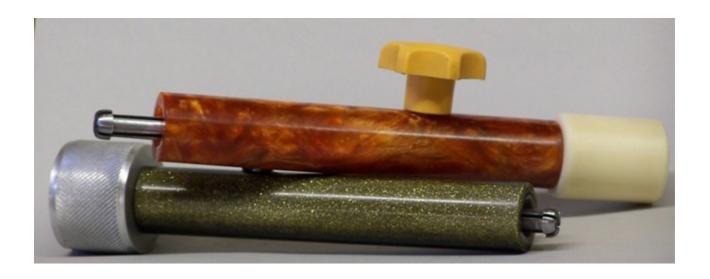
## **Closed Ended Pen Coupler Remover**

By Steven 'Skiprat' Jackson August 2009

This little gadget will safely extract the cap coupler from the body of a pen. It was designed specifically for closed ended pens but of course can be used on normal finialed pens.



## How does it work? The nib is unscrewed from the pen.

The tool is inserted through the coupler. It squeezes closed as it's pushed in and then expands again once it has gone through the coupler.

The big knob on the end of the tool is tightened, which pulls the bolt back out, drawing the coupler with it.

The knob on the top simply stops bears lightly against the flat on the bolt and prevents it just turning as the end knob is tightened.



I started off with an old coach bolt 150mm long, but it doesn't need to be this long.



Mount the bolt in the lathe



Hold the file handle in your left hand and remove the square portion



Square portion cleaned off



Measure the inside of the pen tube



Now file down the bolt head so that the tube just slips over



Nice fit



Cut two slots with a hacksaw about 50mm long. Try and keep them straight but it's not critical if they wave a bit



With a little tape, squeeze all the tips together. Now round over the tip and file the diameter down till it fits through the coupler smoothly



Like this...

File a flat on the side of the bolt.





The tool handle will need a hole all the way through, the same size as the bolt diameter. One end of the handle will need a bigger hole to bear against the trim ring



Here is the handle cut to length. Note the tapped hole in the side. This is just for the knob to stop the bolt from rotating while you extract the coupler. Also note that the flat is long enough for the bolt to travel the required distance at least

Now you just need the end knob, which is just threaded to match the bolt.

