

Eliminator™ H Model 754 Stage Tool

Enables stage cementing operations through use of a hydraulically opened port system

Applications

- Stage cementing necessitated by weak formations or well hydrostatics
- Stage cementing in deep vertical or highly deviated horizontal wells
- Stage cementing with a packer to isolate weak formations below

Features and Benefits

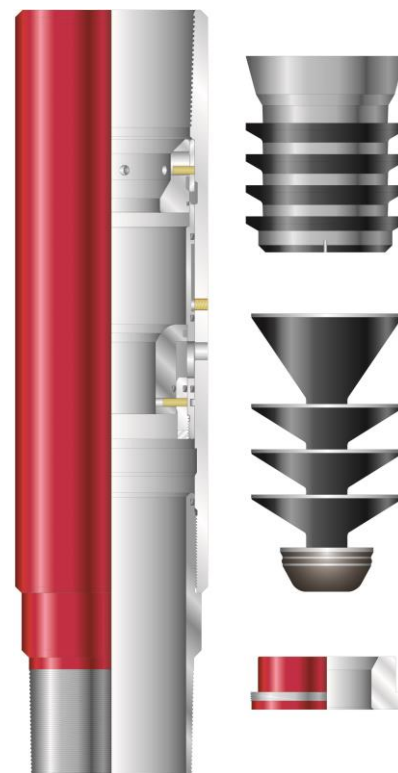
- The tool reduces total pumping and hydrostatic pressure on weak zones and prevents lost circulation during cementing.
- The tool can be opened without a free-fall opening cone, which enables operations in highly deviated wells.
- Shear pins can be adjusted at the rig site, which enables the operator to adjust opening pressures to specific well requirements.
- HNBR seals are API RP2-rated for H₂S and CO₂ environments.
- The absence of an opening cone along with PDC-drillable materials accelerates drillout and saves costly rig time.

Tool Description

The Weatherford Eliminator H Model 754 stage tool facilitates cementing at any hole angle through use of a hydraulically opened port system. The tool is PDC-drillable and equipped with removable, field-adjustable shear pins that enable the operator to select opening pressures as required at the wellsite. Hydraulically opened by internal casing pressure, the stage tool eliminates the need for—and cost of—a free-fall plug.

For two-stage cementing operations, the first stage cement slurry is followed by a first-stage shutoff plug. When the first-stage shutoff plug lands on the shutoff baffle below the stage tool, the resulting increase in internal casing pressure hydraulically opens the stage tool and enables circulation. Second-stage cement then passes through the ports and into the annulus above the tool. After the closing plug is released, it wipes cement from the casing ID before bumping on a closing seat that is connected to the unitary sleeve. The resulting pressure increase shifts the closing seat downward, which releases the locking lugs and allows the unitary sleeve to move down across the ports and close the tool. A snap ring locks the sleeve in position and ensures the stage tool remains locked.

For three-stage cementing operations, Weatherford offers a 754TP Model for use as a lower-stage tool with a Model 751E Eliminator M stage tool on top. The 754TP features a smaller-ID closing seat and flexible closing plug that is necessary to close the lower-stage tool after displacement.



The Eliminator H Model 754 stage tool features a hydraulically opened port system that facilitates cementing at any hole angle.



Eliminator™ H Model 754 Stage Tool

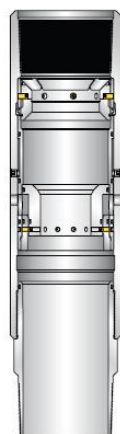
Options

- Custom sizes, materials and threads available upon request.
- Casing plug sets are available for stage cementing casing strings.
- Model 854BS liner plug set are available for stage cementing liner strings.
- A free-fall opening cone is available if casing pressure cannot be generated to open the tool.
- Viton® seals are available for high temperature applications.
- The tool is compatible with Weatherford BULLDOG™ annulus casing packers and mechanical ball seat.

Specifications

Size range	4 1/2 to 13 3/8 in. (114.3 to 339.7 mm)
Temperature rating for HNBR seals (standard)	350°F (177°C)
Temperature rating for Viton seals (special order)	400°F (204°C)

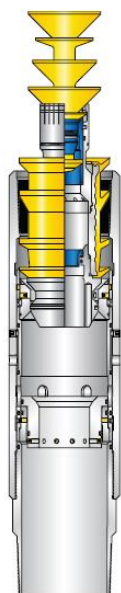
The drawings below illustrate liner operating sequence (left) and the casing operating sequence (right).



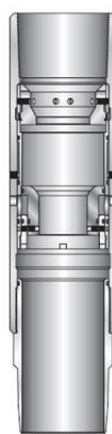
Running in hole: ports closed



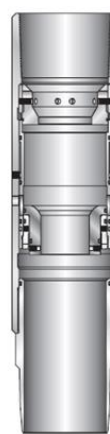
First-stage shutoff plug: opens ports



Bump closing plug: closes ports



Ports closed: running in hole



Ports closed: cementing complete



Ports open: cementing



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