Hako Rotobic

Focus CLASSIC SCRUBBER / POLISHER



Parts Manual and Owners Guide

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An ideal cleaning solution from **Hako Rotobic**.



PACKAGING

- The Focus & Focus Hi-Torque Classic models are despatched in two cartons. The cartons contain the handle and chassis assembly.
- The Focus Suds Classic model is despatched in 3 cartons, containing the handle, chassis and tank assembly.

HANDLE ASSEMBLY

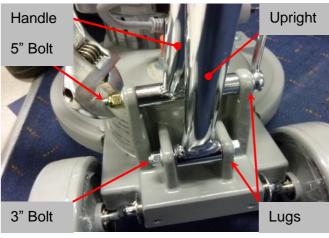
- Focus & Focus Hi-Torque Classic refer to Pic.1, Focus Suds Classic refer to Pic. 2.
- Remove the 5" bolt from the handle support lugs.
- Fit the handle between the chassis lugs. Insert bolt with washer under bolt head through lugs and handle stem. Tighten nut with washer under nut head until no side movement is evident and handle is free to rotate.
- Remove 3" bolt from handle upright support lugs and repeat the above procedure.
- On Focus Suds Classic models, remove 4" bolt from bar support lugs, and reposition with additional heavy duty washers under both bolt head and fastening nut, and between lugs and bar support.

ELECTRICAL CONNECTION

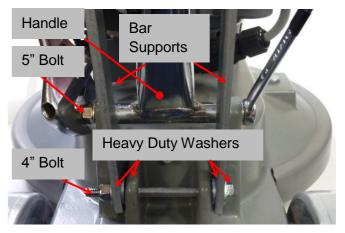
- For Focus & Focus Hi-Torque Classic models, connect 3 pin socket from handle to plug from motor and tuck connection behind motor refer to Pic.3.
- For Focus Suds Classic models, orientate and then connect 4 pin socket from handle, to plug from motor. Lock the connection together by hand using the connector rings and tuck behind motor refer to Pic. 4.



Pic 4 Focus Suds Classic Electrical



Pic 1 Focus & Focus Hi-Torque Handle Assy



Pic 2 Focus Suds Handle Assy



Pic 3 Focus & Focus Hi-Torque Suds
Classic Electrical Connection



TANK CONNECTION (FOCUS SUDS models)

- Lay handle to a horizontal position, and attach U Bolt and Keeper to tank ends as shown in Pic 5.
- Add the screw thread protectors to U Bolt threads after tightening.
- Attach Hose between Solenoid Valve as shown in Pic 6 and Tank Fitting refer to Pic 7.



Pic 6 Attaching Hose to Solenoid Valve.

HANDLE ADJUSTMENT

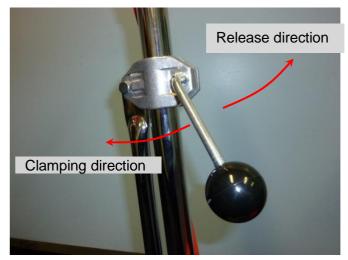
- To adjust handle height, release the handle clamp by rotating the handle lever shown in Pic 8 clockwise, adjust handle to comfortable waist height, then lock into position, by rotating the lever counter clockwise.
- Do not use excessive force to lock.
- Do not adjust the back of the handle clamp shown in Pic 9 on Focus & Focus Hi-Torque Classic models, or as shown in Pic 10 on Focus Suds Classic models, this has been factory set.



Pic 5 Attaching Tank to Focus Suds Model

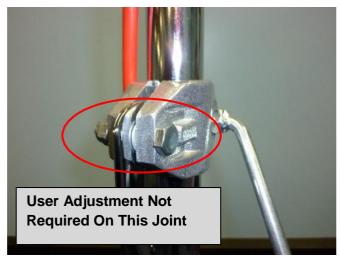


Pic 7 Attaching Hose to Tank



Pic 8 Handle Adjustment

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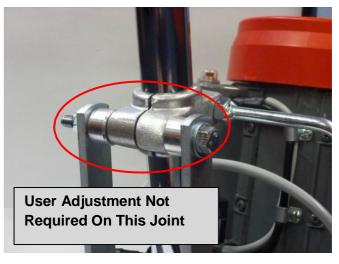
Pic 9 Factory Set Joint on Focus and Focus Hi-Torque Classic Models

PAD AND BRUSH SIZE

 Use 40cm Quick Release brushes, or 40cm Quick Release pad holders with 40 cm pads.

FITTING PADS AND BRUSHES

- Raise the handle to an upright position and lay machine back on to the floor refer Pic 11.
- From in front of the machine engage the brush or pad holder onto the Quick Release and lock into position refer Pic 12
- Return the machine to an upright position.

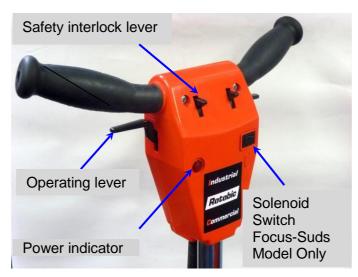


Pic 10 Factory Set Joint on Focus Suds Classic Models



Pic 11 Attaching a Brush

HANDLE INDICATOR AND CONTROLS



Pic 13 Handle Indicators & Controls



Pic 12 Locking and Releasing a Brush Attachment



MOTOR CONTROLS



Pic 14 Motor Thermal Overload Switch

 When the motor has switched off from overheating, allow sufficient time for it to cool, then press switch to reset.

START UP

- Unwind the electrical cord and plug into power point
- Adjust handle to comfortable waist height refer to Pic 18.
- Rotate wheels OFF the floor refer to Pic 18.
- Check that the power indicator lamp is ON.
- Push the Safety Interlock Lever forward to disengage safety lock refer to Pic 15.
- Squeeze the start/run lever one side only, which will START the machine refer to Pic 16.

DISPENSING (FOCUS SUDS models)

 Press Switch as shown in Pic 17. Dispensing only occurs while switch is being pressed.



Pic 17 Activation of Solution Dispensing

SAFE USE

- Ensure that this Manual has been read and understood by the operator.
- This appliance is not intended for use by young children or infirm persons without supervision. Young children should be supervised to ensure that they do not play with the appliance.
- Only trained operators should use this appliance and be familiar with its adjustment and use.



Pic 15 Dis-engaging the Safety Interlock.



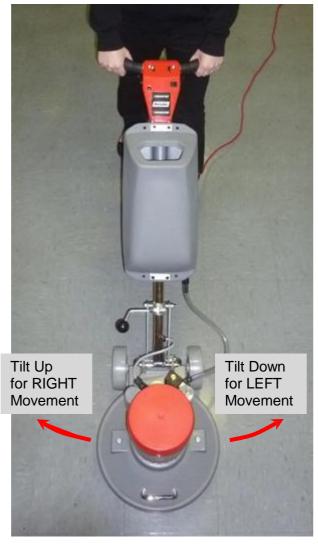
Pic 16 Squeeze Start/Run Lever for Operating.

Squeeze Lever



CONTROL

 The machine is controlled by balance rather than strength. Tilt handle slightly upwards and the machine moves to the RIGHT, tilt the handle slightly down the machine moves to the left. When the handle is in the intermediate position the machine remains stationary refer to Pic 18 and Pic 19.



Pic 19 Swing Directions

PLANNING THE JOB

- Plan the work path based on the location of the power point, room/furniture layout, entrance and exit points.
- Work away from the power cord to avoid entanglement with the rotating brush/pad mechanism.
- Ensure that the power cord is clear of the operator's feet to avoid tripping, refer to Pic 20.



Pic 18 Handle Height and Wheel position



Pic 20 Planning the Job.



TRANSPORTATION

- For transporting the machine on level surfaces adjust the handle in an upright position, and transport the machine on the back wheels refer to Pic 21.
- When transporting the machine and stairs are encountered mechanical lifting aids should be used. Do not transport the machine up stairs by pulling on the handle, this practice increases forces on the operator that can cause injury.
- Where lifting of the machine is inevitable operators should be trained in team lifting and manual handling techniques.

PAD AND BRUSH MAINTENANCE

- Replace brushes and pads that are excessively worn, to reduce the risk of floor damage.
- Wash pads on a regular basis and then store to dry.
- Excessive amounts of polish congealed on brush bristles or embedded in the pad will cause excessive drag, that can over load the machine. For best results use clean or new brushes and pads.
- Abrasive materials embedded in pads can scratch the floor surface. Ensure clean pads are used.
- Remove brushes and pad holders from the machine when stored. In storage the weight of the machine can deform these parts causing the machine to vibrate on the next use.

POWER CORD MAINTENANCE

- Unplug the electrical cord from the power outlet when the machine is not in use, or when cleaning or maintaining the machine.
- Wind the power cord between the handle and cord storage arm from the machine end to reduce knuckling, check for damage, and remove soilage as shown in Pic 22.
- Replace cords that are badly kinked, knuckled, cut or damaged.
- If the cord is damaged it must be replaced with the original manufacturers part and by an Authorized dealer or similarly qualified person.

FOCUS SUDS MAINTENANCE

- Do not use water in the solution tank above 80°C
- Use only water or neutral chemicals in the solution tank. Do not use alkaline chemicals in the solution tank.
- At the end of each shift empty the cleaning solution from the tank. Flush clean water through the tank and solenoid valve to remove residual chemicals.



Pic 21 Transporting the Machine.



Pic 22 Cleaning and Checking the Cord



HAZARD PRECAUTIONS

Unplug electrical plug from the power point before conducting repair, service, maintenance or equipment cleaning.

Electrical

- Do not handle electrical plug or machine with wet hands and power connected.
- Do not store machine outdoors or expose to rain.
- Do not wash or hose down the machine.
- Do not clean the machine by spraying it with water, detergent or cleaning solutions.
- Do not use machine if water has been picked up by the vacuum system, without electrical inspection by a qualified person.
- Do not pull on the Power Cord.
- Work away from the Power Cord to avoid entanglement with the rotating brush/pad mechanism.
- Plan work path based on layout and work area using a systematic approach.

Machine Control and Property Damage

- Ensure correct handle height adjustment for control.
- Violent handle movement by operator will cause rapid sideways movement and may cause operator to lose control.
- Fit quality brushes and pads, correctly sized, to suit application.
- Ensure floor is uniformly wetted when wet scrubbing, and that floor surface is uniform, to minimize rapid sideways movement of the machine.
- Ensure the rear wheels are UP when in use.
- Ensure the machine is in constant motion over the floor area. Keeping the machine in a localized spot may result in friction burns to the floor.

Trips, Slips and Falls

- Do not wear open top footwear when using this equipment.
- Wear slip resistant footwear at all times. Wear chemical resistant footwear when wet scrubbing or stripping.floors.
- Ensure electrical cord is clear of machine and operators feet.
- Use appropriate signage and barriers e.g. 'Cleaning in Progress' to alert public to cleaning activity.

Burns, Fire, or Explosion

- Do not use machine in areas where flammable or combustible liquids, vapors or gases are present.
- Do not operate near explosive materials such as solvents, thinners, fuels or grain dust.

Muscloskeletal Injury

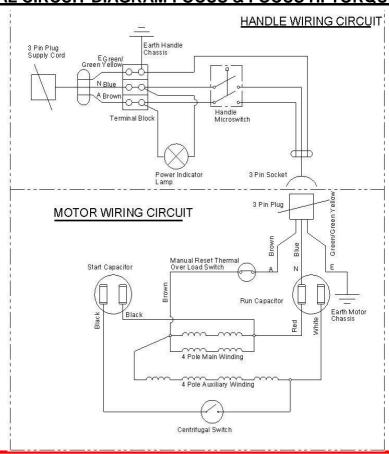
- Change brushes and pads using correct posture.
- Adjust handle to correct height and operate machine using correct posture.
- Hold handle firmly at start, relax grip and maintain a straight wrist when machine is running.
- Do not twist at the waist when slewing the machine or turning, turn using your feet.
- Using mechanical aids or team lifting, when lifting the machine
- Do not pull machine upstairs.
- Do not heel the machine to the point where the machine is on its edge, this can cause injury, damage to the handle, or damage to the floor.



SPECIFICATIONS

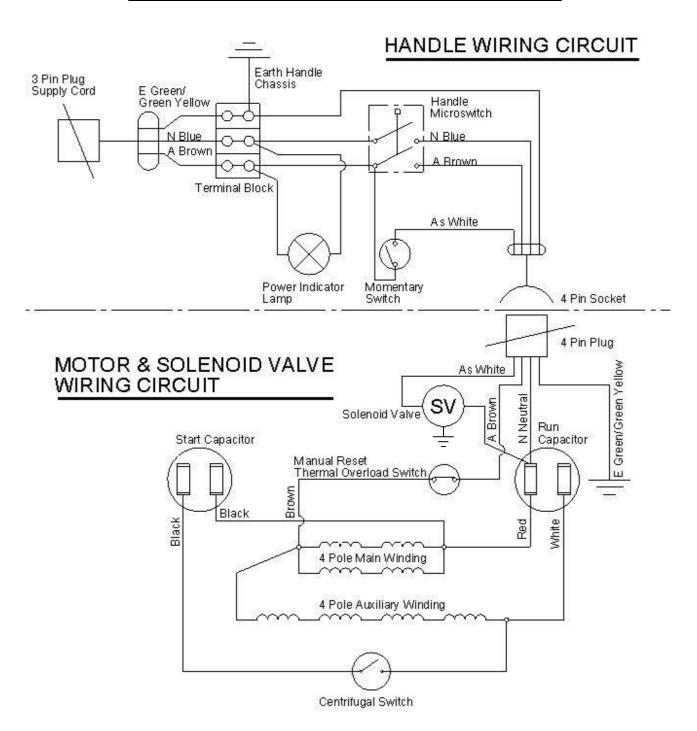
Main Motor	Type:	Induction 4 Pole CSCR				
	Voltage and Frequency: 220 – 240 Volts a.c. / 50 – 60 Hz					
	Power Output:	1500 watts @ 8.3 amps				
Transmission	Type:	HTD® double reduction timing belt.				
	Output speed:	Standard 430 rpm / Hi-Torque				
Noise	Noise:	68dB _A with Bassine brush on vinyl flooring.				
Electrical Cord	Type / Length:	15 amp 3 core normal duty 15m long				
Handle	Safety:	Mechanical interlock				
	Activation:	Lever activated double pole micro-switch				
	Stopping:	Unattended automatic stop incorporated				
	Adjustment:	Lever operated clamp, with infinitely variable				
		height adjustment through 90°				
Wheels	Type / diameter:	Retractable and non-marking / 160mm dia.				
Tank (Focus Suds Model)	Capacity:	10 litre				
Weight		39 kg				
Brush / Pads	Size:	40cm (across bristles) brush, or 40cm pad				
		holder suitable for 40cm pad.				
Compliance	Standards:	Australian and New Zealand Standards				
		AS/NZS 60335.1 & 60335.2.10				
Electromagnetic	Declaration:	Australian and New Zealand Standard				
Conformity		AS/NZS CISPR 14.1				
	Marking:	C-Tick Mark N3771				

ELECTRICAL CIRCUIT DIAGRAM FOCUS & FOCUS HI-TORQUE MODELS





ELECTRICAL CIRCUIT DIAGRAM FOCUS SUDS MODELS



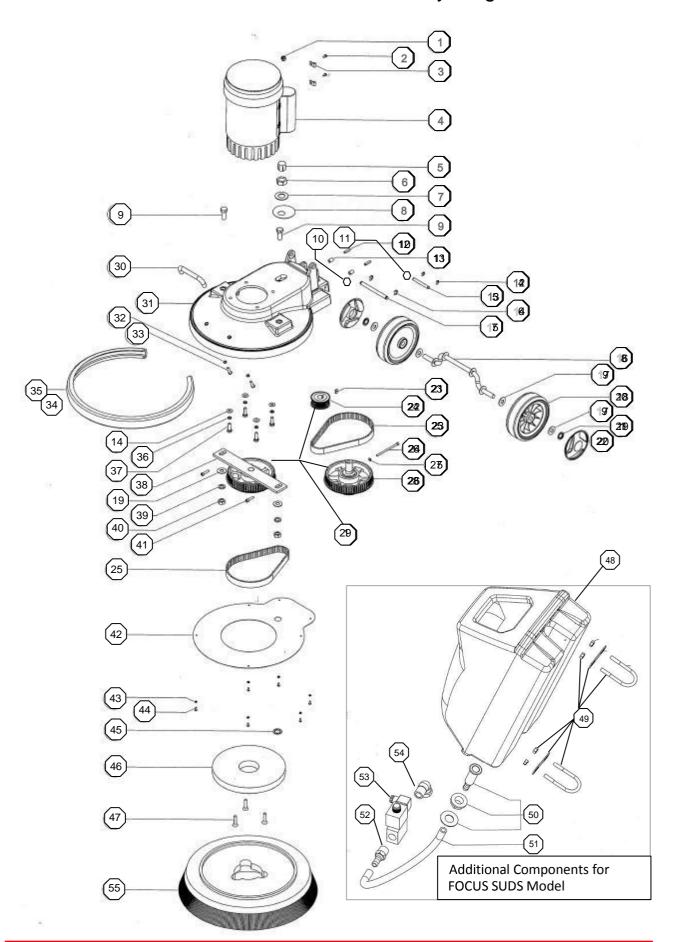


FOCUS Classic Chassis Assembly Parts List

No	Part Name	Part No.	Qty	No.	Part Name	Part No.	Qty
	Chassis Focus Classic Assy	13227020	1	25	Belt 600-8m-21HP	13210003	2
	Chassis Focus Hi-Torque Classic Assy	13227030	1	26	Screw M5 x 90 Socket Head Cap	13380046	1
	Chassis Focus Suds Classic Assy	13227040	1	27	Washer 3/16 x 1/2 x 20# Flat ZP	13420015	3/5
1	Bush Strain Relief 766-1147B	13210002	1	28	Pulley 30-55t Counter Assy	13350027	1
1*	Grommet 9.6x12.7x1.5 Panel Rubber	13260000	1	28*#	Pulley 24-59t Counter Assy	13350026	1
2	Screw No.10 x 3/8 Pan Taptite	13380040	2	29	Pulley Set Focus	13350020	1
3	Clamp 'P' Dia. 6.4 Mtg Hole 5.2 Zn Pl	13220009	2	29	Pulley Set Focus Hi-Torque & Suds	13350021	1
3*	Clamp 'P' Dia. 11.1 Mtg Hole 5.2 Zn Pl	13220008	2	30	Handle D-Pull 13mm X 1/4W thread	13270007	1
4	Motor Polisher CMG 1500 W	13320000	1	31	Chassis Focus Classic	13220020	1
	Key Motor 3/16 x 3/16 x 1	13300001	1	32	Washer 1/4 x 1/16 x 1/16 SQ Sect Sprg ZP	13420022	2
	Cap Start 108-130µF 86 x 46	13220035	1	33	Screw 1/4W x 1 M/T Pan ZP	13380061	2
	Cap Run 30 μF 45 x 92 DQC	13220036	1	34	Tape 18 W Acrylic Foam	13390015	1.01
	Cover Cap. Start (800-5531B)	13220040	1	35	Bumper Focus	13210007	1
	Cover Cap. Run (800-5531BR1B1)	13220041	1	36	Washer 5/16 x 5/64 x 5/64 SQ Sprg ZP	13420027	4
	Switch Thermal Overload Manual	13380006	1	37	Bolt 5/16W x 1 Hex ZP	13210010	4
	Fan Plastic 22mm	13250015	1	38	Pulley 55t Brush Assy Focus	13350028	1
	Washer Fan Pressed Steel	13420060	1	38*#	Pulley 59t Brush Assy	13350029	1
	Cowl Plastic Motor Housing	13220042	1	39	Washer 12 x 4 x 2.5 RECT Sect Sprg ZP	13420035	2
	Cord Motor Focus	13220000	1	40	Nut M12 Hex ZP	13330015	2
*	Cord Motor Focus Suds Classic Assy	13227705	1	41	Screw M6 x 25 Socket Head Cap ZP	13380051	2
	Switch Centrifugal (728-853P1100)	13380007	1	42	Guard Pulley Focus Classic	13260005	1
	Plate Switch (726-5488A)	13350016	1	43	Washer M4 x1.5 x 1.5 SQ. Sect Sprg ZP	13420011	6
5	Cap 1/2 BSP Red Plastic	13220019	1	44	Screw No. 8 x 3/8 Mush Nib ZP	13380030	6
6	Nut 1/2BSPP Hex ZP	13330016	1	45	Washer 16 x 28 Sprg Push On Fix ZP	13420046	1
7	Washer 7/8 x 1-5/8 x 14# Flat ZP	13420050	1	46	Quick Release Adaptor Complete	13360000	1
8	Washer 22 x 70 x 1 Eccentric SS	13420051	1	47	Screw M8 x 35 CSK PH ZP	13380071	3
9	Screw M12 x 32 Set Hex ZP	13380081	2	Additional Parts for Focus Suds Models			
10	Nut 3/8 Hex UNC Nyloc	13330013	1			13307000	
11	Nut 5/16 Hex UNC Nyloc	13330012	1	48*	Tank Suds 4GR (10 Litre)	13390010	1
12	Pin 1/4 x 1 Spring ZP	13350012	2	49*	Bolt U, Keeper, & Nut 5/16W ZP	13210014	2
13	Hose Pressure 6 I.D. X 14mm O.D.	13270006	0.03	50*	Fitting Tank Flange 15 Nyglas	13250007	1
14	Washer 5/16 x 3/4 x 18# Flat ZP	13420025	4/6	51*	Hose 13mm ID x 2mm Wall PVC	13270009	0.25
14*	Washer M8 x 21 x 2 ZP	13420028	4	52*	Hose tail 15mm Nyglass	13270008	1
15	Bolt 5/16UNC x 3 Hex ZP	13210012	1	53*	Valve Solenoid 1/2 BSP PVC	13410000	1
15*	Bolt 5/16W x 4 Hex ZP	13210013	1	54*	Elbow 15mm M & F Nyglass	13240000	1
16	Washer 3/8 x 3/4 x 18# Flat ZP	13420030	2		Accessories (Optional)		
17	Bolt 3/8 UNC x 5 Hex ZP	13210020	1	55	Brush 40cm Bassine QR	13210050	
18	Axle Focus 12.7 O.D. CrP	13200000	1		Brush 40cm Soft Nylon QR	13210051	
19	Washer 1/2 x 1-1/8 x 16# Flat ZP	13420037	6		Brush 40cm Medium Nylon QR	13210052	
20	Wheels 150mm G-Force & Focus	13420100	2		Brush 40cm Hard Nylon QR	13210053	
21	Washer 1/2 UC D6143 Starlock ZP	13420039	2		Brush 40cm Tynex QR	13210054	
22	Cap Hub Focus	13220018	2		Pad Holder 40cm QR	13350100	
23	Screw M5 x 8 Grub Oil Blackened	13380044	2		Pad Holder 40cm Short Trim QR	13350101	
24	Pulley 30t Motor Assy	13350025	1		Bonnet 42.5cm Carpet	13210070	
24*#	Pulley 22t Motor Assy	13350024	1	Note:	Items identified * refer to Focus Suds Models a	nd # refer to Fo	cus

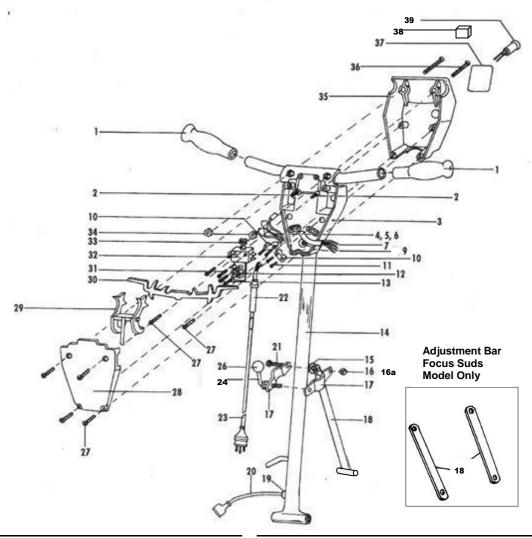


FOCUS Classic Chassis Assembly Diagram





FOCUS Industrial & Commercial Handle



No.	Part Name	Part No.	Qty
	Focus IC Handle	13277020	
	Focus Suds IC Handle	13277040	
1	Handle Grip	13270005	2
2	Pin M6 x 20 Dowell CP	13350010	2
3	Housing Handle Lower Focus IC	13270000	1
3*	Housing Handle Lower Focus Suds IC	13270001	1
4	Wire Green Earth 50mm	13805981	1
5	Wire N Handle Focus IC	13420002	1
6	Wire A Handle Focus IC	13420001	1
6*	Wire A Handle Focus Suds	13420000	1
7	Insulator Post Fit Utilux H2818	13280000	2
9	Screw No.10 x 3/8 Pan Taptite	13380040	1
10	Clamp Cord Handle IC	13220014	2
11	Screw WN1412 K B 40 X 16 Z	13380026	4
12	Terminal Block ANE	13390005	1
13	Screw No. 6 x 5/8 S/T Pan ZP	13380020	2
14	Tube Handle IC	13390001	1
14*	Tube Handle Focus Suds IC	13390002	1
15	Washer 15.8 x 8.05 x 0.90 Belleville ZP	13420045	1
15*	Washer M8 x 22 x 12.7	13420029	2
16	Nut 5/16 Hex UNC Nyloc	13330012	1
16a*	Washer M8 x 21 x 2 ZP	13420028	2
17	Clamp Handle IC Set	13220015	1
17*	Clamp Handle Focus Suds IC	13220016	1
18	Tube Upright IC	13390000	1
Note: I	ms identified * refer to Focus Suds Model C	ly	

No.	Part Name	Part No.	Qty
18*	Bar Adjustment Focus Suds Classic	13210008	2
19	Bush Strain Relief Utilux H2097B	13210001	1
20	Cord Handle Focus IC Assy	13227700	1
20*	Cord Handle Focus Suds IC Assy	13227704	1
21	Bolt 5/16W x 1-1/2 Hex ZP	13210011	1
21*	Bolt 5/16 x 4 Hex ZP	13210013	1
22	Grommet Loom Cord	13260001	1
23	Cord Polisher 3 Core 15m x 15A	13220007	1
24	Lever Handle Clamp IC	13310003	1
24*	Lever Handle Clamp Focus Suds IC	13310004	1
26	Knob Handle 41Dia x 3/8 BSW	13300000	1
27	Screw WN1412 K B 50 X 20 Z	13380048	6
28	Housing Handle Lid IC	13270004	1
29	Lever Safety Interlock Handle IC	13310002	1
30	Lever Start/Run Handle IC	13310001	1
31	Screw No. 7 x 25 HiLo Pan ZP	13380025	2
32	Switch Micro 2HP Terminals 2 x Com, 2 x NO	13380002	1
33	Spring Compression Stainless Steel	13380010	1
34	Nut M6 Hex Steel ZP	13330010	2
35	Housing Handle Upper Focus Red	13805885	1
35*	Housing Handle Cover IC	13270003	1
36	Screw M6 x 45 M/T Pan ZP	13380052	2
37	Label Handle IC	13310010	1
38*	Switch Rocker Black 10A MOM	13380001	1
39	Indicator Red 240V 0.3W T1200.04 & 152mm Leads	13280002	1



Hako Australia Ptv Ltd Warrantv Policv

Effective July 1, 2008

Hako Australia Made Simple Limited Warrantly Policy

Hako Australia Pty Ltd warrants to the original purchaser/user that the product is free from defects in workmanship and materials under normal use. Hako Australia Pty Ltd will, oblige under this warranty to repair or replace at our factory or authorised dealer service outlet, parts that fail under normal use and service when operated and maintained in accordance with the Parts Manual and Owners Guide, after examination discloses it to have been defective. All warranty claims must be submitted through a Hako Australia Pty Ltd Dealer or Authorised agent and approved by Hako Australia Pty Ltd.

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.

Special warning to purchaser - Use of replacement parts not manufactured or supplied by Hako Australia Pty Ltd will void all warranties expressed or implied. A potential health hazard exists without original equipment replacement.

All warranted items become the sole property of Hako Australia Pty Ltd or its original manufacturer, whichever the case may be.

Hako Australia Pty Ltd disclaims any implied warranty, including the warranty of merchantability and the warranty of fitness for a particular purpose. Hako Australia Pty Ltd assumes no responsibility for any special, incidental or consequential damages.

The limited warranty is applicable only to the original user/purchase or this product. Hako Australia Pty Ltd is not responsible for costs or repairs performed by persons other than those specifically authorised by Hako Australia Pty Ltd. 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 damage to property, or loss of income due to malfunction of the product. If a difficulty develops with this machine, you should contact the dealer from whom it was originally purchased.

Hako Australia Pty Ltd warranty period for Rotobic Focus Scrubber / Polisher for Parts and Labour is one (1) year.

Hako Australia Pty Ltd or Authorized agents are required to submit all invoices when using or claiming for a third party or subcontractor as part of their Warranty claim.

Hako Australia Pty Ltd is to approve or disapprove and clear for payment or credit within 30 days of receiving a complete Warranty claim form from its Dealer or Authorised agent.

Hako Australia Pty Ltd is to advise by writing if a claim is disapproved or the total of the claim is varied from that received.

Hako Australia Pty Ltd if claim is approved, will credit labour and parts to a Dealer or Authorised agent account unless a Tax Invoice for payment accompanies the claim.

Dealer/Authorised agent is required to hold the replaced parts under warranty until approval or disapproval has been received by Hako Australia Pty Ltd for a period of 90 days.

Dealer/Authorised agent is responsible for the freight or equipment and parts returned for warranty. These are to be returned when and only if Hako Australia Pty Ltd specifically requests their return for inspection. Ensure the name of Hako Australia Pty Ltd manager granting approval or requesting these returns is included on the return goods.