



PARTS LIST				
ITEM	QTY	PART NUMBER	DESCRIPTION	MATERIAL
1	1	Standard		Wood (Oak)
2	1	Standard Shaft		Wood (Oak)
3	1	Base		Stainless Steel
4	1	Cylinder		Brass, Soft Yellow
5	1	Cylinder Cover		Stainless Steel
6	1	Cylinder Head		Stainless Steel
7	1	Support Link Holder		Stainless Steel
8	1	Flowshaft		Stainless Steel
9	1	Transfer Cylinder		Brass, Soft Yellow
10	1	Base Support		Brass, Soft Yellow
11	1	Support link		Copper Alloy
12	1	Eccentric Sheave		Stainless Steel
13	1	Flywheel		Stainless Steel
14	1	Crankrod 1		Copper
15	1	Crankrod 2		Copper
16	1	Crankrod Bolt 1		Brass, Soft Yellow
17	1	Crankrod Bolt 2		Copper Alloy
18	1	Piston Rod		Stainless Steel
19	1	Piston Stud		Copper Alloy
20	2	Link Bushing		Brass, Soft Yellow
21	1	Piston		Alloy Steel
22	1	Inner Heater Dome		Glass
23	1	Outer Heater Dome		Glass
24	2	Connecting Link		Copper
25	1	Connection Link Stud		Stainless Steel
26	1	Support Link Stud		Stainless Steel
27	1	Crosshead		Brass, Soft Yellow
28	1	Transfer Piston Rod		Steel, Mild
29	1	Transfer Piston		Stainless Steel
30	2	Flowshaft Bolt		Stainless Steel
31	1	Tube		Rubber
32	4	Foot Cussion		Default
33	4	DIN 84 - M3 x 6	Slotted Cheese Head Screw	Steel, Mild
34	14	DIN 912 - M3 x 8	Cylinder Head Cap Screw	Steel, Mild
35	6	DIN 912 - M3 x 12	Cylinder Head Cap Screw	Steel, Mild
36	1	DIN 963 - M5 x 12	Countersunk Screw	Steel, Mild
37	1	DIN 963 - M5 x 20	Countersunk Screw	Steel, Mild
38	1	DIN 6799 - 2,3	Retaining Washer	Steel, Mild
39	1	DIN 7991 - M3 x 12	Countersunk Screw	Steel, Mild

Revision		Date		Description	
Engineered by:		Name:		Date:	
Designer:		Galba, J.		19/12/2009	
Approved:		Galba, J.		19/12/2009	
Project:				Material:	
Miniature Model Air Engine				Total Mass: N/A	
Title:					
Vertical Stirling Engine with Glass Dome Assembly					
Drawingnumber:				Sheet:	
Design State:				0001	
Released				Drawing made with autodesk inventor Revisions only permitted by CAD	

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Corresponding symbols							
Roughness Classes ( NBN 88-02 ) ( ISO 1302 )							
Roughness Value "Ra" in µm ( NBN 88-02 ) ( ISO 1302 )							
N11	N10	N9	N8	N7	N6	N5	N4
25	12,5	6,3	3,2	1,6	0,8	0,4	0,2
Allowable deviations for dimensions without tolerance indication (machined surfaces)							
For measurements ( deviations in mm )							
Accuracyclass (ISO 2768.1)	Dimensions in mm						
	0,5 to 3	>3 to 6	>6 to 30	>30 to 120	>120 to 400	>400 to 1000	>1000 to 2000
f Fine	±0,05	±0,05	±0,1	±0,15	±0,2	±0,3	±0,5
m Medium	±0,1	±0,1	±0,2	±0,3	±0,5	±0,8	±1,2
c Rough	±0,2	±0,3	±0,5	±0,8	±1,2	±2	±4
v Very Rough	-	±0,5	±1	±1,5	±2,5	±4	±8
Fillet and chamfers							
Dimensions in mm				Angles ( in ° and ' )			
0,5 to 3	>3 to 6	>6 to 30	>30 to 120	to 10	>10 to 50	>50 to 120	>120 to 400
±0,2	±0,5	±1	±2	±4	±1°	±30'	±20'
±0,4	±1	±2	±4	±8	±1°30'	±1°	±30'
±0,6	±1,5	±3	±6	±16	±2°	±1°30'	±1°
±1	±2,5	±5	±12	±40	±3°	±2°	±1°30'