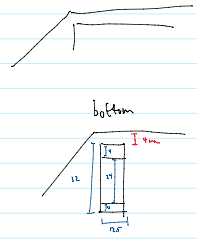
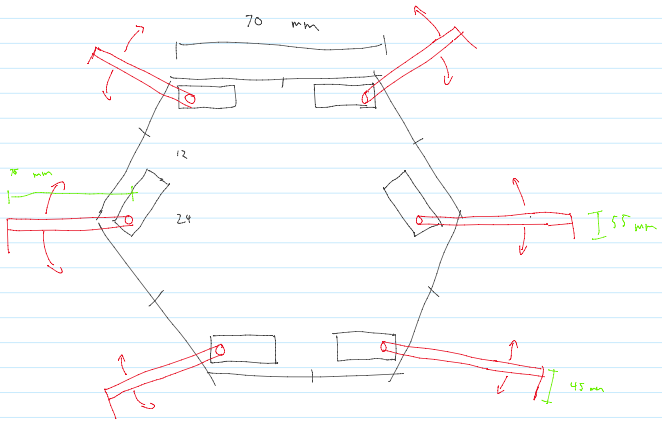
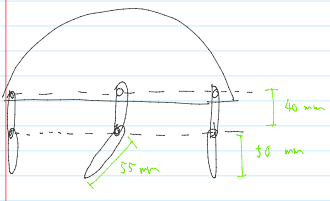


Top down view not including dome

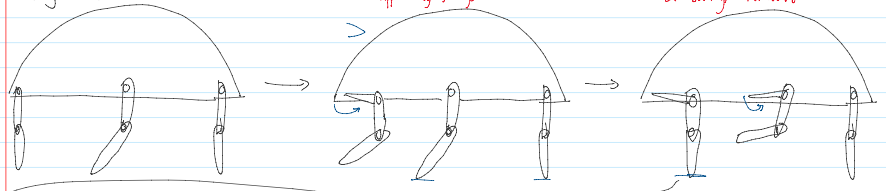


Profile View



$$\begin{aligned}
 60 &= \sqrt{50^2 + a^2} \\
 a &= 33.16 \\
 55 &= \sqrt{50^2 + a^2} \\
 a &= 22.912
 \end{aligned}$$

Walking mech



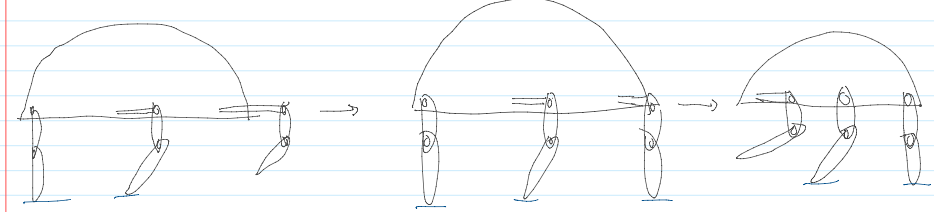
Rear leg pivots so not contacting ground then upper leg swings forward

Rear leg pivots down to contact ground, middle leg pivots up & swing forward

Rear leg swings back, middle leg pivots to touch ground, front leg swings & pivots

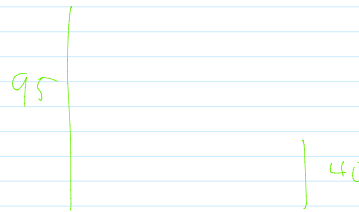
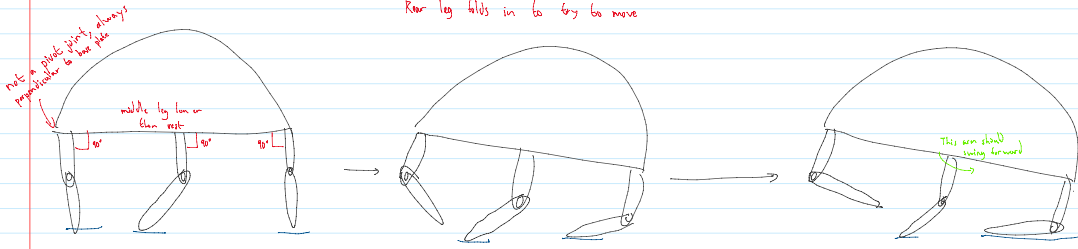
front leg pivots to make contact

rear leg pivots & swings while front 2 legs swing back

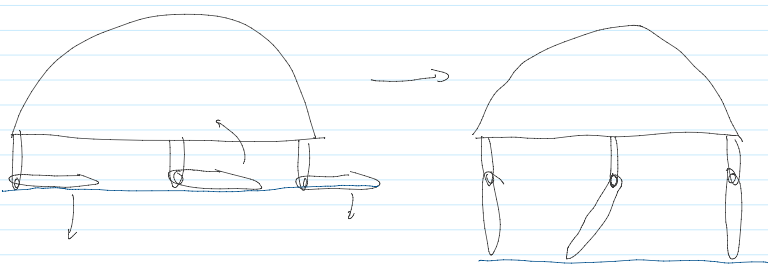
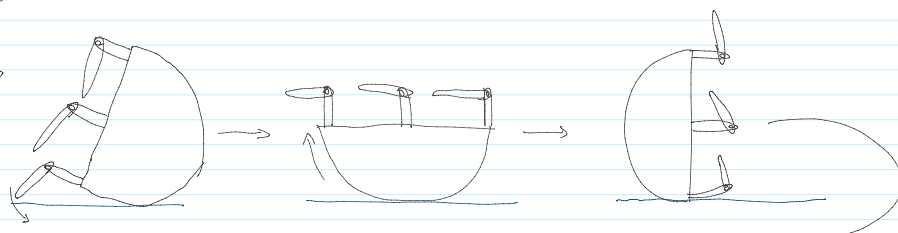
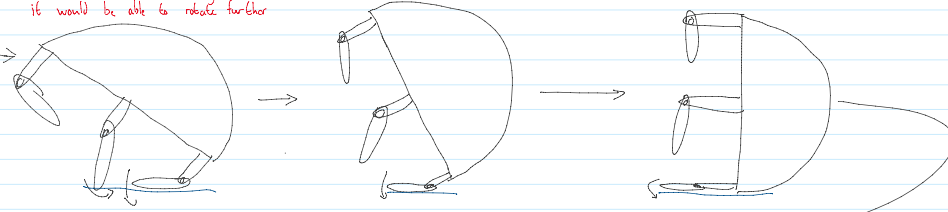


Rolling mechanic

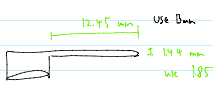
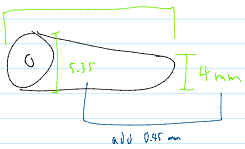
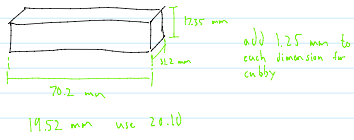
Middle leg begins to straighten out
front leg shortens down
Rear leg folds in to try to move



since middle leg is longer
it would be able to rotate further

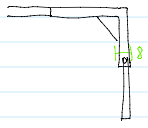


battery dimensions

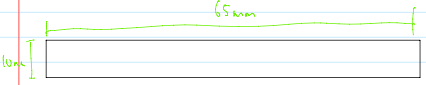


use box base - 0.2

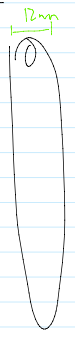
Leg design servo



top view

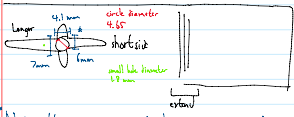


2nd Link



50 or 55 mm

Revision for first stage Leg



Note the cross hole to have a wider width

V2 design

cut a strip in the end of the leg

Extend by 17 mm

Reduce thickness from 5 mm to 3.71

