

Shop Vacuum Procedures

A shop vacuum (shop vac) is a useful tool for cleaning up debris and dust in a workshop, garage, or other work area. Shop vacuums can be hazardous when used in an unsafe manner or in a hazardous environment. Some potential shop vac hazards can include: electrical shock, projectile debris, suction injuries, and particulate exposure (respiratory and eye irritant). These procedures outline safe shop vacuum use.

Before Using the Shop Vacuum

- Read and review the user manual to familiarize yourself with the machine features and manufacturer's operation procedures and complete the required training.
- Put on required personal protective equipment (PPE) – ANSI Z.87+ rated safety glasses and disposable nitrile gloves.
 - Hearing protection (disposable ear plugs or reusable earmuff-style) is strongly recommended.
- Clear the area of storage, debris, cords/cables, and other potential slip, trip, and fall hazards.
- Keep the shop vacuum and its cord away from moisture, and do not use in standing water or on wet surfaces.
- Check the area for hazardous materials such as flammable liquids, gases, or solids.
 - Move any hazardous materials to their correct chemical storage location prior to using the vacuum.
 - The vacuum's electricity can ignite flammable/reactive material vapors.
 - Never use a shop vacuum or other electrical equipment in a potentially hazardous environment (e.g., flammable vapors are present from flammable gas cylinder, oil-based paint, or solvent-based adhesive products, etc.)
- Make sure the vacuum is unplugged and the switch is in the "off" position, and then:
 - Follow the manufacturer's instructions to visually check the vacuum filter, hoses, and attachments – they must be clean and in good condition.
 - A clogged filter can cause the vacuum to overheat.
 - Clogged hoses, filters, and attachment heads can cause the vacuum to lose suction.
 - Ask the supervisor/faculty/technician/monitor to please replace the filter and/or clear any clogs following the manufacturer's instructions. Do not use the shop vacuum if there is a clog or filter issue and you cannot get assistance to resolve it.
 - Follow the manufacturer's instructions to visually check the cord and plug for wear/tear/damaged (loose, frayed, exposed wiring, missing prong, etc.)
 - Immediately report any visible cord/plug damage to the supervisor/faculty/technician/monitor and do not use the equipment. The equipment must be placed out of service until it is repaired, or replaced if repair is not possible.

Using the Shop Vacuum

- Select and connect the correct attachment for the type of work you are looking to do.
 - A flat (horizontal) attachment is useful for working over larger flat surfaces, like a workbench or a floor, to get fine particulates.
 - An angled flat (vertical) attachment is useful for getting underneath objects and in between cracks/tight spaces to get fine particulates.
 - A cylinder attachment is useful for capturing larger particles/debris.
- Plug in the shop vacuum and turn the shop vacuum on with the switch.
 - Never use the shop vacuum to vacuum liquids, hot ashes, or chemicals in any form (powder, liquid, solid, gas), etc.
 - Shop vacuums are not designed for wet or hot materials.
 - Do not vacuum liquids or hot ashes, as this can damage the machine or cause a fire.
 - Vacuuming chemicals will contaminate the shop vacuum, and the disturbance may spread the chemical contamination through the air. Vacuuming chemicals can cause chemical exposure incidents (inhalation or absorption exposure through skin/eyes). Vacuuming chemicals can be a fire hazard.
 - Do not place the vacuum hose/attachment against your body or against another person's body. The suction can cause injury.
- Always turn off the machine and unplug it from the power source when not in use. This prevents accidental start-ups and reduces the risk of electrical shock.
- Follow the manufacturer instructions to empty the debris container. Dispose of the debris properly in a sealed container or bag. Wear PPE while emptying the debris container.