

# RAC

## 2000W Induction Motor Pressure Washer RAC-HP214



Always Read Instruction Manual  
Retain for Future Reference

# SAFETY AND WARNING INFORMATION

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Read and retain these instructions for future reference.

## 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) with a trip current of 30mA.

Disconnect from the electrical power supply before carrying out any user maintenance.

- 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 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.
- 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 jets can be dangerous if misused. The jet 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 1800PSI. To avoid rupture and injury, do not operate this pump with components rated less than 1800PSI working pressure (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.
- The water supply hose must be at least 12.5mm ( 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. Only use hoses, fittings and couplings recommended by the manufacturer.

**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 I product, Only a qualified person should carry out servicing.

If an extension lead is to be used with this product, please ensure:

- Use only extension leads that are intended for outdoor use and the plug and socket are of a watertight construction.
- Completely unwind the cable from the drum to allow for full current rating of the extension lead.
- To reduce the risk of electrocution, keep all connections dry and off the ground.
- Do not touch the plug with wet hands

**Warning:** Inadequate extension leads can be dangerous.

# COMPONENTS



## Component List

- |                         |                              |
|-------------------------|------------------------------|
| 1. Detergent container  | 10a. Lance rest              |
| 2. Water supply inlet   | 10b. Lance holder            |
| 3. ON/OFF switch        | 11. Adjustable lance         |
| 4. High pressure outlet | 12. Cleaning needle          |
| 5. Trigger gun          | 13. Compact patio cleaner    |
| 6. High pressure hose   | 14. Quick connector (Female) |
| 7. Rotary brush         | 15. Quick connector (Male)   |
| 8. Fixed brush          | 16. Cable holder             |
| 9. Lance extension      | 17. Turbo lance              |

## Technical specification

Rated voltage: 220-240VAC ~ 50Hz  
 Rated power: 2000W  
 Protection class: I  
 Degree of protection: IPX5  
 Permissible pressure: 16.5 Mpa / 165 Bar  
 Rated pressure: 11.0 Mpa / 110 Bar  
 Inlet pressure: 1.5 - 4 Bar

Supply water temperature: 0-50°C  
 Nozzle spray angle: 0 – 90 degree  
 Max output flow rate: 6.0L/min  
 Net weight (machine only): 13.2Kg  
 Cable length: 5m  
 Hose length: 6m  
 Noise value: 89 db Lwa  
 Noise value: 84 db Lpa

# UN-PACKING AND ASSEMBLY

Unpack the box carefully retaining all of the packaging until you have checked the contents to the list on page 2.

Your pressure washer has been factory tested. Due to this, you may find that there is a residue of water inside the unit.

## Assembling

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

1. Lance rest (10a) and the lance holder (10b) are supplied loose and needs to be fitted, Fig 1. There is a screw to hold each in place.
2. Connect the trigger gun (5) to the high pressure hose using two 17mm spanners (not supplied), Fig 2. Note: Using a spanner on the trigger gun connector and a spanner on the hose connector ensures that you do not stress the internal components when tightening (spanners not included).
3. Remove the black protection cover from the high pressure outlet and connect the high pressure hose (6) to high pressure outlet (4) as shown in Fig 1.
4. Fit the lance extension (9) into the trigger gun (5) by pushing the lance extension into the trigger gun and locating the lugs, at the same time turn clockwise to lock into position, Fig 3.

Fig 1



5. Fit the adjustable lance (11) into the lance extension (9) by pushing the adjustable lance into the lance extension and locating the lugs, at the same time turn clockwise to lock into position.

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

Note: The adjustable lance (11) and the turbo lance (17) cannot be fitted into the trigger gun (5) and must be used in conjunction with the lance extension (9).

6. Remove the black protection cover from the water inlet supply. Fit the quick connector male part (15) to the water inlet supply, as per Fig 4 and make sure it is fully tightened (do not over tighten).
7. Connect the quick connector female part (14) to your garden hose. Connect your garden hose to the washer by pushing on the female part (14) to the male part (15) until it clicks into position as per Fig 5. To remove the hose, pull back the orange collar.
8. Connect your hose to the water supply as per fig 6. Always ensure you have a good water supply & there are no kinks in the hose.

Fig 2



Fig 3

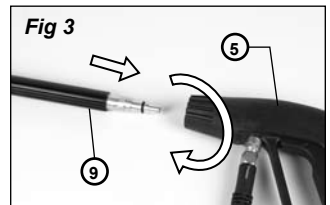


Fig 4



Fig 5

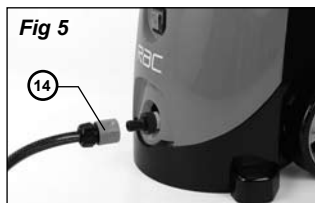


Fig 6

**Mains supply hose adaptor, not supplied**



# OPERATING INSTRUCTIONS

## Note:

Before connecting to the mains power supply please ensure that the ON / OFF switch is in the OFF position (fig 7) and the water supply is connected and is turned on. Running the pressure washer without any water supplied to it will damage the pump.

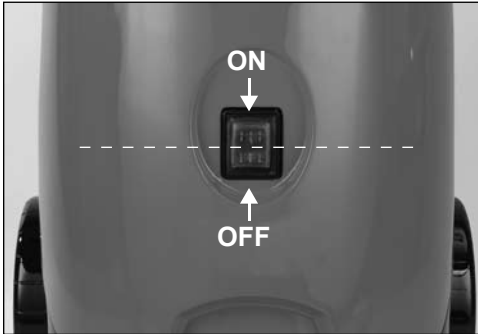


Fig 7

## Instructions for use

- Once the unit is 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.
- Ensuring that the trigger is released, switch ON the pressure washer. 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, we recommend that you lock the gun using the trigger lock for safety reasons (Fig 8). Switch the unit OFF when not in use for extended periods of time and expel pressurised water in the unit by operating the trigger gun while the unit is in the OFF position.



Fig 8

## Helpful Hints

Before starting cleaning remove any objects which could cause 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 9).

When using the pressure washer to clean decking, patios, vehicles, etc., always start by using the fan spray and begin spraying from a minimum 30cm away to avoid damaging the surface of the material to be cleaned.

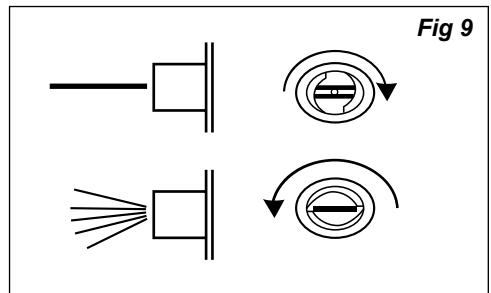


Fig 9

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.

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

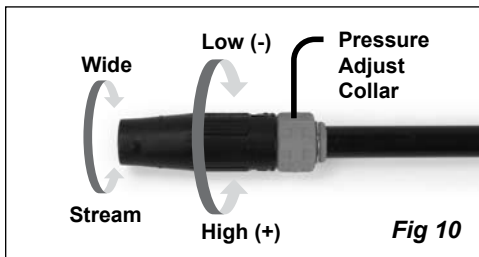
## ADJUSTABLE LANCE

### Low pressure Setting:

Make sure the trigger is released and no water is coming out, then turn the pressure adjust collar of the spray nozzle clockwise (Fig 10) to set to low pressure. This setting is used for releasing detergent from the detergent dispenser in a large volume.

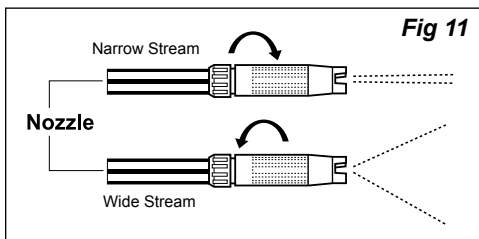
### High Pressure Setting:

Note: When the unit is in the high pressure setting, the detergent cannot be released. Make sure the trigger is released and no water is coming out, then turn the pressure adjust collar of the spray nozzle anti-clockwise (Fig 10) to set to high pressure. This setting is for obtaining a pencil or a fanned jet at high pressure.



### ADJUSTING FAN PATTERN

The angle of spray coming out of this lance may be adjusted by rotating the nozzle. This will vary the spray pattern from approximately a 0° narrow impact stream to a 60° wide fan spray. (See Fig 11)



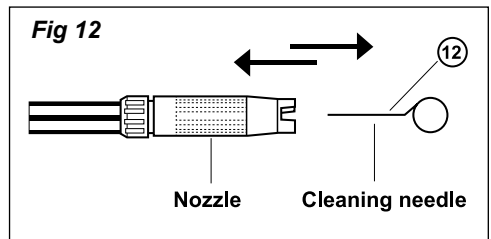
A narrow stream has high impact force on the cleaning surface and results in maximum deep cleaning in a concentrated area. However, this narrow high impact spray must be used cautiously, as it may damage some surfaces.

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.

### 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 or totally stop 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 12).
- Remove additional debris by back-flushing 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.



## Brushes

Your RAC pressure washer is supplied with a rotary brush and a fixed brush (see fig 13). Both have soft bristles and can be used in conjunction with the detergent dispenser to apply detergent to the surface you are cleaning. These are ideal for cleaning car bodywork, windows etc. This is a low pressure setting.

The brushes connect to the lance extension (9). There is an adapter with each brush; you must fit it before connecting to the lance extension.

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

Note: The brushes cannot be fitted into the trigger gun (5) and must be used in conjunction with the lance extension (9).

## WARNING

**Fig 13**



Ensure the brushes are clean and free from debris.

Ensure the surface to be cleaned is sound and will not be damaged by the brushing action. Test on an inconspicuous area first.

Any grit or debris on the surface to be cleaned or in the brush can cause damage to that surface. Please ensure both are checked prior to cleaning.

## Patio Cleaner

Your RAC pressure washer is supplied with a compact patio cleaner (13). Detergent cannot be dispensed while using the patio cleaner. If you require detergent to be dispensed prior to using the patio cleaner please use the adjustable lance first, set on its low pressure setting, to dispense the detergent.

The patio cleaner (13) connects to the lance extension (9) then fit the lance extension into the trigger gun (5)

Since a patio cleaner uses a high impact stream, only use it in applications where the cleaning cannot damage the surface by a high impact

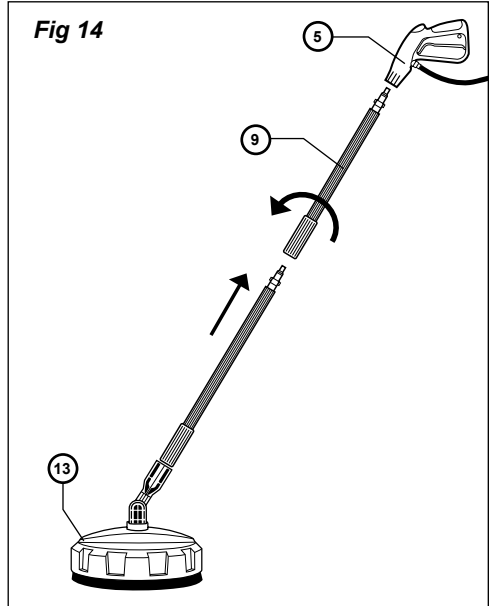
spray. Always test on a inconspicuous area first to ensure you do not damage the surface.

Note: the patio cleaner is not adjustable and cannot be used to apply detergent

Note: Do not fit the patio cleaner when the power is on.

Note: The patio cleaner cannot be fitted into the trigger gun (5) and must be used in conjunction with the lance extension (9) (see fig 14).

**Fig 14**



## 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. Always test on an inconspicuous area first to ensure you do not damage the surface.

Note: The turbo nozzle is NOT adjustable and cannot be used to apply detergent.

## 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.

Follow these simple steps to avoid damaging your surfaces:

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

## 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 15).

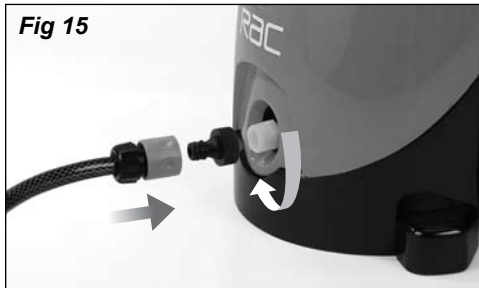


Fig 15

## USING DETERGENT

Add detergent to the container and replace the cap. Do not overfill.

Set the adjustable lance at low pressure (Fig 10). Depress the trigger to spray detergent.

Note; the detergent does not work on high pressure.

## 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 for 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 from 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.



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## TIPS FOR EXTENDING THE LIFE OF YOUR PRESSURE WASHER

1. Never operate the unit without water.
2. 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.
3. 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.
4. Never operate the unit for more than one (1) minute without spraying water. Otherwise, the resulting heat build up 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, and then pack away in your storage area.

**WARNING:** Before reusing completely flush the unit out with clean water. Anti-freeze can damage paintwork so you must ensure there is no antifreeze left in the system before using it again.

## IMPORTANT

This appliance must be earthed.

The wires in the mains lead are coloured in accordance with the following code:

Blue - Neutral Brown - Live Green and Yellow - Earth 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:

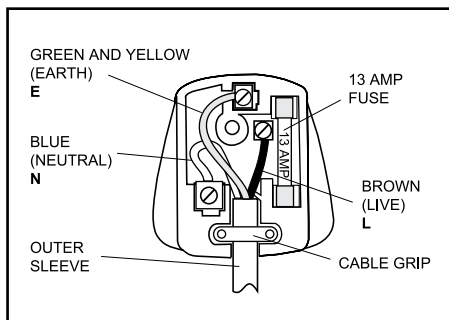
The wire which is coloured blue must be connected to the terminal which is marked with **N**.

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 and yellow must be connected to the terminal which is marked with the letter **E**.

If a 13 AMP (BS 1363) 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.

**Note:** If a moulded plug is fitted and has to be removed take great care in disposing



## Troubleshooting chart

<p><b>Pressure washer does not start</b></p> <ol style="list-style-type: none"> <li>1. No mains supply.</li> <li>2. Poor plug connection or faulty outlet socket.</li> <li>3. Unit is pressurized.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check socket is switched on. Check fuse in plug.</li> <li>2. Check plug connections and outlet socket.</li> <li>3. Squeeze trigger on gun.</li> </ol>
<p><b>Pump does not reach necessary pressure</b></p> <ol style="list-style-type: none"> <li>1. No pressure</li> <li>2. Water inlet filter is clogged</li> <li>3. Pump sucking air from hose connections</li> </ol>	<ol style="list-style-type: none"> <li>1. Ensure that you have a accessory attached.</li> <li>2. Clean water inlet filter</li> <li>3. Check that connections and locking ring are properly tightened</li> </ol>
<p><b>Fluctuating pressure</b></p> <ol style="list-style-type: none"> <li>1. Pump sucking in air</li> <li>2. Clogged nozzle</li> </ol>	<ol style="list-style-type: none"> <li>1. Check that hoses and connections are tight</li> <li>2. Clear blockage with cleaning needle (see page 5)</li> </ol>
<p><b>No detergent suction</b></p> <ol style="list-style-type: none"> <li>1. Using high pressure setting</li> <li>2. Not enough detergent</li> </ol>	<ol style="list-style-type: none"> <li>1. Use low pressure setting (see ADJUSTABLE LANCE)</li> <li>2. Add detergent up to min level</li> </ol>
<p><b>Leaking:</b></p> <ol style="list-style-type: none"> <li>1. Water leaking from the lance</li> </ol>	<ol style="list-style-type: none"> <li>1. 'O' ring burst. Replace with a new 'O' ring. (Note 4 spare 'O' rings are supplied attached to the Instruction manual) they are also available via our spare parts dept)</li> </ol>

## Spare Parts

STOCK NUMBER	DESCRIPTION	STOCK NUMBER	DESCRIPTION
QTG1-2A	(5) Trigger gun	QLE2A	(9) Lance Extension
QRB2A	(7) Rotary brush head	QAL2A	(11) Adjustable Lance
QFB2A	(8) Fixed brush head	QPLCLEA	(13) Compact Patio Cleaner
QMFQFC	(14/15) Male/Female quick fit connectors	QTLA	(17) Turbo Lance
QOR	O-Rings	QPH6A	(6) High Pressure Hose 6m
QWIA1A	(2) Water inlet adaptor		

### SPARE PARTS

Spare parts may be obtained from our helpline or by checking out the website  
Telephone Number 02083 916 767 or e-mail [spares@hilka.co.uk](mailto:spares@hilka.co.uk)



This symbol is known as the 'Crossed-out Wheelee Bin Symbol'. When this symbol is marked on a product, it means that the product should not be disposed of with your general household waste. Only discard electrical/electronic items in separate collection schemes which cater for the recovery and recycling of the materials contained within. Your co-operation is vital to ensure the success of these schemes and for the protection of the environment.

This product is guaranteed for domestic use for a period of 12 months against faulty manufacture or materials.

This product is not guaranteed for **HIRE** purposes. This guarantee does not affect the statutory rights of the consumer.

## HELPLINE

In the unlikely event of a defect occurring please contact our Helpline.  
Office hours 9am – 4pm. Outside office hours or during peak times you will be directed to an answer phone. Please leave your name, a brief description of your enquiry and your number.

One of our operators will contact you as soon as possible.

Telephone Number 02083 916 767 or e-mail [helpline@hilka.co.uk](mailto:helpline@hilka.co.uk)

Alternatively check the Q&A on our website [www.hilka.co.uk/faq.php](http://www.hilka.co.uk/faq.php)

## SPARE PARTS

Spare parts may be obtained from our helpline or by checking out the website

Telephone Number 02083 916 767 or e-mail [spares@hilka.co.uk](mailto:spares@hilka.co.uk)

### NOTE:

These important safeguards and instructions cannot cover all possible conditions and situations that may occur. It must be understood that common sense and caution are factors which cannot be built into any product. These factors must be applied by the person using this product.

Manufactured on behalf of **Home Retail Group**

489 - 499 Avebury Boulevard,

Central Milton Keynes,

MK9 2NW