

HOWO Hook Loader

25Tons Loading Capacity & Optional Garbage Container

User's Manual



www.howotrucks.com/

Hook Lift Truck

OWNER'S MANUAL

Preface

Thank you for purchasing CS TRUCKS products. For better using your HOWO 25tons Hook Lift Garbage Truck, get the best operating performance, we strongly suggest that before the operation process you could read this manual instructions carefully, and to manipulate the program handily.

The manual detailed describes the performance of hook 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.

----CS TRUCKS

Contents

Chapter 1. General Description	5
Chapter 2, Main Technical Data.....	6
Chapter 3, Hook Lift Truck Structure Components.....	7
Chapter 4, Hook Lift Truck Working Principles.....	9
i ,How are the Hook Lift Truck working?	9
ii ,What is the main component for truck?.....	9
iii, How to operate hook lift trucks?. (Very Important).....	10
Chapter 5, Others for Attention	14
Chapter 6, Troubleshooting	15

Chapter 1. General Description

CS TRUCKS Hook Lift Truck based on type II HOWO 8x4 model heavy duty truck chassis, garbage container capacity could up to 20,000liters with loading capacity 25tons, mainly used for waste 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 HOWO LHD truck chassis, fully consider the product's convenience and reliability. The garbage container material is international standard carbon steel, both internal and external with anti-rust painting, which can effective to avoid rusting. As for container capacity, this can be up to 25000 kg, with hydraulic joysticks and English guidance plate for easy operation. And can cover all customers' waste collection & transportation requirement.

The HOWO 8x4 Hook Loader Truck equipped with sealed dumpster and open top dumpster, hydraulic operation joysticks, cabin electric control box, customer required painting and logos. Therefore, the vehicle is an ideal Hook Lift Truck mainly used for garbage collection & delivery.



(Preview for your HOWO 25tons Hook Loader Truck with 6500mm bins)

Chapter 2, Main Technical Data

Basic parameter:

Items		20 CBM HOWO Hook Loader Truck
S I Z E	Outer Dimension (L×W×H) (mm)	9800×2500×3250
	Wheelbase (mm)	1800+4625+1350
Kerb Weight (kg)		14000
G E A R	Gearbox brand	HOWO
	Model	HW19710 10-shift gearbox
	Type	Manual
Cab capacity (includes driver)		2+1
E N G I N	Model	WEICHAI WP10.380E22
	Type	Four cylinder inline, four stroke, turbocharged Inter-cooling, diesel
	Rating Power (kW/HP)	280 / 380

Note: 1. The vehicle height includes hook loader point.

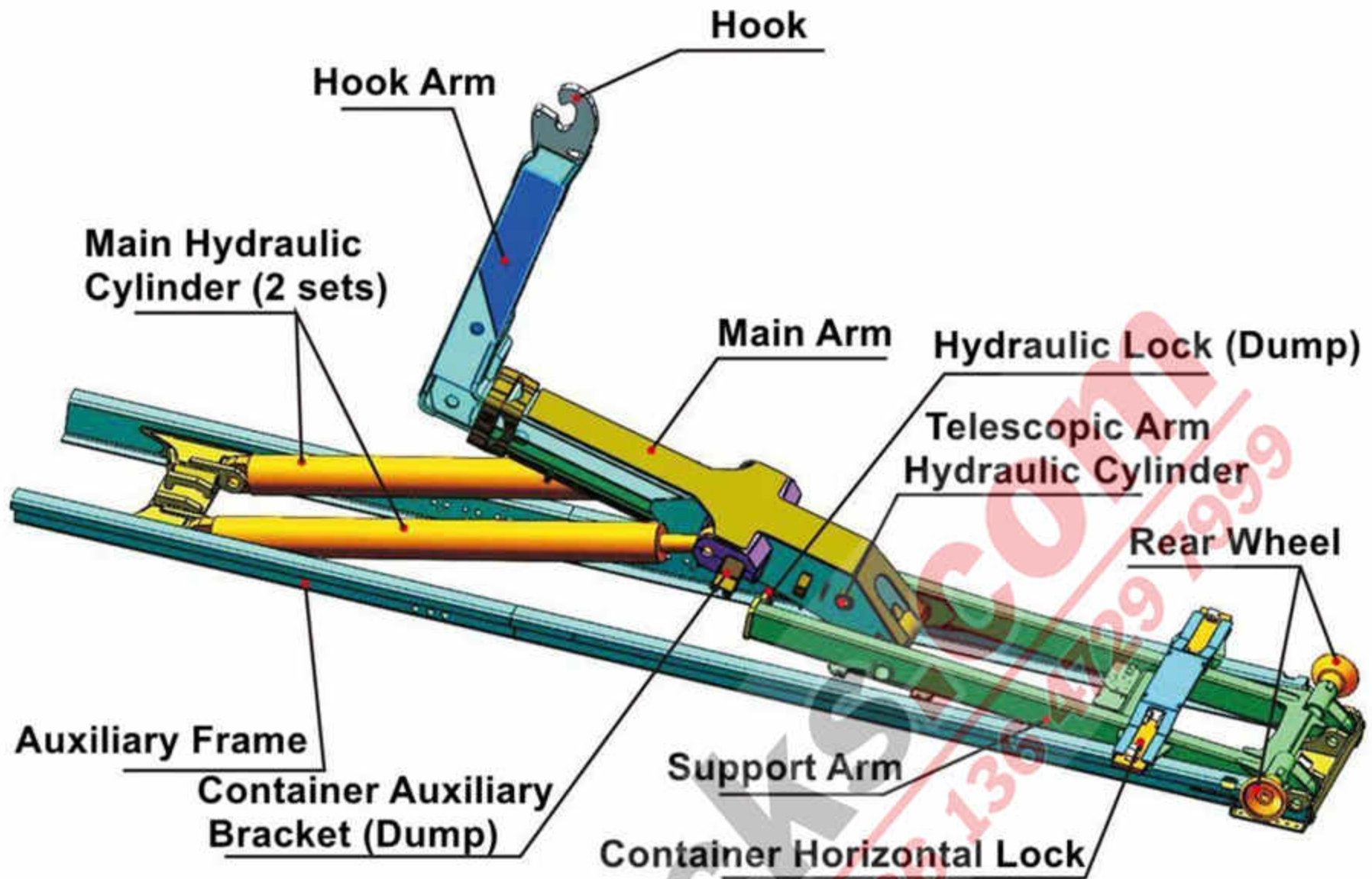
2. We keep the right to revise the parameters on the list above.

Hook Loader Superstructure basic parameter list

Items		Parameter	
Dumpster (Open Top model and Sealed model)	Capacity (CBM)	20CBM / 25TONs	
	Material	Standard Carbon Steel	
	Painting	Internal	With anti-rust painting
		External	Required painting with logo
Hook Loader Device	Operation	Manual Operation Joysticks at rear	
		Electric Control Switch in cabin	
	Cylinder	Special Double cylinder device	
	Safety Assurance	Balance valve for safety	
	Operation Mode One	Garbage container locked, the truck can be act as garbage dumper truck	
	Operation Mode Two	Garbage container unlocked, and containers can be hung up and down	

Chapter 3, Hook Lift Truck Structure Components

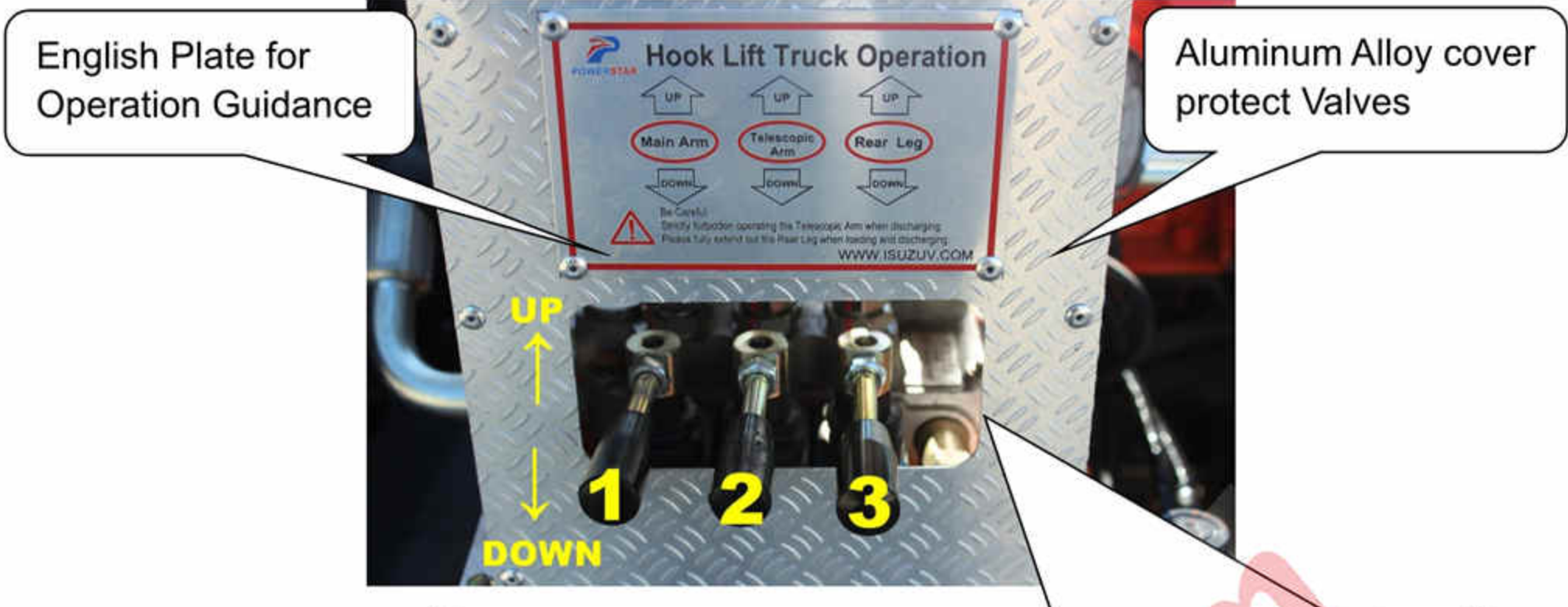
Overviews for hook lift truck upper body kit technical drawing:



Above drawing show the hook loader truck dimension for reference; the garbage container designed based on requirement, with rear open door easy for garbage discharge.

Left View: Hook arm, Garbage container, Manual operation joystick





English Plate for Operation Guidance

Aluminum Alloy cover protect Valves

Manual Operation Joysticks 1 & 2 & 3
 Joystick 1 Control the Main Arm working
 Joystick 2 Control the Telescopic Arm working
 Joystick 3 Control the Rear Leg working

Rear View: Top door, Rear door & safety fence.



Customized dumpster can be loading

Hydraulic control device

Rear hydraulic legs

(Container Lock position)



Curtain Device

Hook Arm Device

Chapter 4, Hook Lift Truck Working Principles

The operator should fully understand Whole Structure and Working Principle for HOWO 25tons 8x4 Hook Lift Truck before any operation. Only trained person can operate this vehicle properly and to prevent unnecessary accidents and equipment damage.

i ,How are the Hook Lift Truck working?

The HOWO 8x4 Hook Lift Truck makes use of the special power take off (PTO) to get power from the engine, and then use the power to control hydraulic cylinder. Operate the manual hydraulic joysticks or electric control switch to operate cylinders to realize garbage container Loading & Unloading working. Then can be used for garbage collection and transportation.

ii ,What is the main component for truck?

The hook lift truck is refitted based on the HOWO LHD / RHD heavy duty truck chassis. The refit part includes Garbage carrying assembly, actuator device, hook loader system and operation system.

- *Garbage carrying assembly: A carbon steel container, which is used to collect garbage. Including customized open top dumpster and sealed dumpster*
- *Actuator device: includes power take off, drive line, etc., which can pass the power from the chassis to the hydraulic system.*
- *Hook loader system: includes hook loader arm, two cylinders & balance valves, which combined working for lifting the container*
- *Operation system: includes rear Hydraulic Operation Joysticks, which helps come to all special functions' convert.*

iii, How to operate hook lift trucks?. **(Very Important)**

1. Ready to work

(If idle for a long time, please keep the truck engine run for a few minutes. Also, should ensure fuel tank and water tank are enough.)

A, Hydraulic Joysticks Operation Guidance

Step 1

Thoroughly check the HOWO hook loader truck to make sure working environment is good. Then start the truck engine. Press the Clutch Pedal, meanwhile pull out the PTO Button to Working Position.

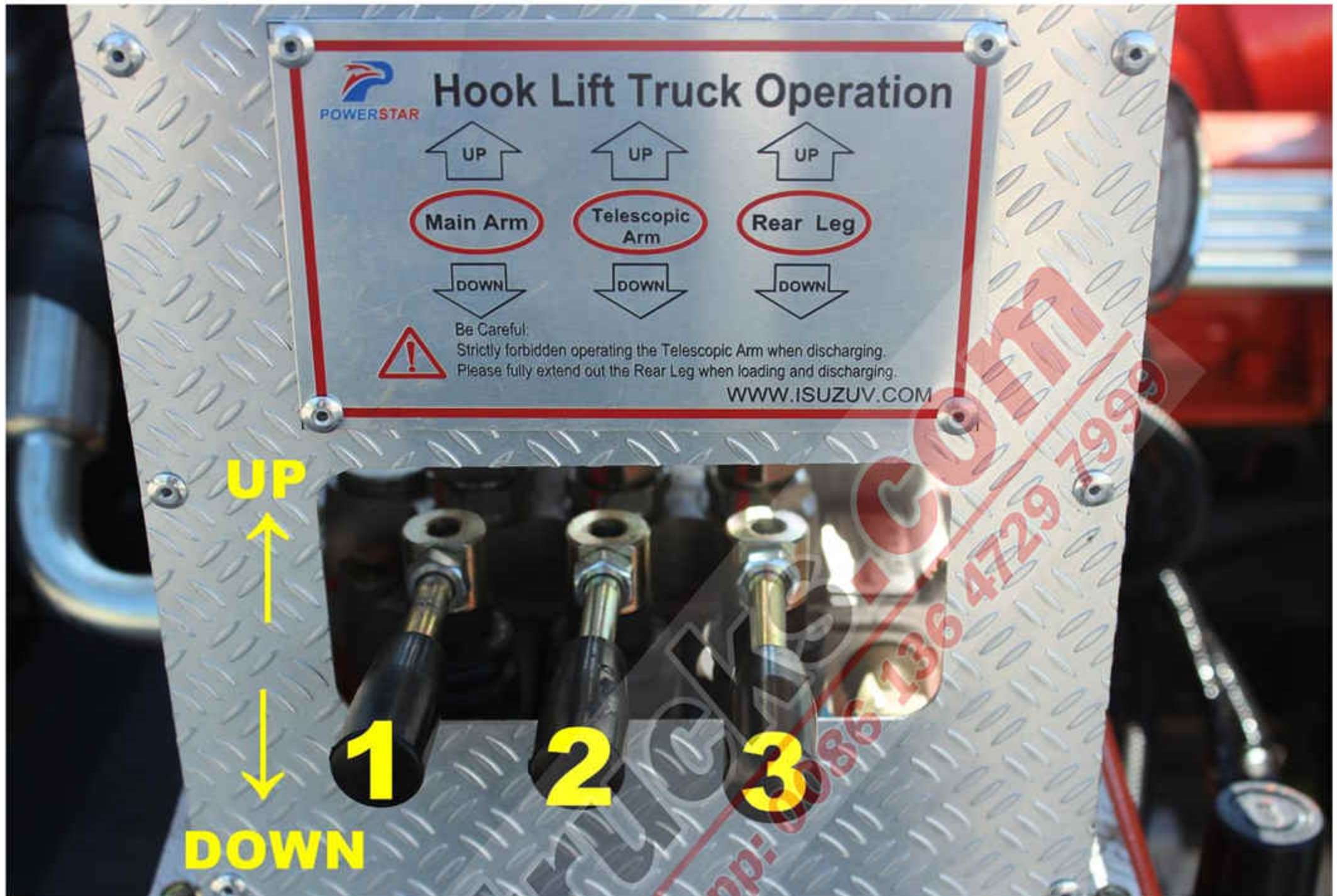


NOTE: Please keep the Accelerator handle Cable at Driving Position while driving the truck!

Please do not operating the garbage loading system while driving the truck!

Step 2

Be familiar with how to Operation Manual Joysticks can control the hook lift truck



Joystick 1: Control the Main Arm Working

Operation 1, UP → Main Arm lifting up

Operation 2, DOWN → Main Arm falling down

Joystick 2: Control the Telescopic Arm Working

Operation 1, UP → Telescopic Arm move forward

Operation 2, DOWN → Telescopic Arm move back

Joystick 3: Control the Rear Leg Working

Operation 1, UP → Rear leg down to the ground

Operation 2, DOWN → Rear leg lifting up to unworking position

Be familiar with how to Operation Electric Control Switch can control the hook lift truck



Switch 1: Control the Main Arm Working

Operation 1, LEFT → Main Arm falling down

Operation 2, RIGHT → Main Arm lifting up

Switch 2: Control the Telescopic Arm Working

Operation 1, LEFT → Telescopic Arm move back

Operation 2, RIGHT → Telescopic Arm move forward

Switch 3: Control the Rear Leg Working

Operation 1, LEFT → Rear leg lifting up to unworking position

Operation 2, RIGHT → Rear leg down to the ground

Step 3

1. Adjust Switch 3 UP or Joystick 3 RIGHT to make rear hydraulic legs down to the ground to support the truck.
2. Adjust Switch 2 DOWN or Joystick 2 LEFT to make hook arm move back.
3. Adjust Switch 1 UP or Joystick 1 RIGHT to make main hook arm lifting up.
4. **Operating 1,2,3 to loading the garbage container**
Operating in the opposite way to unloading the garbage container, two models as below:
5. Model 1—Working as Dump Truck: Open 4 sets bin lock, Switch 3 UP or Joystick 3 RIGHT to make rear legs standing, not operate Switch 2 or Joystick 2, adjust Switch 1 RIGHT or Joystick 1 UP to make main hook arm lifting up. Then can lifting up the garbage bin, and the bin fixed on the hook arm, as below picture showing.
6. Model 2—Discharge the Garbage Bin: close 4 sets bin lock, Switch 3 UP or Joystick 3 RIGHT to make rear legs standing, adjust Switch 2 UP or Joystick 2 LEFT, adjust Switch 1 RIGHT or Joystick 1 UP to make main hook arm lifting up. Then can lifting up the garbage bin and dispatch the bin down to the ground. As below picture showing:

Operation Mode One: Garbage container loading & unloading working

Operation Mode Two: Container garbage discharging working

Control the garbage container loading & unloading working

Control the container garbage discharging working



Chapter 5, Others for Attention

After carefully reading the above information, you must be well known how to use the HOWO Hook Lift truck; below show some parts you need to pay attention while using the truck.

- 1. Please strictly follow the Operation Manual, and note that only skilled worker can be allowed operate the hook lift truck.*
- 2. Carefully checking the working environment, if the working place is slope with angle over 12%, you need to use block brake the wheel.*
- 3. Keep nobody stand around when operating the hook lift truck.*
- 4. Before operating the hook arm system to load and unload the garbage container, make sure the garbage container has been unlocked*
- 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 hook lift 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	<ol style="list-style-type: none"> 1. Sealing ring damage 2. Surface of the piston rod scratch 	<ol style="list-style-type: none"> 1. Carefully checking the sealing ring, change new one if necessary 2. Use sandpaper burnish it, change new one if necessary
Piston Rod Movement is Crawl or Peristalsis	<ol style="list-style-type: none"> 1. Hydraulic cylinder or hydraulic oil mixed with air 	<ol style="list-style-type: none"> 1. Eliminate air
The Hydraulic Cylinder Lifting Powerless	<ol style="list-style-type: none"> 1. Piston sealing element damage 2. System pressure too low (The safety valve imbalance) 3. System pressure too low (The internal leakage) 4. Oil pump damage 5. Hydraulic oil storage shortage 6. Oil filter blocked 	<ol style="list-style-type: none"> 1. Checking & replace the sealing element 2. Checking & adjust the safety valve pressure 3. Checking & replace the element 4. Checking & replace oil pump 5. Checking & refueling hydraulic oil 6. Checking & replace oil filter
External Leakage	<ol style="list-style-type: none"> 1. Sealing ring damage 2. Oil pipeline surface damage 	<ol style="list-style-type: none"> 1. Checking & replace new sealing ring 2. Checking & replace new pipeline