

INSTRUCTIONS FOR: AIR OPERATED OIL INSTALLATION PUMP **STATION**

CONSISTING OF:

AK4555D Pump kit

AK4556D Hose Reel + Digital meter

Hose Reel available as AK4557D

Digital meter available as AK4558D

Thank you for purchasing a Sealey product. Manufactured to a high standard this product will, if used according to these instructions and properly maintained, give you years of trouble free performance.



IMPORTANT: PLEASE READ THESE INSTRUCTIONS CAREFULLY. NOTE THE SAFE OPERATIONAL REQUIREMENTS, WARNINGS & CAUTIONS. USE THE PRODUCT CORRECTLY AND WITH CARE FOR THE PURPOSE FOR WHICH IT IS INTENDED. FAILURE TO DO SO MAY CAUSE DAMAGE OR PERSONAL INJURY AND WILL INVALIDATE THE WARRANTY. PLEASE KEEP INSTRUCTIONS SAFE FOR FUTURE USE.

SAFETY INSTRUCTIONS

- Maintain the pump in good condition (use an authorised service agent).
- Replace or repair damaged parts. Use recommended parts only. Non-authorised parts may be dangerous and will invalidate the warranty.
- Keep the pump clean for the best and safest performance.
- Wear appropriate protective clothing i.e gloves, safety glasses, overalls.
- Install the pump in an appropriate working area. Keep area clean and tidy, free from unrelated materials and ensure there is adequate lighting.
- Maintain correct balance and footing. Ensure the floor is not slippery and wear non-slip shoes.
- Keep children and unauthorised persons away from the working area.
- WARNING! Turn off air supply and de-pressurise the output line before removing the pump, dispensing gun or hose reel from any installation . Failure to comply with this instruction may damage the units and will invalidate the warranty.
- When not in use ensure the air supply is turned off.
- x DO NOT allow unauthorised persons to operate the pump.
- □ WARNING! DO NOT tamper with, or open, the pump unit. To do so will invalidate the warranty.
- DO NOT point air line at yourself, other persons or animals.
- DO NOT use the pump to draw off any liquids other than oils.
- □ WARNING! DO NOT allow uncontrolled discharge of fluids thus polluting the environment.
- DO NOT force the pump to achieve a task it was not designed to perform.
- DO NOT operate the pump when you are tired, under the influence of alcohol, drugs or intoxicating medication.
- DO NOT use the pump for pumping flammable or corrosive liquids.



2. DESCRIPTION & APPLICATION

A complete Oil Installation Pump Station may consist of an oil delivery pump AK4555D, a retractable hose reel AK4557D and a delivery gun AK4558D with digital meter. These parts are available as separate items. In addition the hose reel and dispensing gun are available together under part No. AK4556D. The system is intended to be installed in medium sized garage workshops to pump new engine oil from a barrel or tank direct to a vehicle. Where the bulk oil storage is at a distance from the main work area the system can be plumbed into a correctly specified pipe line. The dispensing gun with digital readout enables the operator to dispense the exact amount of oil required. The meter also features an accumulative readout enabling a check to be made on the total amount of oil dispensed during any day / week / month.

SPECIFICATION

Ratio	
Maximum air pressure	8 bar (120psi)
Operating air pressure	6 bar (90psi)
Max.output pressure	8 bar (120psi)
Transient peak pressure	

Max. free flow delivery14ltr/m	ı
Min. air pressure	r
Air consumption at 6 bar	1
Air inlet port)
Output port)
Suction port)
Max. sound level at 1m)

CONTENTS

Check contents against items in fig.1 and fig.2. Remove items from carton, identify and check pieces for any damage. Contact supplier immediately if you experience a problem.

AK4555D Pump:

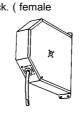
- (A) Pump
- (B) 2" BSP adaptor for tank or drum mounting.
- (C) Inlet tube (flexible 1") with filter and non-return valve.
- (D) Air supply hose (coiled) with 1/4" bsp fittings.
- (E) Outlet hose (flexible 1/2") with shut off valve (F).
- (G) Air filter/regulator with 1/4" bsp fittings.
- (H) Air lubricator with 1/4" bsp fittings.

AK4556D Hose Reel + Gun:

- (I) Retractable (10 mtr) hose reel with 1/2" male inlet
- (J) Inlet hose (flexible 1/2")
- (K) Shut off valve.
- (L) Drain cock / filter. (female fittings).
- (M) Dispensing gun with digital meter (male 1/2" inlet fitting)

AK4557D Hose Reel only:

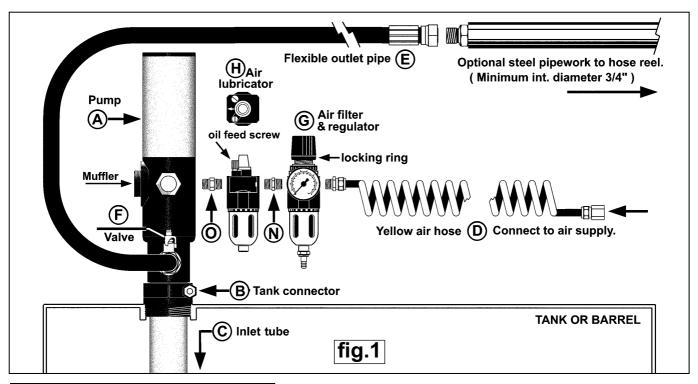
- (I) Retractable (10 mtr) hose reel with 1/2" male inlet fitting.
- (J) Inlet hose (flexible 1/2")
- (K) Shut off valve.
- (L) Drain cock. (female fittings).



AK4558D Digital Gun only:

(M) Dispensing gun with digital meter (male 1/2" inlet fitting)



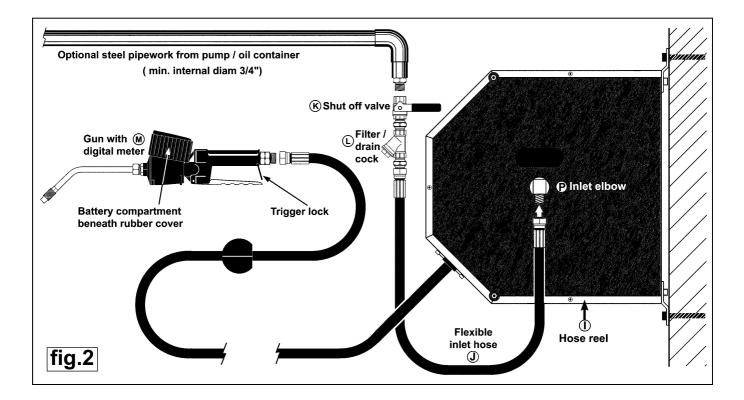


5. ASSEMBLY AND INSTALLATION

- 5.0 Installing the pump and oil pipe connections. (See fig.1)
- When the oil tank or barrel is to be situated next to the hose reel the flexible outlet hose (E) may be connected directly to the hose reel inlet elbow. (See P in fig.2) However, in larger workshop situations it will probably be necessary to install steel pipework between the pump and reel. This pipework should have a minimum internal diameter of 3/4". No more than two hose reels should be installed on any one line.
- 5.2 The use of PTFE tape or a suitable sealant is recommended on all oil related joints.
- Identify the tank connector (B) on the shank of the pump and loosen the hex socket bolt so that the threaded connector can rotate on the pump shaft. The connector is captive on the shaft and cannot be removed.
- 5.4 Identify the 1" flexible suction tube complete with filter and non-return valve (C) and screw the open end into the bottom of the pump (A).
- Insert the flexible suction tube through the opening in the tank or barrel. Ensure that the tube lies unkinked within the container as the body of the pump is lowered through the aperture until the threaded tank connector (B) rests on the tank fitting. Support the weight of the pump whilst rotating the tank connector until it has fully threaded itself into the tank fitting. Turn the pump to the desired orientation by rotating it within the tank connector and then lock it into position by tightening the bolt with a hex key.
- 5.6 Attach the shut off valve (F) to the pump outlet fitting situated just above the tank connector. Attach the flexible outlet hose (E) to the valve. Before tightening the assembly ensure that the valve is orientated for convenient use.
- 5.7 The other end of the outlet hose may be attached direct to the hose reel or to an intervening steel pipeline.
- 5.8 Installing the air management system. (See fig.1)
- □ WARNING! Clean new air lines ensuring any metal shavings have been removed before connecting the pump and control unit. Dirt in the inlet lines could damage the unit and may invalidate the warranty.
- 5.9 Use PTFE tape or similar on all air connections to ensure leak-free joints.
- 5.10 The air control unit items (fig.1. G & H) have polycarbonate bowls and must not be installed where the bowls may be exposed to solvents and chemicals incompatible with polycarbonate, or where fumes can weaken the bowls.
- 5.11 Connect filter-regulator to lubricator using fitting (N). Note the air flow direction arrows on each unit and that lubricator must be between pump and filter-regulator. Using the second fitting (O) connect the lubricator outlet to the pump air inlet.
- 5.12 Screw the gauge into the filter-regulator port, choosing the port which will provide easiest gauge visibility in the final installed position. Plug the remaining gauge port with the plug provided. Screw the yellow coiled air hose (F) into filter-regulator inlet port. Secure all connections (but do not over tighten).
- 5.13 The bowl of the filter-regulator is fitted with an automatic drain valve the outlet of which may be piped away using suitably sized flexible tube.
- 5.14 Remove lubricator oil filler plug and fill with good quality air tool oil (Sealey ATO/500 500ml size or ATO/1000 1L size) checking the maximum level marked on the side of the unit.
- 5.15 Installing the self retracting hose reel and Gun. (See fig.2)
- 5.16 Assess the siting of the hose reel in relation to the work area to ensure that the 10m length of hose will reach to the vehicles work area. Ensure that the wall to which the hose reel will be attached is solid enough to bear the weight of the reel plus the pulling strain that wil be exerted when the hose is pulled out. Fix the hose reel in the chosen position using substantial fixings.
- 5.17 Where a pipeline has been installed between the pump and reel connect the shut off valve (K) and filter/drain cock (L) to the end of the pipeline as shown in fig.2. Use the flexible inlet hose (J) to connect between the filter/drain cock and the inlet elbow (P) on the reel. Where there is no pipeline connect the pump directly to the reel using the flexible hose from the pump. (see E in fig.1) In this case the filter should be installed between the shut off valve on the pump and the flexible hose.
- 5.18 Attach the gun (M) with integral digital meter to the end of the reel hose as indicated in fig.2.
- 5.19 Comissioning the system prior to everyday use.

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- WARNING! Do not operate pump dry suction pipe must be immersed in oil before operating the pump.
 - Note: When resetting the regulated pressure always start from below the new required pressure and adjust up.
- 5.23 For the pump to operate at maximum efficiency it must push a full stroke of oil. Before operation and with the whole system installed all air must be removed from the oil pumping system starting with the pump itself. Place a small container and /or wad of absorbent material directly below the pump outlet fitting and loosen the fitting by 3/4 of a turn. Before turning on the air supply turn the knob on



the air regulator anticlockwise to reduce the air pressure to zero. Then turn on the air supply and slowly increase the air pressure by turning the knob clockwise until the pump just ticks over. Draw a small amount of oil into the container until all air is expelled. Tighten outlet nut.

- 5.24 Any air left in the oil pumping system can usually be eliminated by holding the gun trigger open and operating the pump until oil emerges free of all air. If a pipeline has been installed between the pump and the reel it may be necessary to bleed the fittings on this line to finally eliminate all air.
- 5.22 Once the oil system has been purged of air the air pressure can be gradually increased to the everyday working pressure of 6bar. Check that there are no air leaks from any of the air hoses or fittings.

6. OPERATING INSTRUCTIONS

6.0 Setting up the dispensing gun with digital meter.

By repeatedly pressing the FUNCTION button you will cycle through the three modes of operation available. Stop on whichever of the three modes you require. See below for an explanation of the modes.

Single operation (S.o.t.) This mode is intended for a single dispensing operation of a known quantity of oil in litres. To use this mode repeatedly press the FUNCTION button until the letters S.o.t. appear on the display. After a few seconds the display automatically reverts to a digital readout. If the display is not at zero press the RESET button. Squeeze the trigger to commence filling. Keep the trigger depressed until the display indicates the required quantity then release. When the trigger is pressed again in this mode the display will automatically return to zero.



Partial operation (P.t.) In this mode the display will not return to zero after a dispensing operation but will add the next dispensed quantity to the previous total. Thus this mode could be used to record the total amount of oil dispensed in any period of time such as daily or weekly. Once the reset button is pressed in this mode the display returns to zero. To set this mode repeatedly press the FUNCTION button until the display shows the letters **P.t.**

Absolute operation (A.t.) This mode is a reference mode only and shows the the total amount dispensed in litres from first use. This mode cannot be reset. When 999.9 litres have been dispensed the display starts again from zero. To see this mode repeatedly press the FUNCTION button until the letters **A.t.** appear.

- **6.1** To dispense oil. For safety reasons the system is not designed to fill at high speed. The end of line flow rate will vary depending on a number of factors including length of line, temperature, air pressure and viscosity of oil.
- 6.2 Pull the hose from out of the hose reel and place the digital dispensing gun in a convenient place. Set the required dispensing mode up on the digital display as described above.
- 6.3 Ensure that the shut off valves on the pump and on the hose reel are open.
- Before turning on the air supply rotate the knob on top of the air regulator anti-clockwise to set an air pressure less than 6bar. Now turn on the air supply and screw the air regulator knob clockwise to gradually work up to a pressure of 6bar. The pump will start to operate at about 2bar and will continue to run until the set pressure is reached within the system.
- 6.5 Before commencing to fill the vehicle with oil ensure that you know the capacity of oil required.
- Remove the filler cap and place the trigger nozzle into the aperture. Squeeze the trigger to commence filling with oil. When the digital display indicates the required amount release the trigger. When a large amount of oil is to be dispensed the trigger can be locked in the on position by swinging the wire trigger lock over the end of the trigger lever. To release the lock squeeze and hold the trigger and swing the wire clip out of the way.
- 6.7 When filling is complete replace the filler cap.
- 6.8 Retract the hose into the reel by giving a sharp pull on the hose close to the reel. Do not allow the retracting hose to drag the dispensing gun over the floor or return unaided.
- 6.7 When filling operations are complete turn the air supply off. Keep the system clean, especially the dispensing gun and nozzle.

MAINTENANCE

WARNING! Ensure that the pump is disconnected from the air line and that there is no pressure in any part of the system before removing the pump, gun, or hose reel for service or maintenance. The units should be serviced by an approved Sealey service agent.

Note: It is essential that dirt and moisture are kept out of the air supply to the pump. Drain air supply system and clean filters regularly.

Air line lubricator and water trap (fig.1.B)

This unit is designed to automatically lubricate the pump via the air supply. The unit must be kept topped up with good quality air tool oil (Sealey reference: ATO/500 - 500ml size or ATO/1000 - 1L size). To adjust the oil flow turn the oil regulator on the top of the unit. Turn screw anticlockwise to increase the flow and clockwise to decrease flow - set to minimum flow for this application. At regular intervals check that water is draining from filter-regulator, since it is essential that water does not enter the pump.

7.2.

Clean pump and air units with clean damp cloth. Mild detergents may be used to remove oil. DO NOT use solvents or abrasives and do not get the pump or air units wet.

- 7.3 Digital meter - changing the batteries. The battery pack in the digital meter contains 3 AA batteries and will last approximately one year. To change the batteries pull the ribbed rubber cover off the display housing to reveal the battery hatch on the side off the housing. Remove the two screws that hold the plate and seal and withdraw the battery holder sideways out of the housing. Replace the 3 batteries with fresh ones ensuring that the new batteries are placed in the holder the right way round. Insert the holder back into the housing and screw the cover plate and its seal back into position. Push the ribbed rubber cover back over the housing.
- Oil line filter. Item (L) Filter / drain cock (see fig.2) contains a small filter which should be cleaned every 3 months to remove any 7.4 accumulated debris from the oil line. First disconnect the air line and then close the shut off valve (K) next to the filter . Operate the trigger on the dispensing gun to releive any pressure remaining in the system. Unscrew the cap on the 'Y' piece and remove and clean the filter. Replace filter and cap. Open the shut off valve.

8. TROUBLESHOOTING

THE PROBLEM	THE CAUSE	THE SOLUTION
Air motor does not operate.	1.1. Air pressure is too low. 1.2. Muffler is blocked. 1.3. Internal defect	1.1. Adjust air pressure to above 2 bar/30psi. (5.1). 1.2. Contact service agent. 1.3. Contact service agent.
2. Poor performance	2.1. Muffler is blocked. 2.2. Oil to be pumped is below 15°C. 2.3. Viscosity too high for pump.	2.1. Contact service agent. 2.2. Site tank / barrel in warmer area. 2.3. Check viscosity of oil.

Declaration of Conformity We, the UK distributor, declare that the products listed below are in conformity with the following standards and directives

AIR OPERATED OIL INSTALLATION PUMP STATION Models AK4555D, AK4556D, AK4557D, AK4558D.

The construction files for this product are held by the Manufacturer and may be inspected on request by contacting Jack Sealey Ltd.

Signed by Mark Sweetman 98/37/EC Machinery Directive

9th August 2002

For Jack Sealey Ltd. Sole distributor of Sealey Power Products

NOTE: It is our policy to continually improve products and as such we reserve the right to alter data, specifications and component parts without prior notice. **IMPORTANT:** No liability is accepted for incorrect use of this equipment. **WARRANTY:** Guarantee is 12 months from purchase date, proof of which will be required for any claim. INFORMATION: For a copy of our latest catalogue call us on 01284 757525 and leave your full name and address, including postcode



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