

## Make-Up Procedures

- Potential Hazards:** **Crushing** - Crew is advised to keep out from underneath the tool when elevated
- Crushing** - The tool is assembled with a mechanical spring which may be accessible during rig in depending on tool configuration. If weight is set on the tool, the spring will collapse, resulting in a potential pinch point. is
- Cutting/ Severing** - The tool body contains holes. The crew is advised to keep fingers away from open holes as the possibility of cutting or severing if the tool opens.
- Cutting**- The Bit is tipped with tungsten carbide which is sharp. The crew is advised not to handle the tool by the bit.

- 1) Close The Blind Rams.
- 2) Lift the tool into position above hole.
- 3) Set Slips On the top steel crossover, below the casing collar.
- 4) Before making top connection, apply thread lock to the connection. Make-up to the optimum torque specifications listed above.
- 5) Set float collar on top of the tool, or at the desired position in the string.
- 6) Once attached to the casing string, lift tool and remove slips.
- 8) Tool is ready to run in. Follow SOP while opening blind rams.

## Operating Procedures

- 1) Once the Auto-Set is through the table, continue running in the casing string as normal.
- 2) Once you tag an obstruction, set between 10 - 12 Kdecs on the tool. As the tool is spring loaded, there is no need to engage the mud pumps.
- 3) Mark the depth position on the casing string where it meets the table. and then slowly lift the casing to take the stretch out of the string, and then pick-up approximately an additional 6 feet. Run the tool in quickly, stopping when the weight indicator shows between 10 - 12Kdecs on the tool.
- 4) Repeat step 2-3 as necessary until the obstruction has been cleared and you can continue to run the casing string in. If another tight spot or obstruction is tagged further in hole, the tool can be employed to clear it using procedures 2 and 3.
- 5) Once the tool and string is at the desired depth, packers and/or cementing operations can proceed as normal.

## Drillout Procedures

- Tool Is NOT Drillable** - The Auto-Set is comprised of steel components and would require milling operations to cut through.