

# Rob's Briefings : Bicycle Renovation & Refurbishment



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

## All those little tips - 2

- *making it all easier !*

### Crank removal - 1

Either or both sides of the crank set can sometimes be very difficult to remove from the Bottom Bracket axle - even when using the correct removal tool.

It is sometimes possible to ease the removal using the basic principle of physics relating to unequal expansion of metals when exposed to heat.

Use of a blow-lamp is NOT recommended!

Use boiling water - insert the crank-removal tool and take up the tension on the screw mechanism and then carefully pour boiling water on to the part of the crank that surrounds the axle (this is best achieved using an electric kettle plugged into a socket in the workshop)

*[The boiling water will usually cause the crank (normally alloy) to expand at slighter greater rate than the steel BB axle - thus easing the tightness]*

Then (using a cloth around the crank and tools as they will be HOT!) try to continue with the crank removal process. It may be necessary to repeat the process - or try No 2 below!

### Crank removal - 2

In the event that the crank remains stuck fast, or the internal threads on the crank have been stripped (we've all done it!) then probably the only alternative involves a hammer and is not for the faint-hearted.

Find a length of wood (preferably hardwood) that can be fashioned into a long wedge-shape and then be forced between the crank and the face of the BB with gentle use of the hammer - using the wedge and hammer on alternate sides of the crank/axle point - the boiling water treatment will usually assist. For really severe situations substitute the wooden wedge for a cold chisel and, possibly, a larger hammer!



### Maintaining a shiny finish

Simple - use a good quality wax car polish, applied with a rag to the frame and fork tubes and buffed up - it will repel water and make dirt easier to clean off after a ride.



### Bar tape - improving comfort

Save a few strips of the bar tape that is being replaced and fix them lengthwise to the top of the bars (from the brake levers towards the centre) and hold in position with thin electrical insulating tape. Then apply the new bar tape as normal - with the additional invisible layer of padding.



### Repairing inner tubes (in the workshop)

Prepare and fix the patch as normal, but then to improve adhesion position the patch on the tube, flat, between 2 small pieces of wood (with no sharp edges or splinters!) and clamp *gently* in an engineer's vice for half an hour or so.



### Cable guide (under bottom bracket)

To refit a plastic cable guide under the bottom bracket that has either been riveted or where the thread in the BB shell is damaged try attaching the guide with heavy duty double sided tape (cleaning the shell surface to get a good fix) - once the cables are in and under tension the guide finds the correct position and stays there.



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

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