

This article describes a minor renovation of a Planer for my 1971 maroon Coronet Major lathe.

The planer came with the lathe that I purchased but was not attached to it and I found it, and the other attachments, in a box of bits. So, the first thing to do was to find out exactly how it was attached to the lathe and I described this in a previous article.

When I first gave it the once over, the blades were in very reasonable condition so I was able to re-sharpen them however once the planer was attached to the lathe, the first time I started the motor up, the bearings howled like a banshee.

I then stripped the planer on the bench. Unfortunately, I couldn't find any details in the Manual (or anywhere else for that matter) on how to do it so there were a several areas where I proceeded with great caution in order not to damage anything. I find (and this next bit is relevant to any machine I work on), it pays to clean as much of the crap off as you can and having done so, examine the thing fairly thoroughly and carefully preferably with a mug of tea at your elbow before trying to pull it to pieces. This examination should tell you where all of the obvious, and not so obvious and hidden, fasteners such as grub screws, keys and keyways and bolts are located. I always give such things as Allen Cap head screws or grub screws a good clean out as to strip the head on one can give you an enormous amount of grief.

The sequence of strip down and reassembly of the planer is shown in the following plates. I am assuming a certain degree of mechanical competence here however if you are used to working with something that is whizzing around at a fair old rate of knots, whether lathe, saw or planer, then I suggest said competence is a given. One main point: make sure when pressing bearings out of or into Alloy housings that they are straight and level and you proceed with care. Brute force & ignorance won't really work here.

Once you have all of the component parts on the bench, you can decide whether to paint or just leave as-is when reassembling things. If I have time I paint. If a bit of kit looks reasonably OK then I am more than happy to leave it in an 'oily rag' condition.

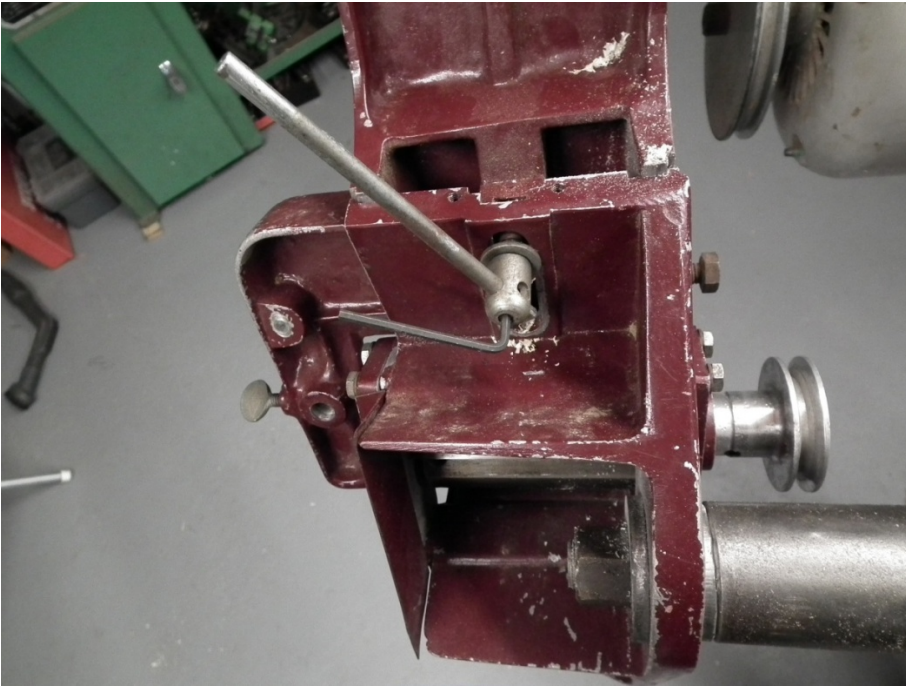
I had a long conversation about bearings with the nice man at <https://www.bearingrevolution.co.uk/> where you can buy replacement imperial size bearings that are the exact same size as the originals except they run out at about £75 each as they are specially made. I finally bought the following from [www.simplybearings.co.uk](http://www.simplybearings.co.uk) : 2 x off 16232RS bearings: "Budget Rubber Sealed Imperial Deep Groove Ball Bearings". Dimensions are stated as  $\frac{5}{8}$ " x  $1\frac{3}{8}$ " x  $\frac{7}{16}$ " width. The pair cost £8.54 + postage which came out at £10:25 all in which I thought was a bargain. There are better quality bearings available for a few pounds extra depending on the standard of quality you want, however whatever the quality, you need twin seals as it is essential to keep the crap out of the bearing.

**NB1:** The Width of the 16232RS replacement bearings are a wee bit ( $\frac{1}{16}$ " or around 1mm) wider than the originals (the dimensions of which are  $\frac{5}{8}$ " x  $1\frac{3}{8}$ " x  $\frac{3}{8}$ " ) so to compensate for this, I used a couple of washers beneath each of the bearing housing bolts to pack out each of the housings by around 1mm, saving around £130.

**NB2:** I suggest that (unlike me) you remove the planer blades before you start. This could save you a fortune in Elastoplasts or lots of interesting and entertaining time spent, particularly so if it's on a Friday or Saturday night, in the nearest A&E getting your fingers stitched.

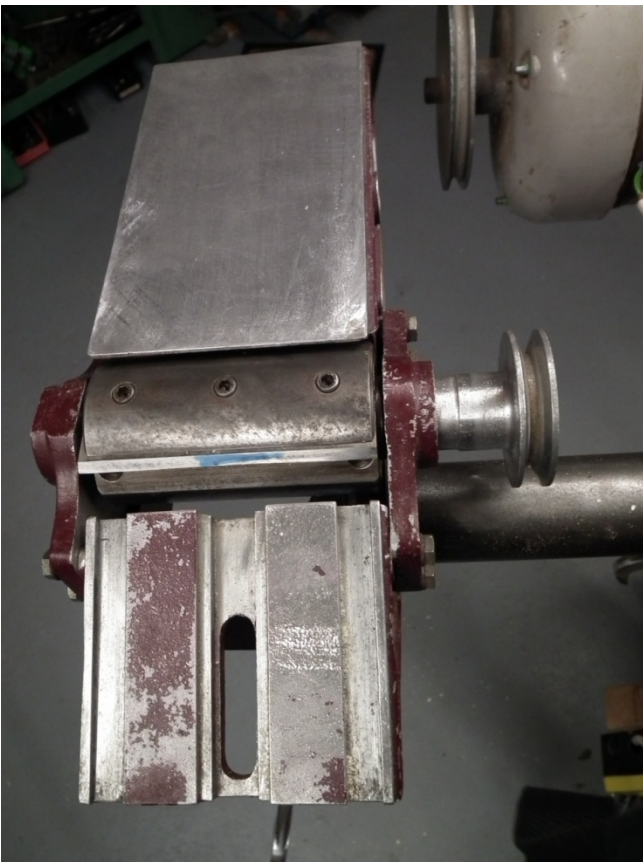
Finally, it was great to start the motor up and to hear the smooth hum you get from a planer but without the horrible cacophony of bearings in distress.

## Disassembly

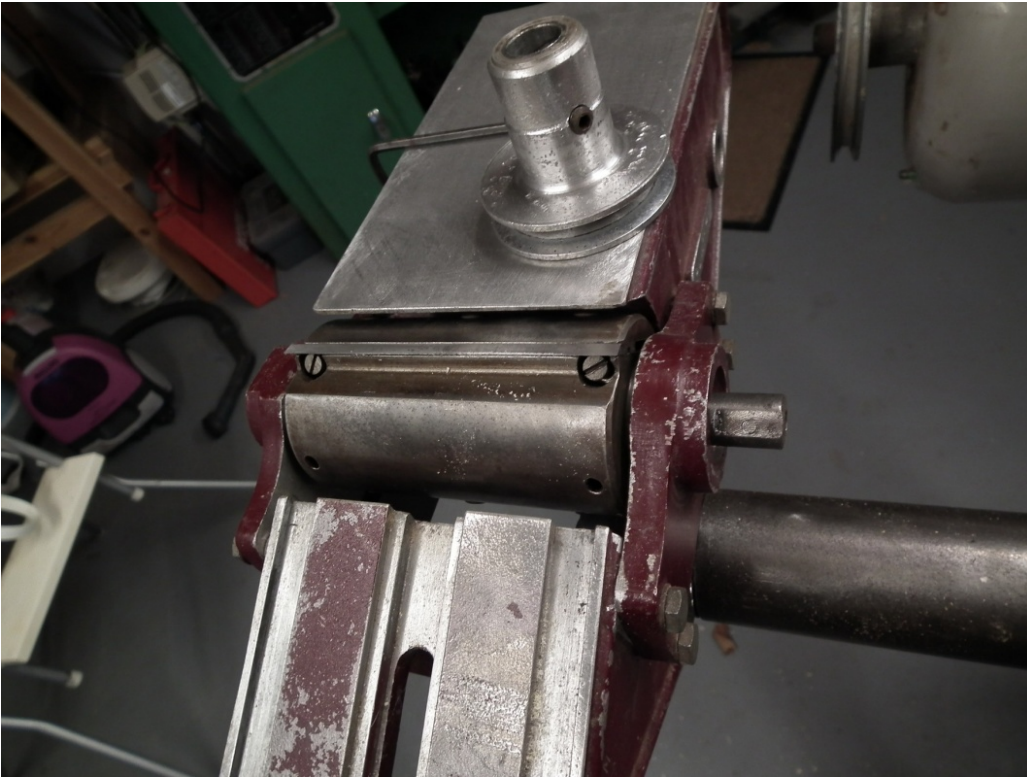


**Plate 1 - removing the rear table locking nut.**

You have to loosen the thing, undo the grub screw and then remove the bar to fully remove the drilled 'nut'



**Plate 2 - Rear planer table removed**



**Plate 3 - Drive pulley removed**

Undo the grub screw shown and gently tap the pulley off using a wooden block to prevent damage.



**Plate 4 - Bearing Housing loosened (inboard)**

The Housing slides off c/w bearing. Be gentle with the housing as it is fairly soft Aluminium alloy.



**Plate 5 - Bearing Housing c/w cutting block removed.**  
Note the inboard bearing housing still attached to the planer body.



**Plate 6 - The outboard Bearing Housing removed.**



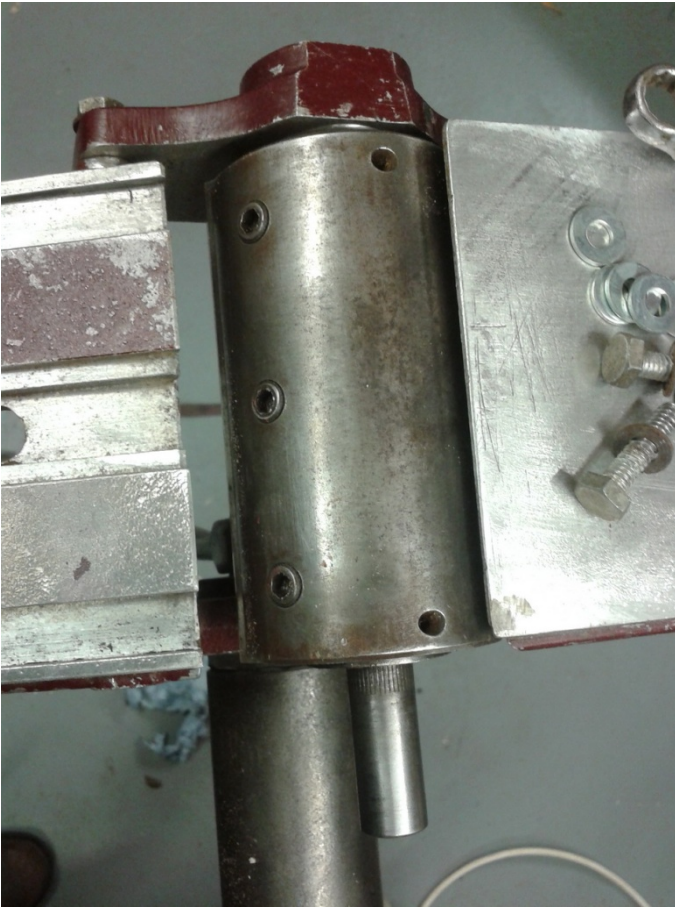
**Plate 7 - Both inboard & outboard Bearing Housings with bearings removed**

### Reassembly

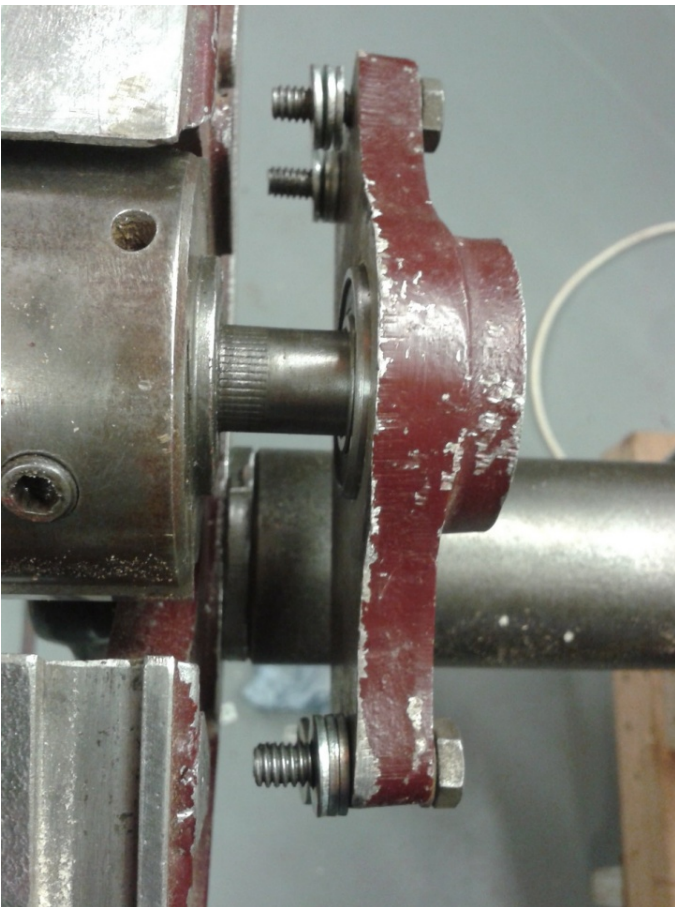


**Plate 8 - New bearing in housing (outboard)**

Gently press or tap the bearings into the housings keeping them straight & level as you do so. Note that the bearings protrude from each housing by about 1mm as shown.



**Plate 8 - Cutter block replaced into bearing (outboard)**

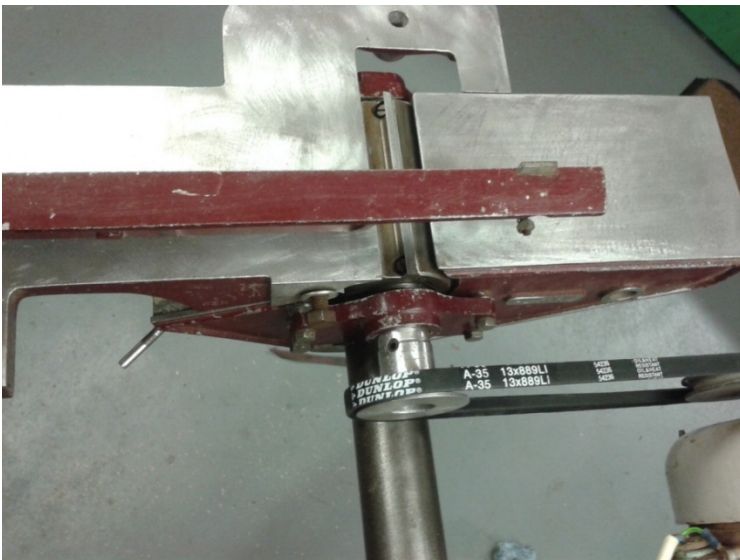


**Plate 9 - Inboard Bearing housing replacement.**

It is much easier to fit spacer washers at this point and slide the whole thing into place. Note that 3 washers are shown but after checking the cutter block / bearing clearance only two were finally fitted.



**Plate 10 - Clearance between cutter block & bearing**  
 The two washers shown provide about 0.5mm clearance.



**Plate 11 - Planer Ready to test run c/w new drive belt**  
 The replacement belt is a Dunlop A35 V Belt from [www.Bearingboys.co.uk](http://www.Bearingboys.co.uk) item No 115909 costing £3.37, + shipping and VAT bringing total to £8.78 (!). Belt Tech details:

<b>Pitch length:</b>	1021mm
<b>Outside length:</b>	1037mm
<b>Inside length:</b>	991mm
<b>Brand:</b>	Dunlop