## Revised 11 August 2012

## Mirror-o-Matic 20 Parts List

Kit Item	#	Item	Location	Supplier	Part	Catalog
	Req'd				Number	Cost
Yes	2	1"X25" polished blower shaft (cut in two)	Turntable,	Grainger	4C908	18.94 x 2
Note 1			Eccentric			
Yes	1	5/8x 30 polished blower shaft	Power	McMaster	6061K123	19.18
Note 1		(cut as required)	Assembly			
Yes	3	1" Set screw shaft collar - zinc plated	Turntable,	MSC	87986642	2.76 x 3
			Eccentric			
Yes	2	5/8" Set screw shaft collar – zinc plated	Powerhead	MSC	87986402	1.76 X 2
Yes	4	1"id x 1-1/2"od x 1/8" bronze thrust washer	Eccentric	MSC	06455489	1.45 x 4
Yes	2	5/8"id x 1"od x 1/8" bronze thrust washer	Powerhead	MSC	06455414	3.83 x 2
Yes	2	1 " id x 1-1/4" od x 3/4" long bronze	Platter & Tool	MSC	064555232	2.21 x 2
		bushing				
Yes	2	1"id x 1-1/4" x 3" long bronze bushing	Bearing Boxes	MSC	06454201	10.64 x 2
Yes	2	Female rod end bearings 3/8" x 24 tpi	Eccentric	MSC	36671238	3.15 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		.15 x 2
Yes	4	Bronze bearings 5/8" self aligning	Powerhead	Grainger	2X529	13.10 x 4
Yes	1	Toggle pad	Swivel	MSC	62125315	9.57
Yes	1	Threaded rod 11 tpi 5/8" x 8" long	Swivel	MSC	04352282	4.87
Yes	3	Nuts 5/8" x 11 tpi	Swivel	Hardware		0.22 x 3
Yes	2	Washers 5/8"id x 2" od	Swivel	Hardware		0.35 x 2

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Yes	4	5/16 " x 2" bolts NC	Powerhead	Hardware		0.35 x 4
Yes	8	5/16" x 1-1/2 bolts NC	Powerhead	Hardware		0.35 x 8
Yes	8	5/16" nuts NC	Powerhead	Hardware		0.10 x 8
Yes	8	5/16 X 1" flat washers	Powerhead	Hardware		0.05 x 8
Yes	18	3/8" pronged t-nuts	Overarm	Hardware		0.35 x 18
Note 2			Eccentric			
			Turntable			
Yes	2	3/8" x 2-1/2" long bolts	Eccentric	Hardware		0.45 x 2
Yes	2	3/8" x 1" Allen head bolts	Eccentric	Hardware		0.25 x 2
Yes	4	3/8" x 2"od flat shim washers	Eccentric	Hardware		0.10 x 6
Yes	4	<sup>1</sup> / <sub>4</sub> " x 1-1/2" eyebolts	Powerhead	Hardware		0.49 x 4
Yes	4	1/4" nuts and washers for eyebolts	Powerhead	Hardware		0.25 x 4
Yes	4	1/4" pronged t-nuts for eyebolts	Powerhead	Hardware		0.35 x 4
Yes	2	Springs 8-1/2 " long 1" dia. 0.1" wire	Powerhead	Home		6.95
Note 7				Depot		(Pack of
						2)
Yes	1	T-handle 5/32" hex driver (set screw tool)	Powerhead	MSC	05043104	2.09
Yes	2	Pulley 1-1/2" x 5/8"	Powerhead	Johnstone	L 36-744	
				Grainger	3x893	4.95 x 2
Yes	2	Pulley 10" x 5/8"	Powerhead	Johnstone	L 36-786	
				Grainger	3x935	30.15 x 2
Yes	1	Pulley 1-1/2 " x ½"	Powerhead	Johnstone	L 36-743	
				Grainger	3x892	4.95
Yes	1	Pulley 3-1/2" x 5/8" (Optional)	Powerhead	Johnstone	L 36-758	
				Grainger	3x910	9.36
Yes	1	Pulley 2-1/2" x 5/8" (Optional)	Powerhead	Johnstone	L 36-752	
				Grainger	3x901	6.39

Kit Item	#	Item	Location	Supplier	Part	Catalog
	Req'				Number	Cost
	d					
Yes	2	Pulley 12" x 1"	Turntable	Johnstone	L 36-792	
Note 3				Grainger	3x941	36.75 x 2
Yes	2	Pulley 8" x 1"	Eccentric	Johnstone	L 36-780	
		-		Grainger	3x929	19.58 x 2
Yes	2	Belt ½" x 36"	Powerhead	Johnstone	P48-360	
				Grainger	4L360	6.17 x 2
Yes	2	Belt ½" x 48"	Powerhead	Johnstone	P48-480	
				Grainger	4L480	7.83 x 2
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	12.88 x 2
Note 6						
No	1	24" Diameter water heater drain pan	Turntable	Hardware		20.00
No	1	Assorted nails or screws	Thru-out	Hardware		2.00
No	1	Polyurethane or other type wood glue	Thru-out	Hardware		6.00
No	1	Plywood ¾" Cabinet Grade	Thru-out	Hardware		40.00
Optional	1	Power cord 18/3 10amp UL listed	Powerhead	Hardware		2.72
Optional	1	Motor <sup>1</sup> / <sub>4</sub> hp 1725 rpm 48/56 frame	Powerhead	Johnstone	S88-532	
Note 4		or		Grainger	3K771	78.45

## Notes:

- 1. Johnstone hollow shafting # B81-972 is also acceptable. Blower shaft is polished. It differs from drill rod in that it is slightly undersize to provide clearance for bearings. Grainger and McMaster-Carr provide blower shafting.
- 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 and McMaster-Carr 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. Iron pulleys may be substituted as they are much stiffer and will be less likely to have run-out. Assure that they have flat faces.
- 4. The motor may be thermally protected. It will restart when cool. Always unplug when reaching into the powerhead. If the motor is not thermally protected it will burn out in a locked rotor situation
- 5. Prices listed are from current catalogs. Prices are subject to change.
- 6. 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.
- 7. Springs were cut down units from Home Depot. Originally the springs were 12 inches long. Cut as required.