

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 AND/OR PERSONAL INJURY, AND WILL INVALIDATE THE WARRANTY. PLEASE KEEP INSTRUCTIONS SAFE FOR FUTURE USE.**

### 1. SAFETY INSTRUCTIONS

#### 1.1. ELECTRICAL SAFETY

**WARNING!** It is the responsibility of the owner and the operator to read, understand and comply with the following:

You must check all electrical products, before use, to ensure that they are safe. You must inspect power cables, plugs, sockets and any other connectors for wear or damage. You must ensure that the risk of electric shock is minimised by the installation of appropriate safety devices. A Residual Current Circuit Breaker (RCCB) should be incorporated in the main distribution board. We also recommend that a Residual Current Device (RCD) is used. It is particularly important to use an RCD with portable products that are plugged into a supply which is not protected by an RCCB. If in any doubt consult a qualified electrician. You may obtain a Residual Current Device by contacting your Sealey dealer.

**You must also read and understand the following instructions concerning electrical safety.**

1.1.1. The **Electricity at Work Act 1989** requires all portable electrical appliances, if used on business premises, to be tested by a qualified electrician, using a Portable Appliance Tester (PAT), at least once a year.

1.1.2. The **Health & Safety at Work Act 1974** makes owners of electrical appliances responsible for the safe condition of those appliances and the safety of the appliance operators. **If in any doubt about electrical safety, contact a qualified electrician.**

1.1.3. Ensure that the insulation on all cables and on the appliance is safe before connecting it to the power supply. See 1.1.1. and 1.1.2. and use a Portable Appliance Tester.

1.1.4. Ensure that cables are always protected against short circuit and overload.

1.1.5. Regularly inspect power supply cables and plugs for wear or damage and check all connections to ensure that none is loose.

1.1.6. **Important:** Ensure that the voltage marked on the appliance matches the power supply to be used and that the plug is fitted with the correct fuse - see fuse rating at right.

1.1.7. **DO NOT** pull or carry the appliance by the power cable.

1.1.8. **DO NOT** pull the plug from the socket by the cable.


1.1.9. **DO NOT** use worn or damaged cables, plugs or connectors. Immediately have any faulty item repaired or replaced by a qualified electrician. When an ASTA/BS approved UK 3 pin plug is damaged, cut the cable just above the plug and **dispose of the plug safely.** Fit a new plug according to the following instructions (UK only).

a) Connect the **GREEN/YELLOW** earth wire to the earth terminal 'E'.

b) Connect the **BROWN** live wire to the live terminal 'L'.

c) Connect the **BLUE** neutral wire to the neutral terminal 'N'.

d) **After wiring, check that there are no bare wires, that all wires have been correctly connected, that the cable outer insulation extends beyond the cable restraint and that the restraint is tight.**

Double insulated products, which are always marked with this symbol , are fitted with live (brown) and neutral (blue) wires only. To rewire, connect the wires as indicated above - **DO NOT** connect either wire to the earth terminal.

1.1.10. Products which require more than 13 amps are supplied without a plug. In this case you must contact a qualified electrician to ensure that a 30 amp supply is available. We recommend that you discuss the installation of an industrial round pin plug and socket with your electrician.

1.1.11. If an extension reel is used it should be fully unwound before connection. A reel with an RCD fitted is preferred since any appliance plugged into it will be protected. The cable core section is important and should be at least 1.5mm<sup>2</sup>, but to be absolutely sure that the capacity of the reel is suitable for this product and for others which may be used in the other output sockets, we recommend the use of 2.5mm<sup>2</sup> section cable.

#### 1.2. GENERAL SAFETY

**WARNING!** Ensure Health & Safety, government and local authority regulations relating to the transfer of diesel are adhered to when using this equipment. Familiarise yourself with the application, limitations and specific hazards peculiar to the pump.

**WARNING!** Disconnect pump from the mains power before changing accessories, servicing or performing any maintenance.

**DANGER:** DO NOT use pump for the transfer of fluid other than diesel fuel of a viscosity from 2 to 5.35 cSt at 37.8°C, with a minimum flash point (PM) of >55°C, or for any other purpose.

**DANGER:** Motor is **not** explosion proof and must not be used where flammable vapours may be present.

✓ Maintain pump in good condition (use authorised service agent). Drain meter and pipes before dismantling.

✓ Ensure unit is correctly calibrated before use, and after having been dismantling for maintenance.

✓ Maintain correct balance and footing. Ensure the floor is not slippery and wear non-slip shoes.

✓ Ensure the transfer area is free of clutter and has adequate lighting.

✓ The motor is equipped with a thermal cut-out which will shut the motor off should the unit over heat.

If this happens, turn the unit off and allow to cool, by which time the cut-out will automatically reset.

✓ Keep children and unauthorised persons away from the working area.

✓ Replace/repair damaged parts. Use genuine parts. Unauthorised parts are dangerous and will invalidate warranty.

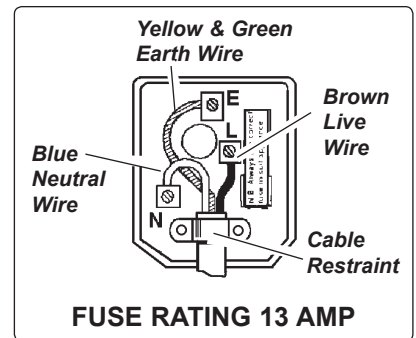
x DO NOT use the pump without the delivery nozzle attached.

x DO NOT start or stop the pump by switching on or off at the mains power supply.

x DO NOT operate the unit with wet hands. We recommend the use of diesel resistant gloves and goggles.

x DO NOT use with a motor other than that built into the unit (incorrect flow pressure will distort pump accuracy).

**IMPORTANT:** It is installer's responsibility to ensure all supply pipes, fixtures and fittings are adequate for the safe flow of diesel fuel.



## 2. INTRODUCTION & SPECIFICATION

The TP955 is a self priming rotary vane type pump with a bypass valve. A 230V direct drive motor is fitted with an overload protector. Flow control is via a volumetric nutating disc type re-settable meter with large 3 digit display. The unit is supplied with the TP109 delivery nozzle and 4 metres of reinforced 3/4" hose. The system is suitable for wall, tank or pedestal installation.

Voltage . . . . .	230V 50Hz	Maximum delivery . . . . .	56 ltr/min
Nominal Power . . . . .	350Watts	Optimum lifting height. . . . .	2 metres
Current . . . . .	3Amp	with 1.5" diameter intake pipe	
Speed . . . . .	2800rpm	Protection . . . . .	IP55

## 3. INSTALLATION & ASSEMBLY

3.1 Unpack the product and check contents against figure 1. Should there be any missing or damaged parts contact your supplier immediately.

**WARNING! This unit must be installed and tested by a qualified fuel system maintenance engineer. We do not accept any liability for damage or injury caused due to incorrect installation.**

**WARNING: DO NOT use conical fittings which can cause damage to seats on pump casing.**

### ASSEMBLY

3.2 To install the delivery tube support hook ( see kit 4 in fig.1 ) it will be necessary to remove the red top cover. Undo 3 screws from the right hand side of the cover and the 2 screws from the top side of the cover and one from above the support hook, lift upwards and tilt towards you. Loosen the bolts on the bottom of the pump and slide the support hook to a desired length then tighten the bolts making sure that the retaining bar and nuts are holding it in place.

3.3 Uncoil the mains cable and feed it through hole 'C' as indicated in fig.2. To make the electrical connections refer to section 3.11 and the electrical safety advice in Section 1. If the unit is to be wall mounted this will be done with the cover removed. The fixing holes are indicated by 'B' in fig.2. Replace the top cover.

3.4 Take the reset knob ( item 5 fig.1) and insert it through the hole in the left hand side of the casing and onto the shaft which is connected to the meter. The shaft has a groove which needs to be aligned with that on the reset knob.

### OUTLET/DELIVERY CONNECTION

3.5 Remove the plastic transport plug from the outlet hole on the left hand side of the unit (fig.3.G). Before connecting the delivery pipe ensure all components are free from manufacturing debris or packaging materials.

3.6 Partially fill pump casing by gently pouring diesel fuel into the outlet hole (fig.3.G) in order to prime unit ready for use. Screw pipe elbow (fig1.6) into outlet hole (fig.3.G), and connect one end of delivery hose (fig.1.3) to the elbow, and the other end to delivery nozzle (fig.1.2).

### INLET CONNECTION (Piping Specification.)

3.7 a) The inlet piping must resist a pressure of at least 10 bar and must be not less than 1" diameter.

b) The tubing/piping must be suitable for low pressure applications.

c) The tubing/piping and accessories used must be suitable for use with diesel fuel.

d) Any curves in the inlet tubing/piping must be of the widest possible radius to aid flow.

3.8 Remove the plastic transport plug from the fuel inlet hole on the underside of the pump (fig.3.F). Before connecting the inlet suction pipe ensure all components are free from manufacturing debris or packaging materials. To make the inlet connections the unit is supplied with a kit (See item 7 fig.1) consisting of two 1" push-in connectors for use with 1" flexible tubing with two worm drive hose clips to secure them. The kit also contains a check valve and filter which must be used at the end of the inlet piping inside the tank, whether flexible or rigid pipe is used (See fig.4). The check valve and filter must always be immersed at the bottom of the tank. To aid priming of the pump it is suggested that the inlet pipe be filled with diesel fuel prior to it being connected to the inlet hole on the underside of the unit (See 'F' in fig.3).

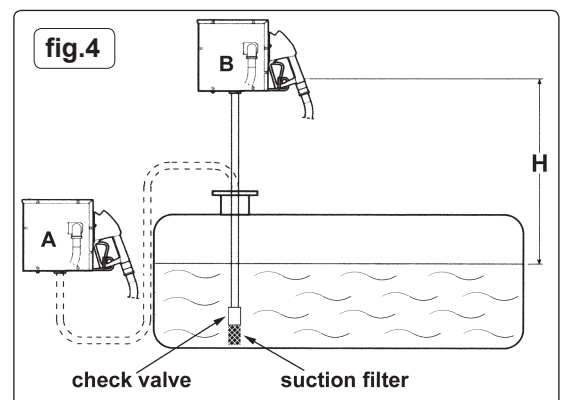
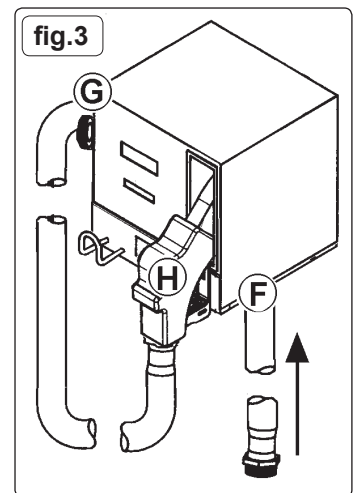
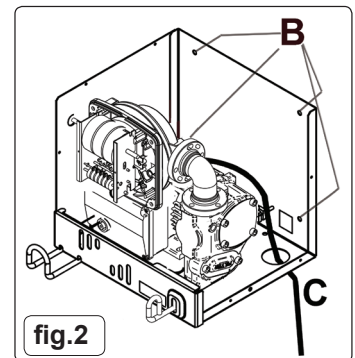
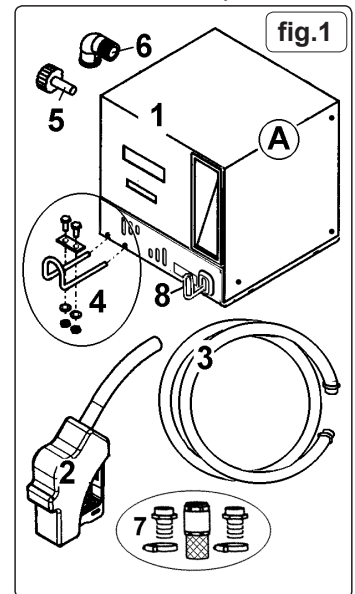
3.9 Lower the on/off switch (fig1.8) to ensure the unit is in the OFF mode, and place the nozzle in its housing (fig3.H).

### MOUNTING THE UNIT

3.10 Whilst the unit can be installed out-of-doors it is recommended that it should be under the cover of a roof to prolong the units working life and also to provide shelter when dispensing diesel fuel in bad weather conditions. Careful consideration must be given to the location of the pump unit to ensure that installation and use of the unit is safe. The unit can be wall, tank or pedestal mounted. The pump should not be mounted below the fuel level in a full tank or higher than 2 metres above the maximum fuel level when a 1" inlet pipe is being used (See fig.4).

### ELECTRICAL CONNECTION

3.11 The connection to the mains supply should be carried out by a qualified electrician who can advise on the best arrangement for your installation. The unit can be hard wired directly into a switch unit or connected via a 3-pin plug to the mains supply. In either case weather proof plugs, sockets and switches should be used. The unit is not equipped with safety switches and it is therefore recommended that in the absence of any other fuse arrangements a 30mA circuit breaker is installed upstream of the mains outlet used. Please refer also to the electrical safety advice given in section 1.



## 4. PRIMING & OPERATION

### PRIMING OF THE UNIT

- 4.1 Care should be taken when priming the pump as the process could take between several seconds or several minutes depending on the configuration of the installation. As previously stated to aid priming of the pump it is suggested that the inlet pipe be filled with diesel fuel prior to it being connected to the inlet hole on the underside of the unit and the pump should be partially filled by pouring diesel fuel into the pump outlet before connecting the delivery tube and nozzle.
- 4.2 Remove the delivery nozzle from its stowage position and direct it into a suitable container.
- 4.3 Turn the pump on by lifting up the on/off switch lever (fig.5) then depress the trigger and keep it depressed until fuel emerges in a steady flow that is free of air.
- 4.4 If the priming process seems prolonged turn the pump off by lowering the on/off switch lever (fig.6) and check the following points.
- 4.5
- Is the pump running dry?
  - Is the suction pipe airtight and completely immersed in the diesel fuel?
  - Is the suction filter clogged?
  - Has the pump been installed more than 2 metres above the level of the fuel?
  - Has all residual air in all parts of the system been evacuated?



fig.5



fig.6

### OPERATING THE UNIT

- 4.6 To avoid running the pump dry check that the amount of fuel available in the tank is greater than the amount of fuel to be dispensed. When delivery is complete the end of the suction tube with check valve and filter should still be completely immersed in the fuel.
- 4.7 When the unit is turned on, the "by pass" valve on the pump will enable it to operate with the nozzle trigger closed for approximately 2-3 minutes only. If the dispensing of the fuel is delayed for any reason the unit should be turned off again.
- 4.8 Rotate the meter reset knob in an anticlockwise direction to return the display to zero. The cumulative display below cannot be reset.
- 4.9 Lift the dispensing nozzle from its rest and check that the trigger lever is in the off position, as shown in fig.7, before inserting it into the vehicle filler opening or container.
- 4.10 Turn the pump on by lifting the on/off switch up (See fig.5).
- 4.11 Press the nozzle trigger and keep it depressed until the desired quantity has been dispensed, then release the trigger.
- 4.12 Turn the unit off by lowering the on/off switch (See fig.6) and replace the nozzle onto the rest.
- 4.13 Hang the delivery tube onto the tube support rest to prevent it being crushed by the wheels of passing vehicles.
- 4.14 When a large amount of fuel is to be dispensed it is possible to lock the trigger of the dispensing nozzle in the 'on' position as indicated in fig 8. The operator must remain at the pump at all times to supervise the entire dispensing process. To unlock the trigger squeeze the lever tightly and the locking bar will spring out of the way.



fig.7

OFF

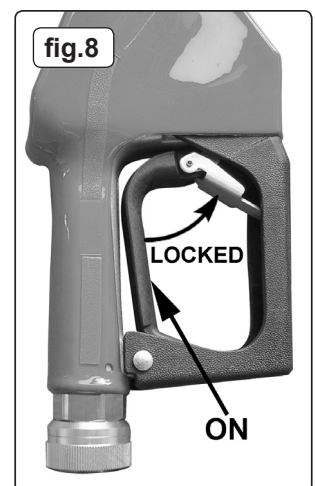


fig.8

LOCKED

ON

**The trigger must always be unlocked before the pump is switched off.**

- ❑ **WARNING! DO NOT leave the pump operating unattended.**
- ❑ **WARNING! DO NOT stow the delivery nozzle back in its housing with the trigger in the locked on position.**
- ▲ **DANGER!** Clean up any spillage in accordance with regulations governing the handling of diesel fuels.

## 5. MAINTENANCE

### WEEKLY INSPECTION

- 5.1 Clean the entire installation and inspect all piping connections for leaks.
- 5.2 Inspect the back pressure sensor hole on the dispensing nozzle for blockage and clean out if necessary (See fig.10).
- 5.3 Clean the filter and check valve at the end of the suction tube on a weekly basis and every time the tank is refilled.

### CLEANING THE PUMP FILTER

- 5.4 The pump filter should be cleaned on a weekly basis and whenever a reduction in flow rate is noticed. This may occur in particular when the fuel tank is topped up which may stir up sediment from in the bottom of the tank.
- 5.5 To access the pump filter it will be necessary to remove the top cover. Undo 3 screws from the right hand side of the cover and the 2 screws from the top side of the cover and one from above the support hook, lift upwards and tilt towards you. Remove the bolts holding the filter cover covering the filter chamber also remove the rubber seal (fig.9A) and withdraw the filter (fig.9B). Clean and dry the filter (blow it through with an airline if available). Put the clean filter back into its chamber and replace the rubber seal and filter cover.
- 5.6 Replace the top cover.

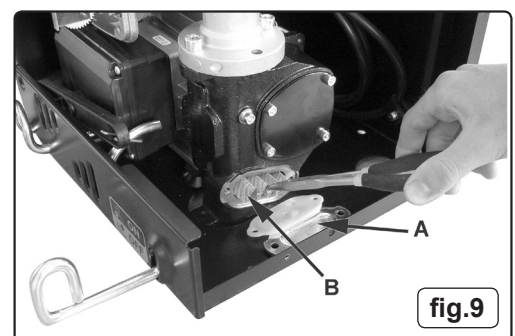


fig.9

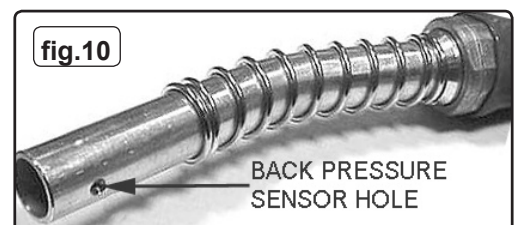


fig.10

BACK PRESSURE  
SENSOR HOLE



The Problem	The Cause	The Solution
Motor not turning	No power	Lift the on/off switch up to the 'on' position
	Circuit breaker has tripped	Re-set circuit breaker. Check that electrical connections are correct
	Fuses burnt out	Replace fuse in plug and/or supply panel
	Motor faulty / jammed	Inspect motor. Return to authorised repair agent if necessary
Motor will not start with nozzle closed / off	Insufficient voltage	Check that voltage is not more than 5% below the nominal requirement
Low or no flow	Excessive suction pressure	Lower the height of the pump in respect to the tank and / or increase the diameter of the suction tube
	Suction tube resting on bottom of tank	Raise suction tube
	Low level in tank	Refill the tank
	Air entering the suction tube or in the pump	Check all piping connections and the level of fuel in the tank
	Low rotation speed of motor	Check and adjust the motor voltage or use cable with a larger cross section
	Check valve blocked	Clean or replace
	Tank filler clogged	Clean or replace the filter
	Pump filter clogged	Clean or replace filter
	Fluid leaks	Check all connections and the condition of rubber tubes
	Meter chamber obstructed	Clean the meter chamber
Meter not accurate enough	Air in the suction line	Check all seals and connections
	Measuring chamber dirty	Clean the meter measuring chamber



**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 product.

**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 and promotions call us on 01284 757525 and leave your full name and address, including postcode.



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