

Figure 1 – Assembly

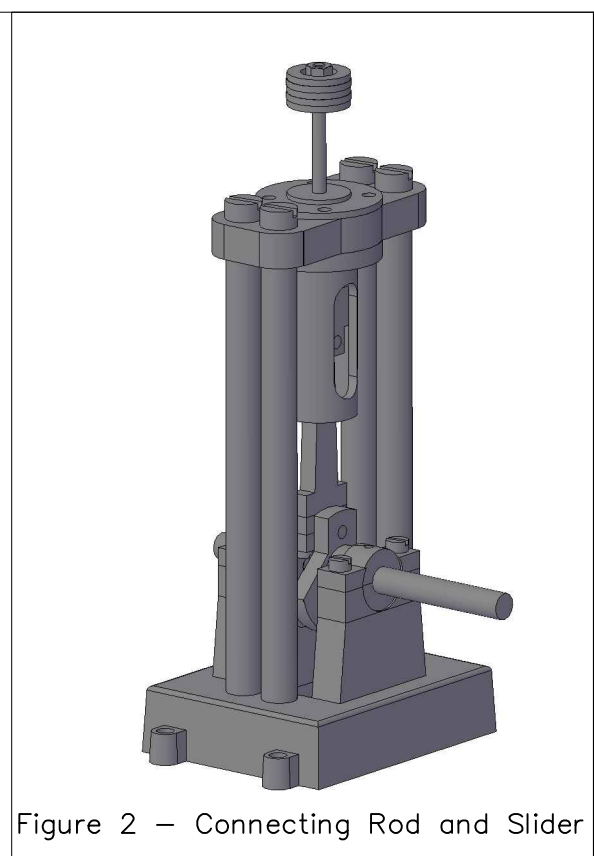


Figure 2 – Connecting Rod and Slider

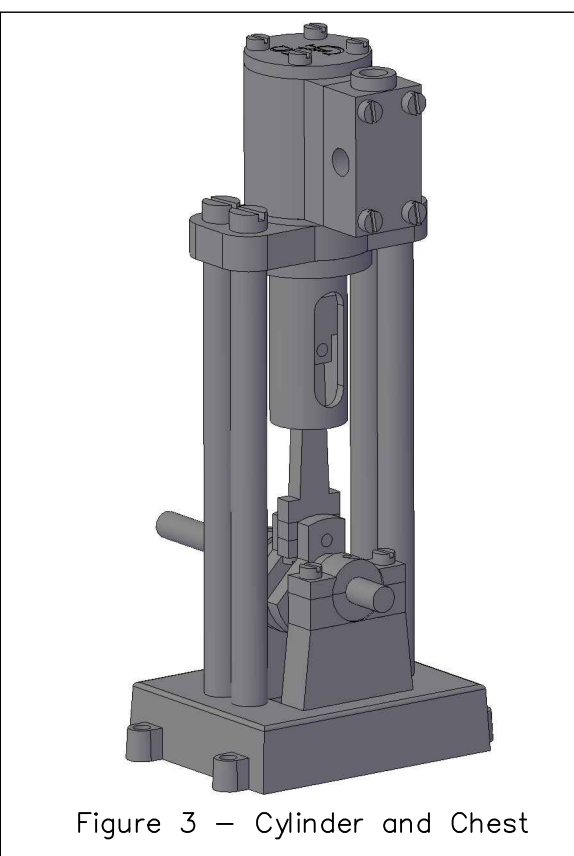


Figure 3 – Cylinder and Chest

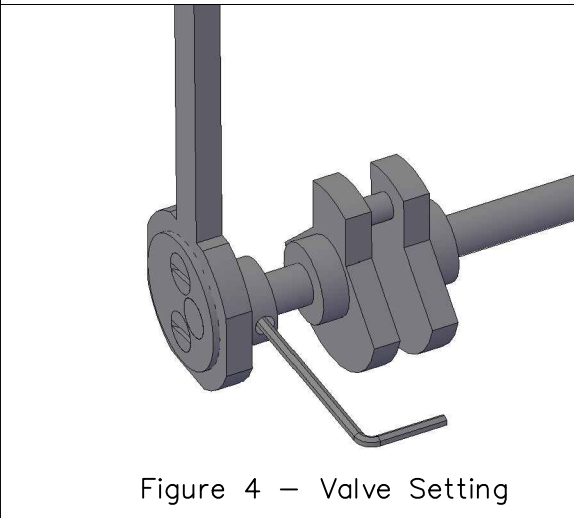


Figure 4 – Valve Setting

| No. | Qty | Description                     | Material        |
|-----|-----|---------------------------------|-----------------|
| 1   | 1   | Vertical Single Base Plate      | Steel           |
| 2   | 1   | Vertical Tube Slider            | Brass           |
| 3   | 1   | Flywheel Single Cylinder        | Brass           |
| 4   | 1   | Single Cylinder Crank           | Steel           |
| 5   | 1   | Con Rod Bearing Keep            | Steel           |
| 6   | 1   | Connecting Rod                  | Stainless Steel |
| 7   | 2   | Con Rod Bearing Halves          | Bronze          |
| 8   | 1   | Slider Pin                      | Steel           |
| 9   | 1   | Vertical Single Top Plate       | Steel           |
| 10  | 4   | Vertical Columns                | Steel           |
| 11  | 1   | Eccentric Wheel                 | Steel           |
| 12  | 1   | Eccentric Wheel Plate           | Steel           |
| 13  | 1   | Eccentric Rod                   | Brass           |
| 14  | 1   | Valve                           | Stainless Steel |
| 15  | 1   | Chest                           | Brass           |
| 16  | 1   | Inlet/Outlet Pipe               | Brass           |
| 17  | 1   | Packing Nut                     | Brass           |
| 18  | 1   | Piston Shaft Packing (not inc.) | PTFE Tape       |
| 19  | 1   | Piston                          | Brass           |
| 20  | 1   | Piston Shaft                    | Stainless Steel |
| 21  | 2   | Piston Ring                     | Teflon          |
| 22  | 1   | Cylinder                        | Brass           |
| 23  | 1   | Cylinder Plate Inner            | Brass           |
| 24  | 1   | Cylinder Plate End              | Brass           |
| 25  | 2   | Main Bearing Upper              | Bronze          |
| 26  | 2   | Main Bearing Lower              | Bronze          |
| 27  | 4   | Cap Screw M3 x 45mm             | Steel           |
| 28  | 8   | Cap Screw M3 x 18mm             | Steel           |
| 29  | 2   | M3 Nut                          | Steel           |
| 30  | 3   | Bolt M2 x 12mm                  | Steel           |
| 31  | 1   | M2 Nut                          | Steel           |
| 32  | 2   | Counter Sunk Screw M3 x 5mm     | Steel           |
| 33  | 1   | M3 Grub/SetScrew x 3mm          | Steel           |
| 34  | 1   | M3 Grub/SetScrew x 4mm          | Steel           |
| 35  | 4   | Cap Screw M3 x 12mm             | Steel           |
| 36  | 8   | Cap Screw M5 x 12mm             | Steel           |
| 37  | 1   | Vertical Slider Tube            | Steel           |
| 38  | 1   | Chest Plug                      | Brass           |

|                                   |             |   |                    |               |
|-----------------------------------|-------------|---|--------------------|---------------|
| Drawn By:<br>Simon Rowley         | Checked By: | File Name:<br>Vert Base v2 Assembly                             | Date:<br>Sept 2018 | Scale:<br>N/A |
| Copyright<br>Chiltern Model Steam |             | Part: Vertical Single Marine Engine v2<br>Assembly Instructions |                    |               |
|                                   |             | Material: N/A   | Rev:<br>1.1        | Part:<br>N/A  |