

Instructions for Use Nilfisk Model VT 60 Wet/Dry **HEPA-Filtered 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.

installed according to Nilfisk-Advance America's written instructions.

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

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 Employees' and others' information, hazardous or toxic materials which may be collected by this equipment. Such information must be communicated to your Employees and other potential users of 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 vacuum cleaner is essential to the maintenance of its ultra-fine filtering capabilities.

PLEASE READ THESE INSTRUCTIONS COMPLETELY BEFORE OPERATING THIS VACUUM CLEANER. IF YOU ARE PICKING UP HAZARDOUS OR ULTRA-FINE MATERIALS, BE SURE TO FOLLOW THE INSTRUCTIONS FOR "HAZMAT" AS OUTLINED BELOW.

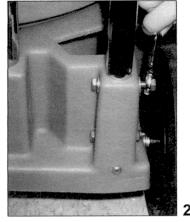
MACHINE SET-UP

ASSEMBLE MACHINE

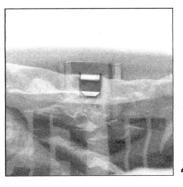
- 1. Assembling the Trolley: If your vacuum cleaner is equipped with a steel trolley, please follow the instructions under section 1(A). If equipped with a gray, polyethylene trolley, please follow instructions 1(B).
- (A.) Open the clamp in the back of the trolley. Place the vacuum cleaner container in the trolley with the inlet facing front and center. To tighten or loosen the trolley's grip on the vacuum container, simply adjust the silver clamp located on the back side of the trolley. First, open the clamp. Then loosen the lock nut at the base of the screw (photo 1). Loosen the screw itself to relax the grip; tighten the screw to strengthen. Once the adjustment is made, tighten the lock nut to hold the clamp in place.



Insert the handle tube into the two brackets on the back of the trolley. Make sure the top of the handle is curved away from the trolley. Beginning on either side, take one of the "L"-shaped handle plates and insert it next to the handle tube in the handle bracket so that the tube is completely surrounded, and the nuts on the handle plate, the holes in the handle tube, and the holes in the bracket are all aligned. Install









lock washers then insert a bolt through both holes and twist until secure. NOTE: Do not tighten the bolts completely until they are both in place. Repeat with other side.

(B.) Place the vacuum cleaner container in the trolley with the inlet facing front and center. Tighten the three thumb screws located on the trolley. This will secure the container in the trolley.

Remove the hardware from the two holes at the back of the trolley where the handle tubes will be inserted. Insert the handle tubes. Make sure the top of the handle is curved away from the trolley. Beginning on either side, align the holes in the handle tube with the holes in the trolley and re-insert the bolt and washer. Install the other washer and tighten with nut (photo 2). NOTE: Do not tighten the bolts completely until they are both in place. Repeat with other side.

CHOOSE DISPOSAL OPTION

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

The VT 60 offers three collection/disposal options, depending on the size and nature of the application.

 Standard 5-gallon Disposable Pail: Lining the container with this
5-gallon pail makes it easy to empty and most convenient for small to average jobs. The pail is reusable or sealable for safe and direct disposal.

To use the pail, first open the bottom set of container clips by turning them counterclockwise and releasing them from the keepers on the container. Lift off the motor/filter housing and lay it on its side. Next, center the pail over the round hump in the bottom of the container (photo 3). Replace the motor/filter housing, making sure the inlet tube and float mechanism fit inside the pail. Seat the motor/filter housing over the container and close the clips by pushing them into place over the keepers and turning them clockwise.

2. <u>Disposable Polyliner</u>: For safe and convenient disposal of larger amounts of material, the vacuum cleaner container may be lined with a disposable polyliner.

Lift off the top half of the machine as described in Step #1 above. Then open a polyliner and insert it in the container bottom. Begin by placing the entire polyliner bag inside the container. Next, grasp the edge of the polyliner and pull it up into the clip (photo 4). DO NOT BUNCH OR GATHER POLYLINER IN OR AROUND THE CLIP as this could affect airflow through the vertical grooves in the clip once the upper container is installed. Then, take the remaining polyliner edge and stretch over the lip of the vacuum cleaner's lower container. In order to minimize wrinkling and gathering, use only as much polyliner as necessary to secure in position. Smooth out the polyliner against the container, leaving as little air between the two as possible. Replace the upper container and motor housing and fasten the container clips.

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3. <u>Direct Collection Into Tank</u>: Material may be collected directly into the tank, in which case no preparation is necessary. This method is not recommended for hazardous material pickup, as proper disposal may not be convenient.

Once assembly and set-up are complete, the machine may be plugged into a properly grounded outlet and switched on.

EMPTYING

WARNING: 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.

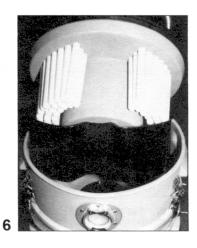
If the VT 60 loses suction power during work, there may be several reasons, the most likely of which is a full container. If the container is filled with liquid, suction will be cut off abruptly as the ball float valve closes off airflow; when the container fills with dry or damp material, suction loss is gradual as the collection bag fills with debris.

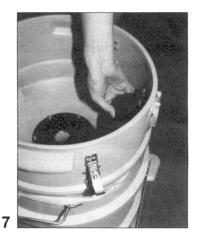
Before emptying, turn off the machine and seal off the hose end or suction inlet. Open the bottom clips and lift out the motor/filter housing. Check the foam impact filter covering the float valve (photo 5). If it appears caked or dirty, remove it from the float valve and shake or dust the debris off the filter into the container. If the filter is freed of clogging debris, it may be put back on the float valve. If it cannot be cleaned, replace with a new one (#017226-01). HAZMAT: Each time the machine is emptied, remove the impact filter, dispose of it with the container contents and replace with a new filter.

- 1. <u>Disposable Pail</u>: Lift pail out of container and seal or dump and replace (#017191-10). **HAZMAT:** Seal and label pail for proper disposal.
- 2. <u>Polyliner</u>: Lift bag out of container and seal for disposal. Place new bag (#017191 for 25-count package) in container according to instructions above. **HAZMAT**: Double-bag, seal and label for proper disposal.
- 3. <u>Vacuum Container</u>: Open the container clamp and lift container off trolley. Dump debris, then replace the container. **HAZMAT:** Direct collection into the vacuum container is not recommended for hazardous material collection.

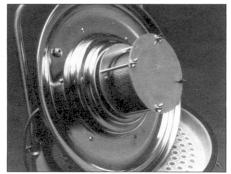
Replace motor/filter housing according to the instructions above.

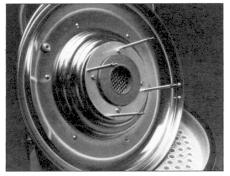
If the machine does not regain full suction power after emptying and cleaning or replacing the impact filter, check the main filter. Open the top container clips by turning counterclockwise and releasing from the keepers. Lift off the motor and put aside. Next, pull out the main filter plate, which consists of a plate holding the polyethylene filter fingers and a splashguard. Unscrew the knob at the bottom of the splashguard and remove. Separate the











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splashguard from the filter (photo 6) and empty, if necessary. Next, examine the filter fingers. If they are dirty or caked with debris, they may be wiped or rinsed clean. If any are split or broken, they may be replaced individually (#017838). After cleaning, reassemble the splashguard and filter and replace the entire filter plate in the vacuum container, making sure it is properly seated. Finally, to loosen any material which may be stuck in the inlet, flex the pliable inlet tube (photo 7). Replace the motor top and close the clips. HAZMAT: The entire main filter and splashguard should be thoroughly cleaned during decontamination.

FILTER REPLACEMENT

MICROFILTER AND HEPA FILTER

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.

The VT 60's internal microfilter and HEPA filter are located directly under the motor housing. Open the container clips and lift off the motor.

- 1. <u>Microfilter</u>: The microfilter is a small white felt sock (photo 8) which fits over the HEPA filter housing. This filter should be checked periodically for dirt or discoloration, and should be changed whenever it is noticeably soiled (#616821-Felt, #017230-AES Polycomposite, #017220-01-Gore-Tex®). Simply loosen the metal clamp band with a screwdriver and pull the microfilter off the HEPA filter housing. Next pull the new one on, making sure to pull it up as far as it will go, covering the HEPA housing completely. Replace the metal band around the filter and tighten. NOTE: Make sure the metal band seats firmly against the underside of the motor cover. **HAZMAT:** Do not shake the microfilter since this can cause liberation of potentially harmful microscopic dust. Remove carefully and discard with collected debris in a sealable poly bag.
- 2. <u>Internal HEPA or ULPA Cartridge</u>: The vacuum cleaner's internal HEPA or ULPA filter (photo 9) should be changed approximately every fourth time the microfilter is 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. 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.

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.

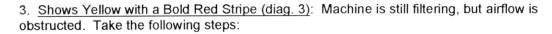
To install the new filter, place the new large, thick foam gasket in the recess of the filter holder (photo 10). NOTE: Three round foam gaskets and one square spacer pad will remain. They may be discarded. Then install the HEPA cartridge, label side out, in the holder. Replace the metal plate and secure it with the wing nuts. NOTE: Make sure the wing nuts are well tightened to provide the necessary seal. Install a new microfilter (see instructions above), then replace the motor on the container and close the clips.

CAUTION: Use only genuine Nilfisk replacement parts and 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

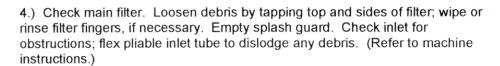
The optional manometer senses air pressure changes within the vacuum cleaner. It will signal a full container or the need to clean or change filters. To obtain an accurate reading from the manometer, the machine must be switched on and the hose or wand-end must be open and unobstructed.

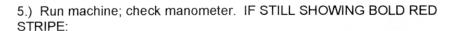
- 1. Shows All Yellow (diagram 1): Filters are clean; airflow is unobstructed. Vacuum cleaner is running efficiently.
- 2. Shows Yellow with a Fine Red Line (diag. 2): Container is filling; filters are retaining material. Vacuum cleaner is still running efficiently.



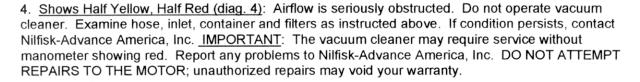


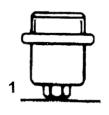
- 2.) Empty machine according to previous instructions.
- 3.) Run machine again, check manometer. IF STILL SHOWING BOLD RED STRIPE:

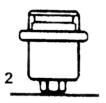


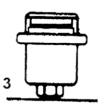


- 6.) Remove microfilter, then run machine again. If manometer goes back to yellow, install a new microfilter. IF STILL SHOWING BOLD RED STRIPE:
- 7.) Change HEPA filter cartridge according to manufacturer's instructions.
- 8.) Run machine; check manometer. IF STILL SHOWING BOLD RED STRIPE, the vacuum cleaner may require service. Call Nilfisk-Advance America Customer Service.



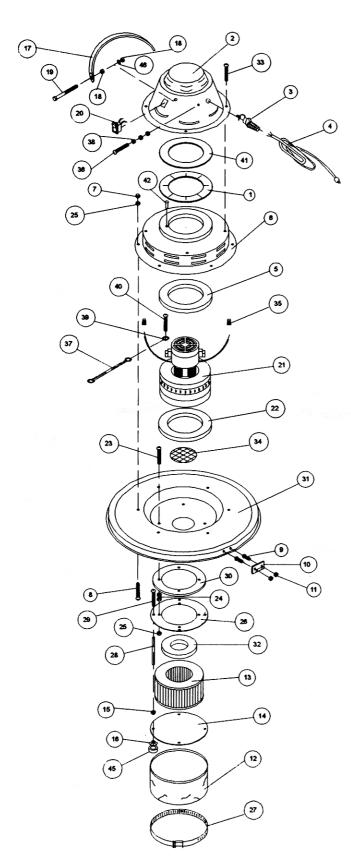








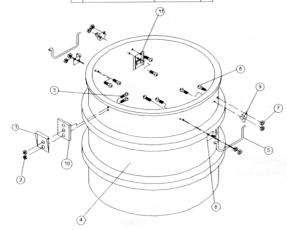
Motor Head and Lid Assembly



	DESCRIPTION	PT.NO.	
1	MOTOR SEAL	017865-00	1
2	UPPER COVER	017866-00	1
3	STRAIN RELIEF	017867-00	1
4	LINE CORD	017868-00	1
5	GASKET,MOTOR	017869-00	1
6	LOWER COVER	017870-00	1
7	NUT, ACORN	017882-38	6
8	SCREW	017631-00	6
9	SCREW 8-32	017631-00	6
10	KEEPER	017093-05	3
11	NUT 8-32 ESN	017630-00	6
12	MICRO FILTER	616821	1
13	HEPA FILTER	017276	1
14	CLAMP PLATE	017871-01	1
15	NUT 8-32	017292-00	4
16	WING NUT	017291-00	4
17	HANDLE	811061	1
18	NUT, 5/16"	017644-00	4
19	BOLT-5/16X1 1/4	017877-25	2
20	SWITCH	017873-00	1
21	MOTOR BLOWER	017874-00	1
22	GASKET, MOTOR	017875-00	1
23	SCREW 8-32	017659-00	4
24	NUT	017292-00	8
25	NUT	017292-00	10
26	PLATE	017876-00	1
27	HOSE CLAMP	017035-01	1
28	SLEEVE	017880-00	4
29	SCREW 8-32	017660-00	4
30	GASKET	017881-00	1
31	COVER, DEEP	017877-02	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	017879-00	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	DATA PLATE	017877-21	1
44	SCREW, DRIVE	017877-22	2
45	SPACER 7/8"OD	017291-05	4
46	LOCKWASHER	017877-26	2

Container

	DESCRIPTION	PT.NO.	
1	KEEPER	017093-06	3
2	NUT 6-32 ESN	017635-00	6
3	SCREW 6-32 X5/8	017636-01	6
4	TANK	017830-00	1
5	HANDLE	711393	2
6	SCREW 8-32 X1/2	017650-00	8
7	NUT 8-32 ESN	017630-00	8
8	BRACKET	711394	2
9	BRACKET	711395	2
10	ADAPTER SHIM	017094-05	3
11	POLY BAG CLIP	017106-25	1



Accessories





for Wet Pickup

Brush for Rough Surfaces





for Concrete

01192-04 - 14" Firm Fiber 017192-05 - 14" Soft Felt for Smooth Floors

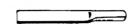




017192-01 - 14" Carpet Nozzle

Aluminum Brush 3" - 017194-01

5" - 017194-02

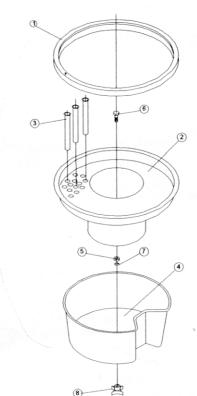


017195 - 11" Plastic Crevice Nozzle

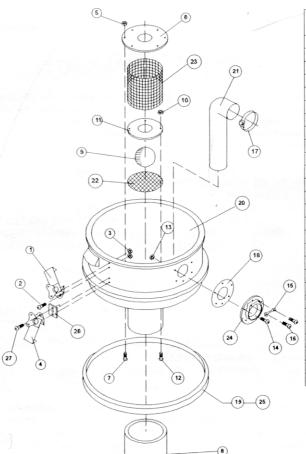


017196 - 10' x 38mm Plastic Hose Complete

Filter System



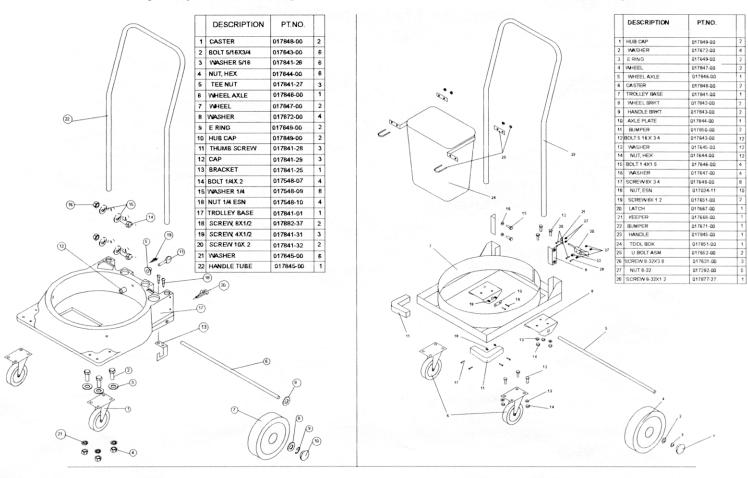
	DESCRIPTION	PT.NO.	
1	GASKET, TUBE PLT.	017836-00	1
2	FILTER TUBE PLT.	017832-00	1
3	FILTER TUBE	017838-00	105
4	SPLASH GUARD	017834-00	1
5	NUT, 1/4-20 LOCK	017637-00	1
6	SCREW, CARRAGE	017639-00	1
7	GROMMET, BRASS	017640-00	1
8	KNOB	017641-00	1



	DESCRIPTION	PT.NO.	
1	LATCH, SIMMONS	017092-11	3
2	SCREW 8-32 X5/8	017632-00	6
3	NUT 8-32 ESN	017630-00	12
4	LATCH, SIMMONS	017092-18	3
5	NUT 8-32 ESN	017630-00	6
6	PLATE, VALVE	017835-00	1
7	SCREW 8-32 X3/4	017633-00	6
8	IMPACT FILTER	017860-00	1
9	FLOAT BALL	017839-00	1
10	NUT 8-32 ESN	017630-00	4
11	BALL SEAT	017833-00	1
12	SCREW 8-32 X3/4	017633-00	4
13	NUT 8-32 ESN	017630-00	6
14	SCREW 8-32 X3/4	017633-00	6
15	PLATE	713640	2
16	SCREW	815769	4
17	CLAMP, HOSE	017642-00	1
18	GASKET, INLET	806877	1
19	SEAL, TANK	017837-00	1
20	FILTER CHAMBER	017831-00	1
21	TUBE, INLET	017861-00	1
22	SCREEN, BOTTOM	017862-00	X
23	SCREEN, SIDE	017863-00	X
24	INLET	713632	1
25	SEAL, TANK	017837-10	Х
26	ADAPTER SHIM	017094-05	3
27	SCREW 8-32 X3/4	017674-00	6

Polyethylene Trolley

Steel Trolley



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 except 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

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.

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