

Torin™
BIG RED JACKS

1 TON
HYDRAULIC
ENGINE CRANE



SPECIFICATION

While every effort has been made to ensure accuracy of information given in this manual is correct at the time of going to print, we reserve the right to change specification without notice.

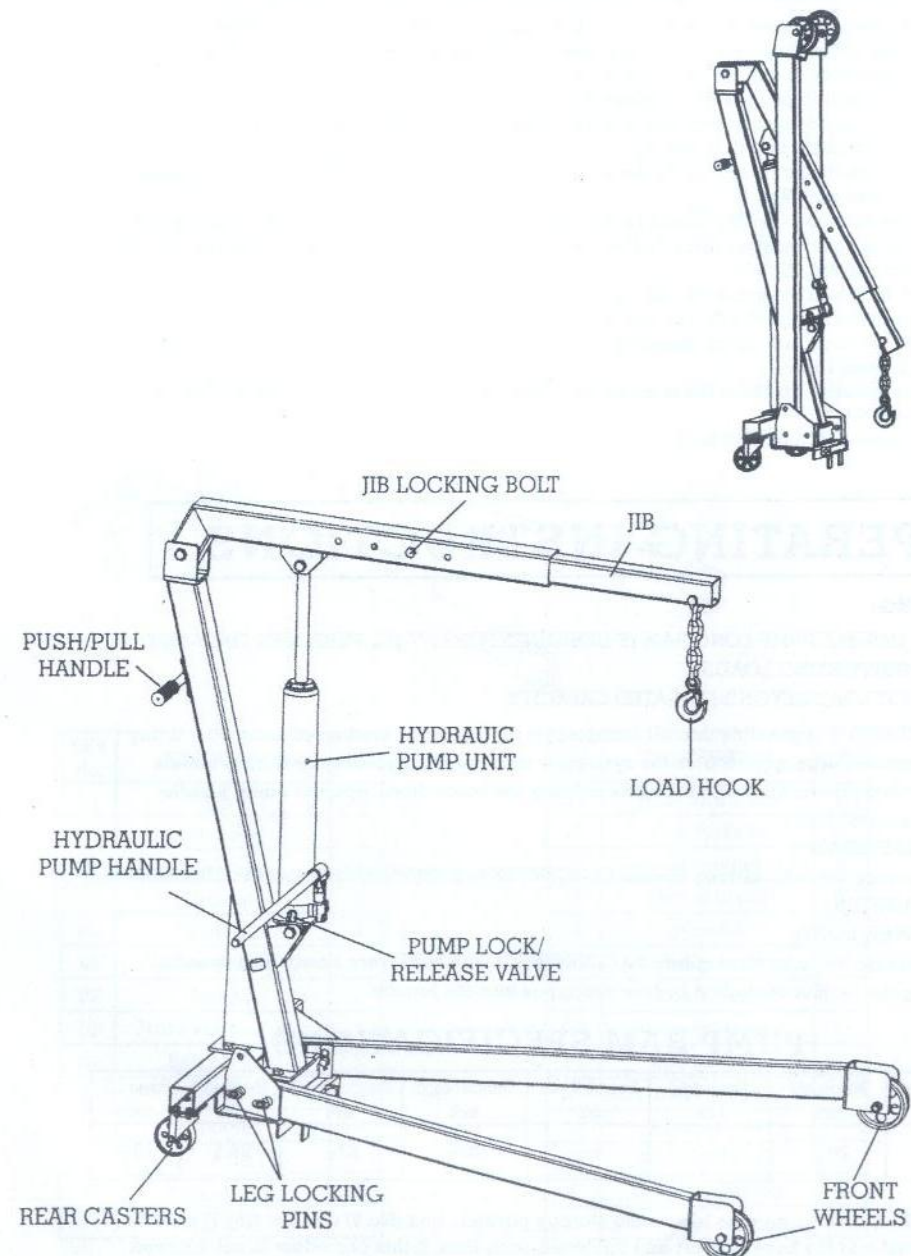
Lifting capacity position 1.....	1000kg
Lifting capacity position 2.....	750kg
Lifting capacity position 3.....	500kg
Lifting capacity position 4.....	250kg
Maximum lifting height min. jib ext.....	79 $\frac{1}{2}$ INCH
Maximum lifting height max. jib ext.....	88 $\frac{1}{2}$ INCH
Length of jib position 1.....	35 $\frac{1}{2}$ INCH
Length of jib position 2.....	39 INCH
Length of jib position 3.....	42 $\frac{1}{2}$ INCH
Length of jib position 4.....	46 INCH
Height of frame.....	6 $\frac{1}{4}$ INCH
Length of frame.....	49 $\frac{1}{4}$ INCH
Overall height.....	55 $\frac{1}{8}$ INCH
Width of frame max.....	37 $\frac{1}{2}$ INCH
Distance between center of rear wheels.....	23 $\frac{1}{2}$ INCH

WARNING

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

FAILURE TO FOLLOW THESE INSTRUCTIONS COULD RESULT IN LOSS OF LOAD AND/OR PERSONAL INJURY OR DAMAGE TO PROPERTY.

KNOW YOUR ENGINE CRANE



ASSEMBLY

NOTE: During the assembly procedure, nuts and bolts should be hand-tightened only. Once assembly is complete, nuts and bolts may be fully tightened.

1. Attach the castor wheels (No.27) to the base using the nuts and bolts supplied.
2. Referring to the spare parts drawing, insert the left hand leg (No.2) into the base (No.1) and lock the leg in place using two locking pins (No.4). Secure these in place using two split-type pins. Now repeat this procedure for the right hand leg.
3. Attach the main support post (No.8) to the base assembly (No.1) using five bolts (No.9) and five washers and nuts (No.10).
4. Now secure the boom (No.11) to the main support post (No.8) using bolt (No.12) washer (No.13) and nut (No.14).
5. Next the ram unit (No.15) should be attached to the main support post (No.8) using bolt (No.16), nut and washer (No.17). Then secure the ram unit to the boom using bolt (No.18), nut and washer (No.17).
6. Insert the boom extension (No.22) into the main boom (No.11), secure in one of the four positions using bolt (No.9), nut and washer (Nos.9 and 10).
7. Attach the hook and chain assembly (No.24) to the boom using nut, bolt and washer (Nos.23 and 10).
8. Secure handle (No.19) to the main support post (No.8) using four bolts (No.21) and four washers (No.20).
9. Now tighten all nuts and bolts.

OPERATING INSTRUCTIONS

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 release valve (turn handle counterclockwise as shown), then while holding the boom down, operate pump handle rapidly several times.

TO RAISE LOAD

Close release valve by turning handle **CLOCKWISE** to a **SNUG-TIGHT** position. (DO NOT OVER TIGHTEN).

TO LOWER LOAD

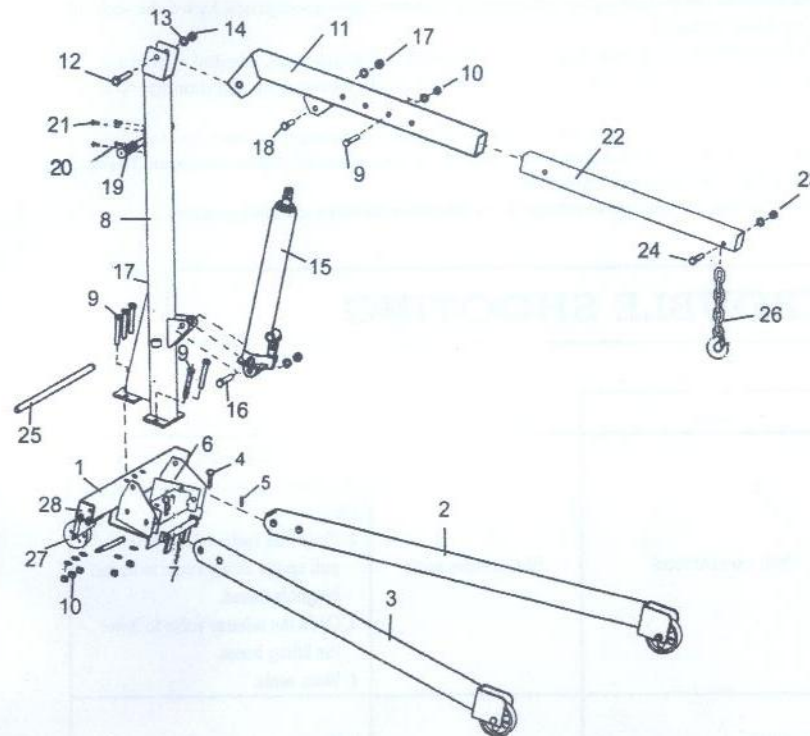
Open release valve by turning handle **COUNTERCLOCKWISE** very slowly. The speed of lowering the load is controlled by how much you turn the handle.

PUMP RAM SPECIFICATIONS

Capacity ton	Min Height inch	Max Height inch	Overall Width inch	Overall Length inch	Handle Length inch	Net Weight lbs	Power Lift inch
3	26 $\frac{1}{2}$	45 $\frac{7}{8}$	5 $\frac{1}{8}$	26 $\frac{3}{8}$	23 $\frac{1}{2}$	26.5	19 $\frac{1}{2}$

NOTE: Before raising the legs to the storage position, bolt (No.6) and nut (No.7) must be inserted into the base support and tightened each time. If this procedure is not followed the unit may fall over.

1 TON HYDRAULIC ENGINE CRANE SPARE PARTS LIST/DRAWING



KEY No.	DESCRIPTION	QTY
01	Base	1
02	Left leg	1
03	Right leg	1
04	Lock pin	4
05	Split pin	4
06	Bolt M6x30	1
07	Nut M6	1
08	Main support post	1
09	Bolt M14x90	6
10	Nut and washer M14	6
11	Boom	1
12	Bolt M16x110	1
13	Washer M16	1
14	Nut M16	1

KEY No.	DESCRIPTION	QTY
15	Ram unit 3 ton	1
16	Bolt M16x90	1
17	Nut and washer M16	3
18	Bolt M16x60	3
19	Handle	1
20	Washer 8	12
21	Bolt M8x20	12
22	Boom extension	1
23	Bolt M14x75	1
24	Nut and washer M14	1
25	Jack handle	1
26	Chain & Hook	1
27	Castor & Fixing	2
28	Nut M8	8

MAINTENANCE

IMPORTANT: When adding or replacing oil, always use a good grade hydraulic jack oil such as Shell Tellus 22.

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 long ram.

When adding oil, be VERY CAREFUL not to permit dirt or foreign matter to get into 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 long ram, always leave the jib in the fully lowered position.

TROUBLE SHOOTING

Trouble	Probable Cause	Remedy
Will not hold load.	Dirt on valve seats	1. Lower lifting boom. Close the release valve and remove oil filler plug. 2. Place one foot on the leg and pull up the lifting boom to its full height by hand. 3. Open the release valve to lower the lifting boom. 4. Worn seals.
Will not lift load. Will not lift to its full height. Pump feels unsteady under load. Pump will not lower completely.	Air block.	1. Open the release valve and remove oil filler plug. 2. Pump handle a couple of full strokes and close the release valve.
Pump will not lift to its full height. Pump feels unsteady under load.	The reservoir could be overfilled. Low hydraulic oil level.	Check the oil level. Remove the filler plug. Top up oil to correct level.
Pump feels unsteady under load.	The pump cup seal could be worn out.	Replace cup seal with a new one.
Will not lower completely.	Air block. Unit requires lubrication.	Release air from hydraulic pump by removing filler plug. Oil external moving parts.



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MADE IN CHINA