

Cotter Pins and R-Clips

DT Workshop Equipment Reference — D&T / STEM resource for school workshops | Fasteners & Hardware



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Cotter pins and R-clips are split and spring pin fasteners that lock threaded nuts, clevis pins and shafts in place, securing moving parts on machines, axles and projects. They are cheap, reusable and essential mechanical fixings.

Key Features

- Cotter pins in diameters 1-8 mm
- R-clips (hairpin) and split ring types
- Zinc, stainless and spring steel
- Standard and extra-long lengths
- Curved and diver points on cotter pins

Typical Uses in the Workshop

- Lock castle nuts on axles
- Secure clevis and hitch pins
- Retain shafts and bearings
- Fix guards and quick-release parts

Safe Operation

1. Select the pin to suit the hole
2. Insert through the hole and bend the legs
3. Used cotter pins bend over the nut flat
4. R-clips push into the hole and snap
5. Check the pin holds under load

SAFETY NOTES

- Sharp ends - wear gloves
- Check the pin is the right size and tension
- Never reuse bent cotter pins in safety roles
- Keep pins away from small children
- Check fixings each session

Maintenance & Consumables

- Sort pins by size and type
- Check for rust and bend
- Replace worn pins
- Keep the assortment drawer stocked
- Check security-critical pins regularly

Specification & Buying Notes

Assortment trays of cotter pins and R-clips in the common sizes cover machines and models. Quality spring steel holds shape; soft pins work loose.