



巨輪興有限公司

高雄市岡山區岡山北路199號

CHU LUN SING CO.,LTD

No.199, Gangshan N. Rd., Gangshan Dist.,
Kaohsiung City 82059, Taiwan

<http://www.sunrun.com.tw>

E-mail:sun.run@msa.hinet.net

TEL:886-7-6210505

FAX:886-7-6217575

側趾式液壓千斤頂-機械式舉升 操作說明

SLOH



中文 : C1~C5

中文
English
Ver.16

1. 安全預防措施



不遵守以下的注意事項和警告將引起設備損失及人員傷害。



重要事項：未滿18歲人員不得擅自操作。操作 SUN RUN油壓設備前請先仔細閱讀並了解相關操作手冊、安全事項和警告事項。操作人員負有油壓設備週邊之人員及環境之安全責任。



警告事項：為確保避免人員傷害和設備作業損失，請確認所有油壓設備及週邊配件，使用最大壓力為 700 bar(10,000psi)。



警告事項：操作人員於使用期間為避免傷害，需全程配戴安全防護措施。



警告事項：不得使用油壓設備作為支撐重物使用。當液(油)壓缸作為負載頂昇設備時，僅可頂昇，不可用來支撐重物使用。當完成頂升作用後，需使用機械性工具來固定支撐。



警告事項：必須使用硬性物體來支撐重物。慎選能承受重物的鋼鐵或木塊來支撐荷載。不要在頂升或持壓使用中將液(油)壓缸當做墊塊使用。



危險事項：為避免人員傷害，請於操作過程中手、腳遠離液(油)油壓缸和液壓設備。



警告事項：禁止超載使用。超載使用易造成設備損害及人員損傷。液(油)壓缸設計最大使用壓力為 700 bar (10,000psi)。



危險事項：千萬不可將溢流(安全)閥的壓力值設定高於泵浦的額定壓力。超載的壓力值可能引起設備損壞及人員損傷。尤其千萬不可拆除溢流(安全)閥。



警告事項：系統操作壓力絕不可超過最低壓力元件之值最低值。系統中應加裝壓力錶藉以監測系統中的壓力並了解使用狀態。



警告事項：避免損壞油壓管。捲收油管時，避免油管強烈彎曲或打結。使用彎曲或打結油管易引起背壓。強烈彎曲或打結的油管亦易引起內部損壞或提早油管老化。



千萬不要重壓油管。劇烈的撞擊會造成油管內鋼絲網損壞。使用受損的油管可能導致油管破裂。



重要事項：千萬不要利用油管來提攜其他油壓設備(例如:小型油壓缸、泵浦..等)。




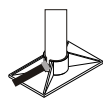
危險事項：液(油)壓設備應遠離火或熱源。高溫會軟化包裝和密封材料，導致液壓油洩漏；高溫同時也會造成油管材質與包裝變質。為確保最好狀態，不要將液(油)壓設備暴露於 65°C(150°F)高溫。在電焊場所時亦應注意防止電焊火花噴到油管。




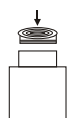
危險事項：不要用手對油管施加壓力(包括拉或舉高) 高壓下洩漏的液壓油會穿透皮膚造成嚴重傷害。當液壓油侵入皮膚請立即就診。


1. 安全預防措施


 **警告事項：**液(油)壓缸只能在已連接好的液壓油路中使用；快速接頭尚未確實連接時禁止使用或加壓，否則高壓情況下接頭的油封及鋼珠會高速噴出造成人員傷亡。

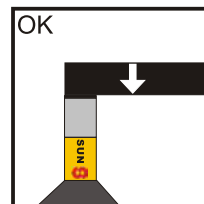
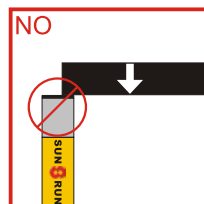
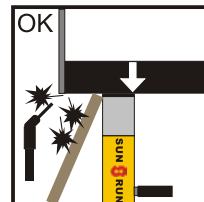
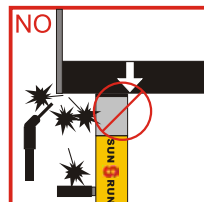
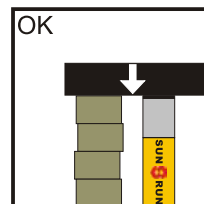
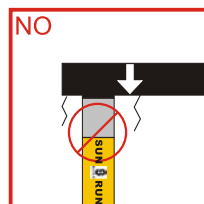
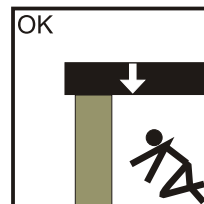
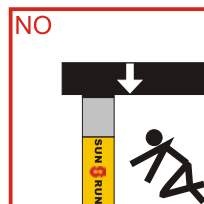
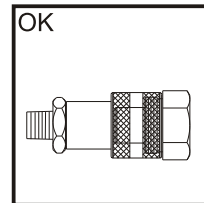
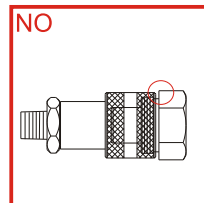
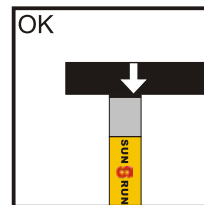
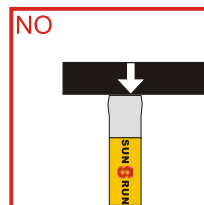
 **警告事項：**頂昇荷載前，請確保油壓裝置平穩。油壓缸必須放在平穩可支撐重物的基座上。若情況許可，可使用油壓缸基座來增加穩定性。千萬不可使用焊接或其他方法將油壓缸與所使用的基礎面(支撐座)連接一起。

 避免荷載不直接作用在油壓缸的主軸中心上。偏心荷載易導致油壓缸和主軸受損。此外，重物亦可能因傾斜而滑落，引發潛在危險。

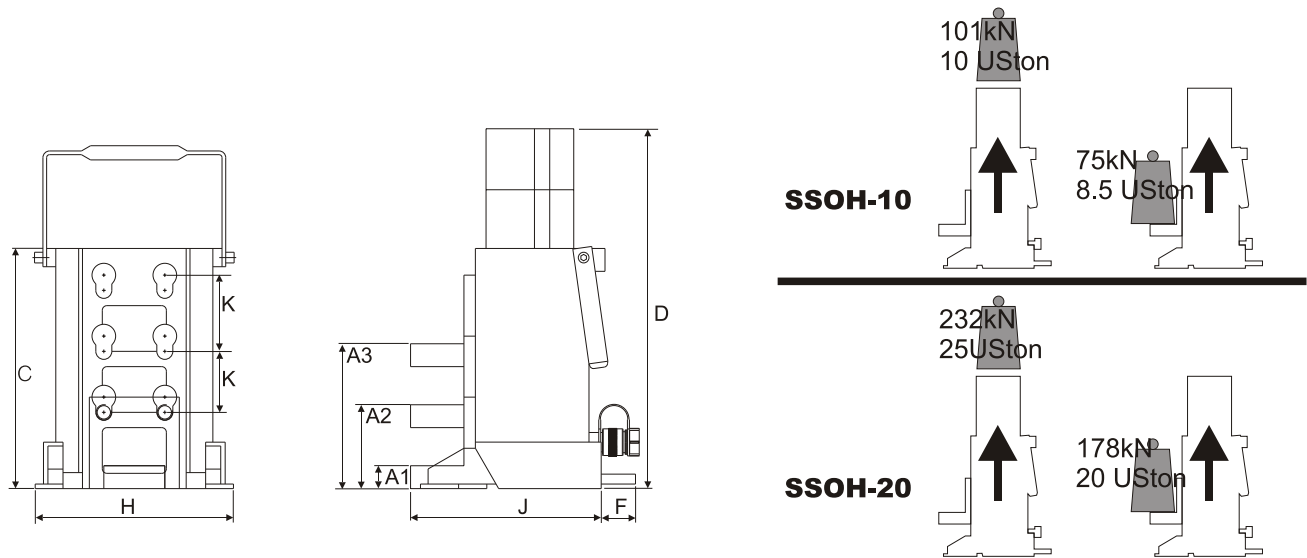
 將荷載平均的分布在墊塊表面。傾斜墊塊可消除偏荷載。當無使用螺牙連接其他附件時，一定要使用墊塊以保護主軸。

 **警告事項：**當零件出現裂痕或損壞時，應立即以**SUN RUN**零件更換。正確標準的零件可防止人員或設備損傷。**SUN RUN**零件經特別設計可完全適用並適用產品標稱的額定荷載或壓力。

 **重要事項：**液壓設備必需由合格的液壓技工進行維修。需要修理時，請連繫就近的**SUN RUN**服務據點並使用**SUN RUN**液壓油保固方為有效。

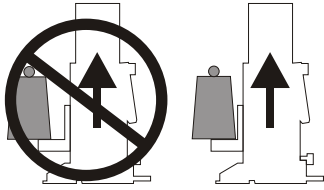


2. 規範



Model No. 型號	Top cap. 頂部荷重 (ton)	Low toe-Lift cap. 爪部荷重 tons/kN	Stroke 揚程 (mm)	Oil Capacity 油量 (c.c)	Dimensions (mm)						Toe-Lift Clearance with Cyl. Retracted 突趾高度 A1-A2-A3 (mm)	Weight 總重 (kg)	Max. Pressure 最大壓力 (bar)
					Body Ht. 本體高 C	Ext. Ht. 伸長高 D							
SSOH-10	10.0	8.5/75	136	224.5	294	430	-	190	214	74	20-95-169	26	700
SSOH-20	40.0	20/178	157	524.4	320	472	65	265	250	80	30-110-190	45	700

3.操作

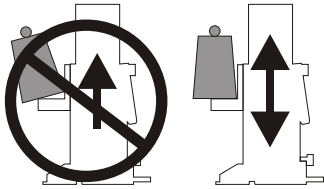


舉升前:

油缸須穩固的附在側趾舉升基座上。確保側趾爪舉升面和荷載接觸面保持淨空。接觸面必須確保油路暢通及固定潤滑以避免荷載時滑出。

舉升荷載前須確保荷載面與側趾爪完全含載以避免爪變形斷裂。

鎖銷鏈在舉升前須隨時在支撐腳的位置以避免舉升中移動發生意外。



千斤頂揚升與回縮

請參考搭配泵浦的操作冊依序操作。

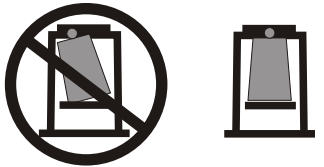
手動泵浦

使用手動泵浦時請先關閉洩壓閥然後上下作動手把使油缸前進(上升)。

欲回縮油缸則打開洩壓閥即可。

若使用二位閥手泵則將閥把手轉向"前進"方位並上下作動手泵把手則油缸前進(上升)。

欲回縮油缸則將閥把手轉向回復位，油缸即回縮(下降)。



重要事項:

欲使荷載緩慢下降則緩慢打開洩壓閥。

動力泵浦

將閥轉向前進方位然後啟動泵浦則千斤頂開始前進(上升)。

若欲回縮千斤頂則將閥轉向回縮方位即可。

排出空氣

將油缸前進、回縮數次可避免內壓產生。空氣完全排除則千斤頂運作平順。

4. 預防維修

當磨耗或發生洩漏時則需維修。零件定期全檢以及早維修。SUN RUN提供即時隨用修理包方便維修及替換。

重要事項：

油壓設備須由專業的油壓技師提供操作及服務。請連絡就近SUN RUN所認可的維修中心以提供服務。

4.1 請定期零件全檢以及早維修服務。立即更換危險零件。

4.2 請勿超過溫度 60°C/140°F。

4.3 請保持所有零件潔淨。

4.4 定期檢查油壓系統防止鬆脫或洩漏。

4.5 請依泵浦操作手冊更換液壓油。

重要事項：

請隨時保持舉升板潤滑。

5. 疑難解答

狀況	原因	解決
油缸無法前進前、進緩慢或突然噴出	1. 泵浦油位太低 2. 洩壓閥呈現打開狀態 3. 油壓快速接頭鬆脫 4. 系統內有空氣 5. 油缸主軸黏貼	1. 泵浦加油 2. 關閉泵浦洩壓閥 3. 確認所有接頭完全鎖緊 4. 排出空氣(見頁3) 5. 確認油缸問題。請洽詢就近SUN RUN服務中心
油缸前進但無法持壓	1. 連接漏油 2. 油封漏油 3. 泵浦內漏	1. 確認所有連接處鎖緊 2. 請連絡就近的SUN RUN服務中心 3. 請連絡就近SUN RUN 服務中心
油缸無法回縮、回縮部份或較平常回縮速度慢	1. 關閉洩壓閥 2. 泵浦油桶油太滿 3. 油壓快速接頭鬆脫 4. 系統內有空氣 5. 油缸內油路阻塞	1. 打開泵浦洩壓閥 2. 將多的液壓油倒出 3. 確認快速接頭完全鎖緊 4. 排出空氣(見頁3) 5. 確認快速接頭已正確連接，完全鎖緊；閥功能正常

出廠證明暨保固書

產品名稱：

型 號：

序 號：

出廠日期： / /

保固期間： / / ~ / /

該產品經公司嚴格品質管制,並測試合格出廠,本產品自驗收合格日起保固一年,如非人為使用不當或天然不可抗拒之災害,本公司免費維修,如非以上之原因本公司將酌收材料成本負責維修。

公司：巨輪興有限公司

負責人：蘇明益

高雄市岡山區岡山北路199號

TEL:886-7-6210505

FAX:886-7-6217575



巨輪興有限公司

高雄市岡山區岡山北路199號

CHU LUN SING CO.,LTD

No.199, Gangshan N. Rd., Gangshan Dist.,
Kaohsiung City 82059, Taiwan

<http://www.sunrun.com.tw>

E-mail:sun.run@msa.hinet.net

TEL:886-7-6210505

FAX:886-7-6217575

OPERATING INSTRUCTIONS

Manual Hydraulic Machine Lifts

SLOH



English : E1~E6

中文
English
Ver.16

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 SUN RUN 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.




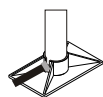
CAUTION : KEEP HYDRAULIC EQUIPMENT AWAY FROM FLAMES AND HEAT. Excessive heat will soften packings and seals, resulting in fluid leaks. Heat also weakens hose materials and packings. For optimum performance do not expose equipment to temperatures of 65°C (150°F) or higher. Protect hoses and cylinders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




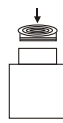
DANGER: Do not handle pressurized hoses. Escaping oil under pressure can penetrate the skin causing serious injury. If oil is injected under the skin, see a doctor immediately.


1. SAFETY PRECAUTIONS


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

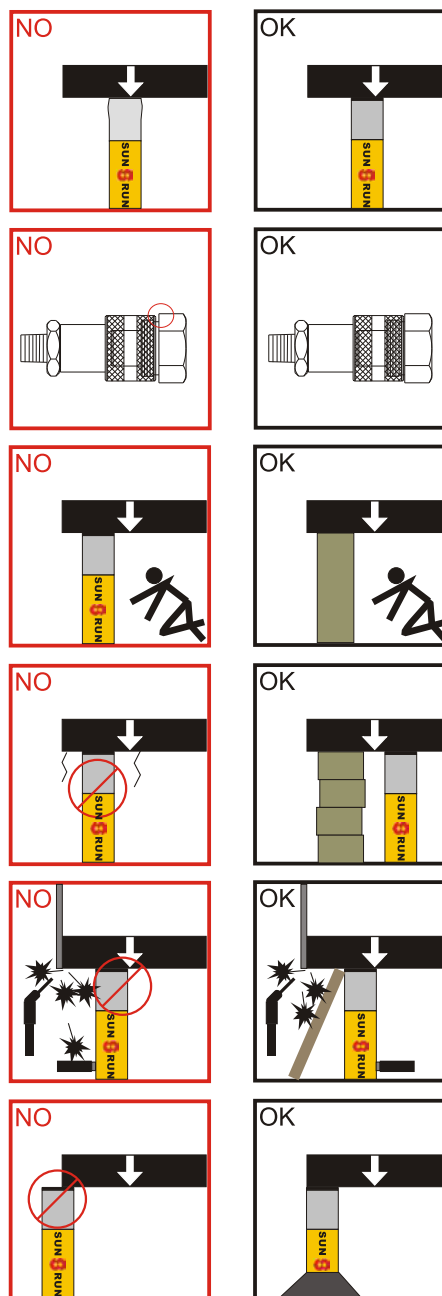
 **WARNING: BE SURE SETUP IS STABLE BEFORE LIFTING LOAD.** Cylinders should be placed on a flat surface that can support the load. Where applicable, use a cylinder base for added stability. Do not weld or otherwise modify the cylinder to attach a base or other support.

 **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.

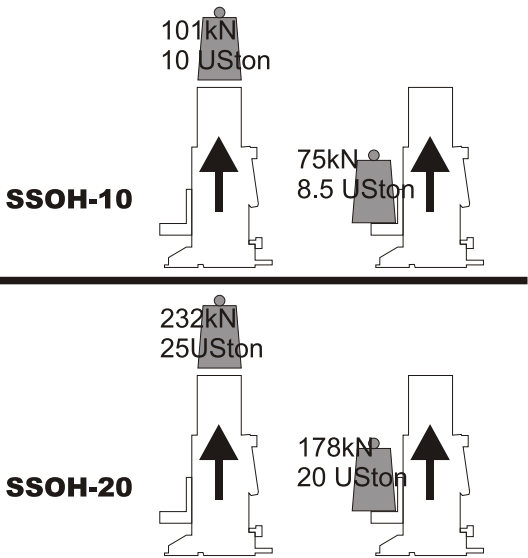
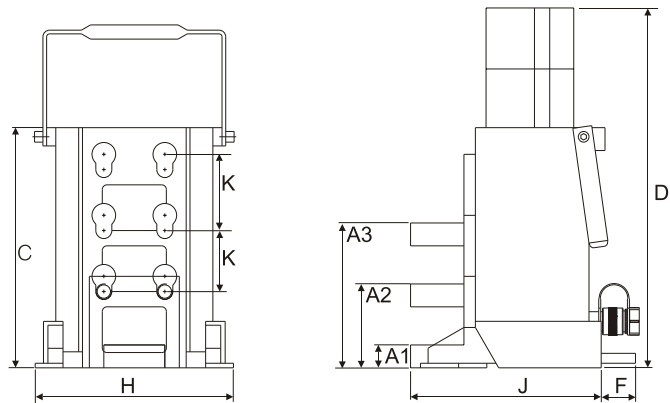
 Distribute the load evenly across the entire saddle surface. Always use a saddle to protect the plunger.

 **WARNING:** Immediately replace worn or damaged parts with genuine 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.

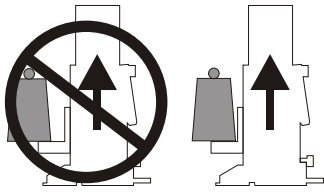


2. SPECIFICATION



Model No.	Top cap.	Low toe-Lift cap.	Stroke	Oil Capacity	Dimensions (mm)						Toe-Lift Clearance with Cyl. Retracted	Weight	Max. Pressure
					Body Ht.	Ext. Ht.							
	(ton)	tons/kN	(mm)	(c.c)	C	D	F	H	J	K	A1-A2-A3 (mm)	(kg)	(bar)
SSOH-10	10.0	8.5/75	136	224.5	294	430	-	190	214	74	20-95-169	26	700
SSOH-20	40.0	20/178	157	524.4	320	472	65	265	250	80	30-110-190	45	700

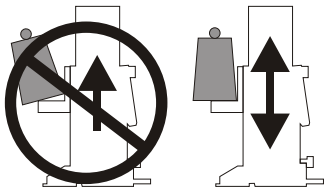
3.OPERATING INSTRUCTIONS



Before Lifting:

The cylinder must be securely attached in the toe lift base. Keep the contact surface between the toe lift and the load clean. The contact surface must be free of oil and grease to avoid the load slipping off.

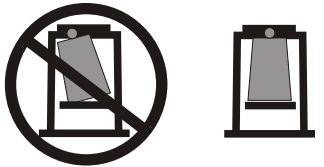
Before lifting a load make sure that the contact surface of the toe lift completely support the load to avoid bending of the toe.



The chains with the lock pins must always be positioned in the support feet before lifting to avoid the support feet from accidentally be moved during lifting.

Advancing and retracting the jack

For complete operating instructions refer to the instruction sheet included with each pump.



Handpumps

On handpumps with release valves, close relief valve and raise and lower the pump handle to advance the jack. To retract the jack, open the release valve. On handpumps with two position valves, shift valve to advance position and raise and lower the pump handle to advance. To retract, shift the valve to the retract position.

IMPORTANT:

Open the pump relief valve slowly in order to lower the load slowly.

Power Pumps

Shift the valve on the pump to the advance position and run the pump to advance the jack. To retract the jack, shift the valve to the retract position.

Air removal

Advance and retract the jack several times avoiding pressure build-up. Air removal is complete when the jack motion is smooth.

4. PREVENTIVE MAINTENANCE

Maintenance is required when wear or leakage is notice. Periodically inspect all components to detect any problem requiring service and maintenance.

SUN RUN offers ready-to-use spare parts kits for repair and/or replacements. Contact SUN RUN.

IMPORTANT:

Hydraulic equipment must only be serviced by a qualified hydraulic technician. For repair service, contact the Authorized SUN RUN Service Center in your area.

4.1 Periodically inspect all components to detect any problem requiring maintenance and service.

Replace damaged parts immediately.

4.2 Do not exceed oil temperature above 60°C/140°F.

4.3 Keep all hydraulic components clean.

4.4 Periodically check the hydraulic system for loose connections and leaks.

4.5 Change hydraulic oil in your system as recommended in the pump instruction sheet.

IMPORTANT:

Always keep the guidings of the lifting plate greased.

5. TROUBLE-SHOOTING GUIDE

Trouble	Cause	Solution
Cylinder does not advance, advances slowly or in spurts.	1.Oil level in pump reservoir is low. 2.Release valve open. 3.Loose hydraulic coupler. 4.Air trapped in system. 5.Cylinder plunger binding.	1.Add oil to pump. 2.Close pump release valve. 3.Check that all couplers are fully tightened. 4.Remove air (see page 3) 5.Check for damage to cylinder. Have cylinder serviced by an authorized SUN RUN service center.
Cylinder advances, but does not hold pressure.	1.Leaking oil connection. 2.Leaking seals. 3.Internal leakage in pump.	1.Check that all connections are tightened. 2.Lockate leak and have equipment serviced by an SUN RUN service center. 3.Have pump serviced by an authorized SUN RUN service center.
Cylinder does not retract, retracts part way or retracts more slowly than normal.	1.Release valve closed. 2.Pump reservoir overfilled. 3.Loose hydraulic coupler. 4.Air trapped in system. 5.Oil flow to cylinder blocked.	1.Open pump release valve. 2.Drain oil level to full mark. 3.Check that coupler are fully tightened. 4.Remove air (see page 3) 5.Check that coupler are correctly connected, fully tightened and valving is functioning properly.