



ROLLER LATCH™ QUICK PUMP-IN™ OVERSHOT

ROLLER LATCH™ QUICK PUMP-IN™ OVERSHOT

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 overshoot in use today.



ROLLER LATCH™ QUICK PUMP-IN™ OVERSHOT

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

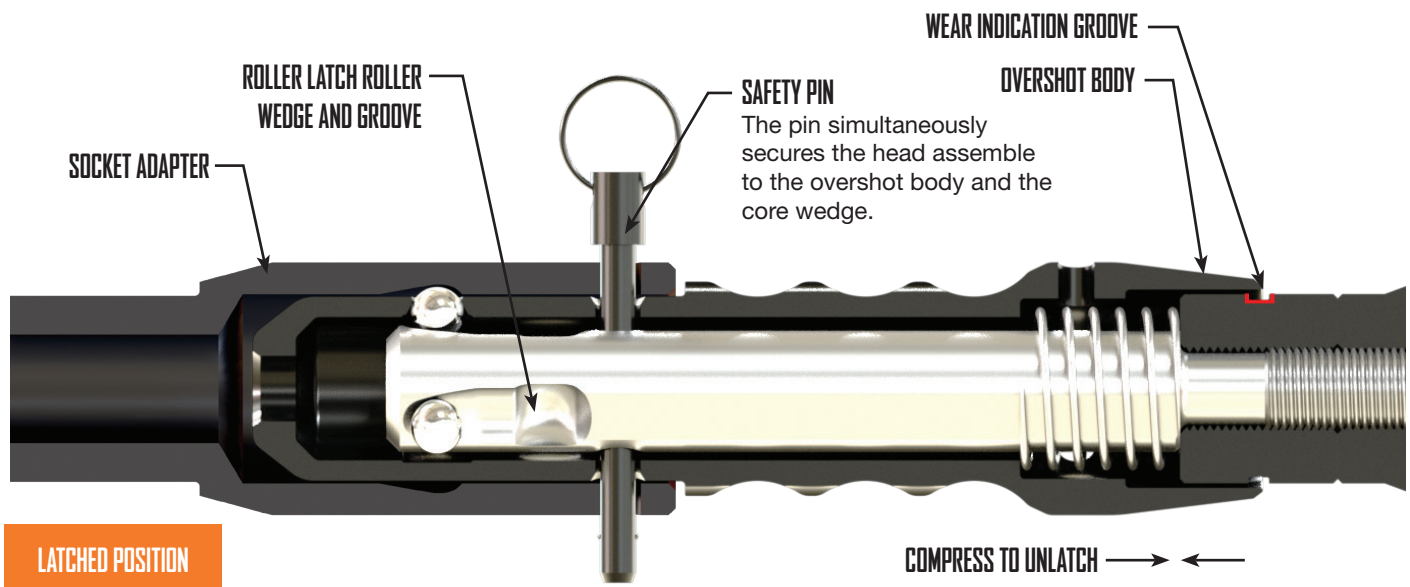
The new overshot is designed for self-flushing and — if need be — easy cleaning by flushing through the porting provided. The wedge has three large flats to ensure no debris build up. Using past experience, we have been able to improve function of the landing indication system for better productivity 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.

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.

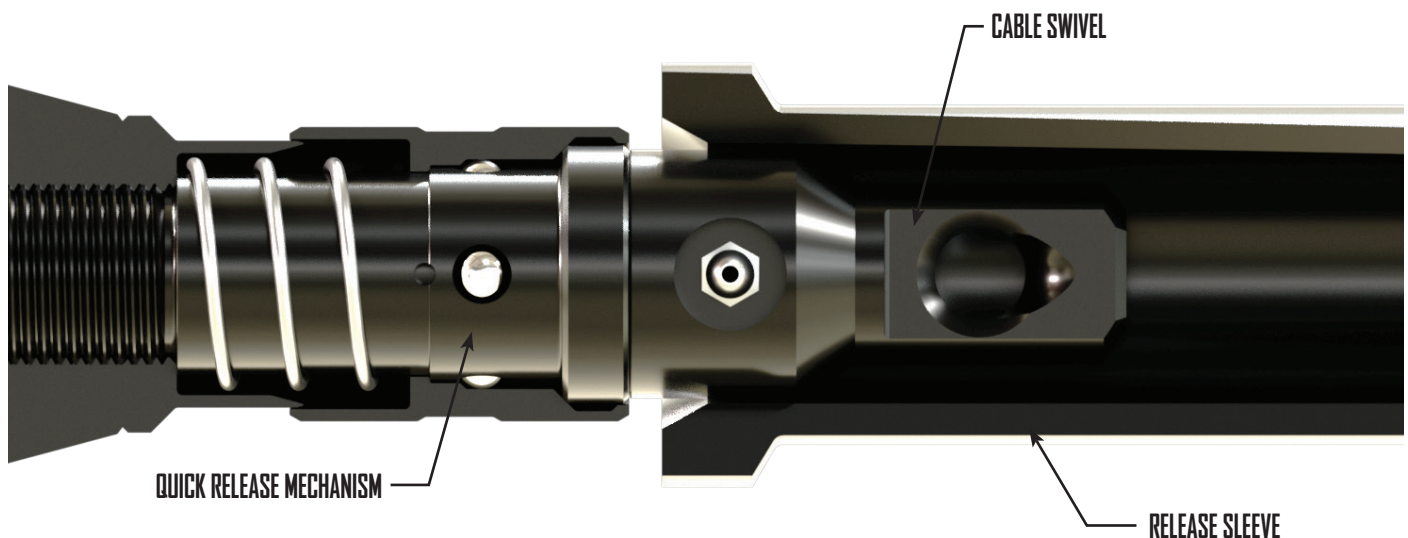
SOCKET ADAPTER & SAFETY PIN

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.

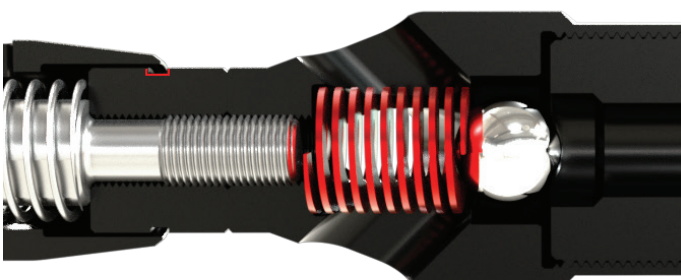
The Roller Latch Overshoot landing indicator features a steel bushing and spring design. If a snag is hit, the spring automatically resets the ball. The spring and ball eliminate premature landing indication and the associated lost time.

The auto-reset landing indicator is tunable using different fluid-retention springs. The Roller Latch overshoot ships with the light duty (1MPa/150psi) spring. Optionally, the steel fluid retention bushing and spring can be replaced with landing indicator bushings which require manual resetting.

CABLE RELEASE

Introduced by one of our own drillers, the Roller Latch Overshoot 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.

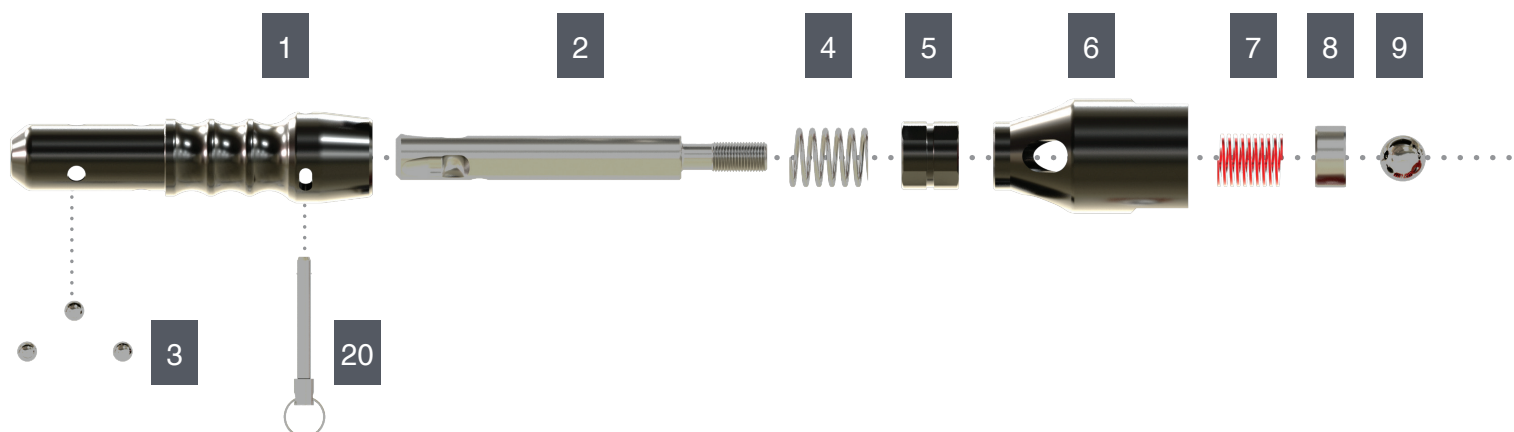
The Roller Overshoot adds a slotted sleeve and pumping assembly that is placed over the wireline and pumped up to the overshoot. The sleeve reliably engages a quick release mechanism and frees the wireline.



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

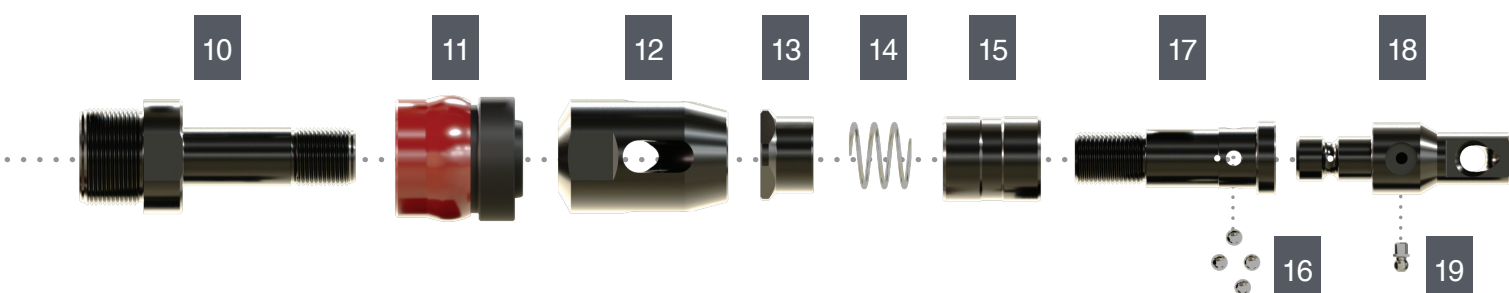
BQTKU OVERSHOT			
#	Part No.	Description	Qty
	5008025	O/Shot, BQTKU R/L	1
1	5008024	Body, BQ/NQ O/Shot	1
2	5008023	Wedge, BQ/NQ Lifting	1
3	5005100	Ball, 3/8" SS	3
4	5008028	Spring, R/L O/Shot	1
5	5009165	Jam Nut, BQU/NQU R/L O/Shot	1
6	5008105	Adapter, BQ R/L R/L O/Shot Joint	1
7	104966	Fluid Retention 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-Lip	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-Lip	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
1	5008476	Sleeve, BQU Pump-In	1
2	5008684	Packing Plug, BQ	1
3	25546	Packing, 3/16" Cable	1
4	3541816	Washer, 1/4"	1

NQ/NQTK CABLE RELEASE KIT			
#	Part No.	Description	Qty
	5009851	Kit, NQ R/L O/Shot Pump-In Sleeve	1
1	5008793	Sleeve, NQU Pump-In	1
2	5008794	Packing Plug, NQ	1
3	25546	Packing, 3/16" Cable	1
4	3541816	Washer, 1/4"	1

HQ CABLE RELEASE KIT			
#	Part No.	Description	Qty
	5009852	Kit, HQ R/L O/Shot Pump-In Sleeve	1
1	5008832	Sleeve, HQU Pump-In	1
2	5008833	Packing Plug, HQ	1
3	25546	Packing, 3/16" Cable	1
4	3541816	Washer, 1/4"	1



ACCESSORIES TECHNICAL INFORMATION

R/L ADAPTERS (Link Latch)

Part No.	Description	Qty
5008056	BQ/BQTK R/L Adapter (Link Latch)	1
5008057	NQ R/L Adapter (Link Latch)	1
5008058	HQ R/L Adapter (Link Latch)	1

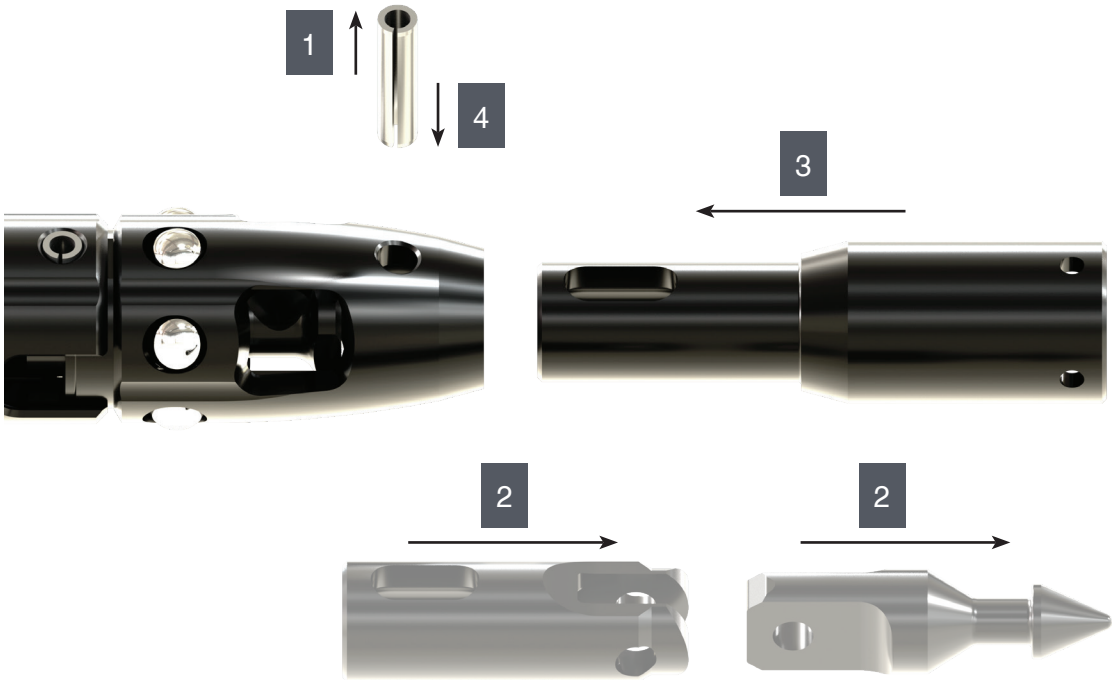
R/L ADAPTERS (Roller Latch)

Size	Description	Qty
5008799	BQ/BQTK R/L Adapter (Roller Latch)	1
5008799	NQ R/L Adapter (Roller Latch)	1
5008089	HQ R/L Adapter (Roller Latch)	1

SPEARHEAD ADAPTER PROCESS

The spearhead adapter is all that is needed to convert existing head assemblies for use with the Roller-Latch Overshot.

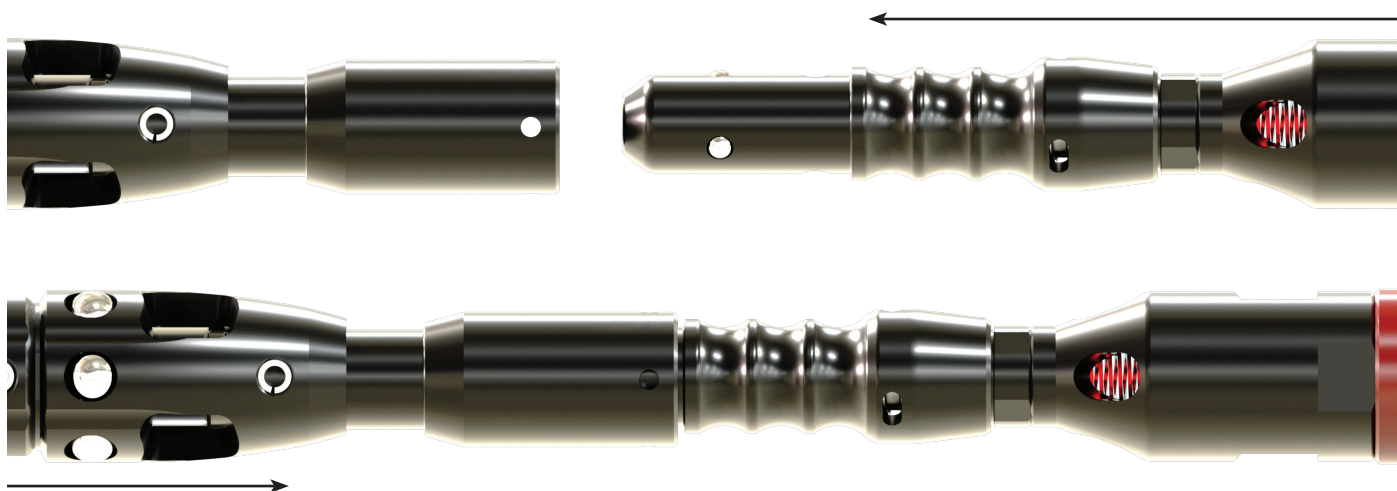
1. Remove spring pin (save)
2. Remove spearhead assembly
3. Slide in adapter and align the slot with pin hole
4. Replace spring pin



RETRIEVING R/L HEAD ASSEMBLY

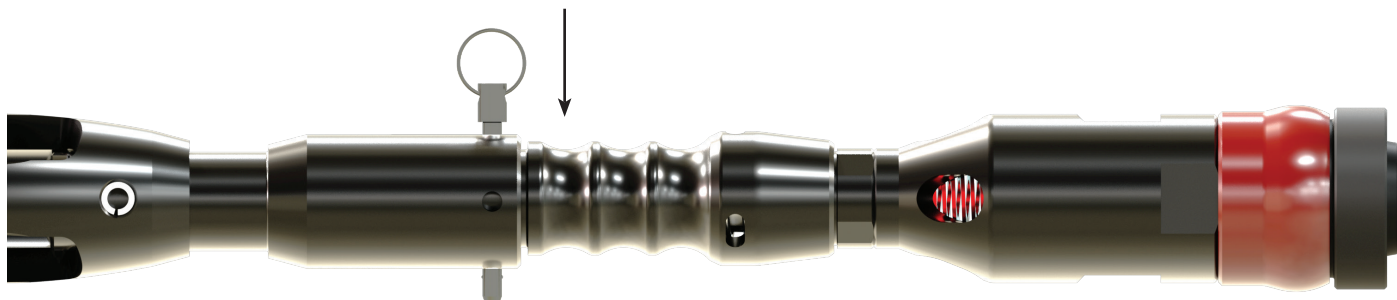
STEP 1

Pump the overshot into the hole, and observe landing indication as usual. Bleed excessive fluid pressure to allow wireline tension to retract the valve piston in the head assembly, and un-latch. When retrieving from inclined holes, some supply fluid flow may be required to un-load the holdback brake and allow it to disengage.



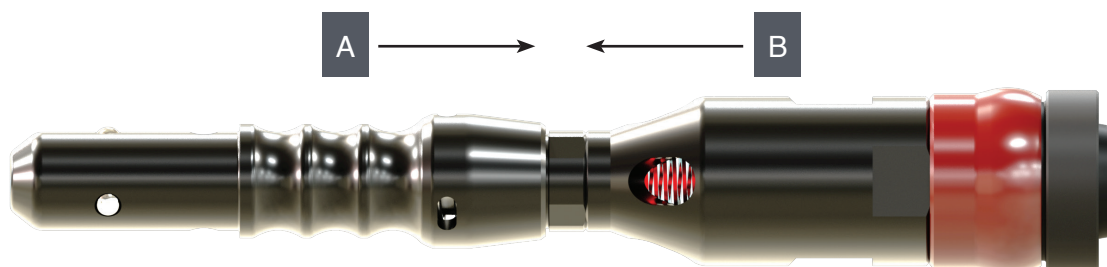
STEP 2

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



STEP 3

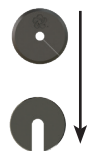
To disengage the overshot, remove the pin, and with two hands push the overshot head (a) toward the join adapter (b).



CABLE RELEASE OPERATION

STEP 1

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



Note: the pump-in seal needs to be cut using site approved tools to install onto the sleeve and over the cable respectively.



STEP 2

Pump release assembly in the hole while maintaining wireline tension.



STEP 3

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

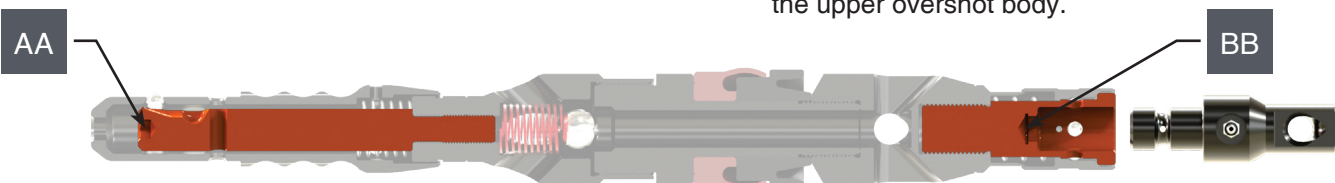


MAINTENANCE/SPARES

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 overshot head (AA) and used to tighten the central lifting wedge to the jam nut.

2. Thread the overshot 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 overshot body, wrench tightening the jam nut against the upper overshot body.



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

CONTACT US

Global Headquarters

Tel: +1 801 972 6430
Fax: +1 801 977 3374

Canada

Tel: +1 905 822 7922
Fax: +1 905 822 7232

Australia

Tel: +61 8 8375 8313
Fax: +61 8 8375 8497

Latin America

Tel: +56 2 2595 3300

South Africa

Tel: +27 11 767 9300

Europe

Tel: +41 22 709 0800
Fax: +41 22 709 0801