

# OPERATING INSTRUCTIONS

## Manual hydraulic Jack with Toe-lift

### **CHL**



## 1. SAFETY PRECAUTIONS



Fail to comply with the following cautions and warnings could cause equipment damage and personal injury.



**IMPORTANT :** Minimum age of the operator must be 18 years. The operator must have read and understood all instructions, safety issues, cautions and warnings before starting to operate the factory equipment. The operator is responsible for this activity towards other persons.



**WARNING :** To avoid personal injury and possible equipment damage, make sure all hydraulic components withstand the maximum pressure of 700 bar (10,000psi).



**WARNING:** Always wear safety glasses. The operator must take precaution against injury due to failure of the tool or workpiece.



**WARNING:** Stay clear of loads supported by hydraulics. A cylinder, when used as a load lifting device, should never be used as a load holding device. After the load has been raised or lowered, it must always be blocked mechanically.



**WARNING:** USE ONLY RIGID PIECES TO HOLD LOAD. Carefully select steel or wood blocks that are capable of supporting the load. Never use a hydraulic cylinder as a shim or spacer in any lifting or pressing application.



**DANGER:** To avoid personal injury keep hands and feet away from cylinder and workpiece during operation.



**WARNING :** Do not overload equipment. Overloading causes equipment failure and possible personal injury. The cylinders are designed for a max. Pressure of 700 bar (10,000psi).



**DANGER: NEVER** set the relief valve to a higher pressure than the maximum rated pressure of the pump. Higher settings may result in equipment damage and/or personal injury. Do not remove relief valve.



**WARNING :** The system operating pressure must not exceed the pressure rating of the lowest rated component in the system. Install pressure gauges in the system to monitor operating pressure. It is your window to what is happening in the system.



**CAUTION:** Avoid sharp bends and kinks that will cause severe back-up pressure in hoses. Bends and kinks lead to premature hose failure.



**DO NOT** drop heavy objects on hose. A sharp impact may cause internal damage to hose wire strands. Applying pressure to a damaged hose may cause it to rupture.



**IMPORTANT:** Do not lift hydraulic equipment by the hoses or couplers. Use the carrying handle or other means of safe transport.



**CAUTION :** KEEP HYDRAULIC EQUIPMENT AWAY FROM FLAMES AND HEAT. Excessive heat will soften packings and seals, resulting in fluid leaks. Heat also weakens hose materials and packings. For optimum performance do not expose equipment to temperatures of 65°C (150°F) or higher. Protect hoses and cylinders from weld spatter.



**DANGER:** Do not handle pressurized hoses. Escaping oil under pressure can penetrate the skin causing serious injury. If oil is injected under the skin, see a doctor immediately.

## 1. SAFETY PRECAUTIONS



**WARNING:** Never pressurize uncoupled couplers. Only use hydraulic equipment in a coupled system.



**WARNING: BE SURE SETUP IS STABLE BEFORE LIFTING LOAD.** Cylinders should be placed on a flat surface that can support the load. Where applicable, use a cylinder base for added stability. Do not weld or otherwise modify the cylinder to attach a base or other support.



**Avoid** situations where loads are not directly centered on the cylinder plunger. Off-center loads produce considerable strain on cylinder and plungers. In addition, the load may slip or fall, causing potentially dangerous results.



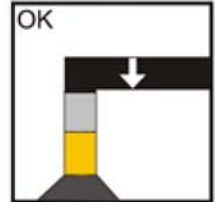
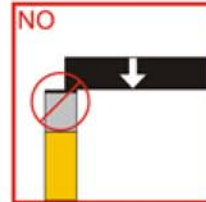
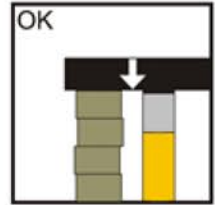
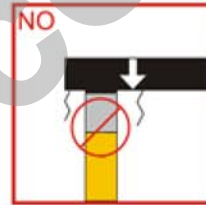
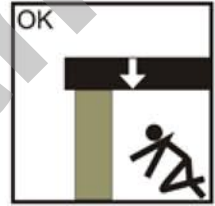
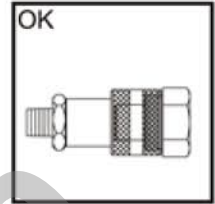
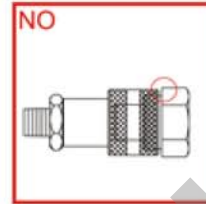
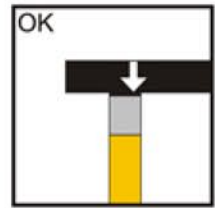
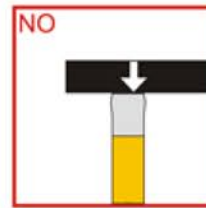
Distribute the load evenly across the entire saddle surface. Always use a saddle to protect the plunger.



**WARNING:** Immediately replace worn or damaged parts with genuine **factory** parts. **Factory** parts are designed to fit properly and withstand rated loads.



**IMPORTANT:** Hydraulic equipment must only be serviced by a qualified hydraulic technician. For repair service, contact the **our** Service Center in your area. To protect your warranty, use only **standard** oil.





### 3. OPERATING INSTRUCTIONS

**IMPORTANT: Do not carry jack by the jacking lever.**

**Lifting a Load:**

Position the load on the toe of the jack.

**WARNING!**

**Do not** lift a load on the end of the toe. Fully engage the load with the toe.

**IMPORTANT!**

When lifting by the toe, wedge the head of the jack on the load to avoid bending the column.

Turn the release valve knob in a clockwise direction until it is snug.

Pump the jacking lever in an up and down motion.

**Lowering a Load:**

Slowly loosen the release valve knob by turning it in a counterclockwise direction. The more the knob is loosened, the faster the load will be lowered.

To stop the jack from lowering a load, tighten the release valve knob by turning it in a clockwise direction.

### 4. PREVENTIVE MAINTENANCE

**IMPORTANT:**

The greatest single cause of failure in hydraulic units is dirt. Keep the jack clean and well lubricated to prevent foreign matter from entering the system.

If the jack has exposed to rain, snow, sand, or grit, it must be cleaned before it is used.

- 4.1 When the jack is not in use, keep the piston and pump rods fully retracted. Store the jack in its base and in a well protected area where it will not be exposed to corrosive vapors, abrasive dust, or any other harmful elements.
- 4.2 Visually inspect the jack before each use. Take corrective action if any of the following problems are found:
  - a. Cracked or damaged housing
  - b. Excessive wear, bending, or other damage
  - c. Leaking hydraulic fluid
  - d. Scored or damaged piston rod
  - e. Incorrectly functioning swivel heads or adjusting screws
  - f. Loose hardware
  - g. Modified or altered equipment