

# Operating Instructions & Safety Manual



# Hydraulic Rotating Jack

**Rated Capacities  
5 through to 25 tonne**

**Note: Operator must read and fully understand the operating instructions before using this product.**

# Safety Information

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## SIGNAL WORDS

Note use of the following signal word **WARNING** with safety messages. The appropriate signal word for each has been selected using the following guidelines:

### WARNING

Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices.

Replace any Caution, Warning, Danger or Instruction safety label that is not readable or is missing.

Do not attempt to operate this equipment under the influence of alcohol or drugs. Review safety instructions with all users.

Operator should be a competent person. **DO NOT ALLOW PERSONS TO OPERATE OR ASSEMBLE THIS UNIT UNTIL THEY HAVE DEVELOPED A THOROUGH UNDERSTANDING OF SAFETY PRECAUTIONS AND HOW IT WORKS.**

## WARNINGS

The GT Hydraulic Rotating Jack shall only be operated by qualified personnel.

### WARNING

The safe use of this jack should follow every point described in this manual, otherwise the injury of operators or damage of articles might be caused because of neglect or misuse of this jack.

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

### WARNING

GT holds no responsibility for the change of mechanical properties which are caused directly or indirectly from maintenance by a third party, without written permission from GT.

## SPECIFICATIONS

This box includes:

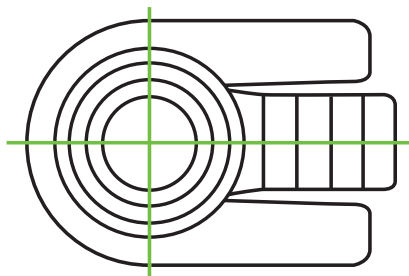
- GT Hydraulic Rotating Jack
- Spare Parts bag
- This manual

Capacity	Lifting range of Toe	Lifting range of head	Weight
kgs	mm	mm	kgs
5,000	25 - 230	368 - 573	20
10,000	30 - 260	420 - 650	35
25,000	58 - 273	505 - 720	100

# Operation

## SCOPE OF USE

The jack shall be used on a fixed solid base, such as reinforced concrete floor, to lift or to move load vertically. In order to lift load in such limited area of jack, an 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.



## METHOD OF OPERATING LIFTING

Position the toe underneath the load, ensuring the load is at the back of the toe plate so as not to lift on the tip. Insert the handle tightly by screwing clockwise into the socket.

Using a steady up and down movement of the handle repeatedly to pump the pressure to the lift the load. The lifting movement can be stopped immediately by stopping the operating handle.

## LOWERING

Screw out the unload handle slowly in anticlockwise direction to reduce the load step by step. When the jack is in unloaded condition, the head of it should be pressed to reduce its height.

## NOTE:

Unless the jack is undergoing maintenance, the only part that should be dismantled when not in use should be the operating handle.

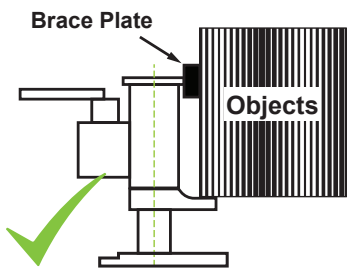
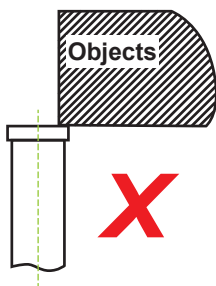
## SAFETY STANDARD

- The lifting of the load is a dangerous operation, the appointed operators should be trained and competent.
- Never add extra weight to the load being lifted.
- Never exceed the rated capacity of the jack.
- Please keep a safe distance from the lifted load.
- Never use the jack if it's in a bad condition.
- When lifting the weight by toe plate, please keep the weight close to the head of the jack to avoid the jacks pillar being bent.
- Ensure that each support point of ground is solid and stable, including floor area and loading etc, then any type of operating should be handled on a plane surface only.
- Please guarantee the lifted weight is stable during the whole lifting period to avoid it being turned over or slipping. Each device shall be fixed before lifting.
- Never operate the jack when people are on the load.
- never use the front end of the toe plate to lift weight. The toe plate should be located in its base, the pushing point to the weight should close to the back end of toe plate as far as possible.
- Never screw the adjustable screw (18), under any circumstance otherwise you can risk the jack dropping. These parts (10,11,18,19,20,21) are the device of overloading protection.

# Operation & Maintenance

## SAFETY STANDARD (cont'd)

- Never use the side of jacks head to lift weight. The weight should be contacted with the black shadow surface of the following pictures.



- Operators should be very careful to use different jacks to lift a heavy-duty weight. Pay attention to the shifting centre of gravity during lowering or lifting of the load. The total lifting capacity of all jacks should be larger than load of the lifted weights.
- The owner of jack should guarantee all of the stick labels concerning safety standards remain on its relative locations, which should be replaced when they cannot be read clearly.
- The operation manual can not cover all situations, please follow each step cautiously.

## MAINTENANCE

### ROUTINE INSPECTION:

Before operation, please inspect and confirm:

1. All of the stoppers and screws of jack have been screwed up properly. Take care to ensure they are not under or over tightened.
2. There is no oil leaking on the jacks pump.
3. There is no cracking or deformation on pump body, toe plate and it's base.
4. The pump should be operated normally without load.

Under more frequent use of the jack, periods of checking shall be reduced and the following checking points shall be emphasised:

1. All of the jacks 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 fully until the release valve opens and without any oil leaking (oil spot on the surface of pillar or valve stem is 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 is, take out of service and refer back to the manufacturer for a pillar change.
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 normal).
4. Please carefully check all exterior parts of the jack including:
  - Pump body; no deformation, cracking or impact 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.
  - Toe plate: no deformation or cracking.
  - Base: no deformation or cracking.

# Trouble Shooting

## ADDING OIL

1. If the jack cannot 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 equivalent. Mixing of different fluids is prohibited!

Symptom	Possible cause	Solution
Jack cannot be pumped correctly	The release valve is open	<ol style="list-style-type: none"><li>1. Screw in the handle (16) tightly clockwise.</li><li>2. Loosen the screw (38) to release air from the pump then screw it back tightly.</li></ol>
Jack cannot be released down at the top position	The release valve is not open enough	Screw out the handle (16) counterclockwise
Jack cannot be pumped up to its maximum height.	Insufficient oil amount.	Remove screw (10) and add sufficient oil.
Oil is leaking from the plunger	Seals are worn out	Replace the worn seals (7) & (8)

# Spare Parts List

No.	Name	Part Code	Qty
1	Upper Handle	2501	1
2	Lower Handle	2502	1
3	Snap Ring	2503	6
4	Socket	2504	1
5	Pin	2505	2
6	Plunger	2506	1
7	O Ring	2507	2
8	Backup Ring	2508	2
9	Pin	2509	1
10	Screw	2510	2
11	Gasket	2511	3
12	Ball	2512	1
13	O Ring	2513	1
14	Release Rod	2514	1
15	Snap Ring	2515	1
16	Unload Handle	2516	1
17	Screw	2517	1
18	Adjusting Screw	2518	1
19	Spring	2519	1
20	Ball Seat	2520	1
21	Ball	2521	1
22	Linkage	2522	1
23	Screw M8x30	2523	4
24	Pin	2524	1
25	Ball	2525	3
26	Spring	2526	2
27	Screw	2527	2
28	Pump Body	2528	1
29	O Ring	2529	2
30	Y Ring	2530	1
31	O Ring	2531	1
32	Valve Stem Brush	2532	1

No.	Name	Part Code	Qty
33	Oil Pipe	2533	1
34	Retaining Ring	2534	1
35	Filter	2535	1
36	Spring	2536	2
37	Screw	2537	2
38	Screw	2537	1
39	Ball	2525	1
40	Cylinder	2540	1
41	Steel Wire	2541	1
42	Retaining Ring	2542	1
43	Limit Block	2543	1
44	Retaining Ring	2544	2
45	Bush	2545	2
46	Forked Mounting	2546	1
47	O Ring	2547	1
48	Y Ring	2548	1
49	Pillar	2549	1
50	Axle	2550	2
51	Plate	2551	2
52	Spring Wash	2552	2
53	Nut	2553	1
54	Retaining Ring	2554	2
55	Wheel	2555	2
56	Bearing	2556	2
57	Snap Ring	2557	2
58	Snap Ring	2558	2
59	Spring Pin	2559	1
60	Pin	2560	1
61	Knob	2561	1
62	Spring	2562	1
63	Axle	2563	1

# Spare Parts Diagram

