

## Parts List

Index No.	Part No.	Description	Q'ty	Index No.	Part No.	Description	Q'ty
1	5-1	Body	1	17	5-13	ram	1
2	12.5-8	stell ball	2	18	5-14	washer	1
3	12.5-3	O-ring*	1	19	5-15	O-ring*	1
4	5-2	release rod	1	20	5-16	bushing	1
5	5-3	spring	1	21	5-17	snap ring	1
6	5-4	copper washer*	1	22	5-18	O-ring*	2
7	5-5	scerw	1	23	5-19	nylon gasket*	2
8	12.5-9	oil filler plug	1	24	5-20	pump cylinder	1
9	12.5-10	stell ball	1	25	5-21	pin	2
10	5-6	washer	1	26	12.5-31	pin	3
11	5-7	snap ring	1	27	5-22	rod joint	1
12	5-8	snap ring	1	28	5-23	pin	1
13	5-9	washer	1	29	5-24	handle socket	1
14	5-10	O-ring*	1	30	5-25	rear handle	1
15	5-11	sealing washer*	1	31	5-26	middler handle	1
16	5-12	piston ring	1	32	5-27	front handle2	1

## Troubleshooting Guide

Repair procedures must be performed in a dirt-free environment by qualified personnel who are familiar with this equipment.

Trouble	Cause	Solution
Erratic Action	<ol style="list-style-type: none"> <li>Air in system</li> <li>Viscosity of oil too high</li> <li>Ram sticking or binding</li> <li>Internal leakage in ram</li> </ol>	<ol style="list-style-type: none"> <li>With jack sitting on its base and ram retracted, bleed air by opening release valve &amp; remove oil plug. Pump for 10 seconds.</li> <li>Change to a lower viscosity oil.</li> <li>Look for dirt, gummy deposits, leaks, misalignment, worn parts, or defective packing.</li> <li>Replace worn packings. Look for excessive contamination or wear.</li> </ol>
Ram does not advance.	<ol style="list-style-type: none"> <li>Release valve is open</li> <li>Low/no oil in reservoir</li> <li>Air locked system</li> <li>Load is above capacity of system</li> </ol>	<ol style="list-style-type: none"> <li>Close release valve.</li> <li>Remove oil plug, fill jack with oil to bottom of oil fill hole, and bleed system.</li> <li>With jack sitting on its base and ram retracted, bleed air by opening release valve &amp; remove oil plug. Pump for 10 seconds.</li> <li>Use correct equipment.</li> </ol>
Ram Only extends partially and stops	<ol style="list-style-type: none"> <li>Low Oil level in reservoir</li> <li>Piston rod is binding</li> </ol>	<ol style="list-style-type: none"> <li>Fill reservoir with oil, and bleed System.</li> <li>Look for dirt, gummy deposits, leaks, misalignment, worn parts, or defective packing.</li> </ol>
Ram advances slowly	<ol style="list-style-type: none"> <li>Pump not working correctly</li> <li>Leaking seals</li> </ol>	<ol style="list-style-type: none"> <li>Re-work pump.</li> <li>Replace seals.</li> </ol>
Ram advances but doesn't hold pressure	<ol style="list-style-type: none"> <li>Release valve is open</li> <li>Ram seals are leaking</li> <li>Pump check valve not working</li> <li>Overload valve leaking or not adjusted.</li> </ol>	<ol style="list-style-type: none"> <li>Close release valve.</li> <li>Replace seals.</li> <li>Clean/replace check valve.</li> <li>Overload valve leaking or 4</li> <li>Replace /adjust overload valve.</li> </ol>
Jack leaks oil	<ol style="list-style-type: none"> <li>Worn or damaged seals.</li> </ol>	<ol style="list-style-type: none"> <li>Replace seals</li> </ol>
Ram will not retract, or retracts slowly	<ol style="list-style-type: none"> <li>Release valve is closed</li> <li>Reservoir too full</li> <li>Ram damaged internally</li> </ol>	<ol style="list-style-type: none"> <li>Open release valve.</li> <li>Drain oil to correct level.</li> <li>Take jack to authorized service center for repair.</li> </ol>

# 5 TON HYDRAULIC BOTTLE JACK Operation Manual



# Bottle jack

Maximum Capacity: 5ton

These instructions have been written to help the user effectively use and maintain the jacks. Some of the information applying to construction, installation, operation, inspection, and maintenance of hydraulic jacks selected from ANSI B30.1 and ASME/ANSIPALD-1.

## Safety Precautions



**WARNING:** Failure to heed the following warnings can result in personal injury and / or equipment damage. These warnings cannot cover every situation, so have safety foremost in your mind when setting up a job.



- Read understand and follow the operation instructions and the ANSI B30.1 and ASME PALD-1 safety standards for jack.

If the operator cannot read English, operating instructions and safety precautions must be read and discussed in the operator's native language.



- Wear eye protection that meets the requirements of ANSI Z87.1 and OSHA.
- Inspect the jack before each use; do not use the jack if it is damaged, altered, or in poor condition.
- To prevent tipping, set up the jack on a hard, level surface. Set vehicle parking brake and block tires.



- The load must not exceed the rated lifting capacity of the jack. Lift Only dead weight.
- Center the load on the jack saddle, because off-center loads can damage seals and cause hydraulic failure.
- Use the jack for lifting purposes only. This jack is designed to LIFT loads, NOT SUPPORT loads. Immediately support a lifted load with jack stands.
- Stay clear of lifted loads
- Use only approved hydraulic fluid, such as Chevron AW Hydraulic Oil MV or equivalent.

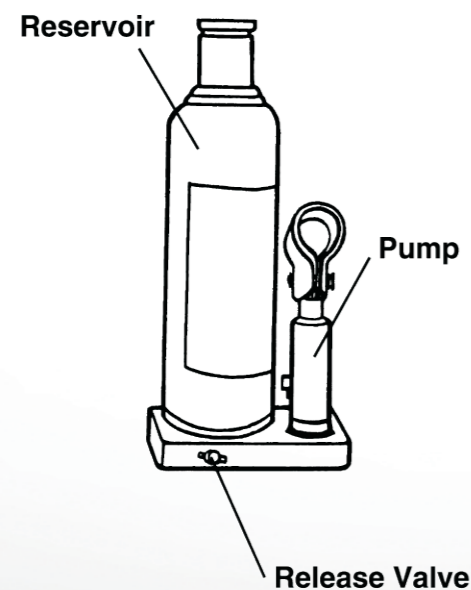
## Operating Instructions

To raise the jack, use narrow end of jack handle to tighten release valve clockwise (CW) Insert handle into socket, and operate pump.

To lower the jack, SLOWLY open the release valve knob by turning it counter clockwise (CCW).

To use the jack in a horizontal position, the pump MUST be lower than the reservoir. Position the jack as shown in Figure 1.

**Figure 1**



## Preventive Maintenance

Important: Dirt is the greatest single cause of failure in hydraulic units. Keep the jack clean and well lubricated to prevent foreign material from entering the system. If the jack has been exposed to rain, snow, sand, or grit, it must be cleaned before it is used.

1 When the jack is not in use, keep the piston fully retracted. Store the jack on its base and in a well protected area where it will not be exposed to corrosive vapors, abrasive dust, or any other harmful elements.

2 Maintain the oil level at the bottom of the filler plug hole. If it's necessary to add oil, remove the filler plug, and fill the reservoir with Chevron AW Hydraulic Oil MV or equivalent.

3 Visually inspect the jack before each use. Take corrective action if any of the following problems are found:

- Cracked or damaged housing
- Excessive wear, bending or other damage
- Leaking hydraulic fluid
- Scored or damaged piston rod
- Incorrectly functioning swivel heads or adjusting screw
- Loose hardware
- Modified or altered equipment

## Parts List and operating Instructions

