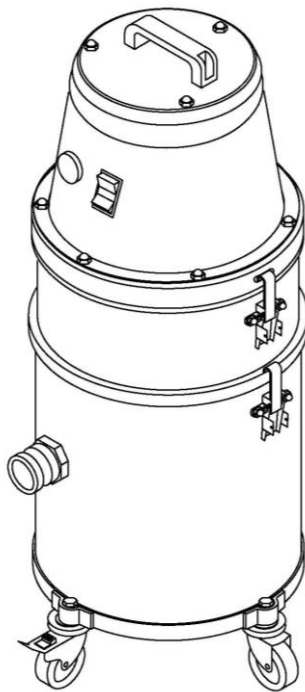


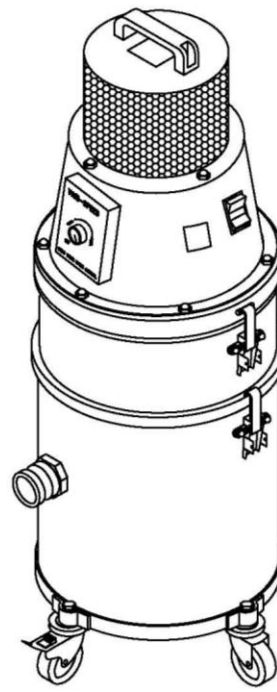
INSTRUCTION MANUAL

FOR MODELS MRV-900 (HMR) AND MRV-1000

MERCURY RECOVERY VACUUM CLEANER SYSTEMS



MRV-900 (HMR)



MRV-1000

TO ENSURE A SAFE WORKING ENVIRONMENT,
CAREFULLY READ THE FOLLOWING INSTRUCTIONS BEFORE
OPERATING.

SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE



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April 3, 2025

1.0 INSPECTION

Carefully unpack and inspect your Tiger-Vac vacuum cleaner for shipping damage. Each vacuum cleaner is tested and thoroughly inspected before being shipped; therefore, any damage is the responsibility of the delivering carrier, who should be notified.

2.0 PRE-USAGE NOTES AND TESTING PROCEDURES (FOR 230 VOLT MODELS)

POWER SUPPLY CORD, FOR 230 V MOTORS

Should the power supply cord be replaced, carefully study the wiring diagram supplied with the instruction manual.

NOTE: As the colours of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

- The wire which is coloured green and yellow must be connected to the terminal in the plug which is marked with the letter E or by the earth symbol, or coloured green or green and yellow.
- The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.
- The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

WARNING: **THIS APPLIANCE MUST BE EARTHED.**

- Dispose of a plug that has been cut from the power supply cord.

WARNING: For units having plugs with built-in fuses. Do not use such a plug in a 13A socket-outlet elsewhere in the working area because of the risk of electrical shock hazard.

- Use only replacement fuses that are ASTA approved to BS1362 and have a rated current of 13 A.
- Do not use a plug without a proper fitted fuse cover.
- For a BS1362 plug, the correct replacement for the detachable fuse carrier is identified by the colour coding.
- Replacement fuse covers may be obtained from:

Tiger-Vac Inc. (USA)
73 S.W. 12 Ave. Bldg. 1, Unit 7
Dania, FL 33004 USA
sales@tiger-vac.com

Tiger-Vac International Inc.
2020 Dagenais West
Laval, Qc H7L 5W2 Canada
support@tiger-vac.com

Toll Free Numbers (USA & Canada)

Tel.: 1-800-668-4437

Fax: 1-800-668-4439

2.1. GROUNDING INSTRUCTIONS

IMPORTANT: The TIGER-VAC vacuum cleaner is equipped with a specially designed electronic filter suppressor which protects equipment from electromagnetic interference produced by its own motor field. The vacuum unit **must be grounded** during operation to ensure proper operation of the filter suppressor. **It is the responsibility of the user to ensure that the electrical outlet is grounded.**

WARNING: DO NOT OPERATE UNIT WITHOUT A PROPER GROUND SOURCE.

This vacuum cleaner is equipped with a cord having an equipment-grounding conductor and grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances. Ensure that the fuse/breaker on the electrical panel is of the correct rating and exceeds the maximum current rating shown on the technical data sticker of the vacuum unit.

DANGER: Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a qualified electrician or service person if you are in doubt as to whether an outlet is properly grounded. Do not modify the plug provided with the vacuum cleaner. If it will not fit the outlet, have a proper outlet installed by a qualified electrician. No adaptor should be used with this vacuum cleaner.

2.2.IMPORTANT SAFETY PRECAUTIONS

WARNING: The following safety precautions must be taken:

1. Vacuum cleaner must be equipped with a Mersorb activated carbon cartridge (Tiger-Vac part# 212214A)

WARNING: If the carbon filter cartridge has been removed and stored in a sealed poly bag to prolong its life make sure before using or re-using the vacuum cleaner that the carbon filter cartridge is re-installed in the vacuum cleaner.

WARNING: Removal and re-installation of the carbon filter cartridge or any other contaminated part of the vacuum cleaner system should only be carried out by trained personnel wearing proper clothing and using an appropriate breathing apparatus.

2. Service and operation should only be carried out by trained personnel.

3. **Dispose of collected materials responsibly. Follow government regulations for the disposal of hazardous materials.**

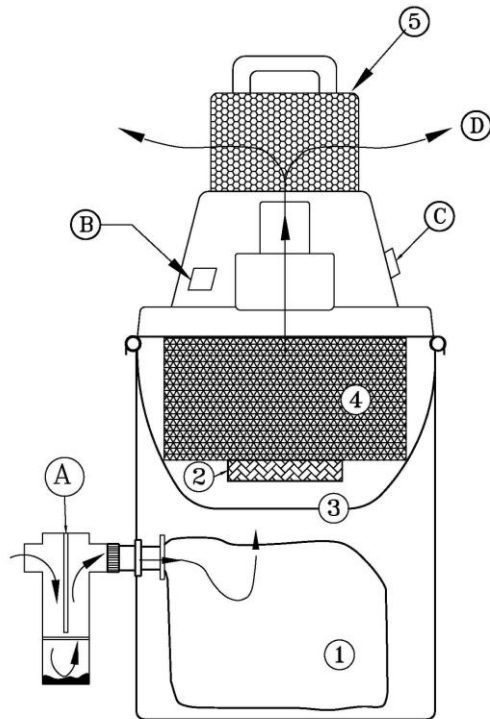
NOTE: Any health hazard associated with the use of this vacuum cleaner in conjunction with the recovery of asbestos and other hazardous substances has not been investigated.

2.3. ADDITIONAL SAFETY PRECAUTIONS

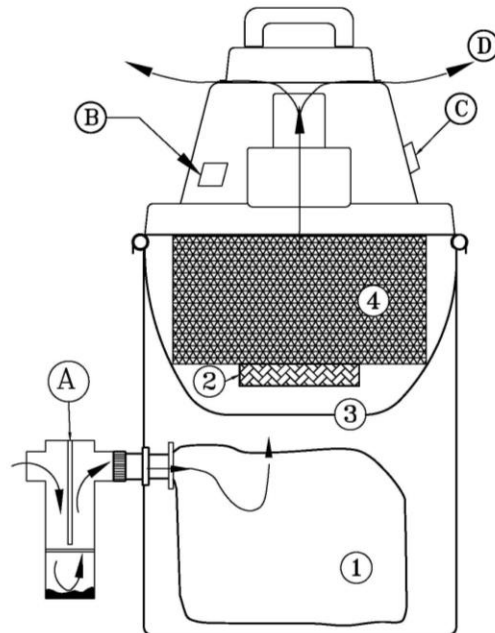
WARNING: To reduce the risk of fire, electrical shock, or injury:

1. Do not leave vacuum cleaner when plugged in. Unplug from outlet when not in use and before servicing.
2. Do not allow vacuum cleaner to be used as a toy. Close attention is necessary when used near children.
3. Use only as described in this manual. Use only with recommended attachments.
4. Do not use with damaged cord or plug. If vacuum cleaner is not working as it should, has been dropped, damaged, left outdoors, or dropped into water, return it to a service centre.
5. Do not: pull or carry by cord, use cord as a handle, close a door on cord, or pull cord around sharp edges or corners. Do not run vacuum cleaner over cord. Keep cord away from heated surfaces.
6. Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord.
7. Do not handle plug or appliance with wet hands.
8. Do not put any object into openings. Do not use with any openings blocked; keep free of dust, lint, hair and anything that may reduce air flow. Poor ventilation will result in overheating of motor.
9. Keep hair, loose clothing, fingers and all parts of body away from openings and moving parts.
10. Do not pick-up anything that is burning or smoking such as: cigarettes, matches or hot ashes etc.
11. Do not use without appropriate filters in place.
12. Turn off all controls before unplugging.
13. Use extra care when cleaning on stairs.
14. Do not pick-up flammable or combustible liquids such as gasoline, or use in areas where they may be present.
15. Never operate unit unless the power-head is securely fastened to the recovery tank with latches.
16. Connect to a properly grounded outlet only. See grounding instructions.

3.0 FILTRATION SYSTEM



MRV 1000



MRV 900

1. **Paper filter bag:** Disposable paper filter bag with latex micro-liner, one micron efficiency. Facilitates recovery and disposal. Tiger-Vac part# 212500A
 2. **HEPA filter:** With 99.99% efficiency on particles as small as 0.3 microns. Part of the carbon cartridge assembly.
 3. **Disposable polyester pre-filter**
 4. **Carbon cartridge assembly:** For the adsorption of mercury vapors and odors. Designed to completely adsorb mercury vapors for one hour of continuous exposure. Under normal use, the activated carbon pack should be replaced every 10 to 12 months, nevertheless, after one hour of exposure the concentrations of mercury vapors will begin to rise above 0.000 mg/M3. Once the carbon has been exposed to mercury vapors for one hour, it is the operator's responsibility to ensure that the exhaust air falls within permissible exposure limits. The recommended device is the Jerome brand mercury analyser or other similar device (not included with vacuum cleaner). Cartridge part# 212214A
 5. **ULPA filter:** 99.999% efficiency 0.12 microns. PART# 211027. **(For model MRV-1000)**
- A** **Mercury Separator & detachable mercury recovery jar:** Separates the liquid mercury and directs it into the recovery jar. The mercury separator is made of stainless steel for excellent corrosion resistance and easy decontamination. Separator assembly (includes 2 jars) part# 212208. Replacement jar complete with lid part# 212210A.
- B** **Electronic filter suppressor** for electromagnetic interference. Meets FCC norms for Class B computing devices.
- C** **Hour Counter / Timer:** Facilitates the measuring of the carbon filter life.

WARNING: The Hour Counter / Timer cannot be reset to zero. It is the user's responsibility to take note of the time on the Counter / Timer when changing the carbon filter.

D Clean air exhaust

4.0 OPERATING PROCEDURE

4.1. DRY RECOVERY (refer to section 3.0 Filtration System for illustrations)

1. Disengage the latches and remove the powerhead from the middle ring.
2. Disengage the latches and remove the middle ring from the recovery tank.
3. Ensure that no liquids are present in the recovery tank.
4. If using a poly liner open it and place it at the bottom of the tank to make a nest
5. Connect the paper filter bag to the adaptor inside the recovery tank.
6. Place the middle ring on the recovery tank and fasten the latches.
7. Place the powerhead on the middle ring and fasten the latches.
8. Plug in the power cord into a grounded electrical outlet.
9. Remove storage cap and attach the suction hose to the suction intake on the recovery tank.
10. Attach desired tools to the hose. Use only the recommended cleaning tools supplied with each unit.
11. To operate unit, depress switch either in the HIGH or LOW setting as desired.
12. To shut off unit, depress switch in the OFF position. Disconnect power cord when not in use.

4.2. RECOVERY WITH MERCURY SEPARATOR

WARNING: The mercury separator is designed for the recovery of small amounts of liquid mercury. The capacity of the mercury recovery jar is 20 oz (540 ml). Take care not to overfill the jar.

WARNING: After use, disconnect the suction hose from the mercury separator. Hold up both ends of the suction hose as there may be some mercury left in the suction hose. Pour any remaining mercury into an appropriate container.

1. Disengage the latches and remove the powerhead from the middle ring.
2. Disengage the latches and remove the middle ring from recovery tank.
3. Ensure that no liquids are present in the recovery tank.
4. If using a poly liner open it and place it at the bottom of the tank to make a nest
5. Connect the paper filter bag to the adaptor inside the recovery tank.
6. Place the middle ring on the recovery tank and fasten the latches.
7. Place the powerhead on the middle ring and fasten the latches.
8. Remove storage cap and attach the mercury separator with jar on the suction intake on the recovery tank.
9. Attach the suction hose to the mercury separator
10. Attach desired tools to the hose. Use only the recommended cleaning tools supplied with each unit.
11. To operate unit, depress switch either in the HIGH or LOW setting as desired.
12. To shut off unit, depress switch in the OFF position. Disconnect power cord when not in use.

5.0 MAINTENANCE

5.1. CLEANUP PROCEDURE AFTER USE

1. Disconnect power cord from electrical outlet.
2. Disengage the latches and remove the powerhead from the middle ring.
3. Disengage latches and remove middle ring from the recovery tank.
4. Disconnect paper filter bag from the inlet in the recovery tank. If using a poly liner pull out the poly liner from the recovery tank with the paper bag in it. Paper filter bags may not be reused once full, they must be discarded.
5. Empty collected materials into suitable container.
6. After each use hold up both ends of the suction hose as there may be some mercury left in the suction hose. Pour any remaining mercury into an appropriate container.

NOTE: To prolong the life of the carbon filter cartridge, it is possible to remove the carbon filter cartridge from the vacuum cleaner when the vacuum cleaner is not in use. The carbon filter cartridge can be stored in a sealed poly bag.

WARNING: Before using the vacuum cleaner make sure that the carbon filter cartridge is re-installed in the vacuum cleaner.

WARNING: Removal and re-installation of the carbon filter cartridge or any other contaminated part of the vacuum cleaner system should only be carried out by trained personnel wearing proper clothing and using an appropriate breathing apparatus

WARNING: Dispose of collected materials responsibly. Follow government regulations for the disposal of hazardous materials.

5.2. STORAGE

1. It is recommended that the inside of the recovery tank be cleaned and dried before storing the vacuum cleaner.

WARNING: Service and operation should only be carried out by trained personnel wearing proper clothing and using an appropriate breathing apparatus

2. The suction intake of the recovery tank should be closed with the supplied storage cap.

5.3. CARBON FILTER REPLACEMENT

The carbon filter cartridge is designed for the adsorption of mercury vapors. It is designed to completely adsorb mercury vapors for one hour of continuous exposure. Under normal use, the activated carbon pack should be replaced every 10 to 12 months, nevertheless, after one hour of exposure the concentrations of mercury vapors will begin to rise above 0.000 mg/M3. Once the carbon has been exposed to mercury vapors for one hour, it is the operator's responsibility to ensure that the exhaust air falls within permissible exposure limits. The recommended device is the Jerome brand mercury analyser or other similar device (not included with vacuum cleaner). Cartridge part# 212214A

WARNING: Proper clothing and the use of an appropriate breathing apparatus is necessary when replacing the carbon filter or any other contaminated part of the vacuum cleaner system.

To replace the carbon filters.

1. Disconnect the power cord from the electrical outlet.
2. Disengage latches and remove the power head from the middle ring.
3. Remove the carbon filter cartridge and seal it in a poly bag for disposal.
4. Insert the new carbon filter cartridge with Mersorb carbon (Tiger-Vac Part # 212214A) into the middle ring.

WARNING: The Hour Counter / Timer cannot be reset to zero. It is the user's responsibility to take note of the time on the Counter / Timer when changing the carbon filter.

5. Dispose of the contaminated carbon filter cartridge according to government regulations.

5.4. ULPA FILTER REPLACEMENT (MODEL MRV-1000)

The ULPA filter is designed for filtration of ultra-fine particles. A clogged ULPA filter will restrict the air flow thereby reducing the vacuum's performance.

Depending upon operating conditions, it is recommended that the ULPA filter be replaced at least once a year. (refer to section 3.0, item 5)

WARNING: If the vacuum cleaner is used for the recovery of toxic materials proper clothing and the use of an appropriate breathing apparatus is necessary when replacing the ULPA filter or any other contaminated part of the vacuum cleaner system.

To replace the ULPA filter.

1. Disconnect the power cord from the electrical outlet.
2. Unscrew the three nuts that secure the cylindrical ULPA filter housing to the power head.
3. Remove the ULPA housing and discard the used ULPA filter.
4. Carefully inspect the seal gasket on the ULPA housing for wear and breaks. Replace gasket if defective. (Tiger-Vac Part # 211201)
5. Insert the new ULPA filter (Tiger-Vac Part # 211027) into the housing, with the filter orifice pointing down.
6. Securely fasten the ULPA filter housing using the three hex nuts.
7. Dispose of the contaminated filter according to government regulations. (If applicable)

NOTE: It is recommended that an aerosol leak test, or particle count test be performed before use to ensure that ULPA filter has been properly installed.

Two Year Warranty

Tiger-Vac warrants that its 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 Tiger-Vac shall upon notification within such time period, correct such non-conformity, 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 Tiger-Vac 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 Tiger-Vac.

Except as specifically set forth herein, Tiger-Vac 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 non-conformities or defects in the manner and for the period of time provided above, shall constitute fulfillment of all liabilities of Tiger-Vac 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 Tiger-Vac 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 plate is removed or defaced or if repairs are made or attempted by persons not authorized by Tiger-Vac.

Some states do not allow exclusions of implied warranties or limitation 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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