



Hydraulic Technologies
5885 11th Street
Rockford, IL 61109-3699 USA

Internet Address:
<http://www.powerteam.com>
Tech. Services: (800) 477-8326
Fax: (800) 765-8326
Order Entry: (800) 541-1418
Fax: (800) 288-7031



Hydraulic Technologies
655 Eisenhower Drive
Owatonna, MN 55060-0995 USA
Phone: (507) 455-7000
Tech. Services: (800) 533-6127
Fax: (800) 955-8329
Order Entry: (507) 455-1480
Fax: (800) 283-8665
International Sales: (507) 455-7223
Fax: (507) 455-7746

Parts List and Operating
Instructions for:

9030

HYDRAULIC JACKS

CAPACITY: 30 TON

MARATHON LIFETIME™ WARRANTY EFFECTIVE 4-1-84

All OTC products and parts, with the exceptions noted below, are warranted against defects in materials and workmanship for the life of the product or part.

OTC's warranty is expressly limited to persons who purchase OTC's products or parts for the purpose of resale or use in the ordinary course of the buyer's business. This warranty does not cover any product or part that has been abused, worn out, heated, ground or otherwise altered, used for a purpose other than that for which it was intended, or used in a manner inconsistent with any instructions regarding its use.

OTC electronic products are warranted against defects in material and workmanship for one year.

This warranty does not cover any chains, batteries or electric motors which are sold with the OTC products. All electric motors are separately warranted by their manufacturer under the conditions stated in the separate warranty.

THIS WARRANTY IS EXCLUSIVE, AND OTC MAKES NO OTHER WARRANTY OF ANY KIND WHATSOEVER, EXPRESSED OR IMPLIED, WITH RESPECT TO THE PRODUCTS MANUFACTURED AND SOLD BY IT, WHETHER AS TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER MATTER. No agent, employee or representative of OTC has any authority to bind OTC to any affirmation, representation or warranty concerning OTC products or parts, except as stated herein.

If any product or part manufactured by OTC is found to be defective by OTC, in its sole judgment, OTC will, at its option, either repair or replace such defective product or part. **THIS REMEDY SHALL BE THE EXCLUSIVE REMEDY AVAILABLE FOR ANY DEFECTS IN THE PRODUCTS OR PARTS MANUFACTURED AND SOLD BY OTC OR FOR DAMAGES RESULTING FROM ANY OTHER CAUSE WHATSOEVER, INCLUDING WITHOUT LIMITATION, OTC'S NEGLIGENCE. OTC SHALL NOT IN ANY EVENT BE LIABLE TO ANY BUYER FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES OF ANY KIND, WHETHER FOR DEFECTIVE OR NON-CONFORMING GOODS, NEGLIGENCE, ON THE BASIS OF STRICT LIABILITY OR FOR ANY OTHER REASON.**

The purpose of this exclusive remedy shall be to provide the buyer with repair or replacement of products or parts manufactured by OTC found to be defective in materials or workmanship or negligently manufactured. This exclusive remedy shall not be deemed to have failed of its essential purpose so long as OTC is willing and able to repair or replace said defective products or parts in the prescribed manner.

INTRODUCTION

These instructions are written to help you, the user, more effectively use and maintain your OTC jacks. Some of the information was selected from ANSI B30.1 and applies to the construction, installation, operation, inspection and maintenance of hydraulic jacks. It is strongly recommended that the user read ANSI B30.1. The document may be ordered from the American Society of Mechanical Engineers, United Engineering Center, 345 East 47th, New York, New York 10017.

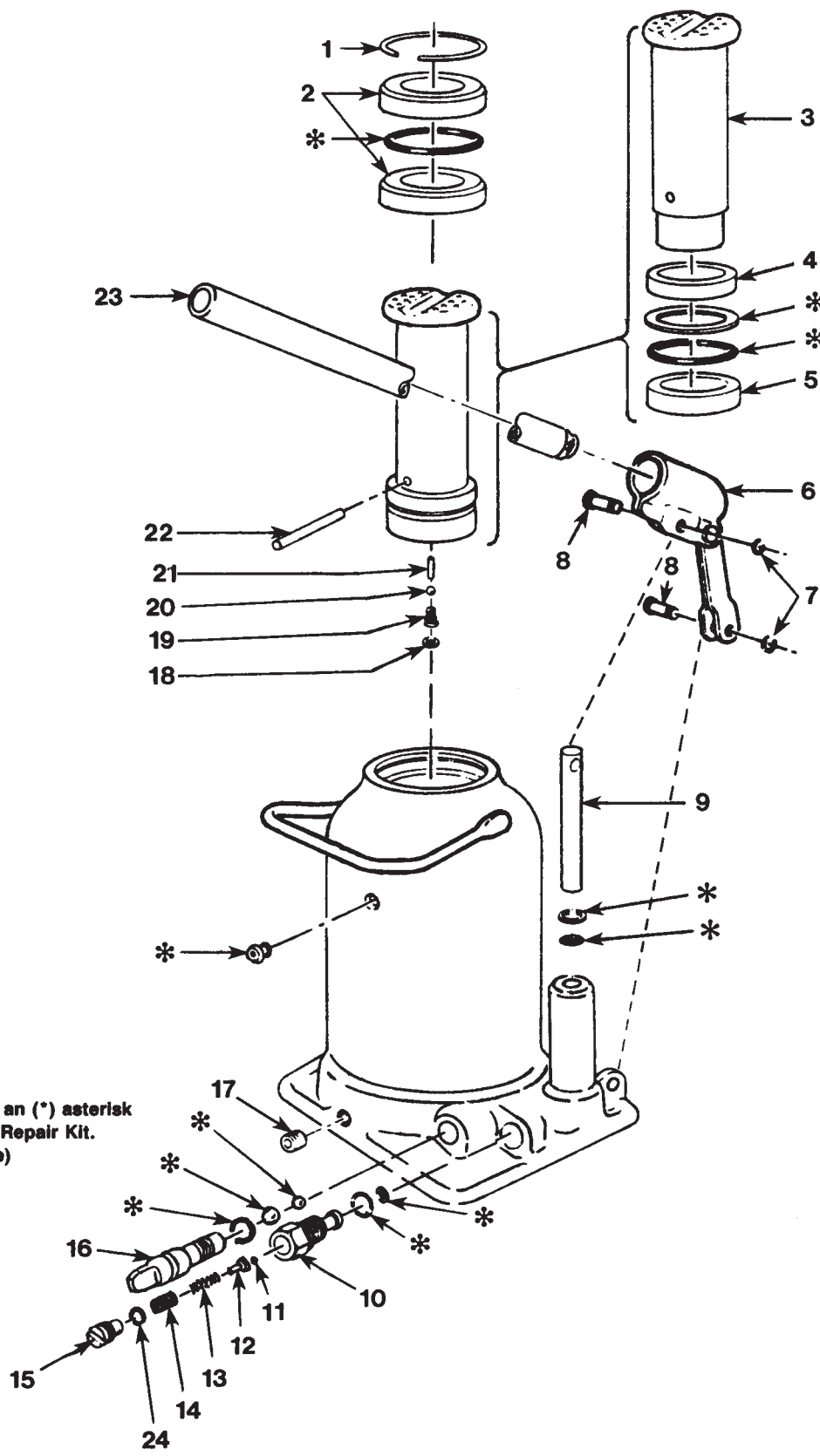
Sheet No. 1 of 2

Rev. Date: 15 Oct. 1987

PARTS LIST

HYDRAULIC JACKS

CAPACITY: 30 TON



Items marked with an (*) asterisk are contained in a Repair Kit. (See opposite page)

Item No.	No. Req'd	Description	30 Ton 9030
1	1	Snap Ring	214422
2	1	Upper Bearing	214423
3	1	Ram	214424
4	1	Ram Bearing (A)	214427
5	1	Ram Bearing (B)	214428
6	1	Lever Linkage Ass'y	214617
7	2	Retaining Ring	214620
8	2	Pin Link	214618
9	1	Pump Plunger	214622
10	1	Overload Valve Body	214619
11	1	Check Ball	214623
12	1	Spring Cap	214624
13	1	Overload Spring	214625
14	1	Adjustment Screw	214626
15	1	Set Screw	214621
16	1	Release Valve	214385
17	1	Plug	214437
18	1	Retainer	214354
19	1	Spring	214353
20	1	Check Ball	10375
21	1	Valve Pin	214415
22	1	Limit Pin	214425
23	1	Handle (1 piece)	214616
24	1	"O" Ring	214674
	1	Decal (Not shown)	308133
	1	Repair Kit	214453

SAFETY PRECAUTIONS



WARNING

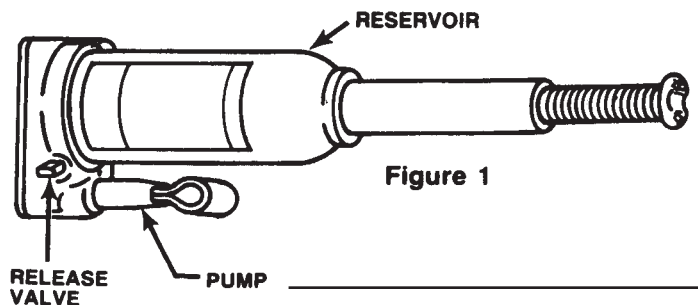
To avoid possible personal injury or damage to equipment:

- Read, understand and follow all instructions and the ANSI B30.1 safety code for jacks.
- Use a jack with sufficient capacity to lift or support the load.
- Properly support the jack.
- Center load on jack.
- Follow lifted load with cribbing.
- Do not allow personnel to go under or work on a load before it is properly cribbed or blocked.
- All personnel must be clear of the load before lowering.
- Lift only dead weight loads.
- Inspect jack before each use. Do not use jack if damaged, altered or in poor repair.
- Use only approved hydraulic fluid (Chevron AW Hydraulic Oil MV or equivalent).

This guide cannot cover every situation, so always do the job with safety first.

OPERATING INSTRUCTOINS

1. To raise the jack, close the release valve tightly by turning it clockwise. Insert the handle into the pump receiver and operate pump.
2. To lower the jack, open the release valve slowly by turning it counterclockwise.
3. To use the jack in a horizontal position, the jack MUST be placed on its side so that the pump is lower than the reservoir. See Figure 1.



TROUBLESHOOTING GUIDE

This troubleshooting guide is intended as a general reference, and all statements may not apply to a particular jack. Repair procedures must be performed in a dirt-free environment by qualified personnel familiar with this equipment.

Trouble	Cause	Solution
Erratic Action	<ol style="list-style-type: none"> 1. Air in system 2. Viscosity of oil too high 3. Internal leakage in cylinder 4. Cylinder sticking or binding 	<ol style="list-style-type: none"> 1. <i>With jack sitting on its base and ram retracted, bleed air by opening the release valve three turns and stroking the handle 20 times. Check for leaks.</i> 2. <i>Change to lower viscosity oil</i> 3. <i>Replace worn packings. Check for excessive contamination or wear.</i> 4. <i>Check for dirt, gummy deposits or leaks. Check for misalignment, worn parts or defective packing.</i>
Jack does not advance	<ol style="list-style-type: none"> 1. Release valve is open 2. Low/no oil in reservoir 3. Air locked system 4. Load is above capacity of system 	<ol style="list-style-type: none"> 1. <i>Close release valve</i> 2. <i>Fill with oil and bleed system</i> 3. <i>Bleed the system</i> 4. <i>Use correct equipment</i>
Jack only extends partially	<ol style="list-style-type: none"> 1. Reservoir is low on oil 2. Piston rod is binding 	<ol style="list-style-type: none"> 1. <i>Fill reservoir</i> 2. <i>Check for dirt, gummy deposits or leaks. Check for misalignment, worn parts or defective packing.</i>
Jack advances slowly	<ol style="list-style-type: none"> 1. Pump not working correctly 2. Leaking seals 	<ol style="list-style-type: none"> 1. <i>Rework pump</i> 2. <i>Replace seals</i>
Jack advances but doesn't hold pressure	<ol style="list-style-type: none"> 1. Cylinder seals are leaking 2. Pump check valve not working correctly 3. Overload valve leaking or not adjusted correctly 	<ol style="list-style-type: none"> 1. <i>Replace seals</i> 2. <i>Clean/replace check valve</i> 3. <i>Replace/adjust overload valve</i>
Jack leaks oil	<ol style="list-style-type: none"> 1. Worn or damaged seals 	<ol style="list-style-type: none"> 1. <i>Replace seals</i>
Jack will not retract or retracts slowly	<ol style="list-style-type: none"> 1. Release valve is closed 2. Cylinder damaged internally 3. Reservoir too full 	<ol style="list-style-type: none"> 1. <i>Open release valve</i> 2. <i>Send jack to authorized service center for repair</i> 3. <i>Drain oil to correct level</i>

IMPORTANT MAINTENANCE PROCEDURES

1. Keep the jack clean at all times. Regularly clean and lubricate exposed threads. If the jack has been exposed to rain, snow, sand or grit, it must be cleaned before it is used.
2. When the jack is not in use, keep the piston and pump rods fully retracted. Store the jack in a vertical position in a well protected area where it will not be exposed to corrosive vapors, abrasive dust or any other harmful elements. Jacks must be thoroughly inspected before use.
3. Visually inspect the jack periodically for the following problems and take appropriate corrective actions before use:
 - a. Cracked or damaged housing
 - b. Excessive wear, bending or other damage
 - c. Leaking hydraulic fluid
 - d. Scored or damaged piston rod
 - e. Improperly functioning swivel heads and adjustment screws
 - f. Loose hardware
 - g. Modified or altered equipment