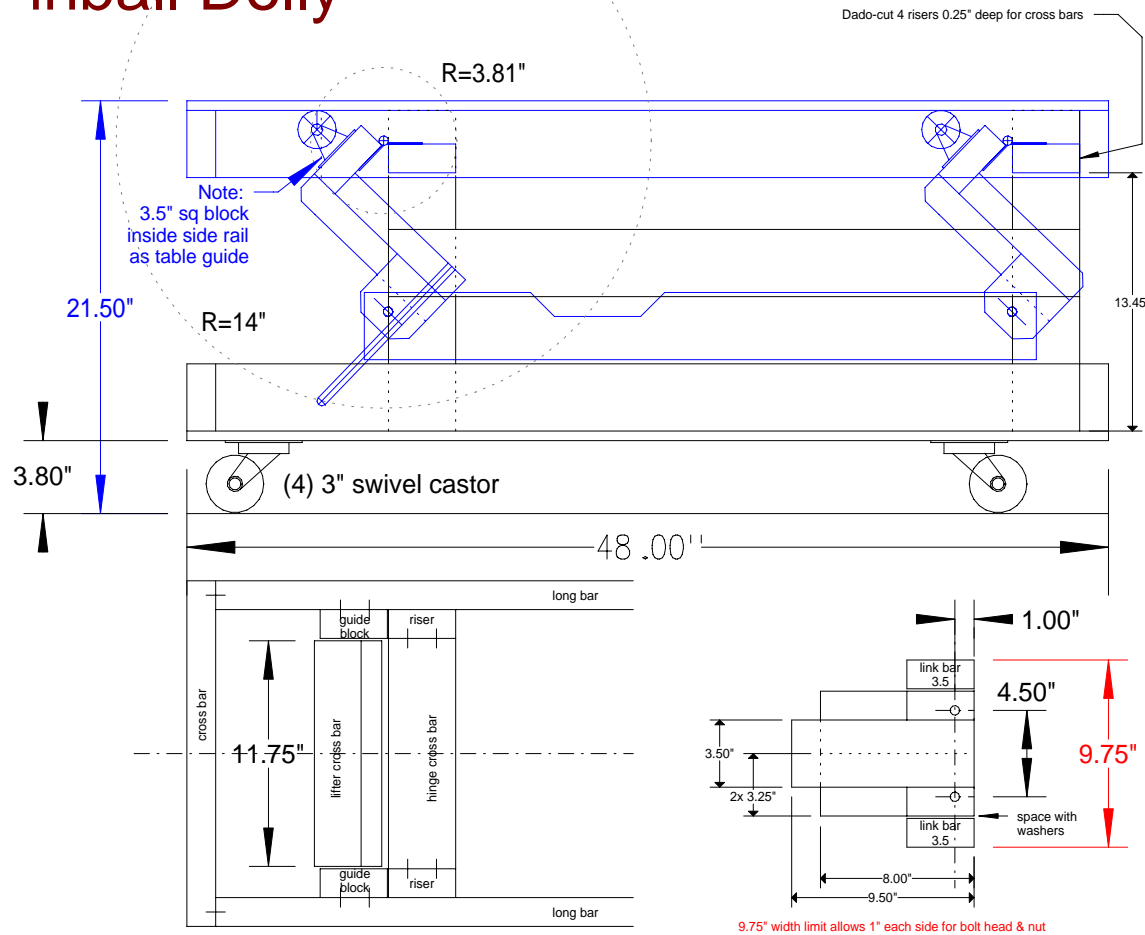


Lift leverage = $14 / 3.81 = 3.68$
 If load = 250 lbs, handle pull force = 68 lbs
 Drawing scale: 1" : 10"
 Created: Nov. 1, 2007, Revised: Nov.4, 2007

Pinball Dolly



- Wood: 2" x 4"
 (4) 45" long bar
 (2) 36" long bar
 (4) 18" cross bar
 (2) 12.5" cross bar
 (4) 16.75" riser
 (2) 11.75" lift cross bar
 (4) 8" lift bar (x 3.25")
 (2) 9.5" lift bar
 (6) 3.5" block
 (1) 35" lift link bar (optionally 2)

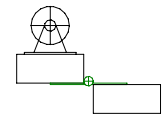
Cost Summary:
 \$3.50 x 6 wood
 \$20.00 x 1 plywood
 \$7.00 x 4 caster 3"
 \$3.49 x 4 caster 2"
 \$6.00 handle
 \$40 hardware
 Total:
 \$129.00

- Wood: 3/4" ply sheet
 (2) 18" x 48" (from 48"x48" sheet)

- Bottom Caster hardware:
 (4) 3" swiveling castor (250 lb)
 (16) 5/16" flat washer
 (16) 5/16" lock washer
 (16) 5/16" nut
 (16) 5/16" x 1 1/4" bolt
- Lifting Caster hardware:
 (4) 2" straight caster (125 lb)
 (16) 1/4" flat washer
 (16) 1/4" lock washer
 (16) 1/4" nut
 (16) 1/4" x 2" bolt

- Hinge Hardware:
 (4) 4" utility hinge, 4 holes per side
 (16) 1/4" x 2" bolt, lock washer, flat washer, nut

- Link Hardware (each link bar):
 (2) 3/8" x 4" bolt
 (6) 3/8" flat washer
 (2) 3/8" nylon locking nut



- Misc. Hardware:
 (1) 1/2"-13 x 4" x 10" Steel strap (handle)
 (2) 1/2"-13 nut
 (2) 1/2" lock washer
 (2) 1/2" flat fender washer
 (1) 6.5" utility pull handle

Feature: Self locking in up position.
 120° lever movement. Advantage is that no latch or hook is required to stay up.
 (Note: You should probably install a safety hook to grab handle in up position regardless.)
 Feature: You can add an air cylinder (screen door type) to the design to prevent the table from dropping too fast and to make lowering easier.
 Note: a standard 2x4 board is actually 1.5" x 3.5"

45				45				3.5		
45				45				3.5		
36				36				12.5		8
18		18		18		18		12.5		8
16.75		16.75		16.75		16.75		9.5		9.5
11.75		11.75		8		8		35		3.5 3.5