

the Proof
is in the
Product.

Warequip Lift Trolleys

Hand Pallet Trucks



- WBF685SPW
- WBF520SPW
- WBF685SS
- WBF520SS

Owner's Manual and Parts List

HAZARD ASSESSMENT AND COMMON SENSE GUIDELINES FOR WAREQUIP LIFT TROLLEYS

1 June 2003

- **DO NOT** overload or exceed the rated capacity of lift trolleys.
- **DO NOT** use as a passenger lift
- **ALWAYS** ensure hands and feet are clear when lowering lift trolley
- **DO NOT** use lift trolleys for climbing stairs when loaded
- All lift trolleys are designed for use on a smooth even surface
- **DO NOT** concentrate load on one side of lift trolley, **ALWAYS** place load evenly on either tynes or platform
- Use common sense and the right lift trolley to reduce load handling injuries
- Please ensure all operators have been trained on the use of lift trolleys and are familiar with operation guidelines.

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1. Applications

BF manual hydraulic truck is a low-lifting apparatus only used to carry palletized goods. Also named as pallet truck, it features as stable lifting and lowering, easy operation, safety and reliability, etc., and is suitable for the use on hard flat ground.

2. Main parameters

Capacity	(kg)	2000/2500
Total lift height	(mm)	200/190/150/142
Lowered fork height	(mm)	85/75/60/52
Height of handleless	(mm)	431.5/421.5/406.5/398.5
Fork length	(mm)	900/980/1000/1100/1150/1220
Width over the forks	(mm)	520/550/650/680/685
Steering wheel	(mm)	Φ 200/Φ 180/Φ 150
Fork wheel	(mm)	Φ 80/Φ 74/Φ 58/Φ 50
Truck weight	(kg)	75~102

3. Assembling

3.1 See Fig. 1. Spring Pin (1) is disassembled from Axle Pin (2) before pulling out

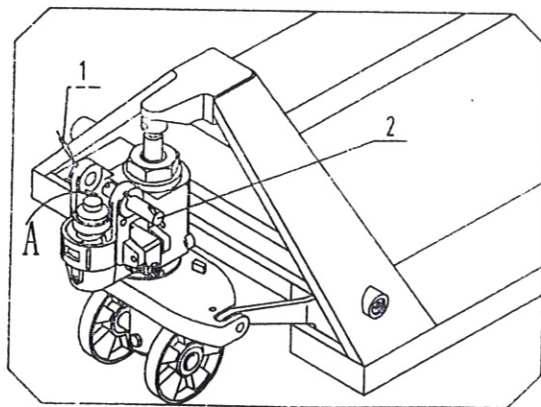


Fig1

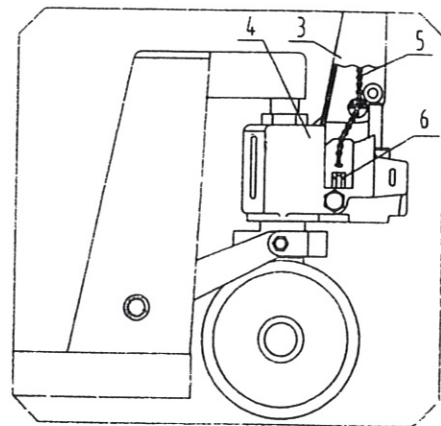


Fig2

Axle Pin (2).

- 3.2 Insert Handle tube (3) at Position A and connect Handle tube (3) with Pump Body (4) by Axle Pin (2) which shall not longitudinally be put to the very end so as to leave space for free turn.
- 3.3 Turn Axle Pin (2) to make vertical the axis of the big pore in Axle Pin. Cross Roller Chain (5) of Handle through the pore in Axle Pin (2). See Fig. 2.

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- 3.4 Put Screw and Nut at the end of Roller Chain (5) into the slot of Lever Pad (6). See Fig. 2 and 5.
- 3.5 Restore Axle Pin (2) to its original place and push longitudinally to the end, then insert Spring Pin (1) into Axle Pin (2) to reset.
- 3.6 See Fig. 3. Raise Handle to a horizontal position. Pull out Pin (7) and keep it well for future replacement of the handle tube.
- 3.7 Try shaking Handle and operate Trigger (8) at different gears to see whether the truck works well at raising, neutral gear and lowering. See Fig. 4.
- 3.8 Screw (9) in Fig. 5 is used for the modification of the truck. In the event that the truck body lowers shortly after rising, turn Screw (9) a little in counterclockwise before trying the truck again. In the event that the truck body is unable to lower, turn Screw (9) a little in clockwise and then try the truck again until it restores normal lowering. Hexnut (10) at Screw (9) functions as a lock, so it shall be fastened before modification and locked after modification.

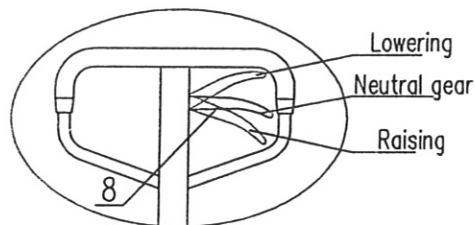


Fig.4

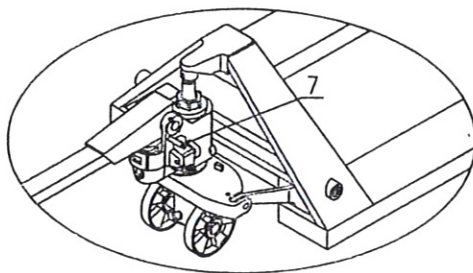


Fig.3

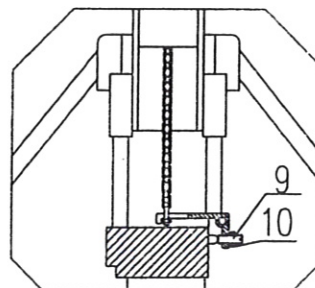


Fig.5

4. Operation guidance

- 4.1 When Trigger (8) is at the bottom gear, the forks are ready for Lifting. Shake the Handle, and the fork will rise rapidly.
- 4.2 When Trigger (8) is at the middle gear, the truck is ready for moving. Shake the Handle, and the forks will not rise or lower.
- 4.3 When Trigger (8) is at the top gear, the truck is ready for Lowering, and meanwhile the truck shall lower automatically.

5. Examination before using

Air may be absorbed into hydraulic system when the truck is not used for a long time.

The air can be removed in the following ways:

Put the Trigger at the lowering position. Fully shake the Handle for 4-6 times and then release the Trigger. If needed, the above operation can be done for several times until normal working.

6. The loading style and rated capacity

The ideal loading style demands that the gravity center of the cargo position in the center of the forks. In the event of unbalanced loading, the rated capacity shall be reduced. The rated capacity is shown as the labels.

7. Oil

The hydraulic oil needed by the oil pump is about 250ml (or 0.25kg). The ISO Oil Quality Standard shall be complied with under which 32# oil be used at $-5\sim 40^{\circ}\text{C}$ and low-temperature working oil at an ambient temperature of $-35\sim -5^{\circ}\text{C}$.

8. Maintenance

Everyday routine examination is necessary for solving the abnormal operations at sight. Do not use the troubled truck for the sake of prolonging its work life. Every turning joint must be lubricated by motor oil every three months, and see to that the wheels and axles are not intangled by threads or other materials. All the wheels shall runs smoothly.

9. Possible failures and solutions

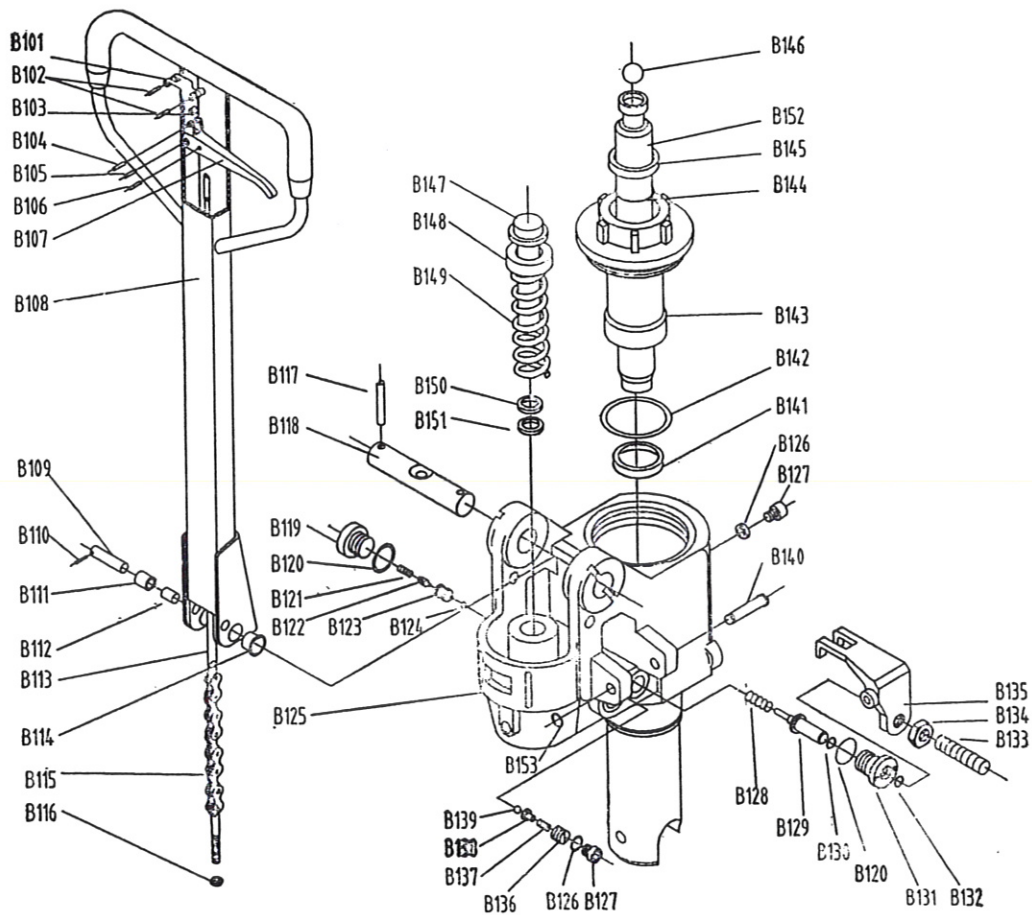
No.	Failure	Causes	Solution
1	Insufficient lifting.	The hydraulic oil is not adequate.	Add appropriate filtered working oil.
2	Inadequate restores.	<ol style="list-style-type: none"> 1. Too much hydraulic oil. 2. The turning part is caught up due to deformation. 3. Seizing-up between piston and guide screw. See Parts Fig. B152 and B153. 	<ol style="list-style-type: none"> 1. Extract appropriate amount of hydraulic oil. 2. Replace the part. 3. Replace B152 and B153.
3	The forks do not lower after rising.	<ol style="list-style-type: none"> 1. Abnormal in unloading devices. 2. Deform and damage in parts. 	<ol style="list-style-type: none"> 1. Re-adjusting the unloading device. See 3.8 clause. 2. Replace the deformed and damaged parts.
4	Leakage of hydraulic oil.	<ol style="list-style-type: none"> 1. Failure of oil seal. 2. Light break or erosion on the surfaces of one or two parts. 3. Relax in joints. 	<ol style="list-style-type: none"> 1. Replace the seal. 2. Replace the damaged parts. 3. Tighten the joints.
5	The forks does not lift.	<ol style="list-style-type: none"> 1. Viscosity of working oil is too high or the working oil is not added. 2. Impurity in oil. 3. Abnormal of unloading device. 	<ol style="list-style-type: none"> 1. Replace the working oil. 2. Remove the impurities in the oil circuit and replace the oil. 3. Re-adjust the nloading device. See 3.8 clause.
6	The forks drop immediately after lifting when shaking the handle, which springs back noticeably or the forks lower automatically after lifting.	The valve is caught up by impurities.	Relax Part B119, take out and clean Part B121, B122, B123 and B124. Reassemble and tighten B119 after cleaning the oil holes.

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10. Warning

- 10.1 Read the instructions carefully and grasp the features of the truck before operation!
- 10.2 Lift the Trigger a little up when lowering the truck by controlling the Trigger to make the truck lower slowly. Never drag the Trigger rudely because rapid lowering will damage the truck and cargo!
- 10.3 Do not shake the Handle hastily or frequently!
- 10.4 Rapid loading on the forks is not permitted!
- 10.5 Do not overload, otherwise the truck will not work normally!
- 10.6 The gravity center of the cargo should be positioned in the middle of two forks. Unbalanced loading will cause overturns of the truck after the cargo is lifted!
- 10.7 Relaxed or unstable cargoes are not permitted for loading!
- 10.8 Do not place the cargo on the truck body for long time!
- 10.9 Set the forks at the lowest position when the truck is not in working!
- 10.10 The truck is forbidden to carry man and the truck is also not permitted to move with man standing on its forks. Any part of the operator's body is not permitted to be placed under the cargo!
- 10.11 The truck is suitable for flat and hard ground. A truck with brake can be selected if the truck must be used on a slope!
- 10.12 Do not operate those not approved parts!
- 10.13 Do not try repairing the truck without training!

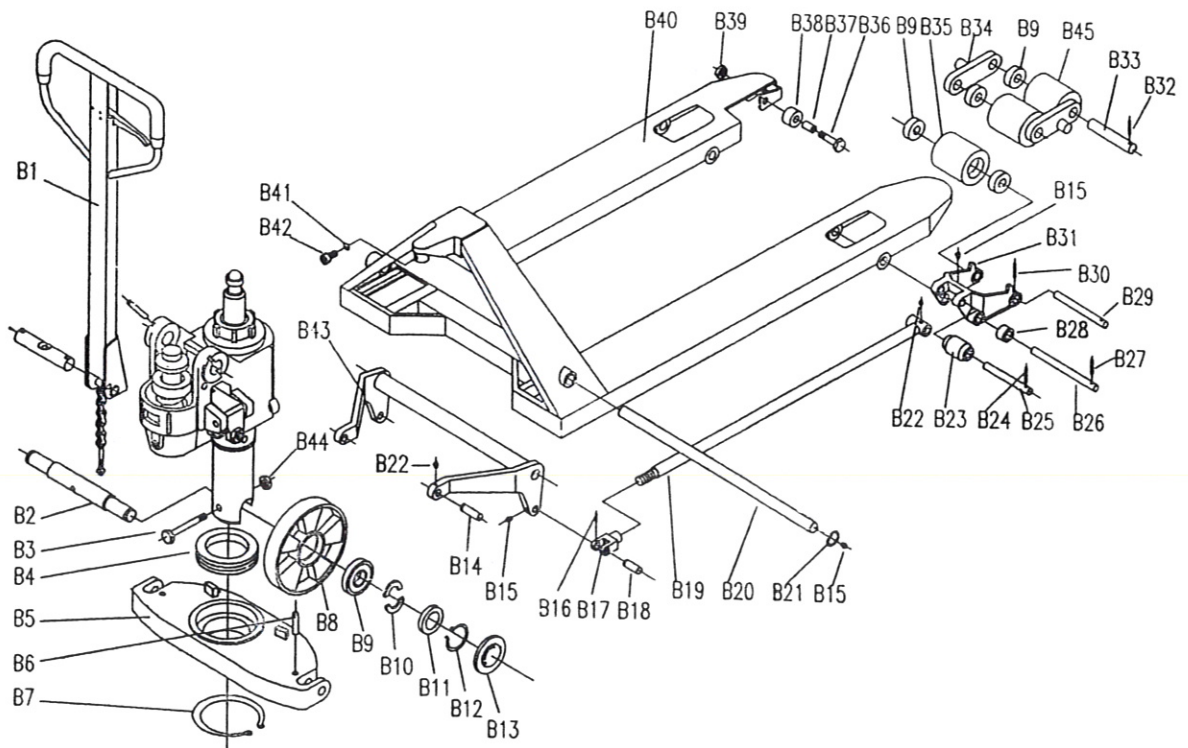
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NO.	DESCRIPTION	QUANTITY	NO.	DESCRIPTION	QUANTITY
B101	BLADE SPRING	1	B128	SPRING	1
B102	SPRING PIN	2	B129	STRIKE PIN	1
B103	ROLLER	1	B130	C-RING	1
B104	SPRING PIN	1	B131	AXLE SLEEVE	1
B105	SPRING PIN	1	B132	O-RING	1
B106	SPRING PIN	1	B133	BOLT	1
B107	HANDLE	1	B134	NUT	1
B108	HANDLE TUBE	1	B135	LEVER PLATE	1
B109	SHAFT	1	B136	BOLT	1
B110	SPRING PIN	1	B137	SPRING	1
B111	PRESSURE ROLLER	1	B138	BALL BASE	1
B112	BUSH	1	B139	STEEL BALL	1
B113	PULL POLE	1	B140	PIN	1
B114	BUSH	2	B141	Y-RING	1
B115	CHAIN	1	B142	O-RING	1
B116	NUT	1	B143	CYLINDER CAP	1
B117	SPRING PIN	2	B144	O-RING	1
B118	SHAFT	1	B145	DUST RING	1
B119	PLUG	1	B146	STEEL BALL	1
B120	COPPER WASHER	2	B147	PUMP PLUNGER	1
B121	SPRING	1	B148	WASHER	1
B122	SPINDLE OF DAMPING VALVE	1	B149	SPRING	1
B123	SEAT OF DAMPING VALVE	1	B150	DUST RING	1
B124	STEEL BALL	1	B151	Y-RING	1
B125	BASE	1	B152	PISTON ROD	1
B126	COPPER WASHER	2	B153	RETAINING RING FOR AXLE	1
B127	BOLT	2			

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NO.	DESCRIPTION	QUANTITY
B1	HANDLE AND PUMP COMPLETE	1
B2	BIG WHEEL SHAFT	1
B3	BOLT	1
B4	BEARING	1
B5	SUPPORTING BASE	1
B6	SPRING PIN	2
B7	RETAINING RING FOR AXLE	1
B8	BIG WHEEL	2
B9	BEARING	8
B10	HALF CIRQUE	4
B11	BOWL WASHER	2
B12	RETAINING RING FOR AXLE	2
B13	DUST COVER	2
B14	PIN	2
B15	OILER	8
B16	SPRING PIN	2
B17	JOINT	2
B18	PIN	2
B19	STRAIGHT TAPPET	2
B20	LONG SHAFT	1
B21	RETAINING RING FOR HOLE	2
B22	OILER	4
B23	ROLL SHEATH	2

NO.	DESCRIPTION	QUANTITY
B24	SPRING PIN	2
B25	SHAFT	2
B26	SHAFT	2
B27	SPRING PIN	2
B28	ROLL RING	4
B29	SHAFT	2
B30	SPRING PIN	2
B31	FRAME OF FORK WHEEL	2
B32	SPRING PIN	8
B33	SHAFT	4
B34	NOG OF FORK WHEEL	4
B35	FORK WHEEL	2
B36	BOLT	2
B37	SHEATH	2
B38	WHEEL	2
B39	NUT	2
B40	FORK FRAME	1
B41	SPRING LOCK WASHER	1
B42	BOLT	1
B43	ROCKER ARM	1
B44	NUT	1
B45	FORK WHEEL	4

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