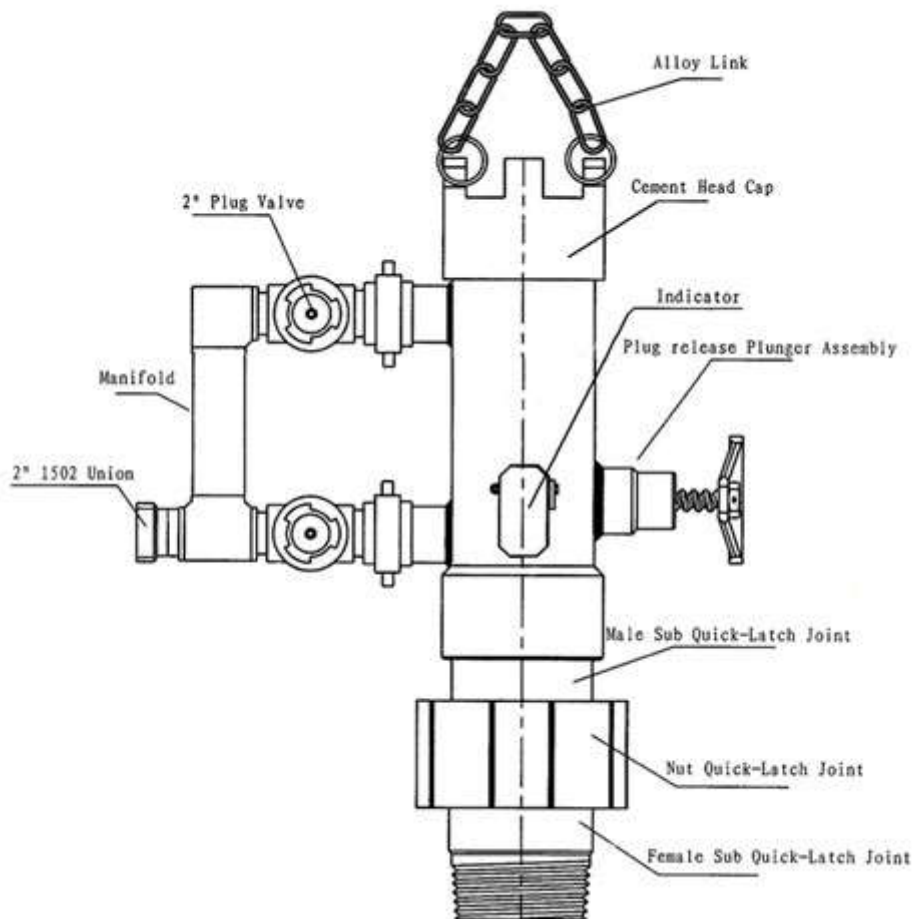


DSC SINGLE-- PLUG CEMENT HEAD  
**OPERATION & MAINTENANCE MANUAL**

## 1.STRUCTURE

Special tool for pumping slurry and releasing plug.It can couple with two plugs simultaneously,and makes the drilling fluid fill into casing in turn and quickly.This can simplify the cementing operation,prevent cement pollution.

The structure of the DSC Single- Plug Cement Head as fellow.It's bottom has a quick-latch joint,it be used to connection with casing.The body contains plug.Screw-bar block plug.Open cement head cap can put plug into cement body.Union interface can be connected with cementing pipeline or displace mud.Cement head cap body and quick-latch joint are used with large trapezoidal-thread,it makes the tool convenient to disassemble and carry.



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## 2.FEATURES

- (1).Positive lever indicates plug releasing.
- (2).Structure is very reasonable,main parts are made from AISI4145H alloy steel.
- (3).Cement head cap and nut quick-latch joint with large trapezoidal-threaded,  
It makes the tool convenient to disassemble and carry.

## 3.MAIN TECHNICAL PARAMETERS

Specifications,mm(Inch)	Φ 177.8mm (7" )	Φ244.5mm (9 <sup>5</sup> / <sub>8</sub> " )	Φ273.mm (10 <sup>3</sup> / <sub>4</sub> " )	Φ339.7mm (13 <sup>3</sup> / <sub>8</sub> " )	Φ 473mm (18 <sup>5</sup> / <sub>8</sub> " )	Φ508mm (20" )
Working Pressure,PSI	8750	6600	6000	6000	4000	3100
Connection Thread	7" BTC	9 <sup>5</sup> / <sub>8</sub> " BTC	10 <sup>3</sup> / <sub>4</sub> BTC	13 <sup>3</sup> / <sub>8</sub> BTC	18 <sup>5</sup> / <sub>8</sub> BTC	20BTC
Manifold	2" 1502 Union	2" 1502 Union	2" 1502 Union	2" 1502 Union	2" 1502 Union	2" 1502 Union
I.D.of Plug Container, mm	Φ 160	Φ 225	Φ 255	Φ 320	Φ 452	Φ 490
Length of Plug Container,mm	450	550	550	550	610	610

## 4.INSTALLATION AND OPERATION

- (1).Open the nut of quick-latch joint,connection with casing.
- (2).Open cement head cap,turn-off all screw-bar,then install plug,push down the handle of indicator.
- (3).Close and screw down cement head cap in order to prevent leakage.
- (4).Connect cementing pipeline and displace mud pipeline with union.
- (5).It must connect the pipeline with cementing head on the lower union before circulate,circulation through cement head.
- (6).Open screw-bar to release plug after finish cementing.
- (7)Open upper plug valve when displace mud,let mud push plug down.

Notice:

The screw-bar handle contrarotate is advance (screw-bar block plug).

## 5.MAINTENANCE

Clean cement head after use.

(1).Maintain manifold

Open nut of union by hammer,disassemble manifold,rinse out rudimental cement and apply butter on union.

(2).Maintain cement head cap.

Open cement head cap and clean,check " o " sealing ring,if it have been damaged,change it with new,apply butter and make-up.

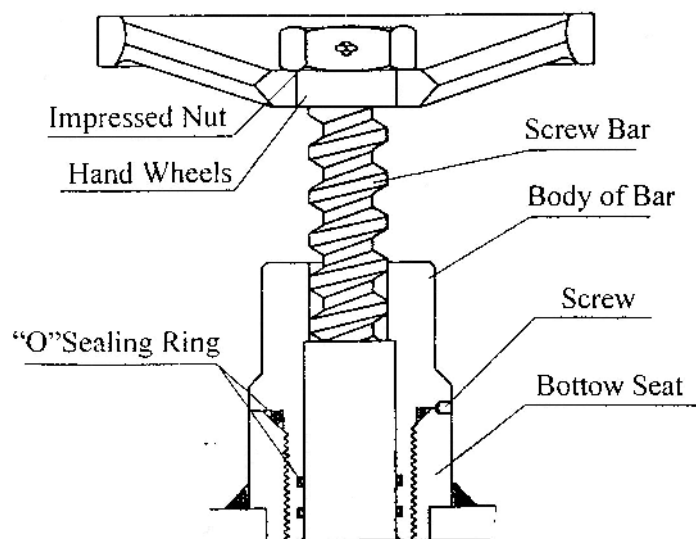
(3).Open quick-latch Joint and clean,check " o " sealing ring,if it have been damaged,change it with new,apply butter and make-up.

(4).Maintain screw-bar

According to Fig,disassemble bolt by screwdriver,take out sealing rings and check it.Dissassemble impacted nut,screw out bar,take out sealing rings and check it.Clean screw-bar and wipe butter,assemble it in order again.

Disassemble process

Disassemble the nut of indicator,hit shaft out of indicator (Notice:don't damage thread),take out wedge-block and washer from body,chnge sealing ring and apply lube.



(5).Maintain indicator

Indicator will be the case with slurry running water,turning the handle indicator to ensure that the rotation of its flexibility,such as the rotation is not flexible,open maintenance plans.

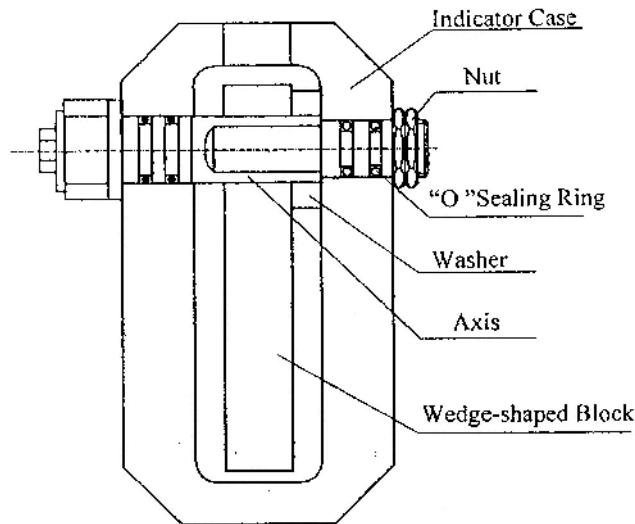
① The demolition process indicator

Wrench off-axis with the fastening nut indicator,the indicator will be played

axis.(Be careful not to damage thread) out from the cylinder,wedge-shaped block allocation,positioning washer,wash.The replacement of seals,lubricants painted.

②indicator assembly process

The indicator from the axis of penetration hole,wedge-shaped block set aside,the location in the body washer followed extinguishers from the set of indicators to the axis,and then continue to axis of penetration across the hole,firmly fixed on the nut.



(6).In the course of transportation or and go up or down drilling platform,naked thread of cement head must be installed protector.Prohibit suddenly break and frusta,lest happen distortion or spoil,can not use normal.

Table: