please read the manual thoroughly before using the product

SP600 Road Roller User Manual
CONTENTS

Foreword

1. Product introduction.................................................................................................(5)

2. Structural characteristics.........................................................................................(6)

3. Technical parameters.................................................................................................(7)

4. Safety.......................................................................................................................(8)

5. Maintenance..............................................................................................................(13)

6. After sales service and contact method.................................................................(15)
FOREWORD

Thank you for your purchase of the products of our company. Before use, please read this manual thoroughly. This specification provides our company of this type of product information and safe operation and maintenance of knowledge. For your safety, please fully understand the properties and methods of operation of the machine, in order to achieve the purpose of the correct use of. If the individual terms do not understand, please call or fax to contact my company sales department, please keep this manual for future reference.

If the transfer or lease of the product, please pass on these instructions with this product in order to avoid improper use of and damage to the machine or injury.

This manual contains the content is produced based on the machine. Our company reserves the right to change any part of the contents of the manual without prior notice.

All rights reserved,

The standard implementation of this product: JG/T8511-2005
NOTICE TO USERS

After unpacking check box parts is consistent with the packing list contents.

The fuel of engine must be 92# gasoline or above 92# gasoline.

After starting and stop before must be low speed (3 ~ 5) minutes, try to avoid the no-load speed running speed diesel engine parts, prevent damage or injury caused by! Try to avoid rapid parking!

In well ventilated place to add fuel, must stop the operation of the machine when adding fuel, near the machine cannot smoking or open flames and sparks!

Diesel engine operation and shutdown after a period of time, it is strictly prohibited to touch the muffler and the surface of the cylinder body, so as not to burn. In order to avoid scalding or fire, when diesel engine cooling before handling or storage.

**Warning:**

- Prohibited for cleaning and maintenance when the machine is running.
- Prohibit unauthorized modification machine.
- Forbidden to touch heating muffler, engine cylinder or sink, so as to avoid the scald.
- Our company must use original spare parts replaced old or damaged parts.
- Must keep the machine clean and labels legible handwriting. Provide instructions and warnings of danger is important for the operator. When damaged, replace all difficult to identify the tag in time.
- Must external fastener regularly check and tighten all the.

The machine and manual include all kinds of warning signs and labels, must understand and comply to avoid casualties, equipment damage or improper repair.

**Safety warning:** safety warning icon used to warn you of potential personal injury hazards. Observe the safety instructions for all to avoid damage.

DANGER

Risk refers to a kind of emergency situation, if not avoided, can cause casualties.
1. Product Introduction

1.1. Main features
1.1.1 The CH440 gasoline engine as the power source, power strong, durable and reliable.
1.1.2 Chain and a V type belt drive completely closed, reducing the wear of parts.
1.1.3 Manganese plate made of steel wheels, steel wheels compared to the ordinary steel, has a longer service life.
1.1.4 The integrated design of operating mechanism, make the manipulator is more convenient, comfortable.
1.1.5 The import BDU, durable and reliable.
1.1.6 The machine can work more efficient in front and back, easy to use.
1.1.7 has the advantages of compact structure, beautiful appearance.

1.2. Main purpose and scope of use
The roller is used for containing particles of soil compaction of loose paving stone, gravel, and asphalt pavement. Mainly used in the corner, near the roadside, foundation structure and narrow place.

2. Structural Characteristics
2.1. **Structural characteristics** (specific structure shown in Figure 1)

2.1.1 Wheel assembly: the walking part
2.1.2 The mud scraping plate: toughness and good wear resistance.
2.1.3 Water tank assembly: iron water tank, high durability. Chain and a V type belt drive
2.1.4 Totally enclosed.
2.1.5 Diesel engine: the power source is directly connected with the base.
2.1.6 With the center of the hanger of lifting points.
2.1.7 The control box: integrated control box, convenient and comfortable.
2.1.8 Handle: forward and backward and vibration control of machine.
2.1.9 Safety gear: machine back press block, so that the machine still or moving forward.
2.1.10 After the steel wheel assembly: vibration, the walking part.

3. Technical Parameters
<table>
<thead>
<tr>
<th><strong>Mating Power</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Engine</td>
<td>CH440</td>
</tr>
<tr>
<td>Power</td>
<td>7.2KW/3600rpm</td>
</tr>
<tr>
<td>Fuel Tank</td>
<td>7L</td>
</tr>
<tr>
<td>Fuel consumption</td>
<td>1.75L/hour</td>
</tr>
<tr>
<td><strong>Walk</strong></td>
<td></td>
</tr>
<tr>
<td>Walk speed</td>
<td>0-3km</td>
</tr>
<tr>
<td>Theoretical Grade ability</td>
<td>40%</td>
</tr>
<tr>
<td><strong>Compaction</strong></td>
<td></td>
</tr>
<tr>
<td>Static linear load</td>
<td>45/50 N/cm</td>
</tr>
<tr>
<td>Nominal amplitude</td>
<td>0.6mm</td>
</tr>
<tr>
<td>Centrifugal force</td>
<td>15KN</td>
</tr>
<tr>
<td>Vibration frequency</td>
<td>70Hz</td>
</tr>
<tr>
<td><strong>Dimensions</strong></td>
<td></td>
</tr>
<tr>
<td>Width of steel wheel</td>
<td>600mm</td>
</tr>
<tr>
<td>Diameter of steel wheel</td>
<td>450mm</td>
</tr>
<tr>
<td>Arm of wheel</td>
<td>600mm</td>
</tr>
<tr>
<td>Max length</td>
<td>2460mm</td>
</tr>
<tr>
<td>Max width</td>
<td>700mm</td>
</tr>
<tr>
<td>Max height</td>
<td>1800mm</td>
</tr>
<tr>
<td><strong>Work</strong></td>
<td></td>
</tr>
<tr>
<td>Working weight</td>
<td>600kg</td>
</tr>
<tr>
<td>Water tank</td>
<td>50L</td>
</tr>
<tr>
<td>Drive</td>
<td>hydraulic</td>
</tr>
<tr>
<td>Vibration</td>
<td>Mechanical drive, electromagnetic clutch</td>
</tr>
</tbody>
</table>

**Sheet 1**

**4. Safety Operation**
1. Safety Information (Please read carefully)

**WARNING:** For safety and to avoid injury, please read, understand and comply with the safety instructions.

Follow the instructions in the manual for your road roller operation and maintenance. In this way, you will be able to efficiently use the machine without trouble in operation.

2. The safe handling of this equipment requires skilled skills and appropriate training. Improper operation of this machine or untrained personnel to operate be dangerous, please read the operating instructions before operating and be familiar with all devices and control switch position and proper use. Inexperienced operator should receive prior guidance of skilled personnel.

**WARNING:**
- Prohibit to use of road roller in the bad operating conditions.
- Prohibited without the proper training of personnel.
- Do not touch the heating muffler, engine cylinder and fins, so as not to cause burns.
- Prohibit the use of our company recommended equipment and accessories for the roller, so as not to damage and operating roller casualties.

- Banned in indoor or enclosed area such as a deep trench in the operation of the device. Engine exhaust gases containing toxic carbon monoxide; exposure to carbon monoxide which may lead to loss of consciousness or even death possible.
- Banned in potentially explosive areas to operate the machine.
- Must power off the machine before maintenance equipment to prevent road roller accidental start.

- Before operating the machine, the operator must be read the operating manual repeatedly and understand, comply with it.
- Other personnel must keep a safe distance to the vibration drum. If anyone near the drum, the operator should stop operating the machine.
- The operator must ensure that know safety regulations and operating techniques before using the machine.

- Must ensure that wear overalls, goggles, earmuffs and safety shoes during operation.
- Must ensure that when operating, hands, feet and loose clothing keep safety distance to the roller moving parts.
- Must shut down the engine promptly when stop using the road roller.
- The operator must not be sandwiched between the rollers and solid barrier. When work on uneven ground or compacted coarse material should pay more attention. In the above case the operation of the machine to ensure that the operator standing stability.
● Must ensure that operation on the breaks, traps, slopes, ditches and platform edge, road roller will be no danger of overturning or falling.

● Without our approval, prohibit to change the machine, or, not in the scope of our maintenance

3. The following persons prohibited to operate the machine
3.1 Mental illness.
3.2 Drunken man.
3.3 Minors or the elderly.
3.4 The person without operating knowledge.
3.5 Overwork, sick people, still take medication and other reasons, who cannot operate the machine normally.
3.6 Has just been vigorous activity without a good rest, people who sleep less, lactating women cannot engage in this activity.

4. Operation Instructions
4.1 preparation before start
First of all, the maintenance work must be completed before the start of the road roller, and do the following:
4.1.1 Check the direction of control handle is located in the middle place.
4.1.2 Check the vibration switch is located in the off position.
4.1.3 Check that the engine oil and fuel is enough.
4.1.4 Check the hydraulic oil is enough.
4.1.5 At startup, the machine should be parked in the little slope place, the ratio of slope should be less than 1:17, so as not to the machine slide itself, or will cause accident.

4.1.6 Check the distance between scraper and drum. Should be adjusted if the gap is too large or too small, please loosen the fixed bolts first when adjusting the gap, then move the whole scraper up or down, make the distance between scraper and drum kept in 3-5mm,
ensure the uniform gap.

4.1.7 Check every fastening screw whether is loosen, tighten it in time if loose, an important check is to check the engine fixed bolts, car frame fixed bolts, and connecting shaft fixed bolts.

4.2 Start road roller

Confirm all equipment normally, then start road roller.

4.2.1 Open the engine fuel switch.

4.2.2 Make throttle handle to "SLOW" position.

4.2.3 The knife switch is energized.

4.2.4 Rotated starting switch clockwise to ‘START’ location

4.2.5 Once the engine start, leave the hand immediately from key. Strictly prohibited to make the switch to the “START position when the engine running,, otherwise it will damage the start motor.

4.2.6 If engine has not started after start 10 seconds, you must stay after 15 seconds to start again.

Electric start cannot be achieved, you can use the recoil starter.
Reference engine manual.

4.3 Running operation

During operation of road roller, the clutch bypass valve should be in the off position (as shown below).
The speed, forward and backward of the roller controlled by the walking handle.

4.3.1 Push the handle forward then move forward, the speed is determined by the handle distance, from low speed to high speed can change stepless speed.

4.3.2 Push the handle to the rear the moved backward, control mode contrary of the forward.

4.3.3 Handle placed in middle position should immediately stop running machine. If the machine is still moving forward, should loosen the nut B, and anticlockwise rotating nut A, make the control line C to move forward, until the machine stop. If the machine moving backward, should loosen the nut B, clockwise rotation nut A, make the control line C to move backwards, until the machine stop moving, then lock nut A, B.

4.3.4 When operation in the slope or hillside should be careful. The machine can continuously in the slope is not more than 14 degrees slope operation. And only along the downhill driving machine. Strictly prohibited to the transverse walk, otherwise it may overturn.

4.4 Vibration operation

The objective is to increase the vibration compaction effect of road roller. When Compaction is very spongy or soft material, the first times do not use vibration compaction, and at a high speed through, and then increase the throttle and open the vibration switch, the machine will then use the rear wheel of high frequency vibration, vibration and compaction at low speed, so as to achieve the desired purpose.

4.5 Sprinkler system

According to the different requirements of compaction, sprinkle water tank can be installed to spray water wheels, to prevent the compacted material is stuck to the wheels, the required flow adjustable water valve switch control.

Note: if the temperature is below zero, roller park should be completely discharge the
water sprinkler system.

4.6 Parking and transportation

4.6.1 Parking reverse the handle in median.
4.6.2 When the engine stop, start key must pull to "OFF" position, at the same time the guillotine switch in off position, otherwise the battery selfpower consumption, causing the engine cannot be started.
4.6.3 When the engine stops running, roller park on a slope, the front and rear wheel should be used to prevent sliding wedge tightly.
4.6.4 When drag, open the bypass valve to "ON" position, towing speed is not more than 2KM/ hours.
4.6.5 Roller hoisting rope, you should use the appropriate tools. The bottom of the machine is strictly prohibited standing or go through machine.
4.6.6 Long distance transport, to prevent battery self-discharge, the main circuit of the machine is in off state. The first run of the machine, please connected line according to the circuit. Otherwise, the engine cannot be started.

4.7 Circuit diagram

5. Maintenance

Good maintenance is very important for the normal operation of the security, economic, reasonable maintenance can prolong the life of the machine, so that the equipment is safe and comfortable operation in a long time, improve work efficiency. Here are the maintenance procedure should be strictly to comply with.

5.1 Lubricant and fuel

A: Calcium base grease

B: gasoline engine
   Four stroke engine oil

C: Hydraulic oil: use API standard grade CI, CH-4, CG-4, CF and CD level or CF-4 grade engine oil, hydraulic oil, also can choose ISO11158-HM or DIN51524-2HLP grade.

D: Fuel
   Gasoline 92#

Note: work in the cold or hot conditions, please choose the special lubricants and fuel.
## 5.2 maintenance schedule

<table>
<thead>
<tr>
<th>Project</th>
<th>Daily</th>
<th>20 hours</th>
<th>50 hours</th>
<th>100 hours</th>
<th>200 hours</th>
<th>500 hours</th>
<th>800 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Check the oil level</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Check the hydraulic oil level</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Check fastened parts</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change the oil</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cleaning oil filter</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjust the throttle control line</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjust the walking control handle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Replace the air filter element</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Chain tension</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Belt tension</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>The degree of belt wear</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>The degree of coupler wear</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

- 14 -
6. After sales service and contact information

1. After sales service
The products in the finite period, such as failure, not normal use, by the company (including special repair department) are indeed identified by the manufacturing quality, the company is responsible for service. Due to improper transportation, safe keeping of early wear and failure or not in accordance with the provisions of the product specification of the use, maintenance, resulting in damage of the machine, it is not in the service range; no purchase invoices, after sell service cards or cards to fill out the machine number does not match with the kind, will not be service.

2. Contact information
As in accordance with product instructions specified the correct operation, maintenance, ensure the normal use of the machine, once the fault happened, please contact your regional dealers, they will provide you with quality service.