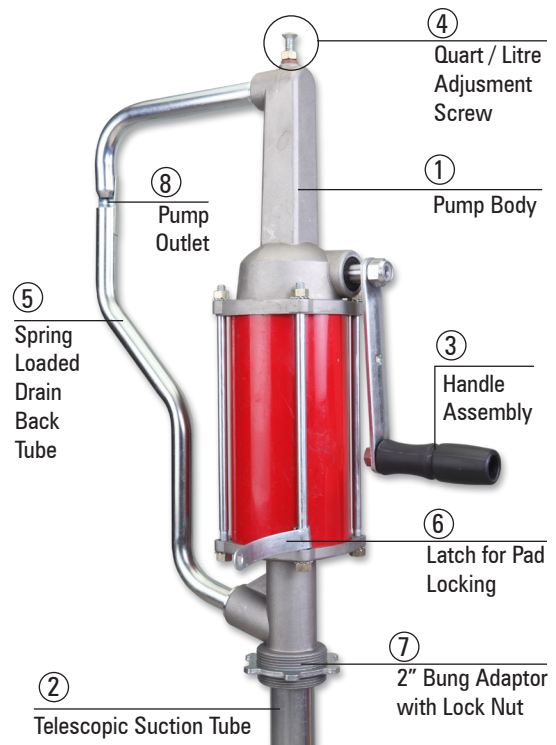


Quart / Litre Stroke Pump

QSP-01

Congratulations on purchase of this World Class Quart / Litre Stroke Pump!

- Heavy duty industrial pump to dispense 1 Quart or 1 Litre of media per stroke, making it economical and suitable for metered delivery.
- A precision Rack and Pinion mechanism.
- Adjustment screw for easy calibration between quart and litre measurement
- Built in 2" Bung Adaptor to fit most of the drum sizes.
- Complete with a telescopic suction tube for use with 15-55 gallons (50-205 litre) barrels
- Spring Loaded Drain Back Tube for overflown media
- Lockable handle which allows the pump to be pad locked, when not in use
- Lock Nut for positioning the pump outlet in any direction



PART DESCRIPTION

REFERENCE NUMBER	DESCRIPTION	QUANTITY
1	Pump body (Including components 4, 5, 6, 7, 8)	1
2	Telescopic suction tube	1
3	Handle Assembly	1

Get acquainted with QSP-01

The pump has a rack & pinion mechanism to control the overall stroke length & is designed to dispense approx 1 Litre / 1 quart per stroke.

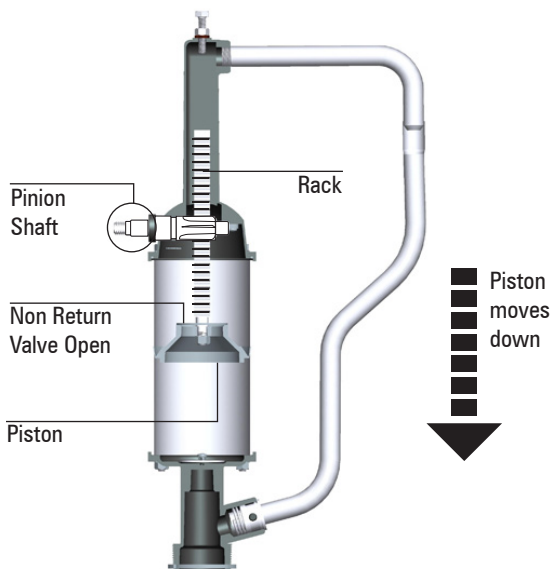
WORKING OF THE PUMP

One Stroke is defined as movement of the pump handle, with the pinion moving from one end of the rack to the other & then back.

Each stroke is divided into two stages:-

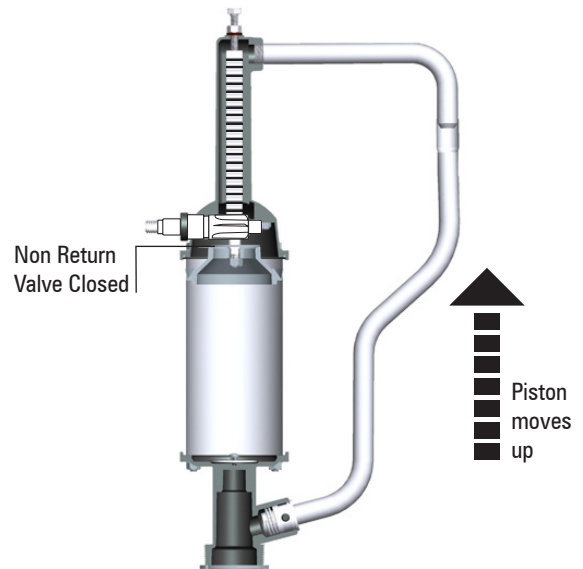
Downward or Refilling stage-

1. On operating the handle counterclockwise a few times , the pinion gear moves the rack downwards
2. A non-return valve opens
3. The media is forced upwards to fill the pump.
4. When the rack reaches its downmost limit , the pump gets entirely filled with media and the handle stops moving any further.



Upward or Delivery stage-

1. On operating the handle clockwise a few times, the pinion gear moves the rack upwards
2. The non-return valve stays closed
3. The entrapped media is forced out via the pump outlet.
4. When the rack reaches its topmost limit, the pump gets emptied and the handle stops moving any further.

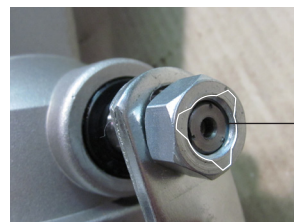


PUMP ASSEMBLY

NOTE: Use oil resistant pipe compound or a thread sealant such as Teflon on all threaded joints.

1. Fasten the suction tube (2) into the female threads on the pump inlet. Hand tighten the connection.
2. Extend the telescopic suction tube (2) to its full length and insert the suction tube (connected with the pump) into the drum from the 2" threaded opening.
3. Once the base of the suction tube touches the bottom of the drum, securely fasten the Bung Adaptor (7) onto the drum.
4. Using the lock nut on the bung, tighten the pump on the drum to have the outlet (8) in the desired direction.

5. Install the handle assembly (3) on the pinion shaft and tighten the hexagonal clinch nut in the correct position.



Note : The triangulated shape on the nut should be visible from the outside

6. Calibrate the pump as mentioned in the next section.

CALIBRATION

The calibration is needed :-

- Before first time use
- When changing unit of measure (Litres to Quarts or vice versa)
- When pumping a different fluid

CALIBRATION PROCEDURE

In-order to calibrate, you would need an accurate graduated container with a volume of approx. 5 Litres / 5 Quarts or more

1. Make sure the pump is primed.
2. Pump handle should be in a position such that you cannot move it any further in the clockwise direction.
3. Now start to operate the pump handle in counterclockwise direction, till it stops moving any further.
4. Keep the graduated container below the pump outlet.
5. Move the pump handle in clockwise direction, till it stops moving any further.
6. Note the amount of fluid dispensed into the graduated container. It should be near about 1 Litre / 1 Quart.
 - If it is less than 1 Litre / 1 quart as shown by the graduations on the container, then turn the adjustment screw on top of the pump in counterclockwise direction. This will increase the stroke length allowing for increased discharge.
 - If the reading on the graduated container is more than 1 Litre / 1 Quart, then rotate the adjustment screw in clockwise direction. This will reduce the stroke length allowing for reduced discharge.
7. Repeat steps 3, 4, 5 & 6 till the reading on the graduated container equals 1 Litre / 1 quart, depending on what you wish to set the pump to dispense.

USE

When using pump for the first time or after an extended period of time, you would need to prime the pump.

Priming refers to getting the pump lubricated & started. Priming simply requires operating the pump handle for a few strokes till pump starts dispensing media.

REPAIR

Pumps needing repair should be taken to an authorized dealer or returned to factory for service. Pumps must be thoroughly flushed before being taken in for repair.



- Improper use or installation of this product can cause serious bodily injury .
- DO NOT smoke near pump or use pump near an open flame / spark. Fire could result.
- Always wear protection gear like safety gloves, goggles, apron, and ear plugs during operation.
- This product is not suited for use with water or fluids for human consumption.
- Use only Genuine Factory Spare Parts for repair.

WETTED COMPONENTS

Steel, Aluminum, Nitrile Rubber & acetal

RECOMMENDED USE

Gear & Lube Oil, Petroleum based Media, Diesel & Kerosene

DO NOT USE WITH


Food Liquids, Water Based & other Corrosive Fluids



**Groz Engineering Tools (P) Ltd.
Groz Net Industries**

Village Kherki Daula, National Highway-8
Gurgaon-122001, Haryana, INDIA
TEL +91.124.282.7700 / 221.4050
FAX +91.124.2827986 / 221.4224
FAX (USA) +1.509.271.7848
FAX (UK) +44.870.121.1854

E-MAIL info@groz-tools.com
URL www.groz-tools.com

The Groz name, Groz logo and the  mark are
trademarks of Groz Engineering Tools (P) Ltd. India