

FLM5030ZLJFS6

Garbage Collection Truck

FULONGMA GROUP CO., LTD.

2021-05

INTRODUCTION

1. Overview

FLM5030ZLJFS6 adopts FOTON BJ1032V4AV5-01 truck chassis, which is small in shape and flexible in driving. It is mainly used for domestic garbage collection in residential areas and alleys, and for short-distance transfer. The truck has outstanding advantages such as strong applicability and low pollution.



Right



Left



Front



Rear

2. Functions

As a small garbage collection and transportation vehicle, this product is mainly used for domestic garbage collection and short-distance transfer in residential areas and alleys, and can also be docked with large garbage compactor trucks.

3. Applications

This product is suitable for all-weather domestic garbage collection and dustbin garbage collection on urban roads, highways, squares, residential areas and alleys, and for short-distance transfer.

4. Structure & Characteristics



4.1 Chassis

Chassis: Modified with FOTON BJ1032V4AV5-01 chassis, which has strong power and strong bearing capacity.

Engine: Equipped with a DAM16KL petrol engine with a rated power of 90kW, a rated rotation speed of 6000r/min, and the emission meets the China VI emission standard.

4.2 Dumping

The lifting and tipping mechanism is the main moving assembly part that is docked with the garbage compactor truck. The device adopts the principle of tilting around the fixed-point axis and uses the action of a hydraulic double-stage cylinder, and is installed on the upper platform of the garbage tank lifting mechanism. The tipping angle is $\geq 45^\circ$. The maximum dumping capacity is 1075kg (Type-A) / 1165kg (Type-B).

4.3 Garbage Tank

The garbage tank is a special part for loading domestic garbage. It is made of wear-resistant, corrosion-resistant and high-strength stainless steel, and the whole adopts a frame-type

welded structure. A feeding door is opened on each side of the tank, and the door is assisted by a hydraulic gas support spring, which is easy and light to open and close. The tailgate seal adopts a new locking structure, which uses the lowering of the garbage tank to control the swing angle of the tighten hook, and compacts the sealing strip between the tailgate and the tank body to prevent sewage leakage. It can also be fine-tuned by adjusting the bolt to increase the degree of sealing. The bottom of the tank is also equipped with a sewage rough filter device and a water retaining slope. After the rough filter device, the sewage will be led into the 20-liter sewage collection tank, and then discharged through the ball valve when it reaches the landfill.

4.4 Hydraulic System

The tipping and dumping of the garbage truck is performed by the hydraulic system of the vehicle. The hydraulic system is divided into two actions: lift and return. The hydraulic cylinder is independently controlled by the DC power unit, and electromagnetic commutation is integrated. The DC power unit system pressure is 16Mpa, and the tipping time is about 15 seconds.

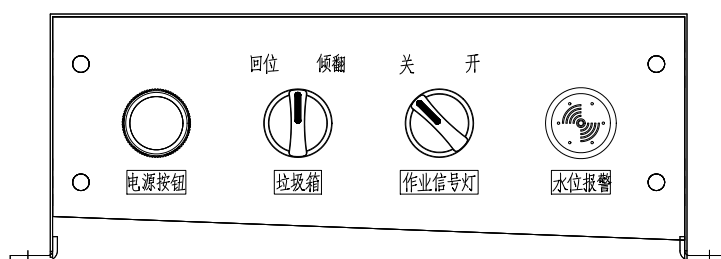
4.5 Electronic System

The electronic control system of the special working device is composed of an electronic control box and an electromagnetic reversing valve element, which is used to control the garbage dumping function.

4.6 Control

The vehicle adopts the mode of electronic control.

The garbage truck is equipped with a control panel in the cab, and the operator can directly control the operation from the seat, and control the lifting and tipping of the garbage tank. The electric control components on the panel are shown in the following figure:



5. Main Specifications

Items		Units	Specifications
Vehicle	Curb Weight	kg	Type-A: 2095 Type-B: 2005
	GVW	kg	3495
	Dimension (L×W×H)	mm	5135×1740×2005
	Ground Clearance	mm	180
Working Performance	Garbage Tank Volume	m ³	Type-A: 3.5 Type-B: 4.5
	Dumping Angle	°	≥45
	Sewage Tank Volume	L	20
Driving Performance	Gradeability (Full-loaded)	%	30
	Brake Distance (Full-loaded 50km/h)	m	≤21
	Turning Radius	m	12
Chassis	Chassis Model		BJ1032V4AV5-01
	Passengers		2+3
	Engine Model/Manufacturer		DAM16KL/DONG'AN
	Engine Rated Power/Rotation Speed		90 kW /6000 r/min
	Maximum Torque/Rotation Speed		158 N·m/4400r/min
	Transmission Type		DAT18R
	Gear Ratio		4.810,2.577,1.513,1.000,0.871,4.457
	Tires	Front	185R14LT 6PR
		Rear	185R14LT 6PR

6. Advantages

No.	Advantages	Descriptions
1	Outstanding Performance	The vehicle has flexible and convenient steering, small turning radius, good maneuverability, low fuel consumption and low noise, and is suitable for operation in urban areas.
2	Good Quality	The tank body is made of Q235B material, and SUS304 material can be selected to ensure the overall structural strength and rigidity.
3	Safe & Reliable	This product pays attention to the safety of use, and the warning lights are specially designed to effectively prevent various safety problems during operation.
4	User-friendly Experience	The operating system is optimized to perform various operations in the cab.
5	Easy Maintenance	The structure is simple, the hydraulic power unit is adopted, and the electric control and hydraulic components are integrated. The system is highly integrated, durable and reliable.

7. Working Devices

No.	Items	Descriptions
1	Side Feeding Port	 福建龙马环卫装备股份有限公司制造
	Functions	Used for loading garbage.
	Structure & Characteristics	Width: 1000mm Opening height $\geq$ 1900mm Hydraulic gas support spring is used to assist, opening and

		closing is simple and lightweight, and it is convenient to put all kinds of garbage.
2	Power Unit	
	Functions	Used to supply power to the superstructure.
	Structure & Characteristics	Voltage 12V Power 1.6KW Displacement 2.1CC/REV When using, set the parameter of the relief valve to 160bar, and the direction of the electromagnetic reversing valve determines whether the pressure oil flows out from the A1 port or the B1 port. When the reversing valve is in the neutral position, the pressure oil circuit is communicated with the oil tank to form a pressure relief circuit.
3	Sealing Hook	
	Functions	Used to seal the tailgate.
	Structure & Characteristics	Use the lowering of the garbage tank to control the swing angle of the tight tailgate hook, and compact the rubber sealing strip between the tailgate and the box to prevent sewage leakage.

4	Sewage Tank	
	Functions	Used for collecting sewage in garbage.
	Structure & Characteristics	Volume 20L The sewage in the garbage is collected and discharged through the ball valve when it reaches the landfill.