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USER INSTRUCTIONS

UNI-PROP TEMPORARY SUPPORT & UNI-PROP HYDRAULIC ASSEMBLY

- UP-Mini-0-D1
- UP-Midi-1-D1
- UP-Maxi-2-D1
- UPHA-17-A





USER INSTRUCTIONS

UNI-PROP TEMPORARY SUPPORT & UNI-PROP HYDRAULIC ASSEMBLY

CONTENTS

Important Safety Information	4
Risk Assessment	5
Uni-Prop Temporary Support	6
Uni-Prop Diagram	7
Uni-Prop Installation	8-9
Uni-Prop Removal	10-11
Safe Working Loads - Hydraulic Operation	12
Safe Working Loads - Mechanical Operation	13
Uni-Prop Troubleshooting	14
Uni-Prop General Maintenance	15
Uni-Prop Hydraulic Assembly	16
Assembly Diagram	17
Hydraulic Assembly Operation	18
Technical Specification	19
Equipment Use & Care	20
General Maintenance	21
Declaration of Conformity	22

IMPORTANT SAFETY INFORMATION



Take note of safety alert symbols, which highlight potential hazards.

The above warning depicts a hazardous situation which, if not avoided, could lead to physical harm or damage to equipment or property.

PRIOR TO USE, PLEASE READ THE QUICK START GUIDE AND ENSURE THAT A RISK ASSESSMENT HAS BEEN CARRIED OUT.

IN THE CONSIDERATION OF SAFETY, THE CAPACITY OF THE HYDRAULIC ASSEMBLY IS DE-RATED TO 2T (2000kg). NEVER EXCEED SAFE WORKING LOADS.

AS SOON AS THE HYDRAULIC OPERATION HAS BEEN COMPLETED, THE MECHANICAL COLLAR AND PIN FUNCTION MUST BE ENGAGED IMMEDIATELY TO AVOID THE POTENTIAL FOR ACCIDENT/DAMAGE.

ONLY THE UNI-PROP HYDRAULIC ASSEMBLY CAN BE USED WITH THE UNI-PROP RANGE OF TEMPORARY SUPPORTS.

PLEASE NOTE: Pay special attention to all instructions written in **RED** regarding the installation and removal of Uni-Prop.

These instructions do not cover all possible conditions and situations of use and deployment that may occur. The health and safety rules and procedures in force where people are at work may require the person responsible for this equipment to carry out a specific risk assessment to comply with any applicable legislation.

Disclaimer: Uni-Prop International and its appointed resellers and distributors cannot be held responsible for any damage or injury that may occur as a result of improper use of Uni-Prop products.

RISK ASSESSMENT

PRIOR TO USE, ENSURE A RISK ASSESSMENT HAS BEEN CARRIED OUT AND THE SAFE WORKING LOADS ARE CALCULATED CORRECTLY.

- For safe deployment always carefully plan the use of Uni-Prop.
- Uni-Prop should only be used by persons who have the necessary training.
- It is essential to wear the correct PPE (Personal Protective Equipment) identified in the risk assessment.
- Uni-Prop must never be used by anyone under the influence of drugs or alcohol.
- Uni-Prop is designed for operation by an able bodied adult. Anyone with temporary or permanent disability should seek expert advice before using them.
- The Uni-Prop model selected must be fit for the purpose. Ensure the load capacities/extensions are appropriate for the application (p12-13).
- Check both top and bottom pins are attached to Uni-Prop.
- Always operate the Hydraulic Assembly from a safe working position.
- Check the Uni-Prop is in good working order and free of obstruction in ram access chamber.
- It is recommended that the use of Uni-Prop is a two person operation.



As soon as the hydraulic operation has been completed, the mechanical function must be engaged immediately to avoid accident or damage. This is achieved by inserting the top pin through the available holes in the threaded collar section and rotating the collar upwards against the pin. Once the mechanical function has been engaged, the hydraulic assembly can be disengaged and removed. Please refer to (p9 fig.12).

Inner tube holes must align with the threaded slot on outer tube prior to engaging the hydraulic Assembly (p8 fig.8). If the holes are not aligned then the hydraulic pressure will need to be disengaged to enable the inner tube to turn to reveal the holes in the threaded slot section. In this eventuality, it is recommended that an additional Uni-Prop is deployed by its mechanical function to prevent any risk of injury or damage during the process of disengaging the hydraulic assembly.



MULTIFUNCTIONAL TEMPORARY SUPPORT

USER INSTRUCTIONS

TEMPORARY SUPPORT



UP-Mini-0-D1 UP-Midi-1-D1 UP-Maxi-2-D1

UNI-PROP DIAGRAM

- 01

top plate
- 02

inner tube
- 03

safety stop (Maxi only)
- 04

threaded collar
- 05

threaded slot
- 06

top pin & wire
- 07

collar
- 08

collar handle
- 09

outer tube
- 10

ram movement slot
- 11

ram locator boss
- 12

ram access chamber
- 13

bottom pin & wire
- 14

baseplate

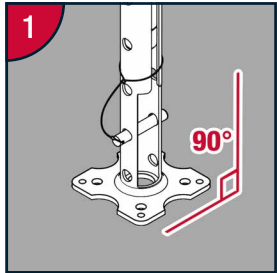
The diagram shows three exploded views of the UNI-PROP temporary support system. Each view (Mini, Midi, Maxi) shows the assembly of the top plate, inner tube, outer tube, threaded collar, threaded slot, top pin & wire, collar, collar handle, ram movement slot, ram locator boss, ram access chamber, bottom pin & wire, and baseplate. The Mini configuration (UP-Mini-0-D1) is the shortest, the Midi configuration (UP-Midi-1-D1) is medium height, and the Maxi configuration (UP-Maxi-2-D1) is the tallest. The components are numbered 01 through 14, corresponding to the legend.

UP-Mini-0-D1

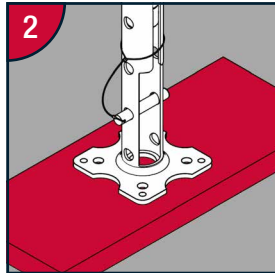
UP-Midi-1-D1

UP-Maxi-2-D1

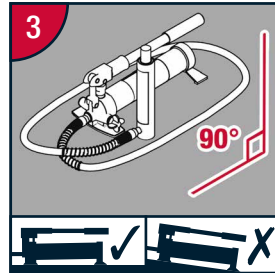
UNI-PROP INSTALLATION



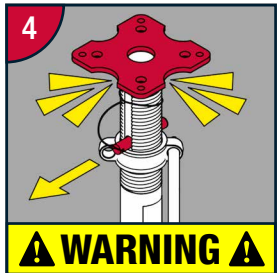
Place plumb on a firm flat level surface.



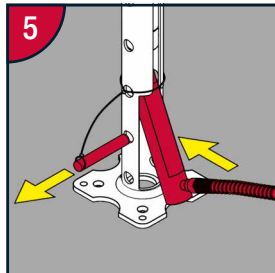
If necessary use a sole board to distribute load.



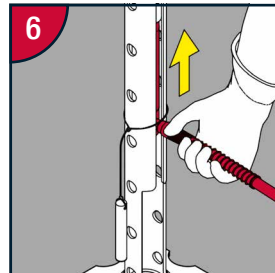
Place Hydraulic Assembly on level ground in horizontal position.



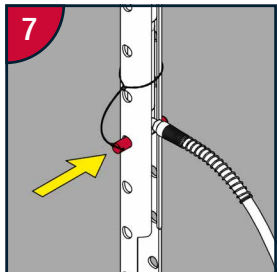
Remove top pin. **Inner tube fully retracts. Be aware of trap/crush injuries.**



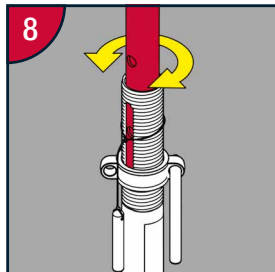
Remove bottom pin and insert ram into ram access chamber.



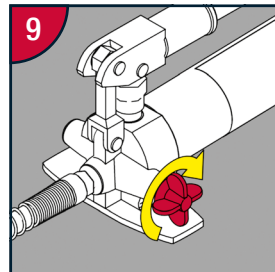
Lift hose to raise ram and inner tube until top plate is close to object surface.



Insert bottom pin through first available hole directly beneath the ram.

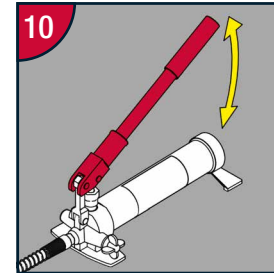


Align holes of inner tube with slot in threaded collar section.

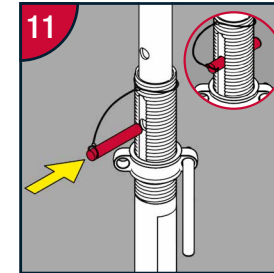


Check pump is horizontal and flow valve is in closed position (turn clockwise to close).

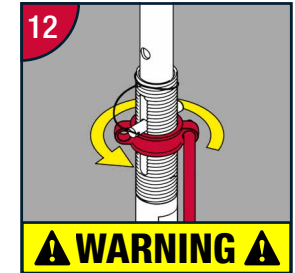
UNI-PROP INSTALLATION



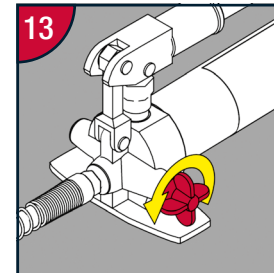
Pump the handle to raise the top plate until the required position is achieved.



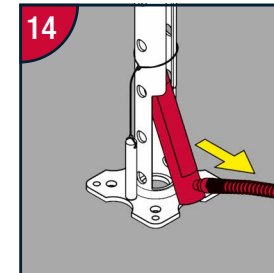
Fully insert top pin through the available hole in the threaded collar section.



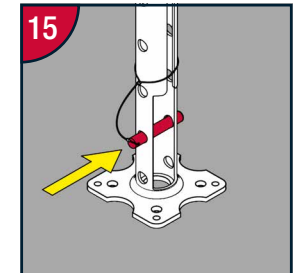
Immediately turn collar until tight against top pin to fully secure the position.



To release ram stick, open flow valve. **Never rotate more than one full turn anti-clockwise.**



Whilst holding hose, take out bottom pin then lower hose and remove ram.



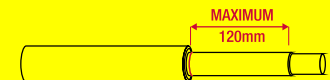
Reinsert bottom pin for storage.



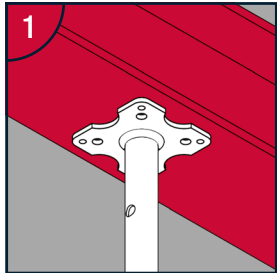
WARNING

DO NOT USE EXCESSIVE FORCE WHEN PUMPING.

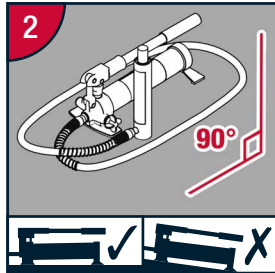
DO NOT OVER-PUMP WHEN A SIGNIFICANT CHANGE IN RESISTANCE HAS RESULTED. THIS MAY COMPROMISE THE PERFORMANCE OF THE HYDRAULIC ASSEMBLY AND INVALIDATE THE WARRANTY.



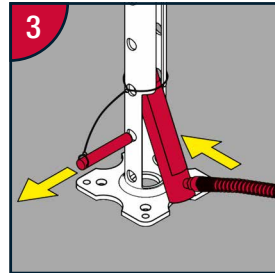
UNI-PROP REMOVAL



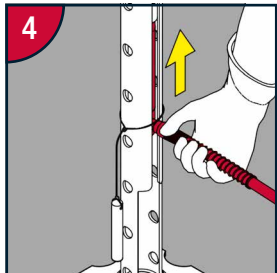
Check Uni-Prop can be removed safely.



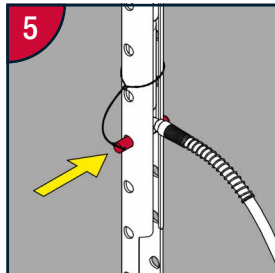
Place Hydraulic Assembly on ground in horizontal position.



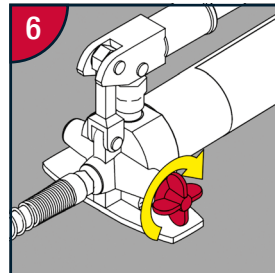
Remove bottom pin and insert ram into ram access chamber.



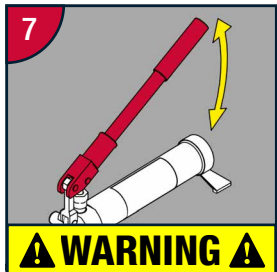
Lift hose to raise ram until ram is as near as possible to inner tube.



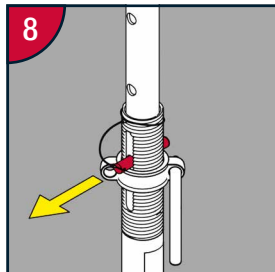
Insert bottom pin through first available hole directly beneath ram.



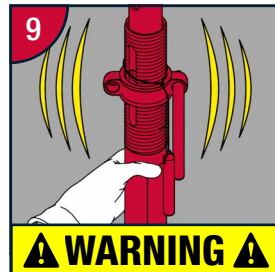
Check flow valve is in closed position (turn clockwise to close).



Pump the handle just enough to free the pressure on the top pin. **Do not over-pump.**

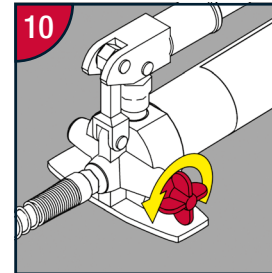


Remove the top pin.

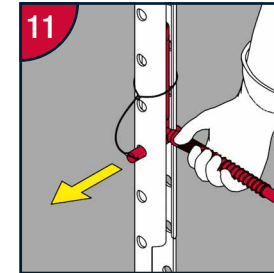


Support outer tube to prevent topple.

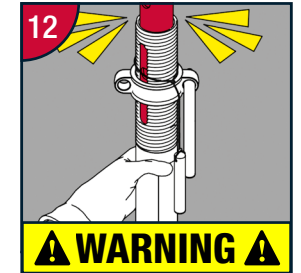
UNI-PROP REMOVAL



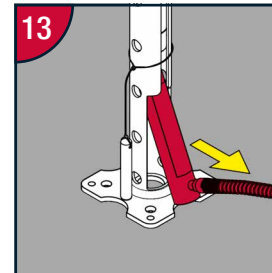
Open flow valve to allow ram stick to retract and inner tube to lower.



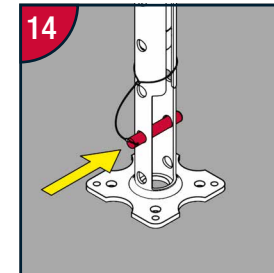
Whilst holding the hose, remove the bottom pin.



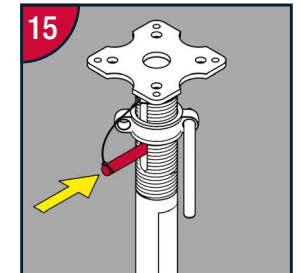
Continue to support outer tube and lower the hose. **Be aware of trap/crush injuries.**



Continue to support outer tube and remove ram via ram access chamber.



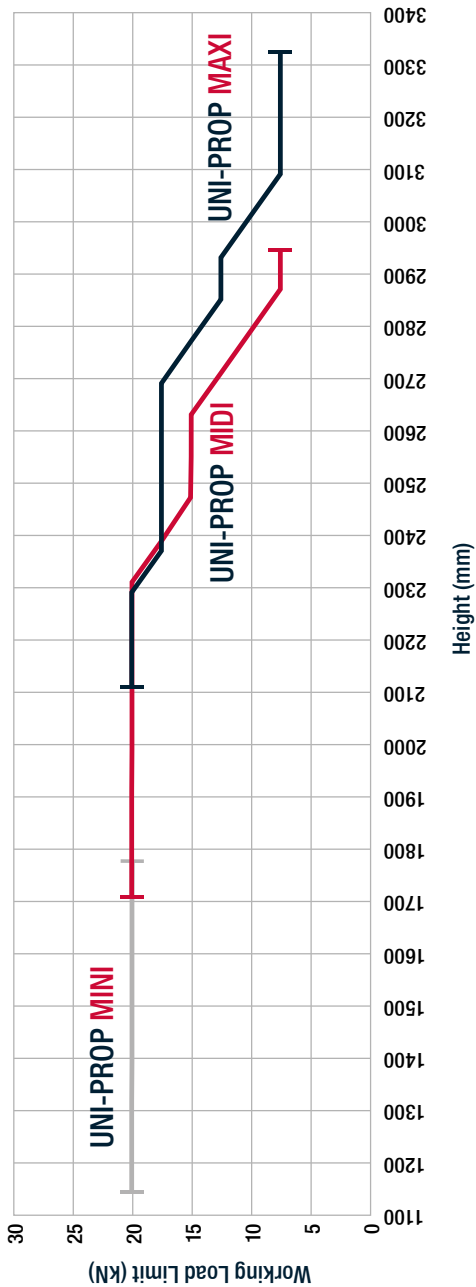
Reinsert bottom pin in its storage position.



Replace top pin through available hole below collar and the removal is complete.

SAFE WORKING LOADS - HYDRAULIC OPERATION

LOADED CONCENTRICALLY AND 1° MAX OUT OF PLUMB

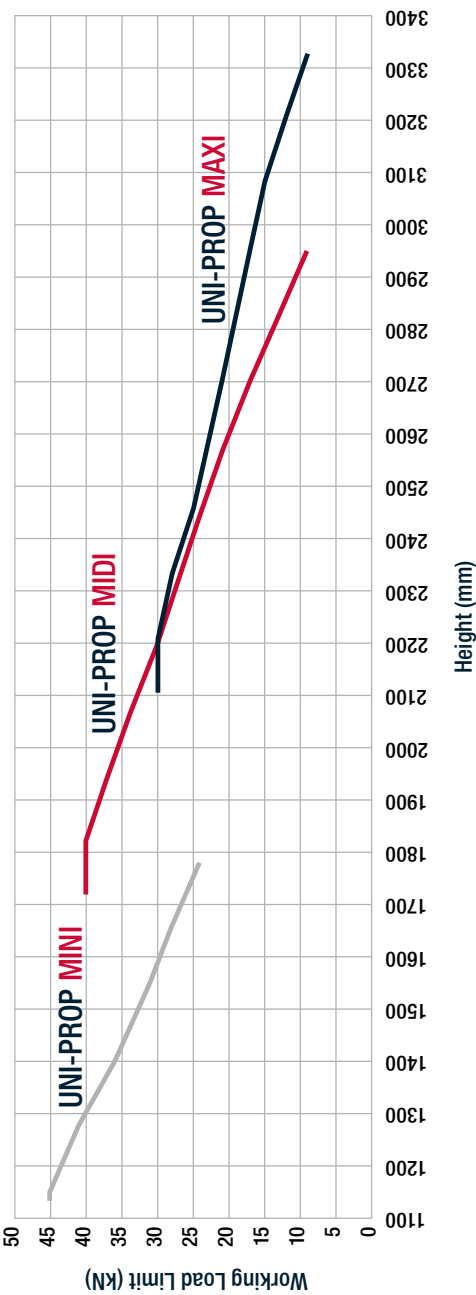


NEVER EXCEED SAFE WORKING LOADS

- i) Safe Working Loads have been derived from load testing to BS EN 1065.
- ii) Mechanical Safe Working Loads are calculated to a minimum Factor of Safety of 2 to 1 on test results.

SAFE WORKING LOADS - MECHANICAL OPERATION

LOADED CONCENTRICALLY AND 1° MAX OUT OF PLUMB



NEVER EXCEED SAFE WORKING LOADS

- i) Safe Working Loads have been derived from load testing to BS EN 1065.
- ii) Hydraulic Safe Working Loads are calculated to a minimum Factor of Safety of 2.5 to 1 on test results.

TROUBLESHOOTING

Ram will not fit inside Ram Access Chamber.

- i) Check flow valve is in the open position (anti-clockwise, max one full turn) to enable complete retraction of ram stick.
- ii) Check chamber is free of obstruction.
- iii) Check there is no obstruction or debris within the ram locator boss at base of inner tube.

Ram stick will not extend.

- i) Check pump is on a horizontal surface.
- ii) Check flow valve is fully closed (clockwise).
- iii) If ram stick still fails to extend, pump the handle vigorously several times which will solve the problem. See youtu.be/3MvRjAXIIKg for demonstration.

Ram stick will not retract.

- i) Check pump is on a horizontal surface.
- ii) Check flow valve is in the open position (anti-clockwise, max one full turn).

Ram won't deliver power.

- i) Check Safe Working Loads have not been exceeded.

Cannot locate pin hole in threaded slot.

- i) Twist the inner tube to align holes with threaded slot.

Oil is leaking

- i) A small seepage of oil during early use is perfectly normal.
- ii) If oil continues to leak, do not use the Hydraulic Assembly and contact your supplier.

Cannot remove Ram from Ram Access Chamber.

- i) Check flow valve is in the open position (anti-clockwise, max one full turn) to enable complete retraction of ram stick.
- ii) If this problem still persists, with the flow valve open, hold hose and tap ram stick up against bottom of inner tube so that the ram stick will fully retract.

The collar won't turn on the threaded section.

- i) Use WD-40 or equivalent to free up the collar.

IF YOU CONTINUE TO EXPERIENCE OPERATING ISSUES, PLEASE CONTACT YOUR SUPPLIER.

GENERAL MAINTENANCE

CARE MUST BE TAKEN TO KEEP THE OPERATION OF THE DEVICE IN GOOD WORKING ORDER.

There is no regulation relating to the inspection of Uni-Prop but it is recommended to carry out a visual check regularly. This is to ensure all parts are clean and in good working order and both top and bottom pin assemblies are intact.

Prior to use with the Hydraulic Assembly, it is especially important to ensure the ram locator boss is free of debris or obstruction. This is located at the base of the inner tube and may be visually checked through the ram access chamber.



HYDRAULIC ASSEMBLY

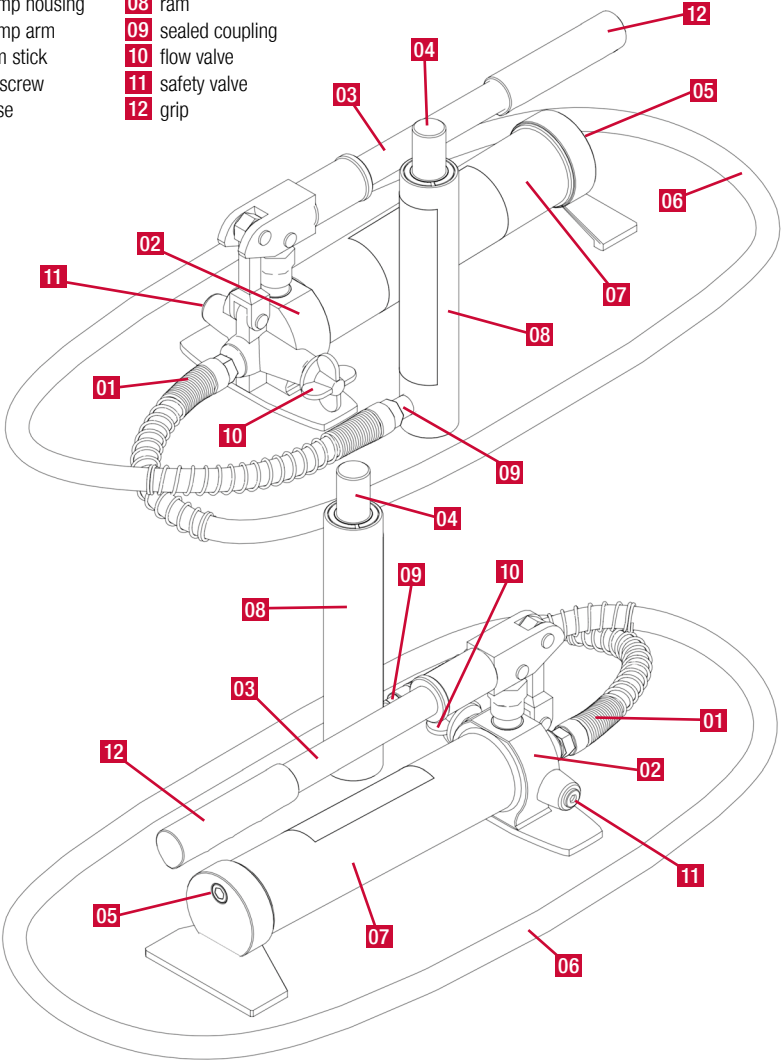
USER INSTRUCTIONS
HYDRAULIC ASSEMBLY



UPHA-17-A

ASSEMBLY DIAGRAM

- | | | | |
|----|--------------|----|-----------------|
| 01 | hose spring | 07 | reservoir |
| 02 | pump housing | 08 | ram |
| 03 | pump arm | 09 | sealed coupling |
| 04 | ram stick | 10 | flow valve |
| 05 | fill screw | 11 | safety valve |
| 06 | hose | 12 | grip |

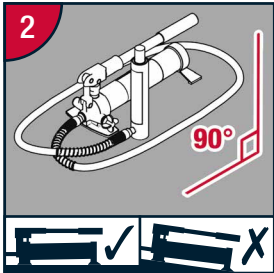


UPHA-17-A

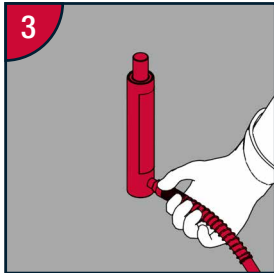
OPERATION



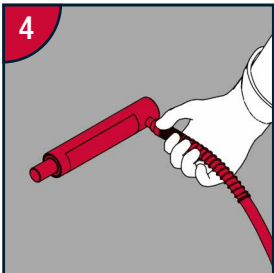
Remove the Hydraulic Assembly from the HDPE storage case.



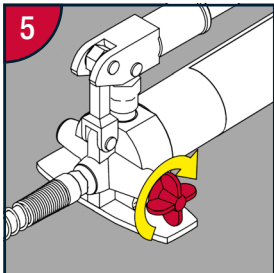
Ensure the Hydraulic Assembly is placed in a horizontal position or it will not function properly.



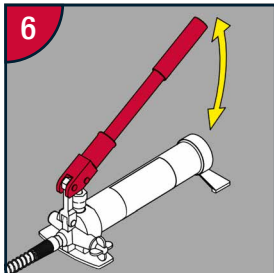
Hydraulic Assembly can be used vertically.



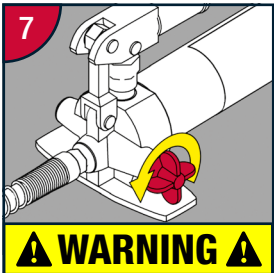
Hydraulic assembly can be used horizontally.



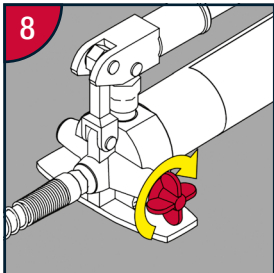
To engage, ensure flow valve is in the closed position.



Pump the handle to raise ram stick.



To release ram stick, open flow valve. **Never rotate more than one full turn anti-clockwise.**



When making ready for storage, ensure flow valve is in the closed position.



Replace the Hydraulic Assembly in its case.

TECHNICAL SPECIFICATION

Capacity	De-Rated to 2T (2000kg)
Max. Working Pressure	33MPa
Min. Height	235mm
Max. Height	355mm
Stroke Length	120mm
Oil Filled	350g
Oil Type	13# refrigerant oil
Operating Temp range	-20°C to +50°C
Hose	2S/N, 1.78m
Package Size	550 × 310 × 210mm
Gross Weight	9.6kg
Net Weight	6.2kg

The Hydraulic Assembly is supplied as a sealed unit comprising: Ram, Hose and Pump Unit.

IMPORTANT: The safety/relief valve **MUST NOT** be tampered with. In the consideration of safety, the valve is preset set to a maximum capacity of 2T (2000kg) in this application.

EQUIPMENT USE AND CARE

THE HYDRAULIC ASSEMBLY IS SUPPLIED AS A SEALED UNIT FOR EXCLUSIVE USE WITH THE UNI-PROP TEMPORARY SUPPORT.

How the Hydraulic Assembly operates

With flow valve closed, an upward stroke of the pump handle draws oil from the reservoir into the ram cavity. Hydraulic pressure holds the flow valve closed, which keeps the oil in the ram cavity. A downward stroke of the pump handle releases oil into the cylinder, which forces out the ram stick. When the ram stick reaches maximum extension, the surplus oil returns into the reservoir to prevent an over extended ram stroke and possible damage to the unit. Opening the flow valve allows oil to return into reservoir. This releases hydraulic pressure on the ram, which results in lowering the ram.

Environmental precautions: In the unlikely event of excessive oil seepage, contain the spillage with sand or earth. Prevent any spillage or runoff entering drains, sewers or watercourses. The product is insoluble in water and will spread on the water surface.

Disposal methods: Dispose under European Waste Catalogue (EWC) 13 01 13* (other hydraulic oils). The hydraulic assembly must be disposed of as hazardous waste; dispose via a licensed waste contractor.



THE FLOW VALVE MUST NEVER BE OVER-ROTATED WHEN DISENGAGING THE HYDRAULIC ASSEMBLY. A MAXIMUM OF ONE FULL TURN ANTI-CLOCKWISE WILL ALWAYS BE SUFFICIENT. IF OVER-ROTATED THE FLOW VALVE MAY BECOME DETACHED AND COMPROMISE THE PERFORMANCE OF THE UNIT.

GENERAL MAINTENANCE

CARE MUST BE TAKEN TO KEEP THE OPERATION OF THE DEVICE IN GOOD WORKING ORDER.

The Hydraulic Assembly will require an annual inspection carried out by a competent person. This inspection should be performed yearly on or before the anniversary of the original date of purchase.

Do not fill or bleed the hydraulic fluid.

This is a sealed unit and any such action would be hazardous and invalidate the warranty.

This is a sealed unit and requires no air purging or adjustment. Please note: An initial small seepage of oil is perfectly normal but if this persists please contact your supplier.

Keep all surfaces of the Hydraulic Assembly free of dirt and grease. Use only a mild detergent and damp cloth when cleaning.

Do not use a flammable or combustible solvent to clean the Hydraulic Assembly.

Store the Hydraulic Assembly in the HDPE case and ensure the flow valve is closed (turned clockwise).

A coating of light lubricating oil to pivot points, axles and hinges will help prevent rust and ensure the continued good performance of the assembly.

Periodically check all moving parts for signs of rust or corrosion. Clean as needed and wipe with a soft non-abrasive cloth.

When the assembly is not in use always store with the ram fully retracted and never expose to rain.



PLEASE MAKE SPECIAL NOTE: THIS EQUIPMENT MUST RECEIVE AN ANNUAL INSPECTION CARRIED OUT BY A COMPETENT PERSON.

DECLARATION OF CONFORMITY

**THIS DEVICE HAS BEEN TESTED ACCORDING TO ALL RELEVANT
CURRENT CE GUIDELINES. MACHINE DIRECTIVE 2006/42/EC.**

EN 1494: 2000+A1:2008

Mobile or moveable jacks and associated
lifting equipment.

EN ISO 12100: 2010

Safety of machinery – General principles for
design – Risk assessment and risk reduction.



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