

1. Liner hanger is comprised of liner hanger body assembly, packer assembly, seal assembly, setting tool, polished bore receptacle, landing collar, pump-down plug, liner wiper plug, etc. See Fig 1.

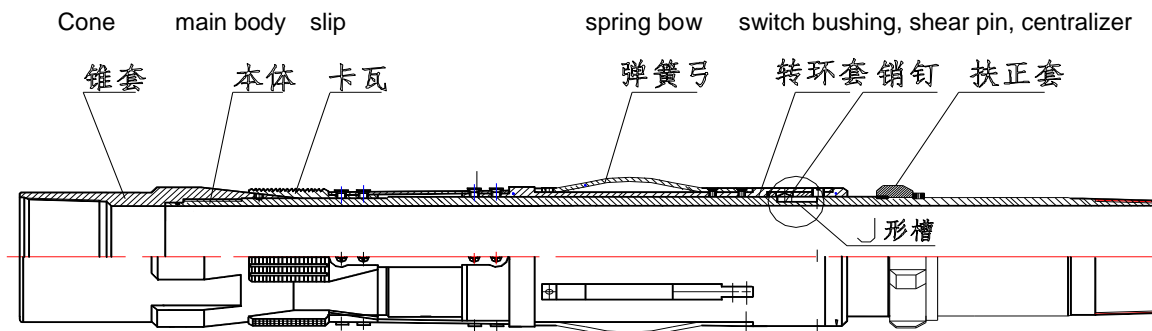


Fig 1 J-slot mechanical liner hanger

2. Setting tool: could be reused. Composites sand-proof cap, lifting sub, setting dog, bearing, release nut, polished nipple, etc. See Fig 2.

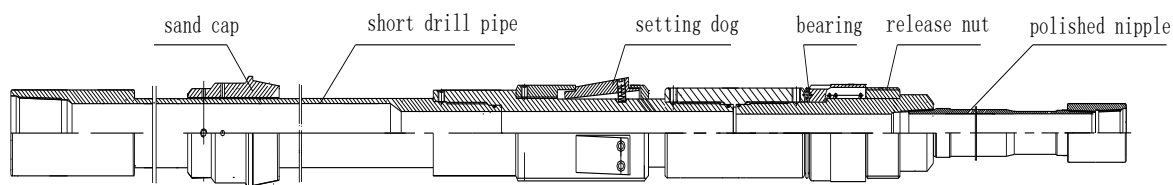


Fig. 2: Setting tool assembly

3. Seal assembly (consisting of sealing collar and pack-off bushing. See Fig. 3)

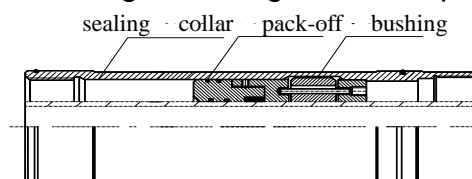


Fig. 3: Seal assembly

4. Polished bore receptacle (See Fig. 4)

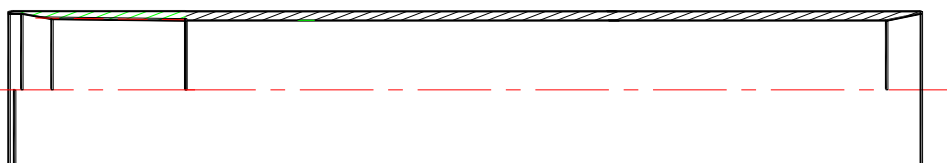


Fig. 4: Polished bore receptacle

5. Plugs (pump-down plug and liner wiper plug. See Fig. 5 and Fig. 6)

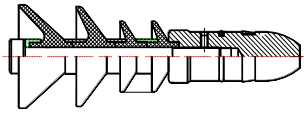


Fig. 5: Pump-down plug

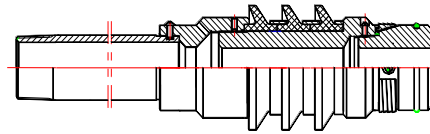


Fig. 6: Liner wiper plug

6. Landing collar assembly (See Fig. 7 and Fig. 8)

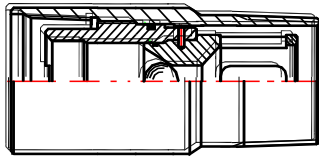


Fig. 7: Landing collar



Fig. 8: Brass ball

7. Float collar, float shoe (See Fig. 9 and Fig. 10)

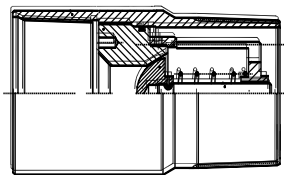


Fig. 9 Float collar

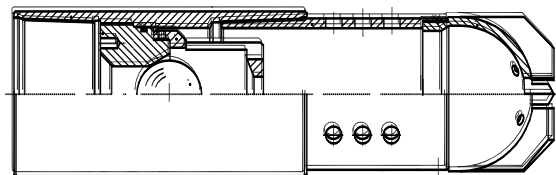


Fig. 10 Float shoe

Specification	$\Phi 244.5 \times \Phi 177.8$ ( $9\frac{5}{8}'' \times 7''$ )
Rated load, t	120
Rated load of supporting sleeve, t	16
Rated pressure of pack-off bushing, MPa	<b>&gt;25</b>
Lifting range of setting, m	>0.04
Right angle of setting	>35°
Lowering free range of setting, m	0.15
Shearing pressure of pins in liner wiper collar, MPa	12
Max length to be lift after back off operation, m	1.3
Max OD of liner hanger body, mm	$\Phi 215$
ID of liner hanger body, mm	$\Phi 155$
Length of polished bore receptacle, mm	1200
ID of polished bore receptacle, mm	$\Phi 210$
ID of polished bore receptacle, mm	$\Phi 187$

Length of pump-down plug, mm	332		
OD of liner wiper plug, mm	Φ170	Φ166	Φ162
Liner wall thickness, mm	6.91/8.05/9.19	10.36/11.51	12.65
Casing linear weight, kg/m	29.76/34.22/38.69	43.15/47.62	52.08
Grade of upper casing	L80		
Upper casing wall thickness, mm	10.03	11.05	11.99
Upper casing linear weight, kg/m	59.52	64.73	69.94
Connection of the short drill pipe	410 (NC50)		
Bypass area, cm <sup>2</sup>	Casing wall thickness, mm	Before setting/After setting, cm <sup>2</sup>	
	10.03	67/ 36	
	11.05	60/ 32	
	11.99	53/ 31	