

# 1TONNE LONG REACH ENGINE CRANE WITH EXTENDABLE LEGS

MODEL NO: SC10LR.V3

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

- ✓ 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.
- ✓ Ensure the crane legs and arms are locked before use.
- ✓ 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.
- 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.
- ✓ Ensure jib extension locking bolt and nut 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** 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 product 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
- ✓ When not in use fold the crane down and 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.

### 2. INTRODUCTION

Delivered in knock-down form for reduced freight cost. Heavy-duty front and rear castors are on extendible legs to give improved stability, particularly when operating at maximum jib extension of 1447mm. Side pump access with removable handle.

# 3. SPECIFICATION

Model No:	SC10LR.V3
Height of frame:	180mm
Height of Jib down	1446mm
Length Legs Extended:	1600mm
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

Lifting Capacity in Position 1:	1000kg
Lifting Capacity in Position 2:	750kg
Lifting Capacity in Position 3:	500kg
Lifting Capacity in Position 4:	250kg
Max. Lift Height at Jib Position 1:	1750mm
Max. Lift Height at Jib Position 2:	1850mm
Max. Lift Height at Jib Position 3:	1950mm
Max. Lift Height at Jib Position 4:	2050mm
Rear Width:	860/1160mm

Width Front Frame:	690-720mm
Width Inside Front Frame:	381/605mm

### 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 (5 & 7) in position.
- 4.7. Attach 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 supports (3) in the next step.
- 4.8. Attach the supports (3) to the base and post. Then tighten all the bolts.
- 4.9. Attach the boom (1) to the post.
- 4.10. Attach the pump (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.

#### 5. PREPARATION

- 5.1. Purge air from hydraulic system.
- 5.1.1. Manual operating system:
  - (a) Make sure that the boom in its lowest position (the piston of the pump is fully retracted into the cylinder).
  - (b) Turn release valve counterclockwise one full turn to the open position.
  - (c) Quickly pump handle 10-20 full strokes to eliminate any air in the hydraulic system.
  - (d) Turn release valve clockwise to the closed position.
- 5.1.2. Carefully and slowly pinch oil fill plug to release trapped air.
- 5.2. Check for proper pump action. It may be necessary to perform the above step (5.1.1 and 5.1.2) more than once to assume air is completely evacuated.

### 6. OPERATION

- □ 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.
- 6.1. RAISING THE CRANE
- 6.2. Locate the hole on the Boom with a weight limit higher than the weight you will be lifting.
  - \*\*For example: Locate the 1 TON hole on the Boom for a load that is under one Ton.
- 6.3. Adjust the Boom Extension so the hole furthest from the hook-end aligns with the chosen hole on the Boom.
- 6.4. Secure into place by inserting the Bolt through all aligned holes and tightening in place with the Washer and Nut.
- 6.5. Move the Crane so that the Hook and Chain is directly above the item to be lifted.
- 6.6. Securely attach the Hook and Chain to the item.
- 6.7. 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.
- 6.8. 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.
- 6.9. Lift only from directly above the load. WARNING! DO NOT LIFT THE LOAD AT AN ANGLE!

#### 6.10. LOWERING THE CRANE

- 6.11. 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.
- 6.12. 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.
- 6.13. When load has been secured, remove lifting sling, support beam etc. and place crane in a safe location with lifting beam fully lowered.
- 6.14. After removing crane from the load, lower to lowest resting position to reduce exposure to rust and contamination.

## 7. MAINTENANCE

- 7.1. Keep the crane clean and wipe off any oil or grease. Lubricate all moving parts.
- 7.2. When not in use, the boom must be stored in the lowest position to minimize ram and piston corrosion.
- 7.3. Before each use check all parts, ensure that all applicable bolts and nuts are firmly tightened. If any part of the crane is damaged or suspect, remove it from service and take necessary action to repair.
- 7.4. Periodically check the ram and piston for signs of corrosion. Clean exposed areas with a clean oiled cloth.
- 7.5. When crane efficiency drops, purge away air from the hydraulic system.

7.6. Check the hydraulic oil level. If not adequate, add hydraulic oil as necessary. **DO NOT** use brake fluid or any other improper fluid.

#### 7.7. NSPECTION 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 workshop 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.

# 7.8. 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 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 safely continue 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.

#### 7.9. DAMAGED CRANES.

Any crane which appears to be damaged, badly worn, or operates abnormally **MUST BE REMOVED FROM SERVICE!** It is recommended that necessary repairs be made by an authorised service agent.

#### 8. TROUBLESHOOTING

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



**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.

Sealey Group, Kempson Way, Suffolk Business Park, Bury St Edmunds, Suffolk. IP32 7AR 01284 757500 oscillation sales@sealey.co.uk oscillation www.sealey.co.uk