



Mini 360 Core Actuator Regulator

Instruction Manual

KL15868



KegLand Distribution PTY LTD

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 **WARNING** 

WHEN ATTACHING AND DISCONNECTING THE REGULATOR TO/FROM A SODASTREAM CYLINDER ALWAYS HOLD THE NECK OF THE SODASTREAM CYLINDER WITH A SPANNER TO PREVENT THE NECK OF THE CYLINDER ROTATING

 **WARNING** 

DO NOT SUBMERGE THE REGULATOR IN LIQUID AT ANY TIME

 **WARNING** 

ALWAYS PERFORM A LEAK TEST PRIOR TO USE. FAILURE TO DO SO MAY RESULT IN A LEAK OCCURRING AND YOUR CO2 CYLINDER OR BULB EMPTYING

 **WARNING** 

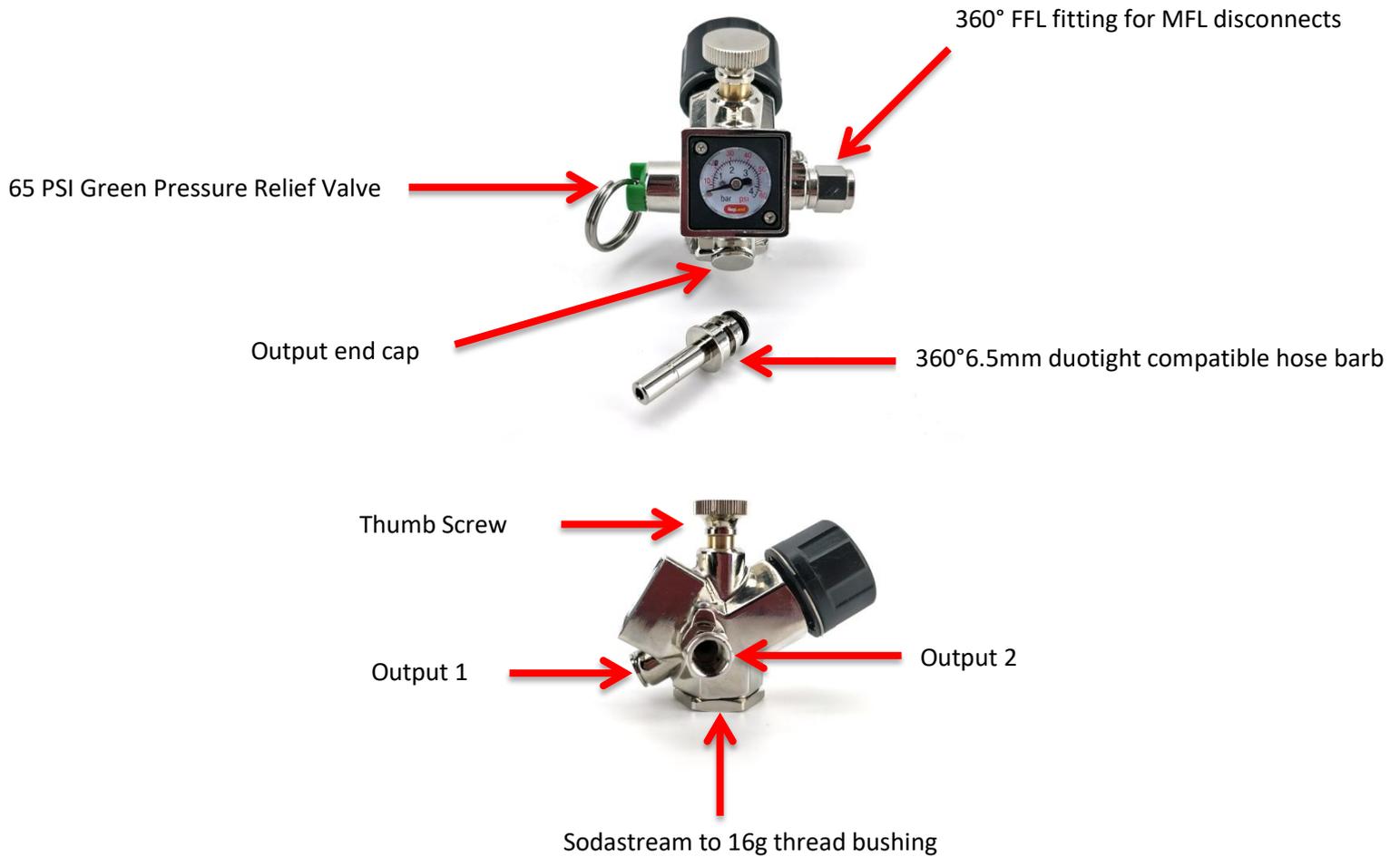
ALWAYS ENSURE THE REGULATOR IS SET TO A HIGHER OR EQUAL PRESSURE TO THE KEG TO AVOID LIQUID ENTERING THE REGULATOR. IF LIQUID ENTERS THE REGULATOR IT CAN RESULT IN THE REGULATOR BEING DAMAGED.

 **WARNING** 

DO NOT OVERTIGHTEN THE GAS BULB/CYLINDER ONTO THE REGULATOR



Items Included



Note: The duotight compatible hose barb or FFL fitting can be placed on either output 1 or output 2 depending upon which orientation you require the regulator to be.

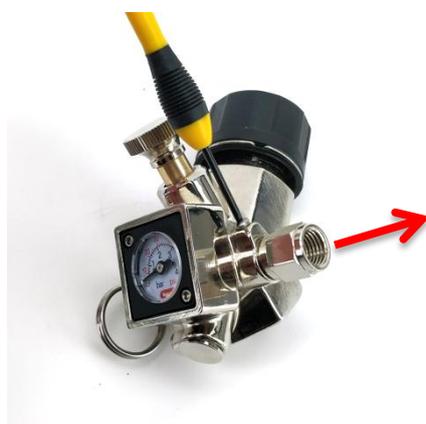
It is essential to lubricate the thumb screw shaft regularly and prior to first use.

Connecting the mini regulator to a keg or keg system

The Mini 360 Core Actuator Regulator is very versatile in regards to the ways that it can be connected to a keg system. It is suitable for both portable kegging systems and more permanently situated kegging systems. This versatility is a result of the regulator having two output positions which can be used interchangeably depending upon the disconnect being used.

How to alternate fittings and outputs

Step 1. Undo the flathead grub screw holding the output end cap in position and remove the output end cap.



Loosen grub screw and remove fitting

Step 3. Insert the output end cap into the unused output and tighten firmly using the grub screw.

Step 4. Insert the required fitting into the output required to be used and tighten firmly using the grub screw.



Insert required fitting into desired output and retighten grub screw

Connecting directly to a keg

The Mini 360 Core Actuator Regulator can connect directly to a mini keg, or Cornelius keg in multiple orientations which make it ideal for directly connecting to a keg via a wide array of ball lock disconnects.

Connecting to a keg via a premium ball lock disconnect MFL ([KL02967](#))

It is best to use the output directly below the gauge (output 1) when connecting the regulator to a premium ball lock disconnect MFL as shown to the right.





No nylon flare washer is required between a premium ball lock disconnect and the regulator.

Connecting to a keg via a stainless ball lock disconnect MFL ([KL09539](#), [KL03001](#) or [KL09041](#))

It is best to use the output adjacent to the gauge (output 2) when connecting the regulator to a stainless ball lock disconnect.

A nylon flare washer ([KL03032](#)) is recommended to be used between the stainless steel disconnect and the regulator.

If you do not have a nylon flare washer in place between the disconnect and regulator you will need to tighten the 360° FFL fitting tightly using a spanner to form a metal-metal seal.



Connecting to a keg via EVABarrier tubing

When using the regulator in a portable keging system such as an esky or jockey box system then it may be a good idea to connect the regulator to the ball lock disconnect on the keg via a length of EVABarrier gas hose. This will allow the gas cylinder to be kept separately at a distance from the keg. The regulator can be connected to EVABarrier gas hose via two different methods:

Connecting to a hose via a duotight fitting

The easiest way to connect 4mm ID or 5mm ID EVABarrier tubing to the output of the mini regulator is to use a duotight fitting.

1. Attach the 6.5mm duotight compatible barb to the desired output on the mini regulator.
2. Push a 6.5 mm x 8 mm duotight reducer ([KL07481](#)) onto the 6.5mm duotight compatible barb.
3. Push 8mm OD EVABarrier tubing into the 6.5 mm x 8 mm duotight reducer



Connecting via hose with stepless clamps directly onto the 6.5 mm barb

Alternatively you can connect 4mm ID or 5mm ID EVABarrier tubing to the output of the mini regulator by clamping the hose directly onto the supplied 6.5 mm duotight compatible barb.

1. Push your 8mm OD EVABarrier tubing over the 6.5mm duotight compatible barb.
2. Secure the tubing onto the barb using a 7-10mm OD stepless clamp ([KL06682](#)).

If you find it difficult to get the tubing over the barb you can heat it up in warm water and stretch the internal diameter using needle nose pliers.

To pressurise multiple kegs at once, split the 8mm OD EVABarrier hose using duotight tee-pieces ([KL02387](#)).

Connecting a 16g CO₂ Cartridge/Bulb

16g CO₂ cartridges are a suitable portable option for dispensing on go with smaller volume kegs. They are not suggested for use for both carbonating and dispensing as this will require a large number of gas bulbs to be used, typically with about 6g per litre of CO₂ used for carbonating and 6g per litre of CO₂ used for dispensing.

1. Ensure you have the 16g CO₂ reducing bush tightened onto the inlet.
2. Unscrew the thumb screw. Do not unscrew until there is thread exposed on the thumb screw.
3. Screw the 16g CO₂ bulb into the reducing bush.
4. Screw the thumb screw in to pierce the CO₂ bulb.
5. Ensure a seal is formed between the gas bulb and the regulator. Tighten more if needed but do not over tighten the CO₂ bulb into the reducing bush. Over tightening can result in no gas being able to pass through the regulator.
6. Perform a leak test to ensure an adequate seal has been formed.



Connecting to a Sodastream cylinder

If you were looking for a more cost-effective but still portable CO₂ source than CO₂ bulbs a Sodastream cylinder can be used. This doesn't require an adaptor to be used.

1. Unscrew the reducing bush on the inlet.
2. Unscrew the thumb screw. Do not unscrew until there is thread exposed on the thumb screw.
3. Screw the Sodastream cylinder into the regulator, making sure to hold the neck of the Sodastream cylinder in place while attaching and detaching.
4. Screw the thumb screw in to depress the valve on the Sodastream cylinder.
5. Ensure a seal is formed between the cylinder and the regulator. Tighten more if needed but do not over tighten the Sodastream cylinder into the reducing bush. Over tightening can result in no gas being able to pass through the regulator.
6. Perform a leak test to ensure an adequate seal has been formed.



Setting the pressure

Turn the adjustment dial on the regulator clockwise to increase the set pressure. To decrease the set pressure turn the adjustment knob completely counter clockwise and then release the pressure downstream of the regulator (by pulling on the PRV of the keg), then turn the dial clockwise to reset the pressure at the desired pressure.

Always ensure the pressure on the regulator is equal to or higher than the pressure of the keg to avoid liquid flowing back into the regulator. It is highly suggested to use a check valve in your system ([KL07047](#)) to prevent this from occurring in the event that your gas cylinder becomes empty and you



are unaware of a pressure drop in the regulator. If liquid flows back into the regulator it may result in the regulator becoming damaged, hence, this should be avoided.

Performing a leak test

It is essential that a leak test is performed every time a gas bulb or Sodastream cylinder is connected to the mini regulator. This can be performed via the methods described below:

1. Pressure decay test

Step 1. Connect your regulator up to your keg.

Step 2. Attach the CO₂ source to the regulator.

Step 3. Turn the adjustment dial on the regulator to register 5-10 psi on your pressure gauge.

Step 4. Turn the adjustment dial to the off position and leave the regulator to sit for a few hours. Then check if the pressure on the gauge has decreased from the set pressure.

If the pressure has decreased on the gauge then there is a leak in the system and the source of the leak should be identified via a soapy water/stellarsan leak test.

Please note: If the keg has liquid in it then this can result in the pressure decreasing over a few hours as the CO₂ is absorbed into solution. It is best to perform a pressure decay test on an empty keg.

2. Soapy water/Stellarsan Leak Test

Step 1. Connect your regulator up to your keg .

Step 2. Attach the CO₂ source to the regulator.

Step 3. Turn the adjustment dial on the regulator to register a reading on the gauge (a few psi will be sufficient).

Step 4. Spray every connection with soapy water or stellarsan solution. This includes the following connections:

- Between the gas bulb/cylinder and regulator.
- Between the regulator body and the 360° FFL fitting or 360° 6.5 mm duotight compatible barb.
- Between the regulator body and the output end cap.
- Between the 360° FFL fitting and ball lock disconnect (if applicable).
- Between the 360° 6.5 mm duotight compatible barb and the 8mm OD hose.
- The ball lock posts and lid on the keg.

Please note: Stellarsan should not be used on duotight fittings and instead the use of soapy water is preferred.



Swapping the mini gauge

If you wanted to install a mini gauge with a different pressure range to the default 0-60 psi mini gauge then follow these steps:

Step 1. Unscrew the two socket head cap screws which hold the mini gauge cover in position and remove the mini gauge cover.

Step 2. Pull on the face of the gauge to remove it.

Step 3. Push the replacement gauge into the regulator and screw the gauge cover back on.

Different pressure mini gauges can be found here:

- Mini Gauge 0-23 PSI ([KL14984](#))
- Mini Gauge 0-30 PSI ([KL14991](#))
- Mini Gauge 0-150 PSI ([KL15011](#))

Lubricating Thumb Screw

If the regulator is new and has not been lubricated or alternatively if the thumb screw is a bit too tight then application of some food grade lubricant may be necessary.

Step 1.

Disconnect the regulator from the pressure source.

Step 2.

Turn the thumb screw all the way anti-clockwise so it's out as far as it will go.

Step 3.

Apply food grade lubricant to the thread or neck of the thumb screw as shown below. Rotate the thumb screw in both directions to spread the lubricant over the thumb screw components.



NOTE: It is perfectly normal for the thumb screw to be tight when under pressure. When the regulator has a cylinder attached and is under pressure it is completely normal for the thumb screw to be more difficult to turn but with moderate force it still will move. When the pressure is released it will become easier to turn.

Replacing Seat and Seat Cap Assembly

All regulators contain parts that are susceptible to ingress of contamination. Although the Mini 360 Core Actuator Regulator is made from high quality components and assembled in a clean environment it's possible that throughout its life that some contamination can get into the regulator (normally through the inlet side). If this contamination is able to get past the integrated sintered filter you may get "pressure creep". Pressure creep is when contamination or something else has got into the seat and seat cap assembly and the flow of gas doesn't stop even when the set pressure is reached.

This will often be noticed if the needle on the pressure gauge continues to rise until the pressure relief valve opens and pressure is released. If this happens repeatedly then it's likely you will need to perform this maintenance process.

Step 1. With a small screw driver remove the two grub screws on both sides of the regulator knob:



Step 2. Once these grub screws have been removed the regulator black knob can be completely undone and removed as shown below:



Step 3. Using a set of needle nose pliers remove the piston diaphragm:



Step 4. With a 16mm or 5/8" socket set remove the seat and seat cap assembly. Please ensure the black o-ring comes out with this assembly. If the o-ring doesn't come out at the same time you may have to remove the o-ring separately with a pointy object:



Replace the brass seat and seat cap assembly with a new one. Ensure that you adequately tighten this seat cap assembly and then re-assemble the regulator in the reverse order.

NOTE: The seat and seat cap assembly is the same part used inside the KegLand MK4 Regulator and is interchangeable. So the replacement MK4 diaphragm and seat assembly ([KL15646](#)) can be purchased as the spare part for this regulator model.

Replacing Thumb Screw O-Ring

If for some reason you get gas leaking from the base of the thumb screw it's possible that you have blown the o-ring on the thumb screw shaft. To replace this o-ring follow the steps below:

1. Follow the **steps 1-4** above for the "Replacing Seat and Seat Cap Assembly"
2. Once the seat and seat cap has been removed in **step 4** the thumb screw can be completely removed. Simply unscrew in the anti-clockwise direction.



3. Inspect the o-ring in the image above and replace if necessary.
4. Re-assemble the regulator in the same sequence as you took the components apart.