

Instruction Manual for Side loader lift Garbage Truck



I. Overview

Chengli special vehicle hanging bucket garbage truck (hereinafter referred to as garbage truck) is a special vehicle used for garbage collection, transfer and unloading operations in cities and towns.

The car is composed of car chassis, dump cylinder, hoist assembly, top cover (optional), attached frame, garbage box and so on. The operation of the car is completed by the hydraulic control system, and the control mode can be manual or electric control.

The vehicle is mainly used for garbage collection, transfer and unloading of urban garbage. Operate the lift control valve to lift the trash can up and tilt with the hoist, and the garbage in the bucket is poured into the carriage to complete a single loading of garbage. Operate the lift control valve in reverse, and the trash can is lowered with the hoist;

When the garbage is loaded and then dumped, the dump control valve is operated, the garbage can is tilted and lifted around the rear inversion axis, the rear door of the container is

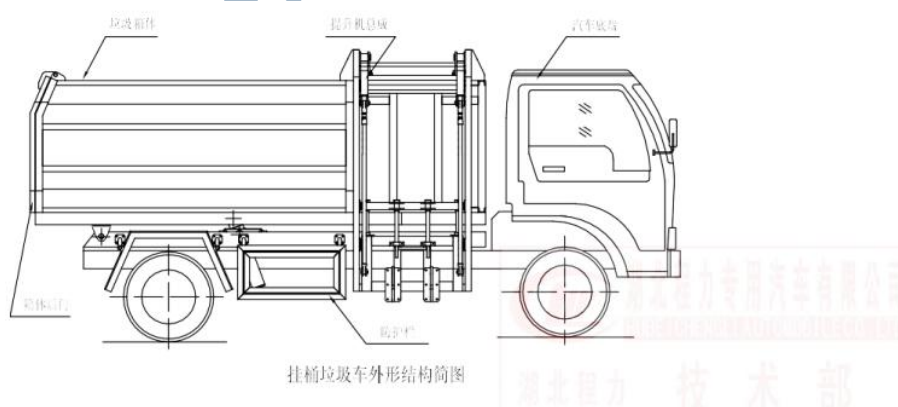
opened, and the garbage is dumped out of the container; The lifting and lowering of the hoist and the self-unloading function of garbage reduce the labor intensity of workers and improve the working environment.

The collection and transportation method of this garbage truck is the garbage collection and transfer method widely used in China at present. The functions of its special devices are all powered by the automobile engine, and are realized by manual or electronic control or pneumatic control of the hydraulic mechanism. The box body of the vehicle adopts a high-quality carbon steel plate fully sealed and welded structure, which has the advantages of high strength, light weight, dust-proof, overflow-proof and no secondary pollution.

The basic performance of the garbage truck is the same as that of the original chassis. Users should refer to the manual of the original chassis. This instruction manual only introduces the operation, inspection and maintenance of the special modification part. Before using the vehicle, we strongly urge you to read this manual thoroughly and be comfortable with the operating procedures.

Our factory will further improve the product. Product improvements, performance enhancements, and structural improvements are made without prior notice, so some instructions may not apply to your specific vehicle, please understand.

Second, the structure diagram



3. Operation steps

Before loading garbage, when the no-load operation reaches 6 standard air pressure, hang up the power take-off (lower left of the steering wheel in the cab), check whether there is any leakage or abnormality in each part, and then follow the operation steps;

The specific operation steps are as follows: Garbage loading
step 1.

First, place the trash can on the hook of the hoist, and then push the lifting or upper cover (optional) operating handle to the raised position, and the hoisting oil cylinder on the right side of the box or the top cover opening cylinder extends out, so that the hoist Drive the trash can up and rotate

Turn over the garbage, the garbage enters the box. Release the operating handle to return it to the neutral position; as shown in the figure:



提升机提起垃圾桶收集垃圾简图

Step 2.

Push the lift operating handle to the retracted position, and retract the lift cylinder on the right side of the box or the top cover opening cylinder, so that the hoist drives the trash can down and places it on the ground, loosen the operating handle to make it return to the neutral position, Complete a load, then release the power take-off and the car is ready for transport.

Also note:

If a small scraper is installed in the box, please push the handle in the direction of the operation sign to push out the scraper, push and scrape the garbage at the front of the box to the back of the box, and pull the handle back in the opposite direction before loading the garbage again. , so that the scraper is retracted and the handle is returned to the neutral position; in order to prevent the garbage from pouring into the scraper and the front end of the box and being stuck;

If there is no small scraper installed in the box, in order to prevent the garbage from being only installed at the front end of the box, the self-unloading handle can be pushed to the open position at this time, and the self-unloading cylinder at the bottom of the box is extended, so that the box can wrap around the self-unloading flip seat Rotate and lift at a certain angle, so that the garbage at the front of the box slides to the rear of the box due to its own weight. After completion, pull the operating handle back in the opposite direction or return to the neutral position, and then let the box fall flat to release the handle.

garbage dump

When the whole vehicle runs to 6 standard air pressure, hang up the power take-off, check whether there is any leakage or abnormality of each component, and then operate according to the operation steps;

step 1.

First, loosen the lock button of the rear door of the box, then push the self-unloading handle to the open position, and the self-unloading cylinder at the bottom of the box is extended, so that the box can be rotated and lifted around the self-unloading flip seat. Under the impact of

garbage, it will automatically open and the garbage will be discharged; as shown in the figure

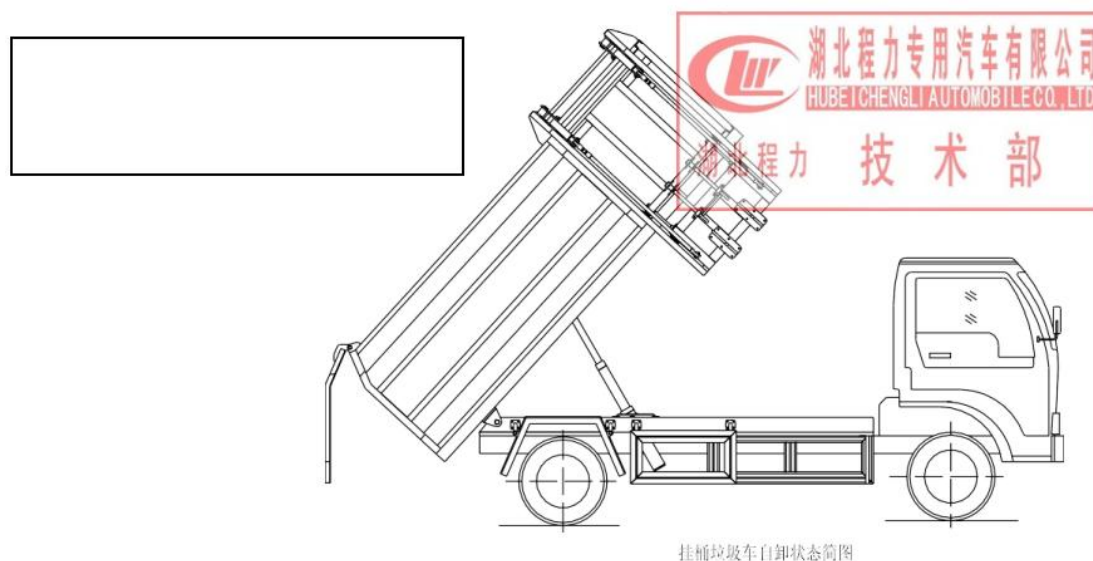
Step 2. After the trash uninstal is complete

Loosen the self-unloading operating handle or pull it back in the opposite direction, the box will fall and be placed on the sub-beam stably due to the pressure of its own weight or the retraction of the self-unloading cylinder, and finally lock the rear door of the box;

Loosen the power take-off trash can and place it, the whole vehicle can be driven

illustrate:

When the garbage is dumped, it is strictly forbidden to stand at the rear of the carriage.



4. Brief description of the structure

1. Attached frame

The attached frame of the docking garbage truck of Chengli garbage station is welded with No. 14, 12, 10 low-alloy channel steel and Q235, 16Mn and other steel plates, and is firmly connected to the car frame with multiple sets of U-bolts.

2. Trash box

The garbage box body is welded by No. 10 hot-rolled ordinary channel steel, 12mm, 8mm, 5mm, 4mm steel plates, etc. The box body is an overall sealed structure to prevent secondary pollution caused by garbage during transportation.

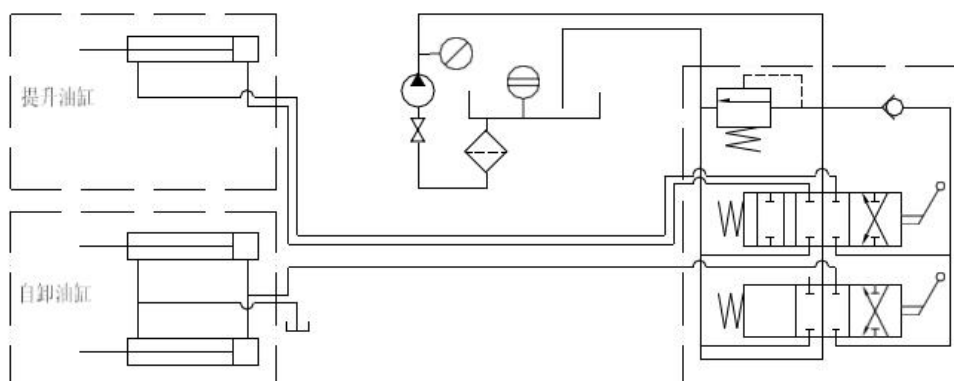
3. Hydraulic system

The action of the hydraulic cylinder of the car is controlled by a manual hydraulic multi-way valve, and the hydraulic multi-way valve controls the action of the oil cylinder. Simple and reliable operation and easy maintenance.

The hydraulic system consists of oil tank and filter system, oil pump, multi-way reversing valve, one-way throttle valve, oil cylinder, oil pipe, etc. The power of the system comes from the engine, and the power is separated through the power take-off, which drives the gear pump to work.

The gear pump sucks the hydraulic oil in the hydraulic oil tank through the oil suction filter, and the multi-way valve (located behind the cab and at the front of the car box) supplies oil. When the multi-way valve is working, the rear door oil cylinder and the self-unloading oil cylinder are activated. When the hydraulic oil cylinder is not working, the hydraulic oil is directly returned to the oil tank through the multi-way valve.

Schematic diagram of hydraulic system:



4. List of main accessories

serial number	name	Specification	quantity	Remark
1	hydraulic oil pump	CBT-F550FHL	1	
2	power takeoff		1	
3	2 - way valve		1	
4	open cover cylinder	63/32-795 × 535	2	(Optional)
5	hoist assembly		1	
6	High-pressure pipeline	F 19	4	
7	Shut-off valve	Q11F-16P	1	
8	hydraulic gauge	YN-60 40MPa	1	
9	Hydraulic tank	40 liters	1	
10	Scraper assembly		1	(Optional)

5. Maintenance

1. The use and maintenance of the chassis and engine parts of the car are carried out in accordance with the provisions of the chassis car's instruction manual.

2. In the running-in stage of the new car, the mileage is within 1500-2500km and the lift box (push plate) unloading is within 900 times, and the loading is carried out at 70% of the rated load mass. The engine shall not bombard the accelerator with manganese during unloading.

3. After the cylinder works 300 times, all the working oil should be replaced. Unscrew the oil drain plug of the hydraulic oil tank, and then inject new oil from the upper oil filling hole, then start the engine, and test the operation of each oil cylinder twice to confirm that the operation is reliable.

4. The high-pressure oil pipe should be replaced regularly every two years. If there are cracks, damage, swelling of the shoulders and other phenomena during use, it should be replaced in time.

5. Regularly check the oil leakage of the hydraulic system, and repair and replace the oil seal in time.

6. Lubrication adopts lithium-based grease for automobiles (GB5671-85), which can be injected with a grease gun from the grease nipple until it is squeezed out of the gap.

7. Clean the whole vehicle, the car box and the lifting assembly after the end of the daily operation. Regularly check the hydraulic oil inventory, regularly add lubricating oil to each moving part, and apply lubricating oil to the surface of each guide rail.

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

6. Matters needing attention

1. It is strictly forbidden to put construction waste into this series of garbage trucks to avoid damage to the parts.

2. If abnormal movement is found during the operation of the hydraulic system, it should stop working immediately, analyze the cause, and eliminate the fault. Never force work under pressure.

3. Whether the power take-off is engaged or disengaged, the clutch pedal must be stepped on; when the power take-off and the multi-way reversing valve are in working state, garbage shall not enter the driving state.

4. The pressure regulating device of the hydraulic system is the pressure regulating bolt on the multi-way reversing valve. After the bolt is adjusted and locked by the pressure calibration, it should not be arbitrarily adjusted during use. The user is not allowed to adjust the oil pressure at will.

5. The one-way throttle valve is a device that controls the speed of the hydraulic cylinder. It should not be adjusted and locked at will.

6. For the models of lifting and unloading:

When the truck is loaded, it is not allowed to descend quickly, and it should be controlled to descend slowly by manipulating the reversing valve.

When the car box is lifted due to oil change, cleaning and maintenance, the support rod of

the car box must be well supported to prevent accidents caused by the sudden drop of the car box.

When lifting and unloading, choose a flat and solid ground for parking and dumping.

When dumping materials, the back door of the carriage should be opened first; in the same way, after the material is dumped, the carriage should be put down first, and then the back door should be closed. 7. Do not flush water into the hydraulic oil tank when washing the car. Check the hydraulic oil level frequently, and add it in time when the hydraulic oil is insufficient.

Note that all oil line joints must not leak oil.

8. During maintenance, collisions should be prevented, and parts damage, deformation and scratches should be avoided. When assembling parts, care must be taken to clean them.

Seven, hydraulic system fault judgment and treatment

When the hydraulic mechanism does not work properly. First, check whether the power take-off is properly engaged, whether the hydraulic oil in the oil tank is sufficient, and whether the oil suction pipe ball valve is fully opened.

1. If the hydraulic mechanism has no action, check it according to the following steps.

a. Whether the oil in the hydraulic oil tank is sufficient. Hydraulic oil should be added when insufficient;

b. Observe whether the oil intake pipe from the oil tank to the oil pump is slumped due to aging. If this phenomenon occurs, the oil inlet pipe should be replaced.

c. Check whether the gear oil pump fails. Install the pressure gauge, turn the pressure regulating bolt, and observe whether the gauge reaches the specified value; d. If the specified oil pressure cannot be reached even after all the pressure regulating bolts are screwed in, the gear oil pump has failed, and the gear oil pump must be replaced; e. If the gear oil pump works normally, the spool of the multi-way reversing valve is blocked. The valve core should be removed, the impurities should be removed, and the

Use after entering.

2. The hydraulic mechanism has action but is powerless

Check whether the gear oil pump fails and whether the system pressure reaches the specified value.

3. Hydraulic mechanism slows down

Check whether the gear oil pump fails, whether the oil suction filter and the oil return filter core are blocked.

Eight, after-sales service

1. When you need consultation or maintenance, please contact the after-sales service department of our factory, and keep the car purchase certificate in a safe place to confirm that the car is within the warranty period.

2. The chassis car manufacturer is responsible for the after-sales service of the chassis car; the factory only implements "Three Guarantees" for the special modified part of the vehicle. During the use process, no matter when or where there is a fault or problem, please call or write to contact us. We will deal with it in a timely manner and give a clear answer within 24 hours of

receiving the information.

3. The new car should be maintained in accordance with the regulations before it can enjoy the "Three Guarantees"

(1) The contents and duration of the Three Guarantees:

a. The vehicle can enjoy the "Three Guarantees" within one year from the date of purchase (subject to the purchase invoice) and within 3000 kilometers of driving mileage (both conditions must be met at the same time);

b. The whole vehicle is all-inclusive within ten days from the date of sale (subject to the date filled in the after-sales service card), that is, if all parts are damaged due to manufacturing quality or cannot meet the performance requirements of the whole machine, Our factory implements "Three Guarantees";

c. During the "Three Guarantees" period, if there is a failure due to quality reasons, our company implements a repair package;

d. During the "Three Guarantees" period, there is a quality problem in the assembly, and the company, supporting units and maintenance service outlets have repaired it for more than two consecutive times (referring to the same fault) and still cannot reach the technical performance and cannot be used. The assembly or component be replaced;

e. The vulnerable parts of the car can enjoy three guarantees for half a year.

(2) The following items do not belong to the scope of "Three Guarantees":

a. Vehicles that do not comply with the regulations of this vehicle and have not undergone mandatory running-in period maintenance;

b. Vehicles with faults caused by abnormal use and self-change of vehicle structure; c. Vehicles causing traffic accidents (including unlicensed driving and vehicles causing accidents in violation of regulations); d. Vehicles that cause failures due to improper disassembly or adjustment without the consent of the company; e. Vehicles for which the assembly or components are disassembled into parts without the consent of the company, and the origin cannot be identified and the responsibility and cause analysis cannot be confirmed;

f. Accident vehicles handled by themselves without the consent or appraisal of the company;

g. Vehicles that have malfunctioned due to improper adjustment or failure to check and adjust;

h. Low-value consumable and wearing parts (such as electrical appliances, glass, rubber, plastic products, etc.); various standard parts and bearings. 4. For vehicles that do not belong to the scope of "Three Guarantees", our company is responsible for users and provides convenient maintenance services, but appropriate fees should be charged.

5. Your reasonable suggestions for this product or other products of our factory, please put forward to my future service department, so that the factory can adopt it in time. All the staff of our factory express our most sincere thanks to you!

9. On-board tools, accessories and technical documents

1. Sealed garbage truck certificate;

2. Instructions for use of the front clamshell sealed garbage truck;

3. Chassis certificate;

Chengli Special Vehicle Co., Ltd. side loader garbage truck www.isuzu.jp.com

4. Chassis manual;
5. On-board tools.

Chengli Special Vehicle Co., Ltd. side loader garbage truck:

<https://www.isuzu.jp.com/product-category/side-loader-garbage-truck/>

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