

# Instruction Manual

## Hydraulic Jack



**Note:** The Owner/Operator must read carefully and understand all the information presented here before operation.

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THANK YOU VERY MUCH FOR CHOOSING OUR HYDRAULIC JACK. FOR YOUR SAFETY AND CORRECT OPERATION, PLEASE CAREFULLY READ THE MANUAL BEFORE USE.

**NOTE:** All of the information reported herein is based on data available at the time of printing. The factory reserves the right to modify its own products at any time without notice or incurring in any sanction. Please verify with the factory for possible updates.

## **1. WARNING IN ADVANCE**

1.1 This jack shall be operated only by qualified personnel.

1.2 The use of this jack should follow every important points described in this manual, otherwise the injury of operators or damage of articles might be caused because of neglect during use of this jack.

1.3 Before operation, operator should check and confirm that the jack is in good state.

1.4 The original manufacturer has no responsibility to the change of jack's mechanical property caused by maintaining of the third party without any written permission from manufacturer except repairing by the manufacturer or his agency.

## **2. DESCRIPTION**

This package includes one jack, one spare parts bag and one this manual.

Capacity	(ton)	25ton
Lifting height	(mm)	215
Min. height / tooth	(mm)	58
Min. height / head	(mm)	505
Load on the operating handle	(N)	400
Net weight	(kg)	109
Reduced speed		adjustable
Temperature range of use		-20C° ---+50 C°
Packing size	(mm)	530x350x610

### **3. TRANSPORTATION & STORAGE**

#### **3.1 Transportation**

The operating handle (02) is just for operating the jack. When transporting the jack, it can not be dropped or be thrown because it may cause the piston of it damaged, and the pump of it might be spoiled. Therefore, the jack should be fixed before transporting to avoid it being shocked by other objects.

#### **3.2 Storage**

Keeping the folded jack in a dry place.

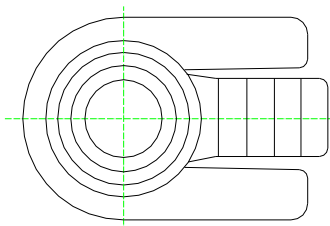
### **4. INSTALLMENT**

The installing of jack is very simple .The only thing you should follow is to insert the operating handle (02) to the socket (04) and screw it tightly in clockwise direction.

### **5. OPERATING**

#### **5.1 Scope of use**

When use this jack, it shall be put on the fixed and solid place, such as reinforced concrete floor, to lift or to move load vertically. In order to lift load in such limited area of jack, some auxiliary pad can be placed under the base of it. The tooth plate (46) of jack should be put on the base, so that it can be folded inside when retracting the jack.



## **5.2 Method of operating**

### **5.2.1 Lifting**

Put a weight on the tooth plate of jack stable.

Attention: Can not use the front end of tooth plate to lift the weight.

Important point: When lifting the weight by the tooth plate, the weight should be close to the head of jack to avoid the pillar (49) of jack being bent.

Please screw in the unloaded handle (16) tightly in clockwise direction before lifting.

Then press and lift the operating handle up and down repeatedly to pump the pressure to lift the weight. The lifting movement can be stopped immediately by stopping the lifting operation.

### **5.2.2 Reducing**

Please screw out the unload handle slowly in anti-clockwise direction to reduce the weight step by step. But when screw up the round unload handle again, the reducing movement can be stopped instantly.

Note: When the jack is in unloaded condition, the head of it should be pressed to reduce its height.

Attention: If the jack is not in the state of maintaining, each part of it can not be dismantled except the operating handle.

## **5.3 Safety standard**

5.3.1 The lifting of weight is dangerous operation, the appointed operators should be professional, be trained and be experienced.

5.3.2 Those extra weights can not be added on the lifted weight to avoid dropping accident happening.

5.3.3 Never exceed the recommended maximum limitation of lifting weight.

5.3.4 Please keep a safety distance with the lifted weight.

5.3.5 Never use the jack, or being changed or spoilt, or in bad condition itself.

5.3.6 When lifting the weight by tooth plate, please keep the weight close to the head of jack to avoid the pillar of jack being bent. Please check the drawing again.

5.3.7 Please confirm that each support point of ground should be solid and stable including floor area and loading etc, then any type of operating should be handled on the plane surface only.

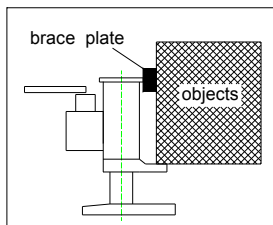
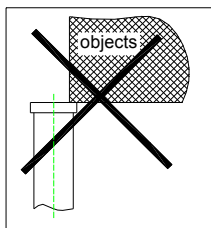
5.3.8 Please guarantee the lifted weight stable during the whole lifting period to avoid it being turn over or being slipped. Each device shall be fixed before lifting.

5.3.9 Never operating the jack when people standing on the lifting weight.

5.3.10 Never use the front end of the tooth plate to lift weight. The tooth plate should be located in its base totally, the pushing point to the weight should close to the back end of tooth plate as far as possible.

5.3.11 Never screw the adjustable screw (18), under any circumstance, otherwise a typical accident of jack dropping might be happened. These parts (10,11,18,19,20,21) are the device of overloading protection.

5.3.12 Never use the side of jack's head to lift weight. The weight should be contacted with the black shadow surface of the following pictures.



5.4.3 Operators should be very careful to use different jacks to lift a heavy-duty weight. Pay attention to the shifting of center of gravity during lowering or lifting the weight. The total lifting capacity of all jacks should be larger than load of lifted weights.

5.4.4 The owner of jack should guarantee all of the stick labels concerning safety standards keeping on its relative locations, which should be replaced when they can not be read clearly.

5.4.5 This operation manual can not cover all situations, please follow each step of it cautiously.

## 6. MAINTAINING

### 6.1 Routine inspection

6.1.1 Before operation, please inspect and confirm that:

- (1) All of the stoppers and screws of jack have been screwed up tightly.
- (2) There is no oil leaking on the jack's pump.
- (3) There is no cracking or deformation on pump body, tooth plate and its base.
- (4) The pump should be operated normally without load.

6.1.2 Under the frequent use of the jack, the time of checking shall be shortened as well, and the following checking points shall be emphasized:

- (1) All of the jack stoppers, screws, and nuts should be

screwed up sufficiently and should be adjusted when it is necessary.

(2) When the jack is in loading state, please pump it totally until the release valve opening and without any oil-leaking (but the oil spot on the surface of pillar or valve stem is in normal). Please release the pressure of pump and check the pillar to confirm the pillar being flat and vertical without any shocking and scraping. If any damage of it being found the pillar should be changed in time.

(3) When the jack is reducing, operator should check whether the reducing movement is stable or not and it should be wedged (but some slight vibration is in normal).

(4) Please, carefully check all of the exterior parts of jack including,

Pump body: no deformation, cracking and impacting on it

Operating handle of pump: no deformation no over space in each plug, otherwise the old plug shall be replaced by a new one

Tooth plate: no deformation & cracking

Base: no deformation & cracking

## **7. ADD OIL**

If the jack can not be pumped up to its rated height, it is necessary for you to add hydraulic oil into the oil tank. The hydraulic oil to be used must have a quality of ISO VG22 or equivalence. Mixing of different fluids is prohibited!



## 8. TROUBLE SHOOTING GUIDE

Symptom	Possible cause	Aliments
Jack can not be pumped up properly.	The release valve is not closed.	1.Screw in the unloaded handle (16) tightly in clockwise direction. 2.Loose the screw (38) to release the air from the pump, then screw in it tightly.
Jack can not be released down at the top position	The release valve is not opened enough.	Screw out the unload handle (16) in counter - clockwise direction
Jack can not be pumped up to its rated max. height.	Oil is not enough.	Screw out the screw (10), and add enough hydraulic oil.
The oil has leaked, around the plunger.	Seals are worn out.	Replace worn seals with new ones (8) and (7) (in the spare parts bag).

## 9. LIST OF PARTS

NO	NAME	CODE OF PARTS	QTY	NO	NAME	CODE OF PARTS	QTY
1	Upper Handle	2501	1	33	Oil Pipe	2533	1
2	Lower Handle	2502	1	34	Retaining Ring	534	1
3	Snap Ring	503	6	35	Filter	535	1
4	Socket	504	1	36	Spring	2536	2
5	Pin	505	2	37	Screw	2537	2
6	Plunger	2506	1	38	Screw	537	1
7	O - Ring	2507	2	39	Ball	525	1
8	Back-up Ring	2508	2	40	Cylinder	2540	1
9	Pin	2509	1	41	Steel Wire	2541	1
10	Screw	510	2	42	Retaining Ring	2542	1
11	Gasket	511	3	43	Limit Block	2543	1
12	Ball	512	1	44	Retaining Ring	2544	2
13	O - Ring	513	1	45	Bush	2545	2
14	Release Rod	514	1	46	Forked Mounting	2546	1
15	Snap Ring	515	1	47	O-Ring	2547	1
16	Unload Handle	516	1	48	Y-Ring	2548	1
17	Screw	517	1	49	Pillar	2549	1
18	Adjusting Screw	518	1	50	Axle	2550	2
19	Spring	519	1	51	Plate	2551	2
20	Ball Seat	520	1	52	Spring Wash	2552	2
21	Ball	521	1	53	Nut	2553	1
22	Linkage	522	1	54	Retaining Ring	2554	2
23	ScrewM8x30	523	4	55	Wheel	2555	2
24	Pin	524	1	56	Bearing	2556	2
25	Ball	525	3	57	Snap Ring	2557	2
26	Spring	526	2	58	Snap Ring	2558	2
27	Screw	527	2	59	Spring Pin	2559	1
28	Pump Body	2528	1	60	Pin	2560	1
29	O - Ring	529	2	61	Knob	2561	1
30	Y - Ring	2530	1	62	Spring	2562	1
31	O - Ring	531	1	63	Axle	2563	1
32	Valve Stem Bush	2532	1	64			

# 10.CONSTRUCTIONAL DETAIL OF PARTS

