

## Powered Hand Tools

# Powered Hand Tools - Powder-Actuated Tools

### On this page

[What general safety principles should you follow when using powder-actuated tools?](#)

[How should you care for and service a powder-actuated tool?](#)

[How should you use a powder-actuated tool safely?](#)

[How should you safely use the projectiles \(fasteners, nails, studs, etc.\)?](#)

[How should you use charge cartridges safely?](#)

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## What general safety principles should you follow when using powder-actuated tools?

- Allow only trained, competent, and authorized persons who are familiar with the regulations and safe work procedures covering the use of the tool to operate powder-actuated tools (also known as explosive-actuated fastening tools).
- Powder-actuated tools operate like loaded guns. Handle powder-actuated tools with the same respect and safety precautions as guns.
- Use the manufacturer's information as a guide for the safe operation and maintenance of the tool.
- Wear safety glasses or goggles, or a face shield (with safety glasses or goggles) and a hard hat.
- Wear hearing protection.
- Always brace yourself when working on ladders or scaffolds to maintain good balance.
- Keep tools pointed in a safe direction. Never point powder-actuated tools at anyone.
- Load powder-actuated tools just before use. Do not carry loaded tools from job to job.
- Do not leave loaded powder-actuated tools unattended.
- Do not allow bystanders near the work. Shields for protecting workers against a possible ricochet may be necessary in the working area.

Check the health and safety legislation in your [jurisdiction](#) for specific requirements related to the powder-actuated tools.

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## How should you care for and service a powder-actuated tool?

- Clean and maintain tools according to the manufacturer's instructions.
  - Check tools before use to ensure they are in good working order.
  - Tag defective tools "Out of service" and remove from service until properly repaired.
  - Store tools and cartridges in a locked container when they are not in use. Ensure that the tool is unloaded before storing it.
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## How should you use a powder-actuated tool safely?

- Use the tool at right angles to the work surface.
  - Check the chamber to see that the barrel is clean and free from any obstruction, before using the tool.
  - Do not use the tool where flammable or explosive vapours, dust or similar substances are present.
  - Do not place your hand over the front (muzzle) end of a loaded tool.
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## How should you **safely use the projectiles (fasteners, nails, studs, etc.)?**

- Use only the projectiles (fasteners, nails, studs, etc.) recommended by the tool manufacturer.
  - Ensure that the base material has no holes or openings and is consistent enough to prevent a projectile from passing right through.
  - Do not load a tool until immediately before use.
  - Do not force a projectile into a working surface that is harder than the projectile being used. If the base material is unknown, use a hand hammer to drive the projectile, using it as a centre punch.
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## How should you use charge cartridges safely?

- Use only cartridges recommended by the tool manufacturer.
  - Check that the colour of the cartridge is appropriate for the work being done. Charge cartridges are colour-coded to show their strength.
  - Conduct a trial first by using the weakest or lowest strength charge cartridge.
  - Provide adequate ventilation in confined spaces where powder-actuated tools are used.
  - Hold the tool in the fixing position for at least 5 to 15 seconds when a tool misfires. Keep the tool pointed in a direction that will not cause injury to you or others and unload a cartridge with extreme caution.
  - Use caution when using tools near live electrical circuits. Make sure that the projectile (nail, stud, etc.) do not enter live circuits buried or hidden in the base material.
  - Keep cartridges locked up when not in use.
  - Do not attempt to force a cartridge into a tool.
  - Do not discard unfired cartridges carelessly.
  - Keep misfired cartridges in water-filled containers until they are properly disposed
  - Do not carry cartridges loose or in a pocket. Carry them in the manufacturer's package.
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