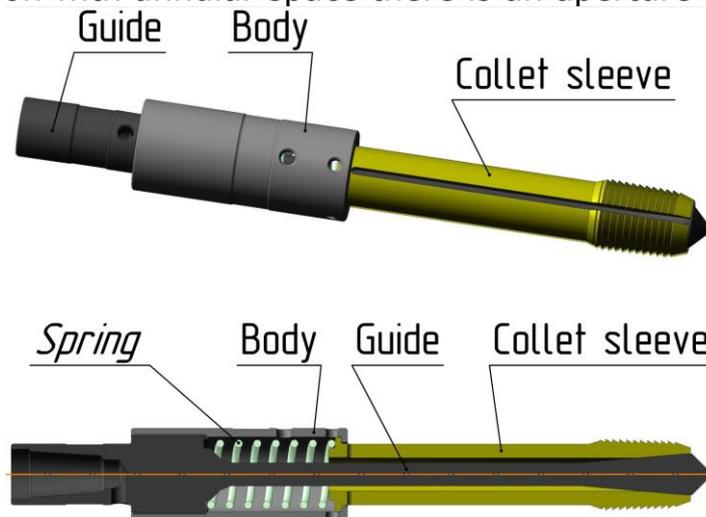


Nonreleasing Spear type TLV 1

The nonreleasing spear is used to retrieve elements of arrangements during repairing and emergency operations in the well using coiled tubing units.

The nonreleasing spear consists of body, guide, collet sleeve and spring. There is fishing thread with thrust profile at the external surface of collet sleeve. Connection thread is made at the top of guide. The body is attached to guide by pipe thread. The nonreleasing spear does not have a watercourse, to provide connection with annular space there is an aperture in the upper sub.



After lowering the arrangement, 2-3 m before the "head" of emergency tool fix the weight of tool. Insert the spear into emergency element. Stretch the fishing string (should be fixed along changes of weight indicator). Lift the arrangement.

To detach the spear from caught pipe at the surface it is necessary to create compression pressure on "spear-pipe" connection in order to wedge the collet sleeve, set the fixing bolt M10, press collet sleeve blades using bolts M8 and then extract the spear.

If detachment does not happen it is necessary to press blades more, tap the blades in radial direction using the hammer rod made of soft metal (copper, brass, bronze). Prepare the spear for next lowering.

Code	ID of caught pipes, in	Body OD, in	Total length, ft	Load capacity, lbf	Connecting thread	Weight, lb
TLV1-60	<i>1.57-1.81</i>	<i>4.84</i>	<i>1.5</i>	<i>26 980</i>	<i>1" AMMT</i>	<i>9.04</i>