

OWNER'S TECHNICAL MANUAL

4040 High Volume Chemical Drum Pump



Description

Model 4040 is a high volume, rotary action chemical drum pump that delivers up to 100 Litres per minute. It is designed for the transfer of chemicals when high volumes are involved. The simple design of the 4040 allows easy servicing if required. The pump comes complete with a basic plastic delivery hose & ryton footvalve & stainless steel mesh strainer.

*Always check a chemical chart for compatibility before using this pump.

* **PLEASE NOTE: OIL GEARS BEFORE USE** (SAE 30 oil is recommended for this purpose).

Specifications

Uses:	The chemicals compatible with ryton, viton and 304 stainless steel
Discharge Quantity:	1 litre per rotation / 100 litres per minute
Materials:	Ryton body, viton seals, 304 stainless steel, teflon (ptfe) cover packing
Weight:	5.0kgs
Size:	Suction pipe: 32mm ID x 1.6m Delivery hose: 25mm ID x 2.4mm long

Operating Instructions

1. Oil gears before use

Before using the 4040 high volume rotary chemical drum pump, make sure that you **fill the gear cover with oil**. Fill with SAE30 oil or equivalent to the reference line through the lubrication bolt hole (as indicated on the diagram). **Inspect periodically.**

2. Revolution Direction

The handle turns in a clockwise direction and the pump discharges one litre per one revolution of the handle.

3. Filter

A filter of #60 mesh stainless steel net is supplied as standard on the pump and is located at the bottom of the suction pipe. Rotating the handle and therefore operating the pump may become harder if the filter is clogged with impurities that may have been filtered out of the chemical, fuel or low viscosity oil. It is recommended that you remove the filter periodically and clean it with kerosene.

Cautions

Suitable liquids include low viscosity chemicals that are compatible with the pumps materials, other thin liquids such as diesel, petrol, kerosene and light oils. Although the pump can be used to pump other liquids of a higher viscosity, the pump becomes harder to operate and doing so will shorten the life of the pump & may void the warranty.

Always check the compatibility of the chemical you want to transfer as incompatible chemicals will dissolve the pumps components and will void the warranty.

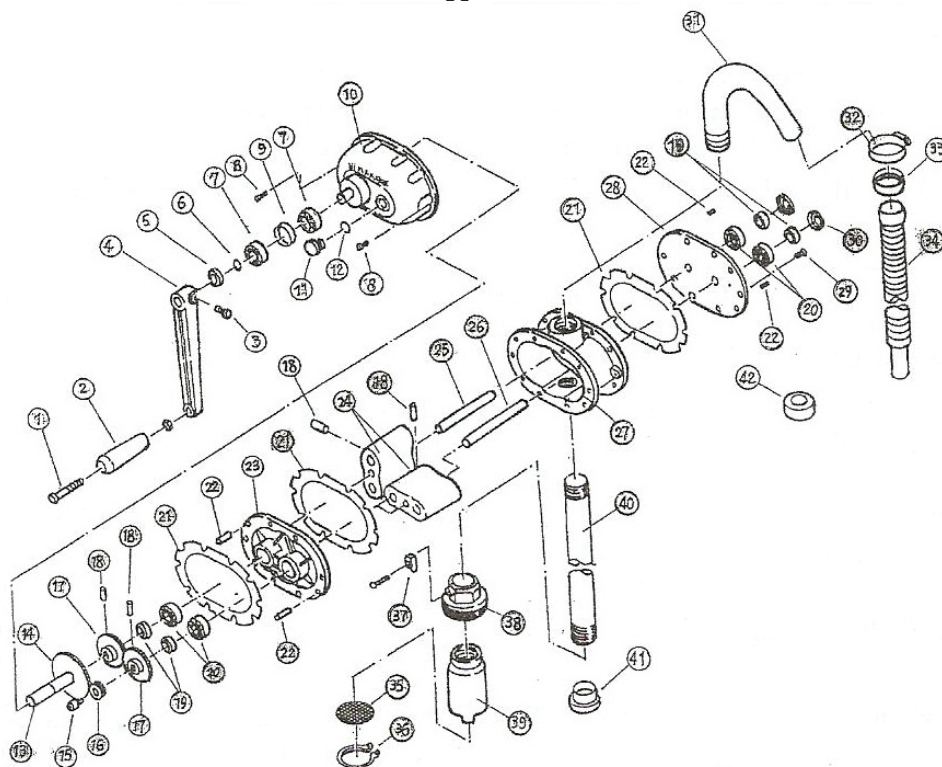
Please note that when pumping fluids like mild solvents, kerosene, petrol or diesel, these products tend to "dry out" the internals of the pump causing parts "to stick" and the pump not to prime and dispense. To stop this from happening and to increase the working life of your pump, we recommend that you lubricate the gears of the pump by dropping a few drops of oil into the pump body by taking off suction pipe (4040-40) & lubricating at this opening. After undertaking lubrication of the pump in such a manner, please rotate the handle a few times.

Please do not leave pump overnight or longer in chemical. Always flush and clean out your pump after each use.

Do not pump liquids containing dirt or particles such as waste oil. Strained liquids may block the filter, preventing discharge, which can damage the pump interior or cause other problems.



Parts and Drawing Breakdown 4040



Ordering Spare Parts

Parts List – Part No. 4040

ITEM	PART N.O	DESCRIPTION	QTY	ITEM	PART N.O	DESCRIPTION	QTY
1	4040-1-2-3-4	Handle Assy	1	22	4040-22	Taper Pin Steel	4
2	4040-2	Hexagon Bolt	1	23	4040-23	Inside Cover Ryton	1
3	4040-3	Handle Screw	1	24	4040-24	Impeller Ryton	2
4	4040-4	Handle Ryton	1	25	4040-25	Impeller Shaft Short SS 304	1
5	4040-5	Oil Seal Viton	1	26	4040-26	Impeller Shaft Long SS 304	1
6	4040-6	Stop ring Steel	1	27	4040-27	Housing Ryton	1
7	4040-7	Bearing Steel	2	28	4040-28	Outside Cover Ryton	1
8	4040-8	Screw SS 304	10	29	4040-29	Screw SS 304	10
9	4040-9	Bearing Collar	1	30	4040-30	Bearing Cap	2
10	4040-10	Gear Cover Ryton	1	31	4040-31	Spout SS 304	1
11	4040-11	Bolt PP	1	32	4040-32	Hose Clamp SS 304	1
12	4040-12	O-ring NBR	1	33	4040-33	Plastic Clip	1
13	4040-13	Reinforced Shaft SS 304	1	34	4040-34	Delivery Hose (PE)	1
14	4040-14	Reinforced Gear Powder Metallurgy	1	35	4040-35	Stopper SS 304	1
15	4040-15	Screw Steel	1	36	4040-36	Strainer SS 304	1
16	4040-16	Gear Washer Steel	1	37	4040-37	L Shaped Bracket	1
17	4040-17	Timing Gear Powder Metallurgy	2	38	4040-38	Bung Adaptor PP	1
18	4040-18	Taper Pin Steel	4	39	4040-39	Filter Body Ryton	1
19	4040-19	Steel	4	40	4040-40	Downtube SS 304	1
20	4040-20	Oil Seal Viton	4	41	4040-41	Rubber stop (for packing only)	2
21	4040-21	Cover Packing Viton	3	42	4040-42	Teflon thread tape	1

*Note: 4040-35, -36, -39 only available in kit form as 4040-35-36-39

Trouble Shooting

Problem	Remedy
Handle fails to turn	Gears broken - Return for repair. Dirt, etc clogging up the pump - Overhaul & clean
Not Priming / Pumping	Impeller dry - lubricate at down tube / body point, turn handle a few times
Handle is hard to turn	Dirt, etc clogging up the pump - Overhaul & clean. Filter blocked - Clean the filter
Handle turns but no discharge	Gears broken / Shaft or pin broken - Return for repair