

Owner Instructions

Original Instructions

Warning! Read instructions before using the machine



HZ 190, 200, 250, 350, 370, 450, 570, 750, 900

HZD 450, 570, 750, 900



Hazardous Dust Machines



www.numatic.com



Machine, Kits and Bags.

		
HZ 190	BB 17	NVM 1CH
HZ 200	BB 17	NVM 1CH
HZ 250	BB 17	NVM 1CH
HZ 350	BB 18	NVM 2BH
HZ 370	BB 18	NVM 2BH
HZ 450	BB 19	NVM 3AH
HZ 570	BB 19	NVM 3BH / NVM 3BM
HZ 750	BB 20	NVM 4BH / NVM 4BM
HZ 900	BB 20	NVM 4BH / NVM 4BM
HZD 450	BB 19	NVM 3AH
HZD 570	BB 19	NVM 3BH / NVM 3BM
HZD 750	BB 20	NVM 4BH / NVM 4BM
HZD 900	BB 20	NVM 4BH / NVM 4BM
<p>NVM 1CH = HepaFlo Bags NVM 2BH = HepaFlo Bags NVM 3AH = HepaFlo Bags NVM 3BH = HepaFlo Bags NVM 4BH = HepaFlo Bags</p>	 <p>HepaFlo Bag + Permatex Filter</p>	
<p>NVM 3BM = MicroFlo Bags NVM 4BM = MicroFlo Bags</p>	 <p>MicroFlo Bag + MicroTex Filter</p>	



BB 17



BB 18



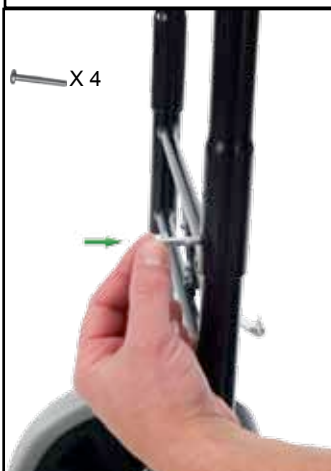
BB 19



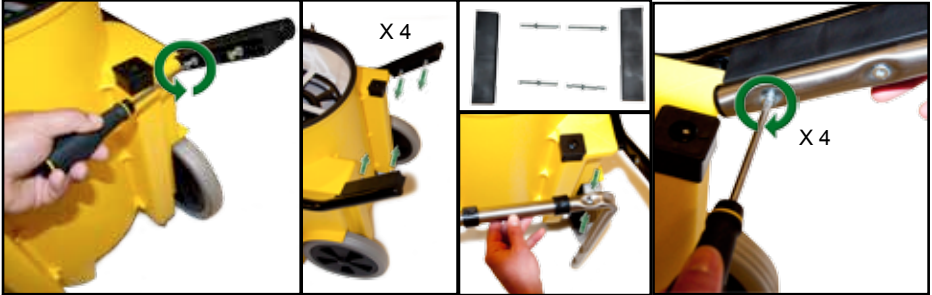
BB 20

Handle Assembly, 350, 450, 750

HZ 350
HZ 450
HZ 750
HZD 450
HZD 750



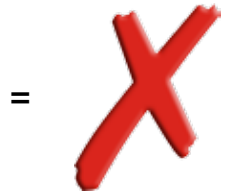
Handle Assembly, 900



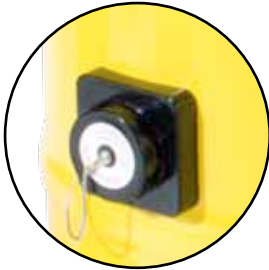
Fitting the bag



Fitting the hose, Fitting the air separator



Moving the machine.





Low Flow Indicator

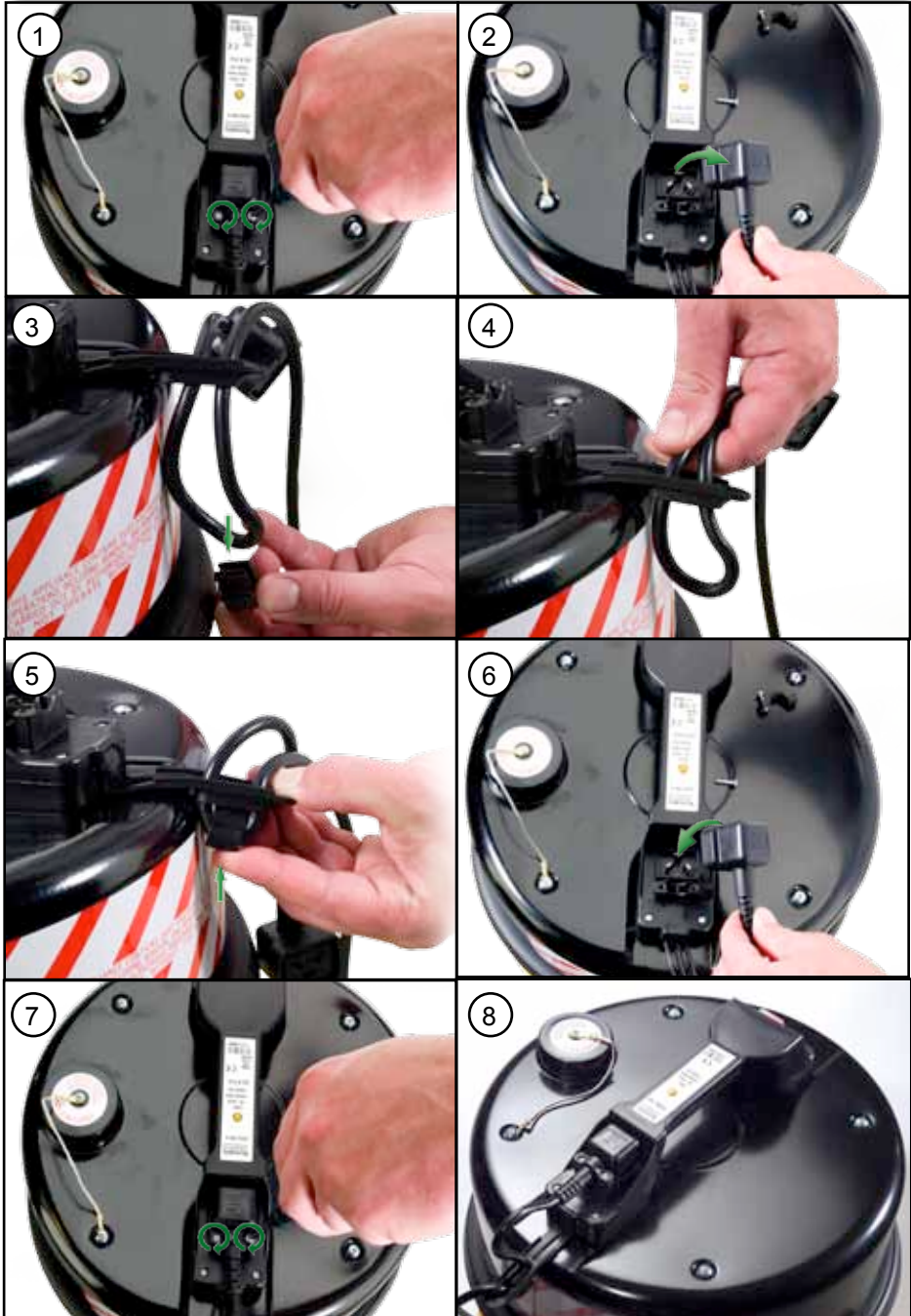
This appliance is fitted with a low flow indicator to show that air flow has reduced. In the event of the indicator light flashing, check the following:-








Cause	Solution
Dust caps still fitted	Remove the caps.
Blocked hose	Unblock the hose.
Bag full	Remove and replace
Cloth filter clogged	Remove and replace, clean dirty filter by vacuuming.
Hepa cartridge clogged	Replace, seek advice from an instructed person or manufacturer.

Variant	Simplex	Duplex
Model	HZ 190, 200, 250, 350, 450, 570, 750, 900	HZD 450, 570, 750, 900
Classification	TYPE H	TYPE H
Voltage	115 / 120 / 230V	115 / 120 / 230V
Frequency	50 - 60Hz	50 - 60Hz
Power rating	1200W MAX 1000 IEC	2400W MAX 2000 IEC
Sound Pressure	68 - 72dB(A) to IEC 60704-2-1 +/- 0.2dB(A)	72 - 78dB(A) to IEC 60704-2-1 +/- 0.2dB(A)
Low flow operation	16L/sec (0.96m3/min)	22L/sec (1.32m3/min)
(NB 16L sec corresponds to an airspeed of 20m/sec in a 32mm pipe) (NB 22L sec corresponds to an airspeed of 20m/sec in a 38mm pipe)		

Changing the cable.



Rating Label

<p>Numatic International Ltd. <small>CHARD, ENGLAND, TA20208</small></p> <p>HZ 750-2</p> <p></p> <p>220v - 240v 50Hz - 60Hz</p> <p>1200W MAX 1000W IEC IP 4X 19.8Kg</p> <p>Type H</p> <p> </p> <p> 094300118</p>	<p>← Company Name & Address</p> <p>← Machine Description</p> <p>← Voltage / Frequency</p> <p>← Power Rating</p> <p>← IP Rating</p> <p>← Weight</p> <p>← Type Hazardous</p> <p>← CE Logo</p> <p>← WEEE Logo</p> <p>← Machine Yr/Wk/Serial Number</p>	<p>Vacuum cleaner, accessories and packaging should be sorted for environmental-friendly recycling.</p> <p>Only for EU countries: Do not dispose of Vacuum cleaner into household waste!</p> <p>According to the European Directive 2002/96/EC on waste electrical and electronic equipment and its incorporation into national law.</p> <p>Vacuum cleaners that are no longer suitable for use must be separately collected and sent for recovery in an environmental-friendly manner.</p> <p></p>
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PPE

(Personal Protective Equipment) that maybe required for certain operations.



Eye Protection



Safety Footwear



Safety Hat



Safety Gloves



Face Mask



Protective Clothing



Ear Protection



Hi Vis Jacket



Caution Floorsign

NOTE:

A risk assessment should be conducted to decide what PPE should be worn

WARNING

Read the instruction manual before using the machine.
Operators shall be adequately instructed on the use of these machines.

As with all electrical equipment, care and attention must be exercised at all times during use, in addition to ensuring that routine and preventative maintenance is carried out periodically to ensure safe operation.

Failure to carry out maintenance as necessary, including the replacement of parts to the correct standard could render this equipment unsafe and the manufacturer can accept no responsibility in this respect.

This machine is for DRY USE only and must not be stored outside or used in wet conditions.

The machine shall be disconnected from the mains by removing the plug from the supply socket during cleaning or maintenance and when replacing parts or converting the machine to another function.

This machine is not a toy

CAUTION

Ensure that the filtration system fitted to the machine is suitable for the material being collected.
This machine is for dry use only.
This machine is for use indoors only.
This machine should be stored indoors only.

NOTE

This machine is also suitable for commercial use, for example in hotels, schools, hospitals, factories, shops, rental businesses and offices for other than normal housekeeping purposes.

DO

- Keep your machine clean.
- Keep filters clean.
- Use filter bags, they will enhance performance and help keep machine clean.
- Use a Numatic Original filter bag under fine dust conditions.
- Keep hoses and tubes clear.
- Replace any worn or damaged parts immediately.
- Regularly examine the power cord. If damage is found such as cracking or ageing the power cord must be replaced by a qualified person using the correct Numatic original part.
- Change dust bag frequently.
- Keep diffuser filter (where fitted) clean.
- Only use the socket outlet on the machine for purposes specified in the instructions
- Only use the brushes provided with the machine. The use of other brushes may impair safety.
- Only replace the power cord with the correct Numatic approved replacement part.

DON'T

- Allow the rotating brush to come into contact with the supply cord (where rotating brushes are fitted).
- Unreel the cable with one pull or pull on the cable to unplug the machine from the power supply.
- Use to suck up hot ashes or lighted cigarette ends.
- Use steam cleaners or pressure washers to clean the machine or use in the rain.
- Immerse in water for cleaning.
- Attempt machine maintenance or cleaning unless the power supply plug has been removed from the supply outlet.

Important User Information

Before use operators shall be provided with information, instruction and training for the use of the machine and the substances for which it is to be used, including the safe method of disposing of material collected.

The dust container has to be emptied when necessary, but also after every time used.

This vacuum cleaner has a lamp that illuminates when air velocity drops below a preset level, which indicates that the bag must be changed.

This machine is not suitable for connection with dust generating machines.

All filters including the bag must be undamaged and in correct position before this machine can be used safely.

CAUTION: This machine is for dry use only and is not to be used or stored outdoors in wet conditions.

Do not pick up glowing embers or dust or any other ignition hazard

Do not use the power cable as a method of moving the machine.

WARNING:

1. This machine must only be operated by suitably trained and authorised personnel.
2. This machine or its accessories must not be modified.
3. The machine must not be stored or used in a wet environment.
4. Do not allow the dust collection bag (NVM-4B) to become so full as to reduce the effective pick-up of the vacuum. (Lamp will illuminate at preset air velocity levels).
5. Only use the dust collection bag (NVM-4B) once.
6. This machine must only be repaired by suitably trained and authorised personnel.
7. Only use genuine Numatic International Ltd spare parts, for repairs.
8. This machine must not be installed as a fixed extraction system or run unattended.

Do not re-use the essential filter element after removal out of the machine.

Operators should observe any safety regulations appropriate to materials being handled.

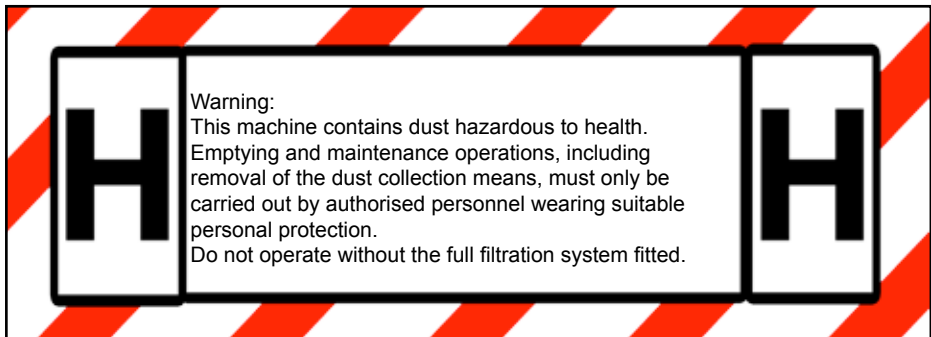
Do not allow the mains lead to come in contact with rotating brushes.

This machine is for dry use only.

PREPARATION FOR USE

Unpack and identify each item of equipment from the delivery note.

Check that the details given match the information on the "rating plate" mounted on the Head Assembly.



Installation / Removal / Disposal of the dust bag.

The dust bag holding the dust and debris must be removed and renewed by authorised personnel only, wearing appropriate personnel protective equipment, in a specified de-contamination area. Never operate without the full filtration system in place.

Process of disposal: Disconnect the hose, fit the Dust Cap on the Hose Flange, un-clip the bottom two Toggle Clamps.

(Upper two toggle clamps have split pins that should not be removed by un-authorised personnel).

Remove the cloth filter (A) in the Drum. Remove the dust bag from the Hose Flange inside the drum and seal the Dust Bag hole. Place the Dust Bag inside an impervious plastic bag and seal the bag.

Dispose of the plastic bag, depending on contamination, in an appropriate manner.

Fit a new Dust Bag over the Hose Flange inside the drum assembly. Fit the cloth filter (B), and the Head, plus Interceptor assembly, re-applying the two Toggle clamps.

MAINTENANCE

All machine parts should be regarded as contaminated when removed from the hazardous area and appropriate action taken to prevent dust dispersal.

Disconnect from the power supply during cleaning, maintenance or when replacing parts. Ensure the plug is removed from the socket outlet.

Maintenance must be carried out in a suitable non hazardous area with facilities for cleaning the area after servicing, and with suitable ventilation.

Maintenance and cleaning work must always be carried out by competent authorised personnel equipped with suitable personal protection.

The Cloth filter must be taken out and checked for degree of contamination, and damage to cloth or seals.

If the Cloth seal is found to be damaged or badly contaminated, you must replace. If only mildly contaminated, either wipe clean or wash with a mild detergent (ensure it is dry before replacing).

Items that can not be satisfactorily cleaned (e.g. filters) need to be disposed of in an impervious plastic bag and disposed of in accordance with current regulations. Replace the items that cannot be satisfactorily cleaned using approved manufacturer parts.

Regularly examine the supply cord for damage, such as cracking or ageing. If damage is found, replace the cord before further use.

All parts of this vacuum are safety critical only replace with the genuine Numatic spare parts.

For user servicing, the machine must be dismantled, cleaned and serviced, as far as is reasonably practicable, without causing risk to maintenance staff and others.

Suitable precautions include decontamination before dismantling, provision for local filtered exhaust ventilation where the machine is dismantled, cleaning of the maintenance area and suitable personal protection.

In class H machines the outside of the machine should be decontaminated by vacuum cleaning methods and wiped clean or treated with a sealant before being taken out of the hazardous area and appropriate action taken to prevent dust dispersal. (HSE Risk Assessment needed).

A competent person shall perform a technical inspection at least annually, consisting of, for example, inspection of filters for damage, air tightness of the machine and proper function of the control mechanism.

Also the filtration efficiency should be tested at least annually, or more frequently as specified in national requirements. The test methods that can be used to verify the machine's filter efficiency are specified in IEC 60335-2.69 Annex AA (AA22.201.2). If the test fails it should be repeated with a new essential filter.

Replacing HEPA Filters Process.

Unclip the top two toggle clamps, removing the security split pins in advance.

Remove the Head assembly and place in a safe area. Unclip the lower two toggle clamps and remove the Interceptor assembly from the drum assembly, and place the Interceptor on a good level working surface.

Unscrew the 6, M5 x 10 screws on the underside of the Interceptor assembly which will expose the HEPA filter.

Remove the contaminated HEPA filter and place in a suitably impervious plastic bag and dispose of in accordance with current regulations. Replace the HEPA filter with an identical approved part (ensure plastic filter grid that locates into the hole in the metalwork is not thrown away with HEPA filter).

Re-assemble the Interceptor assembly in reverse order. If the seal between the upper and lower metal parts of the Interceptor assembly is damaged, replace with a manufacturer approved seal material (there must be NO gap in the circular seal).

Re-assemble the machine in reverse order. (Screw torque 2.5Nm). Ensure new split pins are fitted and legs opened

During this process please look carefully at all seals between mating parts and check for any damage.

If seals have been damaged, please contact the machine manufacturer to obtain an approved replacement part.

DATA

Model	Motor	Airflow	Suction	Capacity	Weight	Size	Cleaning Range
HZ 190	1200W	42 L/sec = 151 m ³ /hr	2500mm	8 L	10Kg	340x340x400	26.8m
HZ 200	1200W	42 L/sec = 151 m ³ /hr	2500mm	9 L	10.1Kg	355x355x520	26.8m
HZ 250	1200W	42 L/sec = 151 m ³ /hr	2500mm	8 L	11.5Kg	340x340x455	26.8m
HZ 350	1200W	42 L/sec = 151 m ³ /hr	2500mm	14 L	15Kg	385x365x845	26.8m
HZ 370	1200W	42 L/sec = 151 m ³ /hr	2500mm	15 L	10.4Kg	355x355x570	26.8m
HZ 450	1200W	42 L/sec = 151 m ³ /hr	2500mm	20 L	26.5Kg	510x500x940	26.8m
HZ 570	1200W	42 L/sec = 151 m ³ /hr	2500mm	23 L	17.1Kg	415x415x645	26.8m
HZ 750	1200W	42 L/sec = 151 m ³ /hr	2500mm	35 L	19.8Kg	510x510x960	26.8m
HZ 900	1200W	42 L/sec = 151 m ³ /hr	2500mm	40 L	25Kg	800x490x880	26.8m
HZD 450	2400W	84 L/sec = 302 m ³ /hr	2500mm	20 L	29.5Kg	510x500x940	26.8m
HZD 570	2400W	84 L/sec = 302 m ³ /hr	2500mm	23 L	19.3Kg	415x415x645	26.8m
HZD 750	2400W	84 L/sec = 302 m ³ /hr	2500mm	35 L	22Kg	510x510x960	26.8m
HZD 900	2400W	84 L/sec = 302 m ³ /hr	2500mm	40 L	27.2Kg	800x490x880	26.8m

HZ TYPE Max under pressure 248 hPa

HZD TYPE Max under pressure 248 hPa

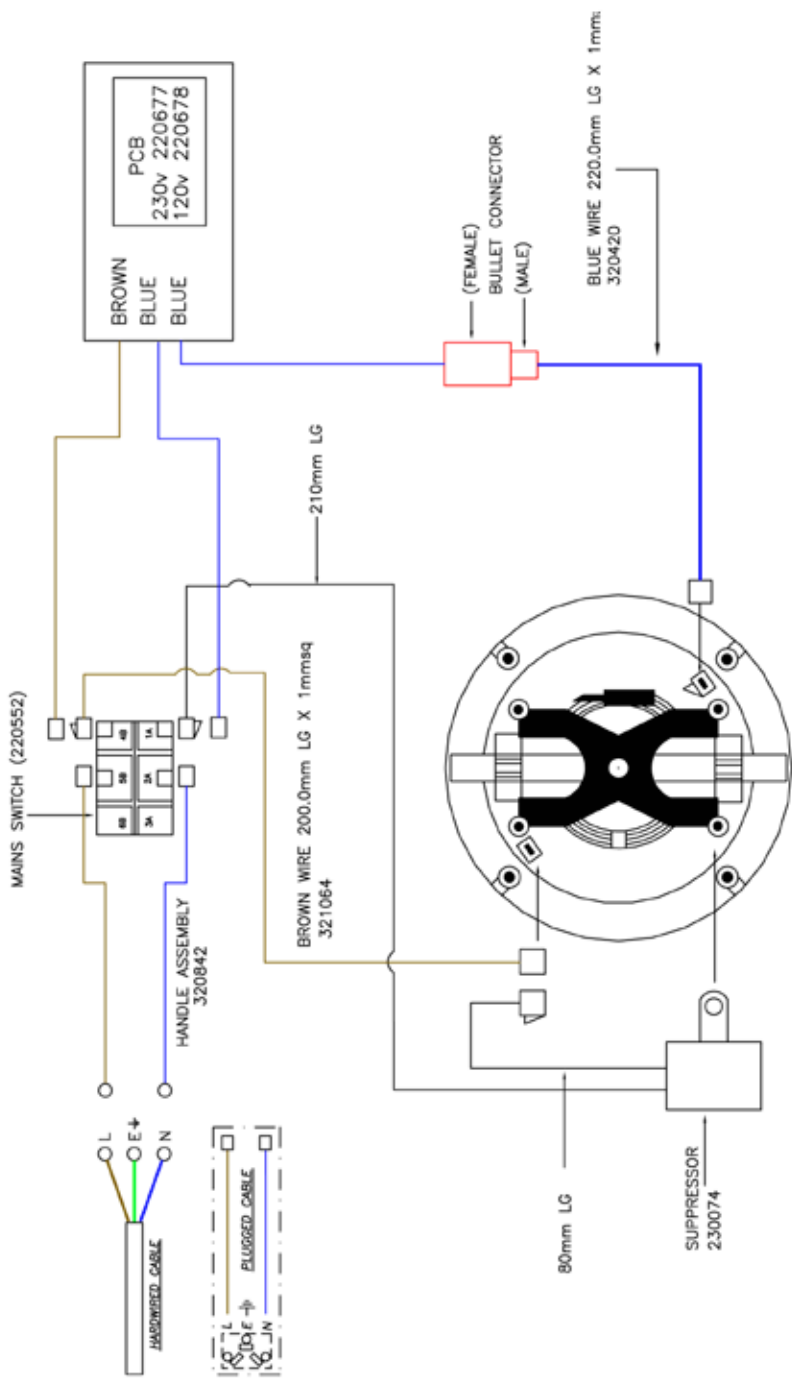
Numatic replacement spare parts

629445 Roll of 10 bags		601144 65mm Soft Brush (NVA-44B)	
602102 2.4M Hose (NVB-2B)		602159 38/32mm Adaptor (NVB-59B)	
602160 305mm Crevice tool (NVM-60B)		604165 TriTex 12" Filter	
602161 152mm Rubber Brush (NVM-61B)		604113 PermaTex 14" Filter	
602923 305mm Stainless gulper (NVM-23B)		604311 MicroTex 12" Filter	
604124 - Bottom filter for HZ machines		604411 MicroTex 14" Filter	
604125 - Bottom filter for all HZD machines		604151 Air Separator	
604015 NVM-1CH HepaFlo Bags Pack of 10		604017 NVM-3BH HepaFlo Bags Pack of 10	
604016 NVM-2BH HepaFlo Bags Pack of 10		604019 NVM-4BH HepaFlo Bags Pack of 10	
604027 NVM-3BM MicroFlo Bags Pack of 5		604024 NVM-4BM MicroFlo Bags Pack of 5	

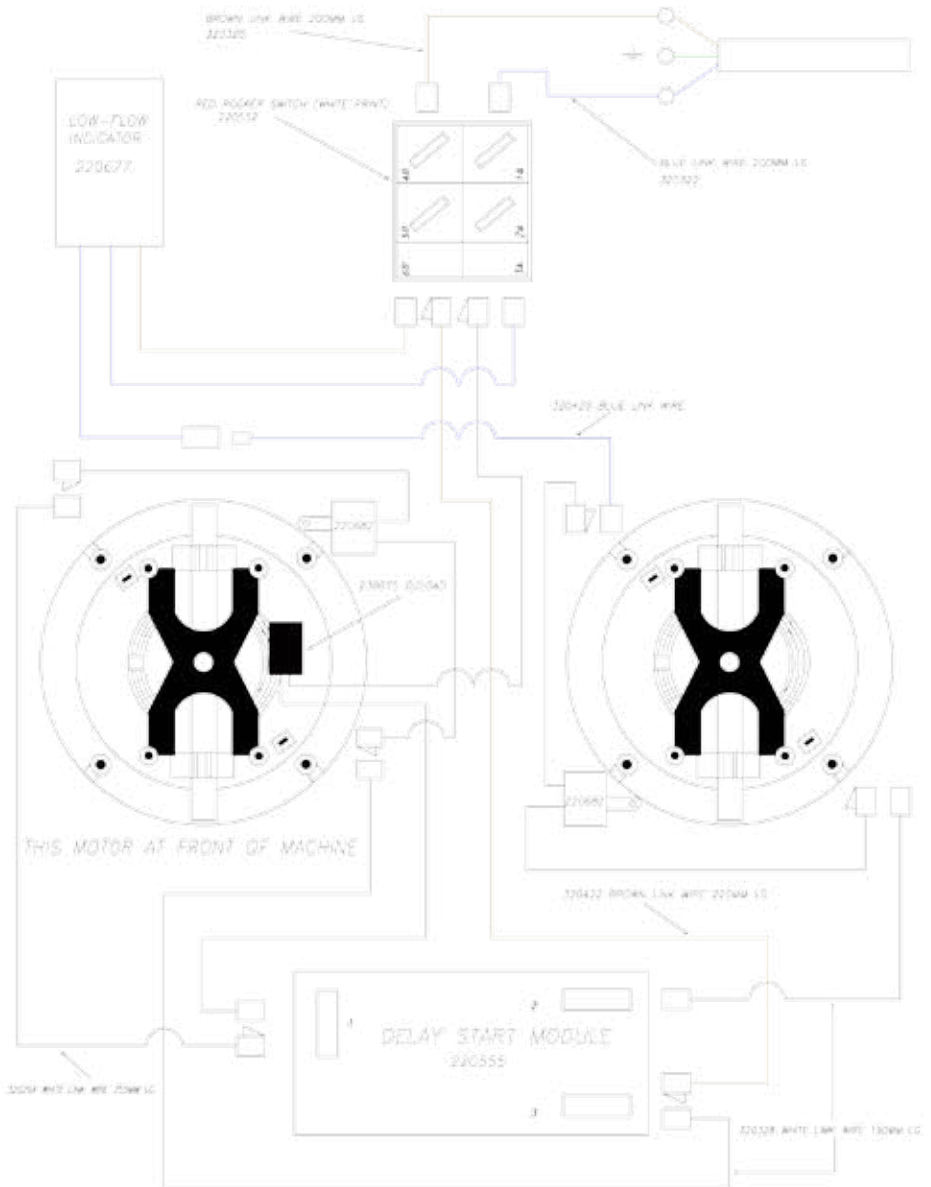
All machines to be retested after fitting replacement filter cartridge.

Spare Parts			
Drum			
500895	HZ 190 YELLOW DRUM ASSEMBLY		
500656	HZ 200 YELLOW DRUM ASSEMBLY		
500024	HZ250 YELLOW DRUM ASSEMBLY		
500018	HZ350 YELLOW DRUM ASSEMBLY		
500031	HZ/HZD450 YELLOW DRUM ASSEMBLY		
500570	HZ/HZD570 YELLOW DRUM ASSEMBLY		
500412	HZ/HZD900 YELLOW DRUM ASSEMBLY		
Hepa Cartridge			
604124	SIMPLEX HEPA CARTRIDGE		
604125	DUPLEX HEPA CARTRIDGE		
Interceptor			
604126	HZ250/350 YELLOW INTERCEPTOR ASSEMBLY		
604127	HZ4/750 YELLOW INTERCEPTOR ASSEMBLY		
604128	HZD4/750 YELLOW INTERCEPTOR ASSEMBLY		
Heads			
Simplex			
588301	HZ 250/350 BLACK METAL HEAD ASSEMBLY (SOCKET) (DAF) (V17/82) LAMB MOTOR		
588302	HZ 250/350 BLACK METAL HEAD ASSEMBLY (SOCKET) (DAF) (V34/54) LAMB MOTOR		
588303	HZ 250/350 BLACK METAL HEAD ASSEMBLY (HARD WIRED) (DAF) (V41) LAMB MOTOR		
588475	HZ 250/350 BLACK METAL HEAD ASSEMBLY (HARDWIRED) (DAF) (V82) LAMB MOTOR		
588543	HZ 450/750 BLACK METAL HEAD ASSEMBLY (HARDWIRED) (DAF) (V41) LAMB MOTOR		
588442	HZ 450/750/570/900 BLACK METAL HEAD ASSEMBLY (SOCKET) (DAF) (V17/82) LAMB MOTOR		
Duplex			
588444	HZD 450/750 BLACK METAL HEAD ASSEMBLY (16 AMP SOCKET) (DAF) (V17/82) LAMB MOTOR		
588445	HZD 450/750/570/900 BLACK METAL HEAD ASSEMBLY (16AMP SOCKET) (DAF) (V34/54/84) LAMB MOTOR		
588477	HZD 450/750 BLACK METAL HEAD ASSEMBLY (HARDWIRED) (DAF) (V82) LAMB MOTOR (INTERVAC)		
588480	HZD 450/750/570/900 BLACK METAL HEAD ASSEMBLY (HARDWIRED) (DAF) (V41) LAMB MOTOR		
Chassis			
501109	HZ350 MILD STEEL CHASSIS ASSEMBLY		
501016	450 HEAVY DUTY FIXED MILD STEEL CHASSIS ASSEMBLY		
501017	750/1000 HEAVY DUTY FIXED MILD STEEL CHASSIS ASSEMBLY		
Cables			
Simplex		Duplex	
236010	10.0MT X 1MM X 3 CORE CABLE (SOCKET + PLUG) UK	236011	10.0MT X 1.5MM X 3 CORE CABLE (SOCKET + PLUG) UK
236014	10.0MT X 1MM X 3 CORE CABLE (SOCKET + PLUG) EURO	236022	10.0MT X 1MM X 3 CORE CABLE (SOCKET + PLUG) SOUTH AFRICA
236050	10MT X 3 CORE X 1.5MM CABLE PLUS 16AMP INDUSTRIAL PLUG	236143	10.0MT X 1.5MM X 3 CORE YELLOW CABLE (SOCKET + PLUG) EURO
236058	10.0MT X 1MM X 3 CORE BLACK CABLE PLUS AUSTRALIAN PLUG	220911	12.5MT X 3CORE X 2.5MM CABLE PLUS 32AMP INDUSTRIAL PLUG

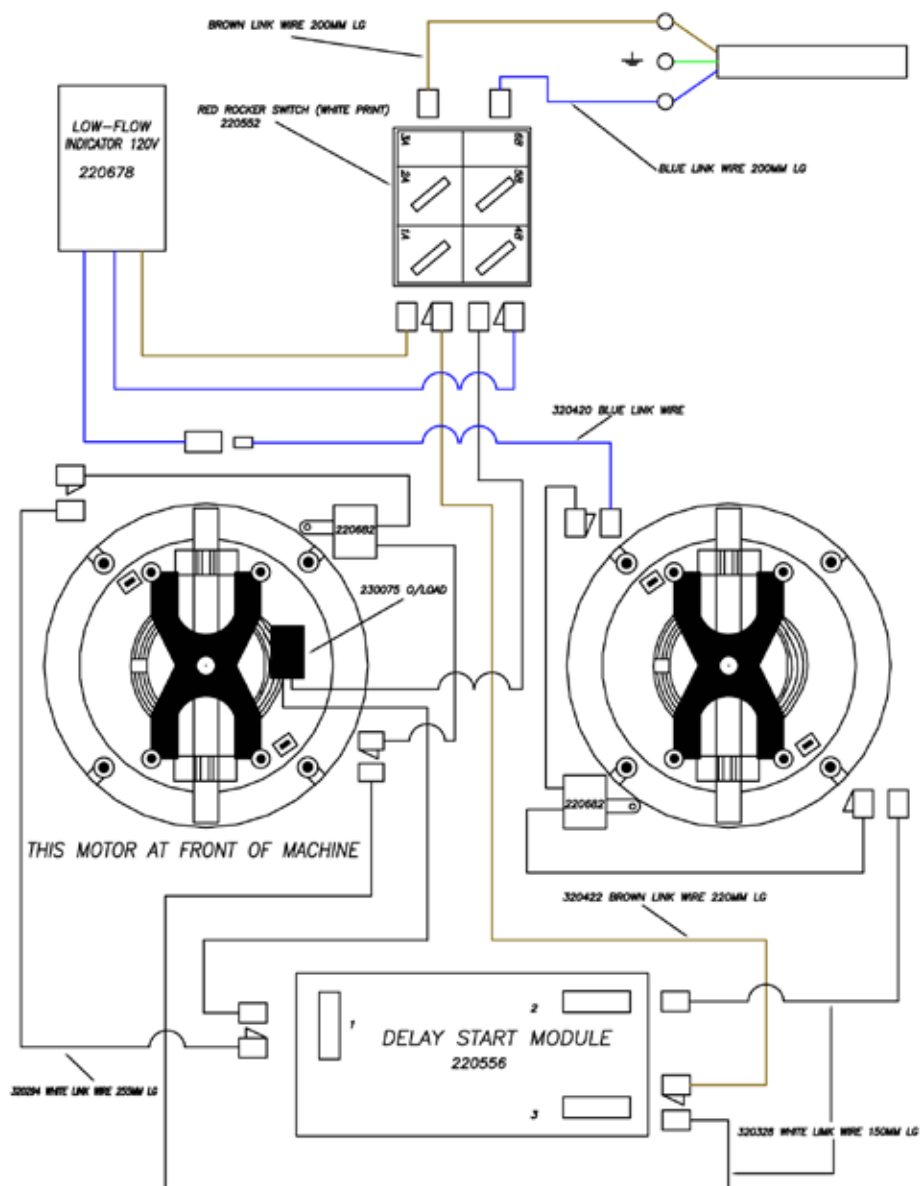
HZ 12 & 14 inch Simplex WD-0235 (A02)



14 inch Metal 3 core WD-0229 05-03-09 (A02)



14 inch Metal 3 core (120 V) WD-0264 (A01)



Numatic International Warranty

Numatic International Limited warrant to the original purchaser that its products are free of defects in both material or workmanship for the period shown below:-

Homecare and Cleancare Vacuum cleaners.....	2 Years
Rotary Floor Machines.....	2 Years
Twintec Auto Scrubber Dryer.....	1 Year
Vario Ride-On Scrubber Dryer.....	1 Year / 1500 hours
Mopping, Compacts, Combi and Servocare Products.....	1 Year
Individual Accessories and Spare Parts.....	6 Months

Note: This warranty expressly excludes consumable parts such as carbon brushes, floor brushes, mops, batteries etc, that are considered replaceable from time to time during the normal working life of the machine.

- A. The warranty period commences from the date the goods are purchased.
- B. All warranty claims must be processed through the Dealer from whom the equipment was purchased. The Dealer will co-operate with the purchaser throughout the warranty claims procedure and will arrange any necessary repairs using genuine Numatic parts.
- C. If the original Dealer is no longer able to fulfil his obligations please contact Numatic International Limited with full details of the claim and proof of purchase so that this may be processed without delay.
- D. Any warranty claim can only relate to the specific part that is proven to be at fault and for which a replacement will be supplied but cannot be extended to constitute a claim against the complete machine.
- E. Numatic International will supply the Dealer with any warranty parts required, subject to the claim being validated, after return of the faulty items in accordance with Numatic International Limited's General Conditions of Sale.
- F. Claims will not be accepted if they are the result of fair wear and tear, misuse or abuse of any kind.
- G. No replacement will be given unless the appropriate evidence of the validity of the claim has been provided to the satisfaction of Numatic International Limited.
- H. Numatic International Limited reserve the right to charge for any unnecessary work carried out as a result of an invalid claim.
- I. No variation to this warranty may be made or implied by any member of Numatic International Limited or its Dealers unless such variation is in writing and authorised by the Company



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