



**ROLLER LATCH™ QUICK PUMP-IN™
OVERSHOT**

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Our newest addition to the exploration drilling industry is the Quick Pump-In Overshot. It is safer, more productive, and designed to last longer than any overshot in use today.



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Drillers regularly deal with a number of challenges when retrieving a core barrel, partial trips, false indications, and spearhead failures. Resetting the landing indication is a costly process and, it increases the opportunity for injury. Boart Longyear created the original wireline technology used throughout the industry and we've focused our experience on reinventing core retrieval.

With innovative, patented technology, the Roller Latch Quick-Pump-in Overshot is a simple, easy to use overshot that improves performance, productivity, and safety.

SAFER

The new overshot applies our experience with Roller Latch head assemblies to create a system that eliminates spearheads and lifting dogs entirely. The spearhead is replaced by a socket adapter that accepts the overshot itself. Rollers securely latch into an internal groove in the adapter.

MORE PRODUCTIVE

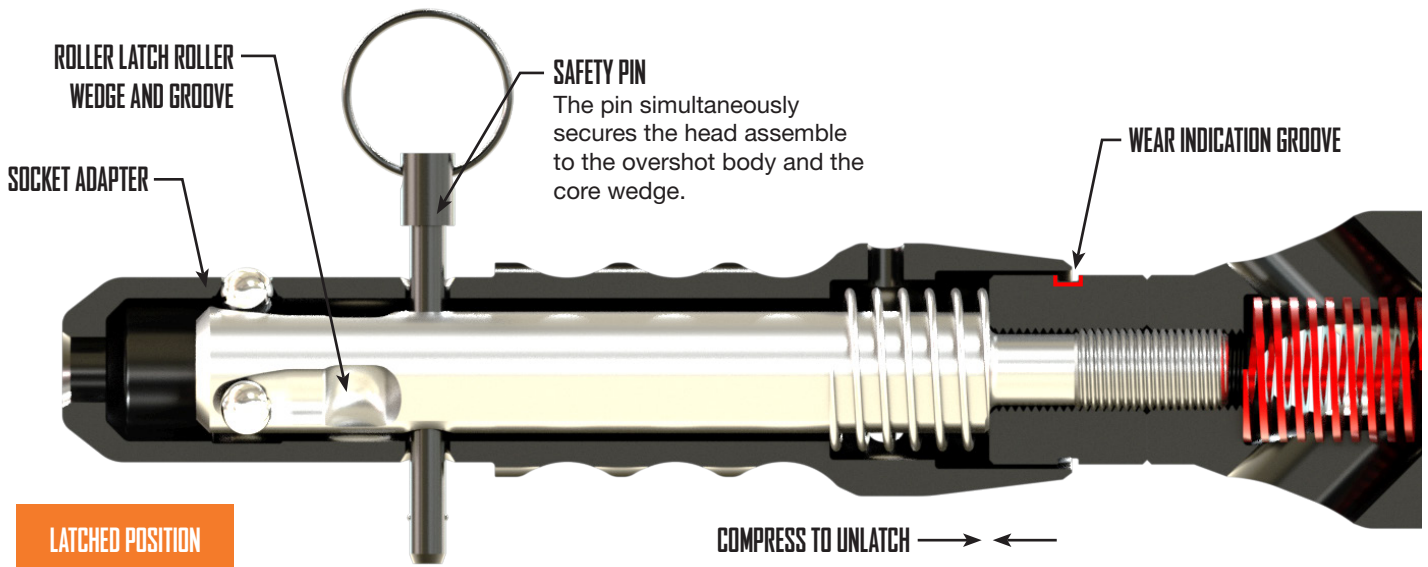
The new overshot is designed for self-flushing and — if need be — easy cleaning by flushing through the porting provided. The wedge has three large flats to ensure no debris build up. Using past experience, we have been able to improve function of the landing indication system for better productivity with your overshot. With a brand new pump-in cable release system, the Roller Latch will eliminate shear pins and increase reliability of wireline recovery.

- Auto-Reset Landing Indication Valve eliminates partial trips and false indications
- Pump-in Cable-Release Sleeve eliminates soft shear pins and lost cable costs
- Threaded connections for easier maintenance in place of assembly pins
- V-Lip seals for use with lighter W-Wall rods

LASTS LONGER

The Roller Latch family of in-hole tools includes a surface treatment that provides excellent corrosion resistance and reduces wear on the overshot. The spearhead assembly will pivot in the center making it twice as strong and less likely to break when pulling tube out.

SAFETY FEATURES



SAFER ROLLER LATCH TECHNOLOGY

The new overshoot allows users to eliminate spearheads and lifting dogs entirely.

Lifting dogs experience wear on their latching surfaces with every use as do the spearpoints. Eventually, the surfaces wear and the connection fails. Our patented roller design reduces the chance of release due to wear by ensuring rolling engagement and locking.

Spearhead assemblies have a hinged joint which is subject to stress and eventual failure. The unique design of the Roller Latch socket and body eliminates latching errors and spearhead bending failures.

The Roller Latch overshoot introduces a secure two-handed release mechanism that prevents accidental release and improves worksite handling.

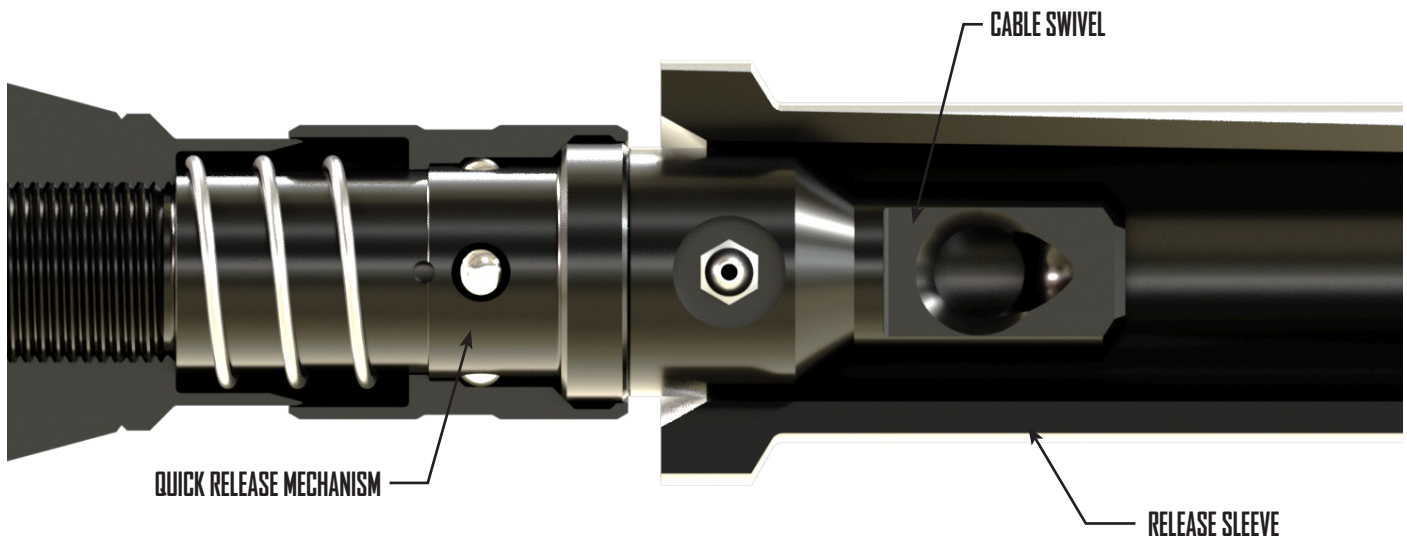
SOCKET ADAPTER & SAFETY PIN

Designed to upgrade existing head assemblies, the spearhead is completely replaced by the socket adapter.

When manually inserting the head assembly into a hole, spearheads can be challenging and dangerous. The socket upgrade provides a blunt surface, making direct handling of the core barrel easier and safer. The upgrade also dramatically reduces the risk of serious injury in the event of an uncontrolled release.

The safety pin in the new overshoot provides a secondary safety device under all conditions and does not degrade with overshoot wear.

PRODUCTIVITY FEATURES

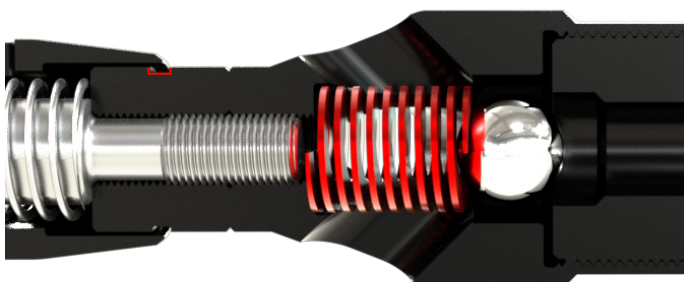


AUTO RESET LANDING INDICATOR

Older overshoot designs have a bushing and ball to create a pressure signal for landing indication. Unfortunately, if the wireline tangles or snags during pump-in, a time-consuming reset may be required.

The Roller Latch Overshot landing indicator features a steel bushing and spring design. If a snag is hit, the spring automatically resets the ball. The spring and ball eliminate premature landing indication and the associated lost time.

Note: The auto reset landing indication is tunable using different fluid retention bushings and springs. The Roller Latch Overshot ships with the standard bushing and light duty (150 psi) spring.



CABLE RELEASE

Introduced by one of our own drillers, the Roller Latch Overshot features a pump-in cable release system. The patented pump-in cable release system eliminates shear pins, and increases reliability during wireline recovery in stuck tube situations.

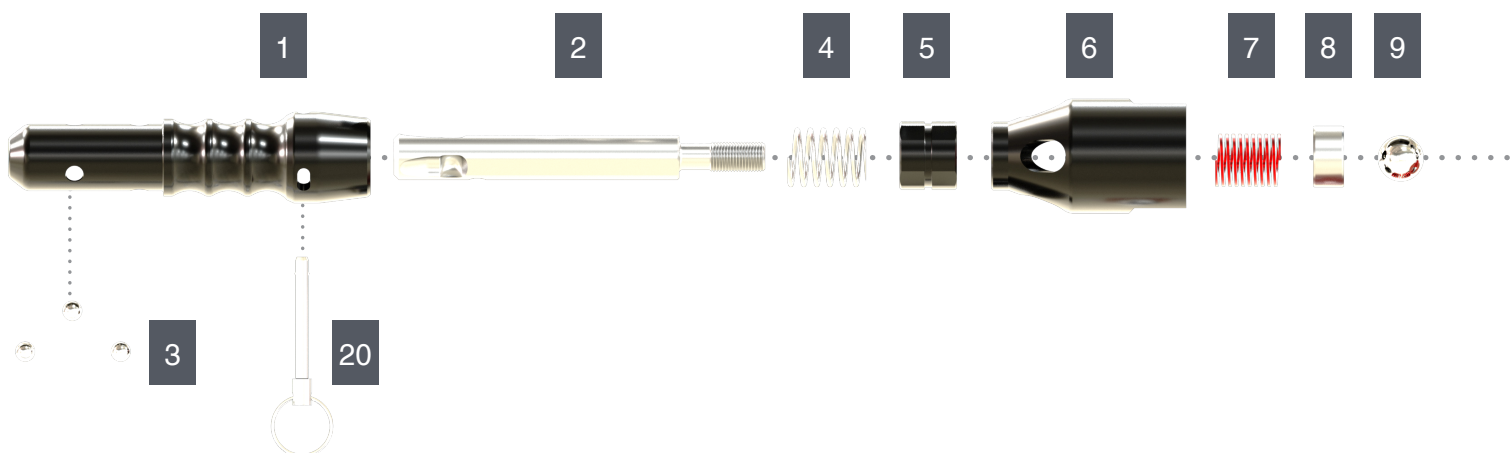
The Roller Overshot adds a slotted sleeve and pumping assembly that is placed over the wireline and pumped up to the overshoot. The sleeve reliably engages a quick release mechanism and frees the wireline.

Note: A guard is available to protect against accidental cable release. The guard is required on rigs where the overshoot regularly impacts the mast.

TECHNICAL OVERVIEW

BQU OVERSHOT			
#	Part No.	Description	Qty
	5008020	O/Shot, BQU R/L	1
1	5008024	Body, BQ/NQ O/Shot	1
2	5008023	Wedge, BQ/NQ Lifting	1
3	5005100	Ball, 3/8" SS	3
4	5008028	Spring, R/L O/Shot	1
5	5009165	Jam Nut, BQU/NQU R/L O/Shot	1
6	5008105	Adapter, BQ R/L R/L O/Shot Joint	1
7	104966	Fluid Retention Spring, Light	1
8	306131	Bushing, Fluid Retention	1
9	62374	Ball, 22mm	1
10	3543906	Pump-In Seal Seat, QU	1
11	100690	Lip Seal, BQ	2
12	5008478	Body, BQU R/L Upper	1
13	5009682	Jam Nut, Cable Release	1
14	5009686	Spring, O/Shot Cable Release	1
15	5009681	Sleeve, O/Shot Cable Release	1
16	5008079	Ball, 5/16" SS	4
17	5009680	Box, O/Shot Cable Release	1
18	5009683	Body, Cable Release Swivel	1
19	17447	Fitting, Hyd Grease	1
20	3546747	Pin, O/Shot Locking	1

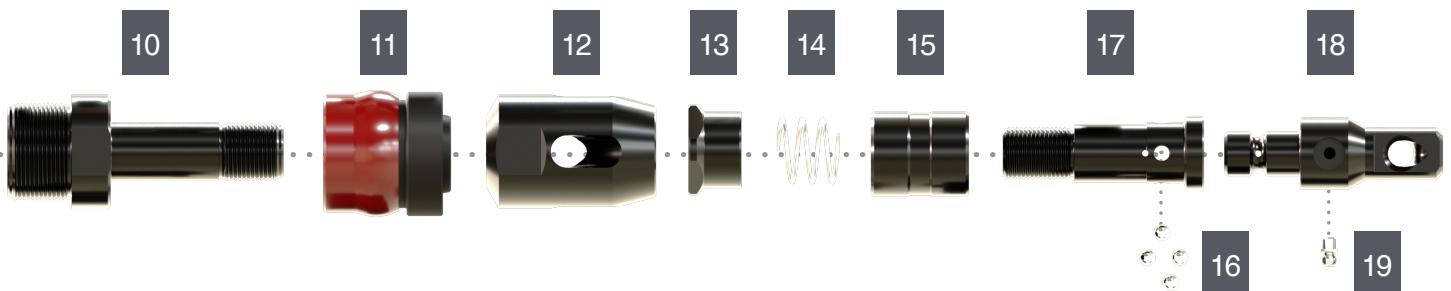
BQTKU OVERSHOT			
#	Part No.	Description	Qty
	5008025	O/Shot, BQTKU R/L	1
1	5008024	Body, BQ/NQ O/Shot	1
2	5008023	Wedge, BQ/NQ Lifting	1
3	5005100	Ball, 3/8" SS	3
4	5008028	Spring, R/L O/Shot	1
5	5009165	Jam Nut, BQU/NQU R/L O/Shot	1
6	5008105	Adapter, BQ R/L R/L O/Shot Joint	1
7	104966	Fluid Retention Spring, Light	1
8	306131	Bushing, Fluid Retention	1
9	62374	Ball, 22mm	1
10	3543906	Pump-In Seal Seat, QU	1
11	64683	Lip Seal, BQTK	2
12	5008478	Body, BQU R/L Upper	1
13	5009682	Jam Nut, Cable Release	1
14	5009686	Spring, O/Shot Cable Release	1
15	5009681	Sleeve, O/Shot Cable Release	1
16	5008079	Ball, 5/16" SS	4
17	5009680	Box, O/Shot Cable Release	1
18	5009683	Body, Cable Release Swivel	1
19	17447	Fitting, Hyd Grease	1
20	3546747	Pin, O/Shot Locking	1





NQU/NQTKU OVERSHOT			
#	Part No.	Description	Qty
	5008030	O/Shot, NQU/NQTKU R/L	1
1	5008024	Body, BQ/NQ O/Shot	1
2	5008023	Wedge, BQ/NQ Lifting	1
3	5005100	Ball, 3/8" SS	3
4	5008028	Spring, R/L O/Shot	1
5	5009165	Jam Nut, BQU/NQU R/L O/Shot	1
6	5008039	Adapter, NQ R/L R/L O/Shot Joint	1
7	104966	Fluid Retention Spring, Light	1
8	306131	Bushing, Fluid Retention	1
9	62374	Ball, 22mm	1
10	5008801	Seat, NQU R/L Seal	1
11	5003432	Seal Asm, NQU V-Wall	2
12	5008705	Body, NQU R/L Upper	1
13	5009682	Jam Nut, Cable Release	1
14	5009686	Spring, O/Shot Cable Release	1
15	5009681	Sleeve, O/Shot Cable Release	1
16	5008079	Ball, 5/16" SS	4
17	5009680	Box, O/Shot Cable Release	1
18	5009683	Body, Cable Release Swivel	1
19	17447	Fitting, Hyd Grease	1
20	3546747	Pin, O/Shot Locking	1

HQU OVERSHOT			
#	Part No.	Description	Qty
	5008040	O/Shot, HQU R/L	1
1	5008044	Body, HQ O/Shot	1
2	5008043	Wedge, HQ Lifting	1
3	5008078	Ball, 7/16" SS	3
4	5008834	Spring, HQ R/L O/Shot	1
5	5009213	Jam Nut, HQU R/L O/Shot	1
6	5008041	Adapter, HQ R/L R/L O/Shot Joint	1
7	104966	Fluid Retention Spring, Light	1
8	306131	Bushing, Fluid Retention	1
9	62374	Ball, 22mm	1
10	3543997	Seat, HQU Pump-In	1
11	5006212	Seal Asm, HQU V-Wall	2
12	5008042	Body, HQU R/L Upper	1
13	5009682	Jam Nut, Cable Release	1
14	5009686	Spring, O/Shot Cable Release	1
15	5009681	Sleeve, O/Shot Cable Release	1
16	5008079	Ball, 5/16" SS	4
17	5009680	Box, O/Shot Cable Release	1
18	5009683	Body, Cable Release Swivel	1
19	17447	Fitting, Hyd Grease	1
20	3546747	Pin, O/Shot Locking	1



KIT OVERVIEW

BQ/BQTK CABLE RELEASE KIT

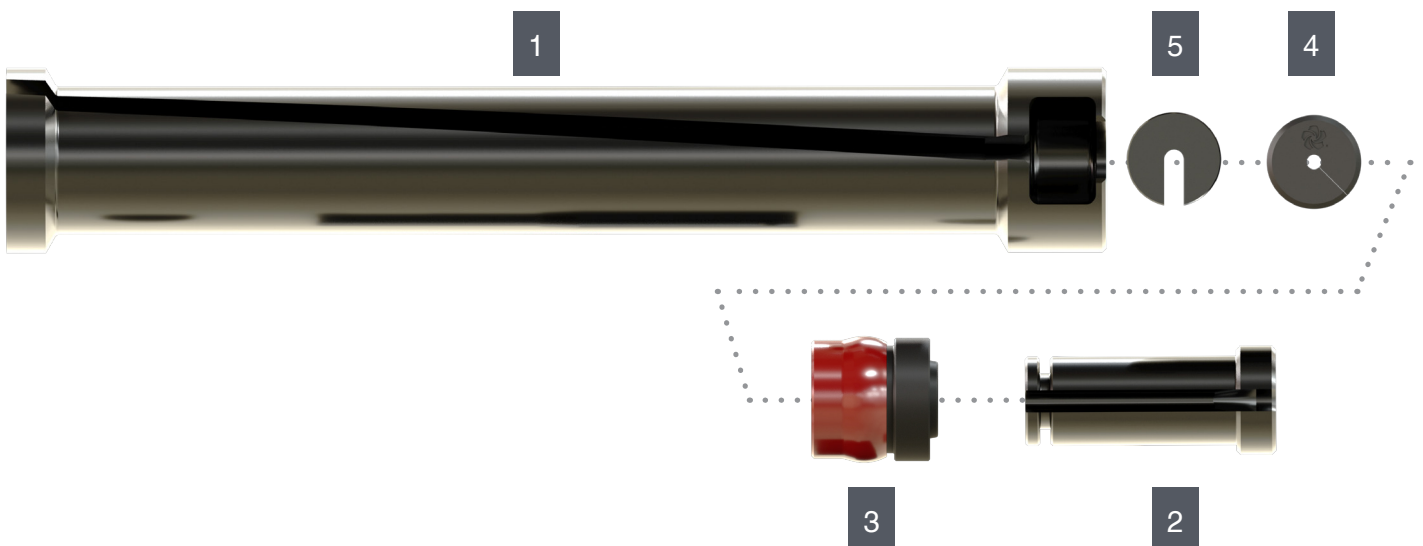
Part No.	Description	Qty
5009849	Kit, BQ/BQTK R/L O/Shot Pump-In Sleeve	1
5008476	Sleeve, BQU Pump-In	1
5008684	Packing Plug, BQ	1
25546	Packing, 3/16" Cable	1
3541816	Washer, 1/4"	1

NQ CABLE RELEASE KIT

Part No.	Description	Qty
5009851	Kit, NQ R/L O/Shot Pump-In Sleeve	1
5008793	Sleeve, NQU Pump-In	1
5008794	Packing Plug, NQ	1
25546	Packing, 3/16" Cable	1
3541816	Washer, 1/4"	1

HQ CABLE RELEASE KIT

Part No.	Description	Qty
5009852	Kit, HQ R/L O/Shot Pump-In Sleeve	1
5008832	Sleeve, HQU Pump-In	1
5008833	Packing Plug, HQ	1
25546	Packing, 3/16" Cable	1
3541816	Washer, 1/4"	1



ACCESSORIES TECHNICAL INFORMATION

R/L ADAPTERS		
Size	Link Latch	Roller Later
BQ/BQTK	5008056	5008799
NQ	5008057	5008799
HQ	5008058	5008089

BRAKE RELEASE SPRINGS	
Size	Link Latch
BQ/NQ	5008827
HQ	5009359*

*Not Released

CABLE RELEASE GUARD	
Size	Link Latch
All Sizes	5009424



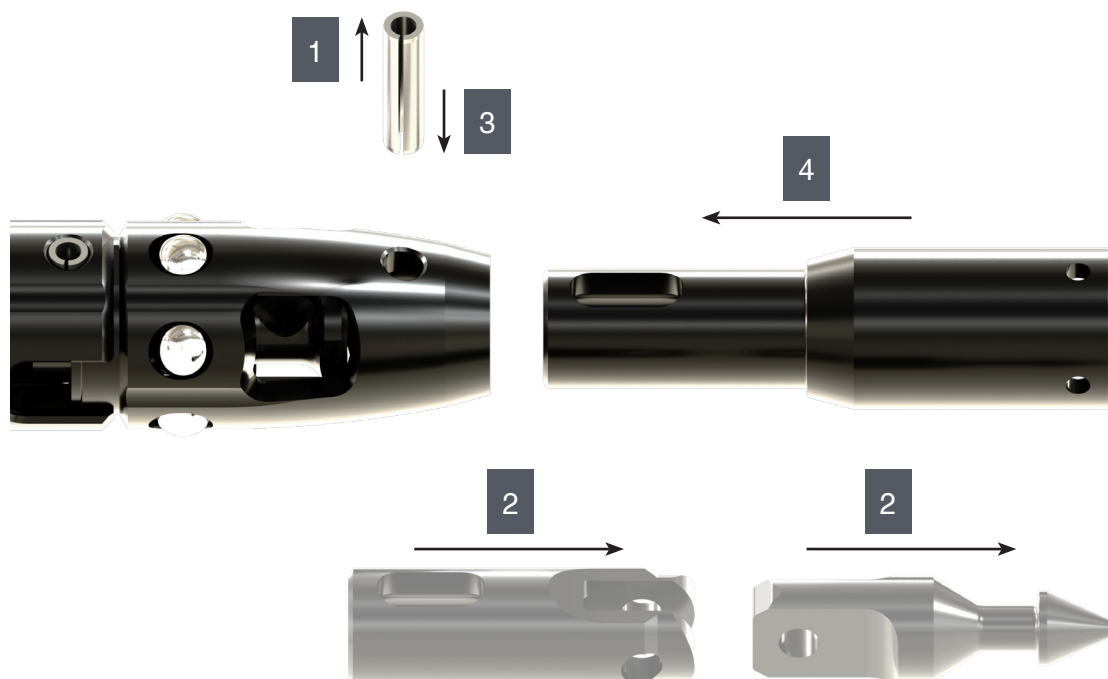
WARNING

When using the optional brake release spring for inclined up-hole drilling, operational procedures must revert back to standard line of fire practices used for link latch systems. If a tube is stuck in an inclined up-hole, and a rod pull is required, pump in a holdback plug to prevent accidental release.

SPEARHEAD ADAPTER PROCESS

The spearhead adapter is all that is needed to convert existing head assemblies for use with the Roller-Latch Overshot. If using Roller Latch heads AND increased up-hole capacity is needed, the optional brake spring (not shown) must be installed at the same time.

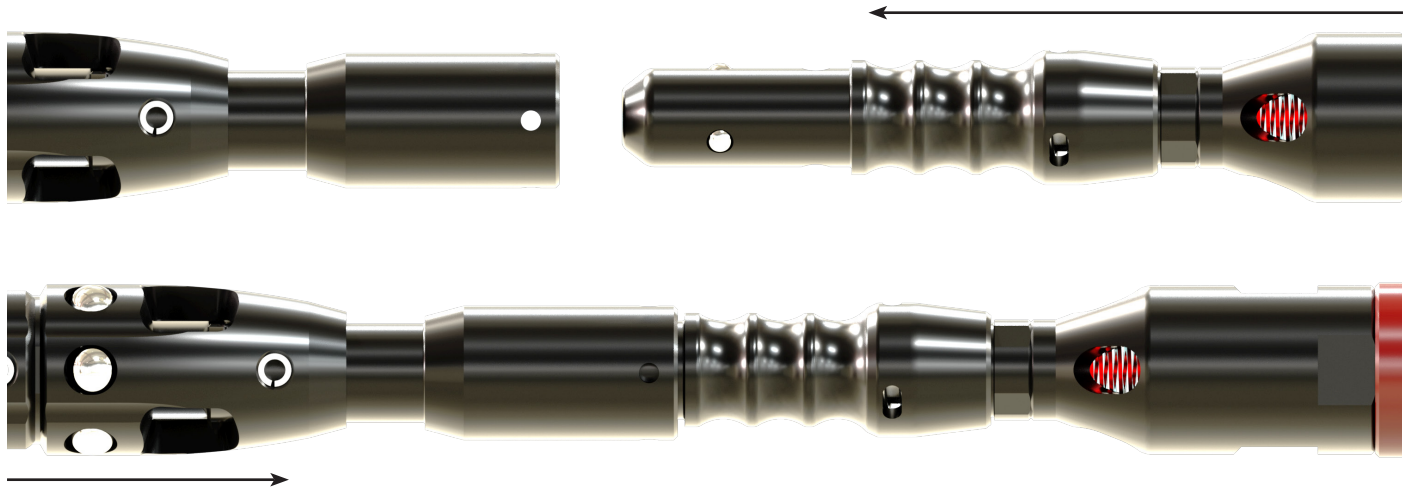
1. Remove spring pin (save)
2. Remove spearhead assembly
3. Slide in adapter and align the slot with pin hole
4. Replace spring pin



RETRIEVING R/L HEAD ASSEMBLY

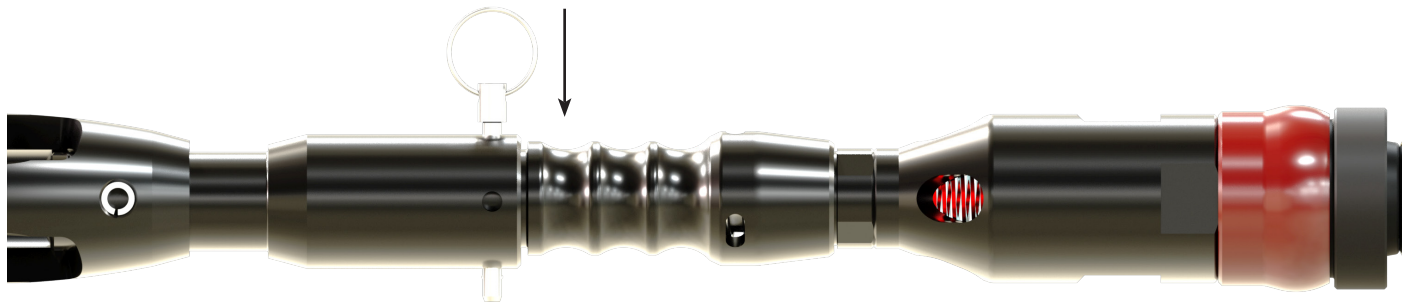
STEP 1

Pump the overshoot into the hole as usual. When the overshoot latches onto the head assembly, the brake release spring will retract the retracting casing, disengaging the brake wedge.



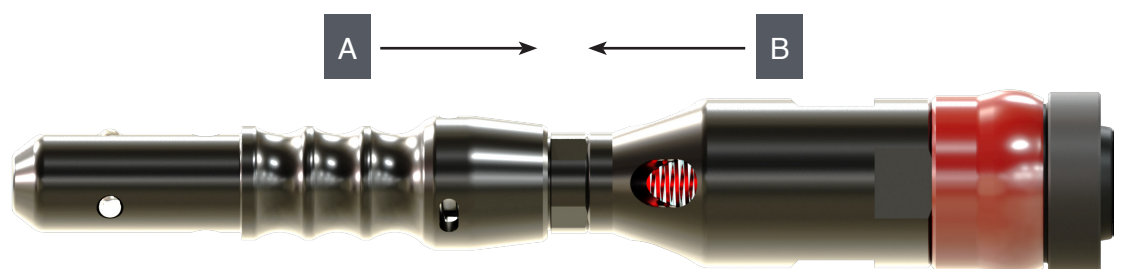
STEP 2

Upon retrieval from the hole, the safety pin must be used to lock the head assembly and overshoot together. This also prevents accidental overshoot release.



STEP 3

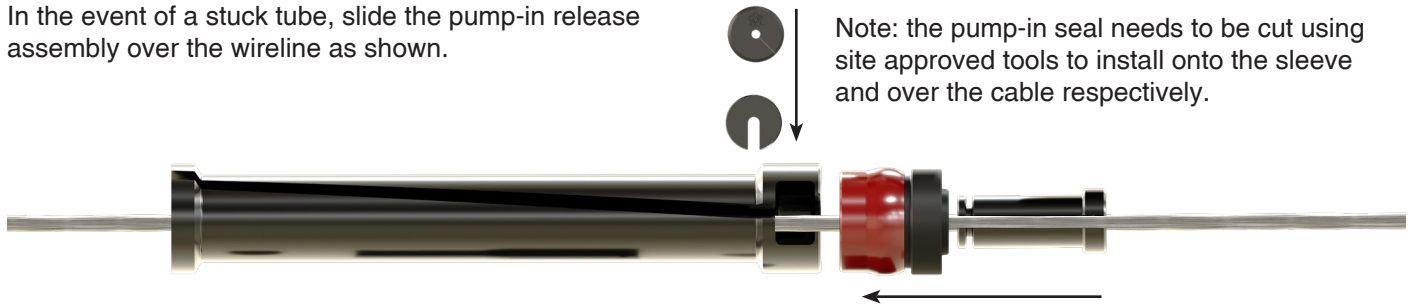
To disengage the overshoot, remove the pin, and with two hands push the overshoot head (a) toward the join adapter (b).



CABLE RELEASE OPERATION

STEP 1

In the event of a stuck tube, slide the pump-in release assembly over the wireline as shown.



STEP 2

Pump release assembly in the hole while maintaining wireline tension.



STEP 3

When the sleeve reaches the overshoot it will release the cable swivel eye-bolt, allowing the wireline to be retrieved.

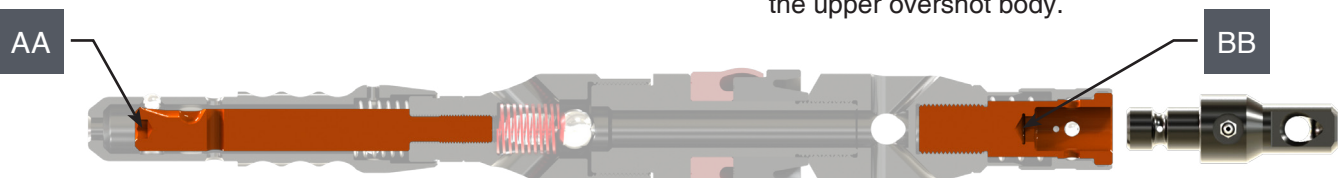


MAINTENANCE/SPARES

There are no pinned connections, it is important to keep all of the parts tightly fastened together. There are two 'hidden' hex key sockets and two jam nuts to help facilitate tightening the threads.

1. A 3/8" hex key can be inserted through the overshoot head (**AA**) and used to tighten the central lifting wedge to the jam nut.

2. Thread the overshoot head subassembly onto the joint adapter, wrench tightening the jam nut against the joint adapter.
3. On the cable release, removing the swivel eye reveals a 1/2" hex key (**BB**) socket that can be used to tighten the cable release assembly onto the jam nut.
4. Thread the cable release subassembly onto the upper overshoot body, wrench tightening the jam nut against the upper overshoot body.



FOR MORE INFORMATION REGARDING THE ROLLER LATCH™
QUICK PUMP-IN™ OVERSHOT, PLEASE VISIT
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