



BIG JOHN Hydraulic Jar

The **BIG JOHN Hydraulic Jar** is included as part of a toolstring to help remove stuck tools.

The BIG JOHN Hydraulic Jar helps free a stuck tool or toolstring by resisting a pull on the workstring. When the workstring is stretched by the pull, tension in the Jar is released and an upward impact is delivered to the stuck tool.

Features

- 1) Design of the hydraulic system ensures long life with little maintenance.
- 2) Rig time is reduced.
- 3) Jar can be recocked rapidly.
- 4) Jar time delay is adjustable.
- 5) Amount of pull to trip the jar can be varied within the limits of the time-delay system.

Operation

The temporary resistance that powers the Jar is provided by a hydraulic time-delay system. Resistance is released when the metering sleeve inside the BIG JOHN Hydraulic Jar moves into a bypass section of the outer case. This action allows the special hydraulic oil to bypass rapidly.

The time delay required to release the temporary resistance varies in relation to the weight of the pull. For example, a light pull requires more time for release than a hard pull.

When tools below the Jar are stuck, a steady pull applied to the Jar creates an upward impact blow to the string. The Jar can be recocked when the string is set down.





| BIG JOHN Hydraulic Jar | | | | | | | | |
|------------------------|------|------|--------|------------|---------------|---------------|----------------|-------|
| Tool Size | O.D. | I.D. | Length | Connection | Service Temp. | Stroke Length | Tensile Rating | W.P. |
| In. | In. | In. | In. | / | °F | in | lb | Psi. |
| 3-7/8" | 3.90 | 1.26 | 61.97 | 3-1/8"-8UN | 350 | 10.0 | 232273 | 15000 |
| | | | 63.15 | 2-7/8" EUE | | | | |
| | | | 64.49 | 2-7/8" CAS | | | | |
| 5" | 5.03 | 2.24 | 66.73 | NC38 | 400 | 10.0 | 316296 | 15000 |
| | | | 66.73 | 3-1/2" IF | | | | |
| | | | 66.73 | 3-7/8" CAS | | | | |

- 1) Other sizes available on request.
- 2) Meets requirements of NACE-0175 (>175°F)
- 3) The values of tensile, burst, and collapse strength are calculated with new tool conditions.
- 4) Pressure rating is the differential pressure at the tool. (Differential pressure is the difference in pressure between the casing annulus and the tool ID.)

Subject to change without notice