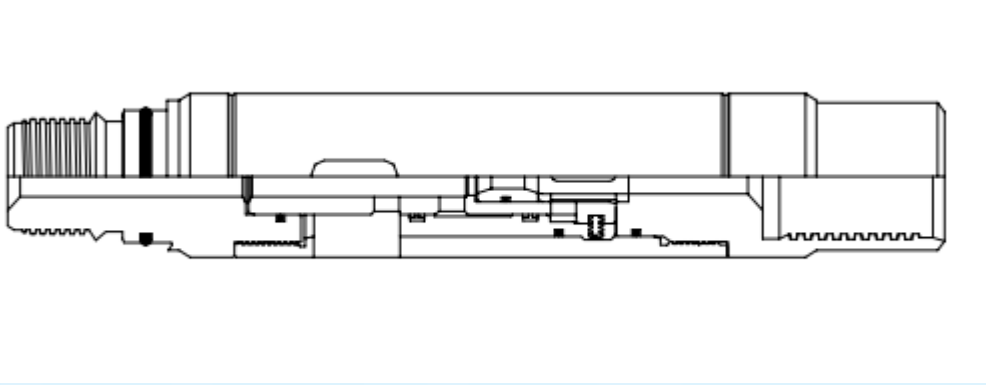
Thru-Tubing Inflation Valve



Editor: Jalal Alali

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- Introduction of Tool
- Disassembly
- Assembly

Introduction:

- The Thru-Tubing Inflation Valve is run in order to provide a communication path from the tubing to the annulus so that fluid can be circulated down the tubing while running in the hole. Another important function of the inflation valve is to equalize the pressure from the tool ID to the wellbore while running in the hole. This prevents damage to the inflatable element and insures that the poppet is not seated too tightly in the poppet seat by wellbore pressure.

Required hand tools

- Pipe Wrench
- Screw driver
- Special tool
- hammer

Disassembly

- 1- Place tool in vise at housing
- 2- Unscrew top sub from housing

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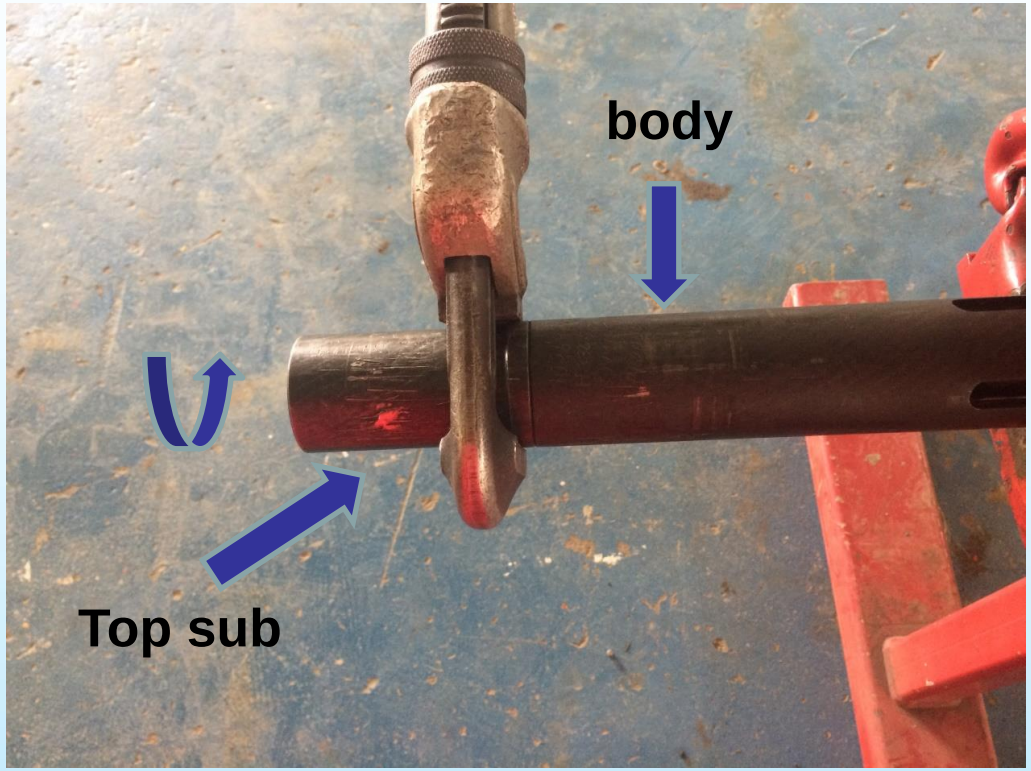

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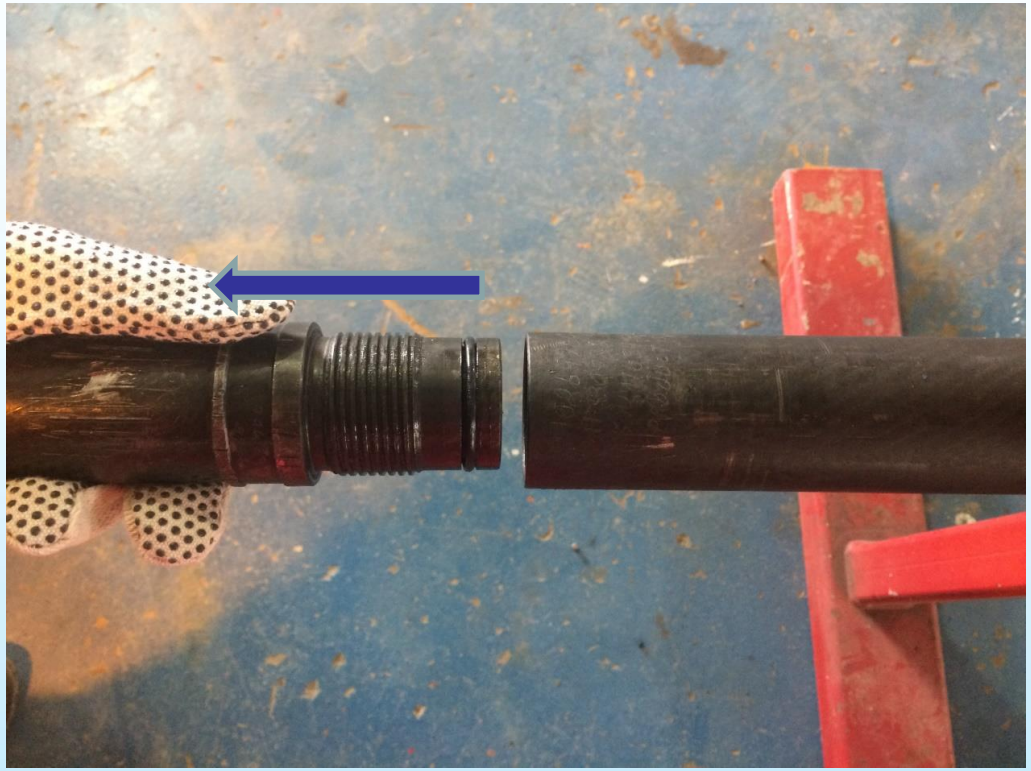
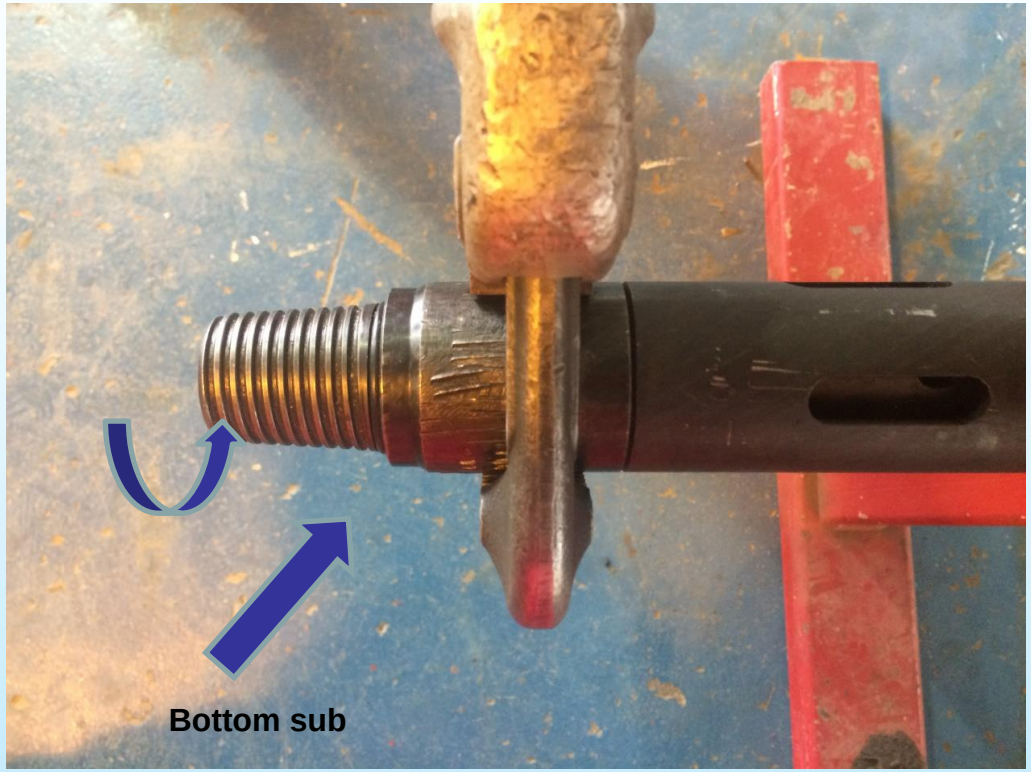


3- Unscrew bottom sub from housing

A



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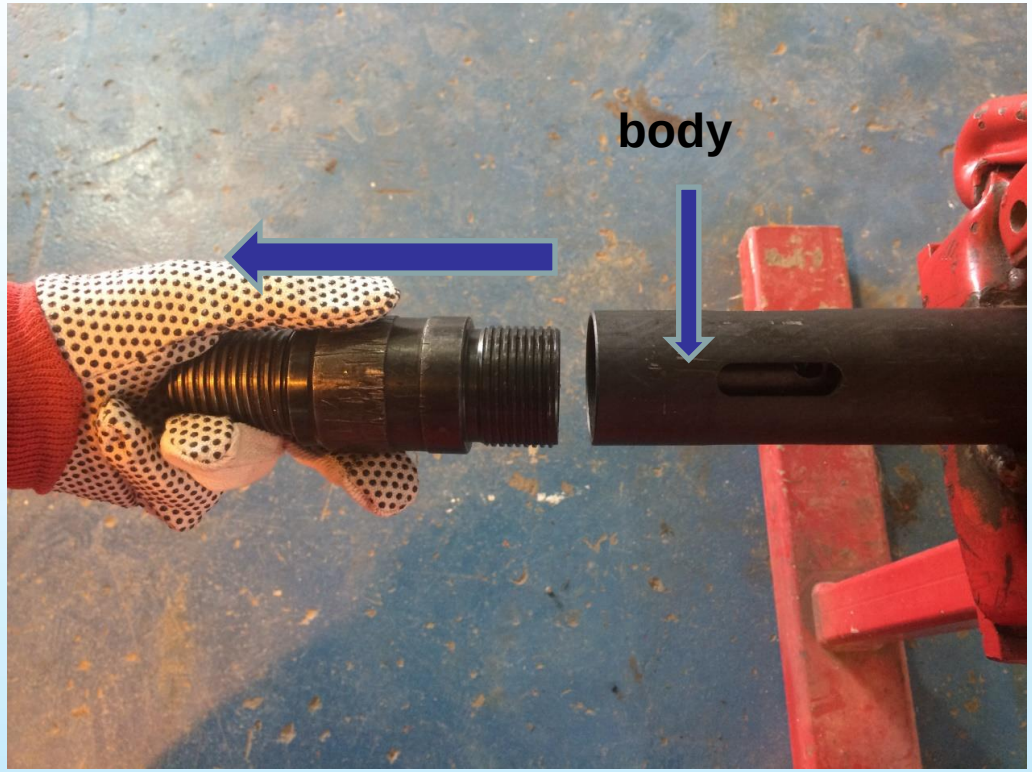

- 4- slide body and piston out of housing .

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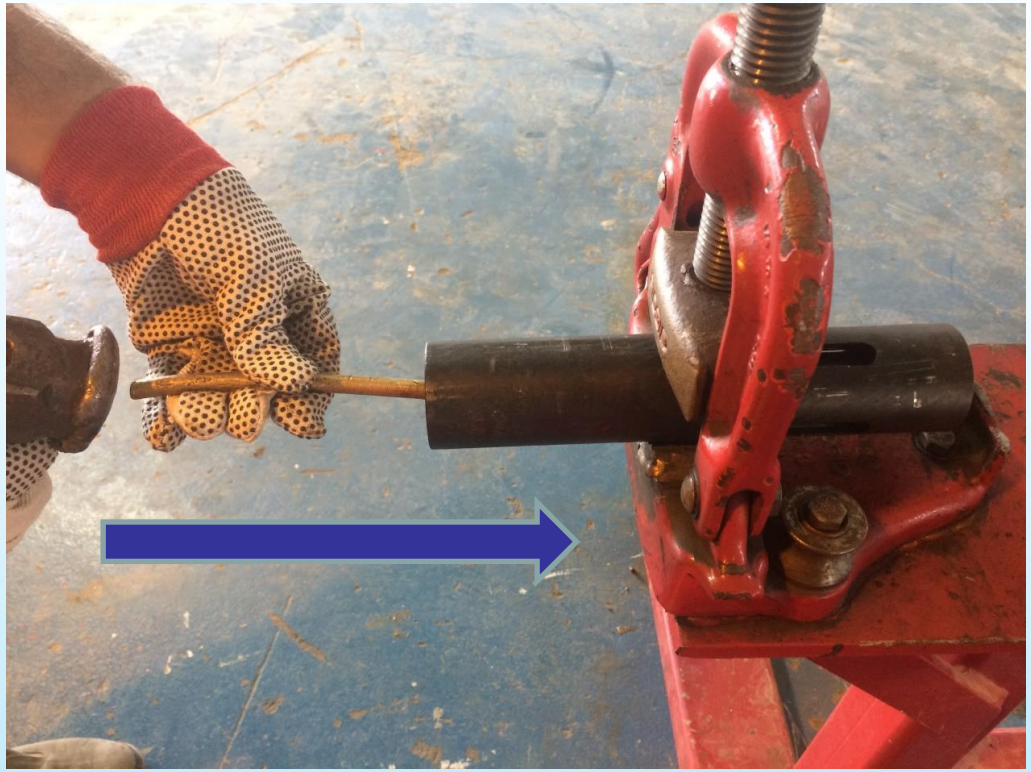

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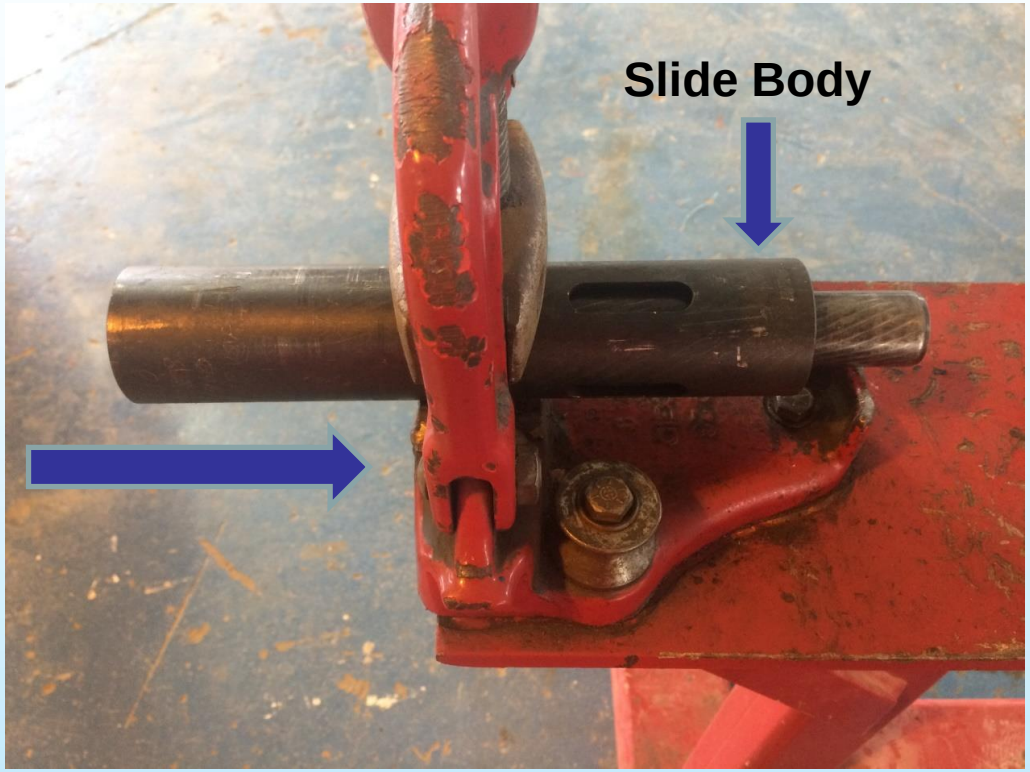

- 4- slide body and piston out of housing .

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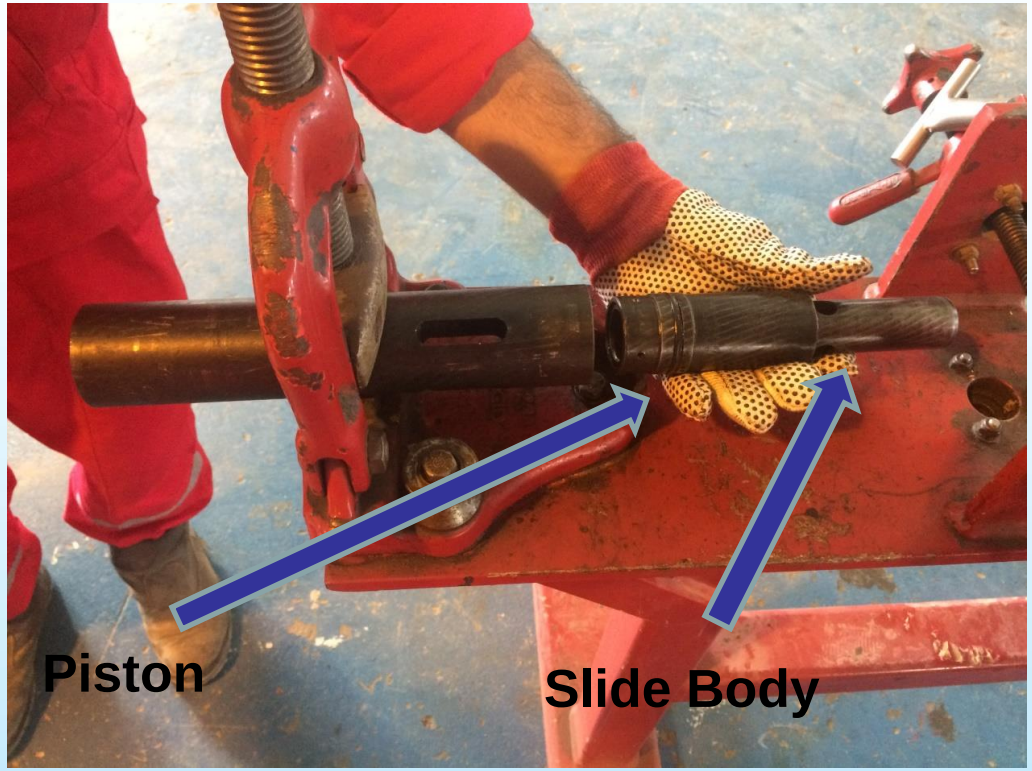
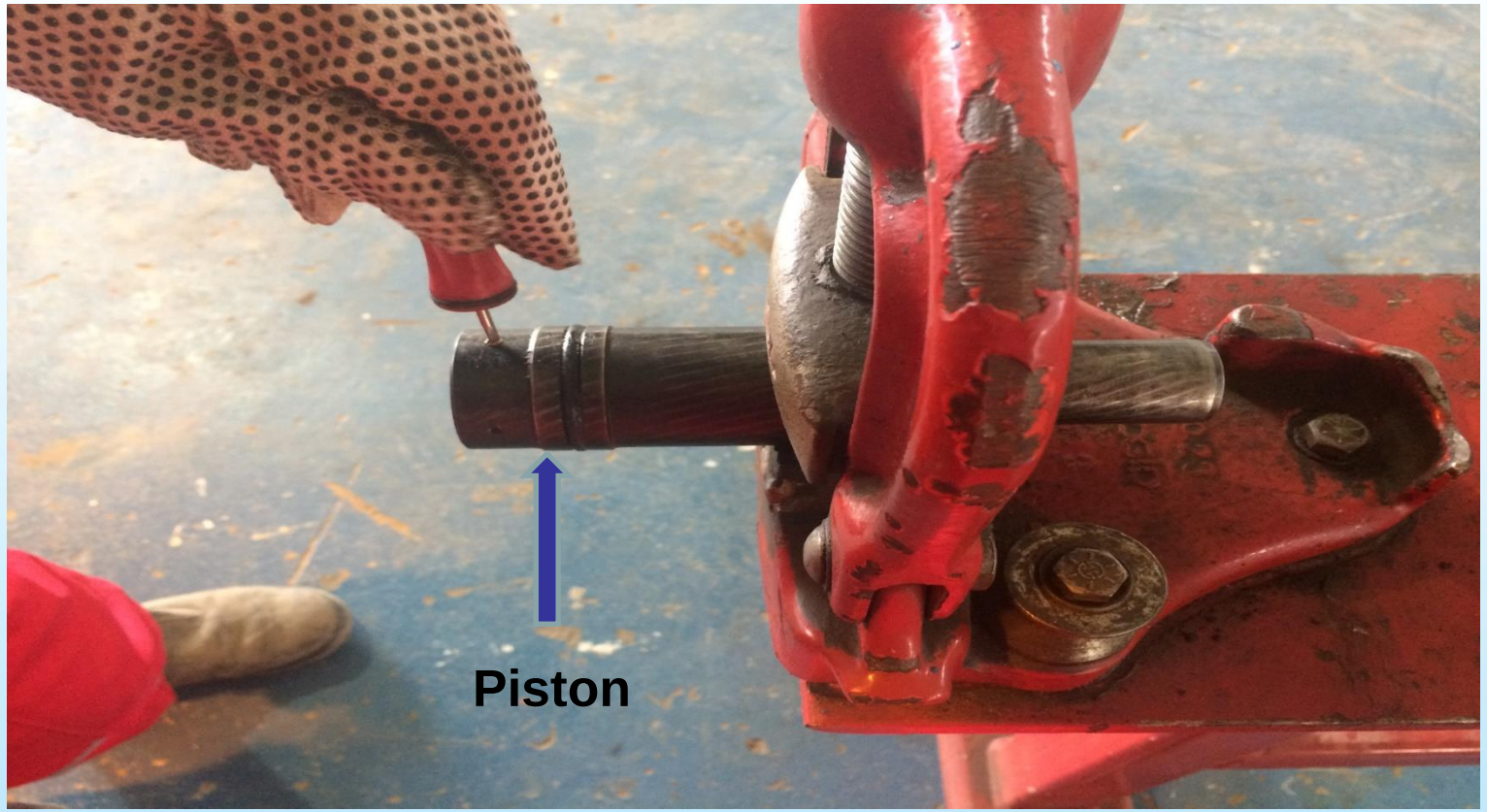


5- remove shear screws from piston .



- 6- Slide piston out of body .
- 7- slide spacer sleeve and ball seat out of body .

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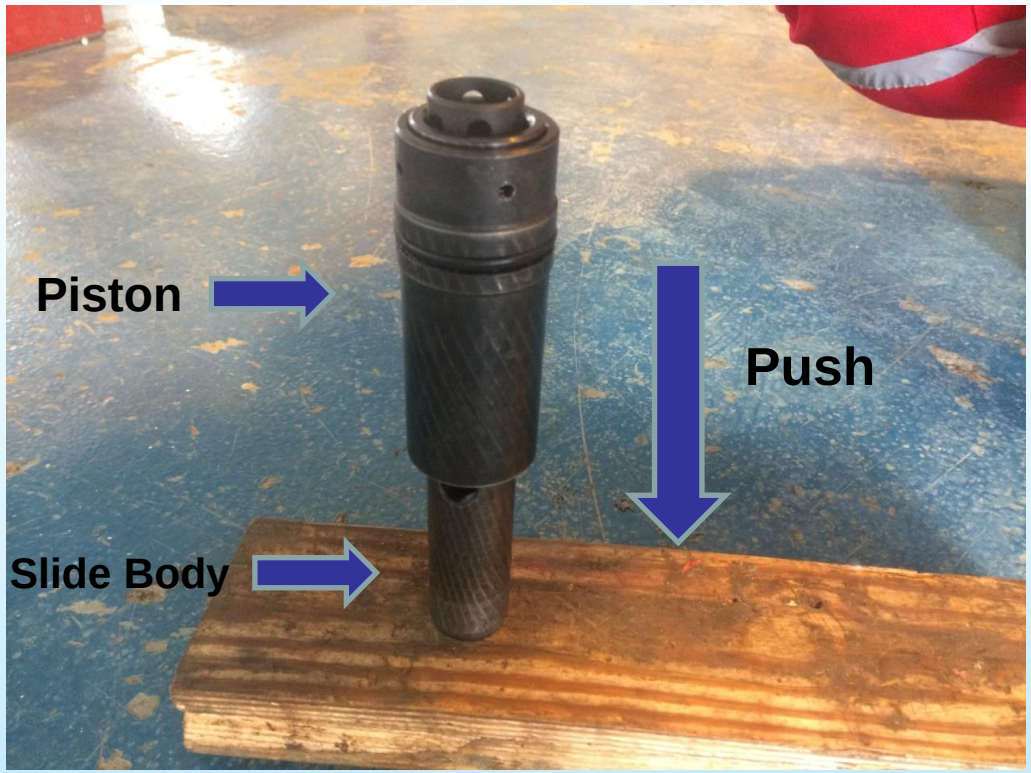

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- 6- Slide piston out of body .
  7- slide spacer sleeve and ball seat out of body .

A

B

Assembly

- 1- install all O-rings and apply a light coat of grease to the threads and seal bores .

  2- slide piston over body and install shear screw

A

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- 3- place bottom sub in vise .
- 4- make up housing to bottom sub .
- 5- slide ball seat and spacer sleeve inside body .
- 6- slide body assembly inside housing .

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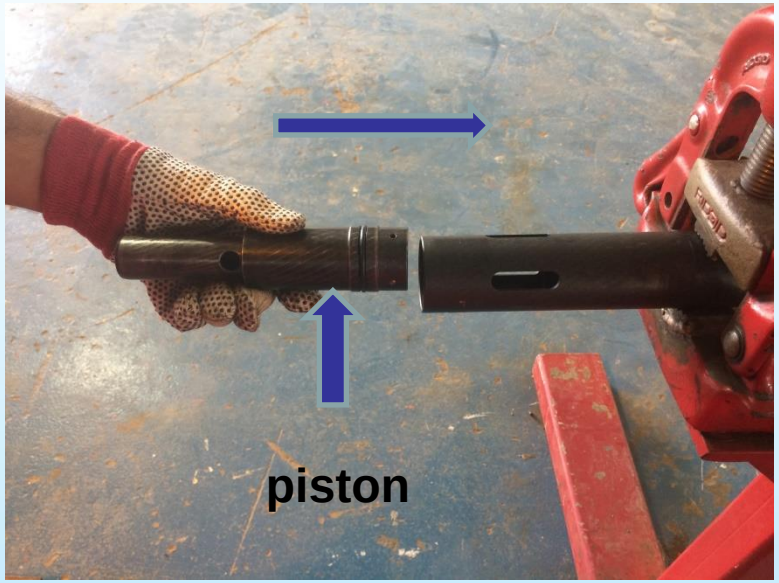

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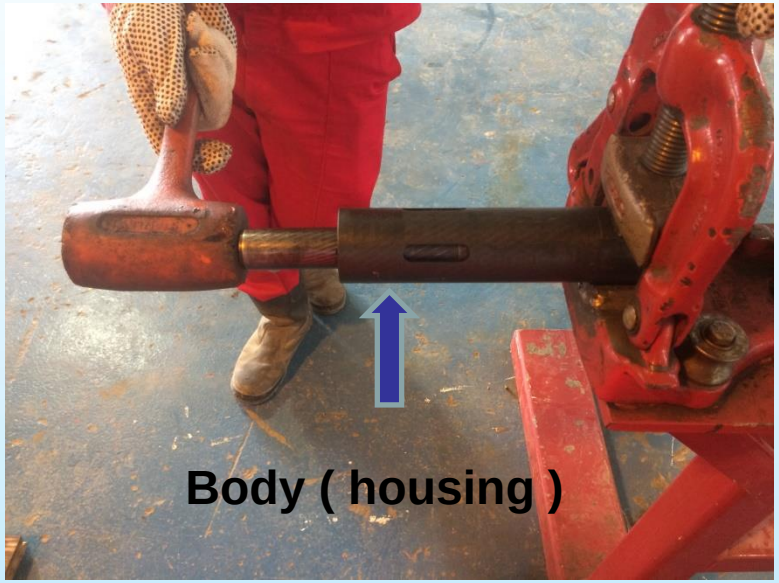

C

- 7- make up bottom sub into housing .
- 8- make up top sub into housing .

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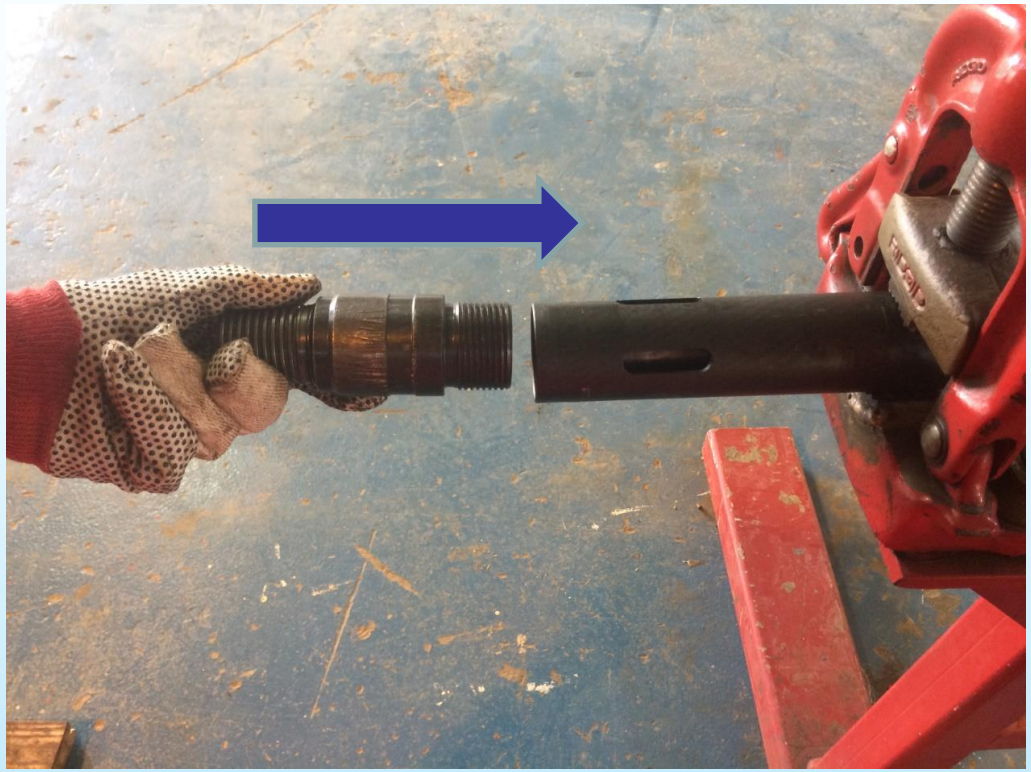

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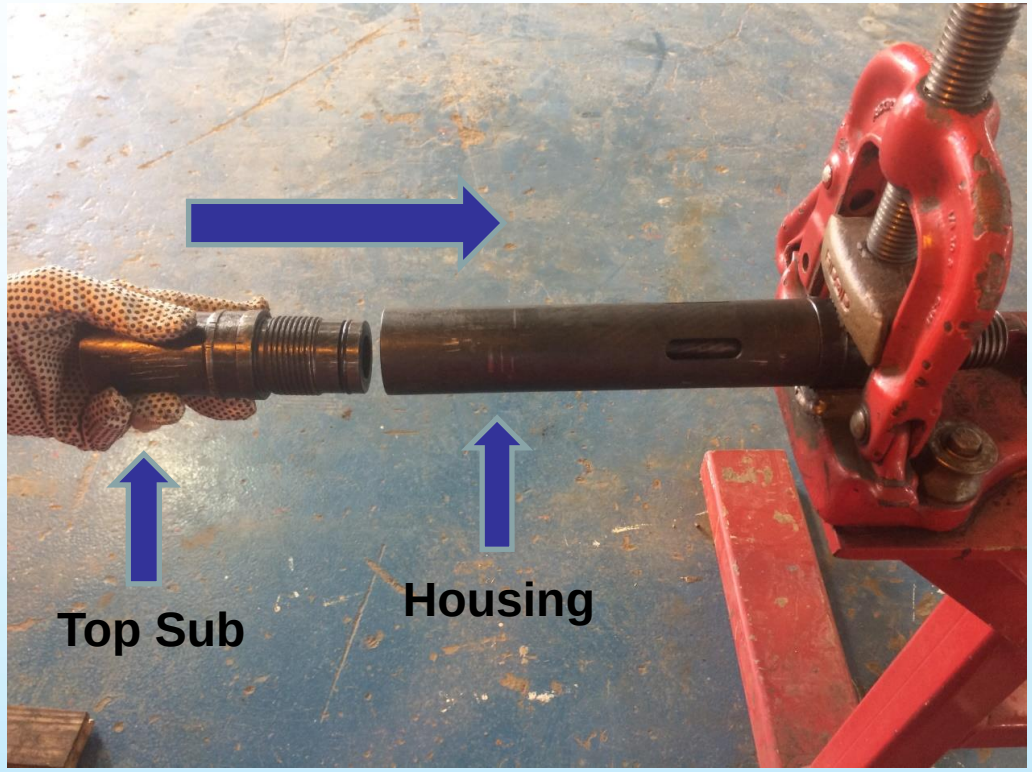

Notice :

***Maximum No. of shear screws recommended in the 1.69" and 2.13" tools are (2) and in the 3.00" tool is (3) .**

Operating Pressure

No. of Screws	Opening Pressure		
	1.69" #8-32	2.13" #8-32	3.00" #10-32
1	650 psi	480 psi	370 psi
2	1,300 psi	960 psi	740 psi
3*	-	-	1,110 psi