# 1 TONNE LONG REACH ENGINE CRANE WITH EXTENDABLE LEGS

MODEL NO: **SC10LR.V4**

**Thank you for purchasing a Sealey product. Manufactured to a high standard, this product will, if used according to these instructions, and properly maintained, give you years of trouble free performance.**

**IMPORTANT:** PLEASE READ THESE INSTRUCTIONS CAREFULLY. NOTE THE SAFE OPERATIONAL REQUIREMENTS, WARNINGS & CAUTIONS. USE THE PRODUCT CORRECTLY AND WITH CARE FOR THE PURPOSE FOR WHICH IT IS INTENDED. FAILURE TO DO SO MAY CAUSE DAMAGE AND/OR PERSONAL INJURY AND WILL INVALIDATE THE WARRANTY. KEEP THESE INSTRUCTIONS SAFE FOR FUTURE USE.


Refer to instructions


Wear protective gloves


Wear safety footwear

## 1. SAFETY

- ✓ The user shall work in accordance with the instruction handbook.
- ✓ Keep crane, lifting slings, support and beams in good working order and condition. Follow the inspection requirements as described in Section 6, Maintenance. Take immediate action to repair or replace damaged parts by contacting your supplier.
- ✓ Ensure that all accessory lifting devices are suitably certified. If crane is damaged, remove from service immediately.
- ✓ Ensure the surface on which the crane is used is level, firm and capable of supporting the weight of the crane with maximum load - we recommend concrete. Never use the crane on tarmacadam or other soft surfaces, as the crane may sink in.
- ✓ Keep children and unauthorised persons away from the working area.
- ✓ Keep working area clean and tidy, free from unrelated materials and ensure that there is adequate lighting.
- ✓ Only suitably qualified and experienced persons should attempt to perform maintenance on the unit.
- ✓ Ensure that load does not exceed the maximum lifting capacity of the crane. Overloading the crane is dangerous. Where appropriate, use only the lifting points recommended by the manufacturer of the item to be lifted, e.g. vehicle engine.
- ✓ Before lifting the load ensure that the crane jib is in the lowest practical position, that there are no obstacles which may snag the load whilst it is being lifted and that the area above the jib is clear.
- ✓ To avoid injury, be fully aware of your own and other persons locations in relation to the lifting, and lowering, of the load.
- ✓ Keep a sound footing and balance, and ensure the floor is not slippery, and wear non-slip footwear.
- ✓ Ensure jib extension locking pin and 'R' pin are in position before lifting.
- ✓ Ensure the centre of gravity always remains inside the crane base.
- × **DO NOT** harness the load at an angle or use any attachments not verified as fit for purpose.
- × **DO NOT** attempt to lift persons.
- × **DO NOT** allow the load to swing during lifting.
- × **DO NOT** allow the load to drop suddenly. Lower load with care, ensuring that you are fully aware of the condition of the surface onto which the load is to be placed.
- × **DO NOT** load crane beyond its rated capacity for each specified jib extension position as indicated in Section 3. The capacity of the crane reduces as the jib is extended.
- × **DO NOT** position any part of your body beneath the load.
- × **DO NOT** use the crane to move or transport a load other than for repositioning. The crane is a lifting device only.
- × **DO NOT** apply any sideways pressure to any part of the crane during lifting or when a load is suspended.
- × **DO NOT** attempt to adjust the safety valve, which has been set and sealed by the manufacturer.
- × **DO NOT** use this crane to perform a task for which it is not designed.
- × **DO NOT** use whilst under the influence of drugs, alcohol or intoxicating medication.
- × **DO NOT** climb on the crane.
- × **DO NOT** attempt to modify the crane as this may make it unsafe and will invalidate your warranty.
- × When not in use store in a safe, dry, childproof area.
- ✓ This crane is designed for lifting within a garage or workshop environment.
- ❑ **WARNING!** Failure to heed safety and warning instructions may result in damage and/or personal injury and will invalidate the warranty.
- ✓ It is necessary that the operator can watch the lifting device and the load during all movements.
- × It is not allowed to work under the raised load until it is secured by suitable means.
- ✓ The operator shall be provided with all necessary information about training and about pumping and translating forces.
- ✓ If more than 400N (41kg) of effort is required in lifting, the effort required per person will be lowered by an additional person helping.
- ✓ The owner and/or operator must be aware that repair of this equipment will require specialised knowledge and facilities. It is recommended that an annual examination of the workshop crane is made by an authorised service agent. Unauthorised parts may be dangerous and will invalidate the warranty.
- ✓ Take extra care when operating under extreme weather conditions i.e cold weather or heatwave.
- ✓ No modifications shall be carried out which adversely affect the compliance of the jack with this standard.
- ✓ In the event of oil spillage or a fire, refer to MSDS for guidance.

## 2. INTRODUCTION

Heavy-duty front and rear castors are on extendable legs to give improved stability, particularly when operating at maximum jib extension of 1447mm. Side pump for easy access and to maintain sight of the load being lifted. Removeable handle. Folding design for easy transportation and storing.

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## 3. SPECIFICATION

**Model: ..... SC10LR.V4**
Nett Weight: ..... 81.5kg
Standards: ..... EN 1494:2000+A1:2008

| | |
|---|---|
| Lifting Capacity in Position 1: | 1000kg |
| Lifting Capacity in Position 2: | 750kg |
| Lifting Capacity in Position 3: | 500kg |
| Lifting Capacity in Position 4: | 250kg |
| Height of jib down | 1446mm |
| Height of frame | 180mm |
| Length of jib Position 1: | 937mm |
| Length of jib Position 2: | 1107mm |
| Length of jib Position 3: | 1277mm |
| Length of jib Position 4: | 1447mm |
| Length: | 1450mm |
| Max. Lift Ht at jib Position 1: | 1750mm |
| Max. Lift Ht at jib Position 2: | 1850mm |
| Max. Lift Ht at jib Position 3: | 1950mm |
| Max. Lift Ht at jib Position 4: | 2050mm |
| Max Leg Length: | 1940mm |
| Min Leg Length: | 1555mm |
| Extended Leg Length | 1590mm |
| Extendable Distance: | 140mm |
| Standard Leg Length: | 1450mm |
| Rear Width | 860/1160mm |
| Width Front Frame: | 690-720mm |
| Width Inside Front Frame | 381-605mm |




For a description of in-service and out-of-service conditions see Section 1 Safety, Section 6 Maintenance.

**3.1.** The crane is fitted with a bypass valve that will prevent the ram from over extending.
**3.2.** For applications see Section 1 Safety.
**3.3.** For control system, see fig.1 and fig.2 for release valve, pump assembly and handle. Operation is explained in Section 5.
**3.4.** For ground condition requirements, see Section 1 Safety.
**3.5.** For information on parts and materials requiring specialised repair techniques see Section 6 Maintenance.

## 4. ASSEMBLY

**4.1.** **Refer to attached Parts List for numbers of components and their fixings.**
4.2. The crane must be installed and commissioned by qualified personnel. All relevant safety regulations must be strictly adhered to.
❑ **WARNING!** For safety and ease of assembly, use two people to assemble the crane.
**IMPORTANT! DO NOT TIGHTEN ANY BOLTS UNTIL YOU ARE FULLY FINISHED WITH ASSEMBLY. OTHERWISE PARTS WILL NOT LINE UP PROPERLY.**
4.3. Fit castors (23) to front (7) and rear (24) legs. Note: an additional pair of castors (23) (not supplied) can be fitted to the frame base (5) where the main post tube crosses the frame.
4.4. Slide the front legs (7) into front of the base (5).
4.5. Slide rear legs (24) into the base (5).
4.6. Use bolt (6) to secure legs (7) in position.
4.7. Attach main post (4) to the base. Do not tighten screw and leave a gap between the post and the base. This makes it easier to install the support braces (3) in the next step.
4.8. Attach the support braces (3) to the base and main post. Then tighten all the bolts.
4.9. Attach the boom (1) to the main post.
4.10. Attach the hydraulic ram (18) to the post and boom (1).
4.11. Attach the boom extension (2) to the boom (1).
4.12. Fit chain and hook assembly (17).
4.13. Tighten all bolts and nuts.
4.14. Push the assembled crane into the working position, ensure that all the wheels touch the floor.
4.15. Pull the jib up slightly, close the release valve (turn clockwise) and pump the handle. The jib should now raise. 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. Close the release valve. Only fill to lower edge of filler plug hole (see fig.2).
4.16. The crane is now ready for use. Ensure it is not damaged in any way. Should you experience any problems, contact your supplier immediately.
4.17. When transporting or moving the unit, be aware that it may unstable due to its configuration and centre of gravity. Ensure it is firmly held if being carried by fork lift truck or trolley jack.

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## 5. OPERATION

**5.1.** **OPERATION.** (Refer to Section 6.2 regarding inspection before each and every use).

❑ **WARNING!** Ensure that you read, understand and apply the safety instructions and warnings before use.

❑ **WARNING!** Ensure that you have familiarized yourself thoroughly with the product and the hazards associated with its improper use.

**5.2.** **RAISING THE CRANE**

5.3. Locate the hole on the Boom with a weight limit higher than the weight you will be lifting.
For example: Locate the 1 TONNE hole on the Boom for a load that is under one Tonne.

5.4. Adjust the Boom Extension so the hole furthest from the hook-end aligns with the chosen hole on the Boom.

5.5. Secure into place by inserting the Bolt through all aligned holes and fixing in place with the Washer and Nut.

5.6. Move the Crane so that the Hook and Chain is directly above the item to be lifted.

5.7. Securely attach the Hook and Chain to the item.

5.8. To raise the Boom, turn the Jack's release valve fully clockwise (right). Insert the Handle into the Jack and pump (up and down) repeatedly until the item has been lifted to the desired height.

5.9. Be 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. Use only the lifting points recommended by the vehicle manufacturer.

5.10. Lift only from directly above the load. **WARNING! DO NOT LIFT THE LOAD AT AN ANGLE!**

**5.11.** **LOWERING THE CRANE**

5.12. Grasp the handle firmly with both hands. Securely hold on to the long ram handle so your hands do not slip and ensure the release valve does not rapidly lower.

5.13. Carefully open the Release Valve by slowly turning the handle counterclockwise. (Do not allow bystanders around the crane or under the load when lowering the crane.
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.

5.14. When load has been secured, remove lifting sling, support beam etc. and place crane in a safe location with lifting beam fully lowered.

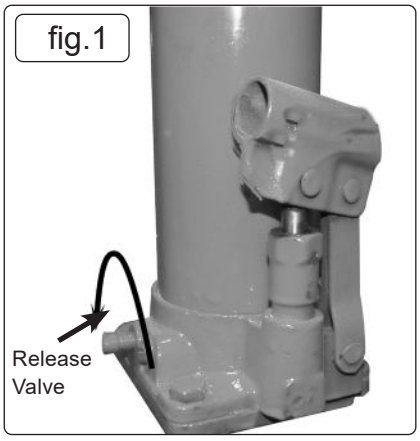
5.15. After removing crane from the load, lower to lowest resting position to reduce exposure to rust and contamination.

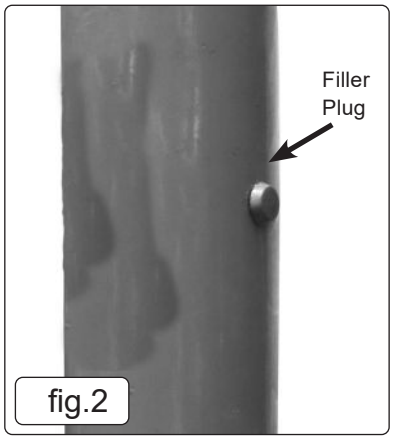
5.16. Ensure sufficient space is available around the working crane to enable free movement, ease of access and maintenance,

5.17. Perform risk assessment before using the crane in severe environmental conditions i.e. frost / heat.

5.18. **DO NOT** handle food if hands contaminated with oil.

## 6. MAINTENANCE/ INSPECTION







**NOTE:** The crane MUST be kept clean and dry and must be maintained in accordance with these instructions.
Cranes shall be maintained and repaired in accordance with the manufacturers instructions. Such maintenance and repair shall be carried out only by qualified persons.

**6.1.** **LUBRICATION**

a) Oil all working parts monthly.

b) The ram is filled with oil and should only require occasional topping up. **DO NOT** use brake fluid, as this will damage the hydraulic seals and invalidate the warranty. Proceed as follows (see fig.2):

1) Use only good quality hydraulic jack oil available from your Sealey stockist.

2) **DO NOT OVERFILL** as this will cause failure. Only fill to lower edge of filler plug hole.

3) After filling with hydraulic oil, pump the crane up to its full height and pour off any excess oil.

When refilling the hydraulic system, the characteristics of the hydraulic fluid used in the jack and the level of hydraulic fluid as it is given by the manufacturer shall be observed.

If there is any oil spillage refer to MSDS.

**6.2.** **INSPECTION AND EXAMINATION OF CRANE BEFORE USE**

a) Before each use of the crane, perform an inspection for leaks, damage, loose or missing parts.

b) The crane must be examined immediately if it has been subject to an abnormal load or shock. It is recommended that such an examination is made by an authorised service agent.

c) The owner and/or operator must be aware that repair of this equipment will require specialised knowledge and facilities.
It is recommended that an annual examination of the workshop crane is made by an authorised service agent.

d) Unauthorised parts may be dangerous and will invalidate the warranty.

e) Check the state of the marking and that the marking remains as the initial original marking.

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**6.3. DEFINITION OF 'INSPECTION' AND 'EXAMINATION' BELOW**

**INSPECTION:**

Inspect the crane for defects and check the operation of controls, limiting and indicating devices without loading the crane. This check but does not normally require any part of the crane to be dismantled other than removal or opening of covers or housings.

**EXAMINATION:**

Verification that the crane can continue safely in service including a functional test of all safety devices i.e. limiting, indicating equipment, brakes, clutches, safety valves etc. to verify that they operate within the required tolerances. An examination is more thorough than an inspection.

**6.4. DAMAGED CRANES**

Any crane which appears to be damaged, badly worn, or operates abnormally **MUST BE REMOVED FROM SERVICE!** Lower the boom and any load if fitted is lowered and made safe. It is recommended that necessary repairs be made by an authorised service agent.

**6.5. STORAGE**

Always store the crane fully closed so that the jib is in lowest position and the ram is closed. Store in dry, clean environment.

**6.6. DECOMMISSIONING**

Drain oil from ram into a suitable container and dispose of in a manner which is compatible with the environment and appropriate legislation.

## 7. TROUBLESHOOTING

| Fault | Cause | Remedy |
|---|---|---|
| Can't lift load | 1. Overload<br>2. Release valve not completely closed<br>3. Air in hydraulic system | 1. Remove partial overload<br>2. Check the release valve<br>3. Purge air |
| Cant lift to full height | 1. Oil low<br>2. Air in hydraulic system | 1. Add oil<br>2. Purge air |
| Oil leaking | 1. Seals failed<br>2. Loose screw parts | 1. Replace seals<br>2. Tighten the screw parts |

**ENVIRONMENT PROTECTION**

Recycle unwanted materials instead of disposing of them as waste. All tools, accessories and packaging should be sorted, taken to a recycling centre and disposed of in a manner which is compatible with the environment. When the product becomes completely unserviceable and requires disposal, drain any fluids (if applicable) into approved containers and dispose of the product and fluids according to local regulations.

REGISTER YOUR PURCHASE HERE

**Note**: It is our policy to continually improve products and as such we reserve the right to alter data, specifications and component parts without prior notice. Please note that other versions of this product are available. If you require documentation for alternative versions, please email or call our technical team on technical@sealey.co.uk or 01284 757505.

**Important**: No Liability is accepted for incorrect use of this product.

**Warranty**: Guarantee is 12 months from purchase date, proof of which is required for any claim.

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