

SR80

Impacting Rammer

Owner's Manual

Dear Owner:

Thank you for your choosing our products. Before operating the rammer, be sure to read and familiar with the manual carefully, otherwise injury to personnel or damage to equipment may occur.

Notice:

This manual is only suitable for operating and maintenance of **SR80** impacting rammer.

- This manual is a part of this machine. It can't be separated from the machine whenever you purchase or resell this rammer.
- We reserve the right to change some of the contents in this manual without giving advance notice and do not take any responsibility.

Section One Product Introduction

SR80 impacting rammer has advanced designing, compact structure, stable function, strong ramming force, handy and safe operating, extensive adaptability, high efficiency, etc advantages.

It is suitable to be used in construction, roadbed, bridge pier etc. It can accomplish some tasks which large and medium-sized machine can't.

Section Two Warning and Caution

WARNING!

Before operating the rammer, be sure to read and familiar with the manual carefully, otherwise injury to personnel or damage to equipment may occur.

NOTICE:

- Check the rammer carefully before using it every time. Such as whether the bolts are fastened? Whether the gasoline and the lubricating oil are suitable or adequate?
- In order to make the rammer work normally, please follow the gasoline engine direction strictly to operate and maintain the gasoline engine.
- Children and pets must be separated from working area to prevent being scalded by gasoline engine or being hurt by the rammer.
- Before operate the rammer, you should learn how to close the engine and all control device quickly. Untrained staff must not operate the rammer.
- Don't place combustible substance such as gasoline, match close to the working rammer.
- Gasoline is highly combustible and it may explode at special conditions ,so refuel the engine at well ventilated place. Close the engine when you

refuel it.

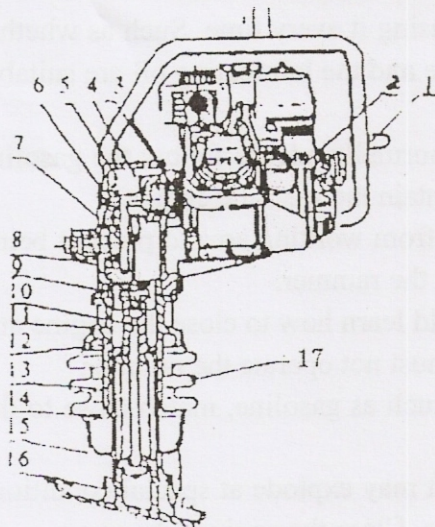
- Don't refuel the fuel tank too fully.
- Ensure the fuel tank cap is fastened.
- If the fuel spill over, you must clear it away thoroughly. Turn on the engine after the fuel volatilize.
- Don't smoke or make spark when you refuel the engine or you are close to the fuel storage tank.
- Don't operate the rammer in sealed room or at poorly ventilated place because the waste gas that the engine exhausts contain poisonous carbon monoxide.

Section Three Technical Standard

Model	SR80 Impacting Rammer	Ramming Frequency	600~700times/min
Engine Power	Gasoline Engine 3~6.5Hp	Ramming Energy	56N.m
Bounce Height	40~65mm	Ramming Plate Size	310×300mm
Advancing Speed	10~13m/min	Package Size	610×520×970mm
Gross Weight	85kg		

Section Four Main Construction of Rammer

The main parts of SR80 impacting rammer are handrail, gasoline engine, clutch, crankcase, transmission gear, connecting rod, core rod, spring, inner and outer cylinder, ramming plate and protecting cover.



- 1、 handrail 2、 gasoline engine
- 3、 clutch 4、 gear shaft 5、 crankcase
- 6、 cap 7、 gear wheel 8、 connecting rod
- 9、 linchpin 10、 core rod module
- 11、 refuel hole 12、 outer cylinder
- 13、 inner cylinder 14、 spring
- 15、 clamp 16、 ramming plate
- 17、 protecting cover

Section Five Checking and Operating Rules

Special Notice:

Please read this manual and gasoline engine direction carefully and learn the key points of operating rules before you operate the rammer.

Caution:

- Please check the air cleaner every time before operating the rammer in order to prevent accelerating the attrition of the engine.
- Please ensure that the lubricating oil is adequate every time before operating the rammer in order to prevent the rammer being damaged in an abnormal way because of being lack of lubricating oil.
- Please ensure that the bolts and every part of the rammer are fastened every time before operating the rammer.
- Do not operate the rammer on cement ground or other hard ground!
- Close the rammer immediately and check it if you hear the abnormal sound from the rammer when you operate it.

Notice:

- Please operate the rammer on the level and compact ground.
- Please operate the gasoline engine according to its manual. You can control the working condition of the rammer by control switch of the engine after starting the engine.
- Don't hold the handrail too tightly so long as you can prevent the rammer from tilting and control the advancing speed and direction. You can change the advancing direction by rotating the handrail.
- Do not hold down the handrail strongly so as not to affect the bounce height of the rammer.
- Hold down the handrail lightly on the slope or the loose ground so as to accelerate the advancing speed.
- This kind of rammer is a small-sized ramming machine, so the earth which need to be rammed should be rammed layer by layer, each layer should be less than 250mm. Each layer should be rammed repeatedly for three times or more where it is needed.

Section Six Maintenance

Warning!

- Close the rammer before maintenance.
- In order to avoid that the engine is started unexpectedly, place the engine switch on "OFF" position and pull out the connecting pipe of the spark plug.
- Please maintain the rammer every time after you use it and insist on

maintaining the rammer after 50, 100 and 300 working hours.

Special Notice:

To keep the rammer in a sound condition, please maintain the rammer according to maintenance date list

- Please clean the dust, dirt and other adhesive on the rammer immediately every time after you use it and check the rammer whether the bolts and every part of it are fastened.
- Please add the lubricating oil (10#, 0.4kg) into the crankcase before operating the rammer at first time and replace the lubricating oil after 30 working hours for three times, then replace the lubricating oil every 100 working hours .
- Do not clean the filter element by using gasoline or other free-burning cleaning liquid because it may lead to explosion.
- Do not start the engine if the air cleaner is absent. Otherwise it may accelerate the attrition of the engine.
- Please maintain the engine strictly according to its manual or the direction of the gasoline engine.

Maintenance Date List

Item \ Frequency		each time	first month or 20 hrs	each season or 50 hrs	every six month or 100 hrs	each year or 300 hrs
Lubricating oil of the Engine	Oil Level check	○				
	Replace		○		○	
Air cleaner	Check	○				
	Clean	○		○(1)	○(1)	
Deposit cup	Clean				○	
Spark plug	Check and Clean				○	
Spark eliminator	Clean				○	
Valve clearance	Check and Adjust					○ (2)
Combustion chamber	Clean					○ (2)
Fuel tank and fuel filter	Clean					○ (2)
Fuel supply line	Check	Every two years (do a replacement if necessary) (2)				

Remarks:

- (1) More often than that in the schedule if in dusty circumstance.
- (2) The items should be done by your dealer unless you are specially trained and is well equipped with tools.

Notice:

The rammer is a vibratory machine and its bolts unfix easily. So check and fasten them immediately and frequently. Because of the influence of vibration, some parts of the rammer are damaged easily, such as spring, protecting cover, shock absorber and gear etc. So check them frequently and replace them immediately if they are damaged.

This machine has special requirements at lubricating aspect. Because of the reciprocating motion of the protecting cover, it produces gas pressure in the machine. This gas pressure vaporizes the lubricating oil and it can lubricate the upper gear, axle, bearing and sliding parts. So the quantity of the lubricating oil will affect the working function of the rammer.

The two ventilation plug sockets of the rammer are used to exhaust gas during work. If the ventilation plugs are lost during work, replace it in time. Do not block up ventilation socket with the ordinary bolt.

If you discover that the gas from the ventilation plug sockets does not contain the oil blob after using long time, please replenish the lubricating oil immediately.

If the rammer can't bounce normally (can't bounce sometimes) after refueling the lubricating oil. Maybe the reason is adding too much lubricating oil. So you should drain part of the lubricating oil.

Section Seven Disassembly of Rammer

1. Please disassemble the rammer according to the procedure.
2. Disassemble the fastening bolts of the gasoline engine, then take down the gasoline engine.
3. First disassemble the ramming plate, then disassemble the connecting nut (at the lower part of the core rod module), and disassemble the lower clamp, the spring and the upper clamp at last.
4. Loosen the fastening nut (at the protecting cover circle), then disassemble the inner cylinder and outer cylinder.
5. Disassemble the elastic retainer ring for axle (at the linchpin) by calipers, then disassemble the linchpin and the core rod module.
6. Disassemble the fastening bolts (at the cap), then disassemble the cap from

the crank case by two M8 long bolts.

7. Disassemble the elastic retainer ring for axle (it is used to fasten the gear wheel and cap) by calipers, then use the M16 long bolt to push off the gear wheel from the rear hole of the cap.

8. Disassemble the elastic retainer ring for axle (at the gear axle) by calipers, then disassemble the gear shaft.

The assembly procedure is opposite with the disassembly procedure. Pay attention to the installation of sealing element, which is at connecting position.

Section Eight Vulnerable Parts List

Number	Name	Quantity
1	Spring	1
2	Protecting Cover	1
3	Shock Absorbing Base	1
4	Clutch Grinding Sheet	1

Section Nine Trouble Diagnosing and Clearing

Num	Conventional Trouble	Trouble Reason	Clearing Way
1	Oil leakage	1.The fastening bolts at connecting position loosen 2. There are some sand holes and gas holes in the cast 3. The sealing parts are worn aged and invalid 4. The protecting cover splits. 5. Refuel excessive oil, spray from ventilation plug socket.	1.Fasten bolts 2.Weld the holes or replace the cast 3.Replace the invalid parts 4.Replace the protecting cover 5. Drain excessive oil
2	Bounce height of the rammer isn't enough	1.The spring is worn or fractures. 2.The nut(at lower part of the core rod) loosen	1.Replace the spring. 2.Fasten the nut or replace it if necessary.
3	Abnormal bounce of the rammer during work	1. The earth is too hard 2. The spring breaks off 3. The lubricating oil is excessive. 4. The throttle of the engine loosens and the rotation speed is not steady.	1.Change working place 2.Replace the spring 3. Drain lubricating oil 4. Adjust the rotation speed of the gasoline engine.

4	The gasoline engine works but the rammer can't work	1. The controlling switch of the throttle is not at proper position. The rotation speed of the gasoline engine is low. 2. The pulling force of the drag spring in clutch is too strong. 3. The transmission gear is damaged. 4. The connecting rod is damaged. 5. The core rod module fractures or the bottom nut loosen 6. The guide key falls off and it seizes up the inner and outer cylinder. 7. The impurity substance seizes up the inner and outer cylinder.	1. Aggrandize the throttle to accelerate the rotation speed. 2. Replace the drag spring 3. Replace the transmission gear 4. Replace the connecting rod 5. Replace the core rod module or fasten the bottom nut. 6. Solder the guide key. 7. Clear away the impurity substance
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Section Ten Supplementary Document

1. One piece of the owner's manual
2. One piece of the gasoline engine direction