

1 TON HYDRAULIC ENGINE CRANE

Item: T31002X
Capacity: 1 TON

(FR) GRUE POUR MOTEUR

(ES) ELEVADOR DE MOTORES

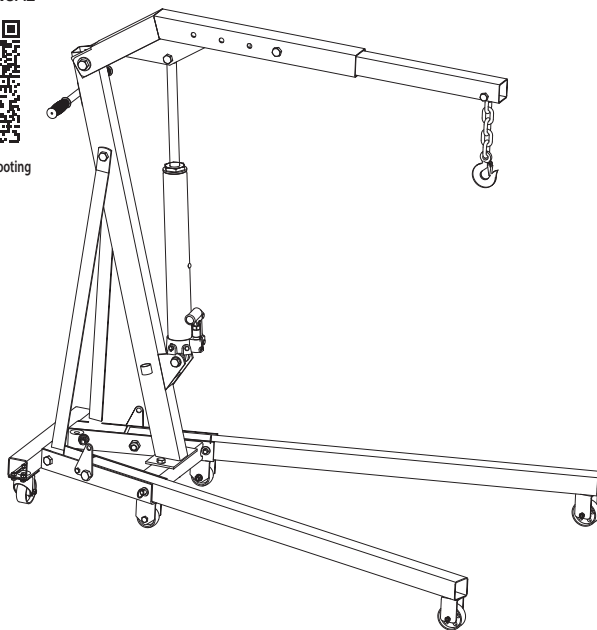
(DE) MOTORKRAN

(RU) ПОДЪЕМНИК ДЛЯ ДВИГАТЕЛЯ

OWNER'S MANUAL



Manual & trouble shooting
QR code



⚠ 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.

SPECIFICATION

ITEM	CAPACITY	Min. Height(mm)	Max. Height(mm)	N.W.(kgs)
T31002X	1 Ton	25	2040	65

SPECIFICATION

Always use Engine Crane!

Always follow safety precautions when installing and operating this equipment. Keep all decals on the unit clean and visible.

Before proceeding ensure that you fully understand and comprehend the full contents of this manual. Failure to operate this equipment as directed may cause injury or death. The distributor is not responsible for any damages or injury caused by improper use or neglect.



WARNING!

DO NOT CLIMB, HANG OR SWING. MISUSE OF ENGINE CRANE COULD RESULT IN A FALL THAT MAY RESULT IN SEVERE INJURY!



**NO
CLIMBING**



KEEP OFF

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 authorized 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.



WARNING!

1. Study, understand, and follow all instructions before operating this device.
2. Do not exceed rated capacity.
3. Use only on hard, level surfaces, with less than 3 degrees of slope.
4. Before moving, lower the load to the lowest possible point.
5. Use only slings or chains with a rated capacity greater than the weight of the load being lifted.
6. Do not allow load to swing or drop violently while lowering or moving.
7. Center load prior to lifting.
8. No alterations shall be made to this product.
9. Make sure that boom is fully lowered before adding oil to unit reservoir.
10. Never use on a lawn mower or lawn tractor.
11. Do not rock the vehicle while working on or around equipment.
12. Equipment is design for lifting only, do not move or dolly crane when in use.
13. The following are not recommended for supporting on this equipment: Foundations, Homes, Mobile Homes, Trailers, RV's, Campers, nor Fifth Wheels, etc...
14. Do not use this crane for any use other than the manufacturer specified usage.
15. Failure to heed these markings may result in personal injury and/or property damage.

ASSEMBLY INSTRUCTIONS

1. Attach the casters (No.18) to the Base (No.14) with bolts (No.19), washer(No.20),spring washers (No.4) and nuts (No.5); without tightening the nuts.
2. Slide the caster (No.18) which is connected to the base(No.14) along with the long holes.
3. Slide the caster to the position that the holes of the caster is aligned with the holes of the base, then fix the casters (No.18) to the base with bolts(No.19), washer(No.20),spring washers (No.4) and nuts(No.5), tighten all the four nuts.
4. Attach the wheels (No.8), Bushing(No.2)to the Base (No.14) with bolts (No.1), spring washers (No.4) and nuts (No.5); tighten all the nuts.
5. Attach the wheels (No.3), Bushing(No.2)to the legs (No.6) with bolts (No.1), spring washers (No.4) and nuts (No.5); tighten all the nuts.
6. Slide legs (No.6) into front of the base (No.14) ,align the hole at the end of the groove of the base with the hole at the end of the leg .
7. Fasten the connect plates(No.16) , base(No.14) ,front legs(No.6) with bolts(No.15 , 17) , washers(No.10) , spring washers (4) and nuts(No.9) , and check to make sure the nuts were tighten. Lift one side of the base to align the hole on the frame to the hole on the front leg(No.6) , then insert the Ring pins(No.12) into the hole , and insert the R-pin(No.13) into the hole of the Ring Pins.
8. Use two Bolts (No.4) and Washers (No.17) to fasten the Handle (No.30) to the Post (No.26) .
9. Use the Bolts(No.11),washers(No.10) and Nuts(No.9) to connect the bottom of the Post(No.26) to the Base(No.14) , don't tighten the nuts temporarily. Leave nuts loose for next steps.
10. Use two Bolts(No.15) ,Washers(No.10) and Nuts(No.9) to connect the lower ends of the Supports(No.25) to the inside of the base(No.14),then use one Bolt(No.15),Washer(No.10) and Nut(No.9) to connect the top ends of the Supports to the post(No.26) , check to make sure the nuts were tightened , and tighten the nuts in step9 .
11. Use the Bolt(No.27),Washer(No.28) and Nut(No.23) to attach the Boom(No.31) to the top of the Post(No.26) , turn the nuts(No.23) to the position that the boom can rotate freely ,so don't over tightened the nuts.
12. Use a Bolt(No.21),Washer(No.22) and Nut(No.23) to fasten the lower end of the Jack(No.24) to the Post(No.21) and another Bolt(No.32) , Washer(No.22) and Nut(No.23) to fasten the top of the Jack to the Boom(No.31).
13. Slide the Boom Extension(No.34) into the Boom(No.31) and then insert the Ring pins(No.33) into the hole , secure at the desired load rating and insert the R-pin(No.13) into the hole of the Ring Pins. Use the Bolt(No.11),Washer(No.10) and Nut(No.9) to attach the Hook and Chain(No.35) to the end of the Boom Extension.
(The boom has four different load ratings; select desired rating before use.)

MAINTENANCE

Monthly maintenance is recommended.Lubrication is critical to jacks as they support heavy loads. Any restriction due to dirt, rust, etc., can cause either slow movement or cause extremely rapid jerks,damaging the internal 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 abnrmal 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 critical areas from excessive corrosion. Do not use brake or transmission fluids or regular motor oil as they can damage the seals.Always purchase and use products labeled Hydraulic Jack Oil.

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 AND SOLUTIONS
X	X		X		Release valve is not completely closed (Turn handle clockwise).
X					Weight Capacity Exceeded.
X			X		Air is in the hydraulics. Purge air from system.
X	X		X	X	Low oil level. Add oil as required.
		X			Oil reservoir is overfilled. Drain excessive oil. Lubricate moving parts.
		X			Jack is binding or foreign obstruction
X	X		X		Power unit malfunctioning. Replace the power unit.

Safe Operating Temperature is between 40°F – 105°F (4°C - 41°C)

MAINTENANCE INSTRUCTIONS

If you use and maintain your equipment properly, it will give you many years of service. 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 (e.g.: pins) and that all components function before each use. Follow lubrication and storage instructions for optimum product performance.

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 un-binding; 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. If the binding continues contact Customer Service.

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

This equipment will not operate safely without proper lubrication. Using the equipment without proper lubrication will result in poor performance and damage to the equipment. Some parts in this equipment are not self-lubricating inspect the equipment before use and lubricate when necessary. After cleaning, lubricate the equipment using light penetrating oil, 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!

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, be sure to lubricate all parts before and after use to ensure the crane stays in good working condition.

FACTORY PRODUCT

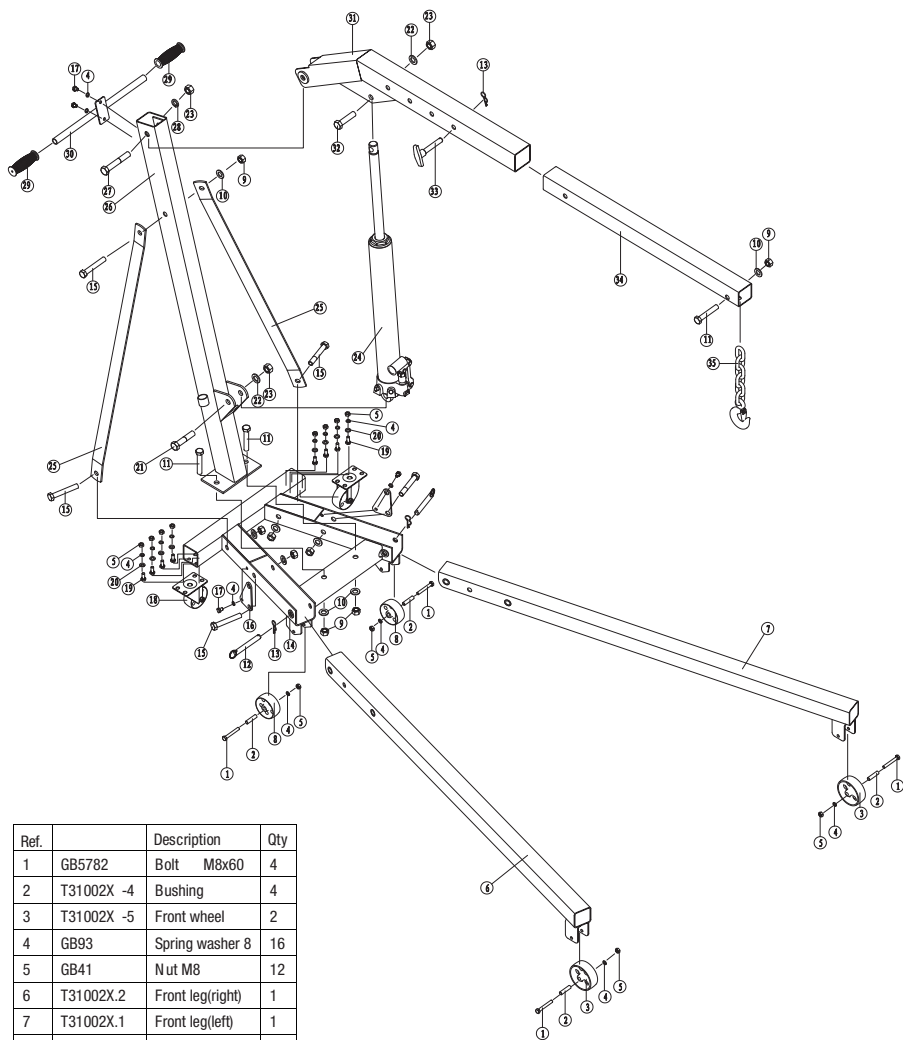
Any hydraulic jack found to be damaged in any way, is found to be worn or operates abnormally, believed to have subjected to an abnormal load, "SHALL BE REMOVED FROM SERVICE UNTIL REPAIRED". Owners and/or operators should be aware that repair of the equipment requires specialized knowledge and facilities.

Only factory authorized parts, labels and decals shall be used on this equipment.

Call customer service department

Annual inspection of the is recommended and should be made by the manufacturer's authorized repair facility to ensure that your jack is in optimum conditions and that the jack has correct decals and safety labels specified by the manufacturer.

ASSEMBLY DIAGRAM



Ref.		Description	Qty
1	GB5782	Bolt M8x60	4
2	T31002X -4	Bushing	4
3	T31002X -5	Front wheel	2
4	GB93	Spring washer 8	16
5	GB41	Nut M8	12
6	T31002X.2	Front leg(right)	1
7	T31002X.1	Front leg(left)	1
8	T31002X -6	W wheel	2
9	GB6170	Nut M14	8
10	GB95	Washer 14	8
11	GB5780	Bolt M14x80	3
12	T31002X.3	Frame pin	2
13	T32002 -1	R-pin	3
14	T31002X.4	Base assembly	1
15	GB5780	Bolt M14x90	5
16	T31002X -1	Connect plate	2
17	GB5781	Bolt M8x10	4
18	T32002.7	3"Swivel caster	2

Ref.		Description	Qty
19	GB5781	Bolt M8x20	8
20	GB95	Washer 8	8
21	GB5780	Bolt M16x75	1
22	GB95	Washer 16	2
23	GB6170	Nut M16	3
24	T30306B	Ram unit 3ton	1
25	T31002X -2	Supports	2
26	T31002X.5	Main support post	1
27	GB5780	Bolt M16x100	1

Ref.		Description	Qty
28	GB93	Spring washer 16	1
29	T32002C -2	Handle sleeve	2
30	T31002X.6	Handle	1
31	T31002X.7	Boom	1
32	GB5780	Bolt M16x65	1
33	T31002CE.4	Pin	1
34	T31002X -3	Boom extension	1
35	T32002.5	Hook chain	1

Made in China