Challenger MDC-2-Pedestal Model & Challenger MDC-2-Counter Model
Owner’s Manual
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Miracle Paint Rejuvenator’s Challenger MDC-2 mixers are heavy duty quality built machines that offer dependable operation throughout their lifetime. To take full advantage of your mixer’s capabilities, you should understand its features and proper operation. Before operating mixer read this manual completely and save for future reference.

Machine Models
This manual includes instructions and replacement parts information for the MDC-2 Pedestal Base and Counter Base models.
- 110V 60 Hz mixers.
- Mounting bases: Counter-base, Pedestal base.
- 30 minute dial timer.
Follow these safety precautions when operating the Miracle Paint Rejuvenators MDC-2 Dual Arm Mixer.

Installation
1. Before operating the machine, read this Owner’s manual carefully.
2. Ground the machine properly. Be sure to follow proper grounding and electrical procedures.
3. Avoid dangerous environments. Do not use the machine in a damp or wet environment.
4. Use the proper power source. Plug mixer into 110V grounded outlet.
5. Avoid extension cords. To minimize the risk of circuit overload, or improper electrical grounding do not use extension cords.

Operation
6. Ensure the can being mixed is securely clamped.
7. Keep customers away from mixing area. Only trained personnel should operate the mixer.

Maintenance
8. Do not get the timer, control panel or wiring wet. Failure to do so could result in electric shock.
9. Clean all surfaces of the machine with soap and water. Do not use any solvent-based cleaners or thinners.
10. Disconnect machine from power source before cleaning or servicing mixer.
11. Be sure to maintain the mixer on a regular basis. Follow the maintenance procedures on page 8.
Installing counter stand model mixer:

1. The counter stand model mixer is shipped fully assembled.
2. Place mixer on counter or table top.
3. Make sure the (4) 3/8-16 hex head screws and (4) jam nuts are fully tightened before operation.
4. Plug the power cord into a grounded receptacle (see page 7).
5. Anchor Mixer to table top with appropriate hardware (not included).
6. Use of isolator cup feet is optional (sold separately).
Installing pedestal stand model mixer:

1. Loosen the (2) 3/8-16 hex head screws and (2) jam nuts on the bottom base.
2. Loosen the (2) 3/8-16 hex head screws and (2) jam nuts on the top base.
3. Insert the pedestal tube into the bottom base. Fully tighten (2) 3/8-16 hex head screws against the pedestal tube. Tighten the (2) jam nuts against bottom base.
4. Repeat step 3 for top base.
5. Set mixer in place on floor.
6. Make sure the (4) 3/8-16 hex head screws and (4) jam nuts are fully tightened before operation.
7. Plug the power cord into a grounded receptacle (see page 7).
8. Anchor Mixer to floor with appropriate hardware (not included)
9. Use of isolator cup feet is optional (sold separately).
Your mixer **MUST BE PROPERLY GROUNDED**. If there is an electrical short circuit, grounding reduces the risk of electric shock.

The machine’s power cord has a grounded plug. This plug must be inserted into an electrical outlet that is properly installed and grounded according to all local codes and ordinances.

If you must repair or replace the power cord or plug, do not connect the grounding 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. Check with a qualified electrician if you don’t completely understand these grounding instructions, or if you are not sure whether the machine is properly grounded. **DO NOT MODIFY** the plug provided: if it won’t fit the outlet, have a proper outlet installed by a qualified electrician.

**Extension Cords**

Avoid using extension cords. If an extension cord is unavoidable, consult a qualified electrician to determine what type of extension cord will satisfy the grounding, current capacity, and other requirements of the particular situation.
**Safety Precautions**

1. Before operating the machine, read this Owner’s manual carefully.
2. Ground the machine properly. Be sure to follow proper electrical connection and grounding requirement procedures.
3. **Do not use in hazardous environment where dust or flammable vapors are present.** Do not mix flammable materials or materials with a low flashpoint per the material safety data sheet.
4. Make sure can lids are tightly closed.
5. Do not mix breakable containers such as glass, porcelain, etc.
6. Ensure container is securely clamped.
7. All customers should be kept away from the work area.
8. The mixer should be operated by trained personnel only.

**NOTE:** The motor is protected by a thermal overload cutoff switch. If the temperature of the motor gets too hot it will automatically shut off. The motor will not start again until it has cooled down.

**Mixing Procedure**

1. Turn the clamp handle counter-clockwise to open the clamp.
2. Place the container to be mixed in the clamp and turn the clamp handle clockwise until the container is secured.
3. If mixing only one container, clamp an empty can (or a piece of 2” x 4” board) in the other clamp.
4. After the containers are secured, set the timer for desired mix time.
5. The mixer will turn off after the mix time has elapsed.

**Maintenance Procedures**

**Always disconnect machine from power source before maintaining or servicing.**

**Cleaning:**
Keep the machine clean. Colorant or paint spilled on the machine can be cleaned with warm soapy water and/or mineral spirits. After washing, oil the clamp plate guides and clamp lead screw with 3in1 oil. Be careful not to get the timer wet.

**Lubrication:**
Keep the clamp guide rods and clamp lead screws free of dirt, dried paint, and other materials. Remove any small nicks with a fine file. **Once a week apply a thin film of 3in1 oil to the clamp guide rods and clamp lead screws.**
<table>
<thead>
<tr>
<th>Item</th>
<th>Qty.</th>
<th>Part Number / Description</th>
<th>Item</th>
<th>Qty.</th>
<th>Part Number / Description</th>
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<td>Base casting</td>
<td>17</td>
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<td>DC-13 Drive pulley</td>
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<tr>
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<td>Sheet metal base</td>
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<td>4</td>
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<td>1</td>
<td>DC-9 1” Steel shaft (R6)</td>
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<td>2</td>
<td>DC-6 Pitman</td>
<td>24</td>
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<td>2</td>
<td>DC-7 3/8” Dowel pin</td>
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<td>DC-3 Two-way eccentric</td>
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<td>15</td>
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<td>Square key 3/16” x 1.50</td>
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### Enclosure Assembly

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<td>Top panel</td>
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<tr>
<td>4</td>
<td>1</td>
<td>Timer knob</td>
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<tr>
<td>5</td>
<td>1</td>
<td>Timer</td>
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<td>Self tapping screw #4 x 5/16”</td>
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<td>7</td>
<td>1</td>
<td>Timer backing plate</td>
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<td>8</td>
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<td>Timer faceplate</td>
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<tr>
<td>9</td>
<td>1</td>
<td>Timer nut</td>
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<td>Flat washer</td>
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<tr>
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<td>9</td>
<td>Truss head sheetmetal screw #10 x .50</td>
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<td>12</td>
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<td>Truss head screw 10-32 x .50</td>
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<tr>
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<td>Keps nut 8-32</td>
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### DC-50 Clamp Assembly

**Item** | **Qty.** | **Part Number / Description** | **Item** | **Qty.** | **Part Number / Description**  
--- | --- | --- | --- | --- | ---  
1 | 1 | 7/16-20 Jam hex nut | 8 | 1 | PIM-10242 Clamping block  
2 | 1 | 7/16” Lock washer, internal tooth | 9 | 2 | 3/8” Lock washer  
3 | 1 | MDC-104 Clamp handle, MDC | 10 | 2 | 3/8-24 Hex nut  
4 | 1 | MDC-101 MDC Clamp plate, top | 11 | 1 | MDC-102 MDC clamp plate, bottom  
5 | 2 | MDC-103 Guide rod, MDC | 12 | 1 | #404 Woodruff key  
6 | 2 | Hex head tap bolt 3/8-24 x 2.50 | 13 | 1 | MDC-106 Clamp lead screw, MDC  
7 | 1 | MDC-105 Guide rod holder, MDC | 14 | 2 | Thrust bearing, MDC clamp

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**Contact our Customer Service Department at:**

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