

**CENTRAL MACHINERY**®

# DUST COLLECTOR 70 GALLON, 2 HP Model 45378

**ASSEMBLY AND OPERATING INSTRUCTIONS**



3491 Mission Oaks Blvd., Camarillo, CA 93011

Visit our Web site at <http://www.harborfreight.com>

Copyright © 2001 by Harbor Freight Tools®. All rights reserved. No portion of this manual or any artwork contained herein may be reproduced in any shape or form without the express written consent of Harbor Freight Tools.

**For technical questions and replacement parts, please call 1-800-444-3353**

Revised Manual 05/03

## Specifications

Motor	2 HP, 20 AMPS Peak, Single Phase, 60 Hz, 110 Volts
RPM's	3450
Power Cord	6' 2", 16 AWG x 3C Gauge
Bag Dimensions	Top = 19-1/2" Dia. x 30" L, Bottom = 19-1/2" Dia. x 30-7/8" L
Intake	4 Inch ID
Exhaust Diameter	4 Inch ID With Screen
Overall Dimensions	75-1/2" H x 33" L x 22" W
2 Collection Bags, 4 Swivel Casters, 2 Hex Wrenches	



## Save This Manual

You will need the manual for the safety warnings and precautions, assembly instructions, operating and maintenance procedures, parts list and diagram. Keep your invoice with this manual. Write the invoice number on the inside of the front cover. Keep the manual and invoice in a safe and dry place for future reference.

## Safety Warnings and Precautions

**WARNING: When using tool, basic safety precautions should always be followed to reduce the risk of personal injury and damage to equipment.**

**Read all instructions before using this product!**

1. **Avoid working alone.** If an accident happens, an assistant can bring help.
2. **Avoid electrical shock.** Prevent body contact with grounded surfaces such as pipes, radiators, ranges, and cabinet enclosures when testing voltages. Do not tamper with grounded plug.
3. **Keep work area clean.** Cluttered areas invite injuries.
4. **Observe work area conditions.** Don't expose to rain. Keep work area well lighted. Only use Dust Collector on dry surfaces.
5. **Keep children away.** Children must never be allowed in the work area. Do not let them handle Dust Collector, or extension cords.
6. **Store idle equipment.** When not in use, Dust Collector must be stored in a dry location to inhibit rust. Always lock up Dust Collector and keep out of reach of children.

Rev 10/06

7. **Dress properly.** Do not wear loose clothing or jewelry as they can be caught in moving parts. Protective, electrically nonconductive clothes and nonskid footwear are recommended when working. Wear restrictive hair covering to contain long hair.
8. **Use eye and ear protection.** Always wear ANSI approved impact safety goggles and dust mask or respirator.
9. **Do not overreach.** Keep proper footing and balance at all times. Do not reach over or across electrical cables or vacuum hoses.
10. **Maintain tools with care.** Inspect tool cords periodically and, if damaged, have them repaired by an authorized technician.
11. **Use the right Dust Collector for the job.** Do not attempt to force a small Dust Collector to do the work of a larger industrial Dust Collector. There are certain applications for which this Dust Collector was designed. Do not modify this Dust Collector and do not use this Dust Collector for a purpose for which it was not intended.
12. **Stay alert.** Watch what you are doing; use common sense. Do not operate Dust Collector when you are tired.
13. **Check for damaged parts.** Before using any tool, any part that appears damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment and binding of moving parts; any broken parts or mounting fixtures; and any other condition that may affect proper operation. Any part that is damaged should be properly repaired or replaced by a qualified technician. Do not use the tool if any switch does not turn On and Off properly.
14. **Replacement parts and accessories.** When servicing, use only identical replacement parts. Use of any other parts will void the warranty. Only use accessories intended for use with this tool. Approved accessories are available from Harbor Freight Tools.
15. **Do not operate tool if under the influence of alcohol or drugs.** Read warning labels on prescriptions to determine if your judgment or reflexes are impaired while taking drugs. If there is any doubt, do not operate the tool.
16. **Use proper size and type extension cord.** If an extension cord is required, it must be of the proper size and type to supply the correct current to the tool without heating up. Otherwise, the extension cord could melt and catch fire, or cause electrical damage to the tool. This tool requires use of an extension cord of **0 to 15 amps** capability (up to 50 feet), with wire size rated at **16 AWG**. Longer extension cords require larger size wire. If you are using the tool outdoors, use an extension cord rated for outdoor use. (signified by "WA" on the jacket).

17. **Take caution as some woods contain preservatives such as copper chromium arsenate (CCA) which can be toxic.** When using these materials extra care should be taken to avoid inhalation and minimize skin contact.

18. **Maintenance.** For your safety, maintenance should be performed regularly by a qualified technician.

**Note:** Performance of this tool (if powered by line voltage) may vary depending on variations in local line voltage. Extension cord usage may also affect tool performance.

**Warning:** The warnings, cautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

## Unpacking

When unpacking, check to make sure the parts listed on page 6 are included. If any parts are missing or broken, please call Harbor Freight Tools at the number on the cover of this manual.

**WARNING: This product contains or, when used, produces a chemical known to the State of California to cause cancer and birth defects or other reproductive harm. (California Health & Safety Code 25249.5, et seq.)**

## Assembly

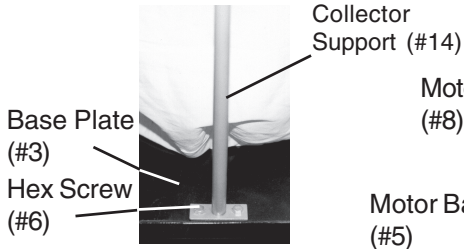
Your Dust Collector will require complete assembly prior to use. It is important that you read the entire manual to become familiar with the product BEFORE you use the Dust Collector. Before assembling the Dust Collector be sure that you have all parts described in the Parts List and Assembly Diagram.

Step 1) Place Caster (#1) in place on the underside corner of the Base Plate (#3). For all four (4) corners of the Caster (#1) insert one Hex Screw (#23) through Washer (#16) down into Base Plate (#3) and through Caster (#1). Thread on Nut (#19). Repeat for the remaining three (3) Casters (#1).

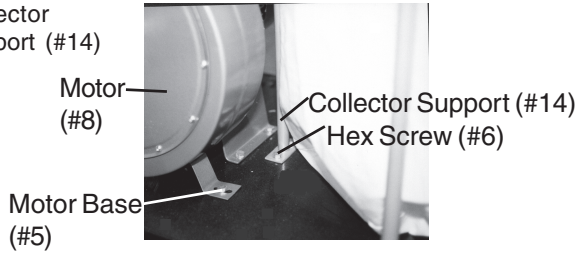
Step 2) Attach the first Collector Support (#14) to the Base Plate (#3). Line up the Collector Support (#14) with holes on edge of the Base Plate (#3). Insert Hex Screw (#6) down through Washer (#4), Base Plate (#3) and secure in place with Nut (#2)-see Figure 1 on the following page.



**Figure 1**



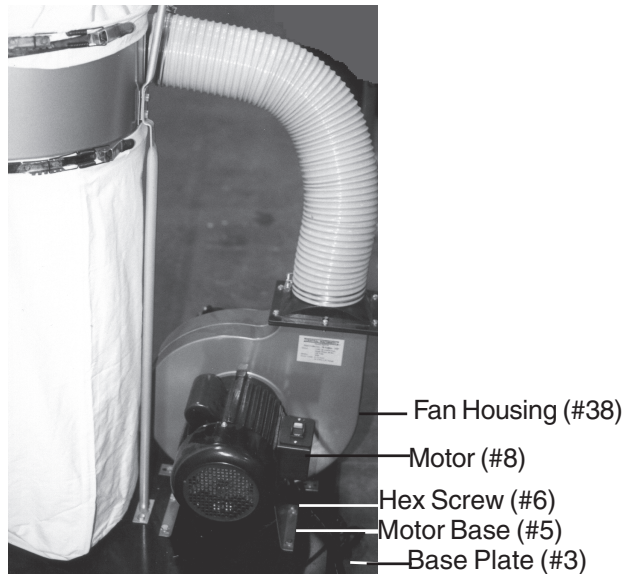
**Figure 2**



Step 3) Attach the second Collector Support (#14) through the inside holes near where the Motor Base (#5) will be mounted-see Figure 2. Insert Hex Screw (#6) down through Washer (#4) and Base Plate (#3) and secure in place with Nut (#2)-see Figure 2.

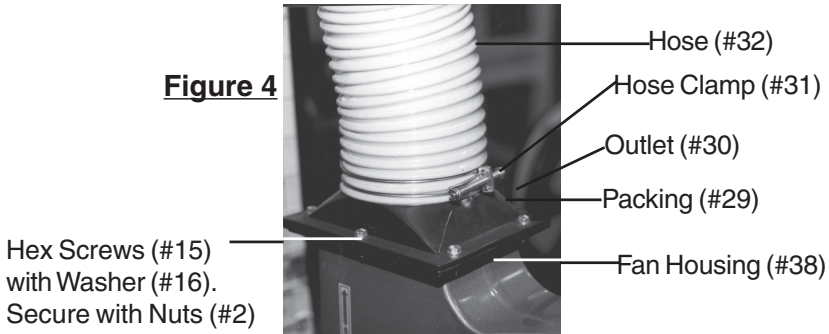
Step 4) The Fan Housing (#38) is attached to the Motor (#8) and Motor Base (#5) as a single unit. Secure the Motor Base (#5) to the Base Plate (#3) using six (6) Hex Screws (#6), six (6) Washers (#4) and six Nuts (#2)-see Figure 2 and 3.

**Figure 3**



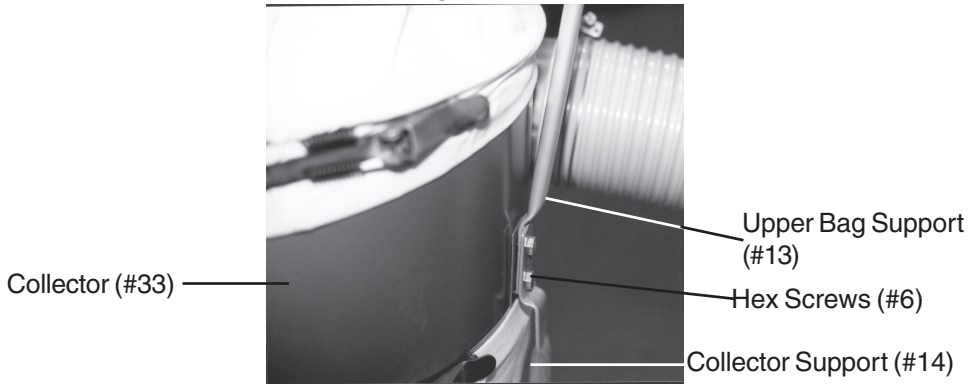
Step 5) Set the Packing (#29) on top of the rectangular opening on the Fan Housing (#38) (see Step 4). Set the Outlet (#30) on top of the Fan Housing (#38) and Packing (#29)-see Figure 4. Slide Washer (#16) onto Hex Screws (#15) and thread into the six (6) holes in the lip of Outlet (#30), Fan Housing (#38) and Packing (#29). Secure in place with Nuts (#2)-see Figure 4.

**Figure 4**



Step 6) Connect the Upper Bag Support (#13) to the Collector Support (#14) and Collector (#33). Thread in both Hex Screws (#6) through the Collector Support (#14) and through the Upper Bag Support (#13) and into the Collector (#33)-see Figure 5.

**Figure 5**



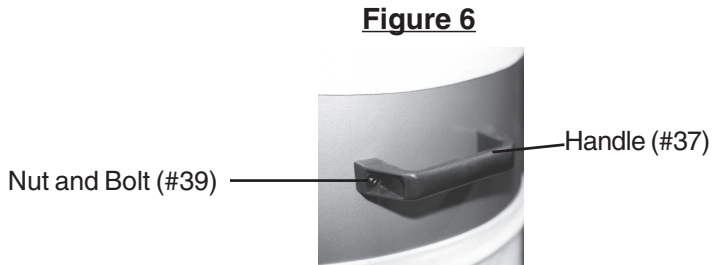
Step 7) Slide the Hose Clamp (#31) onto the Hose (#32). Slide Hose (#32) with Hose Clamp (#31) onto the Outlet (#30). Once the Hose (#32) is in place, tighten the screw on the Hose Clamp (#31) until the Hose (#32) is securely fastened to the Outlet (#30)-see Figure 4.

Step 8) Slide the Hose Clamp (#31) onto the other end of the Hose (#32). Slide the top opening of the Hose (#32) over the duct in the Collector (#33). Tighten the screw on the Hose Clamp (#31) until the Hose (#32) is securely fastened.

Step 9) Place the Filter Bag (#35) on top of the Collector (#33). Once the Filter Bag is in place, adjust the clamp so that the clip rests between the teeth. Press the clamp down to lock in place. Extend the bag so that the loop on the top hangs on the Upper Bag Support (#13).

Step 10) Place the Collection Bag (#36) on the bottom of the Collector (#33) and secure it with a clamp as in step 9.

Step 11) Attach the Handle (#37) to the Collector (#33) with Nut and Bolt (#39)-see Figure 6.



## Operation

This unit is designed for use with an existing dust system, or you can construct a new system.

1. If constructing a new system, connect 4" vent pipe (not included) to the 4" **Inlet (#24)**. Determine the size of the dust ports on your tools and run vacuum hoses (not included) from each tool to an appropriate sized adapter (not included), and into the 4" vent pipe (not included).

**Warning!** Do not tamper with or remove the grounding pole on the plug. You must use this unit with a 3 pole receptacle. If you use an extension cord, it must meet amperage specified (16 AWG), and the cord must be 3 pronged.

2. Make sure the **Collection Bag (#36)** is on tight and not leaking. Switch on the unit using the toggle **Switch (#9)**.
3. During operation, periodically check how full the **Collection Bag (#36)** is. Do not let it fill more than 3/4 full. A completely full bag puts a lot of stress on the bag and the belt.
4. To change **Collection Bag (#36)**, wear ANSI approved impact safety goggles, and a dust mask. Remove the **Belt (#34)** and empty the bag. Replace the **Belt (#34)**.

## Parts List

Part No.	Description	Part No.	Description
1	Caster, 3" lockable	20	Washer, M10
2	Nut, M8-1.25	21	Hex Screw, M10-1.5x16
3	Base Plate	22	Turbo Fan
4	Washer, M8	23	Hex Screw, M6-1.0x10
5	Motor Base	24	Inlet
6	Hex Screw, M8-1.25x16	25	Inlet Cover
7	Power Cord	26	Hex Screw, M6-1.0x20 LH
8	Motor, 110V, 60Hz, 2HP	27	Washer
9	Switch	28	Hex Screw, M8-1.25x8
10	Screw	29	Packing
11	Hex Wrench, 4mm	30	Outlet
12	Hex Wrench, 5mm	31	Hose Clamp
13	Upper Bag Support	32	Hose
14	Collector Support	33	Collector
15	Hex Screw, M6-1.0x20mm	34	Belts
16	Washer, M6	35	Filter Bag
17	Key	36	Collection Bag
18	Packing	37	Handle
19	Nut, M6-1.0	38	Fan Housing
		39	Bolts & Nuts for Handle
		40	Hex Wrench

## Maintenance

1. Check the integrity of the 3 prong plug and cord. Make sure the grounding pole is not bent and the cord isn't torn or frayed.
2. Check your **Collection Bags (#36)** prior to each use for tears or fraying. Replace if necessary.
3. Periodically tighten the **Belts (#34)** and **Hose Clamps (#31)**.
4. Keep the **Motor (#8)** clean of dirt and debris.

### PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER NOR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

**NOTE:** Some parts are listed and shown for illustration purposes only and are not available individually as replacement parts.

# Assembly Drawing

