



No.	Qty	Description	Material
1	1	Vertical Twin Base Plate	Steel
2	2	Vertical Crosshead Slider	Brass
3	1	Flywheel Twin Cylinder	Brass
4	1	Twin Cylinder Crank	Steel
5	2	Con Rod Bearing Keep	Steel
6	2	Connecting Rod	Brass
7	4	Con Rod Bearing Halves	Bronze
8	2	Slider Pin	Steel
9	4	Slider Cap Left/Right	Brass
10	8	Cap Spacer	Brass
11	2	Eccentric Wheel	Brass
12	2	Eccentric Wheel Plate	Brass
13	2	Eccentric Rod	Brass
14	2	Valve	Stainless Steel
15	2	Valve Nut and Bolt (M2 x 9.5mm)	Steel
16	2	Chest	Brass
17	4	Inlet/Outlet Pipe	Brass
18	2	Packing Nut	Brass
19	2	Piston Shaft Packing	Teflon
20	2	Piston	Brass
21	2	Piston Shaft	Stainless Steel
22	4	Piston Ring	Teflon
23	4	M3 Nut	Steel
24	2	Cylinder	Brass
25	2	Cylinder Plate Inner	Brass
26	2	Cylinder Plate End	Brass
27	3	Main Bearing Upper	Bronze
28	3	Main Bearing Lower	Bronze
29	8	Cap Screw M3 x 45mm	Steel
30	22	Cap Screw M3 x 18mm	Steel
31	4	Bolt M2 x 11.5mm	Steel
32	4	Counter Sunk Screw M3 x 5mm	Steel
33	2	M3 Grub/SetScrew x 3mm	Steel
34	1	M3 Grub/SetScrew x 4mm	Steel
35	8	Cap Screw M3 x 12mm	Steel
36	2	Vertical Base Top	Steel

Figure 1 - Assembly

Figure 2 - Connecting Rod and Slider

Figure 3 - Cylinder and Chest

Figure 4 - Valve Setting

Drawn By:	Checked By:	File Name:	Date:	Scale:
		VTA v1.1.5 Assembly	May 2011	N/A
Copyright: Chiltern Model Steam		Part: Vertical Twin Cylinder Marine Engine Assembly Instructions		
		Material: N/A	Rev: 0.1	Part: N/A