Instruction-manual and safety-instructions

The oil-extractor is the ideal equipment for quick and clean oil-changes. The oil-extractor works by connecting the clamps to the 12V car-battery. The oil is simply drawn out the motor through the oil dipstick bore. Please us the extractor exceptionally for motor-, diesel- or heating-oil.

The extractor is not suitable for extracting:

- **water (no lubrication of the pump)**
- **gearbox-oil (too viscous)**
- **easy enflammable liquids (fuel, petrol, etc.) Danger of explosion!**

We will not assume liability for safe function of the extractor, if it is used for purposes other than those mentioned in this manual. No warranty Claims can be lodged for damage resulting from operating errors or inadequate maintenance.

Please carefully read and observe the following safety-instructions, before using the extractor in order to avoid environmental damages or injuries:

- set up the oil-extractor securely
- fasten the drain hose properly
- Protect the power supply cables against heat and sharp edges
- make sure, that the pump is connected correctly to the car-battery before starting to work. (plus to plus and minus to minus)
- do not pump fuel, petrol, paraffin or other easily enflammable liquids - Danger of explosion!
- do not pump water (no lubrication of the pump)
- only pump warm motor-oil (40°-50° C) do not pump off motor-oil, as long as the motor is running
- collect the old oil in suitable Containers to Protect the environment and deliver the old oil to your local collecting-station, petrol-station or oil-supplier

6. Please use suitable Container to collect the old oil and lead the drain-hose into this Container.
7. Connect the oil-extractor to the 12V car-battery. Make sure that the clamps are connected with the correct poles of the battery (red clamp to „plus", black clamp to „minus")
8. Switch the pump on and pump the oil out of the engine.
9. As soon as no further oil is pumped, switch off the pump. Do not let the pump run without oil.
10. Fill the engine with fresh motor-oil according to the maintenance Instruction for your car and check the oil-level with the oil dip-stick.
11. After finishing your work clean the pump thoroughly by pumping some fresh oil.
12. Remove the hoses from the pump, plug them together and Store the whole unit in a place, where it is protected against dust.

ATTENTION:

Never let old or fresh oil seep into the ground or into the sewage System. You will harm the environment and you will make yourself liable for prosecution. Collect the old oil and dis-pose at your local collecting Station, petrol-station or oil-dealer.

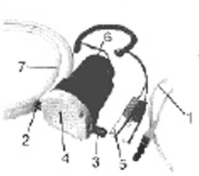
Technical datas:

motor:	12V D.C.
power draw:	approx. 5 A
sound pressure level:	70 dB(A)
Vibration:	< 2,5 m/s²
max. flow rate	
diesel- or heating-oil:	approx. 250 l/h
motor-oil (40°-50° C):	approx. 3 l/min

Important notice:
The working-period for this oil-extractor should not exceed 30 minutes. After this period please Switch off the pump and let it cool down.

Controls

1. Suction probe 6 mm
2. Suction connector
3. Drain connector
4. Extraction-pump
5. Battery-clamps
6. On-/Off-switch
7. Hose 10 mm



- clean the pump and attachment-parts after finishing your work

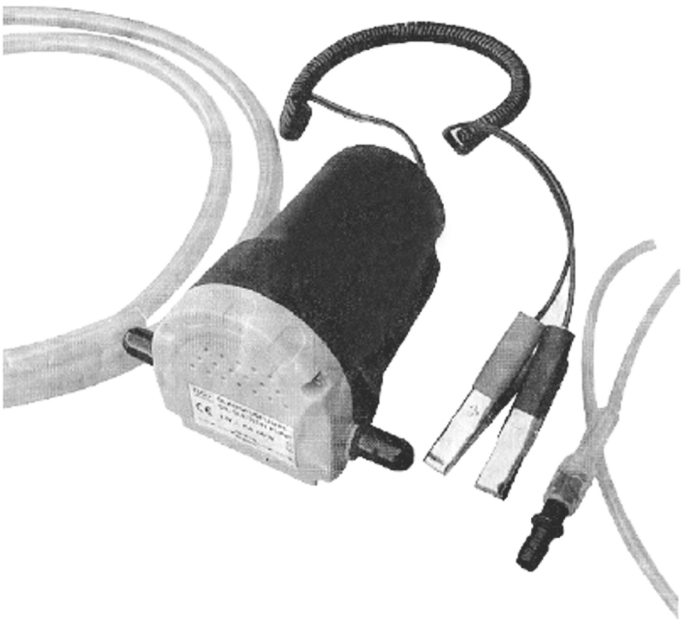
Technical description

The oil-extractor is a vane-pump with brass-lamellas. It is driven by a 12V-D.C.-motor via a reduction-gear. As power-supply please use a 12V- vehicle battery. The connections on the pump are built for hoses of 10 mm internal diameter.

The external diameter of the suction-probe is 6 mm. Therefore the pump can only be used for oil-change if the inner diameter of the dipstick-tube is bigger than 6 mm. The oil-extractor is suitable to pump engine-, diesel- and heating-oil.

Operating the oil-extractor

1. Before starting to change the motor-oil, drive the motor until the oil has a temperature of approx. 40°-50° C. Less temperature will reduce the flow-rate due to the high viscosity of the oil. If the oil is too hot, the sealings of the pump might be disturbed.
2. Shut down the engine after having reached sufficient temperature.
3. Push the hose with the suction-probe onto the pump socket and push the drain hose onto the the drain socket and fasten both by using hose-clamps in order to avoid the hoses coming loose due to the oil-pressure.
4. Unwind the suction-probe and straighten it properly before inserting through the dipstick-tube into the engine. Otherwise the pump will draw no or not enough oil.
5. Insert the suction-probe into the oil dipstick-tube and push it gently down to the lowest Position of the oil-pan.



OIL SUCTION PUMP