

Dust Collector Safety Rules



Shown with optional drum and stand.



Dust collectors are used to capture wood dust and chips at the source. Keeping the work area neat and clean is only the secondary purpose of a dust collector. The primary purpose is to collect as much respirable size dust as possible to prevent respiratory disease. All of the stationary equipment is provided with a dust collection system. The dust collection system **MUST BE USED** when operating this equipment. Some portable power tools are capable of being connected to a shop vacuum. This connection should be used whenever possible.

Dust Collector Safety Rules:

1. **WARNING!** Wood dust has been determined to be a cancer causing material (carcinogenic). You must act proactively to minimize your exposure to wood dust. Use the dust collection systems provided. Wear your dust respirator when there is the potential for wood dust to be in the air.
2. **WARNING!** Do not use the dust collector for anything except wood dust. Materials such as liquids, metal shavings, metal dust, screws, glass, plastic or rock can cause sparks resulting in an explosion of the wood dust and/or damage when coming into

contact with any part of the dust collector. Do not pick up anything that is burning or smoking, such as cigarettes, matches or hot ashes. Do not use to pick up flammable or combustible liquids such as gasoline or use in areas where they may be present.

3. Do not operate a dust collector if the dust collection bag or filter is missing, leaking, or has a hole in it. The dust collection blower will quickly fill the workshop with hazardous dust. If a leak is found, shutdown the equipment connected to the dust collector and the dust collector itself immediately. Put on your respirator, open all workshop doors and evacuate the building until the air is clear.
4. Always wear a dust respirator when replacing a dust collector bag.
5. Always lockout the dust collector when replacing bags or performing maintenance.

Start with a Risk Assessment to ensure a safe work area:

1. Maintain a three foot perimeter around the dust collector that is clear of people, debris and sawdust that might impair traction or footing and to provide easy access to the machine.

Operational Safety Rules:

1. Approach your work in the CLUB Shop and on the jointer with a safe attitude!
2. Start the appropriate dust collector and open the blast gate prior to starting to use any equipment.
 - a. The equipment on the North side of the shop is serviced by Powermatic dust collectors. The dust collector for the north SawStop Table Saw has a dedicated dust collector and no blast gate. The dust collector is started and stopped using a remote control. The other equipment is connected to a Powermatic 3 hp dust collector that starts automatically when the blast gate to the equipment is opened.
 - b. The equipment on the South side of the shop is connected to an Oneida 5 hp dust collector. This dust collector is started and stopped using push-buttons on the motor starter mounted by the radial arm saw. There are blast gates located at each piece of equipment.
3. Stop the dust collector and close the blast gate when you finish using the equipment.
4. Powermatic Dust Collectors:
 - a. Clean the canister filters often to keep the collector's performance optimum. To clean the canister filter, turn the collector off. Turn the handle a couple of rotations in both directions so the dust falls into the clear plastic bag. It is not necessary to wear a dust mask while cleaning the canister in this manner.
 - b. Empty the dust collection bags when they are about three-fourths full. You need to have sufficient 'empty bag' to allow the dust to be transferred into a Contractors bag and closed with a twist tie for transport.
 - i. Turnoff and lockout the dust collector.
 - ii. Clean the cartridge filter by rotating the handle several revolutions in both directions.
 - iii. Put on your dust respirator (dust mask).

- iv. Remove the collector bag by pushing the top of the snap-ring of the collector bag inward and upwards and pulling the bag out at an angle.
- v. Empty the dust collector bag into a Contractor size trash bag. Use a twist tie to close the bag. Place the bag of dust alongside of the building, just outside of the east door.
- vi. Reinstall the dust collector bag if it appears to be in good condition. Otherwise install a new bag. Fold the top 2-3” of the bag over the snap-ring from the inside and compress the ring into a “D” shape. Place the bag and snap-ring into the dust collector and release the snap-ring. Pull downward on the snap ring to seat it at the bottom of the enclosure. Ensure that the bag is evenly positioned around the perimeter without excessive gathers.
- vii. Turn on the dust collector and check for leaks. If leaks are found at the snap-ring, reposition the bag and test again. If the bag itself leaks, replace it.

5. Oneida Dust Collector:

- a. Cartridge filter maintenance. With the unit turned off and locked out, use compressed air to blow dust off from exterior of filter. Hold the nozzle at least 6” away from filter pleats*. Do not remove the bottom dust pan before or during the blow-off process! Let the dust settle into dust pan. Unclip the dust pan and dump out the dust. Filter cartridge removal is not required.

*WARNING: A close, direct blast with the compressed air nozzle too close to filter, may damage filter media. Always wear safety glasses while blowing off filter.

- b. The level in the dust drum is monitored by a high-level switch. If a high level is detected, a light will flash red. This system may have false alarms. If the alarm light is flashing, lift up on the dust drum. If it is obviously not full, the high level switch may be coated with dust. Try lifting the drum and forcefully dropping it down against the floor. If this doesn’t clear the alarm, remove the lid and clean-off the sensing element.
- c. Emptying dust drum.
 - i. With the unit turned off and locked out, unclamp the dust barrel lid and slide the dust barrel out from under the cyclone.
 - ii. Pull the drum liner up and use a twist tie to seal it.
 - iii. Lay the dust drum on its side and slide the drum liner out.
 - iv. Install a new bag liner and drape the excess portion over the sides of the drum. Do not allow more than 3” of the bag to drape over the drum. If insufficient bag is left in the drum, it may rupture as it is being filled.
 - v. Position the drum under the drum lid and secure it in place with the lid clamp.

6. Cleaning Cartridge Filter elements:

- a. After continued use, there will be a time when cleaning the cartridge with compressed air from the outside, or by rotating the handle does not provide satisfactory results. Over time, dust will accumulate in the pleats in the cartridge filter that is difficult to

remove. When this occurs, it will be necessary to remove the cartridge from the filter and perform a more aggressive cleaning.

- i. Put on a dust respirator (dust mask).
- ii. Remove the cartridge filter from the dust collector and take it outside.

CAUTION! Excessive air pressure can damage the filter media. Do not hold the air nozzle closer than 8 inches from the media.

- iii. Use compressed air to blow from the outside of the filter towards the inside. Move the air nozzle slowly and ensure that the entire filter is covered.
- iv. Gently move the filter cartridge up and down against the pavement to knock the dust loose from the cartridge. Continue this until no more dust is knocked loose.
- v. Using the air nozzle, gently blow dust out of the internal pleats. Blow the air parallel to the pleats. Do not get the nozzle closer than about 14". Excessive pressure will blow the dust into the filter media and permanently block it off.
- vi. Reinstall the filter cartridge;
- vii. Clean up the dust dislodged from the filter using a shop vac.