

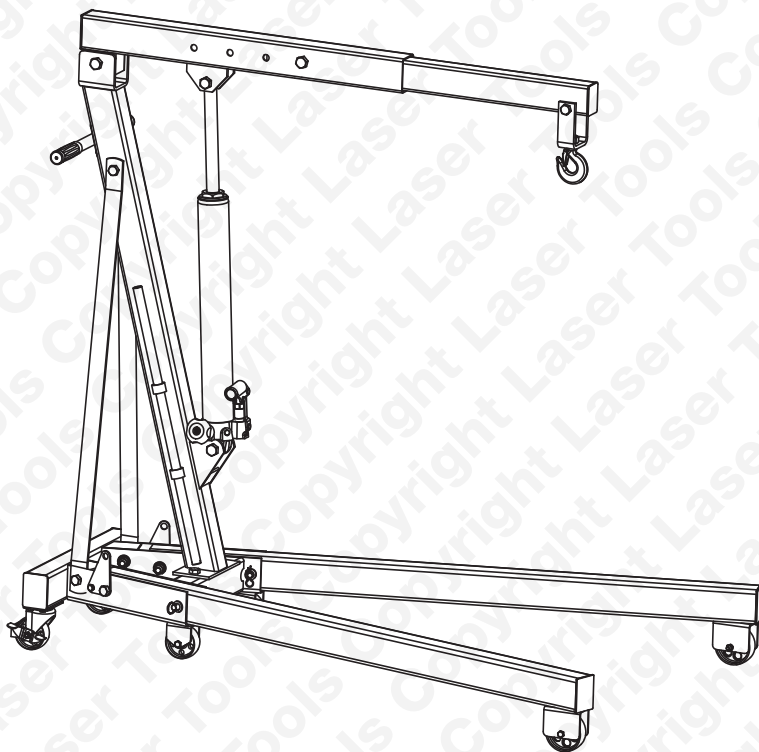
LASER[®]

Part No. 8337

Engine Crane

1 Tonne

Instructions



⚠ WARNING!

Read carefully and understand all ASSEMBLY AND OPERATION INSTRUCTIONS before operating. Failure to follow the safety rules and other basic safety precautions may result in serious personal injury.

www.lasertools.co.uk

Introduction

A fully adjustable, heavy duty, folding engine crane, manufactured to the latest CE, UKCA & TUV standards, for additional safety in the workshop. Adjustable for lifting loads up to 1 tonne (max. capacity), with a multi-position lifting arm, which features a swivel hook with full 360° rotation. Suitable for lifting engines, transmissions, and EV batteries (when used in conjunction with a suitable EV battery lifting frame, such as Laser Part No. 8338).

- Multi-position adjustable lifting arm, lifting range: 160mm - 2040mm.
- Lifting hook with 360° rotation & U-shaped swivel bracket.
- Covered fixed wheels for safety, swivel castors on rear (one with brake function).
- Dimensions: 1515 x 1050 x 1445mm; weight: 67kg. Folds away for easy storage.
- Manufactured from rectangular section heavy duty steel for added strength & fully welded hydraulic cylinder to reduce potential leakage.
- CE & UKCA compliant.

Warnings & Precautions

Read carefully and understand all assembly and operation instructions before using the crane. Always follow safety precautions when installing and operating this equipment.

- Read, understand and follow all instructions before operating this device.
- Do not exceed rated capacity.
- Use only on hard, level surfaces, with less than 3 degrees of slope.
- Before moving, lower the load to the lowest possible point.
- Use only slings or chains with a rated capacity greater than the weight of the load being lifted.
- Do not allow load to swing or drop violently while lowering or moving.
- Centre load prior to lifting.
- No alterations shall be made to this product.
- Make sure that boom is fully lowered before adding oil to unit reservoir.
- Never use on a lawn mower or lawn tractor.
- Do not rock the vehicle while working on or around equipment.
- Equipment is designed for lifting only, do not move or dolly crane when in use.
- Do not use this crane for any use other than the manufacturer specified usage.
- Failure to heed these warnings may result in personal injury and/or property damage.

Specification

- Capacity: 1 tonne
- Min. Height: 160mm
- Max. Height: 2040mm
- Net Weight: 64.5kg

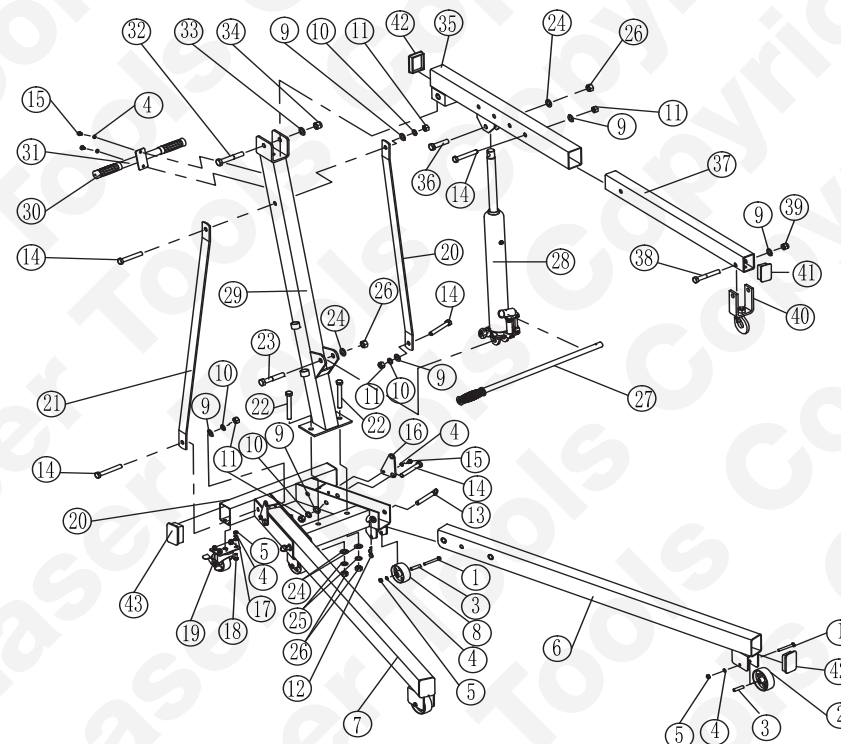
Inspection

- Inspect the equipment carefully before each use.
- Ensure the equipment is not damaged, excessively worn, or missing parts.
- Do not use the equipment unless it is properly lubricated.
- Using equipment that is not in good clean working condition or properly lubricated may cause serious injury.
- Inspect the work area before each use. Make sure it is free and clear of any potential hazards. **DO NOT OPERATE OR REPAIR THIS EQUIPMENT WITHOUT READING THIS MANUAL.**
- To maintain the equipment and user safety, the responsibility of the owner is to read and follow these instructions.
- Inspect the equipment for proper operation and function.
- Keep instructions readily available for equipment operators.
- Make certain all equipment operators are properly trained; understand how to safely and correctly operate the unit.
- Allow unit operation only with all parts in place and operating properly.
- Use only genuine replacement parts.
- Service and maintain the unit only with authorised or approved replacement parts; negligence will make the equipment unsafe for use and void the warranty.
- Carefully inspect the unit on a regular basis and perform all maintenance as required.
- Store these instructions in the handle of your equipment.
- Keep all decals on the unit clean and visible.

Assembly Instructions

1. Fasten the two larger rear caster wheels (**No.19**) on the base structure with bolts (**No.18**), washers (**No.17**), spring washers (**No.4**) and nuts (**No.5**). Fit the bolts from underneath with bolts heads facing down.
2. Fasten the smaller two caster wheels (**No.8**) on the base structure with bolts (**No.1**), bush (**No.3**), spring washers (**No.4**) and nuts (**No.5**).
3. Fasten the remaining larger two caster wheels (**No.2**) on the front legs (**Nos.6 & 7**) with bolts (**No.1**), bush (**No.3**), spring washers (**No.4**) and nuts (**No.5**).
4. Slide the legs (**Nos.6 & 7**) into front of the base (**No.20**).
5. Fasten the guide plates (**No.16**), to the base (**No.20**) and front legs (**Nos.6 & 7**) with bolts (**No.15 & 14**), washers (**No.9**), spring washers (**No.4 & 10**) and nuts (**No.11**). Lift one side of the base to align the hole on the frame to the hole on each front leg (**Nos.6 & 7**), then insert the ring pins (**No.13**) into the hole and insert the cotter-pin (**No.12**) into the hole of the ring pins.
6. Use bolts (**No.15**) and spring washers (**No.4**) to fasten the handle (**No.31**) to the post (**No.29**).
7. Use two bolts (**No.22**), washers (**No.24**), spring washers (**No.25**) and nuts (**No.26**) to connect the bottom of the post (**No.29**) to the base frame (**No.20**).
8. Use two bolts (**No.24**), washers (**No.9**) spring washers (**No.10**) and nuts (**No.11**) to connect the lower ends of the supports (**No.21**) to the inside of the base (**No.20**). Then use bolt (**No.14**), washer (**No.9**), spring washers (**No.10**) and nut (**No.11**) to connect the top ends of the support to the post (**No.29**). Check to make sure the nuts were tightened, and tighten the nuts in step 6.
9. Use bolt (**No.32**), washer (**No.33**) and nut (**No.34**) to attach the boom (**No.35**) to the top of the post (**No.29**), tighten nut (**No.34**) so that the boom (**No.35**) can rotate freely, do not over tighten boom needs to be able to rotate freely. Use bolt (**No.23**), washer (**No.24**) and nut (**No.26**) to fasten the lower end of the long ram (**No.28**) to the post (**No.29**). Then use bolt (**No.36**), washer (**No.24**) and nut (**No.26**) to fasten the top of the long ram to the boom (**No.35**).
10. Slide the boom extension (**No.37**) into the boom (**No.35**) and use bolt (**No.14**), washer (**No.9**) and nut (**No.11**) to secure at the desired load rating. Use bolt (**No.38**), washer (**No.9**) and nut (**No.39**) to attach the hook and chain (**No.40**) to the end of the boom extension. The boom has four different load ratings - select desired rating before use.

Assembly



Ref.	Description	Quantity
1	Bolt M8 x 65 (8.8)	4
2	Front Wheel	2
3	Bushing	4
4	Spring Washer 8	16
5	Nut M8	12
6	Left Leg	1
7	Right Leg	1
8	Caster for centre	2
9	Washer 14	7
10	Spring Washer 14	5
11	Nut M14	6
12	R-Pin	2
13	Ring Pin	2
14	Bolt M14 x 95	6
15	Bolt M8 x 10	4
16	Dead Plate	2
17	Washer 8	8
18	Bolt M8 x 20	8
19	Caster 3" for centre	2
20	Base Assembly	1
21	Support	2
22	Bolt M16 x 110	2
23	Bolt M16 x 90	1

Ref.	Description	Quantity
24	Washer 16	4
25	Spring Washer 16	2
26	Nut M16	4
27	Jack Handle	1
28	Jack	1
29	Post	1
30	Handle Cover	2
31	Handle	1
32	Bolt M16 x 110	1
33	Spring Washer 18	1
34	Nut M18	1
35	Boom	1
36	Bolt M16 x 80	1
37	Boom Extension	1
38	Bolt M14 x 100 (8.8)	1
39	Nut M14	1
40	Hook and Chain	1
41	Block	1
42	Block	3
43	Block	2

Maintenance

Monthly maintenance is recommended. Lubrication is critical to jacks as they support heavy loads. Any restriction due to dirt, rust, etc. can cause sluggish or jerky operation which can damage hydraulic components. The following steps are designed to keep the jack well lubricated:

1. Lubricate the ram, linkages, saddle and pump mechanism with light oil. Grease wheel bearings and axles.
2. Visually inspect for cracked welds, bent, loose, missing parts or hydraulic oil leaks.
3. If jack is subjected to abnormal load or shock, remove from service and have it examined by a customer service representative prior to use.
4. Clean all surfaces and maintain all labels and warnings.
5. Check and maintain the ram oil level.
6. Check ram every 3 months for any sign of rust or corrosion. Clean as needed and wipe with an oil cloth.

When not in use, always leave the saddle and ram all the way down.

Always store your jack in the fully lowered position. This will help protect from excessive corrosion.

Do not use brake or transmission fluids or regular motor oil as they can damage the seals. Always use Hydraulic Jack Oil.

Follow the maintenance instructions carefully to keep your equipment in good working condition. Never perform any maintenance on the equipment while it is under a load.

Inspection

You should inspect the product for damage, wear, broken or missing parts and check that all components function before each use.

Binding

If the product binds while under a load, use equipment with equal or a larger load capacity to lower the load safely to the ground. After unbinding; clean, lubricate and test that equipment is working properly. Rusty components, dirt, or worn parts can be causes of binding. Clean and lubricate the equipment as indicated in the lubrication section. Test the equipment by lifting without a load.

Cleaning

If the moving parts of the equipment are obstructed, use cleaning solvent or another good degreaser to clean the equipment. Remove any existing rust, with a penetrating lubricant.

Lubrication

Using the equipment without proper lubrication will result in poor performance and damage to the equipment. Inspect the equipment before use and lubricate when necessary. After cleaning, lubricate the equipment using light penetrating oil or lubricating spray. Use a good lubricant on all moving parts.

- For light duty applications, use lubrication once a month.
- For heavy and constant application, weekly lubrication is recommended.
- NEVER USE SANDPAPER OR ABRASIVE MATERIAL ON THESE SURFACES!

Maintenance

Rust Prevention

Check rams and pump plungers on the power unit assemblies daily for any signs of rust or corrosion. Without a load, lift the equipment as high as it goes and look under and behind the lifting points. If signs of rust are visible, clean as needed.

How the Long Ram Operates

With release valve closed, an upward stroke of the long ram handle draws oil from the reservoir tank into the plunger cavity. Hydraulic pressure holds the valve closed, which keeps the oil in the plunger cavity. A downward stroke of the long ram handle releases oil into the cylinder, which forces the ram out. This raises the hydraulic ram. When the ram reaches maximum extension, oil is bypassed back into the reservoir to prevent an over extended ram stroke and possible damage to the long ram. Opening the release valve allows oil to flow back into reservoir. This releases hydraulic pressure on the ram, which results in lowering the hydraulic ram.

Storing the Crane

1. Lower the lifting arm.
2. Place the handle in the upright position.
3. Store in a dry location, recommended indoors.

Note: If the crane is stored outdoors, lubricate all parts before and after use to ensure the crane stays in good working condition.

Troubleshooting

Jack will not lift load	Jack will not hold load	Jack will not lower	Poor Jack lifting	Will not lift to full extension	Causes & Solutions
X	X		X		Release valve is not completely closed - turn handle clockwise
X					Weight capacity exceeded
X			X		Air in hydraulics - purge air from system
X	X		X	X	Low oil level - add oil as required
		X			Oil reservoir overfilled - drain excessive oil; lubricate moving parts
		X			Jack is binding or obstruction
X	X		X		Power unit malfunction - replace unit

Our products are designed to be used correctly and with care for the purpose for which they are intended. No liability is accepted by the Tool Connection for incorrect use of any of our products, and the Tool Connection cannot be held responsible for any damage to personnel, property or equipment when using the tools. Incorrect use will also invalidate the warranty.

If applicable, the applications database and any instructional information provided has been designed to offer general guidance for a particular tool's use and while all attention is given to the accuracy of the data no project should be attempted without referring first to the manufacturer's technical documentation (workshop or instruction manual) or the use of a recognised authority such as Autodata.

It is our policy to continually improve our products and thus we reserve the right to alter specifications and components without prior notice. It is the responsibility of the user to ensure the suitability of the tools and information prior to their use.



Safety First. Be Protected.



www.lasertools.co.uk



Distributed by The Tool Connection Ltd
Kineton Road, Southam, Warwickshire CV47 0DR
T +44 (0) 1926 815000 F +44 (0) 1926 815888
info@toolconnection.co.uk www.toolconnection.co.uk

Guarantee

If this product fails through faulty materials or workmanship, contact our service department direct on: **+44 (0) 1926 818186**. Normal wear and tear are excluded as are consumable items and abuse.

8337_Instructions_V2