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# CHU LUN SING CO., LTD

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# OPERATING INSTRUCTIONS Manual hydraulic Jack (Bottle Jack)

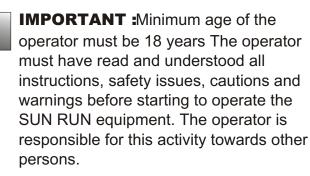


English : E1~E3

#### 1. SAFETY PRECAUTIONS



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





**WARNING:** Always wear safety glasses. The operator must take precaution against injury due to failure 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:** Immediately replace worn or damaged parts with genuine SUN RUN parts. SUN RUN 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 SUN RUN Service Center in your area. To protect your warranty, use only SUN RUN oil.



### **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.



**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.



#### 2.SPECIFICATION

Model Number	Capacity	Stroke	Min. Height	Ext. Height	Plunger Diam.	Base Dimensions	Auxiliary Height	Weight
型 號	能力	揚 程	本身高	伸長總高	主軸直徑	底座尺寸	輔助高	總 重
	(ton)	(mm)	A (mm)	B (mm)	J (mm)	L x W (mm)	(mm)	(kg)
SH-05	5	137	204	341	30	90 X 110	56	3.5
SH-10A	10	134	238.5	372.5	42	105 X 166	85	8.2
SH-10B	10	80	169	249	42	105 X 166	55	6.4
SH-20A	20	150	267.5	417.5	55	128 X 181	85	13.3
SH-20B	20	80	187.5	267.5	55	128 X 181	55	10.0
SH-30A		154	283	437	62	141 X 197	N / A	19.6
SH-30B	30	75	183	258	62	141 X 197	N / A	13.8
SH-50A	50	150	305	455	85	200 X 257	N/A	42.3

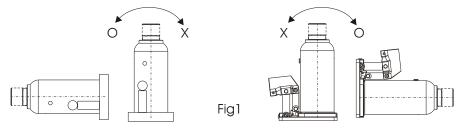
#### 3.0PERATING INSTRUCTIONS

To raise the jack, use narow 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 tuning it counterclockwise(CCW).

To use the jack in a horizontal position, all models work both in vertical and horizontal. Position the jack as shown in Fig.1.

When used in horizontal position, will just use 50~70% oil. And it will effect its stroke.



#### **4.PREVENTIVE MAINTENANCE**

#### IMPORTANT:

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

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

- 3.1 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 tocorrosive vapors, abrasive dust, or any other harmful elements.
- 3.2 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 hydraulic oil enquire.
- 3.3 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



## 5. TROUBLE-SHOOTING GUIDE

Trouble	Cause	Solution	
Erratic Action	<ol> <li>1.Air in system</li> <li>2.Viscosity of oil too high</li> <li>3.Ram sticking or binding</li> <li>4.Internal leakage in ram</li> </ol>	<ol> <li>With jack siting on its base and ram retracted, bleed air by opening release valve. Pump for 10 seconds.</li> <li>Change to lower viscosity oil.</li> <li>Look for dirt, gummy deposits, leaks, misalignment, worn parts, or defective packing.</li> <li>Replace worn packing. Look for excessive contamination or wear.</li> </ol>	
Ram dose not advance	<ol> <li>Release valve is open</li> <li>Low/no oil reservoir</li> <li>Air-locked system</li> </ol>	<ol> <li>Close release valve.</li> <li>Remove oil plug, fill jack with oil to bottom of oil fill hole, &amp; 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> </ol>	
Ram only extends partially and stops	1.Low oil level in reservoir 2.Piston rod is binding	<ol> <li>Fill reservoir with oil, &amp; bleed system.</li> <li>Look for dirt, gummy deposits, leaks, misalignment, worn parts, or defective packing.</li> </ol>	
Ram advance slowly	1.Pump not working correctly 2.Leaking seals	1.Rework pump. 2.Replace seals.	
Ram advances but doesn't hold pressure	1.Release valve is open 2.Ram seals are leaking 3.Pump check valve not working 4.Overload valve leaking or not adjusted	<ol> <li>Close release valve</li> <li>Replace seals.</li> <li>Clean/replace check valve.</li> <li>Replace/adjust overload valve.</li> </ol>	
Jack leaks oil	1.Worn or damaged seals	1.Replace seals	
Ram will not retract or retracts slowly	1.Release valve is closed 2.Reservoir too full 3.Ram damaged internally	<ol> <li>Open release valve.</li> <li>Drain oil to correct level.</li> <li>Take jack to authorized service center for repair.</li> </ol>	

