## BOUT YOUR HOUSE

CE9

### MAINTAINING YOUR HRV

Your heat recovery ventilator (HRV) can help make your house a clean, healthy living environment, while keeping fuel bills down. But your HRV can't do all this without your help.

It's only takes seven simple steps to keep your HRV happy...

## The Seven Steps to a Happy HRV

First turn off the HRV and unplug it.

### Step 1 Clean or Replace Air Filters

Dirty or clogged filters can lower ventilation efficiency. Try to clean your filters at least every two months. Filters in most new HRVs can be easily removed, cleaned with a vacuum cleaner, then washed with mild soap and water before being replaced. Older units have replaceable filters. If your HRV is easily accessible, this is a fiveminute job.

# Step 2 Check Outdoor Intake and Exhaust Hoods

Remove leaves, waste paper or other obstructions that may be blocking the outside vents of your HRV. Without this vital airflow, your HRV won't function properly. During winter, clear any snow or frost buildup blocking outside vents.

### Step 3 Inspect The Condensate Drain

Check to see if your HRV has a condensate drain, a pipe or plastic tube coming out of the bottom of the HRV. If it does, slowly pour about two litres of warm, clean water in the drain inside the HRV to make sure it's flowing freely. If there's a backup, clean the drain.

### Step 4 Clean the Heat Exchange Core

Check your HRV owner's manual for instructions on cleaning the heat exchange core. Vacuuming the core and washing it with soap and water will reduce dust which can build up inside the core.

# Step 5 Clean Grilles and Inspect the Ductwork

Once a year, check the ductwork leading to and from your HRV. Remove and inspect the grilles covering the duct ends, then vacuum inside the ducts. If a more thorough cleaning is required, call your service technician.

### Step 6 Service the Fans

Remove the dirt that has been accumulated on the blades by gently brushing them. Most new HRVs are designed to run continuously without lubrication, but older models require a few drops of proper motor lubricating oil in a designated oil intake. Check your manual for complete instructions.



HOME TO CANADIANS

Canada

### **Step 7 Arrange for Annual Servicing**

Your HRV be should be serviced annually. If you are not comfortable doing it yourself, contact a technician accredited by the Heating, Refrigerating and Air Conditioning Institute of Canada. Make sure the technician you call has been trained by the manufacturer of your HRV.

Check out the handy maintenance checklist on page 3

### Check Your HRV Balance: the Garbage Bag Test

HRV's need to be balanced, with the fresh air flow matching the exhaust flow. If you do not know if the HRV was balanced when installed or if you have changed or added HRV ducts, you may want to check the balance with the following simple procedure. This rough test will take about 10 minutes. Use a large plastic leaf collection bag, typically 1.2m (48 in.) long. Untwist a wire coat hanger. Tape the wire to the mouth of the bag to keep it open. You now have a garbage bag flow tester. Go outside to where your HRV ducts exit the foundation.

#### Step 1

Crush the bag flat and hold the opening tightly over the exhaust hood. The air flowing out of the hood will inflate the bag. Time the inflation. If the bag inflates in eight seconds or more, go to Step 2. If the bag inflates in less than eight seconds, turn the HRV to a lower speed, and repeat the test. Then go to Step 2.

#### Step 2

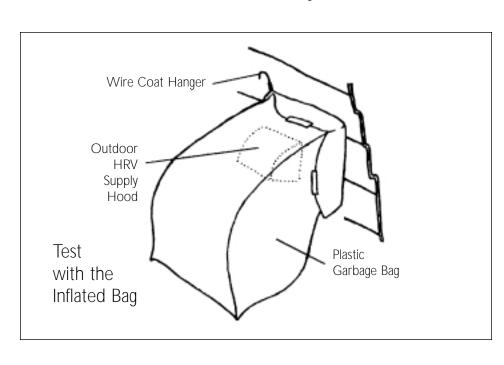
Swing the bag to inflate it and hold the opening against the wall around the HRV supply hood. The air going into the HRV will now deflate the bag. Time the deflation.

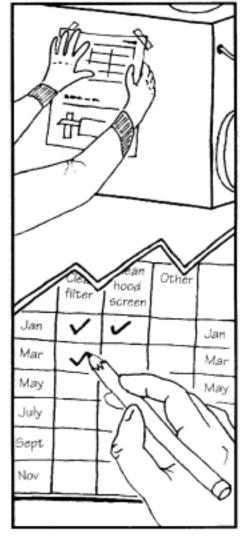
If your HRV is balanced, air going into the HRV will balance the air coming out of the HRV.

The inflation and deflation times should be roughly equal. If you find that the bag inflates twice as fast as it deflates, for instance, your HRV is unbalanced. If you can see no problem with the filters that would cause such an imbalance, you should call a service person to test and adjust your HRV.

Please don't ignore me! Just a little bit of your time is all it takes to keep me happy!

The handy checklist on the next page can be taped directly on to your HRV. Simply check off each box as you complete the indicated task.





### HRV MAINTENANCE CHECKLIST

To start your easy maintenance program, simply disconnect the electrical power source, then open up the front panel.

			Year				Year			
Clean filter	Clean hood screen	Other		Clean filter	Clean hood screen	Other		Clean filter	Clean hood screen	Other
			Jan				Jan			
			Mar				Mar			
			May				May			
			July				July			
		0	Sept			О	Sept			О
			Nov				Nov			
		filter hood	filter hood screen	Clean filter hood screen Other Jan Mar  May July Sept	Clean filter	Clean hood screen  Clean hood screen  Jan  Mar  May  July  Sept	Clean filter Clean hood screen Other filter Clean hood screen Other hood screen   Jan Mar —   May — July   July Sept O	Clean filter Clean hood screen Other hood screen   Jan Jan   Mar Mar   May May   July July   Sept Sept	Clean filter Clean hood screen Other hood screen Clean filter   Jan Jan   Mar Mar   May May   July July   Sept Sept	Clean filter       Clean hood screen       Clean hood screen       Clean hood screen       Clean hood screen       Clean filter       Clean hood screen         Jan       Jan       Jan       Jan       Mar       Mar       Mar       May       July       July       July       July       July       Sept       Sep

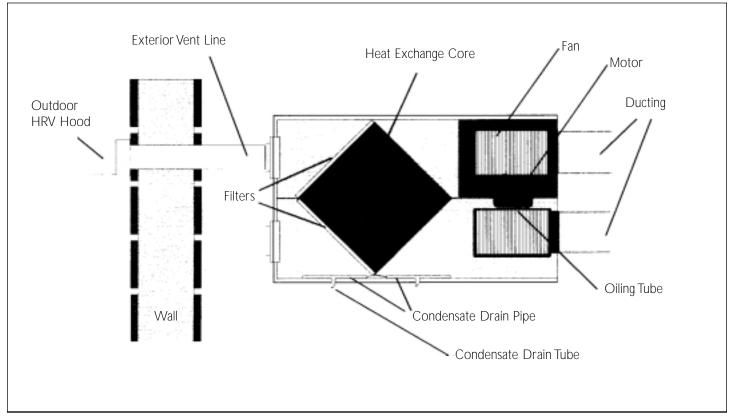
- April or May
- Turn dehumidistat (the adjustable control on many HRVs which activates the HRV according to relative humidity) to HIGH setting or to OFF

#### O September or October

- · Clean core
- Check fans
- Check condensate drain
- Check grilles and ducts in house
- Reset dehumidistat (40 per cent-80 per cent)

### Getting to Know Your HRV From the Inside

Here's what a basic HRV looks like from the inside.



For more information about your HRV, Natural Resources Canada has produced a booklet entitled Operating and Maintaining Your Heat Recovery Ventilator (HRV). Free copies may be obtained by calling or writing the following address:

### **Energy Publications**

Office of Energy Efficiency c/o Canada Communication Group Ottawa ON K1A 0S9 Phone: Toll-free 1 800 387-2000 In the Ottawa area, call 995-2943 Fax: (819) 994-1498

# Other useful information from Canada Mortgage and Housing Corporation

The Clean Air Guide: How to Identify and Correct Indoor Air Problems in Your Home, \$5.95 NHA 6695

This Clean House video, \$14.95 VE057

Package: The Clean Air Guide and This Clean House, \$19.95 Order #4013

To order these publications and to find out about other CMHC publications, contact:

Your local CMHC office

or

Canada Mortgage and Housing Corporation 700 Montreal Road Ottawa ON K1A 0P7

Phone: 1 800 668-2642 Fax: 1 800 245-9274

Visit our home page at <www.cmhc-schl.gc.ca>

©1997, 1999, Canada Mortgage and Housing Corporation Printed in Canada Produced by CMHC

99-08