

Weatherford Single-Wiper Plug II With Integrated Ball Seat

Reduces the risk of damage in pressure-sensitive formations

Applications

- Any liner for which a single-wiper plug is required

Features and Benefits

- The integral ball seat located on the Weatherford single-wiper plug II (WSWP II) can be reached by the setting ball without traveling through the larger liner. This design provides more reliability than conventional landing-collar ball sets and minimizes the potential for nonproductive time (NPT).
- When the integral ball seat is sheared, the pressure dissipates in the liner volume, which significantly reduces the possibility of formation damage resulting from hydraulic shock.
- The WSWP II withstands high bump pressures and high backpressures.
- The lab-tested, field-proven nonrotating latch system prevents the WSWP II and Weatherford dart single wiper plug (WDSL) drillpipe dart from rotating during drillout of the landing collar, which saves rig time.
- Aluminum and elastomeric materials make the WSWP II drillable using a polycrystalline-diamond-compact (PDC) bit, which simplifies drillout operations.
- A set of profiled dogs, rather than shear screws, lock the WSWP II to the running-tool string, which reduces the risk of premature release and associated NPT.
- The fin and backup ring configuration makes the hydrogenated nitrile butadiene rubber (HNBR) fins capable of withstanding high differential pressure, which enables them to effectively wipe the liner ID and act as the lower packoff.
- A single WDSL drillpipe dart can activate the Weatherford liner wiper plug II (WLWP II) or the WSWP II.

Tool Description

The Weatherford single-wiper plug II (WSWP II) is a premium offering that separates drilling fluids from the cement during displacement. Recommended for pressure-sensitive formations, the WSWP II features a ball seat located on the wiper plug that mitigates surge pressure when the seat is sheared.



The WSWP II has an integral ball seat that increases the reliability of the tool and decreases the possibility of formation damage.



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Tool Description (continued)

The integral ball seat activates hydraulic liner hangers and releases hydraulic running tools. The WSWP II is typically used in conjunction with the Weatherford jointed system. Therefore, the plug does not move in relation to the running tool when picking up to verify that the running tool has been released.

The compatible WDSL drillpipe dart is released behind the cement. When it reaches the WSWP II plug, the dart latches and seals into the inner body of the plug, and differential pressure across the plug launches the plug from the plug adapter. The plug is displaced through the liner and acts as a mechanical barrier behind the cement. Then the plug lands, latches in the landing collar, and creates a positive seal from both above and below the landing collar.

Specifications

Please contact an authorized Weatherford representative.

Options

- The WSWP II plug is available without the ball seat.
- An available five-fin WSWP II further enhances the wiping capability of the plug.

