HYDRALIFT
RMOW

OPERATION MANUAL

TOOLS NEEDED

Hydralift Kit (Hydralift, Hydraulic Pump with Charged Batteries, 3", 6", and 9" Spacer, Hydrastick, Hose Assembly), Torque Wrench with 1.25" Socket, 3-bolt Polished Rod Clamp (same size as subject polished rod), small crescent wrench. For Double plate configuration, you will need an additional 4 Hydralift Screws as well as an additional plate.

THE Hydralift KIT

PACKAGED IN PELICAN CASE

HYDRAULIC PUMP

The hydraulic pumps powerful 0,37 kw motor and *qty2 28 volt lithium-ion battery deliver exceptional speed and run time. This allows operation of the hydraulic pump anywhere at any time. *Operates on one battery and back up battery included.

Stacking permanent spacers is not recommended.

PERMANENT SPACERS

Permanent spacers are designed in 3", 6", and 9" sizes. The interior spacer teardrop design allows for easy removal or insertion of the spacer.

SPACER POLE/PAWL ENGAGER

Spacer pole/pawl engager is designed to lift the permanent spacers into position or remove easily. Allowing the operator to stand safely on the ground with no additional equipment.

OPERATION MANUAL - STEP BY STEP

1. SHUT DOWN PUMPING UNIT AND LOCK OUT/TAG OUT
2. INSPECT AND INSTALLATION OF HYDRALIFT
3. INSTALLATION OF TEMPORARY CLAMP
4. LIFT RODS WITH HYDRAULIC PUMP TO DESIRED HEIGHT
5. ENGAGE POSITIVE LOCKOUT BY INSTALLING SPACERS
6. UNDER HYDRALIFT
7. INSTALLATION OF THE PERMANENT SPACER
8. LOWERING THE RODS BACK ON THE CARRIER BAR
9. HYDRALIFT REMOVAL
10. RESTART WELL

DETAILS FOR STEP1:

SHUT DOWN PUMPING UNIT AND LOTO

Stop pumping unit with head down per user's company policy. In situations where the carrier bar is too close to the stuffing box, the operator may choose to stop the unit sooner in the stroke. With Hydralift, you may stop the unit anywhere in the stroke necessary to allow enough room for Hydralift to lift. Set brake. Insert brake pall correctly by fully inserting into slot on hub, or chain the gearbox sheave to the pumping unit skid to lock out potential energy of pumping unit. Lock out and Tag out unit and Try to restart.

DETAILS FOR STEP2 :

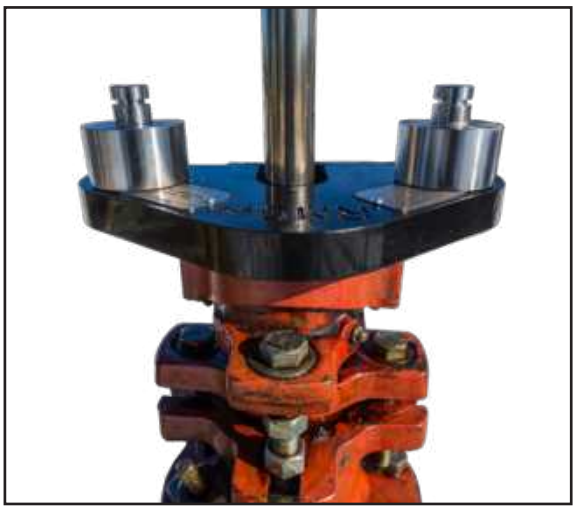
INSPECT AND INSTALLATION OF HYDRALIFT

a. Remove Hydralift system from case. Inspect all fittings and hoses for wear and visually ensure integrity. Lifting plates should be free of deformities, hoses free of nicks or cuts, and fittings clean and not leaking fluid.

b. Clean polished rod surface with company approved cleaning solvent. Do not use solvents that contain lubricants. Hydralift recommends brake cleaner for this task if this is allowable per company statutes.

DETAILS FOR STEP2 CONT. :

c. For Double Plate configuration- Attach feet to bottom plate with provided bolts (see diagram for correct orientation), and install bottom plate on top of stuffing box. Remove the O rings from the feet as these are only used with a single plate configuration. Set Hydralift cylinders over the feet by alternating the top plate opening from that of the bottom plate opening. Latch gate on front of plates. Note- While some stuffing boxes are designed to support the weight of the rods on their top sections, others may require an adjustment first. This is the case when two of the packing bolts of the stuffing box have 4 nuts provided (2 on either side of the stuffing box bolts) that require adjustments up and down to support the top portion of the stuffing box and avoid smashing packing.



Remove feet by rotating counter clockwise. This is imperative for the double plate configuration.

DETAILS FOR STEP2 CONT. :

d. for single plate configuration- Place the Hydralift over stuffing box, slide polished rod into slot on top plate, and set the Hydralift legs down onto the stuffing box flange. The legs should rest between the rings of the stuffing box. Rotate the swivel feet until they sit completely over the bolts of the stuffing box flange. The Hydralift should always have a steady footing and the top plate should be visually level.

e. Inspect the quick connect fittings. Fittings should be completely clean and not leaking prior to connecting. Use cleaning solvent to clean both sides of the hose connections when necessary. The hydraulic quick connect fittings provided only require hand tightened. However it is important to ensure that the threaded quick connect fittings are fully engaged.

DETAILS FOR STEP 3 :

Install a temporary polished rod clamp or clamps directly above the Hydralift on the clean polished rod. The clamp should match both the diameter and weight requirements of the lift being performed and the polished rod. Torque the clamp to manufacturer's recommendations. Failure to do so can result in the polished rod slipping or damage to the polished rod. Install the clamp directly above the top plate of the Hydralift.

DETAILS FOR STEP 4 :

LIFT THE RODS WITH HYDRAULIC PUMP TO THE DESIRED HEIGHT

Lift the polished rod by setting the pump valve to "A" position. Unlock trigger safety on top of handle, and pull trigger underneath handle. Raise Hydralift the minimum height required for the job being performed. (for example, to install a 6" spacer, only raise the rods enough to fit the spacer into the slot, about 7") As Hydralift ascends, a gap should be created between the carrier bar and the permanent polished rod clamp. Set trigger safety to locked position.

DETAILS FOR STEP 5 :

ENGAGE POSITIVE LOCKOUT BY INSTALLING SPACERS UNDER THE HYDRALIFT

a. Only when the permanent clamp needs adjustment will the positive lockout need installed.

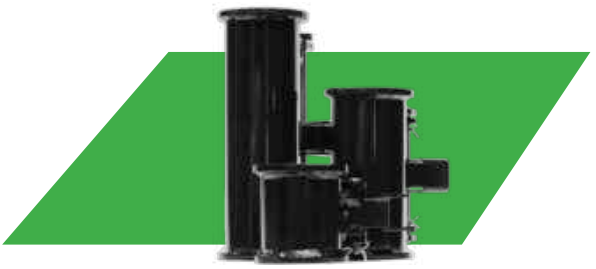
b. For a double plate configuration- Lockout potential energy of Hydralift by placing the spacers around the polished rod, below the top plate and above the bottom plate. Spacers should be stacked as close to top plate as possible. Lower the Hydralift to gently rest on spacers eliminating dead space between the stuffing box and the top plate. This lockout procedure protects operators from the pressure of the system in the event of fluid loss from the hose or cylinders.

c. For single plate configuration- Lockout potential energy of Hydralift by placing the spacers around the polished rod, below the top plate and above the stuffing box. Spacers should be stacked as close to top plate as possible. Lower the Hydralift to gently rest on spacers eliminating dead space between the stuffing box and the top plate. This lockout procedure protects operators from the pressure of the system in the event of fluid loss from the hose or cylinders.

DETAILS FOR STEP 6 :

INSTALLATION OF PERMANENT SPACERS

a. Spacers come in 3",6", and 9" lengths. Selecting the required spacer length is based on the intensity of the tag. For very light tags use 3" spacers, for medium tags use 6" spacers and for hard tags use the 9" spacer. If the tag cannot be removed with the 9" spacer, the permanent clamp will need moved.



b. Spacers are installed using the Hydrastick. Hold the spacer in the open position and slide the square rod of the Hydrastick through the inner most set of holes. The rod should hold the spacer open. Raise the spacer into position between the permanent clamp and the carrier bar. Spacers are recommended to be installed above the rod rotator. Push the spacer inward, against the polished rod and pull down with the Hydrastick. The spring loaded device will close around the polished rod.

c. To remove spacers, use the back two holes of the spacer. Once the weight of the rods is removed from the spacer, Slip the Hydrastick through the back set of holes, and pull out away from the rod. The teardrop design will allow the spring to open and the spacer to be removed. This may require a gentle jerk to get started.

DETAILS FOR STEP 7:

LOWERING THE RODS BACK ONTO THE CARRIER BAR

a. Remove the positive lockout spacers if necessary

b. Lowering the Hydralift is performed by slowly turning the valve on the pump to the “T” position. The speed of the descent is controlled by this operation and should be done as slow as possible. Quickly turning the valve handle is not recommended.

c. Release the pressure on the system until the Hydralift has fully retracted and the gauge on the pump reads 0 psi.

DETAILS FOR STEP 8 :

REMOVAL OF EQUIPMENT

a. Begin with the removal of the temporary clamp. Only remove temporary clamp if Hydralift is fully retracted and gauge reads 0 Psi. Verify that clamp is not holding any weight before removing. Remove clamp slowly and carefully.

b. Remove the Hydralift hose only when the gauge reads 0 Psi, the Hydralift is fully retracted, the pump valve is in the T position, and the temporary clamp has been removed. Once disconnected from the cylinders and pump, place directly into case. Do not set on ground.

c. Remove Hydralift from wellhead by opening the gate closure on the front of the unit. Lift unit up over stuffing box and then out away from rod. Place directly into case.

DETAILS FOR STEP 9 :

RESTART PUMPING UNIT

a. Always follow company procedures for removal of LOTO. Utilize company procedures for restarting unit. Check well for pump tag. Never leave a well tagging unsupervised. Never run a unit with Hydralift sitting on the stuffing box.

b. Use the time and money you saved on the next well to increase production and efficiencies.