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Central Machinery 45378

Central Machinery 2 HP Industrial 5 Micron Dust Collector User Manual

Model: 45378

1. INTRODUCTION

This manual provides essential information for the safe and efficient operation, assembly, and maintenance of your Central Machinery 2 HP Industrial 5 Micron Dust Collector, Model 45378. This dust collector is designed to effectively remove sawdust, dirt, and debris from your workspace, filtering particles as small as 5 microns. Please read this manual thoroughly before initial use and retain it for future reference.

2. SAFETY INFORMATION

Always observe basic safety precautions to reduce the risk of fire, electric shock, and personal injury when operating this equipment.

- **Read All Instructions:** Familiarize yourself with the controls and proper use of the dust collector.
- **Wear Personal Protective Equipment (PPE):** Always wear safety glasses, hearing protection, and a dust mask when operating the unit.
- **Electrical Safety:** Ensure the dust collector is connected to a properly grounded 120-volt, 60 Hz, 20-amp peak, single-phase power supply. Do not operate with damaged cords or plugs.
- **Maintain Work Area:** Keep the work area clean, well-lit, and free of obstructions. Do not operate in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust.
- **Secure the Unit:** Utilize the locking casters to prevent unintended movement during operation.
- **Unplug Before Maintenance:** Always disconnect the power supply before performing any adjustments, maintenance, or cleaning.
- **Supervision:** Do not allow children or untrained individuals to operate the dust collector.

3. COMPONENTS OVERVIEW

The Central Machinery 2 HP Industrial 5 Micron Dust Collector consists of several key components designed for efficient dust extraction.



This image displays the Central Machinery 2 HP Industrial 5 Micron Dust Collector. It features a green motor and fan assembly at the base, connected by a flexible hose to a cylindrical collection unit. The collection unit consists of an upper white filter bag and a lower clear plastic collection bag, supported by a metal frame. The entire unit is mounted on a black base with four swivel casters for mobility.

Key Components:

- **Motor and Fan Assembly:** The primary power unit, generating 1550 CFM air suction.
- **Flexible Hose:** Connects the fan assembly to the collection unit.
- **Upper Filter Bag:** A white cloth bag designed to filter particles as small as 5 microns.
- **Lower Collection Bag:** A clear plastic bag for collecting larger debris and sawdust, allowing visual monitoring of its fill level.
- **Support Frame:** Metal structure that holds the collection bags in place.
- **Mobile Base with Casters:** A sturdy base equipped with four locking swivel casters for easy transport.
- **Intake and Exhaust Ports:** 4-inch diameter ports for connecting to woodworking machinery. Includes a 5-inch machine inlet with a dual-port 4-inch Y adapter.
- **Lockable Toggle Switch:** For controlling power to the unit.

4. SETUP AND ASSEMBLY

Follow these steps for proper assembly and initial setup of your dust collector.

1. **Unpack Components:** Carefully remove all parts from the packaging. Verify that all components listed in the packing list are present and undamaged.
2. **Assemble Mobile Base:** Attach the four swivel casters to the black base plate using the provided hardware. Ensure they are securely fastened.
3. **Mount Motor and Fan:** Secure the motor and fan assembly to the mobile base.
4. **Assemble Support Frame:** Construct the metal support frame according to the diagrams in the full instruction manual (not provided here).
5. **Attach Collection Bags:** Securely attach the upper white filter bag and the lower clear plastic collection bag to the collection unit using the provided clamps or straps. Ensure a tight seal to prevent dust leakage.
6. **Connect Flexible Hose:** Attach the flexible hose between the fan assembly and the collection unit. Ensure all connections are tight.
7. **Positioning:** Place the dust collector on a level surface in your desired work area. Lock the casters to prevent movement during operation.
8. **Electrical Connection:** Connect the power cord to a grounded 120V, 20A outlet.

5. OPERATING INSTRUCTIONS

Follow these guidelines for safe and effective operation of your dust collector.

1. **Pre-Operation Check:** Before each use, inspect the unit for any loose connections, damaged bags, or obstructions in the intake/exhaust ports. Ensure the casters are locked.
2. **Connect to Tool:** Attach the dust collector's intake hose to the dust port of your woodworking machine. Use the 5-inch machine inlet with the dual-port 4-inch Y adapter if connecting to multiple tools simultaneously.
3. **Start the Dust Collector:** Flip the lockable toggle switch to the 'ON' position. Allow the unit to reach full operating speed before starting your woodworking machine.
4. **Monitor Collection Bag:** Periodically check the clear lower collection bag. Empty it before it becomes completely full to maintain optimal suction and prevent back pressure.
5. **Shut Down:** After completing your work, turn off the woodworking machine first, then switch the dust collector to the 'OFF' position.

6. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your dust collector.

- **Empty Collection Bag:** Empty the lower clear collection bag regularly. Do not allow it to overfill, as this can reduce suction and strain the motor.
- **Clean Filter Bag:** Periodically clean the upper white filter bag. This can be done by gently shaking or brushing off accumulated dust from the outside. For thorough cleaning, remove the bag and clean it according to manufacturer recommendations (typically by washing or air blasting). Ensure it is completely dry before reattaching.
- **Inspect Hoses and Connections:** Regularly check all hoses and connections for leaks, cracks, or blockages. Replace any damaged components.
- **Motor Inspection:** Keep the motor housing clean and free of dust. Do not attempt to service the motor yourself; refer to qualified personnel for motor issues.
- **Caster Maintenance:** Keep casters clean and lubricated for smooth movement.

7. TROUBLESHOOTING

This section addresses common issues you might encounter with your dust collector.

Problem	Possible Cause	Solution
Reduced Suction	<ul style="list-style-type: none">• Full collection bag• Clogged filter bag• Leaky hose connections• Obstruction in hose or intake	<ul style="list-style-type: none">• Empty collection bag• Clean or replace filter bag• Tighten or seal hose connections• Clear any obstructions
Motor Does Not Start	<ul style="list-style-type: none">• No power supply• Tripped circuit breaker• Faulty switch• Motor malfunction	<ul style="list-style-type: none">• Check power cord and outlet• Reset circuit breaker• Inspect switch for damage (contact service)• Contact qualified service personnel
Excessive Noise/Vibration	<ul style="list-style-type: none">• Loose components• Fan imbalance• Motor issue	<ul style="list-style-type: none">• Check and tighten all fasteners• Inspect fan for damage or debris (contact service)• Contact qualified service personnel
Dust Leakage	<ul style="list-style-type: none">• Improperly sealed bags• Damaged bags• Loose connections	<ul style="list-style-type: none">• Ensure bags are securely clamped• Replace damaged bags• Tighten all hose and unit connections

8. SPECIFICATIONS

Detailed technical specifications for the Central Machinery 2 HP Industrial 5 Micron Dust Collector.

Feature	Specification
Model Number	45378
Motor	2 HP, 120 volt, 60 Hz, 20 amp peak, single-phase
Motor Speed	3450 RPM
Air Suction Capacity	1550 CFM
Filtration Size	5 microns
Collection Bag Capacity	35 Gallons (approximate)
Intake/Exhaust Diameter	4 inches (with 5-inch machine inlet and dual-port 4-inch Y adapter)
Overall Dimensions (L x W x H)	33" x 22" x 75-1/2"
Weight	103 lbs.
Casters	Four locking swivel casters

9. WARRANTY AND SUPPORT

For information regarding product warranty, technical support, or replacement parts, please refer to the original purchase documentation or contact Central Machinery customer service directly. Specific warranty terms and conditions may vary.

