KEGLAND SERIES 4 KEGERATOR

Instruction manual

For our 2 & 3 Tap Home Keg Systems

Need a hand? We're local and happy to help.

Tap That Brewery & Keghouse
1/10 Ern Harley Dr, Burleigh Heads QLD 4220
0481 583 979 · cheers@tapthatbrewery.com.au

Set-up guide	tapthatbrewery.com.au/setup
Troubleshooting	tapthatbrewery.com.au/help
Keg refills	tapthatbrewery.com.au/refills
Book a demo	tapthatbrewery.com.au/demo

Scan for help

tapthatbrewery.com.au

This is the manufacturer's original manual, supplied by Tap That Brewery & Keghouse.
Always follow the manufacturer's safety and installation instructions.
Liquor licence 247868 · Please drink responsibly.

Series 4 Kegerator Instruction Manual



⚠ WARNING ⚠

IF FRIDGE HAS JUST BEEN MOVED DO NOT TURN ON UNLESS THE FRIDGE HAS BEEN STANDING UPRIGHT FOR 24hrs. FAILURE TO DO SO WILL VOID WARRANTY. STAND FRIDGE IN THE UPRIGHT POSITION FOR 24HRS BEFORE PLUGGING INTO MAINS POWER SOCKET

⚠ SAFETY FIRST ⚠

CO2 gas can be dangerous. Make sure to always use CO2 in a well-ventilated place.
Never exceed 40psi on your keg system.
Flush out chemicals from your beer line completely before tapping keg.
Always thoroughly check for gas leaks once you have set up your system.



Watch our helpful instructional YouTube Videos

Video instructions now available. The KegLand YouTube Channel (https://www.youtube.com/kegland) . You can find the link on our website www.KegLand.com.au

If there is any part of these videos above that you do not understand or you cannot access please call or email www.KegLand.com.au or your nearest KegLand Distributor for more assistance.

Kegerators can be used for different keg types and it's important that you understand what types of kegs are available and the types of fittings that are required for each type. You will need to customize your kegerator to suit the kegs that you want to dispense. The keg types can be split up into two main categories:

1. Commercial Kegs (look similar to the one below). These kegs are usually used by commercial breweries and in Australia are mainly sold as 50L kegs. The commercial kegs use several different coupler types as shown below. The most common are the A-type and D-type couplings. 90% of all 50L commercial kegs in Australia will use one of these two couplings. The next most common coupling is the S-type which is often used for imported beers from Europe or Asia. The device to connect your beer and gas line to the coupling on the keg is called a "Keg Coupler". Make sure to know what type of keg coupler you need before purchasing the equipment so you can easily be supplied with the correct one.





2. Home Brewing Kegs. (look similar to the ones below). These kegs are usually used by home brewers or very small microbreweries. The sizes are usually 19L or 9.5L. These kegs have 2 separate posts on them where you attach the beer and gas lines to. The posts are slightly different in shape as described below:















    1. Pin lock – shown at the top right.
    2. Ball lock – Shown at the bottom right.

The pin lock kegs use a "Pin Lock Disconnect" shown in the top right (red colour). The ball lock kegs use "Ball Lock Disconnects" as shown in the bottom right in grey and black. Most customers prefer the ball lock posts because there is a larger availability of spare parts and accessories for these posts.

1. Commercial Kegs

As described above there are 3 main commercial keg coupler types that you are likely to encounter in Australia. These are "D-type", "S-type" and "A-type". Different brands of beer use different keg coupler types as you can see below. Most of these kegs are 50Litres in size however smaller commercial kegs of 25L or 30L do also exist.

A-type Keg 	A-type Keg Coupling 	This keg coupling is also known as a "German Slider". This type of keg is used by Toohey, Coopers, West End, Little Creatures, XXXX and any beer made by Lion Nathan. To use this keg coupler, just slide the coupling over the top of the keg and engage the handle on the keg coupler. This is the most common keg coupler type in Australia and approximately 45% of kegs in Australia would use this coupling type.
D-type Keg 	D-type Keg Coupling 	This keg coupler is also known as an American Sankey. This keg coupler is used for beers such as VB, Carlton Draught, and any beers made by Carlton United Breweries. About 40% of kegs in Australia would use this coupling type. To use the coupler just push the coupler against the top of the keg, twist clockwise firmly then depress the handle to tap the keg.
S-type Keg 	S-type Keg Coupling 	This keg coupler is often confused with the D-type keg coupling. It looks very similar however the "well" in the middle of the coupling is slightly deeper. These kegs are used by Asian, American and other imported beers such as Asahi and Heineken. To use the coupler just push the coupler against the top of the keg, twist clockwise firmly then depress the handle to tap the keg. About 10% of kegs in Australia use this type of coupling.

Setting up Commercial Keg Couplers

The gas enters the side of the coupler at about a 45 degree angle and the beer exits the keg coupler out the top of the keg coupler. For that reason you will need to connect your gas line from your CO2 regulator to the side of the keg coupler and the beer line from your tap to the top of the keg coupler. Inside the keg coupler there may be two "one-way valve". The one on the left is the one way gas valve and the one on the right is the one way beer valve. On a kegerator system these valves are not strictly necessary and you do not know how to use them it is best to just take them out of the coupler. The keg coupler should include a hex nut, barbtail and rubber washer (as shown to the right). Always ensure that the rubber washer is between the



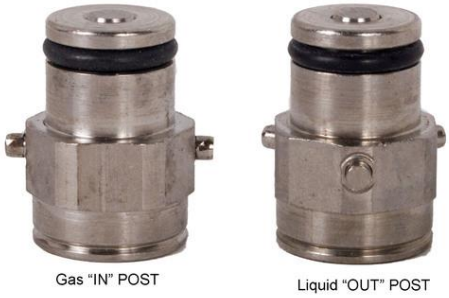




barbital and the keg coupler body.

2. Home Brewing Kegs

Almost all home brewers use the smaller 9litre – 25litre kegs. There are two main systems that are used by home brewers. These are called “ball lock” and “pin lock” as explained below.

Ball Lock Posts (on the keg)  	Ball Lock Disconnects 	These types of kegs were originally used by Pepsi for syrup. About 85% of home brewers use this type of keg because they are easy to use, have a high availability of spare parts and they are inexpensive. The 2 posts on the kegs look very similar but are not compatible. As you can see on the photo to the left the gas post is slightly different shape to the liquid post. The gas post has a small ground notch (see arrow) which signifies the post is a gas post. Similarly the ball lock disconnects are also different from each other. The grey should only be used for gas and the black should only be used for beer.
Pin Lock Posts (on the keg)  	Pin Lock Disconnects 	These types of kegs were originally used by Coca Cola and about 10% of home brewers use these kegs.

Using Stepless Clamps



The stainless stepless clamps that come included with the kegerator are the best clamp to use on the beer line. The stepless clamps grasp the beer line in a perfect circle meaning to do not pinch the line like worm style clamps. The stepless clamps come in different size so it is important you have the correct style of clamp for the beer line and barb fitting that you are using. The clamps are a single use items.

To use the clamps the best tool for the job is clamp tool (shown below in photo to left). These tools can be purchase separately (Part number KL07054). If you do not have one of these tools the wire cutters (shown below to the right) will do an adequate job.



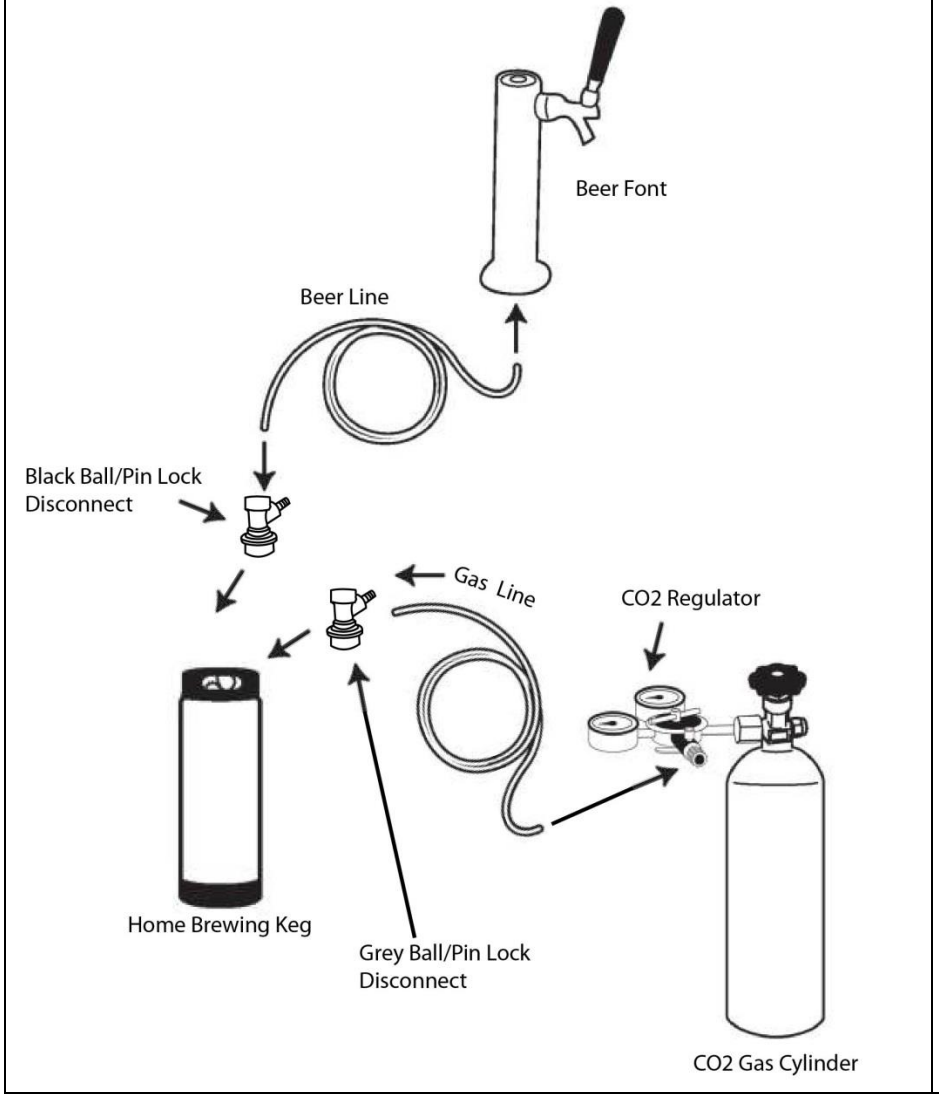
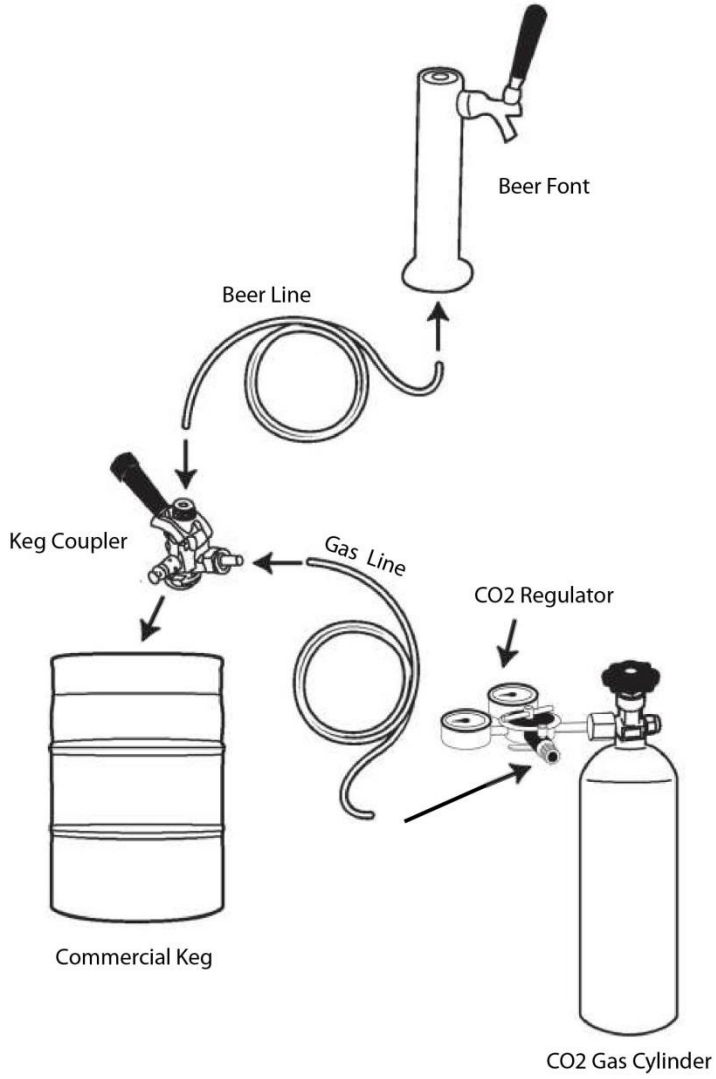


As shown below. All that is required is a quick single clamp with the tool and the job is done.





Setting up the Plumbing on your Kegerator

Installation Diagram for Home Brewing Kegs (Ball Lock & Pin Lock)	Installation Diagram for Commercial Kegs (usually 50L)
	

Balancing your Keg System with CO2

Balancing your keg system is vital for optimum draft beer performance and is especially important when using CO2 to dispense the beer. To balance your keg system correctly we must first understand:

1. Carbonation Level
2. Keg Storage Temperature

Carbonation Level

Different beers are carbonated at different levels. The carbonation is measured in "volumes of carbonation". Most draft beers have a carbonation level of about 2.6-2.8 volumes of carbonation. (see table 1.1).

Keg Storage Temperature

Keg Storage temperature is best measured using a thermometer. Put a full glass of water in the fridge with the keg for 2hrs with a thermometer in the glass. Take a reading with the thermometer. This will give a true reflection of the keg storage temperature. In order to pour without excessive head keg storage temperature of most beers should be between 0^0C up to 2.5^0C. Some very lightly carbonated beers such as English Ales can be dispensed as high as 8^0C.

Once you know what carbonation level is (if you do not know assume 2.6 volumes of carbonation) and your keg storage temperature use the table below to work out the correct dispense pressure. For example, if your keg storage temperature is 1C and the carbonation level is 2.6 volumes then the equilibrium pressure is 70kPa (10.2PSI). The dispense pressure should be 10% above the equilibrium pressure. So you should set your regulator dispense pressure at 77kPa (11.2PSI).

Setting you dispense pressure below the equilibrium pressure will cause the beer to go flat over time. Setting the dispense pressure above the equilibrium pressure will cause the beer to absorb more carbonation over time.

NOTE: Many people make the mistake of using the keg dispense pressure to increase or decrease the flow speed of the beer out of the tap. THIS IS INCORRECT. When using CO2 to dispense, the dispense pressure must be set according to the table below. The method to adjust the speed of flow is to adjust the beer line length and diameter.

Beer line diameter and length adjustment

The beer line on a kegerator is not just a hose to get beer from the keg to tap. It also performs the important function of applying "flow resistance". With too little flow resistance the beer will come out of the tap too fast. With too much flow resistance the beer will come out of the tap too slow. Small internal diameter (ID) beer line with apply more flow resistance and longer beer line will also apply more flow resistance. Most domestic systems work well with the following line length/diameter:

4mm ID Beer Line: 1.5-2 Meters
5mm ID Beer Line: 3-4 Meters
6mm ID Beer Line: 7-8 Meters

Small ID beer line is often the best choice for kegerators as it means the customer can use a shorter beer line which makes less mess inside the fridge. It also minimizes the amount of beer sitting in the beer lines.
Using 4mm ID beer line you will have 12.5ml per meter in the beer line and a total of approx 22.5ml.
Using 5mm ID beer line you will have 20ml per meter in the beer line and a total of approx 70ml.
Using 6mm ID beer line you will have 28ml per meter in the beer line and a total of approx. 210ml.

For the above reasons 4mm ID beer line is often the best choice however the small ID makes it difficult for some customers to fit the ID over the barb fittings on the keg coupler or ball lock disconnects. As of July 2018 the Kegerators are packed with 4mm ID beer line. In order to fit the smaller 4mm ID beer line onto the barbs you can use some needle nose pliers to stretch the inside of the beer line open so you can get it onto the barbs as shown below.

If using 4mm ID the user may need to stretch the beer line open slightly so it can fit onto the barbs of some of the fittings. The perfect tool for this job is a set of needle nose pliers. Heat the beer line in some boiling hot water for 30 seconds to soften then push onto the needle nose pliers to stretch the internal diameter open. Open the handles on the pliers to further stretch the beer line open.



With regards to the gas tubing this is made from clear vinyl which is 5mm ID x 8mm OD tubing.

Table 1.1 – CO2 Conversion Chart

		Grams Per Liter of dissolved CO2											
		4. g/L	4.4 g/L	4.8 g/L	5.2 g/L	5.6 g/L	6.0 g/L	4. g/L	4.4 g/L	4.8 g/L	5.2 g/L	5.6 g/L	6.0 g/L
		Volumes of Desired Carbonation											
		2	2.2	2.4	2.6	2.8	3	2	2.2	2.4	2.6	2.8	3
Temp	Temp	Equilibrium Pressure kPa						Equilibrium Pressure PSI					
32 F	0 C	24	37	50	63	76	89	3.5	5.4	7.3	9.1	11.0	12.9
34 F	1 C	29	43	56	70	83	96	4.2	6.2	8.1	10.2	12.0	13.9
36 F	2 C	34	48	62	76	90	104	4.9	7.0	9.0	11.0	13.1	15.1
37 F	3 C	40	54	68	83	97	111	5.8	7.8	9.9	12.0	14.1	16.1
39 F	4 C	45	60	74	89	104	119	6.5	8.7	10.7	12.9	15.1	17.3
41 F	5 C	50	65	81	96	111	126	7.3	9.4	11.7	13.9	16.1	18.3
43 F	6 C	56	71	87	102	118	134	8.1	10.3	12.6	14.8	17.1	19.4
45 F	7 C	61	77	93	109	125	141	8.8	11.2	13.5	15.8	18.1	20.5
46 F	8 C	66	83	100	116	132	149	9.6	12.0	14.5	16.8	19.1	21.6
48 F	9 C	72	89	106	123	140	157	10.4	12.9	15.4	17.8	20.3	22.8
50 F	10 C	78	95	112	130	147	164	11.3	13.8	16.2	18.9	21.3	23.8
52 F	11 C	83	101	119	137	154	172	12.0	14.6	17.3	19.9	22.3	24.9
54 F	12 C	89	107	125	144	162	180	12.9	15.5	18.1	20.9	23.5	26.1
55 F	13 C	95	113	132	151	169	188	13.8	16.4	19.1	21.9	24.5	27.3
57 F	14 C	101	120	139	158	177	196	14.6	17.4	20.2	22.9	25.7	28.4
59 F	15 C	106	126	145	165	184	204	15.4	18.3	21.0	23.9	26.7	29.6
61 F	16 C	112	132	152	172	192	212	16.2	19.1	22.0	24.9	27.8	30.7
63 F	17 C	118	139	159	179	200	220	17.1	20.2	23.1	26.0	29.0	31.9
64 F	18 C	124	145	166	187	207	228	18.0	21.0	24.1	27.1	30.0	33.1
66 F	19 C	130	152	173	194	215	236	18.9	22.0	25.1	28.1	31.2	34.2
68 F	20 C	136	158	180	202	223	245	19.7	22.9	26.1	29.3	32.3	35.5

Ideally set regulator dispense pressure 10% higher than the "Equilibrium Pressure"

Attaching and Removing the Tap/s from the Font

Attaching and removing the taps from the font may be necessary if you need to change the beer line or taps at any time throughout the life of the kegerator. The kegerators come included with new forward sealing taps. These forward sealing taps require very little maintenance and are easy to fit.



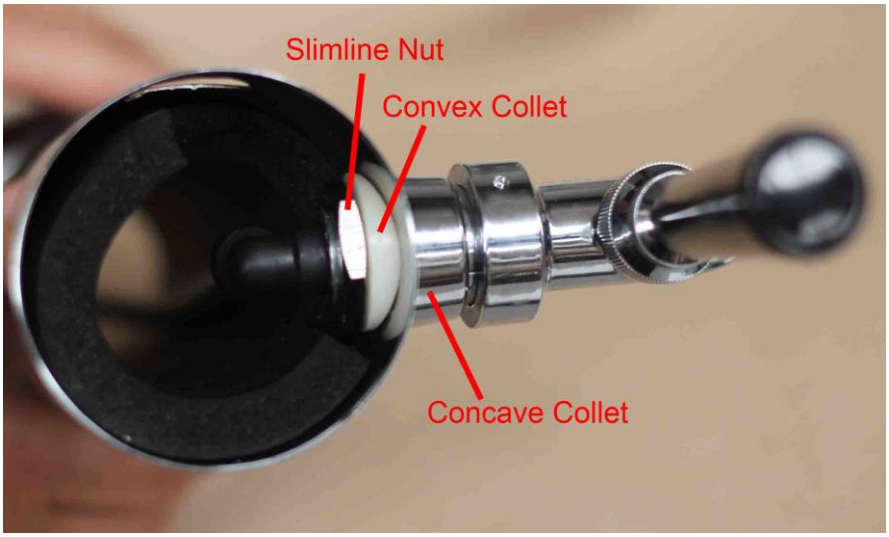
Step 1
Remove the cap from the top of the font. See photo to the Left.

Step 2
Feed the beer line up through the bottom of the font and place through slimline nut and convex collet before going through the tap hole. See photo to right



Step 3
Attach beer line to the back of the tap then push the threaded shank of the tap into the tap hole.

Step 4
On the inside of the font place the convex collet onto the tap shank then tighten the slimline nut to the tap shank to secure to the font.The beer taps Various tap assemblies are available





NOTE: It is important that the user does not over-tighten the faucet collar on the tap. Over tightening of this part will prevent the free and full movement of the tap handle. Over tightening will restrict the tap handle movement preventing the tap from completely opening properly.

IMPORTANT - CO2 Pressure Check

After setting up the kegerator it is important to do a CO2 pressure check to make sure your system holds pressure. Making sure the system holds pressure is extremely important as it will determine that you have no pressure leaks. This can be done in a few simple steps.

Step 1:
With all your hoses and the keg connected turn the pressure on the CO2 regulator up to 140kPa (about 20psi) then turn off the valve on the top of the CO2 gas cylinder.

Step 2:
Wait 2 hrs and check that the pressure on the CO2 regulator has not dropped since step 1.

If the pressure has dropped over the 2 hr period then go over all the hose connections with soapy water to ensure you have no CO2 leaks then repeat the two steps above.

CO2 Consumption Rate

The CO2 cylinder that you use with your kegerator can be used for 2 purposes:

1. **Carbonating** your beer or other drink in the Keg.
2. **Dispensing** your beer or other drink from the Keg.

If you are brewing your own home brew then you will most likely use the CO2 gas cylinder to carbonate your beer. This will consume approximately 6 grams of CO2 per Liter. If you purchase your beer from a commercial brewery then it will already be carbonated.

Dispensing your beer will consume approximately 6 grams per liter as well regardless of whether you brewed it yourself or not.

KegLand sells 2 different CO2 cylinder sizes:

1. 2.6kg Gas Cylinder
   For home brew this will carbonate and dispense approximately 200 Litres.
   For commercial beer that comes already carbonated this will dispense about 400Litres
2. 6kg Gas Cylinder
   For home brew this will carbonate and dispense approximately 500 Litres.
   For commercial beer that comes already carbonated this will dispense about 900Litres

Minimum Clearances Around the Kegerator

The Series 4 Kegerator has radiators in the left and right hand wall of the kegerator in the outside skin. These radiators need to be well ventilated so heat can escape from the kegerators. A minimum of 100mm (4inches) clearance should be given to the kegerator on the left and right hand wall. This allows the kegerator to breathe and for the heat to escape. If the kegerator is incorrectly installed it may void the warranty, cause high electrical consumption and the kegerator may fail prematurely.

For instance it is not a good idea to push the kegerator right up into the corner of a room against two walls as this will prevent adequate ventilation of one of the sides of the kegerator limiting its ability to operate efficiently.

See diagram to the right. This is an incorrect kegerator installation. Little or no ventilation is given to the kegerator on the left and right hand wall.



100mm clearance required on left and right hand side. This installation will void warranty and cause poor performance.

Other Additional KegLand Kegerator Accessories



Keg Parkas

Are you transporting kegs without refrigeration or would you like to take a keg to a picnic. You should try out the KegLand Neoprene Parkas. Made from thick neoprene these keep the kegs cool for hours. You can also slip an ice pack down the side of the keg to keep the keg cold for even longer.



Water Resistant Cover

If you want to keep your kegeator clean and dry when not in use then it's a good idea to purchase a water resistant cover. These are a great investment and will keep your Kegerator in great condition protecting it from the elements.



Tap Faucet Plug

During periods where the kegerator is not used the faucets can be pluged up to prevent contamination or fruit flies getting into the tap. This handy little device fits all tap sizes and shapes and is made from long lasting silicon (See right). We also sell a facet brush that can be used to clean out the taps. (See left)





Beer Line Cleaning Equipment

To keep your kegerator in top condition it is recommended to clean your beer lines out between kegs. KegLand supply sodium percarbonate beer line cleaner is perfect for the job. We also sell beer line cleaning caps (See picture to left) that you can use on an old coke bottle and use this to clean out your beer lines or if you are using commercial keg couplers then you should try our 15litre wash out kegs (see right). These useful parts will ensure the quality of your beer is maintained.



