

Mechanical Shift Up Tubing Release Running Procedures

Running Procedure:

The LRI tubing release is used when dropping of the gun assembly to the bottom of the well bore is desired. Hole depth and tubing string will determine placement of shifting tool, however a minimum of 10m (32ft.) between the tubing release and firing head is recommended.

Make up and run the perforating assembly to the point of the Mechanical Tubing Release.

The Mechanical Tubing Release should be made up independently from the string and tightened only with pipe wrenches ensuring the wrenches are placed on the bottom half of the tool on the knurl and the tubing upset. (Power tongs should not be used)

Note: Do not apply torque through the Tubing Release when making up tubing onto the tool.

Make up the next pup joint in the assembly. Placing the back up wrench on the knurl on top of the Mechanical Tubing Release, tighten the pup joint in with pipe wrenches only. (Again, power tongs should not be used)

To ensure the Mechanical Tubing Release will hold the weight of the perforating assembly before removing the slips pick up the string 2 – 3 ft.

Remove slips and continue running assembly in the hole.

Precautions:

To avoid accidental/premature shifting of the guns LRI recommends spacing the Mechanical Tubing Release at least 10m from the Firing Head, as the drop bar can be jarred up and accidentally shift the tool when the carriers are fired.

Any openings in the assembly if possible should be kept above the Mechanical Tubing Release as well flow could wash open the shifting sleeve prematurely dropping the carriers.

The fluid cushion should be kept well above the Mechanical Tubing Release to prevent the rush of fluid from shifting the tool string prematurely when the drop bar hits the fluid.

Always ensure that there are no restrictions smaller than the shifting sleeve I.D. above the Mechanical Tubing Release. Restrictions will prevent the shifting tools from reaching the Mechanical Tubing Release.

Precautions:

If swedging down to smaller tubing (i.e. 2 7/8 to 2 3/8) the tubing joint directly below the Mechanical Tubing Release should be the same size as the tubing joint directly above, because the shifting tool needs to pass through the Release then back up to shift the string.

Ensure that all tools run inside the tubing string (logging, swabbing, ect.) are kept well away from the Mechanical Tubing Release to prevent them from getting stuck in the shifting tool causing accidental dropping of the guns.



Releasing Procedures:

If possible the drop bar should be retrieved prior to shifting the release. This is not mandatory, however it provides a good reference for depth control. Be sure to run the proper overshot, LRI drop bars have 1 inch fish necks.

Use an Otis type “B” shifting tool with positive keys corresponding to the I.D. of the shifting latch.

The shifting tool should pass all the way through the Mechanical Tubing Release then pick up to engage the shifting latch, gently jar up to shear the screws that hold the latch in place and shift the tool.

After jarring proceed down hole to verify that the guns have dropped off, if the guns have not dropped continue jarring until guns have be dropped.

Once the guns have dropped, continue jarring up with full force until the shear pin in the Otis shifting tool shears and the keys collapse. The shifting tool can than be returned to surface. Once at surface the shifting tool should be inspected to confirm that the pin has sheared. This provides further confirmation that the release has been shifted correctly. content goes here