“Useless Box v1.3 - GM3”

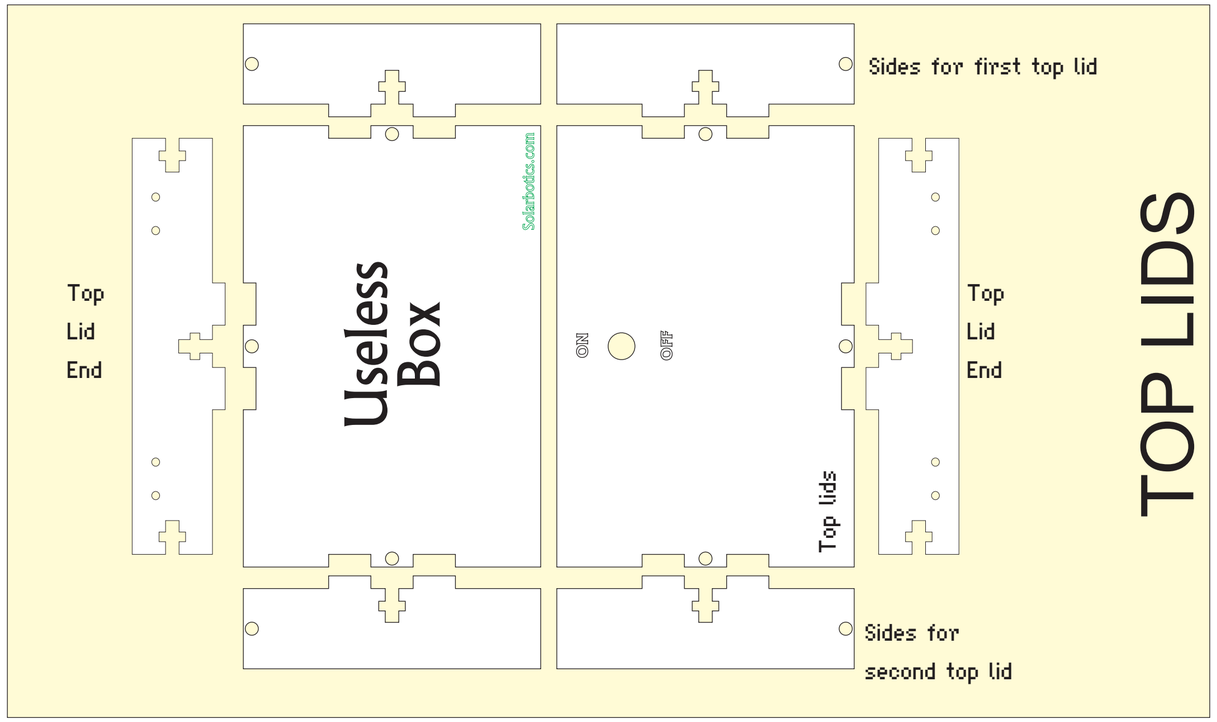
Assembly instructions & Laser Template

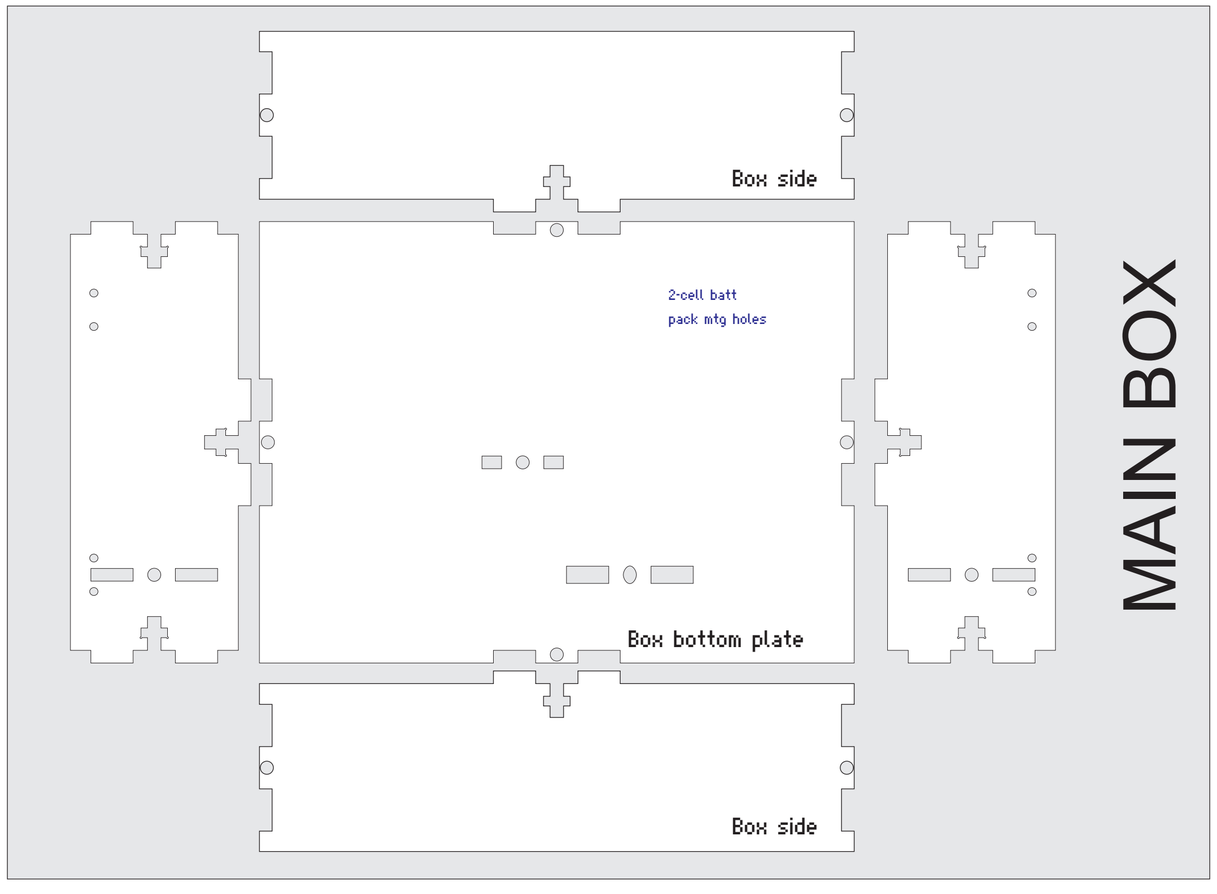
Updatd to use the GM3 gearbox instead of the GM4 - March 24, 2011

First of all, be aware this file is 24” x 18”. It’s the template we use for lasering out the Useless machines, so the documentation is also on this size format. Print at your own risk!

The heart of this design is the clever use of a “double-pole, double-throw” and limit switch. These two switches route to the motor in a way that ... well, make it want to turn itself off!

For full construction details, get the PDF from our website at:
http://www.solarbotics.com/products/60005/resources/



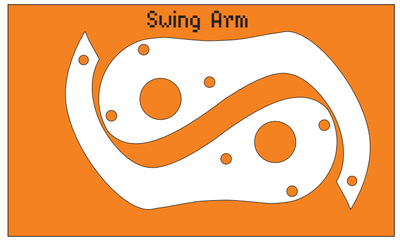


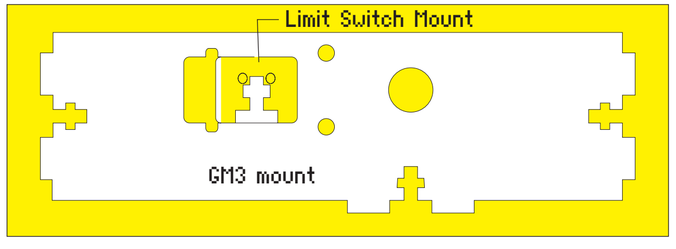
Parts List:

1 - Motor set (GM3 Motor and Accessory Wheel)
1 - Double-Pole, Double-Throw power switch
1 - Single-Pole, Double-Throw retract limit switch
1 - 4-conductor ribbon wire
1 - 2xAA Battery Pack
1 - Double-sided Sticky Tape
4 - Miniature Hinges
4 - Rubber Feet
2 - #4 x ½” Motor-mounting Screws
5 - #2-32 x 3/8” Limit switch / Finger mounting Screws
1 - #2 x 1/4” and #2 Washer set for Accessory Wheel
22 - #4 x 3/8” Bolts and #4 Nut sets
16 - #2 x 1/4” Hinge-mounting Screws

Laser-it-yourself instructions:

- 3mm Acrylic
- 60W Helix Settings: 20 speed / 100 power (use 16 speed if leaving the paper on the acrylic)





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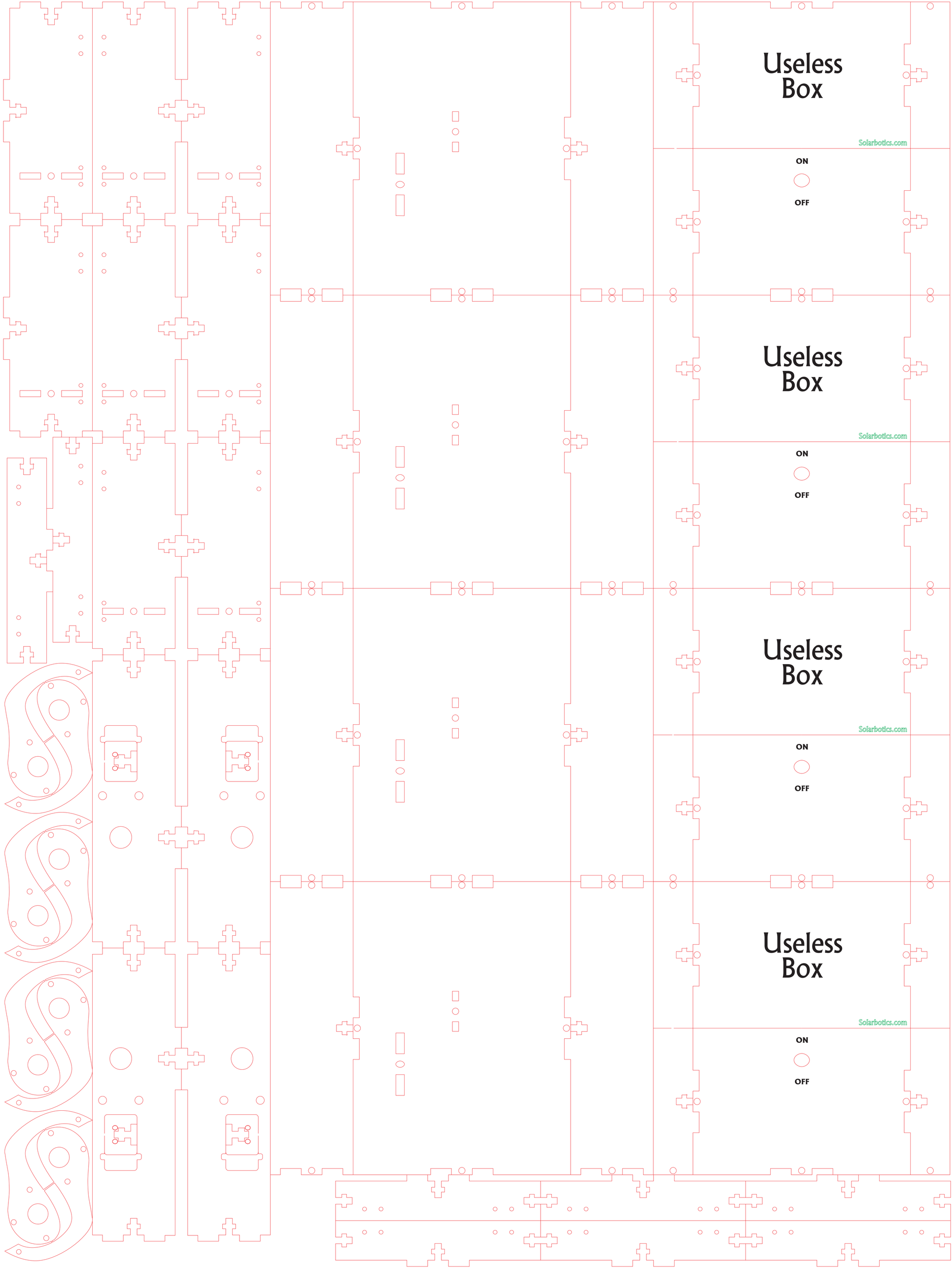
October 12, 2011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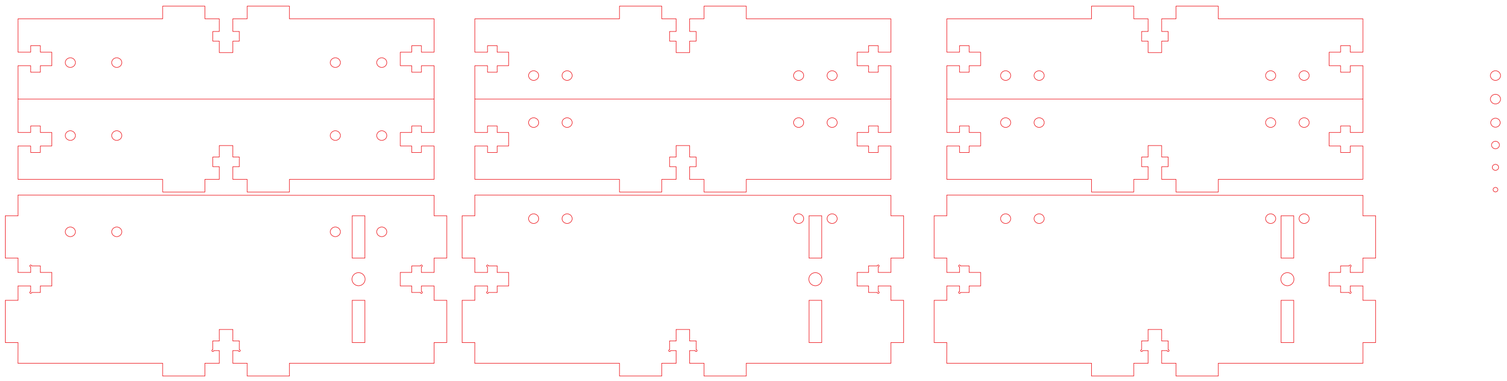
6049 ½" x 5/8" Butt Hinge
Hole locations approximate



A053 - 3/4" Width X 1" Height
from smallboxhardware.com
aka:
https://craft-inc.myshopify.com/products/6050
6050 3/4" x 1" Butt Hinge

New CRAFT Hinges