

COMPACTOR GARBAGE TRUCK USER MANUAL



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一、Foreword

Thank you for choosing our Compactor Garbage Truck. This manual is intended to provide detailed instructions on the operation, maintenance, and care of the compactor garbage truck. Please read and follow this manual carefully before using the vehicle to ensure its safe and efficient operation.

二、Vehicle Overview

Vehision Compactor Garbage Truck is a new-generation sanitation vehicle independently developed and designed by absorbing and integrating advanced domestic and international technologies. The truck features a clean and modern appearance, excellent performance, and advanced operation. It adopts both compression and bidirectional compression technology, offering high pressure, superior sealing, easy operation, and safe, stable performance. It is mainly suitable for the collection and transportation of household waste in municipal sanitation, factories, construction sites, residential communities, schools, and government facilities.

This vehicle is modified on a dedicated chassis by adding a garbage tank, loading mechanism, pusher plate, compaction device, hydraulic system, and electrical system.

The truck can be equipped with four optional loading mechanisms: bin lifter, large ground hopper, swing arm garbage container, and triangular hopper (as shown below). Customers can select the appropriate option based on their operational environment. This operation video demonstrates the commonly used bin lifter type compactor. Other filling mechanisms can be referenced in the corresponding operation manuals.



Bin lifter



Triangular hopper



Large ground hopper



Swing arm garbage container

三、Commonly Used Accessories

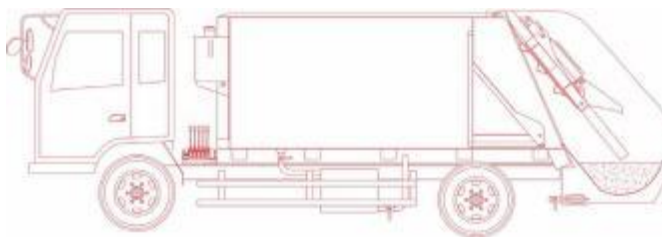
No.	Item	Description
1	Hydraulic Cylinder	Wesun-Bore joint venture cylinder, 2-year warranty
2	Cylinder Installation	External installation, oil enters rodless chamber during compression for higher pressure and faster speed
3	Electrical Control System	CAN bus control system, modular structure with high integration
4	Action Control	Dual proximity switches + hydraulic pressure sensing, low failure rate, automatic throttle adjustment
5	Cycle Time	Single/double pump system controls scraper plate cycle within 20 seconds
6	PTO	Ruizhichengchen brand
7	Oil Filtration	Hydraulic oil filter, high-pressure filter, and tank strainer
8	Valve Groups	Joint venture brand
9	Side Plate	One-piece side plate, no welded seams
10	Floor Plate	Extended floor plate, no welded seams
11	Painting	Three-coat system (primer, intermediate, topcoat), premium paint guaranteed non-fading for 5 years, side guards with powder coating
12	Grease Nipple	Pure copper with standard dust caps
13	Slider	High-strength nylon slider with steel tube reinforcement
14	Lifting Mechanism	Integrated barrel lifter frame
15	Tank Volume	Arc-structure tank, 0.5–1.5m ³ larger than standard tanks on same chassis
16	Operation	Manual, electric, and remote control operation options
17	Leak Prevention	Dual sewage tanks, new lock-tight structure, extended drainage trough with rubber sealing
18	Testing	On-vehicle test run with 28 inspection items

**Oil Tank****Hydraulic Cylinder****Gear Pump****Multi-way Valve****Throttle Valve****Back Pressure Valve**

四、Working Principle

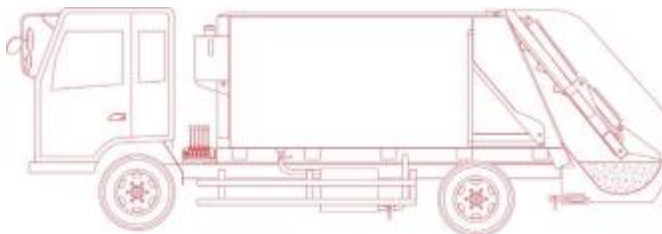
- **Step 1 :Scraper Plate Opens**

When the hopper is filled with garbage, the scraper plate opens in preparation for descending and engaging the waste.



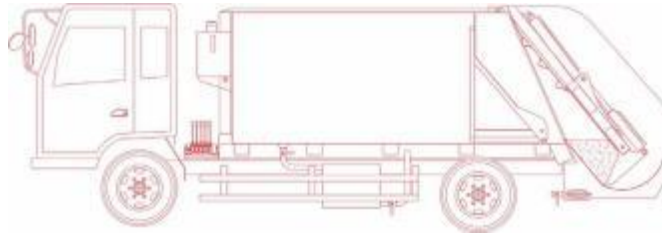
- **Step 2: Sliding Plate Descends**

The sliding plate, together with the scraper plate, moves downward, cutting into the garbage for initial crushing and compression.



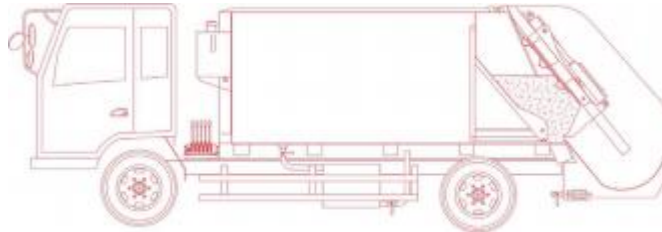
- **Step 3: Scraper Plate Closes**

The scraper plate rotates forward to further compress the garbage.



- **Step 4: Sliding Plate Ascends**

The sliding plate moves upward, pushing the compacted garbage into the main compartment of the garbage container and returns to its starting position.



During continuous compaction, the pusher plate gradually moves backward under compressive force, overcoming the back pressure generated by the pusher cylinder, evenly filling the entire garbage container.

The vehicle adopts advanced bi-directional compression technology, achieving a compression ratio of up to 1:3 or higher. With a short loading cycle and large hopper capacity, the garbage collection and transportation process is efficient and fast. The main compartment and sewage tanks under the hopper have large capacities, reducing the risk of spillage.

When unloading at a waste processing or landfill site, the vehicle first lifts the hopper and opens the rear door of the garbage container. The pusher plate, located at the front end of the container, then moves horizontally toward the rear, pushing out the compressed garbage and completing the discharge operation.

五、The Operation Process

- **Pre-Operation Preparation**

Check all vehicle lighting and inspect the surrounding area to ensure safety.

- **Engage the PTO and start the oil pump operation**

Check and confirm whether the suction pipeline and ball valve between the oil pump and the oil tank are in the open state. Get in the vehicle and start the engine. Observe whether the working instruments are normal. After arriving at the operation area, stop the vehicle, keep the chassis engine running, place the transmission gear lever in the neutral position, pull up the handbrake, check and confirm that the chassis air pressure is above 0.6 MPa, step on the chassis clutch and hold it, and after about 10 seconds, pull out the power take-off (PTO) control handle outward.

✧ **Important Notes:**

The PTO must be disengaged during vehicle travel.

Do not engage the PTO if the air pressure is insufficient. Failing to do so may result in incomplete engagement between

the PTO and the transmission, causing severe damage to both components.

Slowly release the clutch. The oil pump emits a low working sound. If there is no other abnormal noise, it has entered normal working condition. After the oil pump runs stably for 3-5 minutes, press the power switch button in the cab, and the control system performs a self-check. Press the "Tail Box Cleanout" button on the main control panel to control the rear operation panel for garbage loading operations. Press the "Switch Remote Control" button on the control panel to operate the garbage loading through the wireless remote controller. In the absence of power, the multi-way valve operation lever at the middle part of the vehicle body can be selected for emergency operation without power.

✧ **Important Notes:**

When the garbage truck is not loading or unloading garbage, the main power switch in the cab should be in the OFF position, all indicator lights on the control panel should be off, the power take-off (PTO) should be disengaged, the vehicle transmission gear lever should be in the neutral position, and the engine should be idling.

● **Operation Mode Instructions**

This vehicle is equipped with four main operating devices:

The first is the main control panel inside the cab (used for controlling system operation modes and unloading operations);

The second is the control box at the rear of the filler (used for controlling the loading process);

The third is the manual multi-way valve control lever located between the cab and the middle of the vehicle body (used for manual emergency operations in case of electrical failure of the main control panel, rear control box, or wireless remote controller);

The fourth is the wireless remote controller (integrating both loading and unloading operations, providing convenient and fast operation).

✧ **Important Notes:**

The loading and unloading operations are all automatically controlled by the program. During the operation of controlling the hydraulic cylinder movement, the engine speed will automatically increase to 1500 r/min. It is strictly prohibited to press the accelerator pedal to increase the engine speed in order to accelerate the operation, as excessive speed may cause damage to the engine and the oil pump power unit.

● **Compacting Operation Procedure**

After arriving at the garbage loading site, operate according to the "PTO Engagement and Oil Pump Start Operation" video section. Check whether the filler is lowered in place and whether the hydraulic lock hook is locked. Turn on the power switch inside the cab, and press the "Tailbox Clean-out" button on the main control panel to carry out the garbage loading operation.

✧ **Important Notes:**

During the loading operation, the pusher plate must be in the fully extended position at the rear end of the box; otherwise, the compaction density of the garbage will be affected.

❖ **Method 1**

Operate the control box at the rear of the compartment, press and hold the "Lower" button to lower the lifting bucket mechanism, and push the garbage bin to the proper position. Press and hold the "Raise"

button to firmly hook the garbage bin, lift it up until the bin overturns into position. If there is residual garbage in the bin, press the "Lower" button to swing the bin back a little, then press the "Raise" button again to overturn and discharge. After the garbage is discharged, press and hold the "Lower" button, the garbage bin rotates back to position until the bin touches the ground and disengages from the hook, pull out the garbage bin, and the operation is finished.

❖ Method 2

Operate the wireless remote control, press the "Switch Remote Control" button on the main control panel, and complete the loading operation with the remote controller same as the rear control box.

The filling process can be selected in "Manual" and "Automatic" modes. In "Manual" mode, according to the sequence of: Scraper Open → Sliding Plate Down → Scraper Close → Sliding Plate Up, long press the operation buttons to complete the loading work. In "Automatic" mode, you can select "Single Cycle" and "Continuous Cycle" operation buttons to complete the loading work.

【Single Cycle】

According to needs, press the "Single Cycle" button, and the compaction mechanism will perform one working cycle in the filling sequence and stay at the starting position.

【Continuous Cycle】

If other equipment such as a reloading machine is used to continuously and quickly pour garbage into the filler, the continuous cycle operation mode can be used. Press the "Continuous Cycle" button, and the filling operation will be automatically repeated.

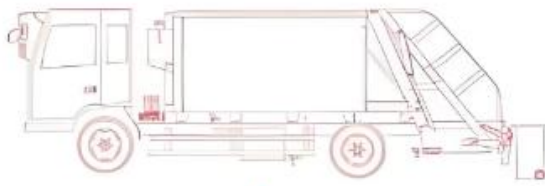
If you need to end, press the "Reverse Operation" button, and the filling operation will reverse and stop at the initial position. If large garbage needs to be cleaned up or an emergency occurs that requires a stop, press the "Emergency Stop" button, and the compaction mechanism will immediately stop at its current position. After the emergency is removed, the related operation can be continued.

❖ Important Notes:

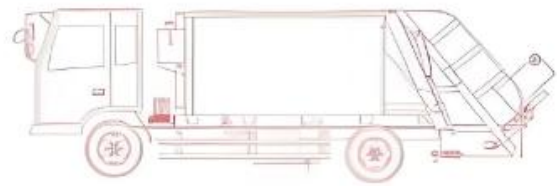
- (1) To ensure safe operation and save equipment and power consumption, it is recommended to adopt the "Single Cycle" operation. When the ambient temperature is low, the viscosity of the hydraulic working oil will increase. Before loading garbage, the compaction and bucket lifting mechanisms should be run unloaded for several cycles.**
- (2) When the pusher reaches the front end of the garbage compartment or the sliding plate is hindered and cannot return to the starting position, it proves that the compartment is basically full of garbage. At this time, it is recommended to adopt manual mode to compact 1-2 cubic meters.**
- (3) If there is no garbage to be loaded, the bottom of the filler, scraper and sliding plate should be cleaned, otherwise, during unloading, the filler may become too heavy and cannot be lifted.**

Operate the "Raise" button to lift the bucket mechanism. In the cab, step on the clutch and hold it for about 10 seconds, then disengage the PTO, slowly release the clutch, and turn off the power switch inside the cab to complete the garbage loading operation.

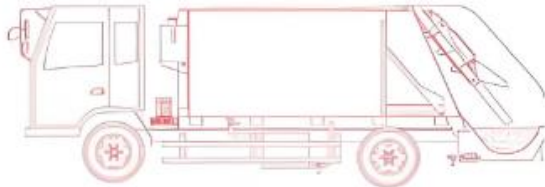
➤ Garbage Compaction Process Diagram(As follows below)



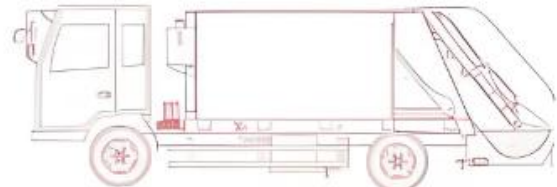
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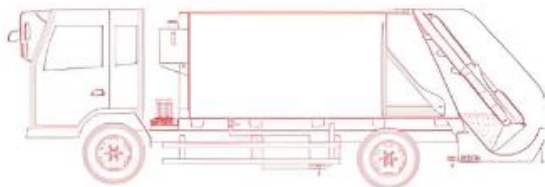
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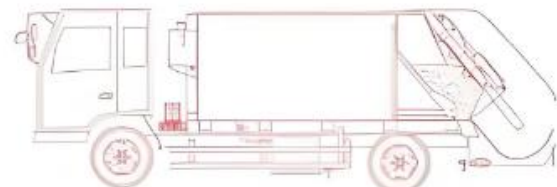
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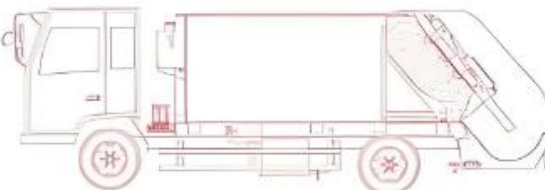
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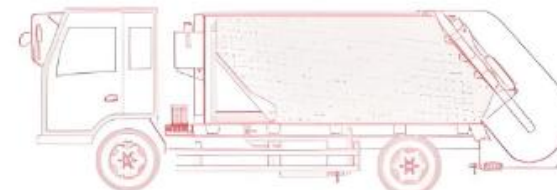
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In the continuous garbage compaction process, under the action of extrusion force, the pusher overcomes the back pressure and gradually moves backward, allowing the garbage to evenly fill the entire garbage compartment.

● Unloading Operation

After arriving at the unloading site, open the sewage valve to drain the sewage in the sewage tank. According to the "PTO Engagement and Oil Pump Start Operation" video section, operate to engage the oil pump into working condition. Turn on the power switch inside the cab, press the "Switch Remote Control" button on the main control panel, start the "Unloading Mode" button on the main control panel, get off the vehicle, operate the remote controller, press and hold the "Hopper Lifting" button of the filler, the filler will slowly lift into position, press and hold the "Pushing Cylinder Forward" button, the pusher will push the garbage out. After the garbage is completely pushed out of the compartment, let the pusher stay at the rear of the garbage compartment without retracting. Press the "Single Cycle" button, the compaction mechanism will automatically perform one compaction cycle to clean out the residual garbage inside the filler hopper.

✧ Important Notes:

(1) For safety, when equipped with a remote controller, it is strictly forbidden to use the cab control panel for unloading

operations.

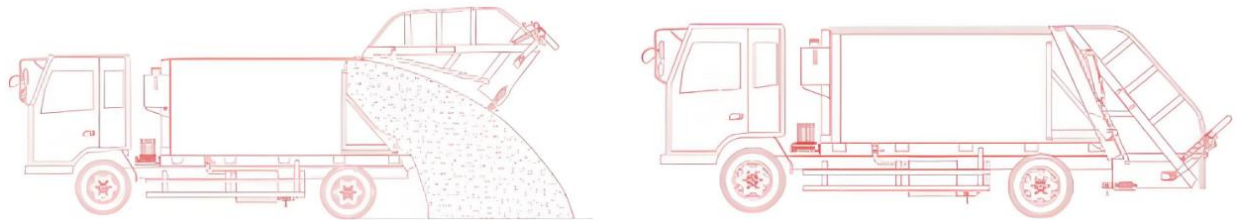
- (2) **The filler must not be lifted on a slope, otherwise it may cause a rollover accident. Confirm the surrounding safety before lifting, and operate carefully. It is strictly forbidden for personnel to stand or pass under the lifted filler.**

Press and hold the "Hopper Down" button, the filler will slowly lower. After the filler is lowered into position, check whether the hydraulic lock hook of the filler is locked. Step on the clutch and hold it for about 10 seconds, disengage the PTO, slowly release the clutch, and turn off the power switch inside the cab to end the unloading operation.

✧ **Important Notes:**

- (1) **The vehicle is not allowed to drive normally before the filler has fully lowered and locked.**
- (2) **After unloading the garbage, check and clean the joint surface of the sewage outlet to ensure a good seal of the joint surface, and close the sewage tank valve.**
- (3) **The pressure valve springs at all positions have been adjusted at the factory, it is strictly forbidden to adjust arbitrarily.**
- (4) **When the remote controller is not in use, the power wiring should be disconnected to prevent power loss.**

➤ **Garbage Unloading Process Diagram(As follows below)**



After the garbage truck is fully loaded, the garbage compartment remains completely closed, ensuring no environmental pollution during transportation. When unloading garbage at the disposal (or landfill) site, the filler is first lifted, the rear end of the garbage compartment is opened, and the pusher, originally located at the front end of the garbage, moves backward horizontally to push the garbage inside the compartment out.

六、Maintenance

- (1) The use and maintenance of the vehicle chassis and engine components shall be carried out in accordance with the relevant provisions of the chassis operation manual.
- (2) During the running-in period of a new vehicle (driving mileage between 1500 – 2500 km, within 900 times of lifting the compartment (pusher) for unloading), the loading volume shall be limited to 70% of the rated load capacity. During unloading, the engine must not be accelerated suddenly.
- (3) After 300 operations of the oil cylinders, all working oil must be replaced. Unscrew the drain plug of the hydraulic oil tank, add new oil from the upper oil filling port, then start the engine and operate each oil cylinder twice for test runs to confirm reliable operation.
- (4) High-pressure oil hoses shall be replaced every two years. If cracks, damage, or swelling at the shoulder are found during use, they must be replaced in time.
- (5) Frequently inspect the hydraulic system for oil leakage, and repair and replace oil seals in a timely manner. Regularly check the hydraulic oil level and replace the hydraulic oil periodically.

- (6) Regularly lubricate all moving parts and apply lubricant to the surfaces of all guide rails. Lubricant shall be general-purpose automotive lithium-based grease (GB5671-85), which can be injected through grease nipples using a grease gun until the grease is squeezed out from the gaps.
- (7) After daily operation, clean the entire vehicle, compartment, and the inner surface of the compactor.
- (8) Regularly inspect and adjust the working pressure of the gear pump; check the filter element of the oil filter, clean surface debris or replace the filter element.

The compactor garbage truck shall be maintained periodically according to the specified maintenance intervals and items, to fully utilize its technical performance and benefits and prolong its service life.

七、Failure Analysis And Elimination

Fault Phenomenon	Cause	Troubleshooting Measures
Oil leakage from cylinder piston rod	1. Seal ring damaged; 2. Piston rod surface scratched.	1. Check guide sleeve, replace seal ring; 2. Replace parts.
Piston rod crawling or creeping	Air mixed into hydraulic cylinder or hydraulic oil.	Remove air.
Insufficient hydraulic cylinder thrust	1. Piston seal damaged; 2. System pressure too low (relief valve maladjusted); 3. Oil pump damaged, system pressure too low; 4. Insufficient hydraulic oil in oil tank; 5. Oil filter clogged.	1. Check, replace seal; 2. Check, adjust relief valve pressure; 3. Check, replace oil pump; 4. Check, refill hydraulic oil; 5. Check, replace filter element.
External leakage	1. Seal ring damaged; 2. Oil pipe joint sealing surface not tight.	1. Repair, replace seal ring; 2. Check, tighten joint; 3. Replace joint, apply sealing glue or tape at joint.

八、After-Sales Service

Our after-sales support team is available 24/7 to assist you. Should you encounter any issues during operation, please contact our customer service center, and we will provide you with professional technical support and solutions.

Thank you for your trust and support in our products!