



GOD  **ILLA**

L O A D E R S

User Operation and Maintenance Manual

For more information and detailed video instructions, visit www.godzillaloaders.com.au/yourloader

Phone: 1300 556 877

All Warranty Claims must be submitted at www.aftersalescare.com.au

- (a) Please provide a detailed explanation of the warranty issue
- (b) Please provide photos or videos to assist in your warranty issue diagnosis

This User Manual/Maintenance Manual is to be read in conjunction with Godzilla Loader Warranty Terms and Conditions www.godzillaloaders.com.au/warranty

This manual is an important part of your machine. It provides safety information and operation instructions to help you to operate and maintain your machine safely and efficiently.

Read this carefully before operation and keep it with the machine at all times.

1. Safety and Security

Operators should understand and follow current safety and security regulations. Since it is impossible to foresee all possible hazards, the security instructions in this manual and on the machine cannot cover all security precautions. If you are not sure about the security of certain operations, please contact us.

1.1 Security provisions:

Only specially trained and qualified personnel can operate and maintain the machine. Be familiar with and follow all security regulations, precautions and instructions when operating and maintaining the machine.

When working with other operators, or those responsible for site traffic directing tasks, ensure that all personnel understand the hand signals being used. Comply with all the rules concerning security.

1.2 Security device:

Ensure that all shields are in correct position and repair any damaged parts, ensure proper use of security devices such as parking brake handle, seat belt etc. Do not remove any security device. It is your responsibility to ensure that all security devices are in good working condition.

1.3 Security inspection and maintenance:

General:

The machine operation and maintenance personnel shall be trained and obtain corresponding qualifications; personnel not connected with the ongoing maintenance and repair work are not permitted to enter the work area.

To prevent personal injury, the working attachment should be lowered to the ground, the engine should be turned off, the parking brake handle should be pulled up, the vehicle should be in the parking brake state, and the tyres should be wedged.

Fuel and oil are dangerous goods. Fuel, oil, grease, and oil cloths cannot contact any open fire and flame, oil cloth cannot be stacked in the corner, may cause spontaneous combustion. Do not smoke when refuelling or checking the battery.

1.4 Working in enclosed spaces:

The gas discharged from the engine can make people sick or even be fatal. If the engine must be started in an enclosed space, an exhaust device is needed to exhaust the gas in the area. If there is no exhaust device, the door should be opened for ventilation.

1.5 Working under the machine:

Park the machine on solid level ground and lower the working attachment to the ground level before starting maintenance or repairs under the machine. You must wedge the tyre in place. It is very dangerous to work under a machine if the tyre is lifted off the ground and supported only by the arm. Never work under a machine that is poorly supported.

1.6 Maintenance work during engine operation:

To prevent injury, do not perform maintenance work while the engine is running. If maintenance must be performed while the engine is running, the following precautions should be followed:

Have an operator in the seat, make sure all maintenance personnel are in contact with him, and be ready to shut down the engine at any time. Do not adjust parts you are not familiar with.

Do not contact the exhaust tail pipe, muffler, and other high temperature parts to prevent scalding.

Never allow any tool or any part of the body to come into contact with the fan blade or fan belt, this can lead to serious trauma.

1.7 Do not drop foreign bodies into the machine:

Be careful not to drop any foreign matter inside the machine when opening the repair window or the fuel port of the oil tank for maintenance, it will cause damage to the machine, operation error and other faults. If any foreign matter falls into the machine, be sure to remove it safely from the machine.

1.8 Welding repair:

Disconnect the terminals of the battery to prevent it from exploding. Remove paint from areas that need to be soldered to prevent harmful gas production. Sparks from welding can fall directly on rubber hoses, wires, or pressurized pipes. These pipes can suddenly break, and the insulation of the wires can be damaged, you must cover with a fireproof shield. When welding near tyres, special care should be taken as the tyres may explode when heated.

No alterations that affect the performance, security or strength of the vehicle or operating device shall be made.

1.9 Maintenance of cooling system:

The temperature of the hydraulic fluid, the engine, the oil, and water in the radiator are still high, as is the pressure immediately after operation. At this point, any operation to open the tank cap, the radiator cap, pour oil and water, or change the filter can result in serious burns. The above operation should be carried out only after the temperature drops.

1.10 Maintenance of hydraulic system:

Before overhauling the hydraulic system, lock the cylinder and other hydraulic devices safely, cool the hydraulic oil, and release all system pressure from the hydraulic system.

Do not bend or hammer high pressure lines, and do not install abnormal bent or damaged hard pipes or hoses on the machine. Repair in time any loose or damaged fuel and lube lines, hydraulic system hard pipes and pipe hoses. Please carefully check the piping (hard pipes

and hoses) and tighten all joints with specified torque. Do not check for leaks with bare hands. Use a board or cardboard to check for leaks. A pressurized fluid leak the size of a pinhole has the potential to cause serious trauma or death.

1.11 Battery maintenance:

Battery electrolyte contains sulfuric acid, and batteries can produce hydrogen and oxygen when charged, so mishandling batteries can lead to serious injury or fire. Therefore, the following precautions should be observed at all times:

The battery contains sulfuric acid liquid, which is highly corrosive, so keep it away from children. Users should wear protective glasses and rubber gloves when operating the battery. Once eyes, skin and clothes are splattered with sulfuric acid, rinse immediately with clean water.

When the battery is charged, it will produce hydrogen and oxygen. It should be regularly checked that the exhaust hole in the battery is not blocked. A fire or vent plug will cause an explosion, so the battery should be kept away from open flame to avoid short circuit and congestion.

The battery should be stored in a 5-25 C dry, clean, and well-ventilated environment, should not be exposed to direct sunlight, at least 2m from the heat source above the ring. If the environment temperature is too high this will have a significant impact on the performance of the battery. The battery shall not be placed upside down or lying down and shall not be subjected to any mechanical impact or heavy pressure.

An indicator to show the battery's state of charge is mounted on the battery cover. When the indicator is green, the battery can be used normally. When the display shows black, the battery should be charged, and when the indicator shows white, it should be replaced immediately.

1.12 Maintenance and storage of tyres:

High pressure can cause a tyre to explode; make sure the tyre pressure is normal and do not inflate above the designated pressure. When adjusting the pressure, move as far away from the tyres as possible, and be sure to stand behind the tyre face when adjusting.

You should check the tyres and wheels daily, do not operate under low pressure, check for tyre cracks, blisters and other damage. Check whether the hub connecting nuts and bolts are missing, and check whether the tightening torque of the connecting nuts meets the demand.

1.13 Security transportation

Loading and unloading machine:

The handling of machinery is always potentially dangerous and should be handled with extreme care. When loading and unloading machines, the engine should run at a low speed and the machine should run at a low speed.

State and local laws on weight, height, width, and length must be observed when the machine is transported. All relevant traffic laws should be observed.

When the loader needs to be transferred, the lifting hook on the front and rear frame is used for lifting. Choose the correct spreader according to the weight of the loader. It is very dangerous to exceed the load limit of the spreader, so special attention should be paid to it.

2. Operation

2.1 Learning about machinery

The use of new engines starts with advanced walking, starting from idling, gradually increase the load, the purpose is to create the friction in all parts for full running-in to extend the service life of the machine. The total walking time of the new machine is 60 hours. During the walking time, comply with the following regulations:

After starting the engine, run it in low speed and neutral for 5 minutes to ensure the engine is fully preheated. Note: you cannot suddenly accelerate the engine during the warm-up phase.

Empty machine running, each gear respectively from low speed to high speed, driving should be smooth left, right steering, and braking. During walking, forward gear, back gear, each gear should be evenly arranged walking.

During loading loose materials, the operation shall not be too fierce or too urgent. The loading weight shall not exceed 70% of the rated weight. Driving speed shall not exceed 70% of the maximum speed.

Pay attention to the lubrication condition of the machine, replace, or add lubricating oil according to the specified time.

Attention must be paid to the temperature of the gearbox, torque converter, front and rear axles, hub, and brake drum. If there is overheating, the reason should be found out to eliminate it.

The following work should be carried out after the new machine closes for 10 hours and the end of the closing period:

1. Check the fastening of bolts and nuts of all parts. Especially diesel engine cylinder head bolts, exhaust pipe bolts, front and rear axle fixing bolts, hub nuts, drive shaft connecting bolts, etc.
2. Clean, rough, and fine oil filters and fuel oil filters.
3. Check the tightness of fan belt, generator belt and air conditioner compressor belt.
4. Check the electro-hydraulic specific gravity and storage of the battery and tighten the battery connector.
5. Check the transmission oil.
6. Check the tightness of the hydraulic system and brake system.

7. Check the connection and flexibility of each control handle.
8. Check the temperature and connection of the components of the electrical system, the power supply status of the generator, the instrument, the light and the steering signal and other working conditions.
9. Open the water discharge valve at the bottom of the gas tank to discharge water.
10. Attend cleaning of transmission oil sump filter screen and torque converter oil filter element. Check the filter element of the oil return filter of the hydraulic tank. Change the engine oil.

2.2 Wheel Loader Operation

Notes for use:

The diesel oil used by the loader must be pure and have been sat for sedimentation for at least 72 hours. The grade of diesel oil should meet the requirements below.

The hydraulic transmission oil used by gearbox and torque converter and the hydraulic oil used by the hydraulic system must be clean.

The loader must be regularly maintained and lubricated according to the provisions.

After the engine starts, the braking pressure reaches 0.35MPa before starting running.

When the control arm and attachment reach the required position, you should take the working device control handle back to the middle position.

Changing the front and rear direction of driving is required after stopping.

The engine water temperature is higher than 60°, and the oil temperature is higher than 100° to allow full load operation. When operating, the engine water temperature and oil temperature should not exceed 95°, and the torque converter oil temperature should not exceed 120°.

When the temperature exceeds the allowable value, the engine should be stopped for cooling.

The bucket shall not be lifted to the highest position to transport materials. When transporting materials, the twisting point under the boom should be kept about 400~500mm above the ground to ensure stable driving.

2.3 Comprehensive check before startup:

Check the bottom and exterior of the vehicle for loose bolts, dirt, oil leakage, coolant leakage or parts damage, and check the condition of accessories and hydraulic parts.

2.4 Starting of engine:

Before starting, the loader's working device control handle must be placed in the middle position, the variable speed control handle in the neutral position, and the switch in the original position.

When starting the engine, do not put the throttle to the maximum position so as not to damage the diesel engine parts.

Turn the starting key clockwise to the ON position, connect the main switch of the power supply, and honk the horn. Press the gas pedal a little and then start.

2.5 After engine started:

Make the engine rotate at low speed and check engine oil pressure indicator. If pressure does not reach the normal range within 10 seconds, turn off engine and troubleshoot machine. Continued use at incorrect pressure will lead to engine failure.

If the oil pressure does not reach the specified value, the engine speed is too high and will damage the turbocharger.

After the diesel engine starts, sit idle for a few minutes, gradually improve the speed to 1000-1200r /min, and then enter the partial load operation. During operation, you must pay attention to the change of the meter reading at any time. Do not allow the engine to run at high speed or low speed in neutral position for more than 20 minutes.

2.6 Driving:

To prevent accidents, prior to driving you should ensure you are aware of all surrounding vehicles, machines in operation and personnel, and that you are always in full control of the loader. Lift the arm, turn the bucket back and maintain the walking posture.

Put the variable speed control handle in forward 1 or backward 1.

Remove the parking brake.

Release the brake pedal, step down the accelerator pedal slowly, and start the loader forward or backward.

Only when the braking pressure reaches the prescribed value (0.45MPa) can the vehicle ensure driving safety.

2.7 Variable speed - Forward and backward conversion:

When changing gears, step on the accelerator properly to avoid excessive impact on the transmission system.

For driver comfort and to maximize the life of the transmission components, changing the driving direction is only to be carried out after the loader stops.

When changing from low speed to high speed, first loosen the throttle and operate the high and low speed control handle, and then step on the throttle. When changing from high speed to low speed, loosen the throttle first, slow down and then shift gears.

2.8 Steering:

When driving, the steering wheel will be turned to the direction of the change, the vehicle can then turn.

The vehicle is centred on the hinge pin, and the front and rear frames turn.

2.9 Brake:

Do not put your foot on the brake pedal unless necessary.

Don't tread the pedal repeatedly unless it is absolutely necessary.

When walking downhill, do not extinguish the engine and coast, and never put the high/low speed control handle or the front/rear gear control handle in neutral.

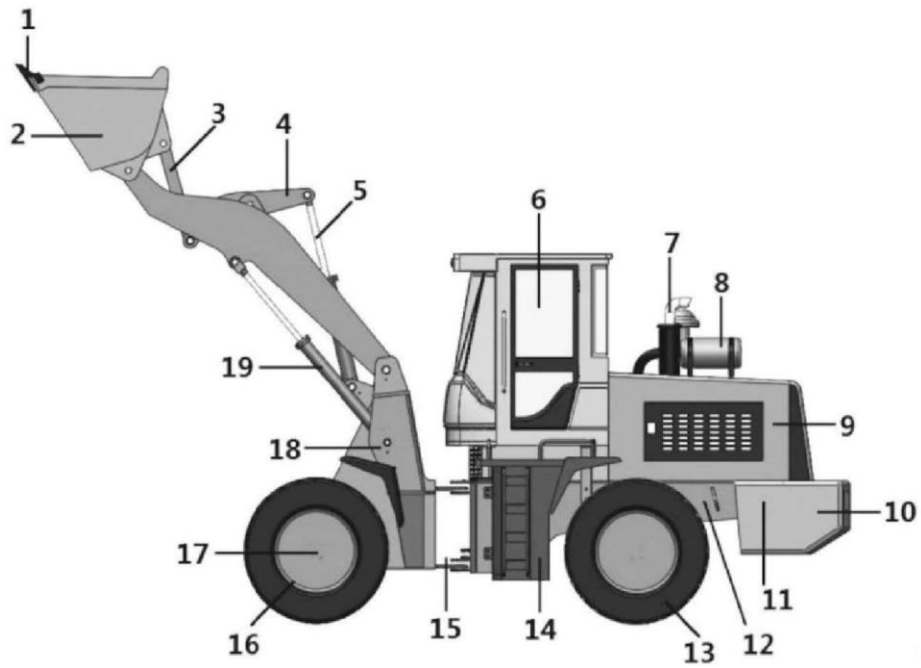
2.10 Parking:

Release the accelerator pedal and press down the brake pedal to stop the vehicle, then change each gearshift control handle to neutral. The vehicle will come to a safe stop. Pull up the parking brake handle to put the machine in the safe braked state. Lower the bucket or other attachment to the ground and lay flat.

If the machine must be temporarily parked on a slope, a wedge should be applied against the wheel to prevent the machine from moving.

2.11 Shovel loading operation:

When the shovel loading operation is carried out, the two sides of the bucket should be cut evenly, and the unilateral cutting operation should be avoided as far as possible, so that the loader is facing the front, and the front and rear frames should not be hit at an angle.



1. Bucket teeth

2. Bucket

3. Small boom

4. S boom

5. Bucket cylinder

6. Cab

8. Air filter

9. Back hood

10. Counterweight

11. Battery case

12. Back frame

13. Tyres

14. Fuel tank

15. Steering cylinder

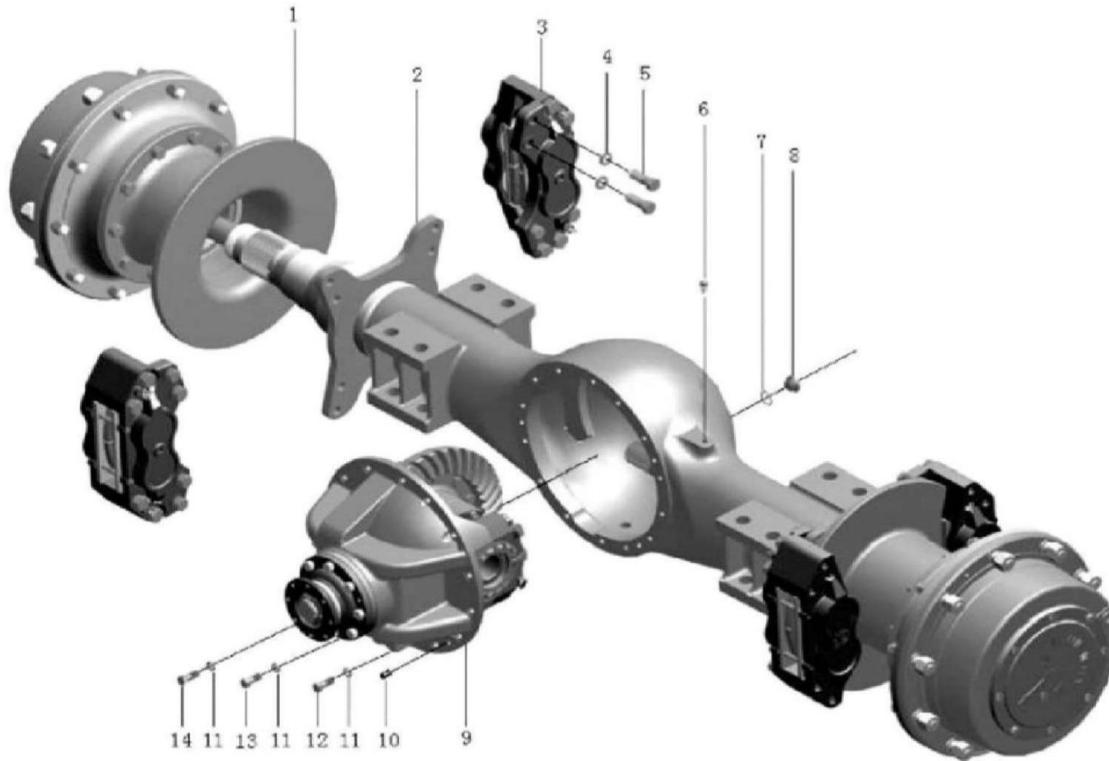
16. Rim

17. Drive axle

18. Front frame

19. Lift cylinder

Drive axle:



- 1. Brake disc
- 2. Brake clamp bracket
- 3. Brake clamp assembly
- 4. Combination pad

- 5. Drainage screw
- 6. Breathing
- 7. Combination pad
- 8. Oil level bolt

- 9. Main reducing gear
- 10.12.13.14. Bolt
- 11. Gasket

Troubleshooting Your Machine

Wheel Loader

Fault	Possible Causes	Troubleshooting
<p>The diesel engine cannot run after it has started</p>	<ol style="list-style-type: none"> 1. The gear is not put up or the gear control mechanism is not adjusted properly 2. The stop stem of the variable speed distribution valve is not returned 3. The transmission system has mechanical failure 4. Shift pressure oil, no pressure or low pressure 5. Hand brake or pincer disc brake is not released 6. Torque converter failure 	<ol style="list-style-type: none"> 1. Put on file or check and adjust 2. Disassembly and troubleshooting 3. Check and exclude 4. See below 5. Check to loosen it 6. Maintenance
<p>Insufficient driving force</p>	<ol style="list-style-type: none"> 1. Diesel engine power is insufficient 2. Torque converter inlet oil pressure is insufficient or too high 3. The oil temperature of the torque converter is too high 4. Insufficient shift pressure clutch slip 5. The hand brake or the pincer disc brake is not completely released 6. There is leakage or blockage in the internal oil passage of the torque converter or gearbox 	<ol style="list-style-type: none"> 1. See the diesel engine instruction manual 2. Maintenance 3. See below 4. Check the oil pressure and piston seal 5. Release or overhaul 6. Dredge or seal, torque or gearbox internal oil channel leakage or blockage

Brake System

Fault	Possible Causes	Troubleshooting
The loader slows down slowly or does not slow down after pressing the brake pedal, the braking distance is too long.	<ol style="list-style-type: none"> 1. The pressure of brake system is low. 2. Air brake main valve and booster pump leakage 3. The distributor pump of the booster and brake calliper is faulty 4. The brake pads and brake disc have severe wear 	<ol style="list-style-type: none"> 1. Please check whether the air compressor, unloading valve and air storage tank is damaged or leaking 2. Check and repair 3. Check for blockage 4. Check and replace
The brake cannot be released	<p>The brake cylinder is corroded and stuck. The oil circuit between booster pump and brake cylinder is blocked.</p>	<p>Check, repair or replace Check whether there is a squash or sludge plugging</p>
The loader does not move in a straight line during braking	<ol style="list-style-type: none"> 1. The air in individual booster pumps led to all four wheels unable to brake at the same time 2. Individual booster pump piston is stuck 3. Tyre pressure difference 	<ol style="list-style-type: none"> 1. Eliminate air 2. Check and repair 3. Check and repair
The parking brake failed	<ol style="list-style-type: none"> 1. The friction surface of brake shoe and brake drum is greasy and dirty 2. There is a small contact area between brake shoe and brake drum 	<ol style="list-style-type: none"> 1. Check and clean 2. Check and repair

Gear Transmission System

Fault	Possible Causes	Troubleshooting
Low or no pressure in each gear	<ol style="list-style-type: none"> 1. Variable speed oil pump suction is insufficient, internal leakage or high-pressure pipeline leakage 2. Improper adjustment of the main pressure regulating valve or failure of the spring 3. The cut-off valve is stuck 4. The piston or oil passage of the shift clutch leaks oil, and the oil passage is blocked 5. Variable speed oil pressure gauge failure or oil pipe blockage 	<ol style="list-style-type: none"> 1. Clean the strainer or replace the oil pump and refuel to the correct position 2. Readjust or replace the spring 3. Maintenance 4. Replace the seal or dredge 5. Replace the oil pressure gauge and dredge the pipeline
Low oil pressure in a certain gear	<ol style="list-style-type: none"> 1. The piston type O ring of this gear is damaged 2. The sealing ring in the oil circuit is damaged 3. The oil duct is blocked or leaking 	<ol style="list-style-type: none"> 1. Change 2. Change 3. Change
Oil leak	Leakage of seal ring at shaft end The seals are damaged, aged or deteriorated, loose joint	Change Change, tighten up
Torque converter oil temperature is too high	<ol style="list-style-type: none"> 1. The gearbox oil level is too low or too high 2. Oil radiator and oil circuit are blocked 3. Clutch slip 4. Continuous high load operation time is long 	<ol style="list-style-type: none"> 1. Refuelling to the specified position 2. Cleaning or replacement 3. Maintenance and correction of variable speed oil pressure 4. Stop cooling or idle cooling

Lifting Device System

Fault	Possible Causes	Troubleshooting
Lift and skip slowly or without action	<ol style="list-style-type: none"> 1. Cylinder oil seal is damaged 2. Pipeline system oil leakage 3. Serious internal leakage of working oil pump 4. Improper adjustment of the safety valve. Low pressure of the system 5. The suction tubing and oil filter of the working oil pump are blocked 6. The priority valve spool is stuck 7. Multi-way valve excessive wear, with clearance is too large 	<ol style="list-style-type: none"> 1. Replace the oil seal 2. Check and repair 3. Repair or replace 4. Adjust to the specified value 5. Cleaning or replacement 6. Maintenance 7. Maintenance
Lift and sink by itself	Leakage in the boom cylinder multi-way valve in the middle of the leakage	Change the sealing ring Maintenance
Empty pump or foaming oil	<ol style="list-style-type: none"> 1. The oil level is too low 2. The oil filter is blocked 3. Leakage of suction pipe or damage of oil pump seal 4. Poor oil or oil deterioration 	<ol style="list-style-type: none"> 1. Refuel to the specified oil level 2. Clean the oil filter 3. Maintenance 4. Replace according to regulations
The oil temperature is too high	<ol style="list-style-type: none"> 1. Working at full load for too long 2. The system pressure adjustment is too high 3. Insufficient oil is measured in the tank 4. Internal friction of working oil pump 	<ol style="list-style-type: none"> 1. Stop cooling 2. According to the regulation of pressure adjustment 3. Refuel to the specified oil level 4. Maintenance

Drive Axle

Fault	Possible Causes	Troubleshooting
Traffic noise	Main reduction gear whistle joint point is not good Bearing wear exceeds limit or loosens Gear wear exceeds the limit	Adjust or change bevel gears Change the bearing or adjust Replace the gear
Sound when braking	Brake bottom bending Brake friction lining rivet loose Brake drum is damaged	Repair or replace Repair Repair or replace
The vehicle swerved when braking	1. There is oil on the surface of brake shoes 2. Improper gap adjustment 3. Tyre pressure imbalance	1. Clean 2. Realign 3. Make the air pressure consistent
Poor braking	1. Improper adjustment of gap between brake drum and brake shoe 2. Oil stains 3. Heavy brake plate wear	1. Realign 2. Cleaning 3. Replace

Steering system

Fault	Possible Causes	Troubleshooting
Turn the steering after wheel is back	1. The return spring piece of the steering gear is damaged 2. The oil distribution sleeve and the oil distribution shaft are stuck, or the oil distribution sleeve and the valve body are stuck	1. Change 2. Open inspection
Turn the steering wheel slowly and lightly, turn fast and heavy	Oil supply is insufficient	Adjust priority valve
Unable to steer	Low working oil pressure	Adjust the overflow valve on the priority valve
Turn the steering wheel and the cylinder does not move	There is insufficient air or oil in the system	Expel air or replenish oil
Oil leak	Loose tubing joints or damaged seals	Tighten or replace

Electrical System

Fault	Possible Causes	Troubleshooting
The engine is normal, and the battery does not charge or charges inefficiently	<ol style="list-style-type: none"> 1. Battery plate vulcanization 2. The generator belt is too loose or damaged 3. Wiring is not strong, bad contact 4. Improper adjustment or damage of the regulator 	<ol style="list-style-type: none"> 1. Desulfurization treatment or replacement plate 2. Readjust or replace 3. Check and eliminate them 4. Readjust or repair
Lack of battery capacity	<ol style="list-style-type: none"> 1. Electrolyte specific gravity or liquid level is too low 2. Short circuit between plates 3. Plate vulcanization 4. Bad wire contact 5. The active material of the plate falls off 	<ol style="list-style-type: none"> 1. Readjust the specific gravity or add electrolyte 2. Eliminate sediment, replace the electrolyte 3. Desulfurization treatment or replacement plate 4. Check and eliminate them 5. Replace the plate
Generator out of operation	<ol style="list-style-type: none"> 1. The remanence disappeared 2. The magnetic field coil loop is broken 3. Bad commutator contact 4. The brush is stuck and not flexible 	<ol style="list-style-type: none"> 1. According to the original polarity of the generator, the battery is connected to both ends of the magnetic field coil magnetization 2. Check and connect 3. Use no. 0 or 00 sandpaper polishing 4. Correct the brush size, adjust the spring pressure check and repair

3. Maintenance

3.1 Engine Oil Supply:

Oil check must be performed before operation or 15 minutes after engine shutdown. Park the loader on a flat surface, put the variable speed control handle in neutral position, pull up the parking brake handle to put the vehicle in safe braked state, and place wedges at the front and back of the tyres.

Open the hood and pull out the dipstick, wipe it off and insert it, then pull it out and check it at least twice.

If the oil level is between the upper limit and lower limit of dipstick, it is the right amount of oil. Put the dipstick back and close the engine hood.

3.2 Oil change:

Unscrew the oil drain plug at the bottom of the engine to release the oil and replace the oil filter. Drain out the old oil and reinstall the drain plug.

Inject the specified oil from the engine oil refuelling port. Run engine at idle, check oil filter and drain plug for oil leakage.

The engine is then turned off for around 15 minutes so the oil fully returns to the oil plate, and the engine oil level is checked again.

3.3 Fuel Tank Filling:

Park the loader on a flat surface and check the oil level from the outside of the tank by observing the level gauge. Fuel is added from the tank port when the level gauge reading is below 0.

3.4 Gearbox Oiling:

Park the loader on a flat surface, put the variable speed control handle in the neutral position, pull up the parking brake handle to put the vehicle in the parking brake state, and place wedges at the front and back of the tyres.

Unscrew the oil drain screw plug on the right side of the bottom of the gearbox to drain oil. Note: when discharging oil, not only the oil in the gearbox should be drained clean, but also the oil radiator of the torque converter should be drained clean.

Unscrew the gearbox refuelling port at the hinge on the right side of the loader and inject the specified hydraulic transmission oil.

Start the engine and idle running, the oil level is required to be above the oil check plug. All gears are selected once. Check the oil level again and add again if necessary.

3.5 Drive Axle Oiling:

Unscrew the refuelling plug in the centre of the front and rear drive axle housing. If the oil level is at the lower edge of the refuelling port, it is appropriate to add the specified gear oil. After refuelling, it should be observed for around 5 minutes.

On a flat surface, idle for around 10 minutes, use the small throttle to slowly move the loader, so that the front drive axle wheel edge end face of the oil discharge plug is in the lowest position.

The engine is cooled off, unscrew the oil discharge screw plug on the side of the two wheels and the oil discharge screw plug at the bottom of the axle housing centre, carry out the oil discharge, exhaust the old oil, screw the oil discharge screw plug at the bottom of the axle housing centre.

Start the engine, slowly move the loader, so that the oil outlet on the side of the wheel edge is in the horizontal axis position of the tyre. The oil discharge port on the sides of the two-wheel sides of the front drive axle and the refuelling port in the centre of the axle housing are added with the prescribed gear oil to check the oil level again.

3.6 Filling Of Hydraulic Tank:

Check the level gauge on the left side of the hydraulic tank. The oil level in the range of 8±2 is moderate. When the oil level is lower than the 6-scale line, please add the specified hydraulic oil.

Clear out clutter from the bucket, park the loader on flat, open ground, with the variable speed control lever in the neutral position, pull up the parking brake handle, with the vehicle in the parking brake state, start the engine and idle, running for 10 minutes. Repeatedly move the arm, forward and backward of bucket to promote oil circulation.

Lift the boom to the highest position, tilt the bucket back to the maximum position, and then turn off the engine.

Push the bucket control handle forward, so that the bucket turns forward under the action of its own weight and discharge the oil in the bucket cylinder.

Remove the oil discharge screw plug at the bottom of the hydraulic tank, discharge the dirty oil, and unscrew the fuel filter cover to speed up the oil discharge process.

Remove the flange cover at the bottom of the tank and clean the inside of the tank. Remove the flange cover at the top of the tank, clean the oil suction port, oil return port and the filter element at the refuelling port. If the filter element is damaged, it must be replaced.

From the top of the oil tank to add the specified hydraulic oil to the middle scale position of the level gauge, it is not permitted to remove the filter element of the oil port directly into the oil tank.

Start the engine, 2-3 times of lifting arm and forward tilt, back tilt bucket and left and right turn to the maximum angle, so that the hydraulic oil fills the cylinder, tubing. Then run the engine at idle for 5 minutes to expel air from the system.

3.7 Oil selection table:

Please give priority to using special oil. You can choose the type and grade of oil according to the table below.

All standard oil products are indicated		
Oil tank (Neutral position of level gauge)	46# Antiwear hydraulic oil	
Diesel tank (level gauge)	Above 10C: 0# Diesel	Below 10C: 10# Diesel
Gearbox + Torque converter (Neutral position of level gauge/ 16~18L)	8# Hydraulic drive oil	
Drive axle (2L/side reducer; 3.5~4L/ main reducer)	GL-5 Heavy duty vehicle gear oil	
Engine lubricating oil (Neutral position of level gauge/ 7.5~8L)	Above 10C:CC40 motor oil	Below 10C: CC30 motor oil
Brake oil (Midpoint of tick mark)	912 Synthetic brake fluid	
lubricating oil for pin (Add before every operate)	Lithium ester butter	
Antifreeze (Full)	Based on weather	

3.8 Electrical system maintenance rules:

If the wires are in a humid environment or the insulators are damaged, the electrical system is prone to power surges, resulting in dangerous accidents.

Check the tightness and damage of the fan belt.

Check the liquid level of the electrolyte in the battery.

Do not arbitrarily remove any installed electrical components.

In accordance with our warranty terms, it is not permitted to add any electrical components.

When cleaning the machine or in wet environments, you must endeavour to keep the electrical system dry.

3.9 Tightening torque of threaded connection:

The following table lists the tightening torque of the thread connection of the main components. Except for special circumstances, the following table should be strictly followed.

No.	Specification	Material	Torque (N.m)
1	M16x1.5x70	8.8	70 100~
2	M18x1.5	8	265 355~
3	M20x1.5x70	8.8	380 460~
4	M12x1.25x45	8.8	75 105~
5	M16x35	8.8	185 265~
6	M20x2x60	8.8	250 360~
7	M16x70	45	193 257~

3.10 Maintenance Schedule

Regular maintenance is divided into every 10, 50, 100, 250, 500, and 1000 hours.

10 hour maintenance (daily):

- Check whether the fasteners are loose / lost and tighten and repair them.
- Check there is no damage to the parts of the machine.
- Check whether the lubrication points are full of lubricating oil.
- Check the fuel tank, hydraulic tank, brake oil level, whether the engine cooling water is full.
- After starting engine, check whether there is oil gassing, water leakage, or any abnormal sounds.
- Test brakes are reliable and whether the steering is flexible.

50 hour maintenance (weekly):

Every 10 hours of maintenance at the same time -

- Check whether the stroke of the brake pedal meets the requirements. If not, it will need to be adjusted.
- Tighten the front and rear drive shaft connection bolt, drive axle connecting bolts, tyre nuts.
- The injection nozzle is pressed with lithium grease.

In addition, add the following maintenance for the first 50 hours:

- Check and clean the transmission vent.
- Check whether there is leakage in the hydraulic system, check and clean the vent of the hydraulic tank, and check the filter element of the oil return filter of the hydraulic tank.

- Check whether there is leakage in any part of the brake system, clean the filter screen of the oil storage cup of the after pump, clean the air outlet, check the brake fluid, and replenish when it is lacking.

100 hour maintenance:

10 + 50 hours maintenance at the same time.

- Clean the radiator group.
- Clean the fuel tank filter.

In addition, add the following maintenance for the first 100 hours:

- Check and clean the breathable port of the gearbox, clean the oil pan of the gearbox, replace the torque converter, filter element of the gearbox oil system, and replace the gearbox oil.
- Replace the front and rear axle gear oil.

250 hour maintenance:

Every 10, 50, 100 hours at the same time.

- Measure tyre pressure. If insufficient, it should be replenished.
- Cleaning fuel, oil, hydraulic oil filter.
- Check whether there is oil leakage or damage to the brake system.
- Check and tighten hub bolts, brake disc and bearing cover bolts.

500 hour maintenance (monthly):

Every 10, 50, 100 hours at the same time.

- Check the multi-way valve, all kinds of cylinder surge loss, if there is a serious decline in the working device, it should be repaired and excluded.
- Check whether the brake pump leather bowl is damaged.
- Adjust the hub bearing clearance and make the outer end face of the brake disc runout less than 0.20mm.

1000 hour maintenance:

Every 10, 50, 250, 500 hours maintenance at the same time.

- Replace all fuel and oil system oil, hydraulic system oil, gearbox, front and rear axle gear oil and brake oil, etc. And the pipeline, tubing, filters and so on cleaned and then injected after purification of the new oil.
- Disassemble and clean the brake main pump and check the brake effect.
- Check the front and rear axle, the main transmission gear meshing situation, if the main and driven bevel gear clearance is too large, it should be adjusted to within 0.2~0.34mm.
- There is no deformation and weld fracture occurrence of the arm, attachments and the machine frame.

In addition, add the following maintenance for the first 1000 hours:

- Check whether there is leakage in the hydraulic system, check and clean the vent of the hydraulic tank, replace the filter element of the oil return filter of the hydraulic tank and the filter element of the pilot filter (when installed).
- Check the hydraulic oil level and cleanliness, filter when conditions are available, add when required, replace when necessary.
- Check whether there is leakage in the brake system, clean the filter screen of the oil storage cup of the aftershock pump, clean the air outlet, and replace the brake fluid.

2000 hour maintenance (yearly):

Every 10, 50, 250, 500, 1000 hours maintenance at the same time.

- Replace antifreeze or replace once a year when applicable.
- Check the performance of torque converter, gearbox, front and rear axle differential and wheel side reducer.
- By testing the natural settlement of the hydraulic cylinder, check the tightness of the multi-way valve and hydraulic cylinder, and measure the working pressure of the system.
- Check the vehicle welding and stress parts and correct any deformation.

The above maintenance provisions are the basic requirements under normal use and the maintenance work shall be carried out according to the first time period due in the above requirements. If the working conditions are bad, users should shorten the maintenance cycle and increase the number of maintenance services according to your needs.

Note: Please use the Service Checklist Manual to ensure services have been completed in full and on time. To maintain your warranty, you are required to upload your service checklist along with a photo of your hour meter to Basecamp to verify your machine has been maintained and serviced in accordance with our warranty guidelines. Failure to upload service checklists and verification photos will result in termination of your warranty.



Maintenance and Service Checklist

CONGRATULATIONS on the purchase of your new loader!

You have made a great investment! To protect that investment, you will need to look after your machine with regular maintenance.

This maintenance manual has been compiled into a series of user-friendly checklists so you can easily carry out maintenance checks to safeguard the optimal performance and lifespan of your machine.

Please read through this maintenance manual carefully and ensure all maintenance is logged when you complete a maintenance check as we will require a copy of your completed maintenance manual with any warranty claims.

Please visit www.godzillaloaders.com.au/warranty/ for full terms and conditions of your 24 months /2000 warranty.

Useful Contacts

For instruction videos, manuals and helpful tips to troubleshoot, please visit www.godzillaloaders.com.au/yourloader/

For parts and aftersales service, please call: **1300 556 877** Or visit www.aftersalescare.com.au

10-Hour Maintenance

	Maintenance Item
	Pin the arm and the bucket arm and front device in grease
	Check welding of structural parts
	Check all operating switches
	Check engine oil level
	Check the oil level of the hydraulic oil tank
	Check the leakage of the hydraulic system
	Check fuel oil level
	Inspection of the oil-water separator
	Check for leakage in the fuel system
	Check the cooling system and add coolant as required
	Check the liquid level of the window cleaning fluid
	Check the wear and tear of bucket teeth and side teeth
	Check whether the engine fan belt is cracked or worn, and the tightening force is suitable
	Check all the external lights, speakers, control indicators and monitor lights
	Start engine, check engine start-up performance, check exhaust colour at start-up and exhaust colour at normal working time, check whether there is noise
	Check all operating controls
	Check bolts and nuts to prevent loosening and loss
	Check the tyres
	Check whether there are loose parts, noise or breakage parts (rail links, supporting sprockets and steering wheels)
	Clean engine air filter cover
	Service checklist uploaded to Basecamp, clearly showing date works completed

Date: _____

Stamp/Sign: _____

20-Hour Maintenance

	Maintenance Item
	Pin the arm and the bucket arm and front device in grease
	Check welding of structural parts
	Check all operating switches
	Check engine oil level
	Check the oil level of the hydraulic oil tank
	Check the leakage of the hydraulic system
	Check fuel oil level
	Inspection of the oil-water separator
	Check for leakage in the fuel system
	Check the cooling system and add coolant as required
	Check the liquid level of the window cleaning fluid
	Check the wear and tear of bucket teeth and side teeth
	Check whether the engine fan belt is cracked or worn, and the tightening force is suitable
	Check all the external lights, speakers, control indicators and monitor lights
	Start engine, check engine start-up performance, check exhaust colour at start-up and exhaust colour at normal working time, check whether there is noise
	Check all operating controls
	Check bolts and nuts to prevent loosening and loss
	Check the tyres
	Check whether there are loose parts, noise or breakage parts (rail links, supporting sprockets and steering wheels)
	Clean engine air filter cover
	Service checklist uploaded to Basecamp, clearly showing date works completed

Date: _____

Stamp/Sign: _____

30-Hour Maintenance

	Maintenance Item
	Pin the arm and the bucket arm and front device in grease
	Check welding of structural parts
	Check all operating switches
	Check engine oil level
	Check the oil level of the hydraulic oil tank
	Check the leakage of the hydraulic system
	Check fuel oil level
	Inspection of the oil-water separator
	Check for leakage in the fuel system
	Check the cooling system and add coolant as required
	Check the liquid level of the window cleaning fluid
	Check the wear and tear of bucket teeth and side teeth
	Check whether the engine fan belt is cracked or worn, and the tightening force is suitable
	Check all the external lights, speakers, control indicators and monitor lights
	Start engine, check engine start-up performance, check exhaust colour at start-up and exhaust colour at normal working time, check whether there is noise
	Check all operating controls
	Check bolts and nuts to prevent loosening and loss
	Check the tyres
	Check whether there are loose parts, noise or breakage parts (rail links, supporting sprockets and steering wheels)
	Clean engine air filter cover
	Service checklist uploaded to Basecamp, clearly showing date works completed

Date: _____

Stamp/Sign: _____

40-Hour Maintenance

	Maintenance Item
	Pin the arm and the bucket arm and front device in grease
	Check welding of structural parts
	Check all operating switches
	Check engine oil level
	Check the oil level of the hydraulic oil tank
	Check the leakage of the hydraulic system
	Check fuel oil level
	Inspection of the oil-water separator
	Check for leakage in the fuel system
	Check the cooling system and add coolant as required
	Check the liquid level of the window cleaning fluid
	Check the wear and tear of bucket teeth and side teeth
	Check whether the engine fan belt is cracked or worn, and the tightening force is suitable
	Check all the external lights, speakers, control indicators and monitor lights
	Start engine, check engine start-up performance, check exhaust colour at start-up and exhaust colour at normal working time, check whether there is noise
	Check all operating controls
	Check bolts and nuts to prevent loosening and loss
	Check the tyres
	Check whether there are loose parts, noise or breakage parts (rail links, supporting sprockets and steering wheels)
	Clean engine air filter cover
	Service checklist uploaded to Basecamp, clearly showing date works completed

Date: _____

Stamp/Sign: _____

50-Hour Maintenance

	Maintenance item
	Pin the arm and the bucket arm and front device in grease
	Check welding of structural parts
	Check all operating switches
	Check engine oil level
	Check the oil level of the hydraulic oil tank
	Check the leakage of the hydraulic system
	Check fuel oil level
	Inspection of the oil-water separator
	Check for leakage in the fuel system
	Check the cooling system and add coolant as required
	Check the liquid level of the window cleaning fluid
	Check the wear and tear of bucket teeth and side teeth
	Check whether the engine fan belt is cracked or worn, and the tightening force is suitable
	Check all the external lights, speakers, control indicators and monitor lights
	Start engine, check engine start-up performance, check exhaust colour at start-up and exhaust colour at normal working time, check whether there is noise
	Check all operating controls
	Check bolts and nuts to prevent loosening and loss
	Check the tyres
	Check whether there are loose parts, noise or breakage parts (rail links, supporting sprockets and steering wheels)
	Clean engine air filter cover
	Grease the shaft socket
	Grease the slewing bearing
	Check fuel tank discharge valve
	Replace engine oil and filter cartridge

Date: _____

Stamp/Sign: _____

	50-Hour Maintenance Continued
	Check water tank, oil radiator and air conditioner condenser core
	Check the battery liquid and charge
	Clean the fuel filter
	Service checklist uploaded to Basecamp, clearly showing date works completed

Date: _____

Stamp/Sign: _____

60-Hour Maintenance

	Maintenance Item
	Pin the arm and the bucket arm and front device in grease
	Check welding of structural parts
	Check all operating switches
	Check engine oil level
	Check the oil level of the hydraulic oil tank
	Check the leakage of the hydraulic system
	Check fuel oil level
	Inspection of the oil-water separator
	Check for leakage in the fuel system
	Check the cooling system and add coolant as required
	Check the liquid level of the window cleaning fluid
	Check the wear and tear of bucket teeth and side teeth
	Check whether the engine fan belt is cracked or worn, and the tightening force is suitable
	Check all the external lights, speakers, control indicators and monitor lights
	Start engine, check engine start-up performance, check exhaust colour at start-up and exhaust colour at normal working time, check whether there is noise
	Check all operating controls
	Check bolts and nuts to prevent loosening and loss
	Check the tyres
	Check whether there are loose parts, noise or breakage parts (rail links, supporting sprockets and steering wheels)
	Clean engine air filter cover
	Service checklist uploaded to Basecamp, clearly showing date works completed

Date: _____

Stamp/Sign: _____

70-Hour Maintenance

	Maintenance Item
	Pin the arm and the bucket arm and front device in grease
	Check welding of structural parts
	Check all operating switches
	Check engine oil level
	Check the oil level of the hydraulic oil tank
	Check the leakage of the hydraulic system
	Check fuel oil level
	Inspection of the oil-water separator
	Check for leakage in the fuel system
	Check the cooling system and add coolant as required
	Check the liquid level of the window cleaning fluid
	Check the wear and tear of bucket teeth and side teeth
	Check whether the engine fan belt is cracked or worn, and the tightening force is suitable
	Check all the external lights, speakers, control indicators and monitor lights
	Start engine, check engine start-up performance, check exhaust colour at start-up and exhaust colour at normal working time, check whether there is noise
	Check all operating controls
	Check bolts and nuts to prevent loosening and loss
	Check the tyres
	Check whether there are loose parts, noise or breakage parts (rail links, supporting sprockets and steering wheels)
	Clean engine air filter cover
	Service checklist uploaded to Basecamp, clearly showing date works completed

Date: _____

Stamp/Sign: _____

80-Hour Maintenance

	Maintenance Item
	Pin the arm and the bucket arm and front device in grease
	Check welding of structural parts
	Check all operating switches
	Check engine oil level
	Check the oil level of the hydraulic oil tank
	Check the leakage of the hydraulic system
	Check fuel oil level
	Inspection of the oil-water separator
	Check for leakage in the fuel system
	Check the cooling system and add coolant as required
	Check the liquid level of the window cleaning fluid
	Check the wear and tear of bucket teeth and side teeth
	Check whether the engine fan belt is cracked or worn, and the tightening force is suitable
	Check all the external lights, speakers, control indicators and monitor lights
	Start engine, check engine start-up performance, check exhaust colour at start-up and exhaust colour at normal working time, check whether there is noise
	Check all operating controls
	Check bolts and nuts to prevent loosening and loss
	Check the tyres
	Check whether there are loose parts, noise or breakage parts (rail links, supporting sprockets and steering wheels)
	Clean engine air filter cover
	Service checklist uploaded to Basecamp, clearly showing date works completed

Date: _____

Stamp/Sign: _____

90-Hour Maintenance

	Maintenance Item
	Pin the arm and the bucket arm and front device in grease
	Check welding of structural parts
	Check all operating switches
	Check engine oil level
	Check the oil level of the hydraulic oil tank
	Check the leakage of the hydraulic system
	Check fuel oil level
	Inspection of the oil-water separator
	Check for leakage in the fuel system
	Check the cooling system and add coolant as required
	Check the liquid level of the window cleaning fluid
	Check the wear and tear of bucket teeth and side teeth
	Check whether the engine fan belt is cracked or worn, and the tightening force is suitable
	Check all the external lights, speakers, control indicators and monitor lights
	Start engine, check engine start-up performance, check exhaust colour at start-up and exhaust colour at normal working time, check whether there is noise
	Check all operating controls
	Check bolts and nuts to prevent loosening and loss
	Check the tyres
	Check whether there are loose parts, noise or breakage parts (rail links, supporting sprockets and steering wheels)
	Clean engine air filter cover
	Service checklist uploaded to Basecamp, clearly showing date works completed

Date: _____

Stamp/Sign: _____

100-Hour Maintenance

	Maintenance Item
	Pin the arm and the bucket arm and front device in grease
	Check welding of structural parts
	Check all operating switches
	Check engine oil level
	Check the oil level of the hydraulic oil tank
	Check the leakage of the hydraulic system
	Check fuel oil level
	Inspection of the oil-water separator
	Check for leakage in the fuel system
	Check the cooling system and add coolant as required
	Check the liquid level of the window cleaning fluid
	Check the wear and tear of bucket teeth and side teeth
	Check whether the engine fan belt is cracked or worn, and the tightening force is suitable
	Check all the external lights, speakers, control indicators and monitor lights
	Start engine, check engine start-up performance, check exhaust colour at start-up and exhaust colour at normal working time, check whether there is noise
	Check all operating controls
	Check bolts and nuts to prevent loosening and loss
	Check the tyres
	Check whether there are loose parts, noise or breakage parts (rail links, supporting sprockets and steering wheels)
	Clean engine air filter cover
	Grease the shaft socket

Date: _____

Stamp/Sign: _____

	100-Hour Maintenance Continued
	Check fuel tank discharge valve
	Replace engine oil and filter cartridge
	Check water tank, oil radiator and air conditioner condenser core
	Check the battery liquid and charge
	Clean the fuel filter
	Replacement of hydraulic oil
	Replace oil filter
	Clean the filter core of the air filter
	Service checklist uploaded to Basecamp, clearly showing date works completed

Date: _____

Stamp/Sign: _____

110-Hour Maintenance

	Maintenance Item
	Pin the arm and the bucket arm and front device in grease
	Check welding of structural parts
	Check all operating switches
	Check engine oil level
	Check the oil level of the hydraulic oil tank
	Check the leakage of the hydraulic system
	Check fuel oil level
	Inspection of the oil-water separator
	Check for leakage in the fuel system
	Check the cooling system and add coolant as required
	Check the liquid level of the window cleaning fluid
	Check the wear and tear of bucket teeth and side teeth
	Check whether the engine fan belt is cracked or worn, and the tightening force is suitable
	Check all the external lights, speakers, control indicators and monitor lights
	Start engine, check engine start-up performance, check exhaust colour at start-up and exhaust colour at normal working time, check whether there is noise
	Check all operating controls
	Check bolts and nuts to prevent loosening and loss
	Check the tyres
	Check whether there are loose parts, noise or breakage parts (rail links, supporting sprockets and steering wheels)
	Clean engine air filter cover
	Service checklist uploaded to Basecamp, clearly showing date works completed

Date: _____

Stamp/Sign: _____

120-Hour Maintenance

	Maintenance Item
	Pin the arm and the bucket arm and front device in grease
	Check welding of structural parts
	Check all operating switches
	Check engine oil level
	Check the oil level of the hydraulic oil tank
	Check the leakage of the hydraulic system
	Check fuel oil level
	Inspection of the oil-water separator
	Check for leakage in the fuel system
	Check the cooling system and add coolant as required
	Check the liquid level of the window cleaning fluid
	Check the wear and tear of bucket teeth and side teeth
	Check whether the engine fan belt is cracked or worn, and the tightening force is suitable
	Check all the external lights, speakers, control indicators and monitor lights
	Start engine, check engine start-up performance, check exhaust colour at start-up and exhaust colour at normal working time, check whether there is noise
	Check all operating controls
	Check bolts and nuts to prevent loosening and loss
	Check the tyres
	Check whether there are loose parts, noise or breakage parts (rail links, supporting sprockets and steering wheels)
	Clean engine air filter cover
	Service checklist uploaded to Basecamp, clearly showing date works completed

Date: _____

Stamp/Sign: _____

130-Hour Maintenance

	Maintenance Item
	Pin the arm and the bucket arm and front device in grease
	Check welding of structural parts
	Check all operating switches
	Check engine oil level
	Check the oil level of the hydraulic oil tank
	Check the leakage of the hydraulic system
	Check fuel oil level
	Inspection of the oil-water separator
	Check for leakage in the fuel system
	Check the cooling system and add coolant as required
	Check the liquid level of the window cleaning fluid
	Check the wear and tear of bucket teeth and side teeth
	Check whether the engine fan belt is cracked or worn, and the tightening force is suitable
	Check all the external lights, speakers, control indicators and monitor lights
	Start engine, check engine start-up performance, check exhaust colour at start-up and exhaust colour at normal working time, check whether there is noise
	Check all operating controls
	Check bolts and nuts to prevent loosening and loss
	Check the tyres
	Check whether there are loose parts, noise or breakage parts (rail links, supporting sprockets and steering wheels)
	Clean engine air filter cover
	Service checklist uploaded to Basecamp, clearly showing date works completed

Date: _____

Stamp/Sign: _____

140-Hour Maintenance

	Maintenance Item
	Pin the arm and the bucket arm and front device in grease
	Check welding of structural parts
	Check all operating switches
	Check engine oil level
	Check the oil level of the hydraulic oil tank
	Check the leakage of the hydraulic system
	Check fuel oil level
	Inspection of the oil-water separator
	Check for leakage in the fuel system
	Check the cooling system and add coolant as required
	Check the liquid level of the window cleaning fluid
	Check the wear and tear of bucket teeth and side teeth
	Check whether the engine fan belt is cracked or worn, and the tightening force is suitable
	Check all the external lights, speakers, control indicators and monitor lights
	Start engine, check engine start-up performance, check exhaust colour at start-up and exhaust colour at normal working time, check whether there is noise
	Check all operating controls
	Check bolts and nuts to prevent loosening and loss
	Check the tyres
	Check whether there are loose parts, noise or breakage parts (rail links, supporting sprockets and steering wheels)
	Clean engine air filter cover
	Service checklist uploaded to Basecamp, clearly showing date works completed

Date: _____

Stamp/Sign: _____

150-Hour Maintenance

	Maintenance Item
	Pin the arm and the bucket arm and front device in grease
	Check welding of structural parts
	Check all operating switches
	Check engine oil level
	Check the oil level of the hydraulic oil tank
	Check the leakage of the hydraulic system
	Check fuel oil level
	Inspection of the oil-water separator
	Check for leakage in the fuel system
	Check the cooling system and add coolant as required
	Check the liquid level of the window cleaning fluid
	Check the wear and tear of bucket teeth and side teeth
	Check whether the engine fan belt is cracked or worn, and the tightening force is suitable
	Check all the external lights, speakers, control indicators and monitor lights
	Start engine, check engine start-up performance, check exhaust colour at start-up and exhaust colour at normal working time, check whether there is noise
	Check all operating controls
	Check bolts and nuts to prevent loosening and loss
	Check the tyres
	Whether there are loose parts, noise or breakage parts (rail links, supporting sprockets and steering wheels)
	Clean engine air filter cover
	Grease the shaft socket
	Grease the slewing bearing
	Check fuel tank discharge valve
	Replace engine oil and filter cartridge

Date: _____

Stamp/Sign: _____

	150-Hour Maintenance Continued
	Check water tank, oil radiator and air conditioner condenser core
	Check the battery liquid and charge
	Clean the fuel filter
	Service checklist uploaded to Basecamp, clearly showing date works completed

Date: _____

Stamp/Sign: _____

160-Hour Maintenance

	Maintenance Item
	Pin the arm and the bucket arm and front device in grease
	Check welding of structural parts
	Check all operating switches
	Check engine oil level
	Check the oil level of the hydraulic oil tank
	Check the leakage of the hydraulic system
	Check fuel oil level
	Inspection of the oil-water separator
	Check for leakage in the fuel system
	Check the cooling system and add coolant as required
	Check the liquid level of the window cleaning fluid
	Check the wear and tear of bucket teeth and side teeth
	Check whether the engine fan belt is cracked or worn, and the tightening force is suitable
	Check all the external lights, speakers, control indicators and monitor lights
	Start engine, check engine start-up performance, check exhaust colour at start-up and exhaust colour at normal working time, check whether there is noise
	Check all operating controls
	Check bolts and nuts to prevent loosening and loss
	Check the tyres
	Check whether there are loose parts, noise or breakage parts (rail links, supporting sprockets and steering wheels)
	Clean engine air filter cover
	Service checklist uploaded to Basecamp, clearly showing date works completed

Date: _____

Stamp/Sign: _____

170-Hour Maintenance

	Maintenance Item
	Pin the arm and the bucket arm and front device in grease
	Check welding of structural parts
	Check all operating switches
	Check engine oil level
	Check the oil level of the hydraulic oil tank
	Check the leakage of the hydraulic system
	Check fuel oil level
	Inspection of the oil-water separator
	Check for leakage in the fuel system
	Check the cooling system and add coolant as required
	Check the liquid level of the window cleaning fluid
	Check the wear and tear of bucket teeth and side teeth
	Check whether the engine fan belt is cracked or worn, and the tightening force is suitable
	Check all the external lights, speakers, control indicators and monitor lights
	Start engine, check engine start-up performance, check exhaust colour at start-up and exhaust colour at normal working time, check whether there is noise
	Check all operating controls
	Check bolts and nuts to prevent loosening and loss
	Check the tyres
	Check whether there are loose parts, noise or breakage parts (rail links, supporting sprockets and steering wheels)
	Clean engine air filter cover
	Service checklist uploaded to Basecamp, clearly showing date works completed

Date: _____

Stamp/Sign: _____

180-Hour Maintenance

	Maintenance Item
	Pin the arm and the bucket arm and front device in grease
	Check welding of structural parts
	Check all operating switches
	Check engine oil level
	Check the oil level of the hydraulic oil tank
	Check the leakage of the hydraulic system
	Check fuel oil level
	Inspection of the oil-water separator
	Check for leakage in the fuel system
	Check the cooling system and add coolant as required
	Check the liquid level of the window cleaning fluid
	Check the wear and tear of bucket teeth and side teeth
	Check whether the engine fan belt is cracked or worn, and the tightening force is suitable
	Check all the external lights, speakers, control indicators and monitor lights
	Start engine, check engine start-up performance, check exhaust colour at start-up and exhaust colour at normal working time, check whether there is noise
	Check all operating controls
	Check bolts and nuts to prevent loosening and loss
	Check the tyres
	Check whether there are loose parts, noise or breakage parts (rail links, supporting sprockets and steering wheels)
	Clean engine air filter cover
	Service checklist uploaded to Basecamp, clearly showing date works completed

Date: _____

Stamp/Sign: _____

190-Hour Maintenance

	Maintenance Item
	Pin the arm and the bucket arm and front device in grease
	Check welding of structural parts
	Check all operating switches
	Check engine oil level
	Check the oil level of the hydraulic oil tank
	Check the leakage of the hydraulic system
	Check fuel oil level
	Inspection of the oil-water separator
	Check for leakage in the fuel system
	Check the cooling system and add coolant as required
	Check the liquid level of the window cleaning fluid
	Check the wear and tear of bucket teeth and side teeth
	Check whether the engine fan belt is cracked or worn, and the tightening force is suitable
	Check all the external lights, speakers, control indicators and monitor lights
	Start engine, check engine start-up performance, check exhaust colour at start-up and exhaust colour at normal working time, check whether there is noise
	Check all operating controls
	Check bolts and nuts to prevent loosening and loss
	Check the tyres
	Check whether there are loose parts, noise or breakage parts (rail links, supporting sprockets and steering wheels)
	Clean engine air filter cover
	Service checklist uploaded to Basecamp, clearly showing date works completed

Date: _____

Stamp/Sign: _____

200-Hour Maintenance

	Maintenance Item
	Pin the arm and the bucket arm and front device in grease
	Check welding of structural parts
	Check all operating switches
	Check engine oil level
	Check the oil level of the hydraulic oil tank
	Check the leakage of the hydraulic system
	Check fuel oil level
	Inspection of the oil-water separator
	Check for leakage in the fuel system
	Check the cooling system and add coolant as required
	Check the liquid level of the window cleaning fluid
	Check the wear and tear of bucket teeth and side teeth
	Check whether the engine fan belt is cracked or worn, and the tightening force is suitable
	Check all the external lights, speakers, control indicators and monitor lights
	Start engine, check engine start-up performance, check exhaust colour at start-up and exhaust colour at normal working time, check whether there is noise
	Check all operating controls
	Check bolts and nuts to prevent loosening and loss
	Check the tyres
	Check whether there are loose parts, noise or breakage parts (rail links, supporting sprockets and steering wheels)
	Clean engine air filter cover
	Grease the shaft socket

Date: _____

Stamp/Sign: _____

200-Hour Maintenance Continued	
	Grease the slewing bearing
	Check fuel tank discharge valve
	Replace engine oil and filter cartridge
	Check water tank, oil radiator and air conditioner condenser core
	Check the battery liquid and charge
	Clean the fuel filter
	Replacement of hydraulic oil
	Replace oil filter
	Clean the filter core of the air filter
	Replace engine oil and filter cartridge
	Service checklist uploaded to Basecamp, clearly showing date works completed

Date: _____

Stamp/Sign: _____

250-Hour Maintenance

	Maintenance Item
	Pin the arm and the bucket arm and front device in grease
	Check welding of structural parts
	Check all operating switches
	Check engine oil level
	Check the oil level of the hydraulic oil tank
	Check the leakage of the hydraulic system
	Check fuel oil level
	Inspection of the oil-water separator
	Check for leakage in the fuel system
	Check the cooling system and add coolant as required
	Check the liquid level of the window cleaning fluid
	Check the wear and tear of bucket teeth and side teeth
	Check whether the engine fan belt is cracked or worn, and the tightening force is suitable.
	Check all the external lights, speakers, control indicators and monitor lights
	Start engine, check engine start-up performance, check exhaust colour at start-up and exhaust colour at normal working time, check whether there is noise
	Check all operating controls
	Check bolts and nuts to prevent loosening and loss
	Check the tyres
	Whether there are loose parts, noise or breakage parts (rail links, supporting sprockets and steering wheels)
	Clean engine air filter cover
	Grease the shaft socket
	Grease the slewing bearing

Date: _____

Stamp/Sign: _____

	250-Hour Maintenance Continued
	Check fuel tank discharge valve
	Replace engine oil and filter cartridge
	Check water tank, oil radiator and air conditioner condenser core
	Check the battery liquid and charge
	Clean the fuel filter
	Check for any discharge or impurities from the hydraulic tank
	Check the wear and tear of front end work device pin and bushing
	Check the hose clamp of the fuel system
	Service checklist uploaded to Basecamp, clearly showing date works completed

Date: _____

Stamp/Sign: _____

300-Hour Maintenance

	Maintenance Item
	Pin the arm and the bucket arm and front device in grease
	Check welding of structural parts
	Check all operating switches
	Check engine oil level
	Check the oil level of the hydraulic oil tank
	Check the leakage of the hydraulic system
	Check fuel oil level
	Inspection of the oil-water separator
	Check for leakage in the fuel system
	Check the cooling system and add coolant as required
	Check the liquid level of the window cleaning fluid
	Check the wear and tear of bucket teeth and side teeth
	Check whether the engine fan belt is cracked or worn, and the tightening force is suitable
	Check all the external lights, speakers, control indicators and monitor lights
	Start engine, check engine start-up performance, check exhaust colour at start-up and exhaust colour at normal working time, check whether there is noise
	Check all operating controls
	Check bolts and nuts to prevent loosening and loss
	Check the tyres
	Whether there are loose parts, noise or breakage parts (rail links, supporting sprockets and steering wheels)
	Clean engine air filter cover

Date: _____

Stamp/Sign: _____

300-Hour Maintenance Continued	
	Grease the shaft socket
	Grease the slewing bearing
	Check fuel tank discharge valve
	Replace engine oil and filter cartridge
	Check water tank, oil radiator and air conditioner condenser core
	Check the battery liquid and charge
	Clean the fuel filter
	Replacement of hydraulic oil
	Replace oil filter
	Clean the filter core of the air filter
	Replace engine oil and filter cartridge
	Service checklist uploaded to Basecamp, clearly showing date works completed

Date: _____

Stamp/Sign: _____

350-Hour Maintenance

	Maintenance Item
	Pin the arm and the bucket arm and front device in grease
	Check welding of structural parts
	Check all operating switches
	Check engine oil level
	Check the oil level of the hydraulic oil tank
	Check the leakage of the hydraulic system
	Check fuel oil level
	Inspection of the oil-water separator
	Check for leakage in the fuel system
	Check the cooling system and add coolant as required
	Check the liquid level of the window cleaning fluid
	Check the wear and tear of bucket teeth and side teeth
	Check whether the engine fan belt is cracked or worn, and the tightening force is suitable
	Check all the external lights, speakers, control indicators and monitor lights
	Start engine, check engine start-up performance, check exhaust colour at start-up and exhaust colour at normal working time, check whether there is noise
	Check all operating controls
	Check bolts and nuts to prevent loosening and loss
	Check the tyres
	Whether there are loose parts, noise or breakage parts (rail links, supporting sprockets and steering wheels)
	Clean engine air filter cover

Date: _____

Stamp/Sign: _____

350-Hour Maintenance Continued	
	Grease the shaft socket
	Grease the slewing bearing
	Check fuel tank discharge valve
	Replace engine oil and filter cartridge
	Check water tank, oil radiator and air conditioner condenser core
	Check the battery liquid and charge
	Clean the fuel filter
	Check for any discharge or impurities from the hydraulic tank
	Check the wear and tear of front end work device pin and bushing
	Check the hose clamp of the fuel system
	Service checklist uploaded to Basecamp, clearly showing date works completed

Date: _____

Stamp/Sign: _____

400-Hour Maintenance

	Maintenance Item
	Pin the arm and the bucket arm and front device in grease
	Check welding of structural parts
	Check all operating switches
	Check engine oil level
	Check the oil level of the hydraulic oil tank
	Check the leakage of the hydraulic system
	Check fuel oil level
	Inspection of the oil-water separator
	Check for leakage in the fuel system
	Check the cooling system and add coolant as required
	Check the liquid level of the window cleaning fluid
	Check the wear and tear of bucket teeth and side teeth
	Check whether the engine fan belt is cracked or worn, and the tightening force is suitable
	Check all the external lights, speakers, control indicators and monitor lights
	Start engine, check engine start-up performance, check exhaust colour at start-up and exhaust colour at normal working time, check whether there is noise
	Check all operating controls
	Check bolts and nuts to prevent loosening and loss
	Check the tyres
	Whether there are loose parts, noise or breakage parts (rail links, supporting sprockets and steering wheels)
	Clean engine air filter cover

Date: _____

Stamp/Sign: _____

400-Hour Maintenance Continued	
	Grease the shaft socket
	Grease the slewing bearing
	Check fuel tank discharge valve
	Replace engine oil and filter cartridge
	Check water tank, oil radiator and air conditioner condenser core
	Check the battery liquid and charge
	Clean the fuel filter
	Replacement of hydraulic oil
	Replace oil filter
	Clean the filter core of the air filter
	Replace engine oil and filter cartridge
	Service checklist uploaded to Basecamp, clearly showing date works completed

Date: _____

Stamp/Sign: _____

450-Hour Maintenance

	Maintenance Item
	Pin the arm and the bucket arm and front device in grease
	Check welding of structural parts
	Check all operating switches
	Check engine oil level
	Check the oil level of the hydraulic oil tank
	Check the leakage of the hydraulic system
	Check fuel oil level
	Inspection of the oil-water separator
	Check for leakage in the fuel system
	Check the cooling system and add coolant as required
	Check the liquid level of the window cleaning fluid
	Check the wear and tear of bucket teeth and side teeth
	Check whether the engine fan belt is cracked or worn, and the tightening force is suitable
	Check all the external lights, speakers, control indicators and monitor lights
	Start engine, check engine start-up performance, check exhaust colour at start-up and exhaust colour at normal working time, check whether there is noise
	Check all operating controls
	Check bolts and nuts to prevent loosening and loss
	Check the tyres
	Whether there are loose parts, noise or breakage parts (rail links, supporting sprockets and steering wheels)
	Clean engine air filter cover

Date: _____

Stamp/Sign: _____

450-Hour Maintenance Continued	
	Grease the shaft socket
	Grease the slewing bearing
	Check fuel tank discharge valve
	Replace engine oil and filter cartridge
	Check water tank, oil radiator and air conditioner condenser core
	Check the battery liquid and charge
	Clean the fuel filter
	Check for any discharge or impurities from the hydraulic tank
	Check the wear and tear of front end work device pin and bushing
	Check the hose clamp of the fuel system
	Service checklist uploaded to Basecamp, clearly showing date works completed

Date: _____

Stamp/Sign: _____

500-Hour Maintenance

	Maintenance Item
	Pin the arm and the bucket arm and front device in grease
	Check welding of structural parts
	Check all operating switches
	Check engine oil level
	Check the oil level of the hydraulic oil tank
	Check the leakage of the hydraulic system
	Check fuel oil level
	Inspection of the oil-water separator
	Check for leakage in the fuel system
	Check the cooling system and add coolant as required
	Check the liquid level of the window cleaning fluid
	Check the wear and tear of bucket teeth and side teeth
	Check whether the engine fan belt is cracked or worn, and the tightening force is suitable
	Check all the external lights, speakers, control indicators and monitor lights
	Start engine, check engine start-up performance, check exhaust colour at start-up and exhaust colour at normal working time, check whether there is noise
	Check all operating controls
	Check bolts and nuts to prevent loosening and loss
	Check the tyres
	Check whether there are loose parts, noise or breakage parts (rail links, supporting sprockets and steering wheels)

Date: _____

Stamp/Sign: _____

500-Hour Maintenance Continued	
	Clean engine air filter cover
	Grease the shaft socket
	Grease the slewing bearing
	Check fuel tank discharge valve
	Replace engine oil and filter cartridge
	Check water tank, oil radiator and air conditioner condenser core
	Check the battery liquid and charge
	Clean the fuel filter
	Replacement of hydraulic oil
	Replace oil filter
	Clean the filter core of the air filter
	Replace engine oil and filter cartridge
	Replacement of hydraulic oil filter
	Replacing the air filter cartridge
	Replacement of fuel filter core
	Check the oil level on both sides of the walking deceleration device
	Replacement of water tank coolant
	Service checklist uploaded to Basecamp, clearly showing date works completed

Date: _____

Stamp/Sign: _____

550-Hour Maintenance

	Maintenance Item
	Pin the arm and the bucket arm and front device in grease
	Check welding of structural parts
	Check all operating switches
	Check engine oil level
	Check the oil level of the hydraulic oil tank
	Check the leakage of the hydraulic system
	Check fuel oil level
	Inspection of the oil-water separator
	Check for leakage in the fuel system
	Check the cooling system and add coolant as required
	Check the liquid level of the window cleaning fluid
	Check the wear and tear of bucket teeth and side teeth
	Check whether the engine fan belt is cracked or worn, and the tightening force is suitable
	Check all the external lights, speakers, control indicators and monitor lights
	Start engine, check engine start-up performance, check exhaust colour at start-up and exhaust colour at normal working time, check whether there is noise
	Check all operating controls
	Check bolts and nuts to prevent loosening and loss
	Check the tyres
	Whether there are loose parts, noise or breakage parts (rail links, supporting sprockets and steering wheels)
	Clean engine air filter cover

Date: _____

Stamp/Sign: _____

550-Hour Maintenance Continued	
	Grease the shaft socket
	Grease the slewing bearing
	Check fuel tank discharge valve
	Replace engine oil and filter cartridge
	Check water tank, oil radiator and air conditioner condenser core
	Check the battery liquid and charge
	Clean the fuel filter
	Check for any discharge or impurities from the hydraulic tank
	Check the wear and tear of front end work device pin and bushing
	Check the hose clamp of the fuel system
	Service checklist uploaded to Basecamp, clearly showing date works completed

Date: _____

Stamp/Sign: _____

600-Hour Maintenance

	Maintenance Item
	Pin the arm and the bucket arm and front device in grease
	Check welding of structural parts
	Check all operating switches
	Check engine oil level
	Check the oil level of the hydraulic oil tank
	Check the leakage of the hydraulic system
	Check fuel oil level
	Inspection of the oil-water separator
	Check for leakage in the fuel system
	Check the cooling system and add coolant as required
	Check the liquid level of the window cleaning fluid
	Check the wear and tear of bucket teeth and side teeth
	Check whether the engine fan belt is cracked or worn, and the tightening force is suitable
	Check all the external lights, speakers, control indicators and monitor lights
	Start engine, check engine start-up performance, check exhaust colour at start-up and exhaust colour at normal working time, check whether there is noise
	Check all operating controls
	Check bolts and nuts to prevent loosening and loss
	Check the tyres
	Whether there are loose parts, noise or breakage parts (rail links, supporting sprockets and steering wheels)
	Clean engine air filter cover

Date: _____

Stamp/Sign: _____

	600-Hour Maintenance Continued
	Grease the shaft socket
	Grease the slewing bearing
	Check fuel tank discharge valve
	Replace engine oil and filter cartridge
	Check water tank, oil radiator and air conditioner condenser core
	Check the battery liquid and charge
	Clean the fuel filter
	Replacement of hydraulic oil
	Replace oil filter
	Clean the filter core of the air filter
	Replace engine oil and filter cartridge
	Service checklist uploaded to Basecamp, clearly showing date works completed

Date: _____

Stamp/Sign: _____

650-Hour Maintenance

	Maintenance Item
	Pin the arm and the bucket arm and front device in grease
	Check welding of structural parts
	Check all operating switches
	Check engine oil level
	Check the oil level of the hydraulic oil tank
	Check the leakage of the hydraulic system
	Check fuel oil level
	Inspection of the oil-water separator
	Check for leakage in the fuel system
	Check the cooling system and add coolant as required
	Check the liquid level of the window cleaning fluid
	Check the wear and tear of bucket teeth and side teeth
	Check whether the engine fan belt is cracked or worn, and the tightening force is suitable
	Check all the external lights, speakers, control indicators and monitor lights
	Start engine, check engine start-up performance, check exhaust colour at start-up and exhaust colour at normal working time, check whether there is noise
	Check all operating controls
	Check bolts and nuts to prevent loosening and loss
	Check the tyres
	Whether there are loose parts, noise or breakage parts (rail links, supporting sprockets and steering wheels)
	Clean engine air filter cover

Date: _____

Stamp/Sign: _____

	650-Hour Maintenance Continued
	Grease the shaft socket
	Grease the slewing bearing
	Check fuel tank discharge valve
	Replace engine oil and filter cartridge
	Check water tank, oil radiator and air conditioner condenser core
	Check the battery liquid and charge
	Clean the fuel filter
	Check for any discharge or impurities from the hydraulic tank
	Check the wear and tear of front end work device pin and bushing
	Check the hose clamp of the fuel system
	Service checklist uploaded to Basecamp, clearly showing date works completed

Date: _____

Stamp/Sign: _____

700-Hour Maintenance

	Maintenance Item
	Pin the arm and the bucket arm and front device in grease
	Check welding of structural parts
	Check all operating switches
	Check engine oil level
	Check the oil level of the hydraulic oil tank
	Check the leakage of the hydraulic system
	Check fuel oil level
	Inspection of the oil-water separator
	Check for leakage in the fuel system
	Check the cooling system and add coolant as required
	Check the liquid level of the window cleaning fluid
	Check the wear and tear of bucket teeth and side teeth
	Check whether the engine fan belt is cracked or worn, and the tightening force is suitable
	Check all the external lights, speakers, control indicators and monitor lights
	Start engine, check engine start-up performance, check exhaust colour at start-up and exhaust colour at normal working time, check whether there is noise
	Check all operating controls
	Check bolts and nuts to prevent loosening and loss
	Check the tyres
	Whether there are loose parts, noise or breakage parts (rail links, supporting sprockets and steering wheels)
	Clean engine air filter cover

Date: _____

Stamp/Sign: _____

	700-Hour Maintenance Continued
	Grease the shaft socket
	Grease the slewing bearing
	Check fuel tank discharge valve
	Replace engine oil and filter cartridge
	Check water tank, oil radiator and air conditioner condenser core
	Check the battery liquid and charge
	Clean the fuel filter
	Replacement of hydraulic oil
	Replace oil filter
	Clean the filter core of the air filter
	Replace engine oil and filter cartridge
	Service checklist uploaded to Basecamp, clearly showing date works completed

Date: _____

Stamp/Sign: _____

750-Hour Maintenance

	Maintenance Item
	Pin the arm and the bucket arm and front device in grease
	Check welding of structural parts
	Check all operating switches
	Check engine oil level
	Check the oil level of the hydraulic oil tank
	Check the leakage of the hydraulic system
	Check fuel oil level
	Inspection of the oil-water separator
	Check for leakage in the fuel system
	Check the cooling system and add coolant as required
	Check the liquid level of the window cleaning fluid
	Check the wear and tear of bucket teeth and side teeth
	Check whether the engine fan belt is cracked or worn, and the tightening force is suitable
	Check all the external lights, speakers, control indicators and monitor lights
	Start engine, check engine start-up performance, check exhaust colour at start-up and exhaust colour at normal working time, check whether there is noise
	Check all operating controls
	Check bolts and nuts to prevent loosening and loss
	Check the tyres
	Whether there are loose parts, noise or breakage parts (rail links, supporting sprockets and steering wheels)
	Clean engine air filter cover

Date: _____

Stamp/Sign: _____

	750-Hour Maintenance Continued
	Grease the shaft socket
	Grease the slewing bearing
	Check fuel tank discharge valve
	Replace engine oil and filter cartridge
	Check water tank, oil radiator and air conditioner condenser core
	Check the battery liquid and charge
	Clean the fuel filter
	Check for any discharge or impurities from the hydraulic tank
	Check the wear and tear of front end work device pin and bushing
	Check the hose clamp of the fuel system
	Service checklist uploaded to Basecamp, clearly showing date works completed

Date: _____

Stamp/Sign: _____

800-Hour Maintenance

	Maintenance Item
	Pin the arm and the bucket arm and front device in grease
	Check welding of structural parts
	Check all operating switches
	Check engine oil level
	Check the oil level of the hydraulic oil tank
	Check the leakage of the hydraulic system
	Check fuel oil level
	Inspection of the oil-water separator
	Check for leakage in the fuel system
	Check the cooling system and add coolant as required
	Check the liquid level of the window cleaning fluid
	Check the wear and tear of bucket teeth and side teeth
	Check whether the engine fan belt is cracked or worn, and the tightening force is suitable
	Check all the external lights, speakers, control indicators and monitor lights
	Start engine, check engine start-up performance, check exhaust colour at start-up and exhaust colour at normal working time, check whether there is noise
	Check all operating controls
	Check bolts and nuts to prevent loosening and loss
	Check the tyres
	Whether there are loose parts, noise or breakage parts (rail links, supporting sprockets and steering wheels)
	Clean engine air filter cover

Date: _____

Stamp/Sign: _____

	800-Hour Maintenance Continued
	Grease the shaft socket
	Grease the slewing bearing
	Check fuel tank discharge valve
	Replace engine oil and filter cartridge
	Check water tank, oil radiator and air conditioner condenser core
	Check the battery liquid and charge
	Clean the fuel filter
	Replacement of hydraulic oil
	Replace oil filter
	Clean the filter core of the air filter
	Replace engine oil and filter cartridge
	Service checklist uploaded to Basecamp, clearly showing date works completed

Date: _____

Stamp/Sign: _____

850-Hour Maintenance

	Maintenance Item
	Pin the arm and the bucket arm and front device in grease
	Check welding of structural parts
	Check all operating switches
	Check engine oil level
	Check the oil level of the hydraulic oil tank
	Check the leakage of the hydraulic system
	Check fuel oil level
	Inspection of the oil-water separator
	Check for leakage in the fuel system
	Check the cooling system and add coolant as required
	Check the liquid level of the window cleaning fluid
	Check the wear and tear of bucket teeth and side teeth
	Check whether the engine fan belt is cracked or worn, and the tightening force is suitable
	Check all the external lights, speakers, control indicators and monitor lights
	Start engine, check engine start-up performance, check exhaust colour at start-up and exhaust colour at normal working time, check whether there is noise
	Check all operating controls
	Check bolts and nuts to prevent loosening and loss
	Check the tyres
	Whether there are loose parts, noise or breakage parts (rail links, supporting sprockets and steering wheels)
	Clean engine air filter cover

Date: _____

Stamp/Sign: _____

850-Hour Maintenance Continued	
	Grease the shaft socket
	Grease the slewing bearing
	Check fuel tank discharge valve
	Replace engine oil and filter cartridge
	Check water tank, oil radiator and air conditioner condenser core
	Check the battery liquid and charge
	Clean the fuel filter
	Check for any discharge or impurities from the hydraulic tank
	Check the wear and tear of front end work device pin and bushing
	Check the hose clamp of the fuel system
	Service checklist uploaded to Basecamp, clearly showing date works completed

Date: _____

Stamp/Sign: _____

900-Hour Maintenance

	Maintenance Item
	Pin the arm and the bucket arm and front device in grease
	Check welding of structural parts
	Check all operating switches
	Check engine oil level
	Check the oil level of the hydraulic oil tank
	Check the leakage of the hydraulic system
	Check fuel oil level
	Inspection of the oil-water separator
	Check for leakage in the fuel system
	Check the cooling system and add coolant as required
	Check the liquid level of the window cleaning fluid
	Check the wear and tear of bucket teeth and side teeth
	Check whether the engine fan belt is cracked or worn, and the tightening force is suitable
	Check all the external lights, speakers, control indicators and monitor lights
	Start engine, check engine start-up performance, check exhaust colour at start-up and exhaust colour at normal working time, check whether there is noise
	Check all operating controls
	Check bolts and nuts to prevent loosening and loss
	Check the tyres
	Whether there are loose parts, noise or breakage parts (rail links, supporting sprockets and steering wheels)
	Clean engine air filter cover

Date: _____

Stamp/Sign: _____

	900-Hour Maintenance Continued
	Grease the shaft socket
	Grease the slewing bearing
	Check fuel tank discharge valve
	Replace engine oil and filter cartridge
	Check water tank, oil radiator and air conditioner condenser core
	Check the battery liquid and charge
	Clean the fuel filter
	Replacement of hydraulic oil
	Replace oil filter
	Clean the filter core of the air filter
	Replace engine oil and filter cartridge
	Service checklist uploaded to Basecamp, clearly showing date works completed

Date: _____

Stamp/Sign: _____

950-Hour Maintenance

	Maintenance Item
	Pin the arm and the bucket arm and front device in grease
	Check welding of structural parts
	Check all operating switches
	Check engine oil level
	Check the oil level of the hydraulic oil tank
	Check the leakage of the hydraulic system
	Check fuel oil level
	Inspection of the oil-water separator
	Check for leakage in the fuel system
	Check the cooling system and add coolant as required
	Check the liquid level of the window cleaning fluid
	Check the wear and tear of bucket teeth and side teeth
	Check whether the engine fan belt is cracked or worn, and the tightening force is suitable
	Check all the external lights, speakers, control indicators and monitor lights
	Start engine, check engine start-up performance, check exhaust colour at start-up and exhaust colour at normal working time, check whether there is noise
	Check all operating controls
	Check bolts and nuts to prevent loosening and loss
	Check the tyres
	Whether there are loose parts, noise or breakage parts (rail links, supporting sprockets and steering wheels)
	Clean engine air filter cover

Date: _____

Stamp/Sign: _____

	950-Hour Maintenance Continued
	Grease the shaft socket
	Grease the slewing bearing
	Check fuel tank discharge valve
	Replace engine oil and filter cartridge
	Check water tank, oil radiator and air conditioner condenser core
	Check the battery liquid and charge
	Clean the fuel filter
	Check for any discharge or impurities from the hydraulic tank
	Check the wear and tear of front end work device pin and bushing
	Check the hose clamp of the fuel system
	Service checklist uploaded to Basecamp, clearly showing date works completed

Date: _____

Stamp/Sign: _____

1000-Hour Maintenance

	Maintenance Item
	Pin the arm and the bucket arm and front device in grease
	Check welding of structural parts
	Check all operating switches
	Check engine oil level
	Check the oil level of the hydraulic oil tank
	Check the leakage of the hydraulic system
	Check fuel oil level
	Inspection of the oil-water separator
	Check for leakage in the fuel system
	Check the cooling system and add coolant as required
	Check the liquid level of the window cleaning fluid
	Check the wear and tear of bucket teeth and side teeth
	Check whether the engine fan belt is cracked or worn, and the tightening force is suitable
	Check all the external lights, speakers, control indicators and monitor lights
	Start engine, check engine start-up performance, check exhaust colour at start-up and exhaust colour at normal working time, check whether there is noise
	Check all operating controls
	Check bolts and nuts to prevent loosening and loss
	Check the tyres
	Check whether there are loose parts, noise or breakage parts (rail links, supporting sprockets and steering wheels)
	Clean engine air filter cover

Date: _____

Stamp/Sign: _____

1000-Hour Maintenance Continued	
	Grease the shaft socket
	Grease the slewing bearing
	Check fuel tank discharge valve
	Replace engine oil and filter cartridge
	Check water tank, oil radiator and air conditioner condenser core
	Check the battery liquid and charge
	Clean the fuel filter
	Replacement of hydraulic oil
	Replace oil filter
	Clean the filter core of the air filter
	Replace engine oil and filter cartridge
	Carry out every 10 hour, 50 hour, 100 and 250 hour maintenance
	Replacing hydraulic oil and cleaning oil filter
	Check and adjust the cleaning valve
	Check the loosening of the bolt
	Replacement of walking deceleration device oil
	Service checklist uploaded to Basecamp, clearly showing date works completed

Date: _____

Stamp/Sign: _____

1100-Hour Maintenance

	Maintenance Item
	Pin the arm and the bucket arm and front device in grease
	Check welding of structural parts
	Check all operating switches
	Check engine oil level
	Check the oil level of the hydraulic oil tank
	Check the leakage of the hydraulic system
	Check fuel oil level
	Inspection of the oil-water separator
	Check for leakage in the fuel system
	Check the cooling system and add coolant as required
	Check the liquid level of the window cleaning fluid
	Check the wear and tear of bucket teeth and side teeth
	Check whether the engine fan belt is cracked or worn, and the tightening force is suitable
	Check all the external lights, speakers, control indicators and monitor lights
	Start engine, check engine start-up performance, check exhaust colour at start-up and exhaust colour at normal working time, check whether there is noise
	Check all operating controls
	Check bolts and nuts to prevent loosening and loss
	Check the tyres
	Whether there are loose parts, noise or breakage parts (rail links, supporting sprockets and steering wheels)
	Clean engine air filter cover

Date: _____

Stamp/Sign: _____

1100-Hour Maintenance Continued	
	Grease the shaft socket
	Grease the slewing bearing
	Check fuel tank discharge valve
	Replace engine oil and filter cartridge
	Check water tank, oil radiator and air conditioner condenser core
	Check the battery liquid and charge
	Clean the fuel filter
	Replacement of hydraulic oil
	Replace oil filter
	Clean the filter core of the air filter
	Replace engine oil and filter cartridge
	Service checklist uploaded to Basecamp, clearly showing date works completed

Date: _____

Stamp/Sign: _____

1200-Hour Maintenance

	Maintenance Item
	Pin the arm and the bucket arm and front device in grease
	Check welding of structural parts
	Check all operating switches
	Check engine oil level
	Check the oil level of the hydraulic oil tank
	Check the leakage of the hydraulic system
	Check fuel oil level
	Inspection of the oil-water separator
	Check for leakage in the fuel system
	Check the cooling system and add coolant as required
	Check the liquid level of the window cleaning fluid
	Check the wear and tear of bucket teeth and side teeth
	Check whether the engine fan belt is cracked or worn, and the tightening force is suitable
	Check all the external lights, speakers, control indicators and monitor lights
	Start engine, check engine start-up performance, check exhaust colour at start-up and exhaust colour at normal working time, check whether there is noise
	Check all operating controls
	Check bolts and nuts to prevent loosening and loss
	Check the tyres
	Whether there are loose parts, noise or breakage parts (rail links, supporting sprockets and steering wheels)
	Clean engine air filter cover

Date: _____

Stamp/Sign: _____

	1200-Hour Maintenance Continued
	Grease the shaft socket
	Grease the slewing bearing
	Check fuel tank discharge valve
	Replace engine oil and filter cartridge
	Check water tank, oil radiator and air conditioner condenser core
	Check the battery liquid and charge
	Clean the fuel filter
	Replacement of hydraulic oil
	Replace oil filter
	Clean the filter core of the air filter
	Replace engine oil and filter cartridge
	Service checklist uploaded to Basecamp, clearly showing date works completed

Date: _____

Stamp/Sign: _____

1300-Hour Maintenance

	Maintenance Item
	Pin the arm and the bucket arm and front device in grease
	Check welding of structural parts
	Check all operating switches
	Check engine oil level
	Check the oil level of the hydraulic oil tank
	Check the leakage of the hydraulic system
	Check fuel oil level
	Inspection of the oil-water separator
	Check for leakage in the fuel system
	Check the cooling system and add coolant as required
	Check the liquid level of the window cleaning fluid
	Check the wear and tear of bucket teeth and side teeth
	Check whether the engine fan belt is cracked or worn, and the tightening force is suitable
	Check all the external lights, speakers, control indicators and monitor lights
	Start engine, check engine start-up performance, check exhaust colour at start-up and exhaust colour at normal working time, check whether there is noise
	Check all operating controls
	Check bolts and nuts to prevent loosening and loss
	Check the tyres
	Whether there are loose parts, noise or breakage parts (rail links, supporting sprockets and steering wheels)
	Clean engine air filter cover

Date: _____

Stamp/Sign: _____

	1300-Hour Maintenance Continued
	Grease the shaft socket
	Grease the slewing bearing
	Check fuel tank discharge valve
	Replace engine oil and filter cartridge
	Check water tank, oil radiator and air conditioner condenser core
	Check the battery liquid and charge
	Clean the fuel filter
	Replacement of hydraulic oil
	Replace oil filter
	Clean the filter core of the air filter
	Replace engine oil and filter cartridge
	Service checklist uploaded to Basecamp, clearly showing date works completed

Date: _____

Stamp/Sign: _____

1400-Hour Maintenance

	Maintenance Item
	Pin the arm and the bucket arm and front device in grease
	Check welding of structural parts
	Check all operating switches
	Check engine oil level
	Check the oil level of the hydraulic oil tank
	Check the leakage of the hydraulic system
	Check fuel oil level
	Inspection of the oil-water separator
	Check for leakage in the fuel system
	Check the cooling system and add coolant as required
	Check the liquid level of the window cleaning fluid
	Check the wear and tear of bucket teeth and side teeth
	Check whether the engine fan belt is cracked or worn, and the tightening force is suitable
	Check all the external lights, speakers, control indicators and monitor lights
	Start engine, check engine start-up performance, check exhaust colour at start-up and exhaust colour at normal working time, check whether there is noise
	Check all operating controls
	Check bolts and nuts to prevent loosening and loss
	Check the tyres
	Whether there are loose parts, noise or breakage parts (rail links, supporting sprockets and steering wheels)
	Clean engine air filter cover

Date: _____

Stamp/Sign: _____

	1400-Hour Maintenance Continued
	Grease the shaft socket
	Grease the slewing bearing
	Check fuel tank discharge valve
	Replace engine oil and filter cartridge
	Check water tank, oil radiator and air conditioner condenser core
	Check the battery liquid and charge
	Clean the fuel filter
	Replacement of hydraulic oil
	Replace oil filter
	Clean the filter core of the air filter
	Replace engine oil and filter cartridge
	Service checklist uploaded to Basecamp, clearly showing date works completed

Date: _____

Stamp/Sign: _____

1500-Hour Maintenance

	Maintenance Item
	Pin the arm and the bucket arm and front device in grease
	Check welding of structural parts
	Check all operating switches
	Check engine oil level
	Check the oil level of the hydraulic oil tank
	Check the leakage of the hydraulic system
	Check fuel oil level
	Inspection of the oil-water separator
	Check for leakage in the fuel system
	Check the cooling system and add coolant as required
	Check the liquid level of the window cleaning fluid
	Check the wear and tear of bucket teeth and side teeth
	Check whether the engine fan belt is cracked or worn, and the tightening force is suitable
	Check all the external lights, speakers, control indicators and monitor lights
	Start engine, check engine start-up performance, check exhaust colour at start-up and exhaust colour at normal working time, check whether there is noise
	Check all operating controls
	Check bolts and nuts to prevent loosening and loss
	Check the tyres
	Whether there are loose parts, noise or breakage parts (rail links, supporting sprockets and steering wheels)
	Clean engine air filter cover

Date: _____

Stamp/Sign: _____

	1500-Hour Maintenance Continued
	Grease the shaft socket
	Grease the slewing bearing
	Check fuel tank discharge valve
	Replace engine oil and filter cartridge
	Check water tank, oil radiator and air conditioner condenser core
	Check the battery liquid and charge
	Clean the fuel filter
	Replacement of hydraulic oil
	Replace oil filter
	Clean the filter core of the air filter
	Replace engine oil and filter cartridge
	Service checklist uploaded to Basecamp, clearly showing date works completed

Date: _____

Stamp/Sign: _____

1600-Hour Maintenance

	Maintenance Item
	Pin the arm and the bucket arm and front device in grease
	Check welding of structural parts
	Check all operating switches
	Check engine oil level
	Check the oil level of the hydraulic oil tank
	Check the leakage of the hydraulic system
	Check fuel oil level
	Inspection of the oil-water separator
	Check for leakage in the fuel system
	Check the cooling system and add coolant as required
	Check the liquid level of the window cleaning fluid
	Check the wear and tear of bucket teeth and side teeth
	Check whether the engine fan belt is cracked or worn, and the tightening force is suitable
	Check all the external lights, speakers, control indicators and monitor lights
	Start engine, check engine start-up performance, check exhaust colour at start-up and exhaust colour at normal working time, check whether there is noise
	Check all operating controls
	Check bolts and nuts to prevent loosening and loss
	Check the tyres
	Whether there are loose parts, noise or breakage parts (rail links, supporting sprockets and steering wheels)
	Clean engine air filter cover

Date: _____

Stamp/Sign: _____

1600-Hour Maintenance Continued	
	Grease the shaft socket
	Grease the slewing bearing
	Check fuel tank discharge valve
	Replace engine oil and filter cartridge
	Check water tank, oil radiator and air conditioner condenser core
	Check the battery liquid and charge
	Clean the fuel filter
	Replacement of hydraulic oil
	Replace oil filter
	Clean the filter core of the air filter
	Replace engine oil and filter cartridge
	Service checklist uploaded to Basecamp, clearly showing date works completed

Date: _____

Stamp/Sign: _____

1700-Hour Maintenance

	Maintenance Item
	Pin the arm and the bucket arm and front device in grease
	Check welding of structural parts
	Check all operating switches
	Check engine oil level
	Check the oil level of the hydraulic oil tank
	Check the leakage of the hydraulic system
	Check fuel oil level
	Inspection of the oil-water separator
	Check for leakage in the fuel system
	Check the cooling system and add coolant as required
	Check the liquid level of the window cleaning fluid
	Check the wear and tear of bucket teeth and side teeth
	Check whether the engine fan belt is cracked or worn, and the tightening force is suitable
	Check all the external lights, speakers, control indicators and monitor lights
	Start engine, check engine start-up performance, check exhaust colour at start-up and exhaust colour at normal working time, check whether there is noise
	Check all operating controls
	Check bolts and nuts to prevent loosening and loss
	Check the tyres
	Whether there are loose parts, noise or breakage parts (rail links, supporting sprockets and steering wheels)
	Clean engine air filter cover

Date: _____

Stamp/Sign: _____

	1700-Hour Maintenance Continued
	Grease the shaft socket
	Grease the slewing bearing
	Check fuel tank discharge valve
	Replace engine oil and filter cartridge
	Check water tank, oil radiator and air conditioner condenser core
	Check the battery liquid and charge
	Clean the fuel filter
	Replacement of hydraulic oil
	Replace oil filter
	Clean the filter core of the air filter
	Replace engine oil and filter cartridge
	Service checklist uploaded to Basecamp, clearly showing date works completed

Date: _____

Stamp/Sign: _____

1800-Hour Maintenance

	Maintenance Item
	Pin the arm and the bucket arm and front device in grease
	Check welding of structural parts
	Check all operating switches
	Check engine oil level
	Check the oil level of the hydraulic oil tank
	Check the leakage of the hydraulic system
	Check fuel oil level
	Inspection of the oil-water separator
	Check for leakage in the fuel system
	Check the cooling system and add coolant as required
	Check the liquid level of the window cleaning fluid
	Check the wear and tear of bucket teeth and side teeth
	Check whether the engine fan belt is cracked or worn, and the tightening force is suitable
	Check all the external lights, speakers, control indicators and monitor lights
	Start engine, check engine start-up performance, check exhaust colour at start-up and exhaust colour at normal working time, check whether there is noise
	Check all operating controls
	Check bolts and nuts to prevent loosening and loss
	Check the tyres
	Whether there are loose parts, noise or breakage parts (rail links, supporting sprockets and steering wheels)
	Clean engine air filter cover

Date: _____

Stamp/Sign: _____

	1800-Hour Maintenance Continued
	Grease the shaft socket
	Grease the slewing bearing
	Check fuel tank discharge valve
	Replace engine oil and filter cartridge
	Check water tank, oil radiator and air conditioner condenser core
	Check the battery liquid and charge
	Clean the fuel filter
	Replacement of hydraulic oil
	Replace oil filter
	Clean the filter core of the air filter
	Replace engine oil and filter cartridge
	Service checklist uploaded to Basecamp, clearly showing date works completed

Date: _____

Stamp/Sign: _____

1900-Hour Maintenance

	Maintenance Item
	Pin the arm and the bucket arm and front device in grease
	Check welding of structural parts
	Check all operating switches
	Check engine oil level
	Check the oil level of the hydraulic oil tank
	Check the leakage of the hydraulic system
	Check fuel oil level
	Inspection of the oil-water separator
	Check for leakage in the fuel system
	Check the cooling system and add coolant as required
	Check the liquid level of the window cleaning fluid
	Check the wear and tear of bucket teeth and side teeth
	Check whether the engine fan belt is cracked or worn, and the tightening force is suitable
	Check all the external lights, speakers, control indicators and monitor lights
	Start engine, check engine start-up performance, check exhaust colour at start-up and exhaust colour at normal working time, check whether there is noise
	Check all operating controls
	Check bolts and nuts to prevent loosening and loss
	Check the tyres
	Whether there are loose parts, noise or breakage parts (rail links, supporting sprockets and steering wheels)
	Clean engine air filter cover

Date: _____

Stamp/Sign: _____

	1900-Hour Maintenance Continued
	Grease the shaft socket
	Grease the slewing bearing
	Check fuel tank discharge valve
	Replace engine oil and filter cartridge
	Check water tank, oil radiator and air conditioner condenser core
	Check the battery liquid and charge
	Clean the fuel filter
	Replacement of hydraulic oil
	Replace oil filter
	Clean the filter core of the air filter
	Replace engine oil and filter cartridge
	Service checklist uploaded to Basecamp, clearly showing date works completed

Date: _____

Stamp/Sign: _____

2000-Hour Maintenance

	Maintenance Item
	Pin the arm and the bucket arm and front device in grease
	Check welding of structural parts
	Check all operating switches
	Check engine oil level
	Check the oil level of the hydraulic oil tank
	Check the leakage of the hydraulic system
	Check fuel oil level
	Inspection of the oil-water separator
	Check for leakage in the fuel system
	Check the cooling system and add coolant as required
	Check the liquid level of the window cleaning fluid
	Check the wear and tear of bucket teeth and side teeth
	Check whether the engine fan belt is cracked or worn, and the tightening force is suitable
	Check all the external lights, speakers, control indicators and monitor lights
	Start engine, check engine start-up performance, check exhaust colour at start-up and exhaust colour at normal working time, check whether there is noise
	Check all operating controls
	Check bolts and nuts to prevent loosening and loss
	Check the tyres
	Check whether there are loose parts, noise or breakage parts (rail links, supporting sprockets and steering wheels)
	Clean engine air filter cover

Date: _____

Stamp/Sign: _____

2000-Hour Maintenance Continued	
	Grease the shaft socket
	Grease the slewing bearing
	Check fuel tank discharge valve
	Replace engine oil and filter cartridge
	Check water tank, oil radiator and air conditioner condenser core
	Check the battery liquid and charge
	Clean the fuel filter
	Replacement of hydraulic oil
	Replace oil filter
	Clean the filter core of the air filter
	Replace engine oil and filter cartridge
	Check generator and start motor
	Inspection of all earthquake resistant rubber blocks
	Carry out and record the results of each cycle test
	Inspect machine welding parts to see if there are cracks or damage to open welding or other structural parts
	Service checklist uploaded to Basecamp, clearly showing date works completed

Date: _____

Stamp/Sign: _____

Important Components - periodic replacement

Main Component		Periodic Replacement Parts	Replacement Time
Engine		Fuel hose (oil tank to filter)	2 years or 4000 hours
		Fuel hose (fuel tank to fuel injection pump)	
		Heating hose (heater connected with engine)	
Hydraulic system	Body	Pump oil suction hose	
		Pump out of oil hose	
		Revolving hose	
	Working device	Arm cylinder hose	
		Bucket cylinder hose	
		Bucket oil cylinder hose	

Date: _____

Stamp/Sign: _____