

OPERATING INSTRUCTIONS FOR Manual Test Pump

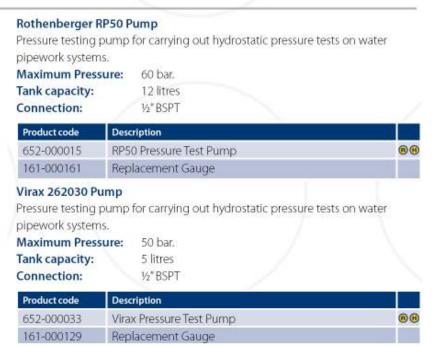
- 1. Machine to be operated by trained personnel.
- 2. Instructions to be read before use.

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Hydrostatic Test Pumps





Hy-Ram Engineering Co Ltd has a policy of continuous improvement in product quality and design. Hy-Ram Engineering Co Ltd therefore reserves the right to change the specification of its models at any time, without prior notice.

Important!

This manual forms a part of the product to which it relates. It should be kept for the life of the product. Any amendments issued by Hy-Ram Engineering Co Ltd should be incorporated in the text. The manual should be passed to any subsequent holder or user of this product.

Safety Information

This equipment should only be used by trained and competent operators.

As an operator, always ensure that you fully understand how the equipment functions and that you are fully aware of the dangers. Always wear the necessary protective clothing including adequate eye protection, hard hat, gloves, overalls, protective boots etc.





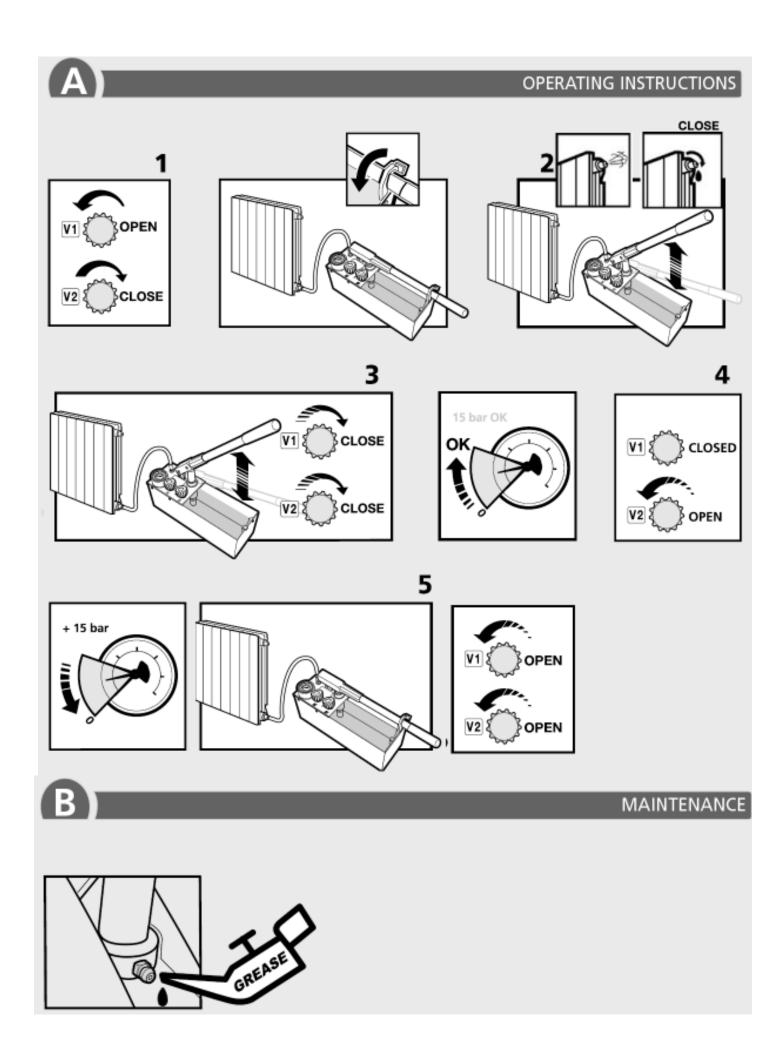








Prior to commencing work, ensure that this equipment is complete and fully serviceable. If in doubt replace.



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INSTRUCTIONS FOR USE

General information

This testing pump has been developed and designed to meet the highest quality standards guaranteeing most stringent operation requirements.

A number of unique design features:

- Double shut-off and purge valve system, to ease test pressure adjustment.
- Combined ball head and monoblock aluminium shut-off valve system reducing risk of leaks in the system.
- Distortion proof wear resistant polyamide piston.
- Knock resistant weather and cold proof galvanised steel tank protected with Duramant ® epoxy coating.
- Pressure gauges with readily available calibration certificates.

At present, a great number of installations for fluid-carrying pipes can be found depending on the type and nature of the pipe materials. These can be of metal: steel, stainless steel, galvanised steel, aluminium, copper..., plastic materials: PP, PE, PB, PVC, PE-X..., as well as composite materials such as Multi-layer. All these types of pipes can be joined as a function of the material and the nature of the joint by means of welding, threads, mechanical joints with bushings, using adhesives ...

No matter the nature of the joint, the type of material and the fluid to be carried, any installation must be liquid-tight, tests being required.

This testing pump is a precision tool for testing installation tightness using water or oil as testing liquid, a maximum testing pressure of 60 bar being possible.

General Safety:

- 1. Prior to starting the testing pump, please carefully read and follow these instructions.
- 2. The position and operation of the controls must be studied prior to operation.
- 3. This test pump has been designed for specific applications. We strongly recommend that it SHOULD NOT BE MODIFIED, nor used for other purposes.
- 4. Using only the liquids specified for the tests is utterly important for the integrity and durability of the liquid-tight systems. NO acids or other corrosive liquids may be used for the tests. Use only clean water or Oil as an alternate.
- 5. Check the pump for damaged or defective parts prior to pump operation. The pump MAY NOT BE USED if pressure hoses or any other parts are flawed or broken.
- 6. Only original parts may be used for maintenance
- 1. Connect the pressure hose to the equipment to be tested with valve V1 opened and valve V2 closed
- 2. Open one or several purge points in the installation. Remove the handle-locking hook and pump liquid until all air has been purged from the installation. Close the vent points. Fill the installation operating the pump handle with ample movements
- 3. Keep on pumping until the test pressure has been reached.
- 4. Close valve V1.

5. If the test pressure is exceeded during the pumping operation, crack open valve V2 until the required pressure is attained. Then close all the valves. If no leaks are present, no pressure drop will be detected in gauge readings. At test completion, open both valves V1 and V2.

Operating instructions:

- 1. Connect the pressure hose to the equipment to be tested with valve V1 opened and valve V2 closed.
- 2. Open one or several purge points in the installation. Remove the handle-locking hook and pump liquid until all air has been purged from the installation. Close the vent points. Fill the installation operating the pump handle with ample movements.
- 3. Keep on pumping until the test pressure has been reached
- 4. Close valve V1
- 5. If the test pressure is exceeded during the pumping operation, crack open valve V2 until the required pressure is attained. Then close all the valves.
- 6. If no leaks are present, no pressure drop will be detected in gauge readings. At test completion, open both valves V1 and V2.

▲ NOTE

After the pressure has been reached, wait for the pressure to stabilize as a function of the size of the installation. If it should be required, pump again until the pressure is reached again.

Maintenance:

Keep the tank and pump system clean. The suction pipe is supplied with a filter to prevent dirt entering the pump pressure system. If the filter should clog, remove the dirt and clean it with water.

Grease the piston periodically with water repellent grease. Be extremely careful not to damage the piston.

Specification:

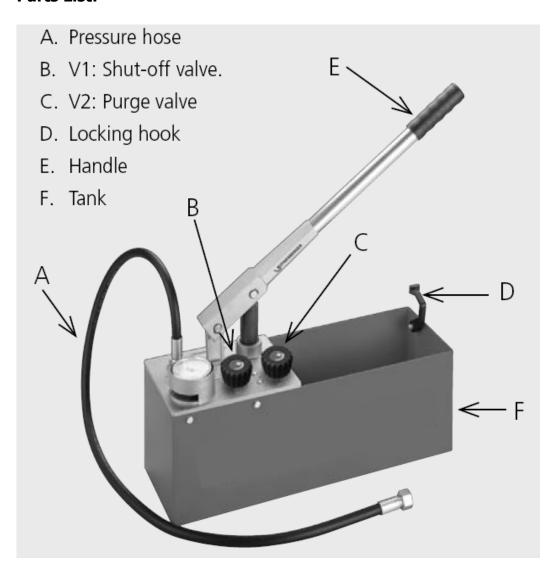
Manual testing pump

Dimensions: 720x170x260 mm

Weight: 8 kg Tank volume: 12 l. Piston volume: 45 ml Outlet connection: R 1/2" Testing fluid: Water, oil

Maximum temperature: 50° C - 120°F Maximum pressure: 60 bar. 860 psi. 6 Mpa

Parts List:



Certificate of Calibration.

- This product has been inspected and tested in accordance with the ISO9001 quality control systems and procedures in place at Hyram Engineering Co Ltd.
- This product has no calibration period, periodic, safety inspections should be carried out by the operator if in any doubt please contact the manufacturer for further information.

Decommissioning & Disposal Instructions

These give the instructions for decommissioning and disposal of the equipment and confirm how it is to be taken out of service safely, in respect of the Essential Health and Safety Requirements.

- If a Hyram tool has reached the end of its useful working life and cannot be refurbished
 it must be disposed of through a licensed scrap or waste disposal facility. Alternatively,
 a reverse engineering company could be used to strip the equipment for recycling
 purposes.
- Disposal is the responsibility of the Customer this can also be achieved by returning the product back to the manufacturer.

Warranty Information.

- 1. Extent of Warranty.
- (a) Hy-Ram Engineering Co Ltd warrants to the end-user customer that its products will be free from defects in materials and workmanship, for six months after the date of purchase by the end-user customer, subject to providing proof of purchase.
- (b) If Hy-Ram Engineering Co Ltd receives, during the warranty period, notice of a defect in product which is covered by this warranty, Hy-Ram Engineering Co Ltd shall either repair or replace the product, at its option. Any replacement product may be either new or like-new, provided that it has functionality at least equal to that of the product being replaced.
- (c) All warranty work will be carried out by Hy-Ram Engineering Co Ltd unless otherwise agreed. On-site warranty and repair or replacement services are available from authorised Hy-Ram Engineering Co Ltd service facilities world-wide.
- (d) Customers shall prepay shipping charges for products returned to Hy-Ram Engineering Co Ltd for warranty service, and Hy-Ram Engineering Co Ltd will charge for return of the products back to the customer.
- (e) This warranty statement gives the customer specific legal rights. The customer may also have other rights which vary from country to country in the world.

Pre-conditions for Warranty Application.

Hy-Ram Engineering Co Ltd' warranty covers only those defects which arise as a result of normal use of the product, and this warranty shall only apply in the following circumstances:

- (a) All the instructions contained in the operating manual have been complied with
- (b) And none of the following apply:
- (i) Improper or inadequate maintenance;
- (ii) Physical abuse;
- (iii) Unauthorised modification, misuse or any use not in accordance with the operating manual and good industry practice;
- (iv) Operation outside the products specifications;
- (v) Improper site preparation or maintenance; and
- (vi) Faulty pipe or fittings.

Limitations of Warranty.

- (a) Hy-Ram Engineering Co Ltd does not warrant the operation of any product to be uninterrupted or error free.
- (b) Hy-Ram Engineering Co Ltd makes no other warranty of any kind, whether express or implied, with respect to its products. Hy-Ram Engineering Co Ltd specifically disclaims the implied warranties of satisfactory quality and fitness for a particular purpose.
- (c) To the extent that this warranty statement is inconsistent with the law of the locality where the customer uses the product, this warranty statement shall be deemed modified by the minimum necessary to be consistent with such local law.
- (d) To the extent allowed by local law, the remedies provided in this warranty statement are the customer's sole and exclusive remedies.
- (e) This tool has been designed for the range of fittings available at the time of its design and development. Hy-Ram Engineering Co Ltd can accept NO liability for the unit's ability or otherwise to work with new or different fittings that subsequently appear in the market place.

Please complete this informatio	n and keep	it safely w	vith your	proof of	f purchase	receipt.
You will require it for any warra	nty claim.					

Where purchased	
Date of purchase	
Name & address Of purchaser	
Type of tool	
Serial number	

For Service and repair please contact:

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