35 and 38 frame plunger pump bell housing mounting

35 and 38 Frame pumps with production date of June 2018 and after can be configured for bell house mount. Changes to the pump include adding material for strength, and increasing bolt size (from M8 to M10) and quantity (from 4 to 8 bolts) for side cover.

1. Remove existing bearing cover.
2. Ensure your pump has the 2-piece, 6-hole shim.
3. Before installing new bearing cover the following must be done:
   a. With the bearing cover removed in step 1, please note that the bearing will stay on the crankshaft, but the bearing race will still be in the old bearing cover along with the oil seal and the o-ring.
   b. Remove o-ring, oil seal and bearing race from old bearing cover. Discard old bearing cover.
   c. Place new bearing cover on work surface with larger opening facing up.
   d. Install bearing race into new bearing cover with the larger opening facing up.
   e. Install oil seal into new bearing cover with small spring facing up.
   f. Install o-ring onto groove of new bearing cover and lubricate.
   g. Ensure that there is a gap between the top and bottom shim halves so the M10 screws will fit through.

*Remove three (3) items and install into new Bearing Cover

**Note:** Ensure your pump has a production date of June 2018 or later with quantity of four (4) M10 side cover screws (17 mm hex on screw head). Prior to this June 2018 date the bell housing cannot be used.
4. Installing new bearing cover:
   a. Slide new bearing cover over crankshaft and ensure bearing race fits over the bearing on the crankshaft. Align new bearing cover holes with crankcase hole pattern.
   b. Slide small diameter end of bell housing over the crankshaft with the opening facing up. Line up holes.
   c. Slide lock washers over screws.
   d. Apply Loctite®242® to screw threads and torque to 360 in/lbs., 30 ft/lbs or 41 Nm.

5. Installing flexible coupling:
   a. Lubricate and install key into slot of crankshaft.
   b. Slide 35mm end of pump coupler half over crankshaft.
   c. Slide spyder over crankshaft and fit into pump coupler half.
   d. Slide motor coupler half over crankshaft and fit onto spyder.
   e. Install hydraulic motor.
   f. Through the opening at the top of bell housing adjust coupler spacing so small knobs on spyder just barely contact each coupler half. Rotate coupling halves so the two (2) clamping screws are facing up. Use a M10 Allen wrench and torque to 360 in/lbs., 30 ft/lbs., or 41 Nm.
   g. Install flat cover over opening on bell housing.
   h. Install four (4) No. 8-32 screws and tighten.