1 TONNE FOLDING ENGINE CRANE

MODEL NO: **SC10.V5**

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

Super economy model delivered in knock-down form for reduced freight cost. Fast folding model provides easy storage and transportation with heavy-duty castors. Weighs only 67kg and is perfect for mobile or workshop use. Side pump access with removable handle.

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3. SPECIFICATION

Model: SC10.V5
Nett Weight: 67kg

Height Jib Down:	1390mm
Height Legs Folded:	1440mm
Height of Frame:	185mm
Length Legs Extended:	1620mm
Length of Jib Position 1:	830mm
Length of Jib Position 2:	950mm
Length of Jib Position 3:	1070mm
Length of Jib Position 4:	1190mm
Length:	1620mm
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 Ht at Jib Position 1:	1820mm
Max. Lift Ht at Jib Position 2:	1935mm
Max. Lift Ht at Jib Position 3:	2030mm
Max. Lift Ht at Jib Position 4:	2150mm
Rear Width:	700mm
Width Front Frame:	920mm
Width Inside Front Frame:	780mm



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/STORAGE

4.1. ASSEMBLY Refer to attached Parts List. Leave fasteners loose until crane is fully assembled. Tighten fixings at end of assembly.

4.1.1. Unpack the product and check contents against the parts list included with these instructions.
Should there be any damaged or missing parts contact your supplier immediately. We recommend two people assemble the crane.

4.1.2. Lay out all the parts in the appropriate positions ready for assembly.

4.1.3. When assembling, ensure that you fit a plain washer, then a locking washer before fitting nuts on to bolts.

4.1.4. Assemble the crane main frame first, leaving the hydraulic ram assembly until last.

4.1.5. Connect the base of the ram assembly to the ram assembly mounting.

4.1.6. Raise the lift arm and carefully move it until the ram fits the arm bracket.
Engage the pin and secure with the fasteners provided.

4.1.7. Now tighten all the nuts and bolts on the main frame. Assemble and insert the legs and locate with the lock pins provided.

4.1.8. Before using crane place the pumping handle, fig.5, on the release valve, fig.4 and turn anti-clockwise.
With the handle inserted in the pump socket, pump 20 times through the full stroke, thus bleeding from the hydraulic system any air which may have entered during transit.

4.2. STORAGE

4.2.1. Always store the crane fully folded so that the jib is in lowest position and the ram is closed (fig.2).

4.2.2. To save space the legs may be folded into the upright position and secured in place using the lock pins (fig.2).



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5. OPERATION

Refer to Section 6.2 regarding inspection before each and every use

NOTE: ENSURE YOU HAVE READ AND UNDERSTOOD THE SAFETY INSTRUCTIONS AT THE BEGINNING OF THIS SECTION BEFORE YOU OPERATE THE CRANE.

5.2.1. TO RAISE: Use the pump handle recess, refer to fig.5 to tighten the release valve, refer to fig's 3 & 4, turning firmly clockwise.

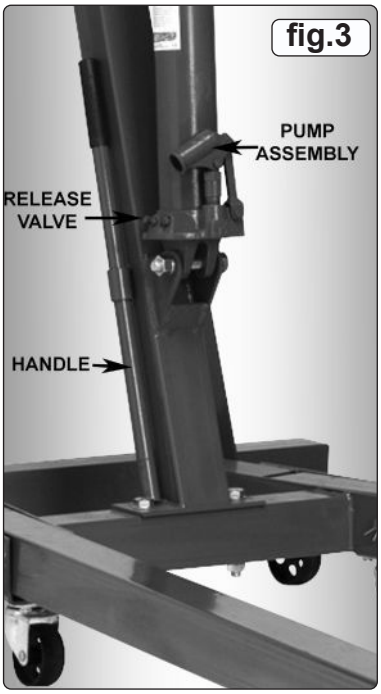
5.2.2. Place handle into pump socket, fig.3 and pump, the jib will raise. Continue to pump until the jib reaches the height at which the load can be secured.

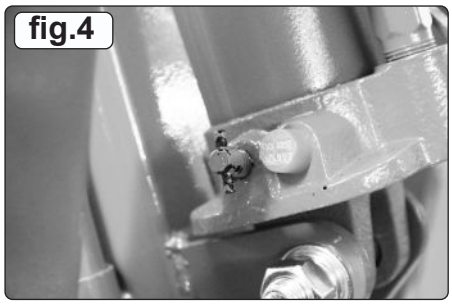
5.2.3. Connect the crane hook to the load using a suitable **certified** sling or support beam. Ensure you are aware of the load weight, and check that it is within the capacity of the crane (at the jib extension you are using) and the sling or support beam. When removing engines ensure you know the weight to be lifted. Use only the lifting points recommended by the vehicle manufacturer.

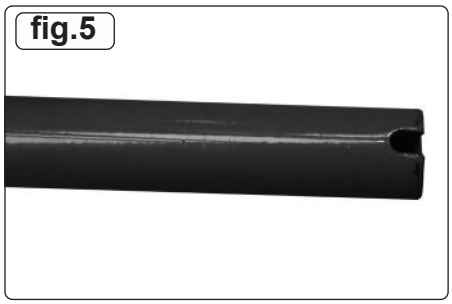
5.2.4. Lift only from directly above the load. ***DO NOT LIFT THE LOAD AT AN ANGLE!***

5.2.5. TO LOWER LOAD: position handle on release valve at base of ram, fig.4, and turn *anti-clockwise*. This crane has descent control.

5.2.6. 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. 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.6):
1) Use only good quality hydraulic jack oil available from your Sealey stockist.
2) Remove oil filler plug. **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.

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.

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7. TROUBLESHOOTING

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

8. END OF LIFE

8.1. Dismantle crane, (Assembly section in reverse order).
Drain oil from ram into a suitable container. Dispose of ram and oil in a manner which is compatible with according to local legislation.

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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