conditions, or anticipate the possibility of complexity, purposeful deceleration or stopping measures, known as anticipatory braking. Anticipatory braking not only ensures safe driving, but also preventsdamage tothe tires(tracks) of themachine. Therefore, this is one of the best braking methods and should be utilized on a regular basis.

There are two methods of anticipatory braking operation. 1, deceleration brake; it is in the operating handle is in the working position, mainly used to reduce the engine speed to limit the driving speed of the loader, generally used in the parking before, before the change of low speed, downhill and through the uneven parts of the use. The way to do this is to stop slowly when the situation is

detected. :: Slow down the loader by utilizing the

operating handle to slow down the travel speed and,

depending on the situation, slow the loader down further. 2、

Parking brake: used when parking. The method is:

reduce the throttle, when the loader traveling speed

reduced to a certain extent, so that the loader smooth parking.

(ii) Emergency braking

When the loader encounters an emergency while traveling, the operator quickly uses the stopping handle to stop the loader within the shortest distance to avoid an accident, which is called emergency braking. Emergency braking on the loader' s components, tires(tracks) will cause greater damage, and often due to inconsistent braking torque of the left and right wheels, or left and right wheels and

the road surface adhesion differences, will cause the loader to "run off", "sideslip", loss of directional control. Therefore, the emergency brake should only be used as a last resort. The method of operation is; hold the operating handle, give full play to the handle of the

maximum braking force, so that the loader immediately stop.

Loaders use emergency braking, the wheel to hold dead, this time there is often a rear wheel side slip, causing the loader violent vibration, when serious, can make the loader warped head, especially in the poor adhesion on the road (such as snow, ice, muddy roads, etc.), more common and obvious. To prevent and mitigate rear wheel skidding, loader training indicates that the following measures can be used.

1. Adopt the operation method of "interval braking", so that the wheels are not locked or less locked as far as possible. The specific method of operation is:

quickly stop the operating handle, and strive to hold the wheels in a short period of time braking; start to hold the moment of death, in order to prevent the wheels from holding or side slip; and then slowly back, and then weaken

the force acting on the pedal. This repeated operation, the loader can get a better braking effect, and can reduce side slip.

2, when found side slip, should immediately stop braking; and operating handle toward the wheel side slip direction. Once the loader is positioned correctly, turn the machine smoothly to the normal driving position.

V. Parking

1. Slowly slow down the operating handle to decelerate the loader.

2、 Push the operation handle according to the stopping distance to make the loader stop at the designated place. 3. Lower the arm so that the bucket is placed on the ground.

VI. Reversing

Reversing should be carried out after the loader has come to a complete stop, and the starting, steering and braking methods of reversing are the same as those of forwarding.

(i) Driving position

To observe the situation behind the machine in a timely manner when reversing, the following positions can be used.

1. Looking backward: Holdtheupper edgeof the handlewith your left handtocontrol the direction, turn your upper body to the right, tilt your lower body slightly, turn your head to the back, and look at the rear target with both eyes.

(ii) Targeting

Forbacking up, choose a site anda wide area of abuilding near the parking location, look atthe rear of the car, and back up.

(iii) Operational points

When reversing, you should first observe the surrounding terrain, vehicles, pedestrians, if necessary, get out of the car to check, and sound the horn to warn pedestrians; then, usethemethod of backward starting to reverse. When reversing, do not go too fast, to stabilizethe handle, not fast or slow, to prevent stalling or reversing too hard to cause accidents.

To turn the rear of the car to the left when reversing, turntherighthandleto the left; conversely, turn it to the right. The bay is anxious to turn more, fast, the bay is slow to turn less, slow. The operation principle of "slow driving, fast steering" should be

mastered. Because when reversing a turn, the outside front wheel track radius of travel is larger than the rear wheels, therefore, under the premise of taking care of the direction of the loader training reminds to pay special attention to the front wheels and the working device whether to touch and scrape other objects or obstacles.

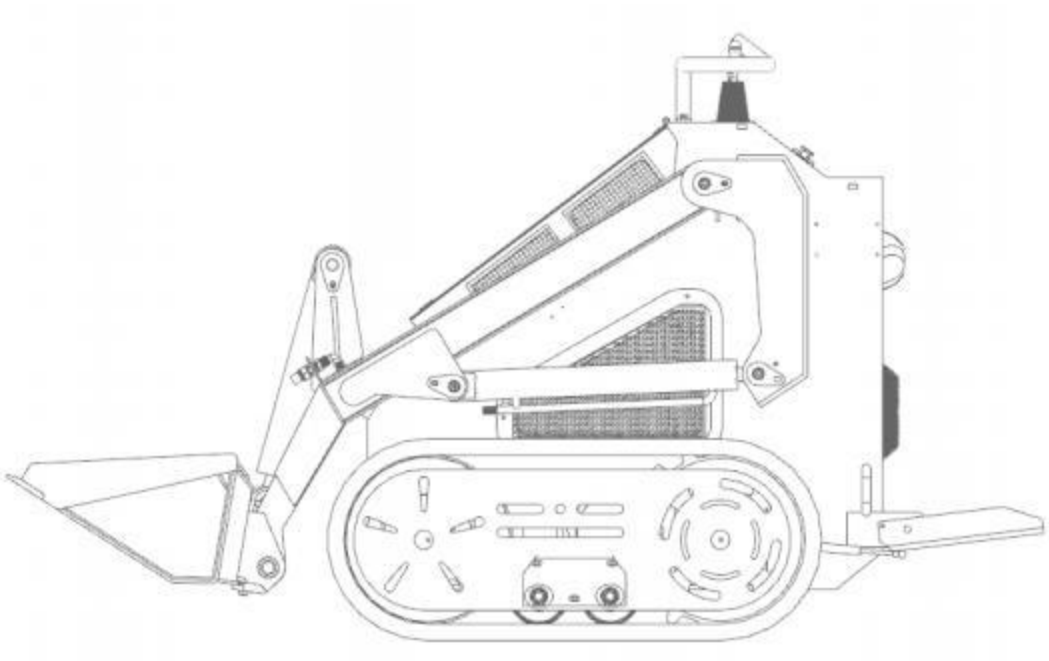
l

long term storage

pre-storage

classifier for sums of money

When storing the machine (for a month or more), hold the machine in the position shown in the diagram below to protect the cylinder piston rod. (Prevents rusting of cylinder piston rods)



When placing the machine in storage for a long period of time (more than one month), do the following.

lTo clean and rinse all parts, then put the machine inside. If you have to store the machine outside, choose a flat surface and cover the machine with a cover cloth.

lFill up the fuel tank so you can place moisture buildup.

Lubricate and change the oil before storage.

lApply a layer of grease to the metal surface of the hydraulic cylinder piston rod.

lDisconnect the negative terminal of the battery and cover the battery or remove the battery from the

machine and store it separately.

depository period

△! warnings

When the machine is indoors, if rustproofing operations must be performed, open windows and doors to promote air circulation to prevent gas poisoning.

lDuring storage, the machine should be operated and moved a short distance once a month to attach a fresh film of oil to the surfaces of the moving parts. Also, charge the battery.

after storage

classifier for sums of money

If the machine has been stored without the monthly rust prevention operation, please contact the after-sales personnel before using the machine.

When using a machine that has been stored for a long period of time, follow these steps before using it:

lWipe some grease applied to the surface of the cylinder piston rod.

lFill all parts with oil and grease.

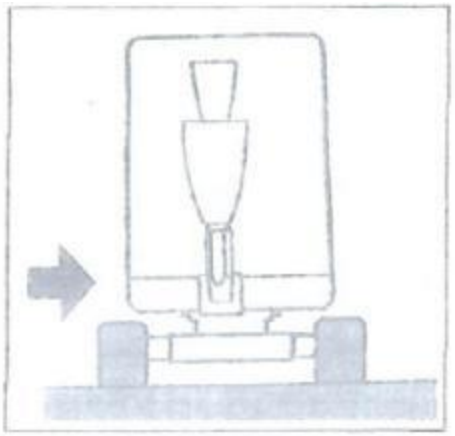
lWhen the machine is stored for a long period of time, moisture from the atmosphere can get into the oil.

Before starting the engine or after starting the engine, check the oil in all parts and change all the oil if there is water in it.

Starting the engine after long term storage

When storing a started engine for an extended period of time, perform a warm-up preheat operation.

Ensure good visibility



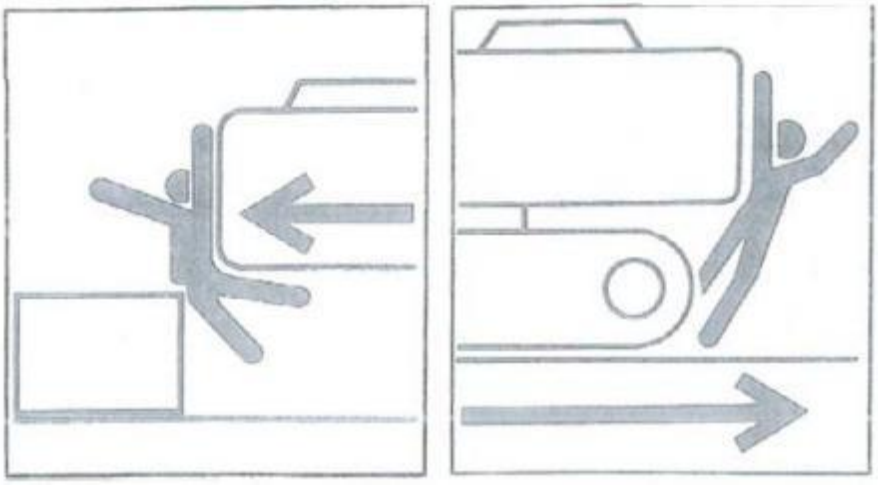
When working in dark areas, turn on the machine's work lights and headlights and install additional lighting if necessary.

When visibility is poor due to inclement weather (fog, snow, rain or haze), stop operating the machine until visibility improves.

Do not carry people on the machine

No person shall be permitted to ride on any part of the machine at any time while the machine is in motion or in operation.

Checkthattheworkareaissafeandsecurebefore operation



Confirm the performance limits of the machine.

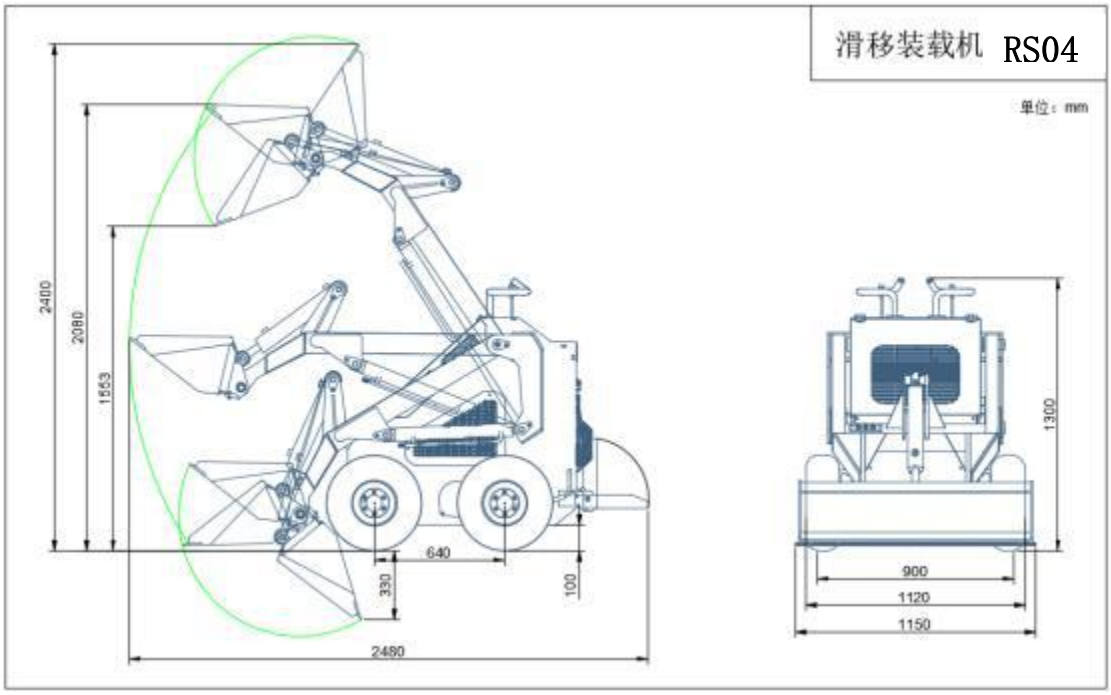
Signalmen are used on road shoulders, in narrow places or where vision is obstructed.

Never allow anyone to enter the machine's swing radius and path.

Indicate your intention to move by sounding the horn.

There is a viewpoint blind spot at the rear of the machine. Before walking backwards, check the safety of your rear and make sure no one is behind you.

VII. Technical specifications



Model parameter of NDI635		
Body data	Wheel model vehicle quality (kg)	800
	Track type vehicle quality (kg)	906
	Overall dimensions (mm) (L*W*H)	2230*1150*1300
	Length with bucket (footrest retracted)	1970
	Length without bucket (footrest retracted)	1520
	Bucket width (mm)	1150
	wheelbase (mm)	640
	Wheel track (mm)	900
	Ground clearance (mm)	100
	Climbing capacity (%)	25
	Maximum loading height (mm)	2080
	Maximum unloading height (mm)	1950
	Maximum height (mm)	2400
	Minimum height (mm)	1270
Load part parameter	Bucket capacity (m^3)	0.15
	Bucket loading mass (kg)	300
Hydraulic system	Rated pressure (MPa)	16MPa
	Hydraulic pump displacement (ml/r)	Pike050505
	Hydraulic pump flow rate (L/min)	16+16+16
	Hydraulic pump flow rate (L/s)	0.27
	Travel motor displacement (ml)	BM5-315
	Multiway valve	ItalyM45
Engine	Engine type	Briggs & Stratton double-cylinder 3864
	Rated speed (r/min)	3200
	Rated power (kw)	17
	displacement (CC)	627
	Number of cylinders	double-cylinder
	Cooling method	Air cooling
	Engine oil change volume (L)	1.7
	Fuel type	gasoline
Tyre	Tyre specification	18*8.50-8
Fuel tank	Hydraulic oil tank capacity (L)	25
	Fuel tank capacity (L)	20

VIII. Failures and solutions

Skid Steer Loader Common Failures and Solutions

common breakdown	Reason for failure	prescription
Weakness and slow movement of the machine	Clogged or loose relief valve	Disassemble to clean or tighten relief valve
	pump damage	Replacement of hydraulic pump
	Clogged oil pump inlet pipe	Clean or replace the oil feed tube
	engine trouble	Contact the factory to have the engine serviced
The machine does not move.	pump damage	Replacement of hydraulic pump
	Damaged shaft coupling splines	Replacement of coupling splines
	Hydraulic oil bias due to tilting of the fuselage to one side	Add hydraulic fluid or level the machine
The machine will not rotate	Traveling motor sprocket fell off	Putting the sprocket in place
	Damaged travel motor	Replacement of travel motor
Blue smoke from the engine and no power	Overfilling of oil	Adjust the oil level according to the upper and lower limits of the oil dipstick
	engine trouble	Contact the factory to have the engine serviced
The engine smokes and is weak.	Clogged air filter	Clean or replace the air filter
	engine trouble	Contact the factory to have the engine serviced
white smoke from the engine (idiom); fig. suffering from a lack of motivation	Water in diesel fuel	Drain the oil and refill
Engine Holding	Stuck relief valve	Remove the relief valve and clean it with gasoline, then reinstall it.
	Relief valve adjustment too tight	Trimming relief valves
The engine won't fire.	Insufficient battery voltage	Charging or charging with an external battery fire
	Diesel fueling with dry talent leads to pipe There's air in the	Unplug the diesel hose from the engine to drain the air and install it again or press the
	road.	hand pump to drain the air.

	Not enough gasoline.	Fill with gasoline as appropriate
	engine trouble	Contact the factory to have the engine serviced
	Clogged injector nozzles	Replacement of fuel injectors
	Clogged air filter element	Replacement of air filter element
	Damage to the high pressure oil pump	Replacement of high pressure oil pump
	Fuse broken	Check and replace fuses
	Clogged fuel filter element	Replacement of fuel filter element
	Damage to the high pressure oil pump	Replacement of high pressure oil pump
	Low temperatures cause the oil to thicken	Change to the right grade of oil
Engine Throttle Up and Down	Folded gasoline leads to fuel supply unruly	Check the gasoline fuel line and adjust the direction to ensure a smooth fuel supply
Throttle continues to increase	Engine Throttle Retainer Locked	Release the engine throttle retainer
Can't get the throttle up.	Throttle cable ferrule is loose	Tighten the throttle cable ferrule

common breakdown	Reason for failure	prescription
Headlights don't come on, odometer or display doesn't work	Line plug disconnected	Check the wiring plugs for dislodged or loose
	component damage	Replacement parts
Battery not charging	Generator wire breakage	Check engine wiring and reconnect
	Damaged fuses	Replacement of fuses
	Damaged regulator	Replacing the regulator
	battery damage	Replacement of battery
High engine temperatures	Highland climate impacts	Replacement of high-pressure water tank cover
	engine trouble	Contact the factory to have the engine serviced
Oil pressure alarm	Lack of oil	Add oil
	overheating of the engine	Check coolant
	Damaged sensors	Replacement of sensors
	line fault	Line checking

IX. Maintenance and upkeep

0.1 Maintenance considerations

Engine Maintenance

As the excavator's most important power system-the engine needs to be maintained in accordance with the "engine instruction manual" carried with the vehicle, in strict accordance with the engine instruction manual for the maintenance of the content can effectively improve engine life, reduce the occurrence of failures.

The main maintenance consists of the following components:

1.Engine break-in care.

2.Oil change intervals, and refills. (Oil will be used with the machine, slow consumption, so you need to regularly check the amount of oil, not a refill and wait until the next time to replace the refill, the oil is insufficient need to be supplemented in a timely manner, otherwise it will lead to serious consequences such as pulling the cylinder, due to the lack of oil caused by the engine damage manufacturers do not warranty)

3.Oil Filter, Diesel Filter Replacement Intervals 4.Air Filter Replacement Intervals

5.Engine maintenance is detailed in the attached booklet

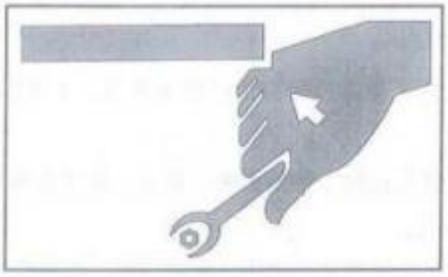
Labeled "Do Not Operate" warning message

Inspection or maintenance of the machine could result in serious injury if an unauthorized person starts the engine or touches the control handle.

Before performing maintenance, turn off the engine, remove the key and keep it with you.

Mark the "Do Not Operate" warning message in a conspicuous place such as the starter switch or lever.

Use the right tools



Do not use damaged or deteriorated tools or tools designed for other uses. Use tools appropriate to the operation in question.

Regular replacement of safety-critical components

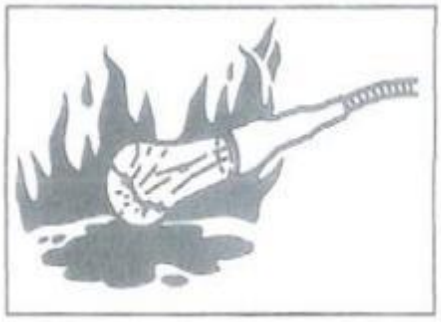
To ensure that the machine can be used safely for a longer period of time, it should be regularly refueled and inspected and maintained. To enhance safety, replace safety- critical parts such as hoses and seat belts
regularly.

"Periodically replaced safety- critical components" means components that age, wear and deteriorate in
function through repeated use and whose performance changes over time. These characteristics of such parts make them capable of causing serious mechanical damage or personal injury, and it is difficult to judge their remaining useful life based on visual inspection or
operating feel alone.

Replace the "Periodic Replacement of Safety Critical Parts" if any damage is found during visual inspection, even if the specified replacement interval has not been reached.
Replace fuel hoses regularly. Fuel hoses can become increasingly worn over time, even if they do not yet show any symptoms of wear.

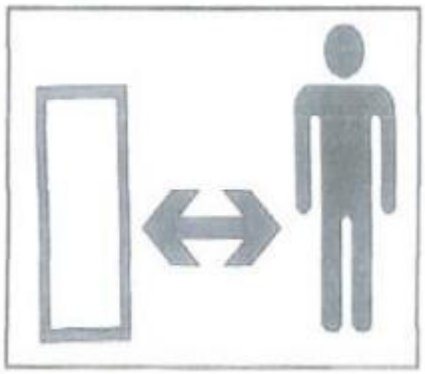
Replace at the first sign of wear, regardless of the replacement schedule.

To use the machine safely, perform regular inspections and maintenance. The following safety-critical components must be replaced periodically to enhance safety. Damage to these parts can cause serious injury or fire.



When checking fuel, lubricating oil, coolant or battery electrolyte, use an explosion-proof lamp to prevent fire or explosion. Otherwise, an explosion may occur, causing serious injury or death.

Access by unauthorized persons is strictly prohibited



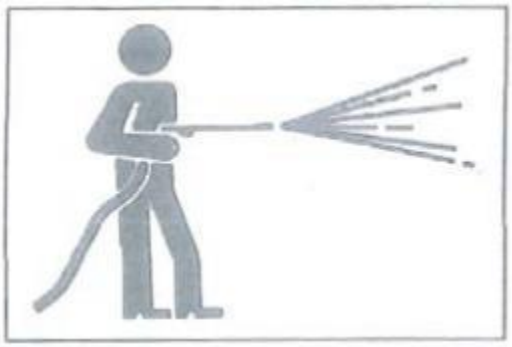
Do not allow unauthorized personnel to enter the work area during operation. Be careful when sanding, welding or using a hammer . You can be injured by flying debris from the machine .

Preparation of the working area

Select a firm and level working area. Ensure proper lighting conditions and ventilation if working indoors.

Remove obstacles and hazardous materials. Exclude slippery areas.

Always keep the machine clean



Before maintenance, the machine should be cleaned

Turn the engine off before cleaning the machine. Cover electrical parts to prevent water ingress. Water ingress into electrical components can cause short circuits or malfunctions.. Do not clean the battery, electronic control components, sensors, connectors or cab with water or steam.

Turn off the engine before maintenance

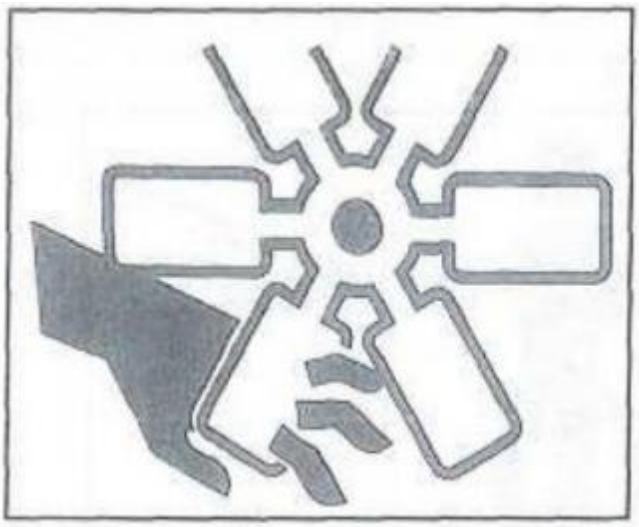
Avoid lubricating or mechanically adjusting the machine when it is running or when the machine is not running but the engine is running. Avoid lubricating or mechanically adjusting the machine when it is running, or when the engine is running even though the machine is not running.

If maintenance must be performed while the engine is running, two people should work as a team and stay in communication with each other.

A person must be seated in the driver's seat so that the engine can be turned off immediately if necessary. This person must take special care not to touch the control levers and pedals, except when required.

The other person performing the maintenance shall ensure that his/her body or clothing is kept away from the moving parts of the machine.

Keep away from moving parts



Keep away from all rotating and moving parts. If a hand or tool gets caught in a rotating or moving part, it could result in serious injury or even death.rotating or moving parts, serious injury or even death can result.

If tools or other objects are thrown or inserted into the fan or fan belt, they will be blown or shredded. Do not drop or insert anything into the fan or fan belt.

Securely fasten the machine or any part that may fall out of place

Before performing maintenance or repairs under the machine, all movable work devices should be lowered to the ground or in the lowest position.

Fixed tracks

If work must be done under lifted machinery or equipment, it must be secured with wooden pads, jacks, or other strong, stable supports. Do not get under a machine or work device without first supporting it securely.Do not get under machines or work devices. This procedure is particularly important when working with hydraulic cylinders.

Stabilized working devices

When repairing or replacing bucket teeth or side teeth, the work unit should be secured to prevent accidental movement of the machine.

Hold it steady when opening the hood or cover.

Be sure to secure the hood or cover before working inside the machine. Keep the hood or cover closed in windy weather or when the machine is parked on a slope .

Place the weight in a stable position

When temporarily placing heavy objects or accessories on the floor during disassembly or installation, be sure to place them in a stable position. Keep unauthorized persons away from areas where such items are stored.

Fueling Precautions

There shall be no smoking or open flames while refueling or in the vicinity of the refueling point.

Do not remove the gas cap or refuel while the engine is running or has not cooled down. Do not spread fuel on hot surfaces of the machine.

Fill the fuel tank in a well-ventilated area.

Do not fill the fuel tank. There should be room for oil expansion.

Spilled fuel should be wiped up immediately.

Securely tighten the fuel tank. If the gas cap is missing, replace it with the original. Use of an unauthorized, poorly vented fuel cap can create internal pressure in the fuel tank.

Keeps dust out

When installing and removing parts, do so in a dust-free area, sweeping the work area and cleaning the parts to prevent dust from entering.

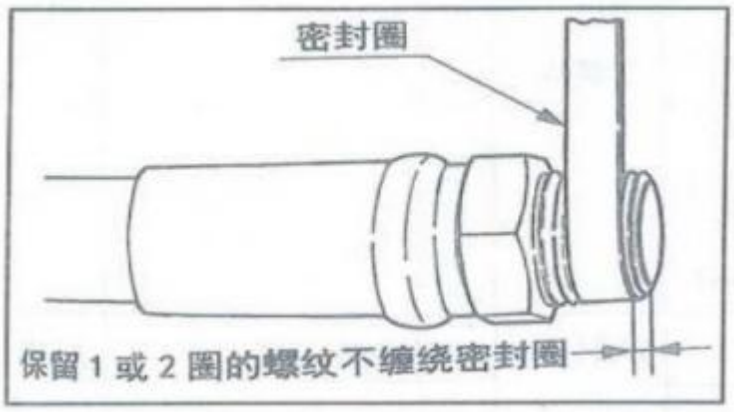
Cleaning the mounting surface

When installing or removing parts, make sure that the contact surfaces of the parts are clean. If the sealing groove on the contact surface is damaged, contact your sales or service agent for repair or replacement.

Seals and Cotter Pins

Be sure to replace all removed seals and cotter pins with new parts.

When installing, be careful not to damage or distort the seal.



When wrapping a screw plug with sealing tape, clean the threads from the old sealing tape and clean the threads. Fuel oil shall not be used for cleaning.

Wrap the threads tightly with a sealing ring, taking care to leave one or two turns at the end of the plug unwound.

Fuel and lubricants use the correct fuel grade for the season .

Please select the appropriate fuel, lubricant and grease according to the temperature. regardless of

whether or not they have reached the designated

If the oil becomes too dirty or rancid, change it.

When refueling, do not mix different brands of oil. If you are changing brands, replace all fuel/ lubricants.

Handling of hoses

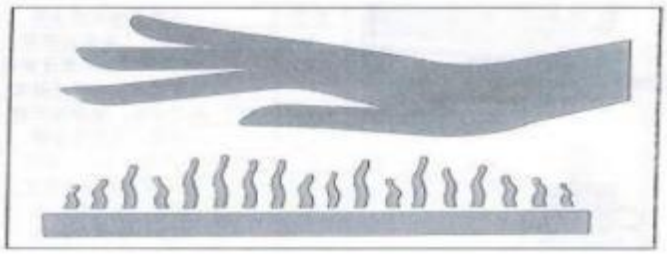
Lubricant or fuel leaks can cause fires. Do not

twist, bend or strike the hose.

Do not use twisted, bent or cracked pipes, metal tubes or hoses as they may burst.

Retighten the loose fitting.

Be careful when handling hot and pressurized parts



Turn off the engine and wait for the machine to cool down before performing maintenance.

The engine, exhaust, radiator, hydraulic hoses,

sliding parts and many other parts of the machine are hot when the engine is first turned off. Touching these parts can cause burns.

Engine coolants, hydraulic fluids and other oils are also exposed to high temperatures and pressures.

Be careful not to touch the hydraulic fluid when loosening the cover or plug. Operating the machine in this condition can result in burns or injuries due to hot oil spray.

Beware of internal oil pressure

The pressure in the hydraulic fluid lines will be maintained for a long time after the engine is turned off.

Internal pressure should be completely relieved before performing maintenance work.

The high pressure of hydraulic fluid can puncture the skin or eyes, causing serious injuries ranging from blindness to death. Keep in mind that hydraulic fluid seeping out of small holes is virtually invisible to the naked eye. When checking for leaks, wear sunglasses and

heavy gloves, and protect your skin with cardboard or plywood to prevent injury from hydraulic fluid spray.

If hydraulic fluid penetrates the skin, it should be removed surgically within a few hours by a physician familiar with such injuries.

Before working on the hydraulic system, it should be relieved of pressure.

Hydraulic fluid may spray out if the cap or filter is removed or piping is disconnected before the hydraulic system is pressurized.

Slowly loosen the bleeder plug to relieve tank pressure.

When removing plugs or screws or disconnecting hoses, stand to one side and slowly loosen them to gradually relieve internal pressure before removing them.

Oil or oil plugs may spray out due to pressure in the travel motor oil tank . Slowly release the oil plug to relieve the internal pressure.

Be careful of flying debris when using the hammer!

When using a hammer, pins or metal shavings may be splashed around. This can cause serious injuries.

Wear protective equipment such as goggles and gloves when striking hard metal parts such as pins, bucket teeth, side teeth or bearings with a hammer.

Make sure no one is around when tapping pins or teeth.

Disconnect the battery cable.

Disconnect the battery cable before working on the electronic system or welding. First disconnect the negative (a) battery cable. When reconnecting, connect the negative (i) battery cable last.

Please be careful when handling the battery

The battery contains sulfuric acid, which can damage eyes or skin if touched inadvertently.

If inadvertent eye contact occurs, flush immediately with water and seek medical attention promptly.

If accidentally swallowed, drink plenty of water or milk and seek immediate medical attention.

If sulfuric acid touches skin or clothing, wash it off immediately with plenty of water.

Goggles and gloves should be worn when handling the battery.

The battery can generate flammable hydrogen gas, which may cause an explosion. Keep away from sources of ignition such as open flames, sparks or lit cigarettes.

Use a flashlight when checking the electrolyte level.

Before checking or disposing of the battery, be sure to turn the starter switch off to turn the engine off.

Be careful not to allow metal tools or any metal objects to touch the electrodes and cause a short circuit.

Electrical sparks are generated when the electrodes are loose. Be sure to tighten it.

Make sure the battery cap is securely fastened.

Do not charge or cross start the engine when the battery is frozen or it may explode. Warm frozen batteries to 15°C before use.

Do not use the battery when the level is below the lower limit. Otherwise, it will accelerate the internal

deterioration of the battery and shorten its life. It can also lead to rupture (explosion).

Do not refill distilled water above the upper limit. Otherwise the electrolyte will leak out. Contact with this liquid can damage skin or corrode machine parts.

Clean the area around the electrolyte level line with a damp cloth and check the level. Do not clean with a dry cloth, as this can lead to static buildup and combustion or explosion.

Using the battery charging cable across the start

When starting the engine using the battery charging cable, be sure to connect the cable following the correct procedure below. Incorrectly connected cables can cause discharge and battery explosion.

Don't let the "problem machine" and the "rescue machine" run into each other.

Do not touch the positive (+) and negative (-) clips of the battery charging cable to each other or to the machine.

To connect, first connect the positive terminal of the battery charging cable to the positive (+) terminal. To

disconnect, first disconnect the negative cable from the negative (-) terminal (ground terminal).

Be sure to securely connect the cable clamps.

Connect the last wire clip of the battery charging cable to as far away from the battery as possible.

Goggles and gloves should always be worn when starting the engine with the battery charging cable.

Use battery charging cables and clips sized for the battery capacity. Do not use damaged or corroded battery charging cables and clips.

Make sure that the battery of the "rescue machine" is of the same capacity as the battery of the "problem machine".

Please appoint our service agent for welding repair

When welding must be performed, it must be done by qualified personnel in a fully equipped workplace. To prevent damage to any part of the machine caused by excessive current or electrical sparks, observe the following.

Disconnect the battery wiring before performing welding.

Do not apply 200V or more continuously.

The grounding point shall be connected within 1 meter of the welded part. Do not connect the ground terminal near the electrical controls/ meter or connector.

Ensure that there are no seals or bearings between the welded part and the grounded end do not.

Do not connect the grounding end around pins or hydraulic cylinders of the work unit.

To perform welding work on the body, disconnect the connector of the electronic control unit before working.

waste treatment

Ensure that waste oil from the machine is collected in a container. Improper disposal of waste oil can be harmful to the environment.

Follow applicable laws and regulations when handling hazardous materials such as lubricants, fuels, coolants, solvents, filters and batteries.

Disposal of hazardous chemicals

Direct exposure to harmful chemicals can cause serious injury.

Hazardous chemicals used in this machine include grease, battery electrolyte, coolants, paints and adhesives.

Please handle hazardous chemicals carefully and properly.

Maintenance Catalog

Cartridge Name	inaugural		conventional (weapons)		model number	note
	timing	Maintenance	timing	Maintenance		
Oil Filter	50H	change (one's address etc)	200H	change (one's address etc)	/	For severe conditions, cleaning and replacement intervals will be shortened (air blowing, not water washing).
air filter	50H	change (one's address etc)	200H	change (one's address etc)	/	
Hydraulic oil suction	300H	change (one's address etc)	600H	change (one's address etc)	/	
Hydraulic oil return filter element	300H	change (one's address etc)	600H	change (one's address etc)	/	
slick						
Oil Name	inaugural		conventional (weapons)		model number	note
	timing	Maintenance	timing	Maintenance		
oil	50H	change (one's address etc)	200H		CD 15W-40 CF-4 15W-40	Choose the right oil for your local temperature
diesel	everyday	replenishment	/	/	92	Use gasoline from regular gas

						stations
hydraulic oil	300H	change (one's address etc)	600H	change (one's address etc)		
Traveling Motor Gear Oil	50H	change (one's address etc)	500H	change (one's address etc)		
grease	new airport	raise the stakes	8H	raise the stakes		
Hydraulic oil radiator	50H	clear up	50H	clear up		Air blowing or high pressure water flushing of the exterior

oil change

Oil Change Precautions

1、Oil changes must be done with the engine hot.

2、Do not start the engine during an oil change or until the oil has been drained and new oil has been added. 3、An oil fill level close to but not exceeding the upper limit of the dipstick is optimal.

4、The oil filter must be changed at the same time as the oil change.

5.Gasoline should meet the following standards, and this table lists several fuel specifications in force in the world.

World Fuel Code gasoline key indicators				
	category I	Category II	Category III	Category IV
Lead, g/L Not more than	0.013	not detected	not detected	not detected
Sulfur content, % (m/m) Not more than	0.10	0.02	0.003	not have
Oxygen content, % (m/m) Not more than	2.7	2.7	2.7	2.7
Aromatic content, % (v/v) Not more than	50.0	40	35.0	35.0
Olefin content, % (v/v) Not more than	———	20.0	10.0	10.0
Benzene content, % (v/v) Not more than	5.0	2.5	1.0	1.0
cleaning agents	———	must be added	must be added	must be added

Caveats:

Gasoline tank filling port, filling gasoline, pay attention to the rear of the car body first the left side of the gas tank cover unscrewed, use the funnel and tank filling port connection, and then use the tank bucket filling gasoline, pay attention to turn on the power switch, pay attention to the meter shows the filling position of the tank, to prevent overfilling, resulting in the tank cover can not be covered, resulting in serious consequences.

lFuel tank capacity: 20 liters

lWhenthetankisfull,theinstrumentpanel shows Fill.

After refueling, tighten the fuel tank cap clockwise

Hydraulic oil tank filling port, filling

hydraulic oil, pay attention to the front of the carbody first hydraulic oil tank cover unscrewed, the use of funnels and oil tank filling port

connection, and then use the tank bucket filling hydraulic oil, pay attention to observe the

hydraulic oil window, pay attention to the oil

window of the filling position, when the

hydraulic oil more than the oil window red dot marked one-half of the hydraulic oil to

immediately stop filling, prohibit overfilling, resulting in the oil tank cover cannot be capped, resulting in severe consequences

Hydraulic oil tank capacity: 25 liters (No. 46)

After the hydraulic oil has been filled in accordance with the specified volume, the

filling can be stopped.

The filling can be stopped.

1. After refueling, tighten the fuel tank cap clockwise to prevent oil leakage.

	Fuel tank/capacity	RecommendationRefill volume
hydraulic oil	25L	23L

diesel	20L	18L

Diagram of grease filling position

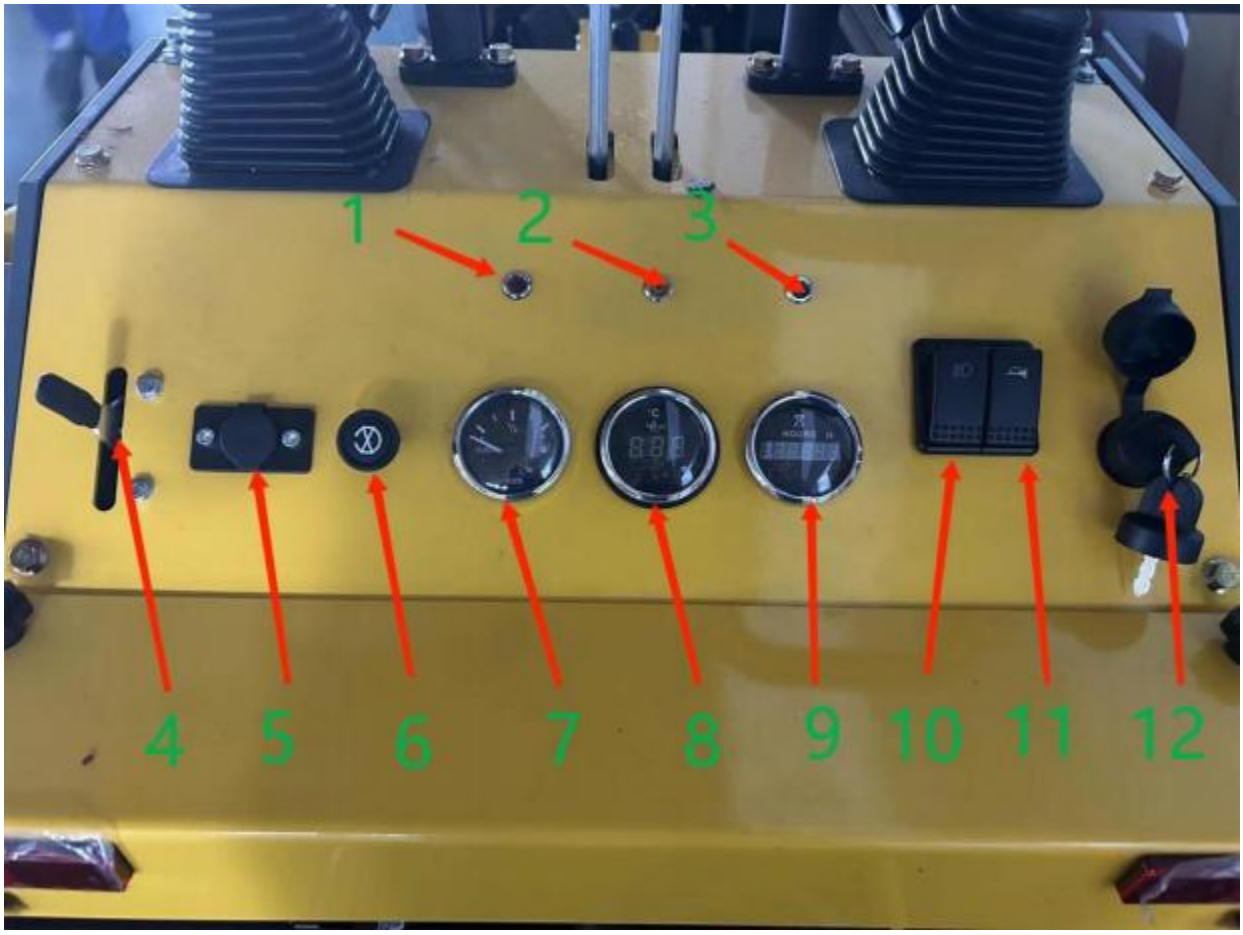
RS04 黄油加注标准

序号	加注位置	加注次数	图示	加注要求	备注
1	动臂后左部销轴位置	8次		加注黄油时，黄油加注口连接处黄油溢出为合格	避免黄油加注过量，造成黄油低落，车身产生污垢。
2	动臂后右部销轴位置	8次		加注黄油时，黄油加注口连接处黄油溢出为合格	避免黄油加注过量，造成黄油低落，车身产生污垢。
3	左侧动臂油缸缸头销轴位置	5次		加注黄油时，黄油加注口连接处黄油溢出为合格	避免黄油加注过量，造成黄油低落，车身产生污垢。
4	左侧动臂油缸缸尾销轴位置	5次		加注黄油时，黄油加注口连接处黄油溢出为合格	避免黄油加注过量，造成黄油低落，车身产生污垢。
5	右侧动臂油缸缸头销轴位置	5次		加注黄油时，黄油加注口连接处黄油溢出为合格	避免黄油加注过量，造成黄油低落，车身产生污垢。
6	右侧动臂油缸缸尾销轴位置	5次		加注黄油时，黄油加注口连接处黄油溢出为合格	避免黄油加注过量，造成黄油低落，车身产生污垢。
7	铲斗油缸前端销轴位置	5次		加注黄油时，黄油加注口连接处黄油溢出为合格	避免黄油加注过量，造成黄油低落，车身产生污垢。
8	铲斗油缸后端销轴位置	5次		加注黄油时，黄油加注口连接处黄油溢出为合格	避免黄油加注过量，造成黄油低落，车身产生污垢。
9	快换板左侧销轴位置	8次		加注黄油时，黄油加注口连接处黄油溢出为合格	避免黄油加注过量，造成黄油低落，车身产生污垢。
10	快换板右侧销轴位置	8次		加注黄油时，黄油加注口连接处黄油溢出为合格	避免黄油加注过量，造成黄油低落，车身产生污垢。

X. Additions

Model:Slip RS04

Instructions for using the control panel



1. Red light (oil pressure indicator)

When the oil pressure reaches the lowest level, the lowest value (when lacking oil state), the red light flashes.

2. yellow light

Attention:When the oil temperature reaches or exceeds≥ 60° C, the yellow light comes on (normally on). When the oil temperature is below≤60℃, the yellow light turns off.

3. green light

Note:Green light is always on light, when the vehicle starts, the green light is always on, when the vehicle stops working, the start key is turned off, the

green light is turned off, all the lights are turned off, and the machine stops working.

4. gas switch

Push forward - throttle up

Pull back - Throttle reduction

5. cigarette lighter

Note: Spare socket for power supply to the assistive device

6. Dampers

Steps to start the machine: open the damper switch - turn the key to the right for 3-4 seconds - start the machine - close the damper switch

7. Fuel Level Gauge Note: Indicates (gasoline fuel level)

8. Oil Temperature Gauge Note: Indicates (Hydraulic Fluid Oil Temperature)

9. Timetable Note: Indicates (machine operating hours)

10. Light switch

Note: Press the button forward First two presses: low beam

Third down: pop-up lights

Press the button backward: Turn off the light

11. speaker button

12. activation key

NOTE: Indicates (vehicle start key switch).