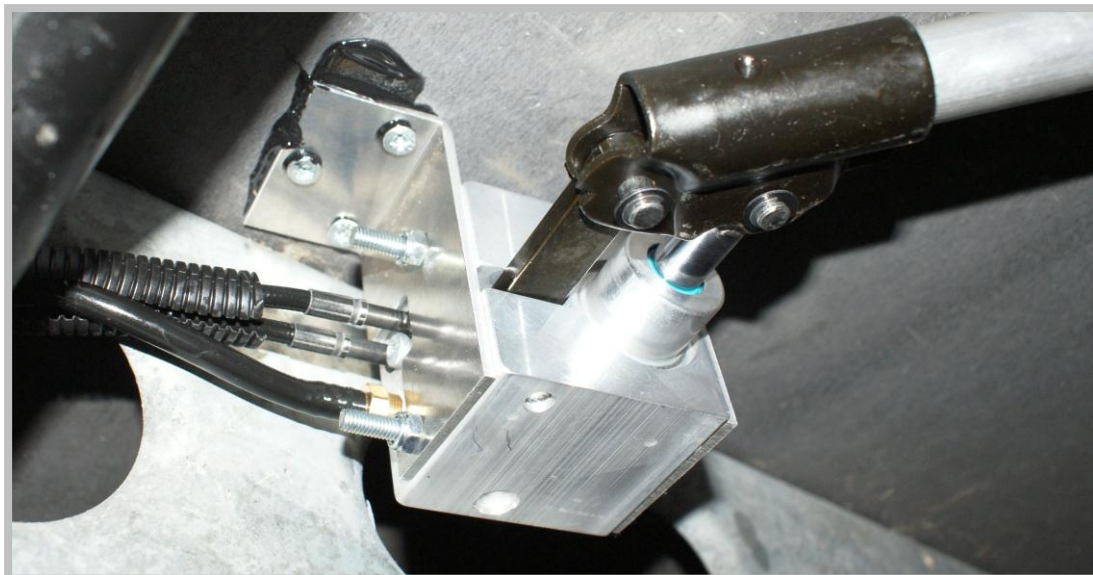


Emergency Hand pump EPNH-01
Level System Caravan



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Limited Warranty

Under all circumstances this manual should be read thoroughly, before installing and/or using the product. In no event shall E&P Hydraulics be liable for any direct, indirect, special consequential or incidental damages arising out of the use or inability to use this documentation or product, even if advised of the possibility of such damages.

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For CE-countries:

This device conforms with the CE standard. Please note that this device can ONLY be used with the official E&P Hydraulics level system parts to conform to these standards.

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Preface

The E&P Hydraulics "Emergency Hand pump System" works in combination with the E&P Hydraulics Caravan Levelsystem. The ergonomic design ensures effortless operation.

Within the E&P Hydraulics strategic vision, this product is 100% user friendly and reliable.

This philosophy not only applies to our customers (end users). The technicians installing this device/system at the E&P Dealers are also very important to us. This product greatly depends on a proper, professional installation. That's the reason why E&P Hydraulics do all they can do to support the people who are responsible for installing our products for you.

This manual is part of our policy. In this manual we explain the general features and how to install this product as simply as possible within the E&P Hydraulics Levelsystem.

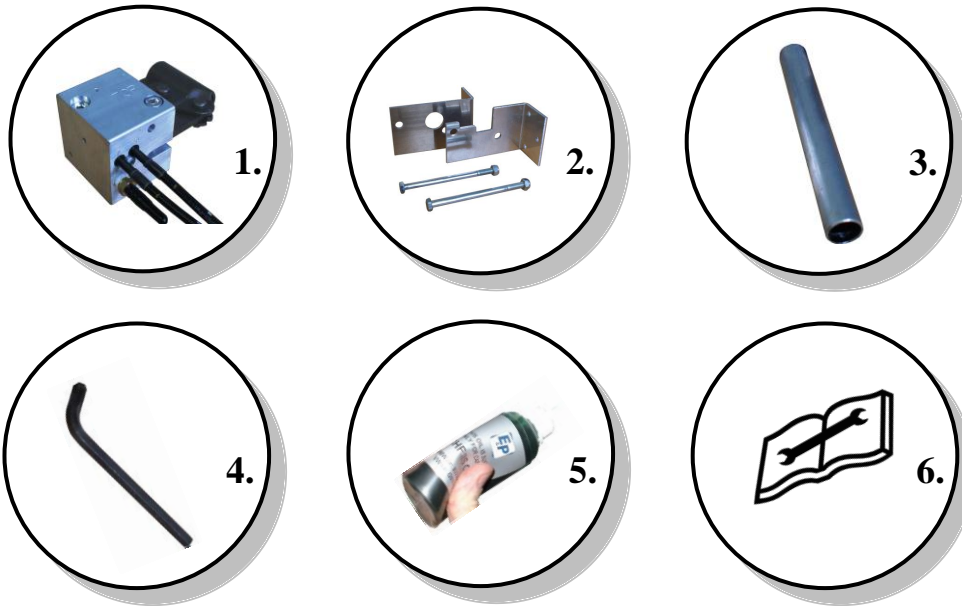
Precisely follow these instructions for the installation, because installing the E&P Hydraulics Levelsystem is a precise job. Fully installing the system requires a high level of skill. After all, we are dealing with equipment that must be able to withstand huge forces, something that is often underrated by people with insufficient technical training. If the installation is not performed correctly, serious damages could result in a short time, and even personal injury. Therefore this system may only be installed by professional technicians with sufficient practical experience and a thorough relevant technical training. At all times, the installer will bear sole responsibility for the assembly of the system.

This document is based on hundreds of test hours as well as many successful installations. If you follow this manual step-by-step, you will see what a wonderful, user friendly, quality product this is. However, there will always be aspects that can be improved. If you have any suggestions, remarks or questions concerning this product or manual, please do not hesitate to contact us.

On behalf of E&P Hydraulics

1.1 Unpacking

Remove the parts and accessories from the box and packing material. Refer to the packing list to make sure you have received all the items ordered. Visually inspect these parts for any evidence of physical damage. Immediately contact E&P Hydraulics if anything appears to be damaged, or missing.



Contents:

The system (set) consists of the following components.

1. Emergency handpump	1 pcs. incl. Hydraulic hoses.
2. Mounting parts	1 pcs. 2 brackets incl. bolts and nuts
3. Lever	1 pcs. tube connectable to pump
4. Allen key	1 pcs. open and close of the pump
5. Bottle of hydraulic oil	1 pcs. 125 cc.
6. User's manual	1 pcs. How to mount and use

Attention:

- Details may differ from the illustration above, but functionality should be identical.

1.2 Introduction

1.2.1 Purpose

Hereby we would like to inform you about the E&P Hydraulics designed Emergency Hand pump System for the caravan.

The Emergency Hand pump allows the Levelsystem to be operated manually, in the (emergency) event the system is defective, or (more likely) because there is not enough battery voltage present.

This possibility is offered by E&P Hydraulic for situations where, for whatever reason, the Levelsystem does not withdraw its support jacks and is therefore preventing you from driving, or moving, the caravan.

We call it an "emergency situation" because in practice the time of withdrawing the hydraulic jacks is, most often, also the time of a (planned) departure. By not automatically withdrawing the support jacks you can no longer move, with adverse consequences.

Therefore, E&P Hydraulics offers you the possibility to integrate an emergency hand pump, for the Levelsystem. As the name implies, it is a pump operated by hand that controls (the withdrawal of) all jacks. This means that the time of your departure, transport or movement can be guaranteed.

If necessary, at your next destination you can contact an E&P Dealer to have the Levelsystem serviced. Dealer locations can be found on our website.

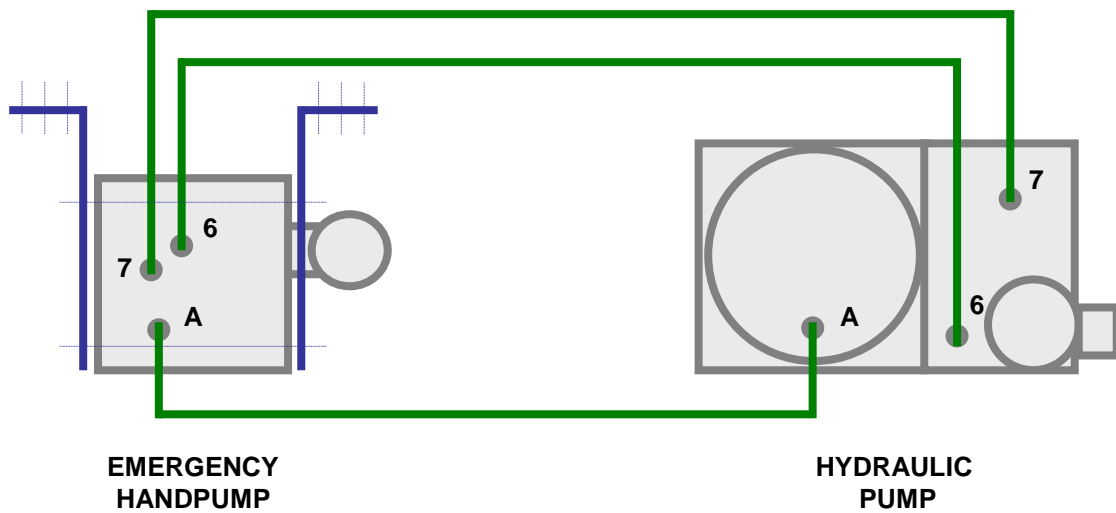
1.2.2 General

The system is designed in such a way that it can be used with all E&P Hydraulics caravan Levelsystems.

The emergency hand pump is mounted under the caravan in such a way that it is accessible from the side.

1.3 Schematic view

Schematic connections concerning the Emergency Hand pump System for the caravan:



For traceability and warranty administration the registration number label is placed inside the product, to be sure it remains undamaged. This official registration number is directly related / unique to the device.

E&P Hydraulics, or the E&P Dealer, may ask you for this number (e.g. when the product needs to be serviced), so please familiarise yourself with it.

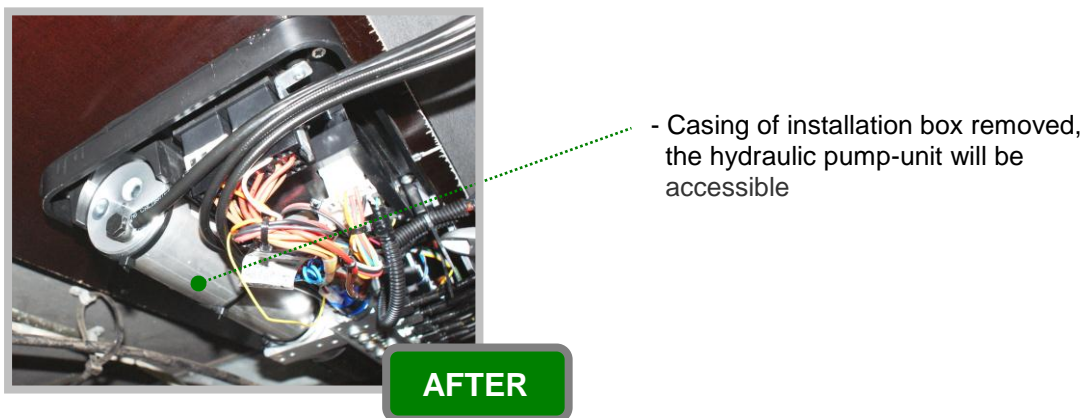
2. Installation / Mounting

Before you start the installation procedure of the Emergency hand pump system, you must be sure the E&P Hydraulic Levelsystem is professionally installed and is functioning correctly.

Attention ! Be aware you are dealing with equipment that must be able to withstand huge forces!

Before: (important)

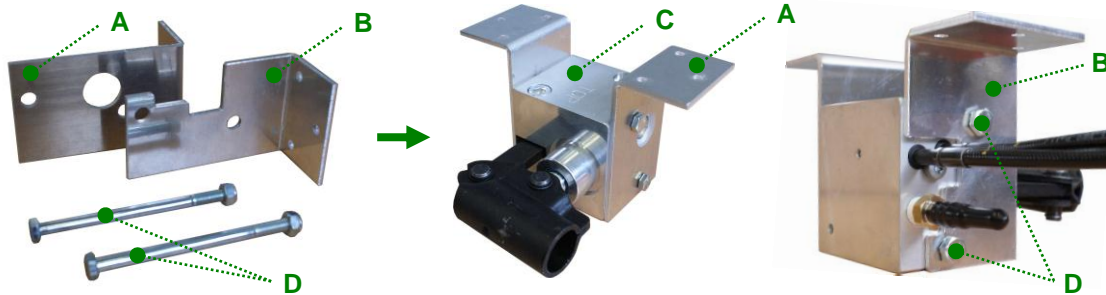
Before mounting the Emergency hand pump system, you need to unscrew the casing of the installation box, in which the pump unit of the hydraulic Levelsystem is situated



2. Installation / Mounting (continued)

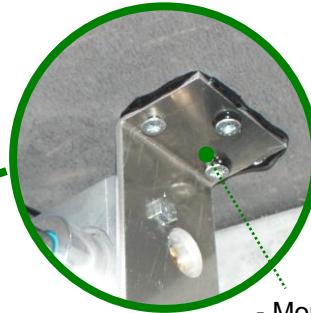
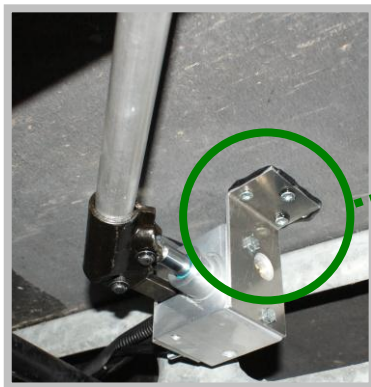
Step 1 : Fixing the mounting brackets to the emergency hand pump

Mount the mounting brackets (A and B) on the emergency hand pump (C) by means of the 2 bolts and 2 locknuts (D).



Step 2 : Mounting the emergency hand pump on the caravan

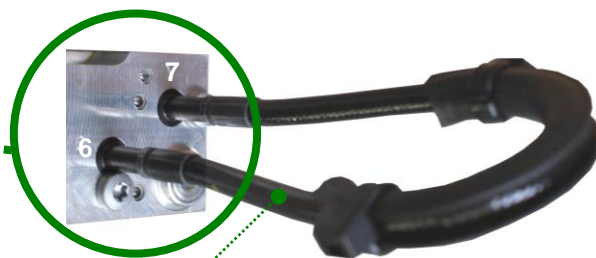
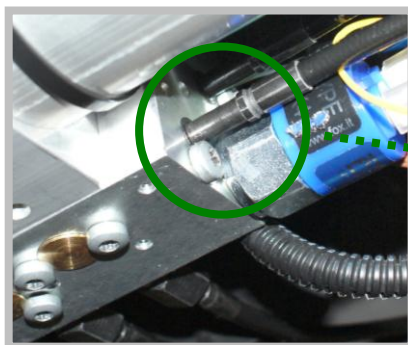
Mount the emergency hand pump by means of 6 short self-tapping screws and sealant at a location under the caravan in such a way the end user (client/owner) can reach the emergency hand pump easily from the caravan side.



- Mounting underneath the caravan by means of sealant and 6 short self-tapping screws.

Step 3 : Removing the hydraulic hose-bridge.

Before connecting the hydraulic hoses from the emergency hand pump, you have to disconnect (remove) the "hose-bridge" from the hydraulic pump-unit.

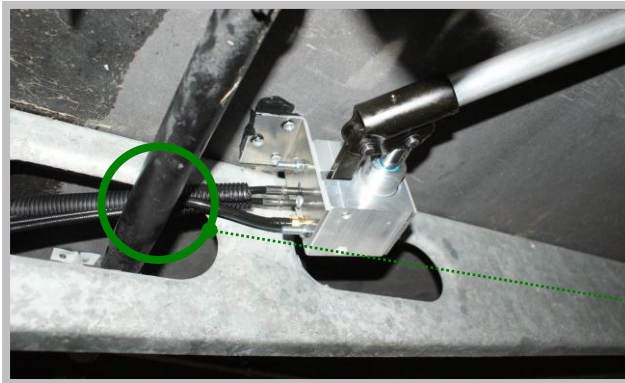


- Disconnect the "Hose-bridge" between connection 6 and 7

2. Installation / Mounting (continued)

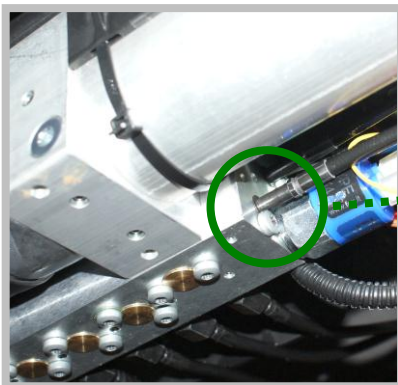
Step 4 : Connecting the hydraulic hoses on the pump.

Route the hydraulic hoses through an opening of the chassis beam to the location of the hydraulic pump-unit.



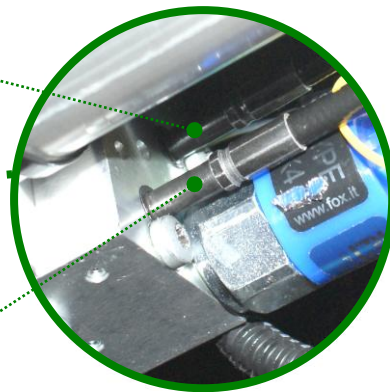
- protecting the Hydraulic hoses by means of protective materials

Connect the two hydraulic hoses (**6** and **7**) from the emergency hand pump assembly on the hydraulic pump-unit of the level system.

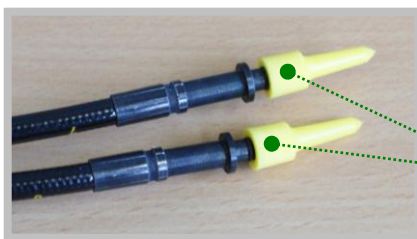


- Hose connection 7

- Hose connection 6



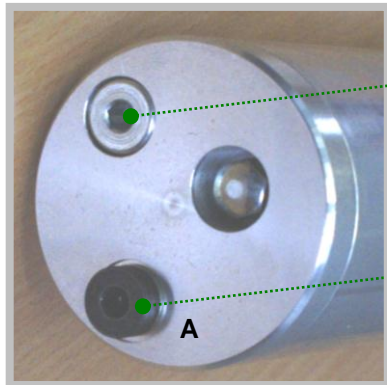
Note: Remove the protective plastic sleeves that are placed over the hydraulic nipples just before actual installation on the pump-unit, to avoid unnecessary dirt, or damage to the nipples.



- Plastic protective sleeves over the hydraulic nipples

2. Installation / Mounting (continued)

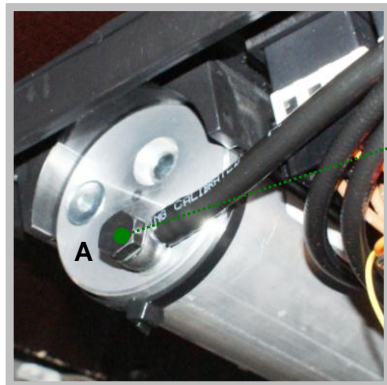
Remove the (black) allen key screw **(A)** from the oil reservoir of the hydraulic pump-unit. (located on the front side of the pump) **Attention! Oil comes free**



- Filling screw hydraulic oil

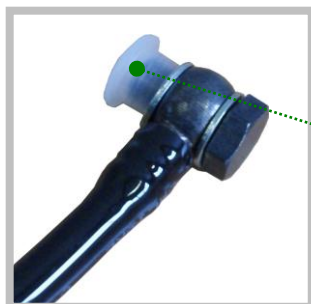
- Remove the allen key **(A)**

Then connect the “suction-hose” of the emergency hand pump assembly to the hydraulic pump-unit of the Levelsystem.



- Mounting the “suction-hose”

Note: Remove the protective plastic sleeve that is placed over the hydraulic nipple just before actual installation on the pump-unit, to avoid unnecessary damage on the nipple.

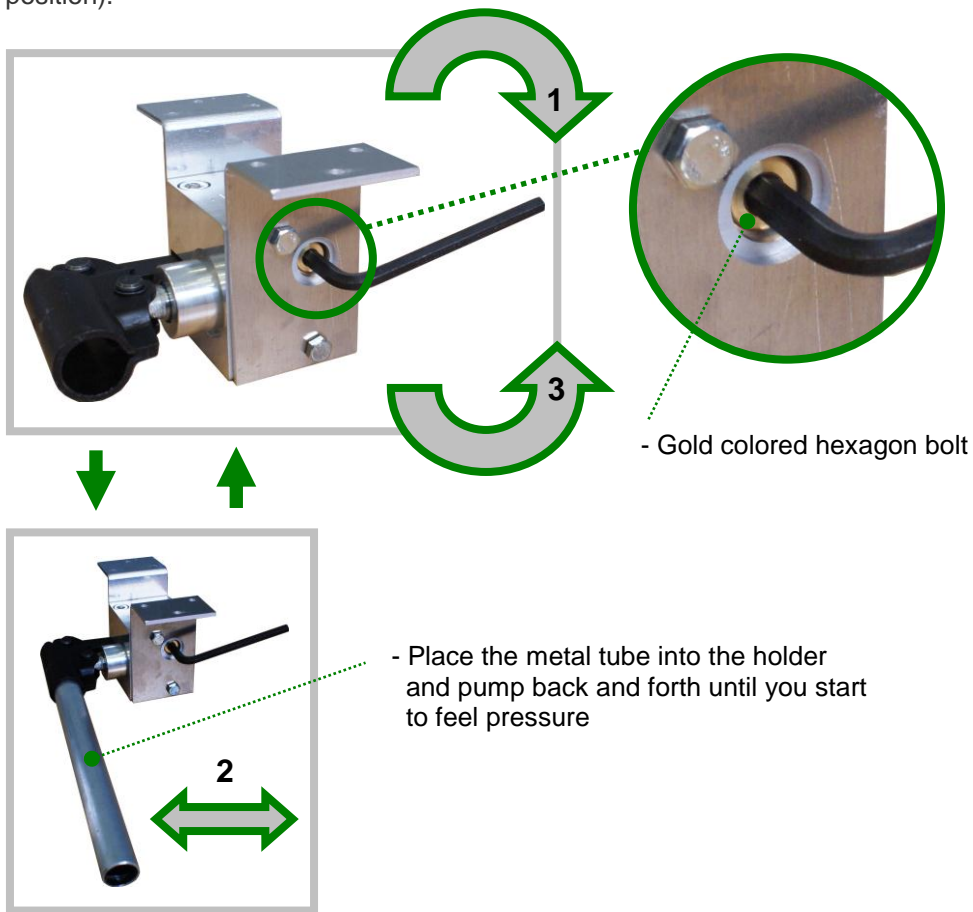


- Plastic protective sleeves over the hydraulic nipple

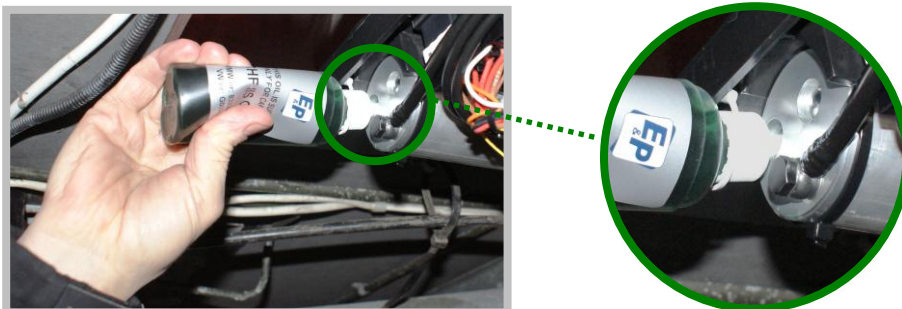
3. Bleeding

Before you start using the emergency hand pump system you must bleed the complete system first.

1. Turn (using the allen key) the gold colored hexagon bolt on the emergency hand pump to the right (open position).
2. Then place the metal tube (handle) on the emergency hand pump (C) and move (pump) back and forth until you start to feel pressure during this movement.
3. Then turn the gold colored hexagon bolt again **gently** to the left until it locks (closed position).



4. Refill the oil reservoir of the hydraulic pump-unit with oil and close. (add oil until the oil runs out of the filling hole)



4. Using the pump

When actually using the emergency hand pump operation, proceed as follows:

Step 1 : Using the allen key, turn the gold hexagon bolt on the emergency hand pump clockwise to the right (open position).

Step 2 : Place the metal tube (handle) into the black holder on the emergency hand pump assembly.

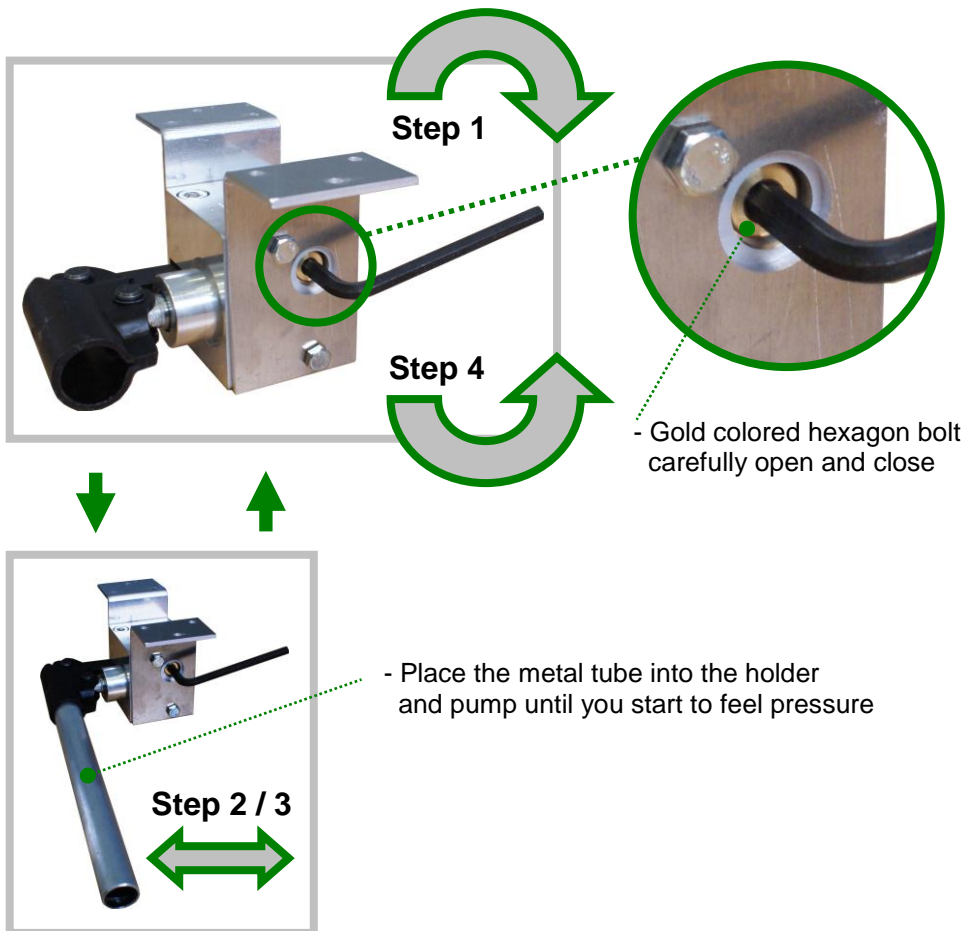
Pump (back and forth) with the metal tube until all hydraulic jacks are withdrawn. (all jacks will be withdrawn at the same time)

The moment you feel pressure (resistance) building up during this movement is the sign the jacks are fully withdrawn.

Step 3 : Remove the metal tube from the holder.

Step 4 : Using the allen key, turn the gold hexagon bolt on the emergency hand pump assembly carefully to the left until it locks (closed position).

Attention ! carefully turn to the lock (closed) position



5. Specifications

Physical :

Weight (complete set) apr.. 1.000 Gr.

Dimensions :

Length x Width x Height apr.. 65 x 110 x 130 mm.

Environmental :

Operating temperature - 40°C / + 40°C

Humidity 20% - 95% RH (non-condensing)

6. Fault diagnosis

- Battery empty

Recharge the Battery or, where this is not possible, use jump cables to the vehicle battery.

- Oil leakage

For example, by ruptured hydraulic oil line(s). This reduces the oil pressure in the system with the result that the system, but also the emergency hand pump, stops working.



LEVELSYSTEM
CAMPERS
CARAVANS

www.ep-hydraulics.nl

Made in Holland
