Assembling the Main Piston

1. Assemble the piston as follows:

   a. Fit the Body cap (3) to the Piston (4). Slide the cap midway down the shaft.

   b. Ensure smooth action. You may need to trim the body cap.

Body Cap fitted to the Piston

   c. Screw the Piston screw top (1) onto the Piston screw thread. Tighten firmly by hand (do not over tighten).

Fitting the Piston Screw Top to the Piston

   d. Fit the Piston O-ring (5) to the Piston.

Fitting the O-ring to the Piston

Assembling the Piston to the Body

2. Inspect the Pump body (7) and ensure that the bore is clean.

3. Apply a light smear of Silicone grease to the first 1 – 2 cm of the pump bore.

Caution:	An even coating of grease to the bore should be achieved prior to assembly. Take care not to apply too much grease as this will cause the pump to malfunction.

4. Position the Piston (4) so that it just enters the bore on an angle of 60 degrees. Rotate the Piston vertically so that it is central in the bore. Push the piston down into the bore until it reaches the bottom of the bore. Ensure that the piston travel is smooth in operation.

Fitting the Piston into the Pump Body

5. Identify the locating dowel hole on the Pump body to Body cap surface (directly in line with the Tap flange).

6. Rotate the Body cap until the mating dowel pin lines up with the pump body dowel hole. Carefully mate the two components.

Dowel Pin located on the Body Cap

7. Hold the cap in place firmly and raise the piston to the extent of its travel. Push the piston down until the resistance of the air can be felt. This should occur within the first 1 cm (1/2 in) of travel. Perform this check several times to ensure that the O-ring is sealing. If this test fails, disassemble the pump and rectify the problem. Fit the four Body cap screws (2) to the Body cap. Tighten.

Fitting the Body Cap Screws

Caution:	Take extreme care not to screw the screws into the body unless there is correct mating of the dowel pin in the dowel hole, as pump body damage may result.