

# **170BAR HOT WATER PRESSURE WASHER** 230V

## MODEL NO: PW2500HW

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. KEEP THESE INSTRUCTIONS SAFE FOR FUTURE USE.







clothing







people, animals, live electrical

equipment or the machine itself.

SAFETY

#### **ELECTRICAL SAFETY** 1.1.

protection

WARNING! It is the user's responsibility to check the following:

gloves

- $\checkmark$ Check all electrical equipment and appliances to ensure that they are safe before using.
- Inspect power supply leads, plugs and all electrical connections for wear and damage.
- √ Ensure that the insulation on all cables and on the appliance is safe before connecting it to the power supply.
- × DO NOT use worn or damaged cables, plugs or connectors.
- ~ Ensure that any faulty item is repaired or replaced immediately by a Sealey qualified technician.
- If the cable or plug is damaged during use, switch off the electricity supply and remove from use.
- 1 Sealey recommend that an RCD (Residual Current Device) is used with all electrical products.
- Important: Ensure that the voltage rating on the appliance suits the mains power supply.
- DO NOT pull or carry the appliance by the power cable. ×
- **DO NOT** pull the plug from the socket by the cable.

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

- **IMPORTANT** The machine has to operate with clean water in order to avoid any damage to the machine. **IMPORTANT ALWAYS FLUSH** the machine through thoroughly with cold water after hot water use. **IMPORTANT ALWAYS** release any stored water after use.
- WARNING! This appliance is for outdoor use only. DO NOT use in a closed place where ventilation may be insufficient. DO NOT use indoors unless adequate ventilation is assessed by national labour authorities. Ensure that any exhaust emissions are NOT in the vicinity of air intakes.
- WARNING! always disconnect electrical and water supply on completion of every job.
- WARNING! DO NOT use the machine if a supply cord or important parts of the machine are damaged e.g. safety devices, high pressure hoses, trigger or gun.
- WARNING! The machine has been designed to be used with the detergent specified by the manufacturer. The use of other detergents may put the machine's safety at risk.
- WARNING! Wear appropriate protective clothing: eye, ear, gloves and protective clothing. DO NOT use machine within 15metres range of people unless they wear protective clothing.
- WARNING! Be aware that if the nozzle is directed towards mechanical parts containing lubricant/grease, the grease will dissolve and spread over the surrounding ground. Vehicle tyres/valves may only be cleaned from a minimum distance of 30cm, other the vehicle tyre/tyre valve could be damaged by the high pressure jet. The first indication of this is discolouration of the tyre. Damaged vehicle tyres/tyre valves can be dangerous.
- WARNING! High pressure jets can be dangerous if subject to misuse. The jet MUST NOT be directed at persons, animals, live electrical equipment or the machine itself.
- WARNING! High pressure hoses, fittings and couplings are important for the safety of the machine. Use only hoses, fittings and couplings recommended by Sealey. Protect these components against damage by avoiding their improper use and protecting them against bending, knocks and scratches.
- DO NOT leave in stand by for more than 5 minutes. Machine is fitted with Automatic Stop System.
- Switch Master switch (fig.1.1) to Off whenever it is left unattended.
- Take care to avoid damage to the electric cable. if the supply cord is damaged it must be replaced by the manufacturer or their service agent or similarly qualified persons.
- WARNING! Machine has fluid under pressure. Keep a firm hold and be prepared to take the kickback pressure. Only use the high pressure nozzle supplied with the machine.
- The machine shall NOT be used by children. Children should be supervised to ensure they DO NOT play with the appliance. ×
- DO NOT start without completely unwinding the high pressure hose. When winding/unwinding the hose take care that the machine × does not over turn.
- 1 Before winding/unwinding the hose switch the machine off and release the pressure in the hose.
- DANGER Risk of explosion DO NOT spray flammable liquids.
- Use only genuine spare parts, unauthorised parts may be dangerous and may invalidate your warranty.
- DO NOT direct the jet against yourself or others in order to clean clothes or footwear. ×
- WARNING! Unit shall not be used by children or untrained personnel.
- WARNING! Back flow preventer to be fitted. Water that has passed through a back flow preventer is considered to be non-potable.
- Disconnect from the power supply during cleaning and maintenance.

- ✓ If an extension cord is used it must be waterproof and correctly rated.
- **x DO NOT** cover the unit.
- **× DO NOT** use the machine during thunderstorms or when it is raining.
- **x DO NOT** use the machine on flammable surfaces.
- **WARNING!** Never touch the machine with wet hands or bare feet.
- DO NOT pull the mains cable or machine in order to disconnect the plug from the socket.

#### 1.3. SAFETY DEVICE

- □ WARNING! The gun is fitted with a safety catch. Whenever use of the machine is interrupted it is important to operate the safety catch to prevent accidental activation of the jet. The safety catch on the gun is not for locking the lever during operation but to prevent its accidental operation.
- **WARNING!** The machine is fitted with a motor protection device. In case of device intervention wait a few minutes or disconnect and reconnect to the mains supply. If the machine does not start again take it to an approved service agent.
- ✓ The machine must always be used/kept on a horizontal surface so that it remains safe and stable.

### 2. INTRODUCTION

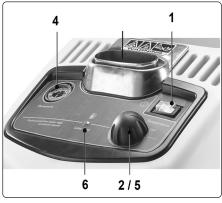
Professional, heavy-duty hot/cold water pressure washer. Ideal for a range of applications including cleaning vehicles, commercial equipment, motorbikes, patios and decking. Fitted with a heavy-duty, upgraded induction electric motor with a diesel water heater. Double motor (pump and burner) with three high durability ceramic coated pistons and aluminium axial pump. Automatic temperature regulation. Detergent tank is built-in for direct suction. Features an automatic Total Stop System (TSS) which switches the motor and heater on and off when the lance trigger is operated, prolonging the motor life. Manufactured with heavy-duty plastic wheels for transportation over rough terrain

Item

### 3. SPECIFICATION

Model no	PW2500HW
Detergent Tank:	Integrated
Effective Cleaning Power:	
Fuse Rating:	
Heating Fuel:	Diesel
Hose Length:	
Maximum Flow Rate:	
Maximum Pressure:	170bar(17MPa)(2465psi)
Motor Power:	
Motor Induction:	
Weight:	
Peak Water Temperature:	
Plug Type:	3-Pin

Power Supply Cable Length:	6m
Pump Head:	
Rated Pressure:	
Rated Water Flow:	8L/min
Supply:	230V
Vibration/Uncertainty:	1.35m/s²/0.19





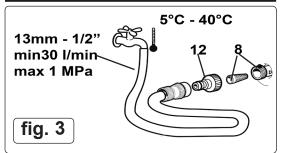
## 4. CONTENTS

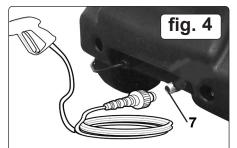


1	Electropump switch
2	Regulator burner
3	Electric cable
4	Pressure gauge
5	Burner switch
6	Low fuel light
7	High pressure water
	outlet
8	Water inlet + filter
9	Gun
10	Lance
11	High pressure hose
12	Rubber hose fitting
13	Nozzle
14	Diesel tank cap
15	Detergent tank cap

Description

### 5. PREPARATION





**NOTE:** Ensure the unit is switched in the "OFF" position and disconnected from the water supply before assembling or servicing (fig.1.1).

### 5.1. WATER ASSEMBLY

- 5.1.1. Ensure that the inlet filter (fig.3.8) is inserted into the water inlet (fig.3.8) and screw on the hose inlet fitting (fig.3.12).
- 5.1.2. Connect the water feed hose to the hose inlet fitting. The feed hose must have an internal diameter of at least 13 mm (1/2").
- 5.1.3. Connect the high pressure hose to the pump's outlet (fig.4.7).
- 5.1.4. Open the water feed tap fully. **IMPORTANT** The machine has to operate with clean water in order to avoid any damage to the machine. **IMPORTANT** Always flush the machine through thoroughly with cold water after hot water use. **IMPORTANT** Always release any stored water after use.
- WARNING! The machine is not suitable for connection to the potable water mains. The machine can only be connected to the water mains, if the mains are separated from the mains by a backflow preventer.
- **NOTE:** Feed water temperature must be between 5°<sup>I</sup>C and 40°C.

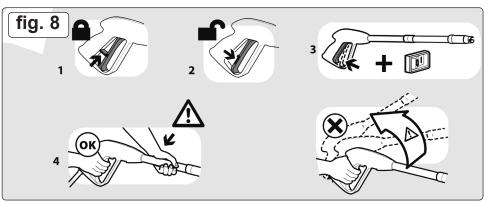
### 5.2. FUEL SIDE

- NOTE: DO NOT allow the machine to run out of fuel whilst running to avoid damaging the fuel pump.
- NOTE: Use the correct fuel indicated on the side panel (Diesel).
- 5.2.1. **DO NOT** overfill the fuel tank to.

#### 5.3. DETERGENT SIDE

- 5.3.1. Fill the detergent tank with the correct product for the washing task being undertaken. **DO NOT** overfill.
- WARNING! Only use liquid detergent, NEVER use acid or alkali products.

### 6. OPERATION



**NOTE:** Check oil level before first use. Remove outer cover and unscrew reservoir plug, located on the top of the pump. Fill to level indicated on plug. Recommended oil grade SAE15W-40.

WARNING! The gun is fitted with a safety catch. Whenever use of the machine is interrupted, it is important to operate the safety catch to prevent accidental activation of the jet. (fig.8.1, fig.8.2).

### 6.1. PRESSURE WASHING

- 6.1.1. Turn electric pump switch ON (see fig.1.1 and fig.8.3).
- 6.1.2. To wash with hot water turn the burner switch ON (fig.1.2). Rotate control knob to increase or decrease the working water temperature (fig.1.2) The burner operates when the trigger is pressed.
- 6.1.3. Unlock and squeeze the trigger (fig.8.2, fig.8.4). To avoid kickback, hold the lance firmly and steady using both hands.

#### 6.2. DETERGENT OPERATION

- 6.2.1. The adjusting head on the lance (fig.9, fig.2.13) is used to adjust the water jet pressure.
- 6.2.2. When the nozzle is adjusted to a low pressure position (fig.9), detergent delivery will occur.

### 6.3. TURNING MACHINE OFF

- 6.3.1. Turn off water supply (fig.3).
- 6.3.2. Turn off mains power.
- 6.3.3. Release trigger and apply trigger lock (fig.8.1).

### 6.4. AUTOMATIC STOP SYSTEM

6.4.1. Automatic Stop system stops the machine during the bypass phase.

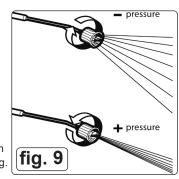
6.4.2. To start the machine it is necessary to set the switch (fig.1.1) to the on (I) 'ON' position. After that, press the trigger. The Automatic Stop System will start the machine and will stop it automatically when the trigger is released. It is advisable to put on the trigger lock on the pistol trigger whenever the machine is stopped, in order to prevent unintentional starting.
6.5. WATER SUPPLY FROM AN OPEN CONTAINER

#### 6.5. WATER SUPPLI FROM AN OPEN CONTAINE

- 6.5.1. Unscrew the coupling part for the water inlet.
- 6.5.2. Screw the suction hose with a filter (not included) onto the water connection of the unit.
- 6.5.3. Hang the filter in the container.
- 6.5.4. Vent the unit before operation:
  - unscrew the high pressure line at the high pressure outlet of the unit (fig.2.7).
  - switch on the unit and let it run until water free of bubbles emerges at the high pressure outlet.
  - switch off the unit and screw on the high pressure hose again.

IMPORTANT Failure to comply with the above conditions causes serious mechanical damage to the pump and loss of warranty cover.
 WARNING! The machine is not suitable for connection to the potable water mains. The machine can only be connected to the water mains, if the mains are separated from the mains from a backflow preventer.

- Ensure that the hose is at least Ø13mm 1/2 inch and that it is reinforced.
- WARNING! Water that has flowed through a backflow preventer is considered to be non-potable.
   IMPORTANT Only clean or filtered water should be used for intake. The delivery of the water intake tap should be equal to double of the maximum pump range.

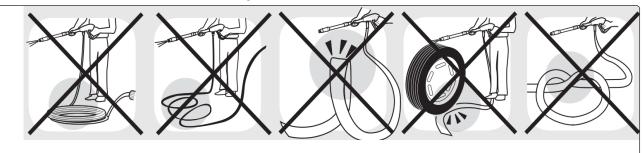


- : Minimum delivery rate 15L/min
- : Maximum intake water temperature 40°C
- : Maximum inlet water pressure 1Mpa
- Place the cleaner as close to the water supply system as possible. 6.5.5.
  - IMPORTANT The machine has to operate with clean water in order to avoid any damage to the machine.

**IMPORTANT ALWAYS FLUSH** the machine through thoroughly with cold water after hot water use.

6.5.6. IMPORTANT ALWAYS release any stored water after use.

WARNING! DO NOT restrict flow when in use. See fig.10 below.



#### MAINTENANCE 7.

WARNING! Disconnect the machine from the mains and water supply during Maintenance.

WARNING! DO NOT spray the machine with water and DO NOT use aggressive solvents as the machine could be damaged.

#### 7.1. CLEANING (fig.11)

- 7.2. Clean the machine with a with a dry cloth.
- 721 Always keep the machine clean so that cooling air can pass through the ventilation slits without obstruction.

#### **CLEANING THE WATER FILTER (fig.11)** 7.3.

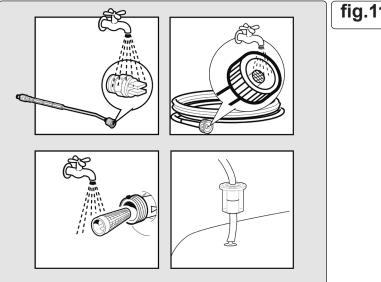
7.3.1. To ensure the pump gives good service it is extremely important to check and clean the water filter frequently. Use pliers to extract it from the pump (fig.2.8) and rinse it carefully in running water.

#### 7.4. CLEANING THE NOZZLE (fig.11)

- 7.4.1. A blockage may prevent the machine from working correctly, so it must be kept clean. Switch off the machine (see section 6), and remove the lance. Clean the nozzle under a running tap.
- 7.4.2. Rinse the lance hose in running water.

#### 7.5. **CLEANING THE FUEL FILTER (fig.11)**

7.5.1. To replace the in-line fuel filter, remove the outer covers and locate the in-line filter situated between the diesel tank and pump. Separate the filter housing and remove and replace the filter (not supplied).



#### 7.6. **ENGINE OIL**

- 7.6.1. Change the engine oil after the first 50 hours. Subsequent oil changes recommended at 500 hours.
- 7.6.2. Recommended oil grade SAE 15W-40.

#### 7.7. DESCALING

- 7.7.1. Descaling can only be carried by suitably experienced individuals.
- 7.7.2. Descaling must be carried out periodically. The interval depends on the hardness of the water being used.
- 7.7.3. The descaling product must be disposed of according to local regulations.

#### 7.8. **BOILER CLEANING**

- Boiler cleaning can only be carried by suitably experienced individuals. 7.8.1.
- 7.8.2. Boiler cleaning is to be carried out every 180 - 200 hours work.

### 8. STORAGE

- 8.1. Move the machine by using the carrying handle.
- 8.2. Store the machine and accessories in a frost free, child proof place.
- 8.3. Drain fuel and fluids before long term storage.

fig.10



Fault	Probable cause	Solution
The pump does not start when the switch is pressed.	The plug is not properly connected to the socket.	Connect the plug to the power socket correctly.
pressed.	The electrical socket is not working. The mains voltage is insufficient.	Have the electrical socket checked. Check that the system is suitable.
	The gauge of the electrical power lead is too	Refer to the section detailing the electrical
	small.	connection.
	The pump has cut out.	Turn the switch to ON while keeping the gun lever pressed;
		If the problem persists contact an authorised
		service centre.
The machine starts but no water comes out.	Pump, hoses or accessories frozen.	Allow the pump and hoses to thaw.
	No water supply.	Connect the machine to the water supply system and turn on the tap.
	Water filter fouled.	Remove and clean the filter (see
		"MAINTENANCE" section).
	Nozzle fouled.	Remove the lance from the gun and clean the nozzle with the pin provided.
The pump runs but pressurisation does not	Insufficient water.	Check that the delivery rate is at least
take place.		30 l/min.
	Suction filter fouled.	Remove and clean the filter (see
	Lance nozzle worn.	"MAINTENANCE" section). Replace the lance.
	Suction or delivery valves fouled or worn.	Contact an authorised service centre.
	Nozzle jet blocked, causing too high	Clean jet in nozzle with nozzle cleaning pin
	pressure, pump cuts out.	provided.
Uneven working pressure.	Lance nozzle fouled or dirty.	Remove the lance from the gun and clean the nozzle.
	Air in intake water.	Supply the machine with water correctly, refer
	Custion filter foulad	to section 6.
	Suction filter fouled.	Remove and clean the filter (see "MAINTENANCE" section).
	Suction or delivery valves fouled or worn.	Contact an authorised service centre.
	Gaskets worn. Pressure regulator valve gaskets worn.	Contact an authorised service centre. Contact an authorised service centre.
The motor stops suddenly.	Machine's safety overload cutout has been	Allow the motor to cool for a few minutes. If
The motor stope suddenity.	tripped.	the problem persists contact an authorised
		service centre.
	The gauge of the electrical power lead is too small.	Refer to the section detailing the electrical connection.
Water leaks from the machine.	Leaks from hose reel (if used).	Tighten the couplings; if the problem persists
	Les la francista la seconda a	contact an authorised service centre.
	Leaks from intake coupling.	Make sure that the coupling has been fitted correctly (See illustrations in the
		"INSTALLATION" section).
	Leaks from pump.	Contact an authorised service centre.
Abnormal noise.	Suction filter fouled.	Remove and clean the filter (see
	Intake water temperature too high.	"MAINTENANCE" section). Reduce the temperature below 40°C.
	Suction or delivery valves fouled or worn.	Contact an authorised service centre.
	Bearings worn.	Contact an authorised service centre.
Water in the oil.	O-ring seals worn.	Contact an authorised service centre.
The machine restarts with the gun released.	Water leak from hose - gun connection (except models with hose and gun supplied	Tighten the connection with 2 spanners.
	ready connected).	
	Air in intake water.	Supply the machine with water correctly, refer
		to section 5. Contact an authorised service centre.
	Water look from the gun	
	Water leak from the gun. Water leak from the pump.	Contact an authorised service centre.
The machine does not suck in the detergent.	-	
The machine does not suck in the detergent.	Water leak from the pump. Tank empty. Lance handgrip is on high pressure setting (if	Contact an authorised service centre. Fill the tank. Move it to the low pressure setting by pulling
The machine does not suck in the detergent.	Water leak from the pump. Tank empty.	Contact an authorised service centre. Fill the tank.

Turning on the burner switch the boiler does	No fuel	Check level in tank and check whether the
not start.		rigid suction pipe is clean
	Fuel filter is clogged	Replace the inline filter
	Fuel pump is either blocked or burnt out	Replace it
	Damaged thermostat	Replace it
	Ignition spark insufficient or totally lacking	Contact an authorised service centre
	The space among the electrodes is not	Contact an authorised service centre
	correct	



#### WEEE REGULATIONS

Dispose of this product at the end of its working life in compliance with the EU Directive on Waste Electrical and Electronic Equipment (WEEE). 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.

### ENVIRONMENT PROTECTION

Recycle unwanted materials instead of disposing of them as waste. All tools, accessories and packaging should be sorted, taken to a recycling centre and disposed of in a manner which is compatible with the environment. When the product becomes completely unserviceable and requires disposal, drain any fluids (if applicable) into approved containers and dispose of the product and fluids according to local regulations.

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 is required for any claim.

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