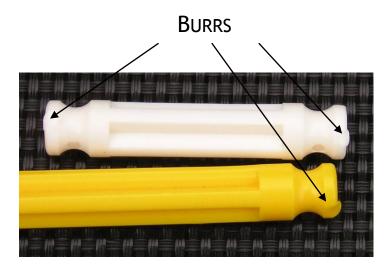
Looking After Your Pieces

Burrs

Most of the K'Nex which Ted uses is second-hand, virtually all having been acquired from car boot sales and eBay. This means that it is generally not in pristine condition.

Whilst dirt can be removed and the odd scratch doesn't really matter, there is one defect which affects the assembly of K'Nex parts — burrs on the end of rods. Here is a picture of two such afflicted rods:



You may think that the odd burr doesn't matter, but if you connect one of the damaged rods to a connector, there is a good chance that the rod and the connector won't lie in a straight line. Also, it won't have the strength of a proper connection.

If you find that you need a lot of force to push a rod into a connector, there's a good chance that it's a burr which is causing the problem.

How Burrs are Created

When dismantling K'Nex, you must slide a rod out of a connector sideways, not just wrench the two apart — it's this wrenching which can cause the damage.

How to Remove Burrs

A fine metal file is the easiest way to remove a burr. The next best thing is a metal nail file (not an emery board). All you have to do is file it down so that there is no protrusion — but don't overdo it, otherwise the connection will be loose. There will still be a small dent in the rod, but it won't matter.

Building Practice

Before joining a rod to a connector, inspect the end of the rod first. Alternatively, go through a batch of rods and remove any burrs before using them - it's generally quicker to do this than inspect the rods as you go.

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Other Damage

Rods

Occasionally you will find that a rod is bent. Don't try to straighten it - just throw it away; it will never be the same again.

Connectors

Sometimes you will notice that, when you've snapped a rod into a connector, there was no 'snap.' If this happens, make sure that there isn't a crack in the connector. If there is, throw it away.

Chain Links

The links of K'Nex chains do tend to wear. Depending on the nature of their use, this can cause chains to keep breaking.

When links are joined together, there should be a satisfying click as they snap into place. If this doesn't happen, throw away the worn link.

However, if a chain does keep breaking, wear may not be the cause - make sure that the links are the right way round, i.e. the curvature of the gear is not pulling the links apart. The hooks should point towards the outside of the chain.

Tyres

If a tyre is not fixed properly onto the rim of a wheel — typically a $37\frac{1}{2}$ mm wheel — it will become distorted over time. This will make it unusable and the tyre must be thrown away.