



PEGAS[®]

Evolution Pacific II

OPERATION MANUAL

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Warranty card

Serial number

Name of product _____ Device for foam-free dispensing of foamy beverages PEGAS Evolution Pacific

Warranty period _____ 2 years from the date of purchasing the device

Date of sale _____

Selling company name _____

Full name and signature of Seller _____
Signature Full name Stamp

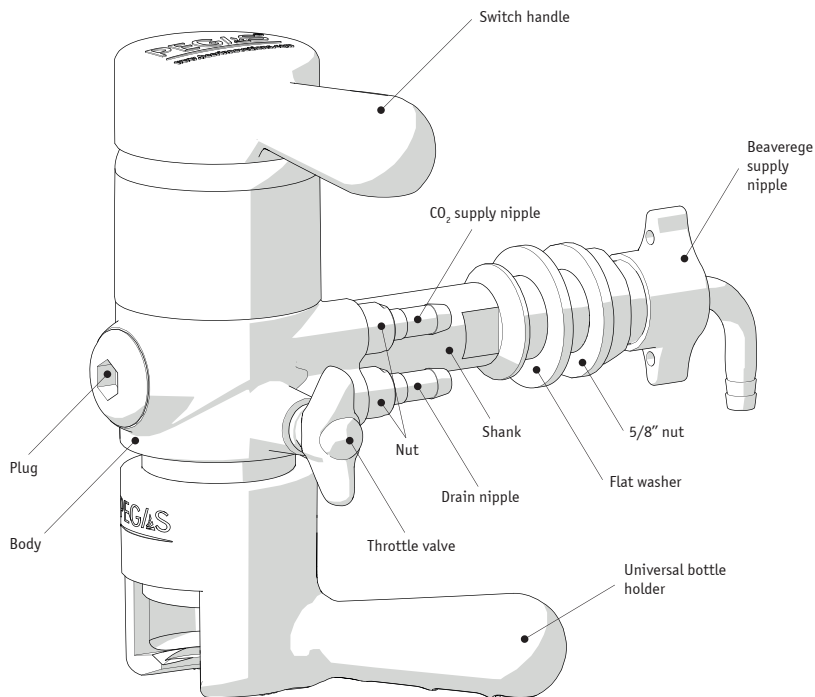
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1. PEGAS Evolution Pacific Device Diagram



2. Function of Device

The PEGAS Evolution Pacific device is intended for fast foam-free dispensing of foamy and/or carbonated beverages (including beer) from pressurized containers (kegs) into plastic bottles with PCO 1810/1881 or BPF necks. Dispensing is based on the counter pressure method.

This method ensures foam-free dispensing which preserves beverage quality when storing sealed bottles for long periods.

Use only new bottles.

3. Technical Data

		Unit	Value
Beer styles quantity		pcs.	1
Filling capacity*		l/hour	45-120
Beer hose inner diameter		mm	7
Dimensions		mm	215 x 124 x 175
CO ₂ pressure when supplied to a keg		MPa	0,25 – 0,3
Device weight	Net	kg	0,56
	Gross	kg	0,67

* Estimated when filling a two-liter bottle at 6°C or less.

** Per liter of product filled under 0.2 MPa of pressure.

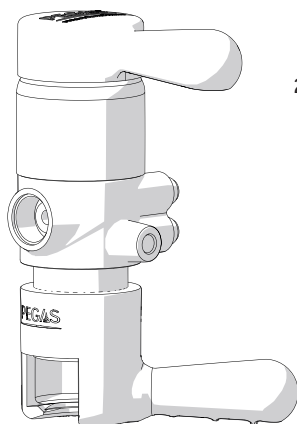
4. Working parts replacement

Guidelines for the frequency of replacing working parts (for 30 000 cycles per year)

Item number	Item name	Replacing frequency (30 000 cycles/year)	Quantity
131006	O-ring	12 mnth	1
131007	O-ring	12 mnth	2
101012	Gasket	12 mnth	2
131012	Gasket	6 mnth	1
123016	Slider	6 mnth	1
131025	O-ring	12 mnth	2
131044	O-ring	12 mnth	2
131045	O-ring	12 mnth	2
123033	Gasket	12 mnth	1

5. Assembly and installation

Remove all parts from individual packaging.

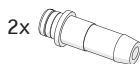


Dispensing device



2x

Nuts



2x

Nipples with rings



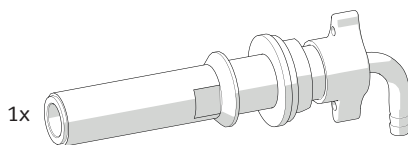
1x

Plug



1x

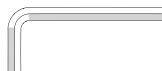
Throttle valve



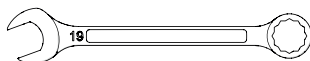
1x

Shank

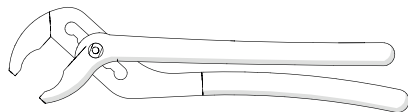
Tools for assembly and installation:



Hex wrench S10



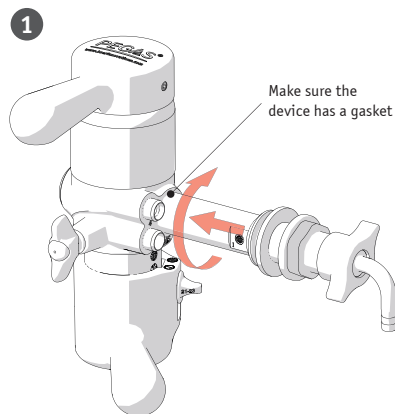
Wrench S19



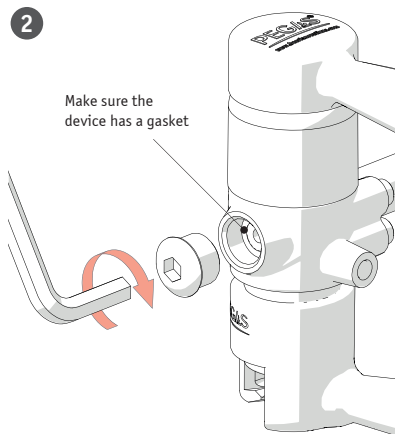
Adjustable pliers*

*Required size of adjustable pliers from 19 to 30 mm

PEGAS Evolution Pacific device should be assembled as follows:

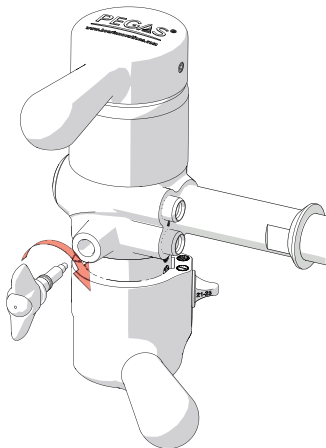


Using an S19 wrench, screw the shank into the 5/8" threaded hole in the body.



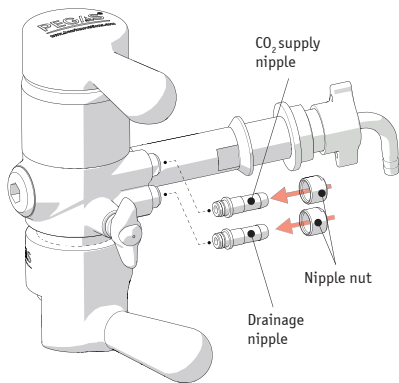
Using an S10 hex wrench, screw the plug into the 5/8" threaded hole or tap for dispensing beer into glasses/mugs. (Not included).

3



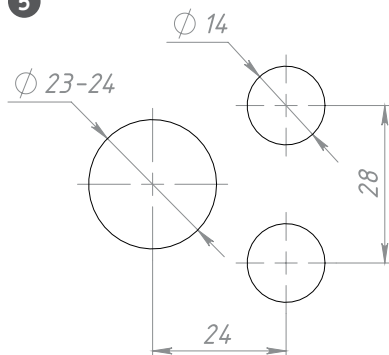
Install the throttle valve.

4



Insert the CO₂ supply nipple and the drainage nipple into the matching holes on the device. Place the nuts on to the nipples and hand tighten them up to the stop.

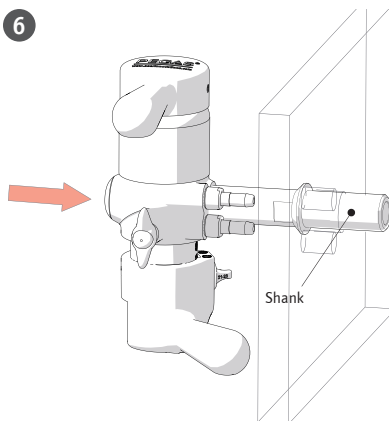
5



Recommended hole sizes and its arrangement for PEGAS Evolution installation. Max sidewall thickness – 25 mm.

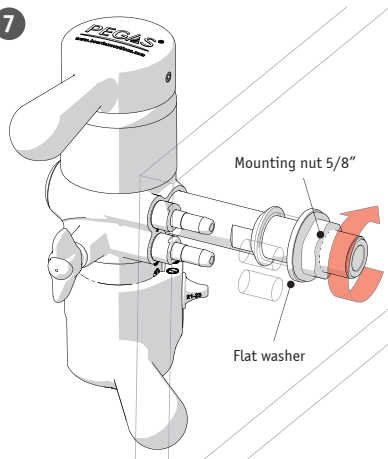
Device installation in a 23+ mm through hole

6



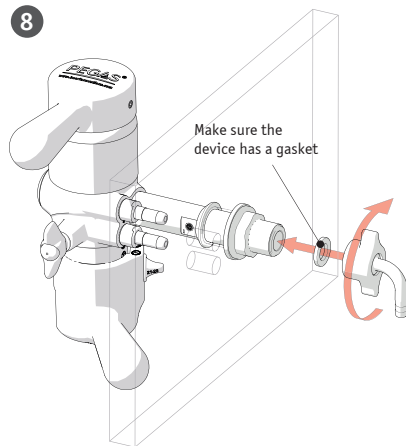
Insert the free end of the shank into the matching hole.

7

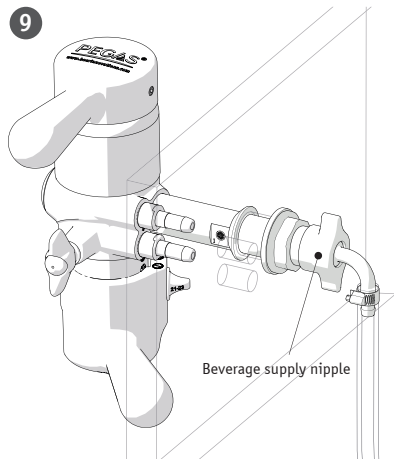


Place the flat washer on to the shank from the inside; tighten the 5/8" nut, secure the device in a vertical position with the 5/8" nut.

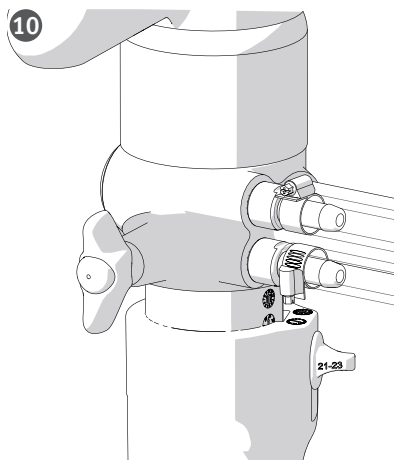
8



Place the coupling nut on to the nipple and tighten it. Ensure that the gasket is properly placed in position.

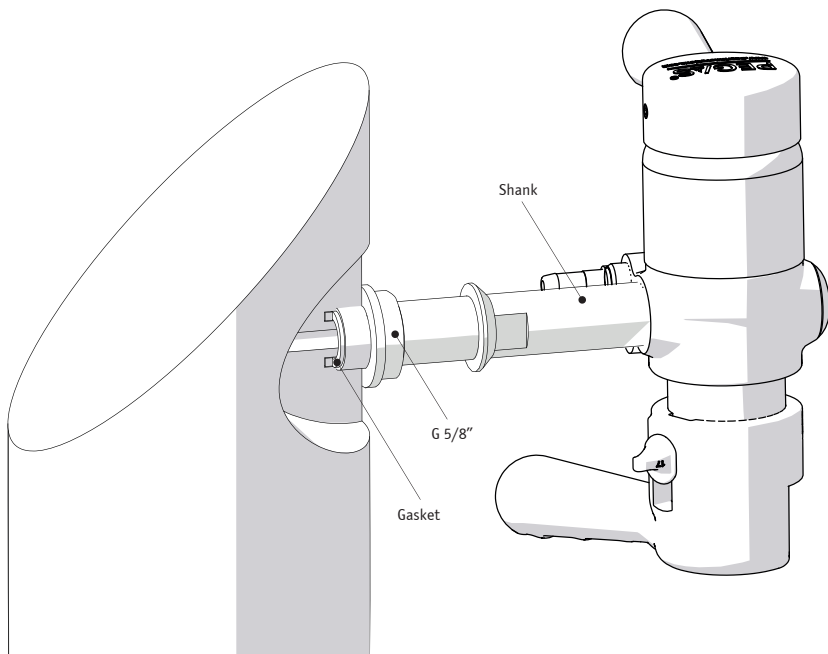


Connect the beverage supply hose to the beverage supply nipple. Fix the hose with a pipe clip (not included).



Connect the CO₂ supply hose to the upper nipple. Connect the drainage hose to the bottom nipple. Fix the hoses with pipe clips.

Device installation in a G 5/8" blind-end Hole (beer tower)



When installing device in a G 5/8" blind-end hole, installation should be done according to the following instructions:

- Place the 5/8" nut onto the shank and tighten.
- Place a gasket into the screw hole with the dimensions mentioned above.
- Twist the shank into the hole in such a way that the PEGAS Evolution Pacific device is in vertical position, and the gasket is pressed down to ensure a proper seal.
- Tighten the nut using a 27mm wrench. The device is now ready to be used.

The following equipment is required for device connection:

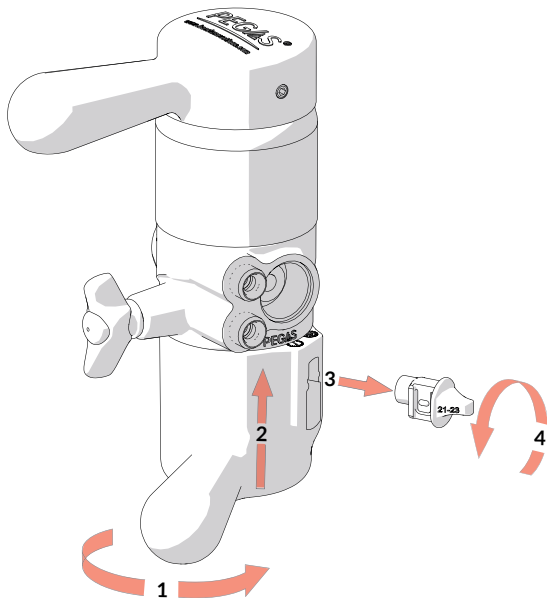
- Beer keg with a coupler.
- Gas cylinder with pressure regulator (adjustable to 0.15–0.3 MPa).
- Beer cooler.
- Beer supply from the keg and CO₂ supply are provided through PVC hoses (with inner diameter of 7 mm).
- Pipe clips to secure hoses.
- T-fitting.

The device should be connected as follows:

- Supply beer from the keg coupler into the cooler, and from the cooler to the beer supply nipple.
- Supply gas under a pressure of 0,25-0,3 MPa from the gas cylinder through the T-fitting towards the keg coupler and through the hose to the CO₂ supply nipple.
- Close the free ends of the hoses with pipe clips.
- Connect the hose to the drainage nipple. Put the free end of the hose into the drainage tray.
- Place the hoses inside the beer tower. To supply the hoses from the device to the beer tower, drill two holes of at least 14 mm diameter in the beer tower, or install the device onto a beer tower with ready-made holes.

7. Readjustment and Removal of a Bottle Holder Mechanism

PEGAS Evolution bottle holder is suitable for bottles with a neck standards PCO 1810/1881 and BPF. If the bottle cannot be fixed properly, you may need to readjust the bottle holder mechanism.



1. Turn the bottle holder to the right.
2. Hold the slider and press the bottle holder from below until it clicks. The slider will come out of the fixing slot.
3. Holding the bottle holder, pull out the slider and turn it over.
4. Insert the slider back into the fixing slot. Holding the slider, pull the bottle holder down.

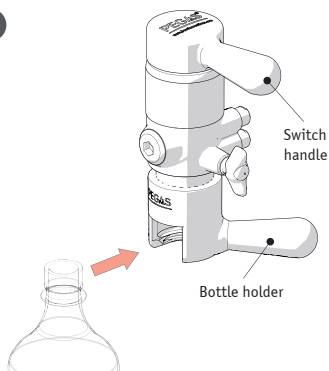
Now the bottle holder is ready to use with another type of bottle neck.

To find out what standard the bottle holder is set to, look at the slider. Correctly oriented figures (not inverted) show the height of the bottle neck in mm.

8. Dispensing procedure

Before dispensing make sure the device is properly installed and connected, and that all of the joints are sealed tightly. Dispensing into plastic bottles with the PEGAS Evolution Pacific should be done as follows:

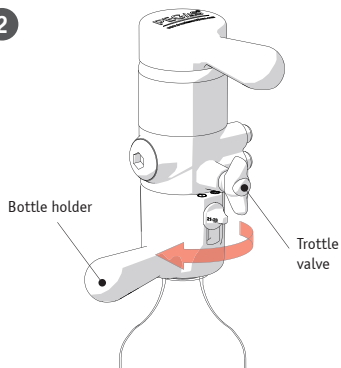
1



Initial Position

Ensure that the switch handle is in its neutral position, it should be perpendicular to the shank all supplies are of. The bottle holder is turned to the right until it stops. The throttle valve is closed (turned clockwise until it stops). Insert a PET bottle into the slot of the bottle holder.

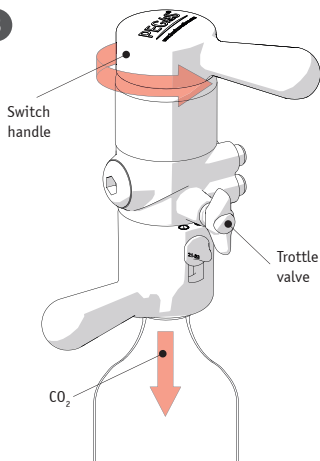
2



Securing the bottle in the holder

Turn the bottle-holder to the left ensuring that the bottle neck is pressed tightly against the sealing gasket.

3

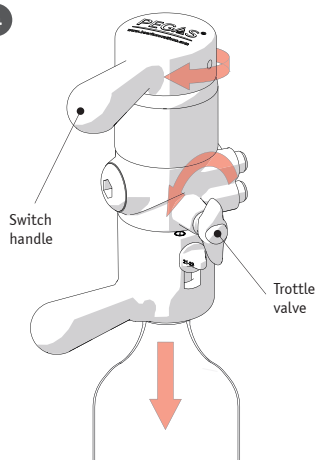


Filling the Bottle with CO₂

Turn the switch handle counterclockwise until it stops, this will supply CO₂ into the bottle (throttle valve remains closed). The average time for filling a two-liter bottle is 3-5 seconds. Fill the bottle to make sure it's hard.

Do not lift the handle!

4

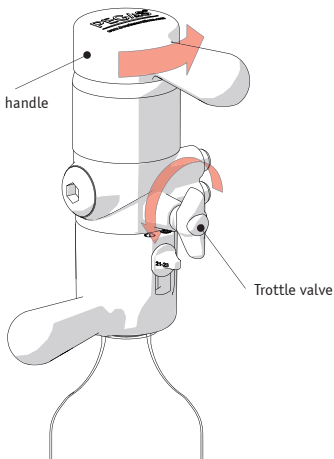


Filling the Bottle with Beverage

Pull the switch handle to start beverage dispensing. Set the throttle valve to a half-open position. Control the process of filling the bottle by adjusting the throttle valve. If the beverage becomes too foamy – slightly close the throttle valve, if the flow is too slow – open the throttle valve.

5

Switch handle

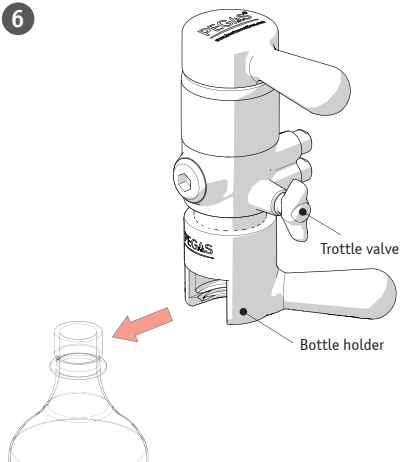


Throttle valve

Completion of Dispensing

Once the bottle is filled, return the switch handle to its neutral position and open the throttle valve completely.

6



Throttle valve

Bottle holder

Bottle removal

Wait a few seconds until the pressure in the bottle equalizes to the atmospheric pressure. Close the throttle valve. Turn the bottle-holder to the right and remove the filled bottle from the device.

In order to preserve beer quality, seal the bottle with a leak-proof cap as quickly as possible.

9. Device Maintenance

Only the personnel who have studied the operations manual and have been trained to safely operate the device should be allowed to maintain the device.

PEGAS Evolution Pacific may eventually clog the beer supply elements, as well as the drain and throttle parts, and hoses.

In order to avoid the clogging and fouling of device elements, the dispenser should be washed and disinfected regularly.

Washing

To clean the device a sanitary liquid should be supplied from a hose-adapted container placed at the beer keg position. The beer supply hose and the PEGAS Evolution Pacific device itself are the first ones to be washed. In order to wash the drain hose, a plastic bottle should be placed into the bottle fixing mechanism. When the plastic bottle overflows, the drain and throttle elements are clean.

PEGAS Evolution Pacific Sanitary Standards

Sanitary Rules for the Brewing and Beverage Industry 3244-85* stipulate that dispensing devices should be washed daily for 30 minutes both in hot (60°C) and cold water.

Weekly disinfection of the device and a thorough rinse with water until the full dissolution of the disinfecting agent has been reached is required.

**This standards is currently in effect in the territory of the Russian Federation. Maintenance of the device should be done according to the schemes described by Chart 1.*

Sanitary and hygienic measures:

Type of sanitary procedure	Frequency	Cleaning agent	Time, min.	t°, C	Source of cleaning agent
Washing	Every day after use	Water	10	60	Water pipe
Rinsing		Water	15	20	Water pipe
Disinfection	Weekly	Neomoscan Sepa or similar agents used in food processing equipment disinfection	10-15	60	Container with a proper fitting (wash-keg)
Rinsing	After each disinfection	Water	10	40-60	Water pipe
Rinsing		Water	15	20	Water pipe

Chart 1

Sanitary procedures:

- Disconnect the beer keg from the beer supply system.
- Prepare a container for collecting used water/cleaning agent.
- Make sure that the switch handle is in its middle position.
- Connect the beer dispensing system to the source of water/cleaning agent.
- Place an empty plastic bottle (preferably of small capacity) into the universal bottle holder; fasten it by turning the bottle holder lever to the left.
- Open the throttle valve.
- Pull the switch handle until it stops.
- Make sure to control the rate of fill as it can overflow rapidly. Be prepared to collect any excess solution from the drain hose.
- Sanitary procedures should be implemented according to time frames prescribed by the chart.
- In order to stop the supply of water/cleaning agent, turn the switch handle to its neutral position.
- Remove the bottle from the device.
- Use a clean cloth to remove the remaining water/cleaning agent from the surface of the PEGAS Evolution Pacific device.

10. Troubleshooting

Problem	Possible cause	Steps to solve the problem
Beer does not pour	No beer in the keg	Replace the keg
	Coupler is not connected to the keg	Connect the coupler to the keg
	No gas in the gas cylinder	Replace the gas cylinder
	Pressure regulator is closed	Open the pressure regulator
	Improper connection of hoses to the device	Check that the hoses are connected properly, reconnect them in the right sequence
	Hoses or their joints are damaged	Replace the hoses that are out of order
	Beer/gas supply hoses are clogged	
	Pressure release valve is closed/clogged	Open/unclog the pressure release valve
Gas is not being supplied into the bottle	No gas in gas cylinder	Replace the gas cylinder
	Pressure regulator is closed	Open the pressure regulator
	Improper connection of gas supply hoses to device	Check if hoses are connected properly, reconnect them in the right sequence
	Hoses or their joints are damaged	Replace hoses, make sure that joints are connected tightly
The bottle does not fit in the fixing mechanism properly	Bottleneck does not correspond to standards stated in the operation manual	Use the correct bottles or try other bottles
	Bottle fixing mechanism is damaged	Check and replace the bottle fixing mechanism
	The bottle holder is not set correctly	Proceed with a bottle holder mechanism changover as described in section 6
A lot of foam during bottle filling	Pressure release pace is too fast	Adjust the pressure release pace
	Pressure regulator is set incorrectly	Set pressure according to the type of beer dispensed
	Gas in the gas cylinder is running out	Replace the gas cylinder
	Beer in the keg is running out	Replace the keg
	Not enough gas is supplied to the bottle	Supply more gas into the bottle
	Beer supply hose is clogged/greased	Wash the device
Beer leaks when the switch handle valve is closed	Foreign objects are clogging the beer channel	Unclog the beer channel and remove any foreign objects
	Rubber gaskets in the beer channel have worn out	Replace the worn-out gaskets

11. Safety Measures

It is important to follow certain operation rules in order to ensure the reliability of the device.

- Containers used for dispensing should correspond to sanitary and hygiene requirements set forward to foodstuffs packaging. Bottles must be clean and bear no visible signs of damage or cracking.
- The device requires regular maintenance.
- Do not set the device pressure to a position higher than 0.4 MPa.

Regular washing and disinfection as well as a constant monitoring of the sanitary condition of the PEGAS Evolution Pacific will ensure a long life span and smooth function of the device.

12. Flow switch maintenance

The flow switch of PEGAS Evolution Pacific dispensing device is a high duty effective appliance which ensures operating capability of the whole device for at least 100 000 cycles. Providing a proper maintenance (see section 8), the flow switch will effectively operate through the whole warranty period.

Upon expiry of the warranty period, the rings 131044 and 131045 are to be replaced.

The rings shall be replaced in the following order:

- Unscrew the screw 131033, take off the washer 131041 and the cam 131035.
- Take off the ring 131045 by pressing the valve on the side of the ring.
- Pull the valve 131043, the spring 131042, o-ring 131044, the washer 131046 from the flow switch.
- Replace the rings 131044 and 131045.
- Assemble the switch in reverse order.

MAINTENANCE FOR SEASONAL OPERATION:

In case the device needs to be dismantled (parked) for winter months, it should be cleaned with wash liquid (alkali), then with antiseptics and finally washed off with warm water in order to remove any substances from the working channels. This will ensure that having been installed at the beginning of the next season the device will effectively operate again. Should the seasonal maintenance recommended in this manual is not properly executed, before starting the operation again it is advised to replace the same parts as upon expiry of the warranty period.

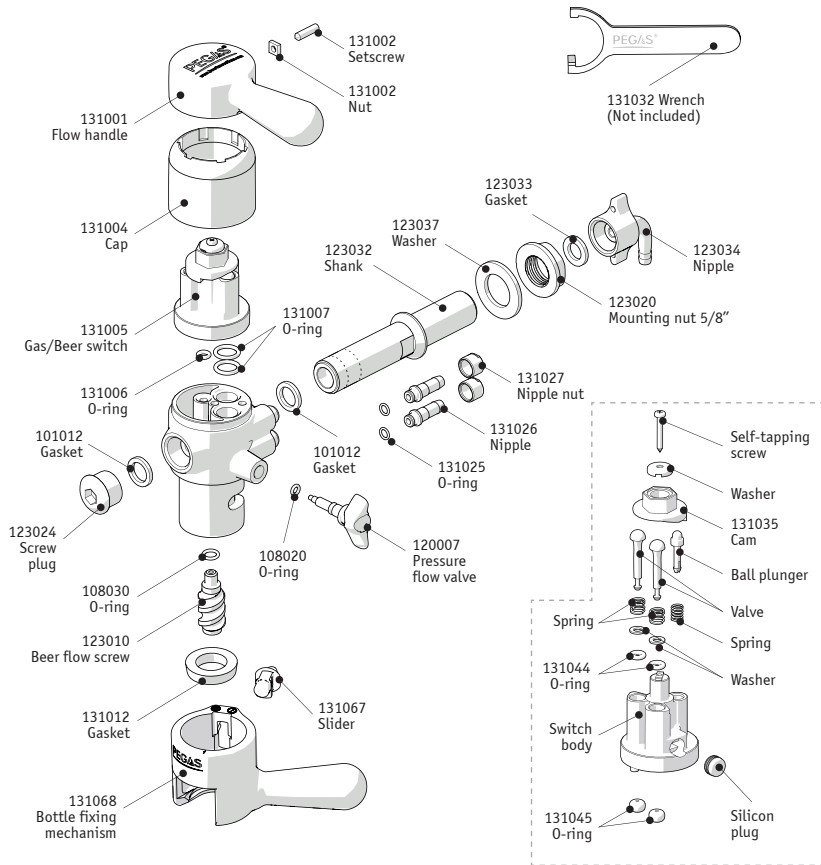
13. Additional Information

No part of this operations manual shall be copied, transferred, re-written, saved as a reserve copy or translated into any language in any form and by any means without prior written notice issued by NPM, Ltd.

NPM, Ltd. reserves the right to change characteristics and properties of the device described in the present manual at any time and without prior notification.

NPM, Ltd. bears no responsibility for any damage connected to the use of the PEGAS Evolution Pacific device. NPM, Ltd. would appreciate any information in relation to errors and flaws found in the this operations manual.

Device diagram for ordering spare parts





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