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ASSEMBLYING INSTRUCTIONS: PLUNGER ASSEMBLY FOR MORE THAN THREE PIECES

 WITH DIFFERENTIAL CONNECTING BOLT

**NOTE: ¾” drive extension (supplied), 1-3/4” 12 point socket (not supplied), and two wood clamping blocks (not supplied) required for assembly.**

Note that the crates have been marked identifying plunger sections and top ends. When possible, the bottom plunger section may be shipped inside the cylinder. Do not uncrate until plunger sections are standing in the hoistway with tops up. Provide safety sling under crate bottom when hoisting. Plunger sections are covered with plastic film and rust proofing compound. It is recommended that this protective compound not be removed until entire assembled plunger is ready to be cleaned and head installed. This could be very important if for any reason it was necessary to leave the job for any extended period of time such as overnight or weekend.

Plunger sections are joined with a short length of 1-14” connecting bolt, and are sealed with Loctite with Teflon (supplied). Wrenches for assembly are shipped inside plunger sections.

Lower bottom section into cylinder, suspended by wood clamping blocks located 2” below plunger joint. Make sure that fin thread of connecting bolt are threaded all the way into plate in mid section and backed out two turns. This has been factory set and should not require any change in the field. Thoroughly clean counter bore in mid plunger section and machined shoulder on bottom section. Apply Loctite on all machined surfaces of joint so that all areas are covered. Align the ¾” alignment pin with offset hole in bottom section and lower mid section until coarse threads of connecting bolt just touches threaded plate in bottom section. Using ¾” drive extension, tighten connecting bolt until joint is pulled together. This requires approximately 18 turns. Torque to approximately 500ft. pounds while holding plunger so that it cannot wobble. Loosen plunger clamps and lower sections into cylinder and reclamp as instructed above. Remove ¾” drive extension and repeat above process for each mid to mid section assembly, using ¾” drive extension to tighten as above. For top to mid assembly, use 1-3/4” 12 point socket in top section. Tighten connecting bolt until joint is pulled together. This requires approximately 18 turns and 500 ft. pounds to complete assembly.

Raise assembled plunger and clean thoroughly as plunger is carefully lowered into cylinder. Assemble head and immediately fill assembly with oil.