

# OPERATION MANUAL FOR CARPET EXTRACTORS FCX-02COM FCX-03COM FCX-03HOM FCX-06HOM FCX-12HOM

**PARTS LIST** 





RISK OF INJURY! READ ENTIRE MANUAL BEFORE OPERATING!
THIS MANUAL IS AN IMPORTANT PART OF THE CARPET
EXTRACTOR AND MUST REMAIN WITH THIS UNIT!

#### INTRODUCTION

THANK YOU for purchasing this product.

READ THIS MANUAL carefully to learn how to operate and service your machine correctly. Failure to do so could result in personal injury or equipment damage.

THIS MANUAL SHOULD BE CONSIDERED a permanent part of your machine and should remain with the machine when you sell it.

The SERIAL NUMBER is located in the Specification or Identification Numbers section. Accurately record all the numbers to help in tracing the machine should it be stolen. Your dealer also needs these numbers when you order parts. File the identification numbers in a secure place off the machine.

WARRANTY is provided from your dealer for customers who operate and maintain their equipment as described in this manual. The warranty is explained on the warranty certificate shown in this manual.

This warranty provides you the assurance that your dealer will back products where defects appear within the warranty period. Should the equipment be abused, or modified to change its performance beyond the original factory specifications, the warranty will become void.

# **A WARNING**

▲ WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

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ALL INFORMATION, ILLUSTRATIONS AND SPECIFICATIONS IN THIS MANUAL ARE BASED ON THE LATEST INFORMATION AVAILABLE AT THE TIME OF PUBLICATION. THE RIGHT IS RESERVED TO MAKE CHANGES AT ANY TIME WITHOUT NOTICE.









#### RECOGNIZE SAFETY INFORMATION

This is the safety alert symbol. When you see this symbol on your machine or in this manual, be alert to the potential for personal injury.

Follow recommended precautions and safe operating practices.

#### **UNDERSTAND SIGNAL WORDS**

A signal word--DANGER, WARNING or CAUTION--is used with the safety-alert symbol. DANGER identifies the most serious hazards.

DANGER or WARNING safety signs are located near specific hazards. General precautions are listed on CAUTION safety signs. CAUTION also calls attention to safety messages in this manual.

#### **FOLLOW SAFETY INSTRUCTIONS**

Carefully read all safety messages in this manual and on your machine safety signs. Keep safety signs in good condition. Replace missing or damaged safety signs. Be sure new equipment components and repair parts include the current safety signs. Replacement safety signs are available from your dealer.

Learn how to operate the machine and how to use controls properly. Do not let anyone operate without instruction.

Keep your machine in proper working condition. Unauthorized modifications to the machine may impair the function and/or safety and affect machine life.

If you do no understand any part of this manual and need assistance, contact your dealer.

#### **GROUNDING INSTRUCTIONS**

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

DANGER - Improper connection of the equipment-grounding conductor can result in a risk of electrocution. 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 product--if it will not fit, have a proper outlet installed by a qualified electrician.



#### **CLEANING DETERGENT PRECAUTIONS**

Know the detergent being used. Be prepared to tell a physician exactly what you are using in the event of an emergency. Read all detergent labels and follow all instructions exactly regarding preparation, use, safety, transportation, and disposal. Keep all detergents out of the reach of children, pets and livestock.



#### **SAFETY**

#### IMPORTANT SAFETY INSTRUCTIONS

# WARNING: TO REDUCE THE RISK OF INJURY, READ THIS OPERATOR'S MANUAL COMPLETELY. WHEN USING THIS PRODUCT, THE FOLLOWING BASIC PRECAUTIONS SHOULD ALWAYS BE FOLLOWED:

- 1. DO NOT operate this unit if any part of the unit appears to be damaged.
- 2. DO NOT operate if ground plug is broken.

# ELECTROCUTION RISK: DO NOT OPERATE IF THE UNIT IS IN STANDING WATER.

- DO NOT use volatile substances or operate where volatile substances exist.
- 4. DO NOT service while unit is running or connected to electricity. Unplug the unit!
- 5. DO NOT use hot water in your unit
- 6. DO NOT use solvents with this unit
- 7. DO NOT use as a dry vacuum. This will damage your motor.
- 8. DO NOT use unit unless completely assembled.
- 9. Use only liquid detergents. Powders do not fully dissolve and will damage the pump.
- Always use defoamer in the recovery tank. Foam will suspend moisture particles that damage motor.



#### PREPARE FOR EMERGENCIES

Keep a first aid kit and fire extinguisher handy.

Keep emergency numbers for doctors, ambulance service, hospital and fire department near your telephone.

Be prepared if a fire starts.



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#### **PREPARATION**

#### **BEFORE USE**

WARNING: ALL CARPET EXTRACTORS - NO MATTER WHAT THE TIME OF YEAR - ARE SHIPPED WITH ANTIFREEZE IN THE PUMP AND SOLUTION LINES. PRIOR TO FIRST USE, FILL THE CLEAN WATER TANK WITH CLEAN WATER. ATTACH THE HOSE AND USING THE HAND TOOL, FLUSH OUT THE SYSTEM BY SPRAYING THE WATER THROUGH THE PUMP.

#### DRAIN ANTIFREEZE FROM THE MACHINE

- 1. Fill solution tank with clean water.
- 2. For 2 and 3 gallon units, replace recovery tank. Center tank properly and then close rotating lock to secure in place.
- Plug unit into a grounded electrical outlet.
- 4. Attach Solution Hose to Unit: Hold female quick disconnect (female QD) on hose and slide collar back on female QD. Slide on to male quick disconnect (male QD) on machine. Release collar off male QD. You should hear hose click into place. If you do not hear it click into place, repeat the previous steps.
- Secure vacuum hose onto drain spout on front of recovery tank. You may have to force vacuum hose on by turning it back and forth while pushing hose onto drain spout. If tool is not connected to hoses, repeat procedures to attach tool to hoses.
- 6. Turn on pump only and depress trigger on tool to flush the antifreeze completely from unit.



#### PREPARING THE CLEANER

- 1. Attach the 1-1/2-inch vacuum hose and the brass quick disconnect.
- 2. Be sure to replace any filters back into the machine prior to use.
- Fill the solution tank with warm water (less than 100 degrees Fahrenheit).
   Fill to approximately 4 inches from the top. Use a liquid detergent made for carpet cleaning or upholstery. Read and mix to the dilution ratios as directed.
- 4. If you use detergent/shampoo, you MUST clean your machine with 50/50 water/ vinegar solution after EVERY USE.
- 5. DO NOT use the heater without turning on the pump. Running the heater without spraying for more than 5 minutes will cause the pump to overheat. Water/solution needs to run through the pump at all times to keep the pump cool while in use. Failure to do so will void the warranty.
- 6. Do not use citrus acid, buterol or harsh degreasers inside the machine.

#### **ELECTRICAL**

Plug cord(s) into 20 AMP grounded wall outlet(s). 20 AMP circuits are normally found in kitchens and bathrooms. Never remove ground prong from the plug. If a circuit breaker trips during operation, turn machine off.

#### **VACUUM SHUT-OFF**

The extractor uses a single vacuum motor system that provides outstanding water lift and air flow.

Automatic Vacuum Shut-Off: The float assembly shut-off, located in the recovery tank on the vacuum stand pipe, prevents the recovery tank from overflowing into the stand pipe and damaging the vacuum motor. The float

#### **PREPARATION**

assembly will cut-off vacuum to the recovery tank. When this happens, immediately turn off the vacuum motor and empty the recovery tank.

It is also necessary to use low foaming chemicals or defoamer to eliminate foam buildup in the recovery tank and damage to the vacuum motor. If moisture does enter the vacuum motor, it is necessary to clean the motor. Turn on vacuum motor. Spray a five second burst of WD-40 into the vacuum motor and continue to let the vacuum motor run for three minutes.

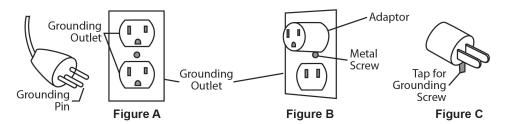
#### **GROUNDING INSTRUCTIONS**

# **A**□

#### DANGER: IMPROPER INSTALLATION OF THE GROUNDING PLUG CAN RESULT IN A RISK OF ELECTRIC SHOCK!

The equipment is for use on a normal 120 Volt circuit. It includes a grounded plug (plug shown in Figure A). A temporary adapter (Figure B and C) may be used to connect this plug into a 2-pole receptacle (Figure B) if a properly grounded outlet is not available.

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



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 EQUIPMENT. IF THE PLUG WILL NOT FIT INTO THE OUTLET, HAVE A PROPER OUTLET INSTALLED BY A QUALIFIED ELECTRICIAN.

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

#### **OPERATION**

#### START-UP

- 1. Place on level surface. For 2 and 3 gallon units, open rotating lock on sides of machine and remove recovery tank from solution tank. For 6 and 12 gallon units, open clean water lid.
- 2. Fill solution tank with desired amount of clean water only (highly recommended), leaving water level at least 4" from top. Do not over fill. Do not use water from the recovery tank. Do not use hot water.
- 3. For 2 and 3 gallon units, replace recovery tank. Center tank properly and then close rotating lock at side to secure in place.
- 4. Plug unit into a grounded electrical outlet.
- 5. Attach Solution Hose to Unit. Hold female quick disconnect (female QD) on hose and slide collar back on female QD. Slide on to male quick disconnect (male QD) on machine. Release collar off male QD. You should hear hose click into place. If you do not hear it click into place, repeat the previous steps.
- 6. Secure vacuum hose onto drain spout on front of recovery tank. You may have to force vacuum hose on by turning it back and forth while pushing hose onto drain spout. If tool is not connected to hoses, repeat procedures to attach tool to hoses.
- 7. Turn on pump only and depress trigger on tool to remove air from hoses.
- 8. Pre-spray a small section of carpet with carpet cleaning solution. Agitate with brush. Allow it to dwell a few minutes before extraction begins.
- 9. For a heated unit, turn on heater for about 5 minutes to preheat water.
- 10. For cold or heated spotters, turn on pump and depress trigger on tool to begin spraying solution to carpet. Agitate carpet with end of tool. Then alternate spraying solution and vacuuming. Alternating spraying and vacuuming will allow heater to keep water at optimal temperature.

# CAUTION: BRASS QUICK CONNECTS CAN GET HOT. ALLOW TO COOL BEFORE DISCONNECTING.

- 11. If you are not spraying solution for more than a few minutes, turn off heater. Water should remain hot. When you begin to spray solution again, turn heater back on.
- 12. Listen for any changes to the vacuum motors. When recovery tank fills, the float valve slides up to block air. The sound of the motor will be different and this is notice to shut off machine completely and empty recovery tank. Failure to stop at this point will void warranty, as water will be sucked into vacuum motor.
- 13. For 2 and 3 gallon units, remove recovery tank from unit. For 6 and 12 gallon units, open drain valve. Pour recovered solution into a sink, toilet or drain.

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#### **OPERATION**

#### **USING THE HEATER**

This machine includes a heater system to warm water. Before using it, the heater and pump must be turned on for at least 5 minutes to prevent damage.

Remember to always turn on the pump when starting the heater. When the heater is run without the pump, it will overheat causing the elements to become welded to the inside of the heater tube. This causes water leaks and heater failure.

- 1. Activate both pump and heater buttons simultaneously.
- 2. Allow 5 minutes for water to heat with pump running before use.
- 3. Alternate between 5-minute vacuuming and 5-minute hot water use intervals.
- 4. Allow at least 2 minutes for hot water to flow from the unit.



#### **M**WARNING: DO NOT POUR HOT WATER INTO THE SOLUTION TANK.

#### AFTER HEATER USE

Rinse the machine system with a 50/50 vinegar-water solution (2 gallons for spotters), then flush with water to maintain pump and system condition.

If the heater stops working, don't continue using the machine to avoid potential hazards including electric shocks or popping electric brakers. Instead, take it to an authorized service center for inspection.

#### **STORAGE**

#### **STORAGE**

If you're storing the machine for a short period, we still suggest that you winterize or run water through it regularly to prevent clogs. Clogs are typically not covered under warranty as they are usually the result of poor maintenance or leaving water in the tank for extended periods.

For long-term storage, it's advised to use antifreeze to maintain the machine. Antifreeze helps prevent freezing in cold weather and blockages/buildup in warm weather. This is called "Winterizing" your unit. Left over water within the heater can freeze. This causes the heater tube to swell and burst, which also causes water leaks and heater failure. Check the machine every few months if storing it for long periods as antifreeze will eventually evaporate and this can cause blockages within the system. We recommend to change the antifreeze every 2-3 months. Even if you have winterized your unit- avoid exposing it to extreme temperatures!

#### WINTERIZING

Pour antifreeze into the solution tank. For 2 and 3 gallon units - put a minimum of two inches of antifreeze in the solution tank. For 6 and 12 gallon units - remove the acorn filter and add a few inches of antifreeze to the solution tank. Then, turn on the pump and let it run through the system by pressing the trigger of the hand tool or wand.

#### **MAINTENANCE**

#### **FOLLOWING EACH USE**

Regular maintenance is required to keep your carpet extractor in proper working condition. Thoroughly clean all equipment and accessories after each use:

- Rinse the solution and recovery tanks with clean water.
- Flush the pump system with clean water, including all hoses and wand(s).
- Do not allow water to remain in the tanks after use.
- Lubricate all quick disconnects with WD-40 or similar lubricant.
- Clean vacuum shut-off assembly screen.

#### PREVENT MINERAL DEPOSIT BUILDUP

Vinegar may be used to prevent mineral deposit buildup in your machine's lines and pump. Failure to do so may clog your lines and pump. Pour vinegar into the solution tank (dilute with 1/2 water). Run the pump, while squeezing your wand or upholstery tool's trigger until you smell vinegar or notice it coming out of the tool. Flush the machine with 1 gallon of clean water or until you do not smell vinegar any longer.

## **TROUBLESHOOTING**

CAUTION: ALWAYS DISCONNECT POWER CORD BEFORE SERVICING EXTRACTOR. NEVER OPERATE THIS CARPET EXTRACTOR WHEN THE EQUIPMENT IS NOT PERFORMING AS EXPECTED OR WHEN ANY PART IS VISIBLY DAMAGED.

WARNING: REPAIRS SHOULD ONLY BE PERFORMED BY AN AUTHORIZED SERVICE CENTER. FAILURE TO DO SO WILL VOID WARRANTY.

Symptom	Problem	Solution
No vacuum/Weak Vacuum	Recovery Tank Full	Empty Tank
	Float Shut-Off Tank Screen Dirty	Clean the Screen with Water
	Float Ball Stuck	Tap Float to Unstick then Clean
	Damaged or Loose Vacuum Hose	Attach or Replace
	Dump Valve Open (6/12 gallon only)	Close Valve
	Access Lid not Sealed	Replace Gasket
	Vacuum Hose Clogged	Clear Debris
	Air Intake Grid Clogged	Clean
	Leak in Recovery Tank	Clean and Dry Area, Patch with Silicone
	Water Coming out of Vacuum Exhaust	Use a Low Foaming Detergent
Unit Will not Turn On	Power Cord not Plugged In	Check if Machine and Cord are Plugged In
	Switch not in the "On" Position	Check Switches, Replace if Necessary
	Building Circuit Overloaded	Reset Circuit
	Wiring Connections Loose	Unplug Machine and Check for Loose Wires
Pump is not Running Properly	No Power to the Pump	Check the Electrical System
	Jets on Wand are Clogged	Clean Jet Filters
	In-Line Water Filter is Clogged	Clean In-Line Filter
	Debris in Solution Tank Covering Inlet	Clear Debris
	Kinked or Loose Hose	Check and Replace Hoses if Necessary
	Pump Failed	Replace Pump
	Quick Disconnects are not Completely Locked Together	Snap Quick Disconnects Together
	Heater is Clogged with Deposits	Flush Heater with System Maintainer or Replace if Necessary
	Pump is Pulsating	Check for Clogged Jets and Clean



#### STATEMENT OF WARRANTY

The manufacturer warrants all parts, (except those referred to below), of your new Carpet Extractor to be free from defects in materials and workmanship during the following periods:

- 1. Lifetime on body, 2-years on vacuum motors, pumps and 100 PSI pump, 1-year on 55 PSI pump and all electrical components, 90-days on tools and accessories.
  - Defective parts not subject to normal wear and tear will be repaired or replaced at our option during the warranty period. In any event, reimbursement is limited to the purchase price paid.
- This warranty does not cover parts damaged due to normal wear, misapplication, misuse, operation at
  other than recommended speeds, pressures or temperature. Parts damaged or worn because of the use
  of caustic liquids or by operation in abrasive or corrosive environments or under conditions causing pump
  cavitation are not warranted. Failure to follow recommended operating and maintenance procedures also
  voids warranty.
- 3. The use of other than genuine manufacturer repair parts will void warranty.
- 4. Warranty will be void if used in any application other than consumer/homeowner. Parts returned, prepaid to our factory or to an Authorized Service Center will be inspected and replaced free of charge if found to be defective and subject to warranty. There are no warranties which extend beyond the description of the face hereof. Under no circumstances shall the manufacturer bear any responsibility for loss of use of the unit, loss of time or rental, inconvenience, commercial loss or consequential damages.
- 5. "Rate Labor: The flat rate labor allowance for warranty is the maximum allowable time for completion of a specific repair or procedure as shown for the appropriate flat rate schedule as it applies to a specific Statement of Warranty. The time is listed in hours and tenths of hours. The times listed take into account an allowance for tool and parts gathering. Refer to the Mi-T-M Flat Rate Manual for specific instructions for using the schedule."
- 6. Travel Time and/or Transportation Expense: Travel time or transportation of Mi-T-M equipment to the Service Center or the Service Center's Technician to the equipment is not covered by warranty. It is the responsibility of the owner to make such arrangements.
- 7. Freight: Ground transportation of defective parts from the Service Center to Mi-T-M Corporation, 9846 Kapp Court, Peosta, IA 52068 will be reimbursed as costs are incurred, subject to the warranty claim approval from Mi-T-M. All parts should be returned prepaid to Mi-T-M via United Parcel Service (UPS). Should the parts exceed the 50 pound limit established by UPS contact the Mi-T-M Service Department for proper routing and shipping instructions. Parts must be returned PREPAID. Parts shipped Freight Collect will be refused.
- 8. Air Freight: Air freight charges incurred as part of a warranty repair are the sole responsibility of the ordering Dealer. Mi-T-M will credit freight only for ground transportation. Recommended parts inventory lists are available and if such inventories are maintained by the Dealer, the need for urgent shipments will be minimized.

For Service or Warranty Consideration, contact

Mi-T-M Corporation, 50 Mi-T-M Drive, Peosta, IA 52068-0050

563-556-7484 / 800-553-9053 / Fax 563-556-1235

Monday - Friday 8:00 a.m. - 5:00 p.m. CST