

OWNER'S TECHNICAL MANUAL

Ryton Rotary Drum Pump

Description

The 301A is a manually operated rotary action drum pump designed specifically for the transfer of weak chemicals and solvents from 60 litre or 205 litre drums. The pump is made from polypropylene and is thus lightweight at only 2.3kg, It has a unique rotating 2 piece discharge spout and there are no aluminium parts which makes the pump ideal for use in underground mines. The 301A rotary drum pump can transfer liquids at a rate of 20 litres per minute.

Specifications

Uses	Light acids, alkalis, light chemicals, etc for 60 or 205L drums. Check compatibility charts.
Discharge Quantity	0.33 litres per revolution / 20 litres per minute
Material / Weight	Ryton/Stainless Steel Weight: 2.3kgs

Assembly Instructions

1 Suction Tube and Strainer Assembly

Thread strainer (part No 19) to first piece of 3 part suction tube. Use teflon tape (provided) on joint threads. Thread a union (part No 18) to the opposite end of the suction tube, using teflon tape, & connect a second length of suction tube. Continue until all lengths are assembled. 2 unions & 3-15" suction tubes are provided. Slide bung adaptor (part No.16) over the top section of the suction tube. Screw the suction tube assembly into the bottom of the pump body (part No 7). Make sure to use teflon tape or other joint compound.

Note: All connections must be air-tight for the pump to create suction & operate correctly

2 Crank Arm & Handle Assembly

Remove 1 metal nut (A), from threaded shaft of handle, b. Finger-tighten remaining nut (B) against plastic handle. c. Insert nut removed in step 'a' into crank arm. d. Thread metal shaft of pump handle into crank arm until shaft is flush with nut A in crank arm. e. Loosen nut B from plastic handle, tighten against crank arm.

Note: Plastic handle should spin freely on threaded metal shaft.

3 Pump Handle Assembly

Attach the pump handle to rotor shaft. Align the set-screw with the indentation on rotor shaft and tighten. Make sure that the set screw seats properly in the indentation.

4 Spout Assembly

Insert male end of discharge spout into threaded female end & tighten. Spout can be rotated 360 degrees. Apply tape to 3/4" male thread on discharge spout. Screw into 3/4" fem opening on body. Hand tighten.

5 Lubrication

NOTE: Pumping chemicals or fuels may dry out internals of pump reducing the ability of the pump to suck and prime. To remedy this, add a couple of drops to the pump body via the outlet and turn the handle a few times to lubricate the vanes. Failure to do this may lead to priming problems or broken handles as the vane jams. Rinse thoroughly after each use with a suitable light-cleaning agent or the material being pumped.

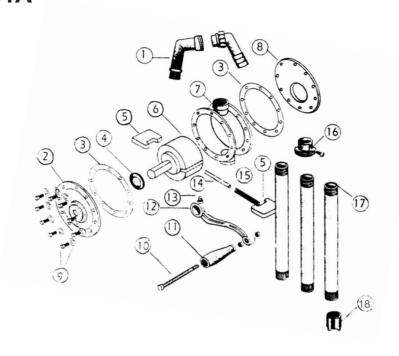
Operating Instructions

*NOTE: Before pumping, always consult the parts list included to verify that each component is compatible with the chemical being pumped. A chemical compatibility list is available from your pump dealer or Alemlube.

1 Turn the handle 5 or 6 times. When liquid begins to flow down, fix the indicated point to that of the handle.



Parts and Drawing Breakdown For The 301A



Ordering Spare Parts

Parts List - Part No. 301A

ITEM	PART NO	DESCRIPTION	QTY	
1	301A-1	Discharge Spout Assembly	1	
2	301A-2	Front Casing	1	
3	301A-3	Gasket	2	
4	301A-4	Seal	1	
5	401A-5	Vane	2	
6	301A-6	Rotor	1	
7	301A-7	Pump Body	1	
8	301A-8	Rear Casing	1	
9	301A-12	Nuts Washer set	9	
10, 11, 12, 13	301A-10, 11, 12, 13	Handle Assembly	1	
14	301A-14	Spring Shaft	2	
15	301A-15	Vane Spring	2	
16	301A-16	Bung Adaptor	1	
17	301A-17	Suction Pipe	3	
18	301A-18	Locking Nut	1	

Trouble Shooting

TROUBLE	REMEDY
Important Information for	Please note that while the polypropylene and stainless steel components of the 301A pump offer excellent
increasing the life of your	chemical resistance to corrosive chemicals and solvents, certain products will "dry out" the internals of the
301A Pump	pump causing parts "to stick" and the priming action of the pump reduced. To Stop this from happening, and
	to increase the working life of your pump, we strongly recommend that at the end of each day you lubricate the
	vanes of the pump by adding a few drops of oil to the internals of the pump via the outlet opening.
	By lubricating the vanes and then rotating the handle around two or three times at the end of each day or at the
	end of a production run, you will ensure that the internals of the pump are well lubricated. This practice will
	also ensure that next time you go to use the pump the handle will rotate smoothly and easily through its 360°
	rotation and the pump will prime instantly.
Pump does not pump	Check suction tubes to make sure they are airtight.
Handle is stiff to turn	1. Lubricate with drops of oil. Rinse pump with water or other suitable solvent for chemical being pumped. 2.
	Open pump body and clean internal parts so they rotate freely.
	3. If rotor (6) or vanes (5) are swollen from chemical permeation, they may need to be replaced.

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