

Thank you for purchasing a Sealey product. Manufactured to a high standard, this product will, if used according to these instructions, and properly maintained, give you years of trouble free performance.

**IMPORTANT: PLEASE READ THESE INSTRUCTIONS CAREFULLY. NOTE THE SAFE OPERATIONAL REQUIREMENTS, WARNINGS & CAUTIONS. USE THE PRODUCT CORRECTLY AND WITH CARE FOR THE PURPOSE FOR WHICH IT IS INTENDED. FAILURE TO DO SO MAY CAUSE DAMAGE AND/OR PERSONAL INJURY AND WILL INVALIDATE THE WARRANTY. KEEP THESE INSTRUCTIONS SAFE FOR FUTURE USE.**



Refer to  
instruction  
manual

## 1. SAFETY

### 1.1. GENERAL SAFETY

- ❑ **WARNING!** The warnings, cautions and instructions in this manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be applied by the operator. Ensure a safe working space of at least a metre exists around the installed unit.
- ❑ **WARNING!** For hydraulic technical support or repair services, please contact an authorised Service Stockist in your area. The supplier is not liable for any injury or property damage. Repairs carried out at unauthorised hydraulic service centres may result in safety risks and void any warranties. Always ensure your equipment is serviced by Sealey authorised stockist.
- ✓ Familiarise yourself with the applications, limitations, and hazards peculiar to the hydraulic hand pump.
- ✓ Maintain the hydraulic hand pump in good condition (use an authorised service agent).
- ✓ Replace or repair damaged parts. Use recommended parts only. Unauthorised parts may be dangerous and will invalidate the warranty.
- ✓ Keep the hydraulic hand pump clean for best and safest performance.
- ✓ Locate the hydraulic hand pump in an adequate working area for its function, keep area clean and tidy and free from unrelated materials and ensure there is adequate lighting.
- ✓ The hydraulic equipment operator must be a qualified operator must have correct training and work experience with hydraulic equipment. Lack of knowledge in any of these areas can lead to equipment damage or personal injury
- ✓ Ensure the workpiece is correctly secured before operating the hydraulic hand pump.
- ✓ Ensure that all fittings are tight before each use.
- ✓ Keep hand and feet away from cylinder and workplace during operation to avoid personal injury.
- ✓ Cylinder is a load lifting device, not a load holding service. After the load has been raised or lowered, it must always be held mechanically, never work under a load supported by hydraulics.
- ✓ Keep the hand pump clean all the time.
- ✓ When the hand pump is not in use, release the valve, remove hose and use rubber cap to cover the port.
- ✓ Use hydraulic equipment in normal temperature, **DO NOT** use equipment in temperatures of 65°C (150°F) or higher. Overheating will soften seals and weakens hose materials, resulting in oil leaking or other equipment failure.
- ✓ Never lift a load more than the capacity of the cylinders, overloading causes equipment failure and serious personal injury.
- ✓ Carefully inspect cylinder(s), coupler(s), hose(s) and hand pump before using hydraulic equipment,
- ✓ Any modifications or welding of hydraulic equipment are not permitted by the supplier.
- ✓ If you find any damage contact with you nearest Sealey stockist. These damages can cause personal injury when you use the hand pumps.
- ✓ Remove ill fitting clothing. Remove ties, watches, rings, loose jewellery and contain long hair.
- ✓ Keep hands and body clear of the work table when operating the hydraulic hand pump.
- ✓ Maintain correct balance and footing. Ensure the floor is not slippery and wear non-slip footwear.
- ✓ Keep children and unauthorised persons away from the working area.
- ✓ Check the hydraulic hand pump for loose or damaged parts before each operation. Replace damaged parts and tighten all bolts.
- ✗ **DO NOT** drop heavy duty items on hose.
- ✗ **DO NOT** put poor-balanced or off centre loads on cylinders. The incorrect load can result equipment failure and serious personal injury.
- ✗ **DO NOT** lift and carry hydraulic equipment by the hoses or couplers, use the handle or other safe way.
- ✗ **DO NOT** operate the hydraulic hand pump if any parts are missing as this may cause failure and/or possible personal injury.
- ✗ **DO NOT** use the hydraulic hand pump for a task it is not designed to perform.
- ✗ **DO NOT** make any modifications to the hydraulic hand pump.
- ✗ **DO NOT** adjust or tamper with the safety valve.
- ✗ **DO NOT** exceed the rated capacity of the hydraulic hand pump.
- ✗ **DO NOT** apply off-centre loads.
- ✗ **DO NOT** get the hydraulic hand pump wet or use in damp or wet locations or areas where there is condensation.
- ✗ **DO NOT** operate the hydraulic hand pump when you are tired or under the influence of alcohol, drugs or intoxicating medication.
- ✗ **DO NOT** allow untrained persons to operate the hydraulic hand pump.
- ✗ **DO NOT** use it for any other purpose it is not designed to perform.
- ✗ **DO NOT** exceed the ram stroke, so as not to damage the hydraulic hand pump.
- ✗ **DO NOT** expose the hydraulic hand pump to rain or any other kind of moisture.
- ❑ **WARNING!** Always wear approved eye or face protection when operating the hydraulic hand pump. A full range of personal safety equipment is available from your Sealey stockist.

- **WARNING!** Keep hands and feet away from working table area at all times.
- ✗ **DO NOT** top up hydraulic unit with brake fluid, or any other fluid other than a good quality hydraulic oil (Sealey Part Number: HJO500MLS/HJO5LS) as this may cause serious damage to the hydraulic unit and will invalidate the warranty.
- **WARNING!** Wear safety glasses, safety cap and other necessary personal protective equipment when operating hydraulic equipment.
- **WARNING!** Cylinder(s) used to lift load must have solid footing for correct support. Select steel or wood blocks that are capable of supporting the load.
- **WARNING!** Install Pressure gauges in the system to monitor the operating pressure. The gauge must have the same pressure rating as the pump and cylinder(s). The wrong gauges may result in Personal injury.
- **WARNING!** The system operating pressure must lower than the lowest rated pressure in the system.
- **WARNING!** Carefully inspect the cylinder(s) and couplers before use cylinder(s). Never connect the cylinder(s) with damaged couplers or damaged port threads. The damaged coupler(s) or damaged port threads may cause equipment failure and possible personal injury.
- **WARNING!** Change coupler(s) in a clean environment. Prevent dirt or other debris from entering into cylinder(s) body or tube. Dirt or other debris will damage the cylinder(s) and result in equipment failure and possible personal injury.
- **WARNING!** Cylinder must be placed on a stable base, use cylinder base to improve stability.
- **WARNING!** Before removing or tightening hose(s) or coupler(s), release hydraulic pressure in system.
- **WARNING!** Never handle pressurised hoses; escaping oil under high pressure can penetrate the skin, causing serious injury. Seek medical aid immediately if injured.
- **WARNING!** Hand pump must use special hydraulic oil, use the supplier's or other approved hydraulic oil.

## 2. INTRODUCTION

Hand operated manual hydraulic pump offering increased control when using the hydraulic system. 2-Stage pump reduces the number of pumps needed to reach contact before switching to a higher force mode. Perfect for a wide range of hydraulic tasks, including use with hydraulic body repair kits, presses, and rams. Features a 2300ml oil reserve. Fitted with 3/8" outlet with hoses available to make it suitable for use with most hydraulic powered tools. Compatible with Hydraulic Hose RE111.

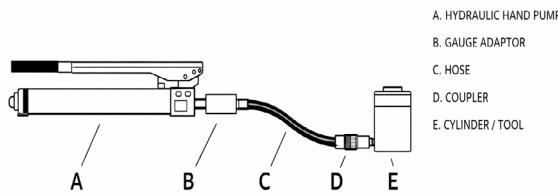
## 3. SPECIFICATION

Model No	RE110
Capacity	2300cc
Handle Force	48gf
Nett Weight	8.8 kg
Oil Output Per Stroke	First stage 31.7CM <sup>3</sup> Second stage 3.16CM <sup>3</sup>
Outlet Thread	3/8-18 NPT
Pressure Rating	First stage 20bar Second stage 700bar

## 4. ASSEMBLY

**NOTE:** Before using hand pump, visually check all units to make sure there are no damage on hand pump and other hydraulic equipment. No oil leaking and shortage of parts. If you find any problem contact with your supplier.

fig.1



4.1. To connect the hand pump, refer to fig.1 and follow the steps below.

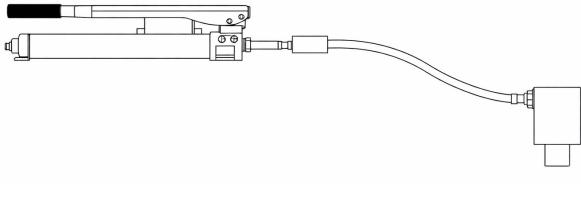
- 4.1.1. Clean all hose ends, couplers and other areas around oil parts of pump and cylinder.
- 4.1.2. Install a pressure gauge and gauge adaptor into hand pump.
- 4.1.3. Thread hose into gauge adaptor.
- 4.1.4. Connect the hose(s) to cylinder or tool

**NOTE:** To fully seal the connections, use of Teflon tape or sealing compound is necessary. Use 2 or 3 wraps of Teflon tape on thread, leaving one or two complete thread free to prevent taps shed into the hydraulic system. Any tap lose in hydraulic system may jam the oil flow.

## 5. BLEEDING AIR FROM THE CYLINDER

- 5.1. Air may accumulate within a hand pump during shipment or after refilling the hydraulic oil. This trapped air can cause the hand pump to feel weak. Bleed the air from the cylinder according to the below steps.(6.Maintenance section).

fig.2



**NOTE:** Be sure loosen the air vent screw before use hand pump. To avoid the oil leak from oil reserve, tighten the air vent screw in shipment.

- **WARNING!** Hand tighten the valve only, applying too much force to the valve may damage the valve stem. Always release the pressure slowly. **DO NOT** use an extension hand, an extension handle will damage the pump.

## 6. MAINTENANCE

- **WARNING!** Ensure disconnection prior to performing any maintenance.

### DRAINING AND REPLENISHING HYDRAULIC OIL

When oil level in hand pump is low, add hydraulic oil. With cylinder fully retracted, set hand pump in its normal level position, remove oil filler screw. Fill until oil is within the oil filler screw hole opening, reinstall oil filler screw. For best performance and increased system life, replace the complete hydraulic oil at least once per year.

- **WARNING!** Always use clean hydraulic oil from the supplier or other approved hydraulic oil with these cylinders. Use other unapproved oil or dirty oil will damage the hand pump.

### 6.1. LUBRICATION

A coating of light lubricating oil to pivot points, axles and hinges will help to prevent rust and assure that pump assemblies move freely.

### 6.2. STORAGE

always keep hand pump and other attachments clean, use dust cap to protect couplers. when not in use,cylinder and hand pump piston must be fully retracted and stored in a clean environment

## 7. TROUBLESHOOTING

- **WARNING!** Repair hand pumps without special tools and knowledge may result in personal injury. Release pressure and disconnect hose(s) before making repair. Ensure that any faulty items should be repaired or replaced immediately by a Sealey qualified technician.

Problem	Cause	Solution
Hand pump can not produce pressure.	1. Pump release valve not fully closed. 2. Couplers not fully tightened. 3. Oil level in pump reservoir is low. 4. Pump or valve malfunctioning.	1. Fully tighten pump release valve. 2. Fully tighten couplers. 3. Fill oil pump. 4. Contact the nearest Authorised Sealey service stockist.
Hand pump can not maintain pressure.	1.Leaky connection. 2.Cylinder seals leaking. 3.Release valve not fully closed. 4.Pump or valve malfunctioning.	1.Clean and reseal thread, tighten connection. 2.Replace worn seals. Clean inside cylinder and use clean hydraulic oil. 3.Fully tighten the release valve. 4. Contact the nearest Authorized Sealey service stockist.
Cylinder extends slower than normal.	1.Leaky connection. 2.Coupler not fully tightened. 3.Pump malfunctioning.	1.Clean and reseal thread, tighten connection. 2.Fully tighten couplers. 3.Repair, or use another pump and valve.
Cylinder will not retract or retracts slower than normal.	1.Pump release valve closed. 2.Couplers are not fully tightened. 3.Pump reservoir is full. 4.Hose is blocked 5.Return spring is damaged. 6.Cylinder damaged.	1.Open release valve. 2.Tighten the couplers. 3.Drain hydraulic oil to correct level. 4.Clean or change hose. 5.Change return spring. 6. Contact the nearest Authorized Sealey service stockist.



#### ENVIRONMENT PROTECTION

Recycle unwanted materials instead of disposing of them as waste. All tools, accessories and packaging should be sorted, taken to a recycling centre and disposed of in a manner which is compatible with the environment. When the product becomes completely unserviceable and requires disposal, drain any fluids (if applicable) into approved containers and dispose of the product and fluids according to local regulations.



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**Note:** It is our policy to continually improve products and as such we reserve the right to alter data, specifications and component parts without prior notice. Please note that other versions of this product are available. If you require documentation for alternative versions, please email or call our technical team on [technical@sealey.co.uk](mailto:technical@sealey.co.uk) or 01284 757505.

**Important:** No Liability is accepted for incorrect use of this product.

**Warranty:** Guarantee is 12 months from purchase date, proof of which is required for any claim.

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