

Owners Manual

Product Code: 1193

**MADE FOR THE
TRADE**

TQ TRADEQUIP
the trusted brand in equipment

ENGINE CRANE



Specifications

- Safe Working Capacity: 3,000kg
- Folded Height: 1540mm
- Maximum Lifting Height @ 3000kg: 1745mm
- Maximum Lifting Height @ 1000kg: 2088mm
- Jib Length Fully Retracted @ 3000kg: 1100mm
- Jib Length Fully Extended @ 1000kg: 1730mm
- Overall Length Fully Extended: 2385mm
- Overall Length Fully Retracted: 1480mm
- Overall Width Fully Extended: 875mm
- Overall Width Fully Retracted: 785mm
- Leg Height 190mm
- Nett Weight: 121.5kg
- Carton 1 of 3 : 1330 x 860 x 100mm (Weight: 29kg)
- Carton 2 of 3 : 1470 x 300 x 200mm (Weight: 82kg)
- Carton 3 of 3 : 700 x 180 x 150mm (Weight: 15kg)

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 1 year trade guarantee across 1,000+ distributors Australia wide.

TQ TRADEQUIP
the trusted brand in equipment

TQPRO
Trusted by various professionals

BORUM
INDUSTRIAL WORKSHOP EQUIPMENT

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 machine unless you have been trained and assessed to a competent level in its safe 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 3000kg 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.
- Keep the engine stand clean for best and safest performance.
- Locate the engine 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 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 3000kg.
- 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 long hydraulic 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 car engines and transmissions during service or repair work.

ASSEMBLY, OPERATION, PREVENTITIVE MAINTENANCE

1. FEATURES

This TradeQuip hydraulic engine crane has a hydraulic long stroke lifting ram with a maximum safe working load capacity of 3000kg. The jib extends to required lifting capacities of 1000kg, 1500kg, 2000kg or 3000kg secured by a single locking pin. Mounted on large castor wheels for excellent manoeuvrability around the workshop, the lifting range is 0-2250mm 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. Certain parts of the assembly procedure may require two persons to carry out safely.

Note: Numbers in brackets refer to item numbers as shown in the parts diagram (Section 9, page 5).

1. Attach wheels (4) to the base (15) using washers, spring washers and nuts (24).
2. Insert wheels (27) into the housings in the outer ends of the legs (13,14) using bolts (25) and securing with washers, spring washers and nuts (26).
3. Slot the legs (13 & 14) into the base (15) and lock using the bolts (3). Ensure that the legs are each locked at the same length
4. Attach the post (18) to the base (15) using bolts, washers, spring washers and nuts.
5. Attach supports (17) to the base (15) using bolts, washers, spring washers and nuts (5,23). g).
6. Attach the tops of the supports (17) to the post (18) using bolts (7), washers, spring washers and nuts.
7. Attach the base of the ram unit (1) to the lower fixing point of the post (18) using bolt (6), washer, spring washer and nut.
8. Attach the jib (20) to the top of the post (18) using bolt (12), washer, spring washer and nut.
9. Attach the piston head of the ram unit (1) to appropriate point on the jib (20) using bolt (11), washer, spring washer and nut.
10. Slot the jib extension (21) into the jib (20) and secure using pin (9) and use 'R' pin (10) to secure this. Be sure to select the correct extension for the weight to be lifted.
11. Attach the hook and chain (22) to the jib using bolt (2), washer, spring washer and nut (28).
12. Open the release valve of the ram by turning the release valve (fig.1) anticlockwise. With the valve held open slightly pump the ram 10-20 times. This is necessary to flush the hydraulic system and purge any air that may be present.
13. Pull the jib up slightly, close the release valve (turn clockwise) and pump the handle. The jib should now raise.
14. Pump the jib all the way up and then lower it slowly by opening the release valve. This is to confirm that the oil level is correct.
15. Close the release valve.
16. The crane is now ready for use.
17. Ensure it is not damaged in any way.
18. Should you experience any problems, contact your supplier immediately.

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.
- Place the handle into the pump socket and pump, the jib will raise.
- Continue to pump until the jib reaches the height at which the load can be secured.
- Ensure that the legs are adjusted so that the lift is always performed within the wheelbase of the crane, and that the legs are secured at equal lengths.
- Connect the crane hook to the load using a suitable certified sling or support beam. Ensure you are aware of the load weight, and check that it is within the capacity of the crane (at the jib extension you are using) and the sling or support beam.
- When removing engines ensure you know the weight to be lifted.
- Use only the lifting points recommended by the vehicle manufacturer.
- Lift only from directly above the load.
- **WARNING! DO NOT lift the load at an angle!**

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.
- The release valve is spring-loaded to return to the closed position.
- **WARNING! Do not allow the load to drop suddenly.**

The crane is not a transportation device but may be used to reposition the load being worked on. To do so, lower load and jib with care, to the lowest possible point before attempting to move. Do not try to move crane in a sideways direction. The crane is not designed to support the load indefinitely. When you have repositioned the load, lower the load onto a secure and appropriate working base, being fully aware of your own and other persons locations in relation to the lowering load. When load has been secured, remove lifting sling, support beam etc. and place crane in a safe location with jib fully lowered.

To Add Oil: Only use good quality Hydraulic Jack 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.

Check Oil Level

- Turn release knob counter clockwise to allow ram to fully retract. It may be necessary to apply force to the crane jib for lowering.
- With the jib in the fully lowered position, remove the oil fill plug. The oil should be level with the bottom of the fill hole. If not, top off. Do not overfill. Always fill with new, clean good quality hydraulic jack fluid – ISO68.
- Replace fill plug and inspection plate.
- Check crane ram operation.
- Purge air from system as required.

System Air Purge

- Turn release valve counter clockwise one full turn to open.
- Continually pump the ram handle to pump air through the system.
- Turn release valve clockwise to close valve.
- Continually pump the ram handle until the jib reaches maximum height and continue to pump air to remove trapped air in the ram.
- Carefully and slowly pinch oil fill plug to release trapped air.
- Turn release valve counter clockwise one full turn and lower ram to the lowest position. Use reasonable force if necessary.
- Turn release valve clockwise to closed position and check for proper pump action. It may be necessary to perform the above more than once to assume air is evacuated totally.

5. STORAGE

This TradeQquip 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**.

6. MAINTENANCE

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

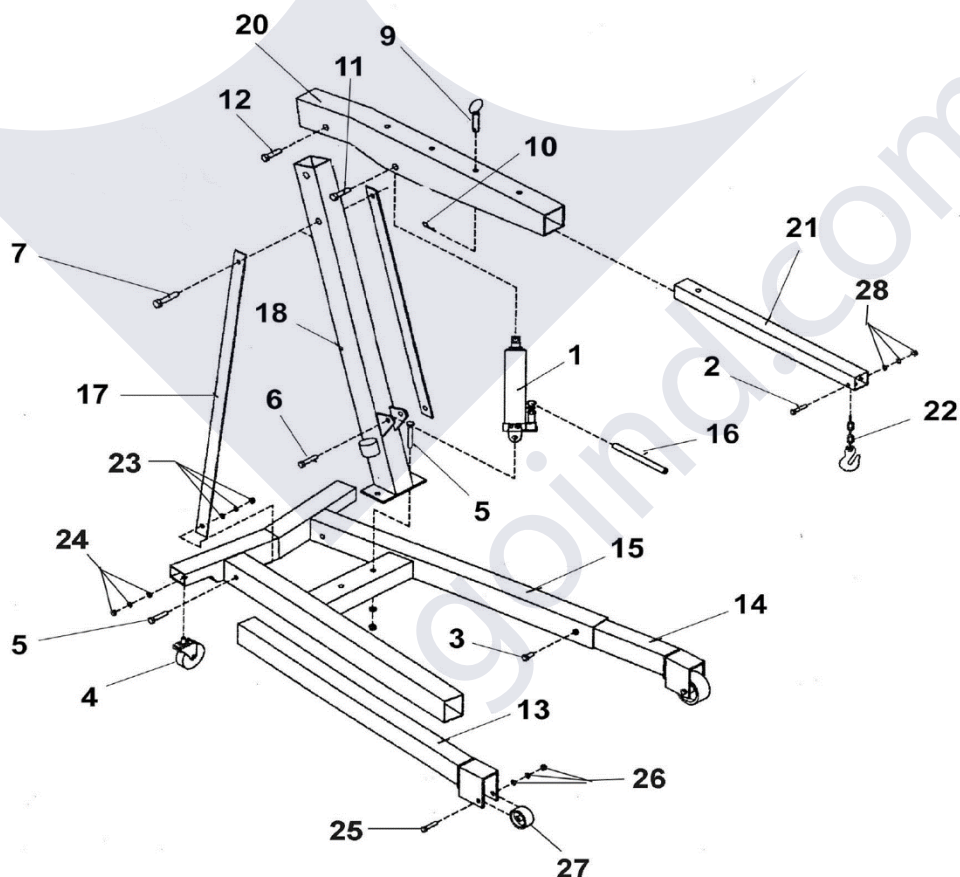
- Check ram and plunger every 3 months for any signs of corrosion.
- Clean as needed with a clean damp cloth.

7. SERVICE & REPAIR

Any 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 LIST

Part #	Description	QTY	Part #	Description	QTY
1	Hydraulic Ram Unit	1	15	Base	1
2	Bolt M13 x 90	1	16	Jack Handle	1
3	Bolt M12 x 30	1	17	Brace	1
4	Wheel	2	18	Upright	1
5	Bolt M16 x 110	4	20	Boom (Jib)	1
6	Bolt M20 x 100	2	21	Boom (Jib) Extension	16
7	Bolt M16 x 120	4	22	Chain & Hook	1
9	Pin	4	23	Washer/Spring Washer/Nut	6
10	"R" Pin	2	24	Washer/Spring Washer/Nut	6
11	Bolt M22 x 130	1	25	Bolt	3
12	Bolt M10 x 130	1	26	Washer/Spring Washer/Nut	3
13	Leg (RHS)	1	27	Front Wheel	1
14	Leg (LHS)	2	28	Washer/Spring Washer/Nut	1



TROUBLESHOOTING

Trouble	Probable Cause	Remedy
Will not hold load.	Dirt on valve seals.	<ol style="list-style-type: none"> 1. 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.	<ol style="list-style-type: none"> 1. Purge air from the hydraulic system by opening the release valve and remove the oil filler plug 2. Pump handle a couple of full strokes and close the release valve.
Pump will not lift to its full height. Pump feels unsteady under load.	The reservoir could be overfilled. Low hydraulic oil level.	<ol style="list-style-type: none"> 1. Check the oil level. Remove the filler plug. Top up oil to correct level.
Will not lower completely.	The pump cup seal could be worn out.	<ol style="list-style-type: none"> 1. Replace cup seal.
Will not lower completely.	Air block. Unit requires lubrication.	<ol style="list-style-type: none"> 1. Release air from hydraulic pump by removing filler plug. 2. 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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