



VACUUM PUMP

The Vacuum Pump is designed for disposal of engine oils and other chemical substances from car engines, lawnmowers and chain saws, motorbikes and scooters, personal watercrafts, motorboats as well as for liquidation of any kinds of leaks from horizontal surfaces.

Thank you for purchasing our Vacuum Pump. Before you start using it, please read this manual carefully to ensure long and faultless operation of the device.

The manual contains all the information needed for right using of the Pump. It provides the scheme of the device and technical data. It cautions about possible dangers when using it in a wrong way. Carefully complying to the recommendations in this manual will ensure the right operation and will lower the exploitation cost

OWNER MANUAL

Technical data:

Working container capacity	10,5 litres.
Average liquid input	0,5 l – 3 l/min.
Tank material	PP (polypropylene)
Net weight	2,30 kg
Pump height	830 mm

Preparing and operating the Pump :

- Make sure the temperature of the withdrawn by suction liquid do not exceed 70°C
- Screw the lance into the feeding ball valve ZR 3/8, checking at the same time if the oring 29x3,5 is inside the ball valve, close the ball valve
- Screw the pump tight in and pump until you get a considerable resistance while the piston's handle is in its upright position
- Insert or put the lance's tip in desired place. If the bore is too small use the flexible rubber lance extension (e.g. car engines)
ATTENTION ! Using the lance extension may result in lower effectiveness of the Vacuum Pump
- After obtaining the maximum underpressure the Vacuum Pump can be carried around using the strap or pump handle.
- The pump handle can be blocked by twisting it left by 90° (transport position)
- If necessary, you can increase the pressure by further pumping.

We recommend you to get acquainted with The Vacuum Pump using water for the first time.

Recommendations:

- Do not overfill the tank beyond the working capacity of 10,5 litres
- When storing, don't expose to sunlight or to temperatures below +4°C
- Don't use contaminated Pump for other purposes.
- After finishing work, empty the Pump, rinse it a few times with water. After putting the Pump together, blow some air through the lance and the handle
- If you observe increased resistance in pump piston or feeding valve you should smear them with the Z05 silicon smear (ignoring this will result in damaging the gaskets).
- When using the Pump for removing motor oil, you must comply with safety and hygiene regulations and strictly follow the engine manufacturer's instructions

SERVICE AND WARRANTY REPAIRS

Marolex company gives you full warranty and post-warranty

The warranty repairs will be made only if you include filled in warranty card and description of the fault. If you repair the Pump by yourself, **you should always use genuine MAROLEX parts.**

When repairing under warranty, damaged part or pump should be delivered to the place of purchase. Do not send entire Pump, just send the damaged part only. If the user is responsible for the damage (i.e. damage occurred because of water freezing in the Pump), the replacement parts will be sent C.O.D.

Dirty Pumps **will not be repaired** under warranty (clean them first).

WORK SAFETY REGULATIONS

1. Children, pregnant women, people taking drugs or drinking alcohol should not operate the Pump
2. The operation of the Pump should be tested with clean water first
3. While working, you should protect your eyes and respiratory system by wearing protective goggles and mask, and your skin by wearing special gloves, protective clothes and rubber boots
4. It's forbidden to eat, drink or smoke while using the Pump
5. It's forbidden to operate the Pump, if there are any damages or leakages
6. After finishing work, wash the Pump a few times with water, then pour the water out and suck air through it by pumping a few times with ball valve ZR3/8 open.
7. In case of poisoning immediately contact the doctor
8. After you finish work, you should change your clothes (the protective clothes must be cleaned), wash your hands, face, mouth and throat and clean your nose
9. The Pump must be stored empty without any liquid in the container or lance
10. It is forbidden to operate the Pump if there are any damages or flows in its construction
11. Repairs must be done when the Pump is decompressed and not contaminated
12. The Pump can't be used for any other purposes than those mentioned in the user's manual
13. Unauthorised changes in the construction of the Pump or using it not according to its purpose may result in poisoning people or animals, cause environment pollution, lead to damages of the Pump or cause accidents
14. **The only device for making underpressure in the container is the Pumps' s pump.
It's forbidden to use any other equipment for this purpose !**
15. For the damages caused by not complying to the rules in this manual the user is fully responsible
16. After the decompression the container must not be hit or dropped
17. It is forbidden to work with liquids warmer than +70 C and explosive or flammable materials, i.e. gasoline, solvent etc.
18. While working and storing the Pump should be secured from any unauthorised people especially children

1.		Sign indicating possibility of unspecified danger
2.		Sign indicating that a users manual should be read before starting work
3.		Sign indicating danger of poisoning. Eating or drinking while using the device is not permissible

ADDITIONAL EQUIPMENT FOR VACUUM PUMP – SOLD SEPARATELY

R01msV15	Suction lance with hoses
R05vac	Underpressure pump
R01msV60	Suction lance 60 cm
R011vac	Transparent hose

MAINTENANCE AND DISASSEMBLY

After finishing work, cleaning the Pump and blowing air through it, you should:

Unscrew hose connected to the handle and clean it (preferably under running water).

Check if the pump works easy without any jamming. If you feel any resistance, remove the pump, unscrew the R20b piston rod, and lubricate: gaskets, piston rod, cylinder using silicon lubricant.

TROUBLESHOOTING

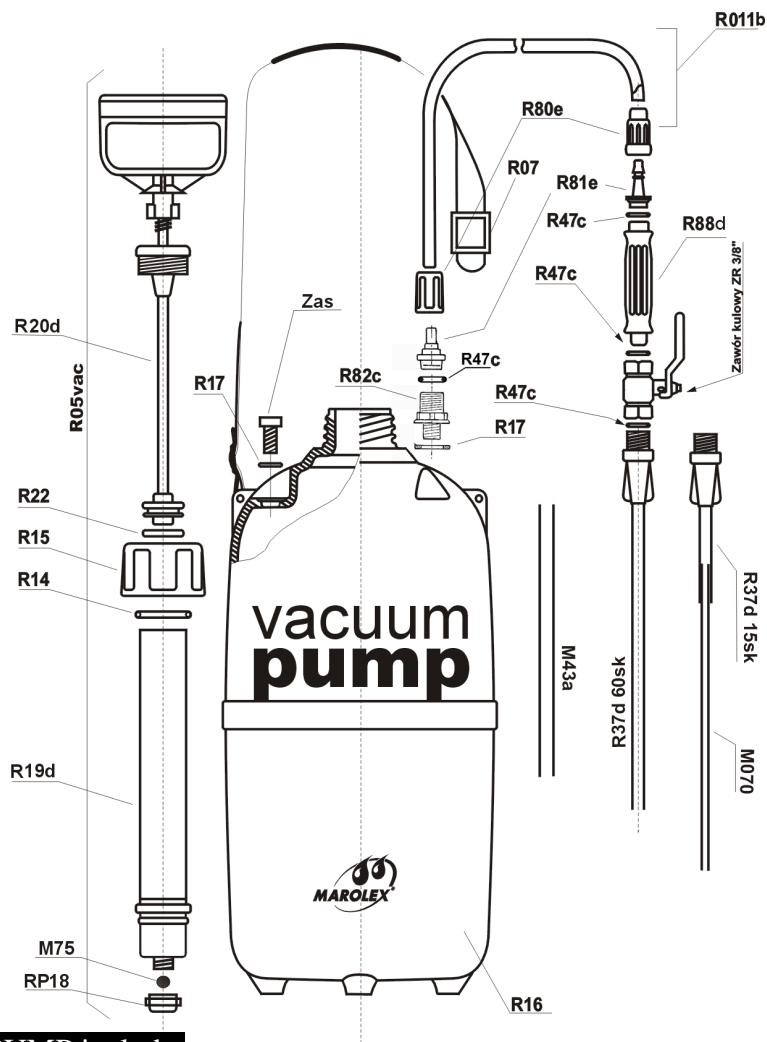
Symptoms :	Reason :	Solution :
No suction	Pump` s element is choked	Check and clean all elements
Fast vacuum lose	The valve or the hose nut is not screwed tight	Screw tight all elements
Unability to create underpressure	Leak of the tank or the elements screwed into it	Check if all elements are screwed tightly and closed
You cannot reach the maximum underpressure	Pump rubber valve-cap is dirty Pump` s cylinder gasket is worn out No silicon lubricant in the pump	Clean or replace gaskets. Lubricate the pump with silicon lubricant.

DISMANTLING, UTILISATION

The damaged Pump, not suitable for repair, should be utilized in such way as not to pollute the environment. Cleansed plastic elements should be recycled as well as the metal parts.

PUMP` S EQUIPMENT

R37d60sk	Segment lance 60cm, steel
R37d15sk	Segment lance 15 cm, steel
M070	Withdrawing hose
R47c	Oring 11,3 x 2,4
R05vac	Withdrawing pump
RP18	Ball screw cap
ZR 3/8"	Feeding ball valve
R15	Pump screw cap
R16	Container 12 l.
R17	Stub pipe gasket 16x24
M75	Ball
R80e	Hose nut
R81e	Hose end piece
R88d	Handle
Zas	Hole plug
R07	Carrying strap
R82c	Hose branch piece
R14	O-ring 38 x 5 mm
R22	O-ring 28 x 4 mm
R20d	Pump piston
R19d	Pump's cylinder
R011b	Hose with nuts
M43a	Technical hose 7x11



All sets of MAROLEX VACUUM PUMP include:

- Complete VACUUM PUMP device with withdrawing pump
- Hose and stainless steel lances with special technical hoses
- Silicone smear
- Owner manual and warranty card