

# ***Rotobic***

## INSTRUCTION MANUAL AND PARTS GUIDE

**CAUTION** Read the instruction manual before using the machine

# Shadow Vac +PLUS Shadow Vac

*Back Pack Vacuum Cleaner With H-10  
HEPA Filter*

Model No: 12923023

# SHADOW VAC +PLUS

***Rotobic***



### **Hako Australia Pty Ltd**

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## Safety Instructions

Read this manual before using the back pack and always follow the Safety and Maintenance Instructions

**CAUTION: This machine shall be stored indoors only**

- **This machine is intended for domestic and commercial use only**
- Do not leave the appliance when plugged in. Unplug from the power point when not in use and before servicing.
- Do not use outdoors or on wet surfaces.
- For domestic use:
  - The 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
- For commercial use:
  - The appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge
- Children should be supervised to ensure that they do not play with the appliance.
- Use only as described in this manual. If appliance is not working as it should, has been dropped, damaged, left outdoors, or dropped into water, return it to a service centre.
- Extension Cord **MUST** be secured by the relief retainer in the side of the vacuum cleaner
- Do not pull or carry by cord or plug, use cord as a handle, close a door on cord, or pull cord around sharp edges or corners. Do not run appliance over cord. Keep cord away from heated surfaces.
- If the cord is damaged, it must be replaced by the manufacturer or its service agent or a similarly qualified person in order to avoid a hazard.
- Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord.
- Do not handle plug or appliance with wet hands.
- Do not put any object into openings. Do not use with any opening blocked.
- Keep hair, loose clothing, fingers and all parts of body away from openings and moving parts.
- Turn off all controls before unplugging.
- Use extra care when cleaning stairs.
- Do not use to pick up flammable or combustible liquids, such as petrol, or use in areas where they may be present.
- A locally approved optional electric power brush shall only be connected to the power outlet.  
(Max Load:200w)

### WARNINGS

#### Do Not

- Do not vacuum wet surfaces, damp areas or suck up water
- Do not use machine if water has been picked up by the vacuum system without an electrical inspection by a qualified person.
- Do not vacuum anything that is burning or smoking such as cigarettes, matches or hot ashes.
- Do not use the machine in areas where flammable or combustible liquids, vapours or gas are present.
- Do not operate near explosive materials such as solvents, thinners, fuels or grain dust.



**SAVE THESE INSTRUCTIONS**

## **Packaging**

- Every Shadow Vac +PLUS unit comes with:
- A basic set of cleaning accessories: crevice tool, 5 paper filter bags, vacuum hose with elbow hand grip, 2 piece wand, and EZ2GO floor tool.
- Cloth filter bag
- Secondary filter (located under cloth filter bag)

## **Assembly**

- Remove lid by releasing latches. Remove and check both the cloth filter bag and secondary filter which are included
- Rotate the canister lid so that the vacuum inlet is on the left or right side to suit your 'vacuuming' arm.
- Attach hose end into canister lid inlet.
- Connect both wands together to create one length.
- Attach end of wand to other end elbow pistol grip.
- Attach Ezi-Glide floor tool to other end of wand

## **Start Up**

- Unwind power supply cord and leave uncoiled on floor.
- Plug the cord into an electrical socket and switch power ON at the power point

## **Wearing and Adjusting**

- Loosen shoulder straps to allow sliding of arm through the strap comfortably
- Lift machine onto one shoulder, by first inserting opposite arm through the shoulder strap by which the machine is lifted (like putting on a shirt or blouse), slide second arm through opposite shoulder strap so now the Shadow Vac +PLUS is on both shoulders.
- Position the waist-band into the 'small' of your back just above your backside. This will lower the centre of gravity of the unit, and positions the weight closer to the body onto the stronger pelvic area. It provides freedom of movement for the arms, and prevents the unit from riding up the back when forward bending. It also provides greater manoeuvrability with less effort for any vacuuming task.
- Tighten the elasticised waist belt by overlapping the hook and loop flaps until secure and comfortable.
- Pull down on both ends of the shoulder strap until the top back padding just makes contact with the back, bringing the unit into a vertical position. The tension in the shoulder straps should be minimal, enabling you to easily insert your fingers easily between the shoulder strap and shoulder.
- Adjust the sternum strap for comfort

## Controls and Features

- Switch the vacuum ON. The switch is located at the left hand side at waist level.
- The EZ2GO floor tool can be used for either hard floors or carpet.
- Removing the floor tool
  - Twist the chrome wand while holding the floor tool neck.
  - **Do not** stand on floor tool.
- The slide regulator on the hand grip of the wand controls the airflow and suction at the floor tool nozzle. The resistance between the tool and floor surface depends on floor type and suction. Opening the slide regulator will reduce the resistance. Adjust the regulator to an open position to reduce suction/airflow. Good for vacuuming low profile carpets or loose coverings e.g. tapestry, or upholstery corners using the correct vacuuming tool.
- Adjusting the regulator to the closed position increases suction and airflow. Good for plush or thicker pile carpets.
- The (optional) crevice tool is designed for crevice cleaning on upholstered furniture or spot cleaning.
- The (optional) dusting brush is used for upholstery, corner and cornices cleaning.
- Both the crevice tool and dusting brush can be used with or without the chrome wands, simply attach it to the end nozzle of the hose. The main advantage is to reduce the need for physical bending when vacuuming. The plastic ferrule at the chrome wand, allows for easy disconnection.
- For fine dust areas use the **(optional) paper bag liners**, inside the cloth filter bag.
- The Shadow Vac +PLUS is provided with an integral cord restraint. Ensure that the cord is fitted through the lead guide in order to provide strain relief to the cord.
- The Shadow Vac +PLUS is provided with on board tool storage. Store a crevice tool and dusting brush in the holes provided for ready access.

## Use, Operation and Maneuverability

- The slender profile of the Shadow Vac +PLUS limits the protrusion from the operators back to 270mm. It is important to maintain this clearance to prevent collision while working.
- For comfortable operation of the Shadow Vac +PLUS, stand upright with a relaxed posture, arms hanging loosely to the side. Maintaining a straight wrist, hold the hand grip section of the wand with one hand, parallel to the floor. The double swivel neck on the floor tool more than compensates for any height variance of operators, and maintains a flat vacuuming face to the floor.
- Use an easy arm-swing motion that covers approximately a 600mm stroke when vacuuming.
- Plan the work path based on location of the power point, room/furniture layout, and entrance and exit points
- Commence vacuuming using a systematic approach working one half of the area first, away from the power point and then the other half of the area, returning back to the start.
- **Ensure that the power cord is clear of feet to reduce likelihood of tripping.**
- When vacuuming under office desks, the reach of the wands is sufficient to avoid bending at the waist. When vacuuming under lower profile objects, or when picking up items off the floor, bend the knees and maintain a straight back.

- When turning do not twist at the waist, turn using your feet.
- Once finished, switch the vacuum OFF at the machine, then switch OFF at the power point and unplug from power socket. Remove Shadow Vac +PLUS by unbuckling waist band and sliding strap off one shoulder by sliding hand and arm between shoulder strap and body. Lower unit to the floor using freehand **(DO NOT DROP the vacuum unit)**

## Maintenance and Storage

### Cord Storage and Maintenance

- Gather the cord by winding from the machine end, checking for cuts, fractures any exposed wires. Cleaning the cord if soiled. This practice minimises the likelihood of knuckling, and provides a visual inspection of cord. Drape cord over the frame for storage.
- Replace badly kinked or knuckled cords. Knuckling is caused by stretching the cord. Stretching occurs by pulling on an entrapped cord, winding the cord from the machine end while still plugged into the power point, or winding the cord from the plug end.

### Filter Bag Maintenance

- The filter bag must be emptied frequently, and the fine dust coating removed from the bag surface. Access the filter bag by releasing the canister clamps holding the lid. To clean, push the bag inside out over a bin, and then brush the surface clean using a soft bannister brush or vacuum. Do not hit the bag against a wall because this may damage the filter media. Check the filter bag for perforations to maintain filtration efficiency.

### Secondary Filter Maintenance

- The secondary filter is located under the filter bag. The filter can be cleaned by thoroughly washing in water with neutral detergent or tap out gently. Ensure the filter is dry before refitting or replace with a clean one while the washed one dries.

### Exhaust Filter Maintenance

- The exhaust filter is located on the vacuum cleaner exhaust. To access, remove screw from end cap, and slide exhaust deflector clear of cap. Squeeze the sides of the exhaust deflector to remove.
- Clean the exhaust filter by thoroughly washing in water with neutral detergent.
- Ensure the filter is dry before refitting.

### Blockage Checks, Hose and Hose Swivel Maintenance

- Loss of suction can occur due to blockages, check for blockages at the floor tool, bent elbow and along hose length.
- Loss of suction can also occur if the hose splits, check the hose for splits.
- The double swivel action at each hose end may lock when heavily impregnated with dust. To free the joint, squeeze together the bayonet click ring retainers and clear the obstructing dust and debris, before re-assembling.

### Motor Maintenance

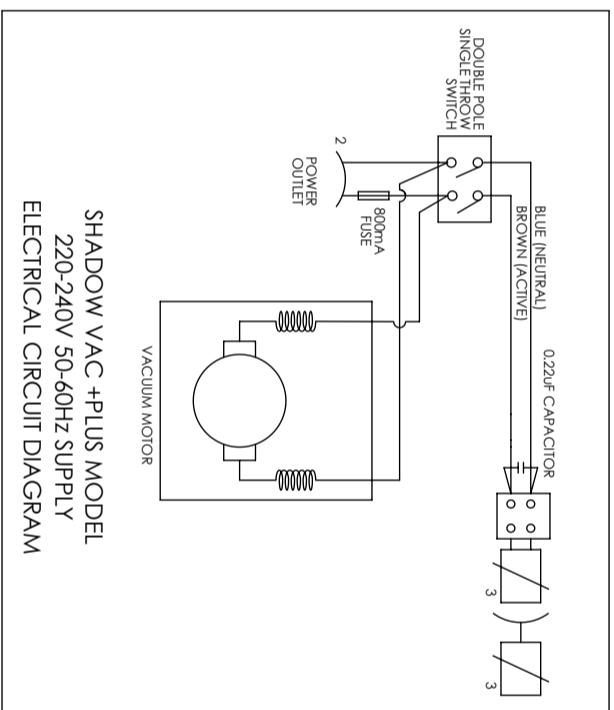
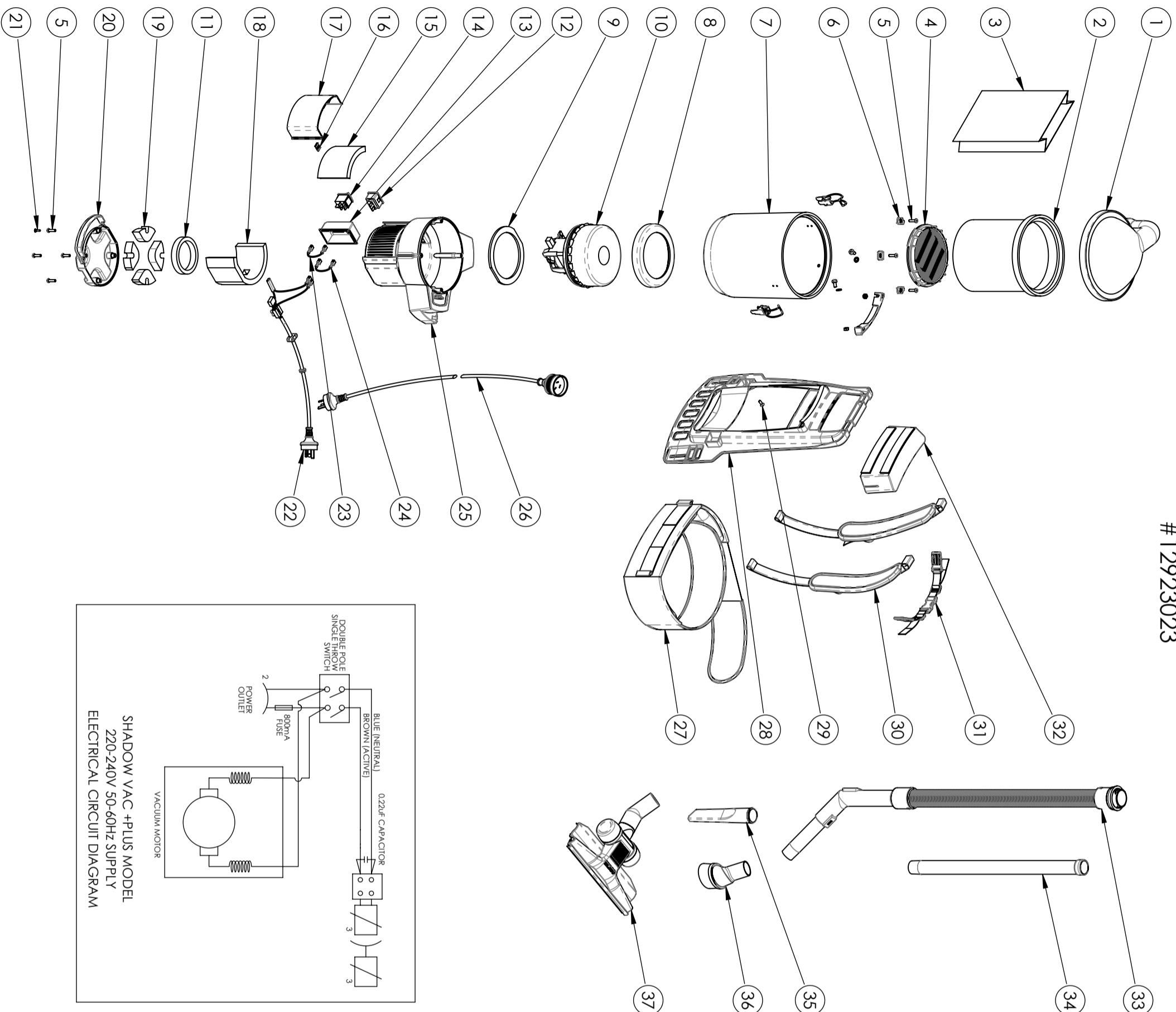
- Check vacuum motor carbon brushes at regular intervals using qualified personnel.

## Specifications

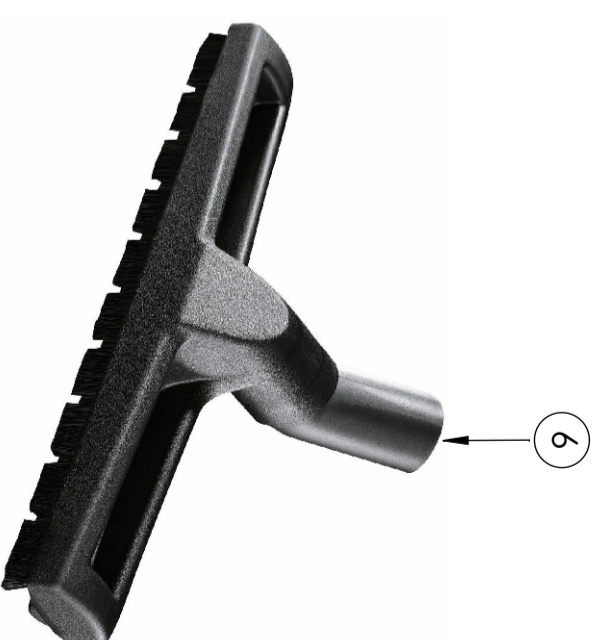
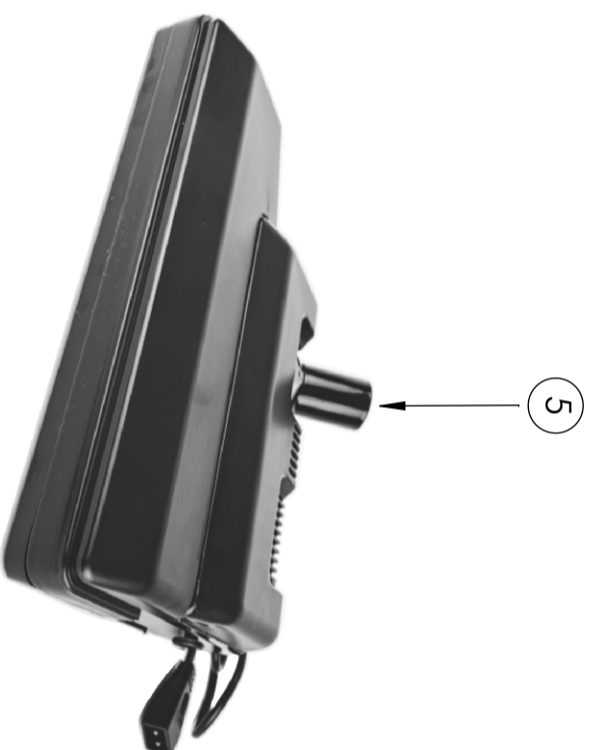
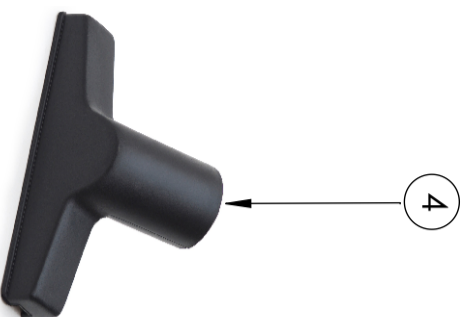
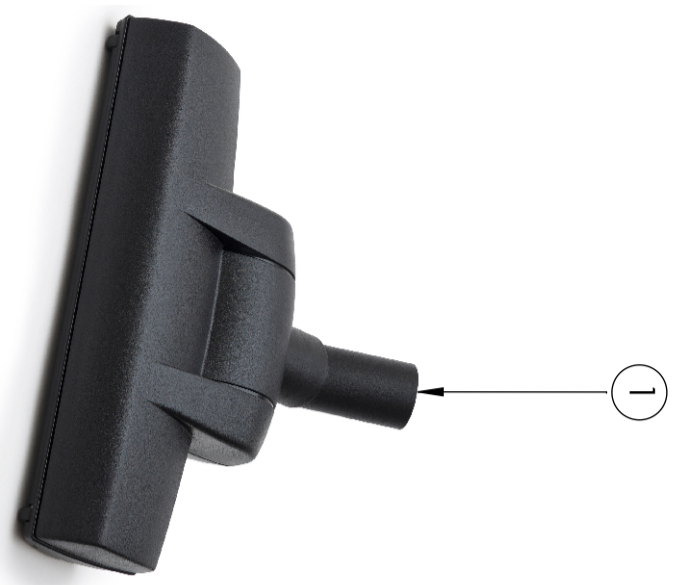
<b>General</b>		
<b>Packaging</b>	<b>Size:</b> 35 x 35 x 53 cm <b>Weight:</b> 9.3 kg	
<b>Vacuum</b>	<b>Type:</b> Dry <b>Class:</b> Type 2 Double Insulated <b>Approval:</b> RCM	<b>Air Flow Nozzle:</b> 33l/s <b>Suction:</b> 22 kPa <b>Noise:</b> 78 dBA at OEL <b>Weight:</b> 5.0 kg - not including cord and rod
<b>Filtration</b>		
<b>Cloth Filter Bag</b>	<b>Size:</b> 4 Litre, Antimicrobial polyester needle felt.	
<b>Paper Filter Bag</b>	<b>Size:</b> 4 Litre, double gusseted, plastic lined, high burst strength.	
<b>Motor Pre-Filter</b>	<b>Type:</b> Rinseable Pleated Teflon Coated Polyester <b>Class:</b> H10 HEPA	
<b>Exhaust Filter</b>	<b>Type:</b> 13mm thick, 60 ppi reticulated foam	
<b>Electrical</b>		
<b>Power Supply</b>	220 - 240V.a.c., 50 Hz	
<b>Power Outlet</b>	2 Pin IEC	
<b>Total Power</b>	1400W	
<b>Electrical Cord</b>	18 m, 10 A, 3 core ordinary duty	
<b>Motor</b>		
<b>Vacuum Motor</b>	<b>Type:</b> Rated 1200w, 2 stage By-Pass <b>Output Performance:</b> Air flow 48.5 l/s, Suction 24.8kPa, Air Watts 350 <b>Carbon Brush Life:</b> up to 800h	
<b>Warranty</b>	2 year Body, 2 year Motor	
<b>Accessories</b>	<ul style="list-style-type: none"> <li>• 32mm EZ2GO Floor Tool with rubber tread</li> <li>• 32mm Crevice Tool</li> <li>• 5 Paper Bag Filters</li> <li>• 1 x 4 Litre Antimicrobial cloth Bag</li> <li>• 32mm x 1.2m "Crush Proof" Antimicrobial Hose</li> <li>• 2 x 495L Corrosion Resistant Stainless-Steel Rods</li> </ul>	

Please note specifications can change without notice.

# SHADOW VAC +PLUS - ASSEMBLY # 12923023



Item	Part Number	QTY.
1	13806516 Lid Canister BVC DGrey	1
2	13806253 Filter Bag 4L Antimicrobial BVC	2
3	13806372 Paper Bag 5 Pkt BVC	2
4	13806500 Filter HEPA 4L BVC	1
5	13380048 Screw WN1412 KB50 x 20Z	8
6	13806504 Washer HEPA Filter BVC	4
7	13806700 Canister Upper Assy BVC	1
	13806514 Canister Upper BVC LGrey	1
	13310006 Latch Toggle Canister Lid Ni Pl	2
	13806518 Tank Fitting BVC LGrey	1
	13380050 Screw M6 x 12 Pan HD ZP	2
	13420018 Washer Spring M6 x 1.5 x 1.5 Section ZP	2
	13330010 Nut M6 x 9.8AF Hex Steel ZP	2
8	13806497 Sealing Ring BVC	1
9	13660002 Gasket B/P Motor	1
10	13806325 Motor Vac 1000W 240V B/P AMS 13805304 Carbon Brush	2
11	13806268 Washer Foam 88x70x15 30Kg PE	1
12	13780008 Socket Outlet C18	1
13	13806526 Plate Mtg 2 Hole LGrey	1
14	13780014 Switch Rocker 2HP	1
15	13806097 Filter Exhaust BVC	1
16	13830130 U Nut 01219-17-4 ZP	1
17	13806520 Cover Exhaust BVC LGrey	1
18	13806100 Insulation Lower Canister BVC	1
19	13806270 Insulation Cap BVC B/P	1
20	13806524 Cap Motor Vented BVC LGrey	1
21	16018026 Screw WN1413 KB35 x 14Z	1
22	13827006 Wire Loom B/P Motor Assy 13806302 Cord Coupling Orange 4L BVC 13380026 Screw WN1412 KB40 X 16Z 13806522 Cable Clamp BVC LGrey 13805403 Grommet 7.2mm ID 13806104 Wire Brown 180mm 10A 13806108 Terminal Block 2 Way 13806107 Wire Blue 180mm 10A 13806135 Capacitor 0.22uF	1
23	13657010 Fuse Link 4L BVC	1
24	13806103 Wire Blue 85mm PO SW	1
25	13806512 Canister Lower BVC LGrey	1
26	16002004 Cord Extension 18m Orange	1
27	13750007 Pad Waist BVC	1
28	13650002 Frame BVC DGrey	1
29	16018028 Screw WN1412 KB50 x 12Z	2
30	13750006 Pad Shoulder BVC 4 Piece Set	1
31	16018025 Strap Sternum with Adjuster and Buckle	1
32	13750003 Pad Back BVC	1
33	16707004 Hose BEP Tank Fitr'n 65 AB Assy 16007004 Hose Connector 65A 32mm 13640002 Elbow BEP 32mm Blk	1
34	16022005 Rod Stainless 32mm x 495L	2
35	16019002 Tool Crevice	1
36	16019003 Tool Dusting Brush	1
37	16019004 Tool Floor EZ2GO	1



OPTIONAL ACCESSORIES			QTY
ITEM NO.	PART NUMBER	DESCRIPTION	
1	16019005	Tool Turbo Brush 32mm	1
2	16019006	Tool Combination 32mm x 300mm Wide	1
3	16019014	Tool Mega Gulper Pro 32mm x 385mm Wide	1
4	16019007	Tool Upholstery 32mm	1
5	16019017	Tool Electric Brush 32mm x 355mm Wide	1
6	16019016	Tool Hard Floor 32mm x 360mm Wide	1

## SHADOW VAC ACCESSORIES



## General Warranty Policy

Hako Australia Pty Ltd ACN 002 858 059 (“Hako”) warrants to the original purchaser that the equipment specified in this manual (“Equipment”) is free from defects in workmanship and materials under normal use for a period of 12 months.

Under this warranty, after examination discloses it to have been defective, Hako will repair or replace at its factory or authorised dealer service outlet, parts of the Equipment that fail under normal use and service, when operated and maintained in accordance with the applicable operation and instruction manuals.

All warranty claims must be submitted via the Hako-authorised dealer or service agent the item was purchased.

The purchaser is responsible to return the defective goods at their expense, to the Hako-authorised dealer or service agent the item was purchased from.

This warranty does not apply to components replaced due to recommended service schedules, normal wear and tear or to items whose life is dependent on their use and care.

Use of replacement parts not manufactured or supplied by Hako will void all warranties expressed or implied and may give rise to a potential health hazard. All parts replaced under this warranty become the sole property of Hako or its original manufacturer, whichever the case may be.

This warranty is applicable only to the original purchaser. Hako is not responsible for costs or repairs performed by persons other than those specifically authorised by Hako. This warranty does not apply to damage from transportation, alterations by unauthorised persons, misuse or abuse of the equipment, use of non-compatible chemicals or parts, or damage to property, or loss of income due to malfunction of the Equipment. If a difficulty develops with this Equipment you should contact the dealer from whom it was originally purchased.

The warranty coverage period on Equipment will commence 1 year after the date of shipment from Hako to its dealer or authorised agent unless the Equipment is sold before this time. This sale date would then be the beginning date of the warranty coverage.

The following statements only apply to a consumer sale of goods or services as defined in the Australian Consumer Law. In this statement, ‘Our’ means ‘Hako’ and ‘you’ means ‘original purchaser’:

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

To the extent permitted by law, all other warranties whether implied or otherwise, not set out in these warranty terms and conditions are excluded and Hako is not liable in contract, tort (including, without limitation, negligence or breach of statutory duty) or otherwise to compensate you for:

- any increased costs or expenses;
- any loss of profit, revenue, business, contracts or anticipated savings;
- any loss or expense resulting from a claim by a third party; or
- any special, indirect or consequential loss or damage of any nature whatsoever caused by Hako’s failure in complying with its obligations.

The benefits given to you in this warranty are in addition to other rights and remedies under a law in relation to the Equipment or services to which this warranty applies.



## Warranty Registration Details

Purchaser:.....Purchase date:.....

Address:.....

State:.....PostCode:.....Contact:.....ph:

ModelNo.:.....SerialNumber:.....

Purchased from:.....

Address:.....

Please attach copy of receipt.

**Hako Australia Pty Ltd**

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