

# MANUAL HYDRAULIC TRUCKS TOR RHP(BF) OPERATION MANUAL



1. Description and operation	3
1.1. Product purpose	3
1.2. Specifications	3
2. Design and function	4
2.1 Handle mounting	4
2.2. Configuring a buffer device	5
3. Maintenance	6
3.1 Oil 6	
3.2 Pumping	6
3.3 Daily inspection and maintenance	6
3.4 Lubrication	7
4. Safety precautions	7
5. Troubleshooting	8

# 1. Description and operation

#### 1.1. Product purpose

Manual trucks for goods transportation on RHP(BF) pallets are widely used at factories, stores, warehouses, etc. in different areas. This equipment is intended for small height loading and unloading of material and it can be used for transportation of all kinds of heavy loads. This manual trucks for transportation of goods on pallets should be used on a hard flat surface at an ambient temperature 10~40 °C. The trucks for transportation of goods on pallets provides safe smooth lifting, it is easy to operate, and the quality of its design ensures operational reliability.

If your manual trucks for transportation of goods on pallets does not operate properly during use, please refer to this manual for information and pre-define the reasons for the refusal and the necessary parts, and then resolve the problem according to the solution specified in this manual.

## 1.2. Specifications

Model	TOR RHP(BF) 2500 550X1150	TOR RHP(BF) 2500 450X1150	TOR RHP(BF) 550X1150	TOR RHP(BF) 2500 685X1220	TOR RHP(BF) 2500 550X1500
Item	1001602	1010176	1010179	1010177	1010168
Load capacity, kg	2500	2500	2500	2500	2500
Max. lifting height, mm	200	200	200	200	200
Model	85	85	85	85	85
Fork length, mm	1150	1150	1150	1120	1500
Overall forks width, mm	550	450	550	685	550
Single fork width, mm	160	160	160	160	160
Fork wheel, mm	PU 80*70	PU 80*70	Нейлон 80*70	PU 80*70	PU 80*70
Steering wheel, mm	PU 200*50	PU 180*50	PU 200*50	PU 200*50	PU 200*50

Model	TOR RHP(BF) 2500 550X1800	TOR RHP(BF) 2500 550X2000	TOR RHP(BF) 2500 550X800	TOR RHP(BF) 3000 550X1150	TOR RHP(BF) 5000 550X1150
Item	1010169	1010170	1010171	1010172	1010173
Load capacity, kg	2500	2500	2500	3000	5000
Max. lifting height, mm	200	200	200	200	200
Model	85	85	85	85	90
Fork length, mm	1800	2000	800	1150	1150

Overall forks width, mm	550	550	550	550	550
Single fork width, mm	160	160	160	160	160
Fork wheel, mm	PU 80*70	PU 80*70	PU 80*70	PU 80*70	Нейлон 80*66
Steering wheel, mm	PU 200*50	PU 200*50	PU 200*50	PU 200*50	Нейлон 178*52

	TOR RHP(BF)	TOR RHP(BF)	TOR RHP(BF)	TOR RHP(BF)
Model	2500	2000	2000	2000
	550X1150	550X1500	550X1800	550X2000
Item	1019505	1021305	1021306	1021307
Load capacity, kg	2500	2000	2000	2000
Max. lifting height, mm	200	200	200	200
Model	85	85	85	85
Fork length, mm	1150	1500	1800	2000
Overall forks width, mm	550	550	550	550
Single fork width, mm	160	160	160	160
Fork wheel, mm	rubber 80*70	PU 80*70	PU 80*70	PU 80*70
Steering wheel, mm	rubber 200*50	PU 200*50	PU 200*50	PU 200*50

# 2. Design and function

#### 2.1 Handle mounting

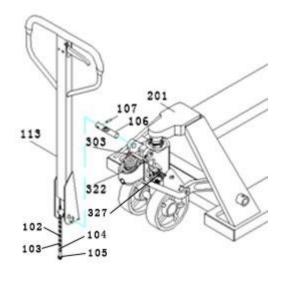
For the ease of transportation the handle and the body of the trolley are packed separately. The user can mount them according to figure 1 and 2.

• Install the handle (113) on top of the cylinder rod (303) and hit the handle positioning shaft (106) with a hammer, so it enter the hole between the hydraulic pump and handle (113).

**Note:** handle positioning shaft should be located at the centre of the hole in the direction "\" and the spring pin hole should be facing you.

Then use pliers and a hammer to drive the spring pin (107) in into the positioning shaft (106).

- Then lower the handle (113), remove the restrictive arm of the cylinder rod (322) (as shown in figures 1 and 2).
- Drive the hinged bolt (103), hex nut (104), non-metallic insert clamp nut (105) and chain (102) through the central hole of the handle positioning shaft, then adjust pedal control (327). Place the hinged bolt (103) in the groove in front of it, and hex nut (104) on the top of pedal control (327), and insert non-metallic insert clamp nut (105) under the pedal control (327). Thus, the handle is installed on the hydraulic pump.



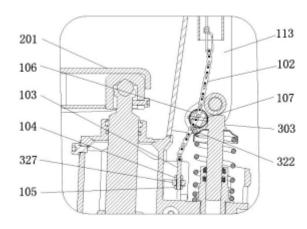


Fig. 1. Fig. 2.

#### 2.2. Configuring a buffer device

You can see a small control handle (119) over the handle on the manual truck for transportation of goods on pallets. It can be adjusted into three positions (see Fig. 3). Set it in the Middle position after the operation. These three positions were properly configured before shipping from the factory. If changes occur at the emergency situation you can reload them in accordance with the following steps:

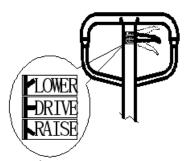


Fig. 3. LOWER: lowering – down position; DRIVE: movement – middle position; RAISE: lifting – up position.

- 1. If a small control knob (119) is set to Middle position, press the oil pump, the manual truck for transportation of goods on pallets rises, turn the hexagonal nut (104) on the hinged bolt (103) and non-metallic insert clamp nut (105) clockwise. Press the oil pump again until the manual trolley for transportation of goods on pallets stops rising, and things work properly.
- 2. If a small control knob (119) is in position Middle, press the oil pump, the manual truck for transportation of goods on pallets goes down, turn the hexagonal nut (104) and non-metallic insert clamp nut (105) counter clockwise until the manual truck for transportation of goods on pallets stops going down.

- 3. When a small control knob (119) is in the Lower position, but the truck cannot go down, turn the hexagonal nut (104) and non-metallic insert clamp nut (105) clockwise until the small control knob (119) is in one position, and the truck is lowered. Follow steps 1 and 2 and check the middle position to make sure the hexagonal nut (104) and non-metallic insert clamp nut (105) are in the correct position.
- 4. When a small control knob (119) is in position Raise, and you press the oil pump, but the truck can't lift up, turn the hexagonal nut (104) and non-metallic insert clamp nut (105) counter clockwise until the small control knob is in the same position, and the truck will rise. Then follow steps 1 and 2 and check the Middle and Lower position to make sure the hexagonal nut (104) and non-metallic insert clamp nut (105) are in the correct position.

#### 3. Maintenance

Maintenance and repair should be performed by qualified personnel.

- Daily maintenance includes checking the correct functioning of the forks, carrying rollers and axles.
- Monthly maintenance consists of lubrication of major components of the truck, checking the correct functioning of the wheels.
- Check the following every three months: oil level while the forks are in down position, tightness of the hydraulic knot, strength of screw and bolt connections, free rotation of the control knob.
- Annual maintenance includes inspection of important components of the hydraulic trolley and their replacement if necessary, change of hydraulic oil and testing for performance.

#### 3.1 Oil

Check oil level every three months. Our company recommends cyclic anti-wear hydraulic oil "Great Wall" 46 #. The user can replace it with hydraulic oil of the same type. The total amount is approximately 0.41 L.

#### 3.2 Pumping

Transportation or turning the pump body may cause air enter the hydraulic oil. This will prevent the truck from even when the control knob (119) is in position Raise when pressing the oil pump. You can pump it off as follows: move a small control knob (119) to the position Lowering and then repeatedly release and lift the handle (113).

#### 3.3 Daily inspection and maintenance

Daily inspection of the manual truck for transportation of goods on pallets can reduce wear as much as possible. Pay special attention to wheels, axles and check for any foreign objects such as cotton yarn and cloth caught in the wheel. After transportation remove the load and remove any foreign material, clean the dirt and debris from the oil pump and lower the truck to a minimum.

#### 3.4 Lubrication

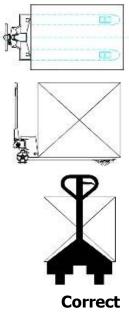
All the bearings/shafts are lubricated with persistent lubricating oil before delivery of the product. When you run a routine monthly check, clean the oil pump and lubrication points and fill the oil feeder with lubricating oil.

#### 4. Safety precautions

- Before using this truck, the operator should carefully read this manual and the warnings specified on the trolley. The operator should operate with caution in special conditions or in special places.
- When driving the trolley, turn the small control knob in the Middle position, it will not only result in easy knob movement, reduction of spring force of the cylinder rod on the handle, but also will allow to protect oil-seal rings and the piston, extend trolley service life.
- Inspect the wheels (219,222,225,311), the completeness of the handle, the frame of the lever (204), the cart, pedal control (327) before use.
  - Do not use the trolley on sloping surfaces.
  - Do not use the trolley for personnel transportation.
  - The operator should wear protection gloves.
- Keep personnel at the distance of 600 mm from the carrying device during transportation.

Pay attention to the centre of gravity to prevent displacement and tilt (see figure 4).

• Prevent from overloading.



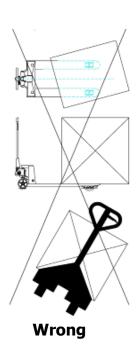


Fig. 4.

# 5. Troubleshooting

Fault	Cause	Remedy
The forks cannot lift to the maximum height.	1. Lack of hydraulic oil.	1. Add the oil.
	1. No hydraulic oil.	1. Add the oil.
Manual trolley for	2. Dirty oil.	2. Change the oil.
transportation of goods on pallets does not lift.	3. Hex nut (104) and non-metallic insert clamp nut (105) are too high, and the discharge valve is open.	3. Adjust the nut (104) (105) (see clause 2.2, section 4).
	4. Air enters the hydraulic oil.	4. Pump the air off (see 3.2).
Magnet to the Harrison	1. Load displacement or overload and damaged piston nut (325) or pump (318).	1. Replace the piston rod (325) or pump body (318).
Manual trolley for transportation of goods on pallets does not	2. The trolley remains in the raised position for a long time, and the piston rod becomes rusty in the open position.	2. Lower the support device to the lowest position.
lower on pellets.	3. Adjusting nut (104) is in the wrong position.	3. Adjust the nut (104) (see clause 2.2, section 3).
	4. Gaskets are worn or damaged.	4. Replace with new gaskets.
Oil leak	5. Some parts are broken.	5. Replace with new parts.
	Oil contamination causes low tightness     of the discharge valve.	2. Change the oil.
	2. Some parts in the hydraulic system are	2. Check and replace damaged
The trolley goes down	broken or damaged.	parts.
by itself.	3. Air in the oil.	4. Pump the air off (see 3.2).
	4. Gaskets are worn or damaged.	4. Replace with new gaskets.
	5. Adjusting nut (104) is in the wrong	5. Adjust the nut (104) (see
	position.	clause 2.2, section 2).

#### 6. WARRANTY

The warranty period is 12 months from the date of sale to the end customer.

#### LIMITATION OF LIABILITY:

- Seller will not be liable for product failures caused by use and normal wear and tear.
- The Seller is not responsible for product malfunctions caused by non-observance of operating rules or use of the Product under unacceptable environmental conditions.
- The warranty will be voided if the Product is not regularly serviced and if it is improperly stored.
- This warranty will not be extended to any Product that has been subject to misuse, neglect or accident or which will have been altered or repaired by elements other than Seller's in such a manner as to adversely affect its performance, stability or reability.
- The warranty does not cover the Product that has suffered any mechanical damage.
  - The warranty does not apply to a Product that has been altered in any way.

In order to determine the causes of failure, a technical check is carried out for a period of 10 working days from the date of receipt of the Product for diagnosis.

## **Claims filing:**

- Claims concerning found defects can be issued by the Buyer to the Seller within the guarantee period. The Buyer may request a claim form and instructions for filing a claim from the Seller.
- All risks associated with delivery of the Product to the dealer or service center are borne by the owner of the Product.
- Claims related to incompleteness and appearance of the Product will not be accepted after it has been put into operation.



The information in this paragraph is current at the time of printing of this manual. Up-to-date information on warranty service rules is published on the official website of the group of companies TOR INDUSTRIES **www.tor-industries.com** ("Service" section).

## PRODUCT PASSPORT

<b>Product Information:</b>					
Model					
Model					
Serial No.					
Sale Date		/		/	
<b>Warranty Period</b>					
Seller Information:					
Company					
Address					
Address					
Phone					
SERVICE MARKS					
Place for Stamp	All control or	perations and t	ests have been	carried out. Th	ne product is fully
		viceable and re			
Dated:					
Dateu.					
Maintenance and repair					
Type of Maintenance					
Type of Maintenance					
Type of Maintenance					
Type of Maintenance					
Warranty Repair					
Warrancy Repair					
Repair					
Date of Maintenance					
Contractor					
The customer confirms tha	t he has familiarize	d himself with th	e rules of use of th	ne product. The co	ustomer received the
manual in English. The cust	tomer has no claim	s to the serviceat	oility, appearance a	and completeness	of the product.
Customer			Place	for	
Signature			Stamr	1	

# List of periodic inspection and repair

Dat		duct inspection	Signature	of the
е	or repair		responsible person	