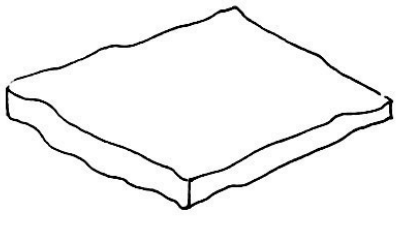


OPERATIONS SEQUENCE FOR MOST CRITICAL MODULE: GEAR TRAIN + GEAR BOX

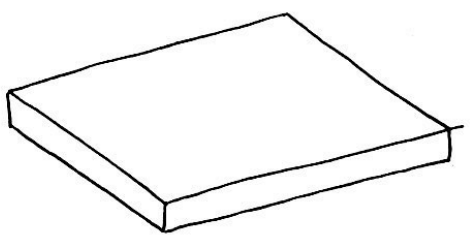
10-26-2018

- 3 SHAFTS
- 3 PLATES
- 2 GEARS
- 4 BOLTS

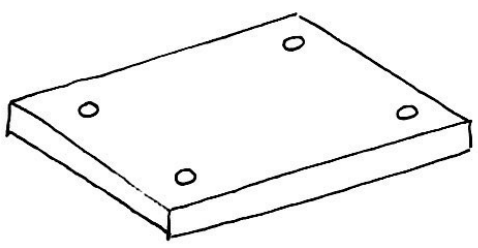
① BOTTOM PLATE:



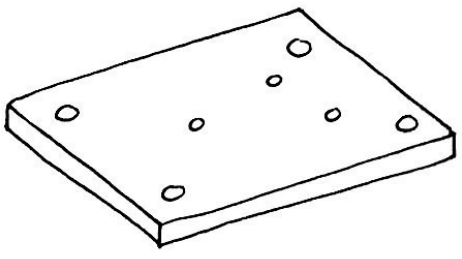
- FACE 4 EDGES TO SIZE (3" x 3.5")



- CENTER DRILL THE 4 PLATE MOUNTING HOLES
- DRILL THE 4 HOLES WITH #8 DRILL
- CLOSE FIT CLEARANCE FOR #8-32 BOLTS

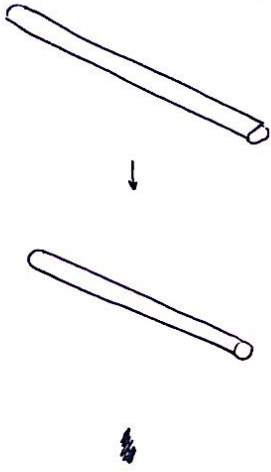


- CENTER DRILL THE 3 MUSIC BOX MOUNTING HOLES
- DRILL THE 3 HOLES WITH #32 DRILL
- CLOSE FIT CLEARANCE FOR #4-40 BOLTS





④ REAR SHAFT

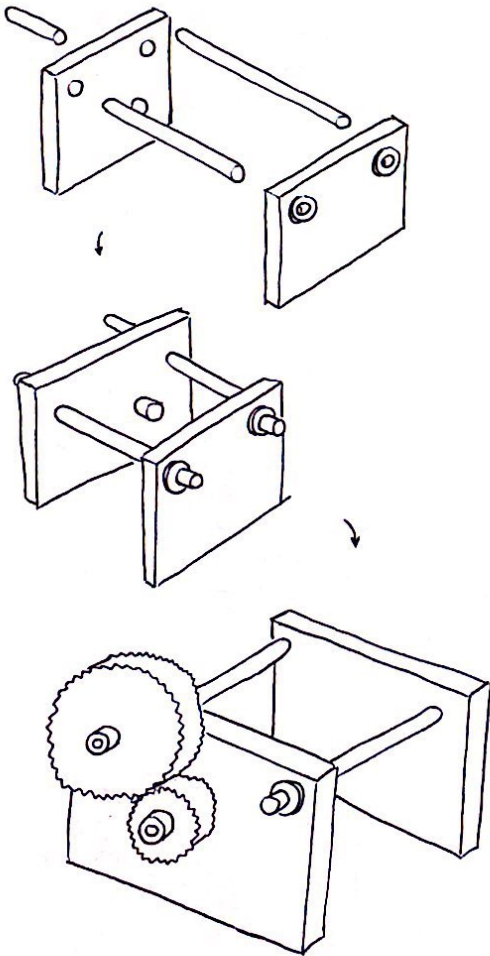


⑤ FRONT SHAFT

⑥ BOTTOM SHAFT

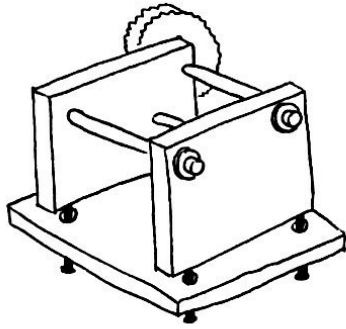
- FACE BOTH ENDS TO LENGTH (4.550") (3.625") (1.5")
- PUT CHAMFER ON EACH END

Ⓐ CRITICAL GEARBOX ASSEMBLY

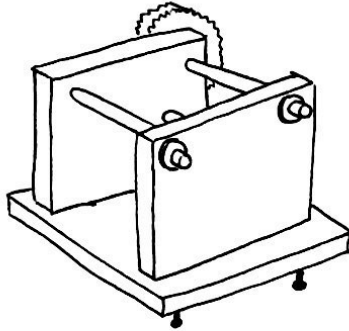


- FACE SHAFTS THROUGH THE 3 AXES
- USE THESE TO ALIGN THE 2 PLATES
- MAKE SURE THEY ARE ABLE TO SPIN EASILY

- PUT THE 2 GEARS ON THE LEFT SIDE OF THE REAR + BOTTOM SHAFTS
- SPIN THE TOP SHAFT + MAKE SURE IT MATES WITH THE LOWER GEAR WELL
- MAKE SURE IT CAN STILL SPIN EASILY



- LINE UP THE RIGHT + LEFT PLATES ONTO THE BOTTOM PLATE
- TIGHTEN DOWN ONE OF THE PLATES INTO PLACE
  - ENSURE ~~there is~~ THE OTHER PLATE HAS ENOUGH WIGGLE SO THAT ALL SHAFTS SPIN EASILY WHEN IN A CERTAIN RANGE OF POSITIONS



- SLOWLY TIGHTEN DOWN ON THE SECOND PLATE
- KEEP THE SHAFTS SPINNING TO ENSURE PROPER CO-AXIAL ALIGNMENT

