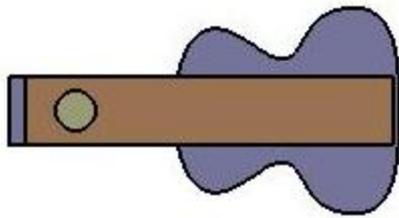
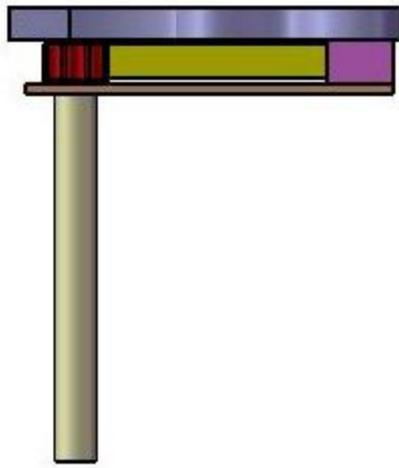


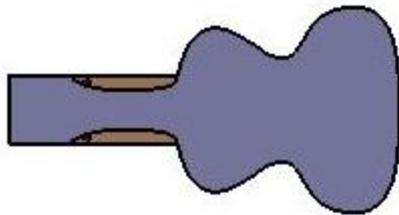
Guitar Matraca - exploded view



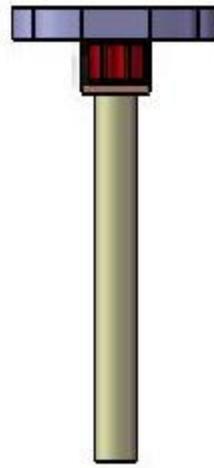
Bottom View



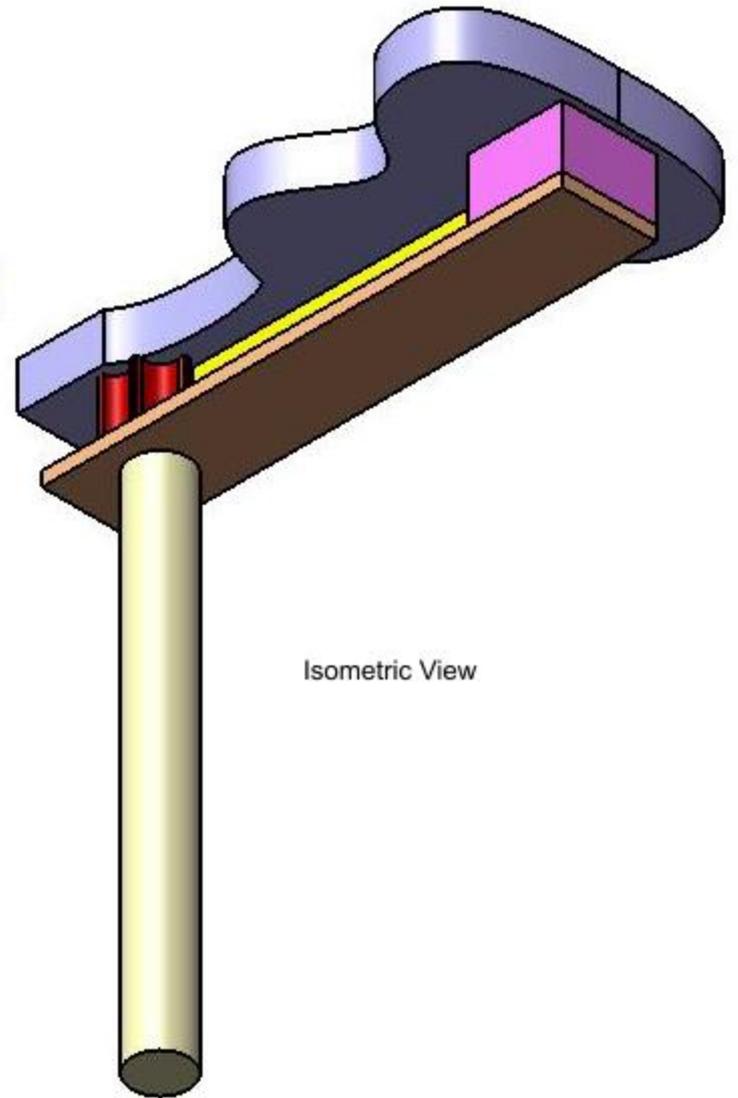
Front View



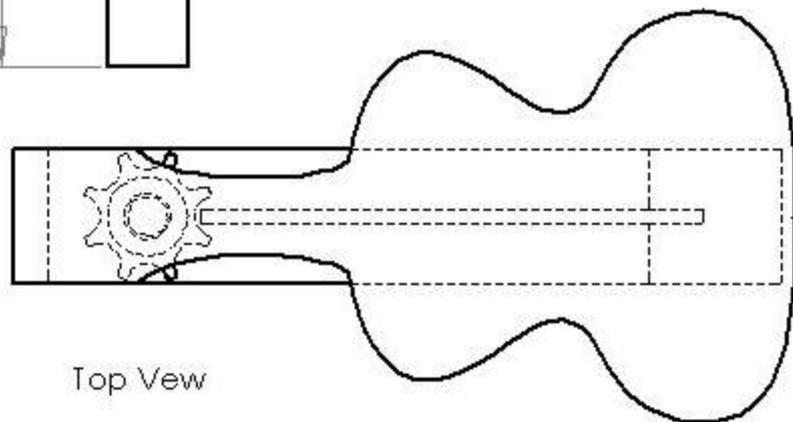
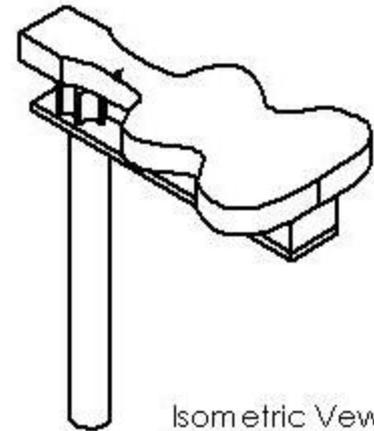
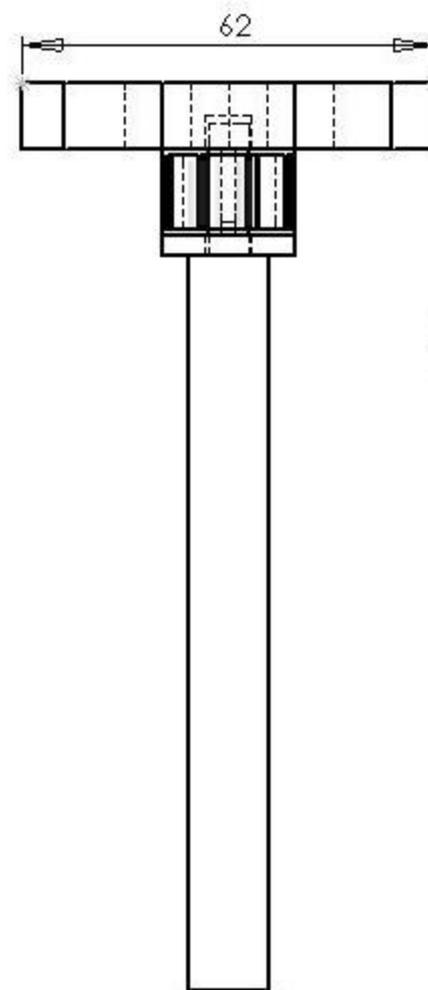
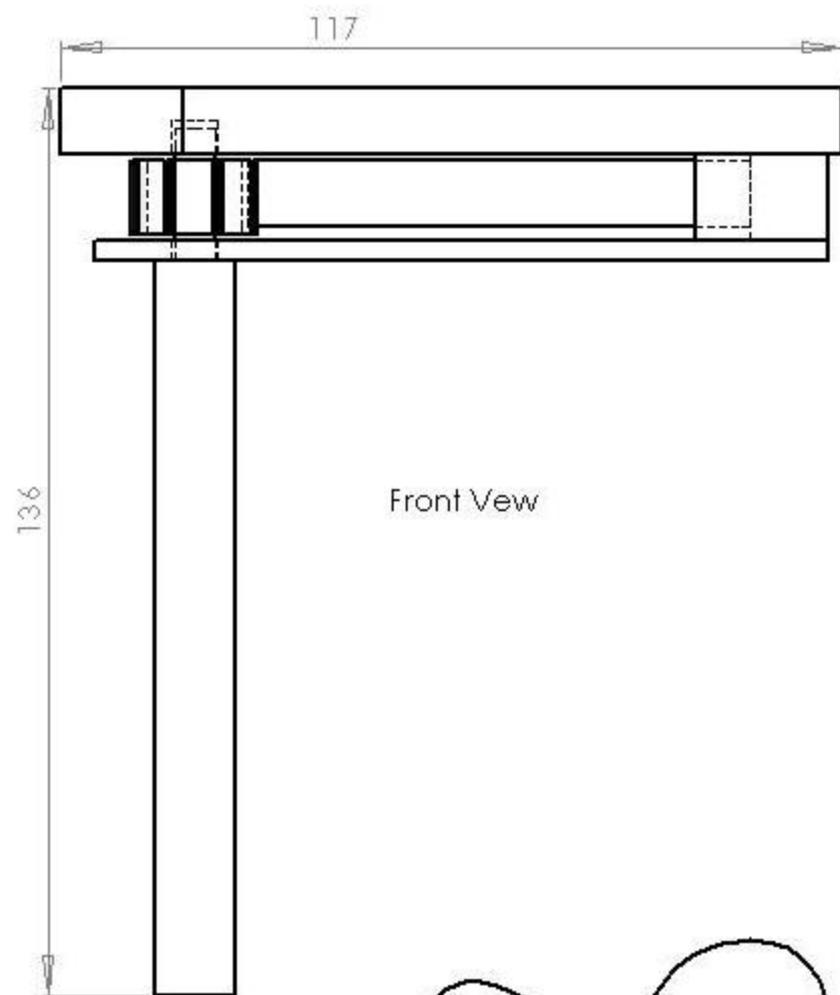
Top View



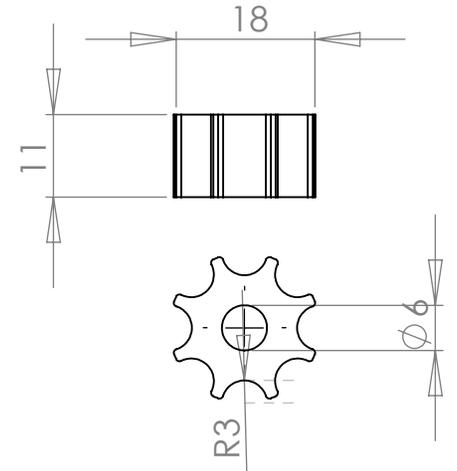
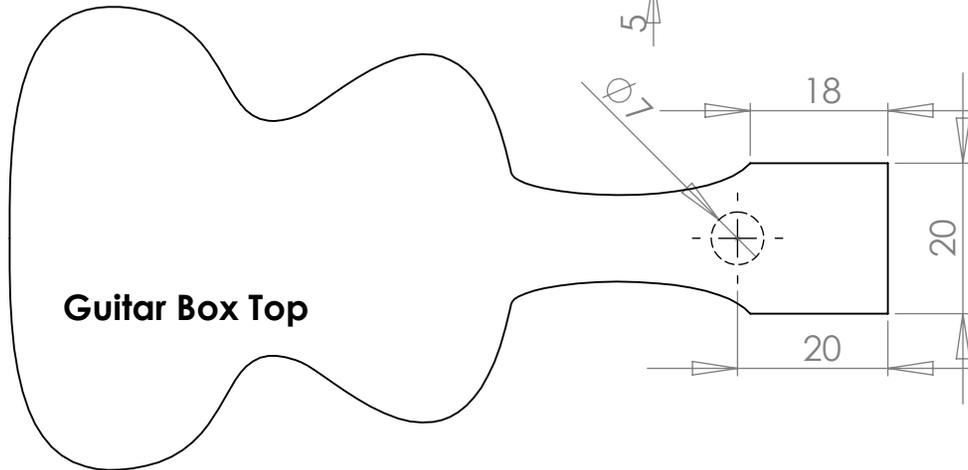
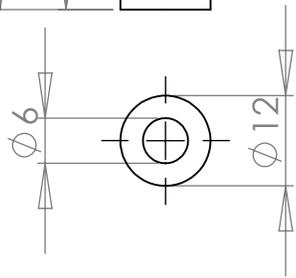
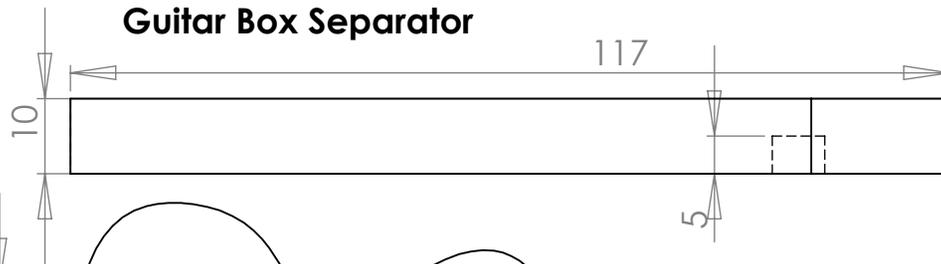
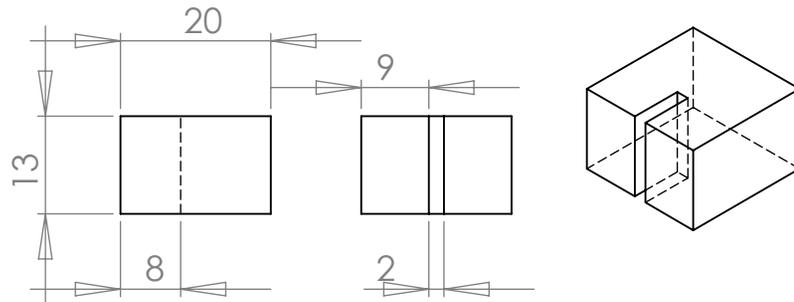
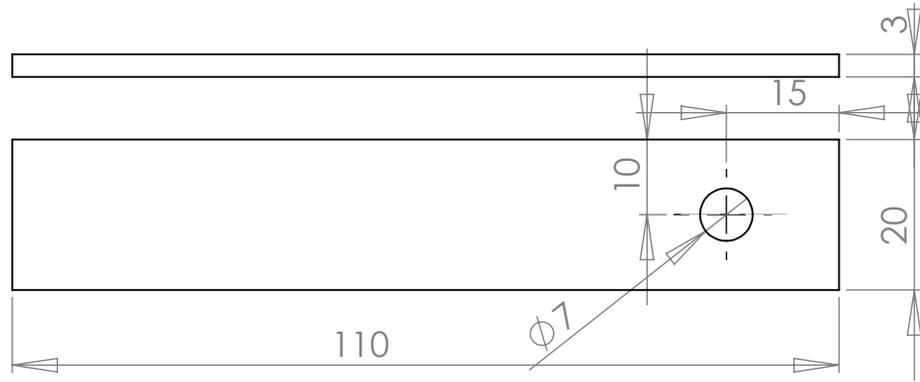
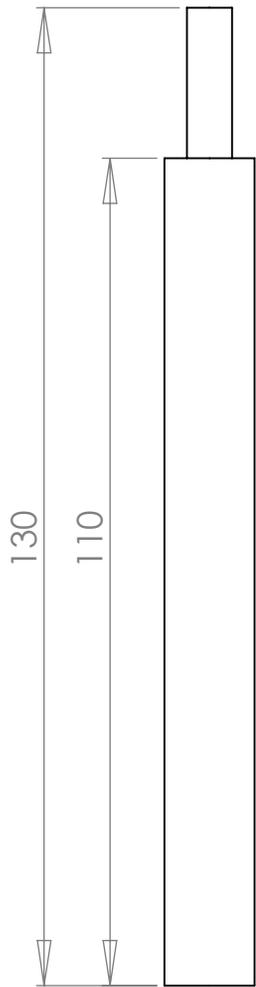
Left Side View



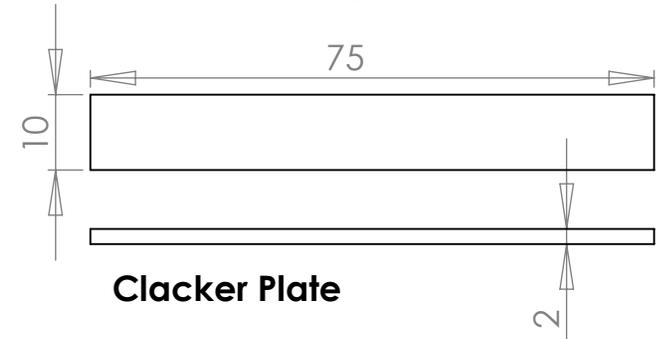
Isometric View



Guitar 'Matraca' - Full Size views



Gear - cut from 20mm diam piece of hardwood 11mm thick - teeth are 3mm semicircles rounded on outside edge



Making the guitar ‘matraca.’

1. Cut all parts to size, Sand and apply any decorative finish you wish to the parts before gluing up the assembly.
2. Use a hard wood for the gear and preferably a hardwood dowel for the handle.
3. The guitar box base part can be made from 1/8” birch plywood or similar for strength and flexibility

Gluing up.

4. Glue the guitar box separator to the undrilled end of the guitar box base, allow to dry
5. Glue the clacker plate into the slot of the separator leaving a 1mm gap between the base of the clacker plate and the guitar box base, allow the glue to set
6. Glue the guitar box top on to the top of the separator – the long centre line of the guitar top should line with that of the guitar box base. Check this by aligning the hole drilled through the box base with that drilled into the box top (the guitar shape). Make sure before gluing that the blind hole of the guitar box top is on the underside!
7. Allow the guitar box assembly to set perfectly before continuing
8. Push the handle spigot (the 6mm diam part) through the box base hole until it just protrudes through the hole and place over it a plastic washer/spacer about 0.75 – 1mm thick. This can be cut with scissors from a plastic bottle – cut a line from its edge to centre so that it can be easily removed from off of the spigot later by pulling it sideways.
9. Apply some glue to the inner bore of the gear and place it between the guitar top and bottom parts and push the handle spigot up carefully to its limit. Note - Whilst fitting the spigot into the gear, push the gear downwards onto the plastic spacing washer to ensure a tight fit.
10. Important!! Remove any excess glue which may be forced out of the gear by the spigot as it is pushed upwards. Do not allow any glue to enter the blind hole drilled into the underside of the guitar box top plate.
11. Once the glued assembly is fully set pull out the plastic washer with a pair of tweezers or similar

If everything has been glued up correctly you should be able to spin the guitar box assembly around the gear making a din as the clacker plate ‘jumps’ from one tooth of the gear to the next.

Note - If the action of the clacker plate seems too tight and stiff carefully sand a little wood off of its end to shorten it slightly