# TYPHON Series Crawler Excavator Operation Manual



# **Foreword**

Hello Dear Customer,

Thank you for your confidence in our company! Our company produces agricultural mini excavator, compact design, the stability is good, it can dig under different operating conditions and handling, and it is agricultural operations and minor works is the best construction machinery.

In order to properly grasp knowledge the use of excavators, adjustment, maintenance and so on, Give full play to the effectiveness of the excavator, please carefully read the user's manual operation and maintenance.

In order to more intuitive display certain structural features of the excavator, this manual section demonstrates picture as structural perspective, and therefore there will be differences in the appearance of the actual product. Because of Due to technical improvements lead to real changes in the mechanical structure of vehicles, technical parameters, Please consult the product's latest product information to the Company.

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# **Safety**



For safety, you must always follow these safety measures, it may cause a major accident or damage to the machine, operation and maintenance personnel before operating and maintenance of the machine must be fully read and understand this manual. This manual should be stored to facilitate timely random see, all the machine-related personnel should regularly read the manual.

# **Precautions**

### **General considerations**

It is your responsibility to follow the relevant safety regulations and laws, according to the manufacturer's requirements for operation, inspection and maintenance of the machine.

By prior identification of potentially dangerous situations can be avoided most accidents.

# Comply with all safety regulations

It must be performed by trained and qualified personnel for machine operation, inspection and maintenance.

In the adverse effects of lack of sleep or the case of alcohol, drugs, drugs, fatigue, please do not operate the machine.

#### Found abnormal machine

In machine operation and maintenance or inspection, If found abnormal machine (noise, odors, oil spills, error alarm, etc.), take reasonable measures, before the exception rule out, do not operate the machine.

# **Operating temperature range**

In order to maintain the machine's performance and avoid premature wear, please observe the following operating conditions.

If the outdoor temperature exceeds +45 °C or below -15 °C, do not operate the machine.

### When from drive seat stand up or leave considerations

When from drive seat stand up, it will reduce the work equipment to the ground and stop the engine. If you accidentally hit any control handle, will cause the machine to move and cause serious injury.

Also, be sure to remove the key, and the key to carry, then stored in a designated place

# Avoid fire and explosion hazard

Maintaining fuel, lubricating oil, grease and antifreeze principle flames. Fuel extremely flammable, very dangerous.

In dealing with these combustibles, away from lit cigarettes, matches, lighters, and other flames or sources of ignition.

Supplementary fuel or lubricating oil, do not leave the job site.

Immediately clean up spilled fuel or lubricating oil.

Electronic systems short-circuit may cause fire.

Check wire connection is loose or damaged everyday. Repair or replace damaged wiring.

# Pipeline caused by fire

Ensure hoses and tubes snap, protection and cushion securely. If loose, hose or tube due to vibration or contact with other parts damaged during operation. This may cause high pressure oil discharge, causing fire or injury.

### Toxic exhaust gases from the engine

Do not place in a poorly ventilated enclosed operating the engine. If natural ventilation is not possible, install a ventilating fan, fans, exhaust extension pipes or other ventilation devices.

# Don't to modify the machine

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

# Be careful to avoid pinching

Do not place hands, feet or other body parts placed between the car and the track or off the middle, between the body and the working device or cylinder and moving parts. When the machine moves, the pore size varies, may cause serious injury or death.

# Using the option products

Before installing the software, please consult our company. Before use, please make sure that the installation option is not contact with other parts. For any damage due to the use of unauthorized attachments caused by accidents or damage to the product, the company is not responsible.

# **Preparing Precautions**

#### **Understand work zone**

Before you begin, you should understand the work area, so as to ensure safety.

Be sure to avoid such as ditches, underground pipelines, a few trees, cliffs, overhead wires, or the implementation of the landslide hazard area and other dangerous obstacles.

Work on the road, be sure to consider the safety of pedestrians and vehicles.

Use signalman or signals, isolating the work area, unauthorized persons shall not enter. When operating in the water or open across shallow streams, should first check the depth of water, whether solid ground and the water flow rate.

# Check the strength of the bridge

When walking or bridge structure above, check the allowable load. If strength is insufficient to deal with the bridge or structure to reinforce.

# Always keep the machine clean

Wipe the lubricating oil, grease, dirt, snow or ice, prevent accidents due to sliding.

Clear engine parts dust, oil or grease, to prevent fires.

# After starting the engine

The engine and hydraulic oil preheating.

After starting the engine, no matter who or where failure to operate and checked. If any fault, according to the program shutdown, and fault reporting.

Check the gauges and warning device is working properly.

Check whether there is noise.

To control the engine speed test.

Operation of the control, to ensure they are working properly.

#### Used to the cold climate

Be careful to freeze the ground, pedals and shake handle is slippery. In cold weather conditions, with bare hands do not touch any metal parts of the machine. Skin can freeze onto metal, causing serious damage.

# Daily check and maintenance

Did not identify or repair the machine malfunction or damage can cause accidents.

Before operating, please proceed specified check, Repair immediately when necessary.

If an accident occurs and it cannot operate or engine malfunction, Please follow immediately shut down the program, and the machine securely parked until the malfunction repaired.

# Safe driving and operating an excavator

# Security considerations of excavator

Without specialized training and obtain operating permits for the operation is not allowed on the machine operator; the operator must wear helmets and goggles.

Drivers to use familiar with the machine before the structural characteristics of the product.

Start the engine strictly according to prescribed procedures.

Before starting the machine and work, should pay attention to safety around the unit within 10 meters of people and things and honking warning note.

When night work, should ensure that the lighting equipment in good condition.

Drivers pay attention to safety when driving, observe traffic rules.

When using excavators always observe the meter and the parts of the work and listen to the sound, when there is abnormal, should immediately stop excavator checks, troubleshooting.

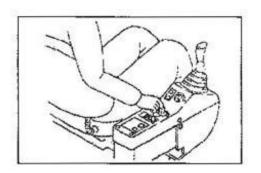
Excavators in homework, become warped head or large tilt, should immediately put down the bucket, take effective measures, so as to avoid tipping. When the engine speed out of control, it should swiftly, cut off the oil, check the flame.

# **Safety**

# **Precautions when operating**

## The right to start the engine

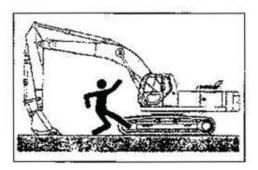
Start the engine at the wheel before the start of the first horn to warn the people around. Do not short-Circuit the battery start-up circuit or a way to start, because it may lead to serious accidents or damage circuitry.



# Let other people away from the machine

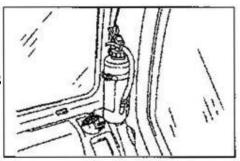
The operator should be prohibited others climbed the machine, because to do so could result in serious injury.

Prevent others from harm.



# Prepare emergency supplies

Ready to fire extinguishers and first aid kits, emergency telephone numbers available for first aid, fire extinguishers and first aid kits in case of fire or accident periodic inspection and maintenance.



### Don't modify the machine without permission

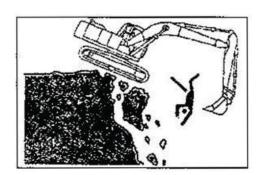
Without the prior consent of the

Dorson company refit the machine
caused damage and injuries,

Our company is not responsible

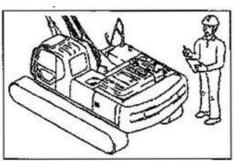
# **Determining site security**

Before operating the machine, thoroughly observe and record the topography and geological characteristics of the site, so as not to fall or the fall of the machine.



### **Check before operation**

Before starting the machine
first checks if there are any problems
should be repaired immediately.
Before leaving the driver's seat,
to set the safety lock lever in the
locked position. If the operating
lever is not set in the locked position,
and is accidentally touched, the
machine may suddenly move causing
serious injury.



### Note safety regulations

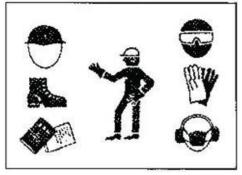
To comply with all safety regulations, as well as the sequence of operations and other considerations. If there are other people working in the same region, asking them to pay attention to special warnings.



# Wear protective clothing

Wear proper fitting safety shoes,
helmets, uniforms, if necessary,
should wear goggles, masks, gloves
and other protective equipment.

Do not wear loose clothing or worn
may hang lever or the moving parts
of the decorations. Do not wear easily

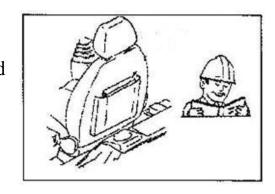


# Carefully read this instruction

catch fire with oil or fuel contamination clothing.

# manual

Before operating the machine, read this manual carefully so that when operating the machine more efficient and safer.



# It is forbidden to smoke and fire the diesel fuel and engine oil

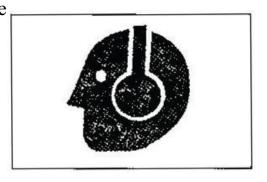
Oil, antifreeze, is particularly diesel are highly flammable, so do not let smoke and fire near the machine. First turn off the engine before adding fuel.



# Caution when approaching the

### noise zone

In operation, if there is a high degree of noise can cause hearing loss, so the operator if prolonged exposure to high noise environment, should wear earmuffs or earplugs.



# Avoid high temperature inspection

# **Openings**

After the machine operation, engine coolant, engine oil, hydraulic oil temperature and pressure is very high. At this time, if you open the lid may be burned, it should wait until after The temperature drops inspection Openings.



### To avoid fire

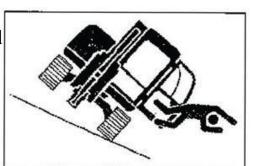
Clear all flammable materials, such as wood chips, leaves and paper, as these may cause a fire. Check diesel fuel, motor oil, hydraulic oil system for leaks.



# Be careful when working on slopes

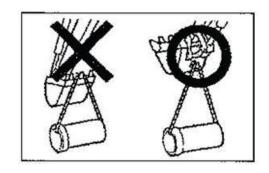
When the machine is dangerous slope work, to lower speed, at any time be careful not to let the machine slide and subversion, the bucket should be kept from the ground when the machine is running on a slope between 30-40cm. Do not switch on the slope direction of the vehicle body, do not walk lateral, later returned to

the ground, you can detour safe driving past.



### **Precautions when hoist**

Because this machine is the excavator, so please pay special attention to the case when dealing with heavy objects.

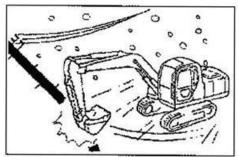


# Machine in the following tips should

be strictly abided by during the snow

# covered the ground operation

Reduce speed, not rapid start, stop, or rotate, because the machine may be a little bit because of the slope and slide.

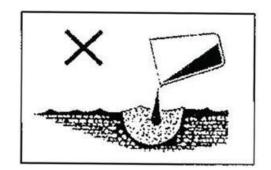


# Appropriate steps when discarding waste

When you want to discard oil, diesel fuel, cooling water, hydraulic oils, solvents, filter or when other toxic substances, to comply with the relevant laws and regulations.

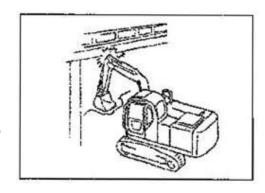
When should discharge the waste liquid from the machine container.

Do not throw the waste liquid on the ground rivers, lakes or cause environmental pollution.



# Carefully work position Operation

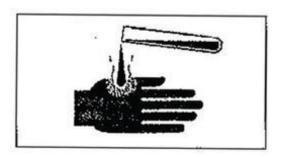
In the narrow space (tunnel, bridge and power lines, etc.) means the job to avoid hit anything.



# **Precautions when using batteries**

# Avoid battery fluid burns

In doing the work of the battery, you should wear long-sleeved shirt, goggles and gloves. The battery electrolyte is highly corrosive, it can be corrosive to the skin and clothing. Splashed in the eyes can cause blindness. If accidentally

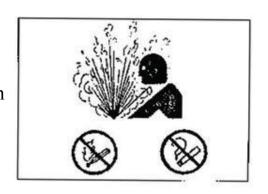


Splashed acid on the skin should be:

- 1, Wash skin with water
- 2, With a soda or lime neutralization
- 3, Rinse with clean water for 10-15 minutes, and seek immediate medical attention.

# **Avoid battery explosion**

Gas battery produces explosive properties, should stay away from sparks and open flames. When charging, should ensure good ventilation.

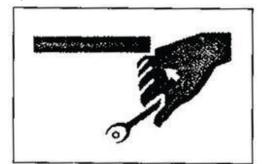


# Notice of inspection or repair

# Use appropriate tools

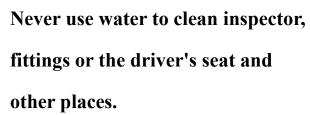
Do not damage or destroy instruments,

tools do not take any other purpose, and maintenance or repair of the machine should use the appropriate tool.



# Keep the machine clean

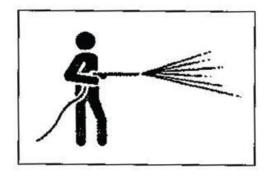
Leakage of oil or butter could lead to an accident, the machine should always be kept clean. If the circuit of water into the system, may cause the machine inoperable or abnormal.





# Inspection or repair should turn off the engine

Check repair when the engine is running, the hands or clothes may be fan, pulley or fan belt clamp, so before inspection or repair engines, should first turn off the engine.

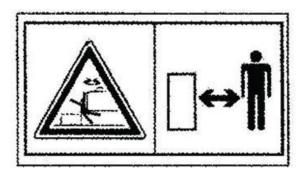


# Safety signs

To ensure the safety of staff as well as operators of the surrounding work area, should be placed in the following security identification certain parts of the machine. Walk around the machine to view the content of these sites and place safety signs.

Safety signs should be kept clean, clear easy to identify. If any missing or damaged safety labels become illegible, replace it with a new logo. When the safety signs posted or body parts have been replaced, the new logo should be posted in a new part or body.

No standing spin scope --- On the weight on both sides



Inspection, maintenance of the engine when Precautions

# --- On the engine water tank



Prohibit smoke and fire --- On the fuel tank, hydraulic tank outside



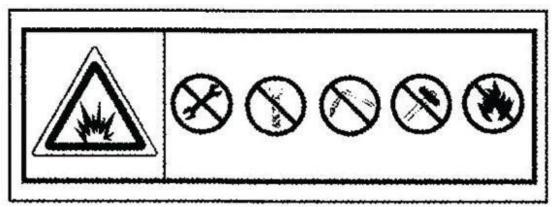
# Pay attention to the high temperature parts



The scope of work prohibited to stand --- On the two side arm



# **Battery Precautions --- On the battery**



Signs indicate risk of explosion

Do not drilling, cutting,the impact or decomposition and also far away from open flame

# Transportation and parking

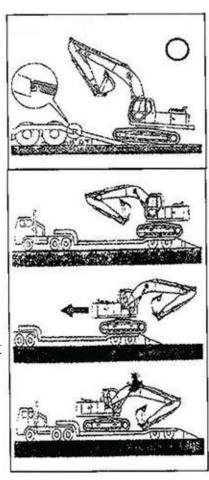
# Machine transport on the road

Before transporting the machine, please note that the main specifications and dimensions, and view total machine weight, length, width, height, walking speed and ground pressure and the like.

Before transporting the machine, you should investigate the case on his way through the road and traffic conditions, if it comes to road traffic, shipping or machine tool limits and other regulations, must obtain prior approval from the relevant authorities.

# When the upper and lower flatbed

- 1, The machine must flatbed truck in the upper and lower flat ground.
- 2, The use of a sufficient length, width, and slope of the intensity is connected to the swash plate. Rainy days, to use non-slip type swash plate.
- 3, If you have a job means working device on the front car, front counterweight flatbed without working device.
- 4, The car parked in a fixed position Flatbed.



### **Fixed machine**

After flatbed machine above, follow the steps below fixed machine:

1, Pull the safety lock lever to the locked position.

- 2, lock all covers. Turn off all switches and remove the ignition key.
- 3, Front and rear using a sufficient length of steel lock fixed track.

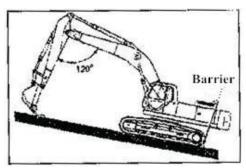
# The machine park

- 1, the machine should be parked on a flat surface, and then the arm vertical, and to lower the bucket to the ground.
- 2, pull the safety lock lever, and set in the locked position.
- 3, set the throttle stick in the low position, and running five minutes to let the engine temperature is gradually lowered, longer engine life.
- 4, turn the start switch to the OFF position turn off the engine and remove the key.

# On the slope are machines

The machine parked on a slope is very dangerous, do not stop on an incline.

When forced to stop on an incline, the bucket should be inserted into the ground, after each lever back into



place, the track is placed behind the barrier.

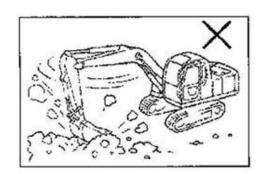
# **Operation and control precautions**

# Prohibiting the use of operation

# Prohibit operation of the machine

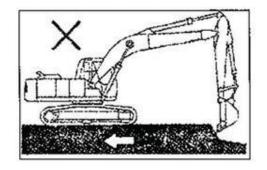
# with a rotating force

Rotating power operation, with machines will be out of rotary load, reduce the service life of machine rotation system.



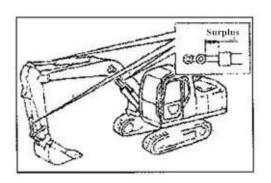
# Prohibit using machine to do drag and drop action

Prohibit walking way to pull the bucket operation, this enormous tensile strength, damage to structures.



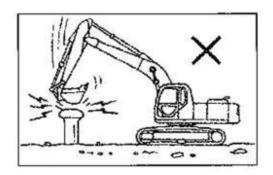
# Carefully move the hydraulic cylinder to the stroke end

If the hydraulic cylinder to the stroke end, the cylinder will be damaged because of excessive wear, so to stop the hydraulic cylinder moving the hydraulic cylinder reaches the end before.



### **Avoid impact**

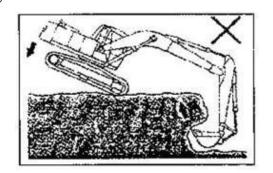
Prohibit the use of bucket do strike action, resulting in damage to structures. Prohibited such dangerous operations.



# Prohibited illegal excavation work

Prohibition tilt the rear of the body, using its gravity drop excavation.

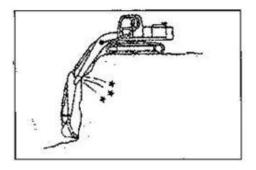
Otherwise, each part of the body will suffer from abnormal impact, damage to the machine.



# When the depth of the excavation

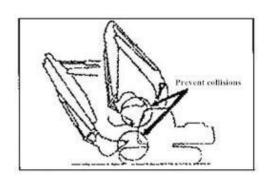
# should pay attention

Do not let the intermediate portion of the boom and bucket hydraulic hoses to hit the ground or come into contact with the track shoe.



# The work device of the ban hit the car body

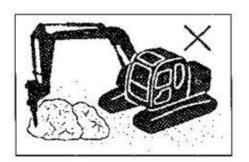
Using new arm for the first time, to determine whether it will affect other parts.



# **Broken precautions when operating**

# Prohibit violent collision object

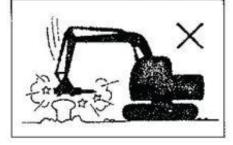
Since the hydraulic breaker is larger than the capacity of the bucket, so the rate of decline quickly, please pay special attention to the front portion and the rotating portion when used



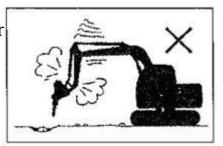
hammers crashing objects will damage the machine.

# Hammer crusher applies only to objects

In addition to the broken features,
prohibiting the use of hammer to carry
out the work of other nature. Operation
Hammer To put the machine in a stable
horizontal surface. When using a hamme

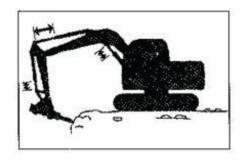


horizontal surface. When using a hammer work, ban full stroke hydraulic cylinder piston rod extended.



# Prohibit the use of hammers hitting objects.

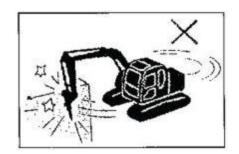
Prohibit the use of a hammer to smash the weight up and down movement of the object, otherwise it will lead to an arm fracture or damage to other components.



# Prohibit the use of the back or side crushing

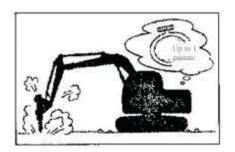
# reminder of moving objects

Do not use hammers or back side moving object, this may cause damage to the hammer.



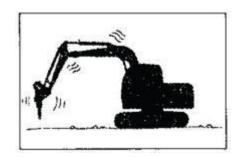
### Avoid sustained broken over 1 minute

If the ground or stones over one minute after the crash has not yet broken, you need to replace another form of impact head. And long lasting impact may also lead to increased oil temperature, hydraulic oil seal damage and so on.



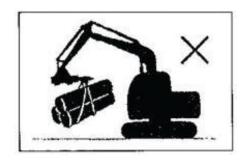
# When tubing trembling, to stop the job

Hydraulic tubing If you do not normally shake, showing the accumulator is a problem, you must stop and inspect the machine.



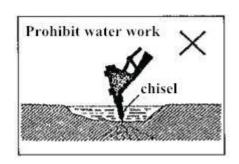
# Do not use a hammer lifting objects

Do not use a hammer lifting objects, but also to comply with the "safety first" in the Code.



### **Prohibit water work**

Hydraulic hammer rust can cause the seal to break, because the rust, foreign matter and water is mixed into the hydraulic oil caused by damage to the hydraulic system.



### Note that the boom collision

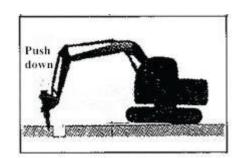
Be careful operating arm, the bucket operating handle, to prevent the hydraulic breaker with the boom collision.



# Caution When lifting the machine

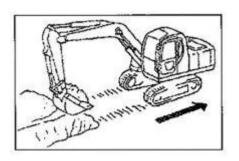
# overall job

The machine overall fitness float construction work, otherwise it will damage the working device.



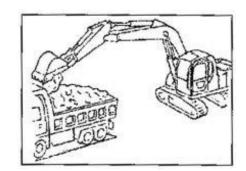
# **Digging the trench Precautions**

When digging a trench, the machine direction consistent with the direction of excavation, the implementation side back side dug excavation method.



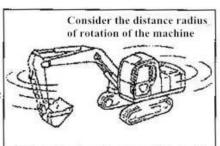
### Load

- 1, When the loaded machine should be first moved to the back of a truck load, so as not to run into the rotating cab truck or other staff.
- 2, After the truck easier than the next carriage loading, and faster.



### Rotation

When you release the rotary control handle to make it back to the neutral position after the machine because the role of inertia, there will be a slight rotation.



# **Precautions after operation**

- 1, After the operation to lower the bucket to the ground does not slide flat solid ground.
- 2, When filling diesel should not be too full, prevent heat expansion of the diesel spill.
- 3, Clear the track assembly stick above the soil.
- 4, Check all the oil or coolant leaks and at the same time check the working parts, if any damage should be repaired immediately.

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# The main structural features of the excavator

# 一, Power system

Dorson excavators with international brands engines (Yuchai, Cummins, Yanmar, etc.), strong power, reliability and economy strong, low pollution, low noise.

# 二, Hydraulic system

Using Japan, South Korea imported advanced hydraulic system, smooth operation, high efficiency, high reliability, the use of electronic negative flow control, energy saving and environmental protection.

# 三, Structure parts

Reinforced boom, arm and bucket, etc. device can secure a large digging force under harsh working conditions. Higher frame strength and stability.

# Excavator daily care and maintenance

# —, Recommended Maintenance Section

### 1, The cooling system

Are not allowed to add add coolant to the overheated engine, the engine should be cooled first. In the cold season, always check the specific gravity of the coolant should ensure adequate protection.

When the engine operating temperature, all of the coolant used are non-corrosive.

If the cooling system is dirty, or engine overheating, or radiators in a bubble, you should clean the cooling system.

Premixed coolant, can be expected to provide protection at the minimum outdoor temperature on the cooling system.

Emissions and refill coolant, emissions must remove the radiator cap when the coolant drain.

# 2, Fuel system

After the machine every day after work, would like to fill the fuel tank of fuel to drive off moisture to prevent condensation, do not overfill the fuel filler, when the fuel temperature increases may swell and spill.

# Warning Do not fill the fuel filter before installing the fuel filter, dirty fuel will lead to accelerated wear of fuel system parts.

### 3, Hydraulic system

Supplement added to the hydraulic tank hydraulic oil must be the same system of hydraulic oil component. Unless the system is equipped with special products can be used, or only used for petroleum products.

If the water and air into the system, the hydraulic oil will become cloudy, the system of water and air will cause pump failure, the need to discharge hydraulic oil, re-tighten all of the hydraulic system tubing, remove and refill the hydraulic oil.

# 4, Intake system

If the air filter is dirty, not only the engine output power is reduced, and fuel consumption increases, leading to emission of harmful gases and black smoke. At this time should be cleaning and replacement coarse filter.

Before coarse filter replacement can be cleaned, when the filter cleaning should be thoroughly checked whether the filter material is damaged, coarse filter if not clean, it should be replaced once a year.

If, after a clean installation of the filter, the engine still black smoke soon, you should replace the fine filter.

# Warning The coarse filter should be replaced fine filter in the third time maintenance, pay attention to the fine filter can not be cleaned before use, must be replaced with new parts.

# 二, Maintenance item at any time

# 1, bucket teeth and tooth edge

# Dangerous A



Fixed pin will fly when striking force, may lead to nearby personnel injury, so should be fixed percussion pin to ensure that no one around to avoid injuring the eyes, knocking should wear protective glasses, replacement of the bucket good bucket teeth before pad.

### 2, Track shoe

A, place a length over from sprocket wheel to boot straight pole on the track.

B, measure the maximum extent from the highest point of the track to the straight bar at the bottom of the track.

C, adjust the tightness of the nuts until the track to achieve the appropriate level.

# 3, Slewing bearing

Butter filling on time, pay attention to the work of bearing wear, the timely replacement of the damaged ball.

# 4, Filter

To prevent damage to the engine, air filter maintenance only after the engine stalled.

A, check the filter: by the method of the light source is placed inside the inspection, if found to have holes in the filter, the filter

should be replaced.

B, to replace the coarse filter: Loosen the wing nut, remove the coarse filter cartridge from the air filter housing.

C, replace the fine filter: Clean air filter casing, accept the intake port cover.

Note that the fine filter must be replaced, not cleaned before use.

Install new fine filter, tighten the wing nut.

Reinstall the coarse filter, tighten the nut.

D, coarse filter cleaning: Do not hit or strike the filter cleaning methods. Note that the compressed air can cause physical injury when using compressed air cleaning, should wear protective masks, wear protective clothing and shoes.

# 三, Maintenance

# 1, Lubrication and maintenance

According to the table, combined with the engine working hours counter indicates the machine, the machine for regular inspection and maintenance. If the machine is very bad working conditions or work great strength, or configured with accessories such as hydraulic breaker, inspection and maintenance period some parts need to be reduced.

# 2, Every 10 working hours or daily maintenance item

### A, engine oil

Oil can not overfill to avoid engine damage; start the engine, the machine check the oil level at the surface; check the oil surface when the job ends, after the engine stops should wait about 30 minutes, regardless of the replacement cycle, as soon as possible replace very dirty or deterioration of oil.

B, the engine cooling system

Remove the filler cap slowly to release pressure, observe coolant level.

C, the hydraulic system

Check whether the hydraulic system leakage. Note: Check the oil level should be noted that at the operating temperature, hydraulic oil tank is hot, hot oil can cause burns.

D, walking frame means

When found abnormal wear sound, check or repair.

# 3, Every 50 operating hours or weekly maintenance item

Battery electrolyte surface, if necessary, add the appropriate electrolyte.

# 4, Every 100 operating hours maintenance item

A, diesel systems exclude condensate and impurities.

B, check the fan belt tensioner degree.

C, clean up the air cleaner element.

### 5, Every 250 operating hours or monthly maintenance item

A, the engine crankcase, oil and filter change.

B, clean diesel fuel tank: turn on the water tank and clean the impurities in the tank bottom drainage holes.

C, replace the air filter.

# 6, Every 500 working hours or every 3 months maintenance item

A, clean the radiator section

### **Dangerous**

When cleaning the cooling system, you should always wear protective glasses, water pressure can make flying debris cause personal injury.

Will only be allowed after the engine flameout cleaning radiator section, otherwise, the rotating fan blades can cause personal injury. Be careful when cleaning to prevent damage caused by leaking radiator.

B, the engine fuel system

Check the fuel injection pump fuel injection pressure, at the same time, the diesel filter replacement. Don't make the goods into the screen. Use clean strainer, non-flammable solution to dry after installation.

C, the hydraulic system

Replace hydraulic oil return and pilot filter, pressure test system.

D, check engine support

Check the engine suspension, bolt looseness.

E, check the acid and charging status

To test the battery acid, ensure the normal operation. Detection of charging, ensure the normal operation of the machine.

# 7, Every 1000 working hours or every 6 months maintenance item

A, lubricant replacement rotary device. Check the front idler, track roller, carrier roller oil level.

B, Engine valve adjusted properly, will reduce the engine power.

This reduction in efficiency will lead to excessive use of fuel and reduce the life of the engine parts.

#### Note

To prevent personal injury, it can not be used to start the motor mode to drive rotation of the flywheel. Hot engine parts can cause burns, before measuring the valve clearance should let the engine cool for some more time.

# 8, every 2000 operating hours or every 1 year maintenance item

Replacing the hydraulic oil, clean the pump into the oil filter.

Periodic replacement of the hydraulic oil can effectively extend the life of hydraulic components. Increase machine reliability.

#### Note

Before starting the machine respond pump air completely released, are not allowed to operate any joystick, or it may cause hydraulic failure.

### 9, When a parked excavator

The bucket will fall, reducing the load hydraulic components, increasing service life of hydraulic components.

# 10, Final drive and slewing reducer maintenance project

A, before driving preparation

Before first starting to be poured into the hydraulic oil, the oil must be clean and meet the requirements of the oil poured from screw, not too much oil, operating for a while and then once again.

B, maintenance

Check daily for leaks.

Check the oil level every week.

Check leakage screw link the case a month.

C, oil change

After the first oil change work about 100 hours, after every 1,000 hours or at the latest once every 6 months back, injection must be cleaned before the new oil.

# **Standard technical parameters**

# Reference

	Technicalparameters		Unit		
Total weight				kg	1000
Bucket capacity			m³	0.02	
Working device type					backhoe
	Model				B&S
Engine	Rated output power/Rotating speed			kw/r/min	14/3000
	Maximum torque			N.m/r/min	25/2880
	Maximum travel speed			km/h	2
Speed	Swing speed			rpm	13
	Maximum gradeability				25°
	Maximum Digging Force			kN	6.5
Size	Overall length		mm	2770	
	Overall width			mm	896
	Overall height			mm	1490
			Maximum depth cleaning	mm	345
	Dozer blade	The maximum height of land clearing		mm	255
Track member	Ground pressure		Kgf/cm <sup>2</sup>	0.35	
	Track shoe		Material		Rubber
			Tension control type		Butter cylinder
	Pump type				Gear pump
The hydraulic capacity of the solution	Working pressure			Mpa	16
	Flow			(L/min)	21.6
	Hydraulic oil capacity			(L)	17.4
	Engine oil capacity			(L)	1.65
	Fuel tank capacity		(L)	6.6	