



Time Electronics
Calibration, Test and Measurement

User Manual

7115 Contamination Trap

Version 1.2
9-21

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Nothing from this manual may be multiplied, or made public in any form or manner, either electronically or hard copy, without prior written consent from Time Electronics Ltd.

This also applies to any schematics, drawings and diagrams contained herein.

This manual provides operating and safety instructions for the Time Electronics product.

To ensure correct operation and safety, please follow the instructions in this manual.

Time Electronics reserves the right to change the contents, specifications and other information contained in this manual without notice.

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1 Warnings

The 7115 contamination trap is design for use with pressure controllers, calibrators and regulated pneumatic pressure systems. These systems control a supplied pressure source and output them to a unit under test. The 7115 is connected between the controller and the UUT. Please observe all warnings and safety instructions when dealing with high pressure supplies and outputs. Please ensure that all users of the instrumentation have fully read and understood operating instructions and safety procedures for handling high pressure systems. Observe all warnings before operating pressure calibration systems (ie 8030, RMTEG etc).



The 7115 shall only be used with clean dry air or nitrogen.
Never use hazardous media as pressure medium.



Do not exceed 210bar input to the 7115.



Before pressurisation of the 7115, check all components and connections are in good condition, fully functional and that all screw fittings are firmly. All connections should be suitable for the applied maximum pressure.



In the case of an error in connections or use, a high pressure or vacuum may be on the input and output connections. Ensure supplies are vented before working on pressure connections.



During operation, do not disconnect the 7115 when pressure is being applied.



When working on and with the device wear safety glasses.



Connections and UUTs damaged from overpressure can cause high velocity shrapnel.

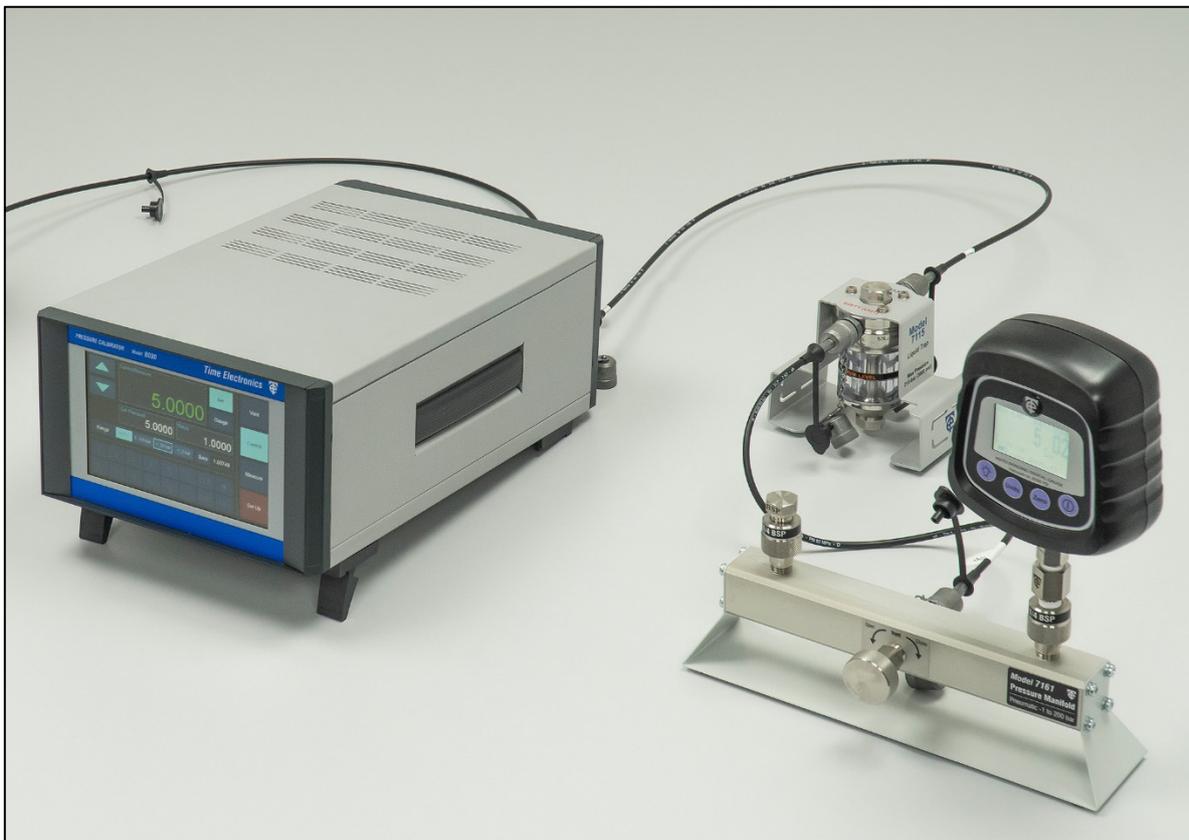
Note that when a device (such as an analogue pressure gauge) is to be tested or calibrated, it is referred to as the UUT (Unit Under Test) in this manual. The UUT should be connected to the 7115 using suitable fittings and hose ensuring they are rated for at least the maximum pressure available from the pressure controller or calibrator supplying pressure.

Time Electronics Ltd do not assume liability for damages that arise from incorrect use of the instrument device or from disregard of the information contained in this manual.

2 Introduction

The 7115 is a contamination trap designed to protect pressure equipment, such as controllers, calibrators and pressure generators, from impurities, liquids (water, oil etc.) and residues released by manifolds, pressure gauges, pressure transmitters and other process instruments under test.

It has been designed primarily for use with the Time Electronics 8030 pressure controller. The 7115 provides a level of protection for the internal system components that require mechanical operation to be smooth and unobstructed, to ensure correct operation of the controller. Contamination can damage the 8030 control mechanisms.



During transitions from a high pressure setpoint to a smaller one, liquid and residues present in the pneumatic system may flow into the 8030.

For example, consider an 8030 controlling to 20 bar on a UUT, and the setpoint is then changed to 2 bar. In order to decrease the pressure, the 8030 must remove air from the system. Such air removal can cause liquids and residues present in the UUT to flow into the 8030, damaging it and compromising the operation of the control valves. This may also occur when selecting negative setpoints (vacuum).

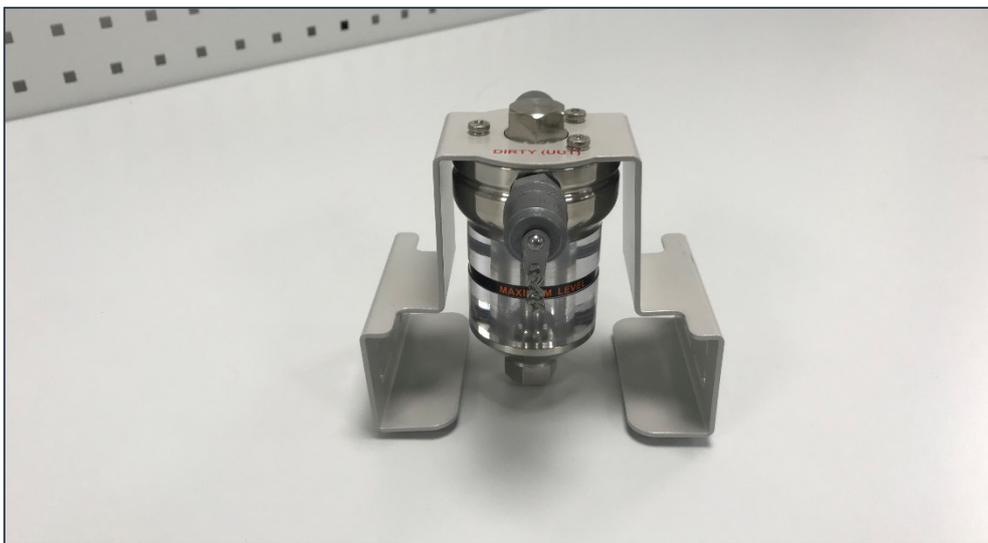
The contamination trap must be placed between the 8030 and the UUT in order to avoid that liquid (water, oil etc.) and residues from these process instruments damage the internal system of the controller. The 7115 is a trap that is supplied as standard with the 8030 controllers.

2.1 Specifications

Pressure Range:	-1 to 210bar
Pressure Media:	Pneumatic only - Gas or air
Material:	Stainless steel, polycarbonate and nitrile rubber seals.
Connections:	2 x Adaptors – minimess, hoses supplied.
Weight:	1 kg
Operating Temperature:	10 to 40°C (50 to 104°F)
Storage Temperature:	0 to 70°C (32 to 158°F)
Air Humidity:	0 to 95% (relative humidity without moisture condensation)

2.2 7115 Photos





3 Using the 7115

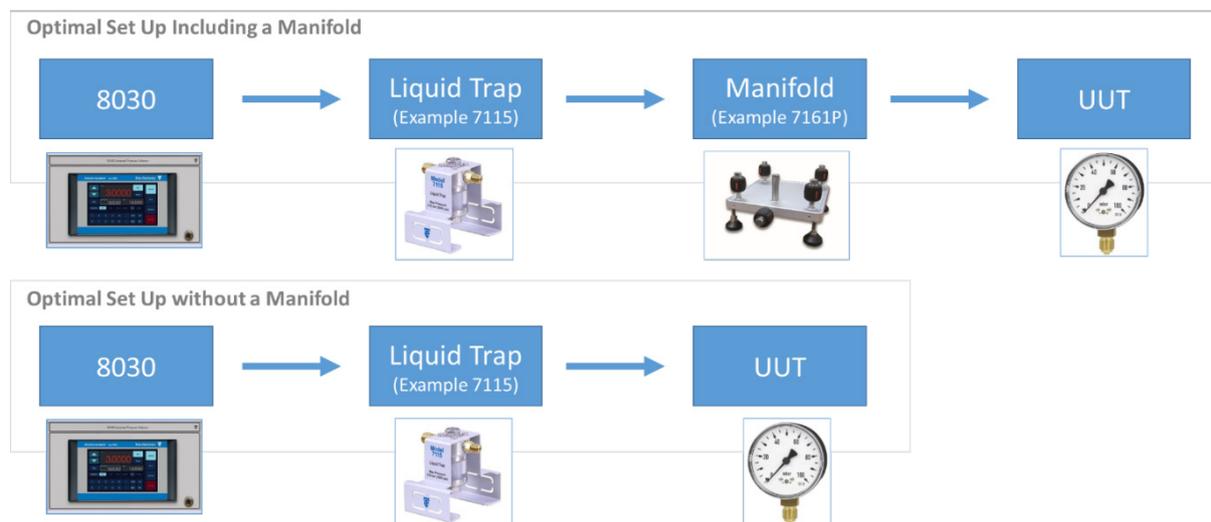
The Contamination Trap must be used always in the upright position to prevent liquid from flowing into the pressure controller or calibrator.

This guide will show the connections and usage with the 8030/8030B Pressure Controllers. 8030B is the module version of the 8030.

The CLEAN port must be connected to the 8030 pressure controller. The DIRTY (UUT) port must be connected to the manifold, manometer, pressure switch, transmitter or other process instruments that will be calibrated or adjusted.

Example Connections:

The 8030 should be used with a liquid trap to ensure that no contamination reaches the instrument. UUT's can be dirty, with oil and water capable of getting into hoses and affecting instrument performance.



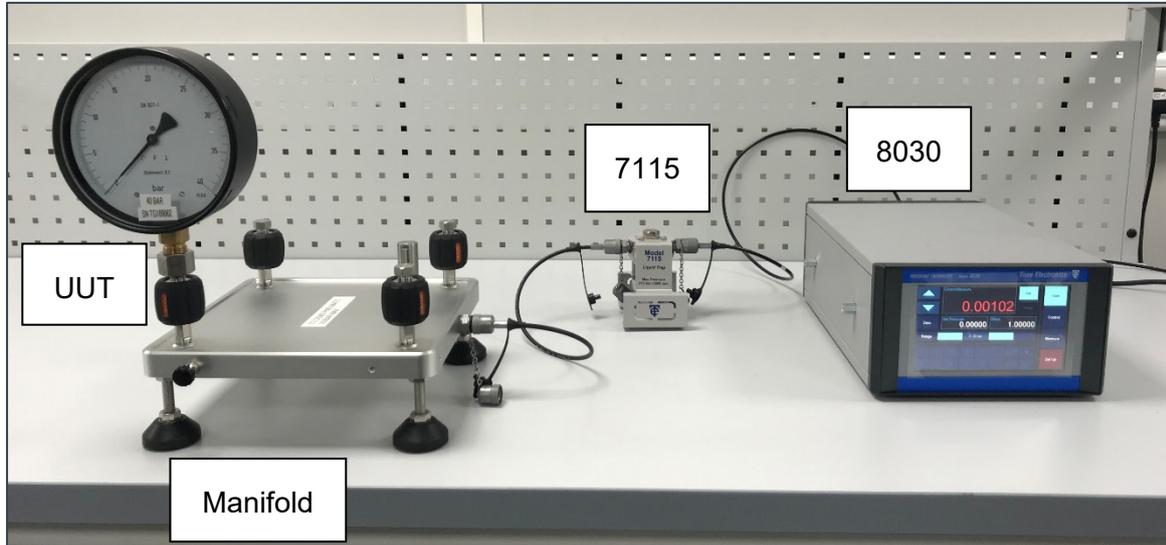
Minimess hoses are supplied for connection from the 8030 to the 7115. An additional hose is supplied for connection from the 7115 to the UUT. If an manifold is supplied this will be a minimess to minimess type. A minimess to ¼ BSP or ¼ NPT hoses will be supplied if required.



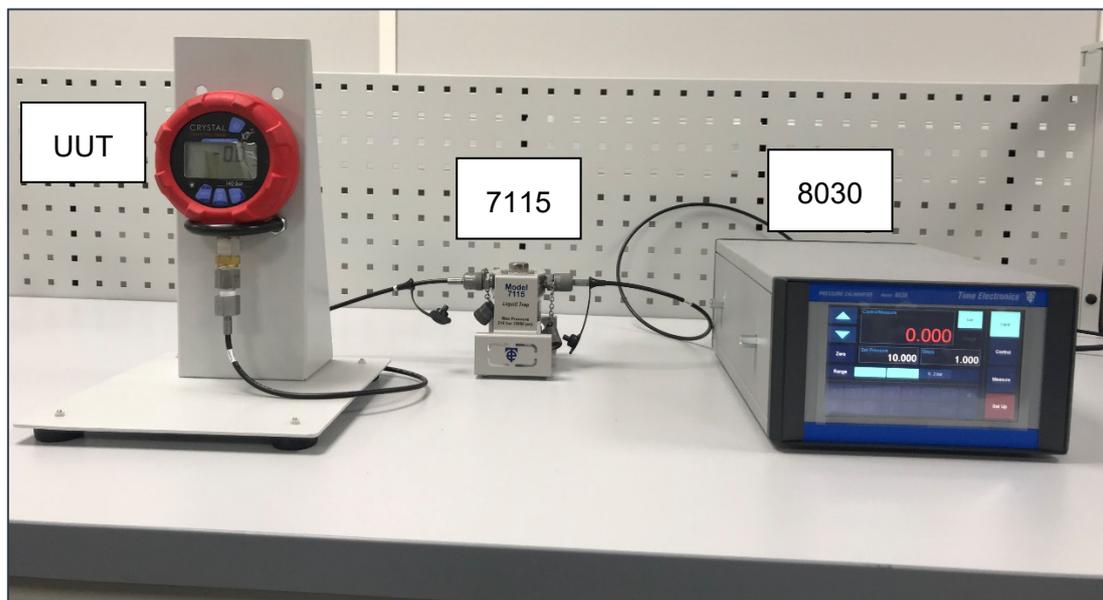
The 7198 pressure adaptor kit can also be used to make connections from the 7115 to various UUTs with different thread types.

3.1 Example Set Ups

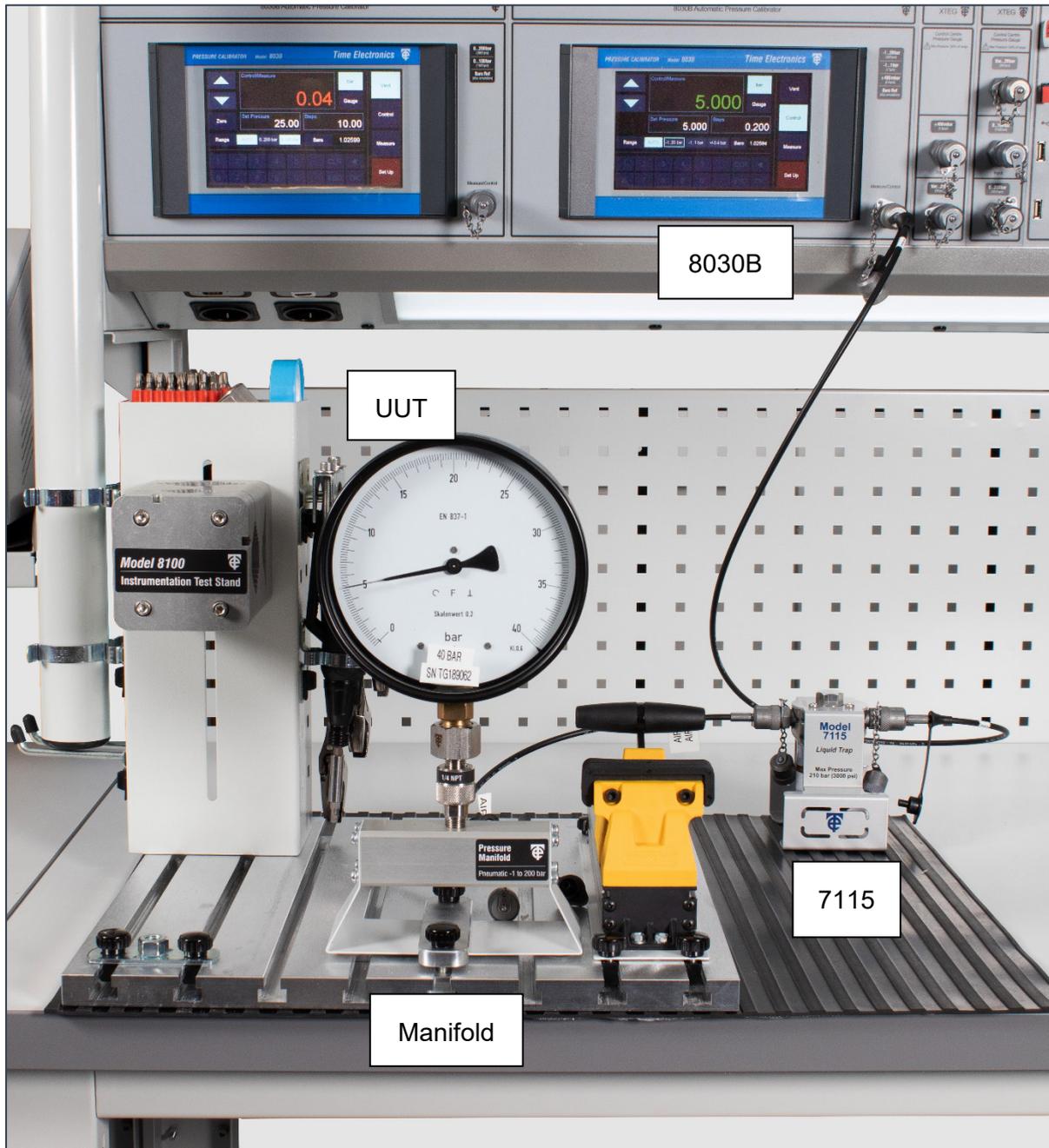
3.1.1 8030 > 7115 > Manifold > UUT



3.1.2 8030 > 7115 > UUT



3.1.3 8030B > 7115 > 8100 Manifold > UUT



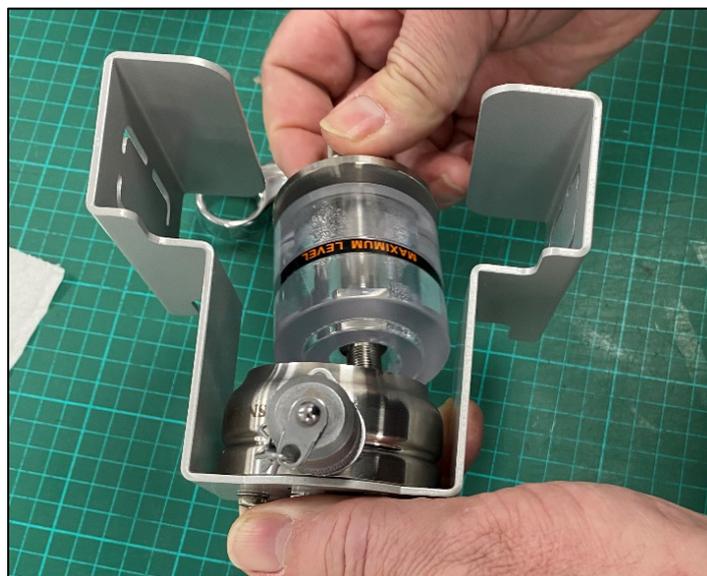
4 Cleaning and Maintenance

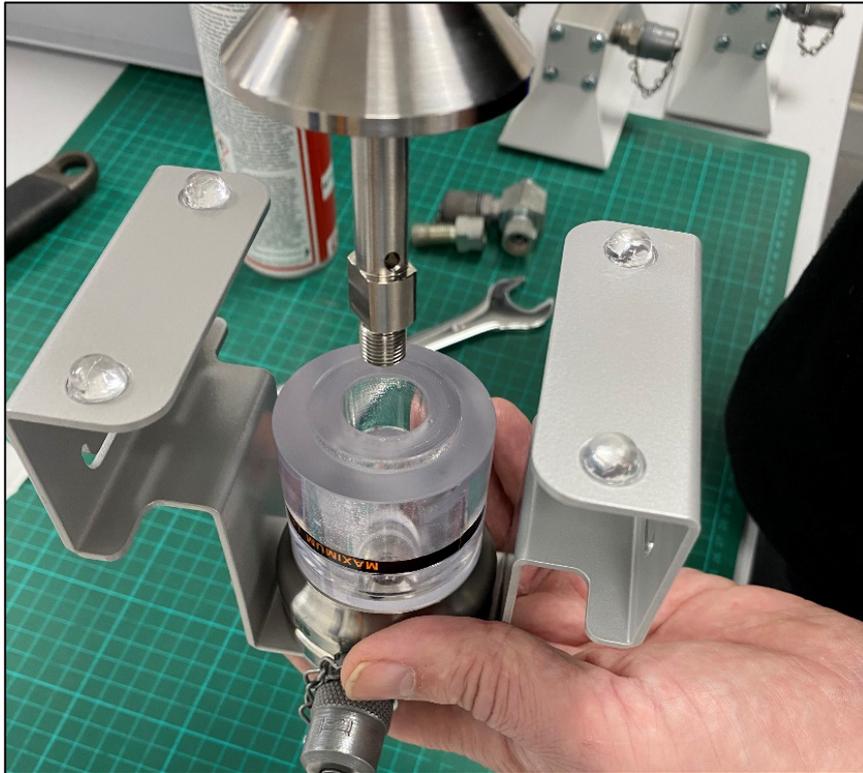
When the liquid accumulated inside the contamination trap reaches the level of the boundary line, the liquid can be removed as follows:

1. Disconnect both hoses from the contamination trap.
2. Using two 19 mm (3/4") spanners loosen the contamination trap via the hexagonal nuts so that it may be dismantled by hand.



3. **Hold the water trap over a sink or receptacle and allow the water/contaminant to flow out.**
4. Dismantle the water trap completely.





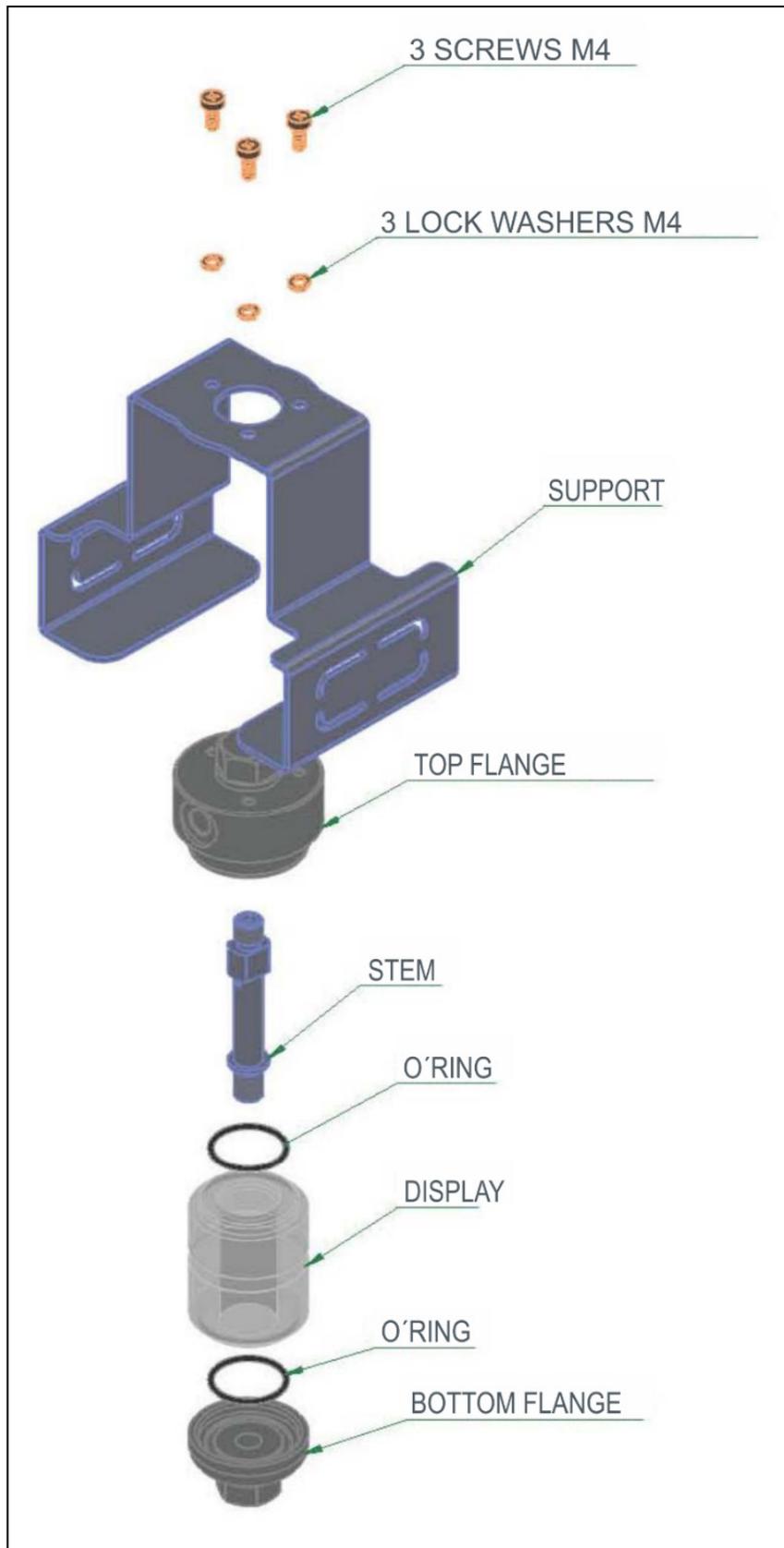
5. Using clean water, rinse the components.
6. Using clean tissue dry thoroughly, ensuring all contaminants are removed.

Note: Do not use solvents.

Note: Do not use grease on the sealing “O”-rings.

7. Reassemble hand tight and then using the two 19mm (3/4”) spanners tighten the assembly by ¼ of a turn clockwise. **Do not over-tighten the hexagonal nuts.**

5 Components List



6 Warranty and Servicing

Warranty

The Time Electronics products carry a one-year manufacturer's warranty as standard.

Time Electronics products are designed and manufactured to the highest standards and specifications to assure the quality and performance required by all sectors of industry. Time Electronics products are fully guaranteed against faulty materials and workmanship.

Should this product be found to be defective, please contact us using the below details. Inform us of the product type, serial number, and details of any fault and/or the service required. Please retain the supplier invoice as proof of purchase.

This warranty does not apply to defects resulting from action of the user such as misuse, operation outside of specification, improper maintenance or repair, or unauthorized modification. Time Electronics' total liability is limited to repair or replacement of the product. Note that if Time Electronics determine that the fault on a returned product has been caused by the user, we will contact the customer before proceeding with any repair.

Calibration and Repair Services

Time Electronics offers repair and calibration services for all the products we make and sell. Routine maintenance by the manufacturer ensures optimal performance and condition of the product. Periodic traceable or accredited calibration is available.

Contacting Time Electronics

Online:

Please visit **www.timeelectronics.com** and select Support Request from the Contact links. From this page you will be able to send information to the Time Electronics service team who will help and support you.

By phone:

+44 (0) 1732 355993

By email:

mail@timeelectronics.co.uk

Returning Instruments

Prior to returning your product please contact Time Electronics. We will issue a return merchandise authorization (RMA) number that is to accompany the goods returning. Further instructions will also be issued prior to shipment. When returning instruments, please ensure that they have been adequately packed, preferably in the original packing supplied. **Time Electronics Ltd will not accept responsibility for units returned damaged.** Please ensure that all units have details of the service required and all relevant paperwork.

Send the instrument, shipping charges paid to:

Time Electronics Ltd

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Tonbridge, Kent, TN9 1RA.
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Web Site: www.timeelectronics.com

Disposal of your old equipment



1. When this crossed-out wheeled bin symbol is attached to a product it means the product is covered by the European Directive 2002/96/EC.
2. All electrical and electronic products should be disposed of separately from the municipal waste stream via designated collection facilities appointed by the government or the local authorities.
3. The correct disposal of your old appliance will help prevent potential negative consequences for the environment and human health.
4. For more detailed information about disposal of your old appliance, please contact your city office, waste disposal service or return to Time Electronics.