Model E Hydraulic Setting Tool

Used to run and set packers, bridge plugs, and cement retainers on a workstring, production tubing, or coiled tubing

APPLICATIONS
- Deviated or horizontal wells
- Applications where wireline setting tools are not practical

BENEFITS
- Design allows applications for higher setting pressures
- Tool accepts any WLAK designed for Schlumberger CPST or Baker E-4 pressure-setting tools

FEATURES
- Automatic fill valve
- Tubing drain that opens after setting packer
- Tandem applications possible
- Auto-fill and tubing-drain features able to be deactivated

The Model E setting tool translates hydraulic pressure applied to the tubing to a force transmitted through the Schlumberger wireline adapter kit (WLAK) to the packer, plug, or retainer to fully set the slips and pack off the sealing element of these tools.

Operation
The Model E setting tool and WLAK are assembled to a packer, bridge plug, or cement retainer that is commonly set with a wireline-deployed pressure setting tool. Use of the Model E is particularly well suited for installation of packers, plugs, or retainers in highly deviated or horizontal wells where wireline operations are either impractical or not recommended.

As the packer and setting tool assembly are lowered into the wellbore, the automatic fill feature allows the tubing to fill with well fluid as the tools are run. When the packer has reached the desired depth, pressure is applied to the tubing string. Hydraulic pressure acts on the internal piston in the setting tool, creating the push/pull action necessary to set the device as it is being installed. When the device is fully set, pressure is increased to the value of the shear stud connecting the setting tool to the WLAK. The shear stud parts and releases the WLAK from the packer, leaving the setting assembly free to be retrieved. After the Model E setting tool has sheared and released from the packer, a tubing drain system is activated. As the tubing string and setting tool are retrieved, the fluid in the tubing is discharged to avoid having to pull a wet string.