Materials List

The Quantity and (May Buy) column lists the amount needed in inches.

The likely available size is in parentheses (listed in feet). This only applies to the wood section.

Notes	Quantity (May Buy)	Material	Where Used and Comments Measures are rounded. This is not a cut-list.
Wood. Available from Homecenters.			
	45" (1@8')	1x2, Actual Size ⅝" or ¾" x 1½"	Feet-spacers 14", 1x3 spacers 11", knobs 10", crank-arm 8", crank-knob 2"
	70" (1@8')	1x3, Actual Size ⅝" or ¾" x 2½"	Top leg-ties 54", axle support plates 10", top plate-blocks 6"
	77" (1@8')	1x4, Actual Size ¾" x 3½"	Crosstie 24", footrest 29", endplates 24"
	96" (1@8')	1x8, Actual Size ¾" x 7¼"	Fixed sides 55", floating sides 41"
	220" (3@8')	2x3, Actual Size 1½" x 2½"	Legs. Eight at 27½"
	50" (1@8')	2x4, Actual Size 1½" x 3½"	Feet. Two at 25"
	1 Piece	¼" Flooring Sample	Axle support plates. Sample size at least 2" x 6". Can also be plywood or tempered hardboard.
	-	Slab for Top of Desk	Size varies, 32" x 24". Can be plywood, countertop, MDF, particle-board or similar, ½" or thicker.
	2"	~ ¾" Or Larger Dowel. Optional	Crank-knob. Can be block cut from 1x2.
	6"	¼" Dowel	For two pins. Can be nails, bolts, rods etc.
Steel. Available from Homecenters and Onlinemetals.com.			
	48"	⅛" x 1½" Flat Bar, Hot Rolled Rect.	Gibs. Two at 24". Can be 1¼ to 2 inches wide.
Machine Screws, Bolts, Threaded Rod.			
		Note: #8 and #10 machine screws can be 24 or 32 threads per inch. Must match nuts.	
	1	#8 x 1¾" Round Head	Crank-arm reinforcement.
	2	#8 x 3" Flat Head	Top plate-blocks.
	1	#10 x 3" Round Head	Crank-knob.
	4	¼-20 x 4½" Carriage Bolt Two Must be Full Thread	Roller-pulley's axle 2, top of inside legs 2. Can be threaded rod or tap bolts.
	1	¼-20 x 2" Eyebolt	Ratchet-pawl.
	1	5/16-18 x 2½" Carriage Bolt Full Thread	Ratchet-axle. Can be threaded rod or tap bolt.
	4	5/16-18 x 3" Carriage Bolt Full Thread	Gibs. Can be threaded rods or tap bolts.
	2	5/16-18 x 2" Tap Bolt	Cable-anchor. Can be threaded rods.
	2	5/16-18 x 3½" Tap Bolt	Cable-anchor. Can be threaded rods.
	1 Piece	¼-20 x 24" Threaded Rod. Optional	Can replace all ¼-20 bolts.
	1 Piece	5/16-18 x 36" Threaded Rod. Optional	Can replace all 5/16-18 bolts.
	1 Piece	⅜-16 x 36" Threaded Rod	Axle.

Notes	Quantity	Material	Where Used and Comments
Nuts			
	3	#8 Match TPI of Machine Screws	Crank-clamp 1, top plate-blocks 2.
	2	#10 Match TPI of Machine Screws	Crank-knob 2.
	8 (+4)	¼-20	2x3 Leg top carriage bolts 2, roller-pulleys' axles 6 (+4 with threaded rod).
	25 (+9)	5⁄16-18	Gib-knobs 4 (+4 with threaded rods), cable-anchors 14 (+4 with threaded rod), ratchet 3 (+1 with threaded rod), gib-nuts embedded in 2x3 4.
	5	5⁄16-18 Cap Nut. Optional	Cable-anchors 4. Ratchet 1 with threaded rod.
	11	⅜-16	Cable-clamp in spools 4, spools 4, crank 2, axle's support in endplate 1.
	1	⅜-16 Cap Nut. Optional	Outside nut on crank.
Flat Washers			
	8	#10	Crank knob 4, crank clamp 2, ¼" plate-blocks 2. Can be used with #8 machine screws.
	8 (+4)	¼"	2x3 Top leg clamps 2, roller-pulley's axles 6 (+4 with tap bolts or threaded rods).
	19 (+5)	5⁄16" Can be SAE or USS	Gib-knobs with carriage bolts 4 (+4 with tap bolts or threaded rods). Cable-anchors 12, ratchet 3 (+1 with threaded rod).
	4	5⁄16" USS Washer	Copper coupling spool-hub 4.
	2	⅜" Washer	Crank to axle. Can be 5⁄16" USS washers.
Fender Washers			
	4	⅜" ID x 1½" OD	Spool flanges.
Lock Washers			
	4	5⁄16"	Cable to anchors 4.
	2	⅜"	Cable to axle 2.
Drywall and Decking Screws			
	76	1⅝" Can be 1¾" Wood Screws.	A 1 pound box of 1⅝" will supply enough for all. Fixed 1x8 16, floating 1x8 12, 1x3 plates 8, 1x4 endplates 12, crosstie 8, footrest 4, 1x3 plate-blocks 4, foot-blocks 4, 1x3 leg-ties 8.
	8	3" Can be #10 Wood Screws.	Feet 8.
Wood Screws			
	3	#4 x ¾" Flat Head	Attach pilaster strip.
	16	#6 x ~⅝" Flat Head	Attach corner braces. Often included with braces.
	2	#6 x ¾" Round Head	Ratchet's wire-stops. Can be brads.
Nails			
	1	Small Nail, 6d or 8d	Ratchet's eyebolt-stop. Can be a screw.
	8	Wire Nails, ⅝-18 Finish. Optional	Secure aluminum cable-cover.
	10	~1¼" Roofing or Drywall Nails	Tie gibs to legs.

Notes	Quantity	Material	Where Used and Comments
Miscellaneous			
	2	¾" Copper Coupling	Plumbing fitting. Used for spools.
	3	¼" Copper Coupling	Plumbing fitting. Used for axle's sleeve-bearings.
	16'	1/16" Diameter Cable	Found with rope and chain. 2 Pieces at 8' each. Cut when purchased.
	2	1¼ Inch Steel Patio Door Rollers with ¼ Inch Bore	Found in door and window hardware. Used for cable-pulleys. Must be metal.
	4	2" Corner Braces	Found in cabinet hardware. Used for top tie-downs. These often include screws.
	Pack of 4	Leveling Glides	Found in cabinet hardware. Used for adjustable feet.
	2'	Shelf Pilaster Strip	Found in shelving. Used for ratchet.
	8"	12 to 14 Gauge Wire	Ratchet-wire. Can be coat hanger. Copper too soft.
	1 Piece	Dryer Duct 4" x 24" Aluminum Pipe. Optional	Found in HVAC duct. Used for cable-covers. Can be poster-board or similar.
	-	Tape. Electrical, Masking or Similar	Holds the cables to spools during construction.
	-	Wood Glue	Carpenter's yellow glue serves well.
	-	Epoxy Glue. Optional	Used with gib-knobs and ¼" copper couplings.
	-	Oil. Motor, Sewing Machine, etc.	Lubricate axle-nut and ¼" copper couplings.

Wood Cuts

The following pages show copies of the dimensioned drawings of the parts grouped by the size of the lumber from the homecenter.

Page numbers for the directions are given with each part.

Parts can be cut before construction begins. The exceptions are the two 1x3 top ties, the 1x4 crosstie and the 1x4 footrest. These four parts have to be cut to measurements taken from the partially constructed desk.