



FermZilla Hydro Test

Instruction Manual

This instruction sheet contains vital information that is related to safely performing a hydro test of a FermZilla tank which is past its stamped expiry date. It is vital that you read this instruction sheet from front to back before performing this test! THIS IS FOR YOUR OWN SAFETY.

KegLand Distribution PTY LTD

www.KegLand.com.au

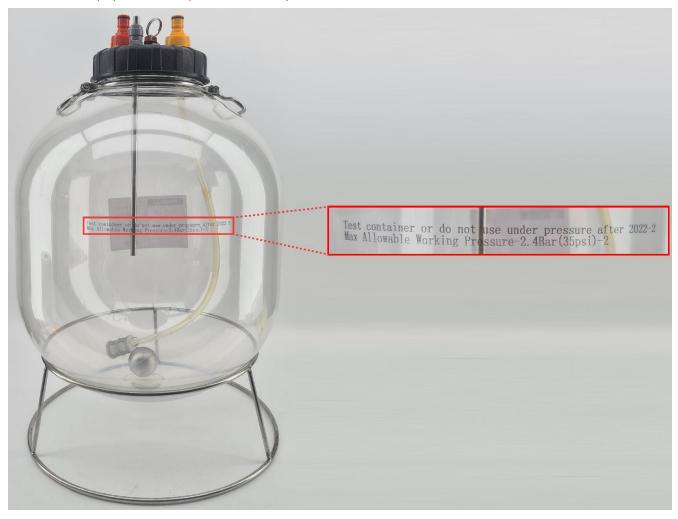


Hydrotesting is a simple process that anyone can do at home with relatively basic tools and equipment.

If you have any doubts in the process or do not have time to do the hydrotest then once the tank has expired you should not continue to use the tank under pressure. Replacement new tanks can be purchased from KegLand Distributors.

Determining if your tank requires hydro testing

The expiry date is stamped onto the body of the FermZilla as can be seen below:



FermZilla's which are past their expiry date should not be used under any pressure until they have passed a hydro test.

Hydro Testing Process



1. Fill the tank with water to the brim. **Do not perform the hydro test with the tank empty**.

The reason why it is so important to ensure the tank you are testing is filled to the brim with water is because water is incompressible so the instance that the tank fails the rupture will be safe. If significant compressed air is in the tank at the time of the rupture then the compressed air has much more stored energy and could cause fragments to be ejected which adds risk that is simply not necessary. Hence, it's important to completely fill the tank with water.

Note: If you are hydrotesting the conical FermZilla tank it is also advised to attach the collection container and keep the butterfly valve open during the hydro test to also hydro test the collection container.

2. Remove the 2.5 Bar RED PRV from the lid of the FermZilla and replace this with a 6.9 Bar GREY PRV (KL03070).

IMPORTANT NOTE: Never leave the GREY PRV in the lid of the tank. Immediately after the hydrotest is completed replace the GREY PRV with the RED PRV.

- 3. Once you have confirmed the FermZilla is completely full of water then apply pressure to the tank slowly. It's important that pressure is applied to the tank in a controlled way. Some methods of applying pressure to the tank include:
- a) Mains water as the pressure source water pressure controlled with an inline regulator KL15035

Hook up EVABarrier tubing to your mains water using a 3 BSP x 6.3mm duotight fitting (KL13888) if connecting to a garden tap or a diverter valve (KL17756), if connecting directly to mains water within the house for example. If choosing either of these options as your water supply you will need to use a short length of 4mm ID x 6.3mm OD water line (KL11143) and then you will need to step this up using a 6.5mm x 8mm reducer (KL07481) to 4mm ID EVABarrier tubing.

It is not suggested to use EVABarrier tubing with a larger ID than 4mm between the mains water source and the inline regulator as 5mm ID and 6.5mm ID may be prone to bursting as a resulting of the very high mains water pressure.

Push the 4mm ID x 8mm OD EVABarrier tubing in to an inline regulator (<u>KL15035</u>) with a 0-10 Bar mini gauge (<u>KL15011</u>) which is initially set at OPSI, then attach this EVABarrier tubing to a ball lock disconnect attached to the carbonation cap on the pressure lid of the FermZilla.

Also ensure you have an accurate pressure gauge on the outlet of FermZilla to accurately determine the pressure within the tank. It is advised to attach a 0-150 PSI push in pressure gauge (KL11532) on the FermZilla to measure the pressure in the tank.

A diagram of this setup can be found towards the end of this manual.

Initially set your inline regulator to 0 PSI and then very slowly turn the dial on the inline regulator to increase the pressure to 4.0 Bar. The pressure applied through the inline regulator should be increased slowly in a controlled manner.

b) Water pressure transfer from Cornelius keg



Fill a Cornelius keg and the FermZilla to be tested with water.

Hook up a regulated gas source to your keg. This can be either a CO_2 cylinder with regulator or compressed air with regulator.

Initially set the pressure on your regulator to 0 PSI and ensure the keg is not pressurised.

Daisy chain the OUT post of the keg to a carbonation cap on the FermZilla using 4mm ID x 8mm OD EVABarrier tubing with two liquid ball lock disconnects. It is a good idea to also have a 0-150 PSI push in pressure gauge attached to the FermZilla to confirm the pressure in the tank.

A diagram of this setup can be found towards the end of this manual.

Very slowly and in a controlled manner, increase the pressure being supplied by the regulator up to 4.0 Bar. Ensure that water is being transferred into the FermZilla, not gas.

Hold the pressure in the FermZilla at 4.0 Bar for at least 1 minute and observe if any leaks or changes to the tank take place.

Note: It is normal for the FermZilla tank to swell in size and stretch during the hydro test.





Left: 30L all-rounder and 27L conical at 0 PSI

Unpressurised – Pre hydro test

Right: 30L all-rounder and 27L conical pressurised with water at 4.0 Bar

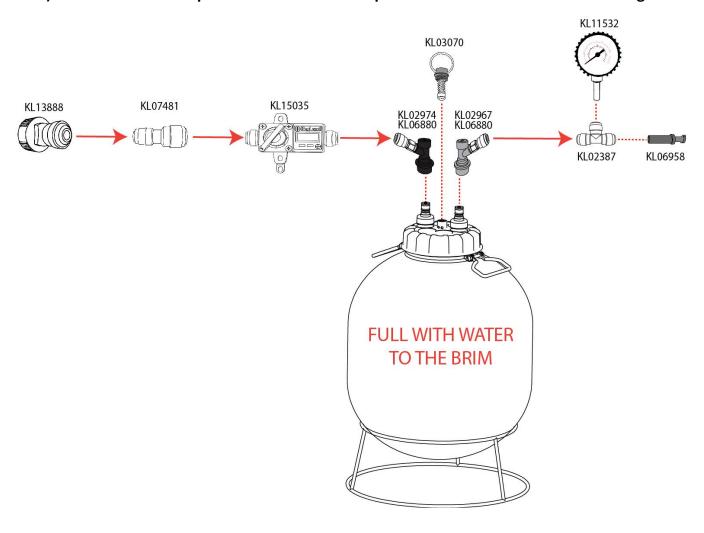
Irrespective of which method is used the pressure should be increased slowly and in a controlled manner.

4. After the tank has been held at 4.0 Bar for at least 1 minute, then release the pressure/water from the tank and observe the tank. If any cracks to the tank are noticed or if any physical damage is visible purchase a new tank. If the hydro test has been completed successfully and no damage is visible on the tank use a permanent marker to cross out the previous expiry date on the tank and write the new expiry date on the tank which should be



1 year from the test date. Then make sure to replace the 6.9 Bar GREY PRV with a 2.5 Bar RED PRV $\,$

a) Mains water as the pressure source - water pressure controlled with an inline regulator





b) Water pressure transfer from Cornelius keg KL07429 KL02967 KL06880 KL02974 KL06880 KL02387 KL06958 KL02387 KL06958