



# Nilfisk Advance

*setting standards*

## INSTRUCTIONS FOR USE & PARTS LIST

Nilfisk Models GM 82, GM 82A, GM 82BP  
HEPA-Filtered Vacuum Cleaners

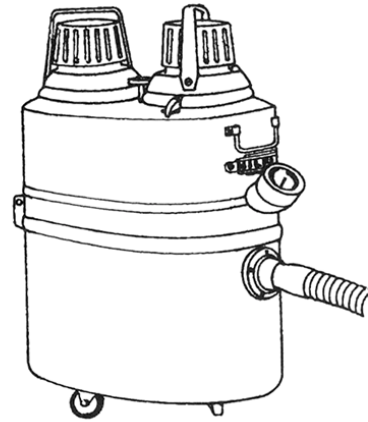


TABLE OF CONTENTS		Page
Contents		
Important Safety Instructions . . . . .		2
Model GM 82 Instructions for Use . . . . .		2-4
Machine Setup . . . . .		2-3
Emptying . . . . .		3
Filter Replacement . . . . .		3-4
Motor Parts . . . . .		7
Models GM 82A and GM 82BP Instructions for Use . . . . .		4-6
Machine Setup . . . . .		4-5
Emptying . . . . .		3
Filter Replacement . . . . .		5-6
Compressed Air Venturi Module Parts . . . . .		8
By-Pass Motor Module Parts . . . . .		9
Container Parts . . . . .		10
Accessories . . . . .		11-12
Warranty . . . . .		6



## IMPORTANT SAFETY INSTRUCTIONS

Read all instructions before operating this vacuum cleaner.

**CAUTION:** This Nilfisk vacuum cleaner or any other vacuum cleaner is not to be used in explosion-hazardous areas, as serious injury could result.

Under no circumstances may this cleaner be used safely for the collection of hazardous or toxic materials unless equipped with special HEPA\* filters and bags which have been installed according to Nilfisk-Advance America's written instructions.

**ATTENTION EMPLOYER:** Please ensure these Instructions for Use are made available and understood by your employees or any other persons who may use this equipment.

To list all toxic and hazardous materials would be beyond the scope of these instructions. It is the Employer's responsibility to identify, for Employee's and others' information, hazardous or toxic materials which may be collected by this equipment.

Your new Nilfisk industrial vacuum cleaner is a precision engineered instrument designed for exceptionally fine filtration. Ordinary vacuum cleaners do not have HEPA filters and cannot be used safely for hazardous dusts. This Nilfisk machine is safe to use as a dust collector for finely ground materials, as long as certain precautions are taken. Proper care of this cleaner is essential to the maintenance of its ultra-fine filtering capabilities.

**BEFORE USE: DO NOT ATTEMPT TO OPERATE THIS VACUUM CLEANER UNTIL YOU HAVE INSTALLED ITS VARIOUS COMPONENTS ACCORDING TO THE FOLLOWING INSTRUCTIONS. IF YOU ARE PICKING UP HAZARDOUS OR ULTRA-FINE MATERIALS, BE SURE TO FOLLOW THE INSTRUCTIONS FOR "HAZMAT" AS OUTLINED BELOW.**



### MACHINE SETUP: GM 82

1. **Before Turning On the Motors:** Install the microfilters, the small white or yellow felt socks (photo 1), on the bottom of each motor by sliding the filter over the motor bottom, and covering as much of the bottom as the depth of the filter will permit. Be sure the filter's elastic collar holds the filter snugly in place and is as high up on the motor bottom as possible.

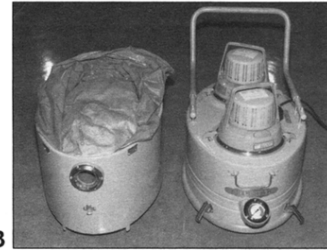


1 Next, mount the HEPA filters (photo 2) according to the accompanying bulletin. Place the motors back in the cavities in the top of the vacuum cleaner, and secure them with the clips provided on the container top.

2. **Installing the Polyliner and Paper Bag:** Unclamp the four container clips located at the body of the container, front and back. Lift off the top. Open the polyliner and place it in the bottom of the container with its walls flush against the container sides and lipped under the container inlet (photo 3). The excess length of polyliner is draped over the top of the container and down the outside, then rolled at the end to permit the container clips to close. Install a paper bag inside the polyliner according to the illustrations printed on the paper bag itself. Replace the container top and fasten the four clips.

3. Equip your Nilfisk vacuum cleaner with whichever accessories have been supplied.

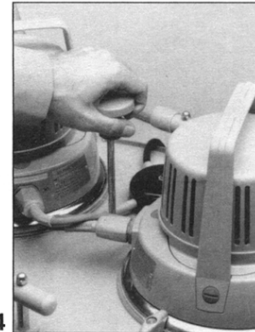
Once assembly and setup are complete, the machine can be plugged into a properly grounded outlet and switched on.



### EMPTYING: GM 82, GM 82A & GM 82BP

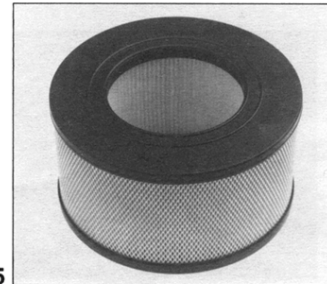
**IF THIS VACUUM CLEANER IS USED TO COLLECT HAZARDOUS MATERIAL, DO NOT ATTEMPT TO OPEN OR EMPTY ITS CONTENTS WITHOUT PERSONAL PROTECTIVE CLOTHING AND RESPIRATORY PROTECTION.**

To empty the container and its contents, first turn off both motors and seal off the hose and/or suction inlet. Then shake down the filter with vigorous use of the shaker handle located externally between the two motors (photo 4). Allow the fine dust to settle in the container for at least thirty (30) seconds. Then unclamp the container clips. Once the seal is broken, turn on the motors again. This will prevent ultra-fine particles which are still suspended in the air inside the container from escaping into the workplace.



Lift off the container top. Remove the polyliner and paper bag within the container taking care not to squeeze or compress it. Then seal off the polyliner with the paper bag inside and install a new polyliner and paper bag according to the previous instructions (refer to Step #2 under Machine Set-Up). **HAZMAT:** Double-bag, seal and label for proper disposal.

**HAZMAT:** Depending on local regulations and the composition of the materials you have collected, there can be a requirement for special handling and labeling of the filled and sealed plastic bags. Consult your local Occupational Safety and Health Agency (OSHA) and Environmental Protection Agency (EPA) officials for details.

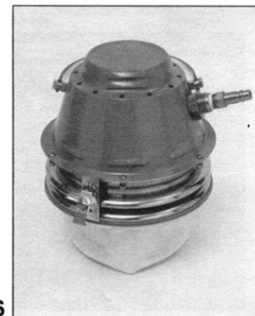


### FILTER REPLACEMENT: GM 82

To ensure that your Nilfisk vacuum cleaner delivers the years of trouble-free operation for which it was designed, it is necessary to check and replace filters regularly.

1. **Main Filter:** The large napped cotton bag which is semi-permanently mounted inside the container will not require frequent replacement. The main filter must be replaced when the vacuum cleaner no longer develops powerful suction, yet bags are not full and other filter components are not clogged. Extend main filter life by frequent changes of disposable polyliners and paper bags.

2. **Microfilters:** These small white (yellow if equipped with AES Polycomposite microfilters) felt socks, which fit over the bottom of each motor will require periodic inspection. Dust will discolor the microfilters. Change these microfilters as soon as any discoloration is easily noticeable (Felt - #616821, AES Polycomposite - #017230, GORE-TEX - #017220-01). Remove filters carefully. If equipped with GORE-TEX® membrane microfilters, the same rules for periodic inspection and disposal apply. The GORE-TEX membrane microfilters must be changed when any



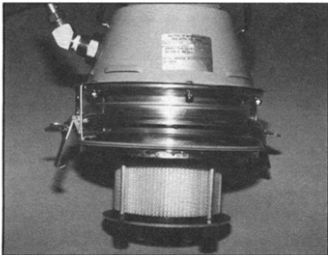
©GORE-TEX is a registered trademark of W.L. Gore & Associates.



7

abrasions, damage or heavy discoloration is noticed on the surface of the filters. **HAZMAT:** Do not shake these microfilters since this can cause liberation of potentially harmful microscopic dust into the air. Remove carefully and discard with collected debris in the sealable polyliner.

3. HEPA or ULPA Exhaust Filters: These cartridges (photo 5) are mounted on the top of each of the motors, outside the container. If the main filter and microfilters are properly maintained, the glass fiber element in the exhaust filters should perform satisfactorily for a minimum of one year. They cannot be renewed or restored. Normally, four changes of microfilter equal one change of HEPA/ULPA filter. Remove the protective metal casings and replace the pleated glass fiber cartridges, according to the accompanying instructions. Cartridges must be replaced more frequently if the vacuum cleaner has had unusually heavy use, or if the main filter has been neglected.

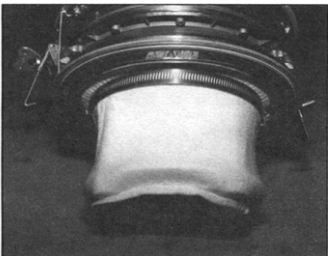


8

**CAUTION:** Use only genuine Nilfisk replacement filter components. The use of substitute components could pose a grave risk of personal exposure and will cause all equipment warranties to be void.

### MANOMETER: GM 82, GM 82A & GM 82BP

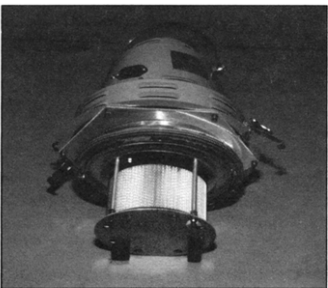
1. For Machines Equipped with Manometer: Regularly check the manometer to see if the indicator needle on the dial remains in the green zone. If in the red zone, turn off the motors and shake the filter with a vigorous up and down pumping of the filter shaker handle, located externally in the center of the vacuum cleaner lid. When the cleaner is restarted, the indicator should remain in the green zone. If it does not, turn off the motors again and empty the container. With an empty container and a properly shaken main filter, the cleaner should perform satisfactorily. If it fails to generate strong suction at this point, the main filter must then be replaced.



9

2. For Machines without Manometer: Regularly turn off the motors and follow the filter shaking instructions above.

**THE FOLLOWING INSTRUCTIONS ARE FOR THE GM 82A AND GM 82BP EQUIPPED WITH COMPRESSED AIR VENTURI MODULES (photo 6) OR BY-PASS MOTOR MODULES (photo 7).**



10

### MACHINE SETUP: GM 82A & GM 82BP

1. Installing the Polyliner and Paper Bag: Unclamp the four container clips located at the body of the container, front and back. Lift off the top. Open the polyliner and place it in the bottom of the container with its walls flush against the container sides and lipped under the container inlet (see photo 3). Drape the excess length of polyliner over the top of the container and down the outside, then roll the edge to permit the container clips to close. Install a paper bag according to the illustrations printed on the paper bag itself. Replace the container top and fasten the four clips.

2. Installing the Microfilters: The microfilters will come already factory installed.

3. For optimum performance, machines equipped with compressed air venturi modules must utilize a compressor of at least 40 h.p. in order to supply a minimum of 140 cfm through a 1" airline I.D. at 90 psi.

4. Equip your Nilfisk vacuum cleaner with whichever accessories have been supplied.



11

## **EMPTYING: GM 82A & GM 82BP**

Refer to instructions for emptying and disposal, page 3 of this booklet.

## **FILTER REPLACEMENT: GM 82A & GM 82BP**

To ensure that your Nilfisk vacuum cleaner delivers the years of trouble-free operation for which it was designed, it is necessary to check and replace filters regularly.

1. Main Filter: The large napped cotton bag which is semi-permanently mounted inside the container will not require frequent replacement. The main filter must be replaced when the vacuum cleaner no longer develops powerful suction, yet bags are not full and other filter components are not clogged. Extend main filter service life by frequent changes of disposable polyliners and paper bags.

The GM 82A & GM 82BP's internal microfilters and HEPA or ULPA filters are located directly under either the compressed air venturi housings or the by-pass motor housings. Open the motors' latches and lift out the motors.

2. Microfilters: These small white (yellow, if equipped with AES Polycomposite microfilters) felt socks, which fit over the HEPA filter spacers, will require periodic inspection. Dust will discolor the white microfilters. Change these microfilters as soon as any discoloration is easily noticeable. If equipped with GORE-TEX membrane microfilters, the same rules for periodic inspection and disposal apply. The GORE-TEX membrane microfilters must be changed when any abrasions, damage or heavy discoloration is noticed on the surface of the filters. Simply loosen the metal clamp band with a screwdriver and pull the microfilter off the HEPA filter housing.

Slide the new microfilter (#616821-Felt, #017230-AES Polycomposite, #017220-01-GORE-TEX) on, making sure to pull it up as far as it will go. Replace the metal band around the filter and tighten (photos 8 & 9 if equipped with compressed air venturis, photos 10 & 11 if equipped with by-pass motors). NOTE: Make sure the metal band seats firmly against the underside of the venturi or by-pass motor module assembly. Clamp the venturi assembly or by-pass motor module, depending on which module your machine is equipped with, back onto the container.

**HAZMAT:** Do not shake this microfilter since this can cause liberation of potentially harmful microscopic dust into the air. Remove carefully and discard with collected debris in the sealable polyliner.

3. Internal HEPA or ULPA Cartridges: The vacuum cleaner's internal HEPA or ULPA filters (photo 5) should be changed approximately every fourth time the microfilters are changed. Exact life will depend on application, frequency of use and prefilter maintenance.

Every Nilfisk replacement HEPA filter (#017276-31), or ULPA filter (#017376-31) comes with four new foam rubber sealing gaskets and one square spacer pad. NOTE: You will only use one round foam gasket (per each replacement filter cartridge). To install the internal filter cartridge, first remove the microfilter by loosening its metal band and pulling it off like a sock. You will now see the cartridge in its cage-like holder (photos 8 & 10).

To remove the cartridge, loosen and remove the four (4) wing nuts from beneath the holder. Then pull the metal plate free of the four pegs and carefully remove the filter. Also remove the foam gasket. Discard both items and the microfilter with collected debris in a sealable poly bag.

To install the new filter, place the new large, thick foam gasket in the recess of the filter holder. NOTE: Three round foam gaskets and one square spacer pad will remain. They may be discarded. Then install the HEPA or ULPA cartridge, label side out, in the holder. Replace the metal plate and secure it with the wing nuts. NOTE: Make sure the wing nuts are well tightened to provide the necessary seal. When tightening the wing nuts, make sure that the nuts on the underside of the filter mounting plate do not get caught on the filter end cap. Do not over tighten. The clearance between the bottom filter end cap and the base of the mounting plate should be 5/32". Install a new microfilter (see instructions above) and repeat procedure with other motor.

**CAUTION:** Use only genuine Nilfisk replacement filter components. The use of substitute components could pose a grave risk of personal exposure, and will cause all equipment warranties to be void.

## WARRANTY

The Nilfisk-Advance Group warrants that Nilfisk equipment will be free of defects in workmanship or material for a period of two years from the date of delivery. Should any failure to conform to this warranty appear, the Nilfisk-Advance Group shall upon notification within such time period, correct such nonconformity, at its option, either by repairing any defective part or parts, or by replacing a part or parts provided that the equipment is returned to an authorized Nilfisk-Advance service facility. In all cases, freight both ways will be at the expense of the customer. Equipment shall not be returned without advance notice to, and consent of the Nilfisk-Advance Group.

EXCEPT AS SPECIFICALLY SET FORTH HEREIN, THE NILFISK-ADVANCE GROUP MAKES NO WARRANTIES, EITHER EXPRESSED OR IMPLIED AS TO ANY MATTER WHATSOEVER, INCLUDING WITHOUT LIMITATION ANY AND ALL WARRANTIES OF MERCHANTABILITY, FITNESS FOR PURPOSE, OR OTHER WARRANTIES, ALL OF WHICH ARE EXPRESSLY DISCLAIMED AND EXCLUDED. NEITHER PARTY SHALL BE LIABLE TO THE OTHER FOR SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING BUT NOT LIMITED TO LOSS OF PRODUCTION, LOSS OF TIME, LOSS OF PROFITS OR ANY OTHER SIMILAR INDIRECT LOSSES WHICH MIGHT OCCUR AS A RESULT OF DEFECTS, PARTIAL OR TOTAL FAILURE OF THE PRODUCT TO PERFORM AS SPECIFIED.

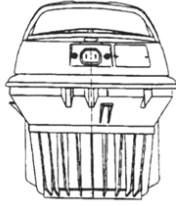
Correction of nonconformities or defects in the manner and for the period of time provided above, shall constitute fulfillment of all liabilities of the Nilfisk-Advance Group to the customer, whether based on contract, negligence or otherwise with respect to, or arising out of such equipment. The remedies set forth herein are exclusive, and the liability of the Nilfisk-Advance Group with respect to this sale or anything done in connection therewith, whether in contract, in tort, under any warranty, or otherwise, shall not exceed as expressly provided herein, exceed the price of the equipment or part on which such liability is based.

This warranty does not cover repairs due to normal wear and tear, accident, neglect, misuse or abuse, incorrect installation or use other than as described in the instruction booklet. Breaks in hoses and cables are not covered. This warranty is rendered void if the motor number plate is removed or defaced or if repairs are made or attempted by persons not authorized by the Nilfisk-Advance Group.

Some states do not allow exclusions of implied warranties or limitations on how long an implied warranty lasts so the above exclusions or limitation of implied warranties may not apply. Some states do not allow exclusion or limitation of incidental or consequential damages so the above exclusion or limitation of incidental or consequential damages may not apply. Limited warranties set forth above give specific legal rights. Customer may have other rights which vary from state to state.

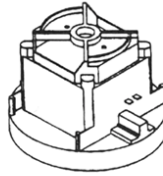
## Motor Parts - GMP and GMPJ

### Motor Complete



121101-29 GMP 110-120 volt  
121103-29 GMPJ 110-120 volt

### Motor / Fan Unit



121250-03 GMP 110-120 volt  
121250-03 GMPJ 110-120 volt

### Internal Wire Kit



221305

### Motor Top



221320  
Handle Complete

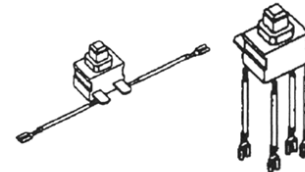
215730-01  
Diffuser Complete

### Diffuser



116410 - Diffusers (2/pkg.)

### On / Off Switch



221311 - One Pole    221312 - Two Pole

### Exhaust Filter

HEPA Complete  
017104-40



717376

ULPA Complete  
017204-40

217377

017247-01

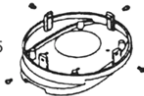
HEPA Cartridge  
017276-31



ULPA Cartridge  
017376-31

017009-01

817375

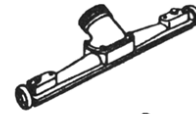


813950 x 4

017010-05

### Wheeled Floor Nozzle

109150 - 16" Nozzle  
106935 - 20" Nozzle



206865

706427

815632 x 4  
803862 x 4

706851 x 2  
806951 x 2

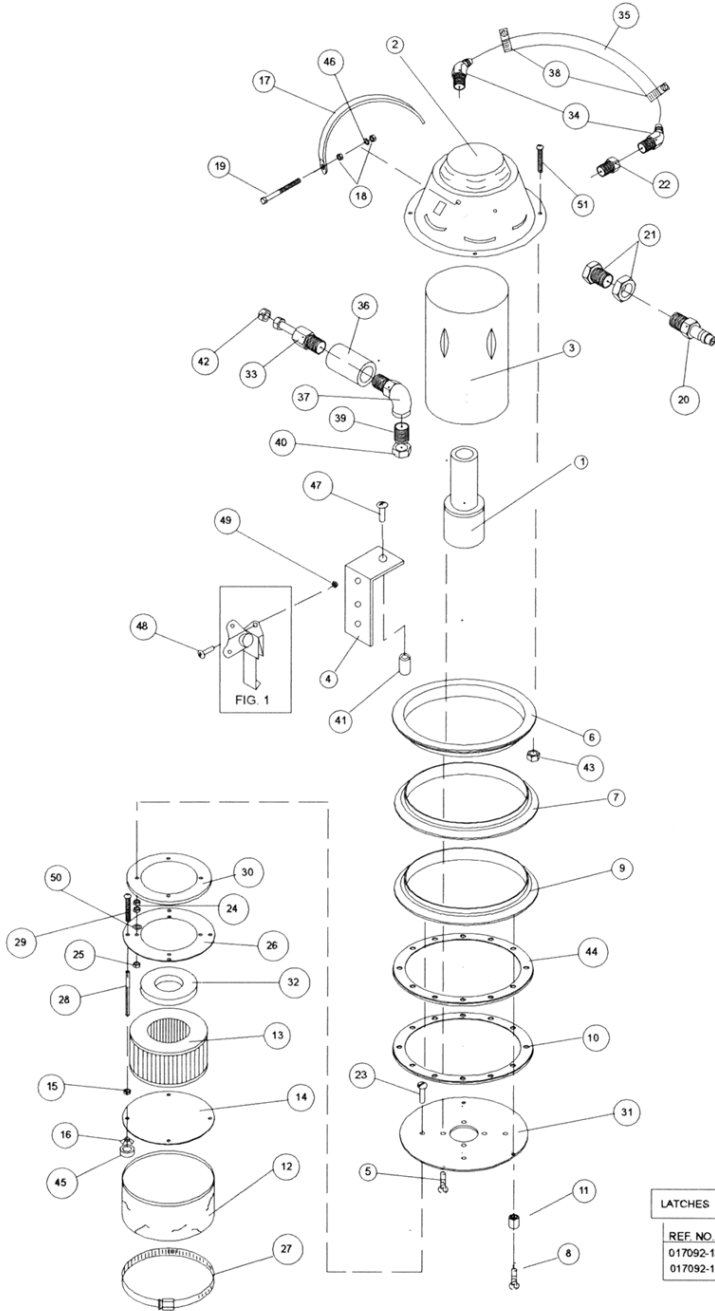
706848 x 2    815412 x 6

806852 x 2  
206938 x 2  
706936 x 2

313466-01 x 2    706850 x 2

815252 x 10  
709151 x 2  
809154 x 2

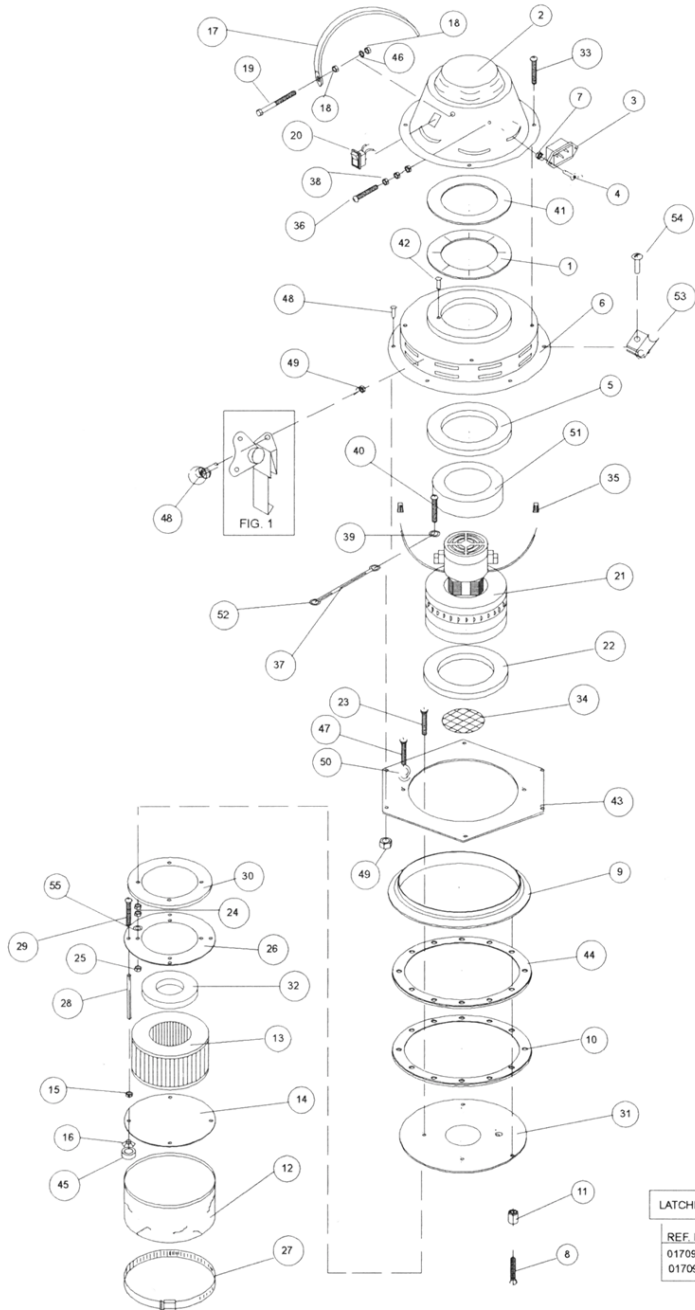
# Compressed Air Venturi Module



DESCRIPTION	PT.NO.	
1 VENTURI NOZLE	017882-00	1
2 UPPER COVER	017866-XX	1
3 MUFFLER	017882-35	1
4 BRACKET	017882-44	2
5 SCREW	017882-15	4
6 RING, MACHINED	815222-X1	1
7 RING, DRILLED	815222-X2	1
8 SCREW	815408	6
9 RING	815222-00	1
10 GASKET	815224-02	1
11 SPACER	017287-15	6
12 MICRO FILTER	616821	1
13 HEPA FILTER	017276-02	1
14 CLAMP PLATE	017871-01	1
15 NUT 8-32	017292-00	8
16 WING NUT	017291-00	4
17 HANDLE	811061	1
18 NUT, 5/16"	017844-00	4
19 BOLT-5/16X1 1/4	017877-25	2
20 NIPPLE	017882-20	1
21 BULKHEAD COUPLING	017882-16	1
22 BUSHING 1/2X3/8	017882-23	1
23 SCREW 8-32	017882-14	4
24 NUT	017292-00	8
25 NUT	017292-00	4
26 PLATE	017876-00	1
27 HOSE CLAMP	017035-01	1
28 SLEEVE	017293-00	4
29 SCREW 8-32	017660-00	4
30 GASKET	017881-00	1
31 NOZZLE PLATE	017882-55	1
32 GASKET, HEPA	017009-00	1
33 VALVE, VACUUM	017882-10	1
34 ELBOW 45	017882-25	2
35 HOSE 9 1/2" LG	017882-26	1
36 REDUCER	017882-49	1
37 STREET ELBOW	017882-39	1
38 HOSE CLAMP	017882-29	2
39 NIPPLE 1/8X3/4	017882-41	1
40 LOCKNUT 1/8"	017882-43	2
41 SLEEVE	017882-45	2
42 NUT, JAM	017882-40	1
43 NUT 8-32 ESN	017630-00	6
44 GASKET	017100-00	1
45 SPACER 7/8"OD	017291-05	4
46 LOCKWASHER	017877-26	2
47 SCREW	017882-46	2
48 SCREW 8-32X3/8	017631-00	4
49 NUT 8-32	017292-00	4
50 WASHER	017890-07	4
51 SCREW 8-32X3/4	017633-00	6

LATCHES			
REF. NO.	DESCRIPTION	FOR MODEL NOS.	FIG.
017092-13	SOUTHCO LATCH	017882-50	1
017092-11	SOUTHCO LATCH	017882-51&80	1

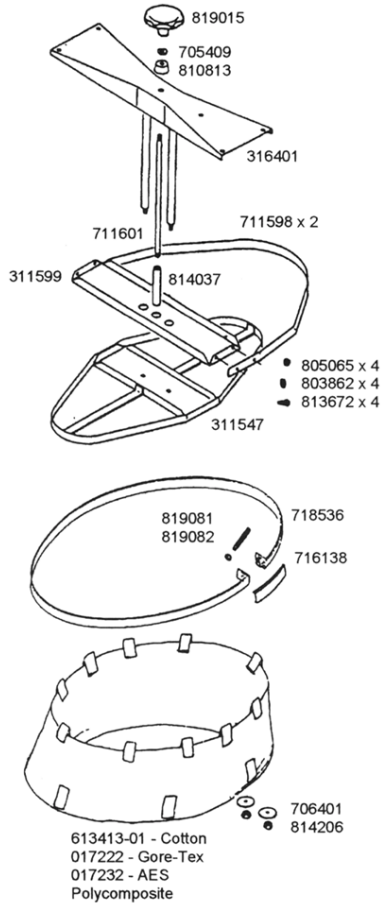
## By-Pass Motor Module



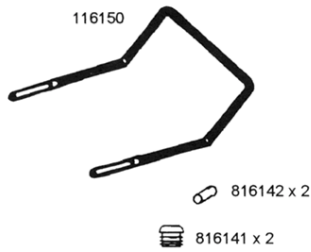
DESCRIPTION	PT. NO.	
1	MOTOR SEAL	017865-00 1
2	UPPER COVER	017866-XX 1
3	RECEPTACLE	017024-05 1
4	SCREW	017024-10 2
5	GASKET,MOTOR	017869-00 1
6	LOWER COVER	017870-XX 1
7	NUT ESN	017024-09 2
8	SCREW	815408 6
9	RING	815222-00 1
10	GASKET	815224-02 1
11	SPACER	017287-15 6
12	MICRO FILTER	616821 1
13	HEPA FILTER	017276-02 1
14	CLAMP PLATE	017871-01 1
15	NUT 8-32	017292-00 8
16	WING NUT	017291-00 4
17	HANDLE	811061 1
18	NUT, 5/16"	017844-00 4
19	BOLT-5/16X1 1/4	017877-25 2
20	SWITCH	017873-00 1
21	MOTOR BLOWER	017899-00 1
22	GASKET,MOTOR	017875-00 1
23	SCREW 8-32	017882-14 4
24	NUT	017292-00 8
25	NUT	017292-00 4
26	PLATE	017876-00 1
27	HOSE CLAMP	017035-01 1
28	SLEEVE	017293-00 4
29	SCREW 8-32	017660-00 4
30	GASKET	017881-00 1
31	NOZZLE PLATE	017882-55 1
32	GASKET, HEPA	017009-00 1
33	SCREW 8-18	017882-37 6
34	SCREEN, PERF.	017878-00 1
35	WIRE NUT	017662-00 3
36	GROUND SCREW	017663-00 1
37	GROUND LEAD	017024-20 1
38	NUT	017664-00 3
39	WASHER #12 I.T.	017665-00 1
40	GROUND SCREW	017666-00 1
41	GASKET, FOAM	017865-05 1
42	SCREW #8 X 3/4	017877-20 2
43	LOWER PLATE	017899-05 1
44	GASKET	017100-00 1
45	SPACER 7/8"OD	017291-05 4
46	LOCKWASHER	017877-26 2
47	SCREW	815262 2
48	SCREW 8-32	017631-00 9
49	NUT 8-32 ESN	017630-00 10
50	WASHER	017899-07 2
51	GASKET	017899-06 1
52	TERMINAL	017899-08 2
53	LOOP CLAMP	017899-09 1
54	SCREW 8-32	017877-27 1
55	WASHER	017890-07 4

LATCHES			
REF. NO.	DESCRIPTION	FOR MODEL NOS.	FIG.
017092-13	SOUTHCO LATCH	017899-90	1
017092-11	SOUTHCO LATCH	017899-91	1

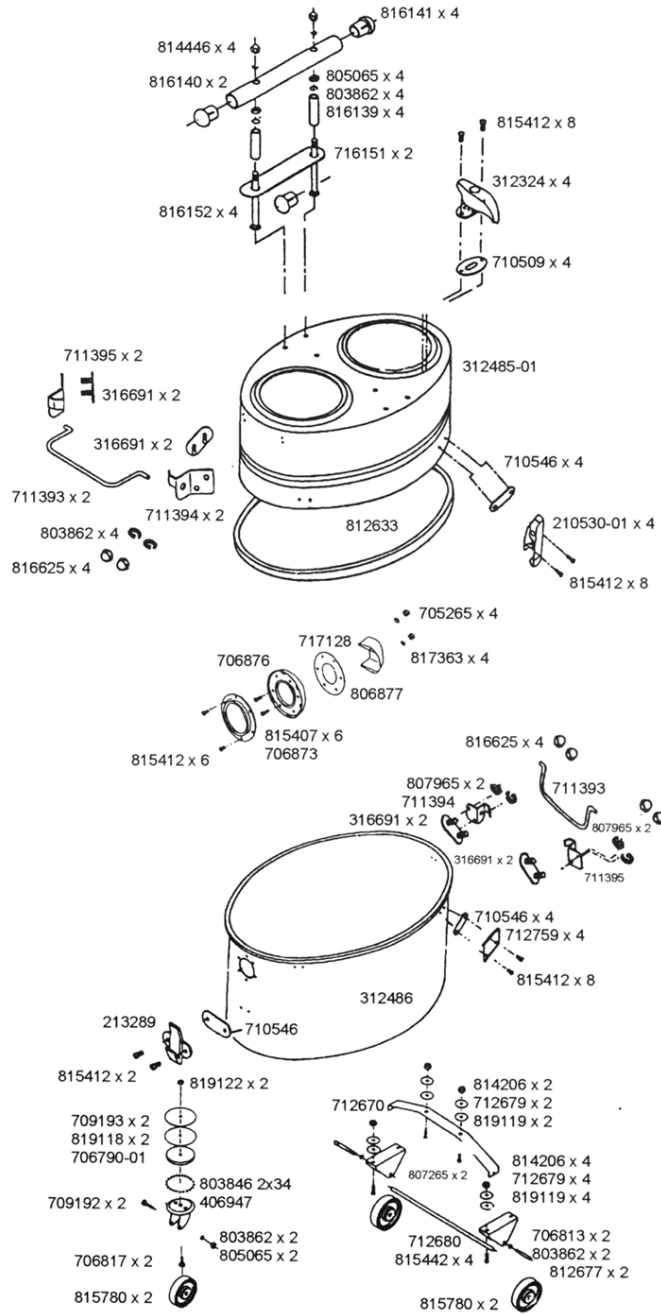
### Filter System



### Handle



### Container



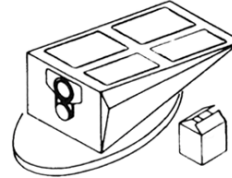
# Paper Bag System

115830-01 - Includes inlet, bag screen and paper bags

## Inlet



## Paper Bag - (5/pkg.)



815840 - Spare Paper Bags  
819990 - Electrostatic Paper Bags

## Bag Screen

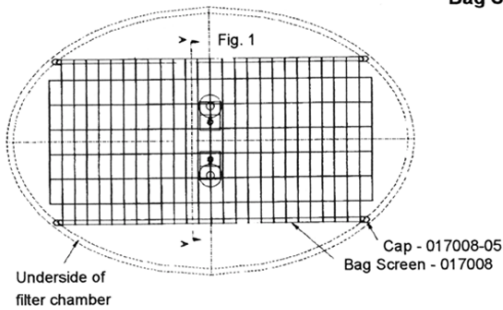
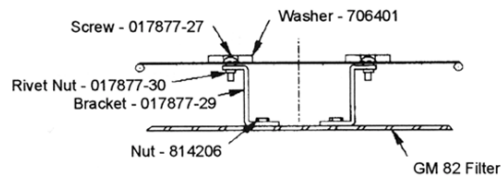


Figure 1



## Safety Latches

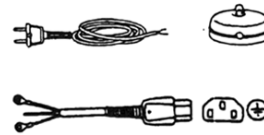


Container Safety Latch Kit 017096-02  
(includes 4 clips)

Motor Ring with Latches 017091-13  
Latches (container) 017092-12  
Keepers 017093-03  
Adaptors 017094-04  
Screws 815406  
Washers 805521  
Screws 815407  
Nuts 705265

## Electrical Junction Box and Cord

215452-14 - Includes junction box, leads and power cord.



## Manometer



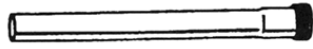
815176 - Gasket  
215172

## Fixed Floor Nozzle

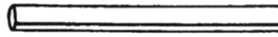
113728 - 20" Nozzle



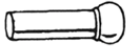
## Wands



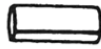
106864 - Straight Steel Wand 3'3"



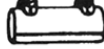
806527 - Straight Etronite Tube 3'3"



106458



806493



206590



106494



206865



813223

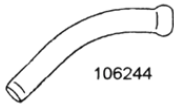
## Hoses



106243 - 6'6" Hose Complete  
106298 - 10' Hose Complete



106965 - 6'6" Hose Extension  
106297 - 10' Hose Extension



106244



706191



806190



706191



706872



806875



706874



809914

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**Nilfisk-Advance Canada Co., 396 Watline Avenue, Mississauga, Ontario L4Z 1X2, 1-800-668-8400**