

Hako Rotobic

G-Force CLASSIC

SCRUBBER / POLISHER WITH SUCTION



Parts Manual and Owners Guide

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An ideal cleaning
solution from
Hako Rotobic.

PACKAGING

- The G-Force and G-Force Hi-Torque models are despatched in two cartons. The cartons contain the handle and chassis assembly.

HANDLE ASSEMBLY

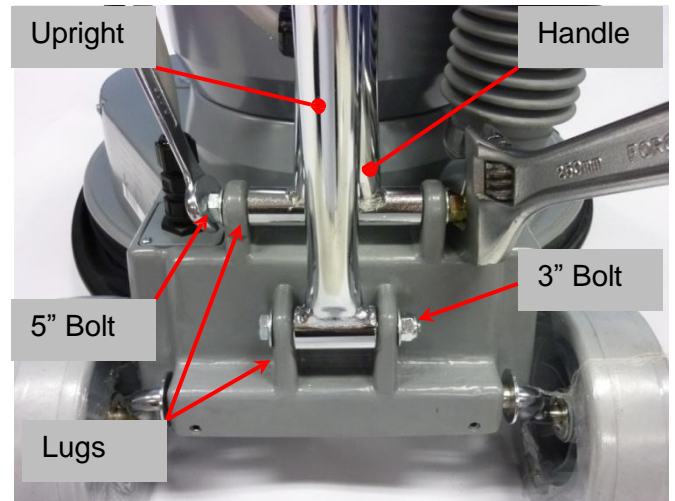
- Remove the 5" bolt from the handle support lugs.
- Fit the handle between the chassis lugs. Insert bolt with washer under bolt head through lugs and handle stem. Tighten nut with washer under nut head until no side movement is evident and handle is free to rotate.
- Remove 3" bolt from handle upright support lugs and repeat the above procedure.

ELECTRICAL CONNECTION

- Align 4 pin bayonet socket from handle with plug base on chassis, and lock into place, refer to Pic.2.

HANDLE ADJUSTMENT

- To adjust handle height, release the handle clamp by rotating the handle lever shown in Pic 3 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 4.



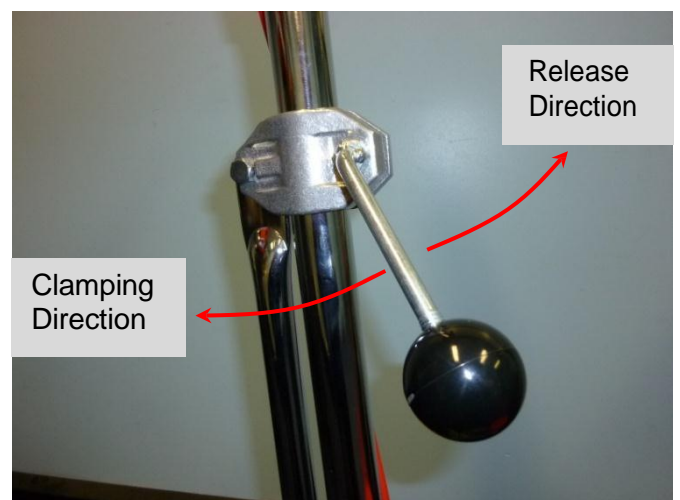
Pic 1 G-Force & G-force Hi-Torque Handle Assy



Pic 2 Electrical Connection



Pic 4 Factory Connection



Pic 3 Handle Adjustment

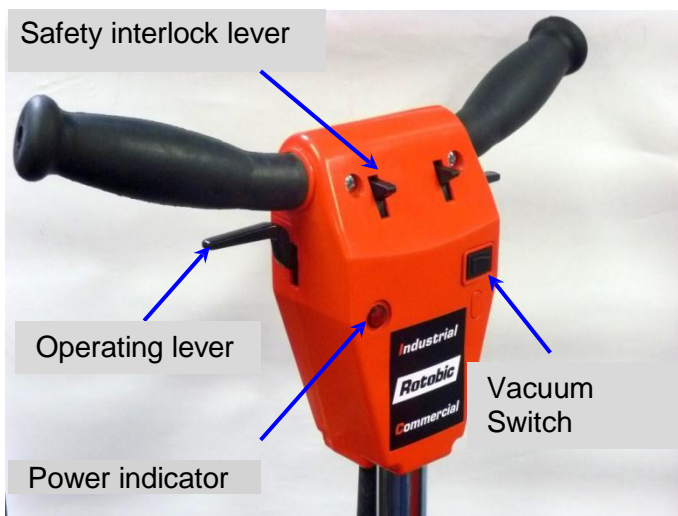
PAD AND BRUSH SIZE

- Use 45cm Quick Release brushes, or 45cm Quick Release pad holders with 45 cm pads.

FITTING PADS AND BRUSHES

- Raise the handle into an upright position and lay machine back onto the floor refer to Pic 5
- From in front of the machine engage the brush or pad holder onto the Quick Release and lock into position refer to Pic 6.
- Return the machine to an upright position.

HANDLE INDICATOR AND CONTROLS



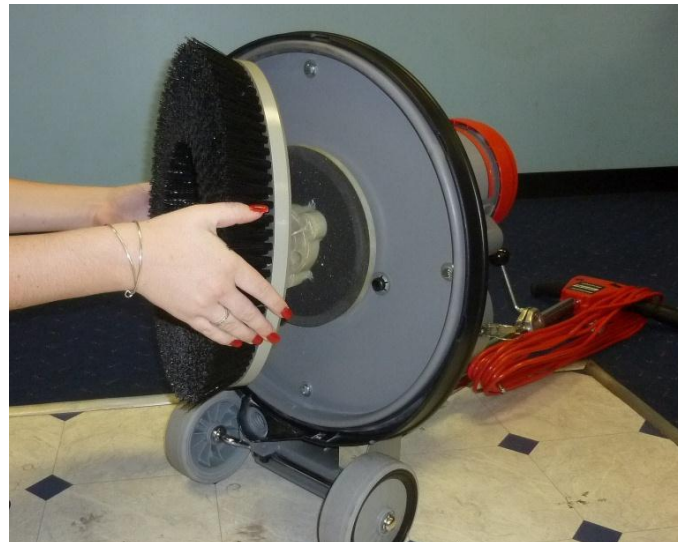
Pic 7 Handle Indicators & Controls

MOTOR CONTROLS

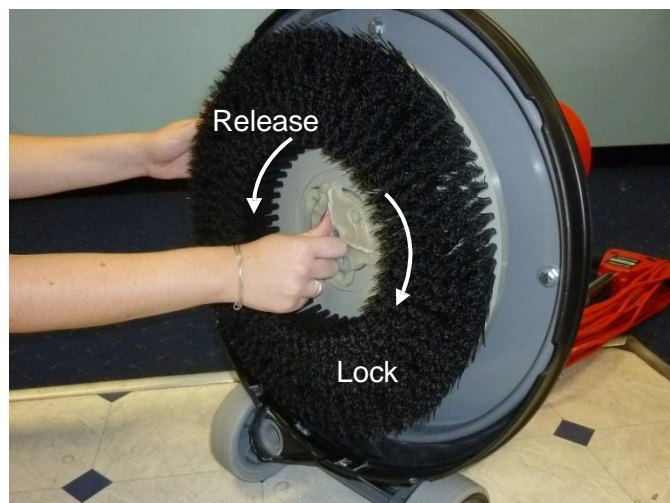


Pic 8 Motor thermal overload switch

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



Pic 5 Attaching a Brush



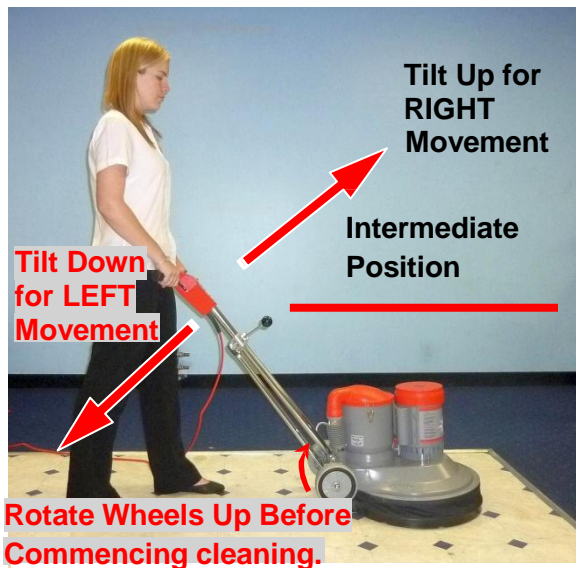
Pic 6 Locking and Releasing a Brush Attachment

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.

START UP

- Unwind the electrical cord and plug into power point.
- Adjust handle to comfortable waist height refer to Pic 12.
- Rotate wheels OFF the floor refer to Pic 12.
- Check that the power indicator lamp is ON.
- Push the Safety Interlock Lever forward to dis-engage safety lock refer to Pic 9.
- Squeeze the start/run lever one side only, which will START the machine refer to Pic 10
- Switch the vacuum motor as shown in Pic 11



Pic 12 Handle Height & Wheel Position



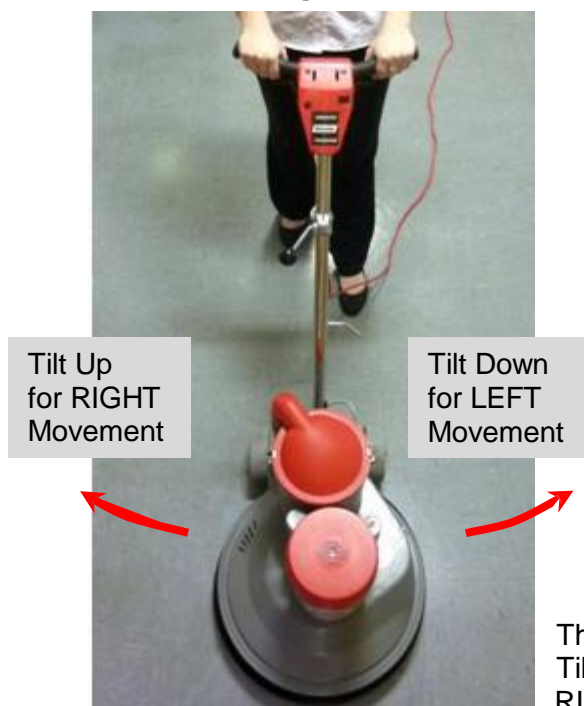
Pic 9 Dis-engaging the Safety Interlock



Pic 10 Squeeze Start / Run Lever to Operate



Pic 11 Switching the Vacuum Motor



Pic 13 Swing Directions

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 12 and Pic 13.

SKIRT ADJUSTMENT

- With the pad/brush fitted check that the Skirt Assembly is sitting evenly on the floor. Rotate the rubber Inlet Hose to be in slight compression when machine is level with the floor. This optimizes the skirt height refer to Pic 14

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 15

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 16.
- 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 operator 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.



Pic 14 Skirt Adjustment



Pic 15 Planning the Job



Pic 16 Transporting the machine.

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 17.
- 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.

SKIRT MAINTENANCE

- Remove accumulated dirt and debris from the skirt.
- Check the skirt for tears.
- Replace the skirt when the edges are worn.

FILTER BAG MAINTENANCE

- Access the filter bag by releasing the latches on the Canister Assembly holding the Lid refer to Pic 18.
- To clean, push the bag inside out over a bin, and then brush the surface clean using a soft banister brush or vacuum refer to Pic 19.
- Check the filter bag for perforations and thinning. Replace the bag as necessary.



Pic 17 Cleaning and checking the cord



Pic 18 Filter Bag Removal



Pic 19 Filter Bag Maintenance

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 run vacuum motor when wet scrubbing or stripping.
- Do not use machine for wet scrubbing without skirt in place.
- 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 vacuum anything that is burning or smoking such as cigarettes, matches or hot ash.
- 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.

Musculoskeletal 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.

Respiratory Damage/Illness due to Irritant Dust.

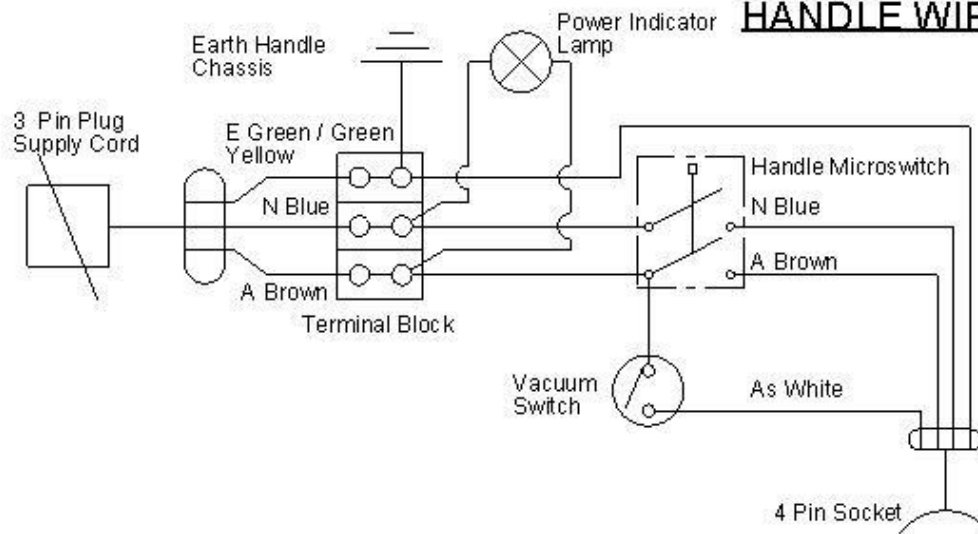
- Do not use machine for vacuuming hazardous dust/particulates as defined in clause 50, WorkCover NSW, Occupational Health and Safety Regulation 2001.
- Filtration efficiency, vacuum airflow, particulate size and quantity must be considered in the assessment of emissions.

SPECIFICATIONS

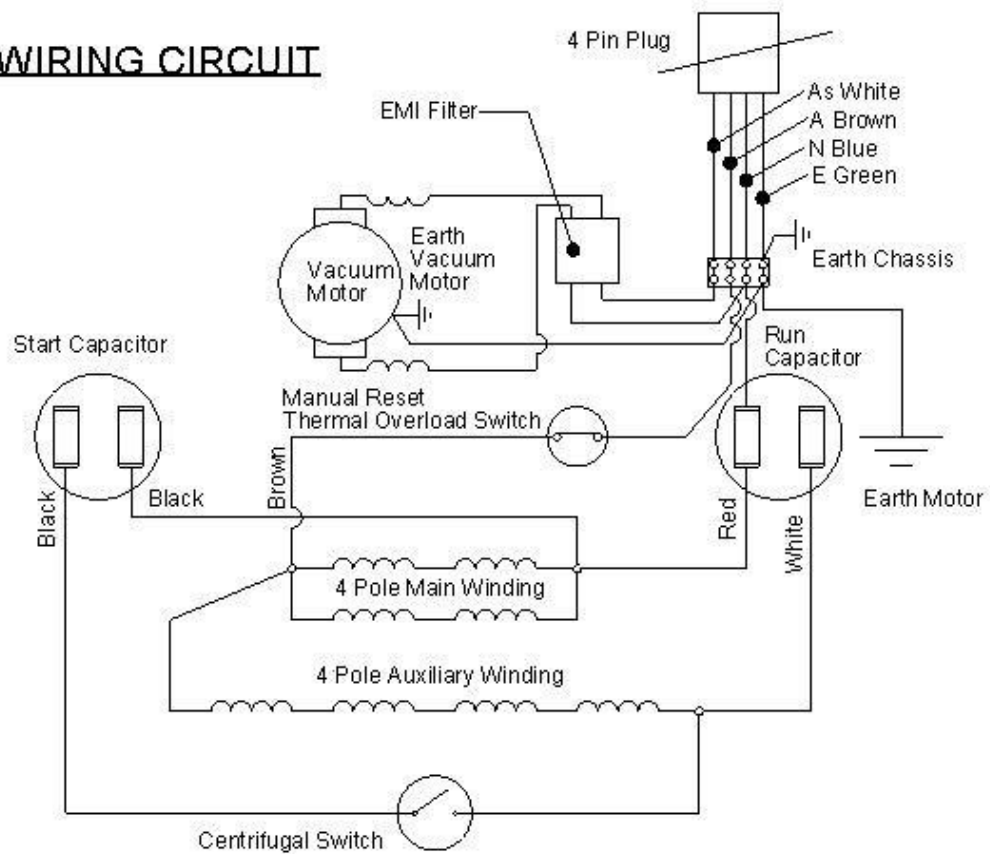
Main Motor	Type: Induction 4 Pole CSCR Voltage and Frequency: 220 – 240 Volts a.c. / 50 – 60 Hz Power Output: 1500 watts @ 8.3 amps
Vacuum Motor	Type: Single stage Flo-Thru Voltage and Frequency: 220 – 240 Volts a.c. / 50 – 60 Hz Air Flow: 25 litres/sec
Transmission	Type: HTD® double reduction timing belt. Output speed: Standard 430 rpm / Hi-Torque 215 rpm at 50 Hz Standard 515 rpm / Hi-Torque 257 rpm at 60 Hz
Noise	Noise: 68dB _A with Bassine brush on vinyl flooring.
Filter / Filtration	Media: Polyester 96.9% Efficiency EN 60312 Dust Capacity: 2.5 Litre
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 / 150mm dia.
Weight (No Brush)	44 kg
Brush / Pads	Size: 45cm (across bristles) brush, or 45cm pad holder suitable for 45cm pad.
Compliance	Standards: Australian and New Zealand Standards AS/NZS 60335.1 & 60335.2.10
Electromagnetic Conformity	Declaration: Australian and New Zealand Standard AS/NZS CISPR 14.1 Marking: C-Tick Mark N3771

ELECTRICAL CIRCUIT DIAGRAM G-FORCE

HANDLE WIRING CIRCUIT



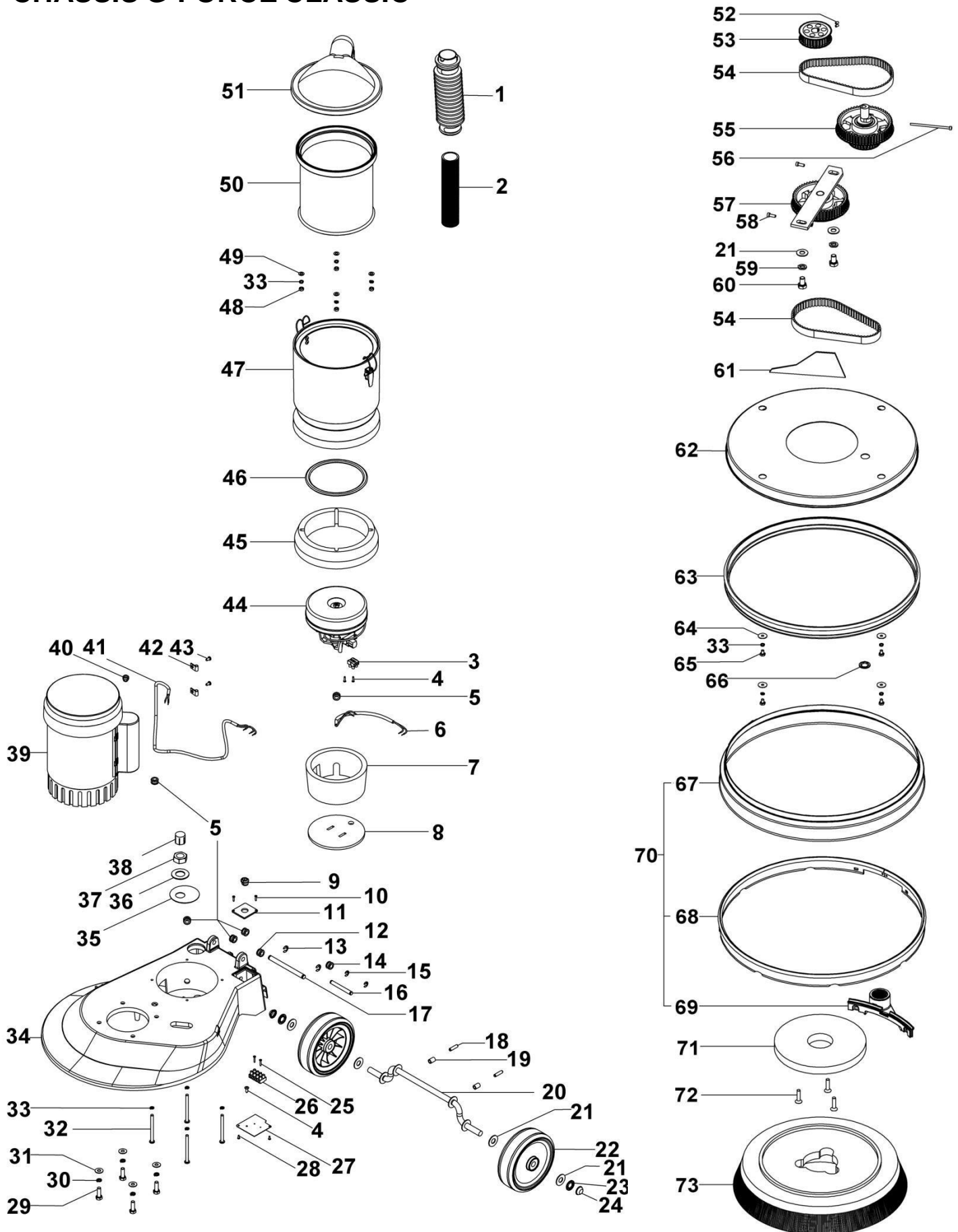
CHASSIS WIRING CIRCUIT



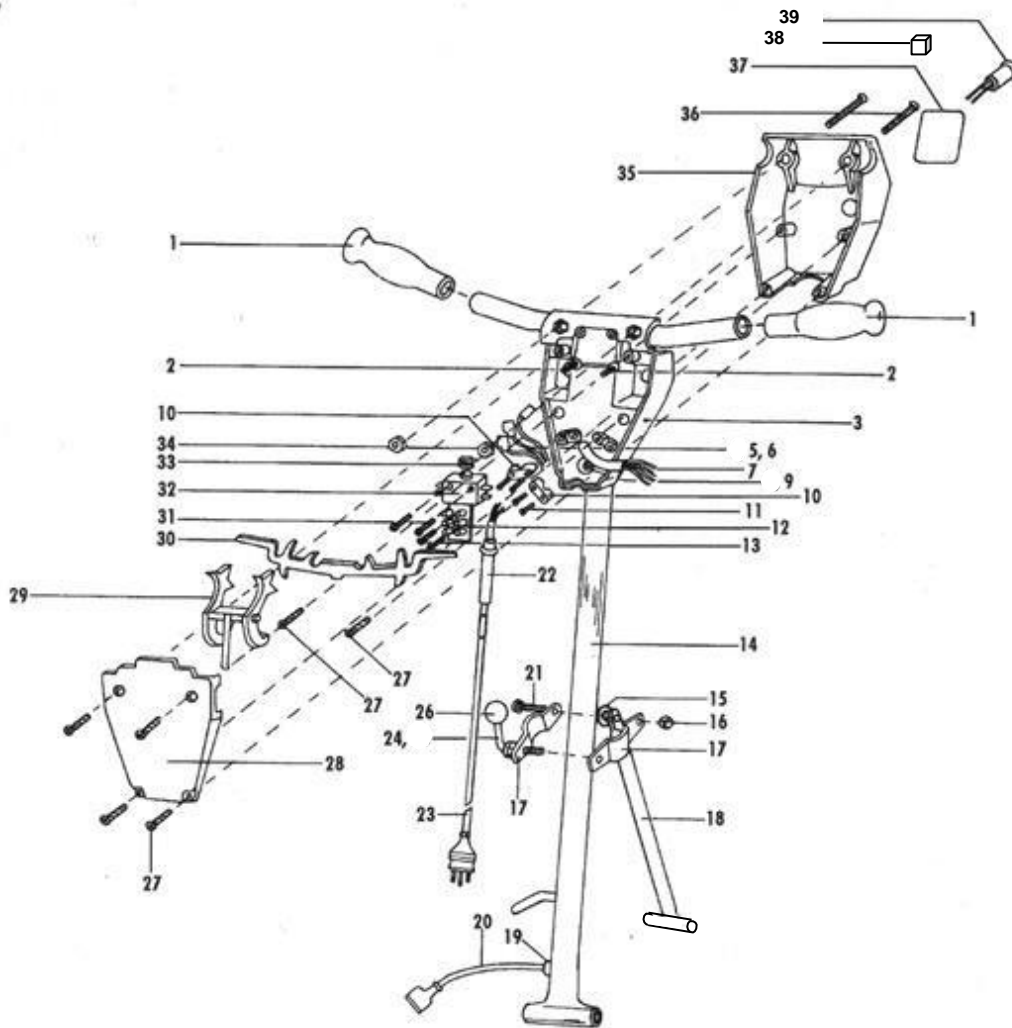
G-FORCE Classic Chassis Assembly Parts List

ITEM No.	PART No.	DESCRIPTION	QTY	ITEM No.	PART No.	DESCRIPTION	QTY
1	13277001	Hose Inlet Assy G-Force	1	41	13220005	Cord Motor G-Force&FX Classic.	1
2	13270010	Hose Grey 32mm x 235+/-3 G-Force	1	42	13220009	Clamp 'P' Dia. 6.4 Mtg Hole 5.2 Zn Pl	2
3	13217000	Bracket EMI Filter Assy	1	43	13380040	Screw No.10 x 3/8 Pan Taptite ZP	3
4	13380041	Screw No. 10 x 1/2 S/T Pan ZP	3	44	13320001	Motor Vac 650W Single Stage Flo-Thru	1
5	13260002	Grommet 8.7x12.7x6.4 Panel	4	45	13280007	Insulation Strip Wall Canister	1
6	13220006	Cord Vacuum G-Force & FX Classic	1	46	13260010	Gasket Ring 150 OD x 12 Xsection	1
7	13280006	Insulation Vac Chamber Wall Chassis	1	47	13227706	Canister Polisher Assy	1
8	13280005	Insulation Disc Vac Chamber	1	48	13420020	Washer 1/4 x 1/2 x 18# Flat ZP	4
9	13227703	Connector Panel Lock Assy	1	49	13330011	Nut 1/4 UNC Hex Steel ZP	4
10	13380016	Screw No. 4 x 1/2 S/T Pan ZP	2	50	13250001	Filter Bag Polisher 167Dia x 125L PE	1
11	13350001	Plate Gland G-Force Classic	1	51	13310005	Lid Canister Red	1
12	13330013	Nut 3/8 Hex UNC Nyloc	1	52	13380044	Screw M5 x 8 Grub Oil Blackened	1
13	13420030	Washer 3/8 x 3/4 x 18# Flat ZP	2	53	13350024	Pulley 22t Motor Assy G-Force HT	1
14	13330012	Nut 5/16 UNC Hex Nyloc	1	53	13350025	Pulley 30t Motor Assy	1
15	13420025	Washer 5/16 x 3/4 x 18# Flat ZP	2	54	13210003	Belt 600-8m-21HP	2
16	13210012	Bolt 5/16 UNC x 3 Hex ZP	1	55	13350026	Pulley 24-59t Counter Assy G-Force HT	1
17	13210020	Bolt 3/8 UNC x 5 Hex ZP	1	55	13350027	Pulley 30-55t Counter Assy	1
18	13350012	Pin 1/4 x 1 Spring ZP	2	56	13380045	Screw M5 x 80 Socket Head Cap	1
19	13270006	Hose Pressure 6 I.D. X 14mm O.D.	0.03	57	13350030	Pulley 55t Brush Assy G-Force	1
20	13200001	Axle G-Force 12.7 O.D. CrP	1	57	13350031	Pulley 59t Brush Assy G-Force HT	1
21	13420037	Washer 1/2 x 1-1/8 x 16# Flat ZP	6	58	13380050	Screw M6 x 16 Socket Head Cap ZP	2
22	13420100	Wheels 150mm G-Force & Focus	2	59	13420035	Washer 12 x 4 x 2.5 RECT Sect Sprg	2
23	13420039	Washer 1/2 UC D6143 Starlock ZP	2	61	13350015	Plate Baffle G-Force	1
24	13220023	Cap Axle 1/2 CP	2	60	13380080	Screw M12 x 20 Set Hex ZP	2
25	13380017	Screw No. 4 x 5/8 S/T Pan ZP	2	62	13260006	Guard Pulley G-Force	1
26	13390006	Terminal Block 500-35DS 12 Way	0.33	63	13210005	Bumper G-Force	1
27	13220024	Cover Junction Box G-Force	1	64	13420021	Washer 1/4 x 7/8 x 18# Flat ZP	4
28	13380015	Screw No. 4 x 1/4 S/T Pan ZP	2	65	13380060	Screw 1/4W x 3/8 Set Hex ZP	4
29	13210010	Bolt 5/16W x 1 Hex ZP	4	66	13420046	Washer 16 x 28 Sprg Push On Fix ZP	1
30	13420027	Washer 5/16 x 5/64 x 5/64 SQ Sprg	4	67	13250010	Fabric Skirt G-Force	1
31	13420025	Washer 5/16 x 3/4 x 18# Flat ZP	4	68	13240001	Extrusion LDPE Skirt G-Force	1
32	13380062	Screw 1/4W x 3 M/T RDHD ZP	4	68	13240003	Extrusion LDPE Skirt G-Force Sander	1
33	13420022	Washer 1/4 x 1/16 x 1/16 SQ Sect Sprg	12	69	13220027	Chute Vac. & Insert Assy G-Force	1
34	13220021	Chassis G-Force Classic	1	70	13387000	Skirt Assy G-Force	1
35	13420051	Washer 22 x 70 x 1 Eccentric SS	1	70	13387002	Skirt Assy G-Force Sander	1
36	13420050	Washer 7/8 x 1-5/8 x 14# Flat ZP	1	71	13360000	Quick Release Adaptor Complete	1
37	13330016	Nut 1/2BSPP Hex ZP	1	72	13380071	Screw M8 x 35 CSK PH ZP	3
38	13220019	Cap 1/2 BSP Red Plastic	1	ACCESSORIES			
39	13320000	Motor Polisher CMG 1500 W	1	73	13210060	Brush G45cm Bassine QR	1
	13300001	Key Motor 3/16 x 3/16 x 1	1		13210061	Brush G45cm Soft Nylon QR	1
	13220035	Cap Start 108-130µF 86 x 46	1		13210063	Brush G45cm Hard Nylon QR	1
	13220036	Cap Run 30 µF 45 x 92 DQC	1		13210064	Brush G45cm Tynex QR	1
	13220040	Cover Cap. Start	1		13350110	Pad Holder G45cm QR	1
	13220041	Cover Cap. Run	1		13350102	Pad Holder G40cm Sandscreen QR	1
	13380006	SwitchThermal Overload Manual	1		13350103	Pad Holder G40cm Sandpaper QR	1
	13250015	Fan Plastic 22mm	1		13380150	Sandscreen 45cm x 60# Coarse	1
	13420060	Washer Fan Pressed Steel	1		13380151	Sandscreen 45cm x 80# Medium	1
	13220042	Cowl Plastic Motor Housing	1		13380152	Sandscreen 45cm x 100# Fine	1
	13380007	Switch Centrifugal	1		13380153	Sandscreen 45xm x 120# Very Fine	1
	13350016	Plate Switch	1		13380154	Sandscreen 45xm x 150# Very Fine	1
40	13210002	Bush Strain Relief	1				

CHASSIS G-FORCE CLASSIC



G-FORCE Industrial & Commercial Handle



No.	Part Name	Part No.	Qty
	Handle G-Force IC Assy	13277050	
1	Handle Grip	13270005	2
2	Pin M6 x 20 Dowell CP	13350010	2
3	Housing Handle Lower G-Force IC	13270001	1
5	Wire N Handle Focus/G-Force IC	13420002	1
6	Wire A Handle Focus Suds/G-Force IC	13420001	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
15	Washer 15.8 x 8.05 x 0.90 Belleville ZP	13420045	1
16	Nut 5/16 Hex UNC Nyloc	13330012	1
17	Clamp Handle IC Set	13220015	1
18	Tube Upright IC	13390000	1
19	Bush Strain Relief Utilux H2097B	13210001	1
20	Cord Handle G-Force IC Assy	13227701	1

No.	Part Name	Part No.	Qty
21	Bolt 5/16W x 1-1/2 Hex ZP	13210011	1
22	Grommet Loom Cord	13260001	1
23	Cord Polisher 3 Core 15m x 15A	13220007	1
24	Lever Handle Clamp IC	13310003	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 Cover IC	13270003	1
36	Screw M6 x 45 M/T Pan ZP	13380052	2
37	Label Handle IC	13310010	1
38	Switch Rocker Red 15A SPST	13380000	1
39	Indicator Red 240V 0.3W T1200.04 & 152mm Leads	13280002	1

Hako Australia Pty Ltd Warranty Policy

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 of 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.