

# Clemas & Co Ltd

Industrial Cleaning Equipment  
Sales - Hire - Service

## KAV 15, 18, 20, 30 & 45 DRY PICK UP HAZARDOUS VACUUM CLEANER OPERATOR MANUAL



Clemas & Co. Unit 5 Ashchurch Business Centre, Alexandra Way, Tewkesbury,  
Gloucestershire, GL20 8NB.

Tel: 01684 850777

Fax: 01684 850707

Email: [info@clemas.co.uk](mailto:info@clemas.co.uk)

Web: [www.clemas.co.uk](http://www.clemas.co.uk)

<b>Important User Information .....</b>	<b>3</b>
<b>Unpacking your KAV Vacuum Cleaner.....</b>	<b>4</b>
<b>Commissioning Your KAV Vacuum Cleaner .....</b>	<b>4</b>
<b>Performance/Compressed Air Requirements .....</b>	<b>4</b>
<b>Risk Assessment (ATEX) .....</b>	<b>5</b>
<b>Risk Assessment (Type H).....</b>	<b>5</b>
<b>Operating Instructions .....</b>	<b>5</b>
<b>Carrying &amp; Storage.....</b>	<b>6</b>
<b>Optional Extra .....</b>	<b>6</b>
<b>Filtration System .....</b>	<b>6</b>
<b>Dust/Debris Disposal .....</b>	<b>7</b>
<b>Decontamination .....</b>	<b>7</b>
<b>Maintenance.....</b>	<b>7</b>
<b>Loss of Suction.....</b>	<b>8</b>
<b>Servicing &amp; Spares.....</b>	<b>8</b>
<b>Guarantee.....</b>	<b>8</b>
<b>Rating Plate.....</b>	<b>9</b>
<b>KAV 15H Spare Parts Diagram .....</b>	<b>10</b>
<b>KAV 18H Spare Parts Diagram .....</b>	<b>11</b>
<b>KAV 20H Spare Parts Diagram .....</b>	<b>12</b>
<b>KAV 30H &amp; 45H Spare Parts Diagram .....</b>	<b>13</b>
<b>Tool Kit for KAV 15H – 45H .....</b>	<b>16</b>



# **IMPORTANT USER INFORMATION**

It is most important that this instruction book should be retained with this appliance for future reference. Should this appliance be sold or transferred to another user, always ensure that this book is supplied with this appliance in order that the user can be acquainted with the functioning of this appliance and the relevant warnings. These warnings are provided in the interest of safety. You must read them carefully before installing or using this appliance.

It is dangerous to alter the specification or modify this appliance in any way.

This appliance is a Type H Dry Pick-Up Compressed Air Vacuum Cleaner and is designed for use in five different environments:

- 1) To pick up non-explosive dust and debris in an unzoned atmosphere.
- 2) To pick up non-explosive dust and debris in a Gas Zone 1 atmosphere (A Gas Zone 1 atmosphere is where flammable gases, vapours and mists are likely to occur).
- 3) To pick up dust and debris that may explode if ignited (Dust Zone 21) in an area where no flammable gases, vapours or mists are present. (A Dust Zone 21 atmosphere is where a potentially explosive dust cloud is likely to occur).
- 4) To pick up dust and debris that may explode if ignited (Dust Zone 21) in a Gas Zone 1 atmosphere.
- 5) To pick up dust and debris that is hazardous to health where a Gas Zone 1 and/or Dust Zone 21 atmosphere may or may not be present.

## **WARNING / CAUTION**

- 1) **DONOT** remove this Type H vacuum cleaner from a contaminated area unless it has been decontaminated in accordance with the "Decontamination" section later in this book.
- 2) This appliance is not suitable for picking up radioactive dusts.
- 3) This vacuum cleaner is not suitable for picking up dust with an ignition energy of less than 1mJ.
- 4) This appliance is designed for dry use only and should be used with care outdoors. It should not be stored outdoors.
- 5) The air supply line has a special conductive lining to dissipate any static build up down to earth. The end piece you fit must be metal and your air supply pipe system must be earthed.
- 6) Prior to putting the machine to use a risk assessment must be carried out by a suitably qualified person to ensure the suitability of the application.
- 7) If your air supply line is damaged and needs replacing, it **MUST** be replaced by a conductive supply line available from Kerstar. Do not use any other air supply line.
- 8) It is strongly advised that the earth path continuity between the pick-up nozzle and the earthed air supply system be checked by a competent person at regular intervals and documentary records be kept of these checks.
- 9) When used in an explosive atmosphere or for picking up explosive dusts, the only plastic nozzles that can be used are the 38 x 300mm nozzle, the 38mm crevice tool or the 38mm dusting brush supplied with this appliance.
- 10) When picking up swarf and similar metallic parts, the KAV must not be used to pick up potentially explosive dusts or be used in potentially explosive atmospheres. **Note:** When rusty steel and aluminium items collide with sufficient energy it is possible to generate a spark.
- 11) This vacuum cleaner must not be used to pick up glowing dust/particles or other ignition hazards.
- 12) Only use accessories and spare parts approved by the manufacturer.
- 13) When collecting dust or debris that may ignite or explode, empty the cleaner after every use.





Do not use the appliance for dry vacuuming with the filters and/or Microfibre bag removed.

**Never use this appliance without the full filtration system fitted.**

Under no circumstances should you attempt to repair the appliance yourself. Repairs undertaken by unauthorised or inexperienced persons may cause injury and/or serious malfunctioning.

This appliance must only be serviced by authorised Kerstar personnel and only genuine Kerstar spare parts should be used.

## **UNPACKING YOUR KAV VACUUM CLEANER**

Unpack the carton and ensure that you have a complete set of accessories as listed below:

- |  |   |
|--|---|
| 1 KAV Compressed Air Powered Vacuum Cleaner  | 2 38mm Stainless Steel Wands                |
| 1 Anti-static air supply line, 5 metres long | 1 38 x 300mm Antistatic Floor/Carpet Nozzle |
| 5 Microfibre Bags to suit your model         | 1 38mm Antistatic Crevice Tool              |
| 1 Antistatic Filter Assembly                 | 1 38mm Antistatic Dusting Brush             |
| 1 38mm x 3m Antistatic Pick-Up Hose Assembly | 1 Blue Type H Test Certificate              |
| 1 38mm Stainless Steel Bent Hose End         | 1 Yellow Earth Path Continuity Certificate  |

*Optional extra:*

Tool Basket (KAV 18, 30 & 45H only)

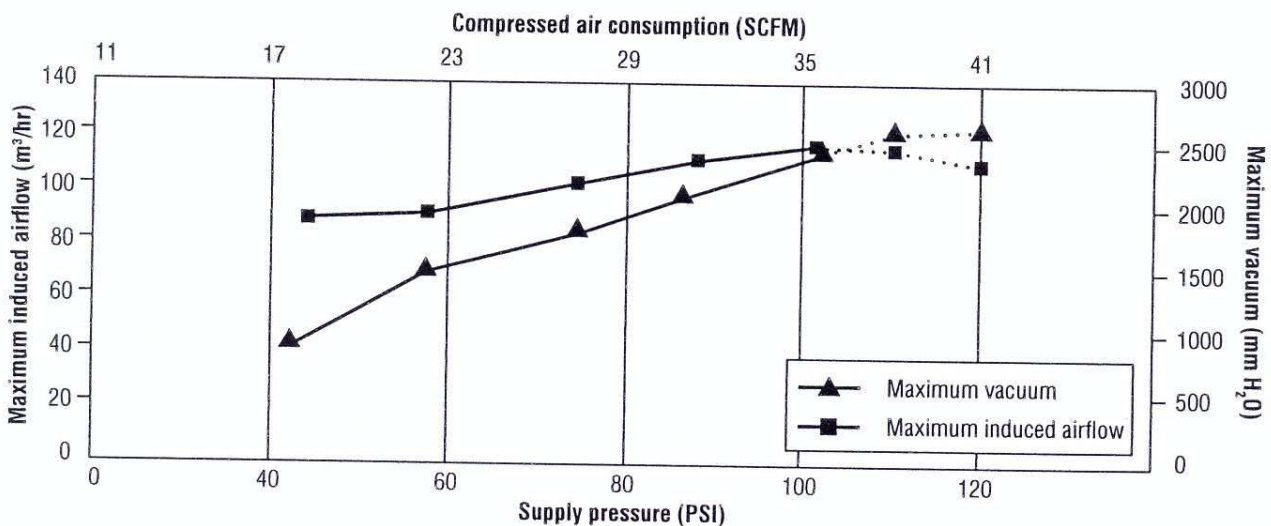
Models on a caddy (KAV 18, 30 & 45) are packed with the caddy handle removed for transport/packing purposes. Refit handle before use.

## **COMMISSIONING YOUR KAV VACUUM CLEANER**

Attach the anti-static air supply line to the air inlet port on the control valve. Do not over-tighten the connection. Do not use any form of liquid thread locker or PTFE tape to seal the thread. The threaded end fitting has its own integral O ring seal. If you use liquid thread sealer or PTFE tape, you may create an insulated barrier so that any static build up cannot dissipate to earth down the air supply.

To the other end of the air supply line, fit a metal (conductive) fitting to suit your air outlet sockets. Make sure the pipework and outlet fittings of your air supply system is constructed entirely of metal pipes and fittings and is suitably earthed. Finally, using a 500 volt megohmmeter, measure the resistance between the body of the vacuum cleaner and the metal air supply pipe. The reading must be no more than 50 Megohm ( $5 \times 10^7$  Ohm).

## **PERFORMANCE/COMPRESSED AIR REQUIREMENTS**





The KAV range does not require the air supply to be dried, filtered or to have oil mist removed. It is advisable to use an air supply that can be regulated so that the performance of the unit can be adjusted to suit the operator. The performance is related to the air input. The more pressure/volume of air input, the more suction/induced airflow is generated. However, using excessive air input wastes compressed air, generates unnecessary noise, may cause implosion of the canister and/or bursting of the Microfibre bags/filters.

## **RISK ASSESSMENT (ATEX)**

If this vacuum cleaner is used for collecting flammable/explosive materials or within a zoned area classified under the ATEX 137 Directive 1999/92/EC then a risk assessment must be carried out by a competent person to verify the suitability of the application.

The risk assessment will be the responsibility of the customer/end user and should take into account but not be limited to the characteristics of the material being collected such as:

1. Spark ignition sensitivity
2. Hot surface ignition sensitivity (cloud)
3. Hot surface ignition sensitivity (layer)
4. Explosion severity
5. Burning behaviour
6. Thermal instability
7. Chemical instability
8. Static electricity generation
9. Impact of collected material
10. The ATEX certification code for the appliance being assessed. (See the rating plate on the machine).

## **RISK ASSESSMENT (Type H)**

If this vacuum cleaner is used for collecting dust and debris which may be hazardous to health if inhaled, ingested or in contact with the skin then a risk assessment must be carried out by a competent person to verify the suitability of the application.

The risk assessment will be the responsibility of the customer/end user and should take into account but not limited to the characteristics of the material being collected such as:

1. The occupational exposure limit of the dust and debris being collected.
2. The particle size of the dust and debris being collected.
3. The method of disposal.

## **OPERATING INSTRUCTIONS**

Connect the KAV to a suitable compressed air supply. Attach the antistatic hose assembly to the canister, connect the stainless steel bent hose end and wands. Choose and attach one of the antistatic nozzles supplied. To activate the KAV, turn the lever on the control valve through 90°. The performance of the vacuum cleaner can be controlled with the control valve, but it is advisable to fit a regulator and pressure gauge at the air outlet point of your compressed air supply. The maximum pressure must be no more than 100psi (7 Bar).



## **CARRYING & STORAGE**

---

The assembled cleaner can be moved around by pulling the vacuum hose, using the flip/flop handle on the motor head or by means of the tubular handle (*models on caddy only*). **It must NOT be dragged around by means of the air supply hose.**

When not in use this vacuum cleaner should be disconnected from the compressed air supply. This vacuum cleaner should be stored indoors in a dry environment.

## **OPTIONAL EXTRA**

---

**Tool Basket** – zinc plated tool basket to prevent a build up of static. It can be fitted by hanging from the two horizontal crossbars on the rear of the caddy. Suitable for models KAV 18, 30 & 45H only.

## **FILTRATION SYSTEM**

---

This compressed air powered Type H vacuum cleaner is fitted with 3 stages of filtration on the negative pressure side of the air motor. That is, before the air motor, so that the air motor always receives clean filtered air.

**1st Stage:**    **K1 Disposable Microfibre Bag** – KAV 15H  
                  **K4 Disposable Microfibre Bag** – KAV 18, 20, 30 & 45H

K1 and K4 Microfibre disposable bags are made from Microfibre material. This material offers better filtration efficiency, greater tear resistance from sharp debris and is less likely to burst when full of heavy dust/debris. Microfibre disposable bags are fitted with a moulded plastic flange and sealing cap. They are fitted over the inlet inside the canister and the dust/debris is collected inside the bag. The sealing cap is designed to prevent the escape of dust from the bag during the bag change and disposal process. When the bag is full or suction efficiency is impaired it should be replaced. Microfibre bags are not designed to be emptied and should not be reused.

**2nd Stage: Antistatic Cloth Filter Assembly**

A conductive needlefelt cloth filtration media attached to a conductive rubber sealing ring and supported by a conductive plastic rigid filter frame.

**3rd stage: HEPA (High Efficiency Particulate Air) Cartridge Filter**

Often referred to as the essential or absolute filter. It is designed to filter to a very fine particle size (0.6micron at an efficiency >99.995%) yet have a large enough surface area to give maximum vacuum performance.

### **Note**

The casing of the HEPA filter housing is metal and is earth bonded to the body of the vacuum cleaner in order to dissipate any static built up in the HEPA filter.

### **WARNING**

The appliance may contain dust hazardous to health. Emptying and maintenance operations including removal and renewal of dust collection bag must only be carried out by authorised personnel wearing suitable approved personal protection.

### **WARNING**

Do not use the appliance unless the full filtration system is fitted – Type H cartridge, antistatic high efficiency cloth filter and Microfibre bag. Failure to fit the complete system may cause premature clogging of the Type H cartridge and may also endanger health.

### **IMPORTANT**

The vacuum unit is designed to collect hazardous dusts: Therefore any dust found within the machine or on its filters may be dangerous to your health. Always take precautions.



# **DUST/DEBRIS DISPOSAL**

(Operation carried out within a contaminated area)

This appliance contains dust hazardous to health. Emptying and maintenance operations, including removal and renewal of dust collection bag, must only be carried out by authorised personnel wearing suitable personal protection. Do not operate without the full filtration system fitted.

Disconnect the hose, fit the blanking cap on the hose entry, unlatch the toggle clips and remove the motor head/HEPA unit. Take care not to drop the motor head/HEPA unit. Remove the antistatic filter assembly and carefully release the disposable bag from the bag tube and lift out of the canister. Seal the disposable bag inlet using the integral cap on the bag collar. The disposable bag should be immediately placed in a suitably labelled impervious plastic bag and this bag sealed and disposed of in accordance with the current regulations. Fit new disposable bag over the bag tube inside the canister.

This vacuum cleaner is supplied with 5 spare Microfibre bags and a spare antistatic filter assembly. This (clean) spare filter should be used and the motor head/HEPA unit refitted.

The contaminated antistatic filter should now be cleaned by vacuuming and stored in a labelled plastic bag ready for future use.

## **DECONTAMINATION**

**Decontamination operations should only be carried out by competent authorised personnel equipped with suitable personal protection.**

Before removing the accessories/vacuum cleaner from the contaminated area:

- Accessories should be cleaned externally with a Type H vacuum cleaner.
- They should then be cleaned with an adhesive wipe, sealed at each end and sealed in a clear impervious bag. The bag should carry an appropriate warning label.
- The external surfaces of the bag should then be cleaned with an adhesive wipe.
- The vacuum cleaner should be cleaned externally with itself. The disposable bag and its contents should be removed and disposed of in accordance with the method described in the section titled Dust/Debris Disposal.
- The vacuum cleaner should then be cleaned externally with an adhesive wipe.
- The vacuum cleaner should be sealed in a clear impervious bag. The bag should carry an appropriate warning label.
- The external surfaces of the bag should then be cleaned with an adhesive wipe.

## **MAINTENANCE**

Maintenance must be carried out in a suitable controlled area with local filtered exhaust ventilation and facilities for cleaning the area after servicing.

During maintenance always disconnect from the air supply.

Maintenance and cleaning must only be carried out by competent authorised personnel equipped with suitable personal protection. All parts must be regarded as contaminated and treated as such and, therefore, another Type H vacuum cleaner should be used and each component to be removed, cleaned prior to removal.

Items that cannot be satisfactorily cleaned are to be disposed of in impervious plastic bags in accordance with current regulations. All surfaces should be cleaned as they become exposed.



## **LOSS OF SUCTION**

---

If your cleaner loses suction power, first check that the hose and other accessories in use are not blocked. Then check that the filtration system is not blocked. The filtration system can be serviced as follows:

**Microfibre bags** – If full, replace.

– If burst, empty/clean out canister and replace.

**Cloth Filter Assembly** – This filter will become contaminated with dust during normal use and/or if the Microfibre bag is holed or burst. The dust must be removed only by vacuuming with another Type H vacuum cleaner. It is advisable to have a spare filter so that the machine itself can be used to vacuum the dust off a contaminated filter.

If any of the filters or Microfibre bags are damaged or holed they must be replaced with new items.

## **SERVICING & SPARES**

---

Should your KERSTAR VACUUM CLEANER need any servicing, repair or spares please contact your nearest KERSTAR dealer or contact KERSTAR directly:

Tel: +44 (0)1604 760455

Fax: +44 (0)1604 701022

*Please make a note of the model and serial number before contacting Kerstar.*

Before attempting any servicing of this appliance, decontaminate as described above and make sure you are protected from any dust which may still be present on or around the machine or any dust which may have collected on internal components.

The Type H cartridge filter is not reusable or cleanable and should be disposed of safely. When it becomes excessively clogged and the vacuum performance of the appliance suffers or is no longer acceptable fit a new unit. Be careful when handling and fitting Type H cartridges as damage to the pleated element will affect the performance and may cause a leakage through the filter of unfiltered air.

## **GUARANTEE**

---

Kerstar products are guaranteed for 12 months against defective parts and workmanship. There are certain conditions that may invalidate this guarantee.

- a) This appliance must be correctly installed and used in accordance with these instructions.
- b) Servicing must be carried out by Kerstar authorised personnel only.
- c) The guarantee may be invalidated by unauthorised repair or modification to the appliance.

KERSTAR (UK) LTD may introduce modifications to their products from time to time and consequently the details given in this instruction book are subject to alteration without notice.



# RATING PLATE

The rating plate gives the precise information about this product. A full explanation is given below.

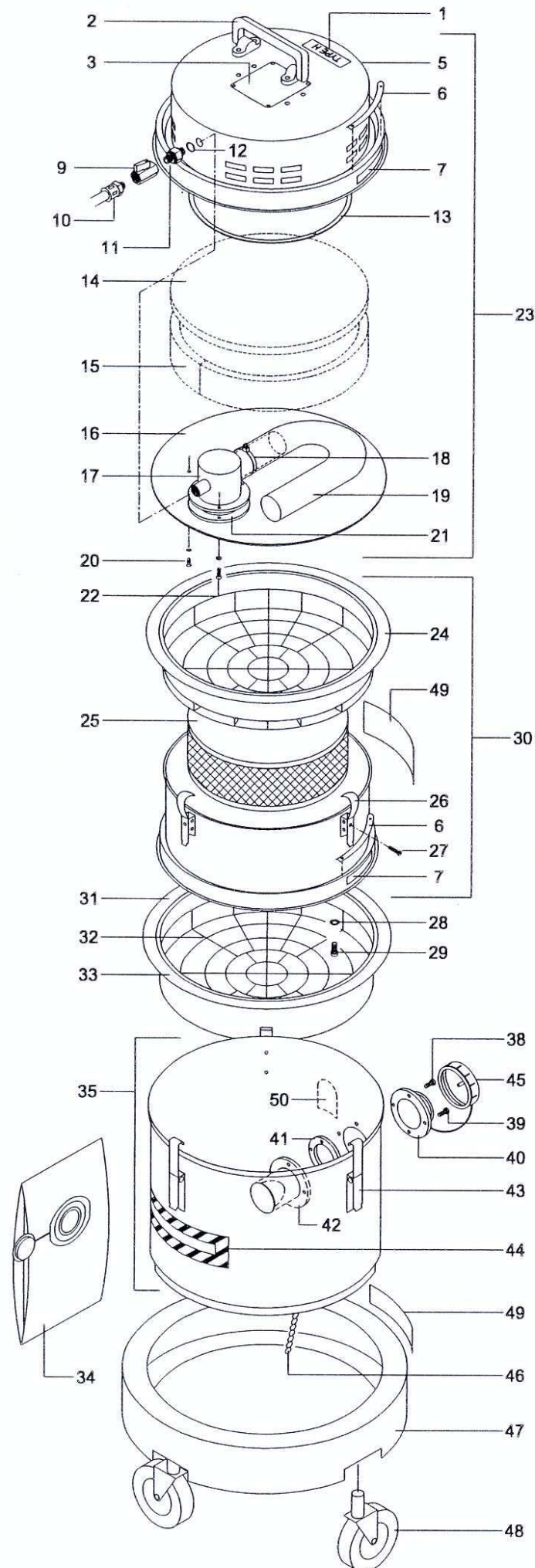
1. Name and address of manufacturer
2. Manufacturers model or type number
3. Year of manufacture, assembly or construction
4. The **CE** mark
5. **Ex** symbol. The distinctive community mark showing a product is suitable for use in a potentially explosive dust and/or gas atmosphere.
6. **II** – equipment group II (surface industries)
7. **2** – Category 2 product
8. **G** – explosive gas, vapour or mist atmosphere (Zone 1)
9. **D** – explosive dust atmosphere (Zone 21)
10. **c** – constructional safety concept (applies to the mechanical parts of the vacuum cleaner)
11. **IIC 50°C (T6)** – **II** equipment group II (surface industries)
  - **C** group II subdivision (suitable for all group II gases, vapours & mists)
  - **50°C** surface temperature for dust evaluation is less than 50°C
  - **T6** surface temperature classification for gases, vapours and mists (less than 85°C)
12. The serial no.  
For example 05B 123 – made in February 2005 number 123
13. **X** – refer to instruction book for special operating or user information

<b>IMPORTANT</b> This appliance is suitable only for dry operation. Empty regularly and always keep filters clean.	<b>BELANGRIJK</b> Dit toestel is alleen voor DROOG GERUIK. Ledig het regelmatig en houd de filters altijd schoon.
<b>WICHTIG</b> Dieses Gerät ist für TROCKENEN GEBRAUCH und muss regelmässig geleert werden. Die filter immer sauber halten.	<b>IMPORTANT</b> Cet appareil ne peut être utilisé que sur SOLS SECS. Videz le fréquemment et gardez les filters toujours propres.
Made by: <b>Kerstar</b> NN4 7HS, UK.	
Model No: <input type="text" value="KAV ** H"/> Year: <input type="text"/>	
<b>CE Ex II 2 G D c IIC 50°C (T6)</b>	
Serial No: <input type="text"/>	
File ref: <b>KAV 15 - 45X</b>	
CAUTION MAX. ADVISED AIR PRESSURE 100PSI (6.8 BAR)	





# SPARE PARTS – KAV 15H

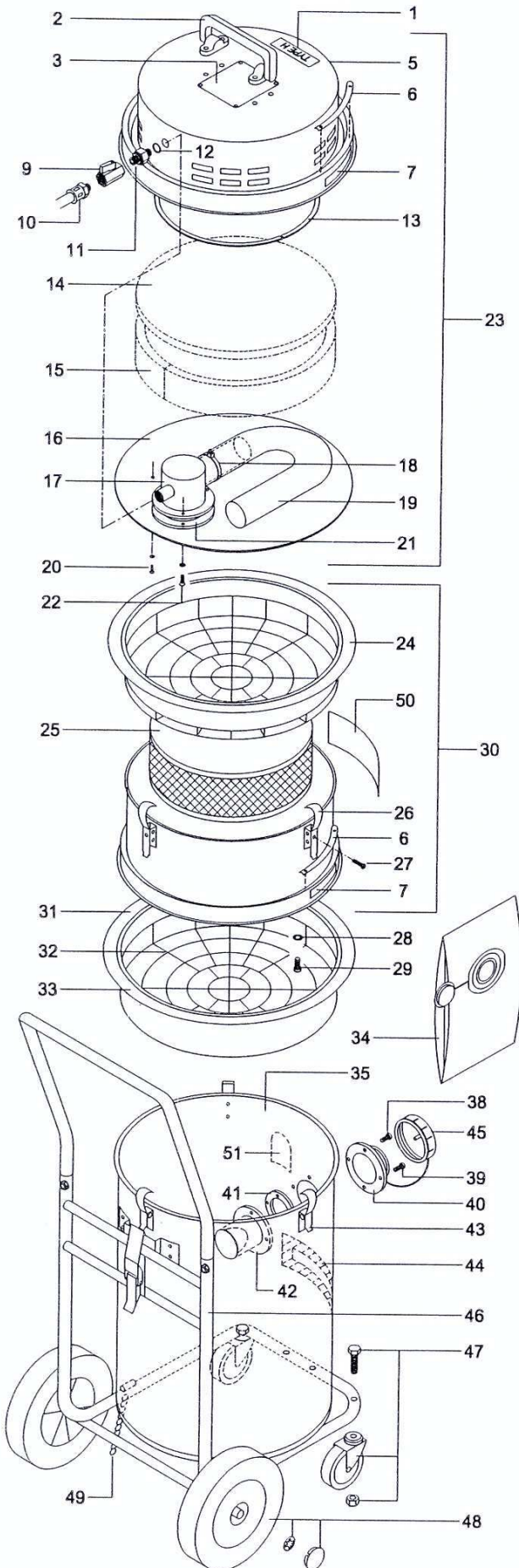


ITEM	QTY	DESCRIPTION
1	1	'TYPE H' LABEL (<20cm <sup>2</sup> )
2	1	ANTI-STATIC FLIP FLOP HANDLE ASSEMBLY
3	1	RATING PLATE (ATEX CATEGORY 2) FOR DRY MODELS
4		NOT APPLICABLE TO THIS MODEL
5	1	TOP COVER INC HANDLE FOR KAV15 & KAV18
6	2	EARTHING STRIP, CURVED TYPE (INC. RIVETS)
7	2	'CLIP HERE TO EARTH BOND CAN' BLACK ON YELLOW LABEL (<20cm <sup>2</sup> )
8		NOT APPLICABLE TO THIS MODEL
9	1	BALL VALVE
10	1	AIR SUPPLY HOSE ANTI-STATIC 5m LONG
11	1	1/4" BSP MALE TO MALE HEXAGON NIPPLE
12	2	SOFT METAL WASHER
13	1	800 x 4 x 6mm FOAM RUBBER SEAL
14	1	FOAM SILENCING CIRCULAR FOR KAV15 & 18
15	1	FOAM SILENCING RECTANGULAR FOR KAV15 & 18
16	1	AIR MOTOR PLATE FOR KV15 & 18
17	1	AIR MOTOR
18	1	TYRAP TO RETAIN SOUND ATTENUATION HOSE
19	1	500 x 38mm SOUND ATTENUATION HOSE
20	4	M4 x 12 PAN HEAD POZI SCREW AND LOCKING WASHER
21	1	GASKET FOR AIR MOTOR
22	3	M5 x 16 PAN HEAD POZI SCREW AND LOCKING WASHER
23	1	AIR VAC MOTOR HEAD ASSEMBLY (INC. AIR SUPPLY HOSE) FOR KAV15H & KAV18H (ATEX CATEGORY 2)
24	1	12" ANTI-STATIC SEALING RING AND FRAME
25	1	TYPE H FILTER CARTRIDGE WITH ANTI-STATIC END CAPS FOR KAV15H & KAV18H
26	3	CLIP TO SUIT KV15H & KAV15H WITH LOCK DOWN FACILITY
27	3	M4 x 20 PAN POZI SCREW & RETAINING RING
28	6	M5 INTERNAL SHAKEPROOF WASHER BZP
29	6	M5 x 16 PAN HEAD POZI SCREW BZP
30	1	COMPLETE TYPE H CARTRIDGE UNIT FOR KAV15H & 18H (INC ITEM No. 24, 25, 26, 27, 6, 7, 28, 29 & 48)
31	1	12" ANTI-STATIC FILTER CLOTH ONLY
32	1	12" ANTI-STATIC FILTER FRAME
33	1	12" ANTI-STATIC FILTER ASSEMBLY
34	1	K1 MICROFIBRE BAG (PACKET OF 5)
35	1	KAV15H CAN ASSEMBLY (ATEX CATEGORY 2)
36		NOT APPLICABLE TO THIS MODEL
37		NOT APPLICABLE TO THIS MODEL
38	2	M5 x 20 PAN POZI STAINLESS STEEL
39	2	M5 x 16 PAN POZI STAINLESS STEEL
40	1	ANTI-STATIC HOSE ENTRY SPIGOT OUTER
41	1	HOSE ENTRY SPIGOT RETAINER
42	1	PAPER BAG/DEFLECTOR STAINLESS STEEL (ATEX CATEGORY 2)
43	3	CLIP TO SUIT KAV15/18
44	1	RED ON WHITE TYPE H SELF ADHESIVE WARNING LABEL (ATEX CATEGORY 2)
45	1	ANTI-STATIC BLANKING CAP ASSEMBLY
46	1	EARTH CHAIN AND SELF TAP SCREW (NOT USED WITH CONDUCTIVE CASTORS)
47	1	12" ANTI-STATIC CHASSIS (EXCL. CASTORS)
48A	4	75mm PUSH IN CASTOR
48B	4	75mm CONDUCTIVE PUSH IN CASTOR
49	1	'KERSTAR' RED LABEL (ATEX CATEGORY 2)
50	1	ZONE 1/21 WARNING LABEL

NOTE: MAY 2008,  
NON CONDUCTIVE CASTORS REPLACED  
WITH CONDUCTIVE CASTORS.



# SPARE PARTS – KAV 18H

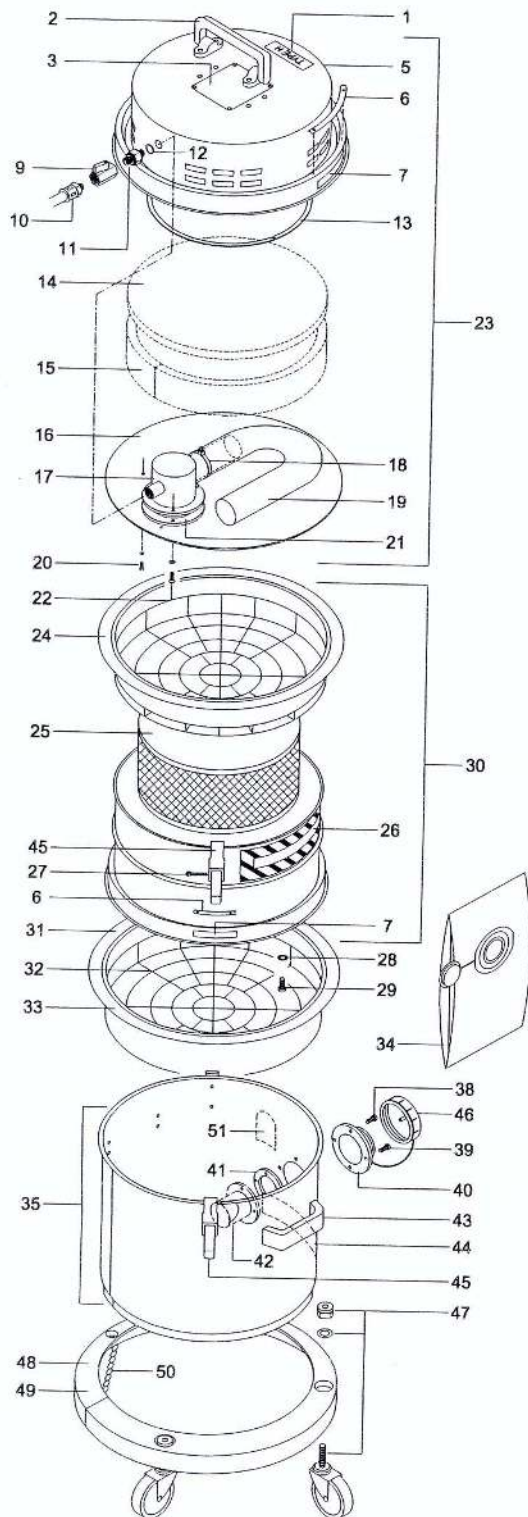


ITEM	QTY	DESCRIPTION
1	1	'TYPE H' LABEL (<20cm <sup>2</sup> )
2	1	ANTI-STATIC FLIP FLOP HANDLE ASSEMBLY
3	1	RATING PLATE (ATEX CATEGORY 2) FOR DRY MODELS NOT APPLICABLE TO THIS MODEL
4		NOT APPLICABLE TO THIS MODEL
5	1	TOP COVER INC HANDLE FOR KAV15 & KAV18 DRY & WET/DRY
6	2	EARTHING STRIP, CURVED TYPE (INC. RIVETS)
7	2	'CLIP HERE TO EARTH BOND CAN' BLACK ON YELLOW LABEL (<20cm <sup>2</sup> )
8		NOT APPLICABLE TO THIS MODEL
9	1	BALL VALVE
10	1	AIR SUPPLY HOSE ANTI-STATIC 5m LONG
11	1	1/4" BSP MALE TO MALE HEXAGON NIPPLE
12	2	SOFT METAL WASHER
13	1	800 x 4 x 6mm FOAM RUBBER SEAL
14	1	FOAM SILENCING CIRCULAR FOR KAV15 & 18
15	1	FOAM SILENCING RECTANGULAR FOR KAV15 & 18
16	1	AIR MOTOR PLATE FOR KV15 & 18
17	1	AIR MOTOR
18	1	TYRAP TO RETAIN SOUND ATTENUATION HOSE
19	1	500 x 38mm SOUND ATTENUATION HOSE
20	4	M4 x 12 PAN HEAD POZI SCREW AND LOCKING WASHER
21	1	GASKET FOR AIR MOTOR
22	3	M5 x 16 PAN HEAD POZI SCREW AND LOCKING WASHER
23	1	AIR VAC MOTOR HEAD ASSEMBLY (INC. AIR SUPPLY HOSE) FOR KAV15H & KAV18H (ATEX CATEGORY 2)
24	1	12" ANTI-STATIC SEALING RING AND FRAME
25	1	TYPE H FILTER CARTRIDGE WITH ANTI-STATIC END CAPS FOR KAV15H & KAV18H
26	3	CLIP TO SUIT KV15H & KAV15H WITH LOCK DOWN FACILITY
27	3	M4 x 20 PAN POZI SCREW & RETAINING RING
28	6	M5 INTERNAL SHAKEPROOF WASHER BZP
29	6	M5 x 16 PAN HEAD POZI SCREW BZP
30	1	COMPLETE TYPE H CARTRIDGE UNIT FOR KAV15H & 18H (INC ITEM No. 24, 25, 26, 27, 6, 7, 28, 29 & 50)
31	1	12" ANTI-STATIC FILTER CLOTH ONLY
32	1	12" ANTI-STATIC FILTER FRAME
33	1	12" ANTI-STATIC FILTER ASSEMBLY
34	1	K4 MICROFIBRE BAG (PACKET OF 5)
35	1	KAV18H CAN ASSEMBLY (ATEX CATEGORY 2)
36		NOT APPLICABLE TO THIS MODEL
37		NOT APPLICABLE TO THIS MODEL
38	2	M5 x 20 PAN POZI STAINLESS STEEL
39	2	M5 x 16 PAN POZI STAINLESS STEEL
40	1	ANTI-STATIC HOSE ENTRY SPIGOT OUTER
41	1	HOSE ENTRY SPIGOT RETAINER
42	1	PAPER BAG/DEFLECTOR STAINLESS STEEL (ATEX CATEGORY 2)
43	3	CLIP TO SUIT KAV15/18
44	1	RED ON WHITE TYPE H SELF ADHESIVE WARNING LABEL (ATEX CATEGORY 2)
45	1	ANTI-STATIC BLANKING CAP ASSEMBLY
46A	1	CADDY ASSEMBLY TO SUIT KAV18 (INC. EARTH CHAIN)
46B	1	STAINLESS STEEL CADDY WITH CONDUCTIVE WHEELS AND CASTORS TO SUIT KAV18H (1 x CASTOR BRAKED)
47A	2	75mm CADDY CASTOR WITH NUT & BOLT
47B	1	75mm CONDUCTIVE CADDY CASTOR (UNBRAKED) WITH NUT AND BOLT
47C	1	75mm CONDUCTIVE CADDY CASTOR (BRAKED) WITH NUT AND BOLT
48A	2	200mm REAR WHEEL WITH STARLOCK WASHER AND CAP
48B	2	200mm CONDUCTIVE REAR WHEEL WITH STARLOCK WASHER AND YELLOW CAP
49	1	EARTH CHAIN (NOT USED WITH STAINLESS STEEL CADDY AND CONDUCTIVE WHEELS / CASTORS)
50	1	'KERSTAR' RED LABEL (ATEX CATEGORY 2)
51	1	ZONE 1/21 WARNING LABEL

NOTE: MAY 2008,  
PAINTED STEEL CADDY AND NON CONDUCTIVE WHEELS /  
CASTORS REPLACED WITH STAINLESS STEEL CADDY AND  
CONDUCTIVE WHEELS / CASTORS.



# SPARE PARTS – KAV 20H

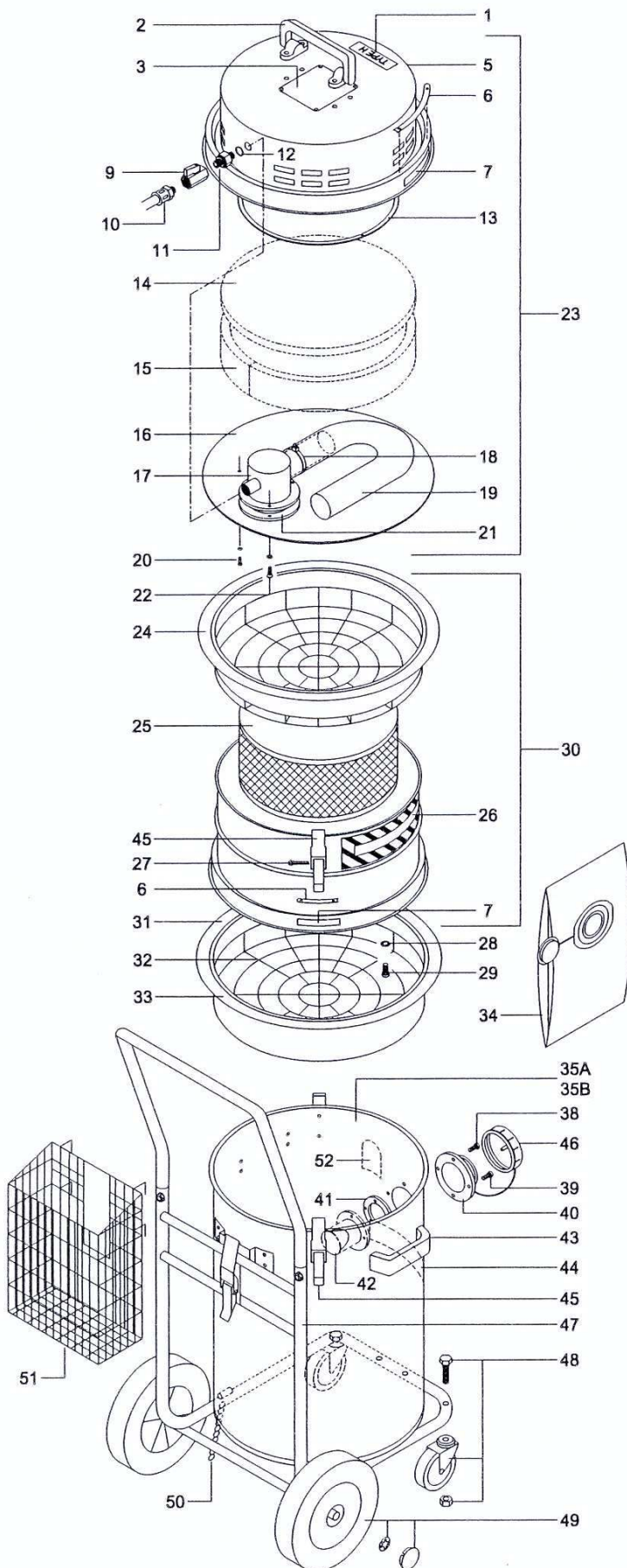


ITEM	QTY	DESCRIPTION
1	1	'TYPE H' LABEL (<20cm <sup>2</sup> )
2	1	ANTI-STATIC FLIP FLOP HANDLE ASSEMBLY
3	1	RATING PLATE (ATEX CATEGORY 2) FOR DRY MODELS
4		NOT APPLICABLE TO THIS MODEL
5	1	TOP COVER INC HANDLE FOR KAV20 & KAV30 AND KAV45 DRY & WET/DRY
6	2	EARTHING STRIP, CURVED TYPE (INC. RIVETS)
7	2	'CLIP HERE TO EARTH BOND CAN' BLACK ON YELLOW LABEL (<20cm <sup>2</sup> )
8		NOT APPLICABLE TO THIS MODEL
9	1	BALL VALVE
10	1	AIR SUPPLY HOSE ANTI-STATIC 5m LONG
11	1	1/4" BSP MALE TO MALE HEXAGON NIPPLE
12	2	SOFT METAL WASHER
13	1	850 x 4 x 6mm FOAM RUBBER SEAL
14	1	FOAM SILENCING CIRCULAR FOR KAV20 - 45
15	1	FOAM SILENCING RECTANGULAR FOR KAV20 - 45
16	1	AIR MOTOR PLATE FOR KV20 - 45
17	1	AIR MOTOR
18	1	TYRAP TO RETAIN SOUND ATTENUATION HOSE
19	1	500 x 38mm SOUND ATTENUATION HOSE
20	4	M4 x 12 PAN HEAD POZI SCREW AND LOCKING WASHER
21	1	GASKET FOR AIR MOTOR
22	3	M5 x 16 PAN HEAD POZI SCREW AND LOCKING WASHER
23	1	AIR VAC MOTOR HEAD ASSEMBLY (INC. AIR SUPPLY HOSE) FOR KAV20 - 45H (ATEX CATEGORY 2)
24	1	14" ANTI-STATIC SEALING RING AND FRAME
25	1	TYPE H FILTER CARTRIDGE WITH ANTI-STATIC END CAPS FOR KAV20, 30 AND 45H
26	1	RED ON WHITE TYPE H WARNING PLATE (ATEX CATEGORY 2)
27	2	SPLIT PIN
28	6	M5 INTERNAL SHAKEPROOF WASHER BZP
29	6	M5 x 6 PAN HEAD POZI SCREW BZP
30	1	COMPLETE TYPE H CARTRIDGE UNIT FOR KAV20, 30 AND 45H (INC ITEM No. 24, 25, 26, 27, 5, 7, 28, 29 & 45)
31	1	14" ANTI-STATIC FILTER CLOTH ONLY
32	1	14" ANTI-STATIC FILTER FRAME
33	1	14" ANTI-STATIC FILTER ASSEMBLY
34	1	K4 MICROFIBRE BAG (PACKET OF 5)
35	1	KAV20H CAN ASSEMBLY (ATEX CATEGORY 2)
36		NOT APPLICABLE TO THIS MODEL
37		NOT APPLICABLE TO THIS MODEL
38	2	M5 x 20 PAN POZI STAINLESS STEEL
39	2	M5 x 16 PAN POZI STAINLESS STEEL
40	1	ANTI-STATIC HOSE ENTRY SPIGOT OUTER
41	1	HOSE ENTRY SPIGOT RETAINER
42	1	PAPER BAG TUBE/DEFLECTOR STAINLESS STEEL (ATEX CATEGORY 2)
43	2	ANTI-STATIC CURVED SURFACE HANDLE WITH SCREWS AND WASHERS
44	1	'KERSTAR' RED LABEL (ATEX CATEGORY 2)
45	4	CLIP TO SUIT METAL HEAD
46	1	ANTI-STATIC BLANKING CAP ASSEMBLY
47A	4	75mm CHASSIS CASTOR WITH NUT, BOLT AND WASHER
47B	3	75mm CONDUCTIVE CHASSIS CASTOR (UNBRAKED) WITH NUT, BOLT AND WASHER
47C	1	75mm CONDUCTIVE CHASSIS CASTOR (BRAKED) WITH NUT, BOLT AND WASHER
48A	1	14" ANTI-STATIC CHASSIS ASSEMBLY FOR KAV20 (INCLUDING CASTORS AND CHAIN)
48B	1	14" ANTI-STATIC CHASSIS ASSEMBLY FOR KAV20 WITH (1 x BRAKED) CONDUCTIVE CASTOR AND (3 x UNBRAKED) CONDUCTIVE CASTOR
49	1	14" ANTI-STATIC CHASSIS MOULDING ONLY
50	1	EARTH CHAIN (NOT USED WITH CONDUCTIVE CASTORS)
51	1	ZONE 1/21 WARNING LABEL

NOTE: MAY 2008,  
NON CONDUCTIVE CASTORS REPLACED  
WITH CONDUCTIVE CASTORS.



# SPARE PARTS – KAV 30H and KAV 45H



ITEM	QTY	DESCRIPTION
1	1	'TYPE H' LABEL (<20cm <sup>2</sup> )
2	1	ANTI-STATIC FLIP FLOP HANDLE ASSEMBLY
3	1	RATING PLATE (ATEX CATEGORY 2) FOR DRY MODELS
4		NOT APPLICABLE TO THIS MODEL
5	1	TOP COVER INC HANDLE FOR KAV20 & KAV30 AND KAV45 DRY & WET/DRY
6	2	EARTHING STRIP, CURVED TYPE (INC. RIVETS)
7	2	'CLIP HERE TO EARTH BOND CAN' BLACK ON YELLOW LABEL (<20cm <sup>2</sup> )
8		NOT APPLICABLE TO THIS MODEL
9	1	BALL VALVE
10	1	AIR SUPPLY HOSE ANTI-STATIC 5m LONG
11	1	1/4" BSP MALE TO MALE HEXAGON NIPPLE
12	2	SOFT METAL WASHER
13	1	850 x 4 x 6mm FOAM RUBBER SEAL
14	1	FOAM SILENCING CIRCULAR FOR KAV20 - 45
15	1	FOAM SILENCING RECTANGULAR FOR KAV20 - 45
16	1	AIR MOTOR PLATE FOR KV20 - 45
17	1	AIR MOTOR
18	1	TYRAP TO RETAIN SOUND ATTENUATION HOSE
19	1	500 x 38mm SOUND ATTENUATION HOSE
20	4	M4 x 12 PAN HEAD POZI SCREW AND LOCKING WASHER
21	1	GASKET FOR AIR MOTOR
22	3	M5 x 16 PAN HEAD POZI SCREW AND LOCKING WASHER
23	1	AIR VAC MOTOR HEAD ASSEMBLY (INC AIR SUPPLY HOSE) FOR KAV20 - 45H (ATEX CATEGORY 2)
24	1	14" ANTI-STATIC SEALING RING AND FRAME
25	1	TYPE H FILTER CARTRIDGE WITH ANTI-STATIC END CAPS FOR KAV20, 30 AND 45H
26	1	RED ON WHITE TYPE H WARNING PLATE (ATEX CATEGORY 2)
27	2	SPLIT PIN
28	6	M5 INTERNAL SHAKEPROOF WASHER BZP
29	6	M5 x 6 PAN HEAD POZI SCREW BZP
30	1	COMPLETE TYPE H CARTRIDGE UNIT FOR KAV20, 30 AND 45H (INC ITEM No. 24, 25, 26, 27, 6, 7, 28, 29 & 45)
31	1	14" ANTI-STATIC FILTER CLOTH ONLY
32	1	14" ANTI-STATIC FILTER FRAME
33	1	14" ANTI-STATIC FILTER ASSEMBLY
34	1	K4 MICROFIBRE BAG (PACKET OF 5)
35A	1	KAV30H CAN ASSEMBLY (ATEX CATEGORY 2)
35B	1	KAV45H CAN ASSEMBLY (ATEX CATEGORY 2)
36	1	NOT APPLICABLE TO THIS MODEL
37	1	NOT APPLICABLE TO THIS MODEL
38	2	M5 x 20 PAN POZI STAINLESS STEEL
39	2	M5 x 16 PAN POZI STAINLESS STEEL
40	1	ANTI-STATIC HOSE ENTRY SPIGOT OUTER
41	1	HOSE ENTRY SPIGOT RETAINER
42	1	PAPER BAG TUBE/DEFLECTOR STAINLESS STEEL (ATEX CATEGORY 2)
43	2	ANTI-STATIC CURVED SURFACE HANDLE WITH SCREWS AND WASHERS
44	1	'KERSTAR' RED LABEL (ATEX CATEGORY 2)
45	4	CLIP TO SUIT METAL HEAD
46	1	ANTI-STATIC BLANKING CAP ASSEMBLY
47A	1	CADDY ASSEMBLY TO SUIT KAV30 & KAV45 (INC. EARTH CHAIN)
47B	1	STAINLESS STEEL CADDY WITH CONDUCTIVE WHEELS AND CASTORS TO SUIT KAV30 & KAV45 (1 x CASTOR BRAKED)
48A	2	75mm CADDY CASTOR WITH NUT & BOLT
48B	1	75mm CONDUCTIVE CADDY CASTOR (UNBRAKED) WITH NUT AND BOLT
48C	1	75mm CONDUCTIVE CADDY CASTOR (BRAKED) WITH NUT AND BOLT
49A	2	200mm REAR WHEEL WITH STARLOCK WASHER AND CAP
49B	2	200mm CONDUCTIVE REAR WHEEL WITH STARLOCK WASHER AND YELLOW CAP
50	1	EARTH CHAIN (NOT USED WITH STAINLESS STEEL CADDY AND CONDUCTIVE WHEELS / CASTORS)
51	1	ANTI-STATIC TOOL BASKET FOR KAV30/45 CADDY (OPTIONAL EXTRA)
52	1	ZONE 1/21 WARNING LABEL

NOTE: MAY 2008,  
PAINTED STEEL CADDY AND NON CONDUCTIVE WHEELS / CASTORS REPLACED WITH STAINLESS STEEL CADDY AND CONDUCTIVE WHEELS / CASTORS.