



Toll Free: 1-800-579-8088 Web: www.zinko.com

MODEL

**ZTCL-30**

Portable Tire Changing Lift

## Operation & Maintenance Manual

### Important Receiving Instructions

Visually inspect all components for shipping damage. Shipping damage is NOT covered by warranty. If shipping damage is found, notify carrier at once. The carrier is responsible for all repairs and replacement costs during product shipping.

### Safety Information

Read and follow all **instructions, warnings, cautions** and carefully. Follow all safety precautions to avoid personal injury or property damage during system operation. **ZINKO** is not responsible for damage or injury resulting from unsafe product use, lack of maintenance, or incorrect product and/or system operation. Contact **ZINKO** when in doubt as to the safety precautions and operations. Failure to comply with the following cautions and warnings could cause equipment damage and personal injury.

### Caution Remarks Used In This Manual

This manual, and the warning labels affixed to the lift itself, utilize the following signal words and definitions in all safety instructions:

**⚠ DANGER** Failure to avoid the potential hazard could result in death or catastrophic bodily injury.

**⚠ WARNING** Failure to avoid the potential hazard could result in serious bodily injury.

**⚠ CAUTION** Failure to avoid the potential hazard could result in minor bodily injury or in damage to property.

### Introduction

**⚠ WARNING** Never attempt to operate this lift unless you have first read and understand all of the operating instructions and product warnings that are contained in this manual and on the warning labels affixed to the lift itself. Failure to do so could result in serious bodily injury and property damage.

Contact your supplier immediately if you have any questions regarding the contents of this manual or of the warning labels.

Always keep this manual nearby for convenient reference while operating this lift. Should either this manual or any of the warning labels become lost or damaged, obtain replacement copies from your supplier immediately.

### Warranty

WE WARRANT THIS LIFT TO THE ORIGINAL PURCHASER AGAINST DEFECTIVE MATERIALS OR WORKMANSHIP FOR ONE YEAR FROM THE DATE OF INVOICE, PROVIDED THAT THIS LIFT IS USED IN ACCORDANCE WITH ALL APPLICABLE INSTRUCTIONS AND WARNINGS.

OUR OBLIGATION IS LIMITED TO THE REPAIR OR REPLACEMENT OF DEFECTIVE COMPONENTS THAT ARE RETURNED TO THE LOCAL LIFT SUPPLIER, FREIGHT PREPAID, WITH PROOF OF PURCHASE.

THIS WARRANTY SHALL NOT APPLY TO ANY DAMAGE RESULTING FROM THE ALTERATION, MISUSE, ABUSE, UNAUTHORIZED REPAIR OR IMPROPER MAINTENANCE OF THIS LIFT.

### Limited Function of This Lift

**⚠ WARNING** This lift was designed solely for the purpose of raising passenger vehicles and light pick-up trucks a few feet off the ground to facilitate the performance of tire, brake, oil, and bodywork.

Never attempt to use this lift to raise vans, trucks having extended wheelbases, or any other load that exceeds this lift's rated capacity. This lift has not been designed to bear such unauthorized loads.

A loss of the load might therefore occur, which could result in serious bodily injury.

**⚠ DANGER** Never use this lift for under-the-vehicle work, to avoid the risk of being crushed. Never work under any vehicle unless it has been provided with independent stable support, by appropriate means, to prevent it from dropping.

### General Specifications

Maximum Capacity: 6,000 lbs.

Minimum Table Height: 3-7/8"

Maximum Table Height: 37" for YMRL-60; 48" for YMRL-60HL

Electrical Requirement: 115VAC or 208-230VAC Single Phase, 60 Hz

Lifting Time: 30 seconds

Dual Safety Lock System: 1) Mechanical Safety Lock. 2) Hydraulic Velocity Fuse Valving.

Optional: 1) Higher Extension Rubber Pad Adapter (set of 4). 2) Adapter with Steel Flip-Up Flange (set of 4)

3) Portable Dolly Assembly.

# Zinko Hydraulic Jack

Model: ZTCL-30

## Parts Contents

Oil: 1 Can (1.5 Gallons)

Swing Arms: 4 pieces (when delivered, the swing arms are fully assembled with the tables)

Rubber Pad Adapters : 4 pieces

Stacking Adapters: 4 pieces

Plugs with Hole: 2 pieces

Hydraulic Hose: 12 Feet

Female Adapter (NPT) coupled with Hydraulic Hose: 1 piece

Safety Lock Release Lever: 1 piece (this lever is connected to the wire cable)

## Safety Precautions

1. Any operator of this equipment shall read in detail this manual so as to prevent the occurrence of hazard.
2. The operator should know the function and operation method for every part this equipment.
3. The periodic inspection and inspection before operation shall be done according to this manual.
4. Do not operate this equipment any more, if you find any abnormal noise.
5. Do not operate this equipment beyond its maximum loading capacity.

## Inspection Before Operation

Item	Inspection	Method	Treatment
1.	Inspect if up-down movement of lower Main and Auxil-machine's platform is horizontal and smooth.	Ocular Inspection	Clean Up and Lubricate
2.	Inspect if the actions of safety pinion are normal and up-down smoothly.	Ocular Inspection	Clean Up and Lubricate
3.	Inspect if the safety device is acting normally (if the safety pinion does not raise, the platform won't descend).	Ocular Inspection	Clean Up
4.	Inspect hydraulic cylinder, oil pipe, and pipe joint to see if any evidence of oil leaks, and inspect the motion of safety device actuation wire.	Ocular Inspection	Cleaning and Re-fix
5.	Inspect motors pump motion, if sound is normal.	Listen to the Sound	Clean Up/Replace Parts
6.	Inspect lift parts and mechanism if they are normal.	Ocular Inspection	Clean Up/Lubricate/Replace Parts
7.	Inspect if tension on the safety pinion and safety device engage normally.	Ocular Inspection and Action	Clean Up

## Safety Warning

- 1) This lift must be operated and maintained in strict accordance with the procedures and warnings contained in this manual, to avoid the risk of serious bodily injury.
- 2) The maximum lifting capacity is 6,000 Lbs., and any attempt to lift unauthorized loads in excess of that amount could result in a loss of the load and serious bodily injury.
- 3) NO modifications shall be made to this lift without the prior written consent of the manufacturer.



### NEVER...

1. Attempt to use this lift for any purpose other than raising passenger vehicles and light pick-up trucks a few feet off the ground to perform tire, brake, oil and bodywork.
2. Attempt to use this lift to raise vans, trucks with extended wheelbases, or any other loads that exceed its rated capacity of 6,000 lbs.
3. Use this lift for any under-the-vehicle work.
4. Work under any vehicle unless it has first been provided with independent and stable support by appropriate means, to prevent it from dropping.
5. Attempt to operate this lift unless you have had prior training and experience in the operation of this lift, and you have also read and understood all of the operating and safety instructions contained in this manual.
6. Allow any untrained or unauthorized persons to operate this lift.
7. Operate this lift if any of the safety devices are inoperative.
8. Allow untrained or unauthorized persons to position vehicles on this lift.
9. Work on a raised vehicle unless the safety lock has first been engaged.
10. Operate this lift when bystanders are present at the site.
11. Attempt to operate this lift unless you have first read and understood the contents of the warning signs affixed to this lift. **Never remove warning signs from this lift.**
12. Attempt to drive a vehicle onto this lift unless you have first confirmed that it is in its fully lowered position.
13. Attempt to block open or override the "OFF" control on the power unit.

# Zinko Hydraulic Jack

Model: ZTCL-30



## NEVER...

14. Raise a vehicle if someone is inside.
15. Permit anyone to ride on this lift while it is being raised or lowered.
16. Operate the power unit while any persons are working on a raised vehicle.
17. Attempt to service this lift while it is in a raised position. The loosening of any oil fitting could cause this lift to fall. Always confirm that this lift is in its fully lowered position before attempting to service it.
18. Attempt to use adapters or attachments that were not provided by the manufacturer.

## ALWAYS...

1. Stand clear of this lift when it is being raised or lowered.
2. Confirm that there are no obstructions under this lift before lowering it.
3. Release the safety lock first before attempting to lower this lift.
4. Confirm that this lift is in its fully lowered position before backing a vehicle off it.
5. Inspect this lift carefully prior to its first use each day. Never attempt to operate it if any of its components appear to be damaged or abnormal. Therefore, inspect this lift before each use for visual indications of damage.
6. Confirm that only genuine manufacturer's parts have been used in making repairs.
7. Confirm that the power cord has been disconnected, and that the power source has been safely locked out prior to performing any maintenance on this lift.
8. Perform all scheduled visual inspections and preventative maintenance in a timely manner, and promptly replace any damaged or worn components.
9. Keep the lift area clean, and free of any obstructions or debris.
10. Clean up any spilled grease and oil as quickly as possible. Keep the affixed warning label clean and legible. Contact your supplier immediately for a free replacement if ever required.
11. Position the swing arms and adapters to provide unobstructed clearance before attempting to drive a vehicle onto this lift. Never hit or run over the swing arms, as that could cause damage to this lift or the vehicle.
12. Position the adapters so that they will contact the vehicle at the lifting points recommended by the vehicle manufacturer. First, raise this lift partially until the adapters make initial contact with the vehicle. After confirming that they are making secure contact at the desired lifting points, raise this lift to desired working height.

**NOTE: The removal or installation of some vehicle components could result in a shift in the vehicle's center of gravity and cause the vehicle to become unstable.**

**Before energizing this lift to test its operation following servicing, always confirm that all maintenance personnel are standing clear of this lift.**

**When abnormalities arise, always stop this lift instantly with the "OFF" control on the power unit.**

## Positioning/Installation Instructions

### *Lift Positioning/Installation*

1. This lift should only be installed and used on level concrete floors having a minimum thickness of five inches. The concrete must have a minimum strength of 4,000 PSI, and must be aged at least 30 days.
2. Position the electric/hydraulic power unit so that a vehicle will never drive over the hydraulic hose, to prevent damage.
3. This lift is designed for indoor use only. The electric/hydraulic power unit is not waterproof and, if installed outdoors, electric shock or damage to the electric/hydraulic power unit could occur.

### *Electric/Hydraulic Power Unit Installation*

1. Firmly tighten the female adapter (NPT) at the end of the hydraulic hose to the male outlet-fitting on the hydraulic power unit. Confirm that no foreign objects have entered the hydraulic hose.
2. Some hydraulic oil has been provided in each of the cylinders for anti-corrosion purposes during shipping, (APPROX. 100 cc IN EACH CYLINDER). Remove the temporary plug from each cylinder, drain all of the oil and then install the replacement plugs that are equipped with safety valves.
3. Position the electric/hydraulic power unit well clear of this lift to assure that it will not obstruct the safe operation of this lift. (For more detailed instructions, refer to the following procedures)

### *Installation Procedures*

1. **Positioning Machine** - Check to ensure the ground is flat and rigid so as to prevent the accumulation of water and bad environment, and then move lift to the place to be installed.
2. **Install the Electric and Hydraulic System** - **1)** Place control Cabinet in suitable position. **2)** Connect  $\varnothing$  ¼ piping to the machine and control cabinet. **3)** Install the control wiring of the safety pinion control circuit.
3. **Connection of Power Supply** - **1)** Check to ensure that appropriate specification of power supply system. **2)** Connect 15 Amp disconnecting device in front of the incoming terminal of machine. **3)** The cable for the connection of disconnecting device shall be 3.5 mm<sup>2</sup>.

# Zinko Hydraulic Jack

## Model: ZTCL-30

### Installation Procedures (continued)

- 4. Inspection and Adjustment - 1)** Turn on disconnecting device, and check if power indicator lights up. If no light, the emergence stop may be engaged. Release it and check again. **2)** Push "up" button to see if lift rises as control command... **3)** In case no raise for 3 phases machine, change the connection of any two phase conductors. **4)** Check to ensure the lift could be raised to its extreme position. **5)** During rising, check to ensure the normal function of emergence stop.
- 5. Trial Run - 1)** Drive car onto the lift and check if the car is placed at appropriate position. If in appropriate position adjust it by moving foot plate and adjustment screws. **2)** Push "up" button to the position in which the car is just leaving the ground. **3)** Inspect to ensure no interference with any other objects. **4)** Raise lift to its extreme position, and inspect to ensure no abnormal situation or leakage occurs. **5)** Raise the safety pinion, and push the release valve so as to check if lift could be descended smoothly. **6)** Repeat #2 - #5 for a couple of times so as to ensure the lift can be operated normally.

### Operation Procedures

#### Inspection

It is essential that the following inspections of this lift be performed prior to its first use each day to assure safe operation.

		Component to be Inspected	Method and Treatment
		• Safety Lock Latch	Confirm that the lock "clicks" into position properly.
		• Swing Arms and Adapters	Confirm that all nuts and bolts are tight.
		• All Hinge Points	Confirm that all hinge points are greased.
		• Floors and Swing Arms	Confirm that the floors are flat and the swing arms aren't cracked.
		• Wire Cable	Confirm that cable isn't stretched or rusty.
		• Hydraulic Hose	Confirm that there is no oil leakage.
		• Rollers and Shafts	Confirm that they have no cracks or other damage.
		• Safety Lock Release	Confirm that the lock release disengages the safety latch.
		• Hydraulic Pipes	Confirm the absence of cracks or leakage.
		• All Welds	Confirm that there are no cracks.
		• Hydraulic Oil	Confirm that oil is clean and that the level is proper.
		• Safety Lock Control	Confirm that the control is operating properly.

#### Purging Air From the Hydraulic System

Press the "UP" control on the power unit and raise this lift about 16". Then press the "DOWN" control and lower this lift. Continue that process several times until all of the air is purged from the hydraulic system.

#### Mechanical Safety Lock Operating Test

- Actuate the safety lock release lever and confirm that the safety latch unlocks.
- Press the "UP" control on the power unit and raise this lift to its highest position, to confirm that the safety latch will automatically "CLICK" into the safety lock position at both of the established sittings. When this lift reaches it's highest position, immediately stop pressing the "UP" control to protect the motor.
- Actuate the safety lock release lever and press the "DOWN" control. Confirm that the safety latch unlocks and that this lift will lower.

#### Positioning the Vehicle on the Lift

1. Fully lower this lift and drive the vehicle over it so that its center of gravity will be centered on this lift, for maximum "LEFT TO RIGHT" stability, Neither its front nor rear wheel should contact this lift.
2. Position front wheel drive vehicles and light pick-up trucks slightly toward the rear of this lift, but position rear wheel drive vehicles more toward the center of the lift, for maximum "FRONT TO REAR" stability.
3. Position the lift arm saddle adapters to contact the vehicle at the lifting points recommended by the vehicle manufacturer.
4. If required, use stacking adapters to improve vehicle stability on this lift.

#### Raising A Vehicle


1. Press the "UP" control and raise the lift slowly until all of the saddle adapters contact the vehicle.
2. Visually confirm that each adapter is making full contact with the vehicle at the proper lifting point.
3. Raise this lift until the vehicle's wheels are slightly off the floor, and confirm that the vehicle is stably positioned.
4. Confirm that the safety lock is functioning properly.

#### Lowering A Vehicle

1. Before attempting to lower this lift, first raise it over 1" and actuate the safety lock release lever, to disengage the safety lock.
2. Continue actuating the safety lock release lever while pressing the "DOWN" control, control, and lower this lift slowly until the safety lock latch passes the lowerst safety lock position (AT A LIFT HEIGHT OF APPROX. 20 INCHES). In the event of an emergency, cease actuating the safety lock release lever.

# Zinko Hydraulic Jack

Model: ZTCL-30

 When the safety lock is engaged, always raise the lift slightly before attempting to actuate the safety lock release lever. This will protect the wire cable from becoming stretched, which could result in a safety lock malfunction.

## Moving the Vehicle Off the Lift

1. Disengage the parking brake.
2. Confirm that this lift is in its fully lowered position, before attempting to back the vehicle off of the lift.
3. Remove all of the adapters from the swing arms, and push the swing arms inboard of this lift.
4. Slowly and carefully back the vehicle off of the lift.

## Maintenance

### Daily Inspections

1. Inspect this lift prior to its first use each day. Never operate it if any of its components appear to be damaged or abnormal. Use only genuine manufacturer's parts in making repairs.
2. Confirm that the power cord has been disconnected, and that the power has been safely locked out, prior to performing any maintenance on this lift.
3. Perform all scheduled visual inspections and preventative maintenance in a timely manner, and promptly replace any damaged or worn components.
4. Never service this lift while it is in a raised position, the loosening of any oil fitting could cause this lift to fall. Confirm that this lift is in its fully lowered position before attempting to service it.
5. Keep the lift area clean, and free of any obstructions or debris. Clean up any spilled grease or oil as quickly as possible.

### Monthly Inspections

1. Re-tighten any screws or nuts that may be loose or worn out.
2. Keep lift greased to keep it moving smoothly.
3. Fix installation of piping with wrench and clean the oil if there is any leakage in hydraulic piping and/or hydraulic cylinder.
4. Make sure buttons are mounted normally by cleaning them properly.
5. Clean and ensure the well connection of every wire in the control cabinet.
6. Replace the hydraulic oil or supply it to the sufficient level.
7. Inspect and replace where necessary.
8. Get rid of rust, lubricate it and paint it.

## Troubleshooting

Problem	Cause	Solution
Uneven Height of Sides When Raised	1. Leakage of hydraulic circuit.	1. Change parts or repair.
	2. Leakage of hydraulic cylinder.	2. Change part.
	3. Ground is not flat.	3. Move lift to level ground.
Lift Will Not Move Upward	1. No power.	1. Switch on power and check power indicator.
	2. Emergency stop button is pressed down.	2. Press the emergency stop button and turn right.
	3. Breakdown of "UP" button.	3. Repair or replace the "UP" button and turn right.
	4. Breakdown of motor.	4. Repair or replace motor.
	5. Breakdown of pump or disconnection of connector.	5. Repair or replace pump.
	6. Hydraulic oil loss or insufficient hydraulic oil.	6. Supply hydraulic oil.
	7. Breakdown of solenoid valve.	7. Repair or replace solenoid valve.
Upward Movement Slows Down	1. Insufficient hydraulic oil.	1. Supply hydraulic oil.
	2. Inappropriate adjustment for the pressure of terminal block.	2. Increase the pressure setting of terminal block by screwing clockwise.
	3. Throttle valve of main lift is not open completely.	3. Open the throttle valve of the main lift counterclockwise.
	4. Leakage of piping system.	4. Repair or replace parts of the piping system.
	5. Block on the filter main and/or auxiliary cylinder connector.	5. Disassemble and clean.
Decent Fail	1. Manually operated valve is not opened.	1. Push down the release valve.
	2. Safety pinion is not opened.	2. Raise up the lift a short distance and release the engagement of the safety pinion, and then push down the release valve.



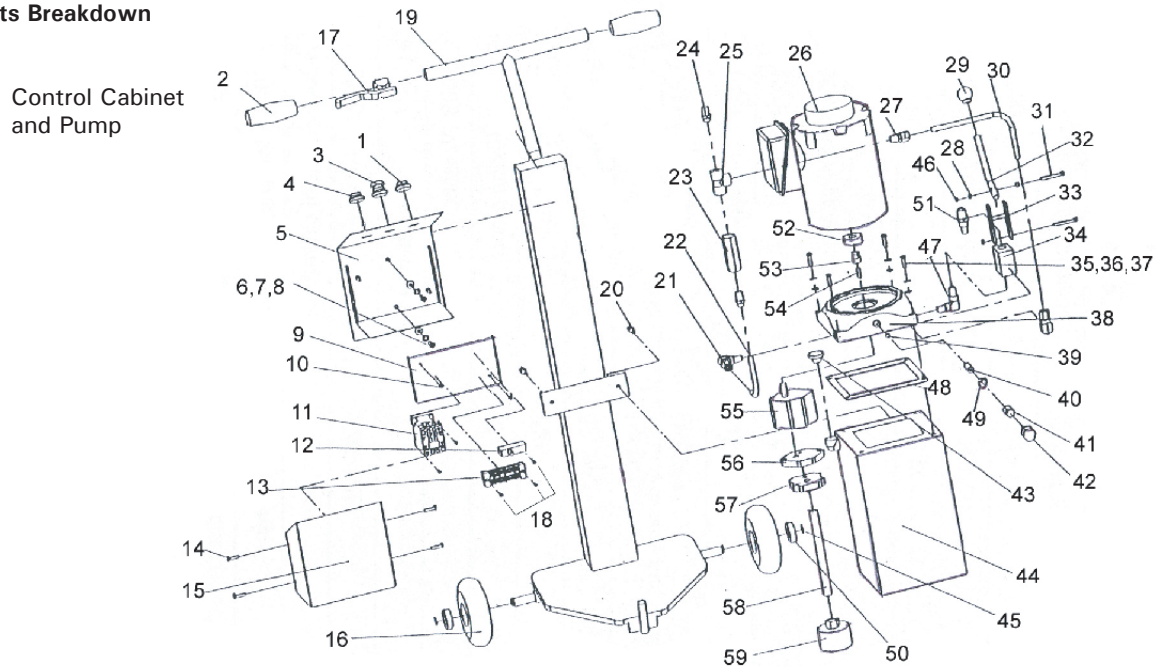
# Zinko Hydraulic Jack

Model: ZTCL-30

## Troubleshooting (continued)

Problem	Cause	Solution
Decent Movement Too Slow	1. Block in the "UP/DOWN" valve.	1. Disassemble and clean.
	2. The flow rate for the return oil circuit of "UP/DOWN" valve is too small.	2. Turn counterclockwise to an appropriate flow rate.
	3. Block in the filter of main and/or auxiliary cylinder connector.	3. Disassemble and clean.
Rough Operation	1. Breakdown or wear of parts.	1. Repair or replace damaged/worn parts.

## Parts Breakdown



PART NO.	DESCRIPTION
9240030-P 01	"UP" button
9240030-P 02	Handle
9240030-P 03	Emergency stop
9240030-P 04	Power indicator
9240030-P 05	Control cabinet
9240030-P 06	"+" screw M6X12L
9240030-P 07	Spring washer
9240030-P 08	Washer
9240030-P 09	Fixing plate
9240030-P 10	Nut
9240030-P 11	Magnetic contactor
9240030-P 12	Fuse seat
9240030-P 13	Terminal
9240030-P 14	"+" screw M4X15L
9240030-P 15	Control cabinet cover
9240030-P 16	Moving wheel
9240030-P 17	Braking handle
9240030-P 18	"+" screw 3/16"
9240030-P 19	Control cabinet
9240030-P 20	Socket screw
9240030-P 21	Hydraulic connector
9240030-P 22	High pressure steel tube
9240030-P 23	Stop valve
9240030-P 24	Hydraulic connector
9240030-P 25	Hydraulic connector
9240030-P 26	Motor

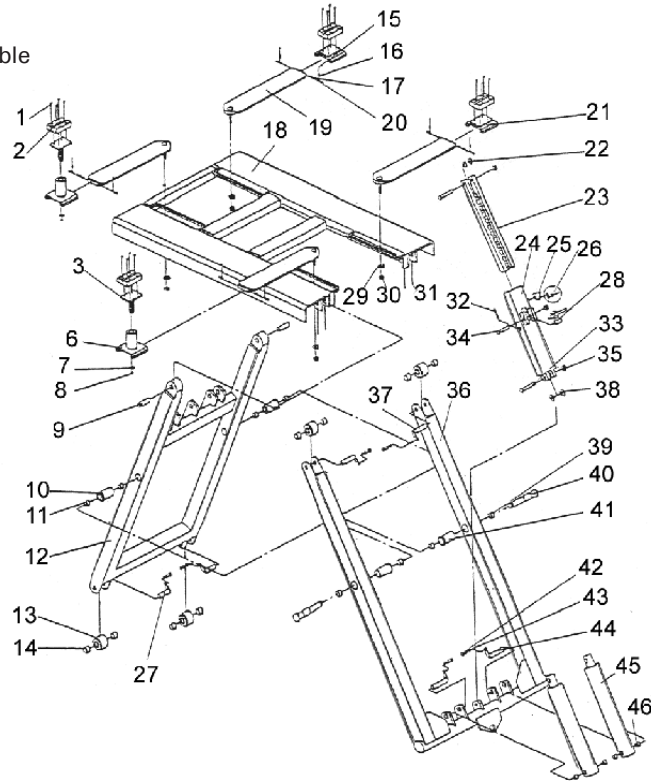
PART NO.	DESCRIPTION
9240030-P 27	Hydraulic connector
9240030-P 28	Packing ring
9240030-P 29	Plastic head
9240030-P 30	High pressure steel tube
9240030-P 31	Socket tube
9240030-P 32	Descent bar
9240030-P 33	H seat
9240030-P 34	Release valve
9240030-P 35	"+" screw M6X40L
9240030-P 36	Spring washer
9240030-P 37	Washer
9240030-P 38	Terminal block
9240030-P 39	Steel ball
9240030-P 40	Spring washer
9240030-P 41	Pressure adjusting screw
9240030-P 42	Hexagon nut
9240030-P 43	Oil cover
9240030-P 44	Oil tank
9240030-P 45	C ring
9240030-P 46	Nut
9240030-P 47	Hydraulic connector
9240030-P 48	Terminal block washer
9240030-P 49	O-ring
9240030-P 50	Bearing
9240030-P 51	Release valve
9240030-P RP	Repair Kit

# Zinko Hydraulic Jack

Model: ZTCL-30

REV 091307

Parts Breakdown Lift Table



PART NO.	DESCRIPTION
9240030-01	Semi-round socket bolt
9240030-02	Foot plate
9240030-03	Foot mat bearing
9240030-04	
9240030-RV	
9240030-06	Foot mat sliding seat
9240030-07	Washer
9240030-08	Big head screw
9240030-09	Shaft
9240030-10	Inner bushing
9240030-11	Du bushing
9240030-12	Inner knife arm
9240030-13	Moving wheel
9240030-14	Du bearing
9240030-15	Socket bolt
9240030-16	Screw cover
9240030-17	Press spring
9240030-18	Upper cover
9240030-19	Sliding arm
9240030-20	Locking Bar
9240030-21	Foot mat bearing seat
9240030-22	Pinion packing ring
9240030-23	Pinion

PART NO.	DESCRIPTION
9240030-24	Pinion seat
9240030-25	Pinion lock
9240030-26	Connection unit
9240030-27	Locking shaft
9240030-28	Safety pinion lock
9240030-29	Packing ring
9240030-30	Nut
9240030-31	Packing ring
9240030-32	Tension spring
9240030-33	Hexagon head bolt
9240030-34	Hexagon head bolt
9240030-35	Nut
9240030-36	External knife arm
9240030-37	Locking shaft
9240030-38	Washer
9240030-39	Du Bearing
9240030-40	Moving shaft
9240030-41	Bushing
9240030-42	Hexagon bolt
9240030-43	Spring washer
9240030-44	Locking shaft
9240030-45	Hydraulic cylinder
9240030-46	Du Bearing
9240030-RP	Repair Kits



## ZINKO HYDRAULIC JACK

PO Box 4903, Ontario, CA 91761

Toll Free: 1-800-579-8088

<http://www.zinko.com>

Phone: (909)989-9526

Fax: (909)989-1724