

Operating manual for rear loading and unloading (compressed) garbage truck

I. Overview

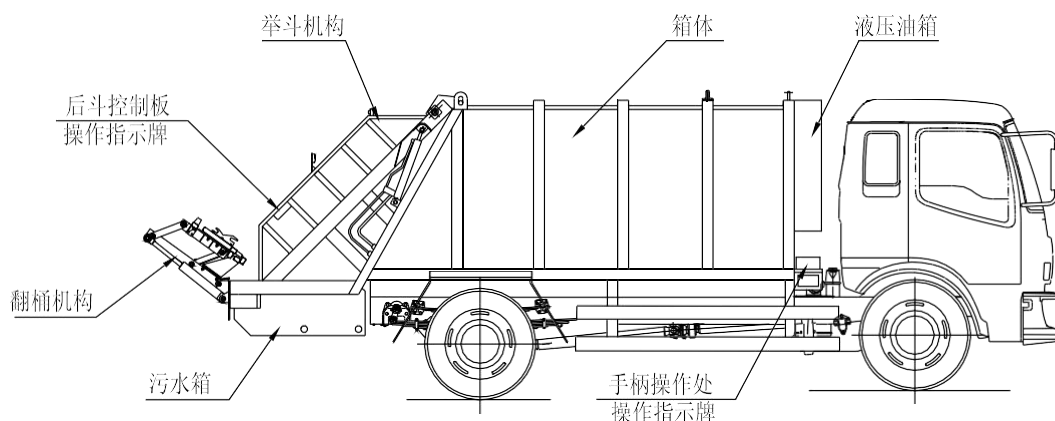
Gree special rear loading and unloading garbage truck, also known as compressed garbage truck (hereinafter referred to as garbage truck), is a special vehicle for the collection, transportation and unloading of bulk household garbage. Garbage is pushed into the tank by the vehicle garbage thruster, also known as the negative pressure mechanism, so that the garbage is distributed uniformly in the tank until full; the garbage truck is widely adopted in the world. Its special device is powered by the motor engine and realized by manual or electric control of the hydraulic mechanism. The vehicle box body, loader, also known as bucket body and sewage tank are all of high quality carbon steel plate fully sealed welding structure, with the advantages of high strength, light weight and no secondary pollution.

The series has an optional trash can hydraulic flip mechanism for 120,140,240 litre plastic bins and 350 litre metal bins.

The basic performance of the garbage vehicle is the same as the original chassis vehicle. Please refer to the original chassis vehicle use manual. This instruction manual only describes the operation, inspection and maintenance of the special modification part. Before using the vehicle, we strongly require you to read this manual and handle the operating procedures.

Our factory will further improve respect to the products. Product improvements, performance improvements, structural improvements are subject to improvement without notice, please understanding that certain instructions do not apply to your specific vehicle.

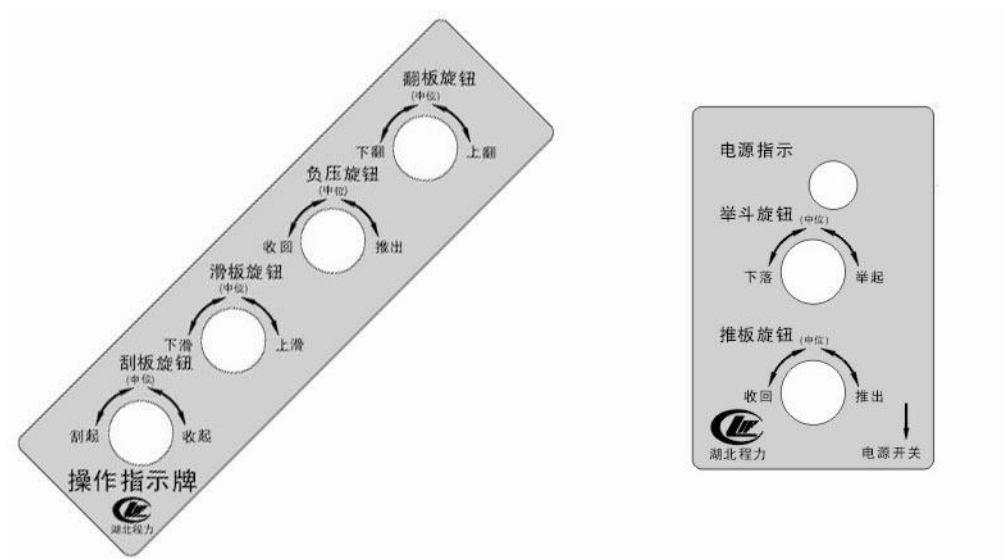
II. Brief diagram of structure



III. Operation steps

Before loading garbage, reach 6 standards, hang the force collector (bottom left of the steering wheel in the cab), check each component for any leakage or abnormality, and then operate according to the position indicated by the operation knob plate;

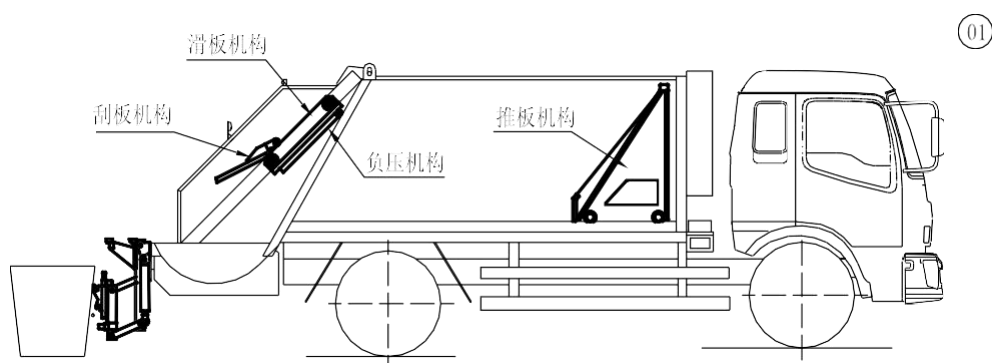
Operation knob signs as shown:



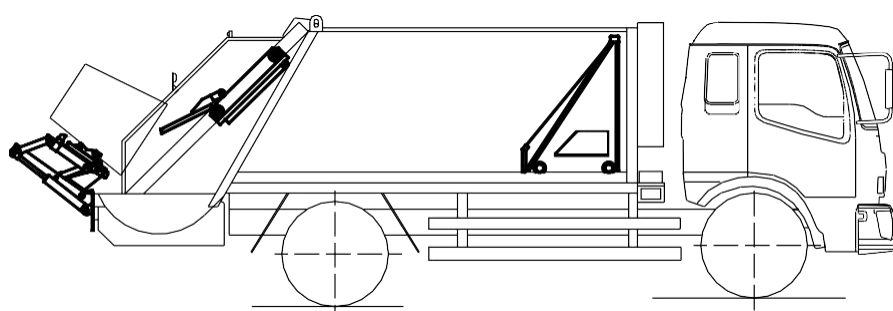
Backbucket operation board (bucket side) The cab operating board (in the cab) are as follows:

Install garbage

Step 1. Turn the bucket (plate) operation knob to the lower left turn, let the bucket (plate) mechanism down, release the knob to the median, and then rotate the scraper operation knob to the right pack position, the scraper away, release the knob to the median, ready to start hanging the bucket. Fig

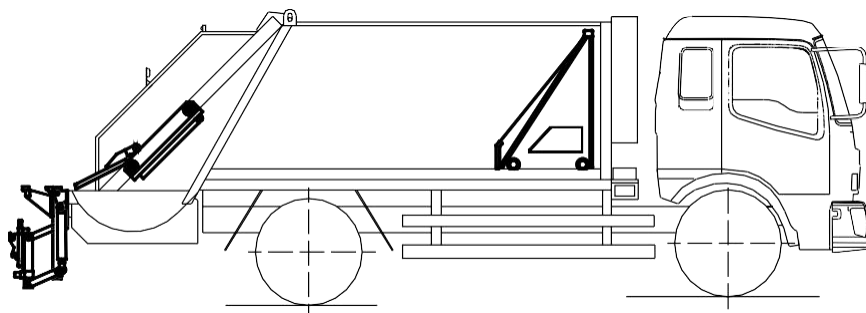


Step 2. Hang the trash can, rotate the bucket operation knob to the top right flip position, the trash can up, garbage automatically into the arc bucket, release the knob to return to the median; as shown in the figure



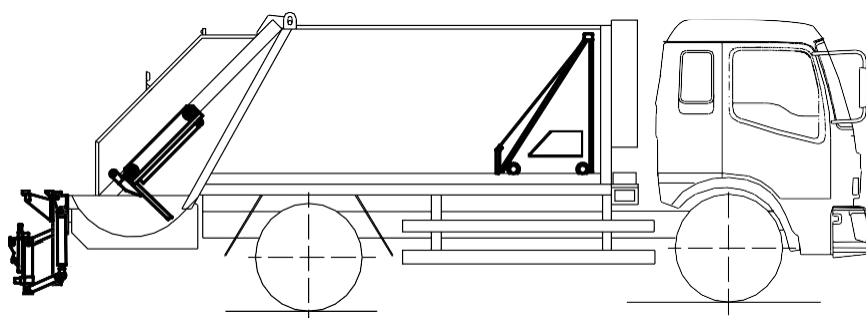
Step 3. Turn the bucket operation knob to the lower left turn position, the trash can back, release the knob back to the median; then rotate the skateboard operation knob to the left slide position, the skateboard slide (note: the scraper is in the upward position), release the knob back to the median, ready to collect garbage; as shown in the figure

03



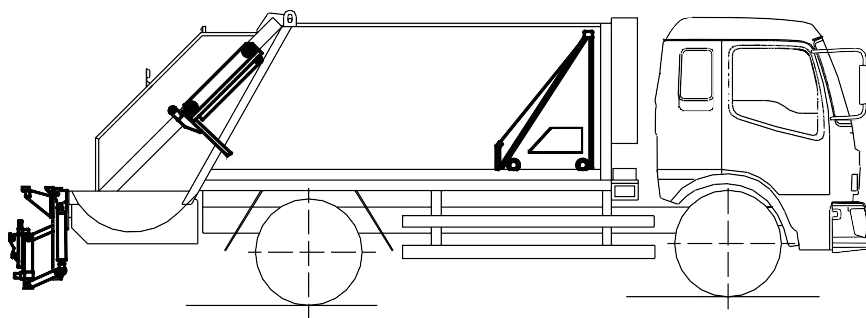
Step 4. Rotate the scraper operation knob to the left scratch position, scrape the garbage along the arc bucket, release the knob back to the median; as shown in Fig

04

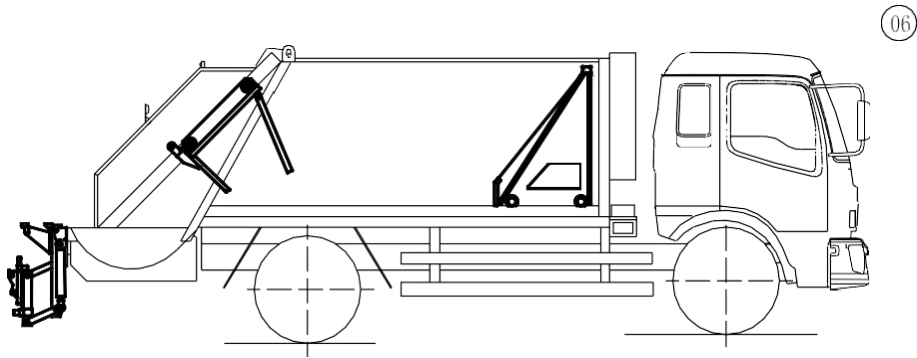


Step 5. Rotate the skateboard operation knob to the upper right slide position (Note: the cylinder seat under the scraper must exceed the stroke switch mark position), The skateboard drives the scraper to slide up at the same time, release the knob to return to the median, the garbage is taken up by the scraper, ready to advance the garbage; as shown in Fig

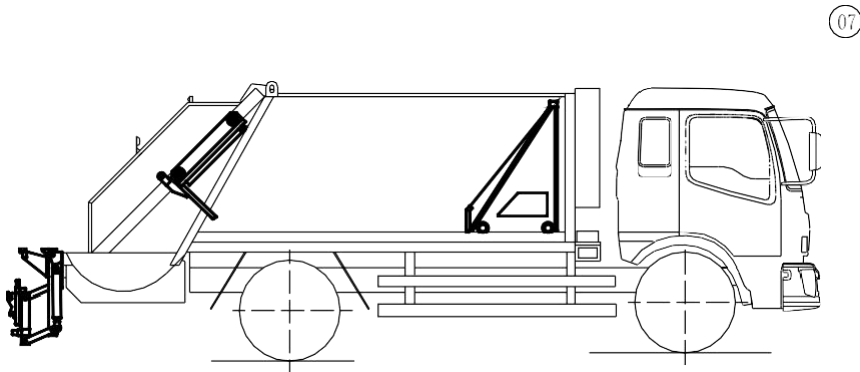
05



Step 6. Rotate the negative pressure operation knob to the right launch position, the garbage is pushed into the chassis by the negative pressure plate, release the knob back to the median; as shown in Fig



Step 7. Turn the negative pressure operation knob to the left recovery position, recover the negative pressure plate, release the knob back to the median, and complete one load of garbage, as shown in Fig

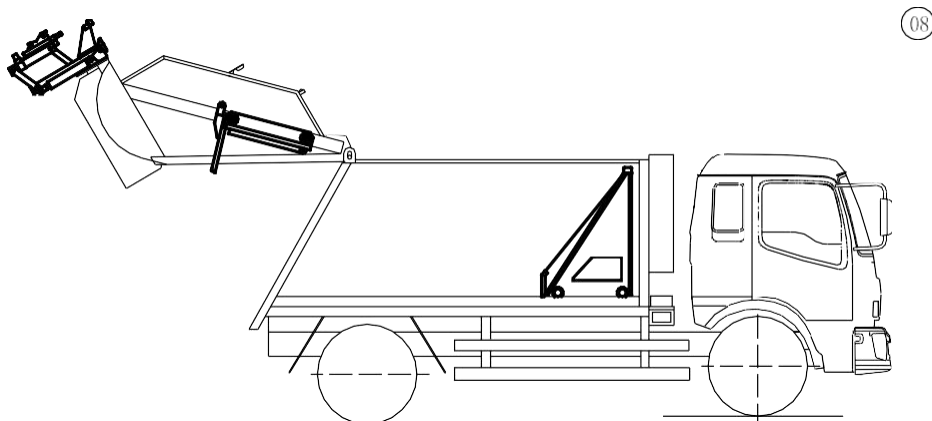


If you load the garbage again, continue the cycle from step 1 (rotate the scraper operation knob to close, ready to start the bucket);

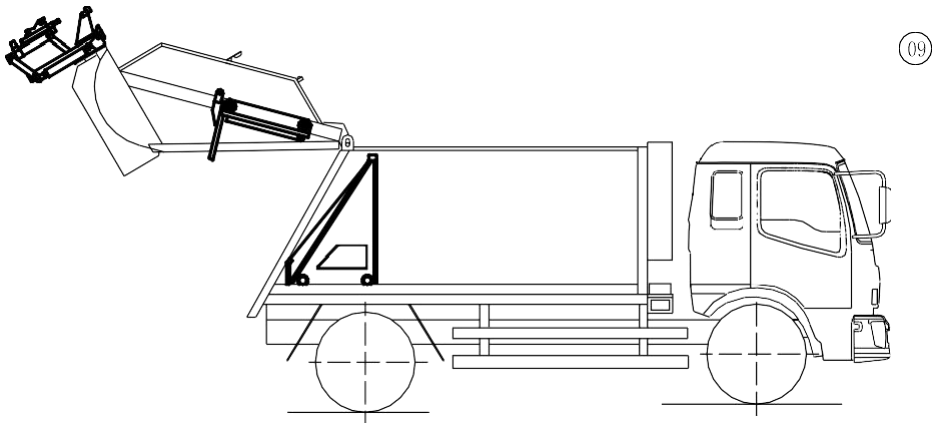
If it is not necessary to load again, rotate the bucket flip operation knob to the upper right flip position, turn the bucket flip mechanism, and then release the force collector before the vehicle can move.

Discharge garbage

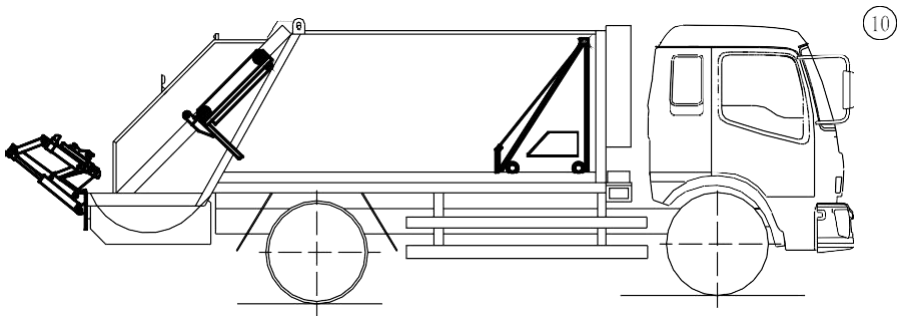
Step 8. Before unloading, when the vehicle reaches 6 standard air pressure, hang the force collector, rotate the bucket operation knob at the front secondary multiplex valve to the right lifting position. The bucket body is lifted, release the knob and return to the median to prepare the unloading, as shown in Fig



Step 9. Rotate the operation knob of the push pad to the right launch position. Please push the garbage into the car compartment and release the knob to complete the unloading work; as shown in Fig



Step 10. Rotate the push plate operation knob to the left recovery position, the push plate is retracted, release the knob; then rotate the bucket operation knob to the left fall position, the bucket is down and locked with the chassis, release the knob, and release the force collector (if the bucket mechanism is the down position), when the vehicle is move.The position of the vehicle is moved as shown in Fig



Manual handle operation (this operation shall be used in an emergency manner

湖北程力专用汽车操作（手动）说明牌					
推板	举斗	翻板	负压	滑板	刮板
推出	降落	翻起	收回	上滑	刮起
↓ (中位)	↓ (中位)	↓ (中位)	↓ (中位)	↓ (中位)	↓ (中位)
收回	举起	落下	推进	下滑	收起
⚠ 注意：举斗下严禁站人					

when the electric control knob fails)

(Between box and cab)

The specific operation steps are the same as the knob control, refer to step 1~10

1. Box

The range large compressed garbage truck tank is welded with no. 16 low alloy groove steel and 8mm, 5mm, 4mm, 16Mn steel plate. The bottom groove steel

of the chassis is not only the installation connection foundation of steel structure, but also the push plate to support. Lightweight maximizes the box effective space and reduces the structural center of gravity.

The standard compressed garbage truck is welded with 12 low alloy groove steel with 5mm, 4mm, 16Mn steel plate. The box is secured to the car chassis by a girder.

The bottom plate of the box is a fully sealed structure, sewage corrosion, water in the box is discharged into the bucket sewage tank to avoid corrosion of the box and

The car chassis, as well as avoid the leakage of sewage to the road, effectively prevent secondary pollution.

2, hops

The bucket, also known as garbage loaders, consists of frame skeletons, guide rails, arc hoppers, scraper, boards, negative presses and light covers. Through the sequence action of the scraper cylinder, the skateboard cylinder and the negative pressure plate. Eight rollers are equipped on both sides of the skateboard, with low friction coefficient, high strength, and a trace swing to ensure the long-term use of the guide rail without wear.

The loader is also a seal at the rear of the carriage, achieving the opening and closing action by lifting the cylinder, sliding hinge and locking device.

Sewage tank is provided at the bottom of the loader, and water inside the carriage and excess water in the hopper flow into the sewage tank. All the sewage tank can be discharged by itself or manually.

3, barrel turning mechanism

According to the user needs optional bucket mechanism, flip mechanism or bucket mechanism, the mechanism uses hydraulic double action double cylinder flip, iron bucket or plastic bucket in the process of flipping locked by the system, safe and stable strength, reasonable structure.

Note; When the vehicle is moving, the mechanism is turned up to facilitate normal driving.

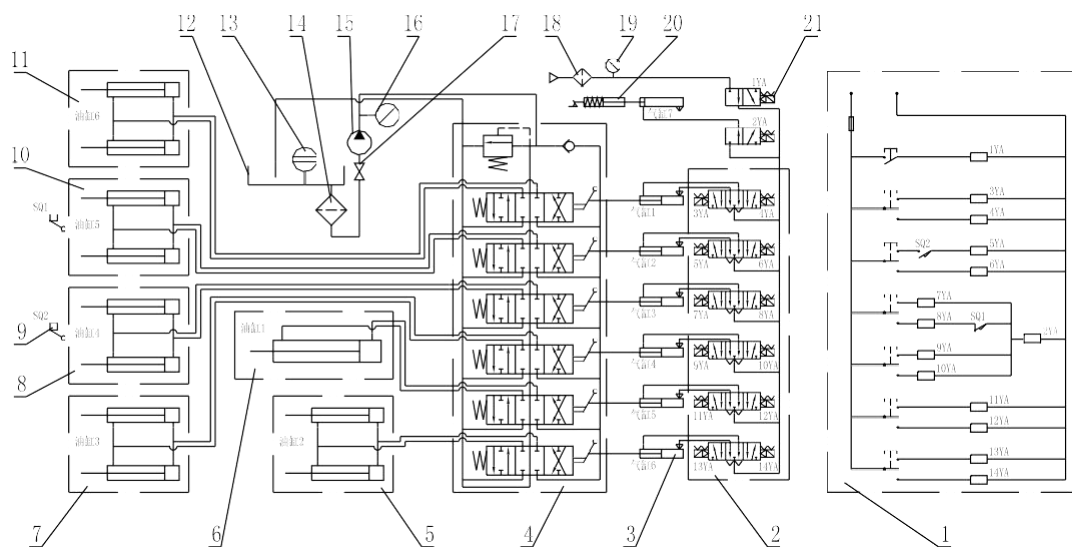
4, hydraulic system

The hydraulic cylinder action of the car adopts circuit control quality gas road, air circuit valve control cylinder, cylinder operation hydraulic multiplex valve, hydraulic multiplex valve control cylinder action. The operation is simple and reliable, but also has the manual direct operation of the hydraulic multiplex valve, with the two-way control of a single hydraulic system.

Hydraulic system consists of fuel tank and filtration system, oil pump, multidirectional direction valve, one-way throttle valve, cylinder, oil pipe, etc. The power of the system comes from the engine, and the power is divided by the power collector, which drives the gear pump to work.

The gear pump draws the hydraulic oil in the hydraulic pump through the suction filter and the multiple valve (located behind the cab, front of the tank) supplies oil. When the multiplex valve works, the negative pressure plate cylinder, skateboard cylinder, scraper cylinder, lift bucket cylinder or push plate cylinder produces action. When the hydraulic cylinder does not work, the hydraulic oil is directly returned to the fuel tank through the multiplex valve.

Schematic diagram of the hydraulic system: (Take Dongfeng 145, for example)



Serial number	Name	Specifications	Number	Comment
1	Circuit control brief	Car power supply is 24V		
2	Combined solenoid valve	TG3522-02U	1	
3	Air cylinder	MAL25×50	7	
4	Portfolio multi-route valve	34DLS-10-P-000000	1	
5	Lift the oil tank	HSGK01-63/35-700×450	2	
6	Push plate oil cylinder	DJG-150III-1150×2170	1	
7	Scraper oil cylinder	HSGK01-80/45-700×300	2	
8	Skateboard oil cylinder	DJG-115 II-1000×1020	2	
9	Travel switch		2	
10	Negative pressure cylinder	HSGK01-63/35-500×300	2	
11	Turn the barrel oil cylinder	HSGK01-90/63-832×500	2	
12	Hydraulic tank		1	Homemade
13	Oil quantity (oil temperature) indicator		1	Sample
14	Hydraulic oil filter	ZUT-A63×20	1	
15	End valve	Q11F-16P	1	
16	Hydraulic oil pump	CBT-F532FHL	1	
17	Hydraulic meter	YN-60 40MPa	1	
18	Air purifier	TW2000-02U	1	
19	Pressure gauge	0~1.0MPa	1	
20	The throttle lever		1	
21	Electromagnetic valve	DH261	1	

1. The use and maintenance of the car chassis and engine parts shall be carried out in accordance with the use instructions of the chassis car.

In the new closing phase of the new car, the range is less than 1500-2500 km and the box (push plate) load at 70% of the rated load quality, and the engine shall not manganese the throttle when unloading.

3, shall replace all the working oil after working the cylinder 300 times. Unscrew the release screw plug of the hydraulic tank, inject new oil from the upper refueling hole, and then start the engine, and test the cylinder twice to confirm that the operation is reliable.

The 4, high-pressure oil tubes are replaced periodically every two years. Cracking, damage, shoulder expansion and other phenomena are found in the process of use, it should be replaced in time.

5, frequently checks the oil leakage of the hydraulic system and repairs and changes the oil seal in time.

6, lubrication is performed with automotive GM lithium-based grease (GB5671-85) and can be driven from the oil nozzle until squeezed in the gap.

7, Clean the inner surface of the vehicle and box and loader after daily operation. Check the hydraulic oil stock regularly, add lubricating oil to each movement site regularly, and apply lubricating oil on the surface of each guide rail.

8, Regularly check and adjust the operating pressure of gear oil pump; check oil filter element, remove surface impurities or replace filter element; replace hydraulic oil regularly.

1. The series of garbage trucks are strictly prohibited to put into construction waste, so as to avoid damage to the parts.

If 2, hydraulic system is found during operation, stop working immediately, analyze the cause and eliminate the fault. Do not force pressure on operations.

3, must press the clutch pedal for both the rodent and detached force collector; garbage must not be driving when the power collector and the multiplexed reversing valve are operating.

The pressure regulating device of the 4, hydraulic system is the pressure regulating bolt on the multiplex switching valve, which shall not be adjusted and locked after use. Users are not allowed to casually adjust the oil pressure arbitrarily.

The one-way throttle at the top of the 5, loader is a device controlling the drop speed of the loader and shall not be mobilized after adjusted and locked.

The closing of the 6, vehicle collection bucket shall bring the collection bucket down to the end, and bite the lock tongue and lock block before closing.

7, Do not flush the water into the hydraulic oil tank when washing the car. Check the height of the hydraulic oil surface frequently, fill timely when the hydraulic oil is insufficient, all oil joints shall not be oil leakage.

8, maintenance shall prevent collision, avoid part damage, deformation, scratches, etc. Attention must be cleaned when assembling the parts.

VII. Failure judgment and treatment of the hydraulic system

When the hydraulic mechanism is not working properly. The suction collector shall first be checked for properly engaged, the hydraulic oil in the tank is sufficient and the suction pipe ball valve is fully opened.

The 1, hydraulic mechanism has no action.

Follow the following steps to check here. Is
icent oil in a, hydraulic tank. Hydraulic oil
shall be filled when insufficient;

b, observed whether the inlet pipe of the tank to the pump is inflated due to aging. If this phenomenon, the inlet pipe should be replaced.

c, Check that the gear oil pump fails. Install the pressure gauge and screw the pressure regulating bolt to observe whether the gauge reaches the specified value; d, If the specified oil pressure is still reached after all screw, the gear oil pump fails and the gear oil pump must be replaced; e, If the gear oil pump is working normally, the multiple direction valve core is blocked. The valve core shall be removed to remove impurities and reinstall

Used after entry.

The 2, hydraulic mechanism is moving but weak

Check whether the gear oil pump fails and
whether the system pressure reaches the
specified value. 3, hydraulic mechanism slows
slower

Check whether the gear oil pump is invalid, the oil absorption filter and the oil return filter core are blocked.

1. When you need political party consultation or repair, please contact the after-sales service department of our factory, and properly keep the car purchase certificate,

To confirm that the car is under warranty.

The after-sales service of 2, chassis car is responsible for the chassis car manufacturer; the factory only implements "three guarantees" for the special modification part of the vehicle. In the process of use, no matter when or where any faults or problems occur, please contact with electricity, and we will give timely processing and give a clear reply within 24 hours of receiving the information.

The 3, new car should be maintained according to the regulations to enjoy the "three guarantees"

(1) Content and duration of the three guarantees:

a, vehicles can enjoy the "three guarantees" from the date of purchase (subject to the purchase invoice) and within 3000 kilometers (two conditions should be met at the same time);

The b, vehicle shall be fully inclusive within 10 days from the date of sale (subject to the date filled in by the after-sales service card), that is, if all parts are damaged due to manufacturing quality or cannot meet the use performance requirements of the whole machine, our factory shall implement "three guarantees";

c, "three guarantees" during the period is indeed caused by quality reasons, our company implements package repair;

During the d, "three guarantees" period of the assembly quality problems, the company, the supporting units and the maintenance service outlets repair (refers to the same failure) still can not reach the technical performance and cannot be used, and the assembly or parts shall be replaced.

(2) The following items do not belong to the "three guarantees": a, does not have mandatory closing period maintenance according to the provisions of this vehicle;

b, vehicle caused by abnormal use and change of vehicle structure; c, vehicle (including unlicensed driving, illegal vehicle); d, disassembly or improperly adjusted faulty vehicle without the consent of the company; e, dismantled the assembly or parts into parts without the consent, and cannot recognize the origin and liability

Cause analysis of the vehicles;

f, self-handled accident vehicles without the approval or identification of the Company; g, faulty vehicles due to improper adjustment or no inspection adjustment; h, low-value consumables, vulnerable parts (e. g., electrical appliances, glass, rubber, plastic products, etc.); various marks and bearings.4, does not belong to the scope of the "three guarantees" of vehicles, our company is responsible to users, to provide convenient maintenance services,

However, fees should be charged.

5, For your rationalization suggestions of this product or other products, please put forward to my future service department, for the factory timely adoption, all the factory staff to express the most sincere thanks to you!

**1. Certificate of
compressed garbage truck;**

2, Use instructions for compressed garbage truck;

3, Chassis Certificate;

4, Chassis instructions;

5, onboard tool.

Company Website : <https://www.isuzu.jp.com>

TEL : +86 13329885001