# CEEC Skip Loader Truck

# User's Manual



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# Skip Loader Truck



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OWNER'S MANUAL

**Preface** 

Thank you for purchasing CEEC TRUCKS products. For better using your DONGFENG Skip

Loader Truck, get the best operating performance, we strongly suggest that before the operation

process you should read this manual instructions carefully, and to manipulate the program handily.

The manual detailed describes the performance of skip loader truck, structure, usage, precautions

and maintenance of such knowledge. While showing details of the truck, both pictures and

description will together help you get better understanding of how to use truck. Before the operation,

the skilled operator should carefully read the contents of the manual.

After master the truck performance characteristics, methods of operation and precautions, then

could start to operate this garbage truck. In order to ensure the staff turnover after the operation,

and properly use of the truck. This manual book must be properly kept, shall not be lost and

damage.

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#### Chapter 1. General Description

CEEC TRUCKS Skip Loader Truck based on type II DONGFENG 4\*2 LHD chassis, garbage container capacity could up to 6,000liters, mainly used for garbage collection, storage and transportation, and the working aerial can be city street, factory, community and other areas of need.

The vehicle designed to fully rely on the advantages of the original 4\*2 left-hand-drive chassis, fully consider the product's convenience, reliability and features. The swing arm and rubbish container material is international standard steel, all with anti-rust painting, which can effective to avoid rusting. As for rubbish container capacity, this can be up to 6CBM and very suitable to meet customers' garbage transport requirement. All with customized painting & logos.

The DONGFENG 4\*2 Skip Loader Truck equipped with Swing Arm and two hydraulic legs, which can be used carrying 6CBM garbage container. For one Skip Loader Truck, can be match used with several containers. And the garbage containers can be spread everywhere for rubbish collection. Therefore, the vehicle is an ideal Skip Loader Truck mainly for refuse collection & refuses transportation.



(Preview for your ISUZU 3cbm Skip Loader Truck)

#### Chapter 2, Main Technical Data

#### Basic parameter:

	Items	6CBM ISUZU Skip Loader Truck	
S I	Outer Dimension (L×W×H) (mm)	6640*2400*3450	
Z E	Wheelbase (mm)	3800	
Kerb Weight (kg)		(kg) 5900	
G E A R	Gearbox brand	DONGFENG	
	Model	6-shift gearbox	
	Туре	Manual	
Cab capacity (includes driver)		2	
E N G I N	Model	YUCHAI YC4FA120-33	
	Туре	Four cylinder inline, water-cool, turbocharged Inter-cooling, diesel	
	Rating Power (kW/HP)	88/120	
	Emission Standard	Euro 3	

Note: 1. The vehicle height includes Swing Arm.

2. We keep the right to revise the parameters on the list above.

#### Skip Refuse System basic parameter list

	Items	Whatsapp	: +86 136 4729 90 Parameter	
Control System			+86 159 71 Hydraulic control system	
Swing Arm			High Strength steel material	
Hydraulic Legs			Double hydraulic legs at rear for support	
	Capacity (CBM)		6	
	Material		Standard Carbon Steel	
Garbage	- A - A - A - A - A - A - A - A - A - A	Internal	With anti-rust painting	
Container		External	Green painting with Logos	
		Width (mm)	1370	
		Height (mm)	1400	

Chapter 3, What is Skip Loader Truck

i , Skip Loader Truck Advanced Feature

CEEC TRUCKS produce Skip loader truck also named skip refuse truck, swing arm garbage truck. This

based on famous DONGFENG brand truck chassis, refitted with special upper structure. As for the

component, including Swing Arm System, Hydraulic System, Control System, Container, etc. Technical

drawing with dimension as following:

Swing Arm System: The material for swing arm is high strength steel, which was welded based on chassis

dimension. Operating the Multi-way Valve can control hydraulic cylinder to move, which can control the

swing arm rotating, the maximum swing angle can be up to 145°. The Swing Arm System can be used

loading & unloading container.

Hydraulic System: The Skip Loader Truck totally controlled by hydraulic system, including swing arm

rotating, hydraulic legs stretch out and draws back.

Operation System: Control PTO to transit power to oil pump work, then operating the multi-way control valve

joysticks to make swing arm and hydraulic legs working, and can control the garbage container loading and

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Container: The material is high strength steel, and model is standard type with no cover. When bulk rubbish

throws into the container, hang up the sling chain to container, then operating multi-way control valve to load

and unload container. For one truck can match with tens of container at one time. Detail construction for one

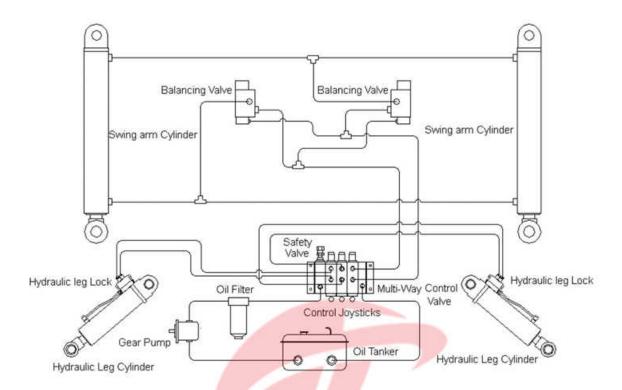
container as follow:

ii, Skip Loader Truck Working Principle

As for hydraulic control system, which including oil tanker, oil pump, multi-way control valve, hydraulic

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cylinder, balancing valve, hydraulic leg lock, oil filter, pipeline system, etc.



The PTO (Power Take Off) gets power from Truck Engine, then transit power to Oil Pump through transmission shaft, the Oil Pump start working, Multi-way Control Valve can control the swing arm and hydraulic legs working, which can match with refuse container loading and un-loading, then realize the garbage collection and transportation job.

The Hydraulic system equipped with Balancing Valve & Hydraulic Lock. To be more specific, Balancing Valve ensures the swing arm working more smoothly and safety, which can efficiently prevent garbage container loading and unloading too fast or too slow. Hydraulic Lock can protect the hydraulic legs during Whatsapp: +86 136 4729 9000 +86 159 7192 0800

When not operating Multi-way Control Valve and Control Joysticks, the hydraulic oil will flow back to oil tank through Multi-way Control Valve.

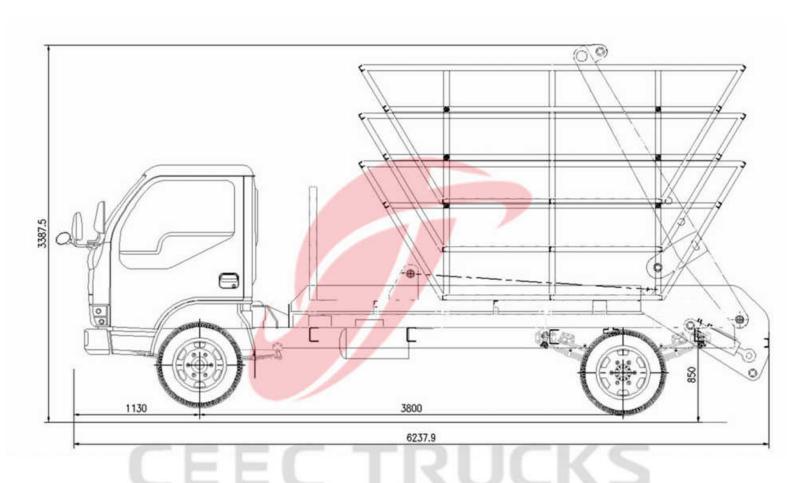
The Maximum working pressure for Hydraulic System is 16MPa, this pressure is limited by safety valve on Multi-Way Control Valve. Frankly speaking, when hydraulic system working pressure over 16MPa, the hydraulic oil will through safety valve back to oil tank, means the truck is over loading, the hydraulic system cannot working properly.

Please note that the Safety Valve has been set in factory, do not adjust anything!

#### Chapter 4, How to Operate Skip Loader Truck

#### i ,Skip Loader Truck Introduction

Overviews for DONGFENG 6 CBM skip loader truck with 3 garbage bins technical drawing:

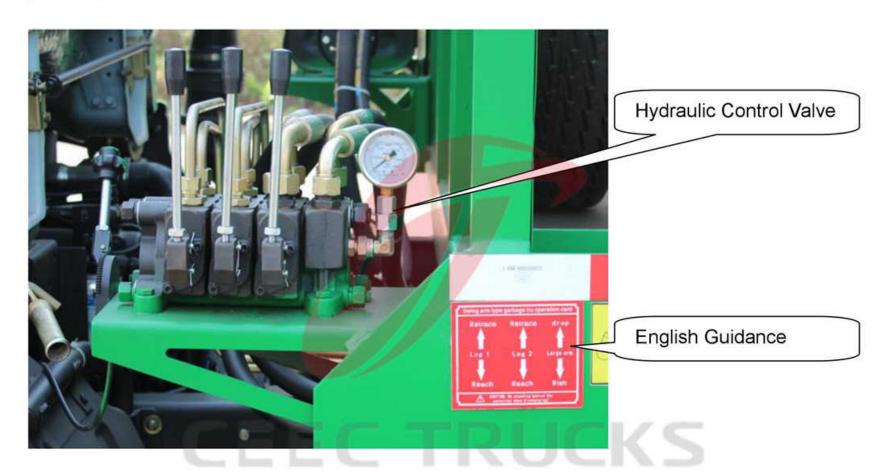




Garbage Container: Designed as required, 3 garbage bins can be put together for transportation (NOTE: Please use crane trucks or other cranes to detach the garbage bins, because the skip loader truck can only loading one garbage bin at one time)

Hydraulic oil Tank: Located between truck cabin and super structure

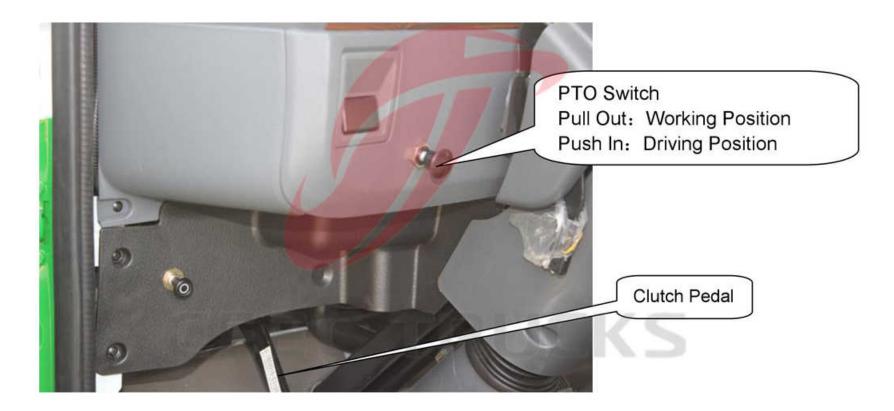
Hydraulic Control System: Multi-way control valve joysticks and pressure instrument panel, also English plate for guidance





#### ii, Skip Loader Truck Operation Guidance (Very Important)

- The Preparation for Operation: Carefully checking the operation environment, make sure no person stand around the truck, also do not forget pull the Parking Brake before any operation.
- 2. PTO Operation: Before operating the swing arm system, please make sure the PTO is working. Detail operation process should as follow, firstly start the truck engine and depress the clutch panel, secondly pull out the PTO switch, thirdly slowly loosen the clutch panel, then the oil pump start working.



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**NOTE**: Please keep the Accelerator handle Cable at Driving Position while driving the truck!

Please does not operating the swing arm system while driving the truck!

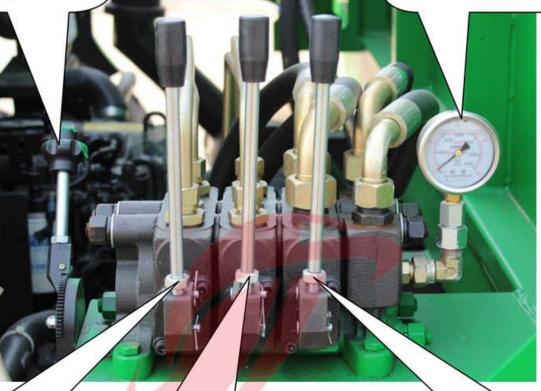
3. Hydraulic Legs Operation: Operating multi-way control joysticks one & two together to stretch hydraulic legs, only when the double hydraulic legs stabilized then can start other process.

#### Accelerator Assembly:

Use this when need Skip Loader Truck work faster or heavy loading

#### Pressure Gauge:

Checking the system pressure, 16Mpa as standard



#### Left Joystick:

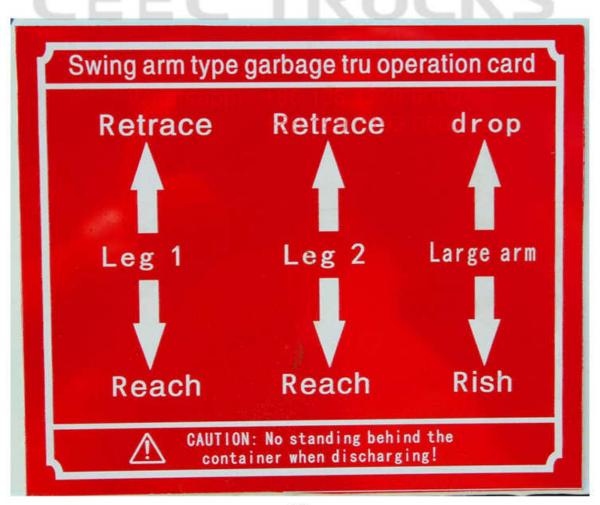
Control Rear right hydraulic leg Reach & Retract

#### Middle Joystick:

Control Rear left hydraulic leg Reach & Retract

#### Right Joystick:

Control Swing Arm System Rise & Drop



4. Container Loading Operation: Hang up the hinge chain connect with the container, operating the multi-way control joysticks three to loading and unloading the garbage container. Please note that the hinge chain is relaxation mode when container on the truck.

Left Joystick: Pull →Left side hydraulic leg Stretch Out

Push → Left side hydraulic leg Retract Back

Middle Joystick: Pull → Right side hydraulic leg Stretch Out

Push → Right side hydraulic leg Retract Back

Right Joystick: Pull →Swing arm rotating to load container

Push→Swing arm rotating to unload container



**NOTE**: When Reach & Retract rear hydraulic legs, Left and Middle Joysticks should be operated together!

- Garbage Transportation Operation: Stop the oil pump and PTO, make sure the truck hydraulic system not working during transportation.
- 6. Garbage Discharging Operation: Following the above direction to unload garbage.

#### **Chapter 5, Others for Attention**

After carefully reading the above information, you must be well known how to use the DONGFENG Skip Loader Truck; below show some parts you need to pay attention while using the truck.

- Please strictly follow the Operation Manual, and note that only skilled worker can be allowed operate the Skip Loader Truck.
- Carefully checking the working environment, if the working place is slope with angle over 12%, you need
  to use block brake the wheel.
- Keep nobody stand around when operating the skip loader truck.
- 4. Before operating the swing arm system to load and unload the rubbish container, make sure the hydraulic legs are stretch out and stand stabilized.
- 5. Please do not adjust the hydraulic oil pressure, for which has been set in factory.
- 6. Please strictly follow the Owner's Manual to operate the skip loader truck. If any unusual phenomenon happens during operation, you should stop the working immediately and carefully found out the reason, only when the troubleshooting then you can restart working.
- 7. The Hydraulic Oil should keep clean during working, if the oil becomes dirty, please kindly change the oil to make sure the truck can work smoothly.

#### **Chapter 6 Troubleshooting**

Please kindly checking below possible troubleshooting, which just for your reference.

Malfunction Possible Reason		Solution	
Oil Cylinder Piston Rod Oil leakage	Sealing ring damage     Surface of the piston rod scratch	Carefully checking the sealing ring, change new one if necessary     Use sandpaper burnish it, change new one if necessary	
Piston Rod Movement is Crawl or Peristalsis	Hydraulic cylinder or hydraulic oil     mixed with air	1. Eliminate air	
The Hydraulic Cylinder Lifting Powerless	<ol> <li>Piston sealing element damage</li> <li>System pressure too low (The safety valve imbalance)</li> <li>System pressure too low (The internal leakage)</li> <li>Oil pump damage</li> <li>Hydraulic oil storage shortage</li> <li>Oil filter blocked</li> </ol>	<ol> <li>Checking &amp; replace the sealing element</li> <li>Checking &amp; adjust the safety valve pressure</li> <li>Checking &amp; replace the element</li> <li>Checking &amp; replace oil pump</li> <li>Checking &amp; refueling hydraulic oil</li> <li>Checking &amp; replace oil filter</li> </ol>	
Hydraulic legs Powerless	Hydraulic lock leakage     Cylinder piston rod sealing     element damage +86 136 47	Cleaning & replace the element     Checking & replace the sealing     element	
External Leakage  1. Sealing ring damage 2. Oil pipeline surface damage		Checking & replace new sealing ring     Checking & replace new pipeline	