

# Universal Liner Lifting Tool

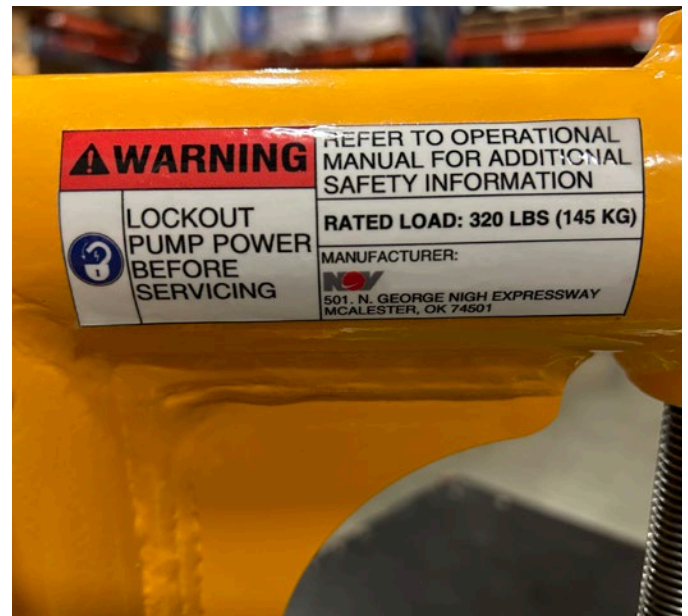
Safely and easily lift your mud pump liners



The MISSION Universal Liner Lifting Tool solves an array of lifting and safety issues surrounding the removal and installation of mud pump liners.

Mud pump liners can be heavy, especially in high horsepower, high pressure pump models. The mud pump rod chamber has uneven surfaces which are usually covered in a layer of slippery drilling mud and the liner bushing is typically low in the pump's frame, resulting in poor maintenance ergonomics. These factors create a rather dangerous environment and can result in numerous back and hand injuries during liner change out.

Our Universal Liner Lifting Tool allows the pump liner to be safely lifted, transported to the pump, and installed within the liner bushing. The device features redundant retention mechanisms for the liner which are a threaded T-handle set screw along with retention shoulder.





## Features and Benefits:

### Design Benefits

- Promotes personnel safety by preventing costly lost time accidents as well as promoting general health through an ergonomic design.
- Light weight – weighs approximately 40 lbs and is compliant with offshore weight restrictions.
- Multiple suspension points for the lifting shackle ensures level liner suspension on virtually any liner design.

### Added Value

- One tool fits all makes and models of triplex mud pumps.
- Two guide handles provide assistance in guiding the liner into the liner bushing or cradle. Being able to steer the liner prevents damage to the end of the liner, liner retention components, and liner wear plate.

### Operational Advantages

- Since the tool is truly universal, one part number can be used as the standard liner lifting device across a drilling fleet, allowing for simple and consistent pump maintenance procedures regardless of mud pump model.
- Eliminates the unsafe use of chains, straps, and homemade lifting devices that can cause equipment damage and falling object hazards.