# USER MANUAL HYDRAULIC TOE JACKS



# **INTRODUCTION**

- Hydraulic toe jack with multi-function head and toe lifting mechanisms
- Quick, smooth effortless operation by hand
- Lifting points on the toe and head allows for a versatile lifting
- Ideal for lifting low weight points and working in confined spaces
- Toe constructed from strong mould casted alloy steel with no welded or bent parts to weaken the material
- High strength return spring enables rapid ram retraction
- Swivelling pump handle assembly allows the operator to access and pump the unit from a variety of positions
- Built-in safety valve prevents over-pressurization
- Internal overflow valve functions as a stroke limiter
- Convienient carry handle

# **SPECIFICATIONS**

Model Number:	HHQD-5	HHQD-10
Lifting Capacity (Toe):	2.5 Tonne	5 Tonne
Lifting Capacity (Head):	5 Tonne	10 Tonne
Stroke:	120mm	130mm
Closed Height:	222mm	265mm
Jaw Height:	16mm	18mm
Net Weight:	12.1kg	18.5kg

Model Number:	HHQD-20	HHQD-30
Lifting Capacity (Toe):	10 Tonne	15 Tonne
Lifting Capacity (Head):	20 Tonne	30 Tonne
Stroke:	130mm	140mm
Closed Height:	285mm	305mm
Jaw Height:	20mm	20mm
Net Weight:	29kg	43.4kg

# **EQUIPMENT IDENTIFICATION**



# **SAFETY GUIDELINES**

- Read these instructions carefully before use and wear the appropriate safety equipment during operation.
- Inspect this equipment regularly and check for damage before use.
- Never use this equipment if any damage or fault is detected. Immediately repair or replace damaged parts.
- Only use Manufacturer's original replacement parts when repairing the jack.
- The use of unapproved parts may be dangerous and will invalidate your warranty.
- · Lubricate and clean the jack regularly to maintain the equipment and keep it in safe working condition.
- Use a qualified person to lubricate and maintain the jack. Only use hydraulic oil.
- Ensure the work area is clean, tidy, well lit and free from clutter. Keep children and animals away from the working environment.
- Always use the jack on solid, level ground, preferably concrete.
   Avoid soft materials such as tarmacadam as the jack may sink and become unstable under load.
- Do not modify jack in any way. Do not use the jack for any other purpose other than that for which it was designed.
- Keep hands etc. clear of moving parts during raising and lowering of the load.
- If being used to lift a vehicle, park the vehicle and apply hand brake. Switch off the engine and place chocks under the wheels.
- Ensure a minimum distance of 0.5m between load and static objects such as doors, walls, etc. to allow for tilting during jacking.
- Check that the lifting point is centred and stable on the jack saddle (off centre loads can slip).
- Always position jack so as to avoid operating it from under the load.
- Only use the jack for lifting only, this equipment is not designed to supporting the lifted load.
- Always use adequately rated mechanical supports.
- Never exceed the rated capacity of the jack and do not operate the jack beyond its maximum pump stroke.
- If lifting a vehicle, do not allow the vehicle to move, or try to start the engine, when the vehicle is jacked up.
- Do not jack a vehicle if it may result in the spillage of fuel, battery acid, or other dangerous substances.
- Do not place any part of your body under load whilst it is supported by the jack.
   Wait until adequately rated supports have been correctly positioned.
- Do not use jack to support extensions or cradles.
- Do not adjust the safety overload valve.
- Ensure there are no persons or obstructions beneath the load before lowering.
- Clean and stow the jack in a secure and dry environment with the ram in the down position after use.
   Never leave the ram extended.

#### **OPERATING INSTRUCTIONS**

#### Before Use:

Before using the jack, ensure that the hydraulic system is fully purged to eliminate any air that may have accumulated during transit:

- 1) Fit jack handle over release valve and turn anti-clockwise to open the valve.
- 2) Insert jack handle into the sleeve and pump several times to ensure full internal lubrication and to bleed any excess air from the system.
- 3) Fit jack handle back over the release valve and turn clockwise to close.

#### Lifting:

- Always use the jack on solid, level ground, preferably concrete.
- Place either toe or head beneath load to be lifted, depending on the application and clearance available.
- If using the toe, ensure that it is inserted beneath the load fully to ensure maximum stability.
- Pump the handle up and down using full strokes until the required lifting height is achieved.
- If the jack becomes overloaded, the safety overload valve will open, and prevent the load from lifting any further.





# **MAINTENANCE**

#### Important: Inspect this equipment regularly and check for damage before use.

- Never use this equipment if any damage or fault is detected. Immediately repair or replace damaged parts.
- Only use Manufacturer's original replacement parts when repairing the jack.
- The use of unapproved parts may be dangerous and will invalidate your warranty.
- Do not use brake fluid or any fluid other than hydraulic jack fluid, as to do so may cause serious damage to the jack and will invalidate the warranty.
- Periodically check the pump piston and piston rod for signs of corrosion. Clean exposed areas with a clean oiled cloth.

#### Storage:

When the jack is not in use, the ram and piston must be placed in their lowest positions to minimise corrosion.

#### **Lubrication:**

Remove the handle to render the jack inoperable and store in a secure dry environment.

Keep the jack clean and lubricate all moving parts with acid free oil on a regular basis.

#### **Checking Hydraulic Oil Level / Refilling Oil:**

- 1. Fully lower the jack.
- 2. Remove the filler plug.
- 3. The correct oil level is indicated to the bottom of the filler opening.
- 4. We recommend that you should replace the hydraulic oil after every year of extensive use. Drain the oil through the filler plug opening.
- 5. Ensure that no dirt or debris is allowed to enter the jack or the fresh oil during this process.
- 6. To replace the oil fill as required.
- 7. Pump (the unloaded jack) 5 or 6 times to expel any excess air.
- 8. Pump jack to full height and pour off excess oil before refitting the filler plug.

Note: Ensure waste oil is disposed of in accordance with local authority regulations.

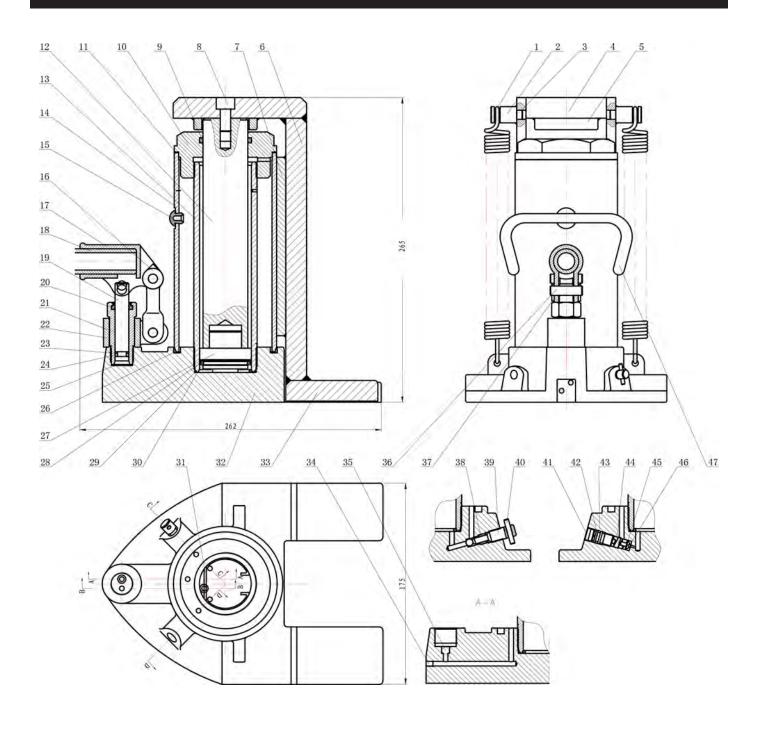
#### **De-commissioning:**

Draw off the oil into an approved container and dispose of the jack and the oil according to local regulations.

# **TROUBLESHOOTING**

Problem	Possible Causes	Solution		
Jack will not lift the load	Jack has been overloaded     Low oil level     Release valve is open or only partially closed     Excess air in the system     Packing worn or defective	Check and confirm jack has rated capacity for the load and application (head & toe capacity)     Top up hydraulic oil level     Check and close the release valve     Open release valve and air valve (if fitted) and pump the handle a few times to purge the air.     Close the release valve & retry.     S.Contact the Seller or the nearest service center for advice.		
Jack will not lift high enough or feels "spongy"  1. Low oil level 2. Worn or damaged seals 3. Excess air in the system 4. Release valve is open or only partially closed		Top up hydraulic oil level     Contact the Seller or the nearest service center for advice.     Open release valve and air valve (if fitted) and pump the handle a few times to purge the air.     Close the release valve & retry.     Check and close the release valve		
Jack lifts but will not hold the load  1. Release valve is open or only partially closed 2. Excess air in the system 2. Worn or damaged seals		1. Check and close the release valve     2. Open release valve and air valve (if fitted) and pump the handle a few times to purge the air.     Close the release valve & retry.     3. Contact the Seller or the nearest service center for advice.		
Jack will not lower completely	Ram is damaged     Excess air in the system     Release valve is open or only partially closed	1.Contact the Seller or the nearest service center for advice.     2. Open release valve and air valve (if fitted) and pump the handle a few times to purge the air.     Close the release valve & retry.     3. Check and close the release valve		

# PARTS DIAGRAM



# PARTS LIST

#	Description	Qty	#	Description	Qty
1.	Spring	2	25.	Gasket	1
2.	Spring Pin	2	26.	Trapezoid sealing ring	1
3.	Side Plate	2	27.	Piston	1
4.	Roof	1	28.	Bowl shaped pad	1
5.	Fix Ring	1	29.	Trapezoid sealing ring	1
6.	Vertical Plate	1	30.	O-ring	1
7.	Guide Plate	1	31.	Steel ball retaining ring	1
8.	Socket cap screw	1	32.	Pedestal	1
9.	O-ring	1	33.	Plate	1
10.	Тор Сар	1	34.	Screw	2
11.	Backup ring	1	35.	Steel ball	3
12.	Piston Rod	1	36.	Pin B8x28	3
13.	Cylinder	1	37.	Pin 2x12	3
14.	Cover	1	38.	Rectangular seal ring	1
15.	Oil Plug	1	39.	Oil return valve stem	1
16.	Connecting Rod	1	40.	Pin D4x22	1
17.	Handle Connector	1	41.	Safety valve cover	1
18.	Handle	1	42.	Safety valve stem	1
19.	Pump Core	1	43.	O-ring	1
20.	J Shape Dustproof Ring	1	44.	Safety valve spring	1
21.	Pump Body	1	45.	Head	1
22.	Connector	1	46.	Steel ball	1
23.	Retaining Ring	1	47	Handle	1
24.	O-ring	1			