

Water Powered Tortoise

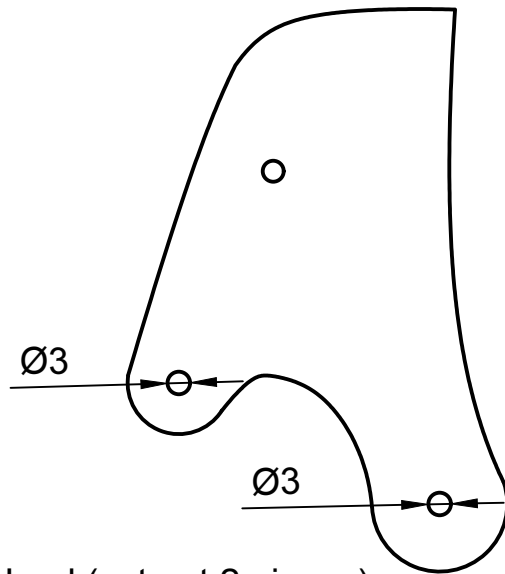
by The Flying Buttresses (of London)

The Flying Buttresses will teach you how to safely make working miniature, water powered 'hydraulic pistons' from easily found materials without needing to "shell out". They will then demonstrate how these can be used to move a tortoise puppet that can slide its head in and out of its shell and open its mouth.

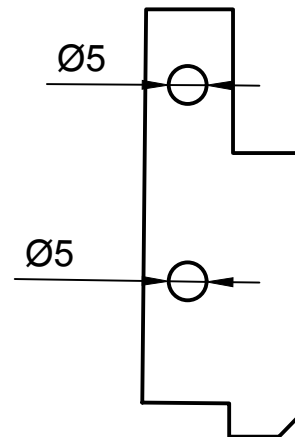
MATERIALS LIST

- A plastic pudding pot/cereal bowl
- 4x 20ml syringes
- 2 x 2.5ml syringes
- A nylon kitchen chopping board
- 3 metres of PVV tubing 3mm inside diameter x 5mm outside diameter
- 4 cable ties (optional)
- 5 flat head nails approx 50mm long
- 2 split pins or a stiff piece of wire approx 100 mm long
- A penny washer
- Sticky tape (optional)

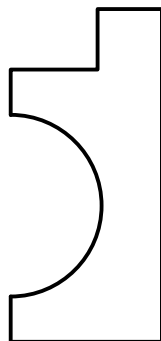
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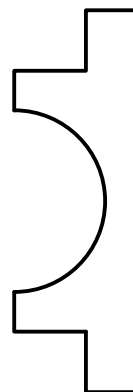
Head (cut out 2 pieces)



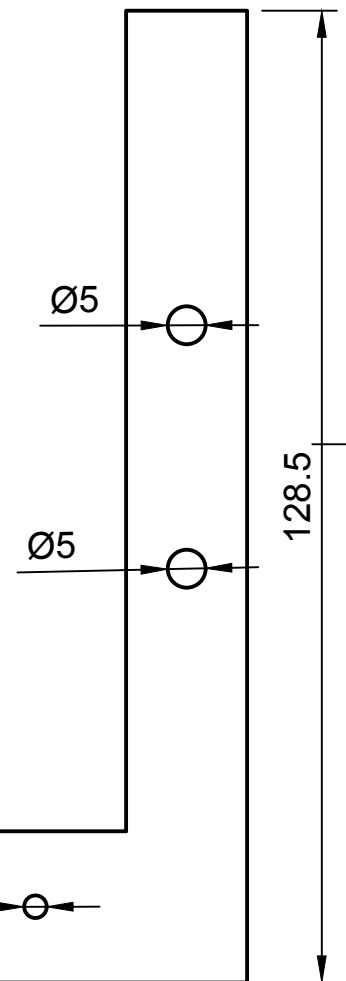
Body Rotate Hinge



Big Saddle




Little Saddle



"L" Bracket

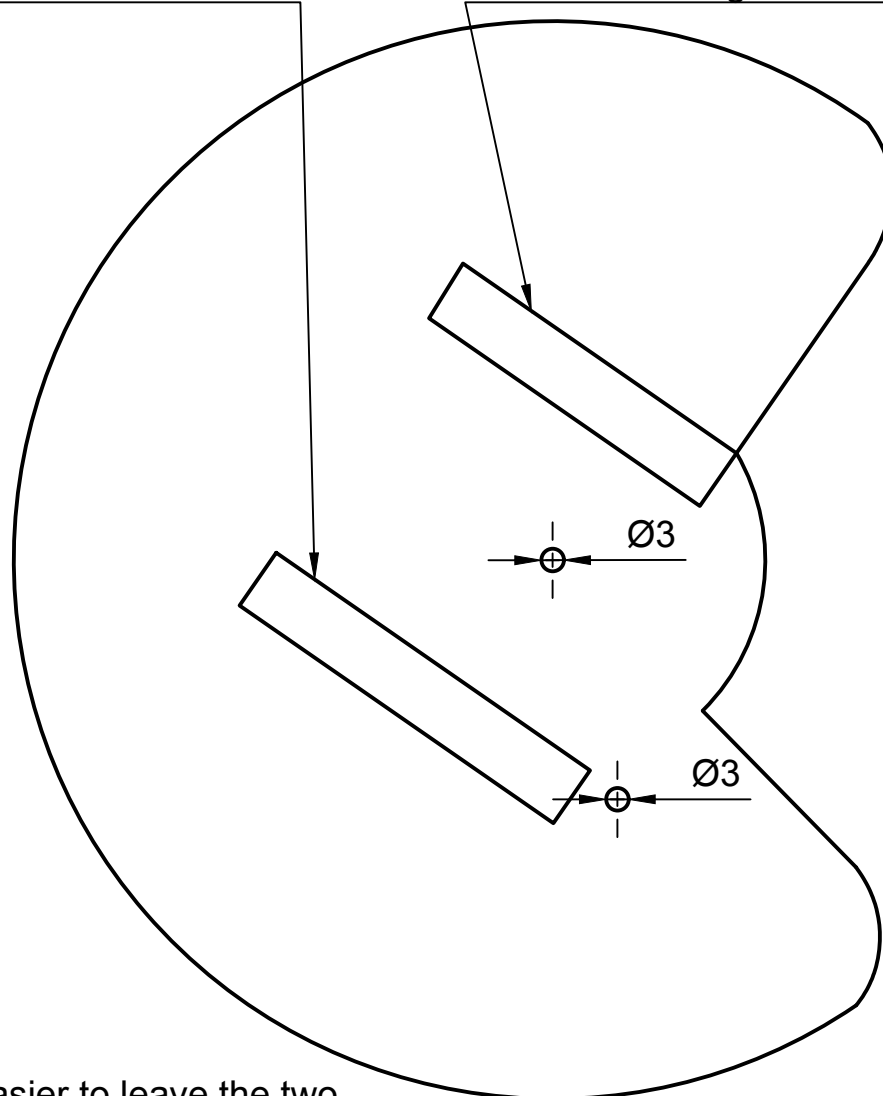
When printing select "Actual Size" not "Fit" to ensure templates are correct size.
 Check that your "L Bracket" is 128.5mm long when printed.

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Location of little Saddle

Location of "Big Saddle"

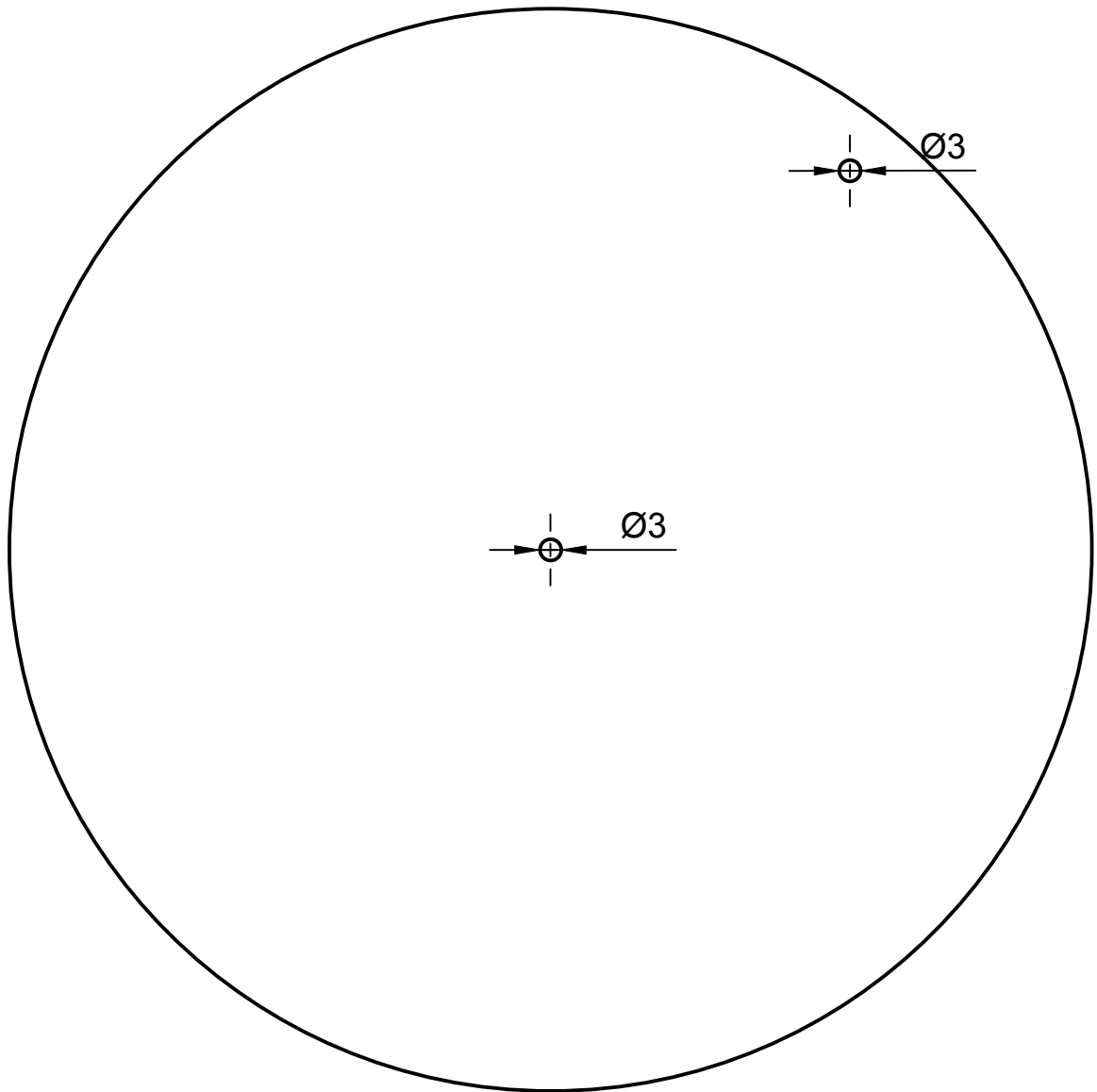


It may be easier to leave the two rectangles intact and use the point of a pencil poked through at each corner to transfer the locations of the saddles to your material.


Turntable

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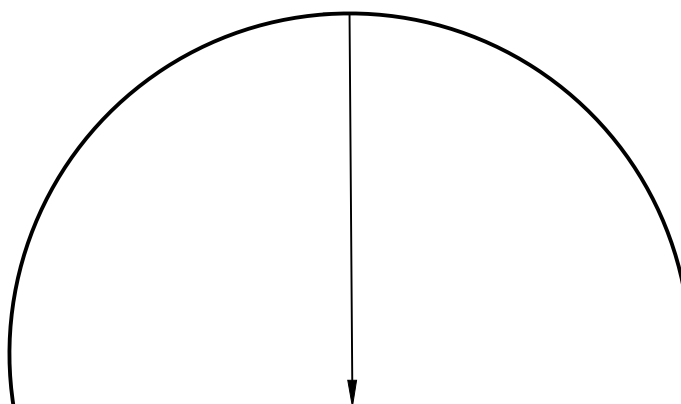
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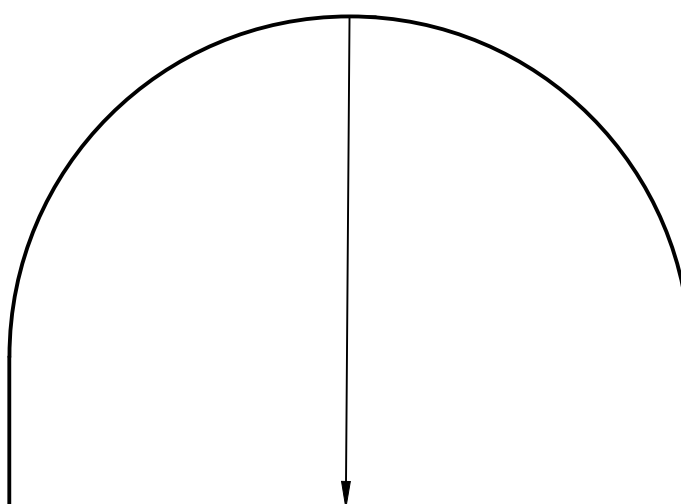
Turntable Base Plate

| | | | | | |
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Tube Exit



Head Entrance

| | | | | | |
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