

## Casing Equipment Plug Setting Aids

# BHKA™ plug setting disconnect tool

Simplify cement plug placement

### FEATURES

- Dart-operated collet mechanism for string separation and safe release of sacrificial tail pipe
- Outer body castellation design with torque rating to 24,840 lb-ft
- Drillable and non-drillable options with tensile rating to 240 Klbf

### BENEFITS

- Disconnect mechanism minimizes swab of the cement plug while the workstring is POOH
- Body design enables string rotation beyond the BHKA position to ensure TD is achieved
- MCXV darts enable tool placement anywhere in the well trajectory
- Simplifies cement plug setting to reduce operational time, risk, and costs

### Overview

Cement plug placement in well abandonment is a challenge when multiple stacked plugs are necessary. This process leads to wait-on-cement (WOC) time and can limit the cement fluid design. Cement contamination risks occur when the string is pulled out on a conventional balanced plug, which can lead to operational repetition. These issues can extend operations from hours to days.

To minimize cement plug disturbance, the pull-out-of-hole (POOH) speed is limited, and pipe geometry is adjusted. Plug lengths are commonly restricted to 200 to 300 m, which requires multiple stacked plugs, each with its own risks and challenges. Cement slurry designs must ensure stability and early compressive strength. Safe strings are used to prevent string sticking downhole. Despite these measures, repeated operations are often necessary, which impacts operational efficiency and increases mud and fluid disposal costs.

The Halliburton BHKA™ plug setting disconnect tool simplifies cement plug placement when necessary during well construction or abandonment operations. The tool allows the downstream portion of the workstring to release within the cement plug, which eliminates the need to swab it out of the cement plug. This helps place a competent cement plug on the first attempt, prevents cement plug disturbance, enables longer cement plugs, and reduces operational time and fluid waste.

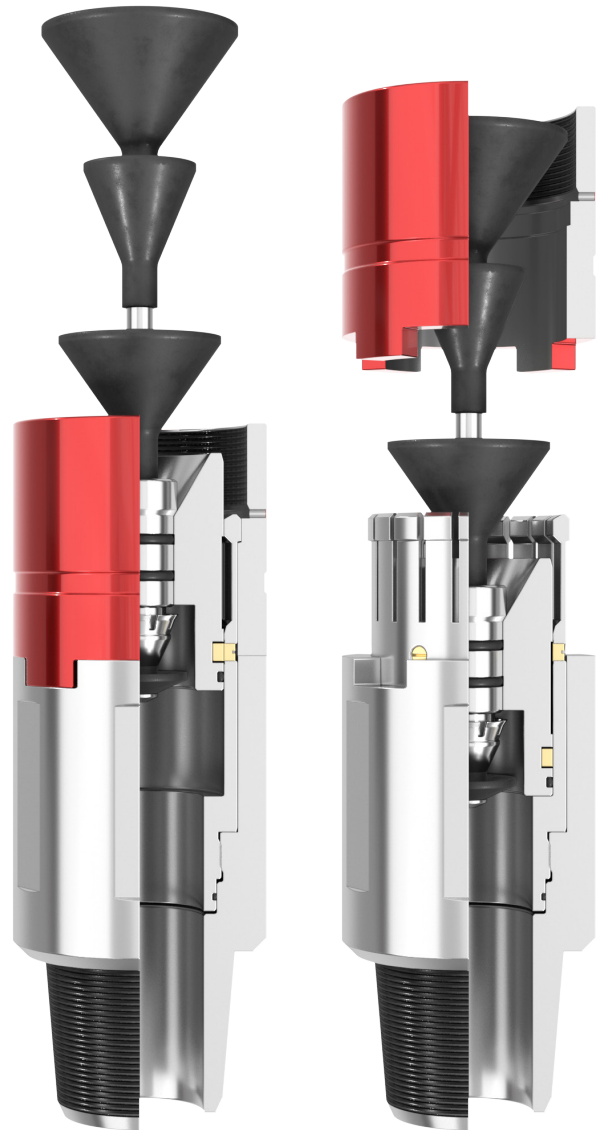
### Simplify cement plug setting during well construction and abandonment operations

The BHKA plug setting aid features a single-collet release mechanism, part of the Halliburton SSR® plug system, activated by an MCXV displacement dart. The displacement dart enables fluid separation down the string and the retaining pins to be sheared with applied pressure. This mechanism quickly releases the downstream tail pipe, provides a clear surface pressure indication, and eliminates the need to pull the string out of the plug length. As a result, there is no cement plug disturbance, and the risk of cement contamination is minimized. The BHKA plug setting aid meets multiple isolation requirements in a single cement operation. It also effectively places reduced-volume kickoff or sidetrack cement plugs.

The BHKA plug setting tool:

- Enables unlimited cement plug length through disconnection of the work string from the tailpipe. This reduces the risk the string will become stuck and eliminates the need for multiple plugs and WOC in between plugs.
- Allows aggressive cement slurry design for quick compressive and gel strength development because it eliminates the need to POOH. This reduces WOC times and improves cement plug tagging reliability.
- Enables full-string pipe movement using a high-tensile rated collet release mechanism unaffected by string rotation. This ensures total depth (TD) is achieved and cement best practices are executed.
- Provides safe string separation and release of sacrificial tail pipe through a field-proven Halliburton single-collet release mechanism and MCXV displacement dart. This minimizes fluid contamination throughout the cement operation.
- Offers secondary release mechanism with left-hand torque capability for safer back-out of the tool and enhanced reliability.

The BHKA plug setting disconnect tool is available in drillable (aluminum) and non-drillable (steel) versions and offers high tensile and torque ratings. The tool boasts a 99% safe release success rate, has successfully operated in various well profiles (to include vertical and highly deviated wells), and has achieved the longest cement plug placement of 2730 m.



For more information, contact your local Halliburton representative or visit us on the web at [www.halliburton.com](http://www.halliburton.com)

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