

# Power Instructions for: 140bar and 170bar PRESSURE WASHER with TSS & ROTABLAST NOZZLE. 230V

Model Nos: **PW2200, PW2500** 

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.

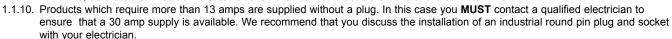
#### 1. SAFETY INSTRUCTIONS

#### **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.

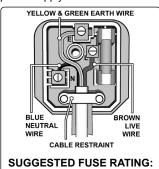
- 1.1.1. The Electricity at Work Act 1989 requires all portable electrical appliances, if used on business premises, to be tested by a qualified electrician, using a Portable Appliance Tester (PAT), at least once a year.
- The Health & Safety at Work Act 1974 makes owners of electrical appliances responsible for the safe condition of those appliances 1.1.2. and the safety of the appliance operators. If in any doubt about electrical safety, contact a qualified electrician.
- 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.
- Ensure that cables are always protected against short circuit and overload.
- Regularly inspect power supply cables and plugs for wear or damage and check all 1.1.5. connections to ensure that none are 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.
- **DO NOT** pull or carry the appliance by the power cable.
- **DO NOT** pull the plug from the socket by the cable.
- DO NOT use worn or damaged cables, plugs or connectors. Have any faulty item repaired or replaced immediately by a qualified electrician. When an ASTA/BS approved UK 3 pin 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.



1.1.11. 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 1.5mm², 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. A waterproof plug and socket should be fitted.

#### **GENERAL SAFETY** 1.2.

- WARNING! Water and electricity are dangerous partners. Be extremely cautious and ALWAYS be aware that this device uses an electric motor. Always plug into a RCD (See electrical safety above). Unplug from mains before changing accessories or servicing.
- WARNING! DO NOT use the washer if any part of the unit, gun, nozzle, detergent tank, hose or cables is damaged. Replace or П repair using genuine parts only. Unauthorised parts may be dangerous and will invalidate your warranty. Always check connections are correctly secured and not cracked or damaged in any way before using the machine.
- WARNING! Use washer on a flat, levelled surface, in an upright position. Failure to do so will invalidate your warranty. **NEVER** lay the washer down during use.
- Ensure you comply with all local water supply regulations. Power washers may only be connected to mains water supply if a check valve is installed in the supply hose, or at the tap outlet.
- The supply hose must be reinforced, and have an internal diameter of 1/2". The water supply must be at least equal to the cleaner capacity. The water temperature must NOT exceed 122°F (50°C). The water supply pressure must NOT exceed 6 bar (90psi).
- Always be aware of the hazards that may occur during use. Study all applications and limitations of the washer before use.
- Use where air can freely circulate around the washer to avoid the machine overheating.
- Keep the washer in good condition. Use an authorised service agent to service the unit.
- Wear adequate protective clothing, goggles and anti-slip rubber soled footwear.
- Position the washer as near to the water supply as possible.
- WARNING! Ensure all persons and animals keep at a minimum distance of 15mtr from the washer when in use.
- WARNING! The pressure washer must only be used with clean water. Unfiltered water or corrosive chemicals must not be used as these will damage the cleaner.
- Ensure the nozzle is aimed correctly at the work surface before switching on the machine.



- Before activating the trigger, grip the gun firmly to counteract the recoil from the high pressure water jet.
- σ WARNING! Avoid sudden bursts of water as these will cause water pressure to drop and put extreme pressure on hoses and
- If, during operation, power failure occurs turn the electricity and water off for safety reasons.
- WARNING! The high pressure jet will cause loose particles to be propelled at high speed, which may cause serious injury.
- WARNING! DO NOT operate the machine without a water supply. Dry running can damage the unit seriously.
- WARNING! DO NOT leave the washer switched on for more than 15 minutes without operating the trigger.
- DO NOT obstruct ventilation grilles during operation. X
- X DO NOT use the washer with flammable or toxic liquids or any other product. Use only recommended detergent. Unapproved detergents may corrode the machine cover and accessories.
- **DO NOT** jam the trigger in the operating position. X
- DO NOT adjust any internal control valves, as they have been factory set. X
- **DO NOT** connect other appliances to the machine inlet or outlet. X
- X **DO NOT** use hoses and fittings other than those designed for use with this machine.
- X DO NOT move the unit by pulling the hoses or electrical cables. Use the handle and tranport by means of the wheels.
- X DO NOT touch plug with wet hands. To avoid the risk of electrocution keep all connections dry and off the ground.
- X DO NOT direct jet against yourself, other persons, animals, electrical equipment or the machine itself.
- X X DO NOT use washer if you are tired or under the influence of alcohol, drugs or intoxicating medication.
- DO NOT allow children or untrained persons to operate the washer.
- WARNING! Discharge residual pressure before disconnecting the washer hose. Pressure left in unit may cause injury.
- After use, disconnect washer from electrical mains and water supply and store in a safe, dry, childproof area.
- Protect from freezing conditions during winter.

NOTE: This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities or lack of experience and knowledge, unless they have been given supervision or instruction concerning the use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.

#### INTRODUCTION

Semi-professional, heavy-duty unit for extensive domestic and light commercial use. Fitted with powerful induction motor (for motor power and pump performance see 'specifications'). Features automatic Total Stop System (TSS) which switches the motor on and off when the lance trigger is operated, prolonging the motor life. Also fitted with high quality polished chrome and brass fittings. Features hose hanging hook, accessory storage on the back of the unit and side mounted gun and lance holder ensuring the unit stays clutter free and fully mobile. Supplied with variable nozzle, 5mtr hose and Rotablast nozzle which helps develop the same Effective Cleaning Power (ECP) as a larger pressure washer (for delivery pressure see 'specifications'). Fitted with heavy-duty composite wheels for transportation over rough terrain.

Model No. PW2200 features dual built-in dual detergent tanks, enabling the user to switch between two different cleaning products by simply using the detergent selection control. E.g. General Purpose Detergent, Model No's AK130 or AK131 and Traffic Film Remover, Model No's AK132 or AK133.



## **SPECIFICATION**

Model No:	PW2200
Maximum Pressure:	140bar/2030psi
Effective Cleaning Pressure (ECP)	226bar/3280psi
Water Flow:	400ltr/hr
Motor Power:	1800W
Supply:	230V
Total Stop System (TSS):	Yes
Rotablast Nozzle:	Yes
Hose Length:	5mtr
Weight:	17.2kg



Model No:	PW2500
Maximum Pressure:	. 170bar/2350psi
Effective Cleaning Pressure (ECP)	. 275bar/3995psi
Water Flow:	438ltr/hr
Motor Power:	2200W
Supply:	230V
Total Stop System (TSS):	Yes
Rotablast Nozzle:	Yes
Hose Length:	5mtr
Weight:	19.7kg

#### 4. SET-UP

#### 4.1. Connecting the water supply.

Use a reinforced hose pipe with an internal diameter of 1/2" and connect to the mains water supply. Before attaching the hose to the pressure washer flush the hose through with some clean water to remove any foreign matter from within the hose.

Connect female quick conection hose fitting to inlet on the front of the machine (fig.1)

## 4.2. Connecting the high pressure hose.(PW2200 only)

Insert the high pressure hose into the hose fitting at the lower rear of the machine and screw the collar onto the threaded outer (fig.2) ensuring the connector is tight. The PW2500 is pre-connected via the inside of the hose storage reel.

4.2.1. Attach the other end of the high pressure hose to the gun (fig.3). To attach the hose, push the male hose connector into the underside of the gun and screw the collar onto the gun fitting. Ensure that the connection is tight to prevent leakage.

#### 4.3. Assembling the lance and nozzle.

Push the nozzle into the gun as shown in fig.4 and screw the threaded male lance connector into the gun, again ensuring that the connection is tight.

WARNING! Ensure the nozzle is locked into position, failure to ensure this could result in the nozzle being ejected under high pressure when operating the gun.

#### 4.4. Connecting to mains electrical supply.

□ **WARNING!** Ensure the On/Off switch is in the 'Off' position.

Using an RCD plugged into a 13A mains socket, DO NOT turn the power on. DO NOT touch the plug with wet hands.









#### 5. OPERATION

- WARNING! Ensure you read, understand and apply Section 1 safety instructions.
- WARNING! Dry running can damage the unit seriously.
- ☐ WARNING! Use washer on a flat, levelled surface, in an upright position.
- Failure to do so will invalidate your warranty. Never lay the washer down during use.
  - WARNING! DO NOT leave washer switched on for more than 15 minutes without operating trigger.

Important! The washer motor will stop as soon as the gun trigger is released and will restart when the trigger is squeezed. Always allow at least 5 seconds between releasing the trigger and restarting.

## 5.1. Primary checks.

Check that the inlet filter is clean; pump delivery and pressure will be reduced if blocked. Never use the machine without a filter (which is fitted inside the inlet connector). Ensure that the water supply, high pressure hose and gun are correctly connected, and that air can circulate around the washer freely.

#### 5.2. Operation of safety catch.

To prevent inadvertent operation of the unit the safety catch should always be engaged when the gun is not in use. Open the safety catch as in fig.3 to lock the trigger against the guard.

#### 5.3. Bleeding The Gun

It is very important to bleed the gun before using the pressure washer. Squeeze the trigger **BEFORE** turning the electrical supply on. This allows any air trapped inside the pressure washer and gun to be removed before using the unit. Continue holding the trigger for approximately one minute to allow any excess air out of the unit. Water will flow through the gun at low pressure during this procedure.

#### 5.4. Operating the machine.

- 5.4.1. Hold the spray gun firmly to counteract the recoil caused by the high pressure of the water. Before switching on ensure that the lance is not directed at people, objects or animals prior to being directed at the object to be cleaned.
- 5.4.2. It is recommended that the trigger is depressed before switching on the unit before every use. This reduces the back pressure and amperage draw which prevents fuses blowing.
- 5.4.3. Switch the machine on by turning the switch to the 'On' position (fig.5). Release the handle safety catch (fig.3). Point the lance at the object to be cleaned and depress the trigger fully. When the trigger is released the motor will switch off automatically.

#### 5.5. Adjusting the spray pattern.

5.5.1. The fan nozzle can be adjusted from pencil point to fan jet by rotating the body of the nozzle as indicated in fig.6 Caution! The pencil point setting is very aggressive. It is recommended that for most cleaning applications, a 20° spray angle is used to avoid damage to the surface being sprayed.









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Note: The pressure of the spray on the surface you are cleaning increases as you move the nozzle closer to the surface.

- 5.5.2. For the high pressure Turbo spray fit the turbo nozzle. This nozzle is intended for maximum cleaning affect.
- **5.6. Using detergent.** Use only detergents approved for use in pressure washers.
  - PC2200: The PC2200 has the facility to use two different detergents (e.g. a traffic film remover and a general detergent).
- 5.6.1. Fill the detergent tanks with the required detergents (if required, only one tank can be used).
- 5.6.2. Turn the detergent selector control (fig.7) in the direction of the tank containing the required detergent.

#### PC2500:

5.6.3. Fill the detergent tank (fig.8) at the rear of the machine.

#### Both machines:

- 5.6.4. To switch to detergent mode, simply push the variable nozzle forwards to activate the low pressure setting. Pull the nozzle backwards to resume normal washing.(fig.6)
- 5.6.5. Dirt is dissolved by applying detergent to the dry surface. On vertical surfaces, work from the bottom upwards.
- 5.6.6. Leave the detergent to act for 1-2 minutes, but **DO NOT** allow the surface to dry out.
- 5.6.7. To wash down select the variable spray jet nozzle set on the wide fan setting (fig.6).
- 5.6.8. When you have finished the soap application, remove the bottle and flush clean water through the tube until it is cleaned thoroughly.
- Note: Failure to clean properly will cause the injection system to become clogged and inoperable.

#### 5.7. When washing is completed.

- 5.7.1. Switch the power supply off by turning switch to 'Off' position (fiig.5).
- 5.7.2. Turn off the water supply tap.
- 5.7.3. Discharge residual pressure by pressing the trigger until no more water comes out of the nozzle.
- □ **WARNING!** Failure to discharge pressure could result in personal injury.
- 5.7.4. Disconnect the inlet and high pressure outlet hoses.
- 5.7.5. Wipe the machine clean and dry and store in a clean, safe, dry, childproof location.
- Note: a) DO NOT leave motor switched on for more than 15 minutes without operating trigger.
  - b) If the water pressure drops (e.g. someone else using the same water supply), the washer will not operate correctly. Immediately switch the motor off and wait until the pressure is restored.

## 6. TROUBLESHOOTING GUIDE

SYMPTOMS	REASON	REMEDY
Motor will not start.	Loose or diconnected plug.     Blown fuse.	Reconnect plug.     See below
Circuit breaker trips or fuse blown.	Circuit Overload.     Extension cord too long or wire size too small.     Nozzle partially blocked, causing excessive pressure.	Check that the circuit is rated 13amps or greater. Disconnect all loads on the circuit.     Use proper extension cord as recommended in section 1.     Clean nozzle as described in maintenance section.
Water or oil leaking from bottom of pump.	1. A small amount of leakage is normal.	If excessive leaking occurs contact authorised service agent.
Trigger will not move.	Gun safety lock engaged.	Release safety lock.
Unit will not stop when trigger is released.	Trigger system not operating properly.	Contact authorised service agent.
Motor running but pump not building. maximum pressure or has irregular pressure.	1. Water supply not turned on. 2. Unit has been stored in freezing temperatures. 3. Water inlet screen clogged. 4. Kink in supply hose. 5. Nozzle worn out. 6. Air in pump.	Turn on water supply.     Thaw out unit completely including hose, gun and attachments.     Clean screen as described in maintenance section.     Straighten hose.     Replace nozzle.     Let pressure washer run with gun open and lance removed until a steady stream of water is released.
	Suction or discharge valves clogged or worn out.	7.Contact authorised service agent.

#### 7. MAINTENANCE

■ WARNING! Ensure the pressure washer is switched off and unplugged from the mains electrical power supply and turned off at the mains water tap before performing any maintenance tasks.

Check, clean or renew the inlet filter (which is fitted inside the inlet connector,) after every 50 hours of use.

Use only genuine Sealaey spares for this machine. Failure to do so could result in personal injury and will invalidate the warranty.

#### 7.1. Nozzles

- 7.1.1. Ensure that both nozzles are kept clean and free of debris.
- 7.1.2. The variable nozzle should be lubricated regularly. Clogging of the nozzle causes the pump pressure to be too high and cleaning is immediately required.
- 7.1.3. Separate the nozzle from the lance by unscrewing anti-clockwise (fig.4).
- 7.1.4. Clear the nozzle of any debris.
- 7.1.5. Flush the nozzle with water.
- 7.1.6. Reconnect the nozzle to the lance. Ensure that the nozzle connection is tight.
- 7.2. Water Filter.
- 7.2.1. The pressure washer is equipped with a water inlet filter to protect the pump.
- 7.2.2. To clean the conical filter, remove quick fit connection and the filter from the pump inlet.
- 7.2.3 Backflush the filter to clean
- 7.2.4. Replace filter and quick connection immediately to prevent any ingress of foreign matter into the pump.
- 7.3. Cooling System.

The air vents, in and around the pressure washer, must be kept clean and free of any obstructions to ensure proper air cooling of the motor during operation.

- **WARNING!** Prevent water from penetrating the vents of the pressure washer to minimise the risk of damage to the machine and to reduce the risk of shock to the operator.
- 7.4. General.
  - Check unit, gun, nozzle, hose, connections and cables for damage. Immediately replace or repair with genuine parts.
- 7.5. Storage.
- 7.5.1. Store in a location where the washer will not be subject to freezing conditions.
- 7.5.2. Make sure that the pressure washer has been drained of water and remove the hoses.

Parts support is available for this product. To obtain a parts listing and/or diagram, please log on to: www.sealey.co.uk, email: sales@sealey.co.uk or phone:01284 757500.



#### **Environmental Protection.**

Recycle unwanted materials instead of disposing of them as waste. All tools, accessories and packaging should be sorted, taken to a recycle centre and disposed of in a manner which is compatible with the environment.



When the product is no longer required, it must be disposed of in an environmentally protective way. Contact your local solid waste authority for recycling information.



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