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### **OPERATION MANUAL**



## **FVR600S Vibratory Road Roller**

PERFORMANCE · EFFICIENT · RELIABLE



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**Master** sincerely thanks you for selecting the Plate Compactor Machine. For your Safety and proper operation, before you start to operate or carry out any maintenance on this equipment, YOU MUST READ and STUDY this manual carefully. Be sure to always keep it ready for reference.

Produced By Henan Master Machinery Co.,Ltd Dear Customer,

Thanks for choosing Master machine.

To ensure the safety and proper use of the machine, please read the instruction book carefully before use. Also, please fill this card and save it for warranty use.

Buyer Name		Purchase	
		Time	
Tel		Contact	
		Person	
Address			
Product	Road Roller		
Name			
MODEL	FVR600S		
Motor Model			
Note			

### 1. Preface

Thank you very much that you have purchased the products.

This operation manual will tell you how to correctly operate



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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



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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

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

- $\bigcirc$  Be familiar with the working site in advance.
- <sup>O</sup>Be familiar with the functions of the machine.

Please operate the machine within the allowed range.

OCheck the machine before operating. Make sure the



functions of the machine are sound.

<sup>O</sup>Pay attention to the bystanders during working.

ODo 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



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OPreheat 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.

 $\hfill {\ensuremath{\mathbb O}}$  Be careful of by standers and barriers when forward and back the machine.

© Repair the machine at once when meeting shortcomings.

OAttentions 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.

 $\odot$  Use the rope with the adequate strength to lifting the



machine

◎ Please vertical lifting the machine

 $\ensuremath{\mathbb{O}}\xspace$  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.

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

 $\odot$  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



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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.

O 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

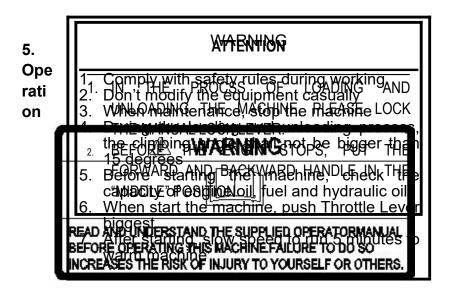
Keep the identification clean, once it is lost, paste the new one.



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### WARNING

ONCE THE ENGINE STOPS IMMEDIATELY PUSH FORWARD AND BACKWARD HANDLE IN THE MIDDLE POSITION. IN PARTICULAR, IN THE PROCESS OF SELF-LADDER, ENGINE STOPS, ROAD ROLLER SLIDE DUE TO ITS OWN WEIGHT, VERY DANGEROUS.



5.1 The name and function of operation device 5.1.1 The name of operation device

**Overall structure** 



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	Model	FVR600SP/SD
5.1. 2	1. Forward and backward	2. Throttle leve
	handle	
	3. Engine	4. Sling rack
Fu ncti	5. Hydraulic oil tank	6. Water tank
on	7. Shaving bat	8. Vibration Wheel

of the operation device

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

1). Place the engine **Fuel Valve Lever** (Figure 1) to the **"ON"** position.



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2). Place the **Choke Lever** (Figure 2) to the "**OPEN**" position.

3). Place the Throttle Lever to "LOW" position.

Caution

ENSURE correct starting position. Failure to do so may result in injuries.

4).Set the Centrifugal Cut-Out Switch to "**ON**" position or "**HOLD**" down the Electric Cut-Out Lever.

5).Grasp the Recoil Starter Grip (Figure 4) and pull it out slowly. Pull till resistance is felt, then continue pulling the Recoil Starter Grip briskly and smoothly to start the engine.

6). If the engine has started, slowly return the **Choke Lever** (Figure 2) to the "**CLOSE**" position. If the engine has not started, repeat steps 1 to 5.

7). Run the engine for several minutes before actual operation.

8). Place Throttle Lever to "**HIGH**" position to begin compacting operation.

5.1.3 After starting up the engine

Do not run machine immediately after staring, 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

5.1.4 Machine running

Attention: Before running the machine, please



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# ensure that there is no person and obstacles nearby.

1) Unlock the "manual lock lever"

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

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

5.1.5 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 along the slopes.

 Leave the machine, please keep "forward and backward handle" in the middle position, turn off the engine.

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



### 5.2 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.

5.3 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.

5.4 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.

5.5 Attention after the operation

1) Remove dirt and water on the machine, especially dirt



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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.

5.6 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) Discharge the water in the tank.

5) Put the forward and back switch on the middle position, lock the machine by hand.

 $6\ )$  Insert wedge-shaped objects under the drums to prevent the machine moving.

7) 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.Norminal maintenance

6.1.1 Maintenance and repairs every 10 hours



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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) 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.



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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 Petrol oil (meet national standard)