



Drill Pipe Pup Joints



Schoeller-Bleckmann fully integral Drill Pipe Pup Joints are manufactured from full length barstock in material specification AISI 4145 H Modified, fully heat treated in accordance with A.P.I. Specification 7.

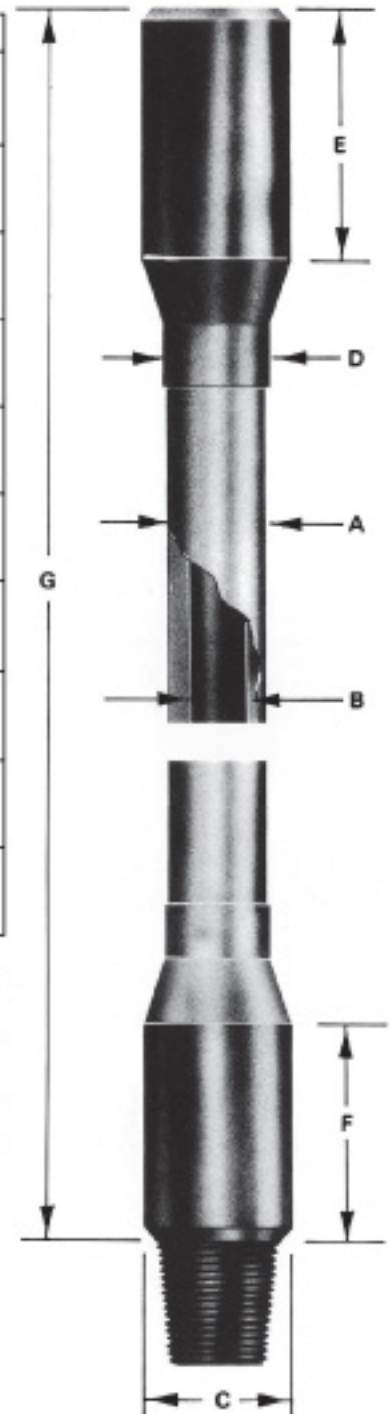
DIMENSIONAL DATA								
DRILL PIPE NOMINAL SIZE (A)	INSIDE DIAMETER (B)	TOOL JOINT OUTSIDE DIAMETER (C)	CONNECTION TYPE AND SIZE	ELEVATOR UPSET DIAMETER (D)	TONG SPACE LENGTHS		AVAILABLE LENGTHS (FT) (G)	APPROX WEIGHT (LBS)
					BOX (E)	PIN (F)		
3 1/2	2 3/8	4 3/4	NC38 (3 1/2 IF)	3 7/8	10 1/2	8	5	143
		5					224	
		5					310	
3 1/2	2 11/16	4 3/4	NC38 (3 1/2 IF)	3 7/8	10	7	5	132
		5					198	
		5					200	
4	2 13/16	5 1/4	NC40 (4 FH)	4 1/16	10	7	5	178
		5 1/2					288	
		5 1/2					394	
4	3 1/4	5 3/4	NC46 (41 IF)	4 1/2	10	7	5	167
		6					242	
		6					312	
4 1/2	3 1/2	6	NC46 (41 IF)	4 11/16	10	7	5	220
		5 3/4					348	
		5 3/4					477	
4 1/2	3 1/2	6 1/8	NC50 (4 1/2 IF)	5	10	7	5	205
		6 1/4					310	
		6 1/8					418	
4 1/2	3 3/4	6 1/8	NC50 (4 1/2 IF)	5	10	7	5	161
		6 1/4					264	
		6 1/8					345	
5	3 1/2	6 3/8	NC50 (4 1/2 IF)	5 1/8	10	7	5	253
		6 1/2					422	
		6 1/2					594	
5	3 3/4	6 3/8	NC50 (4 1/2 IF)	5 1/8	10	7	5	229
		6 3/8					374	
		6 1/2					519	
							20	664

1. Upon request tool joints can be supplied 2" longer than standard to facilitate additional connection repairs.
2. Drill Pipe Pup Joints can be manufactured with alternative connections/diameters to those shown above.
3. All connections are machined and finished in accordance with A.P.I. Specification 7. Thread roots are cold rolled, phosphate coated and fitted with thread protectors.
4. Drill Pipe Pup Joints can be supplied with either 18 degree tapered or square shoulders.

When ordering Schoeller-Bleckmann Drill Pipe Pup Joints, please specify :

1. Nominal pipe diameter 'A'
2. Bore diameter 'B'
3. Tool joint diameter 'C'
4. Size and type of connections
5. Overall length/shoulder to shoulder 'G'
6. 18 degree or square elevator shoulder

Upper Connection (Box or Pin)



Lower Connection (Box or Pin)



Rotary Crossover Subs



Schoeller-Bleckmann Drill Stem Substitutes are manufactured from Alloy Steel AISI 4145 H Modified conforming to the requirements of A.P.I. Specification 7.

All connections are machined to A.P.I. Specification.
Thread roots are cold rolled and kemplated to minimize galling on request.
Substitutes are manufactured with straight or reduced section as shown below.



Reduced Section Subs

Straight OD Subs

On enquiring and when ordering, please specify :

1. Identify use (e.g. DC/DC – DC/DP – Bit Sub etc.
2. Outside diameter(s)
3. Inside diameter(s)
4. Overall length
5. Size and style of connection
6. Whether stress relief groove and/or bore back are to be incorporated

For reduced Section Substitutes include :

1. Outside diameter of reduced section
2. Length of reduced section

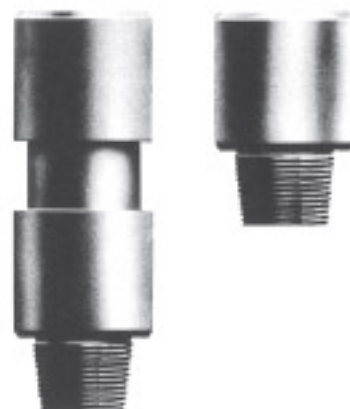
For Bit Substitutes include :

1. Float bore and style

Kelly Saver Subs

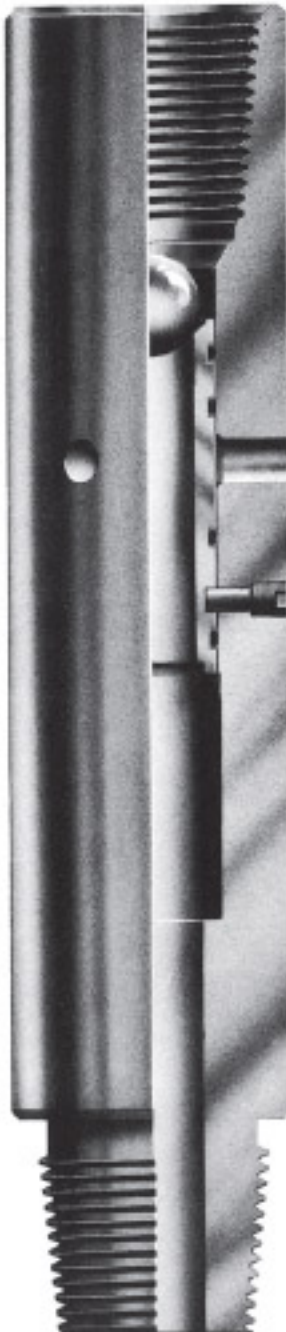
Kelly Saver Substitutes are available in 36", 18" or 12½" lengths for throw away type.

Substitutes 36" long can be fitted with rubber body protectors on request.





Circulating Subs

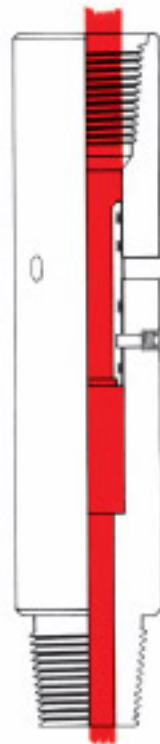


The Schoeller-Bleckmann Circulating Subs have been designed to achieve increased mud circulation by placement in the B.H.A., either above the bit or down hole motor to pump materials in case of lost circulation.

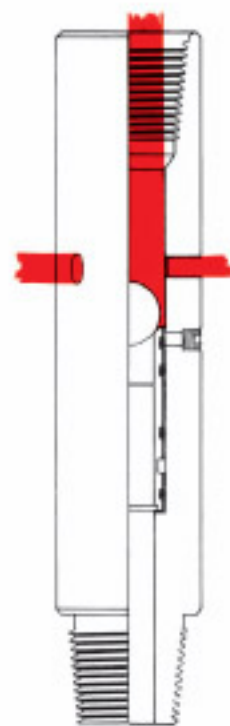
Activation is accomplished by dropping a chrome steel ball down the drill string and then engaging the mud pumps. On application of 3000 psi fluid pressure, the ball shears the pin holding the sleeve in its primary position. The sleeve and pin drop into the secondary position opening the three sub ports and diverting the downhole flow.

Schoeller-Bleckmann Circulating Subs are manufactured from AISI 4145 H material fully heat treated to give 285-341 BHN and are available in the same nominal diameters as standard drill collars or to customers own specifications.

See separate sheet for Re-dress procedure.



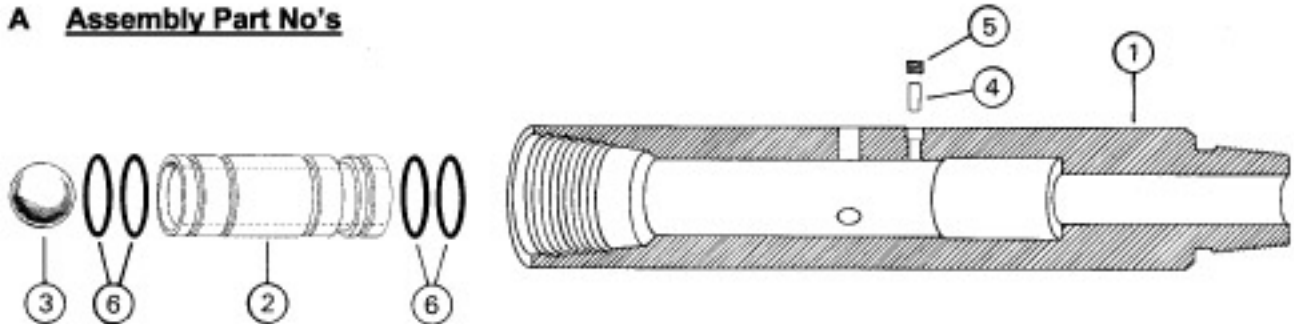
F i g 1 Drilling fluid flow after pin is sheared



F i g 2 Drilling fluid flow after pin is sheared



A Assembly Part No's



⑦ Re-Dress Kit contains : 1 Sleeve, 1 Ball, 1 Shear Pin, 1 Pressure Plug, 4 'O' Rings

ITEM NO.	DESCRIPTION	Ø4½"	Ø6¼"	Ø6½"	Ø8"	Ø8¼"	Ø9½"
1	SUB BODY	CS - 475	CS - 625	CS - 650	CS - 800	CS - 825	CS - 950
2	SLEEVE	CS - 41	CS - 42	CS - 42	CS - 42	CS - 42	CS - 43
3	BALL	CS - 51	CS - 52	CS - 52	CS - 52	CS - 52	CS - 52
	BALL DIA	2"	2¼"	2¼"	2¼"	2¼"	2¼"
4	SHEAR PIN	CS - 61	CS - 62	CS - 63	CS - 64	CS - 65	CS - 66
5	PRESSURE PLUG	CS - 91	CS - 92	CS - 92	CS - 92	CS - 92	CS - 92
6	'O' RING SEAL	CS - 81	CS - 82	CS - 82	CS - 82	CS - 82	CS - 83
7	RE-DRESS KIT	CS - 21	CS - 22	CS - 23	CS - 24	CS - 25	CS - 26
COMPLETE ASSEMBLY		CS - 01	CS - 02	CS - 03	CS - 04	CS - 05	CS - 06
ASSEMBLED WEIGHT (KG)		52	95	105	170	185	235

B Re-Dress Procedures

1. Isolate circulating sub
2. Remove ball (if still housed in sub)
3. Select Allen Key and remove pressure plug
4. Remove top half of shear pin and discard
5. Retract sleeve until remaining half of shear pin in sleeve is visible. Remove and discard
6. Slide sleeve out of sub bore
7. Remove the 4 'O' rings and discard
8. Check condition of sleeve and ball for raised edges and physical damage
9. If ball and / or sleeve is damaged replace with new ones
10. Check conditions of sub bore and drilled tapped hole – remove burrs if required
11. Fit 4 new 'O' rings onto checked or renewed sleeve – grease O.D.
12. Grease sub I.D. thoroughly
13. Slide sleeve into sub, ensure correct insertion (i.e. counter bored end of sleeve first) until the widest groove is visible through the drilled and tapped hole
14. Select new shear pin – check for sharp edges, de-burr if necessary and position in sub body
15. Select Allen Key and pressure plug (use existing plug if undamaged) and screw into body



Lift Subs & Lift Plugs



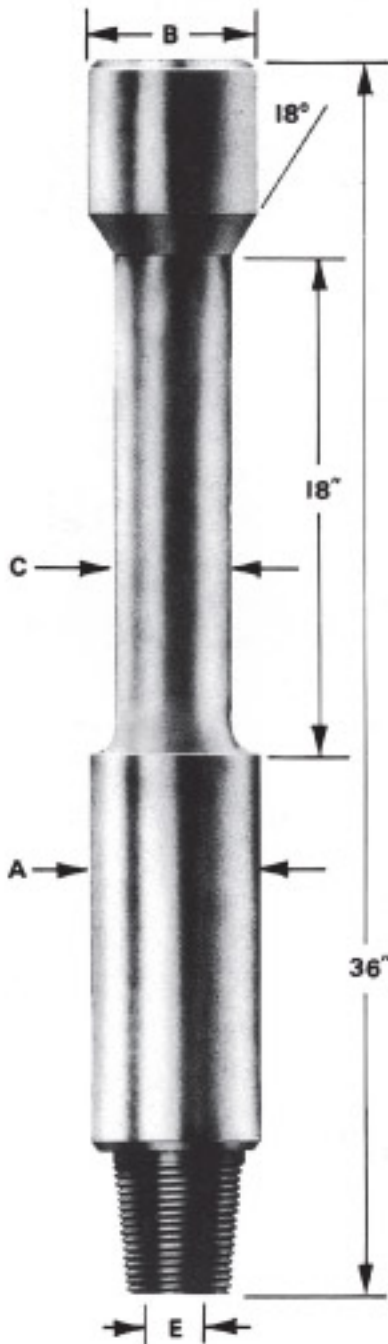
The Schoeller-Bleckmann Lift Subs are manufactured from AISI 4145 H Modified Steel, fully heat treated and supplied in accordance with A.P.I. Specification 7.

Lift Subs can be supplied with an 18 degree tapered shoulder as shown, or alternatively with a square shoulder (Dial Head).

When ordering or requesting quotations on Lift Subs, please specify :

- A. Drill collar O.D.
- B. Tool joint O.D.
- C. Drill pipe O.D.
- D. Drill collar connection size and type
- E. Bore
- F. Tapered or square shoulder

LIFT SUB DIMENSIONS	
DRILL COLLAR SIZE (A)	APPROX WEIGHT (LB)
3 1/2	40
4 1/8	50
4 3/4	84
5	88
6	150
6 1/4	168
6 1/2	168
6 3/4	168
7	169
7 1/4	169
8	257
8 1/4	257
9 1/2	320
9 3/4	320
11	368



Schoeller-Bleckmann Lift Plugs are manufactured from AISI 4145 H Modified Steel, fully heat treated and supplied in accordance with API Specification 7.

In addition to the standard Lift Plug shown, Lift Plugs can be manufactured Pin to Box or Bail type.

When ordering or requesting quotations on Lift Plugs, please specify :

- A. Drill collar O.D.
- B. Lift plate O.D.
- C. Drill collar connection size and type
- D. Tong space length (8" standard)
- E. Standard or Bail type
- F. Pin and box connections

LIFT PLUG DIMENSIONS		
DRILL COLLAR SIZE (A)	LIFTING PLATE DIA. (B)	APPROX WEIGHT (LB)
3 1/2	5 1/2	35
4 1/8	6	40
4 3/4	6 1/2	50
5	7	58
6	8	82
6 1/4	8	82
6 1/2	8 1/2	90
6 3/4	8 1/2	90
7	9	100
7 1/4	9	100
8	10	128
8 1/4	10	128
9 1/2	11 1/2	165
9 3/4	11 1/2	165
11	13	245

