## Revised 25 April, 2011

## Mirror-o-Matic 14 Parts List

Kit Item	#	Item	Location	Supplier	Part	Catalog
	Req'd				Number	Cost
Yes	2 or	<sup>3</sup> / <sub>4</sub> "X 20" polished blower shaft	Turntable,	Grainger	4C907	15.31
Note 1	1	<sup>3</sup> / <sub>4</sub> "x 30 shafting (cut in two)	Eccentric	McMaster	6061K545	24.09
Yes	1	5/8x 30 polished blower shaft	Power	McMaster	6061K123	18.84
Note 1		(cut as required)	Assembly			
Yes	2	<sup>3</sup> / <sub>4</sub> " Set screw shaft collar - zinc plated	Turntable,	MSC	87986485	1.53 x 2
			Eccentric			
Yes	2	5/8" Set screw shaft collar – zinc plated	Powerhead	MSC	87986402	1.44 X 2
Yes	2	<sup>3</sup> / <sub>4</sub> "id x 1-3/8"od x 1/8" bronze thrust washer	Eccentric	MSC	35436823	1.22 x 2
Yes	2	5/8"id x 1"od x 1/8" bronze thrust washer	Powerhead	MSC	06455414	1.01 x 2
Yes	2	<sup>3</sup> / <sub>4</sub> " id x 1" od x <sup>3</sup> / <sub>4</sub> " long bronze flanged bushing	Platter	MSC	06445133	2.44 x 2
Yes	2	Female rod end bearings 3/8" x 24 tpi	Eccentric	MSC	36671238	2.75 x 2
Yes	1	Threaded rod 24 tpi 3/8 dia. x 12" long	Eccentric	MSC	04354155	2.53
Yes	2	Nuts 3/8" x 24 tpi	Eccentric	Hardware		.10 x 2
Yes	4	Bronze bearings 5/8" self aligning	Powerhead	Grainger	2X529	12.48 x 4
Yes	1	Toggle pad	Overarm	MSC	62125315	8.52
Yes	1	Threaded rod 11 tpi 5/8" x 8" long	Overarm	MSC	04352282	4.87
Yes	3	Nuts 5/8" x 11 tpi	Overarm	Hardware		0.22 x 3
Yes	2	Washers 5/8"id x 2" od	Overarm	Hardware		0.35 x 2

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Yes	4	5/16 " x 2" bolts NC	Powerhead	Hardware		0.35 x 4
Yes	5	5/16" x 1-1/4 bolts NC	Overarm	Hardware		0.35 x 5
Yes	19	5/16" x 1-1/2 bolts NC	Overarm	Hardware		0.35 x 19
			Powerhead			
Yes	21	5/16" nuts NC	Thru-out	Hardware		0.10 x 21
Yes	24	5/16 X 1" flat washers	Thru-out	Hardware		0.08 x 24
Yes	5	5/16" pronged t-nuts	Overarm,	Hardware		0.35 x 5
Note 2			Box			
Yes	3	3/8" x 2-1/2" long bolts	Eccentric	Hardware		0.55 x 2
Yes	2	3/8" pronged t-nuts	Eccentric	Hardware		0.35 x 2
Yes	2	3/8" nuts NC	Eccentric	Hardware		0.12 x 2
Yes	6	3/8" x 2"od flat shim washers	Eccentric	Hardware		0.40 x 6
Yes	4	1/4" x 1-1/2" eyebolts	Powerhead	Hardware		0.49 x 4
Yes	4	1/4 nuts for eyebolts	Powerhead	Hardware		0.05 x 4
Yes	4	1/4 washers for eyebolts	Powerhead	Hardware		0.05 x 4
Yes	2	Springs 8-1/2 " long 1" dia. 0.1" wire	Powerhead	Home	Note 8	6.95 (Pack
				Depot		of 2)
Yes	1	T-handle 5/32" hex driver (tool)	Powerhead	MSC	05043104	1.82
Yes	2	Pulley 1-1/2" x 5/8"	Powerhead	Johnstone	L 36-744	
				Grainger	3x893	4.63 x 2
Yes	2	Pulley 10" x 5/8"	Powerhead	Johnstone	L 36-786	
				Grainger	3x935	28.15 x 2
Yes	1	Pulley 1-1/2 " x <sup>1</sup> /2"	Powerhead	Johnstone	L 36-743	
				Grainger	3x892	4.63
Yes	1	Pulley 3-1/2" x 5/8" (Optional)	Powerhead	Johnstone	L 36-761	
				Grainger	3x910	8.75
Yes	1	Pulley 2-1/2" x 5/8"	Powerhead	Johnstone	L 36-752	
				Grainger	3x901	5.97

Kit Item	#	Item	Location	Supplier	Part	Catalog
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Yes	1	Pulley 12" x <sup>3</sup> / <sub>4</sub> "	Turntable	Johnstone	L 36-791	
				Grainger	3x940	34.35
Yes	1	Pulley 8" x <sup>3</sup> / <sub>4</sub> "	Eccentric	Johnstone	L 36-779	
				Grainger	3x928	18.30
Yes	2	Belt <sup>1</sup> / <sub>2</sub> " x 36"	Powerhead	Johnstone	P48-360	
				Grainger	4L360	5.61 x 2
Yes	1	Belt <sup>1</sup> / <sub>2</sub> " x 48"	Powerhead	Johnstone	P48-480	
				Grainger	4L480	7.12
Yes	1	Aluminum or plastic strip 42" x 1-1/2"	Turntable	Hardware		2.00
Yes	1	Plastic tube 3/8" id x 12" long	Eccentric	Hardware		1.00
Yes	2	Hinge-Stanley 10" # 14-52-52	Overarm	MSC	32836397	11.14 x 2
No	1	Assorted nails or screws	Thru-out	Hardware		1.00
No	1	Polyurethane or other type wood glue	Thru-out	Hardware		6.00
No	1	Plywood ¼" 20"x16"	Box	Hardware		7.00
No	1	Birch Plywood <sup>3</sup> / <sub>4</sub> " Cabinet Grade	Thru-out	Hardware		45.00
Option	1	Power cord 18/3 10amp UL listed	Powerhead	Hardware		2.72
Option	1	Motor <sup>1</sup> / <sub>4</sub> hp 1725 rpm 48/56 frame	Powerhead	Johnstone	S88-532	
_				Grainger	3K771	78.45

## Notes:

- 1. Kit provided shafts are cut to correct length.
- 2. Pronged t-nuts are available by the box of 100 from MSC. Hardware stores such as Home Depot sell in bags of 3 to 5 nuts.
- 3. Pulleys and belts are also available from MSC at similar prices. The pulleys listed are Congress brand die-cast aluminum which have a very flat face on one side for the turntable and eccentric to set on. Stiffer iron pulleys may be substituded as long as they have a flat face.
- 4. Belts provided are suggestions. Depending on speeds and ratios required, additional belts may be desired.
- 5. The motor provided by Johnstone is thermally protected. It will restart when cool. Always unplug when reaching into the powerhead. This is the motor provided in the kit. The Grainger motor is not thermally protected. In a locked rotor situation it will burn out. It is listed as an example only, but may be used if work is always supervised.
- 6. Prices listed are from April 99 catalogs. Prices are subject to change.
- 7. The correct hinges are somewhat critical to proper operation. The Stanley 14-52-52 units specified should be used unless you wish to experiment. These hinges are very heavy duty with plastic bushings. Hinges that have 'play' will cause problems.
- 8. Springs were cut down units from Home Depot. Originally the springs were 12 inches long. Cut as required.