





ENGINE CRANE



About the **TradeQuip** brand

The 'TradeQuip' brand of workshop equipment, is designed for use in a demanding workshop environment by professional users. With proven and trusted "Made for the Trade" reliability, 'TradeQuip' branded products offer the very best in performance for an affordable price. All backed by a 1year trade guarantee across 1,000+ distributors Australia wide.







WARNING INFORMATION

IMPORTANT: READ ALL INSTRUCTIONS BEFORE USE



WARNING

The instructions and warnings contained in this manual should be read and understood before using or operating this equipment. Do not allow anyone to use or operate this equipment until they have read this manual and have developed a thorough understanding of how this equipment works. Failure to observe any of the instructions contained in the manual could result in severe personal injury to the user or bystanders, or cause damage to the equipment and property. Keep this manual in a convenient and safe place for future reference.

Whilst every effort has been made to ensure accuracy of information contained in this manual, the TQB Brands Pty Ltd policy of continuous improvement determines the right to make modifications without prior warning.

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STANDARD OPERATING PROCEDURE

DO NOT use this equipment unless you have been trained and assessed to a competent level in its sate use and operation, and have been given permission to use this



DO NOT tilt the unit



Wear the correct PPE

PRE-OPERATIONAL SAFETY CHECKS

- Before using the foldable engine crane ensure it is in sound condition, and good working order.
- Replace or repair damaged parts. Use recommended parts only. Non authorised parts may be dangerous and will invalidate the warranty. The nuts and bolts supplied with the crane are all high strength and should not be substituted for inferior types.
- Always inspect the chain and hook prior to use.
- Always lock the legs and jib in position before lifting a load.
- Keep the stand clean for best and safest performance.
- Locate the stand in an adequate working area for its function, keep area clean and tidy and free from unrelated materials, and ensure there is adequate lighting.
- Use on a firm, level surface capable of sustaining the foldable engine crane lift and the load.
- Operators should maintain correct balance and footing. Ensure the floor is not slippery and wear non slip shoes.
- Ensure all non-essential persons keep a safe distance whilst the crane is in use.
- DO NOT exceed the safe working capacity 1200kg.
- DO NOT operate the crane if damaged.
- DO NOT use crane in damp or wet locations. DO NOT expose to rain.
- DO NOT allow untrained persons to operate the crane.
- DO NOT use the crane to lift or support people.
- DO NOT stand beneath, in front of, or to the side of the load.



WARNING

- This double pump long ram is designed for lifting purposes only.
- Not for supporting loads.
- Do not load beyond its rated capacity.

INTENDED USE

For regular professional use, to raise and/or lower passenger car engines and transmissions during service or repair work.

ASSEMBLY, OPERATION, PREVENTITIVE MAINTENANCE

1. FEATURES

This TradeQuip hydraulic engine crane has a 8 tonne long stroke lifting ram and double acting pump with a maximum safe working load capacity of 1200kg. It is designed to quickly fold up to save space in the workshop. It is very simple to use with a single acting hydraulic pump equipped and an automatic safety valve to control the lowering speed.

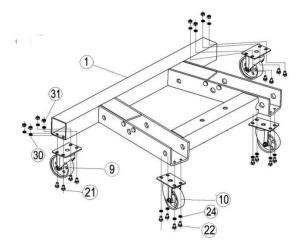
The jib extends to required lifting capacities of 300kg, 600kg, 900kg or 1200kg secured by a single locking pin. Mounted on 6 swivel castor wheels for excellent manoeuvrability around the workshop, the lifting range is 0-2300mm so an engine can be lifted clear out of the engine bay with little effort. With great stability of its wide legs, this crane can also be used to lift machines or other heavy items, making for an excellent piece of equipment for the workshop or warehouse.

2. ASSEMBLY

Ensure assembly is done on a flat, level surface to prevent misalignment.

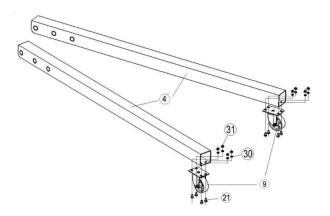
Step 1:

- Fasten the two larger rear castor wheels (9) on the Base structure with Bolts (21), washers (30) and nuts 31). Face bolts up when installing.
- Fasten the smaller two castor wheels (10) on the Base structure with bolts (22), washers (24). Face bolts up when installing.



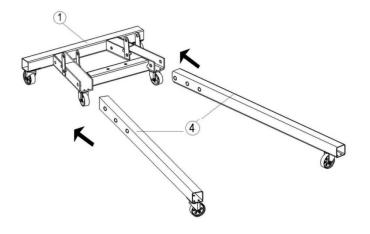
Step 2:

• Fasten the remaining larger two castor wheels (9) on the front legs (4) with bolts (21), washers (30) and nuts (31).



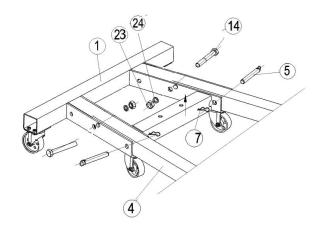
Step 3:

Slide the legs (4) into the front of the base (1).



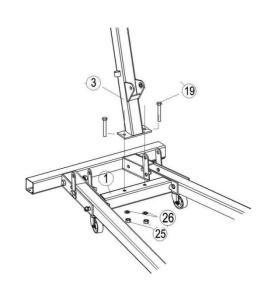
Step 4

• Fasten the support straps (6) to the base frame (1) and front legs (4) with bolts (14), washers (24), and nuts (23). Lift one side of the base to align the hole on the frame to the hole on each front leg (4), then insert the ring pins (5) into the hole, and insert the cotter pin (7) into the hole of the ring pin.



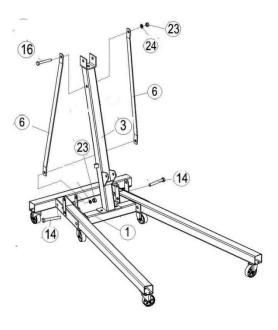
Step 5

• Use two bolts (19), washers (26) and nuts (25) to connect the bottom of the post (3) to the base frame (1).



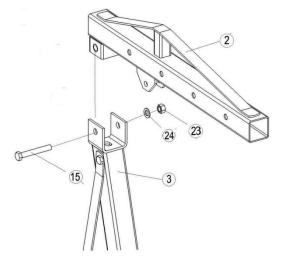
Step 6

• Use two bolts (14), washers (24) and nuts (23) to connect the lower ends of the support straps (6) to the inside of the base (1). Then use bolts (16), washers (24) and nuts (23) to connect the top ends of the supports to the post (3). Check to make sure the nuts are tightened. Tighten all nuts.



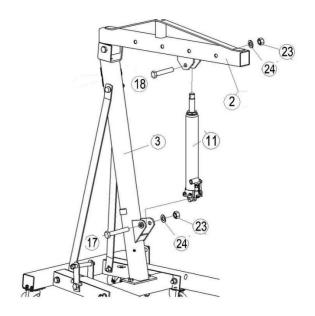
Step 7

 Use bolts (15), washers (24) and nut (23) to attach the boom (2) to the top of the post (3). Tighten nut (3) so that the boom (2) can rotate freely, do not over-tighten as boom needs to be able to rotate freely.



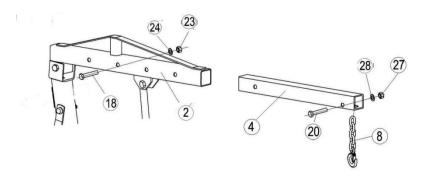
Step 8

• Use bolts (17), washers (24) and nut (23) to fasten the lower end of the long ram (11) to the post (3). Then bolt (18), washer (24) and nut (23) to fasten the top of the long ram to the boom (2).



Step 9

• Slide the boom extension (4) into boom (2) and use bolt (18), washer (24) and nut (23) to secure at the desired load rating. Use bolt (20), washer (28) and nut (27) to attach the hook and chain (8) to the end of the boom extension.



The boom has four different load ratings; select desired rating before use.

3. BEFORE USE

Prior to each use conduct a visual inspection by checking for abnormal conditions, such as cracked joints and damaged, loose, or missing parts.

- During transport it is possible that air has become trapped in the hydraulic system, causing poor lifting performance. Purge any air from the system by fully opening the release valve (turn handle counter clock-wise as shown), then while holding the boom down, operate pump handle rapidly several times.
- Ensure all nuts and bolts are correctly fitted and tight.

4. OPERATION

TO RAISE:

Close the release valve by turning the handle clock-wise to a secure position. Do not over tighten.

TO LOWER:

• Open the release valve by turning the handle counter clock-wise very slowly. The speed of lowering the load is controlled by how much you turn the handle.

TO ADD OIL:

• Only use high quality Hydraulic Oil. Do not use brake fluid, alcohol, glycerine, detergent motor oil. When adding oil ensure dirt or foreign matter does not enter the system.

NOTE: ONLY USE GOOD QUALITY HYDRAULIC JACK OIL.

5. STORAGE

This foldable engine crane should always be stored under cover in a dry location and on a level surface with the jib in the **fully lowered position.**

Note: Before raising the legs to the storage position ensure Bolt (6), and Nut (7) is inserted into the base support and tightened to ensure the unit is stable and won't fall over.

6. MAINTENANCE

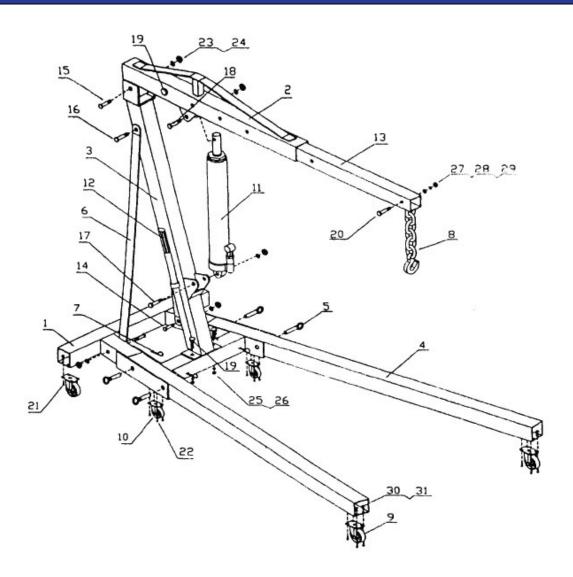
Replace or repair damaged parts. Use recommended TradeQuip genuine parts only. Non authorised parts may be dangerous and will invalidate the warranty.

- Check ram and plunger every 3 months for any signs of corrosion.
- Clean as needed with a clean damp cloth.

7. SERVICE & REPAIR

Any Foldable engine crane found damaged in any way, or found to be worn or operates abnormally should be removed from service until repaired by an authorised service agent. Owners and / or operators should be aware that repair of this product may require specialised equipment and knowledge. Only authorised parts, labels and decals shall be used on this equipment. Annual inspection of the hydraulic lift is recommended and can be made by an authorised repair facility to ensure that your equipment is in optimum condition and that the equipment has the correct decals and safety labels specified by the manufacturer.

PARTS DIAGRAM & PARTS LIST



Part #	Description	QTY	Part #	Description	QTY
1	Base	1	17	Bolt M16x90	1
2	Boom	1	18	Bolt M16x80	1
3	Main Support Post	1	19	Bolt M14x100	3
4	Leg	2	20	Bolt M12x80	1
5	Lock Pin	4	21	Bolt M8x20	16
6	Support Strap	2	22	Bolt M8x12	8
7	Split "R" Pin	4	23	Nut M16	6
8	Chain & Hook Assembly	8	24	Flat Washer 016	6
9	3.5" Swivel Castor	4	25	Nut M14	3
10	3" Swivel Castor	2	26	Flat Washer 014	3
11	8 Ton Long Ram Jack	1	27	Nut M12	1
12	Handle	1	28	Flat Washer 012	1
13	Boom Extension	1	29	Lock Washer 012	1
14	Bolt M16x100	2	30	Nut M8	16
15	Bolt M16x120	1	31	Lock Washer08	24
16	Bolt M16x110	1			

PRODUCT INFORMATION TOP TIPS

PRODUCT INFORMATION

How to extend the life of your Engine Crane

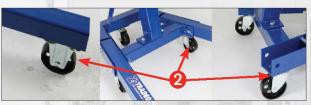
9 Top Tips

to extend the life of your TQB BRANDS 1001T Engine Crane

1 Ensure all assembly bolts and fasteners are positioned correctly and tightened before use.



Regularly lubricate all castors and wheels for ease of movement once loaded.

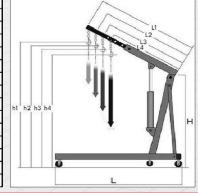


Using an engine crane once assembled starts with a two-step process. First consult the vehicle manufacturer for load weights then step two, consult the TQB Brands Engine Crane Owner's Manual for correct load jib positioning prior to loading the engine crane.



* Overloading can cause serious damage to crane components and or injury to operator.

Dime	Dimensions				
W1	250kg				
W2	500kg				
W3	750kg				
W4	1,200kg				
h1	2300mm				
h2	2170mm				
h3	2025mm				
h4	1890mm				
L1	1580mm				
L2	1405mm				
L3	1220mm				
L4	1040mm				
L(mm)	1660mm				
H (mm)	1485mm				



Off centre loading and unbalanced loads or loads that mount outside of the crane's footprint can cause tipping over of the crane.

Where a combined engine/gearbox extraction and installation is required, we recommend using the shortest position of the jib to decrease risk of tipping.



Use the jib settings to create a balanced load within the footprint of the crane.

Load should always remain within the footprint of the crane to ensure stable manoeuvring and prevent potential forward tipping of the load and crane.

Best Practice Example where a 300kg load should be



6 Correct storage is vital to the longevity of the cranes ram.

Always store the crane with the ram

Always store the crane with the ram fully retracted to prevent corrosion and contamination ingress.



Hazards and Obstructions.

All wheeled TQB Brands equipment must be used on smooth surface free of cracks, crevices and tripping hazards that can foul the wheels during operation or relocation.

3 During transport it is possible air has become trapped in the hydraulic system, causing poor lifting performance.

Bleed any air from the system by fully opening the release valve (turn handle counter clockwise as shown), then while holding the boom down, operate pump handle rapidly several times.

 Read the user Manual thoroughly and keep a copy easily accessible or visit our webpage www.tqbbrands.com.au for instructional documents & pre-start videos.





TROUBLESHOOTING

TROUBLE	PROBABLE CAUSE	REMEDY
Will not hold load.	Dirt on valve seals.	Lower lifting boom. Close the release valve and remove the oil filler plug.
		2. Place one foot on the leg and pull up the lifting boom to its full height by hand.
		3. Open the release valve to lower the lifting boom.
		4. Worn seals.
Will not lift load. Will not lift load to its full height. Pump feels unsteady under load. Pump will not lower completely.	Air block.	 Purge air from the hydraulic system by opening the release valve and remove the oil filler plug Pump handle a couple of full strokes and close the release valve.
Pump will not lift to its full height.	The reservoir could be overfilled.	1. Check the oil level. Remove the filler
Pump feels unsteady under load.	Low hydraulic oil level.	plug. Top up oil to correct level.
Will not lower completely.	The pump cup seal could be worn out.	Replace cup seal.
Will not lower completely.	Air block. Unit requires lubrication.	 Release air from hydraulic pump by removing filler plug. Oil external moving parts.

WARRANTY

TradeQuip products have been carefully tested and inspected before shipment and are guaranteed to be free from defective materials and workmanship for a period of 12 months from the date of purchase except where tools are hired out when the guarantee period is ninety days from the date of purchase.

Should the machine develop any fault, please return the complete tool to your nearest authorised warranty repair agent or contact TQB Brands Pty Ltd Warranty team – warranty@tqbbrands.com.au.

If upon inspection it is found that the fault occurring is due to defective materials or workmanship, repairs will be carried out free of charge. This guarantee does not apply to normal wear and tear, nor does it cover any damage caused by misuse, careless or unsafe handling, alterations, accident, or repairs attempted or made by any personnel other than the authorised TQB Brands Pty Ltd repair agent.

This guarantee applies in lieu of any other guarantee expressed or implied and variations of its terms are not authorised.

Your TQB Brands Pty Ltd guarantee is not effective unless you can produce upon request a dated receipt or invoice to verify your proof of purchase within the 12 month period.

Consumer Guarantee

Our goods come with a guarantee that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.



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