

# EC2000 ENGINE CRANE

OWNER'S MANUAL

2 TONNE MAX CAPACITY



FOR YOUR SAFETY  
PLEASE READ THESE INSTRUCTIONS CAREFULLY  
AND RETAIN THEM FOR FUTURE USE.



## WARNING

Do not overload. Overloading could cause damage or failure of the crane. Never exceed the safe working loads indicated on the jib.

Never use the crane on an uneven floor surface as this could result in the crane tipping over.

Always lock the legs and jib in position before lifting a load.

The nuts and bolts supplied with the crane are all high strength and should not be substituted for inferior types. Before each use ensure that all nuts and bolts are correctly fitted and tight.

**WARNING:** This double pump long ram is designed for lifting purposes only – not for supporting loads. Do not load beyond its rated capacity.

**IMPORTANT:** It is possible that air has got into the hydraulic system causing poor lifting performance. Purge any air from the system by fully opening the release valve (turn handle counter-clockwise) then while holding the boom down operate the pump handle rapidly several times.

**Note:** Before raising the legs to the storage position bolts must be inserted into the base support and tightened each time. If this procedure is not followed the unit may fall over.

## MAINTENANCE

**IMPORTANT:** When adding or replacing oil always use high grade hydraulic jack oil. Avoid mixing different grades/types of oil. Do not use brake fluid, alcohol, glycerine, detergent motor oil or dirty oil. Improper fluid can cause serious internal damage to the ram.

When adding oil be very careful not to permit dirt or foreign matter to enter the system. Check ram and plunger every 3 months for any signs of rust or corrosion. Clean as needed and wipe with an oily cloth.

When not using the ram always leave the jib in the fully lowered position.

## OPERATING INSTRUCTIONS

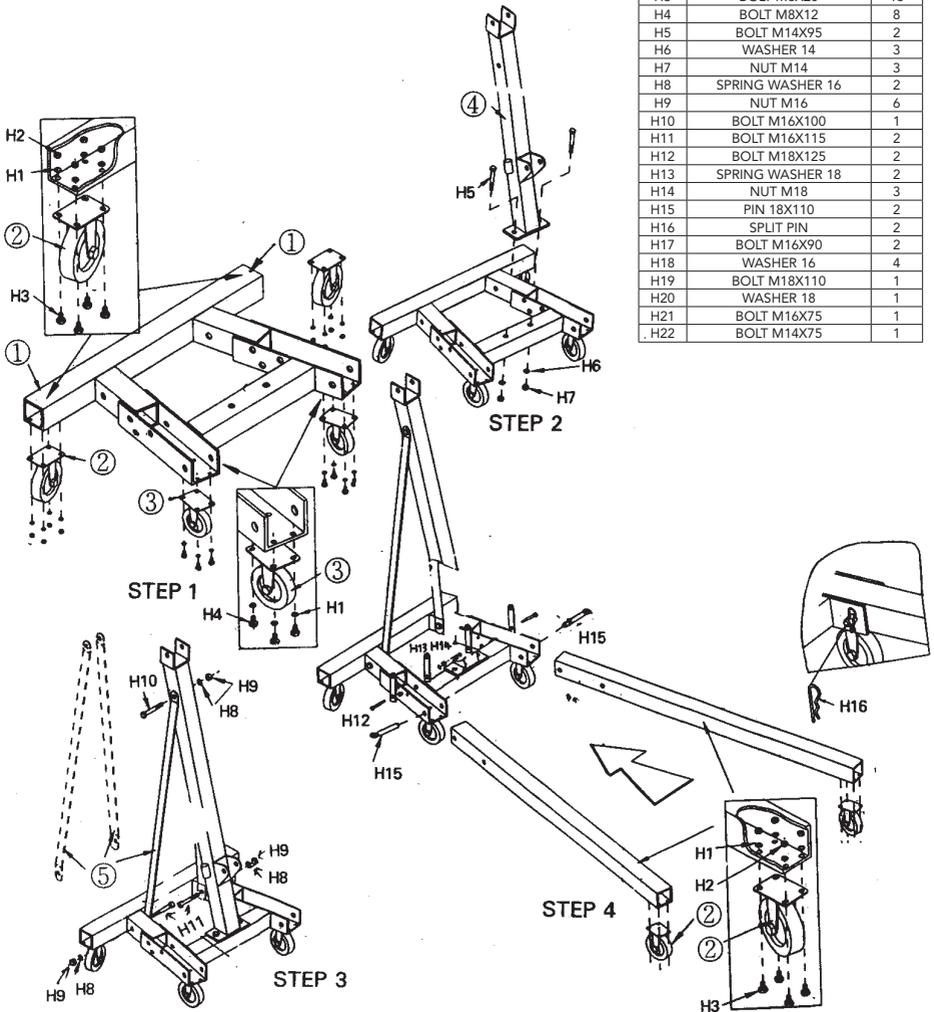
**TO RAISE LOAD:** Close release valve by turning handle clockwise to a snug-tight position. Do not over-tighten.

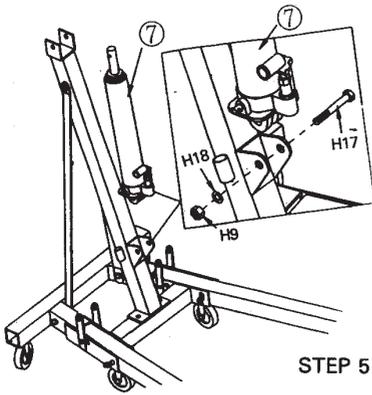
**TO LOWER LOAD:** Open release valve by turning handle counter-clockwise very slowly. The speed of the lowering is controlled by how much the handle is turned.

## TROUBLE SHOOTING

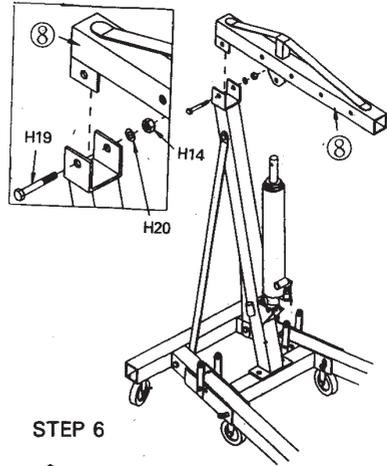
TROUBLE	PROBABLE CAUSE	REMEDY
Will not hold load.	Dirt on valve seats.	<ol style="list-style-type: none"><li>1. Lower lifting boom. Close the release valve and remove oil filler plug.</li><li>2. Place one foot on the leg and pull up the lifting boom to its full height by hand.</li><li>3. Open the release valve to lower the lifting boom.</li><li>4. Replace worn seals.</li></ol>
Will not lift load. Will not lift to its full height. Pump feels unsteady under load. Pump will not lower completely.	Air block.	<ol style="list-style-type: none"><li>1. Open the release valve and remove oil filler plug.</li><li>2. Pump handle a couple of full strokes and close the release valve.</li></ol>
Pump will not lift to its full height. Pump feels unsteady under load.	The reservoir could be over-filled. Low hydraulic oil level.	Check the oil level. Remove the filler plug. Top up oil to correct level.
Pump feels unsteady under load.	The cup seal could be worn out.	Replace cup seal.
Will not lower completely.	Air block. Unit requires lubrication.	Release air from the hydraulic pump by removing filler plug. Oil external moving parts.

ITEM	DESCRIPTION	QTY
H1	SPRING WASHER 8	24
H2	NUT M8	16
H3	BOLT M8X20	16
H4	BOLT M8X12	8
H5	BOLT M14X95	2
H6	WASHER 14	3
H7	NUT M14	3
H8	SPRING WASHER 16	2
H9	NUT M16	6
H10	BOLT M16X100	1
H11	BOLT M16X115	2
H12	BOLT M18X125	2
H13	SPRING WASHER 18	2
H14	NUT M18	3
H15	PIN 18X110	2
H16	SPLIT PIN	2
H17	BOLT M16X90	2
H18	WASHER 16	4
H19	BOLT M18X110	1
H20	WASHER 18	1
H21	BOLT M16X75	1
H22	BOLT M14X75	1

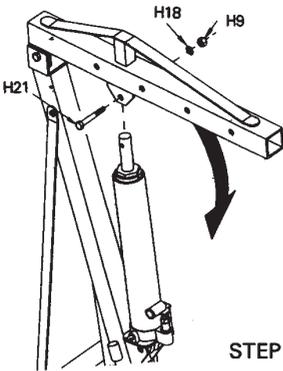




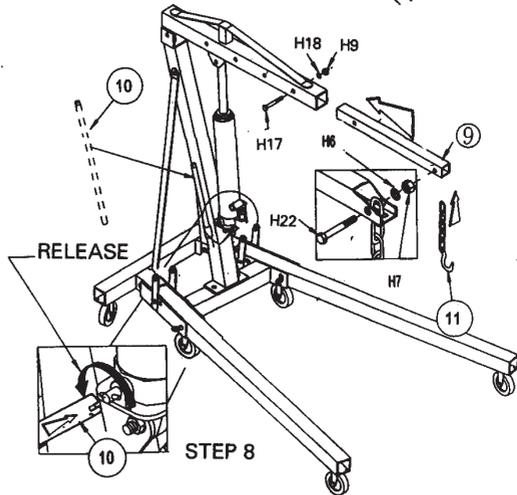
STEP 5



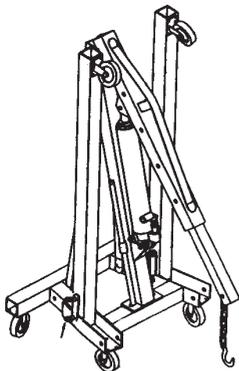
STEP 6



STEP 7



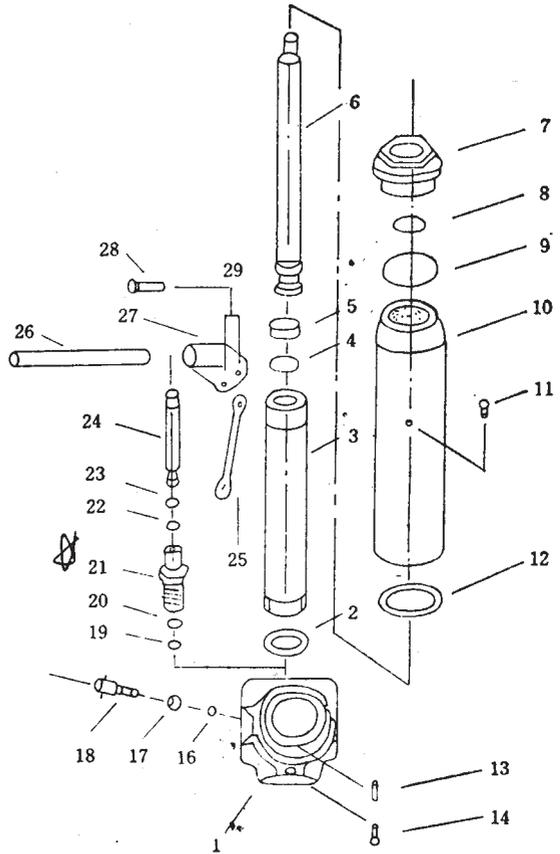
STEP 8



STEP 9

ITEM	DESCRIPTION	QTY
1	BASE	1
2	LARGE CASTER	4
3	SMALL CASTER	2
4	POST	1
5	SUPPORT	2
6	LEG	2
7	JACK	1
8	BOOM	1
9	EXTENSION	1
10	JACK HANDLE	1
11	CHAIN/HOOK	1

ITEM	DESCRIPTION	QTY
1	VALVE BLOCK	1
2	COPPER WASHER	1
3	CYLINDER	1
4	O-RING	1
5	O-RING RETAINER	1
6	RAM	1
7	TOP NUT	1
8	O-RING	1
9	SEALING GASKET	1
10	OIL TANK	1
11	OIL PLUG	1
12	SEAL RING	1
13	TUBE	1
14	BOLT	1
15	SCREW	2
16	BALL	1
17	SEAL RING	1
18	RELEASE SPINDLE	1
19	BALL	1
20	COPPER WASHER	1
21	PUMP CYLINDER	1
22	O-RING	1
23	BACK UP RING	1
24	PLUNGER	1
25	PUMP LINK	1
26	HANDLE	1
27	HANDLE SOCKET	1
28	SHAFT	2
29	COTTER PIN	2



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SGS Engineering (UK) Ltd  
West Side Park  
Raynesway  
Derby, DE21 7AZ

## EC Declaration of Conformity

This is an important document and should be retained

MANUFACTURER'S NAME: SGS Engineering (UK) Ltd

TYPE OF EQUIPMENT: Engine Crane

PART NUMBER: EC2000

APPLICATION OF EC COUNCIL DIRECTIVES / STANDARD:

EN 1494:2000+A1:2008 Mobile or movable jacks and associated lifting equipment

EN ISO 12100:2010 Risk assessment & risk reduction

EN ISO 13857:2008 Safety distances & hazard zone

EN 349:1993+A1:2008 Minimum safety gaps

2006/42/EC Machinery Directive (MD)

I, the undersigned, hereby declare that the equipment specified above conforms to the above European Communities Directive(s) and Standard(s).

PLACE: Derby, UK

DATE: 24th JUNE 2017

A handwritten signature in black ink, appearing to read 'Robert Wyatt', written over a horizontal line.

(Signature)

Robert Wyatt

Company Secretary