

# **General Purpose Gear Pump 12 V / 24 V (04-02-007 / 008)**

- Light and compact DC gear pump suitable for transfer of oil, diesel, antifreeze, water and other viscous liquids.
- Available as an Oil Change Kit (12V/24V – 04-03-009/010), complete with 1.8 m (6 ft) hose set (oil dip stick extraction tube 8 & 6 mm (0.3 & 0.24"), hose connection, wires, fuse and battery clamps

part no. 04-03-010 Gear Pump Oil Change Kit

- Albinus Gear Pumps are, reversible, rated for continuous duty and can be run dry.Pump body and gear in PTFE
- Self-priming dry up to suction lift of 0.8 m (31") Make sure the suction lines are airtight
- Meets ISO 8846,10133,9097 and CE Conforms with EN 55014 for suppression of Electro-magnetic interference

connect oil dip, 12 L/min (3.2 GPH) 24V 3 A 6–8 mm quick connect oil dip.

14 mm (5/8") hose

### Installation:

The pump must be mounted in a dry location – even if the motor is waterproof – and must not be submerged. *Selection of a cool ventilated location will generally extend pump motor life.* The unit can be mounted in any desired position. It is best to mount so that any leakage from a loose port connection will not drip on the motor. Mount the pump by means of suitable fastening screws through the rubber antivibration mounts supplied with the pump. Flow may be reversed by reversing the polarity of the electric leads. Operate the pump not more than 80 cm (32") above the lowest level of the liquid to be pumped. Otherwise, the pump will not be able to lift the liquid.

## Plumbing connection:

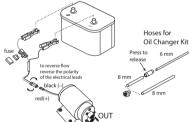
1. Attach the supplied connectors to the pump ports: external 14 mm (%") hose connections for the General Purpose Gear Pump – use stainless steel hose clamps – and the Oil Change Kit comes with the 14 mm (%") hose connector and 6 mm and 8 mm hoses (0.3" and 0.24") for fitting into motor oil dipstick wells.

- Use hoses that do not kink when bent; spiral reinforced hose (with a smooth internal bore) that will not collapse under suction, or rigid or semi-rigid pipework systems.
- 3. The pipework must be compatible with the liquid being pumped.
- Pipe runs should be kept as straight and short as possible, avoiding rising and dipping over obstructions.
- 5. Where possible, use a strainer on the intake hose to stop trash and large solids from damaging the pump.
- 6. All hoses must have airtight connections to enable optimal priming.

### **Electrical connections:**

Connect black wire to negative (–) terminal of battery. Connect the red wire, via an appropriately sized fuse, to the positive (+) terminal of battery. Electrical circuit must be independent of all other accessories. The direction of flow can be reversed by reversing the polarity of the electric leads. Use proper wire size as determined by wire table below.

Wire size	Max wire length (total distance from the battery to the pump and back to the battery)
	Gear Pump & Oil Change Kit
1.5 mm <sup>2</sup> (15 ga)	up to 5 m (16 ft)
2.5 mm <sup>2</sup> (13 ga)	up to 10 m (33 ft)
4 mm² (11 ga)	over 10 m (33 ft)



## Operation as oil transfer pump:

- 1. Operate the engine, whose oil you intend to change, until a temperature of  $40-50^{\circ}\text{C}$  ( $105-122^{\circ}\text{F}$ ) is reached. This will make the oil less viscous and give optimal flow rates. Turn the engine off. Take care not to burn yourself on the engine or the oil.
- Attach a minimum 13 mm (½") inner diameter hose to the discharge port with a hose clamp and place the other end of the hose inside a suitable, stabile container for the waste oil.
- Fit the oil change hose adapter to the inlet port and attach the supplied 8 mm (0.3") hose. If the hose is too large for inserting into the dipstick well of the engine, use the supplied reduction connector and attach the 6 mm (0.24") hose.
- 4. Remove the dipstick if necessary and insert the end of the narrow oil change hose down to the bottom of the oil pan.

- 5. Make sure the discharge hose is well supported to avoid oil spills. It is normal for the hose to move around some during pumping.
- 6. Operate the pump until the oil tank is empty. Shut off the pump by removing the battery clamp from the negative terminal of the battery.
- Exchange the waste oil container with the container of your fresh engine oil.
- 8. Reverse the polarity of the motor by reversing the elctrical leads.
- 9. Reattach the negative battery clamp and operate the pump to refill the oil tank of the engine. Check the correct oil level with the dipstick.
- 10. Dispose of the waste oil in the proper manner for hazardous liquids.

#### Maintenance:

No particular maintenance is required if the pump is employed for the transfer of diesel fluids or oils. If it is expected that the pump will not be used for a period of at least 30 days – especially in case of use with fresh or salty water – it is advisable to run fresh water through the pump and then loosen the pump front plate screws. Upon re-use, run the pump shortly (a few seconds) and then tighten the screws again.

## Troubleshooting

## Why doesn't the pump start? -

- Check the effectiveness of the battery power supply (voltage activity)
- · Check if the fuse has blown
- Check for any foreign bodies inside the pump gear drives. To do so, disconnect the power supply, unscrew the four fixing screws and remove all residuals
- The average life span of the motor commutator brushes is approximately 800/1000 hours under normal operating conditions. Stops are possible due to brush wear and tear after such a time period.

## Why isn't the pump self-priming?

- The pump is fitted at a height over 80 cm (32") above the fluid level
- The pump has run dry for too long a period; Long periods of inactivity: in
  this case it is advisable to add liquid directly into the pump chamber before
  start-up. It is also advisable to add a drop of lubricating oil inside the pump
  only before starting the pump.
- Air leak at the suction pipe due to the following reasons: possible cuts in the pipe, improper hose clamps, malfunctioning of the filter due to defective/worn out seals or clogged filter.

### WARRANTY

Two year limited warranty



EN 55014 ISO 8846

## Waste handling & material recycling

At the product's end of life, please dispose of the product according to applicable law. Where applicable, please disassemble the product and recycle the parts according to material.



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