

VIBRATORY ROLLER

MODEL: RWYL33C

OPERATING INSTRUCTIONS



CAUTION: Read safety and operating instructions carefully before using this equipment for the first time! And keep this manual for future reference.

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1. Preface

Thank you very much that you have purchased the products.

This operation manual will tell you how to correctly operate and maintain your machine. Before using the machine, please read the operation manual thoroughly to guarantee the correct operation. Following the operation requirements in the operation manual will make that your machine is in the best operation state so as to extend the life of the set. For you own safety and protection injury, carefully read, understand and observe the safety instructions described in this manual.

Keep this manual or a copy of it with the machine. This machine is built with user safety in mind; however, it can present hazards if improperly operate and serviced. Follow operating instructions carefully!

With the increasing improvement and enhance of the products made by the company, there may be some differences between the contents described in the operation manual and the practical products, it is our desire that the users will pay attention to the differences.

The walk-behind double drums roller is light road roller. It is used to compress on the asphalt, sand soil gravel and it is also used to planish the lawn and playground.

This machine is with hydraulic unit, variable plunger pump, and constant displacement hydraulic motor, which make the machine has excellent performance.

2. Safety alerts

In order to operate the machine safely, it is very necessary to maintain the machine regularly. Please read the Safety alerts carefully to master the skills of maintenance and operation.

3. Driving qualification

Qualified staffs are allowed to operate the machine

1. Compaction task

Operator should get training on the aspects of compaction before operating the machine.

2. Loading and unloading the machine

Operator should get training on the aspects of Loading and unloading the machine

4. Safety precautions

4.1 General precautions

- Read the Manual carefully to understand and master the operating methods and functions, know the operation device and meanings of labels.

- Comply with the rules

- Be familiar with the working site in advance.

- Be familiar with the functions of the machine.

Please operate the machine within the allowed range.

- Check the machine before operating. Make sure the functions of the machine are sound.

- Pay attention to the bystanders during working.

- Do not touch fire components.

- Pay attention to fireproof.

Fuel and oil catch fire easily, do not smoking and using match and lighter. The engine should be turned off the engine before filling fuel and far from open fire.

4.2 Preparations for safety operation

- Cleaning the machine
- Check the machine before operation. Make sure the functions of the machine are sound.

Check and make sure the enough level of all the liquid.

Check and make sure no leaking of hydraulic oil, fuel and water.

4.3 Attentions before starting up engine

- Make sure each control levers are in the neutral position before starting up the engine.

Using manual brake lever to stop the engine.

- Ensure safety around the machine before starting up engine.

- Be care of ventilate.

It is danger to inhale the exhaust gas, ensure enough ventilate during working.

- Do not near exhaust pipe.

The exhaust gas is poisonous.

4.4 Attentions after starting up engine

- Preheat the machine.

Idle the machine several minutes after starting up the engine. Do not operate the machine in high speed at the beginning of operating. Those will avoid damaging the machine, and prolong the life of machine.

- Trial run

Trial operate the machine and check if every function are sound.

4.5 Attentions during working

- Avoid operation errors.

Focus on operation, and pay attention to bystanders.

- Be careful of bystanders and barriers when forward and back the machine.

- Repair the machine at once when meeting shortcomings.

- Attentions to park the machine.

The machine should be parked on level surface. If must be parked on slope, block should be put in the front of drum.

Push the forward and back control lever to middle position, and push the lock lever to lock position, then turn off the engine, and pull out the key.

4.6 Attention of loading and unloading the machine

- Use the hard climbing board with appropriate width, length and thickness for safe loading and unloading

- Don't use redirector on the climbing board.

- Use the rope with the adequate strength to lifting the machine

- Please vertical lifting the machine

- After loading, the machine firmly fixed. Then inset the block under the double side of drums

4.7 The correct usage of the battery (note: For the battery needing to maintain, maintenance-free except)

- The battery will produce flammable gas, may cause an explosion. Do not smoke around the battery, so that the battery can be far away from fire, sparks and fire

Battery electrolyte contains sulfuric acid; it will destroy the clothing and skin. If it exposed to clothes and skin, rinse with plenty of water. In case of contact with eyes, rinse with water and seek for medical help.

- During checking and processing the battery, please turn off the engine and turn the switch to the OFF position

- Ensure the wire ends tighten

Battery liquid under the minimum line, please don't charge. If you continue to use the battery at this time, it will shorten the battery life, or even cause an explosion. Should add distilled water immediately to the right charge location.

4.8 Attention of the maintenance

- Keep the machine clean

- Detach the negative pole of the battery to disconnect the power when repairing the electric system or doing the electric welding.

- Attention of operating the high-pressure pipe

Do not use a hard object to hit or bend the pipe.

Have to exchange a new part if there is damaged fuel tube and hydraulic hose.

- Maintenance of hydraulic oil.

There is high pressure within the hydraulic system, don't add, discharge, check or repair the hydraulic system until the internal pressure is released.

- Be Careful of the hot components

Engine oil and hydraulic oil will be hot after the machine has run for a few minutes, don't do the repair until the machine become cool.

- Disposal of the waste oil.

Discharge the oil into a suitable container instead of draining the waste oil to the river and sewer. Attention to protect environment.

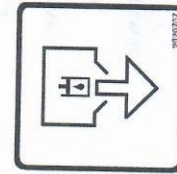
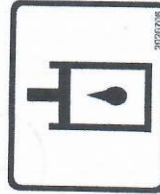
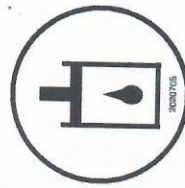
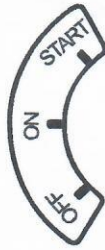
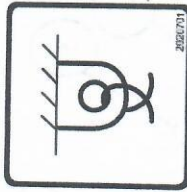
4.9 Safety labels

Keep the identification clean, once it is lost, paste the new one.

WARNING

1. Comply with working site safety rules.
2. Don't change the machine random.
3. When maintenance, please stop the machine.
4. Loading and unloading the machine, ensure climbing angle less than 15 degree.
5. Check the engine oil, fuel, and hydraulic oil before starting the engine.
6. Before starting the engine, ensure the Forward and Backward Lever in the middle position.
7. After starting the machine, run 5 minutes in idle speed to hot the machine.
8. Push the Throttle Valve in the end, the engine stopped. After the engine stopped, put the key in the "OFF" position.
9. Stop the engine after cold running the machine for 5 minutes. After the engine stopped, please pull out the key.

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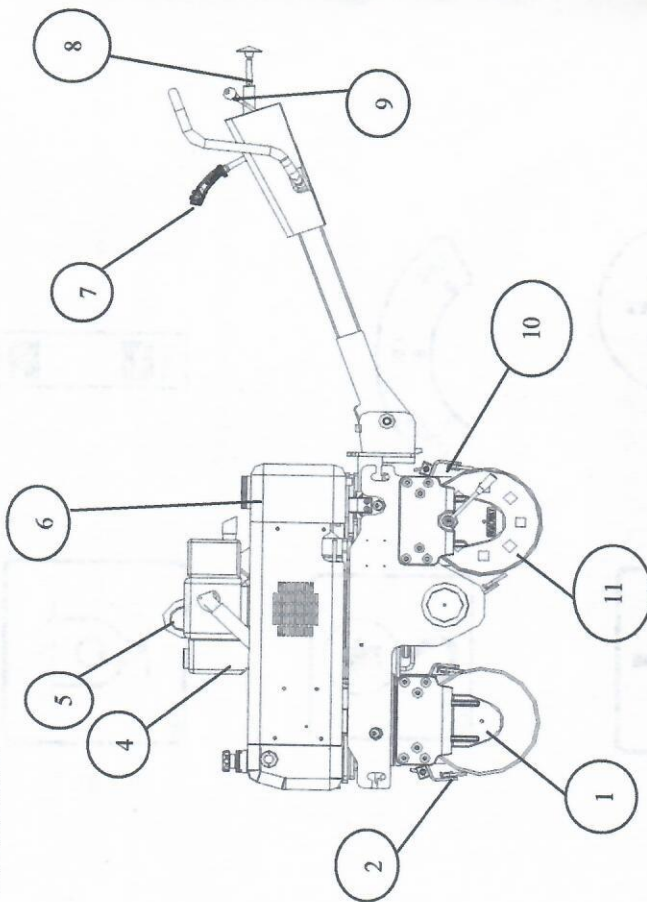


5. Operation

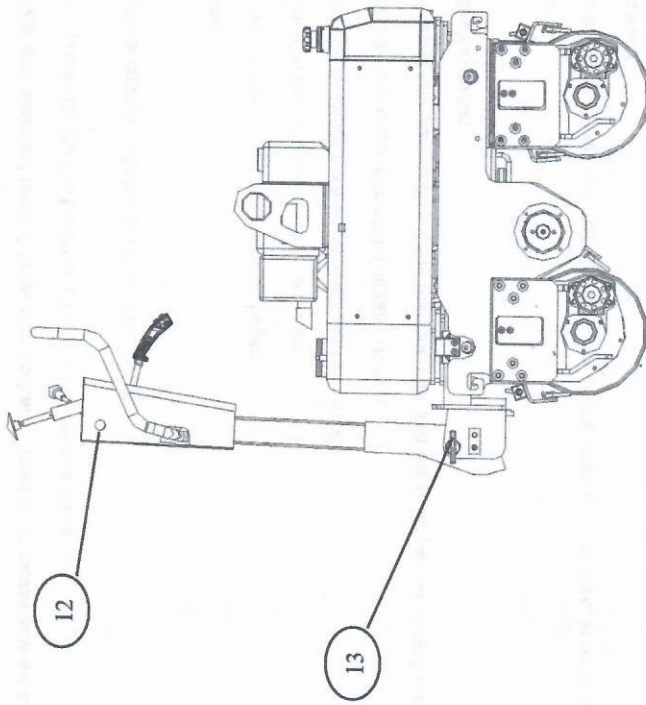
5.1 The name and function of operation device

5.1.1 The name of operation device

Overall structure



1. Front wheel
3. Hydraulic oil tank
5. Sling rack
7. Forward and backward handle
9. Throttle lever
11. Back wheel
13. Lock spanner
2. Scraper
4. Engine
6. Water tank
8. Safety lever
10. Scraper
12. Starting switch



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5.1.2 Function of the operation device

Familiar with the function of the operation device, for safe operation

• Forward and backward handle

The handle has three functions: to walk (forward and backward) stop and stepless speed.

Moving "Forward and backward handle" forward or backward, road roller moves forward or backward correspondingly. Put it in the middle position, the machine stops

Speed proportional changes with the tilt angle of the handle.

● Vibration switch

"Vibration switch" in the "I" position, vibration begins

"Vibration switch" in the "O" position, vibration stops

Attention: Don't vibrate above the hard concrete road or iron plate.

The machine stops, turn off the vibration button

Vibrating and compacting, if the machine falls into the mud, please immediately turn off the vibration button

● Safety lever

Press down the "safety Lever", the machine will slow or stop walking or reverse, in order to protect the operator.

● Starting switch



The switch can control the machine to start, run and stop

In the "ON" position, the circuit connected. The engine starts, the key will stop at this location
In the "ON" position, engine start. Engine started, release hand, the key will automatically return to the (ON) position

In the "OFF" position, the key can be pulled out. All electronic systems are shut down. The key to "OFF" position can turn off the engine. Or the battery power on their own, and led to the engine fails to start.

● Throttle switch

Used to control the engine speed

Press down the "throttle switch", the engine speed will increase. Lift up the "throttle switch", the engine speed will decrease to stop

Attention: When starting the engine, should press down the "throttle switch" to the suitable position (full throttle)

● Lock spanner

Can be folded during transportation (see the overall structure)

1) When folding, pull back the "lock spanner" until the position locked automatically.

2) When normal running, have to unfold the tail parts. Pull back the "lock spanner" to the run position, and then the "lock spanner" is automatically locked.

5.2 Diving operation

5.2.1 Inspection before operation

Ensure that the "forward and backward handle" in the middle position, vibration switch is in the "OFF" position.

5.2.2 Start up the engine

1) Turn on the throttle lever (full throttle)

2) Starting switch turn to "start" position, to start the engine. At the same time of engine start, release the hand, the key will return to the "ON" position.

Attention: Do not keep starting more than 15 seconds

If the starting fails, starting again wait for 30 seconds!

Excessive use the starter, will burn the starting motor!

5.2.3 After starting up the engine

Do not run machine immediately after starting, please observe the following principles:

- 1) Low-speed to warm engine a few minutes, until warm the machine
- 2) Ensure that the exhaust color normal, no unusual sounds and smells

5.2.4 Machine running

Attention: Before running the machine, please ensure that there is no person and obstacles nearby.

Adjust the "forward and backward handle" to make machine forward and backward.

Attention: Should gentle push "forward and backward handle", not too fast.

5.2.5 Machine stopping

Warning:

- Avoid stopping on the slopes
- If you has to park on the slopes, please put obstacles before the front wheel to prevent the machine slide down alone the slopes.
- Leave the machine, please keep "forward and backward handle" in the middle position, turn off the engine, and take away the key.

1) The machine will stop moving when the forward and back handle on the middle position.

2) Lock the machine by hand.

3) Insert wedge-shaped objects under the drums.

4) The Engine runs 2 to 3 minutes under the idle situation.

5) Engine will stop when the throttle switch is pushed to the bottom position.

6) Put the start switch to the OFF position.

5.3 Operation of vibration and compaction

1) Machine begin to vibrate when the vibration switch is on the ON position.

2) Machine stop to vibrate when the vibration switch is on the OFF position

Attention: Stop the vibration when the machine stops moving.

Stop the vibration at once when the machine runs into the mud.

5.4 Operation of the sprinkler system

1) Check the water level before open the sprinkler system, try to fill the water tank full.

2) The sprinkler system will be opened by turning the sprinkler valve switch.

Attention: In the cold weather, make sure the tank is empty to prevent the water from freezing after the work finished.

Presentation : Drain plug is under the water tank.

5.5 Adjustment of the fender

Loosen the screw bolt, and then move the fender up and down to make sure the fender is installed on the drum tightly.

5.6 Operation under the low temperature.

Take the following methods to prevent the faults occurring in the low temperature:

- 1) Use the fuel and oil of low viscosity
- 2) Keep the battery away from the low temperature.

Battery will be of low efficiency and even freeze in the low temperature. Please make sure the battery is full and keep the battery away from the low temperature during the night.

5.7 Attention after the operation

1) Remove dirt and water on the machine, especially dirt and water on the piston rod of the steering cylinder. If the dirt is brought into the oil cylinder, the seal system will be damaged.

The machine should stop on the hard and dry place.

Low temperature may cause low efficiency of the battery. For the work of the next day, cover the battery or remove the battery from the machine and keep it in a warm place.

Please discharge the water tank to prevent freezing.

5.8 Attention of the storage

If the machine will not be used beyond one month, please attention the following requirements

1) Stop the machine in the closed area after cleaning it.

If it is stored outdoors, keep the car under the cover.

2) Inject the oil and butter, change the engine oil, then check there is leak or not.

3) Coat the grease on the exposed piston rod of hydraulic steering cylinder.

4) Disconnect the negative of the battery, or remove the battery

- 5) Discharge the water in the tank.
- 6) Put the forward and back switch on the middle position, make sure the vibration switch on the OFF position, lock the machine by hand.
- 7) Insert wedge-shaped objects under the drums to prevent the machine moving.
- 8) Put away the key switch.
- 9) If long-term storage is needed, please start the machine regularly to prevent corrosion. Start the machine at least one time per month to prevent the oil layer deteriorates, and charge at the same time.

6. Regular maintenance and repairs

Attention: Regular maintenance of machinery can keep the machine in the best situation.

Engine oil should be changed after the machine has run 50 hours or so.

Electrical wiring needs the inspection and maintenance every month.

- 1) Check the wiring is damaged or not.
- 2) Check the wiring loose or not.
- 3) Check the electrical device can work properly or not.

6.1 Regular maintenance

6.1.1 Maintenance and repairs every 10 hours

1) Engine oil

Put the engine in the horizontal position, check the oil level.

If the oil level is not within the scale of oil level indicator, please add.

2) Oil Tank

Check the fuel oil level.

6.1.2 Maintenance and repairs every 50 hours

1) Hydraulic oil

Observe the position of the oil level indicator, it should be at the center or the higher position of the liquid indicator. If the oil is not enough, please add.

2) Storage battery

Observe the state of the battery, and then confirm it should be replaced or not.

Check the bolts loose or not, if loose, please tighten.

6.1.3 Maintenance and repairs every 100 hours

1) Change the engine oil.

Open the oil plug and discharge the engine oil when the oil is still warm.

Tighten the drain plug: inject the engine oil though the oil filling port.

2) Clean the fuel filters.

3) Clean the air filters

6.1.4 Maintenance and repairs every 200 hours

1) Replace hydraulic oil filter.

2) Inject the grease to the drums.

6.1.5 Maintenance and repairs every 500 hours

1) Replace the hydraulic oil in the hydraulic oil tank.

Open the oil plug and discharge the hydraulic oil when the oil is still warm.

Clean the inside of the hydraulic tank.

Add the new hydraulic oil to the standard scale.

Start the engine and keep it run 2-5 minutes in the idle situation, then turn off the

engine and check the oil level again, if the oil level is low, please inject the oil.

2) Inject butter to the rotating support used for steering.

3) Inject butter to the axis pin and hinge parts of the steering cylinder.

6.2 Injections of hydraulic oil, water and lubricants

6.2.1 General norms

1) When filling the water and oil, do not remove the filtering net in which situation dirt will not be brought into the tank easily.

2) Use the recommended lubricants and hydraulic oil.

3) Do not use different brands of lubricants and hydraulic oil.

4) Filling the new oil after the old oil is discharged and the container is cleaned completely.

6.2.2 Recommended lubricant

1) Engine oil

in low temperature SAE 10W-30

in high temperature SAE 40

2) Hydraulic oil

wear-resistant

VG46

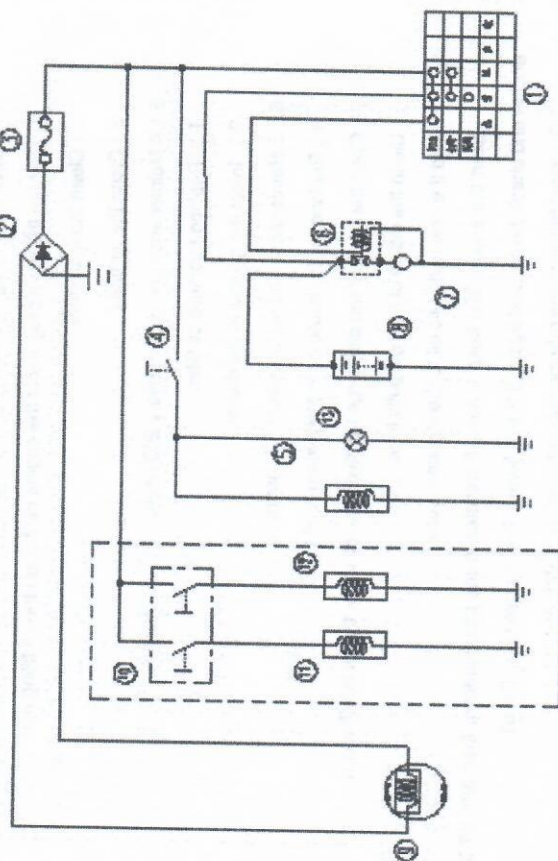
3) Lubricating grease

Heat-resistant lithium saponify

4) Fuel oil

diesel oil (meet national standard)

7. Electrical principal drawing



Note: The dashed box is RWYL34 series. RWYL33 series is without the function.

- ①. Engine switch
- ②. Rectifier
- ③. Fuse
- ④. Vibration switch
- ⑤. Electromagnetic clutch
- ⑥. Start Relay
- ⑦. Starter motor
- ⑧. Battery (12V)
- ⑨. Charging coil
- ⑩. Left magnetic valve (Steering type)
- ⑪. Right magnetic valve (Steering type)
- ⑫. Vibration indicating lamp

8. Main technical parameters

Type	RWYL33C
Engine model	186F
Engine type	Air cooled, 4 strokes, single cylinder, direct injection
Max.power	8hp/3600rpm
Starting method	Electric starting
Fuel tank volume	3.5L
Run speed	0-3.5km/h
Drive method	Variable plunger pump, constant displacement hydraulic motor
Diameter of the steel wheel(forward /back)	Φ355×680mm/Φ355×680mm
Exciting force	17KN
Vibration frequency	65HZ
Vibration clutch method	Electromagnetic clutch
Climbing capacity	25%
Working weight	700kg