

MAG-GRIP ROD LIFTER OPERATIONS

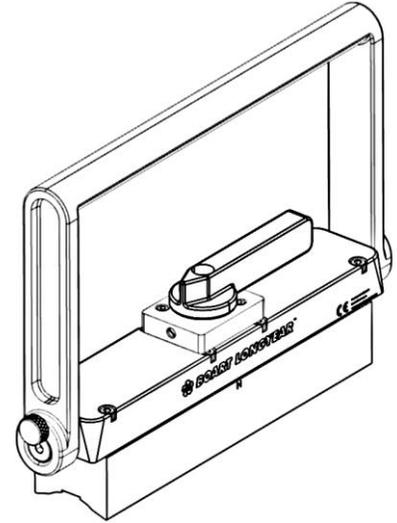
Your new CE certified Mag-Grip Rod Lifter features a curved contact surface for maximum hold and easy alignment on round tubing, an easy to actuate, 180° ON/OFF switch, and an ergonomic pivoting handle.



WARNING

Never use a Mag-Grip Rod Lifter for OVERHEAD LIFTING! Mag-Grip is designed for hand operation only. Do not attach hooks, cables or chains for lifting. DO NOT use underwater or in a hazardous environment, or abnormal conditions.

1. Check the bottom surface of the Mag-Grip lifter. For safe operation, the surface must always be smooth. If necessary, it is possible to sand the base using 400 grit sandpaper. Always remove any burrs that would interfere with full contact.
2. Place Mag-Grip on the tube to be lifted and turn the switch until it detents into place under the lifting handle.



WARNING

DO NOT turn on Mag-Grip unless it is in full contact with a metal tube! Never attempt to lift tubing unless the switch is in the detented 'ON' position.

3. Check the Maximum Load Capacity Table below, and never exceed the rated capacity of the device or attempt to alter the device in any way. Actual load capacity will vary significantly depending on the tube surface conditions and material properties.
4. Maximum Tubing Load Capacity Table:

Tubing Material	Wall Thickness		*Lift Strength		**Shear Strength	
	mm	in	kg	lb	kg	lb
	0.6	0.024	17	38	6	13
	1.2	0.047	49	109	16	36
	1.9	0.075	73	162	24	53
Inner tubes >	3.0	0.118	102	224	34	74
	3.5	0.138	111	244	37	81
Wireline Rods >	4.8	0.187	146	322	48	106
Casing & Pipe >	6.4	0.250	195	429	64	141
	9.5	0.374	212	466	70	154
	12.7	0.500	213	468	70	154

5. Always test the magnetic connection, before attempting to lift any tube, to ensure that Mag-Grip is capable of holding the load securely. The lifting load capacity (*Lift Strength) can be evaluated by testing the shear strength of the Mag-Grip's connection to the tube. Test for sufficient shear strength by ensuring that the operator cannot slide Mag-Grip with one arm when connected to the tubing load (**Shear Strength).
6. If the lifter slides during the shear strength test above, clean the tube and the underside of the Mag-Grip, and then repeat the test. Numerous factors can negatively affect the strength of the magnetic connection. Dirt, debris, oils and grease, painted surfaces and any gap between the magnets and the metal surface



Genuine Q™ Wireline System
www.boartlongyear.com

P/N 5009661 rev B

WARNING

Keep hands and body clear of open rods while operating. Failure to do so could result in serious injury or death.



MAG-GRIP ROD LIFTER OPERATIONS

may decrease the bond. If the tube is not a genuine Q™ wireline system component, then the lifting capacity must be de-rated based on the tube material. Refer to the Load Capacity Reduction Table below.

7. Load Capacity Reduction Table:

Material	Reduction Factor
Cast Steel	0.90
3% Silicon Steel	0.80
AISI 1095 Steel	0.70
416 Stainless Steel	0.50
High Carbon Steel	0.50
Cast Iron	0.45
Pure Nickel	0.10

8. If the connection passes the shear test, then the tubing is ready to be moved. Using safe lifting practices, move the tubing to desired location. Once certain that nothing will fall or become dangerous, the magnet may be released by turning the switch back to the off position. The magnet will release immediately.



WARNING

Always use safe lifting practices. Lifter capacity may greatly exceed operator safe working load! Avoid sudden jerking or shock force as this may cause the magnets to lose hold. Do not use the Mag-Grip Rod Lifter if it is damaged or not working properly.

9. Optionally, the pivoting lifting handle can be fixed in the vertical position by fully inserting the set screw provided in the base of the handle. Unthread or remove the set screw to allow the handle to pivot.
10. Optionally, the resistance of the switch, moving to and from the 'on' position, can be adjusted for greater or lesser resistance ("detent positioning"). Use an allen key to adjust the 3mm hex-socket set-screw located in the base of the switch.
11. Once released and work is complete, Mag-Grip is ready to be stored. Ensure the lifter is stored in the "off" position when not in contact with metal.



WARNING

DO NOT expose magnets to temperatures above 180° F or 82° C. High temperatures will permanently degrade the magnets and may result in unsafe operation! DO NOT attempt to disassemble the device; there are no user serviceable parts.

12. As with all magnetic devices, keep away from data storage devices, electronics, credit cards, ID's, etc.
13. This product does contain PTFE lubricant. For MSDS information contact:

Magswitch Technology, Inc.
1355 Horizon Ave, Lafayette CO 80026
ph. 303.468.0662 fax 303.951.9918



Genuine Q™ Wireline System
www.boartlongyear.com

P/N 5009661 rev B

WARNING

Keep hands and body clear of open rods while operating. Failure to do so could result in serious injury or death.

