

#### **WARNING**

Do not spray at people/animals

Do not spray at electrical supplies/generators



This product bears the selective sorting symbol for waste electrical and electronic equipment (WEEE).

This means that this product must be handled pursuant to European Directive 2002/96/EC in order to be recycled or dismantled to minimize its impact on the environment.

For further information, please contact your local or regional authorities.

Electronic products not intended in the selective sorting process are potentially dangerous for the environment and human health due to the presence of hazardous substances.

If faults cannot be remedied, contact the *Helpline* on *020 8391 6767* helpline@hilka.co.uk

#### **GUARANTEE**

This product is guaranteed for domestic use for a period of 12 months against faulty manufacture or materials. This guarantee does not affect the statutory rights of the consumer. In the event of any problem occurring please contact our Helpline at the number above for advice. This product is not guaranteed for **HIRE** purposes.

Manufactured under license for: HILKA PRO IMPORTS

1 ROEBUCK PLACE, ROEBUCK ROAD, CHESSINGTON, SURREY KT9 1EU

RAC-HP101 - Issue 1 - R.W. 29-08-08



# 2 in 1 Pressure Washer with Wet & Dry Vac RAC-HP101





Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist.

Check with your local authority or retailer for recycling advice.

## **SECTION 1 - PRESSURE WASHER**

#### SAFETY AND WARNING INFORMATION

#### **General Safety Rules**

WARNING: Read the instructions fully before using the product for the first time. Failure to follow the instructions may result in fire, electric shock and or serious injury. We recommend the user wears safety equipment during use. We recommend the product be used with a RCD (Residual Current Device).

#### Please Retain These Instructions For Future Use And Referral

- This unit must not be used by children or untrained personnel.
- When operating the unit in high pressure mode the lance may cause kickback. Therefore please ensure that you hold the spray gun firmly. When using the unit we recommend that other people are at least 10m away from the working area.
- High-pressure lets can be dangerous if misused. The let MUST NOT be directed at yourself. other people, animals, live electrical equipment or the pressure washer itself. The trigger gun safety lock prevents the trigger from accidentally being engaged. This safety feature does not lock trigger in the 'on' position.
- Do not use the pressure washer if the supply cord or other important parts are damaged (e.g. high pressure lance or hoses). Never carry your pressure washer by the cord.
- Do not disconnect the high-pressure hose whilst the system is under pressure. This system is capable of producing 1500PSI. To avoid rupture and injury, do not operate this pump with components rated less than 1500PSI working pressue (including but not limited to spray guns, hose and hose connections.)
- Do not use acids or flammable liquids in the machine.
- · When using a pressure washer always ensure that your water connection is protected by a backflow preventer (as per water byelaws). This will avoid possible contamination of your water supply. Use cold water feed only.
- Protect the unit against freezing, avoid storing the machine where it may be susceptible to frost.
- Prior to starting the pressure washer in cold weather, be sure ice has not formed in any part of the equipment.
- The unit must continuously run with water. Dry running will cause serious damage to the seals.

**IMPORTANT:** The pressure washer is equipped with an auto stop device. When the trigger is released it will open the power circuit to the motor and cause the pressure washer motor to stop. The motor will resume when the trigger is pulled. The pressure washer is also equipped with a main power ON/OFF switch located on the unit. It should always be moved to OFF position when the pressure washer is not being used.

This product is a class II product-double insulated. No means of grounding (to earth) is provided on this product nor should it be added. Only a qualified person should carry out servicing. If an extension lead is to be used with this product, please ensure:

Use only extension cords that are intended for outdoor use.

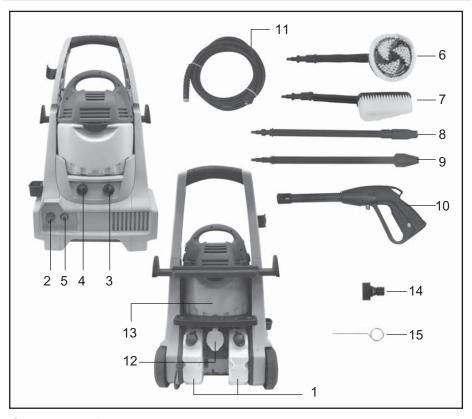
Completely unwind the cable from the drum to allow for full current rating of the extension cable. To reduce the risk of electrocution, keep all connections dry and off the ground. Do not touch plug with wet hands

Hose: Water supply hose must be at least \( \frac{1}{2} \) in diameter with a minimum recommended length of 7.5 meters and be fitted with a suitable coupling that matches the male quick fit connector.

Use only original spare parts from the manufacturer or approved by the manufacturer.

- WARNING: High pressure hoses, fittings and couplings are important for the safety of the appliance.
- Use only hoses, fittings and couplings recommended by the manufacturer

## COMPONENTS



## **Component List**

- 1. Detergent containers
- 2. Water supply inlet
- 3. Control switch
- 4. Detergent supply switch
- 5. High pressure outlet
- 6. Rotary brush
- 7. Fixed brush
- 8. Adjustable lance

- 9. Turbo lance
- 10. Trigger gun
- 11. High pressure hose
- 12. Vac socket
- 13. Wet & dry vac
- 14. Quick fit connector (pre-fitted)
- 15. Cleaning needle

## **Technical specification**

Rated voltage: Rated power Rated frequency Protection class Degree of protection Permissible pressure Rated pressure Supply water temperature Min supply flow rate Nozzle spray angle Max output flow rate

220-240V AC 1800 Watt 50 Hz Class I IPX5 150 Bar / 15 Mpa

100 Bar / 10 Mpa 0 - 40 °C 10.0L/min 0-60 degrees

5.0L/min

Cable length 5m Hose length 5m Noise Value 96 Lwa Noise Value 92 Lpa

-1-

## **ASSEMBLY**

Before carrying out any assembly or disassembly of the unit please ensure that the unit is not connected to the electrical supply.

#### Assembling your machine

- 1. Connect the high pressure connection hose (11) to the high pressure outlet (5) as shown in Fig.1.
- Connect the trigger gun (10) to the high pressure hose using a 17mm spanner (not supplied) Fig.2.
- 3. Fit the adjustable lance (8) to the trigger gun by locating the lugs and pushing in, then turn clockwise to lock in position.
- 4. Connect your garden hose to the quick fit connector using a standard female hose connector (not provided) Fig.3.

Note: Do not fit lances when the power is on.



Fig 1





Fig 2

Fig 3

## **OPERATING INSTRUCTIONS**

#### Note:

Before connecting to the mains power supply please ensure that the control switch is in the off position (Fig.4) and the water supply is connected and is turned on.

Running the pressure washer without any water supplied to it will damage the pump.



Fig 4

#### Instructions for use

- a) With the unit fully assembled, ensure that the unit is switched OFF and is connected to the mains supply and the water supply. Pull the trigger a few times to expel any air trapped in the system.
- b) Ensuring that the trigger is released, turn control switch to 'ON Pressure Washer' position. The unit is now ready to operate by pulling the trigger.

#### Note:

The motor only runs when the trigger is operated.

When the pressure washer is not in use, actuate the gun lock for safety reasons (Fig 5). Switch the unit OFF when not in use for extended periods of time.

Never operate the pressure washer without the water supply connected and turned on.

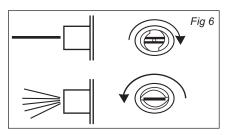


## **Helpful Hints**

Before using remove any objects which could create a hazard.

Ensure that all doors and windows are closed (where appropriate).

The adjustable lance allows you to use a variety of spray patterns from a fan to a pencil jet (Fig 6). When using the pressure washer to clean decking, patios, vehicles, etc., always start by using the fan spray. Begin spraying at an angle of 45° and from a minimum of 30cm away to avoid damaging the surface of the material to be cleaned.



The spray is adjustable from a pencil jet to a fan by turning the nozzle as shown (Fig 6).

## WARNING: Do not adjust the nozzle while the trigger is squeezed.

The pressure of the spray on the surface you are cleaning increases as you move the nozzle closer to the surface. We recommend that for most cleaning applications a 45° spray angle should be used to avoid damaging the surface being cleaned. Spraying directly head-on tends to cause dirt particles to embed in the surface. The turbo lance is a fixed nozzle, which effectively increases the area of the high pressure water jet and decreases the time required to clean larger areas like patios. The turbo nozzle provides a circular water pattern as it sprays high-pressure water. The spray pattern on this nozzle is not adjustable. The circular spray action does heavy cleaning in less time.

-3-

## **Pre-operation**

#### ADJUSTING FAN PATTERN

The angle of spray coming out of the lance may be adjusted on some lances by rotating the nozzle. This will vary the spray pattern from approximately a 0° narrow high impact stream to a 60° wide fan spray. (Fig 7)

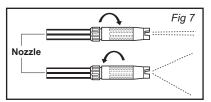


Figure 7 – Adjusting nozzle for fan pattern (not applicable on some nozzle)

A narrow stream has high impact force on the cleaning surface and results in maximum deep cleaning in a concentrated area. However, this narrow high impact spray must be used cautiously, as it may damage some surfaces.

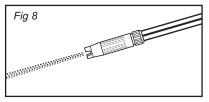


Figure 8 – Narrow high impact stream

A wide fan pattern will distribute the impact of the water over a larger area, resulting in excellent cleaning action with a reduced risk of surface damage. Large surface areas can be cleaned more quickly using a wide fan pattern.

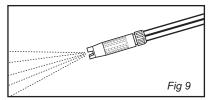


Figure 9 – Wide fan pattern

## Low/High Pressure Adjustable Lance

## **High Pressure Setting:**

Please make sure the trigger is released and no water is coming out, then push the spray nozzle in (Fig.11) to set to high pressure.

## Low pressure Setting:

Please make sure the trigger is released and no water is coming out, then pull the spray nozzle in (Fig.11) to set to low pressure.

**CAUTION:** Selection of high or low pressure must be carried out with the trigger off.

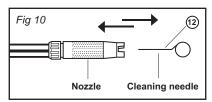


Fig 11

#### **NOZZLE CLEANING INSTRUCTIONS**

A clogged or partially clogged nozzle can cause a significant reduction of water coming out of the nozzle and cause the unit to pulsate while spraying. To clean out the nozzle:

- Turn off and unplug the unit.
- Turn off the water supply and relieve any pressure within the unit by squeezing the trigger 2-3 times
- Separate the lance from the gun.
- Rotate the nozzle to the narrow stream setting. This opens up the fan blades.
- Using the cleaning needle (12) or an unfolded paper clip, insert the needle into the nozzle hole and move it back and forth until the debris is dislodged (Fig 10).



 Remove additional debris by backflushing water through the nozzle.
 To do this, place the end of a garden hose (with water running) to the end of the nozzle for 30-60 seconds.

## HOW TO AVOID DAMAGING SURFACES

Damage to cleaning surfaces occurs because the impact force of the water exceeds the durability of the surface. Never use a narrow high impact stream or a turbo/ rotary nozzle on a surface that is susceptible to damage. Avoid spraying windows with a narrow high impact stream or turbo nozzle as this may cause breakage. The surest way to avoid damaging surfaces is to follow these steps:

- 1. Before triggering the gun, adjust the nozzle to a wide fan pattern.
- Place the nozzle approximately 4-5 feet from and angled at 45 degrees to the cleaning surface and begin spraying.
- Vary the fan pattern spray angle and the distance to the cleaning surface until optimum cleaning efficiency is achieved without damaging the surface.

-5-

#### **TURBO NOZZLE**

A turbo nozzle, sometimes referred to as a rotary nozzle, is a very effective tool that can significantly reduce cleaning time. The turbo nozzle combines the power of a narrow high impact stream and the efficiency of a 25 degree fan pattern. This swirls the narrow high impact stream into a cone shape that cleans a larger area.

**CAUTION:** Since a turbo nozzle uses a narrow high impact stream, only use it in applications where the cleaning surface cannot be damaged by a narrow high impact spray. Note: The turbo nozzle is NOT adjustable and cannot be used to apply detergent.

## 

When cleaning painted surfaces, ensure that the paint is sound and there are no signs of rusting or blistering.

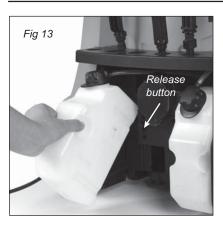
It is your responsibility to check the suitability of the surface to be cleaned. Hilka Pro Imports cannot be held responsible for any damage caused.

#### WATER INLET FILTER

The water inlet filter must be inspected regularly, so as to avoid blockage and restriction in the water supply to the pump (Fig 12). The inlet filter is located in the quick fit connector (14).



Fig 12



### **USING DETERGENT**

The detergent containers can be removed for filling/cleaning by pressing the release button (Fig 13). Add detergent to each container and replace cap. Select detergent tank using the detergent supply switch (4). Press the trigger to start spraying.

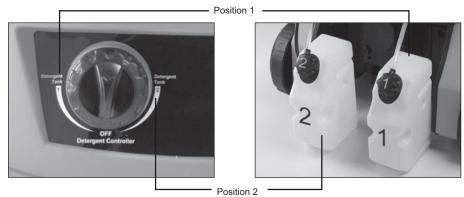
NOTE: Detergents can only be used in low pressure settings:

- -with adjustable lance in low pressure setting (Fig 11)
- -with fixed brush
- -with rotary brush

The detergent will not flow in high pressure settings:

- -with adjustable lance in high pressure setting (Fig 11)
- -with turbo lance

## **Detergent Tank Selection**





#### **DETERGENTS**

The use of detergents can dramatically reduce cleaning time and assist in the removal of difficult stains. Some detergents have been customized for pressure washer use on specific cleaning tasks. These detergents are approximately as thick as water. The use of thicker detergents, such as washing-up liquid, will clog the chemical injection system and prevent the application of the detergent.

The cleaning power of detergents comes from applying them to a surface and giving the chemicals time to break down the dirt and grime. Detergents work best when applied at low pressure. Follow this with a high pressure rinse for best cleaning results. On vertical surfaces, apply the detergent starting at the bottom and work your way upward. This will prevent the detergent form sliding down and causing streaks. High pressure rinsing should also progress from the bottom upwards. On particularly tough stains it may be necessary to use a brush in combination with detergents and high pressure rinsing.

## Operation

The following cleaning procedure will help you organize your cleaning task and ensure that you achieve the most beneficial results in the shortest amount of time.

Remember to use the spraying/
cleaning techniques previously listed.

## 1. Surface preparation

It is important to prepare the surface that is to be cleaned. This is done by clearing the area of furniture and making sure that all windows and doors are closed tight. In addition, you should make sure that all plants and trees adjacent to the cleaning area are protected by a drop cloth. This will ensure that your plants won't be sprayed by the detergents.

#### 2. Initial High Pressure Rinse

The next step is to spray the cleaning surface with water to clear off any dirt or grime that may have collected on the surface. This will allow your detergent to attack the deep down dirt that has worked its way into the cleaning surface.

Before triggering the gun, adjust the nozzle to a wide fan pattern and slowly adjust to the desired spray pattern. This will help you avoid applying too much concentrated spray to the surface which could cause damage.

## TIPS FOR EXTENDING THE LIFE OF YOUR PRESSURE WASHER

- 1. Never operate the unit without water.
- This pressure washer is not designed to pump hot water. Never connect it to the hot water supply – this will significantly reduce the life of the pump.
- Only use detergents specifically designed for pressure washers.
   Other types of detergent may cause internal damage to the unit, as might chemicals such as bleach, washing-up liquid, etc.
- Never operate the unit for more than one (1) minute without spraying water. Otherwise, the resulting heat buildup will damage the pump.
- 5. Winter Storage:

For storage during the winter months we recommend the use of a solution of 50/50 mix of antifreeze and water. This will keep the pump from freezing and getting damaged and will protect the internal components. Method: You will need a length of garden hose and a funnel. Attach the garden hose to the inlet and pour the antifreeze into the unit via the funnel. Switch the unit on for a few seconds to allow the solution to flow through the system. Disconnect your pressure washer from the mains power, then pack away in your storage area.

**WARNING:** Before reusing completely flush the unit out with plain water.

Anti-freeze can damage paintwork so you must ensure there is no anti-freeze left in the system before using it again.

-9-

## **Troubleshooting chart**

Symptom	Possible cause (s)	Corrective Action(s)
Pressure washer does not start	Unit is pressurized     Poor plug connection or faulty     outlet socket	Squeeze trigger on gun     Check plug, socket
	Extension cord too long or undersized	3. Remove extension cord
	4. Main voltage supply too low	Check that main supply voltage is adequate
Not reaching operating pressure	Water inlet filter is clogged     Pump sucking air from hose connections	Clean water inlet filter     Check that connections     and locking ring are     properly tightened
	3. Low supply water flow rate	3. Check supply water flow rate
Fluctuating pressure	1. Pump sucking in air	Check that hoses and connections are tight
	2. Clogged nozzle	Clear blockage with cleaning needle (see page 5)
Motor stops suddenly	Extension cord too long or undersized	1. Remove extension cord
	2. No mains voltage supply	2. Check mains voltage supply
No detergent suction	Using high pressure setting     Not enough detergent	Use low pressure setting     Add detegent up to min level

## Plug fitting

Note: If a moulded plug is fitted and has to be removed take great care in disposing of the plug and severed cable, it must be destroyed to prevent engaging into a socket. If the supply cord is damaged it must be replaced by a qualifued person in order to avoid hazard. Your pressure washer is supplied with a fitted plug, however if you should need to fit a new plug follow the instruction below. If in doubt consult a qualified electrician.

#### **IMPORTANT**

The wires in the mains lead are coloured in accordance with the following code: Blue - Neutral Brown - Live

As the colours of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals

in your plug, proceed as follows:

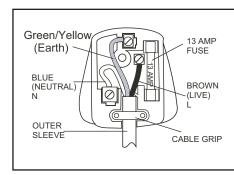
The wire which is coloured blue must be connected to the terminal which is marked with N .

The wire which is coloured brown must be connected to the terminal which is marked with the letter L .

The wire which is coloured green/yellow must be connected to the terminal marked with the letter E or 

...

If a 13 AMP (BS 1363/A) plug is used, a 13 AMP fuse must be fitted, or if any other type of plug is used a 13 AMP fuse must be fitted, either in the plug, or adaptor or on the distribution board.



PRESSURE WASHER ONLY

## **EC DECLARATION OF CONFORMITY**

EQUIPMENT:

1800W Pressure Washer /Wet & Dry Vac

MODEL NUMBER:

RAC-HP101

EU REPRESENTATIVE: Hilka Pro Imports

ADDRESS:

1 Roebuck Place Roebuck Road Chessington Surrey, KT9 1EU.

United Kingdom

The Technical documentation is kept by: - as above

This is to certify that the aforementioned equipment fully conforms to the protection requirements of the following EC Council Directives on the approximation of the laws of the member states relating to:

Applicable Directives:

2000/14/EC

Noise

89/336/EEC EMC

73/23/EEC 93/68/EEC LVD

And in consideration of the following standards:

EN 50366: 2003+A1

EN 55014-1:2000+A1+A2

EN 55014-2: 1997+A1

EN 61000-3-2:2000 + A2

EN 61000-3-3: 1995+A1 +A2

EN 60335-2-2:2003 +A1 +A2

EN 60335-1: 2002 +A1 + A11 + A12 + A2

**EN ISO3744** 

We declare that the above equipment conforms to the requirements of the Directive 2000/14/EC

Sound power level:

Measured

91 dB (A)

Guaranteed 93 dB (A)

The Conformity assessment procedure followed was in according with annex V of Directive 2000/14/EC

This declaration ceases to be valid should there be any modifications or changes to the machine, outside the details in the Instruction Booklet; made by the user.

Signed:

Position:

Director

(Responsible person)

Name: R.J. Satchell

Date of issue:

11/05/08

## **SECTION 2 – WET & DRY VAC**

### SAFETY AND WARNING INFORMATION

## **General Safety Rules**

WARNING: Read the instructions fully before using the product for the first time. Failure to follow the instructions may reslut in fire, electric shock and or serious injury.

We recommend the user wears safety equipment during use.

We recommend the product be used with a RCD (Residual Current Device).

#### Please retain these instructions for future use and referral.

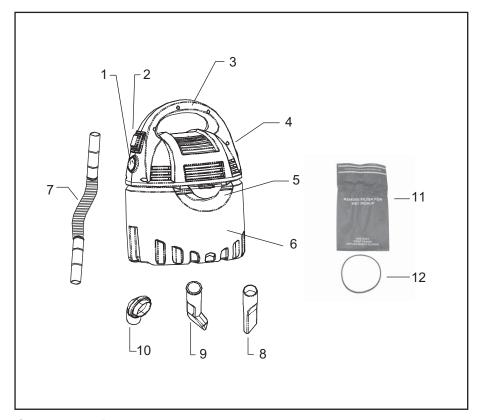
- Don't use this machine to clean up cement, gypsum powder or other substances likely to block
  the filter. A blocked filter can cause damage to the motor. If these types of substances are
  blocking your filter, clean immediately.
- Do not bend, tread on or pull the hose. If the hose is damaged relpace it immediately.
- Do not allow large objects to become lodged in the air inlet or hose. If a large object does become lodged, turn off the machine immediately or the motor may be damaged. The machine must be unplugged before any attempt is made to dislodge the blockage.
- Do not allow too much water to be absorbed when cleaning wet debris. Empty the debris drum as soon as it is full.

## $\triangle$

## WARNING: Do not at any time invert the machine when it contains wet debris!

- Do not expose this machine to extreme temperatures.
- Clean with a damp cloth only.
- When removing the mains plug from a socket grip the plug itself, do not pull on the cable.
- If the cable is damaged do not use the machine.
- Repairs should only be carried out by a qualified person.
- To reduce the risk of electrocution, keep all connections dry and off the ground.
- Do not touch plug with wet hands.

## COMPONENTS



## Component List

- 1. Air inlet
- 2. ON/OFF switch
- 3. Handle
- 4. Air outlet
- 5. Locking catches
- 6. Debris drum
- 7. Hose

- 8. Crevice tool
- Square nozzle
   Round brush
- io. Round brus
- 11. Filter bag
- 12. Rubber band

## Technical specification

Rated voltage: 220-240V AC
Rated power: 800W
Rated frequency: 50Hz
Protection class: Class II
Degree of protection: IPX5
Cable length: 3m
Hose length: 1.2m

-13-

## **OPERATION**

NOTE: Your new RAC Wet & Dry Vac can be powered from a mains socket or from the 'Vac Socket' on the rear of the pressure washer.

If using the 'Vac Socket' please follow these instructions:

- 1. Before connecting the pressure washer to the mains supply ensure that the 'Control Switch' is in the OFF position.
- 2. Connect the pressure washer to a mains supply.
- 3. Check that the Vac ON/OFF switch is in the OFF position.
- 4. Plug the Vac cable into the 'Vac Socket' at the rear of the pressure washer.
- 5. Turn the 'Control Switch' to 'ON Vac Socket' position.
- 6. Use the ON/OFF switch on the Vac to start vacuum cleaning.

#### **Dry Debris**

Your RAC vacuum cleaner is fitted with a dry filter which must be used when cleaning dry debris.

- 1. Ensure that the dry filter (11) is fitted.
- 2. Attach the debris drum to the motor housing and lock in place via the catches on either side.
- 3. Push one end of the hose into the air inlet.
- Attach required accessory (round brush, crevice tool, square nozzle) to the other end of the hose.
- 5. Push ON/OFF button to start.
- 6. Push ON/OFF again to stop.
- 7. If the drum is full, unplug the machine, release the drum via the catches either side and empty. The drum should be emptied and cleaned with a damp cloth and allowed to dry naturally after each use. The dry filter should be washed regularly and thoroughly dried before reusing.

#### **Wet Debris**

Your RAC vacuum cleaner can also be used to clean up water spills or wet dirt/dust.

- 1. Ensure that the dry filter (11) is removed.
- 2. Attach the debris drum to the motor housing and lock in place via the catches on either side.
- 3. Push one end of the hose into the air inlet.
- Attach required accessory (crevice tool, square nozzle) to the other end of the hose. NOTE: Do not use the round brush on wet debris.
- 5. Press ON/OFF switch to start.
- 6. Press ON/OFF switch again to stop.
- 7. If the debris drum is full, unplug the machine, release the drum via the catches either side and empty. Once finished with, the drum should be emptied and cleaned with a damp cloth and allowed to dry naturally before reusing.
- 8. When cleaning water spills, ensure that the drum is emptied as soon as it reaches full capacity. When full remove the hose end from the spillage and then turn off the machine. The unit should be unplugged before the debris drum is removed and the water emptied.

NOTE: When the drum reaches full capacity you will be able to hear a drop in noise pitch of the machine.



**WARNING:** It is not unusual for any excess water to be expelled from the air outlet when the drum is full.

**WARNING:** Do not at any time invert the vacuum cleaner whilst it contains wet debris!

## **Troubleshooting chart**

Symptom	Possible cause(s)	Corrective Action(s)
Vac does not start	Poor plug connection or faulty outlet socket	1. Check plug, socket
	<ol><li>Extension cord too long or undersized</li></ol>	Remove extension cord
	3. Main voltage supply too low	Check that main voltage supply is adequate
Suction power reduced	Blockage in hose, accessory, air inlet	1. Clear blockage
	Debris drum full     Blocked/dirty filter	<ol> <li>Empty debris drum</li> <li>Clean filter</li> </ol>

## Plug fitting

Note: If a moulded plug is fitted and has to be removed take great care in disposing of the plug and severed cable, it must be destroyed to prevent engaging into a socket. If the supply cord is damaged it must be replaced by a qualified person in order to avoid hazard. If you should need to fit a new plug follow the instruction below. If in doubt consult a qualified electrician.

#### **IMPORTANT**

The wires in the mains lead are coloured in accordance with the following code: Blue - Neutral Brown - Live

As the colours of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals

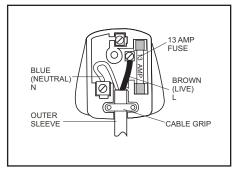
in your plug, proceed as follows:

The wire which is coloured blue must be connected to the terminal which is marked with N .

The wire which is coloured brown must be connected to the terminal which is marked with the letter L.

No connection is to be made to the earth terminal of the plug.

If a 13 AMP (BS 1363/A) plug is used, a 13 AMP fuse must be fitted, or if any other type of plug is used a 13 AMP fuse must be fitted, either in the plug, or adaptor or on the distribution board.



WET & DRY VAC ONLY

-15-