

Rob's Briefings : Bicycle Renovation & Refurbishment



A series of easy-to-understand guides to help enthusiasts repair or rebuild bicycles

Tools

- *always a good investment*

Although these *Briefings* describe some home-made tools you will also need some real tools ... the lists are those that I have, including some specialist items that may seem a luxury but are invaluable.

My tools have been collected over quite a few years and I have often "invested" in a new tool for a specific job (the *Rivnut* tool, for example).

Most of the ordinary tools are nothing special - from any DIY or motor spares shop - I have resisted buying "toolkits" as they usually include some tools that will never, ever be used.

Where cycle-specific tools are necessary I have tried to buy quality items (e.g. *Park Tools*) as many of the cheaper tools are made from inferior materials - an example is Allen keys that "round off" as soon as any sort of torque is applied, rendering them useless.

The cycle-specific multi-tools that are available (again better quality, like *Topeak*) are useful on the road but are awkward to work with in the workshop and a set of specific tools will be worthwhile.

The vast majority of machines from the last 25 - 30 years will have metric bolts - if you are working with older machines Whitworth spanners will be useful.

A workstand to hold the bicycle (and lift it to a comfortable working height) will be a good investment - although a wall-mounted bike hanging rack (supporting the top-tube) would lift the bike up and simplify adjusting gears, brakes etc.



My workshop with bench, small parts storage, tool-board, engineer's vice & grinding/polishing machine

The lists - in no particular order

The essentials :

- Allen keys (L shaped, or multi set) - metric in various sizes
- Spanners ring/open ended - metric in various sizes
- Tyre levers
- Chain splitter
- Hub cone spanners
- Adjustable spanners (2 sizes)
- Philips screwdriver
- Flat-blade screwdriver
- Spoke key
- Pliers - general
- Side cutter pliers
- Plastic/vinyl disposable gloves

Nice to have :

- Workstand
- Bench with engineer's vice
- Track pump (with gauge)
- Chain whip
- Cassette lockring remover
- BB cartridge tool
- Crank remover
- Allen keys with screwdriver handles (for speed)
- Cable cutters
- Socket set with 8 - 20 metric sockets
- Cable tension puller
- Freewheel remover
- Soft-faced (nylon) hammer
- Headset spanner
- Lockring tools (headset & BB)
- BB spanner (s)
- Vernier calliper
- Engineer's hammer
- Brake block toe-in setter
- Grease gun
- Chain link pliers (for opening *Powerlinks*)
- Crimping pliers (for cable end caps)
- Small hacksaw
- Centre punch

Useful for renovation/old machines :

- Whitworth spanners
- Rivnut* gun
- Pop-rivet gun

Home made tools :

- Headset press
- Frame/dropout spreader
- Headset remover
- Chain 3rd hand
- Crown race applicator

If you have any ideas or tips that you would like to share then e-mail : cyclebriefings@beewee.co.uk

© Rob & Beewee, 2006 **DISCLAIMER** - Anyone reading or using these briefing sheets or the information therein does so entirely at their own risk. Rob and/or Beewee or any other person cannot be held responsible for any loss or injury befalling anyone that may result directly or indirectly from use of these sheets. If you are uncertain then seek professional advice from a qualified bicycle dealer.