



SAFETY, OPERATION AND MAINTENANCE MANUAL

MX-1408 SELF-CONTAINED EXTRACTOR

This unit is intended for commercial use.

READ & FOLLOW ALL INSTRUCTIONS, WARNINGS & CAUTIONS BEFORE USING THIS EXTRACTOR

This self-contained extractor will afford you many years of trouble-free operating satisfaction, provided it is given proper care. All parts have passed rigid quality control standards prior to their being assembled to produce the finished product. Prior to packaging, the extractor was again inspected for assurance of flawless assembly.

This extractor is protectively packed to prevent damage in shipment. We recommend that upon delivery, unpack the unit and inspect it for any possible damage. Only a visual examination will reveal damage that may have occurred.

If damage is discovered, immediately notify the transportation company that delivered your extractor. As the shipper, we cannot file a claim for any damage. You must originate any claim within 5 days.

The manufacturer takes no responsibility for damages caused to property or persons due to improper use of the extractor. Operating instructions must always be available for the operator. This extractor may only be operated by persons who have been fully trained and authorized to use this machine.

READ ALL INSTRUCTION BEFORE OPERATING

SAVE THESE INSTRUCTIONS

IMPORTANT SAFETY INSTRUCTIONS



WARNING:

To Avoid Electric Shock, Do Not Expose to Rain
Store Indoors

*When using this self-contained extractor, basic precautions
should always be followed, including the following*

1. **DO NOT** leave extractor when plugged in. Unplug from the outlet when not in use and before servicing.
2. To avoid electric shock, **DO NOT** expose to rain. Store indoors.
3. This is **NOT** a toy. Close attention is necessary when used around or near children.
4. Use only as described in this manual. Use only manufacturer's recommended attachments and accessories.
5. **DO NOT** use with damaged cord or plug. If extractor is not working as it should, because it has been dropped, damaged, left outdoors, or dropped into water, contact an authorized service center or the factory.
6. **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 unit over cord. Keep cord away from heated surfaces.
7. **DO NOT** unplug by pulling on cord. To unplug, grasp the plug, not the cord.
8. **DO NOT** handle plug or extractor with wet hands.
9. Store this extractor indoors in a dry area. **DO NOT** expose to freezing temperatures. (See Page 7)
10. **DO NOT** put any objects into the openings. **DO NOT** use with any opening blocked; keep free of dust, lint, hair and anything that may reduce air flow.
11. Keep hair, loose clothing, fingers and all parts of body away from openings and moving parts.
12. **DO NOT** pick up anything that is burning or smoking, such as cigarettes, matches or hot ashes.
13. **DO NOT** use extractor for totally dry vacuuming. This machine is not fitted with a fine dust filter.
14. Turn **OFF** all the controls before unplugging.
15. **DO NOT** use to pick up flammable or combustible liquids such as gasoline or use in areas where they may be present.
16. **DO NOT** use where anesthetics or oxygen are used.
17. **DO NOT** use an extension cord unless absolutely necessary. If an extension cord is used, then wire size must be #14 gauge or larger and should not exceed 50 feet in length. Use only (3) conductor grounded extension to ensure "**GROUNDING**" protection.
18. Replace damaged or worn parts immediately with genuine original equipment parts to maintain safety and to protect your limited warranty.
19. **DO NOT** run the pump dry. When solution tank is empty, turn the pump **OFF**.

This extractor must be connected to a properly grounded outlet only. (See Grounding Instructions)

SAVE THESE INSTRUCTIONS



DANGER:

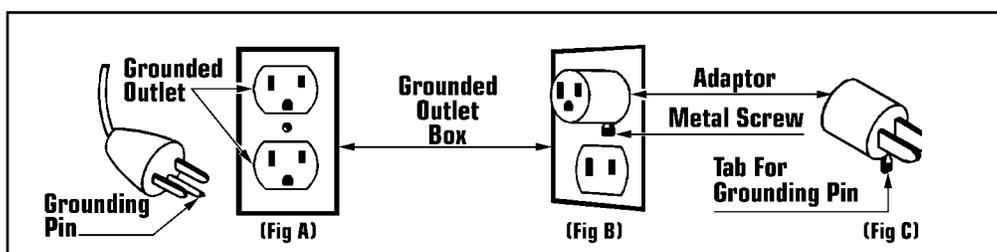
Improper use of the grounding plug can result in a risk of electric shock.

GROUNDING INSTRUCTIONS

Electrical equipment must be grounded. If it should malfunction or breakdown, grounding provides a path of least resistance for electrical current to reduce the risk of electric shock. This extractor is equipped with a cord having an equipment-grounding conductor and grounding plug. The plug must be inserted into an appropriate outlet that is properly installed

and grounded in accordance with all local codes and ordinances.

If repair or replacement of the cord or plug is necessary, **DO NOT** connect the grounded wire to either flat blade terminal. The wire with insulation having an outer surface that is green with or without yellow stripes is the grounding wire.



GROUNDING METHODS

This extractor is for use on a nominal 120 volt circuit, and has a grounded plug that looks like the plug illustrated-rated in (Fig A). A temporary adaptor that looks like the adaptor illustrated in (Fig B & C) may be used to connect this plug to a 2-pole receptacle as shown in (Fig B) if a properly grounded outlet is not available.

The temporary adaptor should be used only until a properly grounded outlet (Fig A) can be installed by a qualified electrician. The green color rigid ear, lug, or the like, extending from the adaptor must be connected to a permanent ground such as a properly grounded outlet box cover. Whenever the adaptor is used, it must be held in place by a metal screw (Fig C).

WARNING:



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 the outlet is properly grounded.

DO NOT modify the plug provided with the extractor. If it will not fit the outlet, have a proper outlet installed by a qualified electrician.

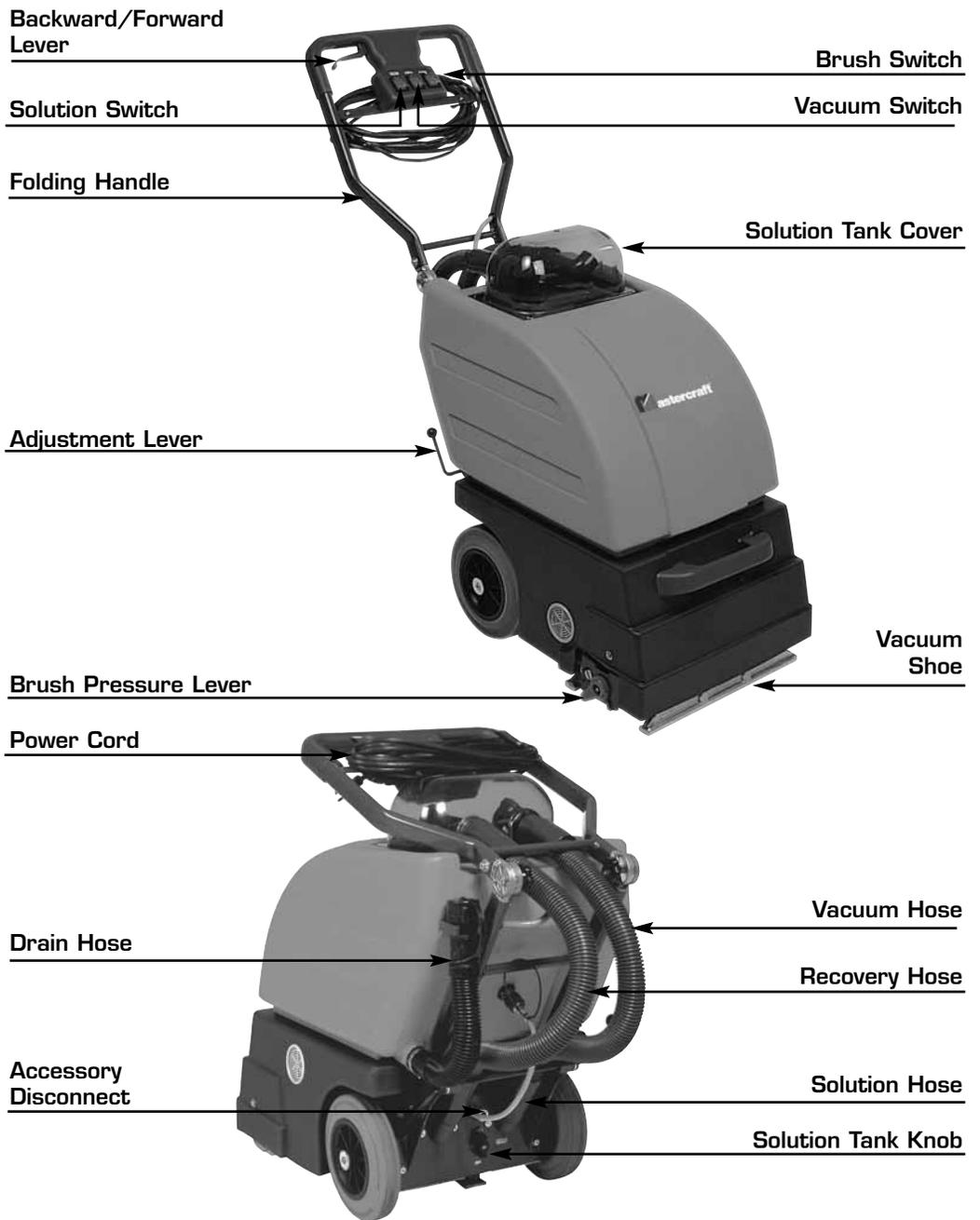
NOTE: In Canada, the use of a temporary adaptor is not permitted by the Canadian Electric Code.

This extractor is designed to be safe when used to perform cleaning functions as specified. Should damage occur to electrical parts, the unit should **NOT** be used until the damage is repaired by the manufacturer or authorized service center. This will avoid further damage to the unit or injury to the user.

These instructions are for your protections and information **PLEASE READ CAREFULLY!** Failure to follow the precautions or instructions could result injury or damage to the user and/or extractor.

CARE OF THE EXTRACTOR

ABOUT THE EXTRACTOR



GENERAL INFORMATION

This extractor is shipped assembled. It is suitable for cleaning all piled carpeting, cemented, stretched and loose-laid carpets with synthetic or woven backing.

Care should be taken when cleaning fitted carpets with a jute backing. It may shrink and become discolored from over saturation of liquids.

PROCEDURES BEFORE USING THE EXTRACTOR

1. Remove furniture from the area to be cleaned. Large pieces can be moved to opposite end of the room from where you start cleaning.
2. Vacuum carpet thoroughly to remove all loose debris.
3. Make sure all switches are in the **OFF** position.
4. Using the bucket shipped with unit, mix cleaning chemical following the direction on the label. Make sure The

bucket is **CLEAN** and always clean the bucket after each use.

5. If you are using heated water, the temperature should not exceed 120° F. This improves the cleaning effectiveness when removing oil or grease from the carpet.

6. Lift up the solution tank cover and fill solution tank with the cleaning mixture. Replace cover.

7. Before plugging power cord into grounded outlet all switches must be in the OFF position.

NOTE: A non-foaming chemical must be used. Carpet that has been previously cleaned may have a heavy build-up of old shampoo residue which may cause excessive foaming in the recovery tank and could damage the vacuum motor. Use a defoaming agent if this occurs.



WARNING:

DO NOT operate extractor without a cord ground pin. This is necessary to avoid electric shock.

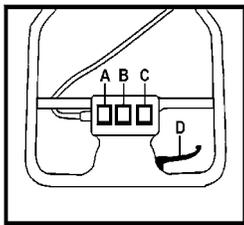
OPERATION PROCEDURES

To Operate Extractor

1. Position the extractor where you are going to start cleaning.
2. Turn solution knob to the horizontal position.

3. Turn **ON** switches in the following order.

- (A) Vacuum
- (B) Brush
- (C) Solution



4. When the brush is switched **ON**, the extractor operates in the forward direction. To operate backwards, squeeze lever (D) on right side of handle to reverse brush action.

5. Clean slowly and evenly in the forward and backward direction.

6. Turn **OFF** the solution switch approximately 12 inches before completing each pass. This allows dispensed solution to be recovered.

7. Each pass should overlap the previous pass by $2\frac{1}{2}$ " to 5". After operating the extractor for a while, some streaking may occur. (See Trouble Shooting Guide, Pg 8)

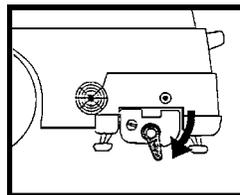
8. This extractor **WILL NOT** shut off automatically when recovery tank is full. It is important to visually inspect the tank so it **DOES NOT** over fill or water may get into the motor.

9. Work from light areas to shade areas, i.e from windows towards the door.

10. Work away from cleaned surface towards the unclean surface.

Brush Pressure

When finished cleaning or stop using extractor temporarily, the brush pressure should be relieved.



1. Press the red lever on the right-hand side of the extractor downward.

This will increase the service life of the

brush.

To Empty Recovery Tank

1. Turn **OFF** solution, brush and vacuum switches.

2 Unhook the drain hose from rear of extractor.

3. Position the hose over a bucket or drain, and remove cap. Rinse tank with clean water, replace cap.

To Empty Solution Tank

Connect the PVC drain hose shipped with the extractor to the accessory disconnect and turn on the solution switch.

CAUTION: DO NOT run the pump without solution, this could damage the pump.

EXTRACTOR MAINTENANCE

After each use:

1. Drain recovery tank after each use.
2. Remove all soil and debris from the recovery tank.
3. Flush out recovery tank with clean water.

End of day:

1. Pour 2 gallons of clean hot water in the solution tank. Turn the pump **ON** and flush the entire system for about a minute to prevent alkaline build-up. Using hose provided, drain tank into a bucket or floor drain.

2. Relieve the brush pressure. Clean debris from around brush and brush tunnel. This will be easier if you remove the brush.

3. Clean vacuum shoe with stiff wire.

CAUTION: DO NOT leave water in tanks over night or store with water in tanks.

After repeated use:

Spray Nozzles: Remove and clean the spray nozzles of any debris or build-up. Replace when necessary. When replacing fitting nozzles, they should be positioned parallel to the brush.

Solution Filter: After 4 to 6 uses, remove the in-line solution filter (located in solution tank) and clean with a small brush and rinse.

Brush: Clean the brush of any debris.

Solution Lines and Fittings: Flush extractor at least once a month with a solution of 1 part water to 3 parts white vinegar in order to neutralize the alkaline residue left by the cleaning solution.

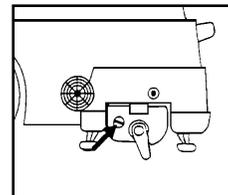
Accessory Disconnect: Spray with silicone lubricant to prevent coupler from sticking.

Pump: Follow procedure used above on solution line and fittings to flush out pump. In order to service the pump, contact the factory or authorized service center. (See *Trouble Shooting Guide Pg 8*)

Vacuum Motor: Carbon brush mechanisms holder should be replaced after operating 700 hours or when carbon brushes are worn down to $\frac{3}{8}$ " in length. Replace both brushes at the same time.

To Replace and Install Brush:

1. Remove the screw next to the brush pressure lever.
2. Remove the brush holder and brush.



3. When installing the brush, make sure the centering pins on the brush are properly placed in the holes of the drive pulley.

4. Re-insert the brush holder securely, replace the screw tightly.

CLEANING TIPS

Pre-Test:

Pre-test an area so cleaning problems will not develop during cleaning or after the carpet is cleaned. Not all products can be safely used on all fibers and dyes.

1. Mix the cleaner you are using according to directions and select an inconspicuous area, such as a corner, behind a chair etc.

2. Place approximately 1 teaspoon of the mixed solution on a spot about the size of a nickel. Work solution in with fibers.

3. Press a clean white cotton cloth against the wet spot and hold it there for about 10 seconds. Examine the cloth to see if any dye has transfer.

4. Examine the wet spot carefully to make sure there is no color change to the carpet that did not appear on the cloth.

Pre-Treat Heavily Soiled Area:

Pre-treat heavily soiled carpet or areas of concentrated foot traffic with pre-spotting or pre-spray chemical. If a spotter is used, follow label directions exactly. **DO NOT** allow to dry on carpet as it may damage the carpet permanently.

After Cleaning:

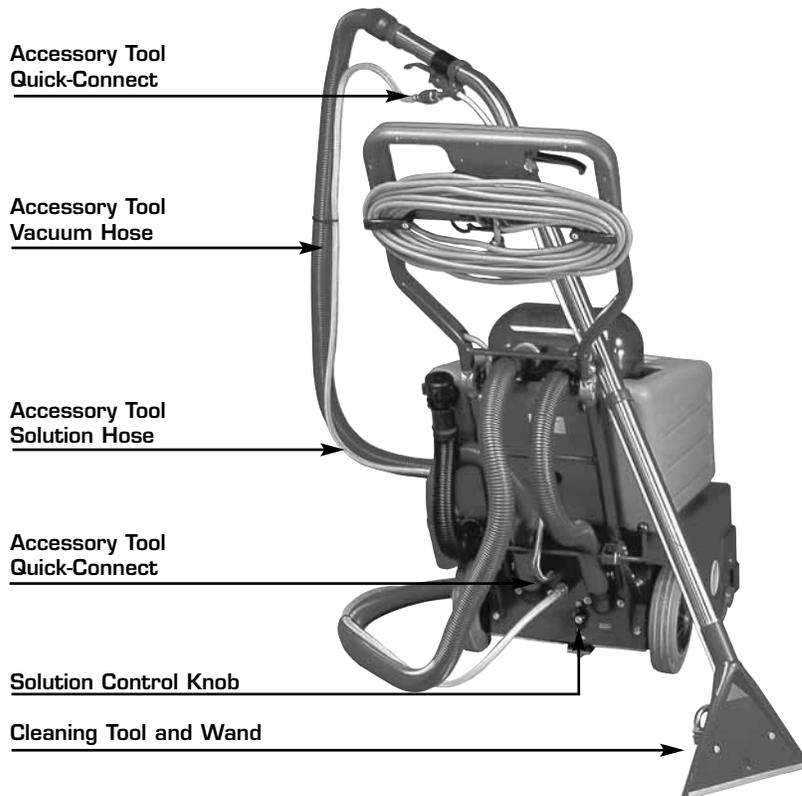
After cleaning the carpet when replacing the furniture, place a small square of styrofoam under the furniture legs to prevent moisture from damaging the finish or rusting metal slides.



CAUTION:

Disconnect the power cord from the outlet before working on this unit

ACCESSORY INSTALLATION



1. Remove the vacuum hose from the left side of the tank cover.
2. Connect the accessory tool vacuum hose to the left fitting on tank cover and on to the end of the cleaning tool wand.
Note: The hose must be connected tightly.
3. Connect solution hose to accessory quick-connect in the back of the extractor and to quick connect located on the handle of the tool.
4. Turn solution control knob in the back of the extractor to the upright position.
5. Turn **ON** the solution and vacuum switches. **DO NOT** turn on brush switch.
6. Start cleaning by squeezing trigger on the wand while slowly pulling the tool towards you.
7. When finished, turn **OFF** vacuum and solution switches, disconnect vacuum and solution hoses from unit.
8. Re-connect the extractor's vacuum hose to left fitting on the tank cover.
9. Return the solution control knob to the normal position.

If it becomes necessary to store or transport the unit where temperatures could drop below freezing, 32° F, the pump, solution hoses and valve on the tools must be protected from freezing with a solution of automotive radiator antifreeze.

1. Mix 1/2 gallon of water and 1/2 gallon of antifreeze in the solution tank. Hook up the hoses and tools to the extractor.

2. Turn the pump **ON** and press the valve to let antifreeze mixture fill the solution line system.

3. Disconnect solution supply hoses and vacuum out remaining antifreeze from the solution tank

4. To prevent damage to unit, allow the extractor to reach room temperature before using. The antifreeze **MUST** be flushed out of solution system with clean water; otherwise, the carpet may be damaged.

FREEZING TEMPERATURE PRE-CAUTIONS

TROUBLE SHOOTING GUIDE



WARNING:

Service and repairs should only be performed by an authorized service center.

PROBLEM: Streaking, uneven or no spray from jets.

Possible Cause

1. Solution control knob in wrong position (auxiliary).
2. Dirty or plugged spray jets.
3. Worn spray jets.
4. Solution line filter plugged.
5. Faulty pump.

Possible Solution

1. Correct knob position.
2. Clean or replace spray jets.
3. Replace spray jets.
4. Clean or replace solution line filter.
5. Replace pump.

PROBLEM: Loss of vacuum.

Possible Cause

1. Drain valve open.
2. Tank cover not properly seated or gasket on cover damaged.
3. Damaged vacuum hose or loose cuffs.
4. Defective vacuum motor.
5. Vacuum shoe is clogged.

Possible Solution

1. Close drain valve.
2. Reseat tank cover correctly or replace damaged gasket.
3. Replace hose or tighten cuffs.
4. Replace vacuum motor.
5. Clean with stiff wire.

PROBLEM: Motors (vacuum, brush & pump) will not run.

Possible Cause

1. Fuse blown or circuit breaker tripped.
2. Faulty **ON/OFF** switch.
3. Loose wiring.
4. Faulty motor.

Possible Solution

1. Replace fuse or re-set breaker.
2. Replace switch or switches.
3. Trace and repair.
4. Replace motor.

STORAGE OF EXTRACTOR

This extractor should be stored in an upright position. Objects should not be stored or stacked on top of unit.

Always store the extractor in a dry, protected area at temperatures above freezing. This unit should not be stored in vehicles or areas where extreme heat or cold occurs.



Address: 777 South Street ♦ P.O. Box 2310
Newburgh, New York 12550-0606

TEL: (800) 835-7812 ♦ (845) 565-8850

FAX: (800) 752-6883 ♦ (845) 565-9392

URL: www.mastercraftusa.com

E-Mail: techsupport@mastercraftusa.com