

# **1 TONNE VIKING ENGINE CRANE** MODEL NO. PFC101S

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.













Lower





Refer to instructions

Wear protective aloves

Wear safety footwear

Wear protective clothing





## 1. SAFETY

DO NOT stand under load

- Keep crane, lifting slings, support and beams in good working order and condition. Take immediate action to repair or replace damaged parts by contacting your supplier. Ensure that all accessory lifting devices are suitably certified.
- WARNING! 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  $\checkmark$ recommend concrete. Never use the crane on tarmacadam or other soft surfaces.
- Ensure the crane legs and arms are locked securely in position before use.
- Keep children and unauthorised persons away from the working area.
- Ensure the load is well balanced and its centre of gravity is within the working envelope of the crane (see Additional Specification).
- 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.
- 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.
- 1 Ensure jib extension is locked in position before lifting.
- Ensure the centre of gravity always remains inside the crane base.
- Ensure sufficient clearance of any obstructions is provided when using or performing inspection, maintenance and cleaning and that the area is well lit, clutter free and there are no trip or slip hazards.
- × 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 on the adhesive label. The capacity of x 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. ×
- x 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. x
- DO NOT climb on the crane.
- When not in use fold the crane down and store in a safe, dry, childproof area.
- 1 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.

#### INTRODUCTION 2.

The legs fold away for storage and transportation and extend parallel to fit around various obstructions like pallets, boxes, etc. Hand operated Dead Man's control to prevent accidental lowering. Manually controlled descent speed. The jib can be extended and locks in five positions between 960-1350mm. The hydraulic unit and handle rotates by 200° aiding use where space is limited. Strong nylon and fibreglass wheels front and rear. Rear castor wheels come with brakes. An additional wheel for ease of movement when folded, all are non floor marking.

#### 3. SPECIFICATION

Model No Lifting Capacity Position 1 Lifting Capacity Position 2 Lifting Capacity Position 3	1000kg 900kg 800kg
Lifting Capacity Position 4	
Lifting Capacity Position 5	
Max. Lift Ht. at Max. Jib Ext. Position 1	
Max. Lift Ht. at Max. Jib Ext. Position 2	
Max. Lift Ht. at Max. Jib Ext. Position 3	
Max. Lift Ht. at Max. Jib Ext. Position 4	2250mm
Max. Lift Ht. at Max. Jib Ext. Position 5	2300mm
Length of Jib Position 1	960mm
Length of Jib Position 2	1053mm
Length of Jib Position 3	1152mm
Length of Jib Position 4	1250mm
Length of Jib Position 5	
Height Jib Down	
Length	
Rear Width	
Width Inside Front Frame	1025mm
Width Front Frame	1129mm
Height Legs Folded	
Height of Frame	
Minimum Leg Length	

#### Additional Specification

Working envelope mm (W x D x H): 11 Nett Weight: 96kg

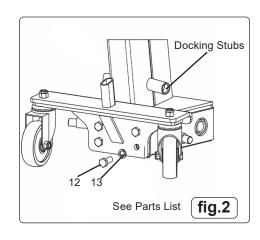
1160 x 1450 x 2300

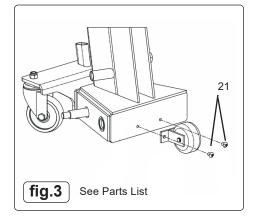
Key to Fig.1		
Item	Description	Parts List Item No.
1	Jib Assembly	Supplied Assembled
2	Ram Assembly	Supplied Assembled
3	Main Post Assembly	6
4	Rear Wheel Plate Assy.	10
5	Auxiliary Wheel	20
6	Front Leg Assy - left	16
7	Front Leg Assy - right	22
8	Axle	2
9	Leg Pin	15
10	Shaft Pin	8
11	Piston Rod Shaft	35

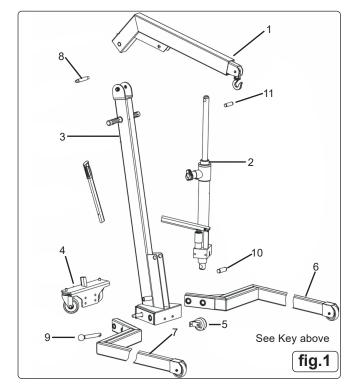
### 4. ASSEMBLY

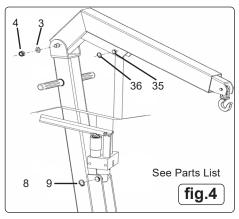
#### Refer to attached Parts list and fig.1

- **4.1.** It is essential to carry out the following assembly processes with the help of other people.
- **4.2.** Fix the rear wheel assembly (item 4) to the Main Post assy. (item 3) using the hex. head screw (see fig.2).
- **4.3.** Fix the auxiliary wheel assembly (item 5) to the Main Post assy (item 3) using the round head screws (see fig.3).







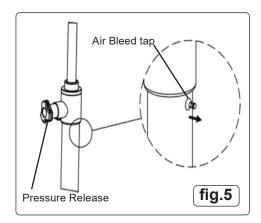


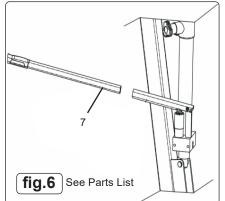
- **4.4.** Locate the parallel legs on either side of the frame base, insert the Front Leg Latch item 6 (see diagram page 2 of parts list) and fix in place using items 4, 5, and 7 (see diagram page 2 of parts list).
- **4.5.** Mount the jib assembly (fig.1 item 1) to the frame using shaft (fig.1 item 8) and fix in position using plain washer and hexagonal nuts and washers (fig.4 items 3 and 4).
- **4.6.** Locate the ram assembly (fig.1 item 2) in the frame using shaft pin (fig.1 item 10, fig.4 item 9). Lock the shaft in position using the circlips (fig.4 item 8 and 9).

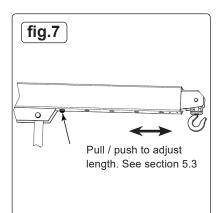
4.7. Locate the cylinder piston rod in the jib using the shaft (fig.1 item 11). Lock the shaft in position using the circlips (items 36 on parts list)

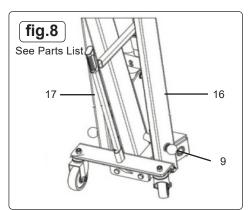
#### 5. OPERATION

- **5.1.** Prior to using the crane, the hydraulic circuit needs to be bled in order to eliminate any air from the system. Insert the operational handle (fig.6 item 7) into the manifold body (see fig. 6).
- **5.2.** To bleed the system, gently raise the air bleed tap (fig. 5) and operate the lever for several strokes. Push the air bleed tap back when the system has been bled of air.
- **5.3.** To adjust the hook location, depress the spring loaded button on the underside of the jib and slide the extendable arm to its required location ensuring that the button is fully located and that the arm is securely located (see fig. 7).
- 5.4. To lift the load, pump lever. If lifting an engine, secure it at the points recommended by the manufacturer.
- 5.5. To lower the load, turn the knob of the pressure release mechanism (fig. 5). This system enables the lowering to be regulated and controlled manually and precisely. The crane will stop the lowering process when the knob is released i.e. 'Deadman's Control'.
  5.6. When the crane is not in use the slide should be moved to its minimum length, and the piston of the hydraulic unit should be fully retracted.
- **5.7.** When storing the crane (fig. 8), lower the jib to its lowest point, remove the operating lever and the locking pins (fig.1, fig.6).
- 5.8. Rotate the legs to the vertical, align the pin holes with the docking stubs (fig. 2) and fully and securely insert the locking pins. Locate the operating handle into the docking stub on the rear wheel assembly (fig. 8).









#### 6. MAINTENANCE

- **6.1.** Ensure sufficient clearance of any obstructions is provided when performing inspection, maintenance and cleaning and that the area is well it, clutter free and there are no trip or slip hazards.
- **6.2.** The maintenance and repair of this crane may only be carried out by qualified and authorized personnel, who as a result of their training and experience are familiar with the hydraulic systems used in these devices.
- 6.3. The crane shall be inspected regularly by professional personnel to check the wear of casters, handles and hooks, check whether the seal is leaking, and whether the safety valve is normal, and confirm that all safety labels are intact, clear and easy to read.
- **6.4.** Every part of the crane should be checked daily for oil leakage, deformation, damage, etc.
- 6.5. It is necessary to lubricate the moving parts of the crane regularly.
  6.6. This product uses ISO 15#, ISO 22# hydraulic oil, or other hydraulic oil of the same grade; DO NOT use brake fluid! Oil volume is 0.75L.
- **6.7.** If oil level needs topping up, carefully remove the air bleed valve (fig. 5) and add oil through hole. Replace bleed valve after filling.
- **6.8.** Clean and lubricate the axes of the moving parts of the crane at regular intervals. The crane should be kept clean and protected from aggressive conditions at all times.
- **6.9.** Only original spare parts should be used.
- **6.10.** Withdraw the crane from service if it is suspected that it has been subjected to abnormal loads or has suffered any type of knock until the unit has been inspected and any problem has been resolved.
- **6.11.** When the crane is not in use, it should be fully retracted in the lowest position so as to minimize piston corrosion. It is recommended to apply an anti-corrosion product to the main piston and to the pump.

#### 7. TROUBLESHOOTING

PROBLEM	REMEDY
The crane cannot be lifted to the highest position.	Check hydraulic oil. See Section 6.6 and fig. 5.
Pumping the oil is not smooth (pumping air).	Check whether the air bleed valve is closed (see fig. 5)
Crane lowers under load (e.g. does not keep the pressure level)	Check whether the pressure relief handle is closed (see fig. 5).



#### **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.

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

Warranty: Guarantee is 24 months from purchase date, proof of which is required for any claim.

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Original Language Version