



# Central Vacuum System User Manual



HD-750-22H

HD-750-32H

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Dealer/Installer Name	
Dealer Phone #	
Serial Number	
Date Installed	

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### 1. IMPORTANT SAFETY INSTRUCTIONS

CAREFULLY READ ALL OF THESE INSTRUCTIONS BEFORE USING THIS CENTRAL VACUUM SYSTEM.

When using an electrical appliance, it is necessary to observe certain basic precautions.



### WARNING - TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY:

- Unplug the power cord from the electrical outlet before performing any maintenance on the power unit.
- DO NOT install outdoors, protect against weathering, and do not use on wet surfaces.
- This appliance must not be used as a toy. Exercise extreme caution when children are using the system or when it is in use in the vicinity of a child or infant.
- This system must be used in accordance with the instructions provided in this manual. Use only the accessories recommended by the manufacturer.
- DO NOT use the system if the power cord or electrical outlet is damaged, if the system does not function normally, if it has been dropped, was left outdoors for an extended period, or if it has been immersed in liquid. In these cases, the power unit must be sent to an authorized service center.
- DO NOT use the power cord to pull or lift the power unit, or use it as a handle. Be careful not to pinch it in a door or let it hang on a sharp corner or edge.
- Check the openings for any foreign objects that may be lodged in the pipe. If found, remove the obstructing objects to ensure maximum airflow.
- Keep the power cord away from contact with any hot objects or surfaces.
- DO NOT unplug the power cord by pulling on it. Always remove it directly from the electrical outlet.
- DO NOT use the system or its accessories with wet hands.
- Keep hair, clothing, fingers, body parts, or other objects away from any openings or moving parts of the system.
- Deactivate all functions of the system before unplugging the power cord from the electrical socket. Take necessary precautions when using the system on stairs.
- DO NOT use the system to pick up flammable liquids or fuels (e.g., gasoline) or use it in areas where such liquids may be present.
- Only plug the power cord into a properly grounded electrical socket. For more information on this subject, please refer to the "Grounding Specifications" on page 4 (section 2).
- The exhaust of the power unit must not be directed against a wall, ceiling, or inside a closed space within a building or structure. It is recommended that the exhaust be vented outdoors.
- DO NOT pick up hot ashes, glowing embers, smoking materials, incandescent materials, cigarette butts, matches, etc...
- DO NOT place anything on top of the power unit or near it, as this could cause the unit to overheat.
- DO NOT use the power unit if the pipe network is clogged. This will cause the unit to overheat.

# KEEP THESE INSTRUCTIONS IN A SAFE PLACE THIS POWER UNIT IS FOR DOMESTIC USE ONLY



### 2. GENERAL GUIDELINES AND REFERENCES

#### **ELECTRICAL GROUNDING SPECIFICATIONS**

The system's power unit must be grounded. In the event of a malfunction or power unit failure, grounding provides the path of least resistance for any electrical current, thereby minimizing the risk of electric shock. The power unit's power cord is 72 inches or 1.83 meters long and is equipped with a grounding wire and pin. The power unit's power cord must always be directly plugged into a suitable electrical outlet that is properly installed and grounded in accordance with current local electrical standards.

#### Do not use extension cords to connect the power unit to the electrical outlet.

#### WARNING

Improper connection of the power unit grounding wire can result in the risk of electric shock. If you are unsure about proper grounding, contact a professional electrician. Do not modify the power cord supplied with this power unit. If the power cord connector does not fit your electrical outlet, have the proper electrical outlet installed by a professional electrician. This power unit is designed to be used on a nominal electrical circuit of 15 A, 110-120 VAC at 60 Hz. The power cord is equipped with a grounding pin. Ensure that the power cord is plugged into an electrical outlet with the same specifications. This appliance should not be used with an adapter. While it is recommended to install this unit on its independent circuit and breaker, it is not necessary to do so.

#### **IMPORTANT**

The manufacturer shall not be held responsible for damages caused by the inappropriate use of this system. The warranty does not cover damages caused by improper use of this system or problems resulting from an installation that does not meet the specifications or any structural or functional alterations made to the power unit. An inappropriate or non-recommended installation of the system or the power unit, made without adhering to the directives outlined in this document, will be considered misuse. The limited warranty and user manual outline all conditions and restrictions. To optimize the performance and lifespan of your Nadair power unit, it is essential to perform regular maintenance and cleaning of the filter according to the guidelines listed in this user manual.

#### General guidelines must be adhered to at all times:



#### The power unit must be installed by a certified central vacuum installer.

- 1. The power unit must be installed in a well-ventilated area, protected from weather conditions, and kept away from all sources of heat.
- 2. This central vacuum system is designed for dry surfaces only and must not be used on wet surfaces or to pick up liquids. It should not be used to clean wet carpets or any wet ground.
- 3. The filter cage must always be covered by the permanent filter during the system's operation.
- 4. The motor housing must never be obstructed to prevent damage or overheating.
- 5. DO NOT use this system to pick up mud or similar substances, or to vacuum baking flour, talcum powder, cement, or gypsum dust, as it will obstruct and clog the filter media. The filter must be cleaned several times during and after such pick-ups to prevent motor overheating and potential damage.
- 6. DO NOT attempt to shorten or modify the power cord in any way.
- 7. For safety purposes, unplug the power cord before performing maintenance or servicing.
- 8. To maintain the validity of the warranty, any repairs or servicing on the power unit must be performed only by an authorized service center.
- 9. The power unit should be positioned so that the power cord and electrical outlet are always easily accessible.
- 10. Regarding the use of an electrified valve (110-120 VAC) (intended for the connection of a current-carrying hose and electrically motorized brush):
  - Only connect a current-carrying hose to this wall valve.
  - DO NOT install a current-carrying valve outdoors.
  - DO NOT use a damaged hose; bring it to an authorized service center for repair.



### 3. MODELS



### 3.1 HYBRID FILTRATION SYSTEM

Can be used with or without disposable bags





- The permanent filter must be **IN PLACE AT ALL TIMES** even when using a filtration bag.
- The permanent filter should be washed with cold water every time the canister is emptied to prevent debris from accumulating on the filter and avoid debris entering the motor compartment.
- The permanent filter must be replaced once every one (1) year to maintain the warranty on the vacuum. It must be replaced with Nadair filters: FP-8 (for HD-750-22H) OR FP-12 (for HD-750-32H).
- The replacement bags are: FD-12.5L-3NAD (for HD-750-22H) and FD-22.5L-3NAD (for HD-750-32H).



The power unit must be installed in a well-ventilated area, protected from the weather. It must be easily accessible and positioned away from any heat source. The power unit must be installed near an appropriate electrical outlet. Ensure that there is at least 6 inches (15 cm) of clearance space all around the unit.

To purchase bags and filters, please contact your Authorized Dealer



### 4. SYSTEM OPERATION INSTRUCTIONS

Your new system is now prepared for use. Here are a few simple guidelines to follow when using your Nadair Central Vacuum System: Insert the wall end of the hose into any of the vacuum wall inlet valves installed throughout your home. When you're ready to begin, simply press the ON-OFF switch on the hose handle!

NOTE: In reference to the low-voltage system, all vacuum inlet valves are equipped with two (2) spring-loaded metal pins. When the hose wall-end cuffs two (2) metal components come into contact with the two (2) pins inside the inlet, the system becomes energized. You can then activate or deactivate it using the hose handle switch (if this option was chosen). The low-voltage cable is connected in parallel from each inlet valve. It runs throughout the piping network and supplies power to the switch for remotely starting or stopping the power unit, ensuring safety. A standard flexible hose, lacking an interrupter, will start the power unit immediately upon insertion into the valve opening.

### 5. FILTRATION SYSTEM MAINTENANCE

To ensure optimal air quality in your home, the power unit includes a high-efficiency HYBRID filtration system. This system uses a permanent polypropylene washable and reusable filter, along with the option to use a 12.5L or 22.5L disposable filter bag.



NOTE: The permanent filter MUST BE IN PLACE AT ALL TIMES; the filter's securing strap must be tight and adjusted to ensure there are no dust or other particles that goes into the motor propeller.

#### PERMANENT FILTER



The permanent filter should be washed each time the canister is emptied to prevent debris accumulation and to avoid any debris from entering the motor compartment.

To maintain the vacuum's warranty, the permanent filter must be replaced once every one (1) year. The new filter must be Nadair filter: FP-8 (for HD-750-22H) OR FP-12 (for HD-750-32H).

#### **FILTRATION BAGS**



#### **IMPORTANT**

Ensure that the rubber diaphragm is correctly installed onto the intake PVC pipe. Verify that the bag is not cut or damaged, and ensure that the canister is securely in place before restarting the power unit.

This Nadair hybrid power unit may be used with OR without a disposable bag. Bags are sold in 3-pack: FD-12.5L-3NAD (for HD-750-22H) OR FD-22.5L-3NAD (for HD-750-32H).

The disposable bag must be installed as described here:

- 1- Remove the debris canister
- 2- Remove the dirt-filled bag
- 3- Install the new bag by twisting it into place
- 4- Verify and clean ( If necessary) the permanent filter
- 5- Replace the debris canister and secure the latches



NOTE: When replacing the disposable bag, ensure that the rubber diaphragm is correctly installed onto the intake PVC pipe. Verify that the bag is not cut or damaged, and ensure that the canister is securely in place before restarting the power unit. It's recommended to replace the disposable bag or empty the debris canister, as well as clean the permanent filter, 3 or 4 times per year. If the system is used more frequently than usual, repeat the above procedure more often.



#### **IMPORTANT**

NEVER use this system to pick up liquids, mud, or combustible materials. Vacuuming baking flour, talcum powder, cement, or gypsum dust will result in obstructing and potentially clogging the filter media. You'll need to clean the filter several times during and after such pick-ups. Otherwise, the power unit's performance will be affected, and the motor may overheat and become damaged.



### 6. TROUBLE SHOOTING

### **GENERAL**

The following may cause failure of the power unit:

- Inadequate electrical power (Voltage or Amperage). Verify that the electrical power supplied complies with the power unit's requirement
- Abnormal performances of the electronic control module or the motor

Before calling a service technician, in case of a malfunction, please review the following situations by running the following simple diagnostics:

	Turning the following simple diagnostics.		
SITUATION	VERIFICATION		
THE POWER	Verify that there is power in the electrical outlet.		
UNIT DOES	Verify that the Breaker or the fuse on your Electrical Panel was not triggered to		
NOT OPERATE	the "off " position.		
	Verify that the power cord is adequately plugged in the electrical outlet.		
	Verify that the mini-breaker button on the side of the unit is pushed-in.		
	Short-circuit the low-voltage connections on the side of the power unit. <b>See next</b>		
	page "how to perform a By Pass to test the system". If the power unit starts,		
	the problem is somewhere else in the inlet low-voltage wiring network or on the		
	current carrying hose.		
	Verify that all low-voltage connections are adequate at every inlet valve location.		
	Open every inlet valve, one at a time, and make contact between the two (2)		
	small pins with a metal object. If all the inlet valves are functioning properly,		
	take a look at the low-voltage circuit or switch on the hose.		
	If the power Unit still does not work after the above diagnostics, contact your		
	Authorized Dealer.		

with the two (2) small metal contact pins, hold your hand around the opening	SITUATION	VERIFICATION
ALL  Verify if the disposable bag is full, if so replace disposable bag and/or that the filter may be clogged, if so clean the permanent filter.  Verify if the debris canister is adequately placed on the unit with no air leaks.  Verify that all other inlet valves are shut and that there is no air leaks.  If one of the vacuum inlet valves has noticeably less power than the others, it sign of a clog at this particular inlet valve. Write a different number on a few patissues and pick one up in every inlet valve in the home; see in the debris canister which one is missing and find which inlet valve is obstructed.  If none of the inlet valves function properly and the power unit is running;	LOW OR NO SUCTION OR AIR FLOW AT	Verify the cleaning tool or the hose for possible obstruction. If the hose is obstructed, try to "massage" the clog out. Try to "reverse" the hose by inserting the cleaning end of the hose in the wall inlet valve and making contact with the two (2) small metal contact pins, hold your hand around the opening for air tightness.  Verify if the disposable bag is full, if so replace disposable bag and/or that the filter may be clogged, if so clean the permanent filter.  Verify if the debris canister is adequately placed on the unit with no air leaks.  Verify that all other inlet valves are shut and that there is no air leaks.  If one of the vacuum inlet valves has noticeably less power than the others, it is a sign of a clog at this particular inlet valve. Write a different number on a few paper tissues and pick one up in every inlet valve in the home; see in the debris canister which one is missing and find which inlet valve is obstructed.  If none of the inlet valves function properly and the power unit is running; disconnect the air intake pipe on the top of the power unit from the debris intake line. If you have plenty of suction there, it is a sign that the clog is between the last inlet valve and the power unit.  If the power unit still does not work after the above diagnostic, contact your



### SITUATION VERIFICATION

#### VACUUM WON'T START OR STOP

#### Hose on/off switch

When setting the hose switch to "OFF", you must wait 3 seconds before the vacuum powers off. If you pressed the "ON/OFF" switch quickly many time; The vacuum will seem to always stay on. Set the switch to "OFF" and wait 3 seconds, the unit powers off.

#### Hose not properly plugged in

Make sure to properly plug the hose in the inlet.(see the picture for proper plug-in method)



Make sure the black part is well aligned in the middle of the 2 small pins.

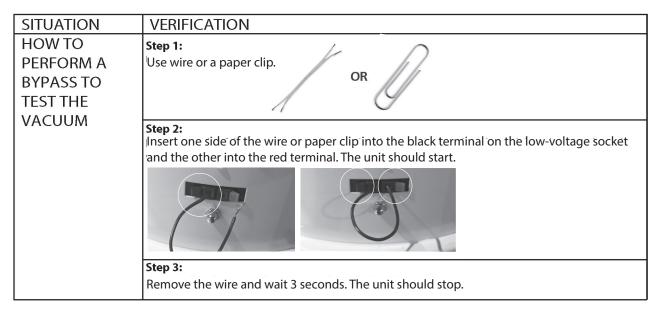
Option 3: The pin's spring could be broken



If the pins, once pushed, do not come up; the spring is probably broken and could cause the vacuum not to start or stop. In which case the spring must be fixed.

#### Option 4:

If all of the above works, proceed with a bypass. See the step below. If the vacuum starts, there may be a problem with the cables. If the unit does not start contact your Authorized Dealer.



For more troubleshooting tips or answers to your questions, visit our website.

USA: www.nadair.com/trouble-shooting CANADA: www.nadair.ca/trouble-shooting

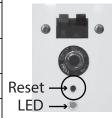


### 7. LOW-VOLTAGE SYSTEM TECHNOLOGY

LED status interpretation guide

This Nadair Central Vacuum Power Unit is provided with an LED status indicator to keep you informed on the different states and functions during its operation. Reading the following table will allow you to identify the status of your appliance by the different behavior of the LED.

Status	Color	Legend	
	OFF	The power unit is not connected to an electrical outlet.	
- <del>\</del>	BLINKING FAST GREEN	The power unit has just been connected to the power source The light will blink fast for few second and turn into a solid green.	
	GREEN	(Solid green light) The system is operational.	
Ŏ	BLINKING SLOW GREEN	Stop power unit / change bag or empty canister / wash the filter. Press and hold the reset button for over 5 seconds . The light will stop blinking and return to solid green.	
	ORANGE	Service Due.	
Ŏ	BLINKING SLOW ORANGE	Stop power unit / change bag or empty canister / wash the filter. Press and hold the reset button for over 5 seconds . The light will stop blinking and return to solid orange	
	RED	Stop using. Service Overdue.	
Solid Operational/ Requirements Blin		Blink slow Warning Action Required Blink fast - Booting System	





Always unplug the central vacuum power unit to prevent the risk of electrocution.





USA: www.nadair.com | Canada: www.nadair.ca

+1-800-776-7891

# TO PURCHASE NEW BAGS AND FILTERS Contact your Authorized Dealer



#### ON CENTRAL VACUUM

The warranty below covers only parts and includes a 1-year labor warranty. The use of electrical power other than prescribed on the unit and/or any repairs made by other than authorized service personnel will render this warranty null and void. The warranty will also be null and void if the system and/or its accessories have been used on wet surfaces. This warranty is for residential applications ONLY; it does not cover commercial or industrial usage of the product. The manufacturer is not responsible for any transportation/freight. Proof of purchase is mandatory, along with the invoice for the installation by a qualified electrician.

The Central Vacuum Power Unit Body, Motor & Module – Fifteen (15) years: Nadair will repair or replace any defective parts of the central vacuum motor, electronic module, body, housing, and dust bin for fifteen (15) years, as long as you own it, and if used in normal conditions and properly maintained, as stated in the power unit instruction manual.

Certain conditions apply: The permanent washable filter must be replaced once every one (1) year, and the disposable bags must be replaced minimum (2) twice a year.



#### ON ATTACHMENT KITS

Cleaning tools, carpet brushes, and flexible hoses: Two (2) years warranty:

The cleaning tools, carpet brushes, and flexible hoses, when used adequately and in normal conditions, are warranted for two (2) years from the original date of purchase against manufacturing defects.

Certain conditions apply: The warranty does not cover the normal wear of bristles, turbines, lamps, belts, carbon brushes, and roller bearings from the turbo brush and electrical carpet brush.

#### TO REGISTER YOUR WARRANTY:

USA: www.nadair.com/register | Canada: www.nadair.ca/register