

# INSTRUCTIONS FOR: 1 TONNE LOW PROFILE ENGINE CRANE

MODEL No: PH10.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.







instruction manual

Wear protective footwear

Wear protective gloves

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# 2. GENERAL

# 2.1 Identification

Supplier: Sealey Power Products,

Kempson Way, Suffolk Business Park, Bury St Edmunds, Suffolk, IP32 7AR.

Model No: PH10.V4

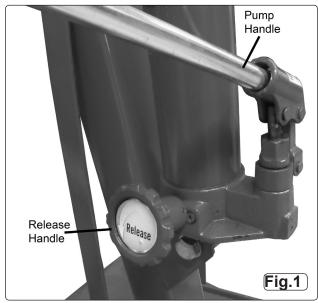
2.2 Technical Data
Rated Capacity

Safe Working Load (SWL) 1tonne (tested to 50% overload).

Lifting Cap. in Position 1:	1000ka
Lifting Cap. in Position 2:	_
Lifting Cap. in Position 3:	0
Lifting Cap. in Position 4:	_
• .	76ka

- a) Design Capability: Test Load 50% overload.
- For a description of in-service and out-of-service conditions see section 3 Safety, Section 6 Maintenance and Section 7.
- The crane is fitted with a bypass valve that will prevent the ram from over extending.
- d) For applications see Section 3 Safety.
- e) For control system, see Fig.1 for release valve and pump handle assy. Usage is explained in Section 5 Operation.
- f) For ground condition requirements, see Section 3 Safety.
- g) For information on parts and materials requiring specialised repair techniques see Section 6 Maintenance.





# 3. SAFETY

### 3.1 SAFETY

- ✓ Keep crane, lifting slings, support and beams in good working order and condition. Follow the inspection requirements as described in Section 6 page 3 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 and that the adjustable rods are screwed down to the floor.
- ✓ 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.
- X DO NOT harness the load at an angle or use any attachments not verified as fit for purpose.
- X DO NOT allow the load to swing during lifting.
- X 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.
- **X DO NOT** load crane beyond its rated capacity for each specified jib extension position as indicated in Section 2 page 1. The capacity of the crane reduces as the jib is extended.
- **X DO NOT** position any part of your body beneath the load.
- X DO NOT use the crane to move or transport a load other than for repositioning (see 5.1.f). 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.
- X DO NOT attempt to adjust the safety valve, which has been set and sealed by the manufacturer.
- X DO NOT use this product to perform a task for which it is not designed.
- **X 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.
- ✓ 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.



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

# 4. ASSEMBLY

# 4.1 Assembly (Refer to attached Parts Diagram Pages 5 & 6)

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

- a) Attach the two rear swivel wheels (15) to the base (1) using bolts (19), washers (20) and nuts (21). Then screw adjustable rods (10) into base.
- b) Attach the two front legs (3) to the base (1). Their bolts pass (23) pass through the support brace (9), through the leg, then through the support straps (7), fix with nuts (27). Use the locating pins (8) to secure the leg in the horizontal position.
- c) Attach the front wheels (13) to the front of the legs using bolts (34), spring washer (35), front wheel washer (16) and front wheel sleeve (14)and nut (18).
- d) Attach upright (2) to base (1) using bolts (24). Secure support straps (7) to upright using bolt (32) and nut (27) and washer (26).
- e) Fit handle (17) using bolts (22) and washers (20).
- f) Attach boom and cover (4) using bolt (36), washer (29) and nut (30). Fit boom extension (5) using locating pin (8). Fit hook (12) using bolt (33), washers (26) and (28) and nut (27).
- g) Fit the hydraulic ram unit (6), fix the bottom first using bolt (25), flat washer (29) and nut (30). Fix the top of the ram using bolt (31), washer (29) and nut (30).
- h) **Bleed the hydraulic system:** Place the pump handle into the pump socket, ensure release handwheel is in the open position and pump the handle 10-15 times through the full stroke, thus bleeding from the hydraulic system any air which may have entered during transit

# 5. OPERATION

- 5.1 OPERATION. (Refer to Section 6.2 (a) regarding inspection before each and every use).
- a) Ensure handwheel is in the raise (fully clockwise position).
- b) Place handle into pump socket and pump, the jib will raise. Continue to pump until the jib reaches the height at which the load can be secured.
- c) 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.
- d) Lift only from directly above the load. WARNING! DO NOT LIFT THE LOAD AT AN ANGLE!
- e) To lower load, turn release handwheel VERY SLOWLY anti-clockwise avoiding any sudden movement.

  WARNING! Do not allow the load to drop suddenly.
- f) 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.
- g) When load has been secured, remove lifting sling, support beam etc. and place crane in a safe location with lifting beam fully lowered.

# 6. MAINTENANCE / EXAMINATION / INSPECTION

NOTE: The crane MUST be kept clean and dry and must be maintained in accordance with these instructions.

#### 6.1. Lubrication.

- Oil all working parts monthly. a)
- The ram is filled with oil and should only require occasional topping up. For the occasional top up DO NOT use brake fluid, as this will b) damage the hydraulic seals. Proceed as follows:
  - 1) Use only good quality hydraulic jack oil available from your supplier.
  - 2) DO NOT OVERFILL as this will cause failure, with ram in lowered position remove rubber bung located on the ram and top up to just below the filling hole. Replace rubber bung.
  - 3) After filling with hydraulic oil, pump the crane up to full height and pour off any excess oil.

#### Inspection and Examination of Crane Before Use. 6.2.

- Before each use of the crane you must perform an inspection for leaks, damage, loose or missing parts. a)
- The workshop crane must be examined immediately if it has been subject to an abnormal load or shock. It is recommended b) that such an examination is made by an authorised service agent.
- The owner and/or operator must be aware that repair of this equipment will require specialised knowledge and facilities. c) 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.

# Note! Please see the Definition of 'inspection' and 'examination' below.

## Inspection:

Looking at the crane for defects and checking the operation of the controls, limiting and indicating devices without loading the crane. This is much more than a 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 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.

# 6.3

- Always store the crane fully closed so that the jib is in lowest position and the ram is closed. a)
- To save space the legs may be folded into the upright position and secured in place using the Lock Pins. b)

# 7. OWNER'S & OPERATOR'S RESPONSIBILITIES

The owner and/or operator shall study these instructions and retain them for future use.

# Understanding instructions and warnings.

The owner and/or operator shall understand the operating instructions and warnings before operating the crane. Warning information must be emphasised and understood.

If the operator is not fluent in English, the product instructions and warnings must be read to, and discussed with, the operator in the operator's native language by the owner, making sure the operator understands the contents.

# b)

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.

#### c) End of service.

Through years of normal wear, the crane will eventually become unserviceable. When this happens ensure the hydraulic oil is drained off and disposed of in accordance with local authority regulations.

# **Environmental 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 off any fluids (if applicable) into approved containers and dispose of the product and the 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. CE

WARRANTY: Guarantee is 12 months from purchase date, proof of which will be required for any claim.



Sole UK Distributor, Sealey Group. Kempson Way, Suffolk Business Park, Bury St. Edmunds, Suffolk, IP32 7AR



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# **EC DECLARATION OF CONFORMITY**

We the sole importers into the UK, hereby declare that the equipment described below Description and Function: Folding Engine Crane 1tonne PH10.V4 Model/Type: ..... Manufacturing Date / Serial number (optional): Manufacturer's authorised representative within the EC: Jack Sealey Ltd. Kempson Way, Suffolk Business Park, Bury St. Edmunds, Suffolk, IP32 7AR Conforms to the requirements of the following Directives, as indicated. 2000/14/EC Outdoor Noise Emissions Directive ▼ 2006/42/EC Machinery Directive 2006/95/EC Low Voltage Directive 2002/96/EC WEEE Directive 2004/108/EC EMC Directive 2011/65/EU RoHS Directive ■ 93/68/EEC CE Marking Directive 97/23/EC Pressure Equipment Directive 2009/105/EC the Simple Pressure Vessels Directive And the following harmonised standard(s) BS EN ISO 12100:2010 BS EN 13001-1:2004+A1:2009 BS EN ISO 12100-2:2003+A1:2009 Additional technical standards and specifications (if applicable): Technical file compiled by: Jack Sealey Ltd. Signed:.... Date: 03-Dec-2012 Place: Bury St.Edmunds. Mark Sweetman Name:.... Position: Managing Director

Being the responsible person appointed by the manufacturer.

Sealey Power Products, Kempson Way, Suffolk Business Park, Bury St. Edmunds, Suffolk, IP32 7AR





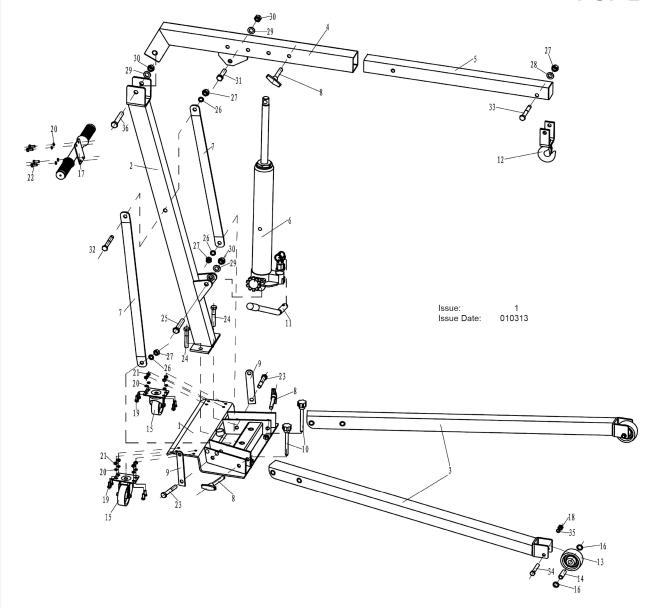




PARTS FOR:

1 TONNE LOW PROFILE ENGINE CRANE MODEL: PH10.V4

1 OF 2



ITEM	PART NO	DESCRIPTION	ITEM	PART NO	DESCRIPTION	ITEM	PART NO	DESCRIPTION
1	PH10.V4-01	FRAME BASE	13	PH10.V4-13	FRONT WHEEL	25	PH10.V4-25	BOLT M16 X 90
2	PH10.V4-02	UPRIGHT	14	PH10.V4-14	FRONT WHEEL SLEEVE	26	PH10.V4-26	SPRING WASHER 14mm
3	PH10.V4-03	LEFT & RIGHT LEG	15	PH10.V4-15	3-1/2"SWIVEL WHEEL	27	PH10.V4-27	NUT M14
4	PH10.V4-04	BOOM + COVER	16	PH10.V4-16	FRONT WHEEL WASHER	28	PH10.V4-28	FLAT WASHER
5	PH10.V4-05	BOOM EXTENSION + COVER	17	PH10.V4-17	HANDLE	29	PH10.V4-29	FLAT WASHER
6	PH10.V4-06	HYD. RAM	18	PH10.V4-18	NUT M12	30	PH10.V4-30	NUT M16
7	PH10.V4-07	SUPPORT STRAP	19	PH10.V4-19	BOLT M8 X 20	31	PH10.V4-31	BOLT M16 X 75
8	PH10.V4-08	LOCATING PIN	20	PH10.V4-20	WASHER 8mm	32	PH10.V4-32	BOLT M14X100
9	PH10.V4-09	SUPPORT BRACE	21	PH10.V4-21	NUT M8	33	PH10.V4-33	BOLT M14X90
10	PH10.V4-10	ADJUSTABLE ROD ASSEMBLY	22	PH10.V4-22	BOLT M8X12	34	PH10.V4-34	BOLT M12X80
11	PH10.V4-11	HANDLE ASSEMBLY	23	PH10.V4-23	BOLT M14X110	35	PH10.V4-35	SPRING WASHER
12	PH10.V4-12	HOOK ASSEMBLY	24	PH10.V4-24	BOLT M14 X 80	36	PH10.V4-36	BOLT M16X110

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INFORMATION: For a copy of our latest catalogue and promotions call us on 01284 757525 and leave your full name and address, including postcode.



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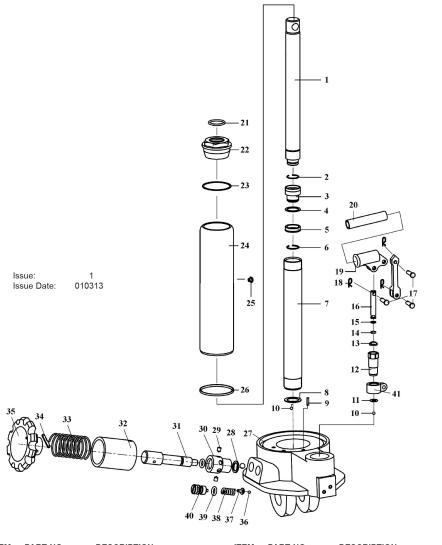
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# PARTS FOR:

# 1 TONNE LOW PROFILE ENGINE CRANE MODEL: PH10.V4

2 OF 2



ITEM	PART NO	DESCRIPTION	ITEM	PART NO	DESCRIPTION
1	PH10.V4-P01	PISTON ROD	22	PH10.V4-P22	TOP CUP
2	PH10.V4-P02	STEEL WIRE WASHER	23	PH10.V4-P23	RECTANGLE RING
3	PH10.V4-P03	PLUNGER	24	PH10.V4-P24	RESERVOIR
4	PH10.V4-P04	BOOM EXT. COVER	25	PH10.V4-P25	OIL FILLING
5	PH10.V4-P05	Y-RING	26	PH10.V4-P26	GUIDE RING
6	PH10.V4-P06	STEEL WIRE WASHER	27	PH10.V4-P27	BASE
7	PH10.V4-P07	CYLINDER	28	PH10.V4-P28	NYLON WASHER
8	PH10.V4-P08	STEEL WASHER	29	PH10.V4-P29	HEX BOLT M6X10
9	PH10.V4-P09	FILTER OIL TUBE	30	PH10.V4-P30	NUT M16
10	PH10.V4-P10	STEEL BALL 6.0mm	31	PH10.V4-P31	RELEASE VALVE
11	PH10.V4-P11	WASHER	32	PH10.V4-P32	BOLT M14X100
12	PH10.V4-P12	PUMP CYLINDER	33	PH10.V4-P33	TORSION SPRING
13	PH10.V4-P13	J-RING	34	PH10.V4-P34	SPRING COLUMN PIN
14	PH10.V4-P14	O-RING	35	PH10.V4-P35	HANDWHEEL
15	PH10.V4-P15	PISTON ROD	36	PH10.V4-P36	STEEL BALL 3.0
16	PH10.V4-P16	PUMP PLUNGER	37	PH10.V4-P37	SPRING BASE
17	PH10.V4-P17	PIN	38	PH10.V4-P38	SAFETY VALVE SPRING
18	PH10.V4-P18	TORSION SPRING PIN	39	PH10.V4-P39	O-RING
19	PH10.V4-P19	HANDLE SOCKET	40	PH10.V4-P40	PLUG SCREW
20	PH10.V4-P20	HANDLE	41	PH10.V4-P41	HANDLE SOCKET BASE
21	PH10.V4-P21	O-RING			

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