

Chuck Keys and Safety Chucks

DT Workshop Equipment Reference — D&T / STEM resource for school workshops | Drilling & Cutting Tools

Chuck keys tighten and release the jaws of drill chucks, while safety chucks use two holes and a spring-loaded design that ejects the key, preventing the dangerous habit of leaving the key in the chuck. They are a small but critical safety item on every drill press and portable drill.

Key Features

- Key sizes match the chuck (numbered)
- Safety chucks eject the key automatically
- Replacements for common chuck brands
- Keys with insulating sleeves for portable drills
- Whips or tethers to keep keys with the drill

Typical Uses in the Workshop

- Tighten and release drill bits in chucks
- Replace with workshop chucks and drill presses
- Keep chuck keys from being left in the chuck
- Fit portable drills for quick bit changes

Safe Operation

1. Insert the key into the chuck hole and turn
2. Tighten all jaws evenly
3. Remove the key before switching on
4. With safety chucks, the spring lifts the key out
5. Store the key tethered to the machine

SAFETY NOTES

- Always remove the chuck key before starting - a key left in can fly out
- Use the key that matches the chuck size
- Do not over-tighten with levers or extensions
- Check the key is straight and un-worn
- Keep keys attached so they are never lost

Maintenance & Consumables

- Check key teeth for wear and breakage
- Replace lost keys with the correct size
- Clean grit from chuck jaws
- Occasionally apply a little grease to key threads
- Check the safety spring still ejects the key

Specification & Buying Notes

Buy chuck key sets in the common sizes and safety chucks for the most-used machines. A key tethered to the machine is a simple workshop rule worth enforcing.